

April 22, 1999

San Francisco Bay Regional
Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Attention: Derrick Lee

Subject: Workplan to Conduct Soil Boring Investigation And
Risk-Based Corrective Action Assessment
Liquid Sugars, Inc., 1266 66th Street
Emeryville, California
GA Project No. 149-02-01

Ladies and Gentlemen:

Gribi Associates is pleased to submit this workplan on behalf of Liquid Sugars, Inc. to conduct a soil boring investigation and a Risk-Based Corrective Action (RBCA) assessment for the Liquid Sugars, Inc. property located at 1266 66th Street in Emeryville, California (see Figure 1, Figure 2, and Figure 3). The proposed soil boring investigation will include the drilling and sampling of approximately 12 soil borings at the site using Geoprobe coring equipment. The proposed RBCA assessment will involve modeling site-specific environmental and human health exposure risks from residual contaminants identified at the site. The goals of these activities will be to: (1) Attempt to determine whether or not identified chlorinated hydrocarbons originated from onsite or offsite sources; and (2) Determine whether or not leaving these contaminants on-site will pose a significant health or environmental risk for potential future onsite and offsite receptors.

GENERAL BACKGROUND

Liquid Sugars, Inc., the current owner of the subject parcel, has operated a food-grade liquid sugar facility on the site since the 1970s. As part of a potential property transfer, Geomatrix recently conducted grab groundwater sampling from seven borings (SB-1 through SB-3, and B-1 through B-4) on the subject property. Results from these sampling activities are summarized in Appendix A. Laboratory analytical results from these borings indicated the presence of chlorinated hydrocarbons in groundwater beneath the site. Specific chlorinated hydrocarbon compounds detected at various locations and concentrations included tetrachloroethene (PCE), trichloroethene (TCE) 1,2-dichloroethene (1,2-DCE), 1,2-dichloroethane (1,2-DCA), and vinyl chloride (VC). Extremely high levels of PCE, TCE, and cis-1,2i-DCE were encountered in a groundwater sample collected from boring B-4, located near the east edge of the project site. In addition, an elevated level of 1,2-DCA was encountered in a groundwater sample collected from SB-3, located on the northwest side of the site. Geomatrix apparently met with the San Francisco Regional Water Quality Control Board (RWQCB), and the RWQCB indicated that a "no further action" might be possible for the project

site if it can be demonstrated that the chlorinated hydrocarbons originated from offsite and that they pose no significant risk to potential receptors at the site.

SITE AND SITE AREA HISTORY

Gribi Associates conducted a Phase I Environmental Site Assessment (ESA) for the subject site and adjacent LSI properties to the south. As part of this Phase I ESA, a detailed history was developed for the site and site vicinity using Sanborn Fire Insurance Maps, cross telephone directories, aerial photographs, and interviews with knowledgeable persons. Copies of relevant portions of selected Sanborn Maps are included in Appendix B. Gribi Associates also recently conducted additional interviews in order to augment information obtained during the Phase I ESA. Results from these activities are summarized in the following sections.

Site History

The only three uses identified for the project site include: (1) As residential property in 1911; (2) As a sodium silicate manufacturing facility from sometime prior to 1939 until about 1970; and (3) As a liquid sugars blending facility since the 1970s. A Sanborn Map from 1911 shows a residential dwelling located in the southwest corner of the project site. Sanborn Maps from 1950 to 1969 show the project site to be occupied by Diamond Alkali, a manufacturer of sodium silicate. Aerial photographs taken in 1939 and 1946 show what appears to be the Diamond Alkali facility, as shown on later Sanborn Maps, to be present. In a 1979 cross telephone directory, Vegetable Oil, Inc. (a former division of Liquid Sugars, Inc.) is listed at the project site address. According to Mr. Ron Mooney of Liquid Sugars, Inc., the project site was purchased by a former Liquid Sugars, Inc. parent company in about 1974, and the five larger vertical above ground storage tanks (ASTs) were present on the site.

The current project site building configuration appears to have remained approximately the same since construction of the facility, presumable by Diamond Alkali, sometime prior to 1939. The 1950 Sanborn Map shows the project site building as a "Factory Building", consisting of a lab in the southwest corner, a mixing room in the northwest corner, and warehouse and shipping occupying the remaining portions of the building. The project site building appears to have been concrete paved, with the north portion of the building marked as "part concrete paved". On a 1939 aerial photo, the east half of the project site yard area appears to have been unpaved. In addition, the west half of the yard area appears to have included the currently-existing railspur along the east side of the project site building and approximately three large vertical ASTs (possibly still present on the site) immediately east from the railspur. On the 1946 aerial photo, the yard area on the east side of the project site contained five vertical ASTs in the approximate location of the currently-existing larger ASTs present on the site.

The manufacturing of sodium silicate involves the melting and processing of a soda ash and quartz sand mixture, with no use of chlorinated solvents or other organic compounds. According to the *Encyclopedia of Chemical Technology* (Kirk-Othmer, John Wiley & Sons, 1982), soluble silicate

glasses are obtained in hearth regenerative furnaces by the reaction of quartz sand and sodium carbonate (soda ash) at temperatures greater than 1,100° Centigrade. Once the glass is produced in the furnace, it can be drawn and formed into solid lumps or dissolved into liquid form using rotary or pressure dissolvers. We talked with Ms. Marjorie L. Besemer, Senior Technical Services Representative for The PQ Corporation, a large sodium silicate manufacturer. Ms. Besemer stated that the only raw materials used in the manufacturing of sodium silicates are soda ash, silica sand, and water. She also stated that minimal mechanical devices are generally used in this process, and she is not aware of significant use of chlorinated solvents or other organic chemicals associated with sodium silicate manufacturing. The PQ Corporation operated a sodium silicate manufacturing facility in Berkeley from about 1911 until recently. According to Mr. Jim Olivier, Plant Manager for The PQ Corporation Berkeley facility, the only groundwater issue that they have encountered at the Berkeley facility has been elevated pH levels in groundwater, and no chlorinated hydrocarbons have been encountered in groundwater beneath The PQ Corporation facility.

The use of the project site by Liquid Sugars, Inc. has not involved significant use of any chlorinated solvents or other hydrocarbon compounds. The current Liquid Sugars, Inc. facility located on the project site comprises warehouse and office areas, laboratory, and numerous vertical silos and tanks related to the blending and packaging of various food-grade corn syrup and sugar products. The laboratory, which tests sugar and vegetable oil products, uses and generates wastes which include sulfuric acid, chloroform, acetic acid, sugars, and vegetable oil. Laboratory wastes are stored in small one to 55-gallon containers on a spill containment platform located in the warehouse area.

The project site yard area, which contains about 20 vertical product tanks, is covered with a concrete ground surface and contains an outer concrete berm around the above ground tank farm. Several catch basins in the yard divert rain water and potential spills to sumps located in the southeast and southwest corners of the yard area prior to discharge to the LSI main yard to the south across 66th street and, ultimately, to the LSI wastewater treatment area on the furthest south parcel prior to discharge to the sanitary sewer. The project site ASTs are accessed from east and west railspurs via a series of pumps and piping. The boiler room in the project site yard area contains a spill containment platform used to store five-gallon drums labeled "Boiler Water Treatment".

Site Area History

Several industrial sites and activities located in an expected upgradient (northeast to east) direction from the project site have operated in the past. These have included: (1) Railroad transportation activities on railroad tracks and railspurs located immediately east from the project site; (2) Various industrial activities conducted in facilities bordering the project site on the north; (3) The Fabco Automotive factory, located approximately 65 feet east from the project site; (4) The former Oliver Rubber facility, located approximately 70 feet southeast from the project site; and (5) The former Myers Drum Company facility, located approximately 180 feet east from the project site and stretching approximately 1,000 feet further east to San Pablo Avenue.

The railroad tracks located immediately east from the project site, currently owned by Union Pacific Railroad, are not shown on the 1911 Sanborn Map but are shown on the 1939 aerial photo. In the 1939 aerial photo, the west project site railspur is present, and the east project site railspur may have been present providing railroad access to the building (shown as a doughnut factory in 1950) immediately north from the project site yard before this north building was extended eastward to the railroad tracks. The primary activity associated with the railroad tracks in the site vicinity includes the on-loading and off-loading of raw materials and products from a wide variety of industrial sites located along the railroad tracks and associated railspurs in Berkeley and Emeryville. Thus, whereas long-haul, through-going railroad activities would not be expected to result in significant hazardous materials spills, the types of slow, bi-directional movements and railcar switchings associated with the materials transfer activities in the site vicinity would have a higher probability of resulting in unreported hazardous materials releases along the railroad tracks. During a recent visit to the project site, we noted several hazardous liquid chemical railcars being shuffled on the railroad tracks adjacent to the project site. In addition, we noted that surface soils east from the project site between the railroad tracks and the Fabco Automotive facility appear to be discolored, possibly due to surface spills from rail cars.

Bordering the project site on the north is an older industrial building occupied by George Martin Machining Company. While we were unable to access a detailed chemical inventory for this facility, it is possible that cutting oils or other solvents are currently used at this facility. On the 1950 and 1952 Sanborn Maps, a doughnut factory is shown immediately north from the project site yard area, and Bacon Vulcanizer Manufacturing Company is shown immediately west, north, and northeast from the project site building. The east portion of the Bacon Vulcanizer building, near the northeast corner of the project site building, is shown as a Machine Shop with a wooden floor. The west portion of the Bacon Vulcanizer building, near the northwest corner of the project site building, is shown with a concrete floor and includes a Smelting Room. On the 1969 Sanborn Map, the doughnut factory has expanded westward to include the entire currently-existing George Martin Machining building, and a brass and copper specialties factory is shown occupying the currently-existing New Logic International building, bordering the project site on the west.

According to Alameda County Health Agency files, Fabco Automotive, located approximately 65 feet east from the project site, began manufacturing truck components at the facility in 1919. Manufacturing processes generally include metal casing and welding, and chemicals used at the site include cutting oils, grease, machine tool coolant, iron and aluminum oxides, copper, silicon, and chromium. On the 1939 aerial photo, the Fabco Automotive facility extends westward only to the northern extension of Vallejo Street, approximately 150 feet east from the project site. On the 1946 aerial photo, the Fabco Automotive facility extends westward to the railroad tracks, as it currently exists.

The former Oliver Rubber facility, located approximately 70 feet southeast from the project site, appears to have been constructed in its current form sometime between 1939 and 1946. Alameda County Health Agency files list the use of zinc oxide, aromatic oils, naphthenic oil, and motor oil at the site. Nonhalogenated solvents were apparently stored in underground storage tanks (USTs)

located in 65th Street, several hundred feet southeast from the project site. In addition, a Stormwater Pollution Control Plan indicates the storage of "Aromatic Oil" in a concrete-lined vault located on the west side of the Oliver Rubber yard area, approximately 140 feet east-southeast from the project site. Data from three shallow groundwater wells located on 65th Street, approximately 350 feet south from the project site indicated a southwesterly groundwater flow direction at the Oliver Rubber site. A representative groundwater flow direction map from the Oliver Rubber site is included in Appendix C.

According to DTSC files, the Myers Drum business began in 1917, originally as a cooperage (wooden barrel) operation and transitioning to steel drum cleaning and reconditioning in about 1942. In 1991, a Remedial Action Order was issued by the DTSC for the Myers Drum Company site. Subsequent soil and groundwater investigations included the installation and sampling of 13 groundwater monitoring wells at the site. Soil and groundwater analytical results indicated hydrocarbon contamination of soil and groundwater on the east half of the property, with some low levels of chlorinated solvents, particularly TCE, detected in downgradient (west) wells. Volatile organic compounds encountered at the Myers Drum site have included: (1) Acetone in the 1,000 part-per-billion (ppb) to 10,000 ppb range; (2) Toluene, Xylenes, PCE, TCE, 4-Methyl-2-Pentanone, 1,1-DCA, cis-1,2-DCE, and Vinyl Chloride in the 100 ppb to 1,000 ppb range; and (3) Chloroethane and 1,2-DCA in the 10 ppb to 100 ppb range. Based on results of site investigations, the DTSC entered into an agreement with the responsible parties for Myers Drum Company requiring Myers Drum to conduct extensive soil and groundwater investigation and remediation as part of site closure. It is not clear whether potential impacts to nearby utilities have been investigated. Groundwater flow direction at this site, as summarized on maps contained in Appendix C, is towards the west.

Underground utility trenches which are visible in 66th Street adjacent to the project site include: (1) A water main apparently running under the north 66th Street sidewalk; (2) An East Bay Municipal Utility District sewer line apparently running along the north side of 66th Street; and (3) Large piping, possibly stormwater piping, apparently running down the middle of 66th Street.

PROJECT APPROACH

Based on results summarized above, it seems unlikely that past and current uses of the project site by Diamond Alkali and Liquid Sugars resulted in the chlorinated hydrocarbon impacts to groundwater encountered during recent sampling conducted by Geomatrix. Furthermore, review of historical records by Gribi Associates, as summarized above, have indicated several potential upgradient sources for these releases. These potential upgradient sources include: (1) The past use of the north bordering property prior to the 1970s by Bacon Vulcanizer, which apparently included a smelter near the northwest corner of the project site building and a machine shop with wooden floor adjacent to the northeast corner of the project site building; (2) Railroad operations immediately east from the project site, where materials transfer activities prevailed, rather than long-haul, through-going rail activities, and where soil discoloration can be readily observed; (3) The past

storage and use of "aromatic oils" at the Oliver Rubber facility, located southeast from the project site across 66th Street; and (4) The past operation of a drum reconditioning facility by Myers Drum Company east from the project site, where all of the chlorinated hydrocarbon compounds detected beneath the project site by Geomatrix have also been encountered.

In order to provide additional assessment regarding potential offsite sources for the chlorinated hydrocarbons detected in groundwater beneath the site, Gribi Associates recommends conducting a soil and groundwater investigation both to augment the previous Geomatrix groundwater data and to characterize impacts to soils beneath the project site. This investigation will include the drilling and sampling of approximately ten soil borings on the project site and two soil borings on the north 66th Street sidewalk immediately east from the project site. Soil samples will be collected at shallow depths from each boring to assess potential near-surface soil impacts, and grab groundwater samples will be collected from selected borings as needed to augment the Geomatrix groundwater data. As part of this investigation, we recommend conducting a risk assessment to determine whether or not residual chlorinated hydrocarbons remaining at the project site pose a significant risk to commercial receptors at the site. If results of these activities indicate that the chlorinated hydrocarbons present on the project site originated from offsite and that they pose no significant risk for future property users, then it is our understanding that the RWQCB will issue a "no further action" letter for the project site.

WORKPLAN ELEMENTS

The proposed soil and groundwater investigation will include the following workplan elements. All activities will be conducted in accordance with applicable local, State, and Federal guidelines and statutes.

Prefield Activities

Prior to implementing this workplan, written approval will be obtained from the RWQCB. Also, a soil boring installation permit will be obtained from Alameda Department of Public Works. In addition, proposed boring locations will be marked with white paint, and Underground Services Alert (USA) will be notified at least 48 hours prior to drilling. Also, a private underground utility locator will clear proposed boring locations and assist in mapping underground utilities on the site and in 66th street adjacent to the site. Prior to initiating drilling activities, a Site Safety Plan will be prepared, and a tailgate safety meeting will be conducted with all site workers.

Location of Borings

A total of 12 soil borings are proposed, with 10 borings to be located on the project site and two borings on the adjacent north 66th Street sidewalk (see Figure 4). Two borings each will be located close to the SB-2, SB-3, and B-4 Geomatrix borings. The purpose of these borings will be primarily to investigate potential impacts to near-surface soils in these "hot spot" areas. Four additional soil borings will be located on the project site to provide additional groundwater data

beneath the site. Two borings will be located in the 66th Street sidewalk immediately east from the Geomatrix B-4 boring to investigate potential easterly offsite sources for the chlorinated hydrocarbons identified on the project site.

Drilling and Sampling of Investigative Soil Borings

The 12 investigative soil borings will be drilled to depths ranging from ten feet to 20 feet, depending on whether a grab groundwater sample is required from a particular boring. The 12 borings will be drilled and sampled using Geoprobe hydraulically-driven soil coring equipment. This coring system allows for the retrieval of almost continuous soil cores, which are contained in a clear plastic acetate tube, nested inside a stainless steel core barrel. After the core barrel is brought to the surface and exposed, the core will be examined, logged, and field screened for hydrocarbons by a qualified Gribi Associates geologist using sight, smell, and photoionization detector (PID). Following completion, the 12 investigative borings will be grouted to match existing grade using a cement/sand slurry. Soil cuttings generated during this investigation will be stored onsite in sealed DOT-approved containers.

Subsurface soils will be sampled at approximately three feet and six feet in depth from those borings where potential surface spills are being investigated. After the sample and core barrel are raised to the surface, each sample was collected as follows: (1) The filled acetate tube will be exposed for visual examination; (2) The selected sample interval will be collected by cutting the sample and acetate plastic tubing to the desired length (typically about six inches); (3) The ends of the selected sample will be quickly wrapped with either Teflon sheets or aluminum foil, capped with plastic end caps, labeled and wrapped tightly with tape; and (4) The sealed soil sample will be labeled and immediately placed in cold storage for transport to the analytical laboratory under formal chain-of-custody. All coring and sampling equipment will be thoroughly cleaned and decontaminated between each sample collection by triple rinsing first with water, then with dilute tri-sodium phosphate solution, and finally with distilled water. Cleaning rinseate will be contained onsite in DOT-approved containers pending laboratory results.

Following completion of soil sampling activities, 3/4 inch diameter Schedule 40 PVC well casing will be placed in those borings where grab groundwater samples are to be collected. If possible, two to three boring volumes of groundwater will then be purged from each well casing using a clean small-diameter stainless steel bailer. Grab groundwater samples will then be collected from each of the borings using the clean stainless steel bailer as follows: (1) Laboratory-supplied containers will be completely filled directly from the bailer with a minimum of agitation; (2) After making sure that no air bubbles are present, each container will then be tightly sealed with a Teflon-lined septum; and (3) Each container will then be labeled and placed in cold storage for transport to the analytical laboratory under formal chain-of-custody. All sampling equipment will be thoroughly cleaned and decontaminated between each sample collection by triple rinsing as described above.

Laboratory Analysis of Soil and Water Samples

Approximately 18 soil samples and 14 grab groundwater samples (to include one duplicate sample and one equipment blank sample) will be analyzed for the following parameters:

USEPA 8260 Halogenated Volatile Organic Compounds

All analyses will be conducted by a California-certified analytical laboratory with one-week turn around on lab results.

Conduct RBCA Assessment

Risk-Based Corrective Action (RBCA) modeling will be conducted for the project site in accordance with American Society for Testing and Materials (ASTM) *Standard Guide to Risk-Based Corrective Action at Petroleum Release Sites*, (E 1739-95). Where site specific data do not exist, the RBCA model will incorporate realistic, conservative assumptions. The goal of the RBCA assessment will be to establish Site Specific Target Levels (SSTLs) for each contaminant of concern for each complete exposure pathway at the site.

Preparation of Summary Report

A report of findings will be prepared for submittal to the RWQCB. This report will describe all investigative and risk assessment methods and results, and will include tabulated laboratory analytical results, as well as laboratory reports and chain-of-custody records.

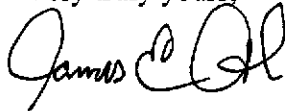
PROJECT SCHEDULE

Subject to your approval, Gribi Associates has tentatively scheduled the soil boring field activities for Wednesday and Thursday, April 28 and 29, 1999. Based on our understanding of the project, we expect to complete the proposed workplan activities within three to four weeks following workplan approval.

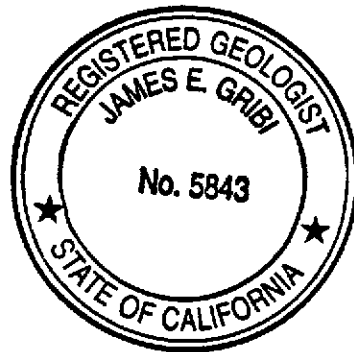
San Francisco Bay Regional
Water Quality Control Board
April 22, 1999
Page 9

We appreciate the opportunity to present this workplan for your review. Please contact us if you have questions or require additional information.

Very truly yours,



James E. Gribi
Registered Geologist
California No. 5843



JEG:ct
Enclosure

c George Lamberth, Ron Mooney, Liquid Sugars, Inc.

File: GA-32/Isi-nsbi.wpl

Attachments:

Figure 1 Site Vicinity Map
Figure 2 Site Area Map
Figure 3 Site Plan
Figure 4 Proposed Boring Locations

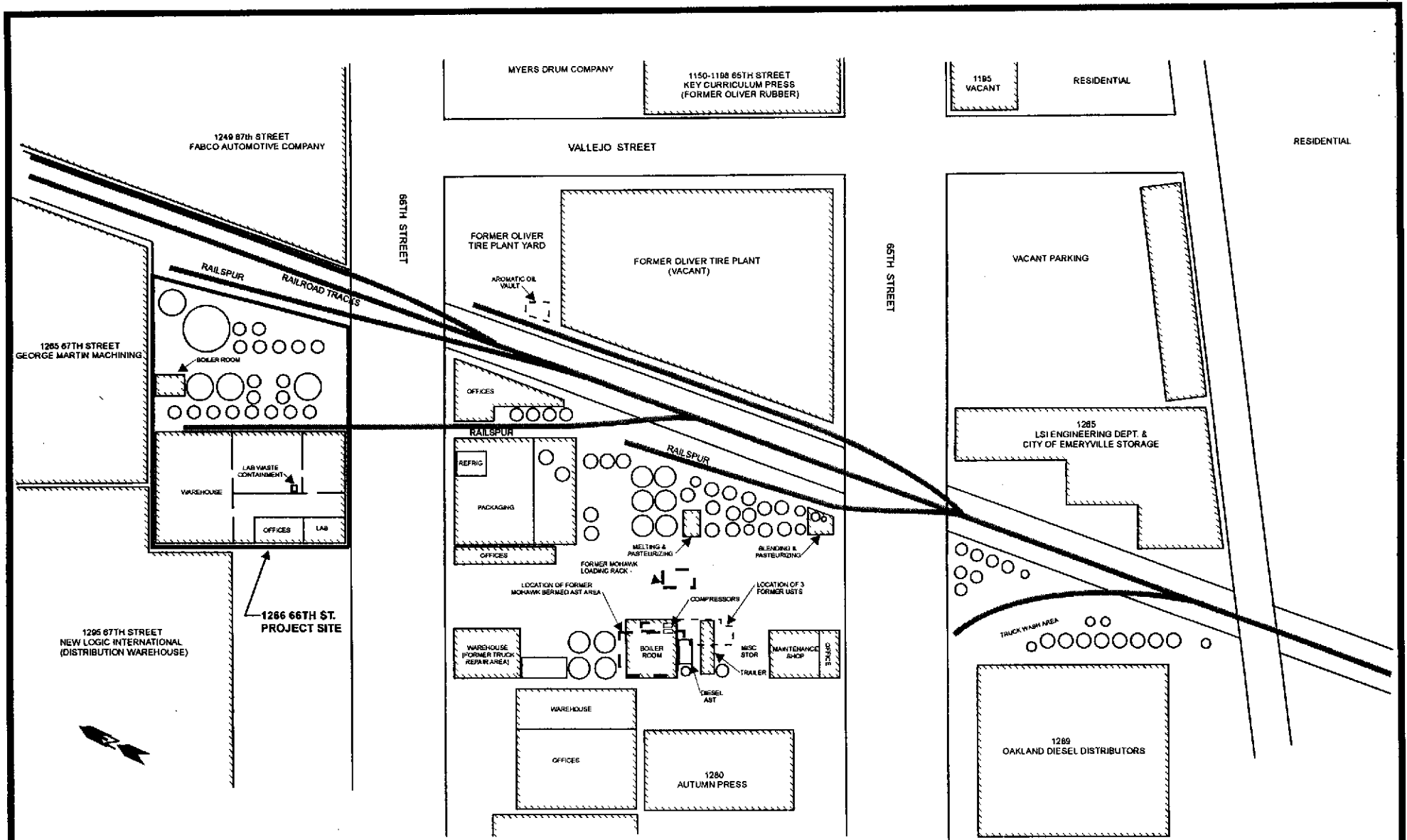
Appendix A Summary of Geomatrix Sampling Results
Appendix B Sanborn Fire Insurance Maps
Appendix C Groundwater Flow Direction Maps From Oliver Rubber
And Myers Drum Sites



TOPOGRAPHY FROM USGS OAKLAND, WEST, CALIFORNIA
7.5-MINUTE QUADRANGLE MAPS, (TOPOI 1997).



DESIGNED BY:	CHECKED BY:	SITE VICINITY MAP	DATE: 11/09/98	FIGURE: 1
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PROJECT NO: 149-01-01				



NOTES

- - VERTICAL PRODUCT SILO/TANK
- - RAILROAD TRACKS OR RAILSPUR

ALL LSI PARCELS ARE PAVED (90+% CONCRETE)

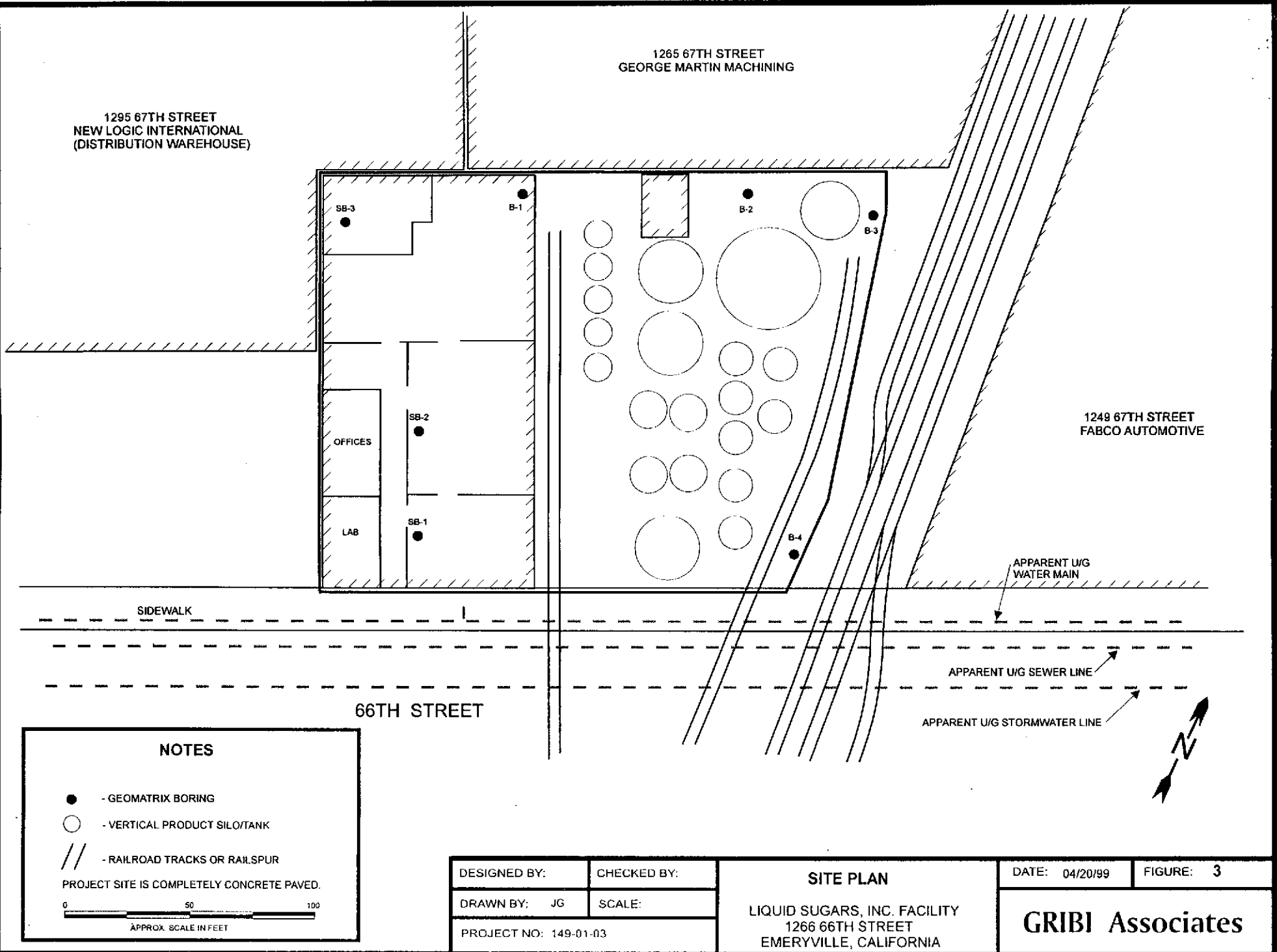
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DESIGNED BY:	CHECKED BY:
DRAWN BY: JG	SCALE:
PROJECT NO: 149-01-03	

SITE AREA MAP

LIQUID SUGARS, INC. FACILITY
 EMERYVILLE, CALIFORNIA

DATE: 04/20/99	FIGURE: 2
GRIBI Associates	



1295 67TH STREET
NEW LOGIC INTERNATIONAL
(DISTRIBUTION WAREHOUSE)

1265 67TH STREET
GEORGE MARTIN MACHINING

1249 67TH STREET
FABCO AUTOMOTIVE

SB-3

B-1

B-2

B-3

OFFICES

SB-2

LAB

SB-1

B-4

APPARENT U/G
WATER MAIN

SIDEWALK

APPARENT U/G SEWER LINE

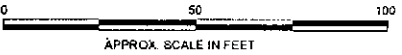
66TH STREET

APPARENT U/G STORMWATER LINE

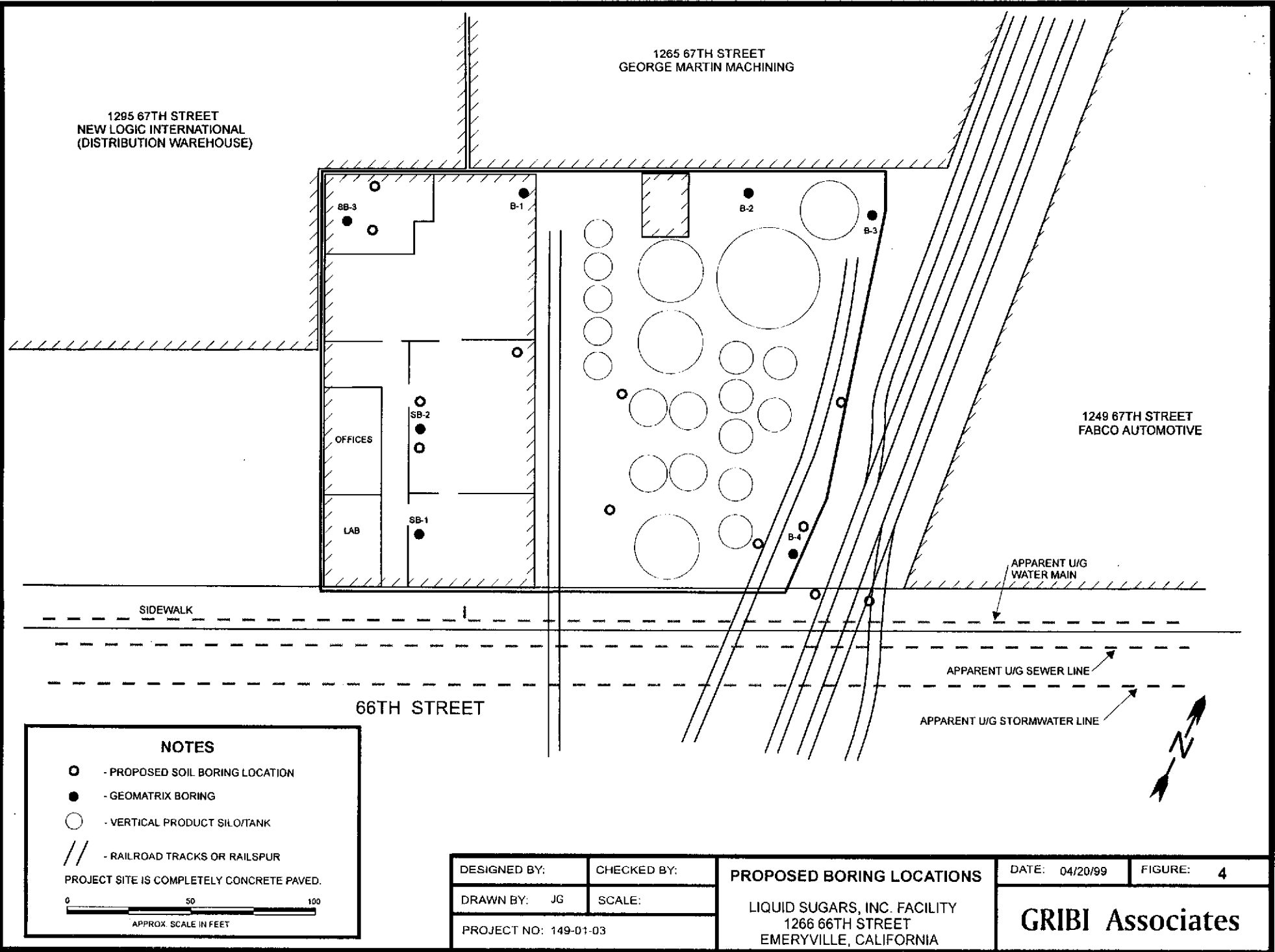
NOTES

- - GEOMATRIX BORING
- - VERTICAL PRODUCT SILO/TANK
- // - RAILROAD TRACKS OR RAILSPUR

PROJECT SITE IS COMPLETELY CONCRETE PAVED.



DESIGNED BY:	CHECKED BY:	SITE PLAN	DATE: 04/20/99	FIGURE: 3
DRAWN BY: JG	SCALE:		GRIBI Associates	
PROJECT NO: 149-01-03		LIQUID SUGARS, INC. FACILITY 1266 66TH STREET EMERYVILLE, CALIFORNIA		



1295 67TH STREET
NEW LOGIC INTERNATIONAL
(DISTRIBUTION WAREHOUSE)

1265 67TH STREET
GEORGE MARTIN MACHINING

1249 67TH STREET
FABCO AUTOMOTIVE

OFFICES

LAB

SIDEWALK

66TH STREET

APPARENT U/G
WATER MAIN

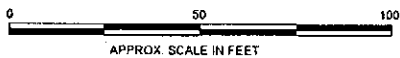
APPARENT U/G SEWER LINE

APPARENT U/G STORMWATER LINE

NOTES

- - PROPOSED SOIL BORING LOCATION
- - GEOMATRIX BORING
- - VERTICAL PRODUCT SILOTANK
- // - RAILROAD TRACKS OR RAILSPUR

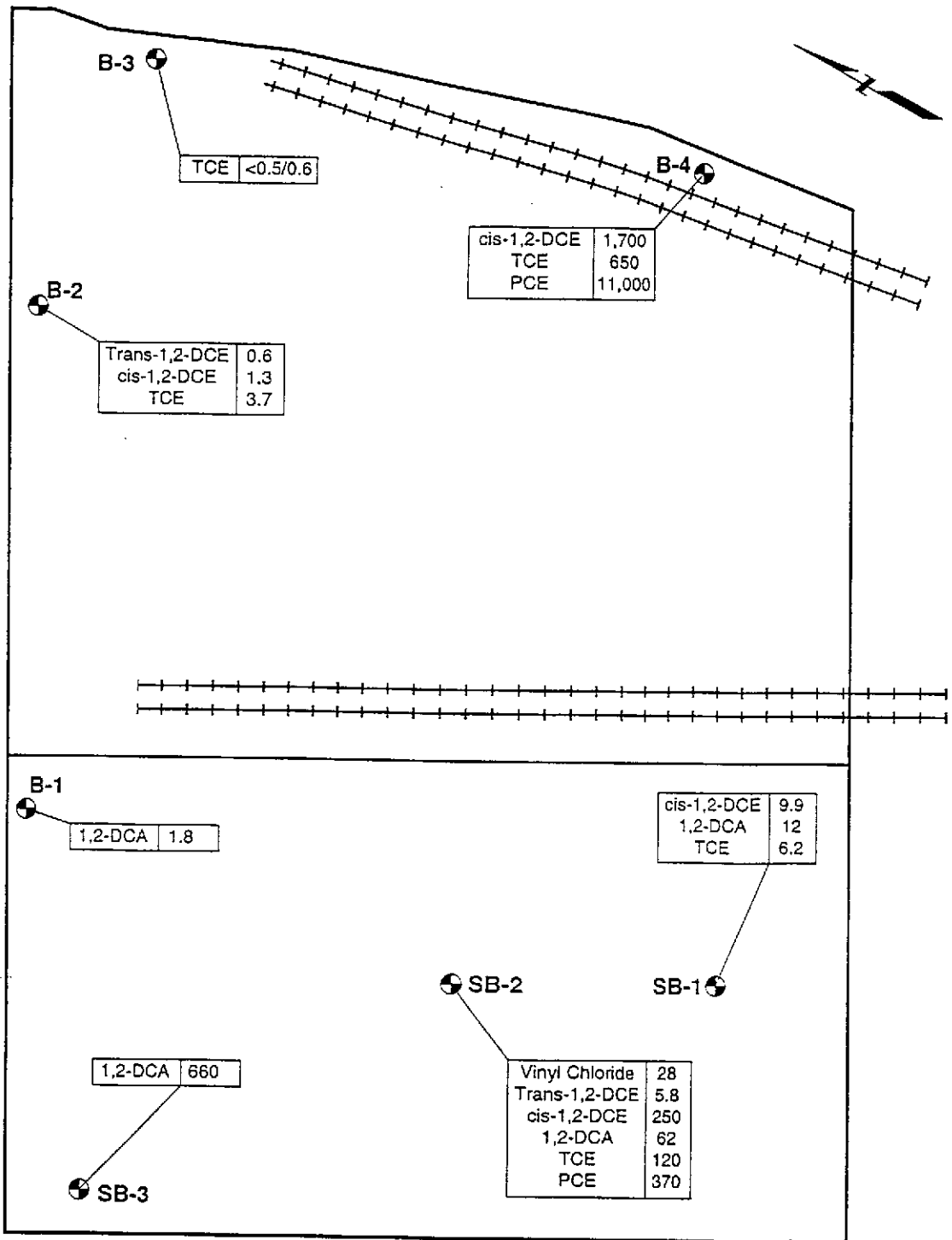
PROJECT SITE IS COMPLETELY CONCRETE PAVED.



DESIGNED BY:	CHECKED BY:	PROPOSED BORING LOCATIONS	DATE: 04/20/99	FIGURE: 4
DRAWN BY: JG	SCALE:		GRIBI Associates LIQUID SUGARS, INC. FACILITY 1266 66TH STREET EMERYVILLE, CALIFORNIA	
PROJECT NO: 149-01-03				

APPENDIX A

SUMMARY OF GEOMATRIX SAMPLING RESULTS



Notes:

- 1) SB-1 through SB-3 analyzed using EPA Method 8260. B-1 through B-4 analyzed using EPA Method 8260A. All samples analyzed by Curtin and Tomkins of Berkeley, California.
- 2) Only detected analytes are shown.
- 3) Abbreviations: TCE = Trichloroethene; PCE = Tetrachloroethene; DCE = Dichloroethene; DCA = Dichloroethane.
- 4) Concentrations in micrograms per liter.

0 30 Feet

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GRAB GROUNDWATER ANALYTICAL RESULTS
1266 66th Street
Emeryville, California

Project No.
5228

Figure
1

TABLE 1
GRAB GROUNDWATER SAMPLE RESULTS¹
 1266 66th Street
 Emeryville, California

Concentrations in micrograms per liter (µg/l)

Boring ID	Vinyl Chloride	Trans-1,2-DCE	Cis-1,2-DCE	1,2-DCA	TCE	PCE
SB-1	<10	<5	9.9	12	6.2	<5
SB-2	28	5.8	250	62	120	370
SB-3	<50	<25	<25	660	<25	<25
B-1	<1	<0.5	<0.5	1.8	<0.5	<0.5
B-2	<1	0.6	1.3	<0.5	3.7	<0.5
B-3 ²	<1/<1	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<0.5/0.6	<0.5/<0.5
B-4	<170	<83	1,700	<83	650	11,000

¹ Samples collected by Geomatrix Consultants, Inc. and analyzed by Curtis and Tomkins, Ltd., of Berkeley, California using EPA Methods 8260 or 8260A.

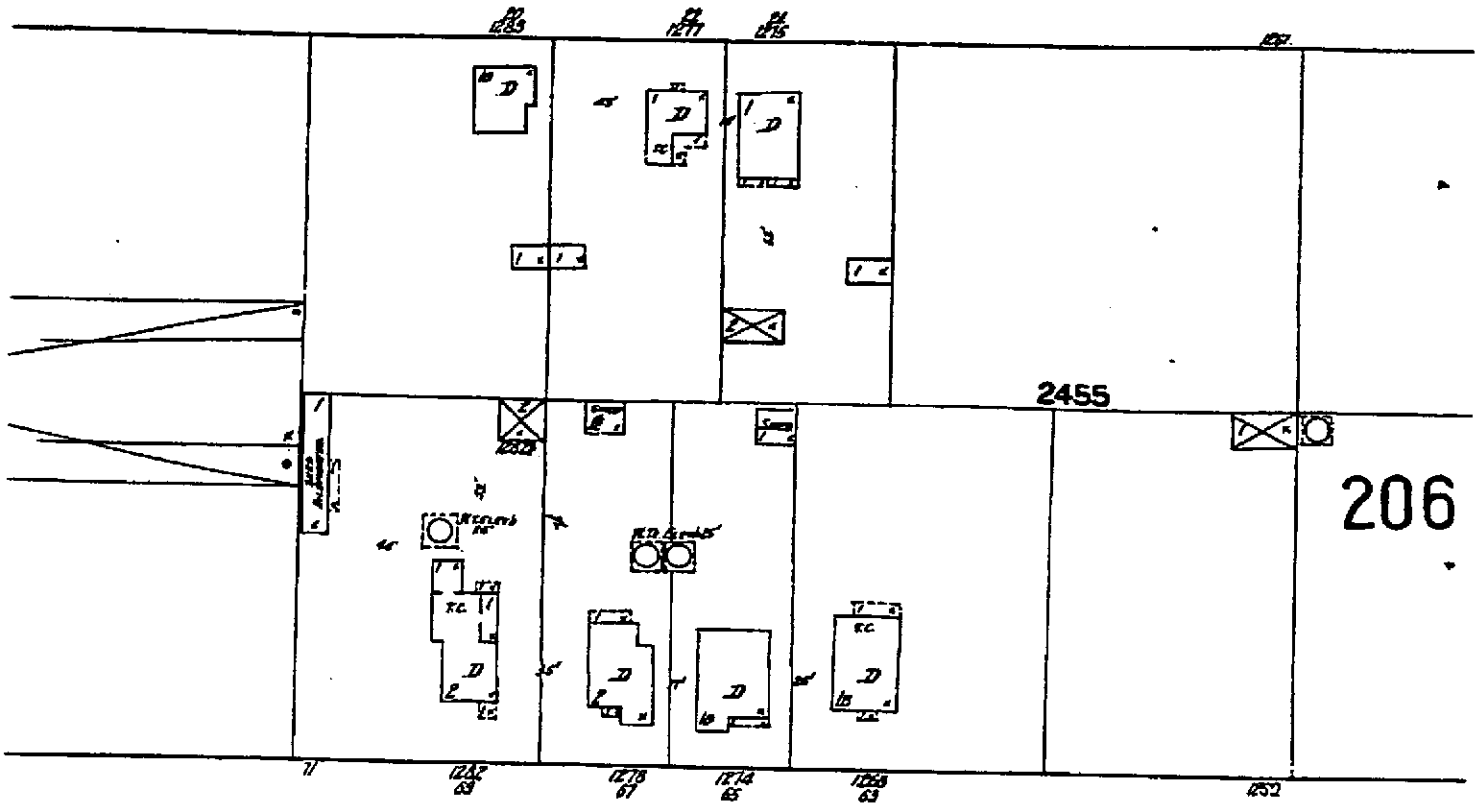
² / indicates duplicate sample results.

APPENDIX B

SANBORN FIRE INSURANCE MAPS

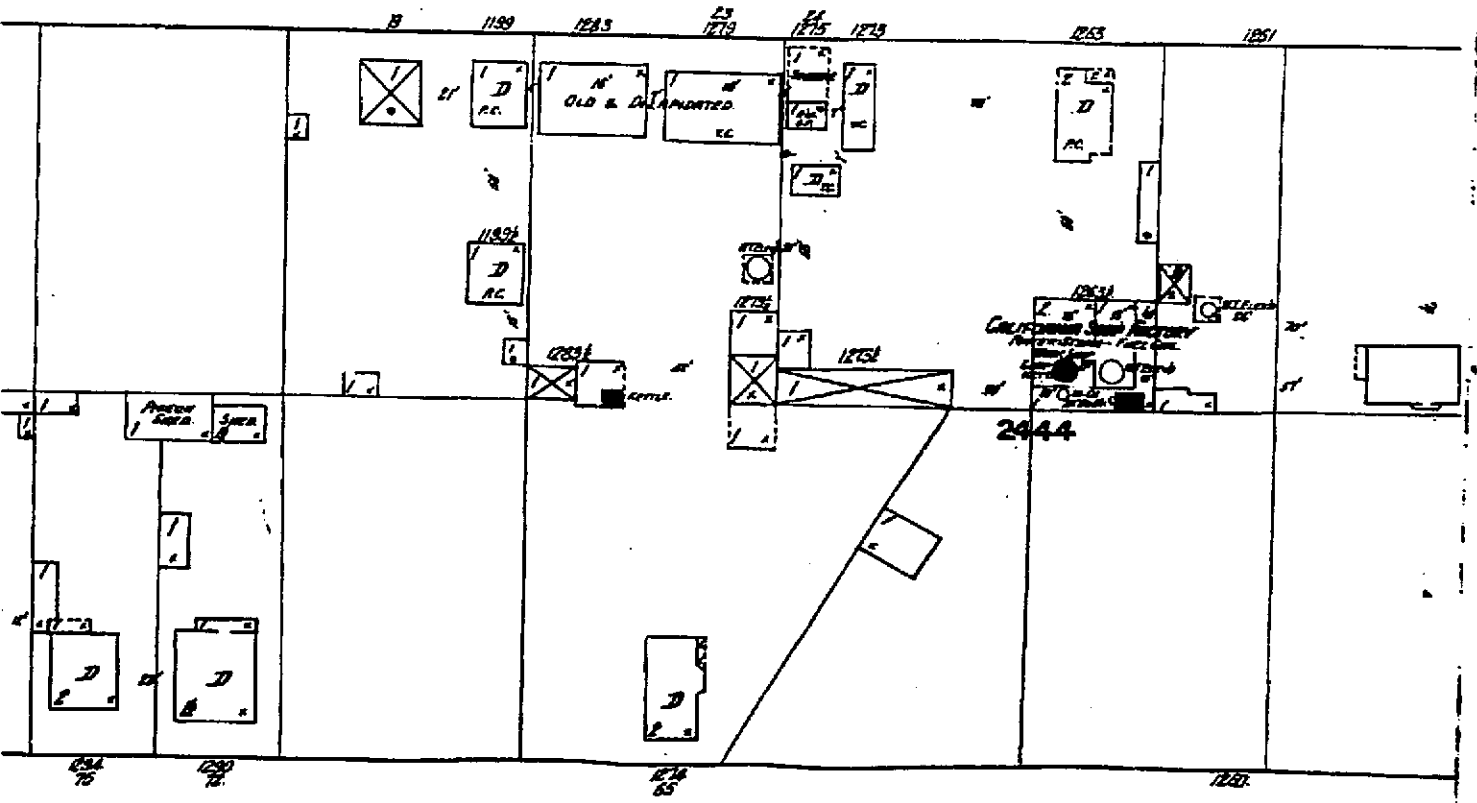
67TH ST.

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66TH ST.

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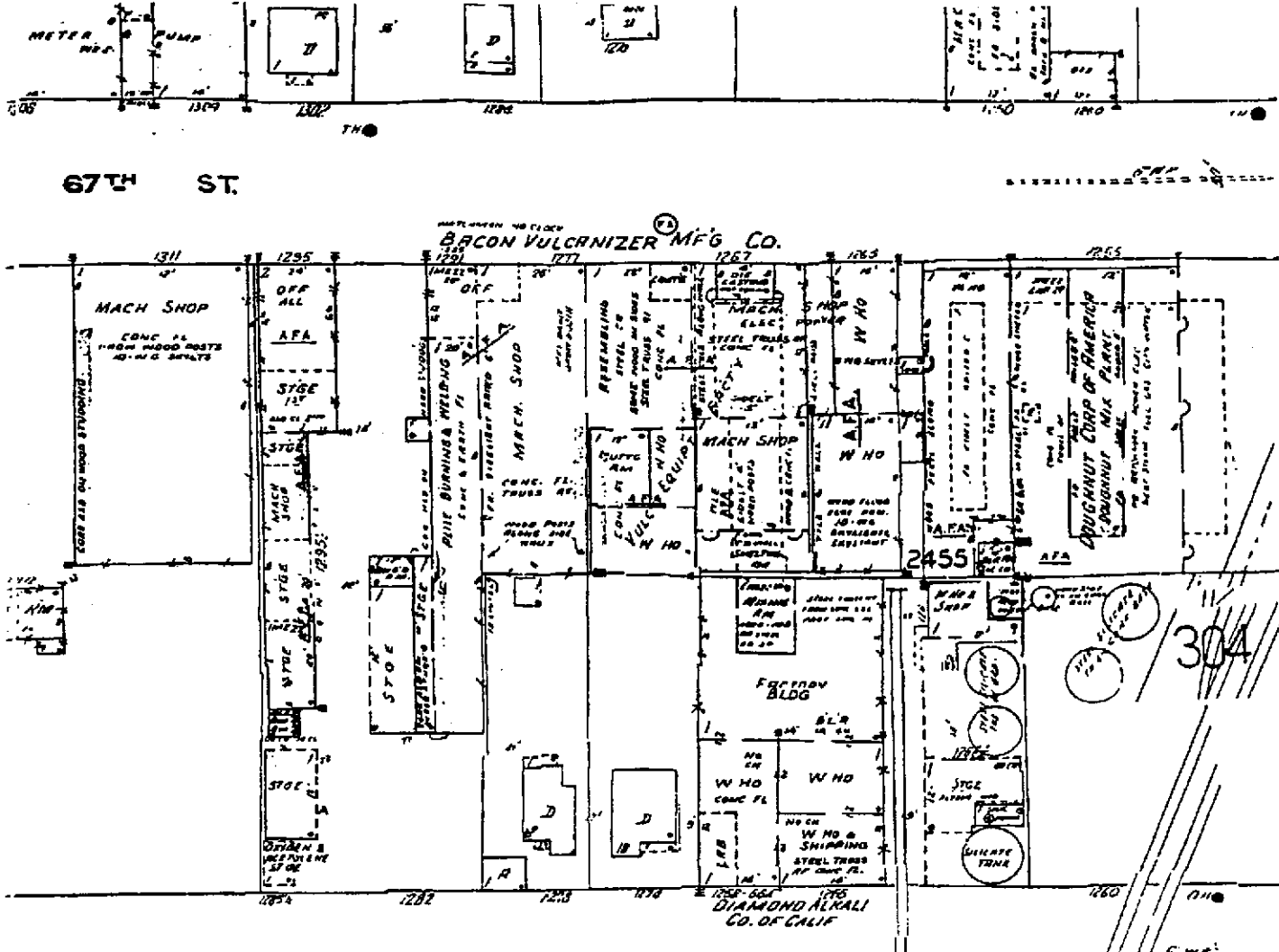


SANBORN MAP
1911
 LIQUID SUGARS, INC.
 EMERYVILLE, CALIFORNIA

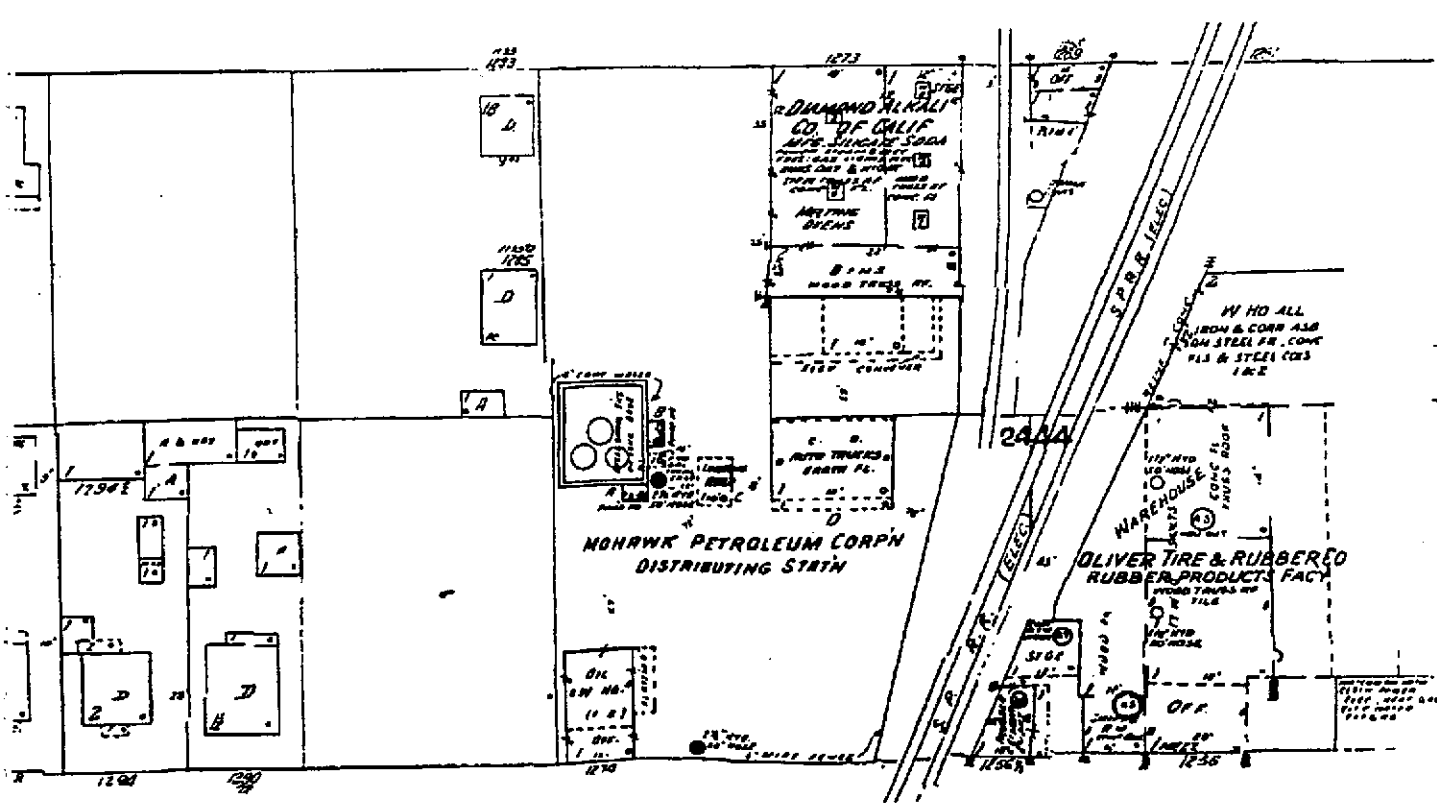
GRIBI ASSOCIATES



67TH ST.

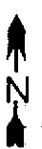


66TH ST.

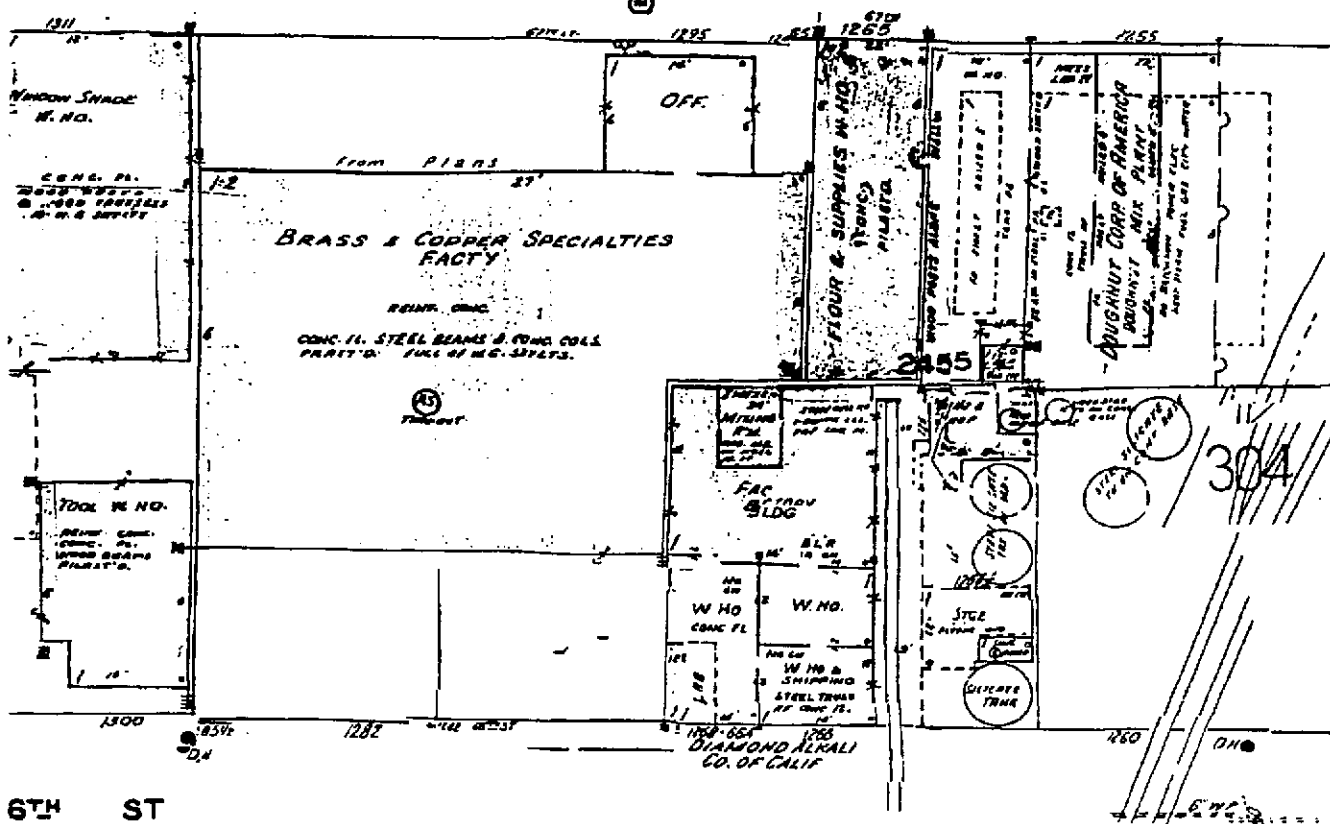


SANBORN MAP
1952
 LIQUID SUGARS, INC.
 EMERYVILLE, CALIFORNIA

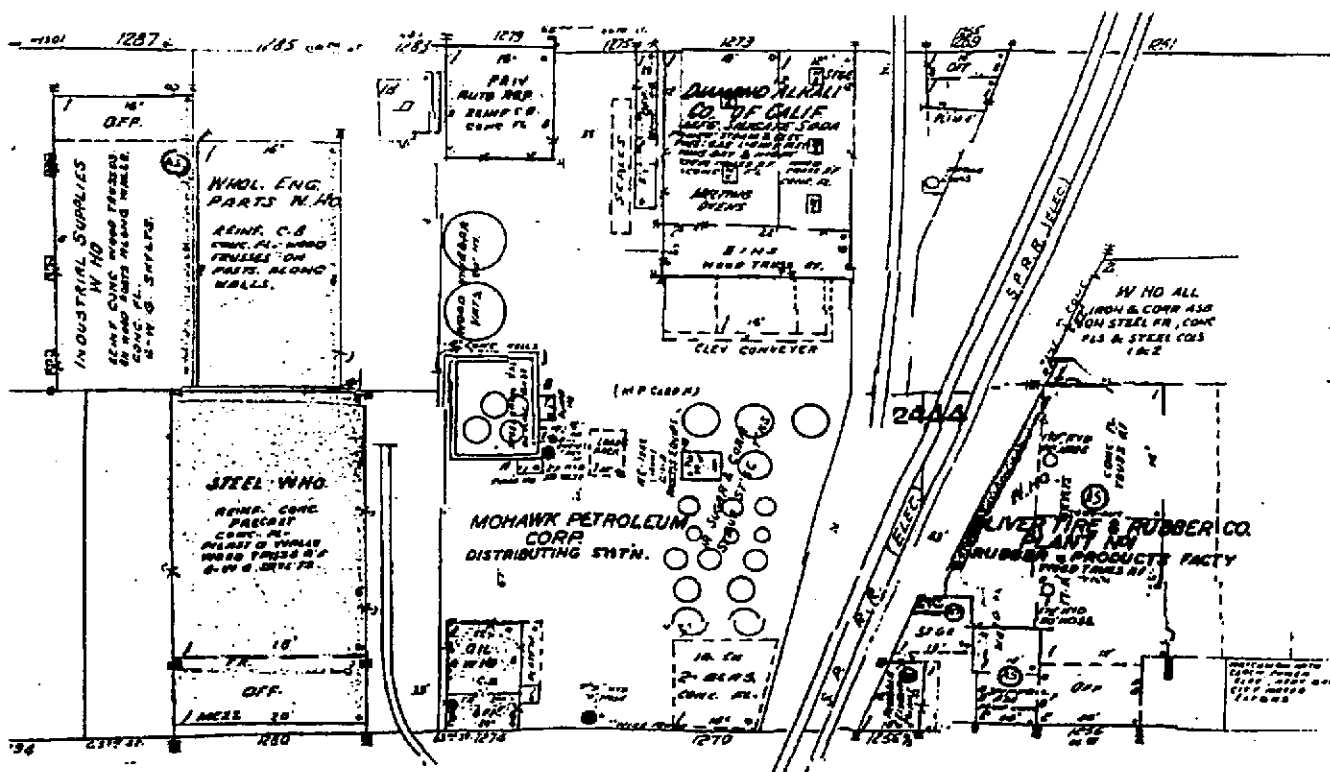
GRIBI ASSOCIATES



7TH ST.



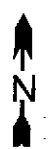
6TH ST.



5TH ST.

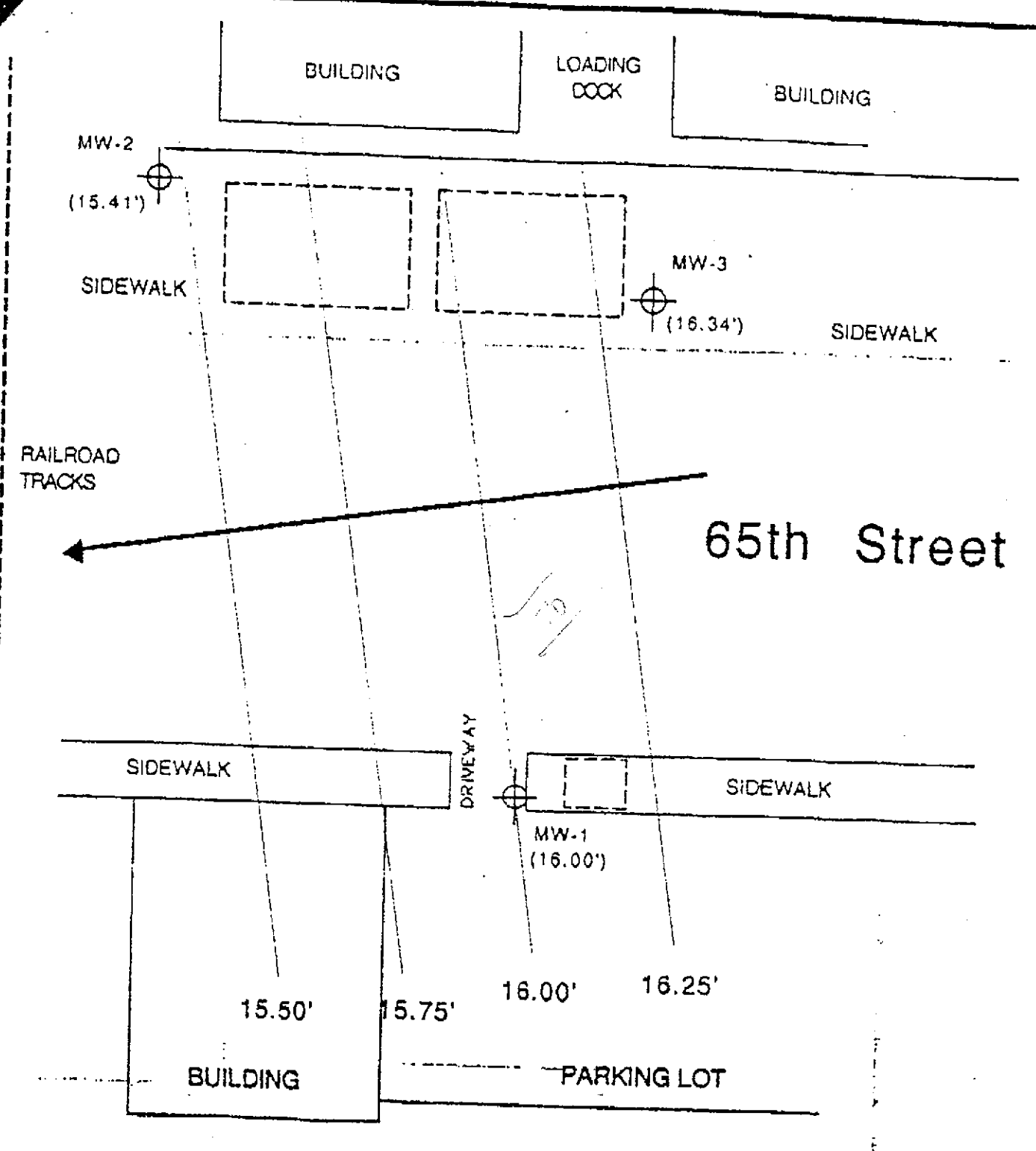
SANBORN MAP
1969
 LIQUID SUGARS, INC.
 EMERYVILLE, CALIFORNIA

GRIBI ASSOCIATES





APPENDIX C

**GROUNDWATER FLOW DIRECTION MAPS
FROM OLIVER RUBBER AND MYERS DRUM SITES**



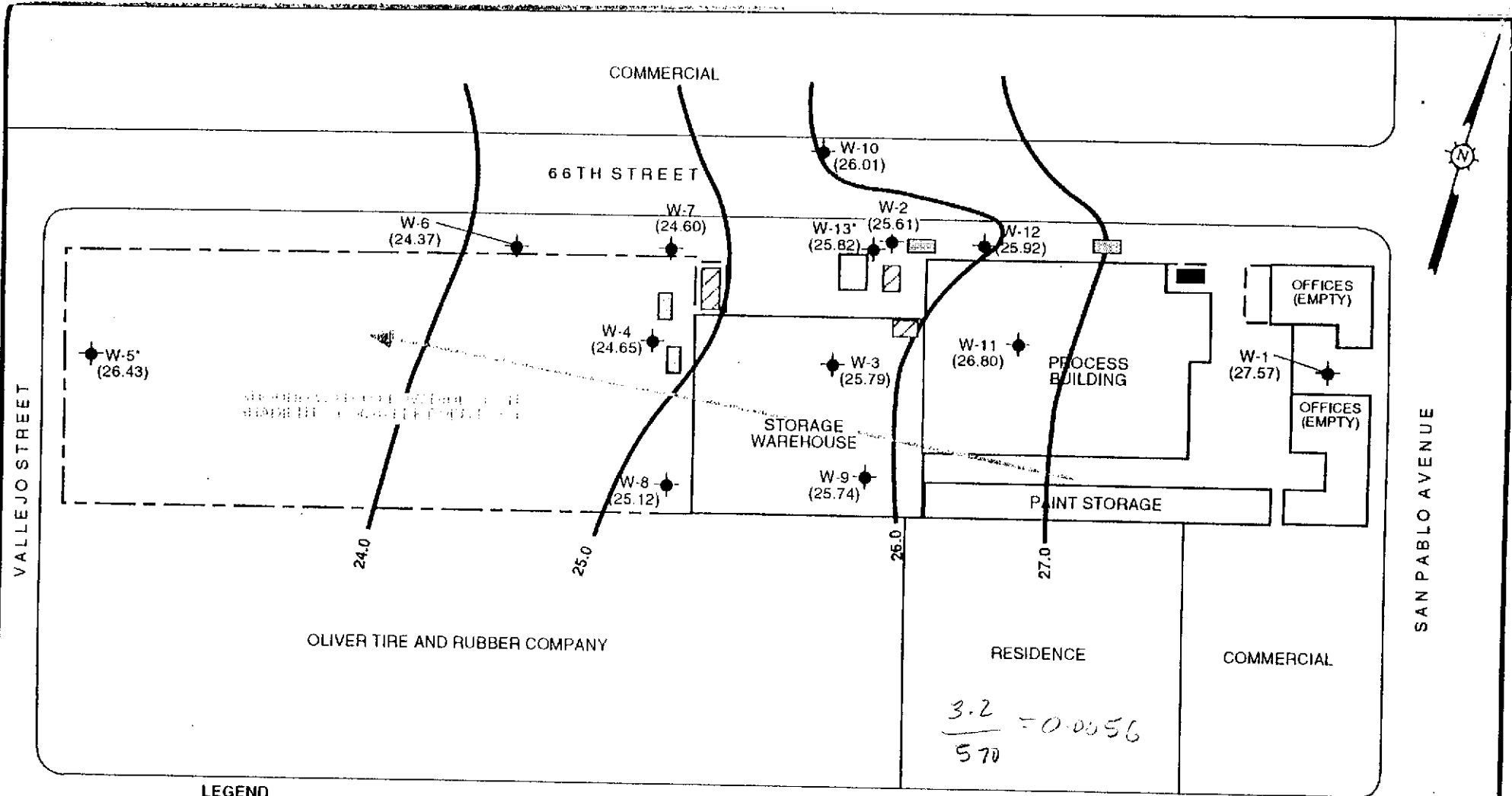
LEGEND

-  MW-1
 Monitoring Well with groundwater depth in feet above mean sea level
-  Groundwater Gradient direction

0 ft.  20 ft.
SCALE

GROUNDWATER GRADIENT
MAP (1/18/93)
 Oliver Rubber
 1200 65th Street
 Emeryville, California
 Aqua Science Engineers | Figure 3

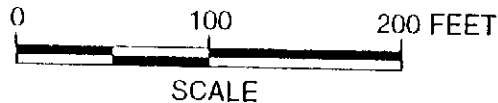




LEGEND

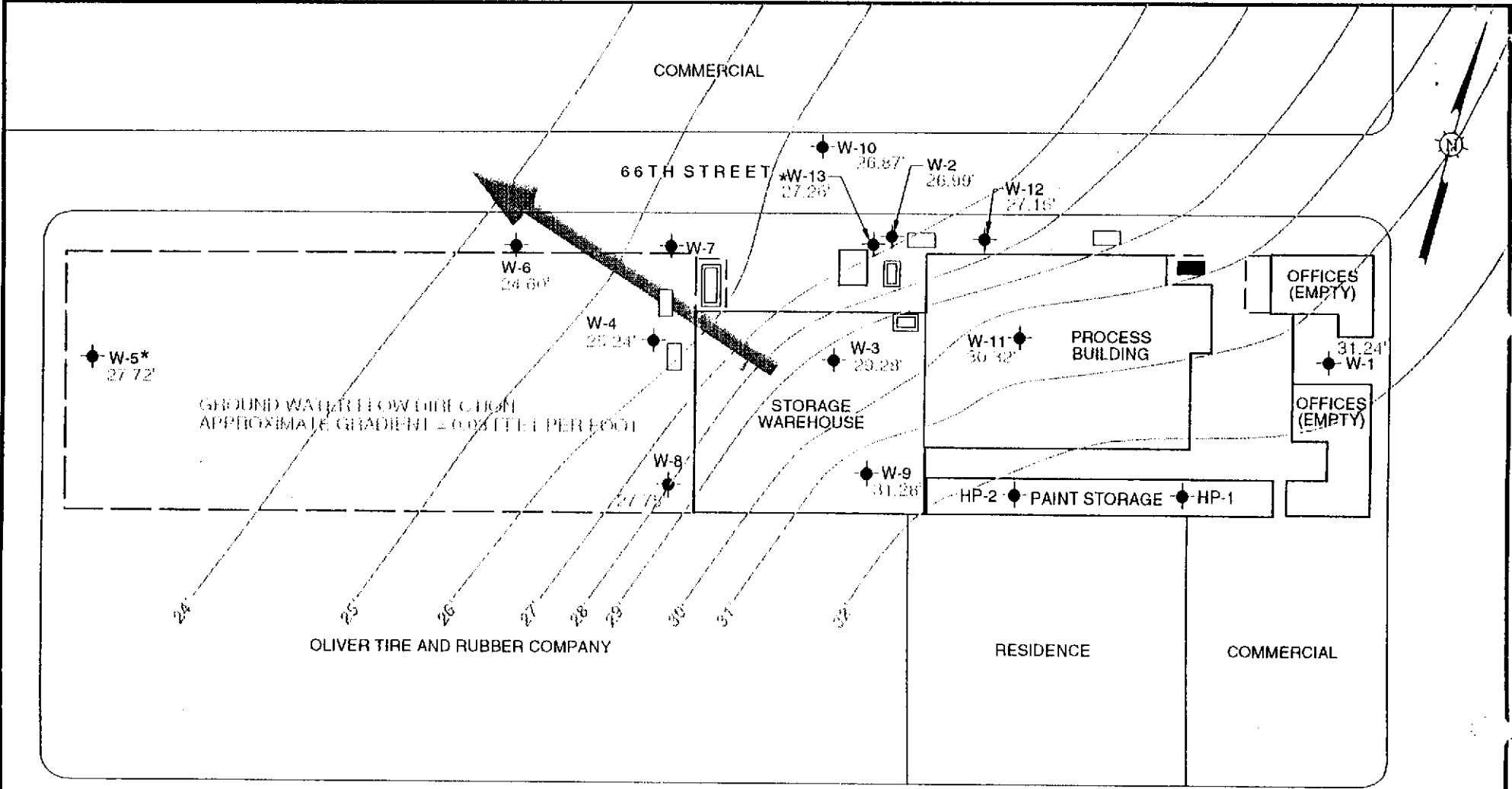
- PROPERTY BOUNDARY (FENCE LINE)
- BUILDING
- ABOVE GROUND STORAGE TANK
- UNDERGROUND STORAGE TANK
- PROCESS WATER SUMP
- MONITORING WELL LOCATION WITH GROUND WATER ELEVATION MEASURED ON 10/27/95
- ESTIMATED GROUND WATER CONTOUR WITH ELEVATION

65TH STREET



W-5 AND W-13 ARE LOCATED IN AN INFERED PERCHED GROUND WATER ZONE; GROUND WATER ELEVATION DATA NOT PLOTTED.

FIGURE 3
GROUND WATER CONTOUR MAP
OCTOBER 1995
 MYERS CONTAINER CORPORATION
 6549 SAN PABLO AVENUE
 OAKLAND, CALIFORNIA
ENVIRONMENTAL SOLUTIONS, INC.



LEGEND

- PROPERTY BOUNDARY (FENCE LINE)
- BUILDING
- ABOVE GROUND STORAGE TANK
- UNDERGROUND STORAGE TANK
- PROCESS WATER SUMP
- MONITORING WELL LOCATION

65TH STREET

W-5 AND W-13 ARE LOCATED IN AN INFERRED PERCHED GROUND WATER ZONE, THEIR GROUND WATER DATA ARE NOT INCLUDED IN THE ELEVATION CONTOURS.

0 70 140 FEET
APPROXIMATE SCALE

**GROUND WATER CONTOUR MAP
DECEMBER 1997**

MYERS CONTAINER CORPORATION
6549 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

TRC	FIGURE 3
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LIQUID SUGARS, INC.

July 7, 1999

Ms. Loretta K. Barasamian
Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

RE: SLIC No. 01S0523 (DCL)

Dear Ms. Barsamian:

I am in receipt of your letter addressed to Ron Mooney of Liquid Sugars, Inc. dated May 25, 1999.

While we are currently not disputing your on-site investigation regarding the revelation of chlorinated solvents, the conclusion in your May 25, 1999 correspondence concerning contamination may be premature as to the threatening nature of the chlorinated solvents.

Nonetheless, we are agreeing to the acknowledgment letter enclosed herein.

If you have any further questions, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in black ink, appearing to read 'George Lamberth', with a long horizontal line extending to the right.

George Lamberth
President & CEO
Liquid Sugar, Inc.

Enclosure (1)

/jm

Loretta K. Barsamian
Executive Officer
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, #1400
Oakland, CA 94612

ATTN: Derek Lee

Dear Ms. Barsamian:

I am in receipt of your letter dated July 7, 1999 concerning cost reimbursement for Regional Board staff costs involved with oversight of the investigation and cleanup efforts at the property located at 1266 66th Street, Emeryville, California.

I, George Lamberth acknowledge that I have received and read a copy of the *Reimbursement Process for Regulatory Oversight*, and that I understand the reimbursement process and billing procedures as explained in the letter. Our company acknowledges and agrees to participate in the cost recovery program and pay all subsequent billings in accordance with the terms in your letter and its attachments. I also understand that signing this form does not constitute any admission of liability, but rather only an intent to pay for costs associated with oversight. Billings for payment of oversight costs should be mailed to the following individual and address:

BILLING CONTACT George Lamberth

BILLING ADDRESS P. O. Box 96

Oakland, CA 94604-0096

Date: 7/7/99

Signature 

GEORGE LAMBERTH
President & CEO
Liquid Sugars, Inc.

Attachment 1
Acknowledgement Letter