PHASE I ENVIRONMENTAL SITE ASSESSMENT AND LIMITED SOIL AND GROUNDWATER SAMPLING REPORT FRIESMAN ROAD PROPERTY LIVERMORE, CALIFORNIA

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July 8, 1997

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A Report Prepared for:

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PHASE I ENVIRONMENTAL
SITE ASSESSMENT AND LIMITED SOIL
AND GROUNDWATER SAMPLING REPORT
FRIESMAN ROAD PROPERTY
LIVERMORE, CALIFORNIA

Kleinfelder Job No.: 10-3006-13

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July 8, 1997



TABLE OF CONTENTS

SECT	TION	<u>Page</u>
1.0	SUMMARY	1
2.0	INTRODUCTION	4
3.0	SITE SETTING	5
4.0	RECORDS REVIEW	8
5.0	HISTORY OF THE SITE	10
6.0	SITE RECONNAISSANCE.	14
7.0	SOIL AND GROUNDWATER SAMPLING	17
8.0	INTERVIEWS	20
9.0	FINDINGS AND CONCLUSIONS	21
10.0	LIMITATIONS	24
11.0	REFERENCES	25
TABI	LES	
	TABLE 1 - Site Setting TABLE 2 - Physical Setting TABLE 3 - Regional Geology and Hydrogeology	6
	TABLE 4 - Bordering Properties	7
	TABLE 6 - Historical Information Reviewed	
	TABLE 7 - Site Reconnaissance General Features	
	TABLE 8 - Site Observations	
	TABLE 9 - Summary of Analytical Results	
	TABLE 10 - Interviews - Owners & Occupants	20

TABLE OF CONTENTS (continued)

PLATES

Plate 1 - Site Vicinity Map

Plate 2 - Site Plan

Plate 3 - Site Reconnaissance Photographs, May 29, 1997

Plate 4 - Site Reconnaissance Photographs, May 29, 1997

Plate 5 - Site Reconnaissance Photographs, May 29, 1997

APPENDICES:

Appendix A Vista Site Assessment Plus Report

Appendix B Well Location Data Log

Appendix C Laboratory Analytical Data Sheets and Chain-of-Custody Forms

Appendix D Authorization to Use

1.0 SUMMARY

Kleinfelder, Inc. (Kleinfelder) was retained by Children's Hospital Foundation to conduct a Phase I Environmental Site Assessment (ESA) and limited soil and groundwater sampling of an approximately 55-acre site located at 1660 Friesman Road in Livermore, California (see Site Vicinity Map, Plate 1). It is our understanding that a portion of the site may be donated to Children's Hospital Foundation and may be developed in the future with residential structures.

It should be noted that Freisman is the correct spelling of the current property owner's name. This name is often misspelled as Friesman on various maps of the site vicinity. In our report, we will use the spelling "Friesman" when referring to the road and site as the Thomas Brothers map for the area uses this spelling. The correct spelling of "Freisman" is used for the property owner's name in this report.

A summary of our findings, conclusions and recommendations is presented below. Kleinfelder's findings are discussed in further detail in the text of this report. This report is subject to the limitations in Section 10.0.

SITE HISTORY

- The site was undeveloped prior to the construction of residences, barns and outbuildings associated with a former on-site dairy in the 1910s.
- According to Hugh Freisman, the current property owner, dairy operations ceased in 1971.
- Steam generated by two boilers located in the former dairy building was used to power various pieces of equipment needed in the dairy operations. These boilers were reportedly fueled by heating oil previously located in a metal shed to the north of the dairy building.
- Open areas on the northern and southern portions of the site were used in the past for agricultural land and pastures for cattle and horses.

CURRENT CONDITIONS

- The central portion of the site is currently occupied by six residences, the former dairy building, several garages, seven barns and a stable.
- The main residence is occupied by the property owner while the remaining residences, several of the barns and the metal shed to the north of the dairy barn are leased to tenants.
- The front pasture is currently leased for boarding of horses.
- No stains were noted on the concrete floor around the two boilers in the dairy building. We were unable to access the interior of the metal shed as Mr. Freisman did not have a key to the padlock; however, we understand that an aboveground storage tank (AST) for heating oil was located in the shed in the past. No evidence of aboveground or underground piping was observed between the boilers and the shed.

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- Several ASTs were observed on the site. No evidence of underground storage tanks (USTs) was noted during our visit. All of these ASTs were located on concrete pads which appeared to have only minor oil staining. According to Mr. Freisman, these tanks are used by some of the tenants for fueling of their vehicles and equipment.
- Two 55-gallon drums of hydraulic fluid were observed adjacent to a barn on the southern portion of the site. Minor stains were noted on the concrete pad beneath the drums.
- Numerous (estimated 250 to 300) one to five gallon containers of paints and thinners were present in and around the barn located to the east of the dairy building. Mr. Freisman stated that this barn has been leased for several years to a house painter. No stains were noted on the concrete floor of the barn or the concrete pad which covered the majority of the exterior yard area.
- Large quantities of debris (tires, old furniture, scrap metal and lumber) were observed across the site.
- One water supply well was located on the site. According to the Alameda County Flood Control and Water Conservation District Zone 7, this well was installed in 1975 and was drilled to a depth of 380 feet.
- The on-site buildings are connected to a septic system, according to Mr. Freisman.
- No detectable concentrations of volatile organic compounds (VOCs) were present in the composite of four soil samples collected from the area beneath the containers of paints and thinners. Total lead was present in this composite at a concentration of 73 milligrams per kilogram (mg/kg). Soluble lead was not present in this sample above the laboratory reporting limit of 0.2 milligrams per liter (mg/L).
- Extractable petroleum hydrocarbons were present in two of the three shallow soil samples collected from around the two boilers, and in the soil and groundwater samples collected from the borings located in the driveway between the dairy building and the metal shed. The concentrations of extractable petroleum hydrocarbons in the shallow samples ranged from 5.2 to 160 mg/kg. The concentrations of extractable petroleum hydrocarbons in the soil samples from the deeper borings ranged from 25 mg/kg to 100 mg/kg while the concentrations of purgeable petroleum hydrocarbons in these samples ranged from 34 to 280 mg/kg.
- The concentrations of extractable petroleum hydrocarbons and purgeable petroleum hydrocarbons in the groundwater sample collected from the site were 160,000 micrograms per liter (ug/L) and 3,100 ug/L, respectively. The concentration of extractable petroleum hydrocarbons in the groundwater sample constituted free-product.

CONCLUSIONS AND RECOMMENDATIONS

- The concentration of total lead in the composite soil sample collected from the site is below the Preliminary Remediation Goal for residential soils 130 mg/kg established by Cal-Environmental Protection Agency (EPA) and the Total Threshold Limit Concentration (TTLC) of 1,000 mg/kg established by Cal-EPA. Based on this data, Kleinfelder recommends no further action with regards to this issue.
- Kleinfelder recommends that additional samples be collected from the area between the boilers and the metal shed which housed the former heating oil AST to establish the lateral and vertical extent of the impacted soils and groundwater in this area. The regulatory



agencies generally require further investigation if concentrations of hydrocarbons in soil exceed 100 mg/kg. In addition, due to the presence of free-product in the groundwater, Kleinfelder anticipates that the regulatory agencies, including the Regional Water Quality Control Board - San Francisco Region (RWQCB) and the Alameda County Health Care Services Agency (ACHCSA) may require remedial action at the site.

Due to the concentrations of hydrocarbons above 100 mg/kg in soils at the site and the presence of free product in the groundwater, some interim remediation may be required. In Kleinfelder's opinion, unless it can be shown that there is <u>no</u> risk to human health and the environment, and the soil and groundwater can be shown to be naturally biodegrading with time, some form of additional remediation will most likely also be required.

- The property owner should be notified of our findings. As required by law, the owner is responsible for informing the ACHCSA of the results of this investigation. If requested, Kleinfelder can assist the property owner in negotiating with the ACHCSA.
- Kleinfelder recommends that the ASTs, the 55-gallon drums of hydraulic fluid, the numerous containers of paint and thinners, the empty containers and drums, the various pieces of farm equipment, and all debris be removed from the site for proper disposal. It should be noted that Kleinfelder's representative was unable to observe the interiors of all of the on-site buildings and that some areas could not be observed due to the presence of equipment and debris. If stains or discolored soils are noted beneath these items at the time they are removed, collection and analyses of soil samples may be warranted.
- Kleinfelder was unable to observe the interiors of the rental houses. Based on the age of the on-site structures, however, it is likely that materials suspected of containing asbestos and lead based paints are present in these buildings. If demolition or remodeling of the buildings requires disturbing any suspected asbestos containing materials or lead based paints, or if the materials are to be removed from the buildings, then a survey of the building for asbestos containing materials and lead paint should be conducted.
- Kleinfelder recommends that the water supply well be destroyed in accordance with Zone 7 requirements if it will not be used in the future. These requirements generally include removal of the pump, perforating the well casing, and filling the casing with cement to within a few feet of the surface. The upper few feet is then filled with soil.
- Due to the residential nature of the site for the last 25 years, it is unlikely that the septic tank would present a significant environmental concern, in Kleinfelder's opinion. Kleinfelder recommends that the soils around the septic system be observed during removal for unusual staining or discoloration. Collection and analysis of samples may be warranted if staining is noted during the removal operations.
- Several soil and/or groundwater releases have been reported in the vicinity of the site. In Kleinfelder's opinion, these nearby releases are unlikely to have impacted the project site due to their successfully remediation (and case closure status) and/or their distance from the site.

2.0 INTRODUCTION

In May of 1997, Children's Hospital Foundation retained Kleinfelder to conduct a Phase I ESA of the subject property. Kleinfelder understands that this report will assist the client in understanding site specific recognized environmental conditions associated with the subject property's past and current use. Kleinfelder performed this ESA in general accordance with the scope and limitations of the American Society of Testing and Materials (ASTM); Standard Practice for Phase I Environmental Site Assessment Process E1527-97.

REPORT FORMAT

The following sections describe Kleinfelder's work scope:

- Section 3, Site Setting, is a compilation of information concerning the site's location, physical setting, geologic and hydrogeologic conditions, and adjacent property use.
- Section 4, Records Review, is a compilation of Kleinfelder's review of several databases available from Federal, State, and local regulatory agencies regarding hazardous substance use, storage, or disposal at the subject site; and for off-site facilities.
- Section 5, *History of the Site*, details the history of the site and adjoining properties based on review of various sources which may have included aerial photographs, city or suburban directories, and historical maps.
- Section 6, Site Reconnaissance, describes the site reconnaissance conducted by Kleinfelder.
- Section 7, Soil and Groundwater Sampling, describes the soil and groundwater sampling conducted at the site by Kleinfelder and presents the analytical results.
- Section 8, *Interviews*, summarizes the interviews and telephone conversations conducted by Kleinfelder with people knowledgeable about the site.
- Section 9, Findings and Conclusions, is a presentation of our findings and conclusions regarding the information contained in Sections 3 through 8; and presents our opinion regarding recognized environmental conditions at the site.
- Sections 10 and 11 include our limitations and references, respectively.

3.0 SITE SETTING

The site setting is evaluated to assess the impact of possible migration of potential contamination from recognized environmental conditions on the subject site. Tables 1 through 4 summarize the physical characteristics of the site and bordering properties. The site location is shown on Plate 1, Site Vicinity Map.

The information presented in Table 1 includes the physical location and size of the subject site, as well as the current and proposed use of the site. This information was obtained from review of various maps (such as topographic maps), and/or review of public records at the city and/or county offices. As shown on the Site Vicinity Map, Plate 1, the site is located at the east end of Friesman Road in Livermore, California. Highway 580 is located immediately north of the site.

	TABLE 1
ADDRESS	SITE SETTING 1660 Friesman Road
LOCATION	Livermore, Alameda County, California
TOWNSHIP/RANGE	Township 3 South, Range 1 East, Section 2, Subsections K, L,
SECTION/SUBSECTION	P and Q (Source: Livermore Quadrangle Topographic Map)
ASSESSOR'S PARCEL NO.	904-0001-001-10
ACREAGE	Approximately 55 acres
CURRENT USE	Single-family residences, barns, storage sheds (rental to various companies), and grazing land
PROPOSED USE	Possible single-family residential development

Table 2 includes information on the physical setting of the site. As noted in Table 2, the United States Geological Survey (USGS) Livermore Quadrangle 7.5 Minute Topographic Map was reviewed during the course of this assessment. The map was originally produced in 1961 and was photorevised in 1980. In addition, historical topographic maps of the Pleasanton Quadrangle 7.5 Minute Topographic Map (1904 and 1937) also were reviewed for information on past site structures. The dates provided for the historical maps indicate the year of the field reconnaissance or the aerial photographs.

The geologic map reviewed for this assessment was compiled by the California Department of Water Resources (1974). The soils map reviewed for the site vicinity was contained in the United States Department of Agriculture, Soil Conservation Service (SCS) report dated 1966.

The Munger Map Book noted in Table 2 is a comprehensive atlas published by the Department of Conservation, Division of Oil and Gas (DOG). The maps in this book show field locations of active and inactive oil and gas wells.

Information on regional geology and hydrogeology is presented in Table 3 below. This information was obtained from published data and maps of the site vicinity.



	PI	TABLE 2 IYSICAL SETTING
SOURCE TITLE	AUTHOR/SOURCE	COMMENTS
USGS TOPOGRAPHIC QUADRANGLE MAPS	Livermore and Pleasanton Quadrangles	 1904 - No buildings were present on-site. A road located on the west side of site led to off-site buildings. 1937 - One on-site building (likely the property owner's residence noted at time of site visit). 1961 - Six buildings present on the north side of arroyo (likely main dairy barn and five residences). 1980 - Previously noted buildings and seven additional structures present on-site. New structures were likely barns and sheds noted during site visit. Site elevation ranges from approximately 385 feet above Mean Sea Level at the northeast corner to 365 feet at the southwest corner. Cottonwood Creek enters Arroyo Las Positas near the center of the site.
EVALUATION OF GROUND WATER RESOURCES (Near surface geology)	California Department of Water Resources, 1974	Surfial deposits consist of stream channel deposits (Qsc) along course of Arroyo Las Positas, alluvial fan deposits (Qf) to north of arroyo, basin deposits (Qb) to south of arroyo, and alluvium (Qal) on west side of site. Nearby faults include Parks Fault (1/4 mile north of site) and Livermore Fault (1/2 mile east).
SOIL SURVEY OF ALAMEDA AREA, CALIFORNIA MUNGER MAP BOOK	US Department of Agriculture, Soil Conservation Service, 1991 Averill H. Munger, 1993	Site soils consist of riverwash (Rh) along the arroyo, Rincon Clay Loam (RdA) north of the arroyo, Sunnyvale clay loam south of the arroyo, and Yolo Loam (YmA) at northeast corner of site (see SCS Sheet Number 15). No oil or gas wells reported on-site or in area.

TABLE 3 REGIONAL GEOLOGY AND HYDROGEOLOGY						
SOURCE TITLE	AUTHOR/SOURCE	COMMENTS				
REGIONAL GEOMORPHIC	T.W. Dibblee, Jr.	Coast Range				
PROVINCE & SEDIMENT TYPE		Upper Pleistocene to Recent				
SOIL TYPE	T.W. Dibblee, Jr.	Continental Rocks & Deposits				
DEPTH TO PERCHED WATER	Kleinfelder field investigation	Groundwater encountered at				
	described in this report	depth of 20 feet.				
DEPTH TO REGIONAL	Alameda County Flood Control &	Anticipated at 30 to 50 feet				
GROUNDWATER	Water Conservation District, 1990	below ground surface				
EXPECTED LOCAL	Surface Topography	To southwest with surface				
GROUNDWATER FLOW	·	slope. Site in Camp and				
DIRECTION		Amador Subbasins.				
REGIONAL GROUNDWATER	Vista Information Solutions Site	Several hydrocarbon releases				
QUALITY-PROBLEMS	Assessment Report and 1991 State	reported in area but no				
	Water Resources Control Board	reported contaminated public				
	Well Investigation Program	water wells				



A brief drive-by survey of the parcels adjacent to the site was conducted on the same day as the site visit, May 29, 1997. The results of this survey are presented below in Table 4. Two businesses, Tri-Valley Golf Center and Los Positas Golf Course, which were suspected by their name and/or the nature of their businesses to be involved in hazardous substances handling were noted in the immediate site vicinity.

	TABLE 4 BORDERING PROPERTIES
LOCATION	PROPERTY USE
North	Grazing land to north of Interstate 580
West	Tri-Valley Golf Center driving range at 1780 Friesman Road
East	Los Positas Golf Course at 909 Club House Drive
South	Scattered residential buildings, Las Positas Golf Course and grazing land

4.0 RECORDS REVIEW

The purpose of the records review is to obtain and review records that would help to evaluate recognized environmental conditions in connection with the subject site and bordering properties. Kleinfelder reviewed databases available from the Federal, State, and local regulatory lists. This review was performed by Vista Information Solutions, Inc. (Vista) of San Diego, California and is summarized below in Table 5. The acronyms used in Table 5 are defined in Vista's Site Assessment Plus Report in Appendix A.

Vista utilizes a geographical information system to plot the locations of reported incidents. This information is reviewed by Kleinfelder to help establish if the project site or nearby properties have been included on the noted databases and lists. The Vista report includes a map which shows the locations of the regulated properties with respect to the project site (Page 3 of Vista's report) and a summary of pertinent information for these properties, including the responsible party, the property address, the distance and direction from the project site, and the databases and lists on which the property appears (see Page 5 of Vista's report).

Due to lack of sufficient address information, Vista was unable to map several facilities with reported releases (see Page 6 of Vista's report). Based on the company names and our experience in the area, Kleinfelder was able to establish that all but two of these facilities were located outside the specified search radii. The locations of Industrial Domestic WW (included on the landfill list) and Thomas Joe Copeland (a facility with a registered tank) could not be established with the information provided by the regulatory agencies. These facilities were not noted in the site vicinity at the time of our visit.

	RECORDS REVIEW	'ABLE 5 VED-SEARCH DIST	TANCE	
FED	ERAL		STATE	
NPL	1 Mile	SPL	1 Mile	
CERLIS	0.5 Mile	SCL	0.5 Mile	
RCRA-TDS	1 Mile	SWIS	0.5 Mile	
RCRA-CORRACTS	1 Mile	LUST	0.5 Mile	
RCRA-GEN	Site & Bordering	CORTESE	1 Mile	
ERNS	Site	UST	Site and Bordering	
	1	LOCAL		
LANDFILLS		0.5 Mile		
CONTAMINATED WELLS		0.5 Mile		
REGISTERED UST		Site & bordering		



Project Site

The project site is not on any of the lists compiled by Vista.

Surrounding Areas

The City of Livermore property at 1800 Friesman Road (included on the LUST list) was incorrectly reported by Vista to be 0.55 miles west of the site. Previous work in the area by Kleinfelder indicated that this property is located immediately south of the site. According to information provided to Vista by the regulatory agencies and our previous review of regulatory files, the release at this property involved gasoline leakage from an underground storage tank located immediately south of the site on the golf course. This case has been granted case closure by the regulatory agencies, according to Vista's information. Based on the information provided, this release does not appear to have impacted the project site.

Two other facilities in the area (the Las Positas Golf Course at 909 Club House Drive and the Schwartz Property/Livermore Airport at 636 Terminal Circle) had reported releases. The extent of the Las Positas Golf Course release was being assessed at the time of Vista's report while the release at 636 Terminal Circle had been granted case closure. In Kleinfelder's opinion, these releases would not likely have a significant impact on the site due to their distances of greater than one-half mile from the project site.

5.0 HISTORY OF THE SITE

The history of the site was researched to identify obvious uses of the site back to the first developed use, or 1940, whichever is earlier or readily available. Table 6 summarizes the available information which was reviewed during this assessment. A summary of the information obtained from aerial photographs by the other consultants is presented below.

	TABLE HISTORICAL INFORMA	·Franciae percentaga e para 1984, 600 (600 (600 (600 (600 (600 (600 (600	
	REMARKS	COMMENTS	REVIEWED
AERIAL PHOTOGRAPHS (Source: Pacific Aerial Survey, Oakland, California)	Years Reviewed: 1957, 1959, 1969, 1978, 1988, and 1994 Scales and ID # in References (Section 11)	See discussion below	Yes
FIRE INSURANCE MAPS (Source: Vista)	No Fire Insurance Maps produced for the site vicinity	See discussion below	No
CITY/COUNTY BUILDING AND PLANNING DEPARTMENTS	Livermore Building and Planning Departments/ Alameda County Building Department	See discussion below	Yes
LAND USE REPORT	Livermore Planning Department	See discussion below	Yes
COUNTY HEALTH DEPARTMENT/ FIRE DEPARTMENT	Alameda County Health Services and Livermore/ Pleasanton Fire Department	See discussion below	Yes
COUNTY ASSESSOR'S RECORDS	Assessor's Parcel Number assigned	APN:904-0001-001-10	Yes
STREET DIRECTORIES	Not reviewed		No
CHAIN-OF-TITLE	None provided by Client	See discussion below	No

5.1 AERIAL PHOTOGRAPHS

Project Site

Due to the scale of the aerial photographs and tree coverage, all of the details of the site were not clearly visible in all of the photographs. The project site appeared generally the same in all of the aerial photographs reviewed for this assessment with all of the on-site buildings noted during the site visit present. These buildings are shown on the Site Plan, Plate 2.



Generally, residential buildings were located to the north of Arroyo Las Positas, and barns and storage sheds were located to the south of the arroyo.

The remainder of the site appeared to be used for farming and grazing land in the aerial photographs.

Cottonwood Creek crossed the northeast corner of the site and Arroyo Las Positas trended in a generally east to west direction across the center of the site.

Surrounding Areas

Farmland was present to the west in all of the photographs reviewed with the Tri-Valley Golf Center present on the site's western border in the later photographs. The area to the east of the site was used as farmland until construction of the Los Positas Golf Course between 1959 and 1969. Several structures which appeared to be residences, sheds and barns were present to the south of the site prior to the 1994 photographs. These buildings were demolished in the late 1980s or early 1990s and the golf course was extended into this area.

In the 1957 to 1969 photographs, a two lane road labeled as Highway 50 on the topographic maps was present to the north of the site. This road was widened prior to the 1978 photographs and is currently named Interstate 580.

5.2 SANBORN FIRE INSURANCE MAPS

During the course of this assessment, Kleinfelder contacted Vista for Sanborn Fire Insurance Maps of the site vicinity. These maps were originally produced to show buildings in sufficient detail for insurance underwriters to evaluate risks and establish premiums. At the time of our assessment, no Sanborn Maps had been published for the project site vicinity. The lack of Sanborn mapping of the project site vicinity suggests that the vicinity was not considered a high population density fire hazard zone.

5.3 CITY AND COUNTY PLANNING DEPARTMENTS INFORMATION REVIEW

Stephen Quayle of Kleinfelder visited the offices of the Alameda County Building Department on May 14, 1997. According to a representative of the County Building Department, a building permit was issued in 1969 for foundation repair work. The project site and surrounding areas were annexed to the City of Livermore in January of 1994 and additional permits may be on file with the City of Livermore, according to a representative of the County Building Department.

Lita Freeman visited the offices of the Livermore Building Department on May 29, 1997. According to a representative of the Building Department, the only permit available was for a day care center being operated on the site in the early 1990s. This center was not in operation at the site at the time of our visit.

Ms. Freeman of Kleinfelder contacted the Livermore Planning Department on May 29, 1997. According to a representative of the Planning Department, the property is currently zoned as PV - Planned Development and the site in located within the 100-year flood zone.

5.4 COUNTY HEALTH DEPARTMENT AND CITY FIRE DEPARTMENT INFORMATION REVIEW

Mr. Quayle visited the Alameda County Health Care Services Agency offices on May 20, 1997 for information on hazardous materials usage at the site and the presence of underground or aboveground storage tanks on the site. According to the file clerk, no files were available for 1660 Friesman Road.

Mr. Quayle contacted the Livermore/Pleasanton Fire Department (LPFD) on May 22, 1997 for information on the site. According to Inspector Danielle Stefani, the file contained paperwork discussing the conditions of approval for a day care center to be operated at the site. No information on hazardous materials usage or tanks at the site was available.

5.5 COUNTY ASSESSOR'S OFFICE INFORMATION REVIEW

The Alameda County Assessor's Office was contacted during this assessment for information on the project site. According to a representative of the County Assessor's Office, the Assessor's Parcel Number for the site is 904-0001-001-10.

5.6 COUNTY OFFICE OF AGRICULTURAL COMMISSIONER INFORMATION REVIEW

Kleinfelder contacted Sharon Neklason-Seslowe of the Alameda County Agricultural Commissioner's Office for information on the use and storage of pesticides on the site. According to the County Agricultural Commissioner's office, no records were available for the site. Ms. Neklason-Seslowe stated that aerial spraying for rodents may have occurred in the past; however, no records are on file with her office to confirm this information.

5.7 WATER DISTRICT INFORMATION REVIEW

Ms. Freeman contacted the Alameda County Flood Control and Water Conservation District - Zone 7 for information on well installation permits issued for the site in the past. According to Steven Ellis of Zone 7, a Well Location Data log was available for the site. This log indicated that DeLucchi Well and Pump installed a well on the site for the property owner, Hugh Freisman, on October 3, 1975. This well was drilled to a depth of 380 feet and had a diameter of 10 inches. A submersible pump was installed in the well upon completion of the drilling. The identification number 3S-1E-2P3 was assigned to this well by Zone 7.

This well was noted on the southeastern portion of the site at the time of our visit. According to Mr. Freisman, this well is used as a domestic water supply for the on-site buildings.

A copy of the Well Location Data log is presented in Appendix B.

5.8 CHAIN-OF-TITLE REVIEW

A chain-of-title was not provided to Kleinfelder during the course of this assessment. The current property owner, Mr. Freisman, did however supply Kleinfelder with a copy of an appraisal conducted for the site in 1995 by Paul Stansky, a Certified General Appraiser from Clayton, California.

According to the information in Mr. Stansky's report, the site consists of 54.67 acres located at 1660 Friesman Road. Mr. Stansky's noted that Freisman is the correct spelling of the name which is misspelled as Friesman on some maps. In our report, Kleinfelder uses the Friesman when referring to the road and ranch name as the Thomas Brothers map for the area uses this spelling. The correct spelling of the property owner's name is used in this report.

Mr. Stansky listed the Assessor's Parcel Number as 099B-3750-001-08. According to information provided by the county assessor's office and Eric Eng of Dutra Realty, the current APN is 904-0001-001-10.

During his visit to the site, Mr. Stansky noted that the on-site buildings included the property owner's residence, five small residences (used as rentals), a defunct dairy building, and several barns and outbuildings. The northern portion of the site was used as pasture land, the central portion was occupied by the residential and dairy buildings, and the barns and outbuildings were located on the southern portion.

Mr. Stansky stated that the residences were connected to a private septic system and that water is provided by an on-site well. According to information in Mr. Stansky's report, a public sewer was located approximately 3,400 feet to the east of the site (and on the north side of Interstate 580), a storm drain system was located about 5,000 feet to the east, and a public water line was present near the northern border of the site. Mr. Stansky noted that the water line was a massive size conduit and could only be tapped at a very high cost.

According to Mr. Stansky's report, an interview was conducted with Mr. Freisman during the appraisal. Mr. Stansky noted that Mr. Freisman was "...directly questioned about the possibility of any underground fuel storage tanks on the 1660 Freisman Road site..." and that Mr. Freisman "...stated that no such tanks or systems were in place" or to his knowledge "had ever existed."

6.0 SITE RECONNAISSANCE

Kleinfelder's representative, Lita Freeman, conducted a site reconnaissance on May 29, 1997. Ms. Freeman was accompanied during the site visit by Mr. Freisman, the current property owner. The purpose of the site visit was to observe environmental conditions involving the use, storage, disposal and handling of hazardous substances. Ms. Freeman completed an ASTM Questionnaire during the site visit.

The Site Plan (Plate 2) shows the approximate site boundaries and the locations of the items discussed in the following paragraphs; photographs taken during the site reconnaissance are presented on Plates 3, 4 and 5.

At the time of the site visit, the approximately 55-acre site was developed with several older residential buildings, barns, sheds and outbuildings with the remaining areas being used for grazing/pasture (see Photos 1 and 2, Plate 3). The largest residence (original farm house) was occupied at the time of our visit by Mr. Freisman. The remaining residences were rented to various individuals. Three detached garages were located to the south and east of the main residence and were being used by Mr. Freisman and tenants for storage of vehicles, tools, and household goods and furniture. We were unable to access the garage rented to a tenant; however, no stains were observed on the floor of the other two structures.

According to Mr. Freisman, the property was used as a dairy in the past but was closed in 1971. The main dairy building was located to the east of the owner's residence. Two boilers, which supplied steam to power for the equipment when the dairy was operating, were located at the northern end of this building (see Photo 3, Plate 3). No stains were noted on the concrete floor beneath the boilers.

Mr. Freisman stated that the boilers were fueled by heating oil stored in an aboveground tank. According to Mr. Freisman, this tank was previously located in a metal shed located to the north of the dairy building across a paved driveway. Mr. Freisman noted that the tank had been removed a number of years ago. We were unable to access the metal shed as it was being rented to a tenant and Mr. Freisman did not have a key to the padlock. No evidence of piping was noted between the shed and the boilers.

Several pieces of farm equipment, including two tractors, and lawn mowers were noted in an open-sided shed located to the south of the dairy building. Minor oil stains were noted on the concrete floor of this shed.

Several aboveground fuel tanks were noted on the site, including one on the north side of the dairy building (see Photo 4, Plate 4), two adjacent to a barn on the south side of the site (see Photo 6, Plate 4), and one in the barn at the southwest corner of the site (see Photo 7, Plate 5). All of these tanks had a capacity of approximately 250 gallons, with the exception of the approximately 1,000 gallon tank located in the barn at the southwest corner. Each of these tanks were located on towers above concrete pads. Minor oil stains were noted on the

14



concrete pads. According to Mr. Freisman, these tanks are used by tenants for fueling their vehicles and equipment.

Two blue 55-gallon drums were observed near the two tanks at the west end of the southernmost barn (see Photo 6, Plate 4). According to the labels, hydraulic fluid was stored in these drums. Minor stains were observed on the concrete pad beneath these drums.

A barn which has been leased for several years to a house painter was located immediately east of the dairy building (see Photo 5, Plate 4). Numerous containers of paints and thinners were noted in and around this barn. The barn and front yard area featured concrete floors with little or no staining. Due to the slope of the concrete pad in the front yard area, soil had been washed into the area beneath the containers. In addition, several containers had been placed just off the concrete pad on bare soil. No stains were noted on the soil beneath the containers.

The remaining barns on the southern portion of the site were leased to various parties, according to Mr. Freisman and no keys were available for these buildings. Mr. Freisman stated that the tenants generally stored equipment for their businesses (construction and trucking businesses) and that no vehicle maintenance was performed on the site.

Numerous empty 55-gallon containers were noted in the barn on the southwest corner of the site (which contained the approximately 1,000 gallon diesel tank). Minor oil stains were noted on the concrete floor of this barn. An empty aboveground storage tank, an empty 55-gallon drum and two empty 5-gallon containers were noted to the west of the stable. No stains were observed on the concrete pad beneath these items. Various pieces of old farm equipment, tires, and piles of scrap metal and lumber were observed across the site.

The areas around the residences, garages, barns, and outbuildings were generally paved with asphaltic concrete or covered by concrete slabs. It is our understanding that these slabs were placed when the site was used as a dairy barn to allow easy cleaning of the areas and equipment. Several square concrete troughs were noted around the barns on the south side of the site. Mr. Freisman stated that these troughs were used in the past to water the dairy cattle and that grazing pastures were located around the site for the cattle.

A water well and holding tank were located near the center of the site (see Photo 8, Plate 5). According to Mr. Freisman, this well supplies water to the site. Mr. Freisman stated that no other wells were located on the site in the past and the water was previously supplied by off-site wells or surface water in the arroyo.

Several propane tanks which supplied fuel to heat the residences were noted on the central portion of the site.

No obvious evidence of underground storage tanks or distressed vegetation was observed onsite. No stains or discolored areas were noted in the accessible portions of Arroyo Las Positas and Cottonwood Creek. General site features are summarized on Table 7. During the site reconnaissance obvious evidence of recognized environmental conditions in association with the site were noted, and are summarized on Table 8.

SITE RECO	BLE 7 NNAISSANCE FEATURES
ROADS	Friesman Road adjacent to northwest of site Interstate 580 adjacent to north of site
POTABLE WATER SUPPLY	On-site well
SEWAGE DISPOSAL SYSTEM	On-site septic system
GENERAL DESCRIPTION OF STRUCTURES	Residences, barns, sheds and outbuildings

	FABLE 8 BSERVATIONS		
511150	REMARKS	OBSERVED	NOT OBSERVED
INTERIOR AND EXTERIOR OBSERVATIONS			
Current use	Residential and grazing land	X	
Past use	Dairy farm	NA	
Hazardous substances and petroleum products in connection with unidentified uses			Х
Storage tanks - above or underground	Several aboveground fuel storage tanks	Х	
Odors or pools of liquid			Х
Drums	Drums of paints, thinners and hydraulic fluids	X	
Hazardous substances and petroleum products	Aboveground tanks with	X	
containers (not necessarily in connection with	diesel for fueling vehicles		
identified uses)	and equipment	·	
Unidentified substance containers			X
Electrical Equipment (Possibly PCB containing oil)			X
Chemical storage or ag chemical mixing areas			Х
INTERIOR OBSERVATIONS			
Heating/cooling	Aboveground propane tanks	X	
Stains or corrosion			X
Floor drains & sumps			X
Hazardous waste storage	<u> </u>		X
EXTERIOR OBSERVATIONS			
Pits, ponds, or lagoons			X
Stained soil or pavement	Minor oil stains on concrete	Х	
Stressed vegetation			X
Solid waste	Scrap metal and lumber, tires, general debris	X	
Waste water	1		X
Wells	One on-site well	X	
Septic systems	On-site septic system	X	
Buried or burn debris			X

7.0 SAMPLING ACTIVITIES

On June 12, 1997, a surface soil, shallow soil, and subsurface soil and groundwater investigation was performed by Keith Powers of Kleinfelder. The sampling was performed using a hand-driven slide hammer attached to a drive sampler and a truck mounted Geoprobe™ sampling system. The deep borings were designated as KB-1 and KB-2, the shallow borings were labeled KSH-3, KSH-4 and KSH-5, and the surface soil sample locations were designated as KSF-6, KSF-7, KSF-8 and KSF-9 (see Site Plan, Plate 2).

FIELD INVESTIGATION

Prior to each drilling and sampling event, the equipment to be used was washed in an Alconox™ water mixture and double rinsed in deionized water. The soil samples were capped with Teflon™ sheets and plastic end caps, properly labeled, logged onto a chain-of-custody form, and placed into an ice cooled chest for transport to the laboratory. Groundwater samples were retrieved using a cleaned stainless steel bailer and were decanted into the sample bottles provided by the laboratory. The bottles were properly labeled, logged onto the chain-of-custody form, and placed into an ice cooled chest.

The Geoprobe™ system was used on borings KB-1 and KB-2. The borings were continuously sampled and samples were collected in 4 foot long, one and 5/8-inch diameter butyrate liners. During drilling activities, the samples were logged according to the Unified Soils Classification System. Soil samples were screened using a photoionization detector (PID) to detect the presence of volatile organic compounds (VOCs). Two soil samples from borings KB-1 and KB-2 were submitted for analysis based upon field observations (i.e. PID readings, visual staining, and odors).

Groundwater samples were collected through a slotted PVC pipe inserted into the boring. Groundwater samples were only collected from KB-2, groundwater was not encountered in KB-1.

During drilling, clays and silty clays were encountered throughout the borings to depths of approximately 24 feet below ground surface (bgs). From the surface to approximately 11 feet bgs, PID readings ranged from 1.2 to 2.6 parts per million (ppm). The PID readings were substantially higher from 12 feet bgs to the bottom of the borings. These readings ranging from 45 ppm to 910 ppm. The highest PID readings were in the 16 to 20 foot samples taken from each boring.

Three shallow soil samples (KSH-3, KSH-4, and KSH-5) were collected in the area of the boilers. The concrete floor was cored at each sampling location prior to collection of the samples from depths ranging from 1.5 to 3 feet bgs. The samples were collected using a hand-driven slide hammer attached to a drive sampler. The sampler contained one 2-inch diameter, 6-inch long, brass or stainless steel liner.



Four surface samples (KSF-6, KSF-7, KSF-8 and KSF-9) were collected of soil accumulated on the concrete pad beneath the containers of paints and thinners and from areas where the containers had been placed directly on bare soil. The samples were collected using a hand-driven slide hammer as described above.

CHEMICAL ANALYSIS

The samples collected from the site were submitted to McCampbell Analytical, Inc. (McCampbell) for analysis. McCampbell is certified by the State of California to perform the requested analysis. A summary of the analytical results is presented in Table 9. The analytical data sheets and the chain-of-custody documents are presented in Appendix C.

The soil and groundwater samples collected from borings KB-1 and KB-2 and the shallow soil samples KSH-3, KSH-4, and KSH-5 were analyzed for Total Purgeable Petroleum Hydrocarbons (TPPH) quantified as gasoline and Total Extractable Petroleum Hydrocarbons (TEPH) quantified as diesel (TPH-d) using EPA Test Method 8015 Modified, and the aromatic VOCs, benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Test Method 8020.

The four surface samples, KSF-6, KSF-7, KSF-8 and KSF-9, were composited by the laboratory into one sample, labeled KSF6-9, and analyzed for VOCs using EPA Test Method 8010 and Total Lead using EPA Test Method 6010/7000.

The analytical results revealed TPPH, TEPH, toluene, ethylbenzene, and/or xylenes in the soil and groundwater collected from the areas of the boilers and the former AST. In addition, the groundwater sample contained benzene.

No VOCs were present above laboratory detection limits in the composite sample KSF6-9. Total lead was detected at a concentration of 73 mg/kg, or approximately parts per million. Kleinfelder requested that the laboratory analyze this sample for soluble lead as the total lead concentration was more than ten times the Soluble Threshold Limit Concentration (STLC) of 5 milligrams per liter (mg/L) or approximately parts per million. The "ten times" factor is a rule-of-thumb commonly used to anticipate whether a sample is likely to exceed the STLC based on the TTLC value. Analysis of this sample did not reveal soluble lead above the laboratory detection limit of 0.2 mg/L.

				SUMMARY	TABLE 9 OF ANALYT	ICAL RESUI	ЛS			
Sample Number	Matrix	TPPH	TEPH	Benzene	Toluene	Ethyl- benzene	Xylenes	H VOCs (µg/kg)	Total Lead	Soluble Lead (mg/L)
KB-1-19	soil	280,j	100,d,b	<0.01	0.52	1.6	1.2	NA	NA	NA
KB-2-19	soil	34,j,b	25,d	<0.005	0.036	0.083	0.13	NA	NA	NA
KB-2-W1	water	3,100, j,h,i	160,000, d,h,i	7.3	19	11	22	NA	NA	NA
KSH-3-1.5	soil	<1.0	<1.0	< 0.005	<0.005	< 0.005	<0.005	NA	NA	NA
KSH-4-2	soil	<1.0	160,c	< 0.005	<0.005	< 0.005	<0.005	NA	NA	NA
KSH-5-3	soil	<1.0	5.2,g	< 0.005	0.016	< 0.005	<0.005	NA	NA	NA
KSF6-9	soil	NA	NA NA	NA	NA	NA	NA	* ND	73	*<0.2
PRG	soil	NE	NE	0.63	790	230	320		130	
TTLC	soil			±**	**				1,000	
MCL	water			1.0	1,000	680	1750		50	
STLC	soil				•					5

Notes: Soil results in mg/kg = milligrams per kilogram

Groundwater results in µg/L = micrograms per liter

Soluble analysis results in mg/L = milligrams per liter

ND = Compound not detected above laboratory reporting limit

NA = Not analyzed

NE = Not established

PRG = US Region IX Preliminary Remediation Goal for Industrial Sites, August, 1996 for residential soils/Values in mg/kg

TTLC = Total Threshold Limit Concentrations/Values in mg/kg

MCL = Cal-EPA Maximum Contaminant Levels/Values in ug/L

STLC = Soluble Threshold Limit Concentrations/Values in mg/L

TPPH = Total Purgeable Petroleum Hydrocarbons (quantified as gasoline)

TEPH = Total Extractable Petroleum Hydrocarbons (quantified as diesel)

b = heavier gasoline range compounds are significant

c = aged diesel (?) is significant

d = gasoline range compounds are significant

j = no recognizable pattern

g = oil range compounds are significant

h = lighter than water immiscible sheen is present

i= liquid sample contains greater than ~ 5 vol. % sediment

8.0 INTERVIEWS

The purpose of the interviews is to obtain information suggesting recognized environmental conditions in connection with the subject site. Table 10 is a summary of the individuals contacted for this information.

ow	TABLE 10 NERS AND OCCUPANTS
OWNER	Hugh Freisman
KEY SITE MANAGER	Hugh Freisman
OCCUPANT	Hugh Freisman and various tenants

Hugh Freisman, the current property owner, was interviewed during the course of the site visit. Mr. Freisman stated that his family purchased the property in 1912 and that he was born at the site in 1913. According to Mr. Freisman, the family operated a dairy on the site in the past. The dairy operations ceased in 1971. Equipment used at the dairy was powered by steam produced by two boilers located in the main dairy building.

The boilers were fueled by heating oil stored in an aboveground tank, according to Mr. Freisman. This tank was previously located in a metal shed located to the north of the dairy building across a paved driveway. Mr. Freisman noted that the tank had been removed a number of years ago.

Mr. Freisman knew of no USTs located on the site currently or in the past. Several ASTs used for diesel storage by site tenants were located on the site. Propane tanks which supply fuel for the heaters in the on-site residences were present on the site.

According to Mr. Freisman, one water supply well is located on the southeastern portion of the site. Mr. Freisman knew of no other wells on the property currently or in the past. The buildings are connected to a septic system which is cleaned on a regular basis, according to Mr. Freisman.

9.0 FINDINGS AND CONCLUSIONS

Kleinfelder performed this environmental site assessment of the subject site in conformance with the scope and limitations of ASTM Practice E1527-97. The purpose of this assessment was to evaluate recognizable environmental concerns associated with the present or past usage, storage or disposal of hazardous substances on-site. The findings of this environmental assessment and Kleinfelder's recommendations are presented below.

SITE HISTORY

The site was undeveloped prior to the construction in the 1910s of residences, barns and outbuildings associated with a former on-site dairy. The dairy operations reportedly ceased in 1971. The equipment used in the dairy operations was powered by steam generated by two boilers in the former dairy building. These boilers were reportedly fueled by heating oil previously located in a metal shed to the north of the dairy building. Open areas on the northern and southern portions of the site were used in the past for agricultural land and pastures for cattle and horses.

CURRENT CONDITIONS

The central portion of the site is currently occupied by six residences, the former dairy building, several garages, seven barns and a stable. The property owner occupies the main residence while the remaining residences and several of the barns are leased to tenants. The front pasture is currently leased for boarding of horses.

No stains were noted on the concrete floor around the two boilers in the dairy building. The interior of the metal shed was not observed during our site visit as Mr. Freisman did not have a key to the padlock. We understand that this shed formerly housed a heating oil AST which supplied fuel to the boilers. No evidence of aboveground or underground piping was observed between the boilers and the shed.

Several ASTs were observed on the site at the time of our visit. These ASTs were located on concrete pads which appeared to have only minor oil staining. Mr. Freisman stated that these tanks are used by some of the tenants for fueling of their vehicles and equipment.

Two 55-gallon drums of hydraulic fluid were observed adjacent to a barn on the southern portion of the site. Minor stains were noted on the concrete pad beneath the drums. Numerous (estimated 250 to 300) one to five gallon containers of paints and thinners were present in and around the barn to the east of the dairy building. This barn has been leased for several years by a house painter. No stains were noted on the concrete floor of the barn or the concrete pad which covered the exterior yard.

In addition, large quantities of debris (tires, old furniture, scrap metal and lumber) were observed across the site.

One water supply well, which was installed in 1975 and was drilled to a depth of 380 feet, was located on the site. It is our understanding that the on-site buildings are connected to a septic system.

No detectable concentrations of VOCs were present in the composite of four soil samples collected from the area beneath the containers of paints and thinners at the house painter's barn. Total lead was present in this composite at a concentration of 73 mg/kg but no detectable concentration of soluble lead was present.

Extractable petroleum hydrocarbons were present in two of the three shallow soil samples collected from around the two boilers, and in the soil and groundwater samples collected from the borings located in the driveway between the dairy building and the metal shed. The concentrations of extractable petroleum hydrocarbons in the shallow samples ranged from 5.2 to 160 mg/kg. The concentrations of extractable petroleum hydrocarbons in the soil samples from the deeper borings ranged from 25 mg/kg to 100 mg/kg while the concentrations of purgeable petroleum hydrocarbons in these samples ranged from 34 to 280 mg/kg.

The concentrations of extractable petroleum hydrocarbons and purgeable petroleum hydrocarbons in the groundwater sample collected from the site were 160,000 micrograms per liter (ug/L) and 3,100 ug/L, respectively. The concentration of extractable petroleum hydrocarbons in the groundwater sample constituted free-product.

CONCLUSIONS AND RECOMMENDATIONS

The concentration of total lead in the composite soil sample collected from the site is below the PRG for residential soils 130 mg/kg and the TTLC of 1,000 mg/kg established by Cal-EPA. Based on this data, Kleinfelder recommends no further action with regards to this issue.

Kleinfelder recommends that additional samples be collected from the area between the boilers and the metal shed which housed the former heating oil AST to establish the lateral and vertical extent of the impacted soils and groundwater in this area. The regulatory agencies generally require further investigation if concentrations of hydrocarbons in soil exceed 100 mg/kg. In addition, due to the presence of free-product in the groundwater, Kleinfelder anticipates that the regulatory agencies, including the RWQCB and the ACHCSA may require remedial action at the site. Due to the concentrations of hydrocarbons above 100 mg/kg in soils at the site and the presence of free product in the groundwater, some interim remediation may be required. In Kleinfelder's opinion, unless it can be shown that there is no risk to human health and the environment, and the soil and groundwater can be shown to be naturally biodegrading with time, some form of additional remediation will most likely also be required.



The property owner should be notified of our findings. As required by law, the owner is responsible for informing the ACHCSA of the results of this investigation. If requested, Kleinfelder can assist the property owner in negotiating with the ACHCSA.

Kleinfelder recommends that the ASTs, the 55-gallon drums of hydraulic fluid, the numerous containers of paint and thinners, the empty containers and drums, the various pieces of farm equipment, and all debris be removed from the site for proper disposal. It should be noted that Kleinfelder's representative was unable to observe the interiors of all of the on-site buildings and that some areas could not be observed due to the presence of equipment and debris. If stains or discolored soils are noted beneath these items at the time they are removed, collection and analyses of soil samples may be warranted.

Kleinfelder was unable to observe the interiors of the rental houses. Based on the age of the on-site structures, however, it is likely that materials suspected of containing asbestos and lead based paints are present in these buildings. If demolition or remodeling of the buildings requires disturbing any suspected asbestos containing materials or lead based paints, or if the materials are to be removed from the buildings, then a survey of the building for asbestos containing materials and lead paint should be conducted.

Kleinfelder recommends that the water supply well be destroyed in accordance with Zone 7 requirements if it will not be used in the future. These requirements generally include removal of the pump, perforating the well casing, and filling the casing with cement to within a few feet of the surface. The upper few feet is then filled with soil.

Due to the residential nature of the site for the last 25 years, it is unlikely that the septic tank would present a significant environmental concern, in Kleinfelder's opinion. Kleinfelder recommends that the soils around the septic system be observed during removal for unusual staining or discoloration. Collection and analysis of samples may be warranted if staining is noted during the removal operations.

Several soil and/or groundwater releases have been reported in the vicinity of the site. In Kleinfelder's opinion, these nearby releases are unlikely to have impacted the project site due to their successfully remediation (and case closure status) and/or their distance from the site.

23

10.0 LIMITATIONS

The scope of work for this report was intended to provide a limited review of certain information related to the possibility of soil and/or ground water contamination of the referenced site as well as the presence of suspected asbestos containing building materials in the on-site building. This preliminary assessment was not intended to be comprehensive, identify all potential concerns, or eliminate the possibility of acquiring land with some degree of problems.

Our report of findings and recommendations are based on review of limited historical documents and information, regulatory agency communications, interviews, and site reconnaissance.

This document may be used only by Children's Hospital Foundation and only for the purpose stated, within a reasonable time from its issuance. Land use, site and building conditions may change over time. Additional assessment work may be required with the passage of time.

Any party other than the Children's Hospital Foundation who wishes to use this document shall notify Kleinfelder of such intended use by executing the "Application of Authorization to Use" which follows as Appendix D. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated document be issued. Non-compliance with any of these requirements by the Client or anyone else will release Kleinfelder from any liability resulting from the use of this document by any unauthorized party.

Kleinfelder performed this preliminary assessment in accordance with generally accepted standards of care that existed in Northern California at the time of the assessment. No warranty, expressed or implied, is made.

11.0 REFERENCES

Aerial Photographs: Pacific Aerial Survey

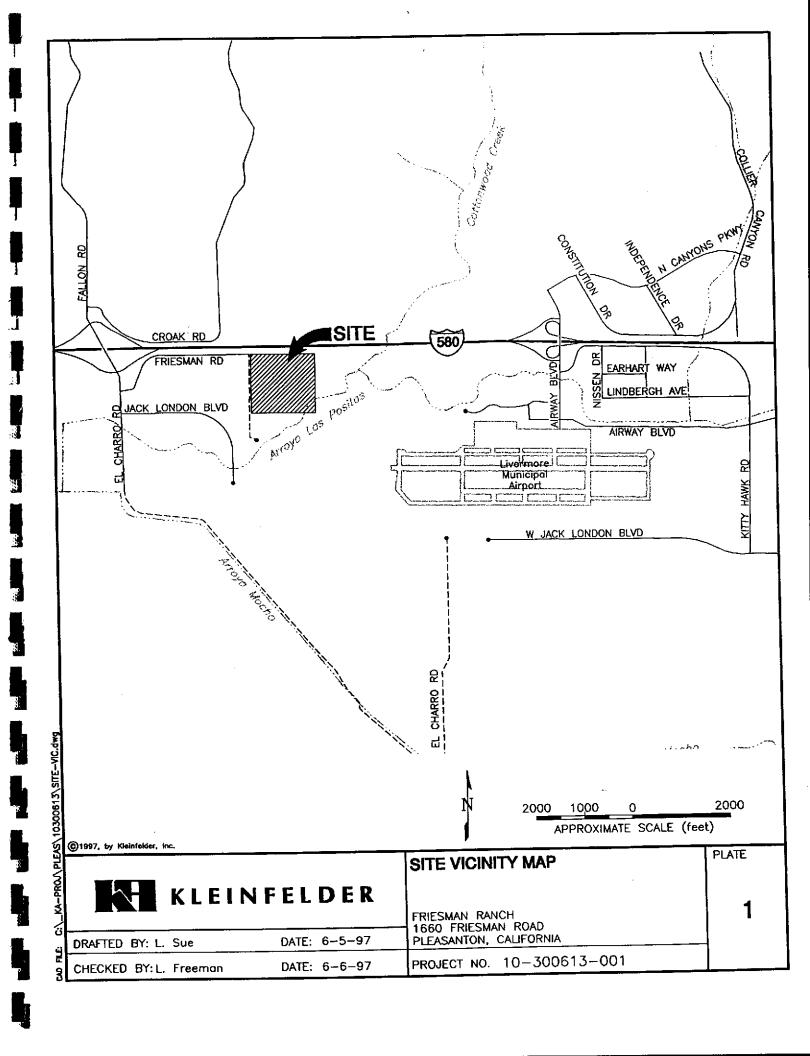
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05-05-78	AV-1498-04-15(16)	1:12,000
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06-02-94	AV-4625-30-38(39)	1:12,000

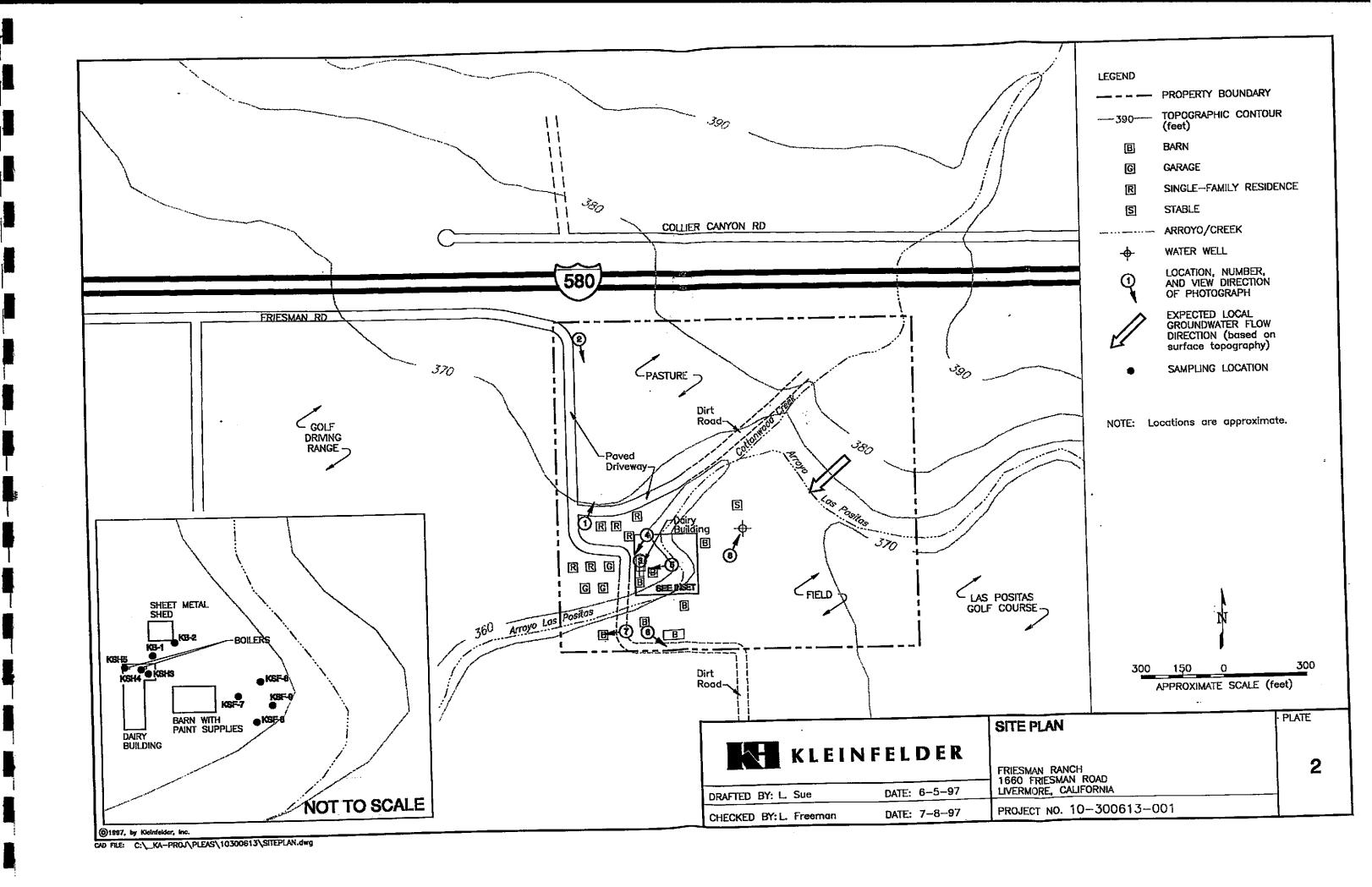
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California Department of Water Resources, 1974, Bulletin No. 118-2, Evaluation of Ground Water Resources: Livermore and Sunol Valleys

Stansky, Paul M., 1995, Appraisal of the Real Property in the Hugh C. Freisman Revocable Trust

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SITE ASSESSMENT PLUS REPORT (EXTENDED BY 1/4 MILE)

PROPERTY	CLIENT
INFORMATION	INFORMATION
Project Name/Ref#: R4533 FRIESMAN ROAD PROPERTY 1660 FRIESMAN RD PLEASANTON, CA 94588 Cross Street: EL CHARRO RD Latitude/Longitude: (37.700040, 121.831915)	STEPHEN QUAYLE KLEINFELDER-PLEASANTON 7133 KOLL CENTER PKY STE 100 PLEASANTON, CA 94566

			F			
	Site Dist	ribution Summary	within 3/8 mile	3/8 to 1/2 mile	1/2 to 3/4 mile	3/4 to 1 1/4 miles
Agency / Da	tabase - Type	of Records				
A) Database	es searched to) 1 1/4 miles:				
US EPA	NPL	National Priority List	0	0	0	0
US EPA	CORRACTS	RCRA Corrective Actions	0	0	0	
US EPA	TSD	RCRA permitted treatment, storage, disposal facilities	0	0	0	0
STATE	SPL	State equivalent priority list	0	0	0	. 0
B) Database	es searched to	3/4 mile:				
US EPA	CERCLIS	Sites under review by US EPA	0	0	0	-
STATE	SCL	State equivalent CERCLIS list	0	0	0	-
STATE REG CO	LUST	Leaking Underground Storage Tanks	0	0	3	_
STATE/	SWLF	Permitted as solid waste landfills,				
REG/CO	DEED	incinerators, or transfer stations	0	0	0	.
STATE	DEED RSTR	Sites with deed restrictions	0	0	0	-
REGIONAL	NORTH BAY	Sites on North Bay Toxic List	0	0	0	_
REGIONAL	BAY	Sites on South Bay Toxic List	0	0	0	-
STATE	CORTESE	State index of properties with hazardous waste	0	0	1	
STATE	TOXIC PITS	Toxic Pits cleanup facilities	0	0	0	-
C) Database	es searched to) 1/2 mile:				
US EPA	RCRA Viol	RCRA violations/enforcement actions	0	0	_	-
US EPA	TRIS	Toxic Release Inventory database	0	0	-	-
STATE	UST/AST	Registered underground or aboveground storage tanks	0	0		



For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.

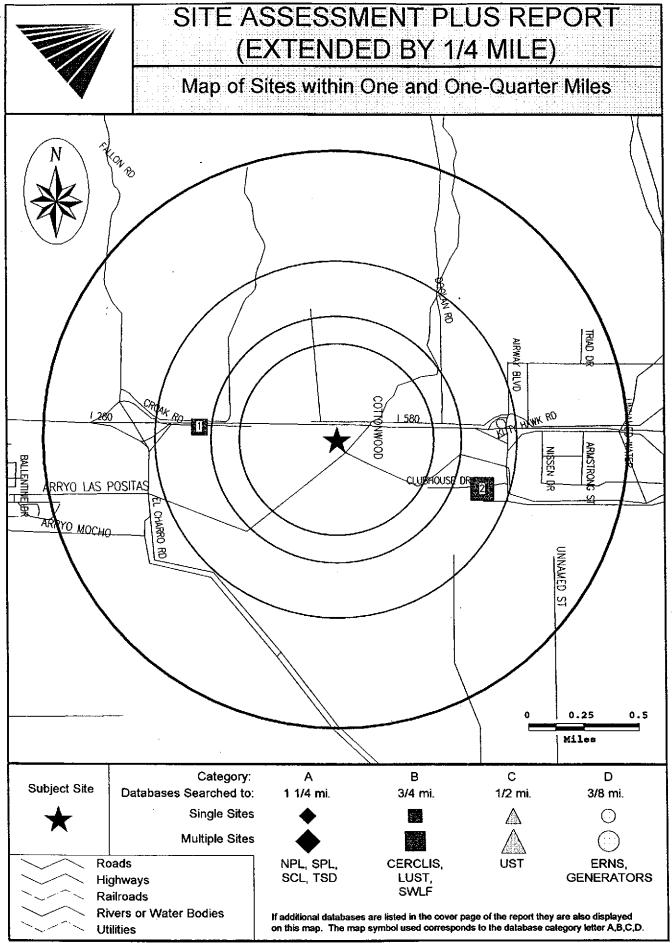
Report ID: 133077-001

Date of Report: May 13, 1997

Page #1

Site Distribution Summary Agency / Database - Type of Records			within 3/8 mile	3/8 to 1/2 mile	1/2 to 3/4 mile	3/4 to 1 1/4 miles
D) Databases searched to 3/8 mile:						
D) Databas	es searched	to 3/8 mile:				
US EPA	ERNS	Emergency Response Notification System of spills	0		_	-
US EPA	GNRTR	RCRA registered small or large generators of hazardous waste		_		
government LIMITATION O Customer pro- VISTA cannot VISTA and its	F LIABILITY ceeds at its own be an insurer of affiliated compa	e search meets the American Society for Te ew. A (-) indicates the search distance exce n risk in choosing to rely on VISTA services, in whole the accuracy of the information, errors occurring in anies, officers, agents, employees and independent cense suffered by customer resulting directly or indire	or in part, pri	search para or to proceed f data, or for c nnot be held	ameters. ling with any customer's us liable for acci	transaction. se of data. uracy,
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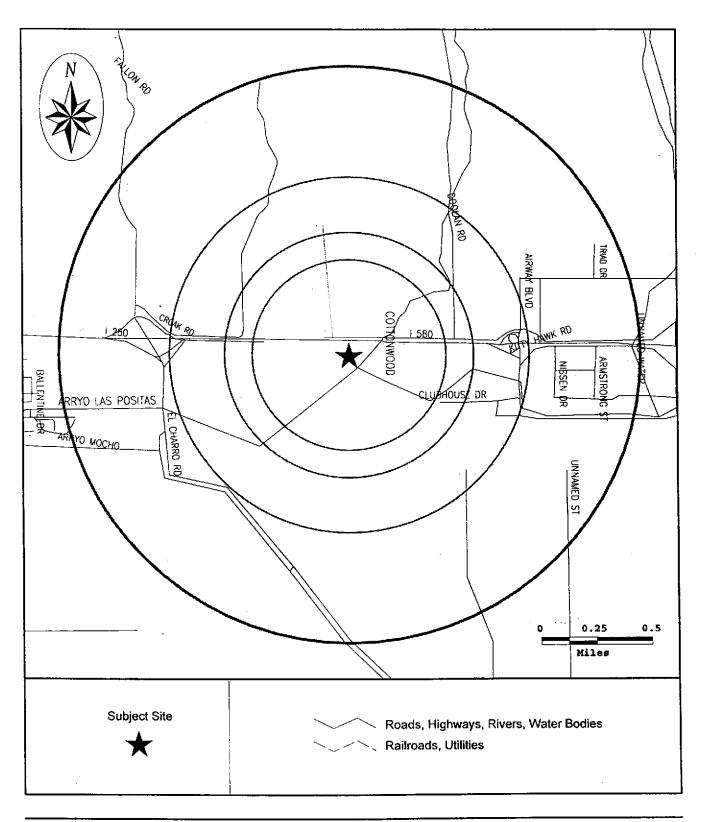
For More Information Call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403

Report ID: 133077-001



SITE ASSESSMENT PLUS REPORT (EXTENDED BY 1/4 MILE)

Street Map



Report ID: 133077-001

Date of Report: May 13, 1997
Page #4

SITE ASSESSMENT PLUS REPORT (EXTENDED BY 1/4 MILE)

SITE INVENTORY

																		_
MAP ID	PROPERTY AND THE ADJACENT (within 3/8 mile)	AREA VISTA ID DISTANCE DIRECTION	0 E O F O G	A AKACIO		CERCLIS		To	_	DEED KSIK B	NOKI II BAT	CORTESE	TOXIC PITS	V VIOL	C	JSI/ASI	EKNS	GNKIK
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MAP ID	SITES IN THE SURROUNDING A (within 3/8 - 1/2 mile)	REA VISTA ID DISTANCE DIRECTION	NPL	CORRACIS A	SPL	CERCLIS	SCL	LUST		DEED RSTR @	NOKIH BAY	CORTESE	TOXIC PITS	A VIOL	TRIS	UST/AST	EKNS	GNRTR
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MAP ID	SITES IN THE SURROUNDING A (within 1/2 - 3/4 mile)	REA		ACIS		SI				STR	NORTH BAY	ESE	PITS	NOL		5		
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	CITY OF LIVERMORE	4222593 0.55 MI														- 1		
1	1800 FRIESMAN	0.55 MI	- 1			-		X		١							-	
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Report ID: 133077-001 Version 2.4.1 Date of Report: May 13, 1997
Page #6

SITE ASSESSMENT PLUS REPORT (EXTENDED BY 1/4 MILE)

DETAILS

PROPERTY AND THE ADJACENT AREA (within 3/8 mile)

No Records Found

SITES IN THE SURROUNDING AREA (within 3/8 - 1/2 mile)

No Records Found

SITES IN THE SURROUNDING AREA (within 1/2 - 3/4 mile)

VISTA CITY OF LIVERMORE
Address*: 1800 FRIESMAN
LIVERMORE, CA

VISTA ID#: 4222593
Distance/Direction: Plotted as: Point

STATE LUST - State Leaking Underground Storage Tank / SRC# | Agency ID: | 3760

3343

Agency Address:

Tank Status:

Media Affected:

Substance:

SRC# 3486

Leak Cause:

Remedial Action: Remedial Status 1:

Remedial Status 2:

Fields Not Reported:

Agency Address:

SAME AS ABOVE

NOT AVAILABLE

GROUNDWATER

GASOLINE (UNSPECIFIED)

UNAVAILABLE
NO ACTION TAKEN

REM ACTION PLAN NOT AVAILABLE

Discovery Date, Quantity (Units), Leak Source

Regional LUST - Regional Leaking Underground Storage Tank / Agency ID:

CITY OF LIVERMORE

1800 FRIESMAN LIVERMORE, CA 94550

NOT AVAILABLE

Tank Status: NOT AVAILAB.
Discovery Date: JULY 27, 1989

Media Affected: GROUNDWATER

Substance: GASOLINE (UNSPECIFIED)

Leak Cause: UNKNOWN

Leak Source: REPORTED AS "UNKNOWN" BY AGENCY

Remedial Action: NO ACTION TAKEN

Remedial Status 1: CASE CLOSED/CLEANUP COMPLETE

Remedial Status 2: NOT AVAILABLE
Fields Not Reported: Quantity (Units)



Report 10: 133077-001 Version 2.4.1

Page #7

01-1758

Map ID

SITES IN THE SURROUNDING AREA (within 1/2 - 3/4 mile) CONT.

VISTA 1233814 LAS POSITAS GOLF COURSE VISTA ID#: Distance/Direction: Address*: 0.61 MI/E 909 CLUB HOUSE DR. Point Plotted as: **LIVERMORE, CA 94550** STATE LUST - State Leaking Underground Storage Tank / SRC# Agency ID: 2979 3343 SAME AS ABOVE Agency Address: NOT AVAILABLE Tank Status: GROUNDWATER Media Affected: DIESEL Substance: UNAVAILABLE Leak Cause: EXCAVATE TREAT Remedial Action: CONTAMINATION ASSESSMENT Remedial Status 1: NOT AVAILABLE Remedial Status 2: Discovery Date, Quantity (Units), Leak Source Fields Not Reported: Regional LUST - Regional Leaking Underground Storage Tank / Agency ID: 01-0883 SRC# 3486 LAS POSITAS GOLF COURSE Agency Address: 909 CLUBHOUSE DR LIVERMORE, CA 94566 NOT AVAILABLE Tank Status: APRIL 16, 1989 **Discovery Date:** GROUNDWATER Media Affected: DIESEL Substance: STRUCTURAL FAILURE Leak Cause: UNDERGROUND TANK Leak Source: EXCAVATE TREAT Remedial Action: CONTAMINATION ASSESSMENT Remedial Status 1: NOT AVAILABLE Remedial Status 2:

VISTA Address*:	SCHWARTZ PROPERTY 636 TERMINAL CIR LIVERMORE, CA 94550	VISTA ID#: Distance/Direction: Plotted as:	5359167 0.64 MI / E Point
CORTESE /	SRC# 2298	EPA/Agency ID:	N/A
Agency Ad	Idress: SAME AS ABOVE		

Map ID

Map ID

2

Agency Ado List Name: Site ID:

Fields Not Reported:

LEAKING TANK INV-ID01-003466

Quantity (Units)



Report ID: 133077-001 Version 2.4.1 Date of Report: May 13, 1997

Page #8

SITES IN THE SURROUNDING AREA (within 1/2 - 3/4 mile) CONT.

VISTA
Address*:

636 TERMINAL CR
LIVERMORE, CA 94550

STATE LUST - State Leaking Underground Storage Tank / SRC#

VISTA ID#:
Distance/Direction:
Plotted as:

4558750

0.64 MI / E
Point

4296

Map ID

Agency Address:

LIVERMORE AIRPORT 636 TERMINAL CR

LIVERMORE, CA NOT AVAILABLE

Tank Status:
Media Affected:
Substance:

SOIL/SAND/LAND JET FUEL

Substance: Leak Cause: Remedial Action:

UNAVAILABLE EXCAVATE DISPOSE

EXCAVATE DISPOSE

CASE CLOSED/CLEANUP COMPLETE

Remedial Status 2: NOT AVAILABLE
Fields Not Reported: Discovery Date, Q

1: Discovery Date, Quantity (Units), Leak Source

Regional LUST - Regional Leaking Underground Storage Tank / Agency ID: 01-0918

Agency Address: Tank Status: Discovery Date: Media Affected:

SRC# 3486

Remedial Status 1:

SAME AS ABOVE NOT AVAILABLE AUGUST 1, 1991 SOIL/SAND/LAND JET FUEL

Substance: JET FUEL

Leak Cause: STRUCTURAL FAILURE

Leak Source: UNDERGROUND TANK

EXCAVATE DISPOSE

Remedial Action: EXCAVATE DISPOSE

Remedial Status 1: CASE CLOSED/CLEANUP COMPLETE

Remedial Status 2: NOT AVAILABLE
Fields Not Reported: Quantity (Units)

SITES IN THE SURROUNDING AREA (within 3/4 - 1 1/4 miles)

No Records Found



UNMAPPED SITES

VISTA IND	USTRIAL DOMESTIC	WW	VISTA ID#:	57001001				
Address*: LIV	ERMORE ,CA, C	A						
VMUDS / SRC# 3	373		Agency ID:	5B390810001				
Agency Address Solid Waste Inve	s: entory System ID:	INDUSTRIAL DOMESTIC LIVERMORE, CA NOT REPORTED	ww					
Facility Type:		INDUSTRIAL - Facilities that treat and/or dispose of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, waterwell pumping.						
Facility In State System:	Board Waste Discharger	YES						
Chapter 15 Facil	lity:	NO						
Solid Waste Ass	sessment Test Facility:	NO						
Toxic Pits Clean	up Act Facility:	NO						
RCRA Facility:		YES						
Department of D	efense Facility:	NO	•					
Open To Public:		NO						
Number Of Was	te Management Units:	1		•				
Rank:	-	NOT REPORTED						
Enforcements A	t Facility:	NO						
Violations At Fa	•	NO						



SITE ASSESSMENT PLUS REPORT (EXTENDED BY 1/4 MILE)

DESCRIPTION OF DATABASES SEARCHED

A) DATABASES SEARCHED TO 1 1/4 MILES

NPL

VISTA conducts a database search to identify all sites within 1.25 mile of your property.

SRC#: 3444 The agency release date for NPL was December, 1996.

The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the US Dept of Health and Human Services and the US EPA in order to become an NPL site.

SPL SRC#: 3172 VISTA conducts a database search to identify all sites within 1.25 mile of your property.

The agency release date for Calsites Database: Annual Workplan Sites was July, 1996.

This database is provided by the Cal. Environmental Protection Agency, Dept. of Toxic Substances Control.

CORRACTS SRC#: 3441 VISTA conducts a database search to identify all sites within 1.25 mile of your property.

The agency release date for RCRA Corrective Action Sites List was December, 1996.

The EPA maintains this database of RCRA facilities which are undergoing "corrective action". A "corrective action order" is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.

RCRA-TSD SRC#: 3441 VISTA conducts a database search to identify all sites within 1.25 mile of your property. The agency release date for RCRIS was December, 1996.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA TSDs are facilities which treat, store and/or dispose of hazardous waste.

B) DATABASES SEARCHED TO 3/4 MILE

CERCLIS SRC#: 3442 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for CERCLIS was January, 1997.

The CERCLIS List contains sites which are either proposed to or on the National Priorities List(NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of all pre-remedial, remedial, removal and community relations activities or events at the site, financial funding information for the events, and unrestricted enforcement activities.



NFRAP SRC#: 3443 VISTA conducts a database search to identify all sites within 3/4 mile of your property.

The agency release date for CERCLIS-NFRAP was January, 1997.

NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.

Cal Cerclis SRC#: 2462 VISTA conducts a database search to identify all sites within 3/4 mile of your property.

The agency release date for Ca Cerclis w/Regional Utility Description was June, 1995.

This database is provided by the U.S. Environmental Protection Agency, Region 9. These are regional utility descriptions for California CERCLIS sites.

SCL SRC#: 3171 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Calsites Database: All Sites except Annual Workplan Sites (incl. ASPIS) was July, 1996.

This database is provided by the Department of Toxic Substances Control.

SWLF SRC#: 2882 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Ca Solid Waste Information System (SWIS) was March, 1996.

This database is provided by the Integrated Waste Management Board.

WMUDS SRC#: 3373 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Waste Management Unit Database System (WMUDS) was November, 1996.

This database is provided by the State Water Resources Control Board. This is used for program tracking and inventory of waste management units. This system contains information from the following eight main databases: Facility, Waste Management Unit, SWAT Program Information, SWAT Report Summary Information, Chapter 15 (formerly Subchapter 15), TPCA Program Information, RCRA Program Information, Closure Information; also some information from the WDS (Waste Discharge System).

LUST SRC#: 3169 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Region #2-North and South Bay SLIC Report was March, 1996.

This database is provided by the Regional Water Quality Control Board, Region #2.

LUST SRC#: 3266 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Region #5-Central Valley SLIC\DOD\DOE List was August, 1996.

This database is provided by the Regional Water Quality Control Board, Region #5.

LUST SRC#: 3343 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Lust Information System (LUSTIS) was October, 1996.

This database is provided by the California Environmental Protection Agency.

LUST RG5 SRC#: 3485 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Region #5-Central Valley Undergound Tank Tracking System was February, 1997.

This database is provided by the Regional Water Quality Control Board, Region #5.



For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403.

Report ID: 133077-001

Date of Report: May 13, 1997

Page #12

LUST RG2 SRC#: 3486 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Region #2-San Francisco Bay Fuel Leaks List was February, 1997.

This database is provided by the Regional Water Quality Control Board, Region #2.

CORTESE SRC#: 2298 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Cortese List-Hazardous Waste Substance Site List was February, 1995.

This database is provided by the Office of Environmental Protection, Office of Hazardous Materials.

Deed Restrictions SRC#: 1703

VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Deed Restriction Properties Report was April, 1994.

This database is provided by the Department of Health Services-Land Use and Air Assessment. These are voluntary deed restriction agreements with owners of property who propose building residences, schools, hospitals, or day care centers on property that is "on or within 2,000 feet of a significant disposal of hazardous waste".

Toxic Pits SRC#: 2229 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for Summary of Toxic Pits Cleanup Facilities was February, 1995.

This database is provided by the Water Quality Control Board, Division of Loans Grants.

North Bay SRC#: 1718 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for North Bay County Toxic List-Region #2 Surface Spills was April, 1994.

This database is provided by the Regional Water Quality Control Board, Region #2.

South Bay SRC#: 1719 VISTA conducts a database search to identify all sites within 3/4 mile of your property. The agency release date for South Bay Site Management System was April, 1994.

This database is provided by the San Francisco Bay Region.

C) DATABASES SEARCHED TO 1/2 MILE

SRC#: 3441

RCRA-Viols/En VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for RCRIS was December, 1996.

> The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Violators are facilities which have been cited for RCRA Violations at least once since 1980. RCRA Enforcements are enforcement actions taken against RCRA violators.

UST's SRC#: 1612 VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Underground Storage Tank Registrations Database was January, 1994.

This database is provided by the State Water Resources Control Board, Office of Underground Storage Tanks; Caution-Many states do not require registration of heating oil tanks, especially those used for residential purposes.



For more information call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403. Report ID: 133077-001 Date of Report: May 13, 1997 Version 2.4.1 Page #13 AST's

VISTA conducts a database search to identify all sites within 1/2 mile of your property.

SRC#: 3370

The agency release date for Aboveground Storage Tank Database was November, 1996.

This database is provided by the State Water Resources Control Board.

TRIS SRC#: 2587 VISTA conducts a database search to identify all sites within 1/2 mile of your property.

The agency release date for TRIS was May, 1995.

Section 313 of the Emergency Planning and Community Right-to-Know Act (also known as SARA Title III) of 1986 requires the EPA to establish an inventory of Toxic Chemicals emissions from certain facilities (Toxic Release Inventory System). Facilities subject to this reporting are required to complete a Toxic Chemical Release Form(Form R) for specified chemicals.

D) DATABASES SEARCHED TO 3/8 MILE

ERNS SRC#: 3006 VISTA conducts a database search to identify all sites within .375 mile of your property. The agency release date for ERNS was March, 1996.

The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the US Coast Guard, the National Response Center and the Department of transportation. A search of the database records for the period October 1986 through March 1996 revealed information regarding reported spills of oil or hazardous substances in the stated area.

RCRA-LgGen SRC#: 3441 VISTA conducts a database search to identify all sites within .375 mile of your property. The agency release date for RCRIS was December, 1996.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Large Generators are facilities which generate at least 1000 kg./month of non-acutely hazardous waste (or 1 kg./month of acutely hazardous waste).

RCRA-SmGen SRC#: 3441

VISTA conducts a database search to identify all sites within .375 mile of your property. The agency release date for RCRIS was December, 1996.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Small and Very Small generators are facilities which generate less than 1000 kg./month of non-acutely hazardous waste.

End of Report

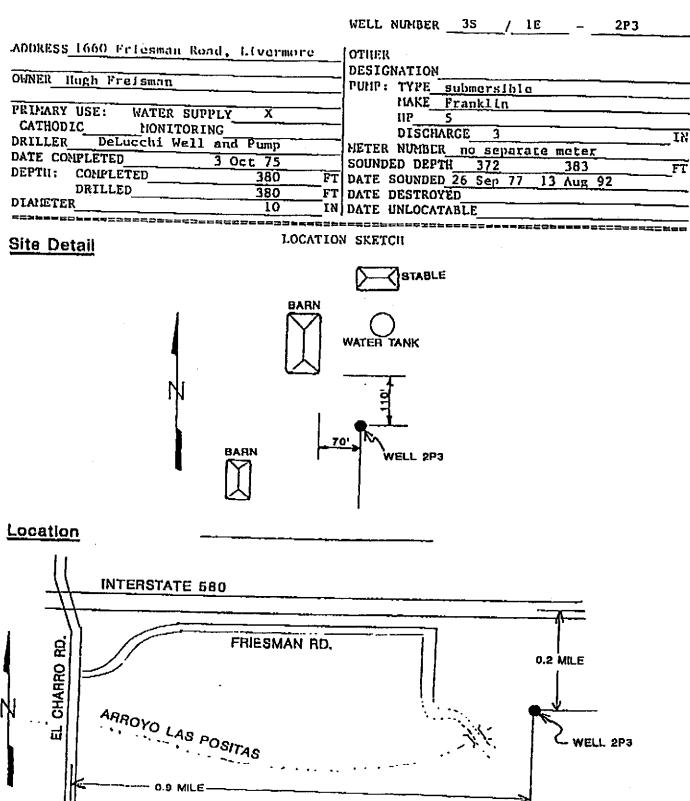


71992

WH 2 SEP 92

ZONE 7 WATER RESOURCES ENGINEERING

WELL LOCATION DATA



Kleinfelder, Inc.	Client Project ID: #10-3006-13/002;	Date Sampled: 06/12/97		
7133 Koll Center Pkwy, #100	Friesman	Date Received: 06/13/97		
Pleasanton, CA 94566	Client Contact: Litta Freeman	Date Extracted: 06/13/97		
	Client P.O: #R4626	Date Analyzed: 06/13/97		

06/20/97

Dear Lita:

Enclosed are:

- 1). the results of 7 samples from your #10-3006-13/002 project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director

Kleinfelder, Inc.	Client Project ID: #10-3006-13/002;	Date Sampled: 06/12/97			
7133 Koll Center Pkwy, #100	Friesman	Date Received: 06/13/97			
Pleasanton, CA 94566	Client Contact: Litta Freeman	Date Extracted: 06/13-06/14/97			
	Client P.O: #R4626	Date Analyzed: 06/13-06/16/97			

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602: California RWOCB (SE Bay Region) method (CCFID/5030)

Lab ID	Client ID	Matrix	TPH(g) ⁺	МТВЕ	Benzene	Toluene	Ethylben- zene	Xylenes	% Recovery Surrogate
77579	KB-1-19	s	280.j		ND<0.01	0.52	1.6	1.2	93
77581	KB-2-19	S	34.j,b		ND	0.036	0.083	0.13	103
77582	KB-2-W1	w	3100,j,h,i		7.3	19	11	22	105
77583	KSH-3-1.5	S	ND		ND	ND	ND	ND	94
77584	KSH-4-2	S	ND		ND	ND	ND	ND	95
77585	KSH-5-3	s	ND	***	ND	0.016	ND	ND	95
			-						
	ng Limit unless ise stated; ND	w	50 ug/L	5.0	0.5	0.5	0.5	0.5	
	t detected above porting limit	S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005]

^{*} water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

cluttered chromatogram; sample peak coelutes with surrogate peak

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

Kleinfelder, Inc.	Client Project ID: #10-3006-13/002;	Date Sampled: 06/12/97
7133 Koll Center Pkwy, #100	Friesman	Date Received: 06/13/97
Pleasanton, CA 94566	Client Contact: Litta Freeman	Date Extracted: 06/13-06/16/97
	Client P.O: #R4626	Date Analyzed: 06/13-06/17/97

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *

EPA methods modified 8015, and 3550 or 3510; California RWOCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d) ⁺	% Recovery Surrogate
77579	KB-1-19	S	100,d,b	103
77581	KB-2-19	S	25,d	102
77582	KB-2-W1	w	160,000,d,h,i	107
77583	KSH-3-1.5	S	ND	100
77584	KSH-4-2	s	160,c	112
77585	KSH-5-3	S	5.2,g	106
Reporting Li	mit unless otherwise ans not detected above	w	50 ug/L	
	eporting limit	S	1.0 mg/kg	

^{*} water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

^{*} cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

^{*}The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

Kleinfelder, Inc.	Client Brainet D	D. #10 2004 12/002.	Date Sampled: 06/12/97			
7133 Koll Center Pkwy, #100	Friesman	D: #10-3006-13/002;	Date Received	: 06/13/97		
Pleasanton, CA 94566	Client Contact:	Litta Freeman	Date Extracted: 06/13/97			
	Client P.O: #R4	1626	Date Analyzed: 06/13/97			
EPA method 601 or 8010	Volati	le Halocarbons				
Lab ID	77586	i i				
Client ID	KSF6-9					
Matrix	S					
Compound		Concentra	tion*	1		
Bromodichloromethane	ND	T				
Bromoform ^(b)	ND					
Bromomethane	ND			 		
Carbon Tetrachloride(c)	ND			<u> </u>		
Chlorobenzene	ND	1				
Chloroethane	ND	·	· · · · · · · · · · · · · · · · · · ·			
2-Chloroethyl Vinyl Ether(d)	ND					
Chloroform (e)	ND					
Chloromethane	ND					
Dibromochloromethane	ND			<u>† </u>		
1,2-Dichlorobenzene	ND					
1,3-Dichlorobenzene	ND					
1,4-Dichlorobenzene	ND			· · · · · · · · · · · · · · · · · · ·		
Dichlorodifluoromethane	ND					
1,1-Dichloroethane	ND					
1,2-Dichloroethane	ND					
1,1-Dichloroethene	ND					
cis 1,2-Dichloroethene	ND					
trans 1,2-Dichloroethene	ND			 		
1,2-Dichloropropane	ND					
cis 1,3-Dichloropropene	ND					
trans 1,3-Dichloropropene	ND					
Methylene Chloride ^(f)	ND					
1,1,2,2-Tetrachloroethane	ND					
Tetrachloroethene	ND					
1,1,1-Trichloroethane	ND		•			
1,1,2-Trichloroethane	ND					
Trichloroethene	ND	1 I	· · · · · · · · · · · · · · · · · · ·			
Trichlorofluoromethane	ND					
Vinyl Chloride ^(g)	ND					
% Recovery Surrogate	98			Ì		
Comments						

^{*} water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe Reporting limit unless otherwise stated: water/TCLP/SPLP extracts, ND<0.5ug/L; soils and sludges, ND<5ug/kg; wipes, ND<0.2ug/wipe ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

⁽b) tribromomethane; (c) tetrachloromethane; (d) (2-chloroethoxy) ethene; (e) trichloromethane; (f) dichloromethane; (g) chloroethene; (h) a lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content.

Kleinfelder	, Inc.	Clien	t Project ID: #1	0-3006-13/002;	Date Sampled: 06/12/97				
7133 Koll (Center Pkwy, #100	Fries	man	U-3000-13/002,	Date Received:	06/13/97			
Pleasanton,	CA 94566	Clien	t Contact: Litta	Freeman	Date Extracted: 06/13/97				
		Clien	t P.O: #R4626		Date Analyzed: 06/16/97				
EPA analytica	1 methods 6010/200.7, 23	9.2 ⁺	Lea	ıd*	. 				
Lab ID	Client ID	Matrix	Extraction °	Le	ad*	% Recovery Surrogate			
77586	KSF6-9	S	TTLC	-	73	93			
•									
					· · · · · · · · · · · · · · · · · · ·				
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Reporting L	imit unless otherwise	s	TTLC	3.0 r	ng/kg				
stated; ND me the r	eans not detected above eporting limit	w	TTLC	0.003	5 mg/L				
			STLC,TCLP	0.2 1	mg/L				

^{*} soil and sludge samples are reported in mg/kg, wipe samples in ug/wipe, and water samples and all STLC / SPLP / TCLP extracts in mg/L

*Lead is analysed using EPA method 6010 (ICP) for soils, sludges, STLC & TCLP extracts and method 239.2 (AA Furnace) for water
samples

[°] EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC - CA Title 22

[&]quot; surrogate diluted out of range; N/A means surrogate not applicable to this analysis

a reporting limit raised due matrix interference

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.



Kleinfelder,	Inc.	Clian	t Design ID. 41	0.3006.137000	Date Sampled: 06/12/97 Date Received: 06/13/97						
	Center Pkwy, #100	Fries		0-3006-13/002;							
Pleasanton,	- ·	Clien	t Contact: Litta	Freeman	Date Extracted: 06/19-06/21/97						
		Clien	t P.O: #R4626	Date Analyzed:	zed: 06/23/97						
EPA analytical	methods 6010/200.7, 239	9.2*	Lea	ıd*							
Lab ID	Client ID	Matrix	Extraction °	Lea	d*	% Recovery Surrogate					
77586	KSF6-9	S	STLC	ND		108					
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					<u> </u>						
			-·								
Reporting L	imit unless otherwise	S	TTLC	3.0 m	g/kg						
stated; ND me	ans not detected above eporting limit	w	TTLC	·	mg/L	_					
			STLC,TCLP	0.2 n	ng/L	1					

^{*} soil and sludge samples are reported in mg/kg, wipe samples in ug/wipe, and water samples and all STLC / SPLP / TCLP extracts in mg/L

*Lead is analysed using EPA method 6010 (ICP) for soils, sludges, STLC & TCLP extracts and method 239.2 (AA Furnace) for water

[°] EPA extraction methods 1311(TCLP), 3010/3020(water, TTLC), 3040(organic matrices, TTLC), 3050(solids, TTLC); STLC - CA Title 22

^{*} surrogate diluted out of range; N/A means surrogate not applicable to this analysis

[&]amp; reporting limit raised due matrix interference

i) liquid sample that contains greater than ~2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

Date:

06/13/97

Matrix:

Water

	Concentr	ration	(mg/L)	1	% Reco	werv	
Analyte	i		MSD	Amount Spiked		MSD	RPD
TPH (gas)	0.0	87.2 8.6	97.5 9.4	100.0	87.2 86.0	97.5 94.0	11.2 8.9
Toluene Ethyl Benzene	0.0	8.9 9.1	9.8 10.1	10.0 10.0	89.0 91.0	98.0 101.0	9.6 10.4
Xylenes	0.0	27.1	30.2	30.0 	90.3 	100.7	10.8
TPH (diesel)	0	158	155	150	105 	103	2.0
TRPH (oil & grease)	N/A	N/A	A\N	N/A	N/A	N/A	N/A

* Rec. = (MS - Sample) / amount spiked x 100

Date:

06/16/97

Matrix:

Water

	Concentr	ation	(mg/L)		% Reco	very	
Analyte	Sample			Amount			RPD
:	#(77427) 	MS	MSD	Spiked 	MS	MSD	
TIDIT (co.s.)	0.0	02.4	05.0	100.0			
TPH (gas)	0.0	93.4	95 - 8	100.0	93.4	95.8	2.5
Benzene	0.0	9.4	9.6	10.0	94.0	96.0	2.1
Toluene	0.0	9.9	9.9	10.0	99.0	99.0	0.0
Ethyl Benzene	0.0	9.8	10.2	10.0	98.0	102.0	4.0
Xylenes	0.0	29.8	30.7	30.0	99.3	102.3	3.0
TPH (diesel)	0	146	144	150	97	96	1.5
TRPH (oil & grease)	N/A	N/A	N/A	 N/A	N/A	N/A	N/A

* Rec. = (MS - Sample) / amount spiked x 100

Date: 06/17/97

Matrix:

Water

1	Concent	ration	(mg/L)		% Reco	very	
Analyte	Sample			Amount			RPD
<u>:</u>	#(77427) 	MS	MSD	Spiked	MS	MSD	
	1						
TPH (gas)	0.0	93.4	95.8	100.0	93.4	95.8	2.5
Benzene	0.0	9.4	9.6	10.0	94.0	96.0	2.1
Toluene	0.0	9.9	9.9	10.0	99.0	99.0	0.0
Ethyl Benzene	0.0	9.8	10.2	10.0	98.0	102.0	4.0
Xylenes	0.0	29.8	30.7	30.0	99.3	102.3	3.0
 TPH (diesel)	0	146	144	150	97	96	1.5
TRPH (oil & grease)	0	25900	26500	23700	109	112	2.3

% Rec. = (MS - Sample) / amount spiked x 100

Date:

06/13/97

Matrix: Soil

	Concent	ration	(mg/kg)		% Reco	very	
Analyte	Sample			Amount			RPD
	(#75863)	MS	MSD	Spiked	MS	MSD	
TPH (gas)	0.000	1.846	2.150	2.03	91	106	15.2
Benzene	0.000	0.174	0.184	0.2	87	92	5.6
Toluene	0.000	0.180	0.192	0.2	90	96	6.5
Ethylbenzene	0.000	0.182	0.194	0.2	91	97	6.4
Xylenes	0.000	0.538	0.572	0.6	90	95	6.1
TPH (diesel)	0	320	320	300	107	107	0.0
TRPH (oil and grease)	0.0 	22.0	21.3	20.8	106	102	3.2

* Rec. = (MS - Sample) / amount spiked x 100

Date: 06/16/97

Matrix: Soil

	Concent:	ration	(mg/kg)		% Recov	very	
Analyte	Sample			Amount			RPD
: !	(#75871) 	MS	MSD	Spiked	MS	MSD	ļ
TPH (gas)	0.000	1.851	1.915	2.03	91	94	3.4
Benzene	0.000	0.178	0.180	0.2	89	90	1.1
Toluene	0.000	0.190	0.190	0.2	95	95	0.0
Ethylbenzene	0.000	0.188	0.192	0.2	94	96	2.1
Xylenes	0.000	0.574	0.578	0.6	96	96	0.7
TPH (diesel)	0	316	313	300	105	104	1.0
TRPH (oil and grease)	 N/A 	N/A	N/A	 N/A 	N/A	N/A	N/A

* Rec. = (MS - Sample) / amount spiked x 100

Date: 06/17/97

Matrix: Soil

14.	Concent	ration	(mg/kg)		% Reco	very	
Analyte	Sample			Amount			RPD
•	(#75871)	MS	MSD	Spiked	MS	MSD	
							
TPH (gas)	0.000	2.129	2.151	2.03	105	106	1.0
Benzene	0.000	0.182	0.186	0.2	91	93	2.2
Toluene	0.000	0.192	0.196	0.2	96	98	2.1
Ethylbenzene	0.000	0.192	0.196	0.2	96	98	2.1
Xylenes	0.000	0.566	0.578	0.6	94	96	2.1
TPH (diesel)	0	316	313	300	105	104	1.0
TRPH (oil and grease)	 0.0 	29.5	29.7	30 	98	99	0.7

% Rec. = (MS - Sample) / amount spiked x 100

QC REPORT FOR EPA 8010/8020/EDB

Date: 06/12/97-06/13/97 Matrix:

Soil

Sample (#75863)			Amount	ļ		
#75863)	110		I MITOURIC	i		RPD
	MS	MSD	Spiked	MS	MSD	
	80	90	100	00		0.0
•			!			0.0
N/A	N/A		N/A			N/A
0	85	85	100	85	85	0.0
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A N/A	0 82 N/A N/A 0 85 N/A N/A N/A N/A	0 82 82 N/A N/A N/A 0 85 85 N/A N/A N/A N/A N/A	0 82 82 100 N/A N/A N/A N/A N/A 0 85 85 100 N/A N/A N/A N/A N/A N/A N/A	0 82 82 100 82 N/A N/A N/A N/A N/A 0 85 85 100 85 N/A N/A N/A N/A N/A N/A N/A N/A N/A	0 82 82 100 82 82 N/A N/A N/A N/A N/A N/A 0 85 85 100 85 85 N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A

% Rec. = (MS - Sample) / amount spiked x 100

QC REPORT FOR METALS

Date:

06/16/97-06/18/97

Matrix: Soil

Extraction:TTLC

:	Concentr	ation			% Reco	very	
Analyte	(mg	g/kg,mg/l	L)	Amount			RPD
	Sample	MS	MSD	Spiked	MS	MSD	
<u></u>		 	<u> </u>				
Arsenic	0.0	5.2	5.2	5.0	103	104	1.0
Selenium	0.0	5.0	5.0	5.0	100	101	0.6
Molybdenum	0.0	5.2	5.2	5.0	105	105	0.2
Silver	0.0	0.5	0.5	0.5	101	101	0.4
Thallium	0.0	4.8	4.8	5.0	96	96	0.1
Barium	0.0	4.5	4.5	5.0.	. 89	89	0.5
Nickel	0.0	5.0	5.0	5.0	100	100	0.2
Chromium	0.0	5.3	5.4	5.0	107	107	0.1
Vanadium	0.0	4.8	4.8	5.0	97	97	0.2
Beryllium	0.0	5.3	5.3	5.0	105	105	0.1
Zinc	0.0	5.5	5.5	5.0	110	110	0.1
Copper	0.0	4.7	4.7	5.0	94	95	1.0
Antimony	0.0	4.8	4.9	5.0	97	98	0.9
Lead	0.0	4.8	4.9	5.0	96	97	1.4
Cadmium	0.0	5.2	5.3	5.0	105	105	0.3
Cobalt	0.0	5.0	5.0	5.0	99	100	0.1
Mercury	0.000	0.256	0.263	0.25	102	105	2.7
	.1					`	

% Rec. = (MS - Sample) / amount spiked x 100

QC REPORT FOR ICP and/or AA METALS

Date:

06/21/97-06/23/97 Matrix: Soil

Extraction: STLC

	Concent				% Reco		
Analyte	(mg	g/kg,mg/1	L)	Amount			RPD
:	Sample	MS	MSD	Spiked 	MS	MSD	
Total Lead	0.0	4.96	5.01	5.0	99	100	0.9
Total Cadmium	0.0	5.30	5.32	5.0 5.0	106	106	0.3
	:						
Total Chromium	0.0	5.21	5.24	5.0	104	105	0.6
Total Nickel	0.0	4.91	4.90	5.0	98	98	0.2
Total Zinc	0.0	5.40	5.39	5.0	108	108	0.1
Total Copper	0.00	5.03	4.98	5.0	101	100	0.9
STLC Lead	N/A	N/A	N/A	N/A	A\n	N/A	N/A

^{*} Rec. = (MS - Sample) / amount spiked x 100

CF CONTAINERS Plostic Plostic Plostic Plostic Plostic Plostic Plostic Plostic Plostic Plostic Story St	XXXXX	COLOR X XXXXXX	N X X X X		XXX X	150	3	Pos		77582 (KSF6, KG	5F7, KS	77 78 79 80 81 82 82
Plostic Plostic Plostic Plostic Plastic Pross Brass Brass Brass Brass	XXXXX	XXXXXX	(X X X X		X	150	/			77578 77578 77579 77580 77581 77582	5F7, KS	77 78 79 80 81 82 82 84
Ploste plostic plostic Plostic	XXXXX	X X X X X X	X X		X		· .	Pos	The side	77578 77579 77580 77581 77582 (KSF6, K	SF7, KS	78 79 80 81 82 82 84
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Pleastic Combur Vons Bress Bress Bress Sress Sress Sress Sress Sress Sress Sress Sress Sress Sress Sress Sress	X	×	X X		X		·	Pos	ite	77580 77581 77582 (KSF6, KS	SF7, KS	81 82 82 81 81
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Bress 59 55 55	X	×	X X		>		m	Pos	site	77582 (KSF6, K	5F7, KS	85
59 53 55	X	3	X X				m	Pos	re	(KSF6,K	SF7, KS	
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APPLICATION FOR AUTHORIZATION TO USE

PHASE I ENVIRONMENTAL SITE ASSESSMENT Friesman Road Property Livermore, California

July 8, 1997

TO:	Kleinfelder, Inc. 7133 Koll Center Parkway, Suite 100
	Pleasanton, California 94566
FROM:	
11101111	
	(please clearly identify name and address of person/entity applying for permission to use or copy this document)
Gentlemen:	:
	Applicant hereby applies for
permission (State	to: there the use(s) contemplated)
for the pur	pose(s) of: there why you wish to do what is contemplated as set forth above)
(State	: Hele will you wish to do what is contemplated as see forth accordy
Applicant	understands and agrees that the "Phase I Environmental Site Assessment and
a copyrigh	oil and Groundwater Sampling, Friesman Road Property, Livermore, California" is atted document, that Kleinfelder, Inc. is the copyright owner and that unauthorized
use or cop	lying of this report is strictly prohibited without the express written permission of
its sole di	r, Inc. Applicant understands that Kleinfelder, Inc. may without such permission at ascretion, or grant such permission upon such terms and conditions as it deems
acceptable	such as the payment of a re-use fees.
Dated:	Applicant Name
	Title