Environmental
Resources
Management

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RECEIVED

2:25 pm, Nov 24, 2009

Alameda County
Environmental Health

20 November 2009

Mr. Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: Site Investigation Work Plan
Lucasey Site- 2744 East 11th Street, Oakland

Dear Mr. Wickham:

Environmental Resources Management (ERM) is pleased to present this work plan for additional site investigation for the Lucasey site in Oakland, California on behalf of Lucasey Manufacturing Company.

BACKGROUND

This work plan is designed to respond to the Alameda County Environmental Health's (ACEH) letter of September 1, 2009 to Lucasey Manufacturing Corporation. ERM and ACEH also met on 22 October 2009 and discussed matters raised in the letter. This work plan reflects that discussion.

WATER SUPPLY WELLS

At our meeting on 22 October 2009, ERM provided additional information regarding the identification of all wells in the vicinity of the Lucasey site. This information is summarized below:

- Juan Escobar, California Department of Water Resources (DWR) Chief of the Groundwater Supply Assessment and Special Studies Section verified that the DWR search included all of 2S/3W Section 7, not just the 1100 29th Avenue address and that only well 2S/3W 7B2 was identified;
- ERM contacted James Yoo of the Alameda County Public Works Agency (ACPWA) to get information on the other three wells (2S/3W -7B3, -7B4, and -7B5) that appear on the ACPWA well summary database. Mr. Yoo explained that when the database was

transitioned from Alameda County Zone 7 Flood Control District to his agency much of the backup information was either not provided, was lost, or was in storage. He was not able to find any backup information on the remaining three wells despite checking through a number of boxes in storage.

- ERM spoke to a former Del Monte employee, Mr. Gary Plotner. Mr. Plotner worked at the former Del Monte Plants #24 and #37 from approximately 1963- 1967. He stated that his recollection was there were water supply wells for the plants in two locations:
  - East of the Lucasey site between the current location of the Humane Society building and the railroad tracks; and
  - Southwest of the Lucasey site, across 29th Avenue in an area currently used as a soccer field.

Available information regarding water supply wells is found in Attachment A.

Recommended Action

In summary, ERM was unable to obtain written backup information such as well logs verifying the existence or specific locations of wells other than 2S/3W 7B2. The destruction log and location map are provided in Attachment A for 2S/3W 7B2. Information provided by the former Del Monte employee placed the additional wells either side-gradient and/or substantial distance away from the Lucasey site. Based on this information, the only well that would have the potential to be impacted by product moving from the Lucasey site was 2S/3W 7B2, which was abandoned in 1977 and well documented at the time of abandonment. ERM recommends that no further action regarding this issue be required by ACEH.

FREE PRODUCT RECOVERY WELLS

At the 22 October 2009 meeting, ERM and ACEH discussed whether the data collected from the three previously existing product recovery wells was valid. ACEH indicated these existing wells are screened across multiple lithologic layers. Furthermore, ACEH believes that, based on observations during installation of these wells, ground water at the site may be under semi-confined conditions. As stated in the 1 September

2009 letter from ACEH and in the aforementioned meeting, ACEH believes that when semi-confined ground water is encountered at the site, an upward hydraulic head brings the water level above the level of free product in the formation and may preclude free product from entering the wells. In order to conclusively determine whether the product at this site is mobile, ACEH believes additional wells need to be installed and screened within a single lithologic unit where product has been observed.

Recommended Action

Based on this discussion with ACEH, ERM recommends installation of five additional product monitoring wells at three locations shown on Figure 1. As shown in Figure 2, previous investigations indicate the presence of multiple lithologic units at the site. To assess the potential for free product migration within these units, ERM proposes to complete two pilot borings adjacent to previous boring/well locations, RW-1 and SB-15, where significant intervals of product were reported (Figure 2). The pilot borings will be used to identify the stratigraphic units that appear to have been impacted by free phase product. The new monitoring wells will be screened within individual impacted stratigraphic units to ensure that, if mobile free product is present, it will not be impeded from entering the recovery wells. It is anticipated that two wells will be installed at both locations to evaluate the potential for mobile free product within intervals of potential significant hydrocarbon impact, based on indications from previous investigation. Well construction details will be determined based on field observations during installation activities, but the following guidelines will govern the construction:

- At each well pair location, a pilot boring will be drilled to determine stratigraphy and intervals of product occurrence. Based on previous investigation data, it is anticipated that the pilot boring will be completed to approximately 25 feet bgs.
- The pilot boring will be converted to a product monitoring well constructed and screened only in the deeper hydrocarbon impacted unit. The well construction details will be based on information obtained from the pilot boring and the well will only be screened within the targeted lithologic unit. In addition, the well seal will be installed with great care to ensure that the filter pack and screen interval remain within the target lithologic unit.

- An additional well will be completed in a shallower hydrocarbon impacted lithologic unit approximately 5 feet laterally away from the deeper well. As discussed above, the construction details will be based on the information obtained from the pilot boring and verified by sampling during well installation
- As shown on Figure 1, a single well is also proposed to be installed adjacent to SB-22, the location farthest from the Lucasey site where indication of product was reported to be present. The boring will be advanced to the shallowest water-bearing lithologic unit and screened in that zone only. Soil samples may be collected in this boring to evaluate whether benzene and ethylbenzene impacts found in this area may be a result of surface spills or dumping.

Product Recharge Testing and Monitoring

Testing and observation for the presence of mobile product will begin following development of the wells. The objective of this work is to evaluate whether mobile, recoverable free product is present. It will be important to distinguish between product that may have been liberated and is temporarily mobile due to the well construction activities from that product which is actually mobile in the native soil. This will be tested by removing accumulated product and monitoring the amount of product recharge over multiple events.

An interface probe will lowered into each well to determine if measurable free product is present. In addition, to verify the free product measurements, a bailer will be lowered into each well to determine if any visual evidence of free product is present. If free product is present, the thickness of the product will be measured and all of the product will be removed from the well. The volume of removed product will be recorded. Recharge of product into the well will be monitored according to the following schedule:

- An initial testing and monitoring will occur immediately following well development.
- Follow-up testing and monitoring will be completed on a weekly basis for the first four weeks following development and then monthly for two additional months.

If product recharge amounts stabilize between events, and product continues to recharge into the well, the product will be considered

"mobile" and a work plan will be prepared for a product recovery program. If product recharge amounts continue to decrease between events, or product is no longer observed in the well or is reduced to a sheen, the product will be considered "immobile", and no further work will be recommended.

PRODUCT DELINEATION

Previous correspondence from ADEH has indicated the need to further define the lateral extent of free-phase product to the north, south, and west. As seen on Figure 1, additional delineation to the north and south is not possible due to the presence of the Lucasey warehouse and office buildings to the north and residences to the south. However, the area to the west is more accessible, albeit hampered by the presence of public roads, sidewalks, and subsurface utilities.

Recommended Action

To help delineate the extent of free-phase product to the west (presumed side-gradient of product plume), ERM proposes the completion of a soil boring on the north side of East 11th St. approximately 40 feet west of SB-24, as shown on Figure 1. The boring will be completed using direct push methods and will be continuously cored. The log for the nearest boring (SB-24) indicated that product was observed from 10 to 16 feet and ground water was apparently encountered at approximately 11 feet bgs. Based on this observation, it is anticipated that the proposed boring will be completed to a depth of approximately 20 feet bgs and ground water will be encountered at approximately 11 feet bgs. If free-phase product accumulates on the groundwater in the borehole, the product will be evacuated. A temporary casing with approximately 10 feet of screen will be placed in the center of the direct push pipe and the direct push pipe will be lifted to expose the screen. Product recharge into the temporary well will be monitored, and at least two evacuation events will be performed to monitor recharge into the well in order to distinguish between product that may have been mobilized due to the DP process from product that is mobile in the native soil. The borehole will be abandoned at the completion of the monitoring.

SOIL VAPOR SAMPLING

At the 22 October 2009 meeting, ERM provided ACEH information concerning potential offsite sources of the benzene and ethylbenzene found in soil vapor samples collected southwest of the Lucasey site. A summary of the information is provided below and included as Attachment B:

- In 1990, an Environmental Site Assessment was conducted on the property east of the Lucasey site that is currently the site of the Oakland Humane Society. At that time, the property was owned by Roadway Express. The site assessment states Roadway Express "leased portions of the facility to an automobile service operation and a towing operation." The identity of the "automobile service operation and towing operation" is not included. The report documents, however, soil staining and drums of oily material close to the intersection of Lisbon and E. 11th Street.
- In 1991, a Phase I was conducted on Del Monte Plant #237 that included a windshield survey to identify potential offsite sources. A facility named Alameda Auto Restoration and Repair was identified as being on the corner of Lisbon and E.11th Street. This information is consistent with the 1990 site assessment.
- Recent photos were taken documenting automotive repair work being conducted by residents across E.11th Street from the Lucasey site. This work was conducted in the location where the highest levels of benzene and ethylbenzene were found in soil vapor samples.

This information demonstrates that there are numerous potential sources other than the Lucasey site for the benzene and ethylbenzene found in soil vapor samples near the intersection of E. 11th Street and Lisbon Avenue. This information also supports the previously documented distribution of benzene and ethylbenzene that showed higher concentrations offsite than onsite suggesting an offsite source for these compounds.

Recommended Action

To further evaluate the potential for indoor air impacts from soil and groundwater at the Lucasey site, soil vapor sampling will be conducted at locations shown on Figure 1. The objectives of this sampling are threefold:

- To collect additional samples between the Lucasey site and ASV-3 and ASV-4 to further evaluate whether the soil vapor impacts are sourced on the Lucasey site or an off-site source;
- To collect additional samples in the public right of way closer to the residences fronting E.11th Street to determine whether the soil vapor exceeds indoor air screening levels.
- To collect soil samples from the surface to five feet to evaluate whether the benzene and ethylbenzene impacts may be a result of surface spills or dumping.

Soil vapor sampling activities will be implemented in accordance with the following guidance documents:

- *Interim Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (* 15 December 2004, revised 7 February 2005, Department of Toxic Substances Control and California Regional Water Quality Control Board-Los Angeles Region); and
- *Advisory – Active Soil Gas Investigations* (28 January 2003, Department of Toxic Substances Control).

Soil vapor samples will be collected at 4 locations (ASV-13 to ASV-16). A direct-push rig will be utilized to facilitate the collection of soil vapor samples from a minimum of 5 feet bgs. Soil vapor samples will be collected with 1-liter Summa canisters equipped with flow controllers with a pre-set sampling rate of 200 milliliters per minute (mL/min) (5 minute sample time for a 1-liter Summa canister). Samples will be analyzed via Modified EPA Method TO-15 for benzene, toluene, ethylbenzene, xylenes, and naphthalene. Detailed procedures that will be followed for collection of the vapor samples are included in the SOP in Attachment C.

SCHEDULE

Upon approval by the ACEH, we are prepared to begin mobilization for this work. A report documenting the results will be submitted within 60 days of ACEH approval.

Please direct any comments or questions to me at (925)279-3240. Thank you for your consideration.

Sincerely,

John Moe
Project Manager

Paul Hausmann
Partner-in-Charge

JCM/Enclosures

Cc: Bruce Flushman
Scott Rickman
Chuck Lucasey

Figures

CAD File:	Drawn By:	Date:	Project No.
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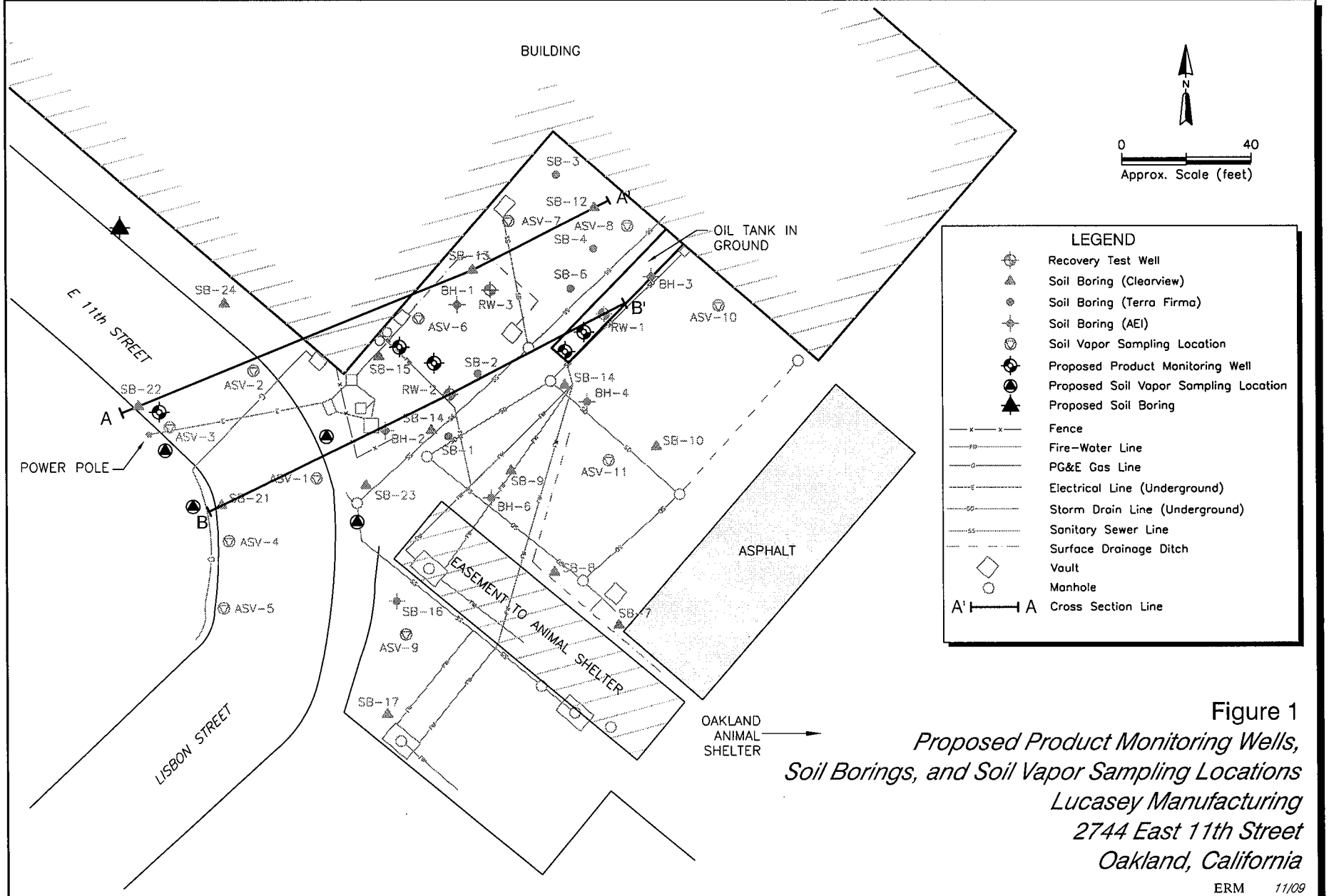


Figure 1

Proposed Product Monitoring Wells, Soil Borings, and Soil Vapor Sampling Locations
Lucasey Manufacturing
2744 East 11th Street
Oakland, California

ERM *11/09*

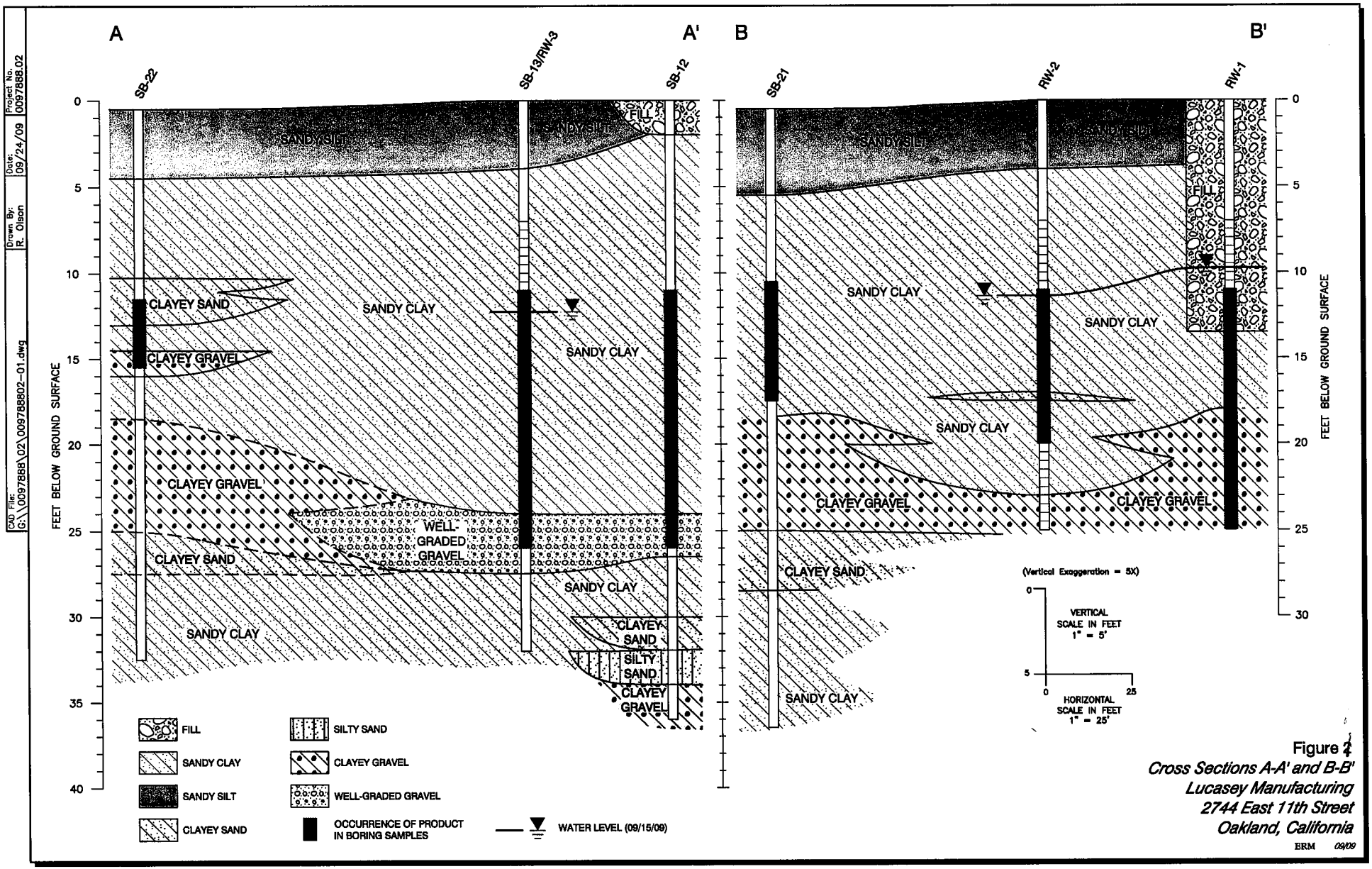


Figure 2
Cross Sections A-A' and B-B'
Lucasey Manufacturing
2744 East 11th Street
Oakland, California
BRM 09/09

Attachment A
Well Information

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY
ARNOLD SCHWARZENEGGER, *Governor*

DEPARTMENT OF WATER RESOURCES
NORTH CENTRAL REGION OFFICE
3500 INDUSTRIAL BOULEVARD
WEST SACRAMENTO, CA 95691

August 3, 2009

Mr. John Moe
ERM
1777 Botelho Drive, Suite #260
Walnut Creek, California 94596

Dear Mr. Moe:

Based on the information provided, we are unable to locate a Well Completion Report for:

1100 29th Avenue
Township 02S, Range 03W, Section 07B

If you have any questions, please contact Joe Garibaldi at (916) 376-9612 or fax (916) 376-9676.

9662

Sincerely,

Juan M. Escobar, Chief
Groundwater Supply Assessment and
Special Studies Section

CALLED JUAN ESCOBAR – HE RECHECKED THEIR SEARCH – IT INCLUDED ALL OF 2S/3W/7B, NOT JUST 1100 29th ST.

CONFIDENTIAL

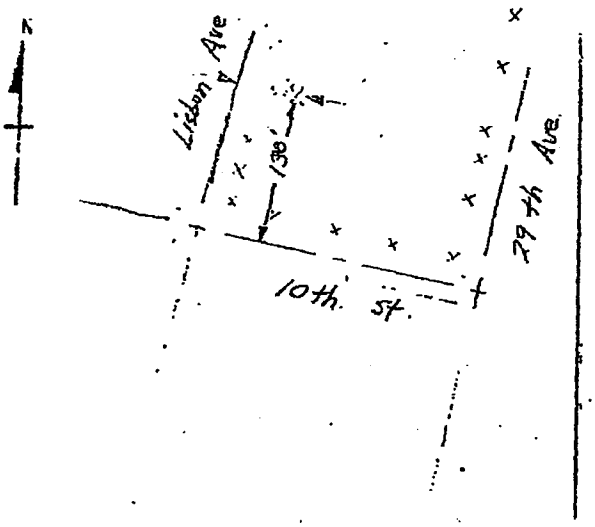
STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

LMC01592

33107

SKETCH
No scale.
ACFC & WCD



GARY PLOTNER - 510-848-1375

1963 - 2003 DEL MONTE EMPLOYEE

1963 - 1967 PLANT #37 / #24

Attachment B
Benzene Source Information

PHASE 1 SITE ASSESSMENT
DEL MONTE PLANT 237
OAKLAND, CALIFORNIA

Prepared for

Del Monte, USA

by

CH2M HILL

March 1991

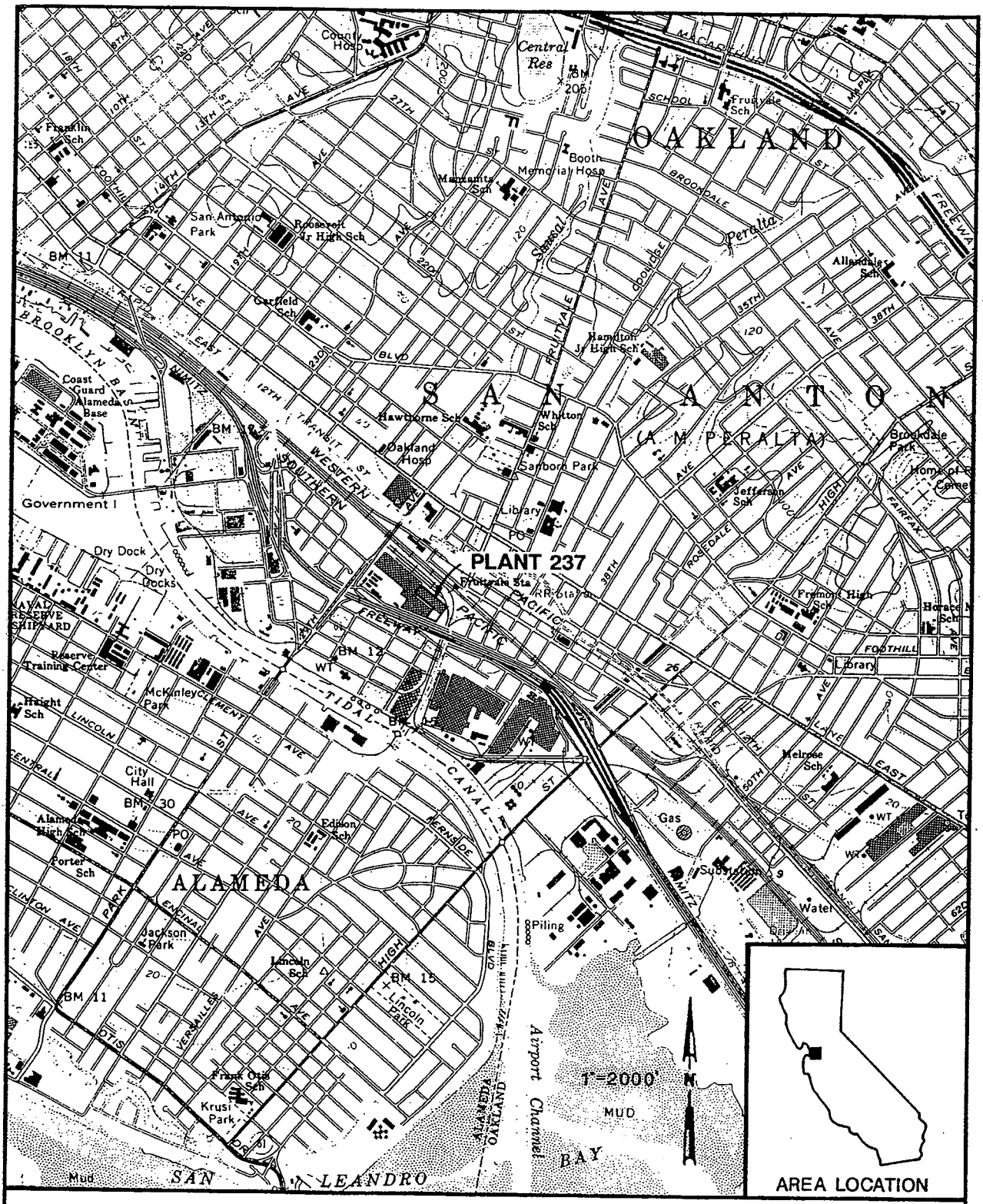


Figure 2-1
Property Location Map
Del Monte Plant 237
Oakland California

SFO 30630.P1

CH2M HILL

Section 3
AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

POTENTIAL OFF-SITE SOURCES

To determine whether potential off-site sources of organic chemicals or heavy metals exist in the vicinity of Plant 237, regulatory agency files were reviewed for reports of releases from nearby industrial facilities. Two databases maintained by the Regional Water Quality Control Board (RWQCB) were reviewed: the North Bay Counties fuel leak list and the North Bay Counties chemical release list. Additionally, the State of California Hazardous Waste and Substances Site List was perused. Following the review of agency records, a "windshield" survey was conducted. Facilities that showed evidence of chemical storage or use, and industries that apparently used or processed chemicals or heavy metals were recorded.

LEAKING UNDERGROUND STORAGE TANKS

A total of 12 underground fuel storage tank leak sites have been reported in the vicinity of Plant 237. The name of the business and its address are listed in the RWQCB database (RWQCB, May 1990). The location of nearby fuel leaks and the name of the respective facilities are shown on Figure 3-1. Table 3-1 provides the facilities' names, addresses, current or past practices, and a summary of results of soil and/or groundwater sampling, if available, from agency records.

Of the 11 sites, only the American Contracting Services facility appears to be in the likely up-gradient direction from the Del Monte plant (Figure 3-1).

REPORTED CHEMICAL RELEASE SITES

One nearby chemical release site, the Learner Company, is on record with the RWQCB (RWQCB, April 1990) and one, Esposito Plating, is included in the State Site List (State of California, 1990). The Learner Company is located on Alameda Avenue, (Figure 3-1). This site is not upgradient of the Del Monte plant, nor is Esposito Plating on Chapman Street.

POSSIBLE SOURCE AREAS

Figure 3-2 and Table 3-2 present the results of the windshield survey. Industrial facilities that appear to store, use, or process organic chemicals, fuel, oils, or heavy metals are shown on Figure 3-2. Table 3-2 lists the facilities' name, location, and current practices; it also gives a qualitative assessment of the potential for groundwater contamination at each site.

Table 3-2
Potential Source Areas Identified During Windshield Survey
Del Monte Plant 237
Oakland, California

Map Reference Number	Company Name	Possible Contaminants	Location	Current Practices	Potential (Qualitative) for Significant Contamination to Local Groundwater	Notes
1	Oakland Metal Treating	Heavy metals, oils	Glascock Street	Metal heat treating, annealing, sandblasting	Low	
2	Industrial Steam, Inc.	Fuel, oils	Derby Avenue	Boiler service	Moderate	Known fuel leak
3	Gilroy Machine and Stamping Company	Lubricating oils, solvents	2915 Ford Street	Steel forming and fabrication	Low	
4	Escado Plating	Heavy metals, acids, cyanide, caustics	Peterson and Chapman Streets	Metal plating and finishing	Moderate	Possibly also called Esposito Plating
5	F&F Surface Grinding	Solvents, metals, lubricants	510 Derby Avenue	Metal grinding	Moderate	
6	Texaco Industrial Lubricants	Lubricants	East 7th Street	Distribution	Low	
7	Anfo Manufacturing Company	Miscellaneous, unknown	3129 Elmwood	Chemical formulation	Low to moderate	Above-ground tanks on site
8	Gold Seal Plating	Heavy metals, acids, cyanide, caustics	3125 East 7th Street	Metal plating and finishing	Moderate	
9	Johnson Propeller Company	Oil, solvents	Lancaster and Ford Streets	Marine propeller service	Low	
10	Owens-Illinois Manufacturing	Solvents, fuel oil	3600 Alameda Avenue	Glass manufacturing	Low to moderate	
11	American Can Company Manufacturing	Enamels, solvents, heavy metals	East 8th Street	Can manufacturing	Moderate	Monitoring wells evident
12	B.W. Norten Manufacturing Company	Paints, solvents, coatings	East 10th Street	Paint and coating formulation or packaging	Low to moderate	Numerous drums of new materials on site
13	Division of Highways, South Oakland	Oil, fuel, solvents, waste oil, paint	East 10th Street and Derby	Vehicle maintenance, storage yard	Moderate	
14	Alameda Auto Restoration and Repair	Fuel, oil, solvents, waste oil	Alameda Avenue and Lisbon	Auto repair	Low	
15	Shell Gasoline Station	Fuel	29th Avenue and I-880	Gasoline station	Low	All new facility

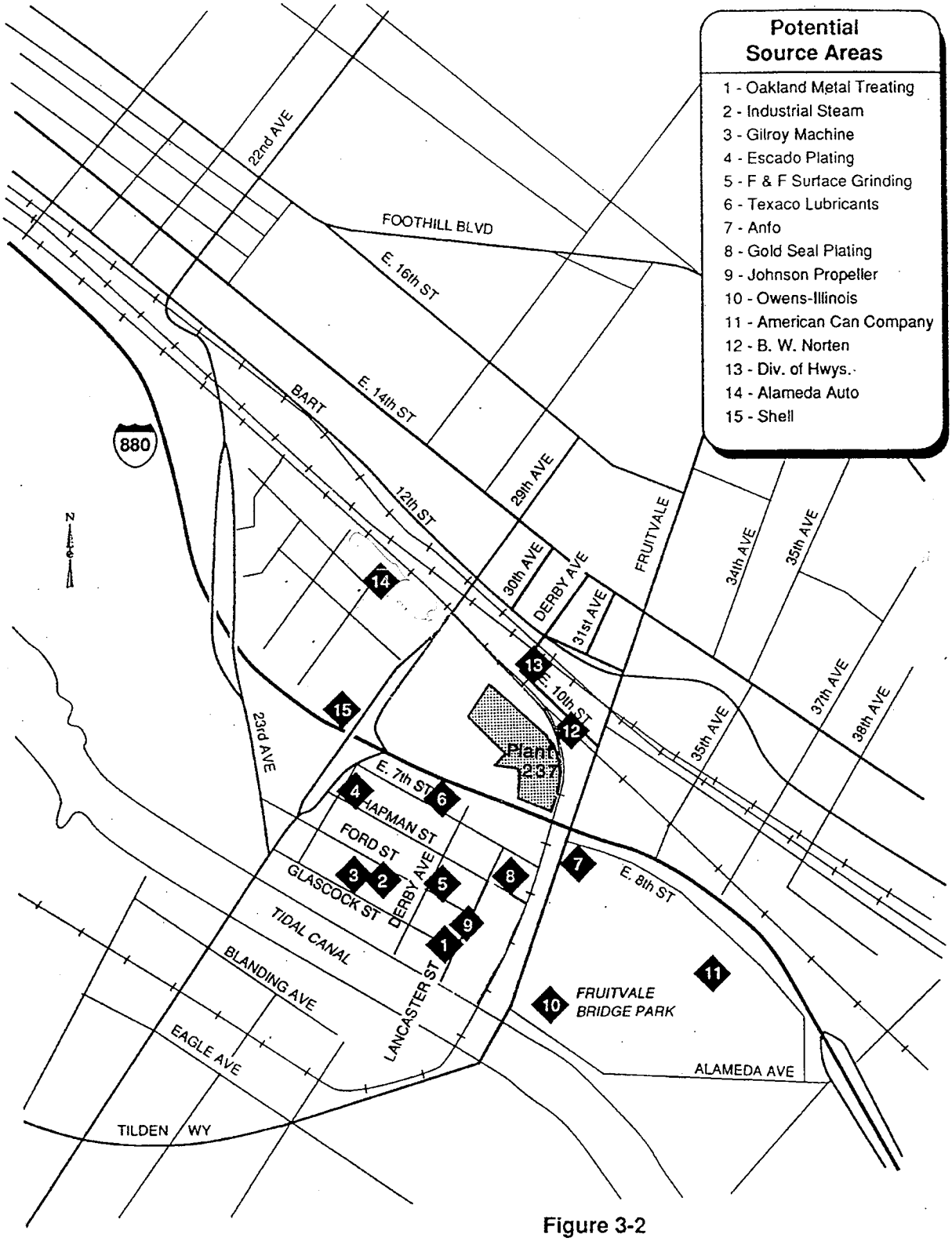


Figure 3-2
Areas of Potential Environmental Concern from Potential Source Areas Surrounding Del Monte Plant 237

ENVIRONMENTAL SITE ASSESSMENT

Parker and Associates
1125 29th Avenue
Oakland, California

Prepared By:

Blymyer Engineers, Inc.
1829 Clement Avenue
Alameda, CA 94501

November 5, 1990
BEI No. 90303

BLYMYER
ENGINEERS, INC.

November 5, 1990
BEI Job No. 90303

Mr. Dennis Cohen
PARKER AND ASSOCIATES
2560 Ninth Street
Berkeley, CA 94710

SUBJECT: ENVIRONMENTAL SITE ASSESSMENT
PARKER AND ASSOCIATES
1125 29th AVENUE
OAKLAND, CALIFORNIA

Dear Dennis:

Blymyer Engineers is pleased to present its report on the subject property. Four copies have been enclosed for your use.

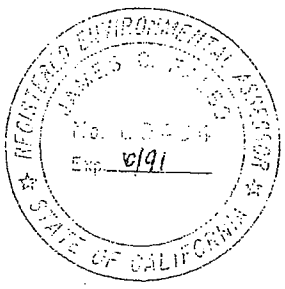
This report has been prepared by the staff of Blymyer Engineers under the supervision of a Registered Environmental Assessor whose seal and signature appear below.

The findings, recommendations, specifications, or professional opinions are presented within the limits prescribed by the client, after being prepared in accordance with generally accepted professional engineering practice. No other warranty is expressed or implied.

Thank you very much for the opportunity to be of service. If you have any questions, please call.

Very truly yours,

BLYMYER ENGINEERS, INC.



James C. Falbo, R.E.A.
Manager, Environmental Planning
& Assessment

enclosures

JCF/mk

(415) 521-3773 • 1829 Clement Avenue, Alameda, California 94501-1395 • FAX (415) 865-2594

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FIGURES

SUMMARY

On October 5, 1990, Parker and Associates retained Blymyer Engineers to conduct an environmental site assessment of a property located at 1125 29th Avenue, Oakland, California. This assessment consisted of historical background research, regulatory authority inquiry, and site and surrounding land use inspection. Results of the assessment indicate the presence of suspected asbestos-containing building materials (ACBMs). Blymyer Engineers recommends that a thorough survey of all buildings at the site be conducted to determine the extent and condition of all friable, suspected ACBMs, including pipe lagging and floor tiles. In addition, if the buildings are to be demolished, a survey of all suspected ACBMs should be conducted prior to demolition work. If the buildings are to remain, potential ACBMs that are non-friable can remain in place and be put under an operations and maintenance plan to monitor their condition. Any building tenants or contractors who may be working around the ACBMs are required to be notified in accordance with California law.

In addition, Blymyer Engineers recommends that a Level II site assessment consisting of a subsurface investigation be conducted along the northern property line in the vicinity of the old facility boiler, in the area where aboveground tanks had been located on the property in the past, and along the southern property line where Del Monte has conducted a subsurface investigation around underground tanks on its property.

Also, Blymyer Engineers recommends that all 55-gallon drums and other containers of suspected hazardous materials at the facility be removed and properly disposed of in accordance with all applicable local, state, and federal regulations.

1.0 INTRODUCTION

1.1 Background and Scope of Work

On October 5, 1990, Parker and Associates retained Blymyer Engineers to conduct an environmental site assessment of a property located at 1125 29th Avenue, Oakland, California. The purpose of the assessment was to determine whether hazardous materials or wastes may exist in the surface, subsurface, or in the buildings at the site.

An environmental site assessment is twofold: 1) the history of occupancy and the uses of a specific parcel are reconstructed to determine whether any hazardous materials have been used on the property and 2) a physical inspection of the property is conducted, which may include a subsurface soil or groundwater investigation. Although the assessment is a thorough investigation, the investigatory tools available are not abundant. Because historical information is often not continuous, a site free of hazardous waste cannot be guaranteed. However, an environmental assessment does substantially reduce the risk of unanticipated discovery.

The scope of work for this assessment consisted of the following:

1) Historical research to identify previous occupants and uses of the site to determine whether any hazardous materials have been used on the property;
2) Regulatory authority inquiry to determine the existence and status of hazardous materials incidents on or in proximity to the subject site; and
3) Physical inspection of the property and surrounding land use.

This report presents the results of the investigative work described above.

1.2 Site Conditions

The site is located in a combined residential, commercial, and industrial area in the western part of Oakland, California, approximately 1/4 mile east of U.S. Interstate 880 and adjacent to a Southern Pacific right-of-way (Figure 1). The site comprises 5.1 acres. Site topography is generally flat.

There are four buildings at the site. The buildings are constructed of corrugated steel, brick, or wood frame and all are slab-on-grade construction. Except for an unsurfaced portion in the southwest part of the yard, the site is paved with asphalt. All of the buildings were vacant at the time of inspection.

2.0 ENVIRONMENTAL SITE ASSESSMENT

2.1 Historical Background and Regulatory Agency Survey

The investigation into the historical uses of the property included systematically reviewing records or interviewing personnel of the following data sources:

1. Alameda County Recorder's Office
2. University of California - Berkeley Map Library
3. Oakland Building Department
4. California Department of Health Services
5. San Francisco Bay Regional Water Quality Control Board
6. Alameda County Assessor's Office
7. Oakland Public Library
8. U.S. Environmental Protection Agency - Region 9
9. Alameda County Health Care Services Agency
10. Alameda County Public Works Agency

The records of the Alameda County Recorder's Office were reviewed to establish a chronology of owners or occupants over the previous 70 years. Property records at the Recorder's Office indicate that California Packing Company, which merged with the Del Monte Corporation, owned the subject property from at least 1920 until 1978. In August 1978, Del Monte Corporation sold the property to Warehouse Properties. Warehouse Properties sold the property to S & W Enterprises and Pacific Region Investments in September 1981. Immediately thereafter, the subject property was sold to Comanche Investment Company. The current owner, Roadway Express, purchased the property in November 1981.

It was reported that Roadway Express leased portions of the facility to an automobile service operation and a towing operation. The dates of occupancy for these businesses were not determined.

According to Sanborn Fire Insurance maps dated 1950, the subject property contained seven residences on the western edge of the property adjoining E. 10th Street, as well as the currently existing buildings. Near the seven residences, a water supply well, pump, and eight large aboveground water tanks are shown. Buildings on the site were used for storage, canning, repairing, offices, peach pitting, fig blanching, and dining areas for the employees. The California Packing Corporation used all of the adjoining land up to 27th Avenue previous to 1978 and had a boiler adjacent to the subject site.

According to records at the Oakland Building Department, all of the residences were demolished in July 1956. No records were found relative to building construction.

Records from the Alameda County Public Works Agency indicate that a 12-inch diameter well constructed in 1925 that was 875 feet deep was properly abandoned in July 1984.

The San Francisco Bay Regional Water Quality Control Board, the California Department of Health Services and the Alameda Health Care Services Agency were contacted to determine if any toxic chemical or fuel leaks within a 1/4-mile radius of the subject sites have been reported. The Del Monte Plant located across 29th Avenue from the site is listed on the Regional Water Quality Control Board's Fuel Leaks and North Bay Toxics lists. At the time of this report, Blymyer Engineers was unable to review the files for that site. Bill Riker, Manager of Facility Engineering for Del Monte, revealed that a Phase I assessment of the Del Monte facility had been completed. Although he would not release the report to Blymyer Engineers, he indicated that based on the findings of the assessment, there would be no further work. No other unauthorized releases have been reported within a 1/4- mile radius of the subject property.

U.S. Geological Survey topographic maps for the area and aerial photographs

(Figures 2, 3, and 4) were examined to determine whether any facilities which may have generated or disposed of hazardous wastes were located or had been located within 1 mile of the subject property. Many such facilities were identified. However, the facilities that were identified to be within 1 mile of the subject site are at least 1/2-mile from the subject site.

2.2 Site Inspection

The environmental site inspection conducted on October 30, 1990, consisted of a visual inspection of the property, including the subject site (Figure 5) and surrounding land. The inspection consisted of traversing the site on foot to identify potential environmental problems and surveying the buildings for hazardous materials or wastes.

There are four buildings on site; buildings A and B are connected and buildings C and D are connected. Corrugated steel covers an area between buildings A and B. All of the buildings were empty and unoccupied at the time of the inspection.

The site is essentially square. The buildings on site are part of an old canning operation which operated on both sides of 29th Avenue. The buildings on site are wood frame or steel, slab-on-grade, and are confined primarily to the eastern portion of the property adjacent to the railroad tracks. Most of the open yard space is paved with asphalt. In the northwestern corner of the property, evidence of a water supply well was observed.

During the inspection of the building, suspected ACBMs were observed as pipe lagging in building A. The insulated pipes range in size from 1 to 10 inches in diameter, with the majority being 1 to 3 inches in diameter. There is an estimated 800 linear feet of pipe lagging which is suspected to contain asbestos. Buildings C and D also have approximately 200 feet of pipe lagging which is suspected to contain

asbestos. In addition to the pipe lagging, other suspected ACBMs include floor tiles, cement pipe, fire doors, roofing felts, and plaster used in the office walls and ceilings.

Oil staining was observed in the covered area between buildings A and B. Numerous drums and pails which may contain waste oil were also observed throughout the site. Unauthorized dumping of trash appears to have occurred at the site.

2.3 Surrounding Community Description

The area surrounding the subject property consists of residential, commercial, and industrial properties (Figure 6). The property is bounded by E. 10th Street and residential homes to the west, railroad tracks to the east, 29th Avenue and a Del Monte plant to the south, and commercial buildings to the north. This property is part of Alameda County, California, in the central part of the city of Oakland.

3.0 CONCLUSIONS

Based on the above observations and file review, Blymyer Engineers concludes the following:

- The site is located in a combined residential, commercial, and industrial area of Alameda County, California, in the central part of the City of Oakland.

- The site was used as a canning facility since from least the 1920's until 1978. At various times since then, portions of the site have been used as an automobile service operation and a towing operation.

- A boiler existed at one time on a parcel that is now adjacent to the subject facility. There is no information on whether this boiler was ever abandoned or if it was fueled by an underground fuel oil tank.

- Fifty-five gallon drums and small pails which may contain hazardous materials were observed in various locations throughout the facility.

- One unauthorized release of hazardous materials within a 1/4-mile radius of the facility has been reported to regulatory agencies. The existing Del Monte facility to the south has reported that it has conducted subsurface investigation in the vicinity of underground tanks on its property.

- Suspected asbestos-containing building materials were identified in three of the four buildings on the subject site.

- Evidence of a water supply well was observed in the northwestern corner of the property. This concurs with the location of a water supply well shown on the 1950 Sanborn Fire Insurance Map.

4.0 RECOMMENDATIONS

Blymyer Engineers recommends that a thorough survey of all buildings at the site be conducted to determine the extent and condition of all friable, suspected ACBMs, including pipe lagging and floor tiles. In addition, if the buildings are to be demolished, a survey of all suspected ACBMs should be conducted prior to demolition work. If the buildings are to remain, potential ACBMs that are nonfriable can remain in place and be put under an operations and maintenance plan to monitor their condition. Any building tenants or contractors who may be working around the ACBMs are required to be notified in accordance with California law.

In addition, Blymyer Engineers recommends that a Level II site assessment consisting of a subsurface investigation be conducted along the northern property line in the vicinity of the old facility boiler, in the area where aboveground tanks had been located on the property in the past, and along the southern property line where Del Monte has conducted a subsurface investigation around underground tanks on its property.

Also, Blymyer Engineers recommends that all 55-gallon drums and other containers of suspected hazardous materials at the facility be removed and properly disposed of in accordance with all applicable local, state, and federal regulations.

5.0 LIMITATIONS

Blymyer Engineers' environmental site assessment was conducted in accordance with generally accepted practices of other consultants performing similar studies at the same time and in the same general vicinity.

Blymyer Engineers observed the degree of care and skill generally exercised by other consultants under similar circumstances and conditions. The findings and conclusions contained in this report are based on Blymyer Engineers' professional opinion concerning the significance of the data gathered during the course of the environmental site assessment, and must not be considered as scientific certainties.

Specifically, because of the limited data available and the absence of scientific certainty in assessing the presence of contaminants, Blymyer Engineers does not and cannot represent that the site contains no hazardous material, oil, or other latent condition beyond that observed by Blymyer Engineers during its site assessment.

The observations above were made under the conditions stated in the body of this report. The conclusions presented above were based on these observations. Should additional information become available, Blymyer Engineers requests the opportunity to review such data and to modify the conclusions herein, as warranted.

The purpose of this report was to assess the environmental characteristics of the site located at 1125 29th Avenue in Oakland, California. Blymyer Engineers investigated the historical uses of the site, reviewed regulatory agency files and records, and visually inspected the site for the presence of hazardous materials, oil, and asbestos-containing building materials. Blymyer Engineers did not remove any panels or perform any demolition work to inspect for the presence of ACBMs which were not readily accessible.

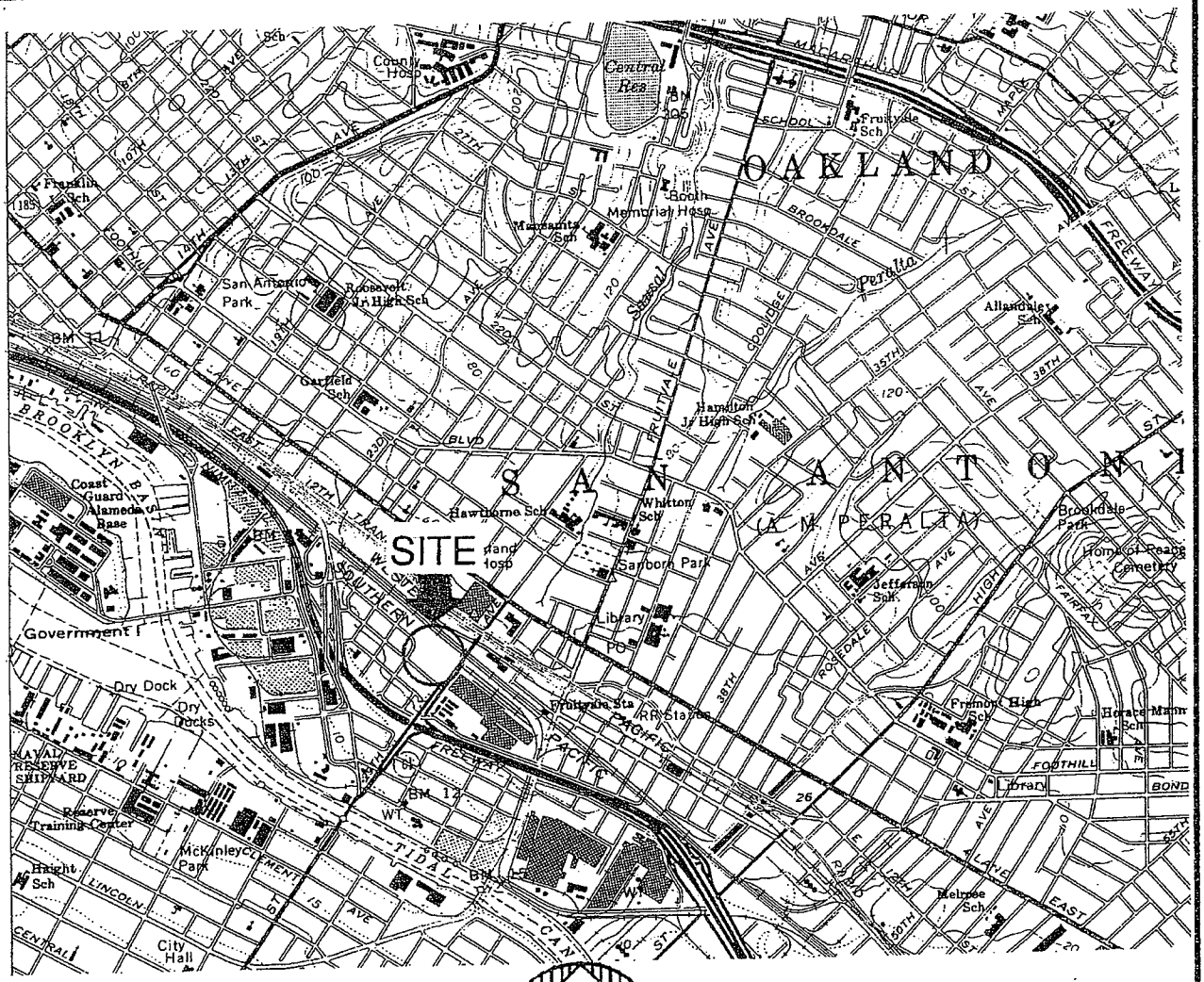
Based on these actions, Blymyer Engineers formed an opinion regarding the likelihood that the site had been impacted by hazardous materials or oil. No soil or groundwater samples were taken and it is therefore impossible to render a scientifically certain opinion whether hazardous materials or oils are present in the soil or groundwater of the site.

This report has been prepared on behalf of, and for the exclusive use of the client. This report and the findings contained herein shall not be disclosed to, nor used by any other party without the prior written consent of Blymyer Engineers.

This report is issued with the understanding that it is the responsibility of the owner or its agent to ensure that the information and recommendations contained herein are brought to the attention of regulatory agencies, if required.

The findings of this report are valid at present. However, changes in the condition of the property can occur with the passage of time, whether as the result of natural phenomena or the acts of persons on the subject site or adjacent site. Additionally, changes in applicable regulations can occur. Consequently, the findings of this report may be invalidated partially or in total as the result of changes by Blymyer Engineers' control.

Figures

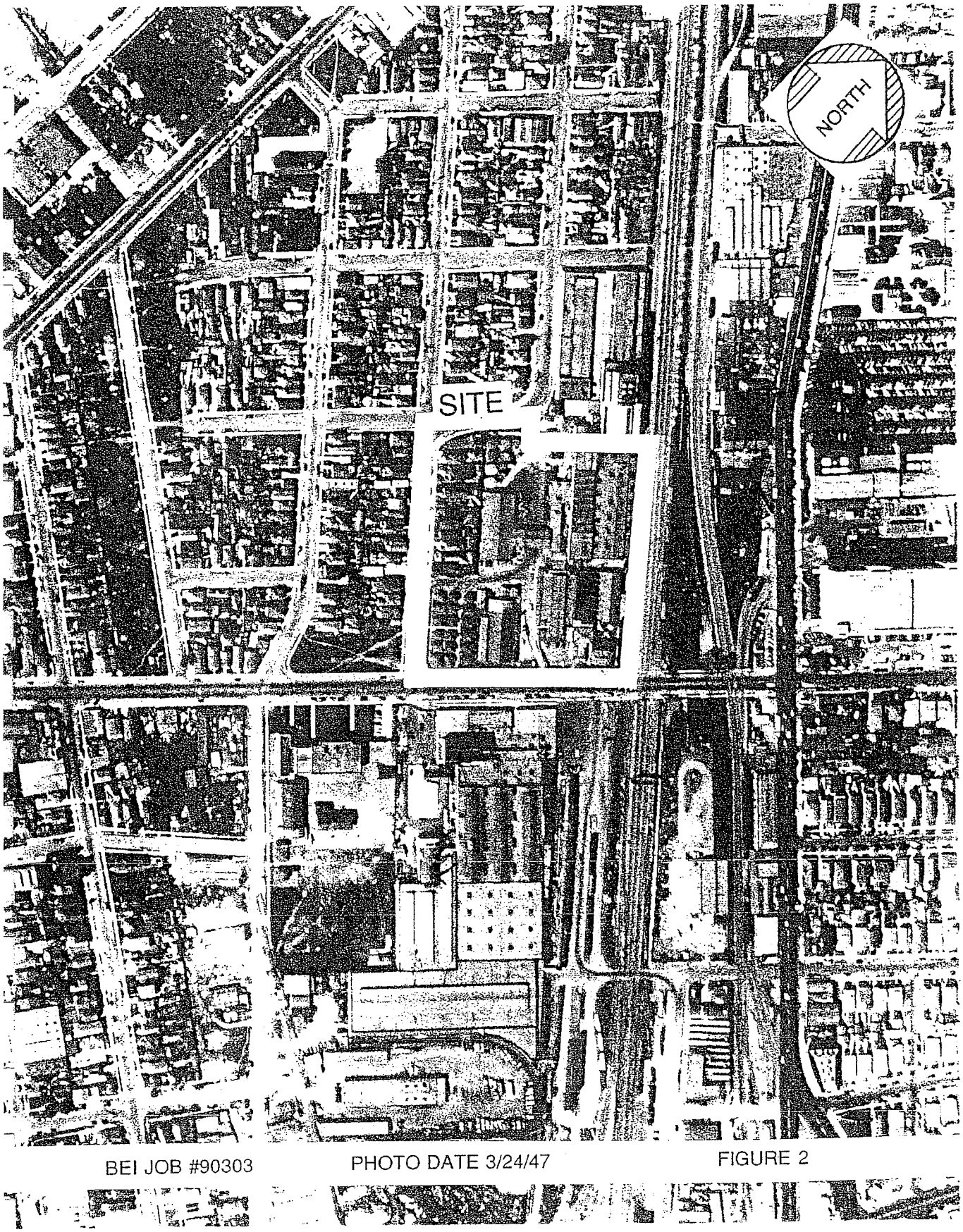


PARKER & ASSOCIATES

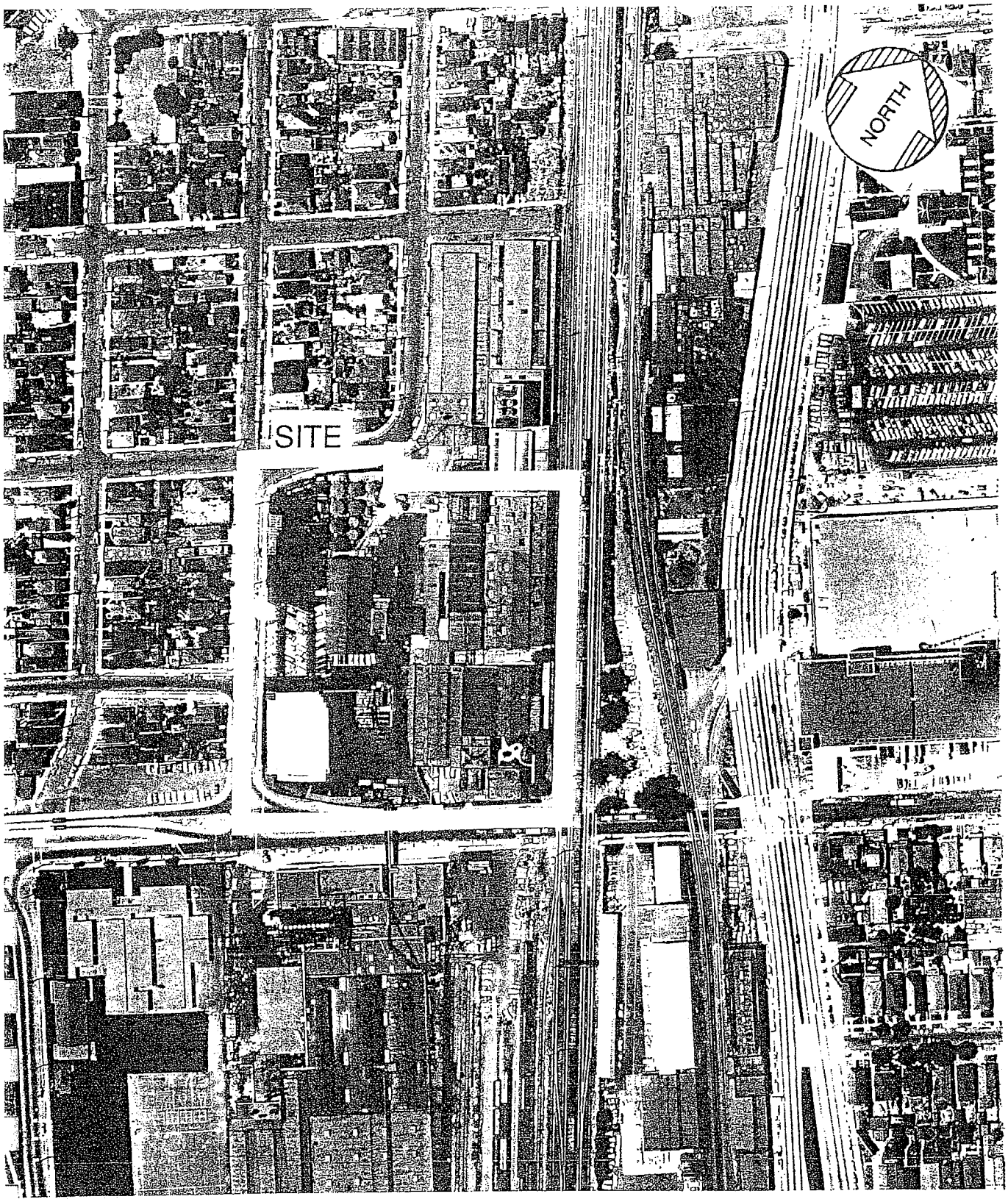
1125 29TH AVE.
OAKLAND, CA

BLYMYER ENGINEERS, INC. 1829 CLEMENT AVE., ALAMEDA, CA 94501			
SCALE	1"=2000'	FOR	PARKER & ASSOCIATES OAKLAND, CA
DRAWN / DATE	LW 11/90		
CHECKED		TITLE	AREA MAP
APPROVED			
JOB NO.	90303	DRAWING NO.	FIGURE 1 REV.

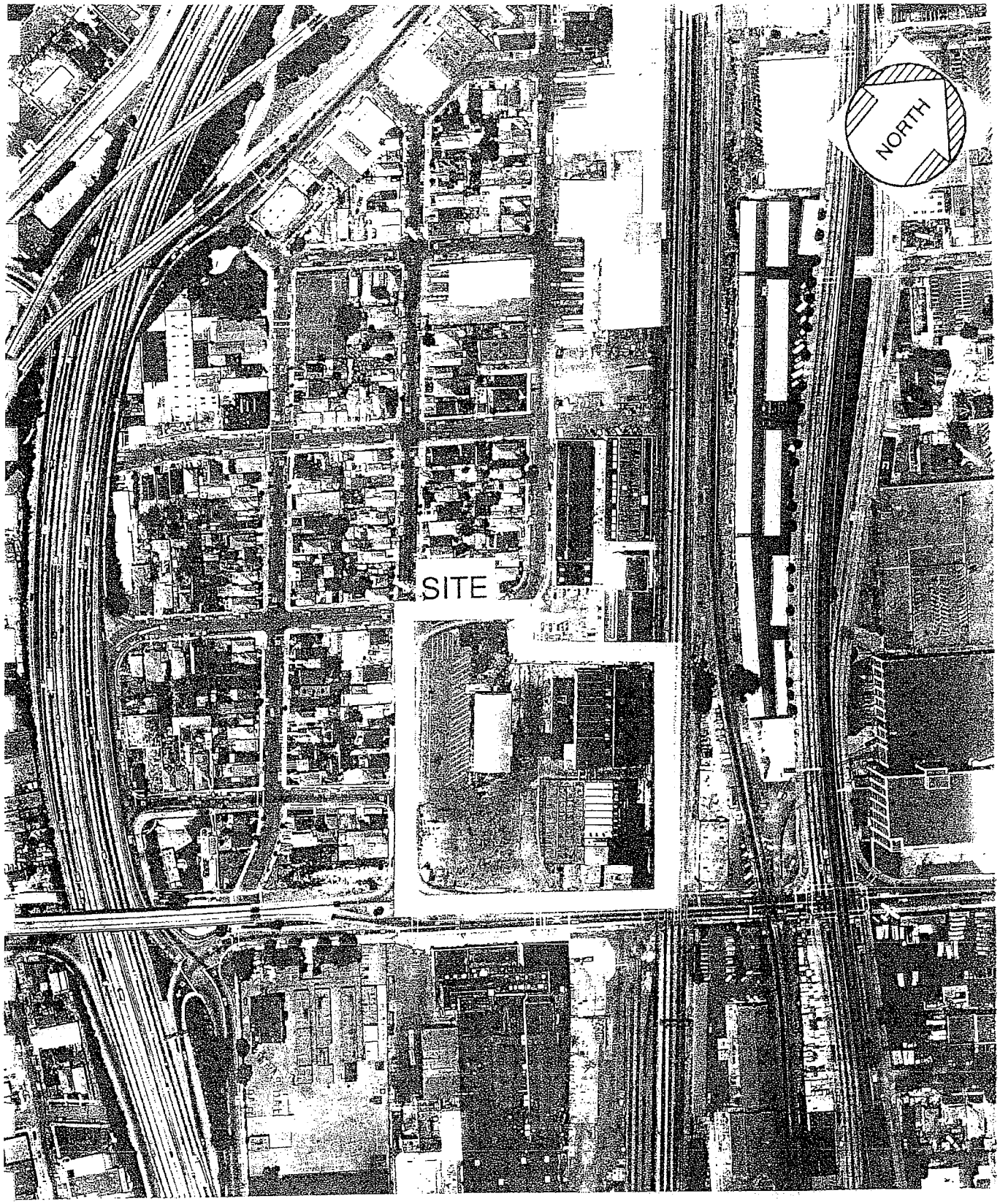
SOURCE: USGS 7.5' QUAD "OAKLAND EAST, CA"



BEI JOB #90303 PHOTO DATE 3/24/47 FIGURE 2



BEI JOB #90303 PHOTO DATE 7/7/59 FIGURE 3



BEI JOB #90303 PHOTO DATE 6/12/90 FIGURE 4

000022 BLY

NOTES: The following notes refer to the Site Map located to the right)

BUILDING A

In the northeast corner there is friable asbestos pipe lagging laying on the ground. Suspected ACBM contamination in building A is found chiefly in pipe lagging. The pipes vary between 1-& 3-inch pipe, with some 10-inch. 10-inch pipe estimated to be < 1% ACBM. Estimated 800 linear feet of ACBM pipe throughout building A. It is suspected that upstairs floor and roofing felt may contain asbestos.

#1 5 drums, vary in size, 1/2 to totally full, appear to contain waste oil.
#2 5 drums, vary from 1/4 to 3/4 full, appear to contain waste oil and sludge.

BUILDING B

In covered area running between building B & C, there is evidence of oil dumped along with garbage materials. There is a 55 gal. drum on its side that may be the source of oil. It appears to be empty now.

#10 1 drum in yard, 1/2 full.
#11 A propane tank with appoximately 18' of suspected waste oil.
#12 13 assorted drums, suspected waste oil.
#13 55 gal. drum, 1/2 full.
#14 Ground stained with black oily dirt, 1/2 full 55 gal. drum.
#15 Ground stained, drums at corner of the building may be the source. Drums are 1/4 full.
#16 3' steel pipe is coming up out of the ground with a cap on it. This may be a well. It is located in an area with land fill.
#17 Pipe main. A 6' pipe with a valve comes up out of the ground. It is blanked off.

BUILDING C

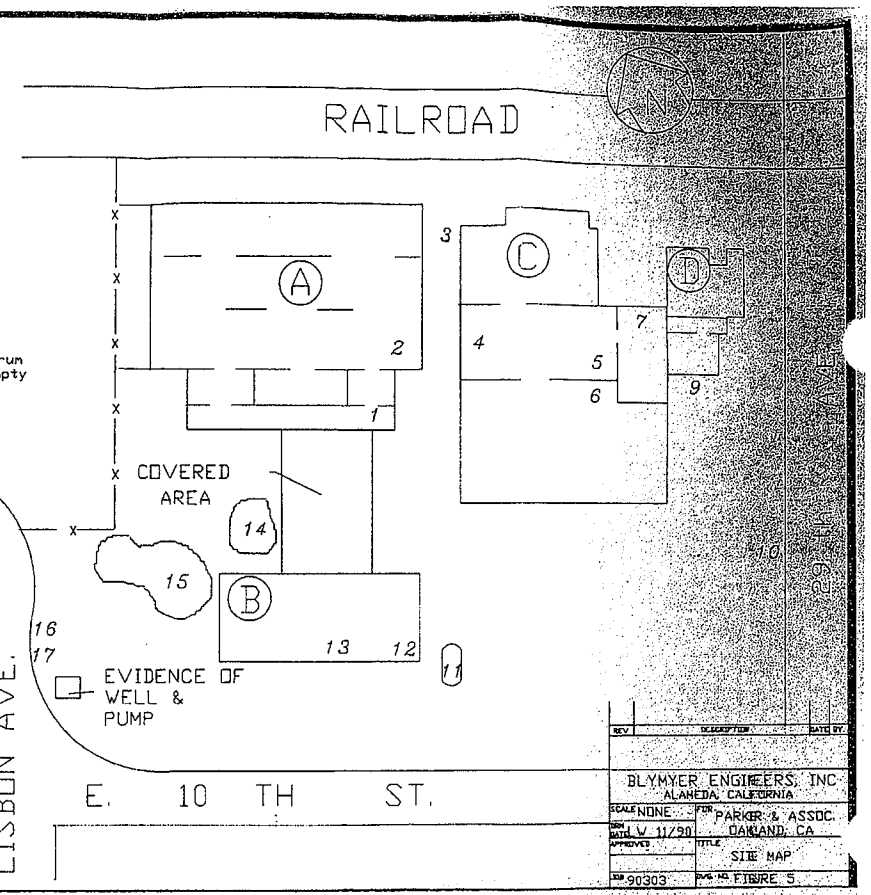
Upstairs area, northwest side, transite pipe leading to roof.

#3 Transite vent pipe running to roof.
#4 Transite pipe in hot water heater room, leads to roof.
#5 3 fire doors laying on ground, may contain asbestos.
#6 2 fire doors laying on floor, may contain asbestos.
#7 Linoleum floors, may contain asbestos.

BUILDING D

Floor tiles and plaster in office may contain asbestos.

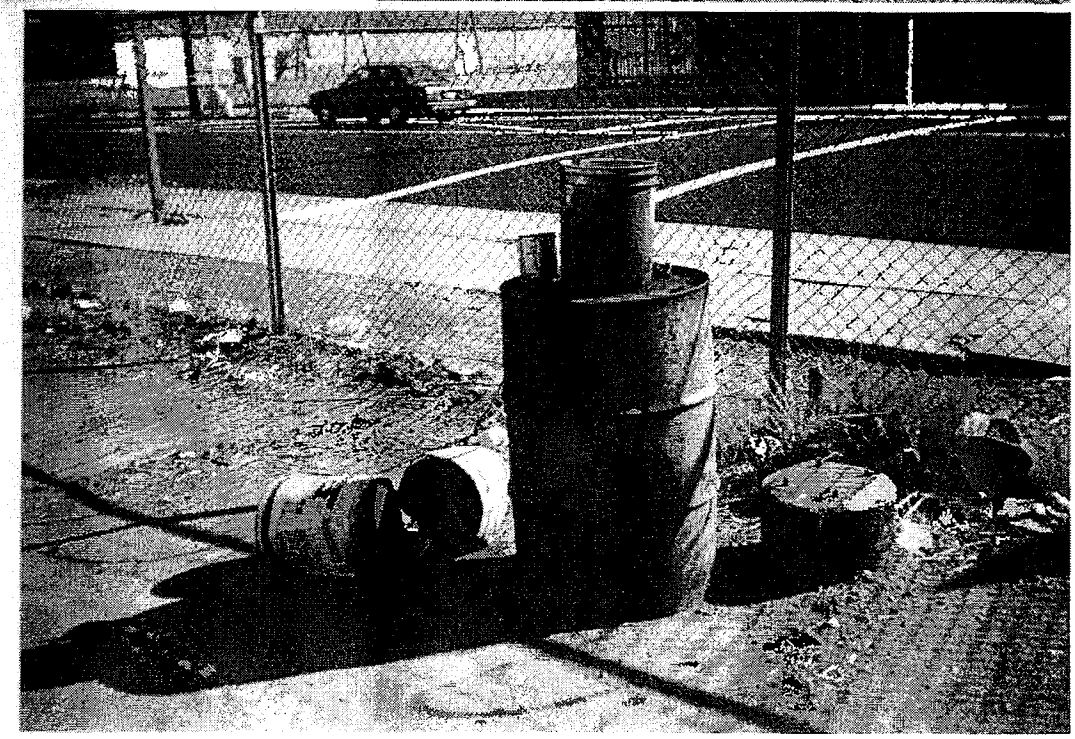
#9 Transite pipe to roof.

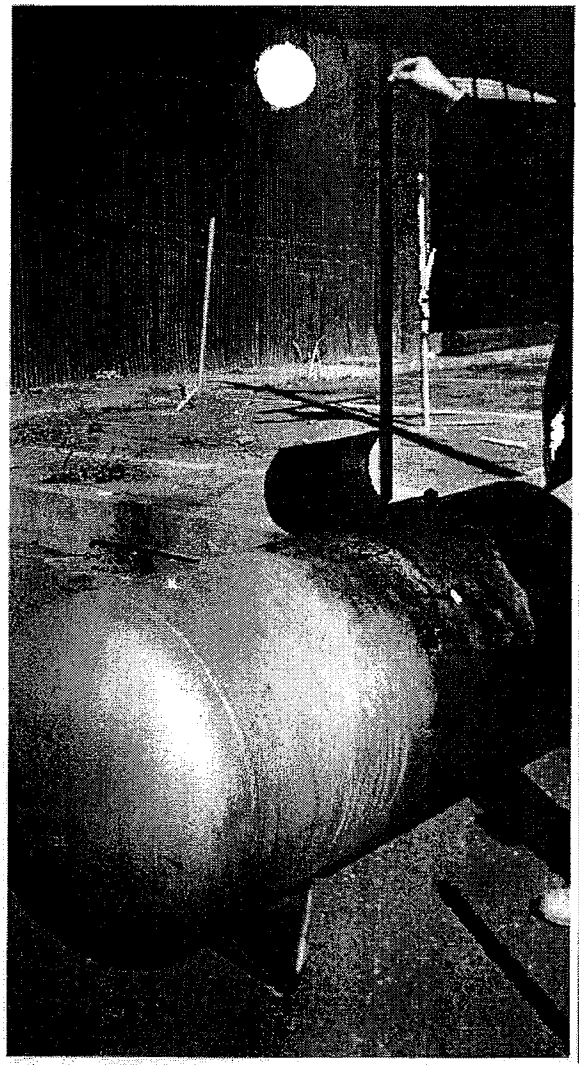


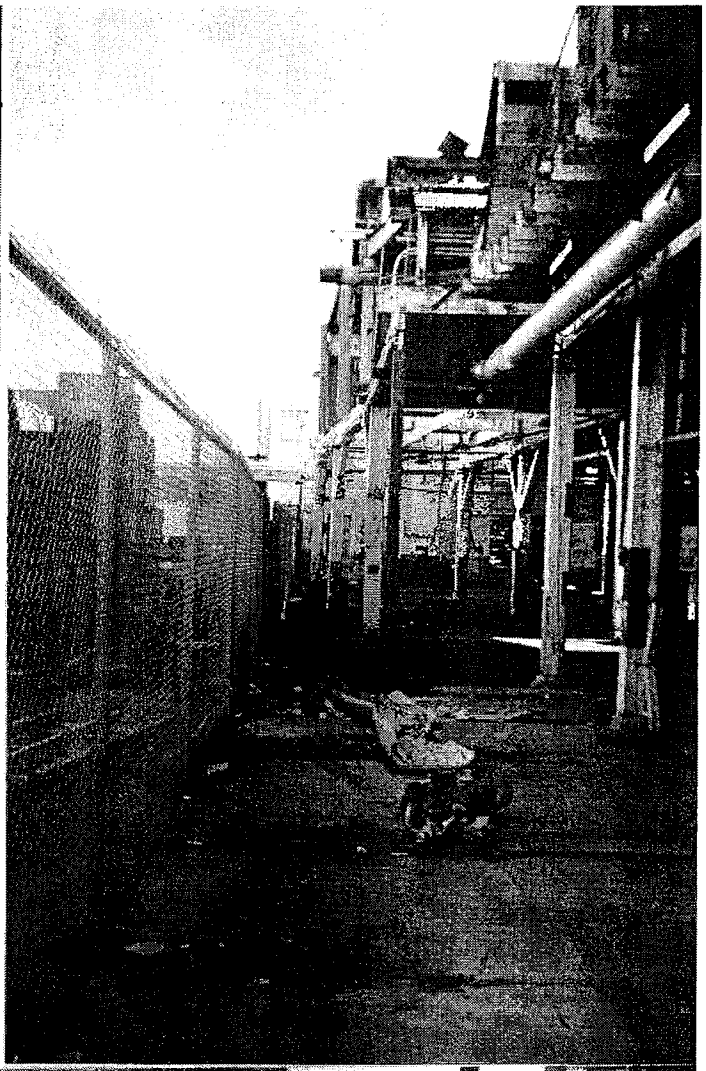
BLYMYER ENGINEERS, INC
ALAMEDA, CALIFORNIA
SCALE NONE FOR PARKER & ASSOC. OAKLAND, CA
DRN Mtd V 11/90
APPROVED
TITLE SITE MAP
JOB 90303 DWG NO. FIGURE 5

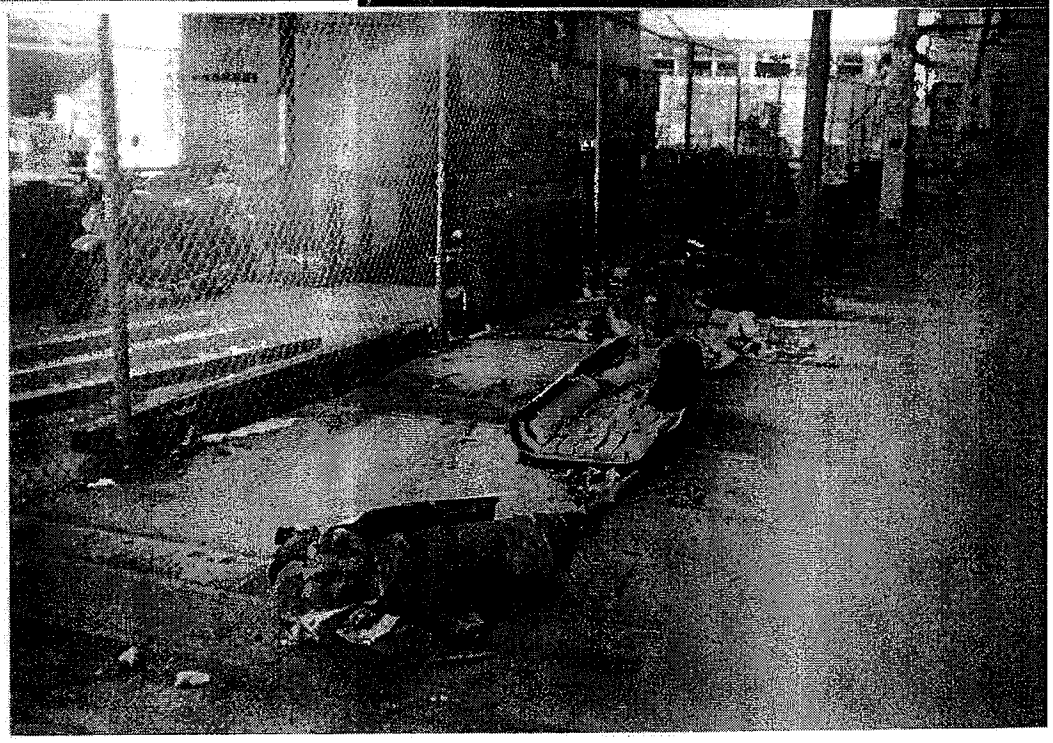
BUY

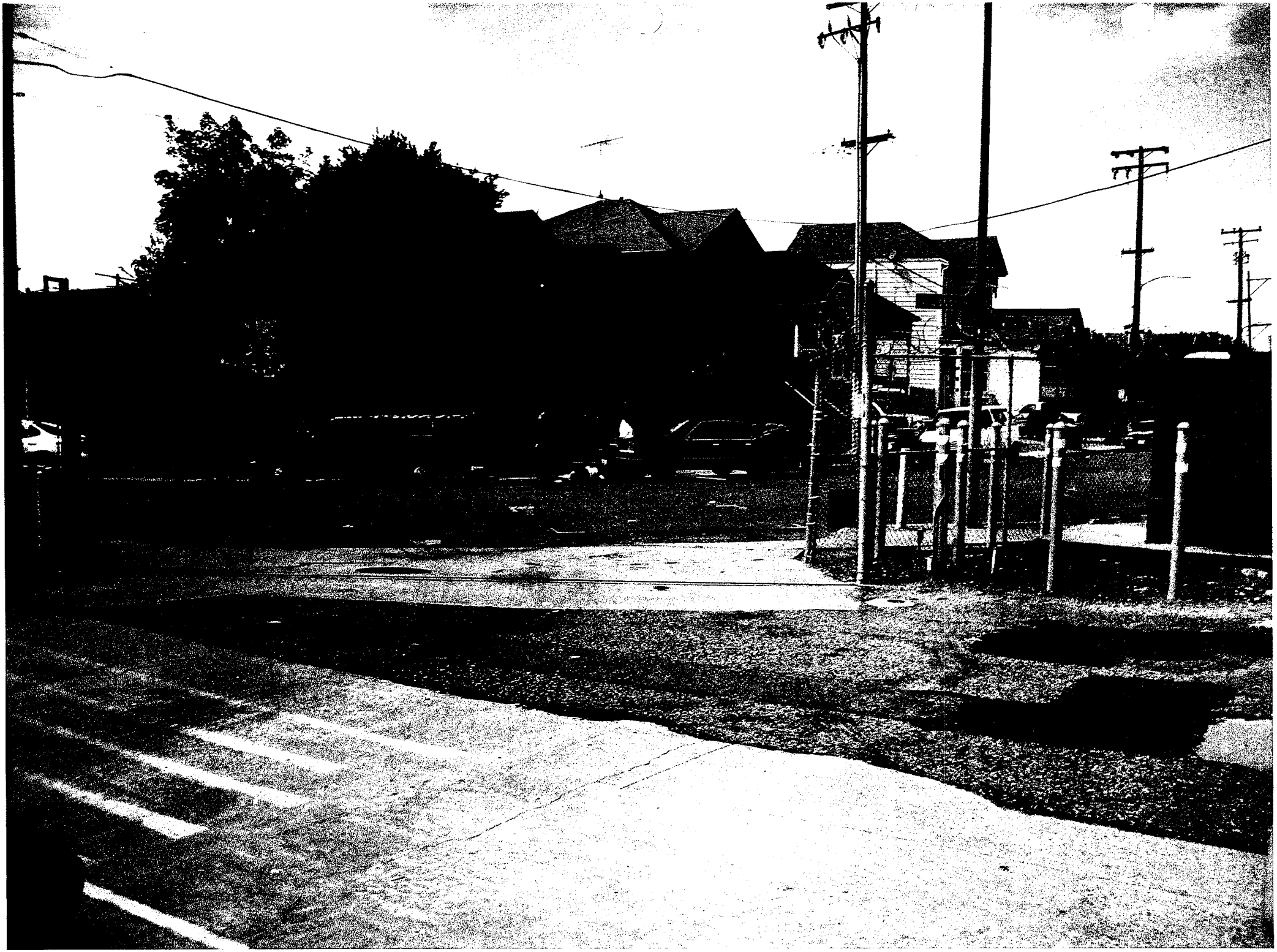
By 00024

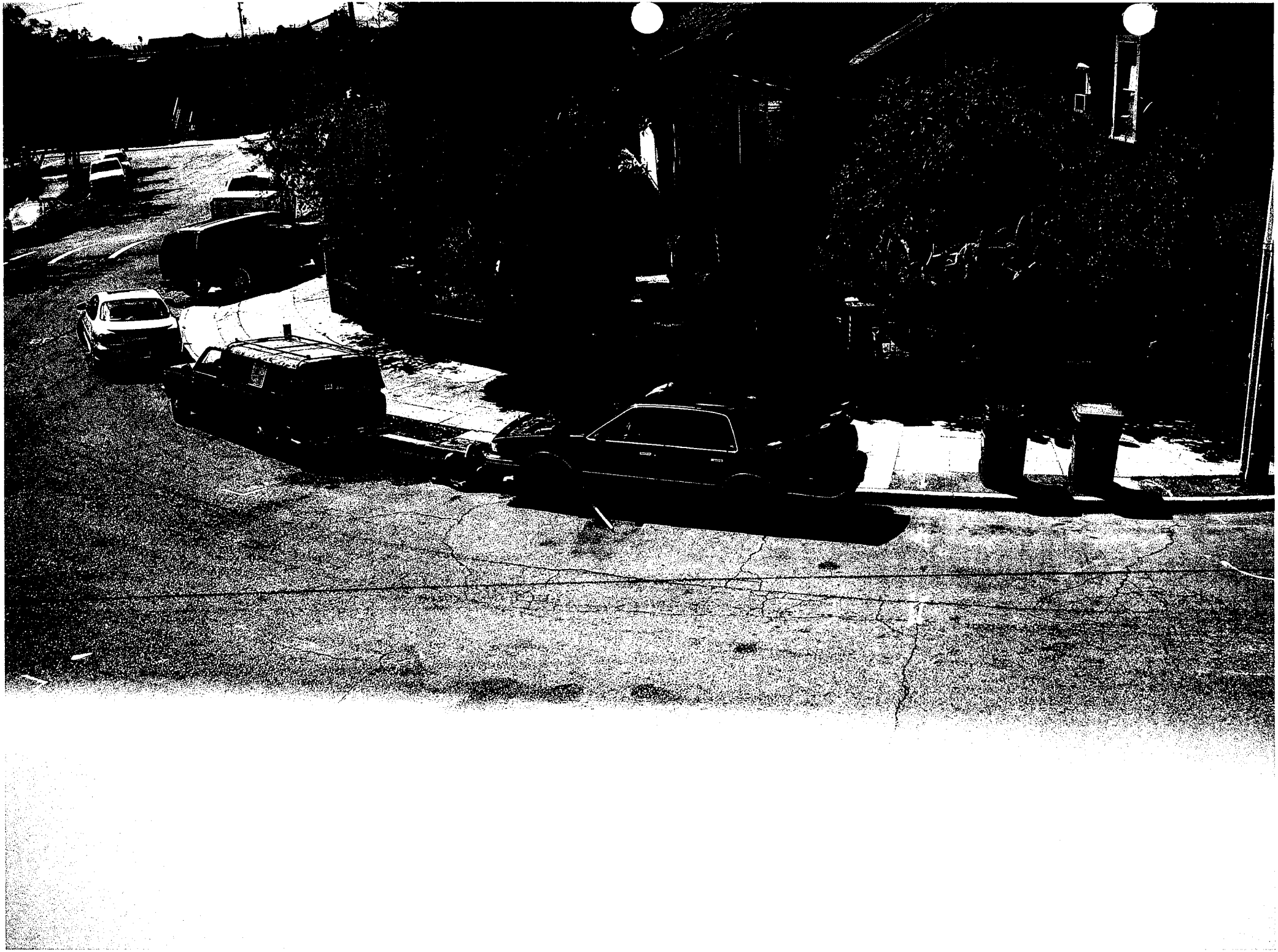


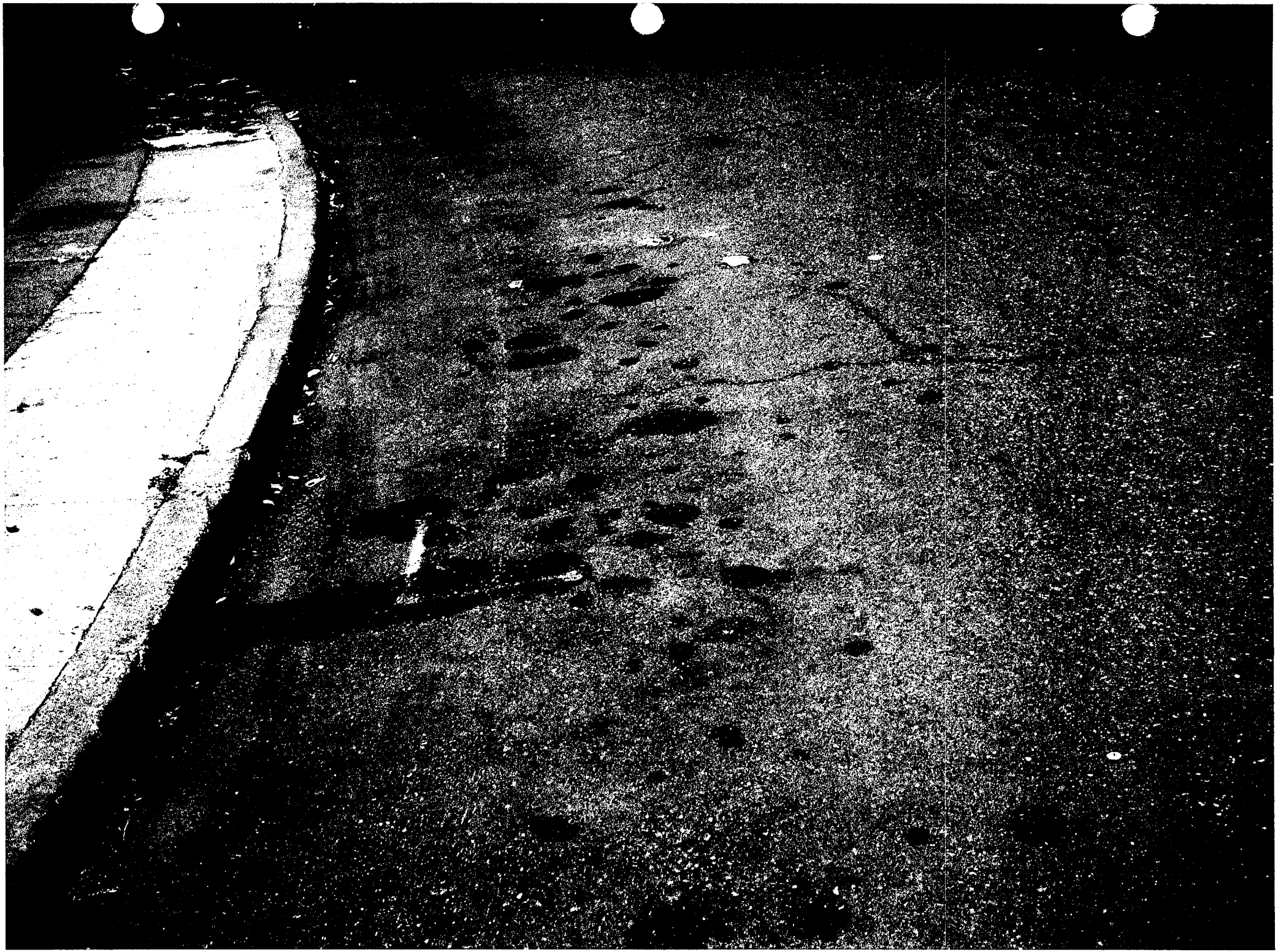












Attachment C
Soil Vapor Sampling
Standard Operating Procedure

Memorandum

Environmental Resources Management

1777 Botelho Drive
Suite 260
Walnut Creek, CA 94596
(925) 946-0455
(925) 946-9968 (fax)

ERM

Active Soil Vapor Sampling

Prior to soil vapor sample collection, the necessary permits will be obtained from Alameda County, and USA will be notified at least 48 hours prior to the commencement of drilling activities. In addition, a private underground utility locator will clear all drilling locations.

Soil vapor sampling activities will be implemented in accordance with the 15 December (revised 7 February 2005) 2005 *Interim Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air* and the *Advisory – Active Soil Gas Investigations* (28 January 2003) documents developed by the Department of Toxic Substances Control (DTSC) and the California Environmental Protection Agency.

A direct-push rig will be utilized to facilitate the collection of soil vapor samples from at least 5 feet below ground surface (bgs), as recommended in the DTSC advisory. Soil vapor samples will be collected with 1-liter Summa canisters equipped with flow controllers with a pre-set sampling rate of 200 milliliters per minute (mL/min) (5 minute sample time for a 1-liter Summa canister). The following procedures should be followed during sample collection:

- A direct-push rig will be utilized to advance drilling rods to a total depth of 5 feet bgs. Once the sampling rods are advanced to total depth, they will be pulled back approximately 6 inches, creating an annular space for vapor sampling. Clear, disposable, Teflon tubing (0.25-inch outer diameter) will then be inserted through the rods and attached to a screened sampling tip with a threaded connection containing a rubber gasket.

- Following the installation of the sampling line, a seal of hydrated bentonite should be emplaced around the drilling rod at ground surface to isolate the subsurface conditions from conditions above-ground. Care should be taken to ensure that the bentonite is not over-hydrated to avoid introducing water down into the borehole. To allow for subsurface conditions to equilibrate, soil vapor sampling should not be initiated for **at least 30 minutes**. Note the equilibration start and end time in the field notes.

- During this time, calculate the volume of the sample tubing and the annular space around the sampling tip to determine the purge volume.

Also, measure the initial vacuum in the Summa canister with a separate vacuum gauge (other than the one on the flow controller) and record the result in the field notes.

- Following equilibration, attach a low-flow vacuum pump and flow meter to the sampling line, following a T-valve. Using the vacuum pump, purge three purge volumes of air from the sampling line at a flow rate of 200 ml/min. Note the purge volume and time in the field notes.

- Following purging, remove the vacuum pump and flow meter from the sampling line and attach the Summa canister and flow controller. While connecting the flow controller to the Summa canister, wrap Teflon tape around in the inside and outside of the Swagelok fittings. When connecting the sample line to the flow controller, be sure you are using pink rubber ferrels and not stainless steel ferrels. Wrap the outside of each of the connections with uncooked biscuit dough.

- Open the valve on the Summa canister and begin sample collection. Note the sample start time in the field notes.

- During the course of the 5 minute sample time, conduct a leak test by holding a cleaning wipe containing isopropyl alcohol near each connection in the sampling train. Double bag the wipes to be used during the leak test and store them away from any of the sampling equipment. Change gloves before and after conducting the leak test to minimize cross-contamination. Seal all used wipes and gloves in two ziplock baggies and store away from all sampling equipment.

- After 5 minutes, or when the vacuum gauge on the Summa canister reads approximately 5 inches of mercury (in Hg), close the valve and disconnect the tubing. Measure the final vacuum in the Summa canister with a separate vacuum gauge and record the result in the field notes. Make note of the sample end time.

- Be sure to completely fill out the sample tags on all of the Summa canisters.

After each soil gas sample is collected, the sample tubing should be removed and discarded. Soil vapor probes will be decontaminated between each sample using a water and Liquinox solution and triple-

rinsed with potable water. Following sample collection, each borehole will be abandoned using granulated bentonite chips, hydrated with water. Borings should be topped at ground surface with concrete dyed black to match the surrounding ground cover.

The following samples will also be collected for QA/QC purposes:

- One ambient air sample - collect from one of the sample locations. Document the location in the field notes.

- One trip blank sample - complete the sample label/tag and keep with the other Summa cannisters.

- One duplicate sample - collect with a duplicate sampling "T" from any location.

Soil vapor samples will be sent to Air Toxics Ltd., a California-certified laboratory in Folsom, California, for analysis by United States Environmental Protection Agency (USEPA) Method TO-15.