A Report Prepared for:

WELLS FARGO BANK, N.A. 525 Market Street, 18th Floor San Francisco, California 94105

UNDERGROUND MINERAL SPIRITS
TANK CLOSURE REPORT
BILL COX CADILLAC
230 BAY STREET
OAKLAND, CALIFORNIA

November 13, 1992

By:

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167.02.001

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1.0 INTRODUCTION

This report documents the removal and closure of an underground mineral spirits tank at the Bill Cox Cadillac automobile dealership in Oakland, California. PES Environmental, Inc. (PES) has prepared this report to document the tank removal and closure, and to comply with reporting requirements of the Alameda County Department of Environmental Health, Hazardous Materials Division (ACDEH), which is the lead local agency responsible for implementing the California Underground Storage Tank program. PES was retained by Wells Fargo Bank, N.A. (Wells Fargo), and Hanson, Bridgett, Marcus, Vlahos and Rudy, legal counsel to Wells Fargo. Wells Fargo is Trustee for the Harold W. Shepard Trust, which is the current owner of the subject property.

1.1 Site Description

The subject property, which consists of slightly less than 2 acres and is shown on the location map (Plate 1), is bounded by Harrison Street to the northwest, Bay Street to the southwest and Vernon Street to the southeast. The northeastern site boundary abuts a steep embankment that is partially supported by a retaining wall. Single- and multi-unit residential buildings are located on the hillside above the site. The property contains a single large building, constructed some time prior to 1903, that houses automobile sales and service facilities (Plate 2). The remainder of the site consists of two paved areas used for parking new cars and automobiles awaiting service.

1.2 Background Information

The subject tank was located beneath the sidewalk adjacent to Harrison Street, within an access driveway leading to the service area inside the dealership. The sidewalk slopes slightly downward to the southwest, parallel to Harrison Street. There appears to be no dispenser pump associated with this tank remaining at the site. The tank was apparently discovered by Spectrum Environmental Subsurface Investigations (Spectrum) in December 1989 during a ground penetrating radar geophysical survey of the site performed for Groundwater Technology, Inc. (GTI, 1990) and Wells Fargo. The tank fill riser was located in a steel vault set in the sidewalk. The bottom of the tank was measured at about 7.5 feet below ground surface (bgs). The tank vent pipe riser and a second, unknown vent pipe were attached to the building wall column adjacent to the tank (refer to Plate 3).

At the time of its 1989 discovery, the subject tank was suspected of having a capacity of 1,200 gallons. Upon removal, the tank has been shown to have a capacity of approximately 1,050 gallons. GTI observed that the tank contained approximately four inches of water and an additional four inches of hydrocarbon product floating on the water. A sample of the product was collected by GTI and tested for total petroleum hydrocarbons (TPH) by EPA Test Method 5030/8015. The results indicated the product was 100% mineral spirits. The sample was also analyzed for volatile organic compounds (VOCs) using EPA Test Method 8240. No VOCs were detected with the exception of

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470 parts per billion (ppb) 1,1,2,2- tetrachloroethane (GTI 1990). Because the GTI report did not include the laboratory analytical reports, the validity of the results could not be confirmed.

To PES' knowledge, there are no records of the tank installation nor its use history. Cox Cadillac has operated at the site since April 1, 1970. It claims its operations have never included usage of the tank. Historical information indicates previous automobile dealerships operated at the site as early as 1927 and other painting activities occurred at the site as early as 1903. The tank may have been installed to support any of these operations, including the operations of Cox Cadillac.

PES understands that a waste oil tank was removed from the southern portion of the site by R. S. Eagan and Company in March 1989. Approximately 20 cubic yards of contaminated soil was removed at that time as well as an unknown amount of water from the excavation.

A 10,000-gallon gasoline tank is located at the southern portion of the site, adjacent to Bay Street. The tank is operated by Cox Cadillac under permit from ACDEH.

2.0 PRELIMINARY ACTIVITIES

2.1 Closure Plan and Permit

In accordance with ACDEH regulations, a closure plan was submitted for approval prior to initiation of tank closure activities. The plan was submitted by CKC, Inc. (CKC) of San Ardo, California, the tank removal contractor. CKC is a California-licensed hazardous waste contractor and registered hazardous waste transporter. The plan was reviewed and approved by ACDEH on September 16, 1992. A copy of the approved plan is attached as Appendix A. The approved plan constitutes the ACDEH permit to remove the tank.

2.2 Site Safety Plan

In accordance with the permit requirements, a site-specific Site Safety Plan (SSP) was prepared for all personnel working on the tank removal. CKC prepared an SSP for its operations. PES personnel followed a separate SSP prepared by PES.

2.3 Geophysical and Utility Surveys

Prior to conducting excavation activities, a subsurface geophysical survey was performed by California Utility Surveys (CUS) for PES on September 9, 1992. The objective of the survey was to delineate the physical limits of the underground tank, locate and mark on the ground surface any related product and vent pipes and locate and mark other utilities in the vicinity of the tank. A secondary objective was to search for a second tank that may be related to the unknown vent pipe attached to the building.

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The CUS survey successfully identified the outline of the one known tank and confirmed the absence of a second tank. Product and vent pipes for the mineral spirits tank were identified. A presumed product pipe line was traced from the tank to a valve vault just inside the building. The pipe apparently terminated beneath the building's concrete floor slab. No evidence of a second tank was discovered. The pipe from the second vent appeared to terminate within the sidewalk. Lastly, underground electric, television, gas, water and sewer utilities were successfully located.

Additionally, utility maps were obtained by PES from East Bay Municipal Utilities District for water supply and sanitary sewer pipes, Pacific Gas & Electric Company for electric and natural gas lines, Oakland Cable for underground television cables and Pacific Bell Telephone for underground telephone cables. This information was used to further identify utilities and confirm information discovered by the CUS survey.

CKC contacted Underground Service Alert (USA) to survey the area prior to commencing excavation.

2.4 Analyses of Residual Product in Tank

Residual product remaining in the tank prior to tank removal was sampled and analyzed to evaluate its chemical composition. The analysis was performed to characterize the product for waste management purposes and to refine the analytical program for soil and groundwater samples collected from the tank excavation (see Section 3.2).

Samples of the product and water were collected from the tank by PES on August 31, 1992 and additional product and water was collected on September 3, 1992. The product had a distinct paint thinner odor. Samples were collected with a clean stainless steel bailer and then decanted to appropriate sample bottles (40-ml VOA vials and 1-liter amber glass bottles). The samples were labeled and then stored in cooled containers for transport to the analytical laboratory. Samples were submitted to Superior Precision Analytical, Inc. (Superior) and Clayton Environmental Consultants, Inc. for chemical analyses. Copies of chain of custody documents and sample analysis request forms are included in Appendix B.

The product was analyzed for TPH, quantified as mineral spirits and diesel fuel, using EPA Test Method 8015-modified (by gas chromatography). The product was also analyzed for TPH as gasoline using EPA Test Method 5030/8015 and benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Test Method 5030/8020. Additionally, the presence of VOCs, including BTEX, was evaluated using gas chromatography/mass spectrometry (GC/MS) following EPA Test Method 8240 and semivolatile organic compounds (acid and base/neutral extractables) using GC/MS by EPA Test Method 8270. Organochloride pesticides and polychlorinated biphenyls (PCBs) were tested for using EPA Test Method 8080. Total oil and grease (TOG) was evaluated using Standard Method 5520F. Lastly, total concentrations of cadmium, chromium, lead, nickel and zinc were analyzed using EPA Test Method 6010.

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Copies of analytical laboratory results are also included in Appendix B. The results of the testing indicated the residual product in the tank was 100% mineral spirits. Although significant concentrations of diesel fuel (4,800 milligrams per liter [mg/ ℓ], equivalent to ppm reported on a mass per unit volume basis) and gasoline (320,000 milligrams per kilogram [mg/kg], equivalent to ppm reported on a mass per unit mass basis) were reported, the laboratory reported that the gas chromatogram did not match the diesel pattern. Therefore, the product does not appear to be a diesel fuel. Gasoline is also not believed to have been present in the tank. The TPH as gasoline test (Method 5030/8015) detects that portion of the mineral spirits that lies within the gasoline quantification range.

Although the BTEX analyses using EPA Method 5030/8020 (gas chromatography) indicates total xylenes were present in the product at 15,000 mg/kg, the more reliable GC/MS Method 8240 indicated it was not present at a detection limit of 300 mg/kg. No benzene or ethylbenzene were detected using either method and toluene was detected by Method 8020 at only 46 mg/kg. There were no other analytical parameters on the 8240 and 8270 scans that were detected above the method detection limits. No organochloride pesticides or PCBs were detected. The concentration of TOG in the product sample was relatively low (32 mg/ ℓ), indicating there is little high molecular weight compounds in the product. There were no detectable concentrations of cadmium, chromium, lead, nickel or zinc in the product.

Based on the results of these analyses, PES concludes that the residual product in the tank was likely a petroleum mineral spirits, also known as naptha, stoddard solvent or mineral thinner. In general, these products are mixtures of aliphatic (non-aromatic) hydrocarbons with carbon chain lengths between C-5 and C-10. The product in the subject tank does not appear to contain other regulated substances, including priority pollutant volatile and semivolatile organic compounds, PCBs or regulated metals.

The long history of the site as automotive dealerships, with associated auto painting, indicates the tank may have been used as a paint thinner storage tank. There is no indication of its use as a fuel storage tank or as a waste tank.

On the basis of this information, the tank contents were classified as a non-RCRA hazardous waste. Subsequent soil and groundwater samples were analyzed for TPH as mineral spirits (see Section 3.2).

3.0 TANK REMOVAL ACTIVITIES

Tank excavation, removal and disposal was performed by CKC for Wells Fargo on September 23 and 24, 1992. PES was present to observe and document the contractor's activities and to collect soil and groundwater samples. Mr. Gary Collins of the City of Oakland Fire Department was present on September 24 to observe the purging of organic vapors from the tank and observe the tank removal. Mr. Lawrence Seto of ACDEH was also present on September 24 to observe the tank removal and collection of soil and groundwater samples from the excavation.

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3.1 Excavation and Tank Removal

Site activities were initiated on September 23 when the concrete sidewalk over the tank was removed. The approximate limits of the concrete removal are shown on the Tank Excavation Detail, Plate 3.

During removal, a number of active and inactive utilities and other pipelines were encountered in the tank excavation. These are shown on Plate 3 and include electrical and television cable conduits, and active and inactive terra cotta sanitary sewers. In addition, a large concrete monolith (see Plate 3), was encountered beneath the television and electrical conduits but overlying the tank. The concrete may have been placed at the time of electric and television cable installation to form a solid base over unstable fill materials, older utilities and/or the tank.

The excavation extended to a maximum depth of 7.5 feet bgs (the depth of the tank bottom at the fill riser end). Most of the excavation extended to a depth of 6.25 feet bgs, as shown on Plate 3. The tank was not installed level; the fill riser end was several inches below the opposite end. Soils encountered in the excavation consisted of a grey sandy clay directly over the tank and a clayey sand with gravel surrounding the tank (tank backfill). Sand was present underlying the many utility pipes and conduits. A considerable amount of brick and other construction debris was present. Soils exposed in the excavation sidewalls consisted of gravelly clay fill materials. Locally saturated conditions were encountered on top of the tank near the fill riser (at approximately 3 to 4 feet bgs). However, upon removal of the tank, only several inches of groundwater existed on the bottom of the excavation.

During excavation, the soils were checked for organic vapors using a Thermo Environmental Instruments Model 580B photoionization detector organic vapor meter (OVM). In general, odors and detectable organic vapors were not present in the tank excavation or in excavated materials. However, a small amount of soil (approximately 2 cubic yards [cy]) that was removed from the top of the tank in the vicinity of the fill riser and product supply/vent connections exuded slight hydrocarbon odors and organic vapors were detected by the OVM. This soil was excavated and segregated from other soil that contained no odors or detectable OVM readings. The suspect soil and approximately 10 additional cy of excavated soil that exhibited no evidence of contamination was stockpiled on plastic sheeting within a paved and fenced area at the northeastern portion of the site.

There was no free product in the tank excavation. There was no hydrocarbon sheen present on groundwater pooled in the bottom of the excavation.

Two pipes were connected to the tank near the fill riser and led to the vicinity of the vents (Plate 3). A 2-inch diameter steel vent pipe ran from one of the vent risers attached to the building wall to the tank connection furthest from the fill riser. The vent pipe connection to the tank included a siphon drop tube that extended to the bottom of the tank. The other pipe connected to the tank, which was likely the intended supply line, did not include a drop tube. This pipe ran from the tank into the concrete monolith, then exited the concrete and ran to a valve vault inside the building. This was confirmed by CUS on September 29, 1992 using

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pipe locating instruments. Normal installation practice would include a siphon drop tube on the supply line and no drop tube on the vent line. This discrepancy can not be explained at this time. It is possible that the lines were incorrectly installed, rendering the tank inoperable. This may partially explain its apparent lack of use.

Several additional pipes of unknown function were discovered during tank excavation. Their locations are shown on Plate 3. These pipes, as well as those related to the subject tank, were removed where accessible and triple-rinsed by CKC. None of the pipes showed evidence of containing any liquids or organic vapors.

To clear the tank of the concrete monolith and the electrical and television conduits, the curb and gutter of Harrison Street needed to be removed. The tank was then moved laterally approximately one foot. Free liquid product and water (approximately 30 gallons) was removed by CKC to a vacuum truck for subsequent disposal.

Following removal of the residual product, the tank was inerted using dry ice (carbon dioxide) to displace hydrocarbon vapors and oxygen in the tank thereby creating a non-explosive atmosphere. A total of 75 pounds of dry ice was used. With Mr. Collins' approval and after oxygen and lower explosion limits declined to less than 10 percent, the tank was loaded on to a flatbed trailer for inspection and offsite transport (see Section 5.0).

Inspection of the tank revealed it was of single wall steel construction. A degraded bituminous coating was observed on the tank. The tank measured 12 feet in length and had an outside diameter of 46.5 inches. The condition of the tank was generally good with the exception of the southeastern corner. One hole, approximately one-half inch in diameter, was observed on the curved sidewall of the tank approximately 8 inches above the base of the tank and near the tank end. The hole was apparently the result of corrosion of the tank materials. The tank was located in close proximity to the abandoned 12-inch sewer line at the approximate location of the observed hole in the tank. The terra cotta sewer line was observed to be broken at this point and water seeped from the broken pipe after the tank was moved laterally away from it.

3.2 Excavation Soil and Groundwater Analyses

Approximately 150 gallons of groundwater was pumped from the bottom of the tank excavation following tank removal to the CKC vacuum truck. Groundwater slowly recharged to the excavation bottom. There was no evidence of floating product or sheen to the groundwater. At the request of Mr. Seto of ACDEH and under his observation, a grab sample of the groundwater (Sample GW-1) was collected for chemical analyses. Two soil samples were then collected from the sidewalls of the tank excavation. The locations of the samples were discussed with and approved by Mr. Seto. Sample TE-S-7.5 was collected from a depth of 7.5 feet bgs at the southwestern end of the tank excavation (see Plate 3). Sample TE-N-5.5 was collected from the northeastern end of the excavation at a depth of 5.5 feet bgs. Soil samples were collected by driving a stainless steel tube into the excavation sidewall. The tube and sample were then extracted, the tube ends were sealed with end caps and tape, and the sample was labeled.

The soil and groundwater samples were placed in a chilled container and transported to Superior with chain of custody documentation, a copy of which is included in Appendix C.

Soil and groundwater samples were analyzed for TPH, quantified as mineral spirits, by EPA Test Method 8015-modified. No detectable TPH was found in either of the soil samples at a method detection limit of 10 mg/kg. The groundwater sample exhibited only very minor levels of petroleum hydrocarbons; TPH was detected at a concentration of $0.1 \text{ mg/}\ell$. Copies of the analytical laboratory reports are included in Appendix C.

3.3 Analyses of Stockpiled Soil

As described above, approximately 2 cy of soil that exhibited sensory evidence of petroleum hydrocarbon contamination was stockpiled at the site. Approximately 10 cy of additional soil that exhibited no evidence of contamination was also stockpiled. To evaluate whether the suspect soil needed to be managed as hazardous waste, a soil sample was collected and analyzed for TPH as mineral spirits following EPA Test Method 8015-modified. Three subsamples (SP2A, SP2B and SP2C) were collected by PES on September 29, 1992 in stainless steel tubes by driving the tube into the soil. The samples were extracted then sealed, labeled and stored in a chilled container for transport to Superior for compositing and analysis.

The results of the stockpile testing showed that no TPH was present above the method detection limit of 10 mg/kg. Copies of the chain of custody form and analytical report are attached as Appendix D.

4.0 EXCAVATION BACKFILLING

The excavation was backfilled by CKC on September 29, 1992, with imported pea gravel from the excavation bottom up to 4 feet bgs. Imported aggregate base was placed and compacted from 4 feet bgs to within eight inches of final grade. The aggregate base consisted of a grey silty sandy gravel.

A sample of the aggregate base was submitted by PES to Testing Engineers, Inc. for compaction testing to determine the maximum dry density by ASTM Method D1557C. The measured maximum dry density was 134.1 pounds per cubic foot (pcf) at an optimum moisture content of 7.9 percent. The project requirements specified that the aggregate base backfill must be compacted to at least 95 percent of the maximum dry density.

Testing Engineers, Inc. conducted four in-place compaction tests of the compacted backfill on September 30, 1992 using a nuclear density meter following ASTM Methods D2922 and D3017. The results are presented in Appendix E and indicated the backfill was compacted to between 88 and 90 percent of the maximum dry density, which was below the specified 95 percent relative compaction requirement.

Subsequently on September 30, the backfill was recompacted and an additional compaction test was performed on October 5, 1992. The test indicated the recompaction effort was successful; the soil had a density of 96 percent relative compaction. The report for this test is also included in Appendix E.

The excavation was resurfaced with concrete on October 6, 1992. New sidewalk, curb and gutter was poured and finished to match the existing surface. Final site restoration took place on October 23, 1992, when minor asphaltic concrete patching within Harrison Street was placed.

5.0 DISPOSAL OF WASTE MATERIALS

Liquid wastes generated during the tank closure were transported by CKC to Refineries Service in Patterson, California for recycling as a non-RCRA hazardous waste. Refineries Service is operated by PRC Patterson, Inc. under a RCRA interim status permit. The waste consisted of the residual product and water removed from the tank and water pumped from the excavation. A copy of the hazardous waste manifest is attached as Appendix F.

The tank was transported by Dexanna, Ltd. to Erickson, Inc. in Richmond, California for cleaning and destruction. Erickson operates under a RCRA permit. A copy of the manifest and a certificate of the tank destruction is included in Appendix G. Piping was triple-rinsed by CKC and will be managed as scrap metal at LMC Recyclers in Richmond.

Based on the absence of detectable TPH in the 2 cy of suspect soil and the absence of sensory or OVM evidence in the other 10 cy of stockpiled soil, all soil generated during the tank removal was disposed as a non-hazardous waste by CKC at the Richmond Sanitary Landfill.

6.0 DISCUSSION AND CONCLUSIONS

Based on historical information on the site and the residual contents of the tank, it appears that the tank was historically used to store mineral spirits, possibly for usage related to painting by previous businesses at the site prior to 1970. There is currently no available documentation of the history of the tank. The tank piping, as configured upon removal, appeared to be incorrectly installed; product could not be suction-pumped from the tank since there was no drop tube to the product line. The vent connection to the tank was fitted with a drop tube. It is possible that no significant use of the tank occurred because of this faulty condition. Although a second vent line was present and possibly a product supply line, there was no evidence that a second tank exists in the vicinity at the removed tank. These pipes were found to terminate within the sidewalk. Two geophysical surveys conducted at the site (by Spectrum in 1989 and CUS in 1992) did not reveal evidence of a second tank in the vicinity.

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There was only minor evidence of soil contamination encountered during the tank removal. This was confined to soil in the vicinity of the fill riser and pipe connections at 3 to 4 feet bgs. Subsequent soil sampling indicated that no detectable contamination existed. There was no OVM or sensory evidence of soil contamination in the sidewalls and bottom of the excavation. Soil samples showed no contamination to be present.

Several inches of water was present in the bottom of the excavation upon tank removal. There was no free product present, no petroleum sheen and no odors to the water. A sample of groundwater that recharged to the excavation revealed only minor amounts of TPH as mineral spirits $(0.1 \text{ mg/}\ell)$.

The tank was in generally good condition with the exception of a single corrosion hole. The localized corrosion may be due to corrosive waters seeping from the abandoned and broken sanitary sewer. It is possible that the clay sewer pipe was damaged at the time of tank installation. This may have damaged the bituminous tank coating, rendering the tank susceptible to corrosion at that location. Although product was present within the tank, the level of the product in the tank was below the corrosion hole. There was no evidence of significant product release from the tank through the hole.

In conclusion, there was no evidence of significant releases from the tank and associated piping. Although a low concentration of TPH was detected in the groundwater, given (1) the long industrial history of the site and vicinity, and (2) the absence of soil contamination in the tank excavation, other ensite or offsite sources could explain its occurrence. No further action is recommended at this time.

REFERENCES

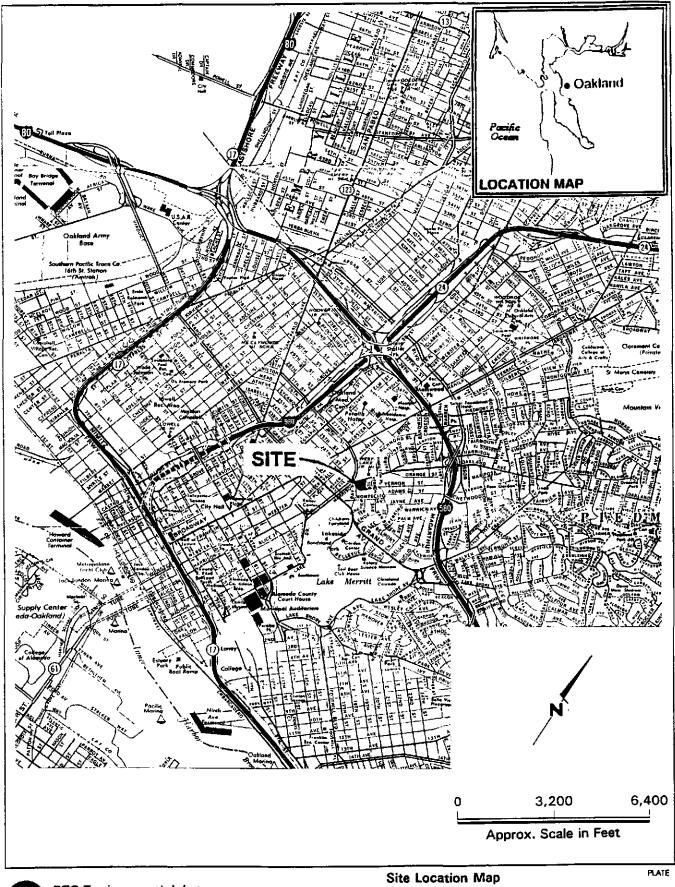
Groundwater Technology, Inc. (GTI), 1990.

Status Report for Cox Cadillac, 27th and Harrison Streets, Oakland, California.

February 5.

Spectrum Environmental Subsurface Investigations, 1989.

Results of the Subsurface Investigations Conducted at Bill Cox Cadillac, Vernon and Bay Streets, Oakland, California. (no date).





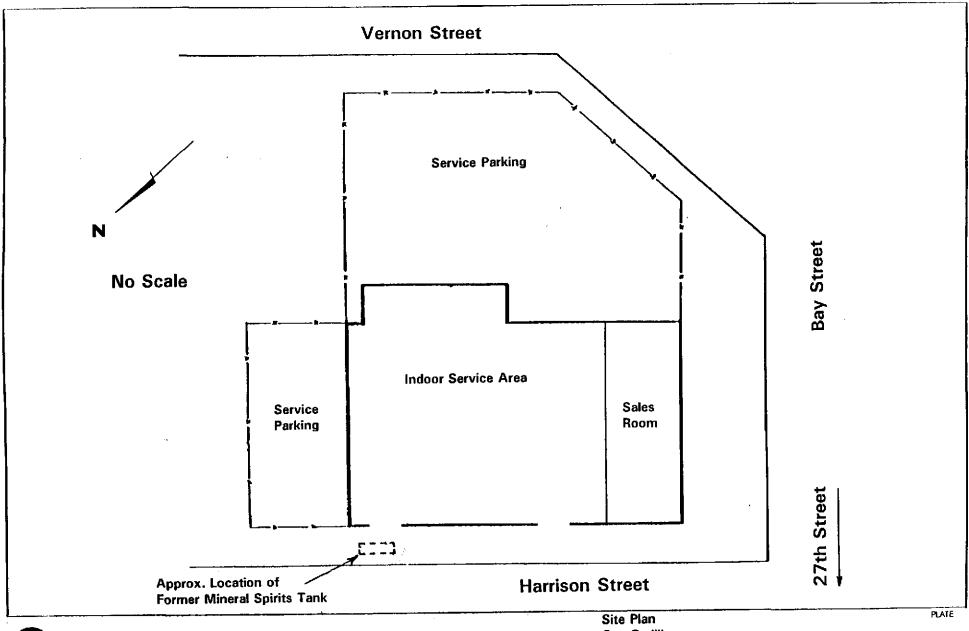
PES Environmental, Inc.Engineering & Environmental Services

Site Location Map Cox Cadillac 230 Bay Street Oakland, California

08 NUMBER 167.02.001 REVIEWED BY

DATE 10/92 REVISED DATE

REVISEO DATE



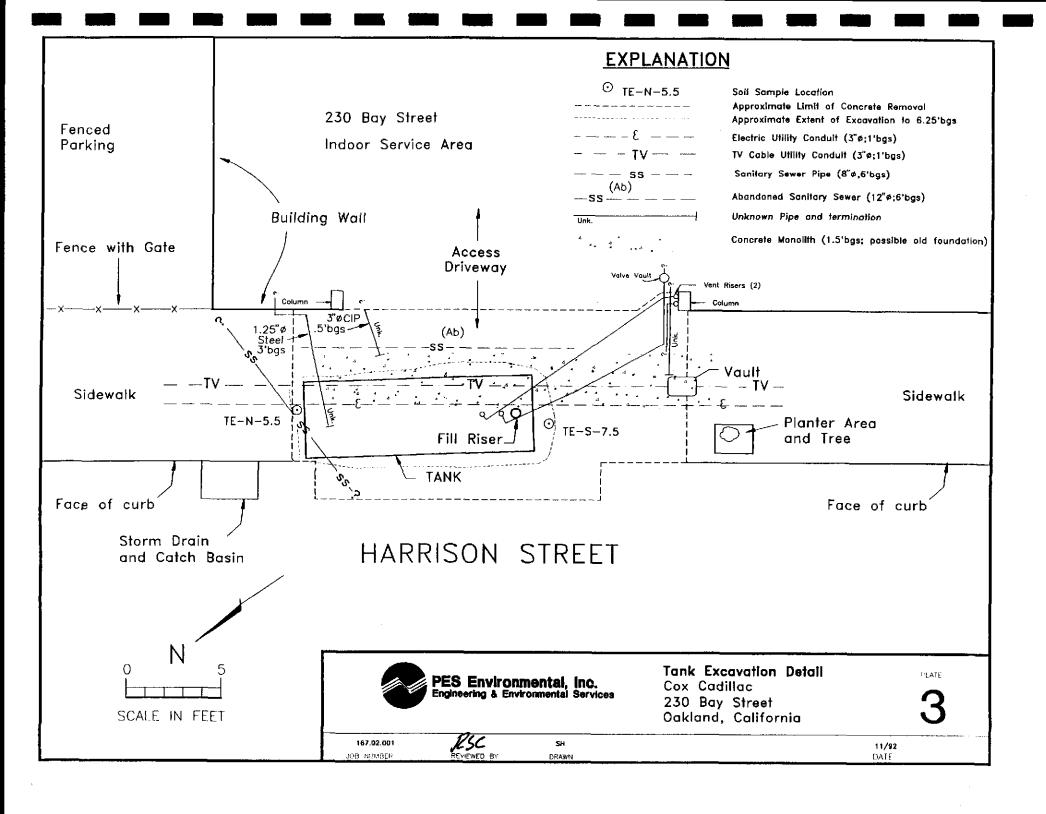
DATE

10/92



PES Environmental, Inc. Engineering & Environmental Services Site Plan
Cox Cadillac
230 Bay Street
Oakland, California

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PES Environmental, Inc.

APPENDIX A

TANK CLOSURE PLAN AND PERMIT

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY DEPARTMENT OF ENVIRONMENTAL HEALTH HAZARDOUS MATERIALS DIVISION 80 SWAN WAY, ROOM 200 OAKLAND, CA 94621 PHONE NO. 510/271-4320

16-92 note adolteral registrant to stay # 15 and 16,

ACCEPTED

DEPARTMENT OF ENVIRONMENTAL HEALTH 470 - 27th Stroet, Third Floor Oalland, CA 946.2

Telaphono: (4.5) 874-7237

These plans have been reviewed and found to be acceptable and ease-tielly meat the requirements of State and local health laws. Changes to your plans indicated by this Department are to easure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction.

One copy of these accepted plans must be on the job and aveilable to all contractors and craftsmen involved with the removal.

Any change or alterations of these plans and specifications must be submitted to this Department and to the Fire and Euilding Interaction Department to determine if such changes meet the requirements of State and local laws.

Notify this Department at least 48 hours prior to the following required inspections:

Removal of Tank and Piping

Issuance of a permit to operate is dependent on compliance with accepted plans and all applicable lews and

regulations.
THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS.

UNDERGROUND TANK CLOSURE PLAN

* * * Complete according to attached instructions * * *

1.	Business Name	Cox Cadillac
	Business Owner _	Bill Cox
2.	Site Address	230 Bay Street (24th + Hanison)
		Zip 94610 Phone (415) 477-1000
з.	Mailing Address	P.O. Box 63939, San Francisco, CA 94163
	City San Franci	sco Zip <u>94163</u> Phone <u>(415) 396-6743</u>
4.	Land Owner Wel	ls Fargo Bank as Trustee for Harold Shepard Trust
	Address P.O. Bo	x 63939 City, State San Francisco Zip 94163
5. Generator name under which tank will be manifested		
		ank as Trustee for Harold Shepard Trust
	EPA I.D. No. und	er which tank will be manifestedCACOO0822840

-	. The second of	
6.	ContractorC.K.C. INCORPORATED	
	Address P.O. Box 2327	
	City Paso Robles, CA 93447 Phone (408)627-259	 95
	License Type A, Hazardous License ID# 534002	
	*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also Mazardous Waste Certification issued by the State Contractors License Board. Indicate that the certificate been received, in addition, to holding the appropriate contractors license type.	hold e has
7.	Consultant PES Environmental, Inc.	
•	Address1682 Novato Blvd.	
	City Novato, CA 94947 Phone (415) 899-1600	
8.	Contact Person for Investigation	
	Name <u>Andrew Briefer</u> Title <u>Senior Engineer</u>	
	Phone (415) 899-1600	
9.	Number of tanks being closed under this plan	<u> </u>
10.	State Registered Hazardous Waste Transporters/Facilities (see instructions).	
	** Underground tanks are hazardous waste and must be handled ** as hazardous waste	
	a) Product/Residual Sludge/Rinsate Transporter	
	Name C.K.C. Incorporated EPA I.D. No. CAD980584510	
	Hauler License No. 0381 License Exp. Date 4/30/93	
	Address P.O. Box 2327	_
	City Paso Robles State CA Zip 93447	_
	b) Product/Residual Sludge/Rinsate Disposal Site	
	Name Refineries Service EPA I.D. No. CAD083166728	
	Address 13331 North HWY 33	_
	City Patterson State CA Zip 95363	_

Few 3/02

Name C.K.C. Incorporated EPA I.D. No. CAD980584510 Hauler License No. 0381 License Exp. Date 4/30/9 Address F.O. Box 2327 City Pasc Robles State CA Zip 93447 d) Tank and Piping Disposal Site Name Erickson, Inc. EPA I.D. No. CAD009466392 Address 255 Parr Blvd. City Richmond State CA Zip 94801
Hauler License No. 0381 License Exp. Date 4/30/9 Address P.O. Box 2327 City Paso Robles State CA Zip 93/47 d) Tank and Piping Disposal Site Name Erickson, Inc. EPA I.D. No. CAD009466392 Address 255 Parr Blvd.
Address P.O. Box 2327 City Paso Robles State Zip 93447 d) Tank and Piping Disposal Site Name Erickson, Inc EPA I.D. No. CAD009466392 Address 255 Parr Blvd.
City Paso Robles State CA Zip 93447 d) Tank and Piping Disposal Site Name Erickson, Inc. EPA I.D. No. CAD009466392 Address 255 Parr Blvd.
d) Tank and Piping Disposal Site NameErickson, IncEPA I.D. No. <u>CAD009466392</u> Address255 Parr Blvd.
Name <u>Erickson, Inc.</u> EPA I.D. No. <u>CAD009466392</u> Address <u>255 Parr Blvd.</u>
Address 255 Parr Blvd.
11. Experienced Sample Collector
NameDaniel Trumbly
Company PES Environmental, Inc.
Address 1682 Novato Blvd.
City <u>Novato</u> State <u>CA</u> Zip <u>94947</u> Phone (415)899-16
12. Laboratory
Name Superior Analytical Labs
Address1555 Burke Street
City San Francisco State CA Zip 94124
State Certification No. 1332
13. Have tanks or pipes leaked in the past? Yes [] No [X]
If yes, describe. There are no known releases from the mineral
spirits tank:

14. Describe methods to be used for rendering tank inert

Dry Ice will be applied in the tank at the rate of 15 lbs. per 1,000 gallons.

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be plugged.

The Bay Area Air Quality Management District (771-6000), along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of explosion proof combustible gas meters to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas meter on site to verify tank inertness.

15. Tank History and Sampling Information

Tank		Material to	
Capacity	Use History (see instructions)	be sampled Location and (tank contents, soil, ground- Samples water, etc.)	
1,200 gals.	gallons of liquid iden- tified as mineral spirits The tank has not been use since before 1970. There is currently no evidence of product piping. A	sampled and analyzed for the constituents d designated in Table 2 for unknown	From the Tank
	sample of the tank contents was analyzed in 1989 and contained mineral spirits with 470 parts per billion of 1,1, 22 tetrachorethene. Details of tank instal-	Soil will be sampled from the ends of the tank pit at the depth of the groundwater.	•
	lation are unknown.		from the tank pit
		Soil	from the stockpile

One soil sample must be collected for every 20 feet of piping that is removed. A ground water sample must be collected should any ground water be present in the excavation.

Excavated/Stockpiled Soil		
Stockpiled Soil Volume	Sampling Plan	
(Estimated)	2 composite soil samples will be collected to evaluat	
50-60 CY loose	the soil for disposal. Each sample will be composite from three locations. Soil will be analyzed for total petroleum hydrocarbons as mineral spirits, benzene,	
	toluene, ethylbenzene, and solvents and any other constituents detected in the tank contents	

Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

16. Chemical methods and associated detection limits to be used for analyzing samples

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. Se attached Table 2.

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Method Number	Method Detection Limit
Mineral Spirits	EPA Method 8015		soil water 10ppm 50ppm
Chlorinated			
Hydrocarbons	EPA Method 8010		5ppb 0.5ppb
BTEX	EPA Method 8020	·	3ppb 5ppb
Oil and Grease	EPA 5520		50թթա 5թթա
Cd, \$1,Pb,2n,Ni TPH (9as) Semi-Voltile Organics	1 cap EPA 7000 series	Cd C1 pb Ni Zn	1ppm 0.05ppm 5ppm 0.05ppm 5ppm 0.1 ppm 10ppm 0.1 ppm 20ppm 0.05ppm ∠5ppm ←40ppm

17. Submit Site Health and Safety Plan (See Instructions)

18. Submit Worker's Compensation Certificate copy

Name of Insurer See Attached Copy

- 19. Submit Plot Plan (See Instructions)
- 20. Enclose Deposit (See Instructions)
- 21. Report any leaks or contamination to this office within 5 days of discovery. The report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report form. (see Instructions)
- 22. Submit a closure report to this office within 60 days of the tank removal. This report must contain all the information listed in item 22 of the instructions.

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true.

I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

Steve Mueller, C.K.C. Inc. Project Manager

Signature of Contractor

Name (nlease tume)

Signature tu Mull	
Signature - Surfluid	
Date September 10, 1992	
Signature of Site Owner or Operator Wells Fargo Bank, N.A., as trustee Name (please type) of the Harold W. Shepard Trust	
Signature	
Date September 10, 1997	

INSTRUCTIONS

General Instructions

- * Three (3) copies of this plan plus attachments and deposit must be submitted to this Department.
- * Any cutting into tanks requires local fire department approval.
- * One complete copy of your approved plan must be at the construction site at all times; a copy of your approved plan must also be sent to the landowner.
- * State of California Permit Application Forms A and B are to be submitted to this office. One Form A per site, one Form B for each removed tank.

Item Specific Instructions

- 2. <u>SITE ADDRESS</u>
 Address at which closure is taking place.
- 5. EPA I.D. NO. under which the tanks will be manifested EPA I.D. numbers may be obtained from the State Department of Health Services, 916/324-1781.
- 6. <u>CONTRACTOR</u>
 Prime contractor for the project.
- 10. STATE REGISTERED HAZARDOUS WASTE TRANSPORTERS/FACILITIES
 - a) All residual liquids and sludges are to be removed from tanks before tanks are inerted.
 - c) Tanks must be hauled as hazardous waste.
 - d) This is the place where tanks will be taken for cleaning.
- 15. TANK HISTORY AND SAMPLING INFORMATION

 Use History This information is essential and must be accurate.

 Include tank installation date, products stored in the tank, and the date when the tank was last used.

Material to be sampled - e.g. water, oil, sludge, soil, etc.

Location and depth of samples - e.g. beneath the tank a maximum of two feet below the native soil/backfill interface, side wall at the high water mark, etc.

16. CHEMICAL METHODS AND ASSOCIATED DETECTION LIMITS See attached Table 2.

- 17. SITE HEALTH AND SAFETY PLAN

 A <u>site specific</u> Health and Safety plan must be submitted. We advocate the site health and safety plan include the following items, at a minimum:
 - a) The name and responsibilities of the site health and safety officer;
 - b) An outline of briefings to be held before work each day to appraise employees of site health and safety hazards;
 - c) Identification of health and safety hazards of each work task.
 Include potential fire, explosion, physical, and chemical hazards;
 - d) For each hazard, identify the action levels (contaminant concentrations in air) or physical conditions which will trigger changes in work habits to ensure workers are not exposed to unsafe chemical levels or physical conditions;
 - e) Description of the work habit changes triggered by the above action levels or physical conditions;
 - f) Frequency and types of air and personnel monitoring along with the environmental sampling techniques and instrumentation - to be used to detect the above action levels. Include instrumentation maintenance and calibration methods and frequencies;
 - g) Confined space entry procedures (if applicable);
 - h) Decontamination procedures;
 - i) Measures to be taken to secure the site, excavation and stockpiled soil during and after work hours (e.g. barricades, caution tape, fencing, trench plates, plastic sheeting, security guards, etc.);
 - j) Spill containment/emergency/contingency plan. Be sure to include emergency phone numbers, the location of the phone nearest the site, and directions to the hospital nearest the site;
 - k) Documentation that all site workers have received the appropriate OSHA approved trainings and participate in appropriate medical surveillance per 29 CFR 1910.120; and
 - 1) Page for employees to sign indicating they have read and will comply with the site health and safety plan.

The safety plan must be distributed to all employees and contractors working in hazardous waste operations on site. A complete copy of the site health and safety plan along with any standard operating procedures shall be on site and accessible at all times.

NOTE: These requirements are <u>excerpts</u> from 29 CFR Part 1910.120(b)(4), Hazardous Waste Operations and Emergency Response; Final Rule, March 6, 1989. Safety plans of certain underground tank sites may need to meet the <u>complete</u> requirements of this Rule.

19. PLOT PLAN

The plan should consist of a scaled view of the facility at which the tank(s) are located and should include the following information:

- a) Scale;
- b) North Arrow;
- c) Property Lines;
- d) Location of all Structures;
- e) Location of all relevant existing equipment including tanks and piping to be removed and dispensers;
- f) Streets;
- g) Underground conduits, sewers, water lines, utilities;
- h) Existing wells (drinking, monitoring, etc.);
- i) Depth to ground water; and
- j) All existing tanks and piping in addition to the ones being pulled.

20. DEPOSIT

A deposit, payable to Alameda County for the amount indicated on the Alameda County Underground Storage Tank Fee Schedule, must accompany the plans.

21. Blank Unauthorized Leak/Contamination Site Report forms may be obtained in limited quantities from our office and from the San Francisco Bay Regional Water Quality Control Board (415/464-1255). Larger quantities may be obtained directly from the State Water Resources Control Board at (916) 739-2421.

22. TANK CLOSURE REPORT

The tank crosure report should contain the following information:

- a) General description of the closure activities;
- b) Description of tank, fittings and piping conditions. Indicate tank size and former contents; note any corrosion, pitting, holes, etc.;

- c) Description of the excavation itself. Include the tank and excavation depth, a log of the stratigraphic units encountered within the excavation, a description of root holes or other potential contaminant pathways, the depth to any observed ground water, descriptions and locations of stained or odor-bearing soil, and descriptions of any observed free product or sheen;
 - d) Description of sampling methods;
 - e) Description of any remedial measures conducted at the time of tank removal;
 - f) To-scale figures showing the excavation size and depth, nearby buildings, sample locations and depths, and tank and piping locations. Include a copy of the plot plan prepared for the Tank Closure Plan under item 19;
- g) Chain of custody records;
- h) Copies of signed laboratory reports;
- i) Copies of "TSDF to Generator" Manifests for all hazardous wastes hauled offsite (sludge, rinsate, tanks and piping, contaminated soil, etc.); and
- j) Tabulation of the volume and final destination of all nonmanifested contaminated soil hauled offsite.

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD





COMPLETE THIS TORM	FOR EACH PACILITYSITE		
MARK ONLY NEW PERMIT 3 RENEWAL PERMIT ONE ITEM 2 INTERIM PERMIT 4 AMENDED PERMIT	5 CHANGE OF INFORMATION 7 PERMANENTLY CLOSED SITE 6 TEMPORARY SITE CLOSURE		
ONE ITEM 2 INTERIM PERMIT 4 AMENDED PERMIT 6 TEMPORARY SITE CLOSURE 1. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)			
	NAME OF OPERATOR		
BILL LOX CADILLAC	Bill Gox		
ADDRESS	NEAREST CROSS STREET PARCEL # (OPTIONAL)		
270 BAY ST.	27TH AND HARRISON		
CITY NAME OAKLAND	STATE ZIP CODE SITE PHONE # WITH AREA CODE CA 94610 510 - 451 - 2400		
	OCAL-AGENCY COUNTY-AGENCY STATE-AGENCY FEDERAL-AGENCY		
TYPE OF BUSINESS 1 GAS STATION 2 DISTRIBUTOR 2 FARM 4 PROCESSOR 5 OTHER	CRESERVATION OR TRUST LANDS 2.		
EMERGENCY CONTACT PERSON (PRIMARY)	EMERGENCY CONTACT PERSON (SECONDARY) - optional		
DAYS: NAME (LAST, FIRST) PHONE # WITH AREA CODE	DAYS: NAME (LAST, FIRST) (AUX) 995-5029		
BRIEFEZ ANDREW A. 415) 899-1600	CAMPRELL, RORY PHONE WITH AREA CODE		
NIGHTS! NAME (LAST, FIRST) PHONE # WITH AREA CODE BRIEFEE, ANDREW A. (415) 952 - 12333	MIGHTS: NAME (LAST, FIRST) (A15) 995-5029 PHONE & WITH AREA CODE		
II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)	THOUGHT THE THE THE THE THE THE THE THE THE T		
NAME	CARE OF ADDRESS INFORMATION		
HAROLD SHEPARD TRUST	WELLS FARGO BANK AS TRUSTEE		
MAILING OR STREET ADDRESS	box to indicate UNDIVIDUAL LOCAL-AGENCY STATE-AGENCY		
P.O. BOX 62937	CORPORATION PARTNERSHIP COUNTY-AGENCY FEDERAL-AGENCY		
CITY NAME	STATE ZIP CODE PHONE WITH AREA CODE		
DAN FRANCISCO	CA 94163 (415) 477-1000		
III. TANK OWNER INFORMATION - (MUST BE COMPLETED)	(+15) 396-6743		
NAME OF OWNER	CARE OF ADDRESS INFORMATION		
LIAROLD GHEPARD TRUST	WELKS FARGO BANK AS TRUSTER		
MAILING OR STREET ADDRESS	STATE-AGENCY STATE-AGENCY		
P.O. Box 63939	CORPORATION PARTNERSHIP COUNTY-AGENCY FEDERAL-AGENCY		
CITY NAME	STATE ZIP CODE PHONE # WITH AREA CODE (415) 477-1000		
DAN FRANCISCO			
IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NU	MBER - Call (916) 323-9555 if questions arise.		
TY (TK) HQ 4 4 -			
· · · · · · · · · · · · · · · · · · ·			
V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE CO	DMPLETED) - IDENTIFY THE METHOD(S) USED		
box to indicate 1 SELF-INSURED 5 LETTER OF CREDIT	2 GUARANTEE 3 INSURANCE 4 SURETY BOND 5 EXEMPTION 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:			
THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT, APPLICANTS MANE (PRINTED & SIGNATURE) APPLICANTS TITLE DATE MONTHUDAYYEAR			
APPLICANT'S NAME (PRINTED & SIGNATURE) APPLICANT'S TITLE APPLICANT'S			
LOCAL AGENCY USE ONLY			
COUNTY # JURISDICTION	# FACILITY #		
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.

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B



COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

1 NEW PERMIT 3 RENEWAL PERMIT 5 CHANGE OF INFORMATION 7 PERMANENTLY CLOSED ON SITE 2 INTERIM PERMIT 6 TEMPORARY TANK CLOSURE 8 TANK REMOVED			
Y NAME WHERE TANK IS INSTALLED: BILL GOX CADILLAC			
COMPLETE ALL ITEMS - SPECIFY IF UNKNOWN			
NK D. # NONE B. MANUFACTURED BY: UNKNOWN			
LED (MO/DAYNEAR) UNKNOWN - PRE - 1970 D. TANK CAPACITY IN GALLONS: 1200			
TE S IFA-1 ISMARKED, COMPLETE ITEM C.			
TOR VEHICLE FUEL 4 OIL B. C. 1a REGULAR 3 DIESEL 6 AVIATION GAS			
TRANSIL PRODUCT 15 PREMIUM 5 JET FUEL 7 METHANOL UNLEADED 5 JET FUEL 5 JET FUEL 7 METHANOL UNLEADED 5 JET FUEL 7 METHANOL 15 JET FUEL 7 M			
EN CEPROCOCI			
TMARKED, ENTER NAME OF SUBSTANCE STORED MINIERAL GPIRITS C.A.S			
NS RUCTION MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX O AND E			
1 DOUBLE WALL 3 SINGLE WALL WITH EXTERIOR LINER SO UNKNOWN 2 SINGLE WALL 3 SINGLE WALL WITH EXTERIOR LINER 99 OTHER			
2 SHOLE HALL			
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			
5 CONCRETE 6 POLYVINYL CHLOHIDE 7 ALDMINOM 6 100% METRANOL COMPATIBLE WIFTH			
1 RUBBER LINED 2 ALKYD LINING 3 EPOXY LINING 4 PHENOLIC LINING			
5 GLASS LINING 6 UNLINED S 95 UNKNOWN 99 OTHER			
LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES NO			
1 POLYETHYLENE WRAP 2 COATING 3 VINYL WRAP 4 FIBERGLASS REINFORCED PLASTIC			
5 CATHODIC PROTECTION 91 NONE 95 UNKNOWN 99 OTHER			
/E LL SPILL CONTAINMENT INSTALLED (YEAR) OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR)			
FORMATION CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE			
PE_ A U 1 SUCTION A U 2 PRESSURE A U 3 GRAVITY A U 98 OTHER HOLE			
THE A U 1 SINGLE WALL A U 2 DOUBLE WALL A U 3 LINED TRENCH A U 95 UNKNOWN A U 99 OTHER SOLE			
(ND A U 1 BARE STEEL A U 2 STAINLESS STEEL A U 3 POLYVINYL CHLORIDE (PVC) A U 4 FIBERGLASS PIPE			
N A U 5 ALUMINUM A U 6 CONCRETE A U 7 STEEL W COATING A U 8 100% METHANOL COMPATIBLE W/FRP N A U 9 GALVANIZED STEEL A U 10 CATHODIC PROTECTION A U 95 UNKNOWN A U 99 OTHER AU 90 OTHER			
CON 1 AUTOMATIC LINE LEAK DETECTOR 2 LINE TIGHTNESS TESTING MONTORING 99 OTHER LINE VOWN			
K DETECTION			
L ECK 2 INVENTORY RECONCILIATION 3 VADOZE MONITORING 4 AUTOMATIC TANK GAUGING 5 GROUND WATER MONITORING			
TESTING 7 INTERSTITIAL MONITORING 91 NONE 95 UNKNOWN 99 OTHER			
OSTRE INFORMATION			
STE ST USED (MO/DAY/YR) 2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING 2. O GALLONS 3. WAS TANK FILLED WITH YES NO MINERT MATERIAL?			
HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT			
AN NAME TO DATE of land			
- DE MANUEL			
NCY USE ONLY THE STATE LD. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW			
COUNTY # JURISDICTION # FACILITY # TANK # ATE I.D.#			
A POLICE TO A PARTY OF THE PART			
THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED.			

APPENDIX B

ANALYTICAL LABORATORY REPORTS FOR RESIDUAL PRODUCT IN TANK



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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55474

CLIENT: PES ENVIRONMENTAL, INC.

CLIENT JOB NO.: 167.02.001

DATE RECEIVED: 09/01/92

DATE REPORTED: 09/11/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB # 	Sample Identification	Concentration (mg/L) Mineral Spirits Range
1	9235T1	1000000

mg/L - parts per million (ppm)

Minimum Detection Limit for Mineral Spirits in Water: 1 mg/L

QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15% MS/MSD Average Recovery = 113%: Duplicate RPD =12%

Richard Stra Ph.D.

Laboratory Director

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55474

CLIENT: PES ENVIRONMENTAL, INC.

CLIENT JOB NO.: 167.02.001

DATE RECEIVED: 09/01/92

DATE REPORTED: 09/11/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB		Concentration (mg/L)
#	Sample Identification	Diesel Range
1	9235T1	4800*

mg/L - parts per million (ppm)

Minimum Detection Limit for Diesel in Water: 1 mg/L * Does not match typical Diesel pattern.

QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15% MS/MSD Average Recovery = 104%: Duplicate RPD = 9%

Richard Srx3/Ph.D

Laboratory Director



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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55474

CLIENT: PES ENVIRONMENTAL, INC.

CLIENT JOB NO.: 167.02.001

DATE RECEIVED: 09/01/92

DATE REPORTED: 09/20/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 5030 and 8015

LAB # 	Sample Identification	Concentration (mg/kg) Gasoline Range		
1	9235T1	320000		

mg/kg - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 1 mg/kg Method Detection Limit for Gasoline in Water: 50 ug/L

QAQC Summary:

Daily Standard run at 2mg/L: %Diff Gasoline = <15 MS/MSD Recovery = MSREC%: Duplicate RPD = DRPD

Richard Srma / PKD D.

Laboratory Manager



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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55474

CLIENT: PES ENVIRONMENTAL, INC.

CLIENT JOB NO.: 167.02.001

DATE RECEIVED: 09/01/92 DATE REPORTED: 09/20/92

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES by EPA SW-846 Methods 5030 and 8020

-		Concentration(mg/kg) Ethvl			
LAB # 	Sample Identification	Benzene	Toluene	Benzene	Xylenes
1	9235T1	ND<30	46	ND<30	15000

mg/kg - parts per million (ppm)

Method Detection Limit in product 30 mg/kg

QAQC Summary:

Daily Standard run at 20ug/L: %Diff 8020 = <15% MS/MSD Average Recovery =93 %: Duplicate RPD = < 5

Richard Srna, Ph.D.

Laboratory Manager



1555 Burke, Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

CERTIFICATE OF ANALYSIS

LABORATORY NO. 55474-1

DATE RECEIVED: 09/01/92

CLIENT: PES ENVIRONMENTAL, INC.

DATE REPORTED: 09/11/92

DATE SAMPLED: 08/31/92

PROJECT NO. 167.02.001

DATE ANALYZED: 09/09/92

EPA SW-846 METHOD 8240 - VOLATILE ORGANICS by Gas Chromatography/ Mass Spectrometry

SAMPLE: 9235T1

Compound	MDL	mg/kg	Compound	MDL	mg/kg
Chloromethane	1000	ND	Cis-1,3-Dichloropropene	300	ND
Bromomethane	1000	ND	Trichloroethene	300	ND
Vinyl Chloride	1000	ND	Dibromochloromethane	300	ND
Chloroethane	1000	ND	1,1,2-Trichloroethane	300	ND
Methylene Chloride	1000	ND	Benzene	100	ND
Acetone	1000	ND	Trans-1,3-Dichloropropene	300	ND
Carbon Disulfide	300	ND	2-Chloroethyl vinyl ether	300	ND
Trichlorofluoromethane	300	ND	Bromoform	300	ND
1,1-Dichloroethene	300	ND	4-Methyl-2-Pentanone	1000	ND
1,1-Dichloroethane	300	ND	2-Hexanone	1000	ND
trans-1,2-Dichloroethene	300	ND	Tetrachloroethene	300	ND
Chloroform	300	ND	1,1,2,2-Tetrachloroethane	300	ND
1,2-Dichloroethane	100	ND	Toluene	300	ND
2-Butanone	2000	ND	Chlorobenzene	300	ND
1,1,1-Trichloroethane	300	ND	Ethylbenzene	300	ND
Carbon Tetrachloride	300	ND	Styrene	300	ND
Vinyl Acetate	1000	ND	Total Xylenes	300	ND
Bromodichloromethane	300	ND	1,3-Dichlorobenzene	300	ND
1,2-Dichloropropane	300	ND	1,4-Dichlorobenzene	300	ND
cis-1,2-Dichloroethene	300	ND	1,2-Dichlorobenzene	300	ND

mg/kg = parts per million (ppm)

ND = ANALYTE NOT DETECTED ABOVE QUANTITATION LIMIT

QC DATA:

QC LIMITS Surrogate Recoveries water 76-114 % 1,2-DCA-d4..... 99% 88-110 % Toluene-d8...... 102% Bromofluorobenzene..... 86-115 % 106%

comments: Increased detection limits due

to matrix interference.

Richard &rn

Laboratory Director



CHAIN OF CUSTODY RECORD

5547**4**

	PANDLEDG, MAI	ry K Holkenbrink			
JOB NUMBER: 167.02.001	SAMPLENS: / / /CL	7 R BIRCH DY M	ANALYSIS REQUESTED		
NAMEROCATION: Cox Cadillac			1 g		
PROJECT MANAGER: Andy Briefer	proposed Ma	ust Holko buch	EPA 601/8010 EPA 602/8020 EPA 622/8240 EDA 625/8270 BTEX TPH (GASOLINE) TOG (5520 C&F) POC R POC R POC R POC R C 化 O S O T E C 化 O S O T E		
THOSE THAT DETERMINE	RECORDER: Mac	Required)	1		
DATE SAMPLE NUMBER W	MATRIX & CON	TAINERS ESERV. DEPTH COL OA	EPA 601/8010 EPA 602/8020 EPA 624/8240 EPA 625/8270 ETEX TPH (QASOLINE) TPH (QASO		
TR MO DY TIME YR WK SEQ	Water Sedim't Soil Oil Umbres HzSO4	DEPTH COL DA CODE	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
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	_ <u></u>		T-1-1-1-1-1		
	<u></u>				
NOTES		CHAIN OF CUSTODY RECORD			
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Hartre froduct only		Mary Atolleabure	1 X/ 1) R. V. 19/1/92 12 (2)		
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	·	HELINGUISHED BY: Sighakith)	RECEIVED BY: (Signature) DATE TIME		
		DISPATCHED BY: (Signature) DATE	TIME THECEIVED FOR TANKEY! DATE TIME		
		DISPATCHED BY: (Signature) DATE	TIME HECEIVED POFTCAPBY! DATE TIME 18/00 1/162 1455		
		METHOD OF SHIPMENT:	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

Laboratory Copy White Project Office Copy

Field or Office Copy Pink

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55547

CLIENT: PES ENVIRONMENTAL

CLIENT PROJECT NO.: 20801001

DATE RECEIVED: 09/15/92

DATE REPORTED: 09/22/92

Following is a list of Cross referenced Lab Numbers and Sample I.D.'s for referring to the following reports.

Superior Lab Number Subbed Lab Number

Customer Sample Identification

55547 -1

9209186-01A

20801001

Subbed to: CLAYTON ENVIRONMENTAL CONSULTANTS DOHS#1196.

1252 Quarry Lane P.O. Box 9019 Pleasanton, CA 94566 (510) 426-2600 Fax (510) 426-0106



September 22, 1992

Ms. Cecilia Joaquin SUPERIOR ANALYTICAL LABORATORY 1555 Burke Street, Unit 1 San Francisco, CA 94124

> Client Ref. 55547 Clayton Project No. 92091.86

Dear Ms. Joaquin:

Attached is our analytical laboratory report for the samples received on September 17, 1992. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

The top organic layer of this bilayered sample was analyzed for EPA Methods 8270 and 8080 using the waste dilution method, EPA 3580, for sample preparation. Results are reported based on the concentration in the entire sample volume.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Suzanne Silvera, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Ronald H. Peters, CIH

Director, Laboratory Services

Western Operations

RHP/tb

Attachments

Page 2 of 13

Results of Analysis for Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample Identification:	55547-1	Date	Sampled:	
Tab Mumban.	0000104 013	Data	Dogodzani.	00/17

Lab Number: 9209186-01A Date Received: 09/17/92 Sample Matrix/Media: AQUEOUS Date Extracted: 09/22/92 Extraction Method: EPA 3580 Date Analyzed: 09/22/92

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Acid Extractables			
Phenol	108-95-2	ND	300,000
2-chlorophenol	95-57-8	ND	300,000
2-methyl phenol	95-48-7	ND	300,000
4-methyl phenol	106-44-5	ND	300,000
2-nitrophenol	88-75-5	ND	300,000
2,4-dimethylphenol	105-67-9	ИD	300,000
2,4-dichlorophenol	120-83-2	ND	300,000
4-chloro-3-methylphenol	59-50-7	ND	300,000
2,4,5-trichlorophenol	95-95-4	ND	300,000
2,4,6-trichlorophenol	88-06-2	ND	300,000
2,4-dinitrophenol	51-28-5	ND	1,000,00
4-nitrophenol	100-02-7	ND	1,000,00
2-methyl-4,6-dinitrophenol	534-52-1	ND	1,000,00
Pentachlorophenol	87-86-5	ND	1,000,00
Base/Neutral Extractables			
Bis(2-chloroethyl)ether	111-44-4	ND	300,000
1,3-dichlorobenzene	541-73-7	ND	300,000
1,4-dichlorobenzene	106-46-7	ND	300,000
Benzyl alcohol	100-51-6	ND	500,000
1,2-dichlorobenzene	95-50-1	ND	300,000
Bis-(2-chloroisopropyl)ether	108-60-1	ND	300,000

ND Not detected at or above limit of detection -- Information not available or not applicable

Page 3 of 13

Results of Analysis for

Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample Identification: 55547-1 Date Sampled: --

Lab Number: 9209186-01A Date Received: 09/17/92 Sample Matrix/Media: AQUEOUS Date Extracted: 09/22/92 Extraction Method: EPA 3580 Date Analyzed: 09/22/92

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (con-	tinued)		
N-nitrosodi-n-propylamine	621-64-7	ND	300,000
Hexachloroethane	67-72-1	ND	300,000
Nitrobenzene	98-95-3	ND	300,000
Isophorone	78-59-1	ND	300,000
Benzoic acid	65-85-0	ND ,	1,000,00
Bis-(2-chloroethoxy)methane	111-91-1	ND	300,000
1,2,4-trichlorobenzene	120-82-1	ND	300,000
Naphthalene	91-20-3	ND	300,000
Hexachlorobutadiene	87-68-3	ND	300,000
2-chloronaphthalene	91-58-7	ND	300,000
2-methyl naphthalene	91-57-6	ND	300,000
4-chloroaniline	106-47-8	ND	1,000,00
2-nitroaniline	88-74-4	ND	1,000,00
3-nitroaniline	99-09-2	ND	1,000,00
4-nitroaniline	100-01-6	ND	1,000,00
Hexachlorocyclopentadiene	77-47-4	ND	300,000
Dimethyl phthalate	131-11-3	ND	500,000
Acenaphthylene	208-96-8	ND	300,000
Acenaphthene	83-32-9	ND	300,000
Dibenzofuran	132-64-9	ND	300,000

ND Not detected at or above limit of detection -- Information not available or not applicable

Page 4 of 13

Results of Analysis for

Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample Identification: 55547-1 Date Sampled: -

Lab Number: 9209186-01A Date Received: 09/17/92 Sample Matrix/Media: AQUEOUS Date Extracted: 09/22/92 Extraction Method: EPA 3580 Date Analyzed: 09/22/92

Analytical Method: EPA 8270

nalyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
ase/Neutral Extractables (con	tinued)		
2,4-dinitrotoluene	121-14-2	ND	300,000
2,6-dinitrotoluene	606-20-2	ND	300,000
Diethyl phthalate	84-66-2	ND	300,000
4-chlorophenylphenylether	7005-72-3	ND	300,000
Fluorene	86-73-7	ND	300,000
N-nitrosodiphenylamine	86-30-6	ND	300,000
4-bromophenylphenylether	101-55-3	ND	300,000
Hexachlorobenzene	118-74-1	ND	300,000
Phenanthrene	85-01-8	ND	300,000
Anthracene	120-12-7	ND	300,000
Di-n-butylphthalate	84-74-2	ND	300,000
Fluoranthene	206-44-2	ND	300,000
Benzidine	92-87-5	ND	2,000,0
Pyrene	129-00-0	ND	300,000
Benzylbutylphthalate	85-68-7	ND	300,000
3,3'-dichlorobenzidine	91-94-1	ND	2,000,0
Benzo(a)anthracene	56-55-3	ND	300,000
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	500,000
Chrysene	218-01-9	ND	300,000
Di-n-octylphthalate	117-84-0	ND	300,000

ND Not detected at or above limit of detection -- Information not available or not applicable



Page 5 of 13

Results of Analysis

for

Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample Identification: 55547-1 Date Sampled: --

Lab Number: 9209186-01A Date Received: 09/17/92 Sample Matrix/Media: AQUEOUS Date Extracted: 09/22/92 Extraction Method: EPA 3580 Date Analyzed: 09/22/92

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (c	ontinued)		
Benzo(b)fluoranthene	205-99-2	ND	300,000
Benzo(k)fluoranthene	207-08-9	ND	300,000
Benzo(a)pyrene	50-32-8	ND	300,000
Indeno(1,2,3-cd)pyrene	193-39-5	ND	300,000
Dibenzo(a,h)anthracene	53-70-3	ND	300,000
Benzo(ghi)perylene	191-24-2	ND	300,000

ND Not detected at or above limit of detection -- Information not available or not applicable

Page 6 of 13

Results of Analysis for

Superior Analytical Laboratory

Client Reference: Clayton Project No. 92091.86

Sample	Identification:	
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METHOD BLANK

Date Sampled:

Lab Number:

9209186-02A

Date Received:

Date Analyzed:

Date Extracted: 09/22/92

09/22/92

Sample Matrix/Media: Extraction Method:

AQUEOUS EPA 3580

EPA 8270

Analytical Method:

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Acid Extractables			
Phenol	108-95-2	ND	5,000
2-chlorophenol	95-57-8	ND	5,000
2-methyl phenol	95-48-7	ND	5,000
4-methyl phenol	106-44-5	ND	5,000
2-nitrophenol	88-75-5	ND	5,000
2,4-dimethylphenol	105-67-9	ND	5,000
2,4-dichlorophenol	120-83-2	ND	5,000
4-chloro-3-methylphenol	59-50-7	ND	5,000
2,4,5-trichlorophenol	95-95-4	ND	5,000
2,4,6-trichlorophenol	88-06-2	ND	5,000
2,4-dinitrophenol	51-28-5	ND	20,000
4-nitrophenol	100-02-7	ND	20,000
2-methyl-4,6-dinitrophenol	534-52-1	ND	20,000
Pentachlorophenol	87-86-5	ИD	20,000
Base/Neutral Extractables			
Bis(2-chloroethyl)ether	111-44-4	ND	5,000
1,3-dichlorobenzene	541-73-7	ND	5,000
1,4-dichlorobenzene	106-46-7	ND	5,000
Benzyl alcohol	100-51-6	ND	10,000
1,2-dichlorobenzene	95-50-1	ND	5,000
Bis-(2-chloroisopropyl)ether	108-60-1	ND	5,000

Not detected at or above limit of detection ND Information not available or not applicable

Page 7 of 13

Results of Analysis for

Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample Identification: METHOD BLANK

Date Sampled:

Lab Number:

9209186-02A

Date Received:

Date Extracted: 09/22/92

Sample Matrix/Media: Extraction Method:

AQUEOUS EPA 3580

Date Analyzed: 09/22/92

Analytical Method:

EPA 8270

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (con	tinued)		
N-nitrosodi-n-propylamine	621-64-7	ND	5,000
Hexachloroethane	67-72-1	ND	5,000
Nitrobenzene	98-95-3	ND	5,000
Isophorone	78-59-1	ND	5,000
Benzoic acid	65-85-0	ND	20,000
Bis-(2-chloroethoxy)methane	111-91-1	ND	5,000
1,2,4-trichlorobenzene	120-82-1	ND	5,000
Naphthalene	91-20-3	ND	5,000
Hexachlorobutadiene	87-68-3	ND	5,000
2-chloronaphthalene	91-58-7	ND	5,000
2-methyl naphthalene	91-57-6	ND	5,000
4-chloroaniline	106-47-8	ND	20,000
2-nitroaniline	88-74-4	ND	20,000
3-nitroaniline	99-09-2	ND	20,000
4-nitroaniline	100-01-6	ND	20,000
Hexachlorocyclopentadiene	77-47-4	ND	5,000
Dimethyl phthalate	131-11-3	ND	10,000
Acenaphthylene	208-96-8	ND	5,000
Acenaphthene	83-32-9	ND	5,000
Dibenzofuran	132-64-9	ND	5,000

Not detected at or above limit of detection ND Information not available or not applicable



Page 8 of 13

Results of Analysis for

Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample Identification: METHOD BLANK

Date Sampled:

Lab Number:

9209186-02A

Date Received:

Date Extracted: 09/22/92

Sample Matrix/Media: Extraction Method:

AQUEOUS EPA 3580

Date Analyzed: 09/22/92

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (con	ntinued)		
2,4-dinitrotoluene	121-14-2	ND	5,000
2,6-dinitrotoluene	606-20-2	ND	5,000
Diethyl phthalate	84-66-2	ND	5,000
4-chlorophenylphenylether	7005-72-3	ND	5,000
Fluorene	86-73-7	ND	5,000
N-nitrosodiphenylamine	86-30-6	ND	5,000
4-bromophenylphenylether	101-55-3	ND	5,000
Hexachlorobenzene	118-74-1	ND	5,000
Phenanthrene	85-01-8	ND	5,000
Anthracene	120-12-7	ND	5,000
Di-n-butylphthalate	84-74-2	ИD	5,000
Fluoranthene	206-44-2	ND	5,000
Benzidine	92-87-5	ND	30,000
Pyrene	129-00-0	ND	5,000
Benzylbutylphthalate	85-68-7	ND	5,000
3,3'-dichlorobenzidine	91-94-1	ND	40,000
Benzo(a)anthracene	56-55-3	ND	5,000
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	10,000
Chrysene	218-01-9	ND	5,000
Di-n-octylphthalate	117-84-0	ND	5,000

Not detected at or above limit of detection ND Information not available or not applicable

Page 9 of 13

Results of Analysis

for

Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample Identification: METHOD BLANK

Date Sampled:

Lab Number:

9209186-02A

Date Received:

Date Extracted: 09/22/92

Sample Matrix/Media: Extraction Method:

AQUEOUS EPA 3580

Date Analyzed:

09/22/92

Analytical Method:

EPA 8270

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (continued)		
Benzo(b)fluoranthene	205-99-2	ND	5,000
Benzo(k)fluoranthene	207-08-9	ND	5,000
Benzo(a)pyrene	50-32-8	ND	5,000
Indeno(1,2,3-cd)pyrene	193-39-5	ND	5,000
Dibenzo(a,h)anthracene	53-70-3	ND	5,000
Benzo(ghi)perylene	191-24-2	ND	5,000

Not detected at or above limit of detection ND Information not available or not applicable

Page 10 of 13

Results of Analysis for

Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample	Identification:	55547-1	Date Sampled:	
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Lab Number: 9209186-01B Date Received: 09/17/92
Sample Matrix/Media: AQUEOUS Date Extracted: 09/21/92
Extraction Method: EPA 3580 Date Analyzed: 09/21/92

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Organochlorine Pesticides			
alpha-BHC	319-84-6	ND	1
gamma-BHC (Lindane)	58-89-9	ND	1
beta-BHC	319-85-7	ND	1
Heptachlor	76-44-8	ND	1
delta-BHC	319-86-8	ND	1
Aldrin	309-00-2	ND	1
Heptachlor epoxide	1024-57-3	ND	1
Endosulfan I	959-98-8	ND	1
4,4'-DDE	72-55-9	ND	1
Dieldrin	60-57-1	ND	1
Endrin	72-20-8	ND	1
4,4'-DDD	72-54-8	ND	1
Endosulfan II	33212-65-9	ND	1
4,4'-DDT	50-29-3	ND	1
Endrin aldehyde	7421-93-4	ND	1
Endosulfan sulfate	1031-07-8	ND	1
Methoxychlor	72-43-5	ND	1 5
Chlordane	57-74-9	ND	5
Toxaphene	8001-35-2	ND	100
Polychlorinated Biphenyls	(PCB's)		
Aroclor 1016	12674-11-2	ND	50

ND Not detected at or above limit of detection -- Information not available or not applicable



Page 11 of 13

Results of Analysis for

Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample Identification: 55547-1 Date Sampled: --

Lab Number: 9209186-01B Date Received: 09/17/92 Sample Matrix/Media: AQUEOUS Date Extracted: 09/21/92 Extraction Method: EPA 3580 Date Analyzed: 09/21/92

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Polychlorinated Bipheny	ls (PCB's) (continue	ed)	
Aroclor 1221	1104-28-2	ND	50
Aroclor 1232	11141-16-5	ND	50
Aroclor 1242	53469-21-9	ND	50
Aroclor 1248	12672-29-6	ND	50
Aroclor 1254	11097-69-1	ND	50
Aroclor 1260	11096-82-5	ND	50

ND Not detected at or above limit of detection -- Information not available or not applicable



Page 12 of 13

Results of Analysis for Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample Identification: METHOD BLANK Date Sampled: -Lab Number: 9209186-02A Date Received: --

Sample Matrix/Media: AQUEOUS Date Extracted: 09/21/92 Extraction Method: EPA 3580 Date Analyzed: 09/21/92

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Organochlorine Pesticides			
alpha-BHC	319-84-6	ND	1
gamma-BHC (Lindane)	58-89 - 9	ND	1
beta-BHC	319-85-7	ND	1
Heptachlor	76-44-8	ND	1
delta-BHC	319-86-8	ND	1
Aldrin	309-00-2	ND	1
Heptachlor epoxide	1024-57-3	ND	1
Endosulfan I	959-98-8	ND	1
4,4'-DDE	72-55-9	ND	1
Dieldrin	60-57-1	ND	1
Endrin	72-20 - 8	ND	1
4,4'-DDD	72-54-8	ND	1
Endosulfan II	33212-65-9	ND	1
4,4'-DDT	50-29-3	ND	1
Endrin aldehyde	7421-93-4	ND	1
Endosulfan sulfate	1031-07-8	ND	1
Methoxychlor	72-43-5	ND	5
Chlordane	57-74 - 9	ND	5
Toxaphene	8001-35-2	ND	100
Polychlorinated Biphenyls	(PCB's)		
Aroclor 1016	12674-11-2	ND	50

ND Not detected at or above limit of detection -- Information not available or not applicable



Page 13 of 13

Results of Analysis for Superior Analytical Laboratory

Client Reference: 55547 Clayton Project No. 92091.86

Sample Identification: METHOD BLANK

Date Sampled:

Lab Number:

9209186-02A

Date Received:

Sample Matrix/Media:

AQUEOUS

Date Extracted: 09/21/92

Extraction Method:

EPA 3580

Date Analyzed: 09/21/92

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Polychlorinated Bipher	nyls (PCB's) (continue	ed)	
Aroclor 1221	1104-28-2	ND	50
Aroclor 1232	11141-16-5	ND	50
Aroclor 1242	53469-21-9	ND	50
Aroclor 1248	12672-29-6	ND	50
Aroclor 1254	11097-69-1	ND	50
Aroclor 1260	11096-82-5	ND	50

ND Not detected at or above limit of detection Information not available or not applicable

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Phone No. Contact:	(415) CE	647-21 C(L)	081	Fax	No	. [4		1-71	23	- 2 - 4	4 Hrs 8 Hrs	5 De 10 De	y	-		<u>`</u>	P.O. Box 1545 Martinez, California 94553
P.O. No.	555	47								١w	Ork	Subcontra	cted	to: _	(<u>Va</u>	ufne 9209186
Section II:	Analy	rsis Re	que	st						#	140 W					· <u>-</u>	Q
Laboreto Sample Identificat		Xi- Xatar Xi- Water	CAM17	Metals:	418.1	8270	8080 (pest. and PCB's)	SAH PERA	PCB's by 8880		ide	Client Sample	Number of Containers	reservative (yes or no)			Sampling Remarks Chevron Non-Chevron **Please Fax Results*
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Relinquished by -						Date	/Time	D		by Date/Tin					— i 7		opriate Containers



Superior Precision Analytical, Inc.

1555 Burke, Unit ! • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55547

DATE RECEIVED: 09/15/92 DATE REPORTED: 09/23/92 CLIENT: PES ENVIRONMENTAL, INC.

CLIENT JOB NO.: 20801001

ANALYSIS FOR TOTAL PETROLEUM OIL AND GREASE by Method 5520F (formerly 503E)

LAB	•	Concentration (mg/L)
#	Sample Identification	Total Petroleum Oil & Grease
1	20801001	32

mg/L - parts per million (ppm)

Minimum Detection Limit for oil & grease in Water: 5mg/L

QAQC Summary:

MS/MSD Average Recovery = 70% Duplicate RPD = 11%

Richard Srna, Ph.D.



CHAIN OF CUSTODY RECORD

		(7
Ξ S	77	7
-5-		

	SAMPLERS: Muc	had Thomp	sen	ANALYSIS REQUESTI	ED
JOB NUMBER: 20801001					
NAME/LOCATION: COX CADILLAC/OA	RLAND_	· A _ A		Wetats	
PROJECT MANAGER: RSC	RECORDER: Mu (Signature R	chall Muny	2009	F	
DATE SAMPLE NUMBER OF LAB NUMBER SEQ SO	MATRIX # CON	TAINERS ESERV. DEPTH COL IN MTD CD FEET CD	QA CODE	EPA 602/8010 EPA 602/8020 EPA 624/8240 EPA 625/8270 BTEX TPH (GASOLIN TPH (DIESEL) TOG (5520 C&F	
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	-		VOA's	without lead space	
			Contro	Prits:	
					-P
NOTES			CHAIN OF	CUSTODY RECORD	
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3 1-lites lottles, 1-1 qua of product/water jane wi	rat masers	RELINQUISHED BY (Signature)		Pra Javanus 1276 RECEIVED BY: (Signature)	9/10/92 1205 DATE TIME
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Superior Precision Analytical, Inc.

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 86787

CLIENT: PES ENVIRONMENTAL, INC.

CLIENT JOB NO.: 20801001

DATE RECEIVED:09/24/92 DATE REPORTED:09/25/92 DATE SAMPLED:09/03/92

ANALYSIS FOR TOTAL NICKEL by SW-846 METHOD 6010

LAB # 	Sample Identification	Concentration(mg/L) Total Nickel
1	20801001	ND<1

mg/L - parts per million (ppm)

Method Detection Limit for Nickel in Water: 0.1 mg/L Result on organic layer.

QAQC Summary: MS/MSD Average Recovery: 96 %

Duplicate RPD : 1

Richard Srna, Ph.D.

Waboratory Manager Molson do

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 86787

CLIENT: PES ENVIRONMENTAL, INC.

CLIENT JOB NO.: 20801001

DATE RECEIVED:09/24/92 DATE REPORTED:09/25/92

ANALYSIS FOR CADMIUM, CHROMIUM, LEAD & ZINC by EPA SW-846 Method 6010

LAB		Con	ncentration	(mg/L)	
#	Sample Identification	Cadmium	Chromium	Lead	Zinc
-					
1	20801001	ND<0.5	ND<0.5	ND<1	ND<1

mg/L - parts per million (ppm)

Method Detection Limit for Cadmium in Water: 0.05 mg/L Method Detection Limit for Chromium in Water: 0.05 mg/L

Method Detection Limit for Lead in Water: 0.1 mg/L Method Detection Limit for Zinc in Water: 0.05 mg/L

QAQC Summary: MS/MSD Average Recovery : 106%

Duplicate RPD: 8

Result for organic layer.

Richard Srna, Ph.D.

Illson for



CHAIN OF CUSTODY RECORD

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APPENDIX C

ANALYTICAL LABORATORY REPORTS FOR SOIL AND GROUNDWATER SAMPLES FROM TANK EXCAVATION



Superior Precision Analytical, Inc.

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55579

DATE RECEIVED: 09/24/92

CLIENT: PES ENVIRONMENTAL, INC. CLIENT JOB NO.: 167.02.001

DATE REPORTED: 09/25/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/kg) Mineral Spirits Range
2	TE-N-5.5	ND<10
3	TE-S-7.5	ND<10

mg/kg - parts per million (ppm)

Minimum Detection Limit for Mineral Spirits in Soil: 10mg/kg

QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Mineral Spirits = <15% MS/MSD Average Recovery = 87%: Duplicate RPD = 2%

Richard Srna, Ph.D.



Superior Precision Analytical, Inc.

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55579

CLIENT: PES ENVIRONMENTAL, INC.

CLIENT JOB NO.: 167.02.001

DATE RECEIVED: 09/24/92

DATE REPORTED: 10/02/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB # 	Sample Identification	Concentration (ug/L) Mineral Spirits Range
1	GW-1	100

ug/L - parts per billion (ppb)

Minimum Detection Limit for Diesel in Water: 50ug/L

QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15% MS/MSD Average Recovery = 77%: Duplicate RPD = 4%

Richard Srna, Ph.D.

Laboratory Director



JOB NUMBER: 167.02.001

CHAIN OF CUSTODY RECORD

SAMPLERS: D. TRUMBLY



ANALYSIS REQUESTED

NAME/LOCA PROJECT M	TION: ∫ ANAGEI	` <u>∞</u> x ∹ Aı	<u> </u>	<u>-</u> દા ટેદ્	اللا اللا	. <u>А</u> А.	ر ا	Ω, α ε	A IE	EE EE	/ <u>P</u>	30		_		- R	EC	OR	DE		(Sign	Latu	Za.	ieat	L) L	1	2	4						·				0	0	0	0.		JNE)	7	S.F.	ant Metak	19. Sep			į				
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APPENDIX D

ANALYTICAL LABORATORY REPORTS FOR STOCKPILED SOIL



CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55600

CLIENT: PES ENVIRONMENTAL, INC.

CLIENT JOB NO.: 167.02.001

DATE RECEIVED: 09/29/92

DATE REPORTED: 10/02/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB
Sample Identification Mineral Spirits Range

2 COMP SP2(A-C) ND<10

mg/kg - parts per million (ppm)

Minimum Detection Limit for Diesel in Soil: 10mg/kg

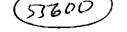
QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15% MS/MSD Average Recovery = 70%: Duplicate RPD = 8%

Richard Srna, Ph.D.

Laboratory Direct





Superior Ambitual

CHAIN OF CUSTODY RECORD

SAMPLERS:

JOB NUMBER: 167.	02,001	SAMPLERS:	1		ANALYSIS REQUESTED						
NAMEROCATION: COX Calillae Oaklad											
PROJECT MANAGER:	AAB	RECORDER:	1/10/1								
	SAMPLE NUMBER		eré Required) CONTAINERS		0000 020 000 000 000 000 000 000 000 00						
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APPENDIX E

COMPACTION TEST REPORTS FOR BACKFILL



Testing Engineers, Inc.

PROJECT NO: 31752

TYPE OF INSPECTION

PLACE OF INSPECTION

PROJECT NAME: Cox Cadillac

27 & Harrison

Nuclear Density

Jobsite

WORK REQUEST: H1180

ZONE:

DATE:

HOURS:

INSPECTOR:

4 Cottom

10-5-92

Reported to: Raymond Boriack

Feature: Driveway Aggregate Base

Field Test Procedure: ASTM D2922 & D3017

Company: Bill-Cox Cadillac

Lab Test Procedure: ASTM D1557

MATERIAL-DESCRIPTION-

OPT.-MOIST.-

MAX.-DENSITY-

LABTREF. #

1. Gray Silty Sandy Gravel

7.9%

2.15 g/cc

L0627

3/4" AB

	Location	FIE	ELD T	TEST Curve No.	R E S U L Field Dens		Rel. Comp.	Proj. Spec.
			<u></u>				0/	%
1 A •	5' N. of Entr	rv Conform,	FAB	1	2.07	9.5	96	95

Test results constitute the reporting of factual information derived from test(s) made by our laboratory following prescribed procedures. These test results should not be considered as an engineering opinion with respect thereto.

Reviewed by

Terry R\ Chiccino, Soils/Asphalt

Field Operations Manager

PES Environmental



Testing Engineers, Inc.

Place of Inspection 31752 Type of Inspection PROJECT#

PROJECT NAME: Cox Cadillac

for PES

Nuclear Density

Jobsite

Environmental

Work Request # H 1043

Zone:

Date 9/30/92 2.0 Hours

R. Griffiths Inspector

Reported to:

Tank Backfill

City of Oakland

Feature: Lab Test Procedure: ASTM D1557 Field Test Procedure: ASTM D2922 & D3017

Material Description

Opt. Moist.

Max. Density

Gray, Silty, Sand with Gravel

7.9%

134.1 pcf

L0627

Lab Ref.

FIELD TEST RESULTS

	Location		1	Elev.		Field Moist.			
1.	See Sketch f	or locations	_	FSG	pcf 117.9	ቴ 13.2	1	% 88	95
3.	See Sketch f See Sketch f See Sketch f	or locations]	FSG FSG FSG	118.6 120.8 120.4	14.7	1 1 1	88 90 90	95 95 95

Test results constitute the reporting of factual information derived from tests made by our laboratory following prescribed procedures. These test results should not be considered as an engineering opinion with respect thereto.

Reviewedby

Terry R. Chiccino, Manager

Soils/Asphalt Field Operations

RECEIVED OCT 1 9 1997



Testing Engineers, Inc.

LABORATORY NO. L0627 REPORT OF SOIL TESTS DATE: 10/01/92 JOB DATA: 31752

Cox Cadillac

27th & Harrison

PES100

-SAMPLE DATA: Recycled class II aggregate base.

American Rock & Asphalt, Source:

Richmond

VISUAL CLASSIFICATION: Grey Silty Sandy Gravel

MAXIMUM DENSITY DETERMINATION:

ASTM D1557 Method C Method Optimum Moisture, % 7.9

Maximum Dry Density

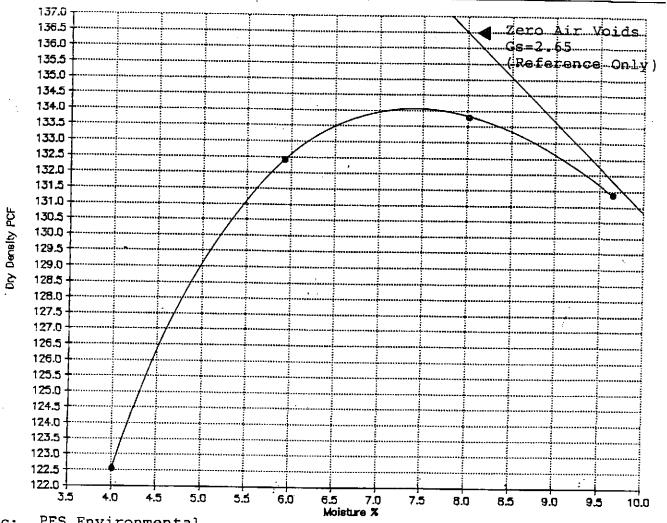
(lbs. cu. ft.)

2.15 g/cc 134.1

PLASTIC CHARACTERISTCS:

Liquid Limit, % Plastic Limit, % Plasticity Index

SAND EQUIVALENT TEST:



lcc: PES Environmental

Reviewed by Walter C. Leonard Lab Supervisor

401 Aldo Avenue, Santa Clara, California 95054-2032 • (408) 988-8888 • FAX (408) 727-0731 DIABLO VALLEY . MONTEREY/SALINAS . OAKLAND . SACRAMENTO . SANTA CLARA

APPENDIX F

MANIFEST FOR RESIDUAL PRODUCT AND EXCAVATION GROUNDWATER

FACILI

Do Not Write Below This Line

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manufest except as noted in item 19.

Printed/Typed Name

19. Discrepancy indication Space

Dav

Month

Year

PES Environmental, Inc.

APPENDIX G

MANIFEST FOR TANK
AND TANK DESTRUCTION CERTIFICATE

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	om At	California—Health and Welfain Agency Paraved OM8 No. 2050—0039 (Explies 9-30-91) print or type. Form designed for use on elite (12-pitch hyperenter).	\$ eo Instruction	s on bac	k of pag	···nalou		Department of Health Service Substances Control Program Sacramento, Californi
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		4. Generator's Prone (4)57 396-6743 5. Transporter I Company Name	3 94	163		The Park Co		
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				1 1	1	3 1 1 1		El'A/Olha
		Androna Description for Maieros (seed Above Oty, I	Empty Storage	Tank		Codes los Wistes	talen ébe is	:V +
Ê		# 7695. Tank has been inert Ice per 1000 gals, capacity.		· DIA	AALD.	U	ŭ.	
**		15. Special Handling instructions and Additional Information Years away from sources of its	mition Always	tre or	hard	bats whe	11 WO	rkine
		Keep away from sources of ig around U.S.T.'s. Site Locati 24 Hr. Contact Name:	ion: 27th = 200	& Phot	-5# 1e.#	CAUSTO Cak	I and	, Cal €.
YAL T		GENERATOR'S CERTIFICATION: I hereby declare that the content packed, marked, and labeled, and are in all respects in proper or	to of this consignment are fully and	occurately d	inscribed of	pove by proper to	icping na	තඉ අතුල් ඇතු දේකාණය ේ,
HE N		if I am a large awanthy generator, I certify that I have a programming and a management of the processing representations of that I have selected the processing representation of the processing and that I are a management	om in place to reduce the volume ble method of freatment, storage, o quantity generator, I have made a p	and texticity or discount cur	of wase o	operated to the dispersions	ogree 1 ha	ave determined to be the present and future
		Emiedityped Nome A gent tor Grene raye	Signicilure			1	Month	COY Yeur
ا الر	¥.	WP COX for JOSETH SCHRONN	WKIR	Jose	the So	hily	0, 9	9 2 4 9 2
	P A	17 Transporter I Acknowledgement of Receipt of Materials Printed/Typed Name	Signature			04	Monte	Day Feat
FNC	2 10 0	James R. Cox	James	V Y.		of	0 ,9	12,419,2
Œ	Q R T	18 Transporter 2 Acknowledgement of Receipt of Mictarios Printed/Typed Nome	Signature		····		Marsh	אביני אבים ו
Ö	E R						1	1 1 1 1
	F A	19. Decrepancy indication Space				<u> </u>		
Z	C							

DO NOT WRITE BELOW THIS LINE.

20. Footing Owner or Operator Certification of receipt of hozordous moterats covered by this maintest except as noted in item 19.

Printed Typing Name

[Signature]

:Sev

091241912

DAVID

SATO

(510) 235-1393

CERTIFIED SERVICES COMPANY

255 Parr Boulevard - Richmond, California 94801

DAY OF N.GHI CKC SAN ARDO CERTIFICATE NO.10572

	CUSTOMER
ļ	
	JOB NO.
ì	20010

	FOR: Erickson, Inc. TANK NO. 9695	
	LOCATION: Richmond DATE: 09/26/90 TIME: 09:36:00	
TE	ST METHOD Visual Gastech/1314 SMPN LAST PRODUCT STS	_
	This is to certify that I have personally determined that this tank is in accordance with the American Petroleum Institute and have found the condition to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.	-
	TANK SIZE 1000 Gatlon Tank CONDITION SAFE FOR FIRE	_
	REMARKS: ONYGEN 20.9%	
	FORER EXPLOSIVE LIMIT LESS THAN 0.1%	
	"ERICKSON INC. HEREBY CERTIFIES THAT FUE ABOVE NUBBERED TAKE HAT BEEN	
	CUT OPEN, PROCESSED, AND THEREFORE DESTROYED AT OUR PERMITTED MAKARDOUS	
	WASTE FACILITY."	
}		
	in the event of any physical or atmospheric changes affecting the gas-free conditions of the above tanks, or if in any doubt, immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.	_
	STANDARD SAFETY DESIGNATION	
	SAFE FOR MEN: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) in the judgment of the inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the inspector's certificate.	
	SAFE FOR FIRE: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) in the judgment of the inspector, the residues are not capable of producing a higher concentration that permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the inspector.	
	The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.	
	REPRESENTATIVE TITLE INSPECTOR	
-		

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November 13, 1992

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Quality Control Reviewer

William F. Frizzell, P.E.

Principal Engineer