RANDICK & O'DEA OS NOV 17 PM 1: 46

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LISA ROBINSON SWANSON OF COUNSEL

November 16, 1995

Mr. Tom Peacock Alameda County Hazardous Materials Division Department of Environmental Health 1131 Harbor Bay Parkway, 2nd Floor Alameda, CA 94502

ROBERT A. RANDICK, JR.

BERNARD F. ROSE, Ph.D. JULIE M. ROSE

BRIAN M. O'DEA

WILLIAM J. TRINKLE

Ms. Loretta Barsamian Regional Water Quality Control Board San Francisco Bay Region 2101 Webster Street, Suite 500 Oakland, CA 94612

> 1300 Powell Street, Emeryville Richard Becker - Property Owner

Dear Mr. Peacock and Ms. Barsamian:

Mr. Becker has retained this firm to assist him in reporting contamination recently discovered at the above-referenced and of the discovery of the contamination and osk Becozei Company as the primarily

Attached here as Exhibit A is the subsurface investigation repetition of the control of the con to conduct the investigation because he was the second reasons **Markey**. It was from this investigation that Mr. Becker first learned that there was oil and greece. Soon the property. Because the report indicates that the type and the location of the contamination is not consistent with N use of the property Mr. Booken goodwood and make the property Mr. of the history of the site. This history, which is included in the following exhibits, shows that the state of

Exhibit B is a copy of the deed of trust should took ownership of the areas to a local to 1022 Pennzoil November 16, 1995 Page 2

subsequently sold the property to Mr. and Mrs. Osburn en Light, 1952. Between 1953 and 1978, the property changed hands a number of times and appears to be held for investment purposes. Aerial photographs show that by 1959 the lot was unoccupied and by 1969 the lot was vacant. Mr. Becker purchased the property in 1978 and uses it to store construction equipment.

Exhibit C is a report of the review by Environmental Bio-Systems, Inc. of the historical aerial photos of the site. This report points out the existence of above during Pensistence of above the site of above during Pensistence of above the site of and along the site of a site of

Exhibit D is a 1951 Sanborn Map showing the Pennzoil Company canning facility which had the property.

When Mr. Becker purchased the property in 1978, the special of the Lush investigation, Lush discuss a laborate tank made in the Lush the second only have been Pennzoil's tank made.

As you can see from the history of this site, I operated a bulk storage and canning facility at the site for years. Aerial photographs show discoloration of the soil after the removal of some of the tanks in 1953. Once Pennzoil sold the property in 1953 it does not appear that there was any activity at the site that would cause the contamination that is reported in the Lush investigation. Based on the site's history Mr. Becker asks that Pennzoil be named the primarily responsible party for this site.

Very truly yours,

RANDICK & O'DEA

Bernard F. Rose

BFR:es

cc: Mr. Richard Becker

EXHIBITS TO NOVEMBER 16, 1995 LETTER REGARDING 1300 POWELL STREET, EMERYVILLE RICHARD BECKER - PROPERTY OWNER

BASELINE SURVEY REPORT CONSTRUCTION SERVICES FACILITY 1300 POWELL STREET EMERYVILLE, CALIFORNIA

For: Mr. Dick Becker

turk Canadianaa Tah Na 510-001

Lush Geosciences

GEOLOGICAL AND ENVIRONMENTAL SERVICES

LUSH GEOSCIENCES

GEOLOGICAL AND ENVIRONMENTAL SERVICES

BASELINE SURVEY REPORT CONSTRUCTION SERVICES FACILITY 1300 POWELL STREET EMERYVILLE, CALIFORNIA

For: Mr. Dick Becker

Lush Geosciences Job No. 510-001

April 12, 1006

Andrew P. Lush President RG 4421

No. 4421

No. 4421

No. 6 CALIFORNIT

Lush Geosciences

Lush Geosciences

GEOLOGICAL AND ENVIRONMENTAL SERVICES

510-001

Mr. Dick Becker Construction Services 1300 Powell Street Emeryville, CA 94608

Subject: Executive Summary
Baseline Survey Report
Construction Services Site
1300 Powell Street, California

Dear Mr. Becker:

Lush Geosciences prepared the attached report presenting the results of our recent subsurface investigation to evaluate whether soil and ground attached at 1300 Powell Street in Emeryville, California. This report was prepared to summarize the work performed to date; the report describes methods and procedures used and presents our conclusions and recommendations.

The site is aware the state of the site include pumps, water trucks, cranes, and other equipment: maintenance facilities include above ground diesel tanks, used oil and hydraulic oil storage, a steam cleaner, and a self-contained parts cleaning unit. The diesel fuel and most of the used oil storage is in a bermed area at the north end of the site building; some used oil is present in 55-gal drums near the north edge of the site.

Areas designated for investigation included:

- Areas near a storm drain where steam cleaner washout was directed and where standing water is common during rainy periods:
- Areas near the aboveground fuel and hydraulic oil storage:

- Areas of potholed pavement west of the site building;
- Areas below worn asphalt near the northwestern corner of the site;
- An area of bare ground near the north edge of the site where surficial runoff from paved areas is directed;
- An area of exposed soil near the northwestern corner of the site where runoff accumulates during rainy periods prior to being pumped into public sewer systems;
- An area near the west edge of the site where asphalt is warped and worn; and
- An area at the east edge of the exposed soil area at the north edge of the site adjacent to waste oil storage in drums and where some spillage was apparent.

Each of these locations was judged likely to have possible surficial contamination with diesel or oily materials dripping from equipment or being washed in during rainy periods. These areas were investigated by drilling 8 borings within or immediately adjacent to the areas of concern to depths of approximately 5 ft and collecting samples at depths equivalent of approximately 1 ft, 3 ft, and 5 ft.

The materials encountered were generally clavey and showed some positive evidence of contamination in the form of odor or low OVM readings. Shallow groundwater was encountered in two borings; an oily sheen was present on the water in one boring near the steam-cleaning storm drain and a thick sheen or emulsion of oily material was observed in another boring near the aboveground fuel and oil storage area.

Selected samples were analyzed for total petroleum hydrocarbons as diesel fuel (TPHd), motor oil (TPHmo), and as kerosene (TPHk) and for total oil and grease (TOC). Sample analyses showed that contamination was present in each of the locations sampled and all of the samples analyzed. The dominant contaminant was oil and grease with relatively low amounts of lighter bydrocarbons such as diesel fuel or hydraulic fluid. The results of sample analyses showed contamination in all samples analyzed, although the TPHmo analysis often showed lower or non-detectable reported concentrations due to the nature of the analysis, which is better suited for lighter (diesel) hydrocarbons. Average concentrations in samples from the 1-ft depth showed an average concentration of more than 285 nnm TOG. Samples from borings B4 and B5 showed 1,200 and 2,800 ppm, respectively. Average concentrations at the 5 ft depth outside of B2 (3,200 ppm TOG) were approximately 490 ppm.

Based on these data, we conclude that the site has been contaminated with oil and grease, with relatively minor concentrations of lighter hydrocarbons. However, the following factors indicated that the present site activities are not the source of the detected contamination:

- The lack of significant variations in the analytical results despite widely varying types of
 expected concentrations and settings is not consistent with patterns which would be expected
 from the wide range of types of settings explored (below asphalt, areas of relatively minor
 activities) and other factors).
- The depth of contamination and the wide-spread extent of contamination is not expected
 from the nature of recent sources of possible contamination given the types of possible recent
 discharges and the contaminants detected.
- The generally higher levels of contamination in the deeper samples than in the shallower samples indicates that surficial sources have not been the dominant points of origin.
- The presence of significant contamination in soil below a buried concrete slab where only surficial sources are currently likely implies that some other type of source is probable.

We examined Sanborn Fire Insurance Maps of the Oakland/Emeryville area dating from 1951. These maps showed that the site was occupied by a bulk oil storage, canning, and warehousing facility labeled as occupied by The Pennzoil Company. The maps also indicate a property to the west was also used for bulk petroleum storage (Cook Oil Co.) and that the site to the north was occupied by Henry Kaiser Motors. We therefore infer that the majority of the contamination detected onsite is related to the prior use of the site as a bulk oil storage facility.

SUMMARY

Contamination has occurred onsite and it is possible that groundwater has been affected. Contamination in some areas exceeds 1,000 ppm TOG. Based on the levels of contamination present, it is our recommendation that:

- Appropriate regulatory agencies (Alameda County and the California Regional Water Quality Control Board) be notified of the presence of contamination.
- We recommend that Construction Services explore the possibility that present or former insurance policies may reimburse costs of delineation and mitigation activities, particularly if offsite migration of contaminants is eventually documented.

- 3. We strongly recommend that the chain of title for the subject property be investigated and possible responsible parties such as Pennzoil be identified and notified that they will be expected to contribute to remedial costs. Additional historical research will be useful in identifying other potential sources and possible responsible parties. Agency notification may be very useful in the process of identifying and securing assistance from alternative responsible parties.
- 4. Legal representation should be procured and brought into the project if and as necessary.
- 5. Further assessment of the contamination will be required by regulatory agencies and will be critical in evaluating the extent of contamination, in verifying responsible parties, and in identifying appropriate remedial actions.

Please call if you have any questions regarding this project.

No. 4421

Sincerely,

LUSH GEOSCIENCES

Andrew P. Lush Senior Geologist

R.G. 4421

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1.0 INTRODUCTION

Lush Geosciences prepared this report presenting the results of our recent subsurface investigation to evaluate whether soil and groundwater contamination has occurred at the construction Services / Becker Machinery property located at 1300 Powell Street in Emeryville, California. The site is located on northwest corner of Powell Street and Doyle Street. Figure 1 illustrates the location of the site. The purpose of the assessment was to assess whether site activities may have resulted in contamination of soil or groundwater at the site.

This report was prepared to summarize the work performed to date; the report describes methods and procedures used and presents our conclusions and recommendations. The methods and procedures used during this investigation included:

- Collecting soil samples from eight soil borings;
- Analyzing selected soil samples; and,
- Preparing this report.

1.1 Background

The site is currently occupied by a construction equipment rental yard, office, and maintenance facility. Equipment stored at the site include pumps, water trucks, cranes, and other equipment; maintenance facilities include aboveground diesel tanks, used oil and hydraulic oil storage, a steam cleaner, and a self-contained parts cleaning unit. The diesel fuel and most of the used oil storage is in a bermed area at the north end of the site building; some used oil is present in 55-gal drums near the north edge of the site. We understand that the site is being considered for lease to another party, and a baseline survey was desired to evaluate site conditions prior to transfer of responsibility for site operations to the lessee.

The site configuration is illustrated in the attached Generalized Site Plan (Figure 2). Areas designated for investigation included:

- Areas near a storm drain where steam cleaner washout was directed and where standing water is common during rainy periods;
- Areas near the aboveground fuel and hydraulic oil storage;
- Areas of potholed pavement west of the site building;

- Areas below worn asphalt near the northwestern corner of the site;
- An area of bare ground near the north edge of the site where surficial runoff from paved areas is directed;
- An area of exposed soil near the northwestern corner of the site where runoff accumulates during rainy periods prior to being pumped into public sewer systems;
- An area near the west edge of the site where asphalt is warped and worn; and
- An area at the east edge of the exposed soil area at the north edge of the site adjacent to waste oil storage in drums and where some spillage was apparent.

Each of these locations was judged likely to have possible surficial contamination with diesel or (dominantly) oily materials dripping from equipment or being washed in during rainy periods. These areas were investigated by drilling borings within or immediately adjacent to the areas of concern to depths of approximately 5 ft and collecting samples at depths equivalent of approximately 1 ft, 3 ft, and 5 ft.

2.0 SITE INVESTIGATION

The work performed included drilling and sampling eight borings, collecting soil samples from each of the borings, conducting analyses on selected soil samples, and compiling and preparing this report. This report summarizes the field and laboratory operations conducted, methods and procedures used, and the data obtained and presents our conclusions and recommendations based on the findings of the assessment.

2.1 Field Methods and Sampling Procedures

All borehole drilling, soil sampling, and monitoring well construction activities were conducted using hollow-stem auger drilling and sampling equipment operated by West HAZMAT, of Newark, California except B8, which was hand-augured due to access limitations. West HAZMAT holds a current, valid C-57 well drillers license. The locations of the soil borings are illustrated on Figure 2. The procedures implemented were as follows:

- Drilling equipment was thoroughly steam-cleaned with clean water prior to drilling each boring.
- Each boring was logged in accordance with the Unified Soil Classification System.

- Samples were collected at depths of 1 ft, 3 ft, and 5 ft except in B8, which was hand-augured and reached refusal at 1 ft; a disturbed soil sample was collected at that depth.
- Soil samples were collected (except for the sample from B8 described above) using a California split-spoon drive sampler lined with three 2-in by 6-in brass tube liners. Soil collected in the first (lowest) liner was preserved for analysis. Care was taken to assure that no headspace was present in the liner following sample collection. Soil collected in the second liner was screened with a portable photoionizing hydrocarbon vapor meter (OVM) to provide field indications of hydrocarbon vapor concentrations. The remaining contents of the second and third liners were extruded and logged in accordance with the Unified Soil Classification System. Immediately after a sample was collected, each end of the brass liner that contained the soil sample to be preserved for analyses was covered with aluminum foil, capped with a polyethylene lid, and sealed with airtight tape. The samples were then labeled, showing the boring number and depth, date, time, and job identification, and placed in iced storage.
- All samples were stored immediately after collection, sealing, and labeling in an ice chest containing ice, and were maintained in a refrigerated condition until they were delivered to the analytical laboratory.
- Chain-of-custody documentation was maintained from the sampling location to the analytical laboratory. The chain-of-custody record was signed by the sampler and placed in the container holding the samples. Condition of the samples was noted on the chain-of-custody record by the laboratory.
- Soil cuttings generated during borehole drilling and sampling were placed and sealed into drums, and left onsite pending the results of the analyses.

2.2 Soil Conditions Encountered

Soil condition encountered are summarized below in Table 1. The materials encountered were generally clayey and showed some positive evidence of contamination in the form of odor or low OVM readings. Shallow groundwater was encountered in borings B1 (less than 1 ft below grade) and B2 (2 ft below grade). An oily sheen was present on the water in B1 and a thick sheen or emulsion of oily material was observed in B2.

TABLE 1 SOIL CONDITIONS ENCOUNTERED CONSTRUCTION SERVICES FACILITY EMERYVILLE, CALIFORNIA Page 1 of 2

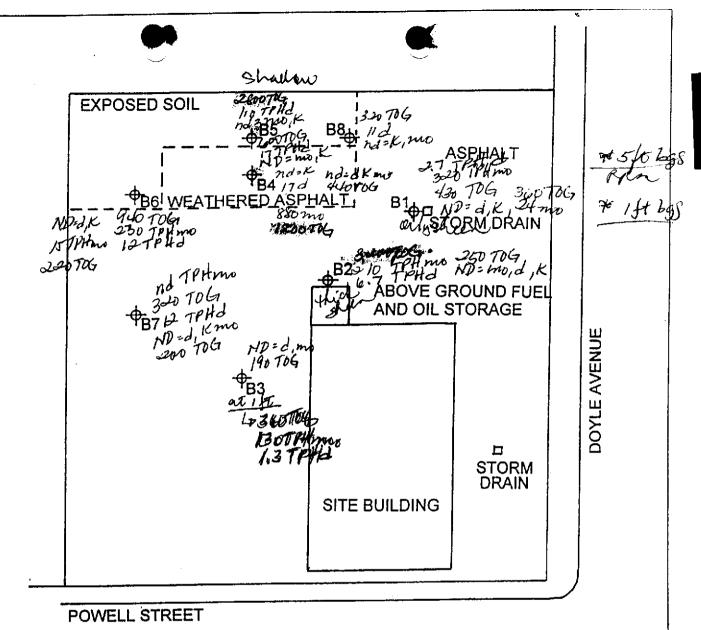
| | | EMERYVILLE, CALIFORNIA Page 1 of 2 | | |
|----------------------------|----------------------|---|-----------------|----------------|
| Boring/Sample Number | Sample Depth (ft) | Soil Type | Blows Per Ft | OVM Reading |
| Boring B1 S-1-B1 | | Gray gravel (1 ft) over dark gray and dark brown clayey silt, very moist to wet, low plasticity, stiff, weak petroleum odor (fill) | | 5 ppm |
| S-3-B1 | 3 | Mottled orange brown, green-gray, gray silty gravely sand, moist, stiff, low plastic slight petroleum odor (fill) | 29 ity | 1.9 ppm |
| S-5-B1 | 5 | Gray green silty gravely sand, moist, dense silty gravely sand, moist, stiff, low plastici slight petroleum odor (fill) | | 8 ppm |
| Boring B2 S-1-B2 | 1 | 1 in asphalt over 4 ins gravel over very dar brown clayey silt, very moist to wet, low plasticity, stiff, moderate petroleum odor; medium yellow brown sand, well sorted, at 1.5 ft. Wood Fragment. | ·k 25 | 18 ppm |
| S-3-B2 | 3 | No recovery | 27 | |
| S-5-B2 | | Layered silty sand and silt, yellow brown, silty gravely sand, moist, stiff, low plastici mederate netroleum oder | 39 ty, | |
| Boring B3 S-1-B3 | 1 | Dark brown clayey silt, moist, non-plastic, stiff, possible brick fragments very weak petroleum odor | 28 | 5 ppm |
| S-3-B3 | 3 | Yellow brown sandy silt with trace gravel moist, stiff, mod. plastic, no petroleum odo | 15 or | 0.8 ppm |
| S-5-B3 | 5 | Mottled medium yellow brown sandy clayer silt, moist, stiff, low plasticity, slight petrol odor | | 29 ppm |
| Boring B4 S-1-B4 | 1 | 1 in asphalt over dark brown clayey silt, moist, non-plastic, stiff, moderate petroleur odor; 3 ins concrete at 0.5 ft | 25 m | 1 8 ppm |
| S-3-B4 | 3 | Yellow brown to medium gray gravely clayey sandy silt, moist, stiff, slight odor | 22 | 22 ppm |
| S-5-B4 | 5 | As above | 37 | 14 ppm |
| | | Continued on Next Page | | |

TABLE 1 SOIL CONDITIONS ENCOUNTERED CONSTRUCTION SERVICES FACILITY EMERYVILLE, CALIFORNIA Page 2 of 2

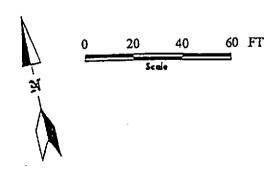
| | | Page 2 of 2 | | |
|-------------------------|----------------------|--|-----------------|-----------------|
| Boring/Sample Number | Sample Depth (ft) | Soil Type | Blows Per Ft | OVM Reading |
| Boring B5 S-1-B5 | 1 | I in asphalt over dark brown clayey silt, moist, non-plastic, stiff, moderate petroleur odor; 3 ins concrete at 0.5 ft | 40 m | 8 ppm |
| S-3-B5 | 3 | Yellow brown to medium gray gravely clayey sandy silt, moist, stiff, slight odor | 20 | |
| S-5-B5 | 5 | As above | 34 | |
| Boring B6 S-1-B6 | 1 | Very dark brown clayey silt, very moist, low plasticity, stiff, no petroleum odor; | 39 | 1. 1 ppm |
| S-3-B6 | 3 | As above | 22 | 0.5 ppm |
| S-5-B6 | 5 | Blue gray to yellow brown sandy silt, moist, stiff, plastic, slight petroleum odor | 41 | 11.6 ppm |
| Boring B7 S-1-B7 | 1 | Dark brown clayey silt, moist, non-plastic, stiff, possible no petroleum odor | 22 | 1.1 ppm |
| S-3-B7 | 3 | Gray brown sandy silt with trace gravel moist, stiff, low plasticity, no petroleum od | 33 lor | 0.1 ppm |
| S-5-B7 | 5 | Mottled medium yellow brown sandy clayers silt, moist, stiff, low plasticity, slight petrol odor | ey 22 eum | 24 ppm |
| Boring B8 S-1-B8 | 1 | Dark brown clayey silt, moist, non-plastic, stiff, slight petroleum odor. | 25 | 8 ppm |

2.3 Soil Sample Analyses

Analysis of selected soil samples from the borings were performed by Sparger Technology Laboratories, of Sacramento, California, which is certified for the requested analyses. The samples were analyzed for total petroleum hydrocarbons as the life of the requested analyses. The (TDLL) in Environmental Protection Agency (EPA) Method (TDLL) in Environmental Protection Agency (EPA) Method (EPA) (modified) and for total oil and (EOG) using EPA method (EOG). Pesults of the analyses are summarized in Table 1; copies of laboratory reports are attached as Appendix A.



- APPROXIMATE SOIL BORING LOCATION



GENERALIZED SITE PLAN CONSTRUCTION SERVICES FACILITY 1300 POWELL STREET

EMERYVILLE, CALIFORNIA

LUSH GEOSCIENCES

FIGURE 2



TABLE 2

RESULTS OF LABORATORY ANALYSES SOIL SAMPLES FROM SOIL BORINGS

CONSTRUCTION SERVICES FACILITY EMERYVILLE, CALIFORNIA

| | | EMERYVII | LLL, CALIFO | MUA | |
|-------------------------------|----------------------|---------------------|--------------|--------------------|----------------------|
| Sample Number | Sample Depth (ft) | TPHd | TPHk | TPHmo | TOG |
| Boring B1 S-1-B1 S-5-B1 | 1 5 | <1.0 2.7 | <1.0 <1.0 | 24 320 | 360 430 oilyshi |
| Boring B2 S-1-B2 S-5-B2 | 1 5 | <1.0 6. 7 | <1.0 <1.0 | <1.0 210 | 250 3,200 - Luk |
| Boring B3 S-1-B3 S-5-B3 | 1 5 | 1.3 <1.0 | <1.0 <1.0 | 130 <1.0 | 360 190 |
| Boring B4 S-1-B4 S-5-B4 | <u>1</u> | 17 <1.0 | <1.0 <1.0 | 880 <1.0 | 1,200 |
| Boring B5 S-1-B5 S-5-B5 | 1 | 110 17 | <1.0 <1.0 | <1.0 <1.0 | 2.800 |
| Boring B6 S-1-B6 S-5-B6 | 1 5 | <1.0 12 | <1.0 <1.0 | 15 230 | 220 940 (Mass) |
| Boring B7 S-1-B7 S-5-B7 | 1 5 . | <1.0 12 | <1.0 <1.0 | <1.0 <1.0 | 200 320 |
| Boring B8 S-1-B8 | 1 | 11 | <1.0 | <1.0 | 320 |

TPHd = Total petroleum hydrocarbons as diesel

TPHk = Total petroleum hydrocarbons as kerosene

TPHmo = Total petroleum hydrocarbons as motor oil

TOG = Total oil and grease

Results given in parts per million (ppm)
<= less than laboratory minimum detection limits

3.0 DISCUSSION

Sample analyses from the soil borings showed that contamination was present in each of the locations sampled and all of the samples analyzed. The dominant contaminant was oil and grease with relatively low amounts of lighter hydrocarbons such as diesel fuel. The differences in reported concentrations between the TPHmo and TOG results is likely due to the presence of relatively heavy hydrocarbons and/or its degradation products. The TOG analysis is judged most appropriate for the heavier hydrocarbons associated with the motor oil contamination judged to be dominant at this site. Until further assessment is performed, we consider the TOG numbers most reliable as a indication of actual site conditions. Each sampled area is discussed below.

3.1 Storm Drain Area

Shallow water was encountered in boring B1 and subjective evidence of contamination was encountered in each sample. An oily sheen was present on the water surface, which was perched above moist soil. Sample analyses showed 360 ppm TOG at 1 ft and 430 ppm at a depth of 5 ft.

3.2 Aboveground Storage Area

Shallow water was encountered in boring B2 and subjective evidence of contamination was encountered in each sample. An oily emulsion or thick sheen was present on the water surface, which was perched above moist soil. A clean sand was found approximately 1.5 ft below the ground surface. Sample analyses showed 250 ppm TOG at 1 ft and 3,200 ppm TOG at a depth of 5 ft.

3.3 Areas of Potholed Pavement

The area of potholed pavement west of the site building was investigated with a boring within the largest and most northerly worn area. Samples from this location showed little or no evidence of contamination; results of laboratory analyses showed TOG concentrations among the lowest reported at the site.

3.4 Areas of Worn Pavement

The area of worn pavement northwest of the site building was investigated with a boring in the central portion of the area. Samples from this location showed high TOG concentrations in the shallow sample and substantial concentrations in the 5-ft sample. This was despite the presence of an apparently competent concrete slab at 6 ins below ground surface.

3.5 Areas of Bare Ground, North Edge

An area of bare ground near the north edge of the site was investigated because runoff from rain water is directed there from adjoining paved areas. As seen with boring B4, high TOG concentrations in were detected in the shallow sample and substantial concentrations were present in the 5-ft sample. This contamination was also present below a concrete slab.

3.6 Area of Bare Ground, Northwest Corner

The area of exposed soil near the northwest corner of the site is where runoff accumulates during rainy periods was explored with boring B6. Very little subjective evidence of contamination was apparent. The shallow sample showed 220 ppm TOG; the deeper sample showed a higher concentration of 940 ppm TOG

3.7 Worn Asphalt Area, West Edge

An area near the west edge of the site, where asphalt is warped and worn below several parked trucks, was explored with boring B7. The shallow soil sample, containing 200 ppm TOG; was similar in concentration to the shallow soil sample in the exposed soil area; the deeper sample (5 ft below grade) showed a higher concentration of 320 ppm TOG.

3.8 Area of Bare Ground, North Edge

An area at the east edge of the exposed soil area at the north edge of the site is adjacent to waste oil storage in drums and where some spillage was apparent. A hand-augured boring was drilled (B8) and encountered refusal at approximately 1 ft. Analysis of a sample composed of disturbed drill cuttings was found to contain 320 ppm TOG.

3.9 Summary

The results of sample analyses showed contamination in all samples analyzed. Average concentrations in samples from the 1-ft depth outside of borings B4 and B5, which had elevated TOG concentrations, showed an average concentration of approximately 285 ppm TOG. Samples from borings B4 and B5 showed 1.200 and 2.800 ppm, respectively. Average concentrations at the 5 ft depth outside of B2 (3,200 ppm TOG) were approximately 490 ppm.

Based on these data, we conclude that the site has been contaminated with oil and grease, with relatively minor concentrations of lighter hydrocarbons. However, the following factors

indicated that the present site activities, judged to be representative of activities during the period Construction Services has operated at the site, are not the source of the detected contamination:

- The lack of significant variations in the shallow TOG analytical results despite widely varying
 types of expected concentrations and settings is not consistent with patterns which would be
 expected from the wide range of types of settings explored (below asphalt, areas of relatively
 minor activities) and other factors).
- The depth of contamination and the wide-spread extent of contamination is not expected from the nature of recent sources of possible contamination given the types of possible recent discharges and the contaminants detected.
- The generally higher levels of contamination in the deeper samples than in the shallower samples indicates that the surficial sources investigated have not been the dominant points of origin.
- The presence of significant contamination in soil below a buried concrete slab where only surficial discharges are likely implies that some other type of source is likely.

Because of these apparent inconsistencies, we examined Sanborn Fire Insurance Maps of the Oakland/Emeryville area dating from 1951, obtained on microfilm from the California State Library. These maps showed that the site was occupied by a bulk oil storage, canning, and warehousing facility labeled as occupied by The Pennzoil Company. Each of the borings drilled were within 20 ft of one or more of 21 large aboveground storage tanks, and concrete pads as noted in two of the borings are indicated to have been present during the 1950's. The maps also indicate a property to the west was also used for bulk petroleum storage (Cook Oil Co.) and that the site to the north was occupied by Henry Kaiser Motors (Figure 3). We therefore infer that the majority of the contamination detected onsite is related to the prior use of the site as a bulk oil storage facility.

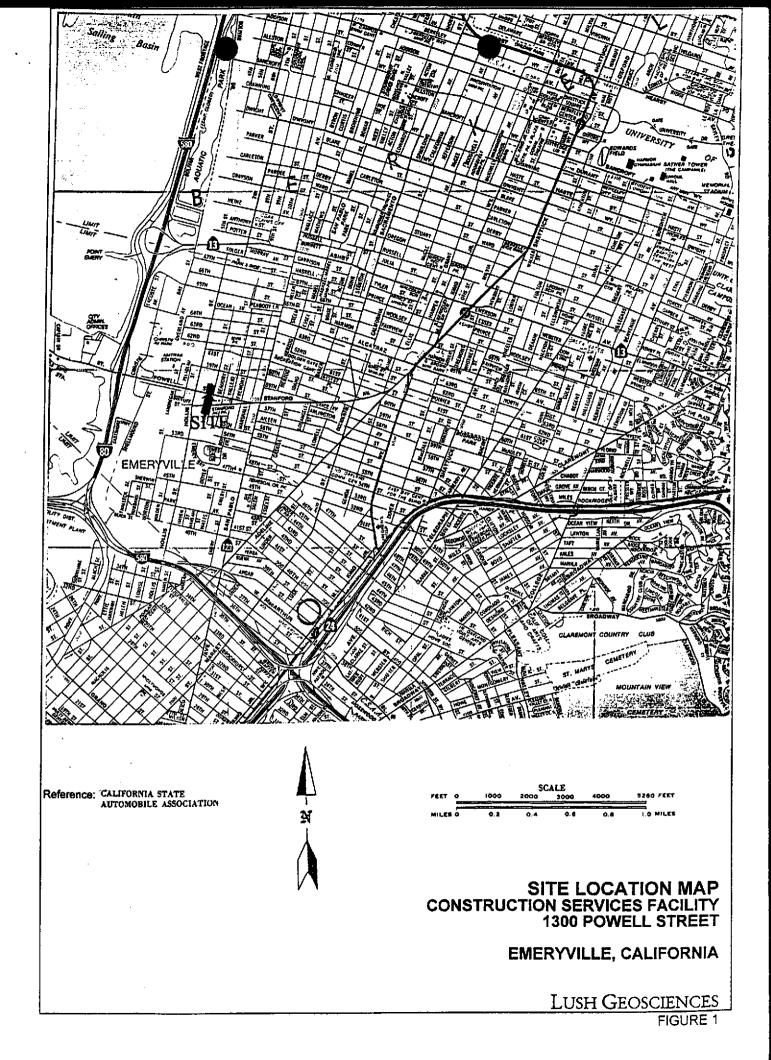
4.0 RECOMMENDATIONS

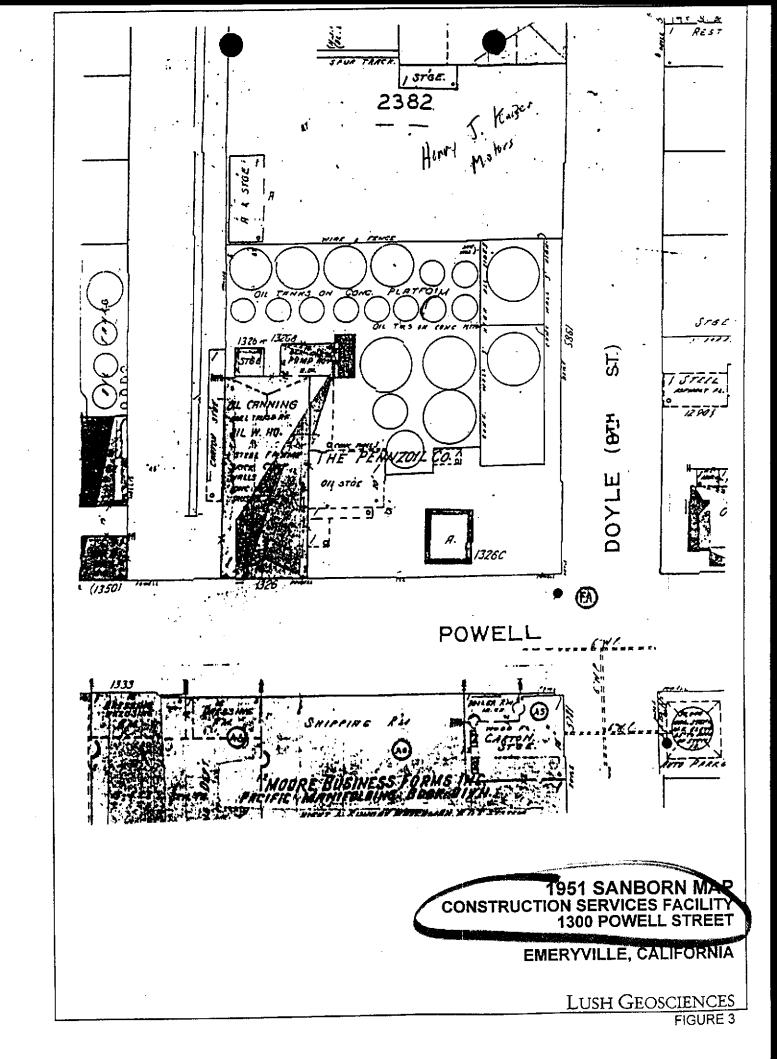
Contamination has occurred onsite and it is possible that groundwater has been affected. Contamination in some areas exceeds 1,000 ppm TOG. Based on the levels of contamination present, it is our recommendation that appropriate regulatory agencies (Alameda County and the California Regional Water Quality Control Board) be notified of the presence of contamination. At this time, we are unable to provide estimates of the vertical or lateral limits of contamination. The distribution of contamination found to date is largely consistent with the distribution of oil storage during operation of the Pennzoil facility.

We further recommend that Construction Services explore the possibility that present or former insurance policies may reimburse costs of delineation and mitigation activities, particularly if offsite migration of contaminants is eventually documented.

We also strongly recommend that the chain of title for the subject property be investigated and possible responsible parties such as Pennzoil be identified and notified that they will be expected to contribute to remedial costs. Additional historical research will be useful in identifying other potential sources and possible responsible parties. Agency notification may be very useful in the process of identifying and securing assistance from alternative responsible parties. Legal representation should be procured and brought into the project if and as necessary.

Further assessment of the contamination will be required by regulatory agencies and will be critical in evaluating the extent of contamination, in verifying responsible parties, and in identifying appropriate remedial actions.





APPENDIX A

Laboratory Results of Sample Analyses from Borings Chain of Custody Records

| SPARGL T | ECHNO | OLOG | Y, I | INC | ; , | | | | | | | | | ì | | | | | | CH | ΙΑΙ | N (| OF | Cl | JS. | TO | DY | ' R | EC | OR | | - | | | - | ٦ |
|--|-----------|----------|--------------|---|--------------|----------------|------------|--|--------------|--------------|----------------|--|--|----------------|-----------------------|-----------------------------|--|--------------------|----------|-------------------------------|-------------------|--------------------|--------------|---------------------|------------|------------|----------|----------|---------------|----------|--|----------------|----------|----------|--|------------------|
| Analytical Lab | | | | _ | | | | | | |) 3G2 | | | | | | | | | | | | | | | | | | | | - | | | | | - |
| 3050 Fite Circle, #1 | 2 Sacrem | ento, CA | 0582 | 7 | | | | FA | X; | 916 | 362 | -09 | 47 | | | | | | | | | | | | | | | | | | | | , | | | |
| Company: I | .ush Gi | EOSCIEN | VCE: | S | | Pluo | | | | | 7-929 | 4 | | | | | | | | | | | | | | | | | | | | 4 (| 45 | 88 | | |
| Project Manager: 📝 | Mon on | Lusa | | <u> </u> | | FA | K {9} | 6) 73 | 7-929 | 8 | | | _ | | | | | | | | | | | | S | TAI | L. Inv | oic. | e Ni | ımb | er. | | | | | |
| Report Address: | | Bi | lling 1 | Vains | 6 A | Addra | 66; | | | | | | | | 4/4 | 95 | Spo | uger | C | mpi | me | a . | with | M | r. | Ana | 4 (| ush | 70 | | han | <u> </u> | the | an | alu | , |
| 1560 Business Drive, St | HTE 120 | | | | | | | | | | | | | ļ | | ð | βWn | 41 | 8-1 | 7 | 6 C |) તે. ^ક | 26K | مدهد | (5, | T20) |) ' | | | | - | , - | | W | my. | ω |
| SACRAMENTO, CA 958 | | | | | | | | | | | | | | _ | | | | | | | | Α | NA | LY | SIS | RE | Ξαι | JES | Т | | | | | | | |
| Project Name: Con | struction | Service | ۲ | P | tojec | t/Jol | . #: | 51 | 0-0 | 00 (| | | | | ner | MAI | KS | | | | | | • | | | | | | | WET | r (ST | LCI | | <u></u> | ~ | |
| Ocale at Leantiant | | | | | | P.O | | | | | | | | | | | | | | | | | | 1 | , , | Ω | • | | | | | | | | | |
| Project Location: | nory with | | | | | | | | | | | | | | | | | | | | | | | , | 7 ر | 6 | | | _ | | TCLP | | \Box | | 4 | |
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| | Samp | oling | <u> </u> | Co | ntal | ner | | | Jead | | | Ma | trix | | | | | | | | | | | <u> </u> | | • | | | | | Total | | \dashv | 7 | ΓAΤ | |
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| | | | | | | | | | | | | | | | | ດີ | sne(8015 | | | 608/8080 (Pesticides)/505/508 | | | | | _ | | | | | [42] | | | | 1 | 72hr / 48hr / 24hr / 12hr | |
| | | | | | | | | | | | | | | | | STEX/TPHgas (602/8020/8015) | 8705 | 4 | | 05/13 | | | ļ | | (418.1) | | | | | Z, | | | | | 124 | |
| | | | | | | | . 1 | | | | li | | | | <u> </u> | 3020 | 종 | 2/50 | | cide | <u>.</u> | | | | | | Ī | | 1 | £ | | | | . | 48h | l |
| | | | | | ١. | | | | | | | ٠. | | | BTEX (602/8020)/503.1 | 302/1 | TPHdiesel/TPHmotor oil/ke | 601/8010/502,2/504 | | Pest | 608/8080 (PCS's) | 624/8240/524.2 | 23 | Oil & Grease (5520) | G/TRP# | ٠, | | | | ö | | | . | | 7 | Ę |
| l' | | | | | amber bottle | stic | | 띯 | | | | | | | 80 | Sa (S) | Į | 5 | 20 | 8 | 8 | ş | 625/8270/525 | į | 2 | | | 1. | # | S Cd | | | | | (2 | day/Weekend Rush |
| | [| · | Yoy | Sieeve | 1 | 250 mL Plestic | | HCI/HN03/ICE | | | | | | 1 | 200 | 1 | 딅 | 1/8 | 602/8020 | 88 | 88 | 18 | 22 | 4 | 0 | ٤ | | | ž | Metals | | | | | 400 | i k |
| | | |] É | | E | E | Other: | Ĭ | a | Other | Water | | | Other | X | 15 | 皇 | 8 | | 1 | | | | Ö | Non-Polar | ş | | | 117 | 5. | | | | ğ | Service | Ş |
| SAMPLE ID | Date | Time | 3 | 2 | <u> </u> = | 12 | <u> </u> | 모 | None | ö | ₹ | Soil | ₹ | <u>8</u> | lä. | 15 | Æ, | ¥d <u>G</u> | ₽ A | EP. | EPA | EPA | ¥. | -Total | 2 | ğ | ក្ត | | CAM-17 Metals | CAM-5 | Lead | | | Standard | ds) | 5 |
| 5-1-81 | 4/3/55 | | - | 1. | | | <u> </u> - | | Ŀ | | <u> </u> | ! | - | | _ | - | 1 | <u> </u> | ├ | <u> </u> | <u> </u> | _ | <u> </u> | Y | VII | 1 | | | | | | | | 7 | | - |
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| The interior of | DE | | | | E | | | <u></u> | au | W | | <u> </u> | | | _ _ | | .,, | J. | | | | | | | '`` | o tal | VO(1 | ογ; | | | | | | | | |
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| Project Manager: | ALLOREN | | | | | | AX (9 | | 737-9 | 298 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Report Address: 1560 Business Drive, | C 120 | ı | Billing | Nar | ne & | Add | lrees; | : | | | | | | | 4 | 4/93 | - <u>S</u> | حرو | w | CAY | bre | wel | | مد | 44. | STA | L Ir | voi | ce l | 1um | ber: | | ٠. | | |
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| SACRAHENTO, CA 9 Project Name: 💪 | | | | | | | | | | | | | | | | | | | | | | Δ | MZ | uν | 'en | | ,-v Fa: | ر. | | | | | | | |
| inlact idatita: Ca | いろひかく もろり | Jerui | cay | | Proje | ict/Ja | ob #; | | 5-/ | 0-4 | 70/ | | _ | | RE | МΑ | RKS | 3: | | | | | | · | 211 | S R | EU | UE: | ST | | | | | | |
| roject Location: ¿ | Emonpille | | | | | P. | D. #: | • | | | | | | | | | | | | | | | 2 | D | د ا | | | | - | WE | TIST | LCI | \Box | | |
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| | Sam | pling | | C- | 4. | lner | | Рге | sarv | | | | | | | | | | TCL | | | | | | | <u></u> | | | | | \prod | | | | |
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| SAMPLE ID | Date 4/3/65 | Time | 40 mL VOA | Brass Sleeve | 1 Lamber bottle | 250 mL Plastic | Other: | HCI/HNO3/CED> | None | Other | Water | Soil | Air | Other: | STEX (602/8020)/503.1 | STEX/TPHgas (602/8020/8015) | TPHdiesel/TPHmotor oil/kerosene(8015) | EPA 601/8010/502,2/504 | EPA 502/8020 | EPA 508/8080 (Pesticides)/505/508 | | | EPA 625/8270/525 | IO. | Non-Poler O & G/TRPH (418.1) | Organic Lead | RCI (1997) | | CAM-17 Metals | CAM-5 Metals (Cd, Cr, Pb, Ni, Zn) | Lead | | | ard | Rush Services (72hr / 48hr / 24hr / 12hr |
| 5- 5-83 | 1 | | | | | | | $\dot{\overline{}}$ | _ | _ | - | | | | | _ | | | | | | | | ~ | M | 5 St. | 943 (| _ | ۴ | 의 | ┝╩┼ | | 4 | ž | 8 |
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| 5-5-87 | 4/3/95 | | | 1 | | | | | · | | | 1 | | | | | 1 | | | - | - | | | レンノ | Щ | | | | | | | _ | - | ᆉ | <u> </u> |
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| elingstshed by | · H | 7 | : | | | | ud-b | | | wl | E | > | | | Reli | រាឮប | ishe | d b | γ: | L | L | L | L | | Rac | eive | ıd b | y: | | | | | | 1 | |
| ate: 4/4/1 | | Time: | - 1 | - 1 | | | / /4 | 1_ | - | Tin | | | | | | | <u> </u> | | | | | | | | | | | | | | | | | | |



April 13, 1995

Mr. Andrew Lush Lush Geosciences 3560 Business Drive, Suite 120 Sacramento, CA 95820

Dear Mr. Lush:

Enclosed is the report for the fifteen (15) soil samples. The samples were received at Sparger Technology Analytical Lab on April 4, 1995.

The samples were received in fifteen (15) brass tubes. The samples were transported and received under documented chain of custody and stored at four (4) degrees C until analysis was performed.

The report consists of the following sections:

- I. Sample Description
- II. Analysis Request
- III. Quality Control Report
- IV. Analysis Results

No problems were encountered with the analysis of your samples.

If you have questions, please feel free to call.

Sincerely,

R. L. James

Principal Chemist



I Sample Description

See attached Samples Description Information.

The samples were received under chain-of-custody.

II Analysis Request

The following analytical tests were requested:

| Lab ID | Your ID | Analysis Description |
|---------------|---------|------------------------------|
| ST95-04-011A | S-1-B1 | TPHdiesel/motor oil/kerosene |
| ST95-04-012A | S-1-B1 | Oil & Grease |
| ST95-04-013A | S-1-B2 | TPHdiesel/motor oil/kerosene |
| ST95-04-014A | S-1-B2 | Oil & Grease |
| ST95-04-015A | S-1-B3 | TPHdiesel/motor oil/kerosene |
| ST95-04-016A | S-1-B3 | Oil & Grease |
| ST95-04-017A | S-1-B4 | TPHdiesel/motor oil/kerosene |
| ST95-04-018A | S-1-B4 | Oil & Grease |
| ST95-04-019A | S-1-B5 | TPHdiesel/motor oil/kerosene |
| ST95-04-020A | S-1-B5 | Oil & Grease |
| ST95-04-021A | S-1-B6 | TPHdiesel/motor oil/kerosene |
| \$T95-04-022A | S-1-B6 | Oil & Grease |
| ST95-04-023A | S-1-B7 | TPHdiesel/motor oil/kerosene |
| ST95-04-024A | S-1-B7 | Oil & Grease |
| ST95-04-025A | S-1-B8 | TPHdiesel/motor oil/kerosene |
| ST95-04-026A | S-1-B8 | Oil & Grease |
| ST95-04-027A | S-5-B1 | TPHdiesel/motor oil/kerosene |
| ST95-04-028A | S-5-B1 | Oil & Grease |
| ST95-04-029A | S-5-B2 | TPHdiesel/motor oil/kerosene |
| ST95-04-030A | S-5-B2 | Oil & Grease |
| ST95-04-031A | S-5-B3 | TPHdiesel/motor oil/kerosene |
| ST95-04-032A | S-5-B3 | Oil & Grease |
| ST95-04-033A | S-5-B4 | TPHdiesel/motor oil/kerosene |
| ST95-04-034A | S-5-B4 | Oil & Grease |
| ST95-04-035A | S-5-B5 | TPHdiesel/motor oil/kerosene |
| ST95-04-036A | S-5-B5 | Oil & Grease |



| Your ID | Analysis Description |
|---------|------------------------------|
| S-5-B6 | TPHdiesel/motor oil/kerosene |
| S-5-B6 | Oil & Grease |
| S-5-B7 | TPHdiesel/motor oil/kerosene |
| S-5-B7 | Oil & Grease |
| | S-5-B6 S-5-B6 S-5-B7 |

III Quality Control

- A. <u>Project Specific QC</u>. No project specific QC (i.e., spikes and/or duplicates) was requested.
- B. <u>Method Blank Results</u>. A method blank is a laboratory-generated sample which assesses the degree to which laboratory operations and procedures cause false-positive analytical results for your sample.

No target parameters were detected in the method blank associated with your sample at the reporting limit levels noted on the data sheets in the Analytical Results section.

- C. <u>Laboratory Control Spike</u>. A Laboratory Control Spike (LCS) is a sample which is spiked with known analyte concentrations, and analyzed at approximately 10% of the sample load in order to establish method-specific control limits. The LCS results associated with your samples are on the attached Laboratory Control Spike and Laboratory Control Spike Duplicate Analysis Report.
- D. <u>Matrix Spike Results</u>. A Matrix Spike is a sample which is spiked with known analyte concentrations, and analyzed at approximately 10% of the sample load in order to establish method-specific control limits. The Matrix Spike results associated with your samples are on the attached Matrix Spike and Matrix Spike Duplicate Analysis Report.

Accuracy is measured by Percent Recovery as in:

% recovery = (measured concentration) x 100 (actual concentration)

IV <u>Analysis Results</u>

Results are on the attached data sheets.



8015 Modified Analysis Report Project: Construction Services (510-001)

Attention:

Mr. Andrew Lush

Lush Geosciences

3560 Business Drive, Suite 120

Sacramento, CA 95820

Date Sampled:

Apr 3, 1995

Date Received : Date Analyzed: Apr 4, 1995 Apr 6, 1995

Invoice #:

4588

| 0.4.10 | | Un | its: ug/g |
|--------------|-----|----------|-----------|
| Matrix: Soil | TOU | TY A SHE | Dilution |

| Man IX. Col. | 00-4 | TPH | Det | TPH | Det | TPH | Det | Dilution |
|--------------|----------|--------|-----------------|-----------|----------|-----------|-----------|------------|
| Lab | Client | · · | 建筑的 机制度和 | | | | Limit | 1: ' |
| ID | <u> </u> | Diesel | Limit | Motor Oil | ELILLI L | Keloselle | | |
| ST95-04-011A | S-1-B1 | ND | 10 | 24 | 10 | ND | 410). | 1 |
| ST95-04-013A | S-1-B2 | ND | 11.0 | ND | 410 | ND | રાષ્ટ્રદે | . 1 |
| ST95-04-015A | S-1-B3 | 1.3 | 140 | | 310 | ND | Mir. | 1 |
| ST95-04-017A | S-1-B4 | 17 | 10 | | 1.0 | ND | 400 | 1 |
| ST95-04-019A | S-1-B5 | | 11.0 | ND | (10) | ND | Fig | 1 |
| ST95-04-021A | S-1-B6 | ND | វុស | 15 | 160 | ND | -160 | 1 |
| ST95-04-023A | S-1-B7 | ND | 1 o | . ND | 1.0 | ND | ()(i) | , 1 |
| ST95-04-025A | S-1-B8 | 11 | 4.0 | ND | 1.0 | ND | 1.0 | 1 |

ppb = parts per billion = ug/L = micrograms per Liter

ppm = perts per million = ug/g = micrograms per gram

ppm = parts per trained = op/y = management at concentrations below the detection limit. ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

Apr 12, 1995

Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA.

DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY

(Certification No. 1814)



8015 Modified Analysis Report Project: Construction Services (510-001)

Attention:

Mr. Andrew Lush

Lush Geosciences

3560 Business Drive, Suite 120

Sacramento, CA 95820

Date Sampled:

Apr 3, 1995

Date Received:

Apr 4, 1995

Date Analyzed: Invoice #:

Apr 6, 1995 4588

Matrix: Soil

Units: ug/g

| Matrix, Con | | | | | | | | mis: ug/g |
|--------------|--------|--------|-------|-----------|-------|----------|-------|-----------|
| Lab | Client | TPH | Det | TPH | Det | TPH | Deta | Dilution |
| ID | ID | Diesel | Limit | Motor Oil | Limit | Kerosene | Dimit | 1: |
| ST95-04-027A | S-5-B1 | 2.7 | 1.0 | 020 | #1.0 | ND | 10 | 1 |
| ST95-04-029A | S-5-B2 | 6.7 | 1.0 | | ίιó | ND | 10 | 1 |
| ST95-04-031A | S-5-B3 | ND | 1,0 | ND | ilo | ND | 740 | 1 |
| ST95-04-033A | S-5-B4 | ND | 1.0 | ND | 10 | ND | 40. | 1 |
| ST95-04-035A | S-5-B5 | 17 | 1.0 | ND | 10 | ND | 10 | 1 |
| ST95-04-037A | S-5-B6 | 12 | 1:0 | | 1.0 | ND | 40 | 1 |
| ST95-04-039A | S-5-B7 | 12 | 1.0 | ND | 1.0 | ND | 1.0 | 1 |

ppb = parts per billion = ug/L = micrograms per Liter

ppm = parts per million = ug/g = micrograms per gram

NO = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

Apr 12, 1995

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA.

DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY

(Certification No. 1614)



8015 Modified Matrix Spike (MS) & Matrix Spike Duplicate (MSD) TPHdiesel Analysis Report

Attention:

Mr. Andrew Lush

Lush Geosciences

3560 Business Drive, Suite 120

Sacramento, CA 95820

Project ID:

Client ID:

Matrix:

510-001

HOMEO DA

MS/MSD-Batch

Soil

Date Sampled:

Date Received:

Date Analyzed:

Project Name:

LAB ID:

Dilution:

Apr 3, 1995

Apr 4, 1995

Apr 6, 1995

Construction Services

ST95-04-060A MS

ST95-04-060A MSD

MSD % % RPD MS MSD **MS %** Sample Conc. Recovery Recovery Recovery Result Units Result Result Spike Added Name 0% 23 77% 77% 23 ug/g ND **TPHdiesel** 30 ppm

ppb = parts per billion = ug/kg = micrograms per kilogram

ppm= perts per million = ug/g = micrograms per gram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

Apr. 12, 1995 Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY

(Certification No. 1614)



5520 F. Modified Analysis Report Project: Construction Services (510-001)

Attention:

Mr. Andrew Lush

Lush Geosciences

3560 Business Drive, Suite 120

Sacramento, CA 95820

Date Sampled:

Apr 3, 1995

Date Received:

Apr 4, 1995

Date Analyzed:

Apr 4, 1995

Invoice #:

4588

Matrix: Soil

Units: mg/kg

| | | | Units: mg/kg | |
|--------------|--------------|--------|-----------------|----------------|
| Lab ID | Client ID | Amount | a Reporting | Dilution 1: |
| ST95-04-012A | \$-1-B1 | 360 | (-0.0) | 1 . |
| ST95-04-014A | S-1-B2 | 250 | 50 414 | 1 |
| ST95-04-016A | S-1-B3 | 360 | 50 | 1 |
| ST95-04-018A | S-1-B4 | | 1 21 50 TA | 1 |
| ST95-04-020A | S-1-B5 | | 1 2 5 50 6 4 in | 1 |
| ST95-04-022A | S-1-B6 | 220 | 50 | 1 |
| ST95-04-024A | S-1-B7 | 200 | 50 | 1 |
| ST95-04-026A | S-1-B8 | 320 | 50 | 1 |

ppb = parts per billion = ug/L = micrograms per Liter

ppm = parts per million = ug/g = micrograms per gram

ppm = perts per million = mg/kg = milligrame per kilogram

NO = Not Detected. Compound(s) may be present at concentrations below the detection limit.

A Fames

R. L. James, Principal Chemist

Apr 6, 1995

Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA.

DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY

(Certification No. 1614)



Analytical Laboratory Division Mobile Laboratory Division Scientific Division

5520 F. Modified Analysis Report Project: Construction Services (510-001)

Attention:

Mr. Andrew Lush

Lush Geosciences

3560 Business Drive, Suite 120

Sacramento, CA 95820

Date Sampled:

Арг 3, 1995

Date Received:

Apr 4, 1995

Date Analyzed:

Apr 4, 1995

Invoice #:

4588

Matrix: Soil

Units: mg/kg

| Watrix: Soil | | | | Dilution |
|--------------|--------------|--------|---------------------|----------|
| Lab ID | Client ID | Amount | Reporting. | 1: |
| ST95-04-028A | S-5-B1 | 430 | 50 | 1 |
| ST95-04-030A | S-5-B2 | 3200 | 450 12 ₀ | 1 |
| ST95-04-032A | S-5-B3 | 190 | 10 150 17 PM | 1 |
| ST95-04-034A | S-5-B4 | 440 | 50 | 1 |
| ST95-04-036A | S-5-B5 | 600 | 50 | 1 |
| ST95-04-038A | S-5-B6 | 940 | 150 | 1 |
| ST95-04-040A | S-5-B7 | 320 | 50 | 1 |

ppb = parts per billion = ug/L = micrograms per Liter

ppm = perts per million = ug/g = micrograms per gram

ppm = perts per million = mg/kg = milligrams per kilogram

ND = Not Detected. Compound(s) may be present at concentrations below the detection limit.

R. L. James, Principal Chemist

Apr 6, 1995

Date Reported

SPARGER TECHNOLOGY ANALYTICAL LABORATORY, INC. IS CERTIFIED BY THE STATE OF CALIFORNIA.

DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY

(Certification No. 1614)

IN WITNESS WHEREOF, eaid CENTRAL NATIONAL BANK OF CARLAND, Trustee, by its mly authorized has hereunto signed its comprate name and affixed officers thereum its corporate seal this twenty fifth day of April A.D. 1922.

CHITRAL HATIONAL BANK OF CARLAND. Trustee Ry, Claud Oatch And by, Daniel Read, Vice President Trust Officer. (CORPORATE TEAL)

STATE OF CALIFORNIA)
COUNTY OF ALAURDA) SS. On this 25th day of April in the year One Thousand Hine Hundred and twenty two, before me, P. E. Sotton, a Notary Public in and for the County of Alameda. State of California, resigning therein, daily commissioned and sworm, personally appeared. Claud Gatch, known to me to be the Vice President and Daniel Read known to me to be the Trust Officer of the corporation that executed the within instrument as Trustee, and the officers who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the same as said Trustee.

IN WITHESS WHEREUF, I have hereinto set my hand and affined my official seal the day and year in this certificate first above written.

Notary Public R. E. Otton. (KOTARIAL SEAL) In and for said County of Alameda. State of California. RECURDED AT REQUEST OF OAKLAND TITLE INSURANCE AND GUARANTY COMPANY. APR-29-1922 at 8 min past 12 P.W. Page 470 Book 155

1 - 20 3-2001 38

4-29-22 COUNTY RECORDER P.K.H.

THIS INDENTURE, made this Eighteenth day of April A.D. 1922. I. A. REALDRY .ET .AL .

Between, Isabella A. Beaudry, a femma sole, and Genevieve TO Prennan, a married weman, the parties of the first part, and THE PENIZOIL CO. THE PERMICOIL COMPANY, a corporation duly organized and existing under the laws of the State of California, and having its principal place of business in the City of Los Angeles. County of Los Angeles. State of California, the party of the second part.

WITNESSETH; That the said parties of the first part, for and in consideration of the sum of Ten (\$10.00) Dollars lawful money of the United States of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, do by these presents grant, bargain, sell, convey and confirm unto the said party of the second part, and to its successors and assigns forever, all those certain lots, pieces or parcels of land situate, lying and being in the Town of Emeryville, County of Alameda, State of California, and bounded and particularly described as follows, to-wit-

> Lots Numbered Thirteen (13) to Twenty four (24) inclusive, in Elock Numbered Nineteen (19) as said lots and block are laid down and delineated upon that certain Map entitled. " MAP OF THE PROPERTY OF L. M. BRAUDRY and G. PMLADEAU, Being Plot No. 41 on J. Kellersberger's Map. " filed November 6, 1876, in the office of the County Recorder of said Alameda County.

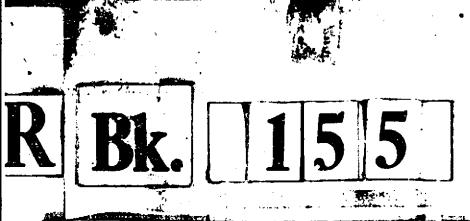
TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunts belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof.

TO HAVE AND TO HOLD all and singular the said premises, together with the appurtenances, unto the said party of the second part, and to its successors and assigns forever, subject, however, to taxes for the fiscal year 1922-23, which said party of the second part herein hereby assumes and agrees to pay.

IN WITHERS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year first above written-

BIGHTD, SEALED AND DELIVERED IN THE PRESENCE OF

imabella A. Beaudry. (SEAL) Generatre Brennan.



471

STATE OF CALIFORNIA on this 25th day of April in the year One Thousand Kine COUTY OF ALAMEDA Hundred and Twenty two, before me, J. Neal Harris, a Motary Public in and for the County of Alareda. State of California, residing therein, duly commissioned and sworm, personally appeared, Isabella A. Beaudry, a femme sole, and Genevieve Brennan, a married woman, known to me to be the persons described in and whose names are subscribed to the within instrument and they acknowledged to me that they executed the same.

IN WITHESS WHEREOF. I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

J. Neel Herrie. Notary Public (NOTARIAL SEAL) In and for said County of Alameda. State of California.
7.3.1.2. Stamps 310.50 Cancelled. 4-18-22, L.C.
RECORDED AT REQUEST OF OAKLAND TITLE INSURANCE AND GUARANTY COMPANY, APR-29-1932 At 9 min past 12 P.W.

5-2001 39

H.N.R.

COUNTY RECORDER

DEED OF GIFT THIS INDENTURE. Made this 26th day of April in the year of our Lord

R. B. MOTT.

One Thousand Nine Hundred and Twenty two.

TO setween, R. R. Mott, the party of the first part, and Jessie Watt, his J. MOTT. wife, the party of the second part.

TIMES ETH: that the said party of the first part, for and in consideration of the love and affection which the said party of the first part has and bears unto the eald party of the second part, as also for the better maintenance, support, protection as at the anid marty of the second part, does by these uperents

For Use of Recorder Over

Corporation Grant Beed



THE PENNZOIL COMPANY,

a corporation organized under the laws of the State of CALIFORNIA

does hereby Grant to WILLIE OSBURN and MARGARFT J. OSBURN, his wife, as joint tenents

the real property situated in the

City of Emeryville

Alameda

.State of California, Inscribed as follows:

PARCEL 1: LOTS 17 to 24 inclusive, in Block 19, as said lots and block are shown on the "Map of the Property of 1. M. Beaudry and G. Peladeau," filed November 5, 1875, in book 5 of Maps, at page 14, in the office of the County Recorder of Alameda

PARCEL 2: PORTION of Hollis street, formerly 7th Street, as said street is shown on the "Map of the Property of L. M. Beaudry and G. Peladau," filed November 6, 1876, in book 6 of Maps, at page 14, in the office of the County Recorder of Alameda County, described as follows:

BEGINNING at the point of intersection of the northern line of Powell Street with the eastern line of Hollis Street, formerly 7th Street, as said streets are shown on said map, and running thence northerly along the said eastern line of Hollis Street a distance of 200 feet; thence at right angles westerly a distance of 30 feet to the center line of said Hollis Street; thence at right angles southerly along the said center Street; thence at right angles southerly along the said center line of Hollis Street a distance of 200 feet to the said northern line of Powell Street; thence seaterly along the said last named line of Powell Street; thence seaterly along the said last named line 30 feet to the point of beginning.





Bu Witness Whereof, said corporation has caused its corporate name and seal to be affixed hereto and this instrument to be executed by its duly authorized officers.

Dated July 6, 1953

THE PENNIZOIL

| | ١ |
|---------------------|----|
| STATE OF CALIFORNIA | 83 |
| COUNTY OF | .) |

July 9, 1953 the understand S' a Notary fablic in and for said. Lon Angalan

County and State, personally appeared

LAND B. BAZER

S. C. DERRICA

kin win to me to be the Secretary of the corporation that exercises the relation that exercises the relation instrument, and known to receive the relation instrument on behalf of the corporation therein market, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal.

Notary Public

AH63571

RECORDED at REQUEST OF Oakland Title Ligurence Company



ENVIRONMENTAL BIO-SYSTEMS, INC.

Innovative Solutions for a Better Environment

Cont. Lic. # 687236

23 September 1995

Mr. Dick Becker Construction Services 1300 Powell Street Emeryville, CA 94608

RE: Historical Aerial Photo Review, 1300 Powell Street, Emeryville

Mr. Becker:

Environmental Bio-Systems, Inc. (EBS) has completed review of historical aerial photographs of the referenced site. Review was conducted on 15 September 1995 at Pacific Aerial Surveys in Oakland, California per your request. Below is an outline of observations noted during our review. References made to Sanborn Maps refer specifically to those provided to EBS by you.

1930, Photo No. GY-1930, Scale 1:9,500

This photograph is the earliest on file for the subject site. A tank farm existed at the site at this time. Ten above ground storage tanks (ASTs) are visible in the north portion of the property. The ASTs appear to be mounted on a concrete pad. The structure identified on the 1951 Sanborn Map as the oil canning and warehouse building is present in the southwest corner of the lot. The remainder of the site appears to be unpaved.

The ASTs depicted west of the site on the 1951 Sanborn Map are also in existence at this time. The area east of the site appears to be used almost exclusively for residences.

24 March 1947, Photo No. AV-11-4-11, Scale 1:20,000

All site ASTs depicted on the 1951 Sanborn Map are now visible in this photograph. The large scale of this photo, however, hinders detailed observations.

6 September 1949, Photo No. AV 28-12-32, Scale 1:7,200

The site appears to remain unchanged from the 1947 picture.

14 August 1953, Photo No. AV-119-09-28, Scale 1:10,000

This photograph (Attachment 1) shows the tank farm to be partially dismantled. Only 8 of the 21 ASTs shown on the 1951 Sanborn Map are seen at the time of this photo. Severe discoloration of the concrete pads is visible where the tanks used to stand. Impressions left by the ASTs in the northern part of the site are almost completely obliterated by the discoloration. In addition, discolored ground is seen in other large portions of the site.

Ground beneath a rail spur adjacent to and west of the site appears darkly discolored. The discoloration continues along the spur to the north, then follows another spur west, approximately 80 feet beyond the north property border.

3 May 1957, Photo No. AV-253-7-20, Scale 1:12,000

This photo (Attachment 2) shows that all of the ASTs have been removed. The structure previously utilized for oil canning and warehousing remains. The concrete pads and 3-foot high walls surrounding the pads (as identified on the 1951 Sanborn Map) also appear to remain. The discoloration of ground seen in the 14 August 1953 photo is still evident in several locations throughout the site. At least one vehicle is seen parked on the lot. Numerous unidentified items, many similar in size and shape, are seen on the site.

The rail spur west of the site has been removed. Soil discoloration in the area of the two rail spurs identified in the 1953 picture is also still present. The tank farm west of the site still exists.

7 July 1959, Photo No. AV-337-7-23, Scale 1:9,600

In this picture, the site appears unoccupied. The oil canning/warehouse building still remains. The AST farm west of the site has been dismantled.

2 May 1969, Photo No. AV-902-6-17, Scale 1:12,000

This photograph shows that the oil canning/warehouse building has been removed. The lot appears vacant..

24 April 1973, Photo No. AV-1100-6-19, Scale 1:12,000

This photo shows the site to appear to remain unchanged from the 1969 picture.

19 May 1975, Photo No. AV-1193-6-17, Scale 1:12,000

Although the site appears to remain vacant and unoccupied in this photograph, a oval shaped, unpaved path (bicycle tracks?) is seen in the central portion of the site.

14 September 1979, Photo No. AV-1750-6-20, Scale 1:12,000

This picture shows the present site structure being erected. At the time of this photo, it appears only the foundation had been completed. No ground discoloration is evident.

EBS appreciates this opportunity to provide our services to you. If you have any questions or comments, please call the undersigned at (510) 429-9988.

Sincerely,

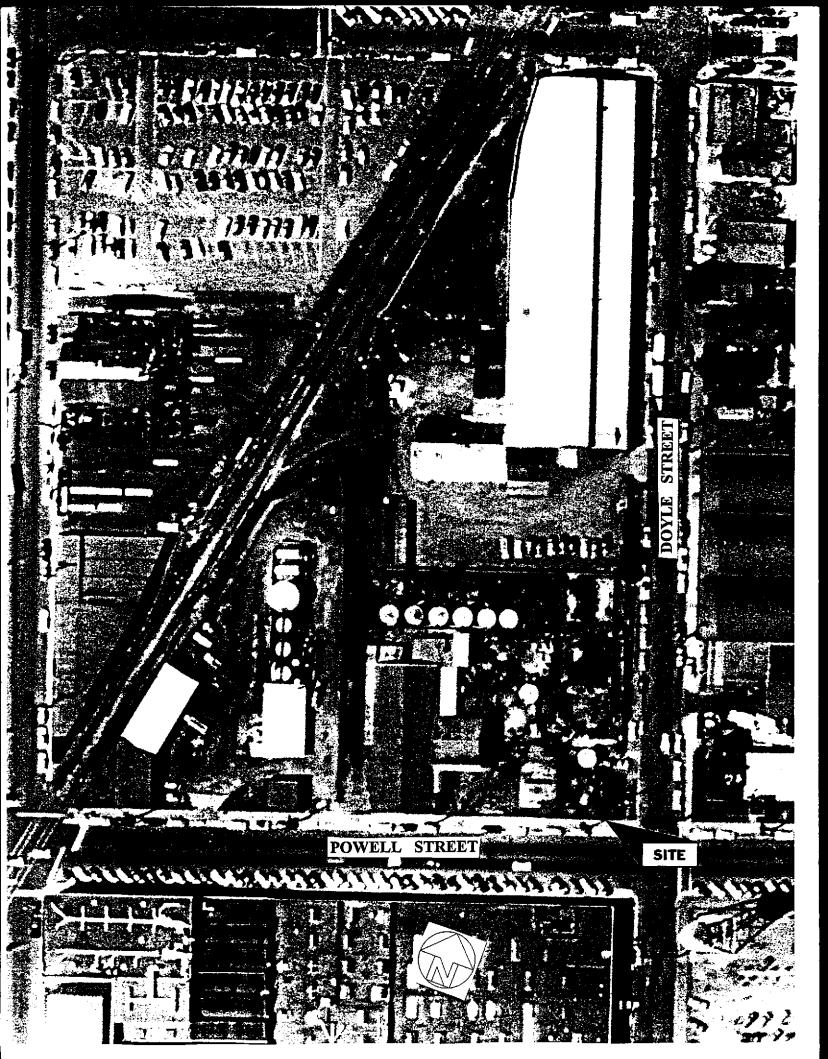
ENVIRONMENTAL BIQ-SYSTEMS, INC.

Dave A. Sadoff

Project Manager, R.E.A., R.G.

/DAS encl.

ATTACHMENT 1 1953 AERIAL PHOTOGRAPH



ATTACHMENT 2 1957 AERIAL PHOTOGRAPH

