SITE CONTAMINANT CHARACTERIZATION HISTORY AT THE FREMONT, CALIFORNIA SITE OF 6000 S CORPORATION

Prepared for:

City of Fremont
Bureau of Fire Prevention and Hazardous Materials

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Revised February 1, 1988

Prepared by:

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7126.W1

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1. SITE HISTORY AND EXISTING DEVELOPMENT

EXISTING USE OF SITE

The subject site is located in the City of Fremont southwest of Interstate 880, east of Stevenson Boulevard and directly southwest of Albrae Avenue (see Figure A.1). Approximately 75 percent of the site is developed. The remaining 25 percent is located southeast of the Home Depot and former Raychem building. This undeveloped portion of the site presently has stockpiles of both foundry sand and apparent metal free dirt.

HISTORIC DEVELOPMENT OF SITE

The site was developed in 1963 by Pullman Trailmobile and this manufacturing concern built four buildings as shown on Boundary Survey Number 1. Building 1 was the main manufacturing center, Building 2 was the main office, Building Number 3 was the trailer painting center and Building 4 was the maintenance shop.

Pullman Trailmobile manufactured a variety of shipping containers, closed truck vans, large long haul trailers and related vehicle trailers for the trucking and transportation industries. Pullman Trailmobile moved their operations to Fresno in 1976 and Mr. Dale Sobek purchased the entire site in May of 1978.

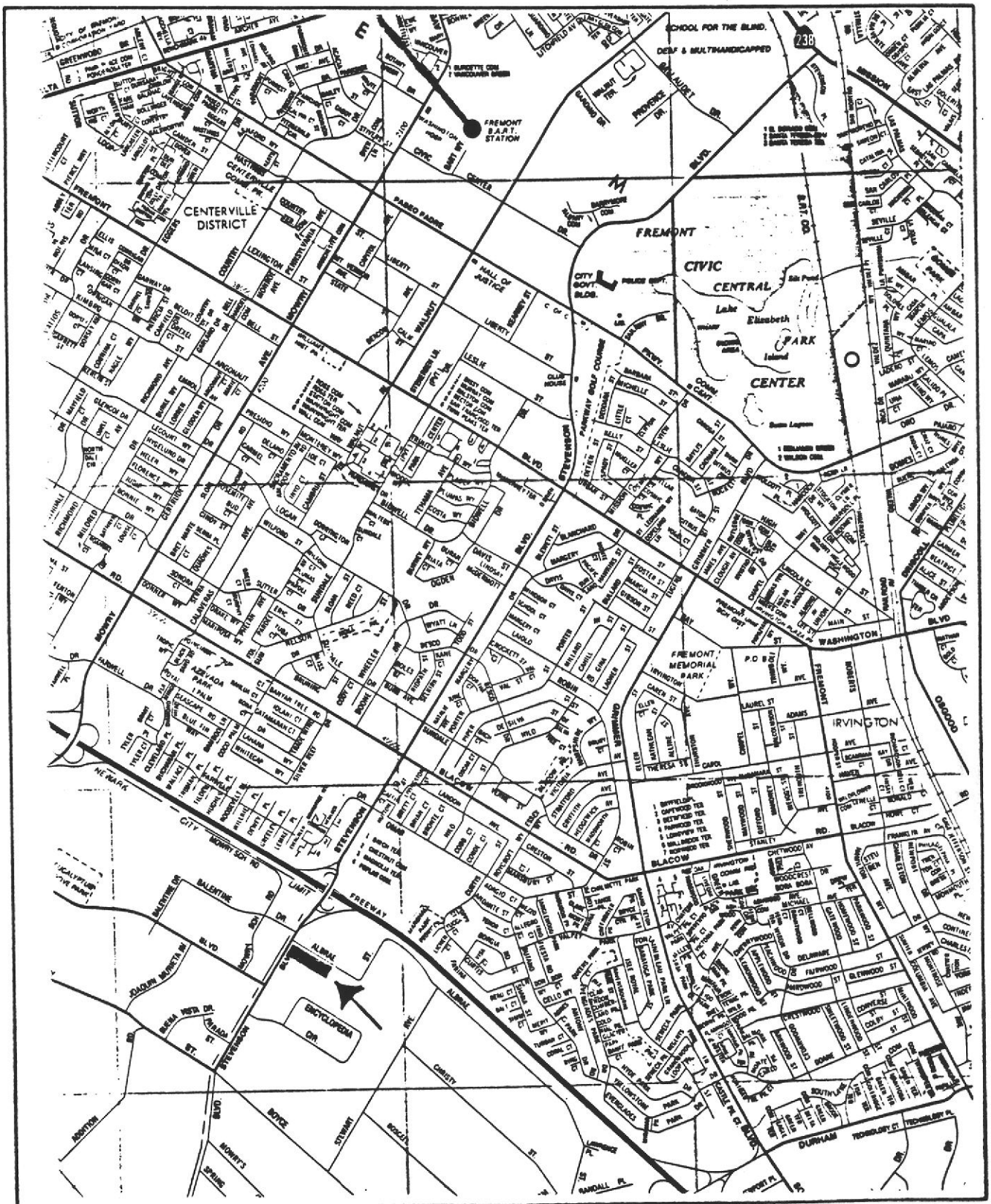
Beginning in June of 1978 and continuing to December of 1979, Buildings 1 and 2 (Boundary Survey 2) were leased to Polymir Industries. This company manufactured polyurethane foam insulation board and various other foam products. Material Safety Data Sheets are provided in Appendix A, for raw materials used in the polyurethane foam manufacturing process. Polymir Industries entered into voluntary bankruptcy in September of 1978. An auction was held and all materials and equipment were removed by the Federal Bankruptcy Court.

California Oil Recyclers leased Building 4 (Boundary Survey 2) from June 1978 to December 1981. This company reclaimed oil from gasoline stations. This reclaimed oil was stored on site in aboveground, 12,000 gallon storage tanks. Oil was also mixed with diesel and stored above ground. These reclaimed products were then resold in bulk for various fuel oil usage. According to Mr. Dale Sobek, California Oil Recyclers was evicted from this site primarily due to poor plant hygiene.

Sobex, Inc., a chemical consulting firm directed by the principal of Polymir Industries, leased Building 3 (Boundary Survey 2) from May, 1980 to January, 1984 at which time the business was dissolved and ceased operations at the site.

Peterbilt Engineers, a division of Paccar Corporation, leased Building 2 (Boundary Survey 2) from April, 1979 to May, 1987. This building was used as an engineering office and computer tapes and parts drawings were stored herein.

The Golden Gate Auto Auction leased Building 1a and the area outlined in red (Boundary Survey 2) from June, 1978 to October, 1983. GGAA used this site as an auto auction yard where 2,000 to 4,000 cars were parked continuously. GGAA installed an underground gasoline storage tank upon moving onto the site.



6000 S Corporation Site in Relation to the City of Fremont

FIGURE A.1

Upon removal of this tank (circa 1985), soil tests were performed and only minor (see Table 3.1) levels of the gasoline indicators (benzene, toluene and xylene) were present according to the test consultant Exceltech (Exceltech, 1985). These probably exist due to overfill and are well below State action levels.

Raychem Corporation leased Building 1 from April, 1980 to May, 1987 (Boundary Survey 2 and 3). Raychem used this building as a warehouse to supply six manufacturing plants in the bay area. Items such as furniture, equipment, packaged goods, palletized dry plastics and packaging supplies were shipped in and out of this warehouse on a daily basis.

In 1980, Buildings 5 and 6 (Boundary Survey 3) were constructed and leased to Sofabed Warehouse (Building 6) and Design Spec (Building 5). Sofabed Warehouse is a retail/wholesale furniture company. They assemble premanufactured pieces, market such, distribute and display furniture. Design Spec was a contract manufacturer of hotel and motel furniture. They also fabricated, distributed and sold retail wood furniture. An outside dust collector was installed to inhibit dust dispersion and has since been removed.

Building 7 (Boundary Survey 3) was built by Mr. Dale Sobek in 1981. It was built as the site office and is used for the same purpose today. One office is leased to All State Insurance. Another office is leased to LJP Marketing Company. Both are sales offices. Building 4 (Boundary Survey 3) was leased to Comstock Roofing Company from February, 1983 to February, 1984. Comstock Roofing used the building to warehouse and distribute new roofing materials. These products included shakes, shingles, roofing paper, adhesive, mastics and fabricated metal components.

Home Depot (Boundary Survey 4) oocupied the new building in January, 1987. Buildings 3 and 4 were removed to allow for Home Depot's parking lot. Home Depot is a hardware store.

Building E-2 (Boundary Survey 4) houses three retail businesses: Pine and Oak Warehouse Company, a furniture retailer; Mai Furniture Company, a furniture retailer; and Farwest Investment Corporation.

World Furniture Club (Boundary Survey 4) occupies the former Peterbilt building. World Furniture Club is a furniture retailer.

TABLE 1.1. DEVELOPMENT CHRONOLOGY OF THE 6000 S CORPORATION SITE IN FREMONT, CALIFORNIA

1963	Pullman trailmobile built site. Occupied site until 1976.
1978	Mr. Dale Sobek purchased the site.
1978 to 1979	Polymir Industries occupied Buildings 1 and 2.
1978 to 1983	Golden Gate Auto Auction leased and outlined parking area and occupied Building 1A.
1978 to 1981	California Oil Recyclers occupied Building 4.
1979 to 1987	Peterbilt Engineers occupy Building 2.
1980 to 1984	Sobex Inc. occupied Building 3.
1980 to 1987	Raychem occupied Building 1.
1980 to Present	Sofabed Warehouse occupy Building 6.
1980 to 1984	Design Spec occupied Building 5.
1981 to Present	Building Seven is the site office for 6000 S Corporation.
1983 to 1984	Comstock Roofing occupied Building 4.
1987 to Present	Building E-2 is occupied by Pine and Oak Warehouse Company, Mai Furniture Company and Farwest Investment Corporation.
1987 to Present	Building Home Depot occupies the newly constructed building.

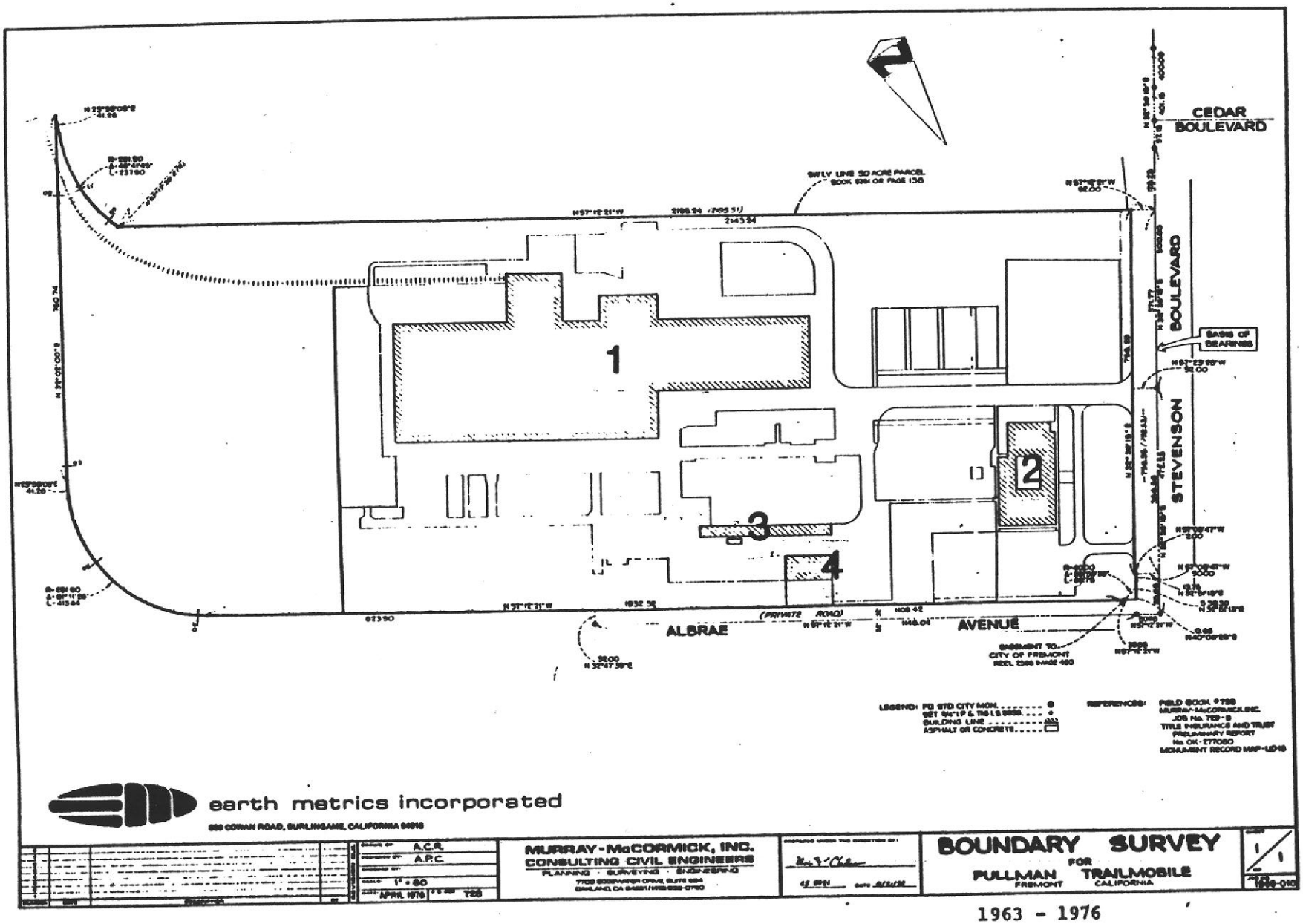
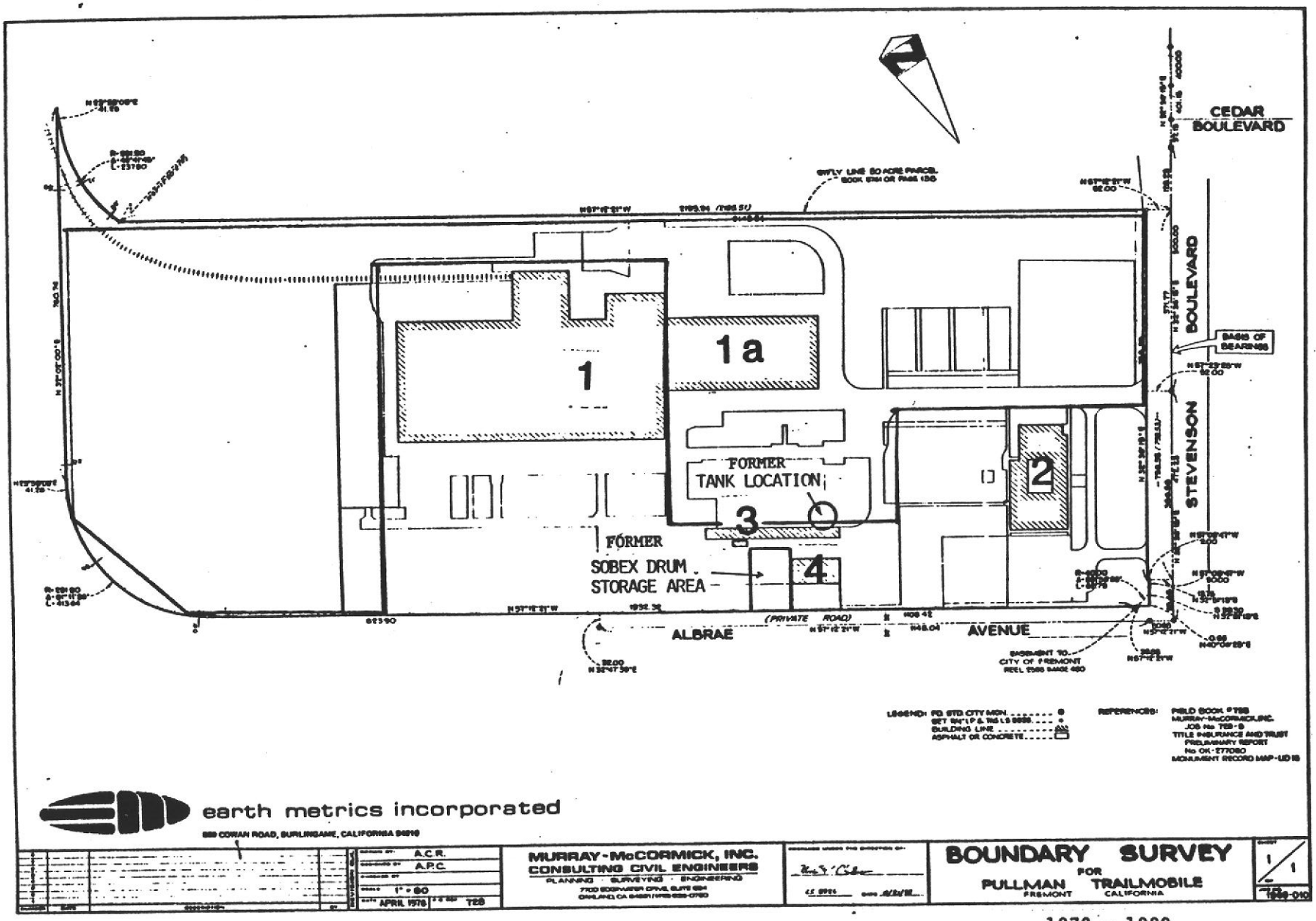
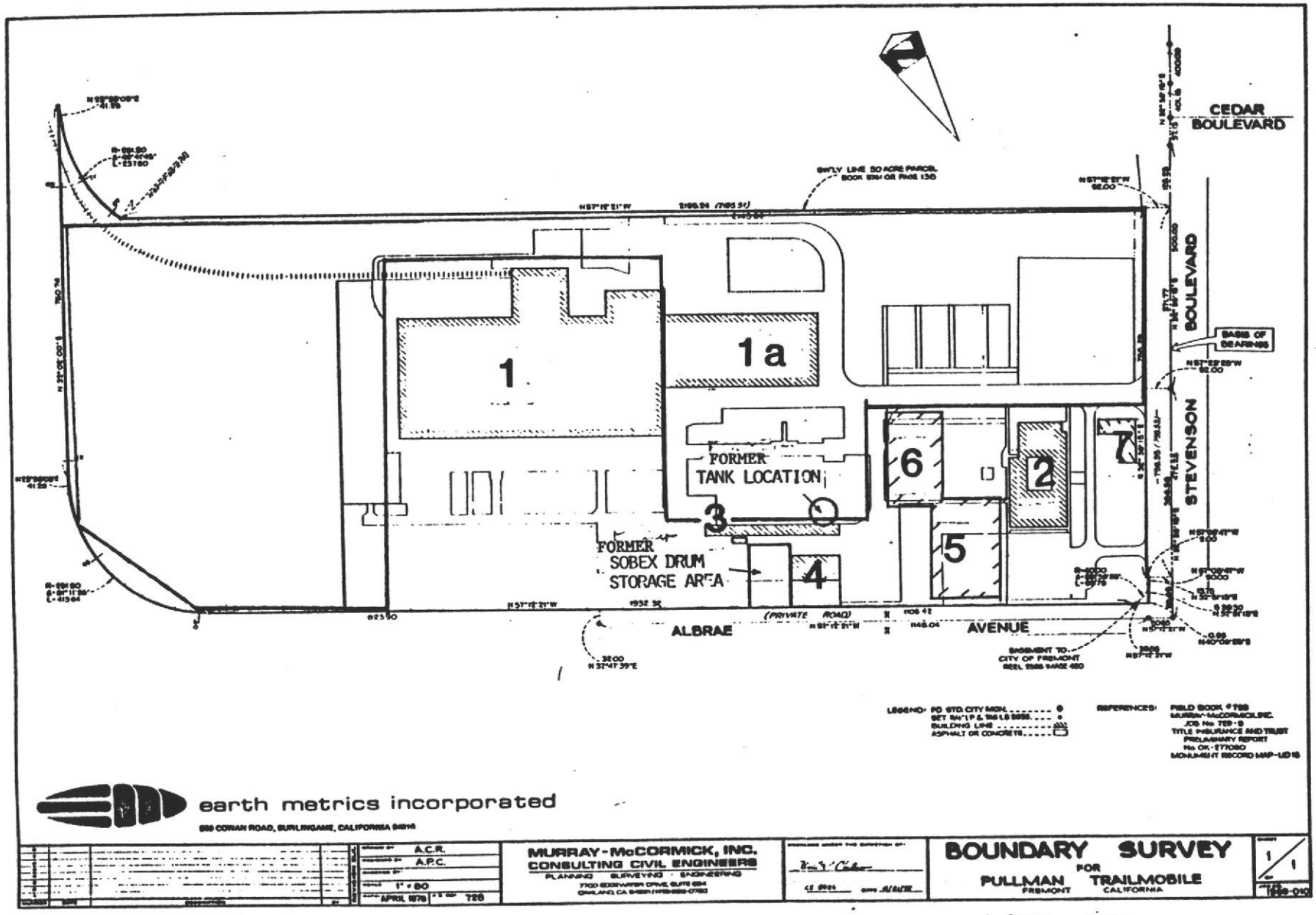


FIGURE 1.1. BOUNDARY SURVEY NO. 1



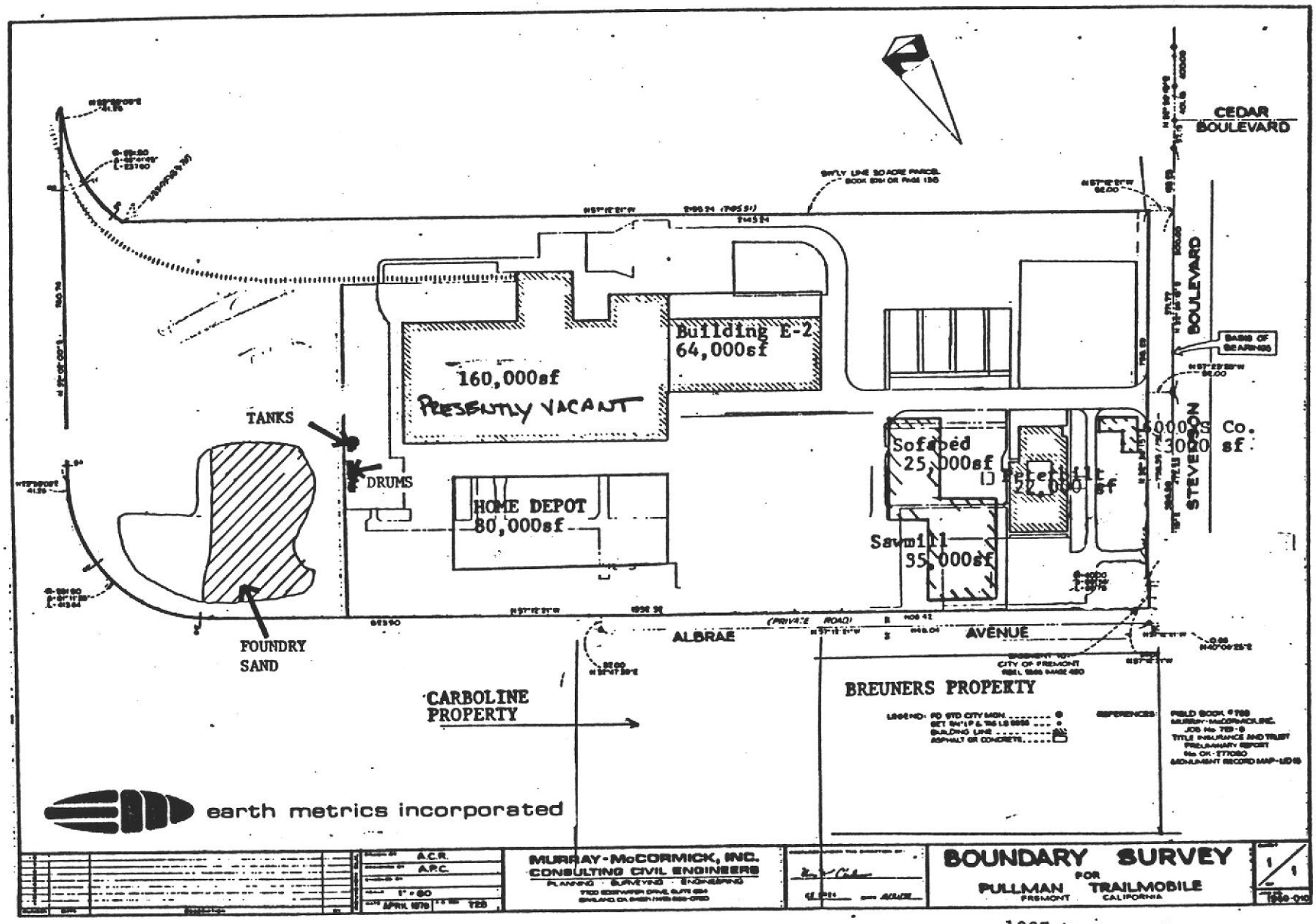
1978 - 1980

FIGURE 1.2. BOUNDARY SURVEY NO. 2



1980 - 1987

FIGURE 1.3. BOUNDARY SURVEY NO. 3



1987 to present

FIGURE 1.4. BOUNDARY SURVEY NO. 4

2. HISTORY OF CLOSURE ACTIVITIES TO DATE

2.1 PREVIOUS DRUM DISPOSAL

According to the Regional Water Quality Control Board, a stockpile of drums and barrels containing "polyols" were stored on the subject site in January, 1982. The likely origin of these drums would be the former Polymir Industries Company. At present, there are approximately 100 barrels remaining on site; a few of these contain glycol and polyol. These remaining barrels have been consigned to a foam manufacturing company and are awaiting transportation. Ethylene glycol or propylene glycol are the major ingredients in polyols. Material Safety Data Sheets are provided in Appendix A.

In a letter dated April 13, 1982 to Mr. Kip Prahl, President of California Oil Recyclers, Mr. Frank Curcuro, the property manager of the subject site, requested that thirteen (13) drums of used oil products be removed from the site. Mr. Curcuro also stated that the RWQCB is monitoring the clean up of this site. ~~Apparently~~, these drums were removed during closure of California Oil Recyclers, under RWQCB supervision and monitoring.

2.2 UNDERGROUND GASOLINE STORAGE TANK

Golden Gate Auto Auction removed their 8,000 gallon underground gasoline storage tank upon their departure. This removal was supervised by Exceltech and a City of Fremont fire department representative. Soil samples were taken at the backfill-native soil contact and results (Table 3.1) indicate that only minor levels of the gasoline indicators (benzene, toluene and xylene) were present. Exceltech stated that BTX levels were normal background levels and not evidence of leakage. The Exceltech, Inc. letter report and TAL, Inc. BTX test data report are provided in Appendix B.

2.3 REMAINING ABOVE GROUND TANKS

There are three large and three small empty tanks that remain on site. One tank is from 6700 Stevenson Boulevard, and ~~was never~~ used. Another of the tanks is a blender tank that was used for polywethane foam manufacture. Four of the remaining tanks, having their ends cut off, are believed to have been used for underground petroleum fuel storage. Two of three may have been pulled from sites elsewhere in Fremont. All of the tanks are empty.

2.4 REGIONAL WATER QUALITY CONTROL BOARD AND DEPARTMENT OF HEALTH SERVICES CORRESPONDENCE

Upon review of DOHS records in Emeryville, an inspection, testing and material removal history was ascertained. There have been associated oil spills from an above ground waste oil diked area previously used by California Oil Recyclers. This diked area has since been covered and, according to the RWQCB, potential contaminated soils were directed to be removed. Both the diked area used for storage of oil drums and a sunken pit for oil waste are identified in the Compliance Monitoring Report (RWQCB, January 26, 1982). The former sunken pit was "in the northeast corner" of the property and was "filled with piles of dirt," according to the 1982 CMR. There is no available historical document which absolutely confirms compliance with the RWQCB directive. ~~Therefore, the possibility exists that some on site soil is still contaminated.~~

3. EVALUATION OF EXISTING DATA

3.1 SOILS REPORTS AND FOUNDRY SAND TEST

Foundry sand was imported by Sobex in 1986 from American Brass & Foundry in Oakland. The location of this foundry sand is diagrammed in Figure 4. The sand has been tested and determined to be nonhazardous. These test results are provided in Appendix C.

Other geotechnical/foundation investigations did not observe any peculiar soil conditions. Pullman Trailmobile, prior to their construction activities in 1963, utilized Woodward-Clyde-Shepard Associates to perform a geotechnical soil investigation on the subject site. This geotechnical engineering report, dated June 10, 1959, addressed the soil properties and recommended a foundation design in addition to procedures to be followed for site preparation. This was a geotechnical engineering report; the possible existence of hazardous materials in the soil or groundwater was not discussed or evaluated in the above report.

Woodward-Clyde Consultants, in September 1980, observed, tested earthwork and inspected the footing excavations for the 6000 S Corporation. A report titled: "Observation and Testing of Earthwork and Inspection of Footing Excavations" was submitted by WCC to the 6000 S Corporation after their activities. The possible existence of hazardous materials in soil or groundwater was not discussed or evaluated.

In March of 1984, GEI of Fremont, California, performed a soil investigation on the subject property. This soil investigation report dealt solely with geotechnical engineering. The three soil borings performed reached groundwater at approximately 15 feet.

GEI, in July of 1985, performed a compaction test (ASTM D1557-78) on the imported foundry sand that is presently stockpiled at the southeast end of the site. This test yielded the maximum dry density at the optimum moisture content. A laboratory test report was submitted to 6000 S Corporation. The possible presence of hazardous materials present was not discussed or evaluated.

GEI, in September and October of 1986, performed density testing services for Alacon Inc., the general contractor for the Home Depot Center. These field tests determined the in-place density of compacted materials. Again, the possible presence of hazardous materials present was not discussed or evaluated.

3.2 GASOLINE CONSTITUENT ANALYSIS OF SOIL BENEATH UNDERGROUND STORAGE TANK

Golden Gate Auto Auction removed their 8,000 gallon underground gasoline storage tank (Boundary Survey No. 2) upon their departure from the subject site. Soil samples were taken at the backfill-native soil contact and results (Table 3.1) indicate only minor levels of the gasoline indicators (benzene, toluene and xylene) were present. According to Exceltech (May 2, 1985 letter to Tommy Thomas of GGAA), no indication of a leak was detected.

TABLE 3.1. PREVIOUS SOILS ANALYSIS RESULTS FROM SAMPLES TAKEN BY EXCELTECH UNDER THE 8,000 GALLON UNDERGROUND GASOLINE STORAGE TANK

SAMPLE ID	BENZENE ppm	TOLUENE ppm	M-XYLENE ppm
GGAC-01	0.09	0.11	0.06
Source: Exceltech, Inc., 1985.			

3.3 POSSIBLE HAZARDOUS WASTE CHARACTERISTICS AT SUBJECT SITE

Considering the nature and history of California Oil Recyclers that prior to 1982 conducted their operations on the subject site, the following is a list of what potentially might be found in the soil.

(1) Diked Area Used for Oil Storage in Drums — Oil, PCB (Arochlor 1254)

Current Status: Removed, covered

(2) Sunken Pit in NE Corner Used for Oil Waste — Oil

Current Status: Covered with Piles of Soil

Source: RWQCB, January/March 1982

There is documentary evidence of California Oil Recyclers accidently or advertently disposing of hazardous waste materials on site. California Oil Recyclers did have associated oil spills, 32 ug/liter Aroclor 1254 (a PCB) being measured by RWQCB in stormwater collected from the diked storage area used for storing oil drums.

The stockpiled foundry sand that appears dark in aerial photographs, might possibly contain metals. This foundry sand is classifiable as a Special Waste under California Title 22. The generator of the waste, American Brass and Foundry, has been requested to produce other relevant information about this stockpiled foundry sand. Test results indicating that the sand is non-hazardous are provided in Appendix C.

3.4 SUBSURFACE SOIL AND GROUNDWATER CONDITIONS

Beneath a shallow fill (1 to 1 1/2 feet), the site is underlain by a stiff, moderately plastic clay which overlies alternate layers of stiff silty clay and silty clay. Groundwater is at approximately 15 feet below the surface. This water level is expected to fluctuate depending on seasonal and climatic conditions.

4. CONCERNS FOR POTENTIAL CONTAMINATION

The following discussion addresses California Oil Recyclers, foundry sand stockpiles, stored drums, and stored blending and fuel storage tanks.

4.1 HISTORICAL WASTE OIL SPILLAGE AND DUMPING

The historical spillage and leakage of waste oil that could potentially contain PCBs and/or solvents is a primary concern on this site. The primary location of the diked oil drum storage area is known. The secondary location of the historic waste oil pit is suspected to be in the northeast corner of California Oil Recyclers, but there is no evidence of the pit on the site at this time.

4.2 FOUNDRY SAND STOCKPILES

These stockpiles are not a concern as verified by chemical testing. These stockpiles were delivered to the site by American Brass and Foundry according to information provided by Mr. Dale Sobek. Foundry sands are classifiable as a "Special Waste", Title 22, Section 66742 of the California Administrative Code. Necessary testing of this material has been performed and is presented in Appendix C. The hazard classification of the material is nonhazardous.

4.3 BARRELS ON SITE

These barrels are not an imminent concern as verified by MSDS data. Approximately one hundred (100) barrels remain on site, some of which still contain glycol and polyol. These barrels are rusting, but no apparent leaks appear around the barrels. According to Mr. Dale Sobek, these barrels are consigned to a foam maufacturing company for reuse.

4.4 STORED BLENDING AND FUEL STORAGE TANKS

Three large and three small blending/storage ground tanks that remain on site will be auctioned off next month, according to Mr. Dale Sobek. These tanks are empty. Presence or absence of trace BTX or semi volatile organics will be determined using an Organic Vapor Analyser.

5. RECOMMENDATION

The primary concern raised at this time, considering the available data, is the potential for contaminated soil around the former California Oil Recycling facility.

1. Earth Metrics inspected the locations of the diked area, sunken pit and southeast corner area of California Oil Recyclers. These areas have been altered in recent time by regrading and paving (refer to Figure 5.1). There is a transite pipe which transects the southeast area. One soil sample (depth = 3 feet) was collected from the southeast area from beneath the asphalt cap. It appeared visually to be free of oil and grease. It will be tested for Total Oil and Grease and PCBs using a DOHS certified laboratory. A second soil sample (depth = 2.5 feet) was collected from the vicinity of the former diked storage area, and will be tested similarly. Test results will be available before the end of February, 1988.

   The samples are stored in capped brass liners in Earth Metrics sample refrigerator. They were collected by an Earth Metrics technician using a trowel.

2. The stored tanks will be screened for total organics using an OVA. If these tanks show no organic vapors, then they will be hauled off the site by March, 1988. If organic vapors above airborne background levels are indicated, then the tanks will be cleaned and rinse water disposed of after testing.

3. Drums containing nonhazardous polyols will be hauled off the site in March, 1988.

4. Addditional testing of the foundry sand is not recommended.

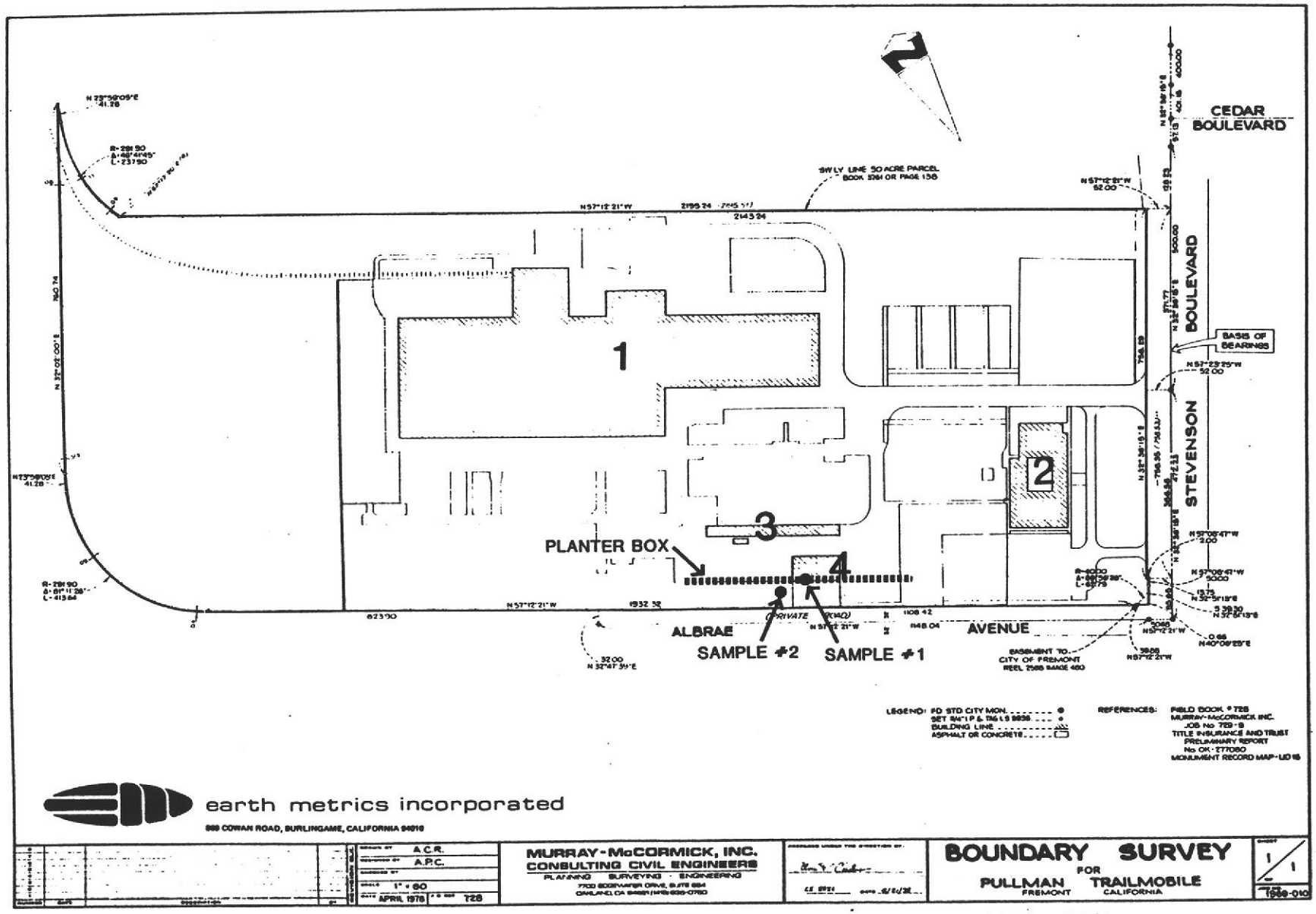


FIGURE 5

FIGURE 5.1. LOCATIONS OF FORMER CALIFORNIA OIL RECYCLES (BUILDING #4) EXISTING LANDSCAPED PLANTER AND SOIL SAMPLES

6. REFERENCES

Brown and Caldwell, letter to RWQCB (February 19, 1982).

EPA Contact Memo, Interagency (June 1, 1981).

Exceltech, Inc., laboratory test results (May 2, 1985). The test laboratory, Trace Analysis Labs (TAL, Inc.), reported its test results to Exceltech in a letter report dated April 30, 1985.

Fremont, City of, memo to Ken Slamon from Battelion Chief, Daniel Lydon (April 15, 1979).

RWQCB, Mr. Steven Morse, letter to California Oil Recyclers (March 2, 1982).

RWQCB, Compliance Monitoring Report to Dale Sobek Properties (January 26, 1982).

Sobex Incorporated, letter to California Oil Recyclers (April 13, 1982).

APPENDIX A. MATERIAL SAFETY DATA SHEETS FOR POLYURETHANE FOAM RAW MATERIALS

MATERIAL SAFETY DATA SHEET

(APPROVED BY U.S. DEPARTMENT OF LABOR "ESSENTIALLY SIMILAR" TO FORM LSB-00S-4)

NPVLA 6-70

Section I

1

MANUFACTURER'S NAME: REICHHOLD CHEMICALS, INC.

STREET ADDRESS: 525 North Broadway

CITY, STATE AND ZIP CODE: White Plains, New York 10603

EMERGENCY TELEPHONE NO.: 914-682-5700

CHEMICAL NAME AND SYNONYMS: Polyol

TRADE NAME: POLYLITE® 34412

CHEMICAL FAMILY:

FORMULA: Complex

Section II — HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS

PIGMENTS	%	TLV (Units)	SOLVENTS	%	TLV (Units)
Not Applicable			None		
CATALYST: Amine	<1		ADDITIVES: Not Applicable		
VEHICLE: Not Applicable			OTHERS: Not Applicable		

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Not Applicable		

Section III — PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H_2O=1)	
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	0.5% max.
VAPOR DENSITY (AIR=1) Density @ 75°F. =8.9		EVAPORATION RATE (butyl ether)	greater
SOLUBILITY IN WATER	moderate		
APPEARANCE AND ODOR	Brown Liquid - NEGLIGIBLE ODOR SLIGHTLY AROMATIC		

Section IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used) Pensky Martens Closed Cup 227°F	FLAMMABLE LIMITS	Lel	Uel

EXTINGUISHING MEDIA: Chemical foam, CO_2

SPECIAL FIRE FIGHTING PROCEDURES: None known

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

Section V — HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
None assigned

EFFECTS OF OVEREXPOSURE
Possible skin irritation from repeated skin contact.

EMERGENCY AND FIRST AID PROCEDURES
On skin contact wash with soap and water at first opportunity. For eyes, flush with plenty of water. See a physician.

Section VI — REACTIVITY DATA

STABILITY	UNSTABLE	X	CONDITIONS TO AVOID: High temperatures
	STABLE		

INCOMPATABILITY *(Materials to avoid)*: none known

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

Section VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Avoid breathing fumes - use adequate fresh air supply.
Soak up spills on absorbent compound and dispose in chemical land fill area.

Waste Disposal Method
Flush with water; dispose expended absorbent compound in chemical land fill area.

Section VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*
fresh air supply

VENTILATION	LOCAL EXHAUST: required	SPECIAL
	MECHANICAL *(General)*: Down draft - fumes heavier than air	OTHER

PROTECTIVE GLOVES: Required
EYE PROTECTION: suggested

OTHER PROTECTIVE EQUIPMENT

Section IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
75°F or above - relieve pressure slowly when opening container.

OTHER PRECAUTIONS
Reseal container well.

MATERIAL SAFETY DATA SHEET

MOBAY CHEMICAL COMPANY
PITTSBURGH, PENNSYLVANIA 15205

SECTION I

MANUFACTURER'S NAME: MOBAY CHEMICAL COMPANY	EMERGENCY TELEPHONE NO.: 412-923-1800
ADDRESS (Number, Street, City, State, and ZIP Code): Penn-Lincoln Parkway West, Pittsburgh, Pennsylvania 15205	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS: Multranol 4034
CHEMICAL FAMILY: Polyether Polyol	FORMULA

Code: K-113

SECTION II HAZARDOUS INGREDIENTS

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Hydroxyl terminated poly (oxyalkylene) polyether	100	

SECTION III PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H_2O=1) @ 25°C	1.10
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____=1)	
SOLUBILITY IN WATER			

APPEARANCE AND ODOR: Light yellowish liquid. Slight aromatic odor.

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): 250°F (121°C) Pensky-Marten C. C.	FLAMMABLE LIMITS	Lel	Uel

EXTINGUISHING MEDIA: Water.

SPECIAL FIRE FIGHTING PROCEDURES: A self-contained breathing apparatus should be worn.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Auto-oxidation can occur if product is overheated for long periods in fires.

MB-321

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
Not established.

EFFECTS OF OVEREXPOSURE
None observed; this type of polyether may be regarded as physiologically innocuous.

EMERGENCY AND FIRST AID PROCEDURES
Skin contact: wash with soap and water.

Eye contact: flush with large amounts of water.

SECTION VI REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATABILITY *(Materials to avoid)*

HAZARDOUS DECOMPOSITION PRODUCTS
Aliphatic fragments, CO, CO_2, H_2O.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Absorb with an oil absorbing compound and flush with large volumes of hot water.

WASTE DISPOSAL METHOD
Waste material may be incinerated under conditions which meet federal, state, and local environmental control regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*
None required.

VENTILATION	LOCAL EXHAUST No special requirements.	SPECIAL
	MECHANICAL *(General)*	OTHER

PROTECTIVE GLOVES Rubber gloves for cleanliness.	EYE PROTECTION Liquid goggles.

OTHER PROTECTIVE EQUIPMENT

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
This product is hygroscopic and containers should be tightly closed to prevent contamination with foreign materials and moisture.

OTHER PRECAUTIONS
Recommended storage temperature is 75-90°F (24-32°C).

8-13-73

EMERGENCY PHONE NUMBER
MOBAY CHEMICAL COMPANY 412-923-1800

Legal responsibility is assumed only for the fact that all studies reported here and all opinions are those of qualified experts.

MATERIAL SAFETY DATA SHEET

(Approved by U.S. Department of Labor "Essentially Similar" to Form LSB-OOS-4)

CHEMICAL NAME: NIAX® POLYOL 34-37

SYNONYMS: --

CHEMICAL FAMILY: Polymer Polyols

FORMULA: --

MOLECULAR WEIGHT: --

TRADE NAME AND SYNONYMS: NIAX Polyol 34-37

I. PHYSICAL DATA

BOILING POINT, 760 mm. Hg	Not applicable	FREEZING POINT	Sets to glass < -25°C.
SPECIFIC GRAVITY (H_2O = 1)	1.0370 at 20/20°C.	VAPOR PRESSURE AT 20°C.	< 1 mm. Hg
VAPOR DENSITY (air = 1)	> 1	SOLUBILITY IN WATER, % by wt.	< 0.1
PER CENT VOLATILES BY VOLUME	Nil	EVAPORATION RATE (Butyl Acetate = 1)	< 0.1
APPEARANCE AND ODOR	White, opaque viscous fluid; mild odor		

II. HAZARDOUS INGREDIENTS

MATERIAL	%	TLV (Units)
Acrylonitrile	~0.02	20 ppm. (skin) ACGIH OSHA
Styrene	~0.07	100 ppm. ACGIH OSHA
(See Sections III through VIII)		

III. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT [test method(s)]	331°F., Pensky-Martens closed cup ASTM D 93
FLAMMABLE LIMITS IN AIR, % by volume	Not determined (nonvolatile, high-molecular weight polymer)
EXTINGUISHING MEDIA	Use carbon dioxide or dry chemical for small fires. Use foam (alcohol, polymer, or ordinary) and water spray for large fires.
SPECIAL FIRE FIGHTING PROCEDURES	A solid stream of water directed into hot, burning liquid could cause frothing.
UNUSUAL FIRE AND EXPLOSION HAZARDS	None

EMERGENCY PHONE NUMBER

304/744-3487

This number is available days, nights, weekends, and holidays.

IV. HEALTH HAZARD DATA

ESHOLD LIMIT VALUE	None established for Polyol by ACGIH or OSHA.
FFECTS OF OVEREXPOSURE	None currently known.
RGENCY AND FIRST D PROCEDURES	None required Flush eye contact with water.

V. REACTIVITY DATA

STABILITY			
UNSTABLE	STABLE	CONDITIONS TO AVOID	None
--	√		

OMPATIBILITY (Materials to avoid)	None
HAZARDOUS COMPOSITION PRODUCTS	Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide, and oxides of nitrogen.

HAZARDOUS POLYMERIZATION			
May Occur	Will not Occur	CONDITIONS TO AVOID	None
--	√		

VI. SPILL OR LEAK PROCEDURES

PS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED	Small spills should be flushed with large quantities of water. Larger spills should be collected for disposal.
STE DISPOSAL METHOD	Incinerate in a furnace where permitted under appropriate Federal, State, and local regulations.

VII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type)		None			
NTILATION	LOCAL EXHAUST	--	SPECIAL	--	
	MECHANICAL (general)	Acceptable	OTHER	--	
OTECTIVE GLOVES		Plastic	EYE PROTECTION	Safety glasses	
OTHER PROTECTIVE EQUIPMENT		Eye bath			

VIII. SPECIAL PRECAUTIONS

PRECAUTIONARY LABELING	NIAX® POLYOL 34-37 On the basis of the toxicological, physical, and chemical properties of NIAX Polyol 34-37, precautionary labeling used on the containers is as follows: FOR INDUSTRY USE ONLY
HER HANDLING AND STORAGE CONDITIONS	

MATERIAL SAFETY DATA SHEET

(Approved by U.S. Department of Labor "Essentially Similar" to Form LSB-OOS-4)

CHEMICAL NAME: UNION CARBIDE® SILICONE SURFACTANT L-5320

SYNONYMS: (Poly)oxyalkylene Silicone

CHEMICAL FAMILY: Organo-silicone Copolymers

FORMULA: Not applicable – complete polymer containing C, H, O, and Si

MOLECULAR WEIGHT: Approximately 1500

TRADE NAME AND SYNONYMS: UNION CARBIDE Silicone Surfactant L-5320

I. PHYSICAL DATA

BOILING POINT, 760 mm. Hg	>150°C. (>302°F.)	FREEZING POINT	60°F.
SPECIFIC GRAVITY (H_2O = 1)	1.06 at 25/25°C.	VAPOR PRESSURE AT 20°C.	<0.1 mm. Hg
VAPOR DENSITY (air = 1)	Not applicable	SOLUBILITY IN WATER, % by wt.	Complete
PER CENT VOLATILES BY VOLUME	Nil	EVAPORATION RATE (Butyl Acetate = 1)	<0.01
APPEARANCE AND ODOR	Light straw colored liquid with a slight characteristic polyether odor.		

II. HAZARDOUS INGREDIENTS

MATERIAL	%	TLV (Units)
(Poly)oxyalkylene Silicone	~100	Not established
(See Sections III through VIII)		

III. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT [test method(s)]	235°F., Pensky-Martens closed cup ASTM D 93 285°F., Cleveland open cup ASTM D 92
FLAMMABLE LIMITS IN AIR, % by volume	Not determined (nonvolatile, high-molecular weight polymer)
EXTINGUISHING MEDIA	Use carbon dioxide and dry chemicals for small fires. Use water spray or foam (alcohol, polymer, or ordinary) for large fires.
SPECIAL FIRE FIGHTING PROCEDURES	Air-supplied breathing apparatus should be available to firemen.
UNUSUAL FIRE AND EXPLOSION HAZARDS	None

EMERGENCY PHONE NUMBER

304/744-3487

This number is available days, nights, weekends, and holidays.

IV. HEALTH HAZARD DATA

RESHOLD LIMIT VALUE	None established by ACGIH or OSHA.
EFFECTS OF OVEREXPOSURE	None currently known.
ERGENCY AND FIRST D PROCEDURES	None required. Flush eye contact with water.

V. REACTIVITY DATA

STABILITY			
UNSTABLE	STABLE	CONDITIONS TO AVOID	None
--	√		

COMPATIBILITY (Materials to avoid)	Avoid strong oxidizing materials.
HAZARDOUS DECOMPOSITION PRODUCTS	Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide, and silicon dioxide.

HAZARDOUS POLYMERIZATION			
May Occur	Will not Occur	CONDITIONS TO AVOID	None
--	√		

VI. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED	Small spills should be flushed with large quantities of water. Larger spills should be collected for disposal.
WASTE DISPOSAL METHOD	Incinerate in a furnace equipped to remove silicon dioxide from the off-gases where permitted under appropriate Federal, State, and local regulations.

VII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type)		None required		
VENTILATION	LOCAL EXHAUST	--	SPECIAL	--
	MECHANICAL (general)	Acceptable	OTHER	--
PROTECTIVE GLOVES		Plastic or rubber	EYE PROTECTION	Safety goggles
OTHER PROTECTIVE EQUIPMENT		Eye bath and safety shower		

VIII. SPECIAL PRECAUTIONS

PRECAUTIONARY LABELING	UNION CARBIDE® SILICONE SURFACTANT L-5320 On the basis of the toxicological, physical, and chemical properties of UNION CARBIDE Silicone Surfactant L-5320, precautionary labeling used on the containers is as follows: FOR INDUSTRY USE ONLY
OTHER HANDLING AND STORAGE CONDITIONS	Due to its 60°F. melting point, storage at room temperature is recommended. Keep containers sealed when not in use.

Stepan

Stepan Chemical Company

Northfield, Illinois 60093

EMERGENCY TELEPHONE
(312) 446-7500
CHEMTREC: 800-424-9300

MATERIAL SAFETY DATA SHEET

DATE: February 23, 1983

SECTION 1: PRODUCT DATA PRODUCT NAME Stepanfoam Polyol X-3152

PRODUCT CLASS: Aromatic polyol

SECTION 2: HAZARDOUS INGREDIENTS

INGREDIENTS	PERCENT	TLV PPM	TLV mg/m³	VAPOR PRESSURE
N.A.				

SECTION 3: PHYSICAL DATA

BOILING POINT: over 240°C

% VOLATILE BY WT: Nil

WT. PER GALLON: approx. 10.3#

EVAPORATION RATE: ☐ FASTER THAN ETHER ☒ SLOWER

VAPOR DENSITY: ☒ HEAVIER THAN AIR ☐ LIGHTER

SECTION 4: FIRE AND EXPLOSION DATA

DOT CATEGORY: Not hazardous

FLASH POINT: Greater than 200°F, (93°C) Seta C.C.

LEL: Unknown

EXTINGUISHING MEDIA: Foam, dry chemical or CO_2, water spray or fog.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SPECIAL FIRE FIGHTING PROCEDURES: Water may be used to cool containers.

SECTION 5: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: See Section 2.

EFFECTS OF OVEREXPOSURE: Direct contact with eyes will be painful and irritating. Repeated or prolonged contact with skin may be irritating.

EMERGENCY AND FIRST AID PRECAUTIONS: Flush eyes thoroughly with plenty of water for at least 15 minutes. Wash skin with soap and water. For over-exposure to fumes remove to fresh air. Restore breathing and give oxygen, if necessary. Call a physician if any symptoms persist.

SECTION 6: REACTIVITY DATA

STABILITY: ☒ STABLE ☐ UNSTABLE

HAZARDOUS POLYMERIZATION: ☐ MAY OCCUR ☒ MAY NOT OCCUR

INCOMPATABILITY (MATERIALS TO AVOID): Strong oxidizing agents, reactive diisocyanates.

HAZARDOUS DECOMPOSITION PRODUCTS: Burning may cause formation of carbon monoxide, carbon dioxide, and smoke.

CONDITIONS TO AVOID:

SECTION 7: SPILL OR LEAK PROCEDURES: Wash away with warm water or soak up with sand, sweeping compound, or inert material and shovel into waste containers in accordance with all legal regulations.

WASTE DISPOSAL METHOD: Flush to sewage system, or bury, or incinerate in accordance with all legal regulations.

SECTION 8: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use a NIOSH or MESA gas mask for organic vapors, or an outside air source or a self-contained breathing apparatus.

VENTILATION: Adequate ventilation to keep fumes low.

PROTECTIVE GLOVES: Use rubber or plastic gloves to prevent prolonged contact with skin.

EYE PROTECTION: Use face mask or goggles.

OTHER PROTECTIVE EQUIPMENT: Wear coveralls to prevent excessive contact.

SECTION 9: SPECIAL PRECAUTIONS: HANDLING AND STORAGE:

OTHER PRECAUTIONS: Do not take internally.

PN—8540-A

APPENDIX B. EXCELTECH AND TRACE ANALYSIS LABORATORY LETTERS CONCERNING REMOVAL OF 8,000 GALLON UNDERGROUND GASOLINE STORAGE TANK

EXCELTECH

42475-A OSGOOD ROAD • FREMONT, CA 94539
PHONE (415) 659-0404 CONTR. LIC. NO. A-461324

May 2, 1985

Mr. Tommy Thomas
Golden Gate Auto Auction
6700 Stevenson Boulevard
Fremont, CA 94539

Dear Mr. Thomas,

Exceltech, Inc. has completed sampling beneath your 8,000 gallon gasoline tank located at 6010 Stevenson Boulevard, Union City. The soil sample was taken at a depth of 13' at the contact of gray sand and brown silt just beneath the mid-point of the tank. The soil was placed in a pre-cleaned brass liner, ends were tin-foil sealed and.plastic capped. The sample was immediately placed in a refrigerated chest and taken to Trace Analysis Laboratory for gasoline analysis.

The analytical report (attatched) indicates that only normal background levels of the gasoline indicators - benzene, toluene and xylene are present. No indication of a leak is detected.

Thank you for your interest in Exceltech, Inc. and our engineering services.

Sincerely,

David Blunt
Environmental Geochemist

Analysis Laboratory, Inc.
23 Investment Boulevard, #8 • Hayward, California 94545
(415) 783-6960

TAL

DATE: 4/30/85

TAL No.: 2546

CUSTOMER: Exceltech

REQUESTER: Dave Blunt

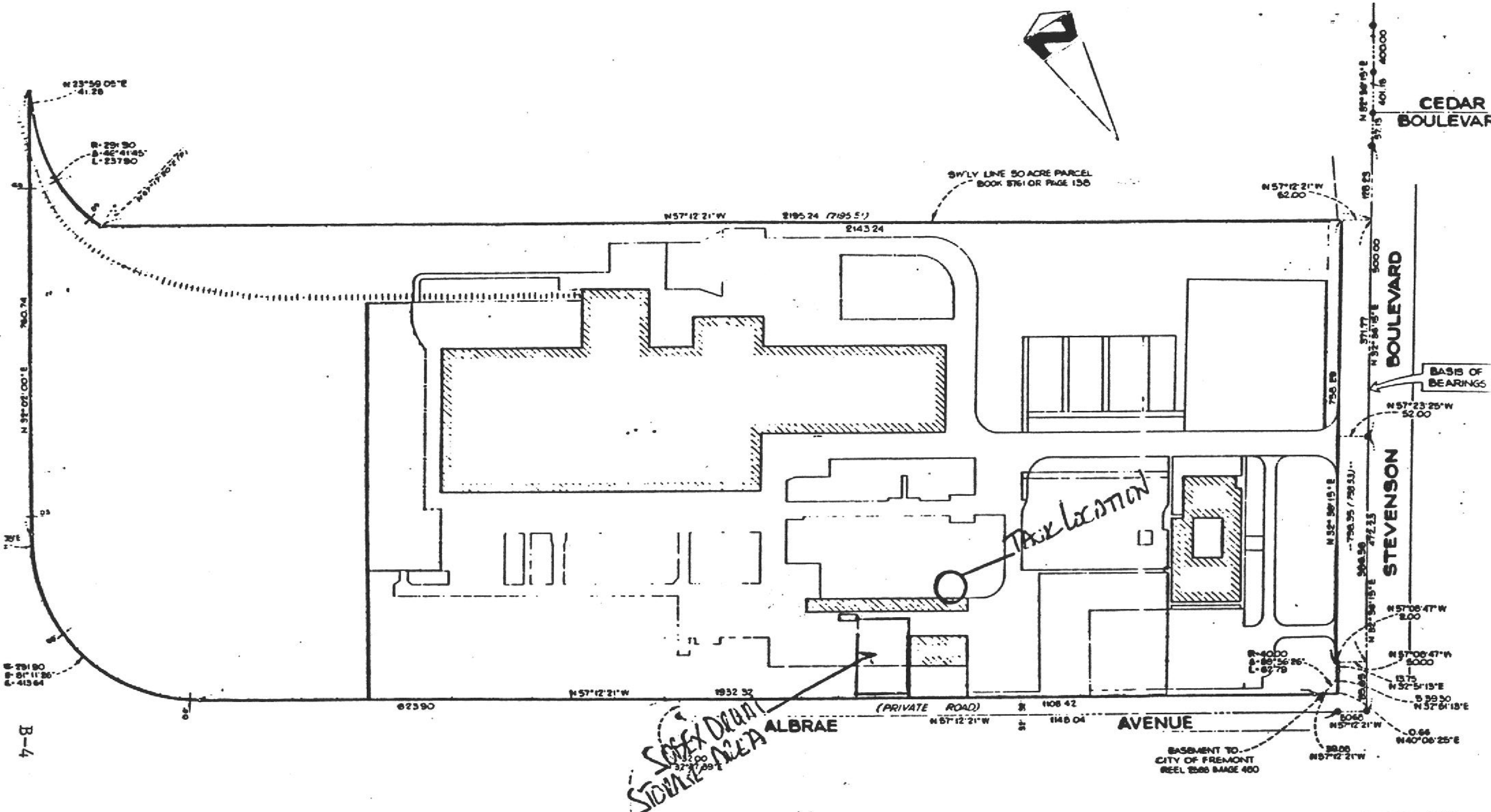
SAMPLE ID: Gasoline

Sample ID	Benzene ppm	Toluene ppm	m-Xylene ppm
GGAC-01	0.09	0.11	0.06

S. C. Furman, Ph.D.
Laboratory Director

SCF:dk

RECEIVED
MAY 02 1985
EXCELTECH, INC.



LEGEND: FD STD CITY MON.
SET 3/4" I.P. & TAG LS 8836
BUILDING LINE
ASPHALT OR CONCRETE

REFERENCES: FIELD BOOK #728
MURRAY-McCORMICK INC JOB No 729-8
TITLE INSURANCE AND TI-
PRELIMINARY REPORT No OK-277080
MONUMENT RECORD MA

DRAWN BY A.C.R. DESIGNED BY A.P.C. SCALE 1" = 80 DATE APRIL 1978 T28	MURRAY-McCORMICK, INC. CONSULTING CIVIL ENGINEERS PLANNING · SURVEYING · ENGINEERING 7700 EDGEWATER DRIVE, SUITE 654 OAKLAND, CA 94621	PREPARED UNDER THE DIRECTION OF:	BOUNDARY SURVEY FOR PULLMAN TRAILMOBILE FREMONT CALIFORNIA

...vestment Boulevard, #8 • ... ward, California 94545 (415) 783-6960

DATE: 4/30/85

TAL No.: 2546

CUSTOMER: Exceltech

REQUESTER: Dave Blunt

SAMPLE ID: Gasoline

Sample ID	Benzene ppm	Toluene ppm	m-Xylene ppm
GGAC-01	0.09	0.11	0.06

S. C. Furman, Ph.D.
Laboratory Director

SCF:dk

RECEIVED
MAY 02 1985
EXCELTECH, INC.

P.O. # 2362

Proj. No.	Project Name					No. of containers	Gasoline				Remarks
	Exceltech										
Samplers: (Signature)											
Sta. No.	Date	Time	Comp.	Grab	Station Location						
GEAC-01	4-8-85	5:55		✓	7,500 gal tank in yard east of Bldg.	1		X			Analyze for gasoline in soil
						1 dup		X			Hold

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	4-9-85 4:43	4/9/85			
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks	

Chain of Custody Record

TIME SHEET

CELTECH
A OSGOOD ROAD
MONT, CA 94539
-461324

DATE 4-8-85

LABOR CHARGES					OTHER DIRECT COSTS	
SONNEL	GRADE	RATE ($/HR.)	TIME (HRS.)	COST ($)	ITEM	DESCRIPTION
hemist	I	55.00	3	165	1	Sample soil beneath tank at Golden Gate Auto Auction
atory		~~125~~ per		125	2	Analysis for gasoline in soil
TOTAL				290		

T Tammy Thomas JOB NO. 1286

Golden Gate Auto Auction

6700 Stevenson Blvd, Fremont CA P.O. NO. 2362

MENTS: Take soil sample per criteria and analyze for gasoline hydrocarbons — report to EBAA

REP. David Blunt CLIENT REP. T.T.

CLIENT COPY

UNION SANITARY DISTRICT

37532 Dusterberry Way
Fremont, California 94536
~~791-0191~~ 790-0120

INDUSTRIAL WASTE ANALYSIS REPORT

BUSINESS NAME: 6000 Stevenson, Newark

TYPE OF SAMPLE: Grab

DATE SAMPLED: 6/19/81

TIME: 1500

SAMPLE POINT: Control Manhole

INSPECTOR: G. Vargas/J. Robi

SAMPLE NUMBER: I-061981-3

Also: Lysol

A. USER CHARGE MONITORING

Suspended Solids	112	mg/l
C.O.D.	466	mg/l
B.O.D.		mg/l
Oil & Grease		mg/l
pH	8.6	unit/l

B. COMPLIANCE MONITORING

Arsenic		mg/l
Cadmium	< 0.02	mg/l
Chromium, Ttl.	< 0.05	mg/l
Copper	< 0.1	mg/l
Lead	< 0.1	mg/l
Mercury		mg/l
Nickel	0.1	mg/l
Silver	< 0.02	mg/l
Zinc	0.33	mg/l
Cyanide		mg/l
	2.5	mg/l
		mg/l

C.

City of Fremont
FIRE DEPARTMENT
4200 Mowry Avenue
Fremont, California 94538
(415) 791-4280
NOV 16 1982
Kenneth J. Slamon, Jr.

19 Horgan JUN 19 1981
ity Officer

Union Sanitary District
A PUBLIC AGENCY

JOHN ROBIN
Waste Source Control Inspector

(415) 790-0120

37532 DUSTERBERRY WAY
FREMONT, CA 94536

antal Protection Agency
treet
CA 94105

JUN Imanonok JUN 19 1981
tection Specialist
010

Union Sanitary District
A PUBLIC AGENCY

Pa GLENN VARGAS
Waste Source Control Inspector

(415) 790-0120

37532 DUSTERBERRY WAY
FREMONT, CA 94536

al Protection Agency
et
A 94105

HAZARDOUS WASTE SURVEY PROJECT

Edgar B. Howell, III
SENIOR SANITARIAN

Ph.D.
trol Supv.

APPENDIX C. FOUNDRY SAND LABORATORY CHEMICAL ANALYSIS

FREDERIKSEN ENGINEERING
CONSULTING ENGINEERS ARCHITECTS
OAKLAND LONG BEACH

July 9, 1986

Mr. George Meyer
The American Brass & Iron Foundry
7825 San Leandro Street
Oakland, CA. 94621

File: J-59-34
Laboratory Analysis

Dear Mr. Meyer:

Enclosed you will find our laboratory report with the results of the Waste Extraction Test (WET) and the anaysis for metals (17) in accordance with title 22, section 66693 of the California Administrative Code. The Foundry sand was found to be NON HAZARDOUS.

If you have any questions please feel free to call us.

Very truly yours,
FREDERIKSEN ENGINEERING CO., INC.

Arnold B. Menar

Arnold B. Menar, Ph.D.
Laboratory Director

ABM/amh
enclosure

JAN 28 1988

1755 BROADWAY, OAKLAND, CALIFORNIA 94612 415 / 465-0644 415 / 452-3970 TWX NO. 910 366 7131

FREDERIKSEN ENGINEERING
CONSULTING ENGINEERS ARCHITECTS
OAKLAND LONG BEACH

LABORATORY REPORT File: J-59-84

Client: AMERICAN BRASS & IRON FOUNDRY

Address: Mr. George Meyer
7825 San Leandro Street
Oakland, CA. 94621

Sample: Foundry Sand

Date of Sampling: 5-15-86

Date of Report: 7-9-86

METALS	mg/1	STLC* mg/1
Antimony	<1.0	15
Arsenic	<1.0	5.0
Barium	<5.0	100
Beryllium	<0.10	0.75
Cadmium	<0.10	1.0
Chromium	<0.50	560
Cobalt	<1.0	80
Copper	0.98	25
Lead	<0.50	5.0
Mercury	<0.010	0.2
Molybdenum	<1.0	350
Nickel	<0.50	20
Selenium	<0.10	1.0
Silver	<0.10	5
Thallium	<1.0	7.0
Vanadium	<1.0	24
Zinc	<0.50	250

*STLC = Soluble Threshold Limit Concentration,
22CA66693 (CA Title 22)

The Foundry Sand was found to be non hazardous material

Arnold B. Menar

Arnold B. Menar, Ph.D.
Laboratory Director

ABM/amh

1755 BROADWAY, OAKLAND, CALIFORNIA 94612 415 / 465-0644 415 / 452-3970 TWX NO. 910 366 7131

FREDERIKSEN ENGINEERING
CONSULTING ENGINEERS ARCHITECTS
OAKLAND LONG BEACH

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Laboratory Director

ABM/amh
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FREDERIKSEN ENGINEERING
CONSULTING ENGINEERS ARCHITECTS
OAKLAND LONG BEACH

LABORATORY REPORT

File: J-59-84

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Address: Mr. George Meyer
7825 San Leandro Street
Oakland, CA. 94621

Sample: Foundry Sand

Date of Sampling: 5-15-86

Date of Report: 7-9-86

METALS	mg/1	STLC* mg/1
Antimony	<1.0	15
Arsenic	<1.0	5.0
Barium	<5.0	100
Beryllium	<0.10	0.75
Cadmium	<0.10	1.0
Chromium	<0.50	560
Cobalt	<1.0	80
Copper	0.98	25
Lead	<0.50	5.0
Mercury	<0.010	0.2
Molybdenum	<1.0	350
Nickel	<0.50	20
Selenium	<0.10	1.0
Silver	<0.10	5
Thallium	<1.0	7.0
Vanadium	<1.0	24
Zinc	<0.50	250

*STLC = Soluble Threshold Limit Concentration,
22CA66693 (CA Title 22)

The Foundry Sand was found to be non hazardous material

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Arnold B. Menar, Ph.D.
Laboratory Director

ABM/amh

1755 BROADWAY, OAKLAND, CALIFORNIA 94612 415 / 465-0644 415 / 452-3970 TWX NO. 910 366 7131