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ADDITIONAL SUBSURFACE INVESTIGATION REPORT

Commercial Property
2853-2863 Mandela Parkway
Oakland, California

CERES Associates

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CERES Project CA268-2
November 18, 1998

Prepared for:

Page Street Properties
Three Embarcadero Center, #1150
San Francisco, California 94111

PHASE II SUBSURFACE INVESTIGATION REPORT

Commercial Property
2853-2863 Mandela Parkway
Oakland, California

CERES Project Number: CA268-2

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1.0 INTRODUCTION

During the months of October and November 1998, CERES Associates conducted additional site characterization at the commercial property located at 2853-2863 Mandela Parkway in Oakland, California (Property).

1.1 PROPERTY AND SURROUNDING AREA DESCRIPTION

The Property is approximately 4 acres in size and is developed with one 142,000 square-foot office and warehouse building. The remainder of the Property is paved with asphalt. The Property building is currently occupied by several tenants which utilize their respective spaces for general office and warehouse use, as well as light manufacturing. The Property has been developed and used for industrial purposes since at least 1942 when International Harvester occupied the site. The Property has been used for truck storage, cleaning, painting and repair until as late as 1951.

The Property is located in an industrial portion of Oakland near the Oakland Army Terminal. Many of the surrounding sites are used as manufacturing and automotive repair facilities, as well as for general warehouse storage use. Many of these sites are listed on various environmental databases for having leaking underground storage tanks (USTs), hazardous materials spills and other environmental violations.

1.2 BACKGROUND

In April 1998, CERES conducted an environmental site assessment transaction screen (ESATS) for the Property in conjunction with a proposed sale of the Property. Findings of the ESATS revealed that the Property had several potential environmental concerns which needed to be addressed before the Property transaction could proceed. Concerns noted during the ESATs included: 1) the potential that soil and groundwater beneath the Property has been affected by chlorinated solvents which are known to have been used and/or stored at the Property; 2) soil and groundwater contamination resulting from leaking gasoline and waste oil USTs which were removed from the Property in 1991; and 3) the potential that offsite sources have adversely affected soil and groundwater quality conditions beneath the Property.

During the ESATS investigation two reports, dated August 13, 1991 and July 16, 1992, generated by Harding Lawson Associates and ATEC, respectively, were reviewed in conjunction with the removal of two USTs from beneath the Property. The USTs were reported to be one 350 gallon UST containing gasoline and one 200-gallon UST containing waste oil. Additional historical information regarding the USTs was not available. Soil, grab groundwater samples and soil vapor

samples collected during the investigations indicate that significant total petroleum hydrocarbon compounds in the gasoline range (TPH-g), as well as benzene, toluene, ethylbenzene and xylenes (BTEX compounds) were present in soil and groundwater surrounding the former USTs which were situated along the south corner of the Property building.

Analytical laboratory results of soil samples collected by Harding Lawson Associates and ATEC indicated that TPH-g and benzene concentrations in soil were as high as 2,800 milligrams per kilogram (mg/kg) and 34 mg/kg, respectively. Grab groundwater samples collected from the ramp excavation near the south tip of the Property building indicated that shallow groundwater (about 3 feet bgs) contained TPH-g and benzene concentrations of 58 milligrams per liter (mg/l) and 0.29 mg/l, respectively. 58,000 ppb 290 ppb

Based on the results of the Harding Lawson Associates and ATEC reports, as well as additional historical site information obtained during the ESATs investigation, additional subsurface investigation was recommended to further characterize the unauthorized UST release along the south portion of the Property as well as assess the potential that previous hazardous materials usage both on and offsite have not adversely affected subsurface soil and groundwater beneath other portions of the Property.

In August 1998, CERES Associates conducted soil and groundwater sampling, as well as soil vapor sampling throughout most of the Property (see Figure 1). The soil vapor sampling was conducted to evaluate the potential that chlorinated solvents originating from unknown source areas have impacted soil and groundwater beneath the Property. The majority of the soil and groundwater sampling was conducted to further assess the vertical and lateral extent of contamination associated with the former gasoline and waste oil USTs. Soil and groundwater samples collected during this investigation were also analyzed for halogenated volatile organic compounds (HVOCs) since waste oil USTs are known to contain such compounds, and it was cost effective to additionally analyze the soil and groundwater samples for HVOCs since the soil and groundwater samples were being collected for another purpose anyway.

Analytical laboratory results and observations noted during the field investigation indicated that elevated TPH-g and BTEX compounds were present beneath the southeast portion of the Property in the vicinity of the former USTs, however the likely source of the contamination was probably somewhere offsite to the east near the south portion of the Property. Gasoline product was observed floating on the water table surface along the southeast Property border, about 50-feet east of the former UST excavation, yet it was not found in soil borings located nearest and down gradient from the former tanks. The groundwater flow direction measured across the Property during the investigation was calculated as flowing towards the west-northwest at a gradient of approximately 0.021. Soil vapor, and soil and groundwater samples collected during the August 1998 investigation

were reported as below laboratory method detection limit concentrations for target HVOCs.

The scope of work outlined in the following Section is intended to supplement data generated during the August 1998 investigation. Results of that investigation are presented in the report prepared by CERES Associates, dated September 1, 1998, entitled "Phase II Subsurface Investigation Report."

1.3 SCOPE OF WORK

The scope of work outlined below was performed for the purpose of further characterizing the vertical and lateral extent of contamination around the UST excavation beneath the Property, as well as assessing whether contamination identified beneath the Property originated from an on or offsite source. The work conducted during the months of October and November 1998 included the following:

- Prepare a workplan for approval by the City of Oakland Office of Emergency Services (OES);
- Obtain drilling and excavation permits from the Alameda County Public Works Agency and City of Oakland Department of Public Works;
- Conduct an aerial photograph review of the Property and surrounding sites to identify potential sources of offsite contamination (i.e., surface features indicative of USTs, such as pump islands, concrete pads, etc.);
- Install eight (8) direct-push soil borings. Five (5) soil borings (SB-3A, SB-3B, SB-3C, SB-8 and SB-9) were installed to assess the volume of gasoline product in subsurface soils along the southeast Property border and to identify whether the gasoline product found in this area originated from an on or offsite source. The other three soil borings (SB-10, SB-11 and SB-12) were installed to assess the vertical and lateral extent of contamination beneath the Property (see Figure 2);
- Conduct geophysical survey along the southeast Property border and beneath Willow Street to locate unidentified USTs in these areas;
- Conduct a regulatory agency review to identify USTs which may be situated on adjacent sites, primarily along the southeast Property border; and
- Prepare report of findings for distribution to the client and the local oversight agency (Alameda County Environmental Health Department).

2.0 SITE ASSESSMENT ACTIVITIES

Mobilization for field investigation activities included: notification of Underground Services Alert (USA) regarding field operations at the Property; soil boring and excavation permit acquisition from the Alameda County Public Works Agency and City of Oakland Department of Public Works; preparation of a site specific health and safety plan; and scheduling the field activities with the appropriate subcontractors, Property tenants and concerned parties. A copy of the drilling permit and excavation permit is provided in Appendix A.

2.1 SOIL AND GRAB GROUNDWATER SAMPLING

On October 28 and 29, 1998, CERES installed a total of eight soil borings at the Property. The soil borings were installed by Gregg Drilling and Testing, Inc using a direct-push Rhino drill rig (see Photograph 1).

2.1.1 Sample Methodology

The Rhino drill rig utilizes direct-push technology to collect soil and groundwater samples from specific subsurface depths while minimizing soil cuttings. The direct-push sampling system consists of a series of 1-inch diameter stainless steel rods which are hydraulically driven into the ground using a jack hammer attached to the Rhino rig. Soil samples were collected by driving a 4-foot long stainless steel sample sleeve attached to the end of the steel rods into soil in 4-foot sample intervals. Soil from the 4-foot column is collected in an acetate sample tube installed inside the steel sample sleeve. After the 4-foot sample sleeve has been hydraulically extended to the target sample depth, the sample sleeve is retrieved to ground surface and the acetate sample tube containing soil from the appropriate sample interval is capped with Teflon-lined plastic end caps, and immediately placed in a chest cooled with ice for the duration of the day's sampling. Excess soil from each sample interval was used for lithologic description and field screening purposes.

Excess soil from each sample interval was field screened for the presence of volatile organic compounds (VOCs) using a Mini Rae photoionization detector (PID). Field screening was conducted by placing soil in a plastic ziploc bag and monitoring the atmosphere inside the bag with the PID. The PID readings were digitally displayed in parts per million (ppm) and recorded on the soil boring log provided in Appendix B.

Grab groundwater samples were collected from each soil boring by extending each borehole to approximately 16 feet bgs, then placing a temporary ¾-inch diameter PVC well casing into the open borehole. The well casings were screened from 5 to 15 feet bgs with 0.010 slotted well screen, and

allowed to remain in place while groundwater accumulated in each soil boring. Grab groundwater samples were collected using disposable ½-inch diameter polyethylene bailers. Once groundwater had been retrieved to ground surface CERES transferred water from the bailers into two (2) 40 milliliter glass containers preserved with hydrochloric acid.

After soil and groundwater samples had been collected the temporary well casings were removed from the boreholes and the soil borings were backfilled with hydrated bentonite and capped with asphalt patch or concrete depending on ground surface conditions in each sample area. Excess soil cuttings and well casings were temporarily stored in one 55-gallon DOT-approved drum, along with a small volume of rinsate fluid generated during the decontamination of the stainless steel sampler. Arrangements have been made to dispose the contents of the drum as hazardous waste.

2.1.2 Sample Locations and Sample Depths

Soil borings SB-8 and SB-9 were placed in Willow Street as shown in Figure 2. The borings were installed in the street to assess the lateral extent of contamination east of SB-3, and to confirm suspicions that the source of the free product observed in SB-3 during the August 1998 investigation originated from an upgradient offsite source, either beneath Willow Street or the site east of Willow Street (2607 Mandela Parkway). Soil samples from SB-8 and SB-9 were collected for laboratory analysis at sample depths of 5, 10 and 15-feet bgs to assess the vertical distribution of contaminants in soil above and below the expected water table located between 5 and 10-feet bgs. Poor sample recovery in SB-8 prevented collection of the 15-foot soil sample in this boring.

Soil borings SB-3A, SB-3B and SB-3C were installed around SB-3 to assess the potential volume of gasoline product reported in SB-3 during the August 1998 investigation. Since soil quality conditions in this immediate area were known from the previous investigation (i.e., soil sample results from SB-3), soil samples were not collected from these three borings. Instead, these boreholes were opened up to 15-feet bgs, and temporary well casings were placed in each hole for the purpose of measuring the thickness of the anticipated gasoline product in this area, as well as assessing the product thickness trend.

Soil borings SB-10 through SB-12 were placed northeast, northwest and west of the former Property USTs to further assess contaminant trends beneath the southeast portion of the Property. The borings were placed to obtain additional soil and groundwater quality data beneath the southeast portion of the Property whether the source was shown to be the former Property USTs or another offsite tank(s). Soil samples were collected for laboratory analysis from SB-10 and SB-11 at sample depths of 5, 10 and 15-feet bgs. Soil samples were supposed to be collected from SB-12 at the same sample intervals as SB-10 and SB-11, however this borehole was mistakenly drilled to 16-feet bgs after the 0 to 4-foot sample interval was retrieved, and soil sample collection from 4 to 16-feet bgs

was not conducted. After the mistake was realized, the soil boring was extended to 20-feet bgs, one soil sample was collected at a depth of 17-feet bgs, and a temporary well casing screened from 5 to 20-feet bgs was installed in the borehole to collect a grab groundwater sample.

Grab groundwater samples were collected for laboratory analysis from SB-10 and SB-11. Since gasoline product was present in SB-8, SB-9 and SB-12, groundwater samples were not collected for laboratory analysis from these sample locations. Product thickness was measured in SB-8 and SB-9 the same day the borings were installed, because conditions of the City of Oakland excavation permit required that soil borings positioned in the street not be left open overnight. The grab groundwater sample collected from SB-10 was also collected the same day the soil boring was installed since leaving the borehole open overnight could have presented a potential health hazard to Property tenants, and groundwater accumulated in this boring relatively quickly.

Groundwater samples and product thickness measurements collected from the other soil borings were done the following day after groundwater in each of these locations was allowed to accumulate overnight.

2.1.3 Sample Analysis and Results

Upon sample collection, the soil and grab groundwater samples collected from SB-8 through SB-12 were delivered under chain-of-custody protocol to McCampbell Analytical Laboratory, a State of California-certified laboratory located in Pacheco, California. Soil and grab groundwater samples submitted for laboratory analysis were analyzed for TPH-g using United States Environmental Protection Agency (U.S. EPA) Method 8015 modified, and BTEX compounds and methyl tertiary butyl ether (MTBE) using U.S. EPA Method 8020/602.

Additionally, two soil samples which were reported to contain the highest TPH-g and benzene concentrations during this investigation were composited in the laboratory and analyzed for total threshold limit concentration (TTLC) lead using U.S. EPA Method 6010. The analysis was performed for waste disposal profiling purposes.

Analytical laboratory results of soil and groundwater samples collected during this investigation, as well as sample results from the August 1998 investigation are tabulated in Tables 1 and 2. Analytical laboratory results from the August 1998 investigation and current investigation are also plotted on Figures 3 and 4.

The 10 and 15-foot soil samples collected from soil borings SB-8 and SB-9, respectively, were composited in the laboratory and analyzed for TTLC lead. The composited sample was reported to contain lead at a concentration of 9.8 mg/kg or parts per million (ppm).

2.2 GEOPHYSICAL SURVEY

On November 4, 1998, CERES contracted Subtronics, Inc to conduct a geophysical survey along the southeast Property border for the purpose of identifying a UST either beneath the southeast portion of the Property and/or beneath Willow Street.

Four separate instruments were employed to conduct the survey. They included ground penetrating radar (GPR), a TW-6 M-Scope, a Schonstedt GA-72CV magnetic locator and a 858G Magmapper. The later three instruments were useful in assessing whether buried USTs were located beneath the search area, and GPR was useful in delineating subsurface irregularities such as buried tanks and former excavations. All pieces of equipment have their limitations which is why more than one search device was used during the survey. A further discussion of each instruments capabilities and limitations is presented in Subtronic's report provided in Appendix A.

As Subtronics' report indicates, USTs and/or former tank excavations were not positively identified along the southeast Property border or beneath Willow Street. However, the metal fence located along the southeast Property border (see Photograph 3), and rebar presumably located beneath the concrete sidewalk, likely interfered with the different types of metal detecting devices used to scan this area. Since we could not confirm whether the readings in the vicinity of the sidewalk represented buried metal objects such as a UST, nine (9) probe holes were installed on the Property, sidewalk and Willow Street for the purpose of identify a UST in this area (see Figure 2). Solid steel probes were manually advanced to a depth of 5-feet bgs in each location, however a UST was not identified during this exercise.

2.3 AERIAL PHOTOGRAPH AND REGULATORY AGENCY REVIEW

On October 13, 1998, CERES Associates reviewed thirteen (13) sets of stereoscopic aerial photographs at Pacific Aerial Surveys in Oakland for the purpose of identifying surface expressions indicative of potential USTs which may be located beneath and/or near the southeast portion of the Property.

The scale of the photographs was 1:1,200 (or 1 inch equals 100 feet), and the years reviewed included 1930, 47, 49, 57, 59, 69, 75, 77, 81, 83, 85, 88 and 89.

Relevant information obtained during the aerial photograph review indicates that the Property and site now east of Willow Street (2607 Mandela Parkway) were once one continuous site. The Property and south half of the present building now known as 2607 Mandela Parkway were constructed sometime between 1930 and 1947. Willow Street was not yet constructed in 1947. The area now occupied by Willow Street and the north half of the present 2607 Mandela Parkway building

were paved areas used for vehicle parking and storage. Obvious indications of USTs located beneath the paved area were not observed on the photographs (in fact, the USTs located formerly along the Property building were not identifiable either), however the paved area now occupied by Willow Street and the north half the 2607 Mandela Parkway site now occupied by the north portion of the building on that property are possible locations for buried fuel tanks. The seam separating the north and south sections of the building located at 2607 Mandela Parkway can be seen in Photograph 3.

3.0 SUBSURFACE SOIL AND GROUNDWATER CONDITIONS

Soils encountered during the installation of SB-8 through SB-12 indicate the Property area is underlain by approximately 4-feet of apparent fill soil which consists of intermixed gravel, sand, silt, clay and debris such as brick fragments. A sand layer was generally encountered between 2.5 and 4-feet bgs in the five soil borings logged during this investigation, however it is not known whether this unit represents native soil or not. Beneath the sand at 4-feet bgs, were bay muds, which were logged as deep as 20-feet bgs in soil boring SB-12.

The Bay Muds encountered between 4 and 20-feet bgs contained relatively thin (< 2" thick) discontinuous sand and organic-rich zones which appear to be the primary shallow water producing units beneath the Property. Obvious product was observed in soil borings SB-8 and SB-9 during the field sampling, however it was difficult to assess the depth intervals at which the product was moving through subsurface soils and/or groundwater. Analytical laboratory results of soil samples collected at 10 and 15-feet bgs from soil borings SB-8 through SB-11, and the presence of floating product at SB-12 seem to indicate that contaminants are migrating beneath the Property through preferential pathways in the bay muds situated between 10 and 16-feet bgs. However, varying degrees of contamination can be found within the 6-foot column depending on the sample location chosen and the depth interval selected for analysis.

Precise depth to groundwater beneath the Property was difficult to assess since the bay muds were very moist to saturated from roughly 4-feet bgs to 20-feet bgs and free product was found in most boreholes installed during this investigation. A 3-foot 3-inch long disposable bailer lowered into borings SB-8, SB-9 and SB-3C indicated that a column of gasoline product at least as thick as the length of the bailer was present in these boring locations, and a 1.5-foot thick column of gasoline product was also present in SB-12. The one soil boring location (SB-11) in which groundwater was allowed to stabilize overnight, the depth to groundwater was measured at approximately 7-feet bgs.

A description of the subsurface conditions encountered during this investigation are presented in the soil boring logs provided in Appendix B.

3.1 GROUNDWATER FLOW DIRECTION

The groundwater flow direction beneath the Property is towards the west-northwest. The groundwater flow direction was calculated during the August 1998 investigation by installing temporary well casings in three soil borings located across the Property, allowing groundwater in each borehole to stabilize for at least 24 hours, and then surveying the water table elevations at each sample location.

Further details concerning the groundwater flow direction and gradient calculations can be found in the previous report mentioned in Section 1.2, however as mentioned above, the groundwater flow direction was calculated in August 1998 as flowing towards the west-northwest at gradient of approximately 0.021 ft/ft.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Findings of this and past investigations indicate that a significant gasoline fuel release has occurred, and that soil and groundwater beneath the southeast portion of the Property, as well as offsite area to the east, has been adversely affected. The primary question which still remains unresolved is whether the contamination originated from the former onsite USTs removed in 1991, an unidentified offsite source, or both?

At present it appears the bulk of the contamination reported in soil and groundwater samples collected beneath the southeast portion of the Property and beneath Willow Street is originating from 2607 Mandela Parkway. The gasoline product thickness increases in the direction of this site, and the groundwater flow direction calculated beneath the Property in August 1998 is towards the west-northwest, which means that 2607 Mandela Parkway is situated in the immediate upgradient groundwater flow direction from the Property. Since results of the geophysical survey did not indicate the presence of USTs or UST excavations beneath Willow Street, presumably the source of the subsurface gasoline product exists somewhere east of Willow Street beneath the 2607 Mandela Parkway site.

One UST was identified at 2607 Mandela Parkway after reviewing OES files for the site. The location of the UST relative to the Property is shown in Figures 2 through 5 and Photographs 2 and 4. Information contained in the file included an underground tank closure report prepared by Light, Air, Space Construction and hand written notes presumably written by the OES inspector. A copy of this documentation is provided in Appendix A.

Information found in the OES file indicates the tank formerly contained gasoline, and the age of the UST was estimated at more than 30 years. Visual observations noted during the abandonment process in February 1997 indicates that several holes were present in the tank and that 650 gallons of water and product were removed from the UST before filling the tank with 6 cubic yards of cement slurry (6 cubic yards is equivalent to approximately 1,200-gallons). One soil sample and two groundwater samples were reportedly collected near each end of the tank and analyzed for TPH-g, BTEX compounds, MTBE and organic lead, however only minor contaminant concentrations were reported in the soil and groundwater samples and the OES closed the case.

Given the proximity of the abandoned UST beneath 2607 Mandela Parkway relative to the known contamination and groundwater flow direction data generated during the past two investigations at the Property, it certainly appears the source of the gasoline product found in subsurface soil and groundwater beneath Willow Street and the Property most likely originated from somewhere beneath the 2607 Mandela Parkway site. Soil and groundwater samples collected around the abandoned UST

at this site do not suggest there is a large contamination problem associated with this tank, however discontinuous subsurface soil and groundwater conditions were recorded during the past two subsurface investigations at the Property and analytical laboratory results of soil samples collected by Harding Lawson and Associates from the former Property UST excavation in 1991 also yielded unexpected results.

The sidewall soil sample collected from the former Property UST excavation at about 2.5 feet bgs was reported to contained TPH-g, TPH-d and TPH-mo at concentrations ranging from 240 to 2,000 ppm, as where the soil sample collected from the floor of the same excavation at approximately 6.5-feet bgs was reported to contain these same compounds at concentrations ranging from only 12 to 41 ppm. The highest benzene concentration reported in either excavation soil sample was only 1,100 ppb (or 1.1 ppm).

In conclusion, although soil and groundwater samples collected in February 1997 near the abandoned UST beneath 2607 Mandela Parkway do not indicate that a significant release has occurred, soil and groundwater quality data, as well as groundwater flow direction data generated during the 1998 investigations at the Property suggest otherwise. It should also be pointed out that an unknown UST(s) may exist beneath the north section of the 2607 Mandela Parkway building since this portion of the site existed as an open lot, presumably during the same time period that the recently abandoned gasoline UST was installed.

Based on the results of this and previous investigations, CERES Associates recommends conducting an additional subsurface investigation to identify the source of the gasoline product found beneath the southeast portion of the Property and Willow Street, and to further define the lateral extent of contamination in the west and northwest directions beneath the Property building. Suggested sample locations are shown in Figure 5.

5.0 REFERENCES

- ATEC, 1992, Subsurface Soil Investigation, 2855 Cypress Street, Oakland, California
- CERES Associates, 1998, Environmental Site Assessment Transaction Screen
- CERES Associates, 1998, Phase II Subsurface Investigation Report, 2853-2863 Mandela Parkway, Oakland, California
- Harding Lawson Associates, 1991, Underground Storage Tank Removal, 2855 Cypress Street, Oakland, California
- Light, Air & Space Construction, 1997, Underground Tank removal Closure Report

6.0 LIMITATIONS

Much of the information on which the conclusions of this report are based, comes from data provided by others. CERES is not responsible for the accuracy or completeness of this information. Inaccurate data provided by others, as well as information that was not found or made available to CERES, may result in a modification of the conclusions presented in this report.

It is possible unpermitted, undocumented or concealed improvements or alterations to the Property could exist beyond what was found during assessment activities. Variations in Property specific soil and groundwater conditions are probable beyond what field characterization can record. Changes in the conditions found on the Property could occur at some time in the future due to variations in environmental and physical conditions.

In today's technology, no amount of assessment can ascertain that the Property is completely free of environmental concern.

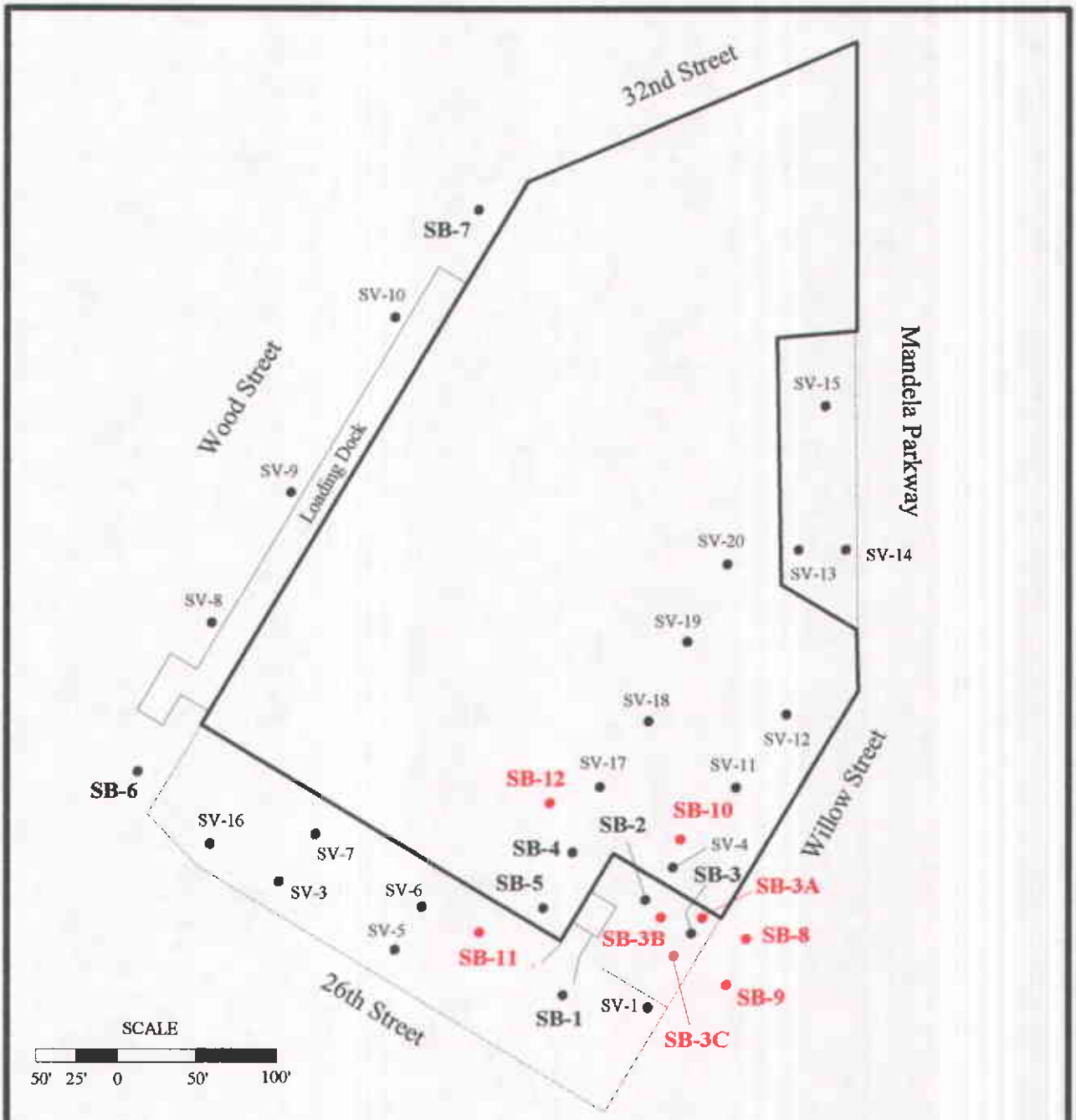
Any geologic and hydrogeologic data are for drawing conclusions, by CERES, within the context and timing of this report only. This report was prepared for the sole use and benefit of Page Street Properties and its lenders.

Photograph 1 View of Rhino drill rig during the installation of SB-8.

Photograph 2 View looking northeast down Willow Street. Soil boring SB-9 and the abandoned UST at 2607 Mandela Parkway are shown.

Photograph 3 View looking west across Willow Street at the southeast Property border.

Photograph 4 View looking east across Willow Street at 2607 Mandela Parkway site.



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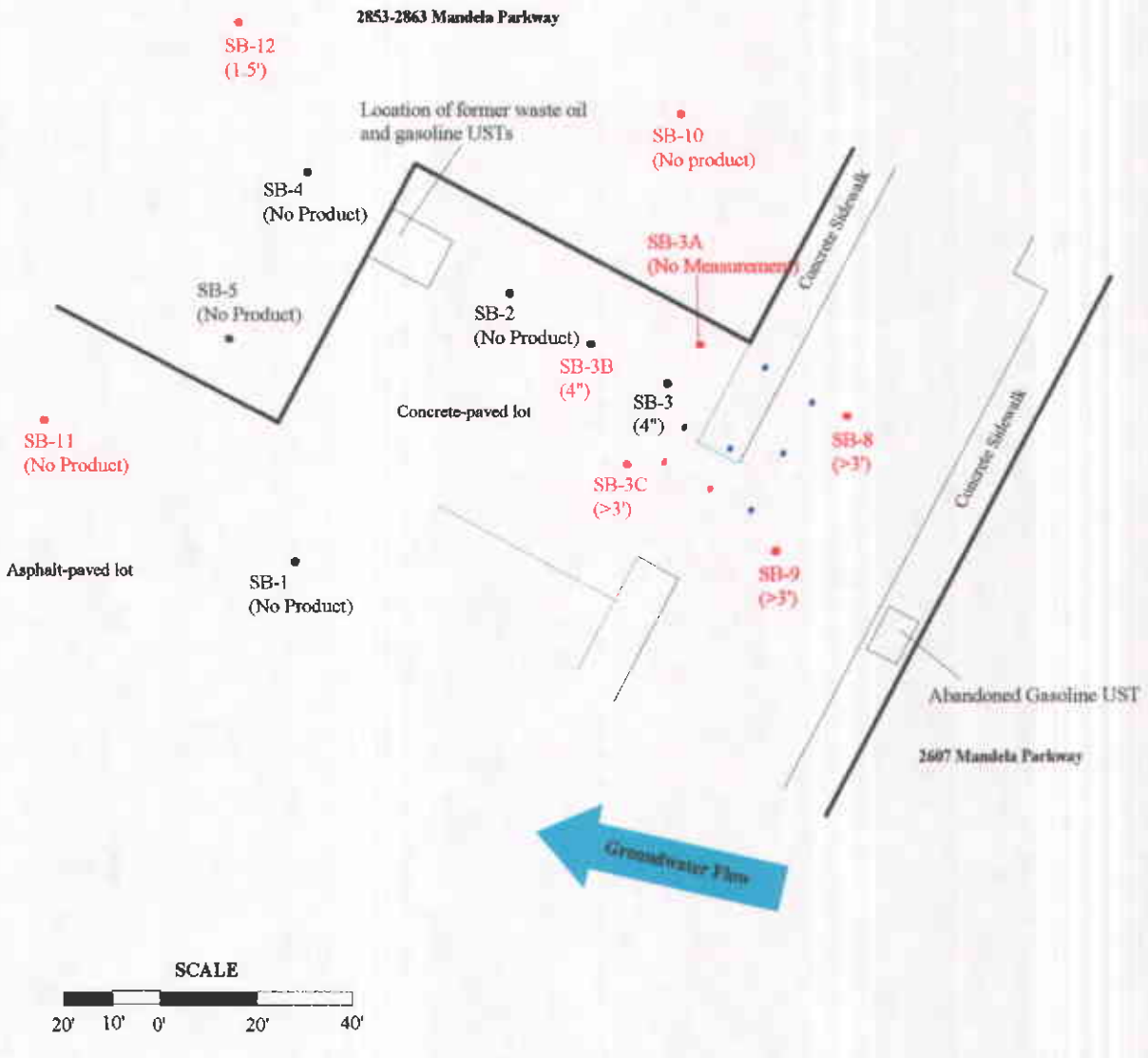
SB-1 Soil boring installed in August 1998

SV-2 Soil vapor point installed in August 1998

SB-9 Soil boring installed during recent investigation

N

FIGURE 1 - SITE MAP



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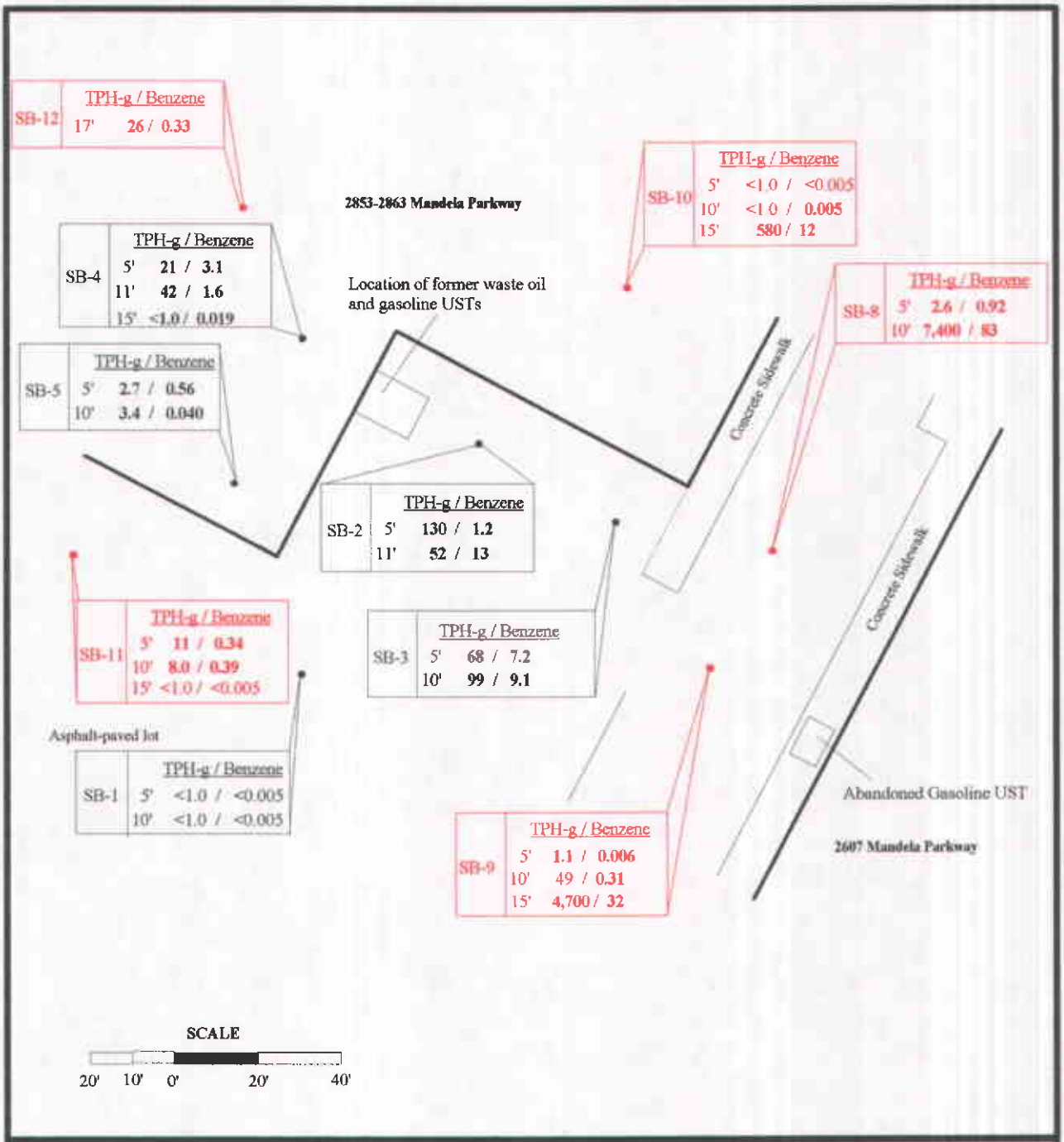
SB-9 (>3') Soil boring installed during recent investigation and product thickness.

SB-3 (4") Soil boring installed in August 1998 and product thickness.

Probe hole installed to 5 feet bgs for the purpose of identifying possible UST.

N

FIGURE 2 - SAMPLE LOCATION MAP



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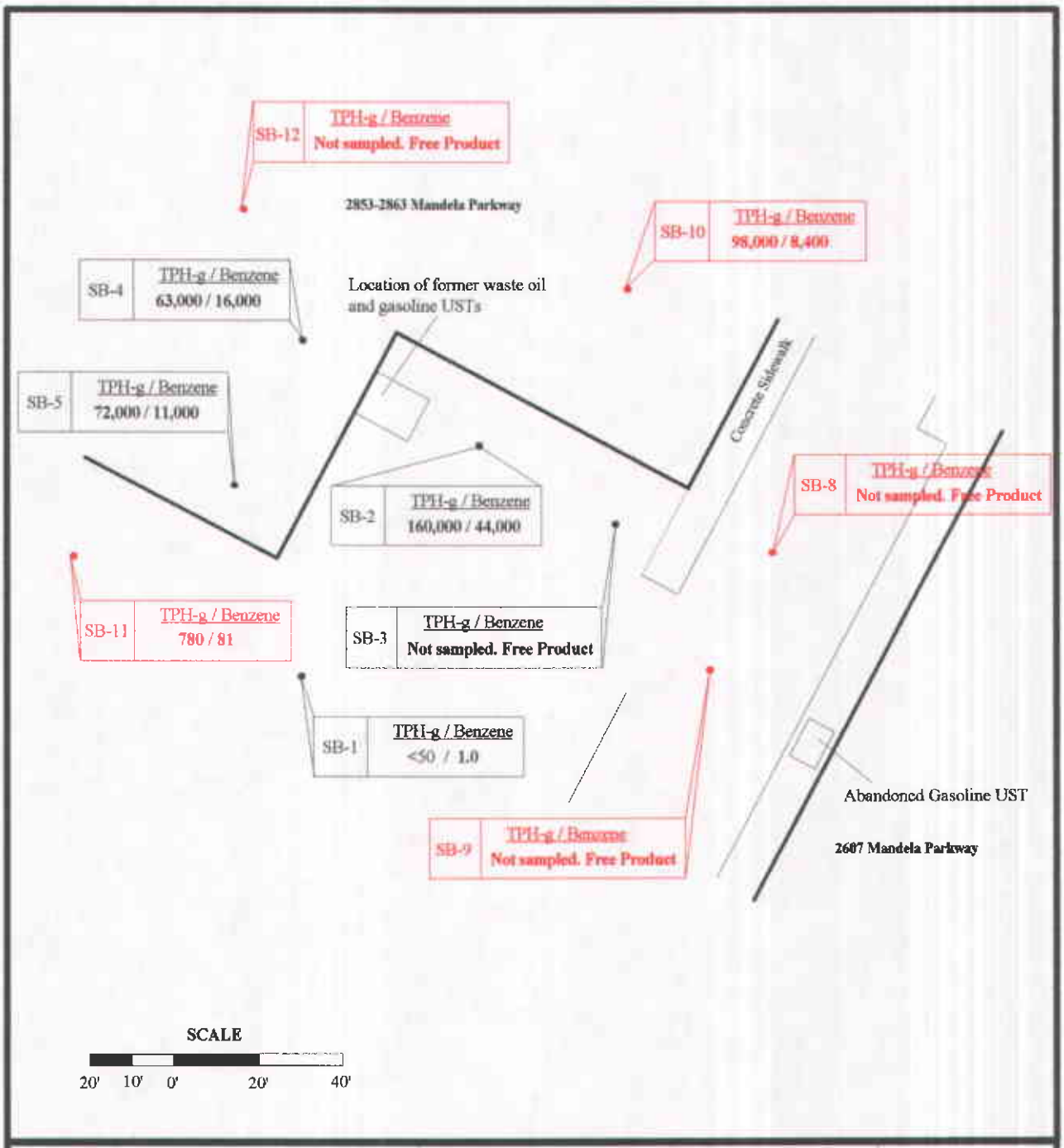
Soil boring sample location and soil sample results (ppm). Boring installed during recent investigation.

Soil boring sample location and soil sample results (ppm). Boring installed in August 1998.

N

FIGURE 3 - SOIL SAMPLE RESULTS (TPH-g / BTEX)



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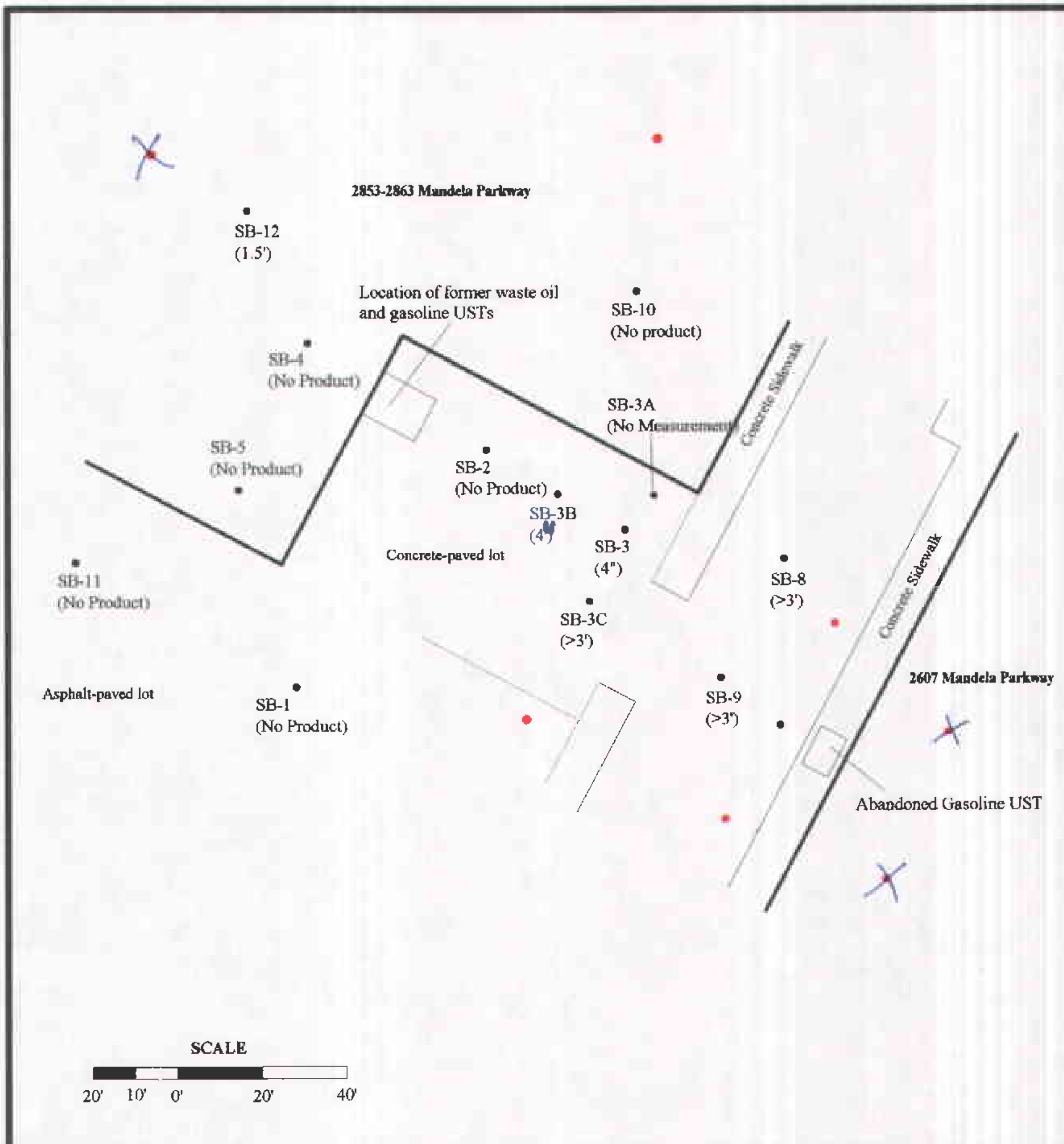
SB-11 TPH-g / Benzene 780 / 81 — Soil boring sample location and grab groundwater sample results (ppb). Boring installed during recent investigation.

SB-1 TPH-g / Benzene <50 / 1.0 — Soil boring sample location and grab groundwater sample results (ppb). Boring installed in August 1998.

N

FIGURE 4 - GROUNDWATER SAMPLE RESULTS (TPH-g / BTEX)



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SB-9 (>3') Soil boring location and product thickness

Proposed future soil boring location

X boring locations eliminated per Nick Patz of Ceres, 11-25-98

N

FIGURE 5 - PROPOSED SAMPLE LOCATIONS

TABLE 1

SOIL SAMPLE RESULTS
(TPH-g, BTEX COMPOUNDS AND MTBE)

Sample Location	Sample Depth (feet bgs)	Analytical Laboratory Results (mg/kg)					
		TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
SB-1	5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
SB-1	10	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
SB-2	5	**130**	**1.2**	**2.0**	**6.3**	**13**	<0.005
SB-2	11	**52**	**13**	**17**	**2.1**	**8.6**	<0.005
SB-3	5	**68**	**7.2**	**15**	**3.0**	**11**	<0.005
SB-3	10	**99**	**9.1**	**14**	**5.0**	**17**	<0.005
SB-4	5	**21**	**3.1**	**0.49**	**2.9**	**2.9**	<0.005
SB-4	11	**42**	**1.6**	**0.12**	**1.1**	**4.3**	<0.005
SB-4	15	<1.0	**0.019**	<0.005	<0.005	<0.005	<0.005
SB-5	5	**2.7**	**0.56**	**0.011**	**0.46**	**0.041**	<0.005
SB-5	10	**3.4**	**0.040**	**0.76**	**0.13**	**0.59**	<0.005
SB-6	5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.0005
SB-7	5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005
SB-8	5	**2.6**	**0.92**	**0.010**	**0.026**	**0.063**	<0.05
SB-8	10	**7,400**	**83**	**270**	**110**	**470**	<100
SB-9	5	**1.1**	**0.006**	**0.034**	**0.017**	**0.082**	<0.05
SB-9	10	**49**	**0.31**	**1.7**	**0.84**	**3.5**	<0.30
SB-9	15	**4,700**	**32**	**180**	**80**	**320**	<70
SB-10	5	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
SB-10	10	<1.0	**0.005**	**0.006**	<0.005	**0.017**	<0.05
SB-10	15	**580**	**12**	**29**	**12**	**52**	<10
SB-11	5	**11**	**0.34**	**0.016**	**0.35**	**0.29**	<0.05
SB-11	10	**8.0**	**0.39**	**0.026**	**0.057**	**0.12**	<0.05
SB-11	15	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
SB-12	17	**26**	**0.33**	**1.5**	**0.52**	**2.1**	<0.50

Bold type indicates compound reported above laboratory detection limit concentration.
HVOCs were not reported above their respective detection limit concentrations. Detection limt concentrations are presented on the analytical laboratory data sheets provided in Appendix C.

TABLE 2

GRAB GROUNDWATER SAMPLE RESULTS
(TPH-g, BTEX COMPOUNDS AND MTBE)

Sample Location	Sample Depth* (feet bgs)	Analytical Laboratory Results (μg/l)					
		TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
SB-1	4	<50	**1.0**	**1.0**	<0.5	**1.2**	<0.5
SB-2	4	**160,000**	**44,000**	**38,000**	**5,900**	**24,000**	<50
SB-3	4	No sample. Free product.					
SB-4	7.5	**63,000**	**16,000**	**12,000**	**3,200**	**11,000**	<50
SB-5	7.5	**72,000**	**11,000**	**17,000**	**3,600**	**20,000**	<250
SB-6	8	**63**	**3.1**	**9.0**	**3.3**	**16**	<0.5
SB-7	6.5	<50	**1.1**	**2.1**	**1.9**	**6.4**	<0.5
SB-8	6	No sample. Free product.					
SB-9	6	No sample. Free product.					
SB-10	11	**98,000**	**8,400**	**10,000**	**2,800**	**13,000**	<200
SB-11	7	**780**	**81**	**1.3**	**4.9**	**18**	<1
SB-12	8	No sample. Free product.					

* Groundwater depth estimated.

Bold type indicates compound reported above laboratory detction limit concentration.

HVOCs were not reported above their respective detection limit concentrations. Detection limt concentrations are presented on the analytical laboratory data sheets provided in Appendix C.

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

Curtis Cooper 238-7259

PERMIT NUMBER	SITE ADDRESS/LOCATION
X9800739	2853 MANDELA PKY
APPROX. START DATE / APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS	CITY BUSINESS TAX #

ATTENTION:

1) State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: 287613 - 287604

2) **48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.**

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____

WORKER'S COMPENSATION

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # _____ Company Name _____

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

Signature of Permittee ☑ Agent for ☐ Contractor ☐ Owner — Date 10/13/98

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☑ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☑ NO

ISSUED BY J. Curtis — DATE ISSUED 10-13-98

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2853-2863 Mandela Parkway
Oakland, CA

California Coordinates Source _____ ft. Accuracy = ___ ft.
CCN _____ ft CCE _____ ft.
APN _____

CLIENT
Name Rage Street Properties
Address 3 Embarcadero Center Phone (415) 398-2266
City S.F. Zip 94111

APPLICANT
Name CERES Associates
Fax (925) 825-4441
Address 5040 Commercial Cir Phone (925) 825-4466
City Concord Ste E Zip 94520

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☑
Monitoring	☐	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other Borings	☑

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☐
Cable	☐	Other	☑	Direct Push (Geoprobe)	

DRILLER'S LICENSE NO. C57 485165 (Gregg Drilling)

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

GEOTECHNICAL PROJECTS
Number of Borings 6 Maximum
Hole Diameter 2 in. Depth 17 ft.

ESTIMATED STARTING DATE 10/28/98
ESTIMATED COMPLETION DATE Same

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

APPLICANT'S SIGNATURE _____ DATE 10/12/98

FOR OFFICE USE

PERMIT NUMBER 98WR432
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

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

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

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

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

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

F. WELL DESTRUCTION
See attached.

G. SPECIAL CONDITIONS

APPROVED _____ DATE 10/13/98

LIGHT, AIR & SPACE CONSTRUCTION
ENVIRONMENTAL SERVICES COMPANY
License Number 445403
R.E.A. Number 04072

UNDERGROUND TANK TECHNICAL CLOSURE REPORT

Client name:	Beverly Wirth	Project # 9663
Mailing address:	9 Westminster Place Lafayette, California 95495	
Job Site address:	2607 Mandela Parkway Oakland, California 94612	
Close-in-Place date:	02-20-97	EPA # CAC 000735536
LA&S supervisor:	David Guthridge	
Removal crew:	Bob Giancola	
Residual in tanks?:	Yes	
Who pumped out tanks:	Americlean Inc.	
Product transporter:	Americlean Inc.	
EPA # :	CAT080014277	
Hauler #:	3493	
Mailing address :	P.O. Box 2130 Walnut Creek, CA 94595	
Telephone #:	510-934-9197	
Product destination:	Artesian Oil Recovery Company	
EPA # :	CAD980638449	
TSD # :	CAD980638449	
Address:	2306 Magnolia Street Oakland, California 94607	
Tel..#:	1-800-771-2105	
EPA Manifest #'s:	96181082	
Tank transporter:	N/A	
EPA # :	N/A	
Hauler #:	N/A	
Mailing address :	N/A N/A	
Telephone:	N/A	
Tank #1 (1,000-gallon)		
Destination:	Filled-in-place	
EPA # :	N/A	
TSD # :	N/A	
Address :	N/A	
Manifest #	N/A	

97 APR 15 AM 9:14
ENVIRONMENTAL PROTECTION

P.O. Box 36303 • San Jose • CA • 95158-6303 • 408-979-0661 • 408-979-0621 FAX • 408-322-7325 PAGER
GENERAL AND ENGINEERING CONTRACTOR • HAZARDOUS SUBSTANCE REMOVAL CONTRACTOR • SITE ENVIRONMENTAL ASSESSMENTS

Inspector:	Barney Chan	Date: 02-20-97
Agency:	Alameda County	Time: 11:00am
	Health Department	Permit # 6251
Address:	1131 Harbor Bay Parkway	
	Alameda, California 94502	
Tel.#:	510-567-6700	

Inspector:	Steve Crawford	Date: 02-20-97
Agency:	City of Oakland	Time: 11:00am
	Fire Prevention Bureau	Permit # 1-97
Address:	421 14th Street	
	Oakland, California 94612	
Tel.#:	510-238-3851	

Did inspector grant permission to fill tank/s?	yes
Did inspector specify soil sample locations?	yes
Did inspector specify analysis required?	yes
Tests required:	EPA 8020 BTEX EPA 8015 TPH Gasoline MTBE Organic Lead

Lab name:	EnviroChem Analytical, Inc.
DOHS # :	E-2186
Address :	1725 Little Orchard Street, Suite A San Jose, CA 95125
Telephone #:	408-287-6792

Was additional excavation ordered by inspector?	No
Final excavation dimensions:	14' x 6' x 2.5' deep
Was all apparent contamination removed?	No
Were samples taken from limits of excavation?	Yes
Soil Sample #:	9663-1
Groundwater Sample #:	9663-2, 9663-3
Analysis requested:	TPH Gasoline, BTEX, MTBE, and Organic Lead
Lab name:	EnviroChem Analytical, Inc.

Did Inspector order excavation left open?	no
When was the excavation backfilled? (date)	02-20-97
Backfill material :	Class II baserock
Compaction:	90%
Who was responsible for re-surfacing?	N/A
Area re-surfaced:	N/A

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TANK NUMBER 1

Tank location	:	see attached map.
Tank age	:	more than 30 years old
Tank material	:	steel
Depth to tank top	:	2.5'
Tank dimensions	:	144" x 44" diameter 12 x 3,8"
Tank capacity	:	1,000 gallons
Tank useage	:	gasoline
Residual contents	:	650 gallons
Quantity pumped	:	650 gallons
Dry ice used	:	200 pounds
LEL reading	:	0.8%
Oxygen reading	:	3.0%
Tank coating	:	none
Condition of tank	:	rusty, pitted, several holes noted.
Backfill material	:	native soil
Native soil	:	sand and clay
Water in excavation	:	yes
product piping	:	none
material	:	N/A
Vent piping	:	none
material		N/A
Remote fill	:	none
material	:	N/A
Sample Locations	:	see attached map
# of soil samples	:	(1) Container: 3" brass
# of water samples:		(2) Container: voa
Type of soil	:	sandy clay

Soil Sample #	Depth	Location	Analysis
9663-1	10.0' bgs	west end of tank	TPH Gasoline/BTEX/MTBE/Organic Lead

G-water Smpl #	Depth	Location	Analysis
9663-2	5.0' bgs	east end of tank	TPH Gasoline/BTEX/MTBE/Organic Lead
9663-3	5.0' bgs	west end of tank	TPH Gasoline/BTEX/MTBE/Organic Lead

Odor in samples	:	no
Staining in samples	:	no

How were soil samples obtained: slide-hammer sampling device
How were water samples obtained: bailer

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PROJECT OVERVIEW

On November 30, 1996, Light, Air, and Space Construction (LA&S) a licensed General, Engineering, and Haz Mat Contractor entered into a Contract with Beverly Wirth to remove (1) underground fuel storage tank at 2607 Mandela Parkway, Oakland, California. The Scope of work included the following items:

1. Obtain Tank Removal Permits from the Alameda County Health Department and Oakland Fire Department, notify the BAAQMD, and obtain an EPA number from the State DOHS.
2. Provide for the excavation and removal of the tank.
3. Inspect the tank and piping for signs of leakage.
4. Obtain soil samples at the direction of the Health Inspector. Have the samples analyzed at a State Certified Laboratory.
5. Provide for the proper disposal of the tank and related piping.
6. Backfill the excavation with native or similar material.
7. Preparation and submittal of a Tank Closure Report.

SITE HISTORY AND DESCRIPTION

The tanks were reported to be over 30 years old.. The tanks had not been used for over 20 years, although no date was available for their last useage. The subject property is occupied by a vacant warehouse building.

EXCAVATION AND REMOVAL OF TANK

On Monday, January 13, 1997, an excavation was begun at the location of the tank. The excavation was advanced to a depth of 3.0' below the ground surface (bgs) along two sides of the tank. Groundwater was encountered at a depth of 2.5' below the ground surface. Substantial subsidence of the adjacent excavation sidewalls along both the building and Willow Street was noted. The sandy native soil began flowing into the excavation and an immediate decision was made to discontinue the excavation to prevent a potential failure of the subgrade under both the building and Willow Street.

The client and the regulatory agencies (Alameda County Health Department and Oakland Fire Department) were contacted and made aware of the site conditions. The excavation was immediately backfilled and a re-assessment of the tank removal was undertaken.

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After review of the site conditions by a Certified Engineering Geologist (Christopher M. Palmer, C.E.G. 1262) it was determined that the excavation could proceed only if shoring was placed along the street and the building to prevent subgrade failure. The initial cost estimates for the shoring were in excess of $40,000.00 which was beyond the financial ability of the property owner. We then applied to the regulatory agencies (ACHD and OFD) for a variance to allow the tank to be abandoned-in-place. The variance was approved on February 3, 1997 by Barney Chan of the (ACHD) and Steve Crawford of the (OFD).

At 8:00 am on February 20, 1997, approximately (650) gallons of residual product and water was removed from the tank by Americlean Inc., (see Hazardous Waste Manifest # 96181082). The residual product was transported to Artesian Oil recovery Company in Oakland, California for disposal. At approximately 10:00am, approximately (200)lbs. of dry ice was placed in the tank. The Fire Department Inspector (Steve Crawford) arrived at 11:00am and LEL and Oxygen readings were obtained by David Guthridge using a Gas-Techtor instrument. The LEL reading for the tank was 0.8% and the Oxygen reading was 3.0%.

The tank was then filled with approximately (6) cubic yards of a cement slurry mix (see RMC Lonestar Ticket # 3244823), while the Health Department Inspector (Barney Chan) witnessed the work.

SAMPLING PROCEDURE

On February 20, 1997, LA&S recovered (1) soil sample (9663-1) from approximately 10.0' below the ground surface at the west end of the tank, and (2) groundwater samples (9663-2 and 9663-3) from approximately 5.0' below the ground surface at the east and west ends of the tank.

Soil sample #9663-1 was recovered using a hand auger and slide-hammer sampling device. A clean brass 2" x 3" brass tube was driven into the soil with the slide-hammer until there was no observable head space in the tube. At this time the ends of the tube were sealed with teflon sheeting and a plastic cap. The tube was then labeled and the information recorded on a Chain-of-Custody, it was then placed on crushed ice in an ice chest for transport to EnviroChem Analytical, Inc. under a legal Chain-of-Custody for analysis.

Barney Chan of the Alameda County Health Department was present to witness the sampling event.

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LABORATORY ANALYSIS OF SOIL SAMPLES

The lab was instructed to run the following EPA tests on all of the samples:

TPH Gasoline
BTEX
MTBE
Organic Lead

The laboratory analysis result sheet is an attachment to this report.

The soil and groundwater sample results are presented in Table 1 below:

TABLE 1

	Soil 9663-1	Water 9663-2	Water 9663-3	Detection Limit
Date sampled	02-20-97	02-20-97	02-20-97	Soil/water
TPH Gasoline	N.D.	<R.L.	570 ppb	1.0 ppm/50 ppb
Benzene	N.D.	<R.L.	<R.L.	0.005 ppm/0.50 ppb
Toluene	N.D.	0.61 ppb	3.8 ppb	0.005 ppm/o.50 ppb
Ethylbenzene	0.0083ppm	<R.L.	2.2 ppb	0.005 ppm/o.50 ppb
Xylene	N.D.	<R.L.	12 ppb	0.005 ppm/0.50 ppb
MTBE	N.D.	<R.L.	<R.L.	0.05 ppm/5.0 ppb
Organic Lead	N.D.	N.D.	Not tested	1.0 ppm/ 0.4 ppb
Date received	02-21-97	02-21-97	02-21-97	
Date analyzed	02-25-97	02-25-97	02-25-97	

N.D. = Non-detect
<R.L. = Lower than the Reporting Limit

BACKFILL OF THE EXCAVATION

The excavation was backfilled on February 20, 1997 with imported Class II material. The fill material was placed in lifts and mechanically compacted to a relative 90%.

The area was not re-surfaced.

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CONCLUSIONS AND RECOMMENDATIONS

Based on the field observations presented and the supporting soil and groundwater sample analysis, it is our opinion that the subject site has been minimally affected by petroleum hydrocarbons previously contained in the former underground storage tank. The low levels of residual contaminants noted in the sample results will continue to naturally degrade and eventually disappear. It is our recommendation that no further work be required at this site and the site should be considered closed by the regulatory agencies.

LIMITATIONS

The conclusions and professional opinions presented herein were developed in accordance with generally accepted practice as outlined in the guidelines of the California Regional Water Control Board for addressing fuel leaks from underground tanks. The chemical analysis results are based on data collected at the sampling locations only, therefore LA&S cannot have complete knowledge of the underlying conditions. Conditions at the project site will change with time due to natural processes or the works of man. Accordingly, the findings of this report apply to the present conditions only; the opinions expressed herein are subject to revisions in light of new information, and no warranties are expressed or implied.

Light, Air, and Space Construction is pleased to have been of service to you on this project. to comply with State and Local Environmental laws, LA&S recommends a copy of this report be forwarded to the following governmental agencies:

1. Alameda County, Department of Environmental Health
   1131 Harbor Bay Parkway
   Alameda, California 94502

   Attn: Barney Chan

Respectfully submitted,
LIGHT, AIR, and SPACE CONSTRUCTION

David B. Guthridge

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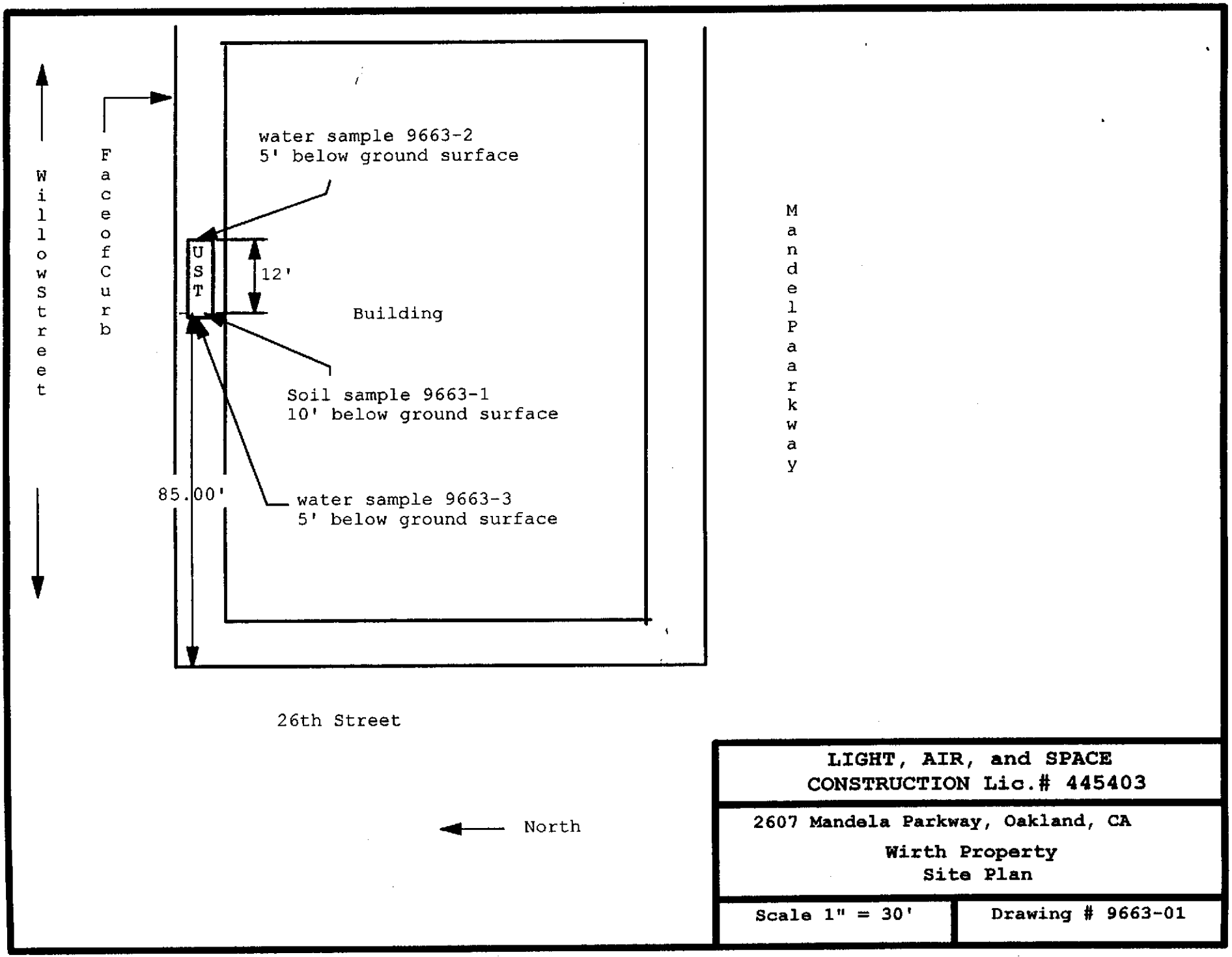

LIGHT, AIR, and SPACE CONSTRUCTION Lic.# 445403	
2607 Mandela Parkway, Oakland, CA Wirth Property Site Plan	
Scale 1" = 30'	Drawing # 9663-01

1-15-97: Dave Outhridge. Lis sandy to max depth (30")

Found gw at 30" bgs. Also soil has stain + HC odor. Will shore it. on all 4 sides.

Top of UST 4', btm is 8 bgs.

UST full - water (?) w/ gas odor.

Wants to pump out UST, dewater pit.

Told him to analyze soil samples for moisture content.

Wants to backfill asap. Can't overex below bldg or st anyway.

Shoring will cost ~$6-7,000. So

Footings on bldgs are only 2' deep.

PG&E line is ~2' fm edge of UST.

Told him to call OFD re close in place

1/29 spw/ D. Outhridge.

requested: 1) WP for soil & GW sples

2) ltr from reg. professional stating removal of tank could cause structural or safety hazards

1-3-97 plan review.

. Need ① updated Cert. of Ins. for gen. liablt

② updated H+S refresher

③ subconts? No workmans comp Subs a backhoe operator, + will send me copy of his workman's comp. But he is an owner/operat

2/20/97, 1-500gal Tank closed in place, BC

#6251

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A

COMPLETE THIS FORM FOR EACH FACILITY/SITE

MARK ONLY ONE ITEM: ☐ 1 NEW PERMIT ☐ 2 INTERIM PERMIT ☐ 3 RENEWAL PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY SITE CLOSURE ☒ 7 PERMANENTLY CLOSED SITE

I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)

DBA OR FACILITY NAME: WIRTH PROPERTY	NAME OF OPERATOR: BEVERLY WIRTH
ADDRESS: 2607 MANDELA PARKWAY	NEAREST CROSS STREET: 24TH STREET; PARCEL # (OPTIONAL):
CITY NAME: OAKLAND 94607	STATE: CA; ZIP CODE: ; SITE PHONE # WITH AREA CODE: NONE

✔ BOX TO INDICATE: ☐ CORPORATION ☐ INDIVIDUAL ☐ PARTNERSHIP ☐ LOCAL-AGENCY DISTRICTS ☐ COUNTY-AGENCY* ☐ STATE-AGENCY* ☐ FEDERAL-AGENCY*

* If owner of UST is a public agency, complete the following: name of supervisor of division, section or office which operates the UST

TYPE OF BUSINESS: ☐ 1 GAS STATION ☐ 2 DISTRIBUTOR ☐ 3 FARM ☐ 4 PROCESSOR ☒ 5 OTHER

☐ ✔ IF INDIAN RESERVATION OR TRUST LANDS

OF TANKS AT SITE: ~~1~~ 0

E. P. A. I. D. # (optional): CAC 000 735536

EMERGENCY CONTACT PERSON (PRIMARY)		EMERGENCY CONTACT PERSON (SECONDARY) - optional	
DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE	DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE
GUTHRIDGE, DAVID	408 979 0661		
NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE	NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)

NAME: BEVERLY WIRTH	CARE OF ADDRESS INFORMATION:
MAILING OR STREET ADDRESS: 9 WESTMINISTER PLACE	✔ box to indicate: ☒ INDIVIDUAL ☐ LOCAL-AGENCY ☐ STATE-AGENCY ☐ CORPORATION ☐ PARTNERSHIP ☐ COUNTY-AGENCY ☐ FEDERAL-AGENCY
CITY NAME: LAFAYETTE	STATE: CA; ZIP CODE: 95495; PHONE # WITH AREA CODE: 510 934 6956

III. TANK OWNER INFORMATION - (MUST BE COMPLETED)

NAME OF OWNER: BEVERLY WIRTH	CARE OF ADDRESS INFORMATION:
MAILING OR STREET ADDRESS: 9 WESTMINSTER PLACE	✔ box to indicate: ☒ INDIVIDUAL ☐ LOCAL-AGENCY ☐ STATE-AGENCY ☐ CORPORATION ☐ PARTNERSHIP ☐ COUNTY-AGENCY ☐ FEDERAL-AGENCY
CITY NAME: LAFAYETTE	STATE: CA; ZIP CODE: 95495; PHONE # WITH AREA CODE: 510 934 6956

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.

TY (TK) HQ 4 4 - ☐☐☐☐☐☐

V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) – IDENTIFY THE METHOD(S) USED

✔ box to indicate: ☒ 1 SELF-INSURED ☐ 2 GUARANTEE ☐ 3 INSURANCE ☐ 4 SURETY BOND ☐ 5 LETTER OF CREDIT ☐ 6 EXEMPTION ☐ 7 STATE FUND ☐ 8 STATE FUND & CHIEF FINANCIAL OFFICER LETTER ☐ 9 STATE FUND & CERTIFICATE OF DEPOSIT ☐ 10 LOCAL GOVT. MECHANISM ☐ 99 OTHER

VI. LEGAL NOTIFICATION AND BILLING ADDRESS

Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING: I. ☐ II. ☒ III. ☐

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE)	TANK OWNER'S TITLE	DATE MONTH/DAY/YEAR
DAVID GUTHRIDGE [signature] agent for owner		12-13-96

LOCAL AGENCY USE ONLY

COUNTY #	JURISDICTION #	FACILITY #
01	000	006251

LOCATION CODE - *OPTIONAL*	CENSUS TRACT # - *OPTIONAL*	SUPVISOR - DISTRICT CODE - *OPTIONAL*

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.

OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

FORM A (6-95)

2/20/97 BC

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B

COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY ONE ITEM: ☐ 1 NEW PERMIT ☐ 2 INTERIM PERMIT ☐ 3 RENEWAL PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY TANK CLOSURE ☒ 7 PERMANENTLY CLOSED ON SITE ☒ 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED:

I. TANK DESCRIPTION

COMPLETE ALL ITEMS – SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. # 1	B. MANUFACTURED BY: UNKNOWN
C. DATE INSTALLED (MO/DAY/YEAR) UNKNOWN	D. TANK CAPACITY IN GALLONS: ~~1000~~ 750

II. TANK CONTENTS

IF A-1 IS MARKED, COMPLETE ITEM C.

A. ☒ 1 MOTOR VEHICLE FUEL ☐ 2 PETROLEUM ☐ 3 CHEMICAL PRODUCT ☐ 4 OIL ☐ 80 EMPTY ☐ 95 UNKNOWN

B. ☒ 1 PRODUCT ☐ 2 WASTE

C. ☐ 1a REGULAR UNLEADED ☐ 1b PREMIUM UNLEADED ☐ 1c MIDGRADE UNLEADED ☒ 2 LEADED ☐ 3 DIESEL ☐ 4 GASAHOL ☐ 5 JET FUEL ☐ 6 AVIATION GAS ☐ 7 METHANOL ☐ 8 M85 ☐ 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED C. A. S. #:

III. TANK CONSTRUCTION

MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM: ☐ 1 DOUBLE WALL ☒ 2 SINGLE WALL ☐ 3 SINGLE WALL WITH EXTERIOR LINER ☐ 4 SINGLE WALL IN A VAULT ☐ 5 INTERNAL BLADDER SYSTEM ☐ 95 UNKNOWN ☐ 99 OTHER

B. TANK MATERIAL (Primary Tank): ☒ 1 BARE STEEL ☐ 2 STAINLESS STEEL ☐ 3 FIBERGLASS ☐ 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC ☐ 5 CONCRETE ☐ 6 POLYVINYL CHLORIDE ☐ 7 ALUMINUM ☐ 8 100% METHANOL COMPATIBLE W/FRP ☐ 9 BRONZE ☐ 10 GALVANIZED STEEL ☐ 95 UNKNOWN ☐ 99 OTHER

C. INTERIOR LINING OR COATING: ☐ 1 RUBBER LINED ☐ 2 ALKYD LINING ☐ 3 EPOXY LINING ☐ 4 PHENOLIC LINING ☐ 5 GLASS LINING ☒ 6 UNLINED ☐ 95 UNKNOWN ☐ 99 OTHER

IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___

D. EXTERIOR CORROSION PROTECTION: ☐ 1 POLYETHYLENE WRAP ☐ 2 COATING ☐ 3 VINYL WRAP ☐ 4 FIBERGLASS REINFORCED PLASTIC ☐ 5 CATHODIC PROTECTION ☒ 91 NONE ☐ 95 UNKNOWN ☐ 99 OTHER

E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) NONE DROP TUBE YES ___ NO ☒ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) NONE STRIKER PLATE YES ___ NO ☒ DISPENSER CONTAINMENT YES ___ NO ☒

IV. PIPING INFORMATION

CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE: A (U) 1 SUCTION A U 2 PRESSURE A U 3 GRAVITY A U 4 FLEXIBLE PIPING A U 99 OTHER

B. CONSTRUCTION: A (U) 1 SINGLE WALL A U 2 DOUBLE WALL A U 3 LINED TRENCH A U 95 UNKNOWN A U 99 OTHER

C. MATERIAL AND CORROSION PROTECTION: A (U) 1 BARE STEEL A U 2 STAINLESS STEEL A U 3 POLYVINYL CHLORIDE (PVC) A U 4 FIBERGLASS PIPE A U 5 ALUMINUM A U 6 CONCRETE A U 7 STEEL W/ COATING A U 8 100% METHANOL COMPATIBLE W/FRP A U 9 GALVANIZED STEEL A U 10 CATHODIC PROTECTION A U 95 UNKNOWN A U 99 OTHER

D. LEAK DETECTION: ☐ 1 MECHANICAL LINE LEAK DETECTOR ☐ 2 LINE TIGHTNESS TESTING ☐ 3 CONTINUOUS INTERSTITIAL MONITORING ☐ 4 ELECTRONIC LINE LEAK DETECTOR ☐ 5 AUTOMATIC PUMP SHUTDOWN ☒ 99 OTHER NONE

V. TANK LEAK DETECTION

☐ 1 VISUAL CHECK ☐ 2 MANUAL INVENTORY RECONCILIATION ☐ 3 VADOZE MONITORING ☐ 4 AUTOMATIC TANK GAUGING ☐ 5 GROUND WATER MONITORING ☐ 6 ANNUAL TANK TESTING ☐ 7 CONTINUOUS INTERSTITIAL MONITORING ☐ 8 SIR ☐ 9 WEEKLY MANUAL TANK GAUGING ☐ 10 MONTHLY TANK TESTING ☒ 95 UNKNOWN ☐ 99 OTHER

VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)

1. ESTIMATED DATE LAST USED (MO/DAY/YR)	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING	3. WAS TANK FILLED WITH INERT MATERIAL?
UNKNOWN	0 GALLONS	YES ☐ NO ☒

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE)	DATE
DAVID GUTRIDGE agent for owner	12/13/96

LOCAL AGENCY USE ONLY

THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.#	COUNTY #	JURISDICTION #	FACILITY #	TANK #
	01	000	006251	000001

PERMIT NUMBER	PERMIT APPROVED BY/DATE	PERMIT EXPIRATION DATE

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. THIS FORM SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS


LIGHTAIR & SPACE CONSTRUCTION
AND ENVIRONMENTAL SERVICES COMPANY
P.O. BOX 26303
SAN JOSE, CA 95159-6303
(408) 979-0661
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DAVE GUTHRIDGE
PRINCIPAL
License Number 445403
R.E.A. Number 04072
H.G. 248 CEG 1252
Gen. and Engr. Contractor
Hazardous Substance
Removal Contractor
Site Environmental Assessments
Certified Engineering Geologist
Registered Hydrogeologist

subtronic corp

Complete Professionals for Utilities.
Location, Mapping, Inspection & Leaks.

2099-C Arnold Industrial Way
Concord, California 94520
Telephone (510) 686-3747
FAX No. (510) 686-5281

John Love
Ceres Environmental Inc.
5040 Commercial Circle, Suite F
Concord, CA 94520

GEOPHYSICAL SUBSURFACE INVESTIGATION
for
CERES, INC.
at
2855 Mandella Parkway
Oakland, California

Subject
Geophysical subsurface investigation for underground storage tanks (USTs).

Site Location and Description
On November 4, 1998, Subtronic conducted a subsurface geophysical survey in the street in front of the concrete/paved parking area of 2855 Mandella Parkway, in Oakland, California.

Geophysical Equipment
The specialized equipment used at the site includes GPR (ground penetrating radar), TW-6 M-Scope, a magnetic locator (the Schonstedt GA-72CV) and the 858G Magmapper (magnetometer).

Ground Penetrating Radar (GPR)
A ground penetrating radar system graphically records subsurface structures. Both geological and manmade structures are recorded by the introduction of a pulse of electromagnetic energy into the ground. Reflected pulses received by the antenna are then processed for measurable contrast in electrical properties. The result is a visual pseudo-cross-sectional profile.

Primary applications of the GPR are detecting UST's, buried drums, previously excavated areas, i.e., UST excavations, and detecting metallic and non-metallic utilities.

The GPR depth penetration is severely limited by clay-rich soil. Radar waves penetrate deeper in sandy and gravely soils.

Magnetic Locator
The Schonstedt Instrument Company GA-72CV is a hand-held magnetic locator designed to detect magnetic objects made of iron and steel buried up to a depth of eight feet below the surface.

Primary applications of the magnetic locator are locating UST's, buried drums and underground pipes.

TW-6 M-Scope
The Fisher TW-6 M-Scope is a split box inductive locator and metal detector mounted on a four foot rod. The split box locator can detect metal lines "inductively". The M-Scope is also used to detect buried metallic objects such as manhole covers, underground storage tanks, etc...

858G Magmapper
The 858G Magmapper is a magnetometer which records magnetic readings as fast a 10 per second. The 858G uses the cesium vapor laser technology to accomplish this. Another advantage besides the high number of readings is that magnetometer still provides reliable readings in an area with a lot of metal.

Survey Methodology

The site was scanned with the magnetic locator for possible buried UST's along traverses spaced approximately five feet apart. Magnetometer data from the 858G Magmapper was visually checked on a display for anomalies along the same grid. Anamolies detected by either instrument are spray painted on the conrete. Special note is taken to anomalies which cannot be associated to a visible cultural feature. GPR scans were collected along profiles spaced ten feet apart to detect either USTs or UST excavations.

Results of the Subsurface Investigation

Both Willow Street and the sidewalk on the west side of Willow Street were scanned with magnetic locator and the 858 Magmapper. No large UST type magnetic anomalies were detected in Willow Street. Rebar was detected in the driveway portion of the sidewalk. Note, the magnetic locator was negatively influenced by the steel fence enclosing the parking lot.

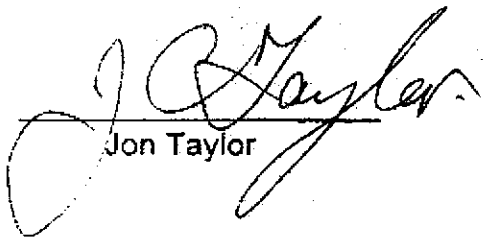
GPR scans were collected both in the street and in the sidewalk to identify a UST or a possible UST excavation. No UST type excavation was interpreted from the GPR records

Limitations

The subsurface geology, object size and composition, burial depth, and surface interference are all major factors as to whether the object will be detected by surface geophysical methods. These are all factors beyond Subtronic's control. The results of geophysical surveys may not represent unique solutions. Apparently similar anomalies may be created by different subsurface phenomena.

The limits of discernment of this survey are estimated to be objects less than two cubic feet, or fifteen gallons, objects buried greater than ten feet and areas within ten feet of metal fences, buildings and vehicles.

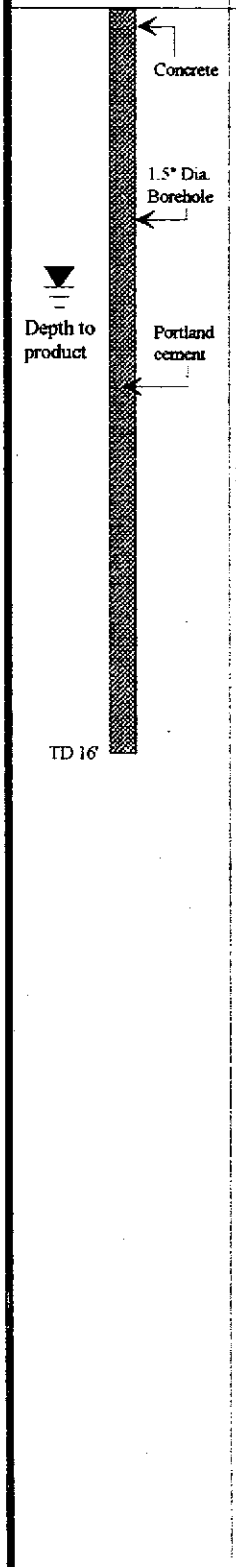
Report Prepared By: Pierre S. Armand, MS
License No. GP 1021

Report Checked By: 
Jon Taylor

CERES ASSOCIATES

Logged by: John Love RG 6315

HOLE NO.	PROJECT NAME:	PROJECT ADDRESS:	DATE:	SHEET 1
SB-8	Commercial Property	2853-2863 Mandela Parkway, Oakland, CA	October 28, 1998	OF 1

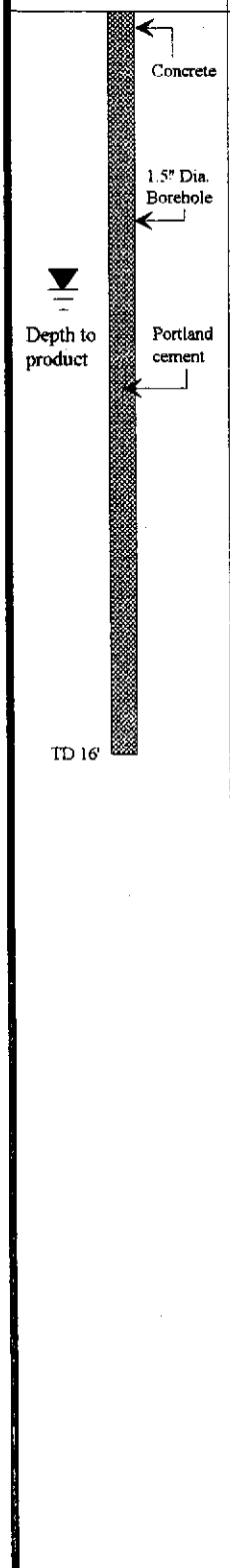


USCS	LOG OF MATERIAL
af	Asphalt and baserock (includes gravel, sand, silt and clay)
SP	**Sand:** variegated (brownish tint); firm; fine sand; no odor.
CL	**Silty Clay:** Dark greenish gray (5GY 4/1); soft; low plasticity (sticky); some orgnics and interbedded sand (SP) lenses up to 2" thick; very moist to saturated. **8'** - Petroleum odor. **12'-16'** - Very little recovery. Noticable product in sample tube.

CERES ASSOCIATES

Logged by: John Love RG 6315

HOLE NO.	PROJECT NAME:	PROJECT ADDRESS:	DATE:	SHEET 1
SB-9	Commercial Property	2853-2863 Mandela Parkway, Oakland, CA	October 28, 1998	OF 1

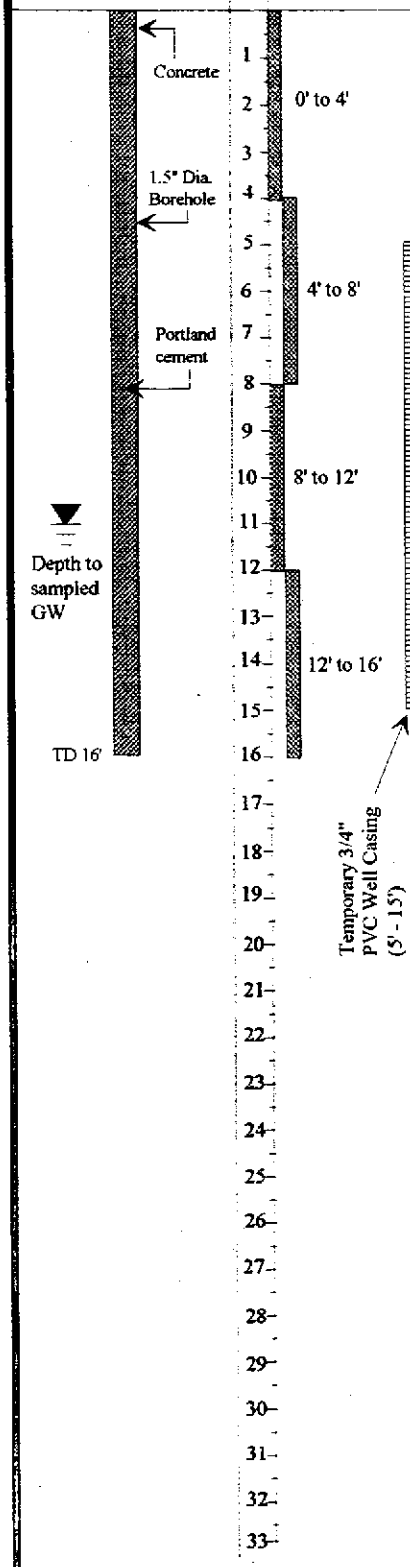


USCS	LOG OF MATERIAL
af	Asphalt and baserock (includes gravel, sand, silt and clay)
SP	**Sand:** variegated (brownish tint); firm; fine sand; no odor.
CL	**Silty Clay:** Dark greenish gray (5GY 4/1); soft; low plasticity (sticky); some orgnics and interbedded sand (SP) lenses up to 2" thick; very moist to saturated.
	9' - Petroleum odor.

CERES ASSOCIATES

Logged by: John Love RG 6315

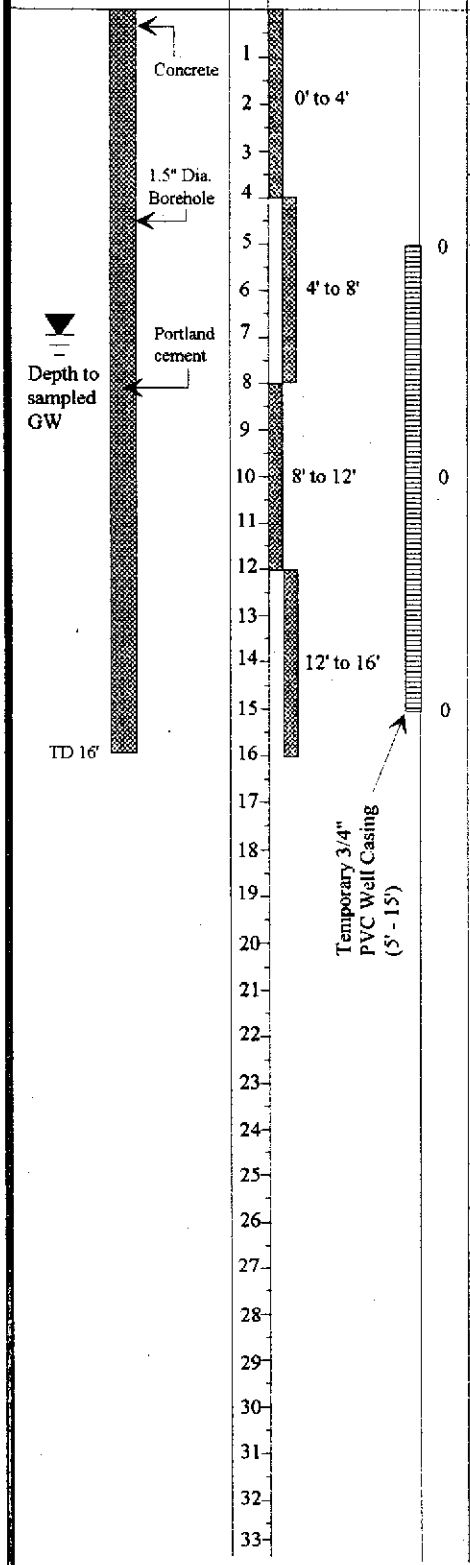
HOLE NO.	PROJECT NAME:	PROJECT ADDRESS:	DATE:	SHEET
SB-10	Commercial Property	2853-2863 Mandela Parkway, Oakland, CA	October 28, 1998	1 OF 1



CERES ASSOCIATES

Logged by: John Love RG 6315

HOLE NO.	PROJECT NAME:	PROJECT ADDRESS:	DATE:	SHEET 1
SB-11	Commercial Property	2853-2863 Mandela Parkway, Oakland, CA	October 28, 1998	OF 1

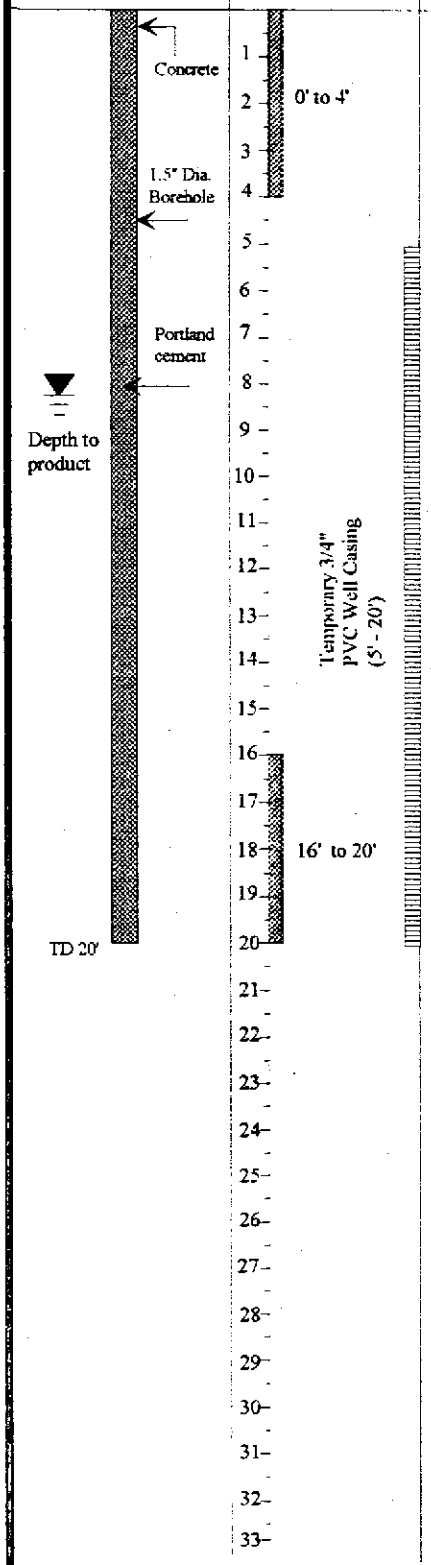


USCS	LOG OF MATERIAL
af	Asphalt and baserock (includes gravel, sand, silt and clay)
CL	**Silty Clay:** Greenish gray (5GY 5/1) with light olive brown (2.5Y 5/6) and black blebs; firm; medium plasticity; moist; slight petroleum odor.
SP	**Sand:** variegated; firm; fine sand; moist to very moist; slight petroleum odor.
CL	**Silty Clay:** Dark greenish gray (5GY 4/1); soft; low plasticity (sticky); some orgnics and interbedded sand (SP) lenses up to 2" thick; very moist; slight petroleum odor..
	Sandy Clay: Gray (5Y 5/1) to olive (5Y 5/3); stiff; fine to coarse sand; moist; no odor.

CERES ASSOCIATES

Logged by: John Love RG 6315

HOLE NO.	PROJECT NAME:	PROJECT ADDRESS:	DATE:	SHEET
SB-12	Commercial Property	2853-2863 Mandela Parkway, Oakland, CA	October 28, 1998	1 OF 1



DEPTH	Sampler Interval	PID Reading	USCS	LOG OF MATERIAL
1–4	0' to 4'		af	Concrete (4" thick) and baserock (includes gravel, sand, silt and clay)
5–15				**No sample recovery. Sample tube was driven from 4 to 16 feet bgs.**
16–20	16' to 20'		CL	**Silty Clay:** Dark greenish gray (5GY 4/1); soft; low plasticity (sticky); very moist; slight petroleum odor.
21–33				

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Ceres Associates 5040 Commercial Circle, Ste F Concord, CA 94520	Client Project ID: #CA268-2	Date Sampled: 10/28-10/29/98
		Date Received: 10/29/98
	Client Contact: John Love	Date Extracted: 10/29/98
	Client P.O:	Date Analyzed: 10/29/98

11/05/98

Dear John:

Enclosed are:

1). the results of **14** samples from your **#CA268-2** project,

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director

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Ceres Associates	Client Project ID: #CA268-2	Date Sampled: 10/28-10/29/98
5040 Commercial Circle, Ste F		Date Received: 10/29/98
Concord, CA 94520	Client Contact: John Love	Date Extracted: 10/29/98
	Client P.O:	Date Analyzed: 10/29-10/30/98

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	MTBE	Benzene	Toluene	Ethylben-zene	Xylenes	% Recovery Surrogate
97891	SB-8 (5')	S	2.6,a	ND	0.92	0.010	0.026	0.063	101
97892	SB-8 (10')	S	7400,a	ND<100	83	270	110	470	---#
97893	SB-9 (5')	S	1.1,a	ND	0.006	0.034	0.017	0.082	105
97894	SB-9 (10')	S	49,a	ND>0.30	0.31	1.7	0.84	3.5	---#
97895	SB-9 (15')	S	4700,a	ND<70	32	180	80	320	---#
97896	SB-10 (5')	S	ND	ND	ND	ND	ND	ND	103
97897	SB-10 (10')	S	ND	ND	0.005	0.006	ND	0.017	104
97898	SB-10 (15')	S	580,a	ND<10	12	29	12	52	118#
97899	SB-10	W	98,000,a,h	ND<200	8400	10,000	2800	13,000	103
97900	SB-11 (5')	S	11,a	ND	0.34	0.016	0.35	0.29	#
97901	SB-11 (10')	S	8.0,a	ND	0.39	0.026	0.057	0.12	116#
97902	SB-11 (15')	S	ND	ND	ND	ND	ND	ND	101
97903	SB-12 (17')	S	26,a	ND<0.50	0.33	1.5	0.52	2.1	---#
97904	SB-11	W	780,a	ND<1	81	1.3	4.9	18	#
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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Ceres Associates 5040 Commercial Circle, Ste F Concord, CA 94520	Client Project ID: #CA268-2	Date Sampled: 10/28-10/29/98
		Date Received: 10/29/98
	Client Contact: John Love	Date Extracted: 11/02/98
	Client P.O:	Date Analyzed: 11/03/98

Lead*

EPA analytical methods 6010/200.7, 239.2+

Lab ID	Client ID	Matrix	Extraction °	Lead*	% Recovery Surrogate
97892/895	SB-8(10')/ 9(15')	S	TTLC	9.8	102
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		S	TTLC	3.0 mg/kg	
		W	TTLC	0.005 mg/L	
		---	STLC,TCLP	0.2 mg/L	

* soil and sludge samples are reported in mg/kg, wipe samples in ug/wipe, and water samples and all STLC / SPLP / TCLP extracts in mg/L

+Lead is analysed using EPA method 6010 (ICP)for soils, sludges, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

° EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC - CA Title 22

surrogate diluted out of range; N/A means surrogate not applicable to this analysis

& reporting limit raised due matrix interference

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 10/29/98 Matrix: WATER

Analyte	Concentration (mg/L) Sample (#97698)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.0	90.2	94.2	100.0	90.2	94.2	4.4
Benzene	0.0	10.0	9.6	10.0	100.0	96.0	4.1
Toluene	0.0	10.3	9.8	10.0	103.0	98.0	5.0
Ethyl Benzene	0.0	10.0	10.0	10.0	100.0	100.0	0.0
Xylenes	0.0	30.4	30.2	30.0	101.3	100.7	0.7
TPH(diesel)	0.0	171	170	150	114	114	0.5
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 10/30/98-10/31/98 Matrix: WATER

Analyte	Concentration (mg/L) Sample (#97698)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.0	85.3	89.5	100.0	85.3	89.5	4.8
Benzene	0.0	9.8	9.0	10.0	98.0	90.0	8.5
Toluene	0.0	10.1	9.2	10.0	101.0	92.0	9.3
Ethyl Benzene	0.0	10.2	9.4	10.0	102.0	94.0	8.2
Xylenes	0.0	30.7	28.4	30.0	102.3	94.7	7.8
TPH(diesel)	0.0	172	166	150	114	111	3.0
TRPH (oil & grease)	0	22800	22700	23700	96	96	0.4

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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QC REPORT FOR HYDROCARBON ANALYSES

Date: 10/29/98 Matrix: SOIL

Analyte	Concentration (mg/kg) Sample (#95609)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.000	2.243	2.153	2.03	110	106	4.1
Benzene	0.000	0.212	0.210	0.2	106	105	0.9
Toluene	0.000	0.222	0.216	0.2	111	108	2.7
Ethylbenzene	0.000	0.214	0.210	0.2	107	105	1.9
Xylenes	0.000	0.650	0.626	0.6	108	104	3.8
TPH(diesel)	0	344	344	300	115	115	0.1
TRPH (oil and grease)	0.0	22.2	22.7	20.8	107	109	2.2

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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QC REPORT FOR HYDROCARBON ANALYSES

Date: 10/30/98-10/31/98 Matrix: SOIL

Analyte	Concentration (mg/kg) Sample (#95609)	MS	MSD	Amount Spiked	% Recovery MS	MSD	RPD
TPH (gas)	0.000	2.297	2.108	2.03	113	104	8.6
Benzene	0.000	0.196	0.196	0.2	98	98	0.0
Toluene	0.000	0.200	0.202	0.2	100	101	1.0
Ethylbenzene	0.000	0.196	0.192	0.2	98	96	2.1
Xylenes	0.000	0.576	0.582	0.6	96	97	1.0
TPH(diesel)	0	339	342	300	113	114	0.8
TRPH (oil and grease)	0.0	22.5	22.7	20.8	108	109	0.9

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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QC REPORT FOR METALS

Date: 11/02/98-11/03/98 Matrix: SOIL

Extraction: TTLC

Analyte	Concentration (mg/kg,mg/L)			Amount	% Recovery		RPD
	Sample	MS	MSD	Spiked	MS	MSD	
Arsenic	0.0	5.4	5.3	5.0	109	105	3.2
Selenium	0.0	5.2	5.3	5.0	103	105	2.3
Molybdenum	0.0	5.1	4.9	5.0	102	99	2.8
Silver	0.0	0.5	0.5	0.5	106	103	3.0
Thallium	0.0	5.0	4.7	5.0	99	94	5.1
Barium	0.0	4.8	4.6	5.0	96	92	4.9
Nickel	0.0	5.1	5.0	5.0	102	101	0.7
Chromium	0.0	5.3	5.1	5.0	105	102	3.1
Vanadium	0.0	4.9	4.8	5.0	98	95	3.2
Beryllium	0.0	5.7	5.5	5.0	114	109	4.0
Zinc	0.0	5.0	4.8	5.0	100	96	3.8
Copper	0.0	5.0	4.7	5.0	99	94	5.2
Antimony	0.0	5.0	4.7	5.0	100	95	5.7
Lead	0.0	5.2	5.0	5.0	104	99	4.0
Cadmium	0.0	5.5	5.4	5.0	111	108	3.1
Cobalt	0.0	5.2	5.0	5.0	105	101	3.8
Mercury	0.000	0.230	0.240	0.25	92	96	4.3

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

CERES Associates
~~ENVIRONMENTAL~~
11823 East Slauson Avenue, Suite 16
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~~2221 Commerce Avenue, Suite D1~~
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Office (510) 825-4466
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3530 Camino del Rio North
Suite 107
San Diego, CA 92108
Office (619) 584-3555
Fax (619) 584-2105 ☐

CHAIN OF CUSTODY

ICE/t° ✓ GOOD CONDITION ✓ HEAD SPACE ABSENT ✓ PRESERVATION ✓ APPROPRIATE CONTAINERS ✓

VOAS | O&G | METALS | OTHER

Page 1 of 2

CERES Project CA268-2 Purchase Order ______

Laboratory: McCampbell

Send Results to: John Love

Sampler's Signature [signature]

Attention ______

48 HR TAT

SAMPLE	Sample Collection Date/Time	MATRIX		TPH-g/BTEX/MTBE		TOTAL Pb 1/2 Sday	Preservative (yes/no)	Sample Condition (Lab)	COMMENTS
SB-8 (5')	10/28/98 8:30	Soil		X					97891
SB-8 (10')	8:35			X		Comp 2:1 X			97892
SB-9 (5')	9:10			X					97893
SB-9 (10')	9:15			X					97894
SB-9 (15')	9:25			X		Comp 2:1 X			97895
SB-10 (5')	10:25			X					97896
SB-10 (10')	10:35			X					97897
SB-10 (15')	10:40			X					97898
x2 SB-10	10:55	H_2O		X			Y	preserved w/HCl	97899
SB-11 (5')	12:15	Soil		X					97900
SB-11 (10')	12:25			X					97901
SB-11 (15')	12:30			X					97902
SB-12 (17')	14:30			X					97903

Relinquished by: [signature] of CERES Environmental Date / Time 10/29/98 / ____

Received by: [signature] of ______ Date / Time 10/27 / 1240

Relinquished by: ______ of ______ Date / Time ____ / ____

Received by: ______ of ______ Date / Time ____ / ____

Relinquished by: ______ of ______ Date / Time ____ / ____

Received by: ______ of ______ Date / Time ____ / ____

RETURN WHITE COPY TO CERES WITH FINAL LAB REPORT.
Yellow copy is for laboratory. Pink copy is to remain with CERES at sample pickup.

12091

CERES Associates
~~ENVIRONMENTAL~~
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CHAIN OF CUSTODY

CERES Project CA268-2 Purchase Order _____

Send Results to: John Love

Sampler's Signature _____

Laboratory: McCampbell

Attention _____

SAMPLE	Sample Collection Date/ Time	MATRIX		TPH-G / BTEX / MTBE																	Preservative (yes/no)	Sample Condition (Lab)	COMMENTS
12 SB-11	10/29/98 10:5	H_2O		X																	Y		preserved w/ HCl

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATION APPROPRIATE ✓
CONTAINERS ✓

VOAs ✓ | O&G | METALS | OTHER

Relinquished by: _____ of CERES Environmental Date / Time 10/29/98 / ___

Received by: Dina A. Butler of _____ Date / Time 10/29 12:40

Relinquished by: _____ of _____ Date / Time ___ / ___

Received by: _____ of _____ Date / Time ___ / ___

Relinquished by: _____ of _____ Date / Time ___ / ___

Received by: _____ of _____ Date / Time / ___

RETURN WHITE COPY TO CERES WITH FINAL LAB REPORT.
Yellow copy is for laboratory. Pink copy is to remain with CERES at sample pickup.