

DRAFT

RICHARD T. WHITE #58622
ROBERT F. CAMPBELL #136153
FITZGERALD, ABBOTT & BEARDSLEY
1221 Broadway, 21st Floor
Oakland, California 94612-1837
Telephone: (510) 451-3300

Attorneys for Plaintiffs

SUPERIOR COURT OF CALIFORNIA
COUNTY OF ALAMEDA

JEAN RATTO LARKIN; JEFFREY RATTO;
ROBERT RATTO,

Plaintiffs,

vs.

DESERT PETROLEUM, INC., a
California corporation; PHILLIPS
PETROLEUM COMPANY, a Delaware
corporation; TOSCO CORPORATION, a
Nevada corporation; TEXACO, INC.,
a Delaware corporation; and DOES
1 through 100, inclusive,

Defendants.

No. 691609-9

DECLARATION OF
LARRY SETO

I, Larry Seto, declare as follows:

1. I am an employee of the Alameda County Health Care Services Agency ("County") and have responsibility for the District's oversight of the remediation of the soil and groundwater contamination at the 1628 Webster Street, Alameda, California ("Property"). I am a Senior Hazardous Materials Specialist with the County. Based on my personal knowledge from a review of the County's record file on this Property and facts and events concerning this Property which are known to me, I could and would

DRAFT

1 testify competently to the matters stated herein if called as a
2 witness at trial.

3 2. The excavation that would have been required to remove
4 four (4) 550 gallon underground storage tanks, and to replace them
5 with tanks of 1,500, 2,000 and 3,000 gallon capacities, would have
6 disclosed any significant gasoline contamination that had occurred
7 from those tanks. My experience, based upon being present at
8 numerous excavations where gasoline underground storage tanks have
9 been removed, is that if there has been any significant (i.e., more
10 than a very small amount), of gasoline leakage or spillage, there
11 will be a strong, noticeable odor of gasoline during the excavation
12 of the contaminated soil.

13 3. Gasoline contamination remains in the soil around tanks
14 or piping where leaks have occurred, and contaminated soil will be
15 excavated during the removal of tanks and piping that have leaked.
16 Moreover, where smaller tanks (such as four (4) 550 gallon tanks),
17 are replaced with larger tanks (such as three (3) tanks with
18 capacities of 1,500, 2,000 and 3,000 gallons), a much larger and
19 deeper excavation is required to install the larger tanks than
20 would be required for removal of the smaller tanks. This would
21 further guarantee the excavation of petroleum contaminated soil,
22 if any existed, particularly from the bottom of the excavation.

23 4. The excavation required to remove underground storage
24 tanks with 1,500, 2,000 and 3,000 gallon capacities, and replace
25 them with one or more tanks of 8,000 to 10,000 gallon capacities,
26 would have disclosed any significant gasoline contamination that
27 had occurred from those tanks. My experience, based upon being
28

DRAFT

1 present at numerous excavations where gasoline underground storage
2 tanks have been removed, is that if there has been any significant
3 (i.e., more than a very small amount), of gasoline leakage or
4 spillage, there will be a strong, noticeable odor of gasoline
5 during the excavation of the contaminated soil.

6 5. Gasoline contamination remains in the soil around tanks
7 or piping where leaks have occurred, and contaminated soil will be
8 excavated during the removal of tanks and piping that have leaked.
9 Moreover, where smaller tanks (such as three (3) tanks with 1,500,
10 2,000 and 3,000 gallon capacities), are replaced with larger tanks
11 (such as 8,000 to 10,000 gallon tanks), a much larger and deeper
12 excavation is required to install the larger tanks than would be
13 required for removal of the smaller tanks. This would further
14 guarantee the excavation of petroleum contaminated soil, if any
15 existed, particularly from the bottom of the excavation.

16 6. I was present at the removal of a 280 gallon waste oil
17 underground storage tank from the Property which occurred on April
18 4, 1989. The excavation to remove the tank was to the normal depth
19 to remove such a tank. There was no noticeable gasoline odor or
20 anything out of the ordinary associated with the excavation or
21 removal. If there had been noticeable gasoline odor associated
22 with the excavation or removal, I would have immediately ordered
23 work to determine the extent of that contamination, including the
24 installation of a groundwater monitoring well. I did not order
25 such work until samples taken from the excavation of the used oil
26 tank indicated that there was some petroleum contamination at the
27 fill and vent ends of the tank.

28

1 7. The Property is contaminated with petroleum hydrocarbon
2 contamination at levels exceeding the accepted regulatory standards
3 for clean. Attached hereto as Exhibit "A" is a true and correct
4 copy of a report dated May 25, 1990, which was prepared by Exeltech
5 for the investigation and remediation of the petroleum hydrocarbon
6 contamination on the Property. The investigation and remediation
7 work reflected by the report attached hereto as Exhibit "A", as
8 well as the preparation of that report, was requested by the
9 County. A copy of this report was submitted to the County as
10 required by the County and is kept with the regular files of the
11 County for this site. I was the lead agency official at the time
12 this remediation work was done and this report was prepared. I
13 reviewed and approved the work plans for this remediation work and
14 reviewed and approved the report attached as Exhibit "A". I
15 visited the site during the remediation work and observed the
16 nature and extent of the petroleum contamination. The report
17 attached as Exhibit "A" accurately reflects the nature and extent
18 of the petroleum hydrocarbon contamination on the Property,
19 including the fact that there were three identified sources of
20 contamination on the Property: (1) the piping between the fuel
21 tanks and the pump islands, (2) the pump islands and (3) the hoists
22 in the lube bays.

23 8. Benzene, toluene and ethylbenzene are petroleum
24 constituents with relatively high volatility. As a result, where
25 there has been a petroleum release/spill into soil, these
26 constituents tend to migrate away from the source of the
27 release/spill at a faster rate than other less volatile petroleum
28

DRAFT

1 constituents. The soil samples taken from beneath the hoists in
2 the lube room show that the soil is contaminated with petroleum
3 which is absent the constituents of benzene, toluene and ethyl
4 benzene. This indicates that the petroleum contamination resulted
5 from releases occurring over a long period of time.

6 9. Jean Ratto Larkin, Robert Ratto and Jeffrey Ratto were
7 requested by the County to investigate and remediate the
8 contamination on the Property because they presently own the
9 Property. All of the actions they have taken to investigate and
10 remediate the petroleum contamination on the Property have been
11 requested by the County.

12 10. The wall of the excavation along Webster Street had
13 visible petroleum contamination which indicates that contamination
14 from the site has migrated off the Property. The historic
15 groundwater flow for the area is in a direction migrating away from
16 the corner of the Property at Webster Street and Pacific Avenue.
17 As reflected by my testimony during a deposition taken of me in
18 this action, plaintiffs have not been required to investigate or
19 remediate off-site contamination. They have not been required to
20 do this because they do not have the financial resources to do this
21 work.

22 11. The contaminated soil excavated from the Property is
23 presently piled up on the Property. Groundwater contamination,
24 including floating product on the groundwater, was encountered
25 during the excavation. A plan for groundwater treatment has not
26 been approved. The County will not approve construction on the
27 Property until the soil is either treated to remove all
28

1 contamination exceeding standards set by the County, or the soil
2 is hauled to an approved landfill, and a plan for groundwater
3 treatment has been approved.

4
5
6 _____
Date

7
8 _____
Larry Seto
9 Alameda County Health
10 Care Services Agency
11 Senior Hazardous Materials
12 Specialist
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28



SUMMARY REPORT

FOR

**JEAN R. LARKIN
(PACIFIC PROPERTIES)
1628 WEBSTER STREET
ALAMEDA, CALIFORNIA**

**Project No. 4358F
May 1990**

EXHIBIT A



May 25, 1990

Golden, Stefan, Ellenberg & Toby
7677 Oakport, Suite 460
Oakland, CA 94621-1967

Attention: Mr. George C. Rogers

Subject: Summary Report for
Jean R. Larkin (Pacific Properties)
1628 Webster Street, Alameda, California
Exceltech Project No. 4358F

Dear Mr. Rogers:

At the request of Jean R. Larkin (Pacific Properties), Exceltech, Inc. is submitting this Summary Report, which includes analytical results and a short synopsis of the work completed at the subject site. The reason for the request, was the vast extent of contamination found in both groundwater and soil on the property.

This report, as stated, is an informational summary of the work completed at the subject site by Exceltech. Any attempt to use this report as an interpretive tool to establish responsible parties for the contamination found at the site will be done so at the sole risk, and liability of the parties doing so.

Yours truly,

Randall L. Stone
Program Manager

RLS:jcd
Enclosure

CONTENTS

<u>Section</u>	<u>Page</u>
Background	1
Phase I Work Schedule and Objective	1
Excavation, Phase I	2
Exceltech's Proposal for Phase II	3
Excavation, Phase II	3
Phase II Summary	6
Excavation, Phase III	7
Job Summary	8
 <u>Appendices</u>	
Background Documents	A
Analytical Results	B
Permits/Correspondence/Manifests	C
1990 Work Summary	D

Background

Exceltech conducted Phase I work at the site based upon the proposed work plan submitted by LRA Environmental, and accepted by Alameda County Department of Environmental Health. (ACDEH) A copy of this work plan , "Plan of Corrections, Waste Oil Tank," July 24, 1989, is enclosed in Appendix A of this report. Based upon this report and our conversations with Pacific Property, the following work schedule was proposed.

Phase I Work Schedule and Objective

1. Re-excavate the contaminated soils placed back into the waste oil tank excavation by the previous contractor.
2. Excavate around the former waste oil tank area until soil sample readings reach non-detectable levels. Conduct confirmation sampling by sending samples to the laboratory.
3. Drill three soil borings around the new excavation and convert one to a groundwater monitoring well, as required by LRA's work plan.
4. Locate the monitoring well downgradient, as defined by an off-site well survey.

LRA 's environmental work plan indicated the only contamination was localized only around the fill end of the waste oil tank excavation. Exceltech believed that excavation was the most prudent approach because (a) contaminated soils had been put back into the excavation and (b) the excavation boundaries were obscure. Furthermore, significant cost savings would result if the contamination could be defined and the soil borings placed in clean areas.

Excavation, Phase I

The first excavation phase was conducted from the end of November through early December 1989 (Site Map 1). Initially, the previously excavated soils were removed to expose native soil sidewalls. After exposing the sidewalls, it was evident that the east wall was substantially contaminated. The west wall had also visible strings of contamination.

It was agreed to extend the excavation in both west and east directions. To the west, the limit would be Webster Street; to the east, the existing building.

Excavation to the east was halted when it was determined that further excavation would undermine the building. At this time, contamination was apparent not only in the east wall of the excavation, but in the north wall as well.

Excavation to the west was stopped before Webster Street when a steel conduit was encountered. Since Pacific Properties had subleased the site to Christmas tree

vendors, Exceltech backfilled the excavation for safety and demobilized its field crews.

Exceltech's Proposal for Phase II

Exceltech proposed to Pacific Properties to demolish the existing building to extend the excavation in an attempt to determine the extent of contamination. Once the building was demolished, Exceltech also proposed to remove two hoists from inside excavating around their concrete-encased bases. Soil sampling would be conducted as required for formal excavation closure.

Excavation, Phase II

The extent of contamination at the subject site began to be revealed during the Phase II excavation (Site Map 2, photo record). Three possible additional sources of contamination besides the waste oil tank were discovered, significantly changing the scope of work. Additional sources included:

1. Two floor hoists.
2. Steel and fiberglass product lines.
3. Five-thousand-gallon fuel tank.

Floor Hoist Area

Soil beneath the floor hoists were the first to be excavated and sampled. Contamination was extensive. Samples taken on February 2, 1990 in areas underneath and around the hoists revealed the following levels of contamination in the soils:

TPH as gasoline	1,800 ppm
TPH as diesel	6,300 ppm
Total oil and grease	4,400 ppm

The contamination had migrated not only laterally but vertically beneath the hoists. In areas underneath the hoists, visible contamination was removed below the water table, dewatering the excavation and removing soils. It was apparent (due to the extent of contamination) that these hoists had been leaking for many years.

A noteworthy discovery in the sample results taken in this area was the presence of gasoline and diesel. Gasoline constituents likely to migrate include benzene, toluene, ethyl benzene, and total xylenes (BTEX). Of those constituents, only total xylenes were present (at 19 ppm). The absence of the other constituents indicates that the contamination did not originate from a new source, but from one that had existed for some time.

Exceltech dewatered the excavation, pumping the water into a baker tank on-site. Samples of the water from the middle of the excavation were taken on March 14, 1990. The following constituents were present:

TPH	860 ppb
Benzene	4.5 ppb
Toluene	8.4 ppb
Ethyl Benzene	7.1 ppb
Xylenes	7.5 ppb
High Boiling Point Hydrocarbons	2,100 ppm

Product Line Areas

The Phase II excavation led to the discovery of product lines, a second possible source of contamination. Both fiberglass and steel lines were exposed and removed (see photo documentation). Site Map 3 shows the approximate location of these lines.

Some of the lines were contained in the same trench, with the fiberglass lines situated above the steel lines. Staining, visible beneath some trench areas, indicated contamination. It was not apparent whether the lines had been properly capped; however, none of the lines had been grouted closed.

Fuel Tank

Another discovery that should be noted was a fuel tank of approximately 5,000-gallon capacity, located northwest of the demolished building. The tank had been closed in-place, that is, filled with sand and capped with cement. There was no evidence, such as staining or visible holes in the tank to suggest that the tank was a source of contamination.

Phase II Summary

The presence of fuel contamination became much more evident to the north and west as the excavation increased in size. Our objectives were (a) to excavate until the readings from the soils reached levels approved by the ACHD and (b) to close the excavation. Results from the February 28, 1990 sampling were sent to Mr. Ariv Levi of the ACDEH for approval. See Appendix B for a summary of work conducted in 1990.

Second, the fact that water had been impacted and needed to be addressed was now an issue. Confirming this was floating product being observed in the open excavation. Water samples taken in the north half of the excavation revealed the following water contamination levels:

High Boiling Point Hydrocarbons (diesel)	8,600 ppm
TPH as gasoline	7,900 ppb
Benzene	95 ppb
Toluene	290 ppb
Ethyl Benzene	220 ppb
Xylenes	1,110 ppb
Oil and Grease	16 ppm

Excavation, Phase III

Based upon the analytical results of sample 1, taken on February 28, 1990 (see Appendix A), it was decided to further excavate the northwest corner of the property where Pacific and Webster Streets meet. (See Site Map 2 and photo record.) This phase of work took place between April 17 and 22, 1990.

Starting at the Pacific Street easement and moving south parallel to Webster Street, we excavated heavily contaminated soil. The contamination appeared at the 5-foot level and continued below groundwater at the 8- to 9-foot level. Contamination appeared to continue beyond the easement, underneath the Webster Street sidewalk.

During excavation, three large canopy footings were found. These footings were situated in a line running north to south, approximately 12 feet east of the Webster Street easement. The first footing, encountered approximately 25 feet south of the

Pacific Street easement, was saturated with petroleum hydrocarbons gasoline and diesel. While removing the middle footing, we noted that the contamination was very close to grade. About 2- feet to the south, contamination reached the surface underneath the concrete slab. This pattern continued to the location of the third footing which was also removed. Approximately 1 foot beyond the third footing, the depth of the contamination began to drop below grade gradually. Contamination was no longer visible at about 120 feet south of Pacific Street.

During the excavation, large amounts of asphalt and concrete rubble were encountered. This material may have been used as backfill when the underground tanks were removed. The largest amounts were found in the northwest corner extending approximately 20 feet east and 50 feet south. On several occasions, we encountered both fiberglass and steel product lines. Often the trenches had both types of product lines, with the steel below and fiberglass above. On April 18, 1990, Exceltech Staff Geologist, Douglas T. Young took soil samples from around the excavation (Appendix C). Two of the three samples had very high levels of gasoline and diesel fuel and moderate levels of oil and grease contamination.

During Phase III, approximately 1,300 cubic yards of contaminated soil were removed from the excavation. The soil was placed upon plastic sheeting on-site and covered to prevent volatilization.

Job Summary

It is evident that the current scope of this job has greatly exceeded anyone's expectations. To date, over 3,000 cubic yards have been excavated. The soil adjacent to Webster, and

the northwest corner of the property adjacent to Pacific, still have soil contamination that will need to be addressed in the future.

Exceltech maintains that the excavation could be closed without any further excavating in areas of the sidewalk and street. In talking with Mr. Larry Seto of the ACEDH, we agreed that backfilling would be feasible based upon criteria outlined in a letter dated May 17, 1990 (Appendix D).

Point number 3 of that correspondence (May 17, 1990) address the attempt to place a barrier to ensure that no native contaminated soil would come into contact with clean fill. However, since groundwater has been contaminated, there are no assurances that the clean backfill will not be re-contaminated until the soil and groundwater have been cleaned up. However, Mr. Seto agreed with Exceltech that the most important aspect was to close the excavation and proceed with site development while monitoring the groundwater.

As previously stated, Exceltech has prepared this report as an informational summary. Any attempt to use this report for litigation, will be at the risk, liabilities, and responsibility of the parties involved.

WEBSTER STREET

APPROXIMATE LOCATION
OF WASTE OIL TANK

EXISTING BUILDING

EXISTING
BUILDING

EXISTING
BUILDING

EXISTING
BUILDING

PACIFIC AVENUE

PROPERTY BOUNDARY



NOT TO SCALE



EXCELTECH

SITE MAP NUMBER 1

LARKIN SITE

1628 WEBSTER STREET

ALAMEDA, CALIFORNIA

REVIEWED BY:

APPROVED BY:

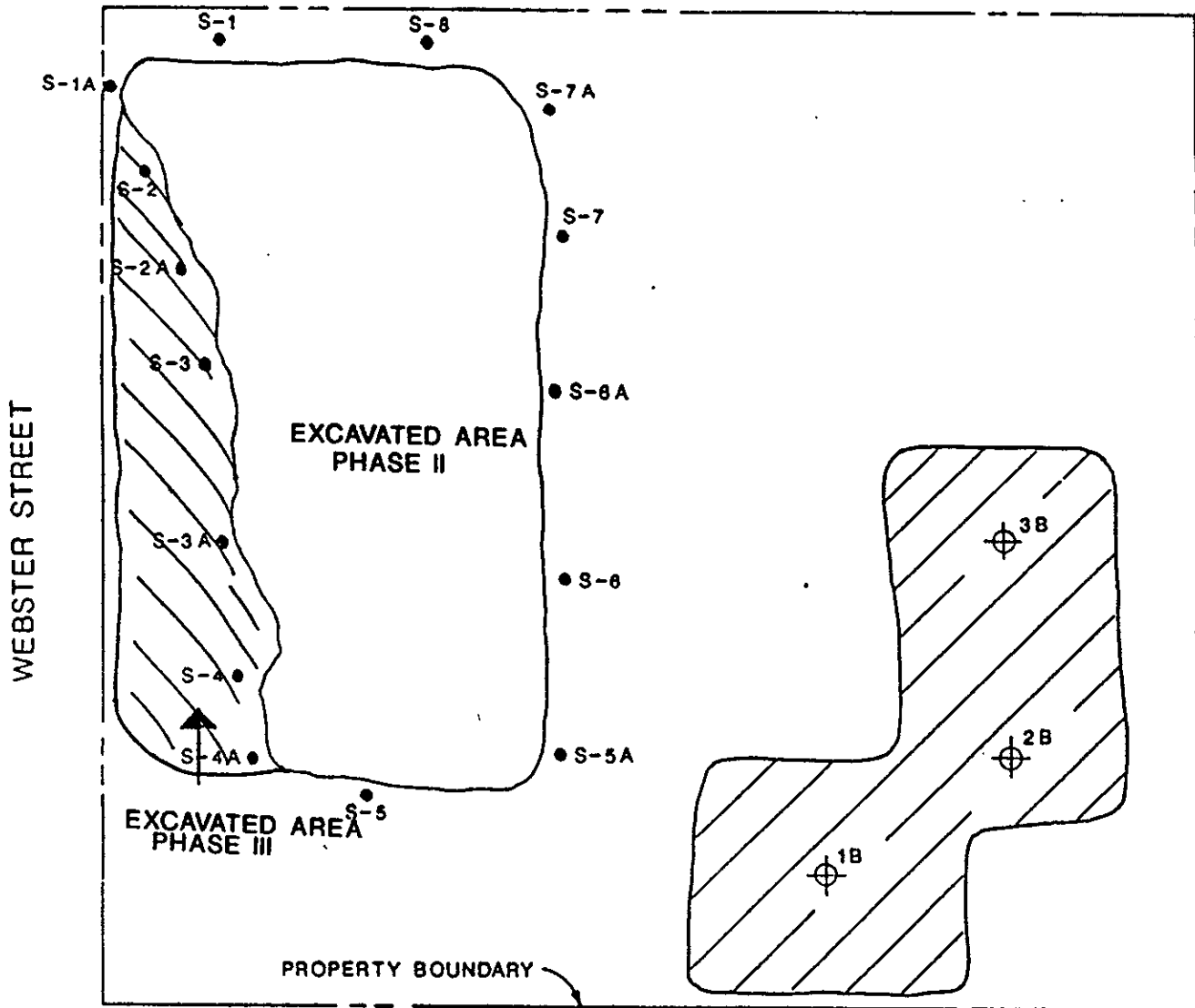
JOB #:
7609G

DRAWN BY:
SLS



DATE:
5-25-90

DRAWING #:

PACIFIC AVENUE



LEGEND

- S-3 SAMPLE LOCATION TAKEN 2/28/90
- S-1A SAMPLE LOCATION TAKEN 3/19/90
- 1B,2B,3B MULTIPLE COMPOSITE SAMPLES TAKEN 3/19/90
-  EXCAVATION AREA
-  STOCK PILE AREA



NOT TO SCALE



SITE MAP NUMBER 2

LARKIN SITE

1628 WEBSTER STREET
ALAMEDA, CALIFORNIA

REVIEWED BY:	APPROVED BY:
JOB # 4358F	DRAWN BY J.C.
DATE 4/17/90	DRAWING #

WEBSTER STREET

APPROXIMATE LOCATION OF ELECTRICAL BOX

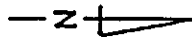
ELECTRICAL CONDUIT

(APPROXIMATE LOCATION) STEEL & FIBERGLASS PRODUCT LINES

APPROXIMATE LOCATION OF WASTE OIL TANK

PACIFIC AVENUE

PROPERTY BOUNDARY



NOT TO SCALE

SITE MAP NUMBER 3

LARKIN SITE

1628 WEBSTER STREET

ALAMEDA, CALIFORNIA

REVIEWED BY:

APPROVED BY:

JOB #: 7609G

DRAWN BY: SLS

DATE: 5-25-90

DRAWING #:



PHASE II EXCAVATION
PHOTO RECORD

Photo #1

**Orientation of Phase II excavation looking north.
Approximate average depth 10'**

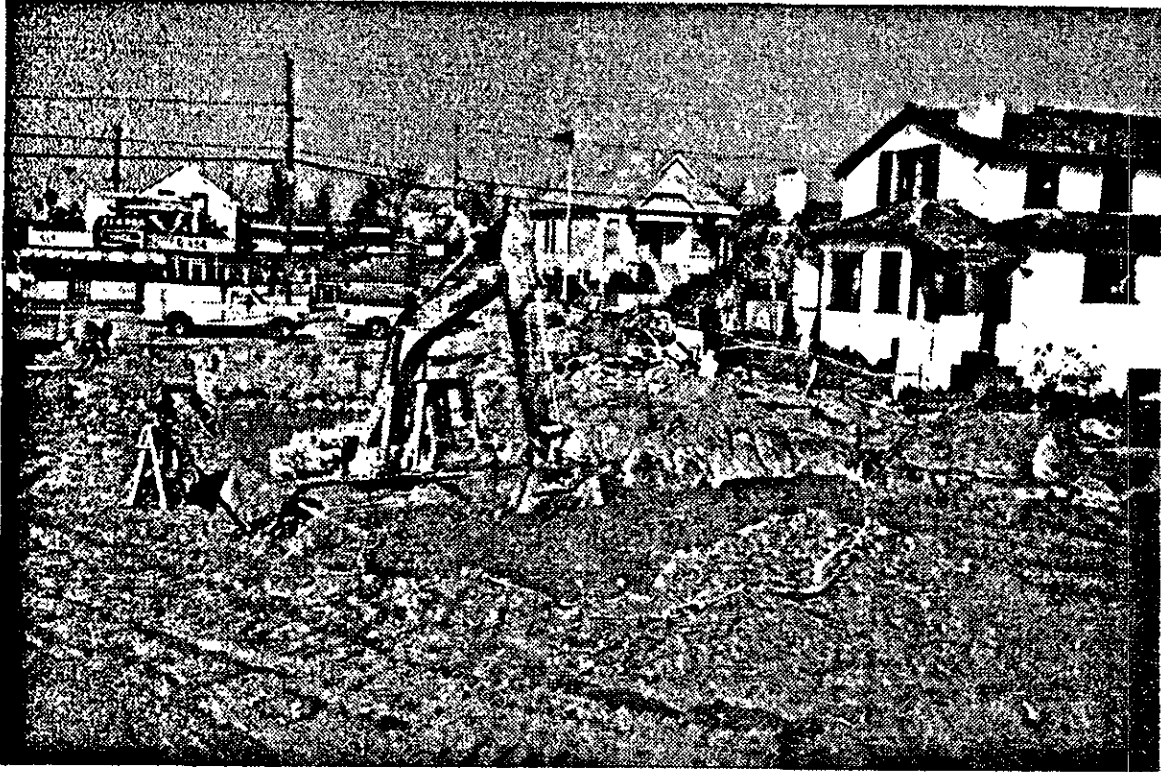


Photo #2

West wall of Phase II excavation.

Note: Fiberglass product line, steel product lines in place.

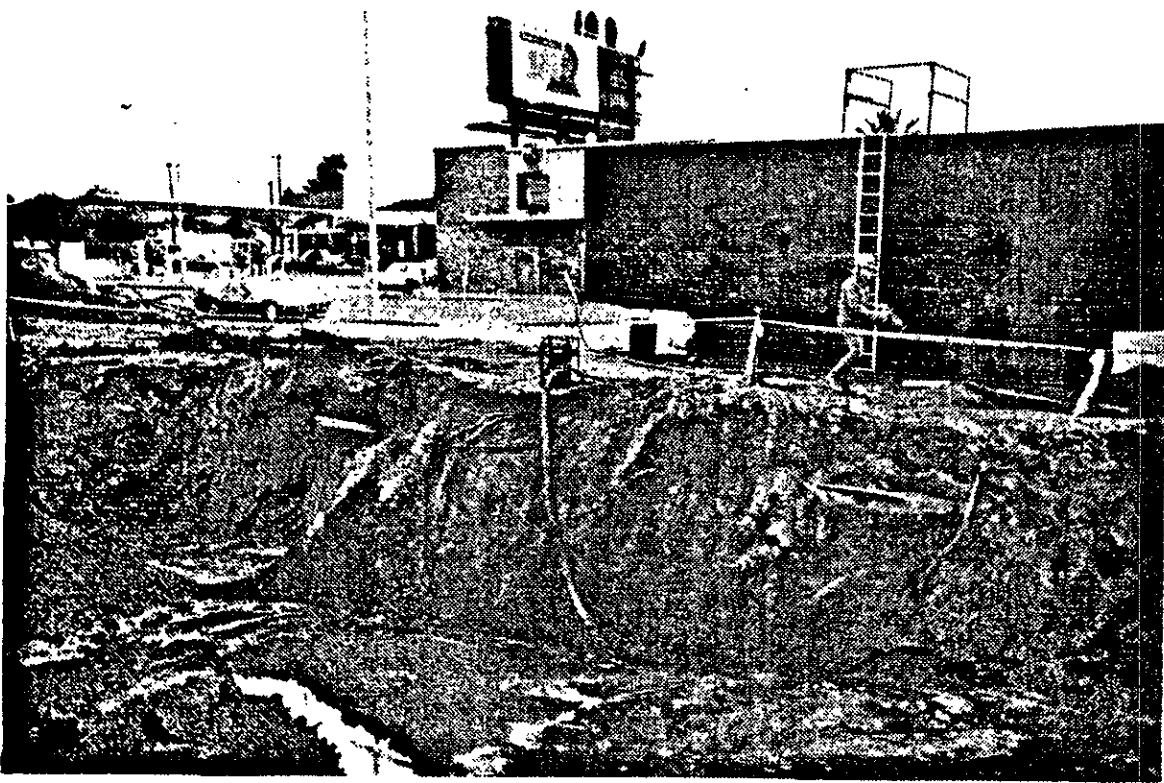


Photo #3

Northwest corner of excavation: Please note discoloration (contaminated soils) and debris in the corner.



PHASE III EXCAVATION
PHOTO RECORD

Photo #1A

Orientation looking south. Note floating product on water.

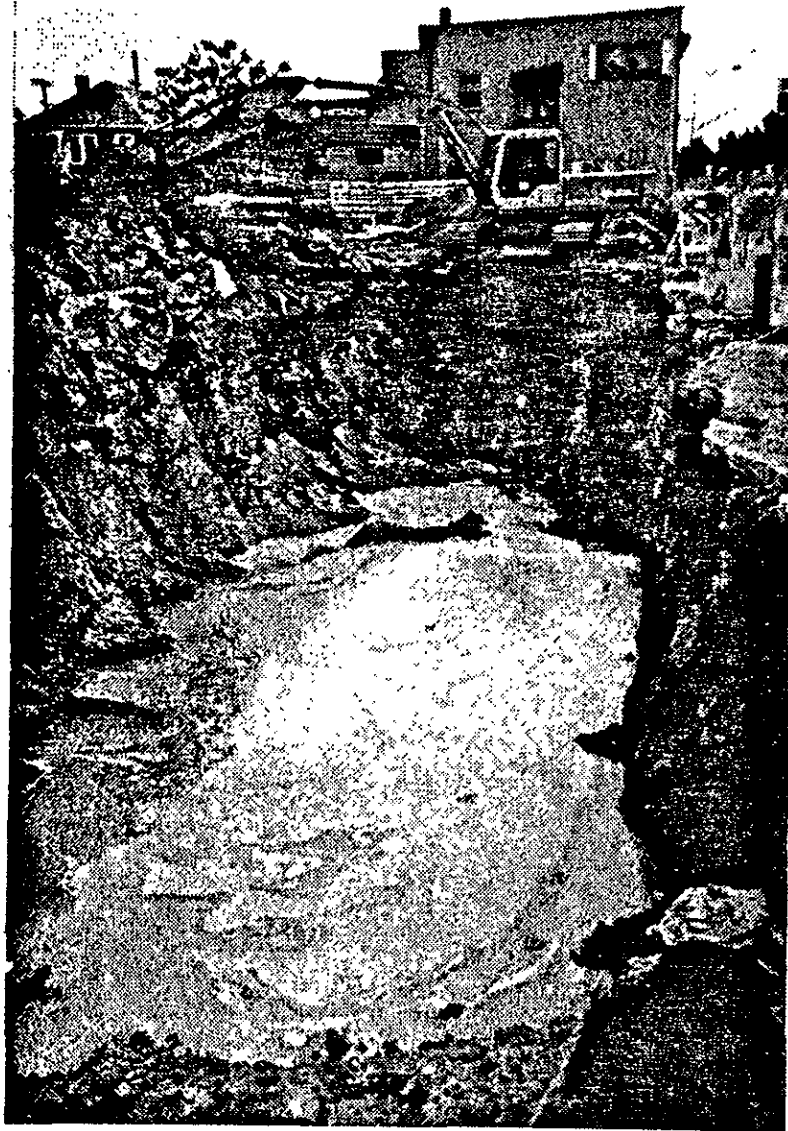
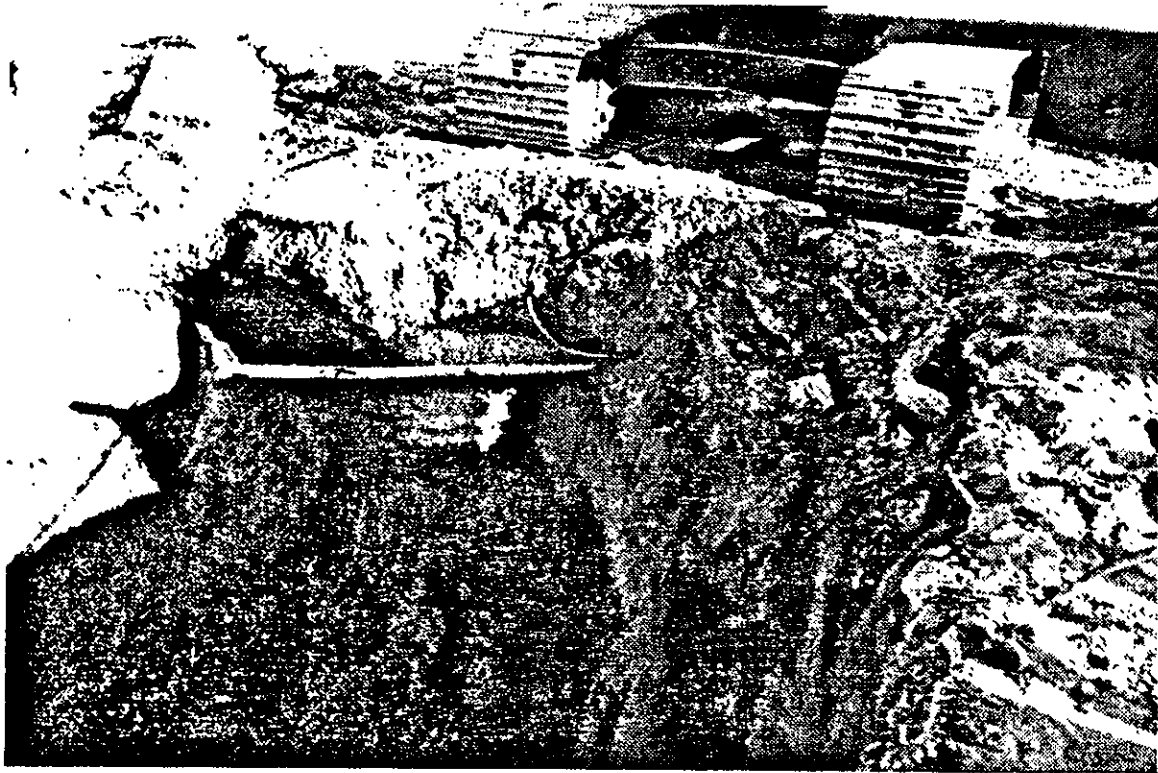


Photo #2A & 3A

During excavating encountered fiberglass lines, contamination and steel lines.



#3A



Photo #4A

Orientation looking west of current open excavation.

Note: Discoloration (contamination) on west wall, toward Webster Street.



APPENDIX A

**BACKGROUND DOCUMENTS PROVIDED
BY PACIFIC PROPERTIES**

LRA ENVIRONMENTAL

July 24, 1989

1628 WEBSTER ROAD, SUITE 9
SACRAMENTO, CA 95811
PHONE (916) 926-0217

44-916-1926-0217

Mr. Jeff Larkin
16 Las Vegas Road
Orinda, California 94563

Subject: Plan of Correction
WASTE OIL TANK
1628 Webster Street
Alameda, Alameda County, California
OUR JOB NUMBER: E-8936

Dear Mr. Larkin:

After placing several requests to the Alameda County Health Care Services Agency our office is in receipt of a copy of the Certified letter (Certified Mail Number 833-981-267) mandating submission of a "workplan of correction" for the above referenced location. We received this copy on or about 17 July 1989.

Immediately upon our receipt of the Health Care Services Agency communication, our office contacted Mr. Larry Seto, Senior Hazardous Materials Specialist, in order to determine the exact concerns of the Health Care Services Agency regarding your site. Mr. Seto has advised us that in light of the initial results of the soils analysis from the waste oil tank excavation it is the opinion of his agency that groundwater protection is a major issue in this case. Consequently, we were advised by Mr. Seto that installation of a single monitoring well is required as part of the "workplan for correction" of conditions at your site.

As of the date that our office contacted the Alameda County Health Care Services Agency, we were provided no specific guidelines for meeting the mandates of the Agency. In the absence of such guidelines from the Health Care Services Agency, we are designing the preliminary workplan in accordance with the document entitled REGIONAL BOARD STAFF RECOMMENDATIONS FOR INITIAL EVALUATION AND INVESTIGATION OF UNDERGROUND TANKS, (2 JUNE 1988) as prepared by the staff of the Regional Water Quality Control Board North Coast, San Francisco, and Central Valley Regional Boards.


The Health Care Services Agency indicated that the release of product into the surrounding environment on your property was detected as a result of chemical analysis of a soil sample acquired from the waste oil tank excavation during the tank removal operations. Section II, Subsection 2 of the Regional Boards guidelines is specific in that soil and groundwater investigations are required if a level of Total Petroleum Hydrocarbons and/or Total Oil And Grease at one hundred (100) parts per million (ppm) is exceeded. The Health Care Services Agency further indicated that levels of Total Petroleum Hydrocarbons (as diesel) and Oil and Grease were detected at concentrations of 270 PPM and 760 PPM respectively. We feel that it is of significant importance to note that your laboratory analysis report indicates that these concentrations were detected only at the fill end of the tank. The only information that we have been provided with to date indicates that the concentrations of Total Petroleum Hydrocarbons and Oil and Grease were below the laboratory detection limits at the vent end of the tank. Given this circumstance, and the absence of any other definitive data suggesting otherwise these results might tend to suggest that the conditions at your site are the results of a small spill during the placement of product into the tank, or possibly a minor overfill.

Given this preliminary data it is proposed to conduct the investigation into the vertical and horizontal extent of the contamination per the proposed preliminary workplan.

It is the intent of this office to continue to move forward on this project pending review and acceptance of the workplan by the Alameda County Health Care Services Agency and our receipt of the agency's comments. We would appreciate receiving copies of any written communication referring to this matter that you may receive. Please reference all communications with our job number.

Very truly yours,

LRA ENVIRONMENTAL


Robert A. Nicholson
Vice President

RAN:1aj

cc: 1 Rafat A. Shalid, Chief, Hazardous Materials Program
Alameda County Healthcare Services Agency

1 Larry Seto, Senior Hazardous Materials Specialist,
Alameda County Healthcare Services Agency

1 Gil Jensen, Alameda County District Attorney,
Consumer and Environmental Protection Agency

1 California Regional Water Quality Control Board
San Francisco Bay Region, Oakland, California

1 Bill Wagoner, George Navone & Associates

1 Merwin Rose, REG, Elk Grove, CA
2 Client
1 File

PRELIMINARY PLAN OF CORRECTION
WASTE OIL TANK
1628 WEBSTER STREET
ALAMEDA, ALAMEDA COUNTY, CALIFORNIA

LRA ENVIRONMENTAL JOB NUMBER E8936

STEP ONE: Obtain soil samples from three (3) borings located adjacent to the sides of the tank, and at the fill end of the tank at a distance of eight (8) to ten (10) feet from the furthest extent of the tank removal excavation. Given the laboratory results of the soil analysis indicating concentrations of Total Petroleum Hydrocarbon and Oil and Grease below laboratory detection limits at the vent end of the tank no additional boring will be placed at that location.

Under the direction of a State of California Registered Engineering Geologist soil samples will be acquired from each of the three borings at intervals of five (5) feet or at every change in lithology. Collection of the samples will commence at the surface of the soil underneath the currently existing parking lot and will terminate at a depth of fifteen (15) feet. All borings will be drilled by utilizing truck mounted drilling equipment equipped with eight (8) inch outside diameter continuous flight augers.

In each boring the Engineering Geologist will log the soils encountered. The logs of the borings will be presented in the preliminary report. Upon terminating the drilling and sampling operation, the boring will immediately be backfilled with neat Portland cement to grade.

Soil samples from each major stratigraphic unit will be collected for particle size analysis and determination of vertical permeability. Samples will be acquired by advancing either a two and one half (2 1/2) inch diameter modified California or split-spoon sampler into the soils a minimum of eighteen (18) inches using a one hundred and forty (140) pound hammer dropped thirty (30) inches. Blow counts will be recorded for every six (6) inch segment of the eighteen (18) inch drive, and will be included in the boring logs.

The soil samples will be retained in six (6) inch brass tubes contained in the sampling device. Those samples acquired for the purpose of chemical analysis will be sealed at both ends with aluminum foil sheets and then sealed with plastic end caps and taped. The samples will then be stored and transported to the laboratory in an ice chest filled with dry ice. The samples not being subjected to chemical analysis will be analyzed by field methods for volatile organic compounds. This procedure will consist of emptying the contents of the brass tube into a "ziplock" style plastic bag. The bag and its contents will be placed in the direct sunlight for a period of time, and then the bag will be pierced and the "headspace " within tested for volatile organic compounds with a portable photoionizing

hydrocarbon detection device. Results of the field analysis will be included in the preliminary report.

Based upon the headspace test results and field observations any sample with apparent contamination will be subjected to laboratory analysis. A sample from the first or second interval below the level believed to be affected will be analyzed to facilitate assessment of the vertical extent of contaminant migration. In event of no detectable contamination, those samples nearest the level of the bottom of the existing tank excavation will be arbitrarily analyzed in conjunction with those samples acquired from the first or second sampling interval below the level of suspected contamination.

Chemical analysis of the soil samples remanded to the custody of the analytical laboratory will consist of the following tests:

- #1: Total Petroleum Hydrocarbons (diesel)
- #2: Total Oil and Grease
- #3: Benzene, Toluene, Xylene, Ethylbenzene
- #4: Chlorinated Hydrocarbons
- #5: Detectable metals (Cd, Cr, Pb, Zn)
- #6: Method 8270 (PCB's, PNA's, PCP, Creosote)

Drilling equipment including but not limited to samplers, drop hammer, drill rods, plugs, auger, etc. will be steam cleaned prior to use in each soil sampling location. Cleaning will be conducted in such a manner so as to contain the wash water, which will be contained in the appropriate drums, labeled, sealed and stored onsite prior to appropriate disposal. Sampler parts not subjected to steam cleaning will be triple rinsed in two tap water immersions and then distilled water after being decontaminated in a solution of Alconox and water. These rinse waters and the decontamination wash will also be contained in the proper drum, sealed, labeled, and stored onsite prior to appropriate disposal.

Auger cuttings (soil from the borings) produced during the drilling operations will be placed in approved drums which will be sealed, labeled, and stored onsite prior to appropriate disposal conditional upon the analytical results.

STEP 2: The environmental consultant will retain a properly licensed well driller to construct and develop a single groundwater monitoring well to be located within ten (10) feet of the fill end of the tank. Results of the particle size analysis and vertical permeability testing will be utilized for the selection of well screen slot size and well filter pack material. It is proposed to construct the monitoring well in accordance to A.S.T.M. Subcommittee D-18.21 proposed recommended practices for design and installation of groundwater monitoring wells. Soil samples will be continuously obtained as the auger is advanced. These soil samples will be subjected to the same testing protocols as the samples obtained from the soils borings.

All work will be under the direct supervision of a State of California licensed Registered Engineering Geologist. Decontamination procedures, soil and wash water storage and disposal will remain unchanged from those procedures utilized for the soils borings.

Prior to the collection of groundwater samples, the well will be purged of a minimum of five (5) wetted casing volumes prior to collection of the sample to be subjected to chemical analysis. Wetted volumes are to be determined in the field at the time the samples are collected.

Water quality parameters consisting of temperature, PH, and specific conductivity will be measured at the beginning and termination of the purging of the well. Appropriate well recovery will be allowed to take place based upon the static water level prior to collecting the sample to be analyzed in the laboratory.

STEP 3: In order to attempt to minimize future impacts to the surrounding environment it is proposed that a LIMITED soil removal program be implemented as soon as practicable. Soil from the existing tank excavation, including the material placed back into the excavation after the removal of the waste oil tank should be removed. The excavation should be limited to a depth of three (3) feet below the bottom of the waste oil tank, and extend no further than two (2) to three (3) feet beyond the existing walls of the waste oil tank excavation. Soil removed during this process will of necessity need to be disposed of in an appropriate manner, which will require your acquisition of a U.S.E.P.A. Identification number, retention of a properly licensed waste hauler, and making arrangements through the waste hauler to identify and access the proper disposal site.

The California Department of Health Services can issue a one-time U.S.E.P.A. Number by telephone. You as the property owner must acquire the identification number. Our office cannot act on your behalf in this matter. Contact the Department of Health Services at 1-916-324-1781, or 1-916-324-1790. We have been advised by that agency that this U.S.E.P.A. Identification Number can be utilized for not only the disposal of the excavated soils from the waste oil tank, but also for the disposal of the wash water and auger cuttings from the soils borings and groundwater monitoring well installation. Further information concerning the use of your U.S.E.P.A. Identification Number can be obtained from the issuing officer at the time that you contact the Department of Health Services.

APPENDIX A
PROPOSED RECOMMENDED PRACTICE FOR
DESIGN AND INSTALLATION OF
GROUND WATER MONITORING WELLS IN AQUIFERS

PUBLISHED BY ASTM SUBCOMMITTEE D18.21

APPENDIX B
ANALYTICAL RESULTS



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: John Rigter

Client Project ID: #4358F, Larkin, PO# 17559
Matrix Descript: Soil
Analysis Method: EPA 5030/8015/8020
First Sample #: 003-2897

Sampled: Mar 19, 1990
Received: Mar 21, 1990
Analyzed: Mar 28, 1990
Reported: Mar 29, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
003-2897	1A	N.D.	0.0090	0.044	0.0090	0.030
003-2898	2A	N.D.	0.0050	0.029	0.0060	0.020
003-2899	3A	N.D.	N.D.	N.D.	N.D.	N.D.
003-2900	4A	N.D.	N.D.	N.D.	N.D.	0.011
003-2901	5A	N.D.	N.D.	N.D.	N.D.	N.D.
003-2902	6A ✓	N.D.	N.D.	0.011	N.D.	N.D.
003-2903	7A ✓	N.D.	N.D.	N.D.	N.D.	N.D.
003-2904	1B	7.0	0.020	0.021	0.075	0.22
003-2905	2B	440	0.17	1.7	2.6	13
003-2906	3B	480	0.029	0.012	0.76	1.0

Detection Limits:

1.0 0.0050 0.0050 0.0050 0.0050

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Tague
Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: John Rigter

Client Project ID: #4358F, Larkin, PO# 17559
Matrix Descript: Soil
Analysis Method: EPA 3550/8015
First Sample #: 003-2897

Sampled: Mar 19, 1990
Received: Mar 21, 1990
Extracted: Mar 26, 1990
Analyzed: Mar 28, 1990
Reported: Mar 29, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
003-2897	1A	N.D.
003-2898	2A	N.D.
003-2899	3A	N.D.
003-2900	4A	N.D.
003-2901	5A	1.6
003-2902	6A	N.D.
003-2903	7A	N.D.
003-2904	1B	7.8
003-2905	2B	540
003-2906	3B	1,500

Detection Limits:

1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: John Rigter

Client Project ID: #4358F, Larkin, PO# 17559
Matrix Descript: Soil
Analysis Method: SM 503 D&E (Gravimetric)
First Sample #: 003-2897

Sampled: Mar 19, 1990
Received: Mar 21, 1990
Extracted: Mar 27, 1990
Analyzed: Mar 28, 1990
Reported: Mar 29, 1990

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
003-2897	1A	N.D.
003-2898	2A	N.D.
003-2899	3A	N.D.
003-2900	4A	N.D.
003-2901	5A	N.D.
003-2902	6A	N.D.
003-2903	7A	N.D.
003-2904	1B	600
003-2905	2B	22,000
003-2906	3B	5,000

Detection Limits:

30

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Tague
Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: John Richter

Client Project ID: #4358F, Larkin, Alameda, PO #17808
Matrix Descript: Soil
Analysis Method: EPA 3550/8015
First Sample #: 004-2703

Sampled: Apr 18, 1990
Received: Apr 19, 1990
Analyzed: Apr 20, 1990
Reported: Apr 20, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
004-2703	W-1	8,000
004-2704	W-2	N.D.
004-2705	W-3	9,800

Detection Limits:

1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech 41674 Christy Street Fremont, CA 94538 Attention: John Richter	Client Project ID: #4358F, Larkin, Alameda, PO #17808 Matrix Descript: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 004-2703	Sampled: Apr 18, 1990 Received: Apr 19, 1990 Analyzed: Apr 19, 1990 Reported: Apr 20, 1990
--	---	---

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
004-2703	W-1	6,800	13	83	130	680
004-2704	W-2	N.D.	0.0051	N.D.	N.D.	0.012
004-2705	W-3	11,000	0.33	9.1	47	300

Detection Limits:	1.0	0.0050	0.0050	0.0050	0.0050
--------------------------	------------	---------------	---------------	---------------	---------------

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: John Richter

Client Project ID: #4358F, Larkin, Alameda, PO #17808
Matrix Descript: Soil
Analysis Method: SM 503 D&E (Gravimetric)
First Sample #: 004-2703

Sampled: Apr 18, 1990
Received: Apr 19, 1990
Extracted: Apr 19, 1990
Analyzed: Apr 19, 1990
Reported: Apr 20, 1990

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
004-2703	W-1	460
004-2704	W-2	N.D.
004-2705	W-3	1,500

Detection Limits:

30

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: John Rigter

Client Project ID: #4358F, Larkin, PO# 17559
Matrix Descript: Soil
Analysis Method: SM 503 D&E (Gravimetric)
First Sample #: 003-2897

Sampled: Mar 19, 1990
Received: Mar 21, 1990
Extracted: Mar 27, 1990
Analyzed: Mar 28, 1990
Reported: Mar 29, 1990

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
003-2897	1A	N.D.
003-2898	2A	N.D.
003-2899	3A	N.D.
003-2900	4A	N.D.
003-2901	5A	N.D.
003-2902	6A	N.D.
003-2903	7A	N.D.
003-2904	1B	600
003-2905	2B	22,000
003-2906	3B	5,000

Detection Limits:

30

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Tague
Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: John Rigter

Client Project ID: #4358F, Larkin, PO# 17559
Matrix Descript: Soil
Analysis Method: EPA 3550/8015
First Sample #: 003-2897

Sampled: Mar 19, 1990
Received: Mar 21, 1990
Extracted: Mar 26, 1990
Analyzed: Mar 28, 1990
Reported: Mar 29, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
003-2897	1A	N.D.
003-2898	2A	N.D.
003-2899	3A	N.D.
003-2900	4A	N.D.
003-2901	5A	1.6
003-2902	6A	N.D.
003-2903	7A	N.D.
003-2904	1B	7.8
003-2905	2B	540
003-2906	3B	1,500

Detection Limits: 1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: John Rigter

Client Project ID: #4358F, Larkin, PO# 17559
Matrix Descript: Soil
Analysis Method: EPA 5030/8015/8020
First Sample #: 003-2897

Sampled: Mar 19, 1990
Received: Mar 21, 1990
Analyzed: Mar 28, 1990
Reported: Mar 29, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
003-2897	1A	N.D.	0.0090	0.044	0.0090	0.030
003-2898	2A	N.D.	0.0050	0.029	0.0060	0.020
003-2899	3A	N.D.	N.D.	N.D.	N.D.	N.D.
003-2900	4A	N.D.	N.D.	N.D.	N.D.	0.011
003-2901	5A	N.D.	N.D.	N.D.	N.D.	N.D.
003-2902	6A	N.D.	N.D.	0.011	N.D.	N.D.
003-2903	7A	N.D.	N.D.	N.D.	N.D.	N.D.
003-2904	1B	7.0	0.020	0.021	0.075	0.22
003-2905	2B	440	0.17	1.7	2.6	13
003-2906	3B	480	0.029	0.012	0.76	1.0

Detection Limits:	1.0	0.0050	0.0050	0.0050	0.0050
-------------------	-----	--------	--------	--------	--------

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: Randy Stone

Client Project ID: #4358F, Larkin, PO #17559
Matrix Descript: Water
Analysis Method: EPA 3510/8015
First Sample #: 003-2896 C

Sampled: Mar 14, 1990
Received: Mar 21, 1990
Extracted: Mar 21, 1990
Analyzed: Mar 27, 1990
Reported: Apr 2, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons $\mu\text{g/L}$ (ppb)
0032896 C	xi	2,100

Detection Limits:

50

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tagoe
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech 41674 Christy Street Fremont, CA 94538 Attention: Randy Stone	Client Project ID: #4358F, Larkin, PO #17559 Sample Descript.: Water, XI Analysis Method: EPA 5030/ 8015/8020 Lab Number: 003-2896 A	Sampled: Mar 14, 1990 Received: Mar 21, 1990 Analyzed: Mar 22, 1990 Reported: Apr 2, 1990
--	---	--

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit $\mu\text{g/L}$ (ppb)	Sample Results $\mu\text{g/L}$ (ppb)
Low to Medium Boiling Point Hydrocarbons	30	860
Benzene	0.30	4.5
Toluene	0.30	8.4
Ethyl Benzene	0.30	7.1
Xylenes	0.30	75

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: Randy Stone

Client Project ID: #4358F, Larkin, PO #17559
Matrix Descript: Water
Analysis Method: SM 503 A&E (Gravimetric)
First Sample #: 003-2896 C

Sampled: Mar 14, 1990
Received: Mar 21, 1990
Extracted: Mar 27, 1990
Analyzed: Mar 28, 1990
Reported: Apr 2, 1990

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/L (ppm)
0032896 C	xi	N.D.

Detection Limits:

10

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager



FAX TRANSMITTAL FORM

Date of Transmission: 3/19/90

Total number of pages sent, including this cover page: 12

TO: Name: ARIU LEVI

Company: ALAMEDA CO HEALTH

FAX Number: (415) 568-3706

FROM: Name: JOHN RIGTER

SENT BY: SAME

TIME: 5:30PM

MESSAGE: INCLUDED ARE THE ANALYTICALS
FOR THE SITE AT 1628 WEBSTER ST,
ALAMEDA (LARKIN SITE). PLEASE LET ME
KNOW IF YOU NEED ANYTHING FURTHER.
THANKS FOR YOUR HELP,
JOHN



SEQUOIA ANALYTICAL

660 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9800 • FAX (415) 364-9233

SOIL SAMPLES

Exceltech 41674 Christy Street Fremont, CA 94538 Attention: Randy Stone	Client Project ID: #1736-G, Larkin, PO #17074 Matrix Descript: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 003-0022	Sampled: Feb 28, 1990 Received: Mar 1, 1990 Analyzed: Mar 13, 1990 Reported: Mar 15, 1990
--	---	--

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
003-0022	#1	150	N.D.	N.D.	N.D.	0.20
003-0023	#2	3.7	N.D.	N.D.	N.D.	N.D.

Detection Limits:	1.0	0.050	0.10	0.10	0.10
-------------------	-----	-------	------	------	------

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

SOIL SAMPLES

Exceltech 41674 Christy Street Fremont, CA 94538 Attention: Randy Stone	Client Project ID: Larkin, #1736-G Matrix Descript: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 003-0024	Sampled: Feb 28, 1990 Received: Mar 1, 1990 Analyzed: Mar 2, 1990 Reported: Mar 9, 1990
--	--	--

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
003-0024	#3	6.0	N.D.	N.D.	N.D.	N.D.
003-0025	#4	N.D.	N.D.	N.D.	N.D.	N.D.
003-0026	#5	N.D.	N.D.	N.D.	N.D.	N.D.
003-0027	#6	1.0	N.D.	N.D.	N.D.	N.D.
003-0103	#7	N.D.	N.D.	N.D.	N.D.	N.D.
003-0104	#8	N.D.	N.D.	N.D.	N.D.	N.D.

Detection Limits:	1.0	0.050	0.10	0.10	0.10
-------------------	-----	-------	------	------	------

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Tague
Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

SOIL SAMPLES

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: Randy Stone

Client Project ID: #1736-G, Larkin, PO #17074
Matrix Descript: Soil
Analysis Method: EPA 3550/8015
First Sample #: 003-0022

Sampled: Feb 28, 1990
Received: Mar 1, 1990
Extracted: Mar 14, 1990
Analyzed: Mar 15, 1990
Reported:

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
003-0022	#1	150
003-0023	#2	22

Detection Limits:

1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

SOIL SAMPLES

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: Randy Stone

Client Project ID: Larkin, #1736-G
Matrix Descript: Soil
Analysis Method: EPA 3550/8015
First Sample #: 003-0024

Sampled: Feb 28, 1990
Received: Mar 1, 1990
Extracted: Mar 2, 1990
Analyzed: Mar 5, 1990
Reported: Mar 9, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
003-0024	#3	N.D.
003-0025	#4	N.D.
003-0026	#5	N.D.
003-0027	#6	2.9
003-0103	#7	N.D.
003-0104	#8	N.D.

Detection Limits:

1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

SOIL SAMPLES

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: Randy Stone

Client Project ID: #1736-G, Larkin, PO #17074
Matrix Descript: Soil
Analysis Method: SM 503 D&E (Gravimetric)
First Sample #: 003-0022

Sampled: Feb 28, 1990
Received: Mar 1, 1990
Extracted: Mar 12, 1990
Analyzed: Mar 13, 1990
Reported: Mar 15, 1990

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
003-0022	#1	N.D.
003-0023	#2	N.D.

Detection Limits:

30

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

SOIL SAMPLES

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: Randy Stone

Client Project ID: Larkin, #1736-G
Matrix Descript: Soil
Analysis Method: SM 503 D&E (Gravimetric)
First Sample #: 003-0024

Sampled: Feb 28, 1990
Received: Mar 1, 1990
Extracted: Mar 2, 1990
Analyzed: Mar 2, 1990
Reported: Mar 9, 1990

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
003-0024	#3	N.D.
003-0025	#4	N.D.
003-0026	#5	72
003-0027	#6	N.D.
003-0028	#7	N.D.
003-0029	#8	N.D.

Detection Limits:

30

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL


Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

WATER SAMPLES

Exceltech
41674 Christy Street
Fremont, CA 94538
Attention: Randy Stone

Client Project ID: Larkin, #1736-G
Matrix Descript: Water
Analysis Method: SM 503 A&E (Gravimetric)
First Sample #: 003-0028

Sampled: Feb 28, 1990
Received: Mar 1, 1990
Extracted: Mar 2, 1990
Analyzed: Mar 2, 1990
Reported: Mar 9, 1990

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/L (ppm)
003-0028	#7	13
003-0030	9	16

Detection Limits:

5.0

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Tague
Vickie Tague
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

WATER SAMPLES

Exceltech 41674 Christy Street Fremont, CA 94538 Attention: Randy Stone	Client Project ID: Larkin, #1736-G Matrix Descript: Water Analysis Method: EPA 3510/8015 First Sample #: 003-0028	Sampled: Feb 28, 1990 Received: Mar 1, 1990 Extracted: Mar 2, 1990 Analyzed: Mar 5, 1990 Reported: Mar 9, 1990
--	--	--

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons µg/L (ppb)
003-0028	#7	8,700
003-0030	#9	8,600

Detection Limits:

50

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

V. Taglia
Vickie Taglia
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

WATER SAMPLES

Exceltech 41674 Christy Street Fremont, CA 94538 Attention: Randy Stone	Client Project ID: Larkin, #1736-G, PO #17074 Matrix Descript: Water Analysis Method: EPA 5030/8015/8020 First Sample #: 003-0029	Sampled: Feb 28, 1990 Received: Mar 1, 1990 Analyzed: Mar 5, 1990 Reported: Mar 9, 1990
--	--	--

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
003-0029	#8	8,000	83	280	83	1,000
003-0031	#10	7,900	95	290	220	1,100

Detection Limits:	30	0.30	0.30	0.30	0.30
--------------------------	-----------	-------------	-------------	-------------	-------------

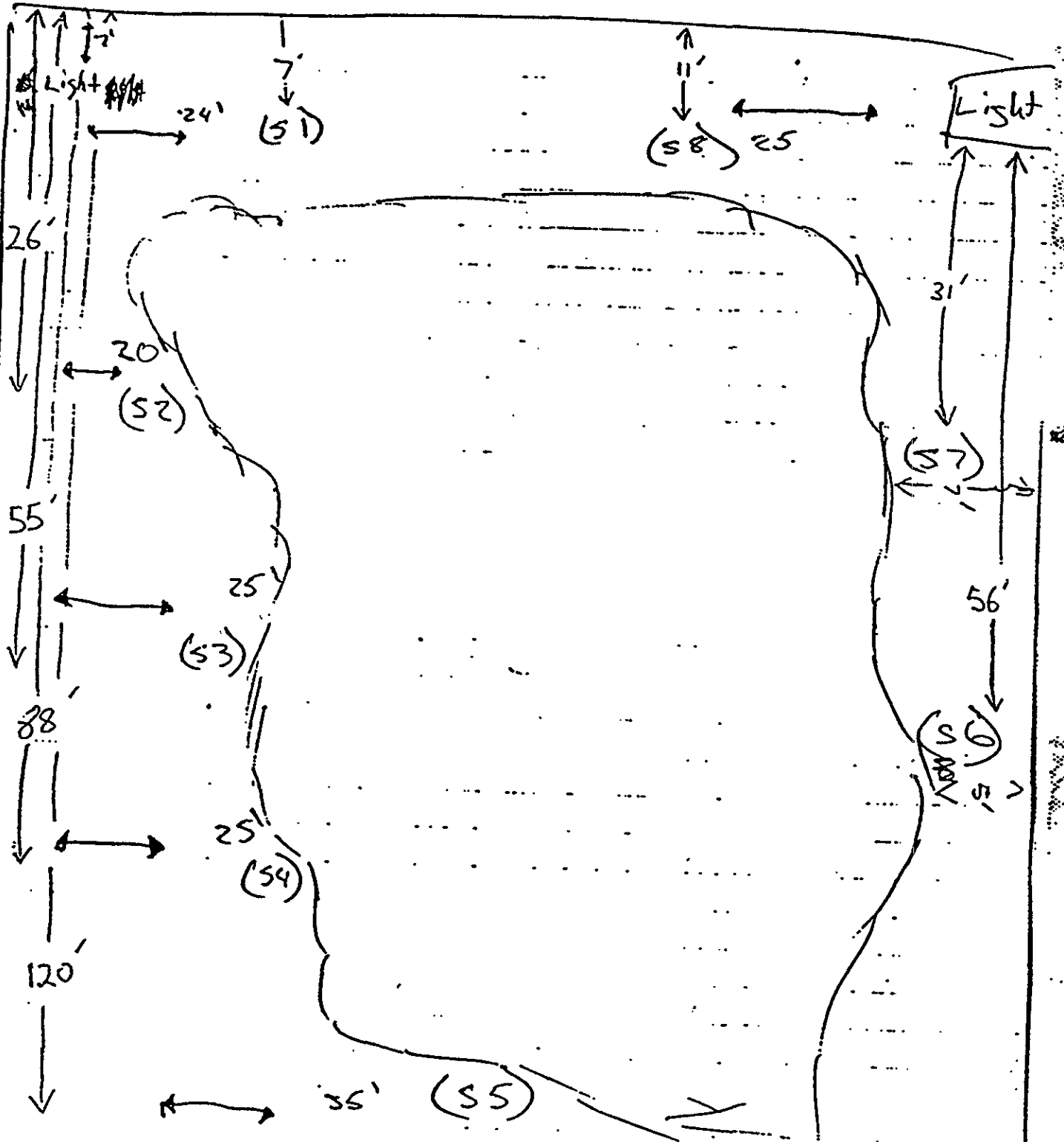
Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Vickie Tague
Project Manager

all samples
Taken at 6'
Depth

Pacific



ANAMETRIX INC

Environmental & Analytical Chemistry
1501 Concourse Drive, Suite E San Francisco, CA 94060
(415) 332-8192 • Fax (408) 437-8192

**REPORT**

Jim Durkin
Ensco Environmental Services Inc.
41674 Christy Street
Fremont, CA 94538-3114

February 22, 1990
Anamatrix W.O.#: 9002040
Date Received : 02/05/90
Purchase Order#: 16945
Project Number : 1736G

Dear Mr. Durkin:

Your samples have been received for analysis. The REPORT SUMMARY lists your sample identifications and the analytical methods you requested. The following sections are included in this report: RESULTS and QUALITY ASSURANCE.

- NOTE: 1) Amounts reported are net values, i.e. corrected for method blank contamination.
- 2) The following footnotes are applicable to Methods 624/8240:
- * A Method 624 priority pollutant compound (Federal Register, 10/26/84)
 - ** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
 - # An additional compound analyzed for by Anamatrix, Inc.
 - ND: Not detected at or above the practical quantitation limit for the method.
- 3) Surrogate recovery for nitrobenzene-d5 was outside established limits in the EPA Method 8270 analysis.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

ANAMETRIX, INC.

Sarah Schoen, Ph.D.
Laboratory Manager

SRS/dmt

REPORT SUMMARY
ANAMETRIX, INC. (408) 432-8192

Client	: Ensco Environmental Services Inc.	Anamatrix W.O.#: 9002040
Address	: 41674 Christy Street	Date Received : 02/05/90
City	: Fremont, CA 94538-3114	Purchase Order#: 16945
Attn.	: Jim Durkin	Project No. : 1736G
		Date Released : 02/22/90

Anamatrix I.D.	Sample I.D.	Matrix	Date Sampled	Method	Date Extract	Date Analyzed	Inst I.D.
----------------	-------------	--------	--------------	--------	--------------	---------------	-----------

RESULTS

9002040-01	1,2,3,4	SOIL	02/02/90	8240		02/08/90	F1
9002040-01	1,2,3,4	SOIL	02/02/90	8270	02/12/90	02/16/90	F2
9002040-01	1,2,3,4	SOIL	02/02/90	TPH	02/08/90	02/13/90	N/A
9002040-01	1,2,3,4	SOIL	02/02/90	6010		02/15/90	ICP1

QUALITY ASSURANCE (QA)

1CB0208V00	METHOD BLANK	SOIL	N/A	8240		02/08/90	F1
2CB0212C02	METHOD BLANK	SOIL	N/A	8270	02/12/90	02/15/90	F2
MB021390S	METHOD BLANK	SOIL	N/A	6010		02/15/90	ICP1

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1736G 1,2,3,4
 Matrix : SOIL
 Date sampled : 02/02/90
 Date analyzed: 02/08/90
 Dilut. factor: 500

Anamatrix I.D. : 9002040-01
 Analyst : WJ
 Supervisor : PG
 Date released : 02/22/90
 Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	5000	ND
75-01-4	* Vinyl Chloride	5000	ND
74-83-9	* Bromomethane	5000	ND
75-00-3	* Chloroethane	5000	ND
75-69-4	* Trichlorofluoromethane	2500	ND
75-35-4	* 1,1-Dichloroethene	2500	ND
76-13-1	# Trichlorotrifluoroethane	2500	ND
67-64-1	**Acetone	10000	ND
75-15-0	**Carbondisulfide	2500	ND
75-09-2	* Methylene Chloride	2500	ND
156-60-5	* Trans-1,2-Dichloroethene	2500	ND
75-34-3	* 1,1-Dichloroethane	2500	ND
78-93-3	**2-Butanone	10000	ND
156-59-2	* Cis-1,2-Dichloroethene	2500	ND
67-66-3	* Chloroform	2500	ND
71-55-6	* 1,1,1-Trichloroethane	2500	ND
56-23-5	* Carbon Tetrachloride	2500	ND
71-43-2	* Benzene	2500	ND
107-06-2	* 1,2-Dichloroethane	2500	ND
79-01-6	* Trichloroethene	2500	ND
78-87-5	* 1,2-Dichloropropane	2500	ND
75-27-4	* Bromodichloromethane	2500	ND
110-75-8	* 2-Chloroethylvinylether	2500	ND
108-05-4	**Vinyl Acetate	5000	ND
10061-02-6	* Trans-1,3-Dichloropropene	2500	ND
108-10-1	**4-Methyl-2-Pentanone	5000	ND
108-88-3	* Toluene	2500	ND
10061-01-5	* cis-1,3-Dichloropropene	2500	ND
79-00-5	* 1,1,2-Trichloroethane	2500	ND
127-18-4	* Tetrachloroethene	2500	ND
591-78-6	**2-Hexanone	5000	ND
124-48-1	* Dibromochloromethane	2500	ND
108-90-7	* Chlorobenzene	2500	ND
100-41-4	* Ethylbenzene	2500	ND
1330-20-7	**Total Xylenes	2500	ND
100-42-5	**Styrene	2500	ND
75-25-2	* Bromoform	2500	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	2500	ND
541-73-1	* 1,3-Dichlorobenzene	2500	ND
106-46-7	* 1,4-Dichlorobenzene	2500	ND
95-50-1	* 1,2-Dichlorobenzene	2500	ND
CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	73-130%	93%
2037-26-5	Toluene-d8	74-121%	94%
460-00-4	p-Bromofluorobenzene	70-124%	100%

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1736G 1,2,3,4
Matrix : SOIL
Date sampled : 02/02/90
Date ext. : 02/12/90
Date analyzed: 02/16/90
Dilut. factor: NONE

Anamatrix I.D. : 9002040-01
Analyst : UM
Supervisor : PG
Date released : 02/22/90
Weight ext. : 30g
Instrument ID : F2

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
62-75-9	* N-Nitrosodimethylamine	330	ND
108-95-2	* Phenol	330	ND
62-53-3	**Aniline	330	ND
111-44-4	* bis(-2-Chloroethyl)Ether	330	ND
95-57-8	* 2-Chlorophenol	330	ND
541-73-1	* 1,3-Dichlorobenzene	330	ND
106-46-7	* 1,4-Dichlorobenzene	330	ND
100-51-6	**Benzyl Alcohol	330	ND
95-50-1	* 1,2-Dichlorobenzene	330	ND
95-48-7	**2-Methylphenol	330	ND
108-60-1	**bis(2-chloroisopropyl)Ether	330	ND
106-44-5	**4-Methylphenol	330	ND
621-64-7	* N-Nitroso-Di-n-Propylamine	330	ND
67-72-1	* Hexachloroethane	330	ND
98-95-3	* Nitrobenzene	330	ND
78-59-1	* Isophorone	330	ND
88-75-5	* 2-Nitrophenol	330	ND
105-67-9	* 2,4-Dimethylphenol	330	ND
65-85-0	**Benzoic Acid	330	ND
111-91-1	* bis(-2-Chloroethoxy)Methane	1600	ND
120-83-2	* 2,4-Dichlorophenol	330	ND
120-82-1	* 1,2,4-Trichlorobenzene	330	ND
91-20-3	* Naphthalene	330	ND
106-47-8	**4-Chloroaniline	330	790
87-68-3	* Hexachlorobutadiene	330	ND
59-50-7	* 4-Chloro-3-Methylphenol	330	ND
91-57-6	**2-Methylnaphthalene	330	ND
77-47-4	* Hexachlorocyclopentadiene	330	860
88-06-2	* 2,4,6-Trichlorophenol	330	ND
95-95-4	**2,4,5-Trichlorophenol	330	ND
91-58-7	* 2-Chloronaphthalene	1600	ND
88-74-4	**2-Nitroaniline	330	ND
131-11-3	* Dimethyl Phthalate	1600	ND
208-96-8	* Acenaphthylene	330	ND
99-09-2	**3-Nitroaniline	330	ND
83-32-9	* Acenaphthene	1600	ND
51-28-5	* 2,4-Dinitrophenol	330	ND
100-02-7	* 4-Nitrophenol	1600	ND
132-64-9	**Dibenzofuran	1600	ND
		330	ND

ND : Not detected at or above practical quantitation limit for the method.
* A 625 approved compound (Federal Register, 10/26/84).
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL).

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1736G 1,2,3,4
Matrix : SOIL
Date sampled : 02/02/90
Date ext. : 02/12/90
Date analyzed: 02/16/90
Dilut. factor: NONE

Anametrix I.D. : 9002040-01
Analyst : WJ
Supervisor : PG
Date released : 02/22/90
Weight ext. : 30g
Instrument ID : F2

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
121-14-2	* 2,4-Dinitrotoluene	330	ND
606-20-2	* 2,6-Dinitrotoluene	330	ND
84-66-2	* Diethylphthalate	330	ND
7005-72-3	* 4-Chlorophenyl-phenylether	330	ND
86-73-7	* Fluorene	330	ND
100-01-6	**4-Nitroaniline	1600	ND
534-52-1	**4,6-Dinitro-2-Methylphenol	1600	ND
86-30-6	* N-Nitrosodiphenylamine	330	ND
122-66-7	**Azobenzene	330	ND
101-55-3	* 4-Bromophenyl-phenylether	330	ND
118-74-1	* Hexachlorobenzene	330	ND
87-86-5	* Pentachlorophenol	1600	ND
85-01-8	* Phenanthrene	330	ND
120-12-7	* Anthracene	330	ND
84-74-2	* Di-n-Butylphthalate	330	ND
206-44-0	* Fluoranthene	330	ND
92-87-5	* Benzidine	1600	ND
129-00-0	* Pyrene	330	ND
85-68-7	* Butylbenzylphthalate	330	ND
91-94-1	* 3,3'-Dichlorobenzidine	660	ND
56-55-3	* Benzo(a)Anthracene	330	ND
117-81-7	* bis(2-Ethylhexyl)Phthalate	330	ND
218-01-9	* Chrysene	330	ND
117-84-0	* Di-n-Octyl Phthalate	330	ND
205-99-2	* Benzo(b)Fluoranthene	330	ND
207-08-9	* Benzo(k)Fluoranthene	330	ND
50-32-8	* Benzo(a)Pyrene	330	ND
193-39-5	* Indeno(1,2,3-cd)Pyrene	330	ND
53-70-3	* Dibenz(a,h)Anthracene	330	ND
191-24-2	* Benzo(g,h,i)Perylene	330	ND
CAS #	Surrogate Compounds	Limits	%Recovery
367-12-4	2-Fluorophenol	15-83%	65%
4165-62-2	Phenol-d6	18-92%	67%
4165-60-0	Nitrobenzene-d5	12-80%	160%
321-60-8	2-Fluorobiphenyl	16-100%	64%
118-79-6	2,4,6-Tribromophenol	15-135%	119%
1718-51-0	Terphenyl-d14	15-117%	101%

ND : Not detected at or above practical quantitation limit for the method.
* A 625 approved compound (Federal Register, 10/26/84).
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL).

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1736G 1,2,3,4
 Matrix : SOIL
 Date sampled : 02/05/90
 Date anl.TPHg: 02/07/90
 Date ext.TPHd: 02/08/90
 Date anl.TPHd: 02/13/90

Anamatrix I.D. : 9002040-01
 Analyst : CB
 Supervisor : TK
 Date released : 02/22/90
 Date ext. TOG : 02/08/90
 Date anl. TOG : 02/08/90

CAS #	Compound Name	Detection Limit (ppm)	Amount Found (ppm)
71-43-2	Benzene	5	ND
108-88-3	Toluene	5	ND
100-41-4	Ethylbenzene	5	ND
1330-20-7	Total Xylenes	5	19
	TPH as Gasoline	100	1800
	TPH as Diesel	10	6300
	Total Oil & Grease	30	4400

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
- TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ANALYSIS DATA SHEET - INDIVIDUAL METALS
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9002040
Matrix : SOIL
Date Sampled : 02/02/90
Project Number: 1736G

Date Prepared : 02/13/90
Date Analyzed : 02/15/90
Date Released : 02/22/90
Instrument I.D.: ICP1

METALS	EPA Method#	Reporting Limit	Sample I.D.# 1,2,3,4	Sample I.D.# BLANK	Sample I.D.#	Sample I.D.#	Sample I.D.#
COMPOUNDS		(mg/Kg)	-01	MB0213S			
Cadmium (Cd)	6010	0.5	ND	ND			
Total Cr	6010	0.5	29.6	ND			
Lead (Pb)	6010	1.0	98.4	ND			
Zinc (Zn)	6010	0.5	76.6	ND			

ND : Not detected at or above the practical quantitation limit for the method.

All Metals by EPA Method 6010/7000, Test Method for Evaluating Solid Waste, SW-846 3rd Edition November 1986, and California Administrative Code Title 22, Section 66699.

MK
Analyst

2/22/90
Date

RA
Supervisor

2/22/90
Date

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240

ANAMETRIX, INC. (408) 432-8192

Sample I.D. : METHOD BLANK

Anamatrix I.D. : 1CB0208V00

Matrix : SOIL

Analyst : LW

Date sampled : N/A

Supervisor : PG

Date analyzed: 02/08/90

Date released : 02/22/90

Dilut. factor: NONE

Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	ND
75-01-4	* Vinyl Chloride	10	ND
74-83-9	* Bromomethane	10	ND
75-00-3	* Chloroethane	10	ND
75-69-4	* Trichlorofluoromethane	5	ND
75-35-4	* 1,1-Dichloroethene	5	ND
76-13-1	# Trichlorotrifluoroethane	5	ND
67-64-1	**Acetone	20	ND
75-15-0	**Carbondisulfide	5	ND
75-09-2	* Methylene Chloride	5	ND
156-60-5	* Trans-1,2-Dichloroethene	5	ND
75-34-3	* 1,1-Dichloroethane	5	ND
78-93-3	**2-Butanone	20	ND
156-59-2	* Cis-1,2-Dichloroethene	5	ND
67-66-3	* Chloroform	5	ND
71-55-6	* 1,1,1-Trichloroethane	5	ND
56-23-5	* Carbon Tetrachloride	5	ND
71-43-2	* Benzene	5	ND
107-06-2	* 1,2-Dichloroethane	5	ND
79-01-6	* Trichloroethene	5	ND
78-87-5	* 1,2-Dichloropropane	5	ND
75-27-4	* Bromodichloromethane	5	ND
110-75-8	* 2-Chloroethylvinylether	5	ND
108-05-4	**Vinyl Acetate	10	ND
10061-02-6	* Trans-1,3-Dichloropropene	5	ND
108-10-1	**4-Methyl-2-Pentanone	10	ND
108-88-3	* Toluene	5	ND
10061-01-5	* cis-1,3-Dichloropropene	5	ND
79-00-5	* 1,1,2-Trichloroethane	5	ND
127-18-4	* Tetrachloroethene	5	ND
591-78-6	**2-Hexanone	10	ND
124-48-1	* Dibromochloromethane	5	ND
108-90-7	* Chlorobenzene	5	ND
100-41-4	* Ethylbenzene	5	ND
1330-20-7	**Total Xylenes	5	ND
100-42-5	**Styrene	5	ND
75-25-2	* Bromoform	5	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	5	ND
541-73-1	* 1,3-Dichlorobenzene	5	ND
106-46-7	* 1,4-Dichlorobenzene	5	ND
95-50-1	* 1,2-Dichlorobenzene	5	ND
CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	73-130%	94%
2037-26-5	Toluene-d8	74-121%	99%
460-00-4	p-Bromofluorobenzene	70-124%	99%

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : METHOD BLANK
 Matrix : SOIL
 Date sampled : N/A
 Date ext. : 02/12/90
 Date analyzed: 02/15/90
 Dilut. factor: NONE

Anamatrix I.D. : 2CB0212C02
 Analyst : JM
 Supervisor : PG
 Date released : 02/22/90
 Weight ext. : 30g
 Instrument ID : F2

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
62-75-9	* N-Nitrosodimethylamine	330	ND
108-95-2	* Phenol	330	ND
62-53-3	**Aniline	330	ND
111-44-4	* bis(-2-Chloroethyl) Ether	330	ND
95-57-8	* 2-Chlorophenol	330	ND
541-73-1	* 1,3-Dichlorobenzene	330	ND
106-46-7	* 1,4-Dichlorobenzene	330	ND
100-51-6	**Benzyl Alcohol	330	ND
95-50-1	* 1,2-Dichlorobenzene	330	ND
95-48-7	**2-Methylphenol	330	ND
108-60-1	**bis(2-chloroisopropyl) Ether	330	ND
106-44-5	**4-Methylphenol	330	ND
621-64-7	* N-Nitroso-Di-n-Propylamine	330	ND
67-72-1	* Hexachloroethane	330	ND
98-95-3	* Nitrobenzene	330	ND
78-59-1	* Isophorone	330	ND
88-75-5	* 2-Nitrophenol	330	ND
105-67-9	* 2,4-Dimethylphenol	330	ND
65-85-0	**Benzoic Acid	1600	ND
111-91-1	* bis(-2-Chloroethoxy) Methane	330	ND
120-83-2	* 2,4-Dichlorophenol	330	ND
120-82-1	* 1,2,4-Trichlorobenzene	330	ND
91-20-3	* Naphthalene	330	ND
106-47-8	**4-Chloroaniline	330	ND
87-68-3	* Hexachlorobutadiene	330	ND
59-50-7	* 4-Chloro-3-Methylphenol	330	ND
91-57-6	**2-Methylnaphthalene	330	ND
77-47-4	* Hexachlorocyclopentadiene	330	ND
88-06-2	* 2,4,6-Trichlorophenol	330	ND
95-95-4	**2,4,5-Trichlorophenol	1600	ND
91-58-7	* 2-Chloronaphthalene	330	ND
88-74-4	**2-Nitroaniline	1600	ND
131-11-3	* Dimethyl Phthalate	330	ND
208-96-8	* Acenaphthylene	330	ND
99-09-2	**3-Nitroaniline	1600	ND
83-32-9	* Acenaphthene	330	ND
51-28-5	* 2,4-Dinitrophenol	1600	ND
100-02-7	* 4-Nitrophenol	1600	ND
132-64-9	**Dibenzofuran	330	ND

ND : Not detected at or above practical quantitation limit for the method
 * A 625 approved compound (Federal Register, 10/26/84).
 ** A compound on the U.S. EPA CLP Hazardous Substance List (HSL).

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : METHOD BLANK
Matrix : SOIL
Date sampled : N/A
Date ext. : 02/12/90
Date analyzed: 02/15/90
Dilut. factor: NONE

Anamatrix I.D. : 2CB0212C02
Analyst : DM
Supervisor : PG
Date released : 02/22/90
Weight ext. : 30g
Instrument ID : F2

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
121-14-2	* 2,4-Dinitrotoluene	330	ND
606-20-2	* 2,6-Dinitrotoluene	330	ND
84-66-2	* Diethylphthalate	330	ND
7005-72-3	* 4-Chlorophenyl-phenylether	330	ND
86-73-7	* Fluorene	330	ND
100-01-6	**4-Nitroaniline	1600	ND
534-52-1	**4,6-Dinitro-2-Methylphenol	1600	ND
86-30-6	* N-Nitrosodiphenylamine	330	ND
122-66-7	**Azobenzene	330	ND
101-55-3	* 4-Bromophenyl-phenylether	330	ND
118-74-1	* Hexachlorobenzene	330	ND
87-86-5	* Pentachlorophenol	1600	ND
85-01-8	* Phenanthrene	330	ND
120-12-7	* Anthracene	330	ND
84-74-2	* Di-n-Butylphthalate	330	ND
206-44-0	* Fluoranthene	330	ND
92-87-5	* Benzidine	1600	ND
129-00-0	* Pyrene	330	ND
85-68-7	* Butylbenzylphthalate	330	ND
91-94-1	* 3,3'-Dichlorobenzidine	660	ND
56-55-3	* Benzo(a)Anthracene	330	ND
117-81-7	* bis(2-Ethylhexyl)Phthalate	330	ND
218-01-9	* Chrysene	330	ND
117-84-0	* Di-n-Octyl Phthalate	330	ND
205-99-2	* Benzo(b)Fluoranthene	330	ND
207-08-9	* Benzo(k)Fluoranthene	330	ND
50-32-8	* Benzo(a)Pyrene	330	ND
193-39-5	* Indeno(1,2,3-cd)Pyrene	330	ND
53-70-3	* Dibenz(a,h)Anthracene	330	ND
191-24-2	* Benzo(g,h,i)Perylene	330	ND
CAS #	Surrogate Compounds	Limits	%Recovery
367-12-4	2-Fluorophenol	15-83%	67%
4165-62-2	Phenol-d6	18-92%	69%
4165-60-0	Nitrobenzene-d5	12-80%	64%
321-60-8	2-Fluorobiphenyl	16-100%	70%
118-79-6	2,4,6-Tribromophenol	15-135%	69%
1718-51-0	Terphenyl-d14	15-117%	80%


ND : Not detected at or above practical quantitation limit for the method
* A 625 approved compound (Federal Register, 10/26/84).
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL).

11:50

Anamatrix 9002040

CHAIN OF CUSTODY RECORD

per Jim Durkin
2/25/90 AS
I-CP 6010

PROJECT NO 17366		PROJECT NAME Larkin			TEST REQUESTED					P.O. # 16945		
SAMPLERS (Signature) <i>James Durkin</i>					TTHG	BTVE	TPHD	Oil + grease	Metals - Cd, Cr, Pb, Zn	Chloride, Ammonia, Nitrate, Nitrite	E. Coli, Bacteria (9270)	LAB Anamatrix
NO.	DATE	TIME	STATION AND LOCATION	TURN AROUND TIME NORM								REMARKS
1	2/2/90		2" x 6" Brass Luer	X	X	X	X	X	X	X	X	Composite 4 into 1 and hold for individual analysis on request.
2												
3												
4												
RELINQUISHED BY: <i>James Durkin</i>		DATE: TIME: 2/5/90 9:50	RECEIVED BY: <i>Tyler Menzies</i>		RELINQUISHED BY: <i>John Hamada</i>		DATE: TIME: 2/5/90 10:30	RECEIVED BY: <i>David [unclear]</i>				
RELINQUISHED BY:		DATE: TIME:	RECEIVED BY:		RELINQUISHED BY:		DATE: TIME:	RECEIVED BY:				
REMARKS:					 enso environmental services, inc. 41674 Christy Street Fremont, C.A. 94538-3114 (415) 659-4434 Fax (415) 651-4577 Contr. Lic. No. 55C205							
REPORT TO: <i>Jim Durkin</i>												

APPENDIX C
PERMITS, CORRESPONDENCE
AND MANIFESTS



a subsidiary of environmental system company

November 21, 1989

Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Suite 200
Oakland, CA 94621-1439

Attention: Mr. Larry Seto

Subject: Work Approval
Mr. Jeff Larkin
1628 Webster Street, Alameda, California
EES Project Number 1736G

Dear Mr. Seto:

Enclosed is a check to cover the cost of your office's approval for work to be done at 1628 Webster Street in Alameda. It is our understanding that a work plan for this action has been submitted by LRA Environmental and accepted by your office. I have also enclosed a copy of the site plan showing approximate locations for the three soil borings. It is our intention to convert one boring to a groundwater monitoring well. The boring to be converted will be that which is most nearly down-gradient from the former tank position. Determination of gradient will be made based upon data from wells installed at 1701 Webster Street by Blymer Engineers on 10/31/89, and by referring to data from the California Regional Water Quality Control Board, which show contaminant plumes moving in a northerly direction on sites in the area of the current investigation. This data is found in two reports: one on the Shell Station at 1601 Webster Street, filed by Weiss & Associates and dated 6/23/89; and one on the Alameda City Housing Authority at 1916 Webster Street by Aqua Science Engineers and dated 10/16/89.

If you have any questions regarding this work plan, please call me. Thank you.

Yours truly,

A handwritten signature in black ink, appearing to read "James F. Durkin", written over a horizontal line.

James F. Durkin
Staff Geologist

JFD:jdd
Enclosures (2)

ENSCO ENVIRONMENTAL SERVICES, INC. 41674 CHRISTY STREET, FREMONT, CA 94538-3114

SBF 210
8/85

DATE	INVOICE NO.	DESCRIPTION	AMOUNT	DISCOUNT	NET AMOUNT
	CHK REQ	Permit	\$333.00		



**ensco
environmental
services, inc.**
41674 CHRISTY STREET
FREMONT, CA 94538-3114
(415) 659-0404

FIRST INTERSTATE BANK
OF CALIFORNIA #706
NEWARK, CA 94560-0545

11-57
1210

NO. 06425

GRANDFORMS (415) 847-0855

\$333 Dollars & NO Cents*	DATE	CHECK NO.	PAYEE I.D.
	11-17-89	6425	

PAY
TO THE
ORDER
OF

Alameda County Health Services

PAY THIS AMOUNT

\$333.00

Don W. Patten

⑈006425⑈ ⑆121000578⑆705114364⑈ 11



a subsidiary of environmental system company

FAX TRANSMITTAL FORM

Date of Transmission: 2/13/90

Total number of pages sent, including this cover page: 2

TO: Name: VICKI

Company: BAY AREA AIR QUALITY MANAG. DIST

FAX Number: (415) 928-8560
(REG 771-6000)

FROM: Name: RANDY STONE

SENT BY: JOHN RIGTER

TIME: 5:55 PM

MESSAGE: THIS WAS SENT BY MAIL ON 1/31.
SINCE WE ARE NOW FAXING THESE TO
YOU, I INCLUDED THIS ONE JUST TO BE
SURE



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

REGULATION 8, RULE 40 Aeration of Contaminated Soil and Removal of Underground Storage Tanks

NOTIFICATION FORM

- Removal or Replacement of Tanks
- Excavation of Contaminated Soil

SITE INFORMATION

SITE ADDRESS 1628 WEBSTER ST
 CITY, STATE, ZIP ALAMEDA CA
 OWNER NAME JEAN LARKIN
 SPECIFIC LOCATION OF PROJECT (ABOVE)

<p>TANK REMOVAL</p> <p>SCHEDULED STARTUP DATE _____</p> <p>VAPORS REMOVED BY:</p> <p>[] WATER WASH</p> <p>[] VAPOR FREEING (CO²)</p> <p>[] VENTILATION</p>	<p>CONTAMINATED SOIL EXCAVATION</p> <p>SCHEDULED STARTUP DATE <u>2/7/90</u></p> <p>STOCKPILES WILL BE COVERED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></p> <p>ALTERNATIVE METHOD OF AERATION (DESCRIBE BELOW):</p> <p>_____</p> <p>(MAY REQUIRE PERMIT)</p>
---	--

CONTRACTOR INFORMATION

NAME ENSCO ENVIRONMENTAL CONTACT RANDY STONE
 ADDRESS 14674 CHRISTY ST PHONE (415) 659-0404 EXT 350
 CITY, STATE, ZIP FREMONT CA 94538

CONSULTANT INFORMATION (IF APPLICABLE)

NAME ~~_____~~ (WE ARE) CONTACT _____
 ADDRESS _____ PHONE () _____
 CITY, STATE, ZIP _____

FOR OFFICE USE ONLY

DATE RECEIVED _____ BY _____ (INIT.)
 CC: INSPECTOR NO. _____ DATE _____ BY _____ (INIT.)
 TELEPHONE UPDATE: CALLER _____ CHANGE MADE _____
 BAAQMD N # _____



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94566 (415) 484-2600

GROUNDWATER PROTECTION ORDINANCE PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

1) LOCATION OF PROJECT SEC Pacific
1628 Webster St.
Alameda, Alameda County

PERMIT NUMBER
LOCATION NUMBER

2) CLIENT
Name Jeff Larkin
Address 16 Las Vegas Rd. Phone
City Orinda Zip 94563

Approved Date

3) APPLICANT
Name James Durkin
Enasco Environmental Services
Address 41674 Christy St. Phone (415) 654-0404
City Fremont Zip 94538

PERMIT CONDITIONS

Circled Permit Requirements Apply

4) DESCRIPTION OF PROJECT
Water Well Construction X Geotechnical X
Cathodic Protection Wall Destruction

A. GENERAL

- 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Notify this office (484-2600) at least one day prior to starting work on permitted work and before placing well seals.
3. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or bore hole logs and location sketch for geotechnical projects. Permitted work is completed when the last surface seal is placed or the last boring is completed.
4. Permit is void if project not begun within 90 days of approval date.

5) PROPOSED WATER WELL USE
Domestic Industrial Irrigation
Municipal Monitoring X Other

B. WATER WELLS, INCLUDING PIEZOMETERS

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

6) PROPOSED CONSTRUCTION
Drilling Method:
Mud Rotary Air Rotary Auger X
Cable Other

C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material.

WELL PROJECTS
Drill Hole Diameter 8 in. Depth(s) 15 ft.
Casing Diameter 2 in. Number
Surface Seal Depth 5 ft. of Wells 1
Driller's License No. 550205

D. CATHODIC. Fill hole above anode zone with concrete placed by trowel, or equivalent.

GEOTECHNICAL PROJECTS
Number 3
Diameter 8 in. Maximum Depth 15 ft.

E. WELL DESTRUCTION. See attached.

ESTIMATED STARTING DATE 11/28/89
ESTIMATED COMPLETION DATE

7) I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-60.

APPLICANT'S SIGNATURE James Durkin Date 11/16/89

**TABLE A
SUMMARY OF FIELD DENSITY TEST RESULTS**

TEST NO.	DATE OF TEST	APPROX DEPTH OF FILL (feet)	LOCATION	APPROX. ELEVATION (feet)	FIELD		LABORATORY		RELATIVE COMPACTION (%)	REMARKS
					DRY DENSITY (pcf)	WATER CONTENT (%)	MAXIMUM DRY DENSITY (pcf)	OPTIMUM WATER CONTENT (%)		
	<u>1990</u>		<u>WITHIN TANK EXCAVATION BACKFILL</u>							
1	3-20	4.0	Northwest Corner	Unk	123.7	N/A	138	N/A	90	
2	3-20	4.0	Southeast Corner	Unk	123.5	N/A	138	N/A	90	
3	3-20	4.0	Southeast Corner	Unk	125.0	N/A	138	N/A	91	
4	3-20	4.0	Southwest Corner	Unk	120.0	N/A	138	N/A	87	
NOTES: The average percent compaction = 90%										

WEBSTER STREET

APPROXIMATE LOCATION OF WASTE OIL TANK

EXISTING BUILDING

EXISTING BUILDING



EXISTING BUILDING

EXISTING BUILDING

PACIFIC AVENUE

PROPERTY BOUNDARY

LEGEND

-  PROPOSED MONITORING WELL
-  PROPOSED SOIL BORING LOCATION



NOT TO SCALE

SITE PLAN

REVIEWED BY:	APPROVED BY:
JOB #: 7609G	DRAWN BY: SLS
DATE: 11/3/89	DRAWING #:



ensco
environmental
services, inc.

Please print or type. Form designed for use on site (12-pitch typewriter).

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

JEFF AND JEAN LARKIN
16 Las Vegas Road, Orinda, CA 94563

4. Generator's Phone (415) 254-3035

A. State Manifest Document Number
90003263

B. State Generator's ID

5. Transporter 1 Company Name

H & H Ship Service Company

6. US EPA ID Number

CA 101013717111618

C. State Transporter's ID

103366

D. Transporter's Phone (415) 641-4839

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address

H & H Ship Service Company
220 China Basin Street
San Francisco, CA 94107

10. US EPA ID Number

CA 101013717111618

G. State Facility's ID

CA 101013717111618

H. Facility's Phone (415) 743-4839

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

HAZARDOUS WASTE LIQUID, N.O.S. ORM-E NA 9189

12. Containers No. Type

0 10 11 T 17

13. Total Quantity

2500

14. Unit

LB

Wt/Vol

Waste No.

State

EPA/Other

State

EPA/Other

State

EPA/Other

State

EPA/Other

State

EPA/Other

State

EPA/Other

State

J. Additional Descriptions for Materials Listed Above

FUEL OIL AND WATER

K. Handling Codes for Wastes Listed Above

101

15. Special Handling Instructions and Additional Information

JOB SITE: LARKIN PROJECT
1628 Webster Street
Alameda, CA

APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR.

16.

GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

Month Day Year

X [Signature]

[Signature]

03/16/90

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

STEVE MESQUITE

[Signature]

03/16/90

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

[Blank]

[Blank]

[Blank]

19. Discrepancy Indication Space

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

Printed/Typed Name

Signature

Month Day Year

[Blank]

[Blank]

[Blank]

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-802-7860

GENERATOR

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7860

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CA 00 00 01 16 1 0 2 1 1 0 10 10 10 10		Manifest Document No. 0 10 10 10 10	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address JEFF AND JEAN LARKIN 16 Las Vegas Road, Orinda, CA 94563					A. State Manifest Document Number 90003141		
4. Generator's Phone (415) 254-3035					B. State Generator's ID		
5. Transporter 1 Company Name H & H Ship Service Company		6. US EPA ID Number CA 00 00 04 7 7 1 1 6 8		C. State Transporter's ID 103578		D. Transporter's Phone (415) 254-4635	
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone	
9. Designated Facility Name and Site Address H & H Ship Service Company 220 China Basin Street San Francisco, CA 94107					10. US EPA ID Number CA 00 00 04 7 7 1 1 6 8		G. State Facility's ID
							H. Facility's Phone (415) 543-1111
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	15. Hazardous Waste No.
a. HAZARDOUS WASTE LIQUID, N.O.S. ORM-E NA 9189				0 10 1	5000	G	
b.							
c.							
d.							
16. Additional Descriptions for Materials Listed Above				17. Handling Codes for Wastes Listed Above			
FUEL OIL AND WATER				01			
15. Special Handling Instructions and Additional Information							
APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR.				JOB SITE: LARKIN PROJECT 1628 Webster Street Alameda, CA			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name				Signature		Month Day Year	
						10 3 13 90	
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
MARK A. DOSS						10 3 13 90	
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 10.							
Printed/Typed Name				Signature		Month Day Year	

Do Not Write Below This Line

YELLOW: GENERATOR RETAINS

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **CA 17 0 10 11 16 1 10 12 11 0 10 10 13** Manifest Document No. **0 10 10 10 13**

2. Page 1 of 1 information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
JEFF AND JEAN LARKIN
16 Las Vegas Road, Orinda, CA 94563

A. State Manifest Document Number
90003142
 B. State Generator's ID

4. Generator's Phone (415) 254-3035

C. State Transporter's ID **103577**
 D. Transporter's Phone **(415) 547-4835**

5. Transporter 1 Company Name **H & H Ship Service Company** 6. US EPA ID Number **CA 18 10 10 14 17 17 11 11 16 13**

E. State Transporter's ID
 F. Transporter's Phone

7. Transporter 2 Company Name
 8. US EPA ID Number
 9. Designated Facility Name and Site Address
H & H Ship Service Company
220 Childs Basin Street
San Francisco CA 94107 10. US EPA ID Number **CA 18 10 10 14 17 17 11 11 16 13**

G. State Facility's ID
 H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)
HAZARDOUS WASTE LIQUID, N.O.S. ORM-E NA 9189

12. Containers No. Type 13. Total Quantity 14. Unit (Wt/Vol) 15. Waste No.

a. **HAZARDOUS WASTE LIQUID, N.O.S. ORM-E NA 9189**

6 10 11 11 015 0100 0

b.

State EPA/Other

c.

State EPA/Other

d.

State EPA/Other

16. Additional Descriptions for Materials Listed Above
FULL OIL AND WATER

17. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
JOB SITE: LARKIN PROJECT
1628 Webster Street
Alameda, CA
APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
 If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name
JEFF LARKIN

Signature
 Month Day Year
10 11 1990

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name
EDWARD G. MILAO

Signature
 Month Day Year
10 11 1990

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name
 Signature
 Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
 Printed/Typed Name
 Signature
 Month Day Year

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA CALL 1-800-552-7850
 14 10
 FACILITY

Please print or type. (Form designed for use on elite (12-pitch typewriter).)

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802 WITHIN CALIFORNIA CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CA 000001610001000004		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address JEFF AND JEAN LARKIN 10 Las Vegas Road, Orinda, CA 94563				A. State Manifest Document Number 90003145			
4. Generator's Phone (415) 254-3035				B. State Generator's ID			
5. Transporter 1 Company Name H & H Ship Service Company		6. US EPA ID Number CA 00000171111618		C. State Transporter's ID 103578		D. Transporter's Phone (415) 543-4035	
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone	
9. Designated Facility Name and Site Address H & H Ship Service Company 220 China Basin Street San Francisco, CA 94107				10. US EPA ID Number CA 0000014717111618			
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
a. HAZARDOUS WASTE LIQUID, N.O.S., ORM-E, NA 9189				10 11 7 11	0.5 100 10	4	State EPA/Other
b.							State EPA/Other
c.							State EPA/Other
d.							State EPA/Other
J. Additional Descriptions for Materials Listed Above FUEL OIL AND WATER				K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information JOB SITE: LARKIN PROJECT 1625 Webster Street Alameda CA APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR.							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Mark A. Doss				Signature		Month Day Year 10 31 1990	
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name MARK A. DOSS				Signature		Month Day Year 10 31 1990	
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							
Printed/Typed Name				Signature		Month Day Year	

Do Not Write Below This Line

YELLOW: GENERATOR RETAINS

THIS CARD MUST BE POSTED ON THE PREMISES AND
PLACED SO AS TO BE SEEN FROM THE STREET

CITY OF ALAMEDA, Building Inspection Office

DATE 1/1/90 VALUATIONS _____ BLDG. PERMIT # _____ PLNG/MECH PERMIT # 90-5032

FORMS _____
REQUIRED BEFORE POURING CONCRETE

JOB Sewer Abandonment

ADDRESS 1628 Webster St.

VAULT TOILET _____

OWNER Jim Larkin

PRELIMINARY GROUND PLUMBING _____

CONTRACTOR Enco Environmental

WILLIAM C. NORTON BY Boys
BUILDING OFFICIAL

INTERIOR LATH _____
REQUIRED BEFORE PLASTERING OR TAPING

FINAL GROUND PLUMBING _____

EXTERIOR LATH _____
REQUIRED BEFORE STUCCO

ROUGH ELECTRIC _____

DESIGN REVIEW _____

INSULATION CERTIFICATE _____

ROUGH PLUMBING _____

TRACT CONDITIONS _____

P.U.D. CONDITIONS _____

ROUGH HEATING & VENTILATING _____

FINAL ELECTRIC _____

FINAL - FIRE DEPT. _____

SUB FLOOR _____

FINAL PLUMBING 1-28-90

Sewer Abandoned OK - J. Carter
No Gas Meter on job - J. Carter

FRAME _____

FINAL HEATING & VENTILATING _____

INSULATION _____

FINAL BUILDING _____

ABOVE APPROVALS REQUIRED BEFORE INTERIOR LATHING OR COVERING
DO NOT OCCUPY STRUCTURE UNTIL CERTIFICATE OF
OCCUPANCY HAS BEEN ISSUED.

DO NOT CALL FOR FINAL INSPECTION UNTIL OTHER ITEMS HAVE BEEN ISSUED
CERTIFICATE OF OCCUPANCY ISSUED _____
BY _____

REMARKS _____



CITY OF ALAMEDA • CALIFORNIA

CITY HALL • SANTA CLARA AT OAK ST. 94301 • (415) 321-1100

MUNICIPAL WORKS DEPARTMENT

CENTRAL PERMIT OFFICE

TIME CONSTRUCTION PERMITTED

Municipal Code Ordinance Section 11-575 (see below) sets out the time during which construction may occur. Please abide by the conditions. A citation will be issued by the Police Department for any violation of the Municipal Code.

TIME LIMITS

Monday - Friday

7:00 a.m. to 7:00 p.m.

Saturday & Sunday

8:00 a.m. to 5:00 p.m.

Sec. 11-575. CONSTRUCTION. The provisions of this Chapter shall not apply to noise sources associated with construction, provided said activities do not take place before 7:00 a.m. or after 7:00 p.m. on any day except Saturday or Sunday, or before 8:00 a.m. - or after 5:00 p.m. on Saturday or

PLEASE TYPE OR PRINT

OWNER	TRACT	BLOCK/RANGE	LOT/PARCEL
	Jean Larkin		
	NAME	10 Los Vegas Rd.	
ARCHIT/ENGR.	ADDRESS	CITY	PHONE
	Orinda	CA.	94563
	STATE	ZIP	
CONTRACTOR	NAME	LICENSE	
	ADDRESS	PHONE	
	CITY	STATE	ZIP
CONTRACTOR	I hereby affirm that I am licensed under provisions of Chapter 9 commencing with section 7000 of Division 3 of the Business and Professions Code, and my license is in full force and effect.		
	LICENSE No. AND CLASS	CITY BUSINESS LICENSE No.	AP#
	550205	5624	
CONTRACTOR	CONTRACTOR NAME	EnSCO Environmental Services, Inc	
	ADDRESS	41674 Christy St.	
	CITY	STATE/ZIP	PHONE
CONTRACTOR	Freemont	94538	(415) 659-8404
	SIGNATURE	<i>[Signature]</i>	
	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 Section 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 five hundred dollars (\$500.):		
OWNER-BUILDER DECLARATION	<input type="checkbox"/> I, as 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 and 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.)		
	<input checked="" type="checkbox"/> 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).		
	<input type="checkbox"/> I am exempt under Sec. B&P.C. for this reason: _____ Date: _____		
WORKERS' COMP. INSURANCE DECLARATION	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. 3800, Lab C.). Policy No. <u>10-52-171-3</u> Company <u>American Home</u>		
	<input checked="" type="checkbox"/> Certified copy is hereby furnished.		
	<input type="checkbox"/> Certified copy is filed with the city Central Permit Office		
WORKERS' COMP. INSURANCE DECLARATION	Applicant: <u>[Signature]</u> Date: _____		
	(This section need not be completed if the permit is for one hundred dollars (\$100) or less.)		
	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 Workers' Compensation Laws of California.		
LENDER	I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3067, Civ. C.)		
	Lender's Name _____		
	Lender's Address _____		
APPLICANT	I certify that I have read this application and state that the information given is true and correct. I agree to comply with all local ordinance and state laws relating to building construction and I make this statement under penalty of law. I hereby authorize representatives of the city/county to enter upon the above mentioned property for inspection purposes. NOTICE! This permit will expire by limitation if work is not started in 180 days or if work is abandoned for more than 180 days. Do not conceal or cover any construction until the work is inspected and the inspection is recorded on the Building Inspection Card. All inspection requests are required 24 hours in advance of the inspection, 748-4564, 8:30AM to 10AM.		
	<input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Owner <input checked="" type="checkbox"/> Agent		
	Signature of Contractor, Owner or Agent: <u>[Signature]</u>		

LOG NO.	COMM. CODE	PERMIT NO. <u>110130</u>
JOB ADDRESS _____		
APPLICATION FOR BUILDING PERMIT CITY OF ALAMEDA Central Permit Office 2263 Santa Clara Avenue Alameda, CA 94501 (415) 748-4564		
NEW CONST. _____	ADDITION _____	ALTERATION <input checked="" type="checkbox"/> REPAIR _____
EXISTING USE: <u>None</u>		
PROPOSED USE: <u>EMPTL LOT</u>		
DESCRIPTION OF WORK		
Demolish former gas station located at 1628 Webster St., Alameda, Ca., Building has been condemned by City of Alameda.		
This permit will be for demolition of building only.		
RECEIVED 11-1-1990		
CITY OF ALAMEDA CENTRAL PERMIT OFFICE		
SQ. FT. ADDED _____	x \$1.50	
VALUATION OF WORK \$ <u>17,000.00</u>		
Including all labor, materials, and all lighting, heating, ventilating, water supply, plumbing, fire sprinklers, electric wiring, elevator equipment and all features that are affixed or a permanent part of the building.		
INSTALLATION OF SMOKE ALARM SYSTEM MANDATORY ON BUILDING PERMITS IN EXCESS OF \$1,000.		
CONTACT NAME: <u>Randy Stone</u>		
CONTACT PHONE: <u>(415) 659-8404</u>		
OTHER PERMITS ARE REQUIRED FOR PLUMBING, HEATING, ELECTRICAL WORK, AND CONSTRUCTION WITHIN THE PUBLIC RIGHT OF WAY.		
BLDG. PERMIT \$ <u>20</u>	AB 941 FEE \$ <u>5</u>	
PLAN CHECK \$ _____	FILING FEE \$ <u>10</u>	
SMIP \$ <u>285</u>	SEWER CONN. \$ _____	
DESIGN RV \$ _____	MICRO-FICHE FEE \$ <u>3</u>	
IMPROVEMENT TAX \$ <u>150</u>	SCHOOL FEE \$ _____	
APPLICATION RECEIVED DATE <u>11/1/90</u> SIGNED <u>[Signature]</u>		
APPROVAL DATE <u>1-11-90</u> SIGNED <u>[Signature]</u>		
ISSUED DATE <u>11-1-90</u> SIGNED <u>[Signature]</u>		

PLEASE TYPE OR PRINT

OWNER	TRACT	BLOCK PAGE	LOT PARCEL
	NAME	Jean R. Larkin	
	ADDRESS	16 Las Vegas Rd.	
ARCHT./ ENGR.	CITY	STATE	ZIP
	NAME		
	ADDRESS		
CONTRACTOR	CITY	STATE	ZIP
	NAME	LICENSE	
	ADDRESS	PHONE	

I hereby affirm that I am licensed under provisions of Chapter 9 commencing with section 7000 of Division 3 of the Business and Professions Code, and my license is in full force and effect.

LICENSE No. AND CLASS: _____ CITY BUSINESS LICENSE No. _____

CONTRACTOR NAME: _____ ADDRESS: _____ CITY: _____ STATE/ZIP: _____ PHONE: _____ SIGNATURE: _____

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 Section 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 five hundred dollars (\$500.):

I, as 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 and 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 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&P.C. for this region.

Owner's Signature: Jean R. Larkin Date: 4/13/89

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. 3800, Lab C.).

Policy No. _____ Company _____

Certified copy is hereby furnished.

Certified copy is filed with the city Central Permit Office.

Applicant: _____ Date: _____

(This section need not be completed if the permit is for one hundred dollars (\$100) or less).

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 Workers' Compensation Laws of California.

Applicant: Jean R. Larkin Date: 4/13/89

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.

I hereby affirm that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3067, Civ. C.)

Lender's Name: _____ Lender's Address: _____

I certify that I have read this application and state that the information given is true and correct. I agree to comply with all local ordinance and state laws relating to building construction and I make this statement under penalty of law. I hereby authorize representatives of the city/county to enter upon the above mentioned property for inspection purposes. NOTICE! This permit will expire by limitation if work is not started in 180 days or if work is abandoned for more than 180 days. Do not conceal or cover any construction until the work is inspected and the inspection is recorded on the Building Inspection Card. All inspection requests are required 24 hours in advance of the inspection, 522-4100 X278, 8:30AM to 10AM.

Contractor

Owner

Agent: Jean R. Larkin

Signature of Contractor, Owner or Agent

LOG NO. 10432 COMM. CODE 088 PERMIT NO. 90-2032

JOB ADDRESS: 1628 Webster St

APPLICATION FOR PLUMBING/MECHANICAL PERMIT

CITY OF ALAMEDA
Central Permit Office
2283 Santa Clara Avenue
Alameda, CA 94501
(415) 522-4100 X236

DESCRIPTION OF WORK: Remo. Bldg. Sewer Abandonment

VALUATION OF WORKS

CONTACT NAME: Jean R. Larkin

CONTACT PHONE: 1254 3035

ITEMS	NO.	FEE	TOTAL
PLUMBING			
Basins		\$ 8.00	
Baths		8.00	
Catch Basin		8.00	
Closets		8.00	
Dishwasher		8.00	
Drinking Fountain		8.00	
Fire Sprinklers		30.00	
Floor Drain		8.00	
Floor Sinks		8.00	
Garbage Disposal		8.00	
Gas Lines/Meters		6.00	
Gas Outlets		2.00	
Gas Range		8.00	
Gas Test		4.00	
Hot Tub/Spa		60.00	
Lawn Sprinklers		10.00	
Leaders Rain Water		8.00	
Sewer Abandonment	1	14.00	14
Sewer Extension/Replacement		20.00	
Sewer Repair		10.00	
Showers		8.00	
Sinks		8.00	
Solar System		38.00	
Sumps		30.00	
Storage Tanks		20.00	
Toilet		8.00	
Vault Toilet		20.00	
Washing Machine/Dryer		8.00	
Water Heater Res/Comm		8.00/10.00	
Water Lines/Meters		8.00	
MECHANICAL			
Air Conditioning Equip.		10.00/20.00	
Boiler		20.00	
Control Change		8.00	
Convertors		4.00	
Dryer Res/Comm.		8.00/10.00	
Fans and Blowers		10.00	
Fireplace		4.00	
Flues		4.00	
Furnace		10.00	
Heaters		10.00	
Hoods Res/Comm		4.00/30.00	
Panels and Coils		4.00	
Registers		2.00	
Vents Bath/Kitchen		4.00	
ISSUANCE FEE		8.00	8.00

Sub-Total Fees: 70

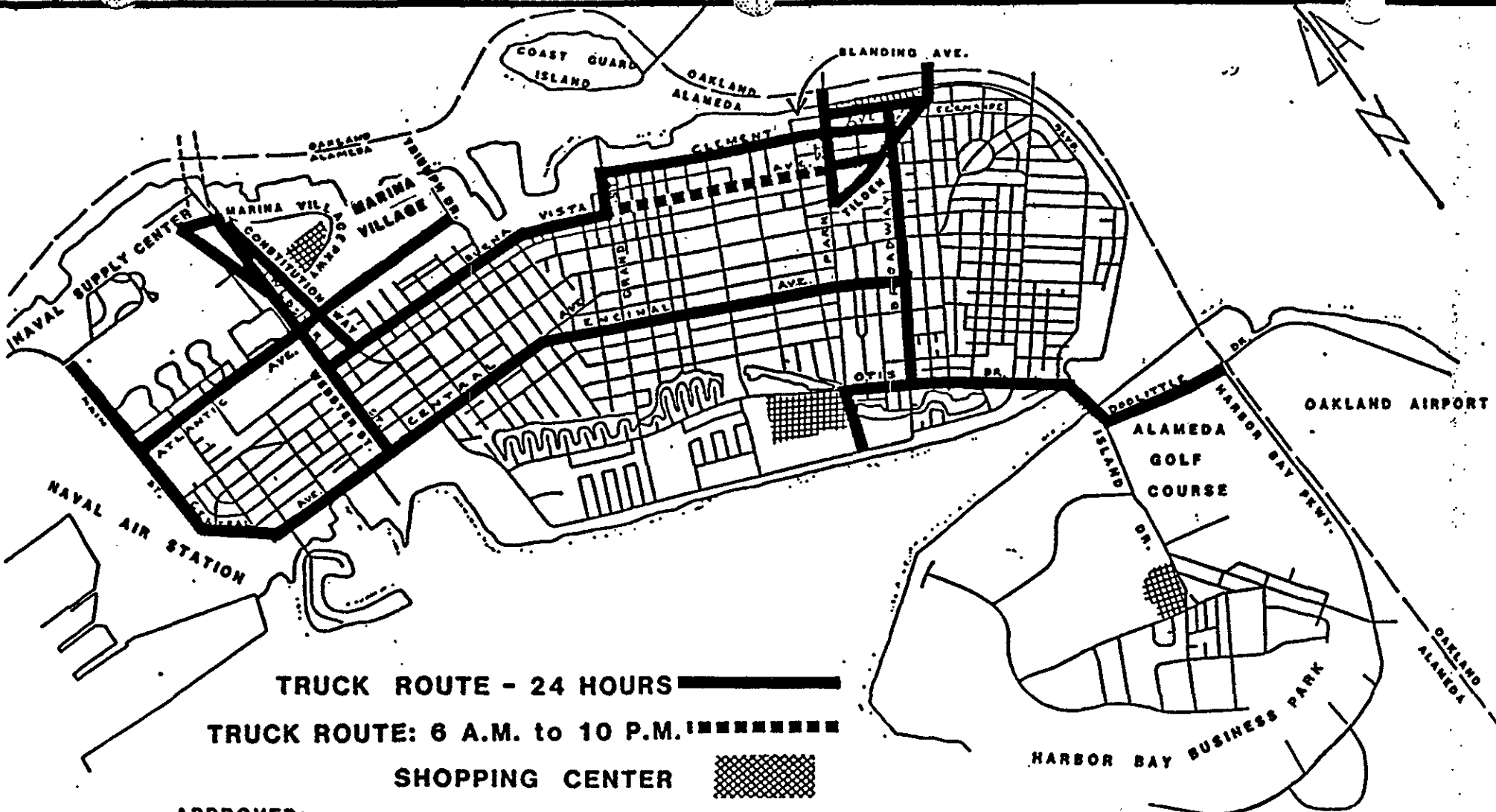
AB 941 Fee: 8.00

Total Fees: 78

APPLICATION RECEIVED DATE: 4/13/89 SIGNED: [Signature]

APPROVAL DATE: 5/9/89 SIGNED: [Signature]

ISSUED DATE: 1/1/89 SIGNED: [Signature]



TRUCK ROUTE - 24 HOURS

TRUCK ROUTE: 6 A.M. to 10 P.M.

SHOPPING CENTER

APPROVED:

CHIEF OF POLICE

CITY ENGINEER

CITY OF ALAMEDA TRUCK ROUTES

Public Works Department, Room 204
City Hall
Santa Clara Avenue at Oak Street - 94501
415.748.4563

Don Rodrigues
Senior Plumbing and
Mechanical Inspector

City of Alameda California



19584-041189-250 Books

CITY OF ALAMEDA
CALIFORNIA

No 28621

No 90-6032

Date 1/11/90

RECEIVED FROM

Hallack

1628 Willet St.

the sum of

Twenty Eight and 50/100 -

DOLLARS

\$

28⁵⁰/₁₀₀

For

RRB-POP-1-1135-1/5m18⁵⁰/₁₀₀-1/mun 3

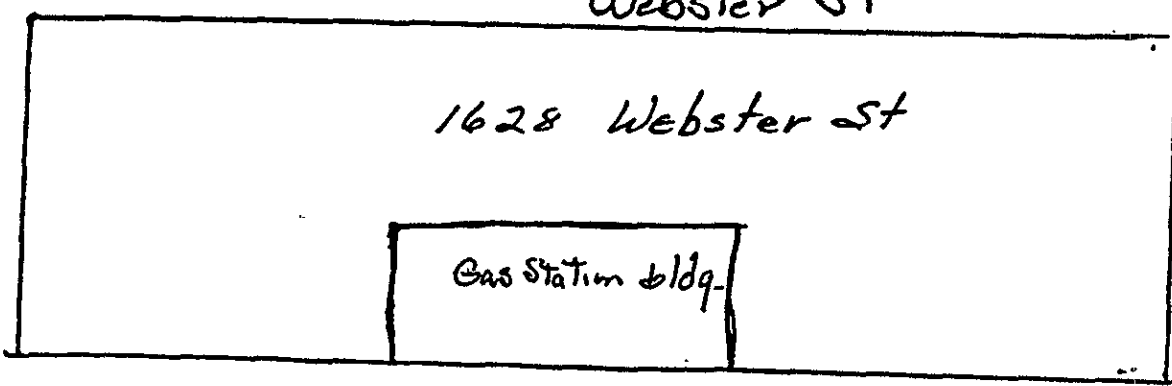
LEWIS E. HURWITZ

City Treasurer

Doyle
Collector

1628 Webster ST

Webster ST



PLUMBING & MECHANICAL PLANS APPROVED

DATE: 5/9/89
 BY: [Signature]
 Donald J. Rodriguez
 Sr. Plba. & Mech. Insp.

RECEIVED
 APR 13 1989
 CENTRAL CITY

CITY OF ALAMEDA
 Planning Department

Approved
 Approved
 W/ Conditions
 Disapproved

By [Signature] Date 5/8/89

APPROVED JOB PLAN
 CITY OF ALAMEDA
 BUILDING & INSPECTIONS DEPT.
 Building Inspector K.W. [Signature]
 Date 5-9-89 1-11-90

RECEIVED

19584-041189-250 Books

CITY OF ALAMEDA
CALIFORNIA

No 28621

No 90-5032

Date 1/11/90

RECEIVED FROM

Hellack

1628 Willet St

the sum of

Twenty Eight and 50/100 -

DOLLARS

\$ 28.50

For

VP 6 - 108714 - 1 1135 - 1/8118th - 1/10000 3

LEWIS E. HURWITZ
City Treasurer

Collector

Doyle

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



May 21, 1990

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Mrs. Jean Larkin
Pacific Properties
16 Las Vegas Road
Orinda, CA 94563

RE: 1628 Webster St., Alameda, CA 94501

Dear Mrs. Larkin:

I have reviewed a letter dated May 17, 1990, that was prepared by Exceltech concerning taking confirmatory samples and backfilling the excavation at the above site. It is acceptable.

Please submit to me, all reports and data as they become available.

If you have any questions, please contact me at 271-4320.

Sincerely,

Larry Seto, Senior,
Hazardous Materials Specialist

LS:mnc

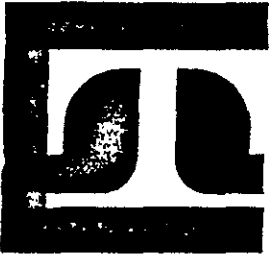
cc: RWQCB

Gil Jensen, Alameda County District Attorney, Consumer and
Environmental Protection Agency

Charlene Williams, DOHS

Randy Stone, Exceltech

Rafat A. Shahid, Assistant Agency Director, Environmental Health
Files



1365 VANDER WAY

SAN JOSE, CALIFORNIA 95112

(408) 297-6969

FAX (408) 297-7716

April 26, 1990

Project 4714

Mr. John Rigter
Exceltech Inc.
41674 Christy Street
Fremont, Ca. 94538-3114

Subject: Field Density Tests
Larkin Site Tank Excavation Backfill
1628 Webster Street
Alameda, California

Dear Mr. Rigter:

As requested, a representative of TERRATECH, INC. was present at the subject site on March 20, 1990 to perform field density tests within the baserock material used as tank excavation backfill. Four (4) field density tests were performed in accordance with the State of California Test Method 231 at a depth of approximately four (4) feet below the adjacent ground surface and within the import baserock backfill material.

The maximum wet density of 138 lbs./cu. ft. for the import baserock material used in calculation of the percent compaction, of the backfill was provided to us by your representative.

The results of the field density tests are presented on the attached Table A. These are for record purposes only.

The excavation backfill was not completed while our representative was on site. It is our understanding that the remaining approximate four (4) feet of the fill will be placed and the surface tested at some future date.

Sincerely,

TERRATECH, INC.

James M. Koch

JMK/pwk

Attachments

TABLE A
SUMMARY OF FIELD DENSITY TEST RESULTS

TEST NO.	DATE OF TEST	APPROX. DEPTH OF FILL (feet)	LOCATION	APPROX. ELEVATION (feet)	FIELD		LABORATORY		RELATIVE COMPACTION (%)	REMARKS
					DRY DENSITY (pcf)	WATER CONTENT (%)	MAXIMUM DRY DENSITY (pcf)	OPTIMUM WATER CONTENT (%)		
	<u>1990</u>		<u>WITHIN TANK EXCAVATION BACKFILL</u>							
1	3-20	4.0	Northwest Corner	Unk	123.7	N/A	138	N/A	90	
2	3-20	4.0	Southeast Corner	Unk	123.5	N/A	138	N/A	90	
3	3-20	4.0	Southeast Corner	Unk	125.0	N/A	138	N/A	91	
4	3-20	4.0	Southwest Corner	Unk	120.0	N/A	138	N/A	87	
	NOTES:	The average percent compaction = 90%								

2/14/90

Mr. Randall Stone
EnSCO Environmental Services, Inc.
41674 Christy Street
Fremont, California 94538-3114

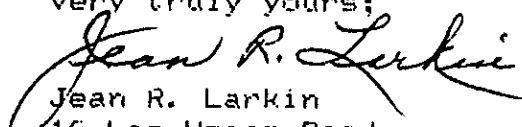
Re: 1628 Webster St.
Alameda, California

Dear Randy:

This is to advise you that we had absolutely no knowledge of any tank in the ground at the above address, with the exception of the waste oil tank which started this whole mess. We therefor have no knowledge of a tank being enclosed after 1984.

If there are any questions, please do not hesitate in calling.

Very truly yours;


Jean R. Larkin
16 Las Vegas Road
Orinda, Ca., 94563
415 254 3035



May 17, 1990

Lawrence Seto
Alameda County Health Agency
80 Swan Way Room 200
Oakland, CA 94621

Re: Backfilling Larkin Project
1628 Webster Street
Alameda, Alameda County, CA

Dear Larry,

As we discussed in our meeting on May 16, 1990, I am sending this letter to confirm the points of our agreement to backfill the above referenced site:

1. Samples in the current excavation will be sampled every 200 square feet on the north, west, and south walls-(the east wall is clean backfill).
2. The south end of the excavation will be left open until the confirmation sampling has been received, and copies sent to your office for approval.
3. A non-permeable, high density, polyethylene material will be used on the west wall to ensure no cross contamination will occur on contact.

Again Larry, it was nice to reach an agreement on these issues, and I certainly appreciate your time and help. I look forward to working with you.

Sincerely,

A handwritten signature in cursive script that reads 'Randy Stone'.

Randy Stone
Exceltech, Inc.

RS/tr

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director



DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

May 21, 1990

Mrs. Jean Larkin
Pacific Properties
16 Las Vegas Road
Orinda, CA 94563

RE: 1628 Webster St., Alameda, CA 94501

Dear Mrs. Larkin:

I have reviewed a letter dated May 17, 1990, that was prepared by Exceltech concerning taking confirmatory samples and backfilling the excavation at the above site. It is acceptable.

Please submit to me, all reports and data as they become available.

If you have any questions, please contact me at 271-4320.

Sincerely,

Larry Seto, Senior,
Hazardous Materials Specialist

LS:mnc

cc: RWQCB
Gil Jensen, Alameda County District Attorney, Consumer and
Environmental Protection Agency
Charlene Williams, DOHS
Randy Stone, Exceltech
Rafat A. Shahid, Assistant Agency Director, Environmental Health
Files

APPENDIX D
1990 WORK SUMMARY

1990 WORK SUMMARY

- 1/11/90 Lubrication/maintenance building demolition permit approved by the City of Alameda.
- 1/23/90 Sewer line closure inspection and backfill sewer line trench.
- 1/25/90 Demolition of building interior is: shelves, desks, hangers, lights, windows, etc.
- 1/26/90 Demolition of building exterior, all the way to the ground and prepare for disposal.
- 1/29/90 Start demolition of concrete pad and foundation. Prepare for disposal.
- 1/30/90 Metal from building loaded and shipped to scrap metal yard.
- 1/31/90 Continue demolition of concrete pad and footings. Dispose of at Class III landfill.
- 2/1/90 Finish clearing steel and concrete rubble. Dispose of at Class III landfill. Prepare site for soil excavation.
- 2/2/90 With an ENSCO geologist present, the two floor hoists and approximately 100 cubic yards of contaminated soil were removed from beneath the demolished lubrication/maintenance building. The soil was stock piled, sampled and covered with plastic. What appeared to be groundwater was encountered at approximately 12 feet.
- 2/5/90 Continued to excavate contaminated soil in the vicinity of the demolished lubrication/maintenance building. This was done by following the contamination veins visually. Approximately 300 cubic yards was removed, stock-piled and covered.
- 2/6/90 Excavated approximately 200 cubic yards of contaminated soil, stockpiled and covered. While following contamination veins, a 5,000 gallon underground storage tank was discovered. It was located northwest of the demo building. The tank had been filled with sand and then capped with concrete. It is unknown what it's contents were and when it was sealed in place.
- 2/12/90 Mobilized pump and generator on-site to remove water from excavation. Replaced backhoe with track excavator to remove above mentioned tank and facilitate the excavation process.
- 2/13/90 Off-loaded a 20,000 gallon "Baker Tank" at site to pump water into. A sump was dug well below water level and pumping began. Using the excavator, an attempt was made to drag the tank out of the excavation. After finding that it was far too heavy, the sand and concrete was removed. Both the tank and it's contents were placed in the contaminated soil stockpile area. Continued digging contaminated soil and looking for the limits, stockpiled and covered.

- 2/14/90 The excavation was headed into the corner where Pacific and Webster Streets meet. A variety of backfill material was encountered in this area. This included: rebar, steel banding, wood, pea gravel, broken-up asphalt and concrete. The fuel odor in this area was very strong. Excavated material was moved to stockpile area and covered. After disturbing this backfill area, water began to enter the excavation at a fairly high rate.
- 2/15/90 Replace electric pump with air driven diaphragm pump to provide higher volume. Pump water from excavation. Continue following/excavating contaminated soil in the corner next to Pacific and Webster Streets. Stockpile and covered excavated materials.
- 2/16/90 Job is rained out. Remove generator from site and make sure that stockpiles are still covered (high winds).
- 2/17/90 Pump water from excavation and check covering on stockpiles.
- 2/18/90 Pump water from excavation and check covering on stockpiles.
- 2/19/90 Pump water from excavation and check covering on stockpiles. (Note: water is returning to excavation faster).
- 2/20/90 Pump water from excavation. Using a hydrocarbon meter, check sidewalls of hole to determine further excavation. Remove soil all along sidewall below house on the east side of excavation. Followed this vein of contamination down below water level to approximately 14 feet where it came clean. Stockpile and cover material that was removed.
- 2/22/90 Secured fencing along site access areas. Pump water from excavation. Started demolishing metal office building/shed. More room is needed for stockpiling contaminated soil.
- 2/23/90 Finished demolition of metal building. Moved around stockpiles for better use of space. Pump water out of excavation. Cover stockpiles.
- 2/24/90 Put up caution tape around excavation. Check site security.
- 2/26/90 Removed product lines along the north side wall of the excavation. There were both steel and fiberglass lines buried in pea gravel approximately 2 feet from the surface. The fiberglass lines were on top. The steel lines were on the bottom and quite rusty. Removed and stockpiled chunks of concrete and sandstone from the trench. Due to large amounts of water in the bottom of the excavation removal of soil was not attempted.
- 2/27/90 Setup diaphragm pump at site and pump excavation. Remove contaminated soil from the middle of the excavation. Stockpile and cover.

- 2/28/90 Pump excavation as much as possible. Take soil samples from sidewalls and water samples from the "Baker Tank" and the excavation. Excavated the middle of hole down to clean soil. Stockpile and cover removed material. In the process, a new vein on contamination was found. It started at a depth of approximately 5 feet and ended between 9 and 10 feet. The direction is towards Webster Street. Water flow into excavation is now too great to keep pumping into tank.
- 3/2/90 Put up more caution tape around excavation. Place barricades with flashers along fence lines. Attached caution sign to security fencing. Checked out site security.
- 3/3/90 Moved stockpiles and covered them. Checked site security.
- 3/5 - 3/8/90 Down due to bad weather.
- 3/9/90 Move "Geofabric" and plastic sheeting to site. Install more barricades with flashers at site.
- 3/12/90 Discuss with the regulator (by telephone) the water situation in the excavation, and the need to backfill the clean portion of the hole so that we could safely excavate the remaining contamination. It was his opinion that groundwater had been impacted and that we could discontinue excavation below the present water level. Further, based upon the analytical results read to him over the telephone, it was acceptable to backfill the excavation excluding the area around Sample #1. He requested that we send him the analytical results as soon as we received the hard copy of them from the lab.
- 3/13/90 The "Baker Tank" is pumped out into licensed transport truck. Approximately 300 tons of crushed rock is placed inside excavation. Approximately 15,000 gallons of water was pumped directly from the excavation into transport trucks during this backfill process. All contaminated water was hauled to H&H Ship Service's TSD facility.
- 3/14/90 Finish-up spreading crushed rock in excavation. Lay out "Geofabric" on top of rock. Start decontamination of "Baker Tank" walls. Take water sample from middle of excavation.
- 3/15/90 Spread plastic sheet over "Geofabric" and entire inside of excavation. Start back filling with Class II baserock.
- 3/16/90 Continued to backfill with Class II baserock. Compacted with "sheepsfoot" vibratory compactor (continuously). Finished decontamination of "Baker Tank".
- 3/19/90 Continued to backfill with Class II baserock. Wetted down material and compacted with "sheepsfoot" vibratory compactor between lifts.

- 3/20/90 Continued to backfill with Class II baserock. Wetted down material and compacted with "sheepsfoot" vibratory compactor between lifts. Sidewall samples taken at 4.5 foot depth stockpile composite samples taken. Field density tests were performed at 4 feet below grade by Terratech.
- 3/21/90 Continued to backfill with Class II baserock. Wetted down material and compactor with "sheepsfoot" vibratory compactor between lifts. Excavation is now approximately 3 feet below grade.
- 3/22/90 Continued to backfill with Class II baserock. Wetted down material and compacted with "sheepsfoot" vibratory compactor between lifts. Excavation is now approximately 1/2 foot below grade.
- 4/17/90 Starting at Pacific Street, excavated heavily contaminated soil parallel to Webster Street approximately 3 feet inside the property line and to a depth of 10 feet. The contamination appears to continue under the sidewalk. Removed between 300 and 400 cubic yards. Place on plastic sheet and cover at the end of the day. Much of the material removed was chunks of asphalt and concrete.
- 4/18/90 Begin building berms and laying out plastic sheeting for remediation beds. With an ENSCO geologist present, continued to excavate heavily contaminated soil along Webster Street. It begins about 5 feet below grade and has the odor of gasoline. Found two large canopy footings made of concrete and drenched in product. Just after the second footing the contamination came up to the surface. Both steel and fiberglass product lines were encountered on a number of occasions. Removed 400 to 500 cubic yards of soil. Spread it out on the remediation beds and covered it. During excavation, soil samples were taken of the side and end walls.
- 4/19/90 Continue to excavate heavily contaminated soil along Webster Street. A third large canopy footing drenched in product was found. Approximately 1-2 feet beyond this, the depth of the contamination began to drop below grade gradually. More product lines were encountered. About 400 cubic yards was removed, placed on beds and covered.
- 4/20/90 Excavated until the contamination quit (visually speaking). This was about 120 feet south of the Pacific Street sidewalk. Material included lots of concrete and debris. Stockpiled and covered. Covered beds with plastic.
- 4/22/90 Finish removing contaminated soil up against earlier excavation. Spread out soil and cover beds.