



General Services Agency

Darlene Smith, Director

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February 16, 1994

Ms. Eva Chu
Hazardous Materials Specialist
Division of Hazardous Materials
Department of Environmental Health
Alameda County Health Care Services Agency
80 Swan Way, Room 200
Oakland, California 94621

ALCO
HAZMAT
94 FEB 18 AM 10:45

SUBJECT: REMOVAL OF PETROLEUM STORAGE TANKS AND SITE
CHARACTERIZATION OF KNOWN CONTAMINATION
STAPLES RANCH, PLEASANTON, CALIFORNIA

Dear Eva:

First of all, thank you and Mr. Jeff Shapiro for the quick responses to all my questions concerning the County's desire to obtain site closure as soon as possible for the Staples Ranch property. I appreciate the help that both of you have given me. I feel our strong working relationship is an asset to both our groups.

As I informed you, the County is in the process of selling approximately two-thirds of the Staples Ranch property, Pleasanton, California to Kaufman and Broad South Bay, Inc. The Staples Ranch property is being subdivided into three parcels which will be zoned residential, commercial and recreational (community park). Kaufman and Broad hired Harza Kaldveer Consulting Engineers to do a detailed Phase 1 Preliminary Site Assessment for all the Staples Ranch property. Per your request, a copy of their report dated November 17, 1993 is enclosed for your records. Diesel residue contamination (no BTEX and TPH-Diesel of 1900 ^{ppb} detected at 15 feet below ground surface) was found. The source appears to be an above ground diesel storage tank referred to as AGT-5 located on that portion of the property that Kaufman and Broad will purchase, build a community park and then donate to the City of Pleasanton. The report indicated that this contamination may have impacted ground water even though no data is given that supports this conclusion. The

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property also contains one unpermitted underground storage tank and two additional unpermitted above ground petroleum storage tanks. My understanding is that these tanks have not been in use for at least five years. One additional above ground storage tank is currently being used to store heating fuel which is the main heat source for the house that the caretaker currently lives in.

After several telephone conversations with Jeff concerning the removal of the above ground storage tanks and our recent meeting concerning the quickest method that the County could employ to cleanup the known contamination and get site closure, I issued a Request For Proposal (RFP) to the following environmental engineering firms: Harding Lawson Associates, Environmental Science & Engineering, Inc, Kleinfelder, and Versar Inc. Enclosed for your information is a copy of the RFP. Currently, I plan to do this work in early March 1994.

In general, the one underground storage tank and the two above ground storage tanks will be removed per the Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites. Per Jeff, the removal and disposal of above ground petroleum storage tanks is covered by the following regulations: Health and Safety Code Division 20 Chapter 6.67 and Title 22, Code Section 66262.12. The two above ground storage tanks will be removed the same day as the underground storage tank, and will be disposed of as hazardous waste. It is my understanding that you will instruct the environmental engineering firm on where to take the appropriate soil sample from under each above ground storage tank that is removed. Jeff indicated to me that we could remove any visible contaminated soil under the above ground storage tank and then take the soil sample that tank closure would be based upon. I would appreciate you allowing us to follow this procedure. I have instructed the engineering firms to include the removal procedure for these above ground storage tanks in their underground storage tank work plan submitted to you for your review.

Concerning the site characterization study, please note that the described method outlined in the Scope of Professional Services, Item 3 of the RFP is the method that you and I agreed upon at our February 1, 1994 meeting. The remediation phase will consist of the actual excavation of this known contaminated soil, once site characterization has been completed, and then stockpile the contaminated soil. This remediation phase will be done under a separate RFP. As we agreed, the County, at its sole option, can either: (1) stockpile the contaminated soil on either the commercial portion of the Staples Ranch property which is not included in the sale to Kaufman and Broad or (2) remove and stockpile at the County's Santa Rita facility. The stockpiled soil will be placed either on visqueen or asphalt. If stockpiled at Santa Rita, the County will segregate it from other stockpiled contaminated soils and we will keep track of it in future reports generated for the Santa Rita property. Once

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stockpiled, the contaminated soil will be allowed to bio-remediate. Since no volatiles are present, the stockpiled soil will not need to be covered with visqueen unless later soil samples indicate a different response is appropriate.

After excavating the contaminated soil, we plan to install three monitoring wells. If ground water contamination is observed and assuming that the impacted ground water is not drinking water, an appropriate acceptance level for site closure might be 100 ppb THP-Diesel and no BTEX.

Also, for your records, I have completed an "Underground Storage Tank Unauthorized Release (LEAK)/Contamination Site Report" for the TPH-Diesel contamination from AGT-5. Please advise if I need to complete any other documents.

I would appreciate a written confirmation for our records that the above represents our understanding of the County's future actions to be taken at Staples Ranch. Therefore, I would appreciate your prompt acknowledgement by signing both original copies of this letter. Please keep one for your records and return one to me.

I appreciate the team approach that Jeff and you have taken on this very exciting project. I feel this demonstrated cooperation by both groups will strengthen our ongoing relationships, and allow us to accomplish the County's objectives in the most efficient and legal manner. Again, thank you for your time, suggestions, advise and help. I look forward to seeing you at the "tank pull". If you have any questions, please give me a call at (510) 535-6277.

Sincerely,

ENGINEERING & ENVIRONMENTAL
MANAGEMENT DEPARTMENT



Andrew B. Garcia, R.E.A.
Environmental Project Manager

Agree and Concur with the above.

Date

Eva Chu

Ms. Eva Chu
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attachments

cc: Mr. Jeff Shapiro, Alameda County Health Care Services Agency, w/o
Mr. Jim P. de Vos, P.E. w/o

ABG:abg:HZM00411
93-7057 Bldg. #1262

PHASE I PRELIMINARY SITE
ASSESSMENT
FOR
PROPOSED COMMUNITY PARK SITE
PLEASANTON, CALIFORNIA

HARZA KALDVEER

Harza Engineering Company of California

HARZA KALDVEER

Consulting Engineers

Harza Engineering Company of California

November 9, 1993
KE904-77-2015, 24067

Kaufman and Broad South Bay, Inc.
2201 Walnut Avenue, Suite 150
Fremont, California 94538

Attention: Mr. Matt Koart

RE: PHASE I PRELIMINARY SITE
ASSESSMENT
PROPOSED COMMUNITY PARK SITE
PLEASANTON, CALIFORNIA

Dear Mr. Koart:

Enclosed is our Phase I Preliminary Site Assessment report for the Proposed Community Park Site in Pleasanton, California. The enclosed report provides a description of our investigation and our conclusions regarding site environmental conditions.

We appreciate the opportunity to provide our services to you on this project. If you have any questions or require additional information, please don't hesitate to call.

Very truly yours,

HARZA KALDVEER



Dennis Laduzinsky, C.E.G./R.E.A.
Senior Engineering Geologist

DL:pv
Copies: Addressee (4)

PHASE I PRELIMINARY SITE ASSESSMENT

For
**PROPOSED COMMUNITY PARK SITE
PLEASANTON, CALIFORNIA**

To
Kaufman and Broad South Bay, Inc.
2201 Walnut Avenue, Suite 150
Fremont, California 94538

November, 1993

HARZA KALDVEER

Harza Engineering Company of California

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Letter of Transmittal

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HARZA KALDVEER

Harza Engineering Company of California

PHASE I PRELIMINARY SITE
ASSESSMENT AND SOIL
QUALITY INVESTIGATION
FOR
PROPOSED COMMUNITY PARK SITE
PLEASANTON, CALIFORNIA

I. INTRODUCTION

This report presents the results of a Phase I preliminary site assessment and soil quality investigation performed at the Proposed Community Park Site in Pleasanton, California. The site is located on the west side of El Charro Road, approximately 1,200 feet south of Interstate 580, as shown on the Site Vicinity Map, Figure 1, and Site Plan, Figure 2.

The purpose of this investigation has been to assess conditions or activities on or near the site which could indicate the potential presence of hazardous materials in the shallow soil or ground water at the site. It is understood that Alameda County currently owns the site, and the City of Pleasanton plans to develop the subject site into a community park.

II. SCOPE OF SERVICES

The scope of work for this study consisted of a Phase I preliminary site assessment (PSA) and a limited soil testing program. The PSA consisted of a site reconnaissance performed on August 12, 1993, discussions with county and state government agency personnel, research of available documents, and review of stereoscopic aerial photographs. The soil testing program was performed between August 30 and September 2, and consisted of: 1) collecting and analyzing shallow soil samples for the possible presence of residual pesticides relating to past agricultural activities at the site, and 2) analyzing subsurface soil samples collected in the vicinity of several above-ground and underground storage tanks, and electrical transformers, for the possible presence of petroleum hydrocarbons, pesticides, and PCBs.

The research for the PSA focused on past and present site and near-vicinity conditions and activities which could indicate the potential presence of hazardous materials in the onsite soil or ground water. Persons and agency representatives contacted, articles, documents and data reviewed, and a list of aerial photographs reviewed during this investigation, are presented at the end of this report. This investigation did not include an evaluation of the presence of asbestos-containing materials in existing structures, radon gas, or wetlands conditions at the site.

HARZA KALDVEER

Harza Engineering Company of California

This investigation was performed by Tacia Miller, Staff Engineer/ Environmental Specialist, and Hugo Hsu, Project Engineer, under the direction of Dennis Laduzinsky, C.E.G./R.E.A., Senior Engineering Geologist. Mr. Laduzinsky is registered as an Environmental Assessor by the State of California.

III. SITE DESCRIPTION

A. Site Description

The site encompasses about ~~31~~ acres and is located south of Interstate 580 and west of El Charro Road as shown on the Site Plan, Figure 2. The site is bounded on the north and west by open fields, on the south by Arroyo Mocho, and on the east by El Charro Road. ~~Arroyo Las Positas flows across the northern portion of the site.~~

At the time of our investigation, the site consisted of open fields overgrown with weeds. An old farm residence and 13 associated out-buildings are present on the northeastern part of the site. According to Ms. Sharon Neklason, an agricultural biologist for the Alameda County Office Agricultural Commissioner, the subject site has not been in agricultural production for at least the last five years. Prior to that, it may have been used for hay production.

Based on appearance, the building complex at the site formerly consisted of a main residence, several guest houses, stables, and a residence for farm workers. Except for the main residence and a water well pump house, all of the buildings are currently used as storage and garage space. For the purposes of this report, the structures are divided into four groups and discussed separately based on their location and use. The four groups are: 1) main residence, 2) pump house, 3) quonset huts, and 4) a ranch barn. Twelve of the fourteen structures are located on the south side of Arroyo Las Positas, and the other two are located on the north side of the creek.

Main Residence

This area includes the main residence and eight associated buildings. The main residence, located approximately 300-feet south of Arroyo Las Positas, is a one-story wood-frame building. Mr. Nick Rotermund, a County Sheriff Deputy, is currently living in the residence. The eight associated buildings, which are all currently used as storage space, includes two former guest houses, a former residence for farm workers, a garage, storage rooms, and stables. Materials stored in these buildings at the time of our reconnaissance included construction lumber, old doors, empty drums, an old boat, furniture, and several old appliances.

One underground storage tank and two above-ground storage tanks are present in this area. The underground storage tank is located approximately 100 feet southwest of the main residence. The tank is estimated to be about 500 gallons in capacity. A fuel pump is located at one end of the tank. At the time of our site reconnaissance, the tank contained approximately two inches of diesel-fuel residue and sediment in the bottom of the tank. The two above-ground tanks are

located adjacent to the two former guest houses. Both former guest rooms contained oil-fired heaters, and the tanks apparently supplied fuel for the heaters. The capacity of the tanks were estimated to be 250 to 325 gallons, and both tanks appeared to be in good condition. One of the tanks still contained fuel oil.

According to Mr. Rotermund, an old bomb shelter might be located in the vicinity of the main residence. Although the location of the bomb shelter is not known with certainty, a metal detector used to locate underground utilities at the site did indicate the possible presence of a large metallic object, which might have been the reinforced concrete for the bomb shelter, located a few hundred feet south of the main residence.

Pump House

A 2-story, concrete pump-house is located to the west side of the main residence. An old chicken coop, and the remains of a previous pump house are located in the vicinity of the existing pump house. A ~~water supply well~~ (Well 3S-1E-3Q1) is located on the west side of the pump house. According to the Alameda County Water Conservation and Flood Control District, Zone 7 (Zone 7), the well is 350 feet deep, and pumps from a level approximately 100 feet ~~below ground surface~~. An electric well-pump and an electric transformer pole are also located in the pump house area. According to Zone 7 records, another irrigation well, Well 3S-1E-3Q2, was formerly located south of Well 3Q1. According to Zone 7, this well is now abandoned. No records regarding the depth of the abandoned well are available from Zone 7. An approximate 15 foot high, steel pipe was found standing at the presumed location of Well 3Q2. This area contains the remnants of a possible former water transmission system. During our reconnaissance, we noted an 8-inch steel pipe originating at the bottom of the stand pipe and ending at the property on the north side of Arroyo Las Positas. Additional underground irrigation pipes may be present elsewhere on the subject property.

Quonset Huts

Two quonset huts are present approximately 100 feet northeast of the main residence. According to Mr. Rotermund, the huts are used for storage by the Alameda County Agricultural Department. At the time of our site reconnaissance, the northern hut contained rope, metal supports for signs, a gas meter, wood cabinets and tables, and at least three 55-gallon drums. Contents and condition of the drums could not be determined because of limited access to the buildings. The southern hut contained wood, several electric motors, electrical components for high voltage lines, an old lawn mower, pipes, and a possible electrical transformer. A pole-mounted electric transformer is also present on the north side of quonset huts. The transformer did not appear to be in use at this time.

Denny

Ranch Barn

This area contains two structures located on the north side of Arroyo Las Positas. One of the buildings was constructed of concrete and the other was constructed of wood. The concrete building contained a stable, a refrigerated room, two empty rooms, and two storage rooms. Bags of phosphate, sulfur compounds, and fertilizer were stacked in the storage rooms. The bags were aged and torn, and the contents were scattered on the concrete floor. Four empty, and one full, 55-gallon drums are present in the other storage room. According to the label, the full drum contained vegetable oil. No label could be found on the empty drums. The wooden structure currently stored railroad ties. An old concrete slab for a former building is present on the east side of the concrete building. An elevated steel tank, approximately 200 gallons capacity, was present to the southwest of the concrete building. The tank is elevated approximately 12 feet in the air and is supported by a wooden framework. According to Mr. Rothermund, the tank formerly stored diesel fuel for servicing tractors and agricultural equipment previously used on the property. The tank appeared to be empty and in good condition.

B. Geology and Hydrogeology

1. Geology

The site is located in the northeastern corner of Amador Valley, at the west end of Livermore Valley. The site is underlain by alluvial valley-fill sediments of Quaternary age. These deposits generally consist of unconsolidated layers of sand, silt, clay, and gravel, and are probably on the order of 400 feet thick. The alluvium is underlain by the Livermore Formation of Plio-Pleistocene age. The Livermore Formation may be up to 4,000 feet thick, and is composed of semi-consolidated deposits of clayey gravel and clayey sand. In general, these deposits are more consolidated, and finer grained (higher clay content) than the overlying alluvium.

2. Ground Water

The subject site is located in the Livermore Valley Ground Water Basin which has been divided into a number of subbasins on the basis of the fault traces and hydrologic discontinuities. The site is located at the junction of the Camp and Amador subbasins. Ground water at the site is at a depth of about 30 to 40 feet below ground surface. Regional ground water flow maps published by Zone 7 indicate that water in the uppermost aquifer beneath the site generally flows toward the southwest (Alameda County Flood Control and Water Conservation District, 1991, 1990). Ground water flow patterns are strongly influenced by pumping at the gravel mining operations located approximately 1,300 feet southwest and southeast of the site.

3. Surface Water

The northern part of the site is crossed by Arroyo Las Positas, and the site is bordered on the south by Arroyo Mocho; two of the major streams draining Livermore Valley. Both streams

are located within modified earth channels, which converge just west of the site. It is understood that Arroyo Las Positas will be relocated as part of the site development.

IV. SITE HISTORY

We reviewed aerial photographs at Pacific Aerial Surveys in Oakland, California to assess the changes in land use since 1957, the date of the earliest available photograph. Based on the aerial photograph review, the site was agricultural land bordered by Arroyo Mocho on the south, by the El Charro Road on the east, and by agricultural lands on north and west, from at least 1957 until 1986. The farm residence and associated buildings were present in the 1957 aerial photographs (see Figure 3). However, several of the building locations have changed through time. Copies of aerial photographs from 1957, 1973, and 1990 are included in this report to show land use changes at the site through time (Figures 3, 4, and 5).

The northern portion of the site was used as grazing land from 1957 until 1986, when it was apparently used as agricultural land. In contrast, the southern portion of the site has always been used as agricultural land at least since 1957. It should be noted that all of the agricultural activity observed in the photographs appear to be low-level dry-farming agriculture. We did not observe indications of row crops, greenhouses, or other evidence of intensive agricultural use.

The subject site was surrounded by agricultural lands on all sides in the aerial photographs from the 1960s and 1970s. The aerial photographs show residential development on properties to the west beginning in the mid-1980s. The property to the east across the El Charro Road has been agricultural land at least since 1957. The properties to the south of Arroyo Mocho were used as agricultural land prior to 1973, when gravel mining began some 1,300 feet southeast and southwest of the site.

During this investigation, an attempt was made to review Sanborn Fire Insurance Maps to aid in evaluating previous site history. However, we were unable to locate any Sanborn map coverage for the area, and it is probable that Sanborn map coverage for the area does not exist.

V. ENVIRONMENTAL CONDITIONS

A. Site Environmental Conditions

Our site reconnaissance, review of aerial photographs, and public files, identified three site conditions of potential environmental concern: 1) onsite underground and above-ground storage tanks, 2) electrical transformers, and 3) historic low-level agricultural use of the site. The following sections include discussions of each of these areas of potential concern.

1. Onsite Tanks

Three above-ground storage tanks, and one underground storage tank are present on the site. Our research indicates that none of these tanks are registered with the Alameda County

Department of Environmental Health. Two of the above-ground tanks, and the underground tank, are located in the vicinity of the main residence. The third above-ground tank is located in the area of the ranch barn, north of Arroyo Las Positas. The approximate locations of the tanks are shown on the Site Exploration Plan, Figure 6.

At the time of our site reconnaissance, approximately two inches of diesel-fuel residue and sediment were present in the bottom of the underground storage tank. Mr. Rotermund (the site tenant) indicated that the two above-ground tanks adjacent to the guest houses were formerly used to store heating fuel; one of the tanks presently contains fuel oil. The third above-ground tank, located on the north side of the property, reportedly stored diesel fuel for farm equipment.

a. Soil Sampling Program

A soil testing program was performed to evaluate the possible presence of fuel hydrocarbons in soil and ground water near the tanks. On the chance that the tanks may have been used in the past for storing or mixing agricultural chemicals some samples were also analyzed for pesticide compounds.

The field investigation was conducted between August 30, and September 7, 1993, and consisted of drilling five exploratory borings in the vicinity of the onsite tanks. Two borings were drilled in the vicinity of the underground storage tank, and one boring was drilled near each of the above-ground tanks. The borings were drilled with a truck-mounted drill rig equipped with 8-inch diameter, hollow-stem augers. Harza Kaldveer staff visually classified the soils encountered during drilling in accordance with the Unified Soil Classification System. Samples were also screened in the field for organic vapors using a portable photoionization detector. The boring logs are presented in Appendix A.

Soil samples were collected from the borings at approximate five-foot intervals using a 2-inch I.D. Modified California sampler containing thin brass liners. The sampler was driven with a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler the last 12 inches of an 18-inch drive are recorded as the penetration resistance (blows/foot) on the boring logs. The augers were steam-cleaned prior to use and the sampling equipment was thoroughly cleaned with a laboratory grade detergent to reduce the potential for cross-contamination. The soil borings were backfilled with neat cement upon completion.

Samples collected for possible chemical analysis were collected in 2-inch diameter, 6-inch long, brass tubes. After being examined for logging, the samples were appropriately sealed, labeled and placed in refrigerated storage. A chain-of-custody form was initiated in the field and accompanied the samples to the analytical laboratory.

HARZA KALDVEER

Harza Engineering Company of California

b. Analytical Results

i. Laboratory Procedures

Soil samples were analyzed by Chromalab, Incorporated, of San Ramon, California. Chromalab is certified by the California Environmental Protection Agency for the analyses performed. Twenty-six soil samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, and purgeable aromatic compounds (benzene, toluene, ethylbenzene, and xylenes, or BTEX) using EPA Methods 5030, 3550, and 8020, respectively. Fifteen of the soil samples were additionally tested for organochlorine pesticides using EPA Method 8080.

ii. Chemical Test Results

Results of the soil sample analyses are presented in Table 1 and Certified Analytical Reports are attached to this report as Appendix B. The chemical test results indicate that elevated levels of petroleum hydrocarbons as diesel are present in the vicinity of the above-ground tank located on the north side of the property, north of Arroyo Las Positas (apparently located beneath the proposed Stoneridge Drive extension). Petroleum hydrocarbons as diesel were detected in the samples collected in the vicinity of the tank (Boring EB-7) beginning at a depth of five feet and extending to the maximum depth explored of 40 feet. The maximum concentrations were reported at 1,200 and 1,900 parts per million (ppm) for the 10-foot and 15-foot deep samples, respectively. TPH as diesel was detected at a concentration of 28 ppm in the sample collected near the soil-ground water interface (35 foot depth) and was reported at 57 ppm in a sample collected below the ground water table at a depth of 40 feet.

The chemical test results also indicate the presence of low levels (non-detect to 6.8 ppm) of gasoline hydrocarbons in the soil samples from this location. ~~Organochlorine pesticides~~ compounds were not detected in any of the samples collected from this boring. Petroleum hydrocarbons and organochlorine pesticides (DDT compounds) were not detected in any of the soil samples collected from the borings drilled near the underground storage tank or the two above-ground tanks located near the main residence and guest houses. A complete listing of chemical test results is presented on Table 1.

2. Electrical Transformers

The site contains two pole-mounted electrical transformers located near the main residence. The two transformers appear to be old and worn with rust and could (based on age of the ranch), be considered as presently, or formerly, containing polychlorinated biphenyl (PCB)-bearing insulating fluids. If the transformers leaked in the past, they could be a source of localized PCB contamination in the shallow soil.

a. Soil Sampling Program

Shallow soil samples were collected near the base of the transformer poles to evaluate the possible presence of PCBs at these locations. A shovel and pick were used to excavate surface soil below the electrical transformer poles to a depth of one foot. A soil sample was collected by manually driving a clean, brass liner into the bottom of the excavation.

b. Analytical Results

A total of two samples, one collected from a depth of one foot beneath each of the electrical transformers, were submitted to the chemical testing laboratory and were analyzed for PCBs using EPA Method 8080. The laboratory results indicate that ~~PCBs were not present in the soil~~ samples in detectable quantities (Samples EB10-1' and EB24-1' on Table 1).

3. Past Agricultural Land-Use

The site and surrounding vicinity have historically been used for cattle grazing and dry farming. The Alameda County Agricultural Commissioner's office did not contain records of restricted chemical use at the site, and indicated that the site has not been in agricultural production for at least the last five years. However, residual pesticides may be present in shallow soil the site related to the previous low-level agricultural land-use.

pesticide storage or mixing area?

a. Soil Sampling Program

Based on the previous agricultural history of the site, a soil testing program was conducted to evaluate the possible presence of residual agricultural chemicals in the shallow soil at the site. The field sampling program consisted of collecting soil samples from a depth of one foot at 20 locations, and from a depth of three feet at eight locations at the site. The sampling locations were evenly distributed across the site to provide representative site coverage (Figure 6). The approximate soil sample locations were determined by pacing, and should be considered accurate only to the degree implied by the method used.

A shovel and pick were used to excavate the surface soil to a depth of approximately one foot. A sample from the one foot depth was collected by manually driving a clean, brass liner into the bottom of the excavation. At eight locations on the site, the excavation was further advanced to a depth of three feet with an "Access II" mobile drill rig equipped with 8-inch diameter hollow-stem augers. Samples were collected from a depth of three feet in these borings using a Modified California Sampler containing 2-inch diameter, 6-inch long, brass liners. Soils encountered during the sampling program were examined for discoloration and chemical odors in the field and classified in accordance with the Unified Soil Classification System. All soil samples were examined and logged, sealed with teflon-lined lids, labeled, and immediately placed in refrigerated storage. A chain-of-custody form was initiated in the field and accompanied the samples to the laboratory. The excavations were backfilled with native soil upon completion.

HARZA KALDVEER

Harza Engineering Company of California

b. Analytical Results

i. Laboratory Procedures

All of the 20 one-foot deep samples, and the eight three-foot deep samples were submitted to the Chromalab, Inc., for analysis. Adjacent groups of four samples were composited into single samples at the laboratory prior to analysis. Thus, a total of five composite samples from a depth of one foot, and two composite samples from a depth of three feet were analyzed. All seven composite samples were analyzed for organochlorine pesticides using EPA Method 8080.

ii. Chemical Test Results

Analytical results are summarized on Table 2 and the Certified Analytical Reports and chain-of-custody records are attached to this report as Appendix B.

Organochlorine pesticides were not detected in any of the soil samples, with the exception of ~~levels of dieldrin and DDE detected in the three-foot deep composite sample collected from the northern half of the site~~ Dieldrin and DDE (a DDT-related compound) were reported at concentrations of 2.3 parts per billion (ppb) and 1.2 ppb, respectively, in the three-foot deep composite sample from Borings EB-7, EB-10, EB-18, and EB-21.

B. Regional Environmental Conditions

Information on regional environmental conditions is derived from a variety of government agency sources. To assess whether sites with documented environmental problems exist within approximately one mile of the site, we reviewed the following regulatory agency Lists:

- California Regional Water Quality Control Board (RWQCB) Leaking Underground Storage Tanks (LUST) list.

Two fuel leak sites are listed within a one mile radius of the site.

- California Environmental Protection Agency (Cal EPA) Annual Work Plan (AWP) list under the Hazardous Substance Cleanup Bond Act of 1984.

No sites are listed within a one mile radius of the subject site.

- California Environmental Protection Agency (Cal EPA) CAL-Sites list (former Abandoned Site Program Information System) under the Toxic Substance Control Program.

Three sites are listed within a one mile radius of the subject site.

- U.S. EPA Superfund CERCLIS listing (lists potential Superfund sites) and National Priorities List (NPL).

No sites are listed within a one mile radius of the subject site.

- California Integrated Waste Management Board Closed, Inactive and Active Landfills list (Solid Waste Information System, SWIS).

No sites are listed within a one mile radius of the subject site.

- State of California Office of Planning and Research Hazardous Waste and Substances Sites list ("Cortese List").

Two sites are listed within a one mile radius of the subject site.

- Hazardous Waste Information Systems (HWIS) list (lists known generators of hazardous materials).

Two sites are listed within a one mile radius of the subject site.

In addition, we reviewed regulatory agency files for specific information regarding listed sites identified in this report. The investigation indicates that there are seven agency-listed sites within an approximate one mile radius of the site. Figure 1 presents the locations of these sites and Table 3 presents the status of these sites. Please note that some site numbers may represent more than one address. The following is a discussion of the listed sites based on information from regulatory agency files reviewed during the investigation.

Site No. 1, Las Positas Golf Course, 1800 Friesman Road, Livermore

Listed as a fuel leak site and located approximately 0.75 miles east of the subject site in a lateral-gradient direction. Regional Water Quality Control Board (RWQCB) files indicate two underground storage tanks were removed from the site in July 26, 1989. The tanks were 250 and 500 gallons in capacity, and reportedly contained heavy fuel oil and diesel fuel. Soil samples collected from the tank excavations indicated the presence of subsurface contamination. A preliminary assessment report submitted to the Alameda County Department of Environmental Health (ACDEH) in October, 1989, indicated that four ground water monitoring wells were installed on the south and west sides of the tank excavation. Eight rounds of quarterly ground water sampling were performed between November, 1989 and March, 1992. The analytical results indicated the ground water contained BTEX concentrations as high as 34, 63, 62, and 67 ppb, respectively. In addition, gasoline, and oil and grease were detected as high as 4,800, and 2,000 ppb, respectively.

The City of Livermore began remediation of the contaminated soil on March 2, 1992. According to a project status report dated July 13, 1992, approximately 22,000 cubic yards of soil was excavated from the former tank area. Soil samples were collected from the side-walls of the excavation and the stock-piled soils and analyzed for BTEX, TPH as gasoline and total lead. Approximately 5,000 cubic yards of excavated soil were aerated and removed from the site. The remaining 17,000 cubic yards of soil were used to backfill the excavation after analytical results indicated that no gasoline or BTEX were detected, and the total lead concentrations was below background level.

The status report also indicated that the migration of gasoline from the leaking tank was laterally confined to within a 10 foot radius beneath the tank until it reached ground water. The gasoline reportedly migrated to the south along the prevailing ground water flow direction in the area. Analytical test results also indicated that gasoline was migrating along an approximately one foot thick soil layer located at a depth of about 40 feet below the ground surface. On April 17, 1992, the ACDEH determined that it would not be economically feasible to continue excavation work at the site. It was recommended that one additional downgradient monitoring well be installed and monitored, along with the remaining two monitoring wells, for gasoline hydrocarbons on a quarterly basis. If no gasoline hydrocarbons were detected in the water for a period of one year, the site could be considered for closure. However, no records of installing additional ground water monitoring wells, or analytical results of succeeding ground water monitoring, could be located during our file review.

The most recent information indicates three additional underground storage tanks containing gasoline and diesel were removed from the site on July 7, 1993. The tanks were 250, 350, and 1,000 gallon in capacity. Soil samples collected from the bottom of the tank excavations contained up to 2,110 ppm of TPH as gasoline, and 1,370 ppm diesel. No further information was available regarding these tanks.

Information available for our review indicates that ground water contamination from the golf course tank sites does not appear to be migrating directly toward the subject site. On this basis, contamination from this site would not appear to represent a potential threat to soil and ground water quality at the subject site.

Site No. 2, Santa Rita Rehabilitation Center, I-580 and Tassajera Road, Pleasanton

The site is an ASPIS listed site approximately 0.75 miles west of the subject site (downgradient). Site is listed as requiring "Low priority preliminary endangerment assessment" by the Department of Toxic Substance Control (DTSC) Office. Given the location and low priority of the site, it would not appear to represent a potential impact to the subject site.

Site No. 3, East Bay BMW, 3830 Old Santa Rita Road, Pleasanton

East Bay BMW is listed as a waste-oil leak site and located approximately one mile west of the subject site in a downgradient direction. A site remediation report dated April 9, 1990, indicated that approximately 120 cubic yards of petroleum impacted soil were removed from the site. The RWQCB files indicate a ground water monitoring well was installed on May 22, 1990. Ground water samples collected in May and August, 1990, did not contain petroleum hydrocarbons in detectable quantities. This site would not appear to represent an impact to the subject site.

Site No. 4, Precision Pool and Plastering, 3675 Santa Rita Road, Pleasanton

Precision Pool is an ASPIS-listed site located approximately one mile west of the subject site (downgradient). Site is listed by the DTSC Office as "No Further Action" required. Given the location and low priority of the site, it would not appear to represent a potential impact to the subject site.

Site No. 4, Central Wholesale Electric Distributor, 3663 Santa Rita Road, Pleasanton

Central Wholesale is an ASPIS-listed site located approximately one mile west of the subject site (downgradient). Site is listed by the DTSC Office as "No Further Action" required. Given the location and low priority of the site, it would not appear to represent a potential impact to the subject site.

Site No. 4, Sportshop Auto Painting and Body, 3687 Old Santa Rita Road, No. 9, Pleasanton

This site is listed as a hazardous waste generator. However, contamination has not been reported for the site.

Site No. 4, Autobahn Collision Werkes, 3687 Old Santa Rita Road, No. 18, Pleasanton

Autobahn Collision Werkes is listed as a hazardous waste generator. However, contamination has not been reported for the site.

VI. DISCUSSIONS AND CONCLUSIONS

This investigation included an initial Phase I preliminary site assessment to identify areas of potential environmental concern within the site and near vicinity, and a limited soil testing program to evaluate the presence of onsite contamination related to several items of potential environmental concern identified during the Phase I assessment. The potential areas of environmental concern identified during the Phase I assessment included the possible presence of petroleum hydrocarbons or pesticides in the soil or ground water in the near vicinity of the three above-ground tanks and one underground storage tank present on the site; the possible

presence of PCBs in the shallow soil beneath two pole-mounted electrical transformers; and the possible presence of residual pesticide compounds in the shallow soil at the site related past low-level agricultural use of the property. The results of our investigation indicate that soil, and possibly ground water, quality at the site have been impacted by the apparent leakage of diesel fuel from the above-ground fuel tank located on the northern portion of the property. A summary of the investigation findings is presented in the following paragraphs.

Our investigation reveals the presence of three above-ground fuel tanks, and one underground fuel storage tank on the site. Our conversations with local government officials indicates that none the tanks are currently registered with the Alameda County Department of Environmental Health. The tanks are believed to have stored diesel fuel for farm equipment, and heating oil. A limited soil testing program performed to evaluate the possible presence of fuel hydrocarbons or agricultural chemicals in soil near the tanks revealed the presence of elevated levels of diesel fuel in soil near the above-ground tank located on the north side of Arroyo Las Positas (beneath the proposed Stoneridge Drive extension). Measured concentrations of diesel fuel at this location were as high as 1,900 ppm (detected at a depth of 15 feet below ground surface). In addition, diesel fuel hydrocarbons were detected in soil samples collected at, and below, the ground water surface, suggesting the possible presence of ground water contamination associated with the tank. Additional investigation would be required to evaluate the full vertical and lateral extent of soil or ground water contamination at the site.

Fuel hydrocarbons were not detected in the soil samples collected near the two above-ground tanks, or the underground storage tank located near the main residence compound. Organochlorine pesticides were not detected in soil samples collected near any of the tanks.

It is recommended that all tanks be removed in accordance with Alameda County Department of Environmental Health Department regulations prior to development.

At the time of our investigation, two pole-mounted electrical transformers were present near the main residence on the site. The transformers appeared old and worn with rust. Based on apparent age of the transformers, they should be considered as potentially containing PCB-bearing insulating fluids. Soil samples collected approximately one foot below ground surface beneath the transformers were not found to contain PCBs. Based on these chemical test results, these electrical transformers do not appear to have impacted soil quality at the site, but may require special handling and disposal during site development. Another transformer stored in one of the quonset huts to the east of the main residence may also require special disposal.

The site has historically been used for cattle grazing and low-level agricultural use. The site has not been used for agricultural production for at least the last five years. However, former agricultural sites often represent a potential environmental concern with regard to the possible presence of residual pesticide compounds in the shallow soil. The chemical test results from a series of shallow soil samples collected in a grid pattern across the site did not indicate the presence of organochlorine pesticides in shallow soil, with the exception of low levels of DDE.

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and dieldrin in one composite sample collected from a depth of three feet on the northern half of the site. The concentrations of these constituents measured in the sample are well below the respective California Total Threshold Limit Concentrations, and are well within the range of what would be considered regional background levels for agricultural sites of this type. In our opinion, the low levels of pesticides reported in the shallow soil on the northern half of the site would not appear to represent a potential impact to future development of the site.

As an additional item of note, the existing agricultural water production well present on the northeastern portion of the site will need to be abandoned in accordance with State and local well sealing standards if the well will not be used as part of the proposed development. We also recommend that a more detailed investigation be performed to evaluate the condition of the old bomb-shelter suspected to be buried in an area south of the main residence.

VII. LIMITATIONS

The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

Environmental conditions may exist at the site that cannot be identified by visual observation. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported by others, naturally occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

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AV903-04, 16/17, May 15, 1969 Scale 1:12000
AV253-28, 43/44, May 16, 1957 Scale 1:12000

Contacts:

Alameda County Agricultural Commissioner

Contact: Greg Gee
Sharon Neklason

Alameda County Water Conservation and Flood Control, Zone 7

Contact: Wyman Hong
Crag Mayfield
Jim Ross

Alameda County Department of Environmental Health

Contact: Jeff Shapiro

Alameda County Sheriff Department

Contact: Candace Fitzgerald

Alameda County Planning Department

Contact: Jim Walsh

Alameda County Real Estate

Contact: Steward Cook
John Feinsmarker
Rory McNail

City of Livermore, Fire Prevention

Contact: Randy Grifus
Angie

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REFERENCES

(continued)

Contacts:

(continued)

City of Livermore, Planning Department

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City of Pleasanton

Contact: Kerri Watt
Mike Fulford
Wes Jost

City of Pleasanton, Fire Prevention

Contact: Dorsey Pearson
Ted Klink

Livermore Municipal Airport

Contact: Dan Lee

Publications and Reports:

California Environmental Protection Agency, CAL-SITES (ASPIS-former Abandoned Sites List), dated September, 1992.

California Environmental Protection Agency, "Expenditure Plan for the Hazardous Substance Clean-Up Bond Act of 1984", CAL-SITES Annual Work Plan (AWP) list, dated September, 1992.

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(continued)

Publications and Reports:
(continued)

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....., National Priorities List, dated October, 1992.

U.S. Geological Survey, Topographic Map of Livermore Quadrangle, photorevised 1980.

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
STORAGE TANK AND ELECTRICAL TRANSFORMER AREAS
Results Reported in parts per million

Sample Location and Depth	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylene	EPA 8080 Pesticides	EPA 8080 PCBs
EB-1								
5'	--	--	--	--	--	--	ND	--
10'	ND	ND	ND	ND	ND	ND	ND	--
15'	--	--	--	--	--	--	ND	--
20'	ND	ND	ND	ND	ND	ND	--	--
30'	ND	ND	ND	ND	ND	ND	--	--
35'	ND	ND	ND	ND	ND	ND	--	--
40'	ND	ND	ND	ND	ND	ND	--	--
EB-2								
5'	--	--	--	--	--	--	ND	--
10'	ND	ND	ND	ND	ND	ND	ND	--
15'	--	--	--	--	--	--	ND	--
20'	ND	ND	ND	ND	ND	ND	--	--
30'	ND	ND	ND	ND	ND	ND	--	--
35'	ND	ND	ND	ND	ND	ND	--	--
40'	ND	ND	ND	ND	ND	ND	--	--
EB-3								
5'	ND	ND	ND	ND	ND	ND	ND	--
10'	ND	ND	ND	ND	ND	ND	ND	--
15'	ND	ND	ND	ND	ND	ND	ND	--
20'	ND	ND	ND	ND	ND	ND	--	--
EB-4								
5'	ND	ND	ND	ND	ND	ND	ND	--
10'	ND	ND	ND	ND	ND	ND	ND	--
15'	ND	ND	ND	ND	ND	ND	ND	--
20'	ND	ND	ND	ND	ND	ND	--	--
EB-5								
5'	110	4.0	ND	ND	ND	ND	ND	--
10'	110	2.0	ND	ND	ND	ND	ND	--
15'	110	24	ND	ND	ND	ND	ND	--
20'	110	6.8	ND	ND	ND	ND	--	--
25'	26	ND	ND	ND	ND	ND	--	--
30'	1.5	ND	ND	ND	ND	ND	--	--
35'	28	5.1	ND	ND	ND	ND	--	--
40'	57	ND	ND	ND	ND	ND	--	--
EB-10								
1'	--	--	--	--	--	--	--	ND
EB-24								
1'	--	--	--	--	--	--	--	ND

Notes:

All results reported in parts per million
 ND = Not detected
 -- = Not tested

TABLE 2
COMPOSITE SOIL SAMPLE ANALYTICAL RESULTS
 (Results Reported in Parts Per Billion)

Composite Sample	Pesticides EPA 8080
EB-7, EB-8, EB-9, EB-25/one-foot	ND
EB-18, EB-21, EB-22, EB-23/one-foot	ND
EB-13, EB-14, EB-19, EB-20/one-foot	ND
EB-6, EB-11, EB-12, EB-15/one-foot	ND
EB-10, EB-16, EB-17, EB-24/one-foot	ND
EB-7, EB-10, EB-18, EB-21/three-foot x 4	Dieldrin: 2.3 x 4 = 9.2 DDE: 1.2 x 4 = 4.8
EB-6, EB-13, EB-14, EB-16/three-foot	ND

Notes:

All results reported in parts per billion
 ND = Not Detected

75X10⁻⁶

As per 65 - No significant Risk Level (mg/L) *

Dieldrin .00002 = (or .02 ppb)

DDE .001 = (or 1 ppb)

* levels indicate concentrations of chemicals in water that correspond to the intake of 2 liters of water per day.

PRCS for residential soil ppm

dieldrin > .053 ppm ≈ 53 ppb

TABLE 3
LISTED SITES

Location on Figure 1	Site	Site Address	Up-gradient (Yes/No)	Potential Impact to Subject Site	Agency Source
1	Las Positas Golf Course	1800 Friesman Road	No	Low	CORTESE, LUST
2	Santa Rita Rehabilitation Center	I-580 & Tassajera Road	No	Low	ASPIS
3	East Bay BMW	3830 Old Santa Rita Road	No	Low	CORTESE, LUST
4	Precision Pool and Plastering	3675 Santa Rita Road	No	Low	ASPIS
4	Central Wholesale Electric Distribution	3663 Santa Rita Road	No	Low	ASPIS
4	Sportshop Auto Painting & Body	3687 Old Santa Rita Road, No. 9	No	Low	HWIS
4	Autobahn collision Werkes	3687 Old Santa Rita Road, No. 18	No	Low	HWIS

California Radius Detailed Report



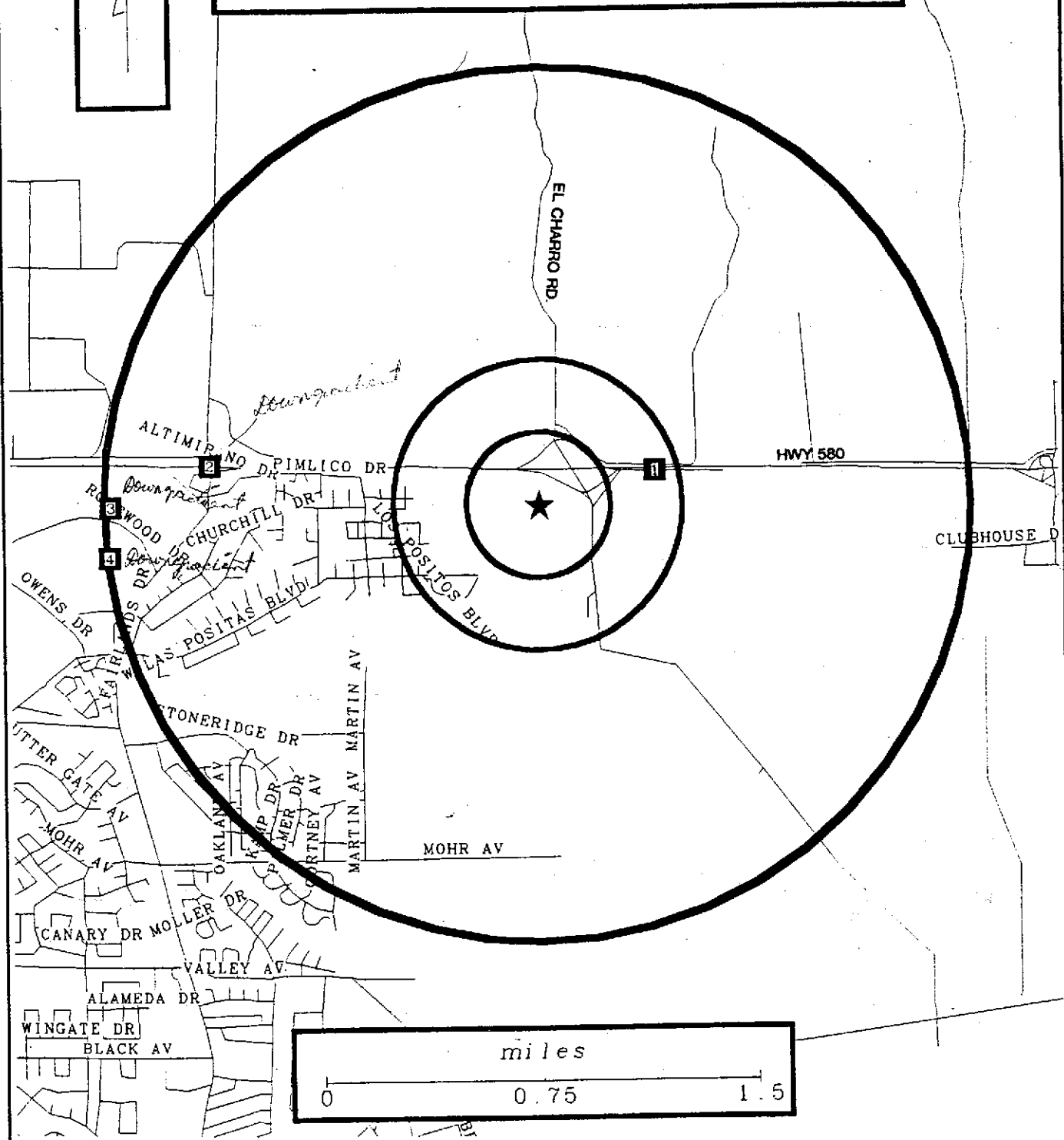
Subject Property



Government Listed Sites

Railroads

Surface hydrology



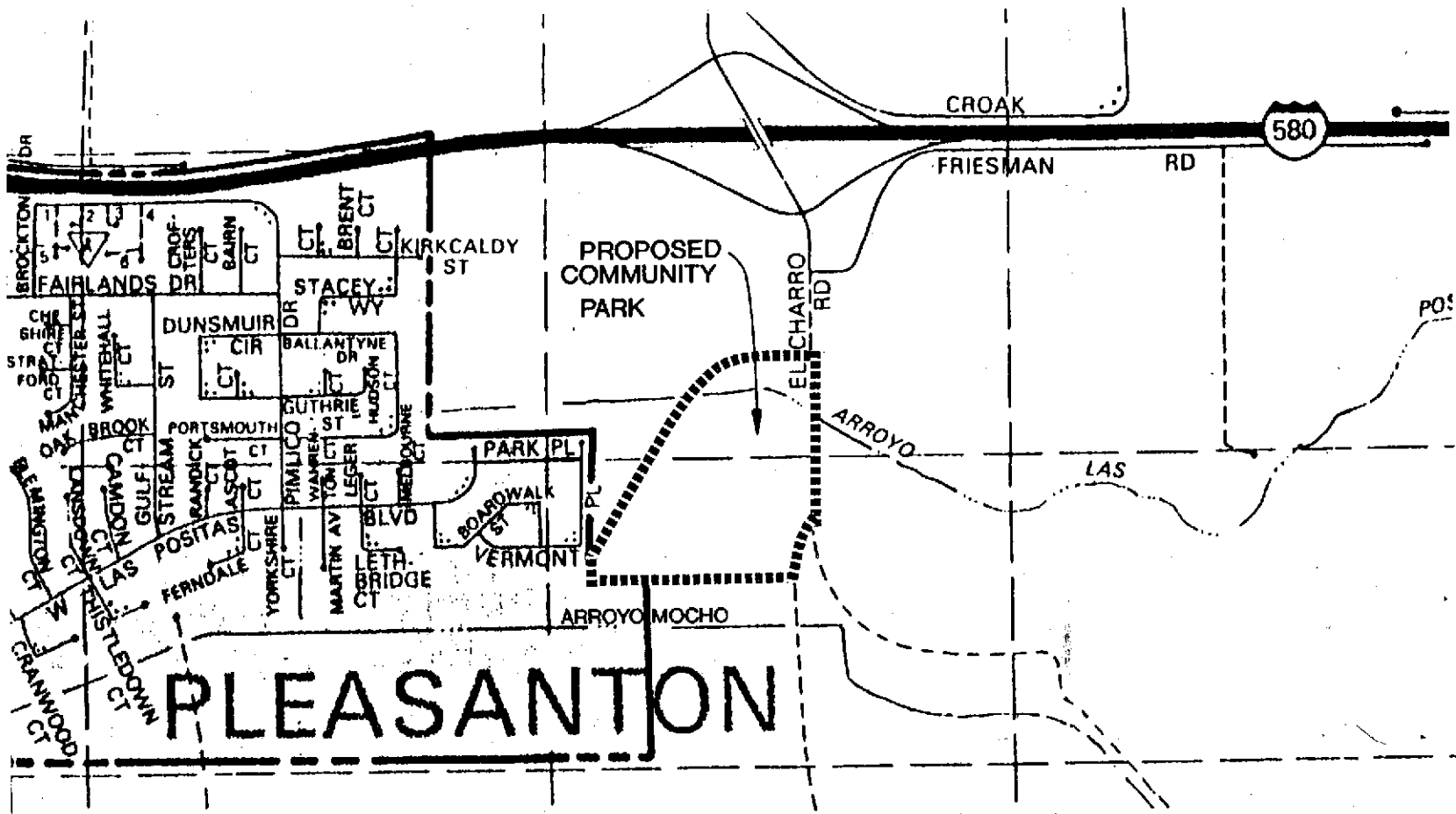
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Consulting Engineers

SITE VICINITY MAP

PROPOSED COMMUNITY PARK
Pleasanton, California

PROJECT NO.	DATE
K904-77-2015	November 1993

Figure 1



Approximate Scale in Feet



BASE: Provided by Thomas Brothers Maps

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SITE PLAN

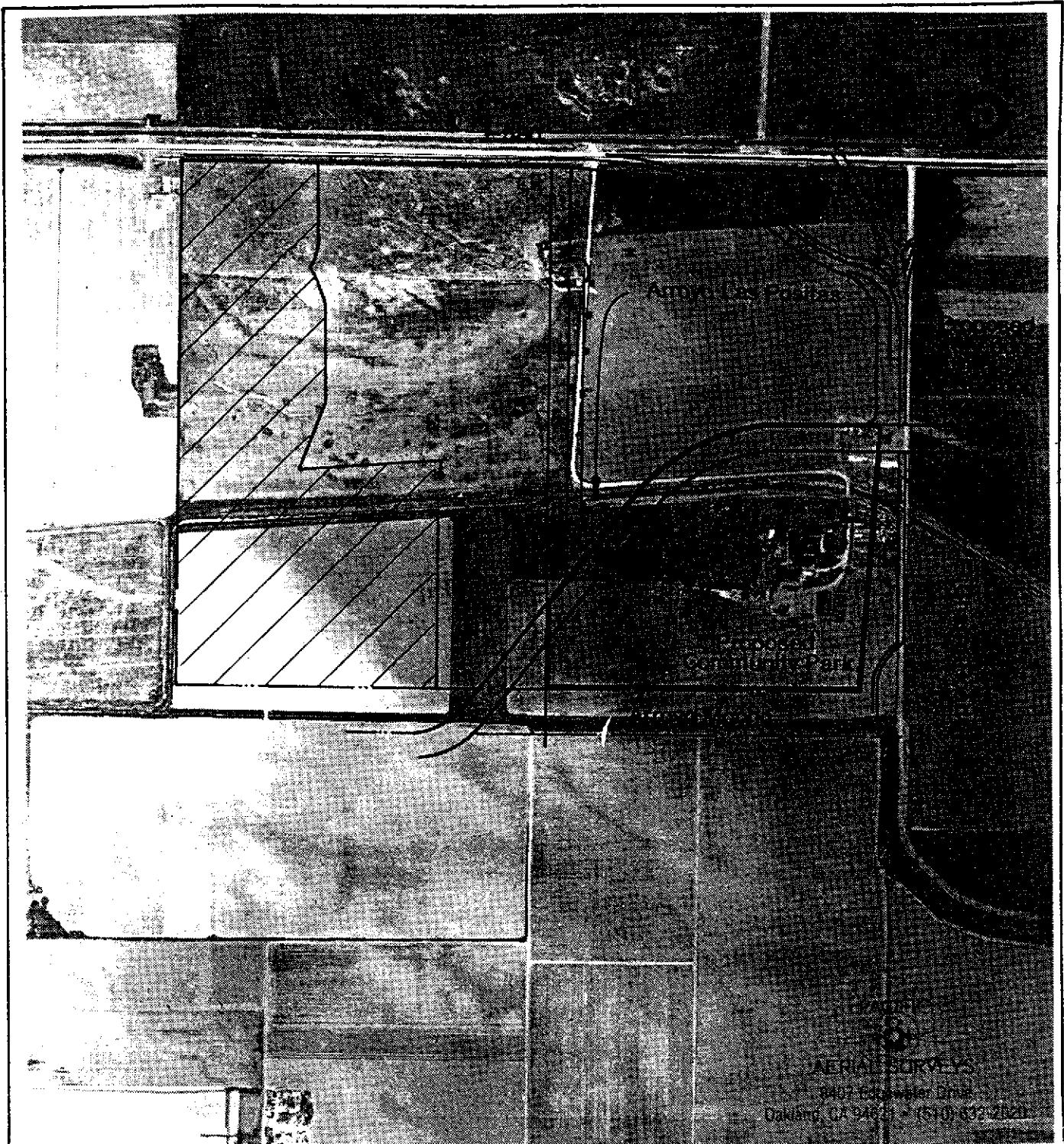
PROPOSED COMMUNITY PARK
Pleasanton, California

PROJECT NO.

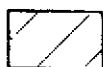
DATE

Figure 2

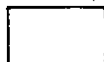
KE904-77-2015 November 1993



LEGEND



Existing Residential Area



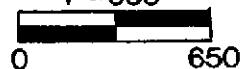
Open Field



Subject Property

Approximate Scale (feet)

1"=650'



Base: Provided by Pacific Aerial Surveys, dated 5/16/57.

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1957 AERIAL PHOTOGRAPH WITH
PROPOSED SITE DEVELOPMENT PLAN

PROPOSED COMMUNITY PARK
Pleasanton, California

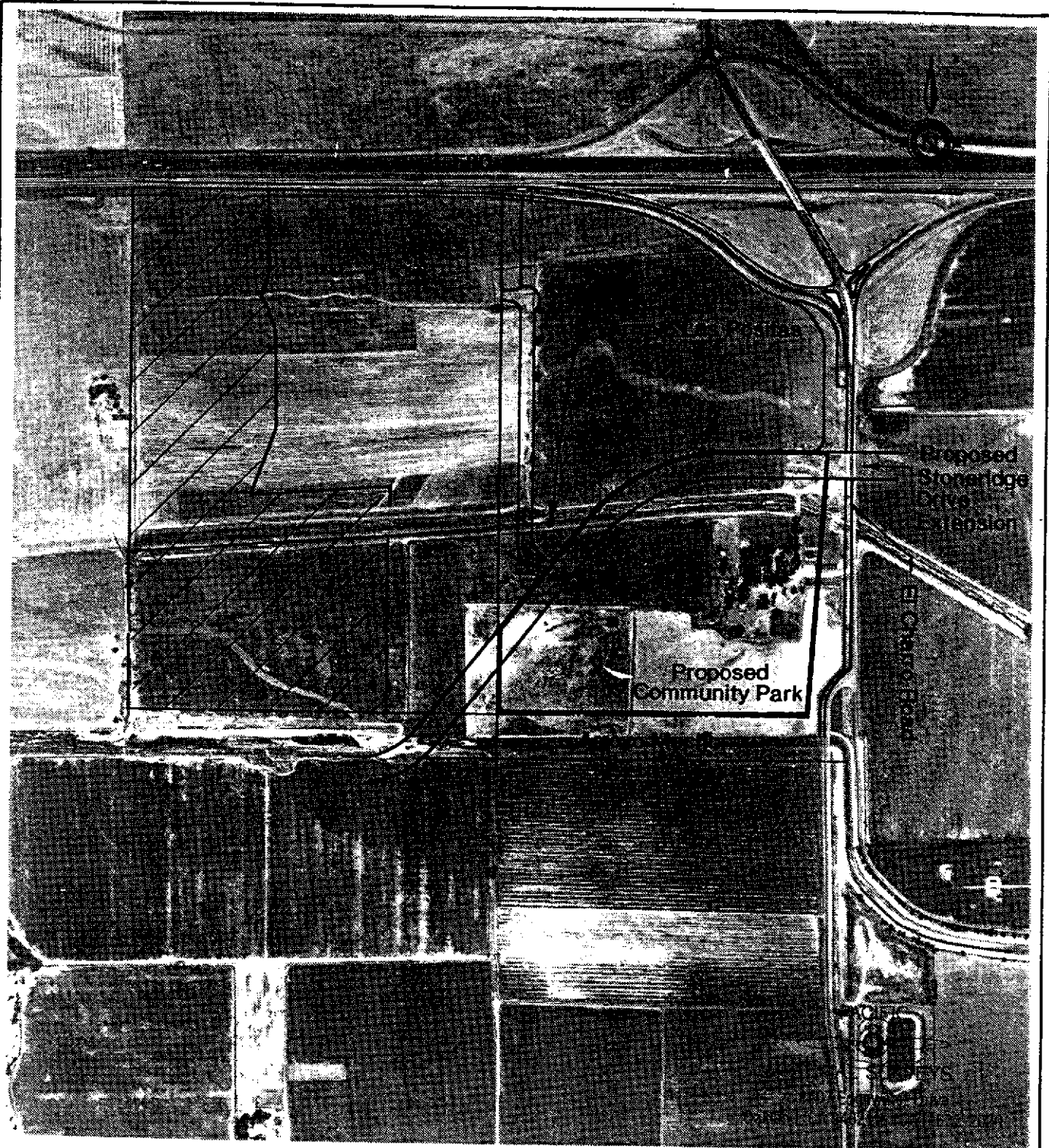
PROJECT NO.

DATE

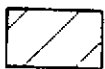
Figure 3

K904-77-2015

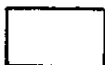
November 1993



LEGEND



Existing Residential Area



Open Field



Subject Property

Approximate Scale (feet)

1"=650'



0 650

Base: Provided by Pacific Aerial Surveys, dated 8/24/73.

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1973 AERIAL PHOTOGRAPH WITH
PROPOSED SITE DEVELOPMENT PLAN

PROPOSED COMMUNITY PARK
Pleasanton, California

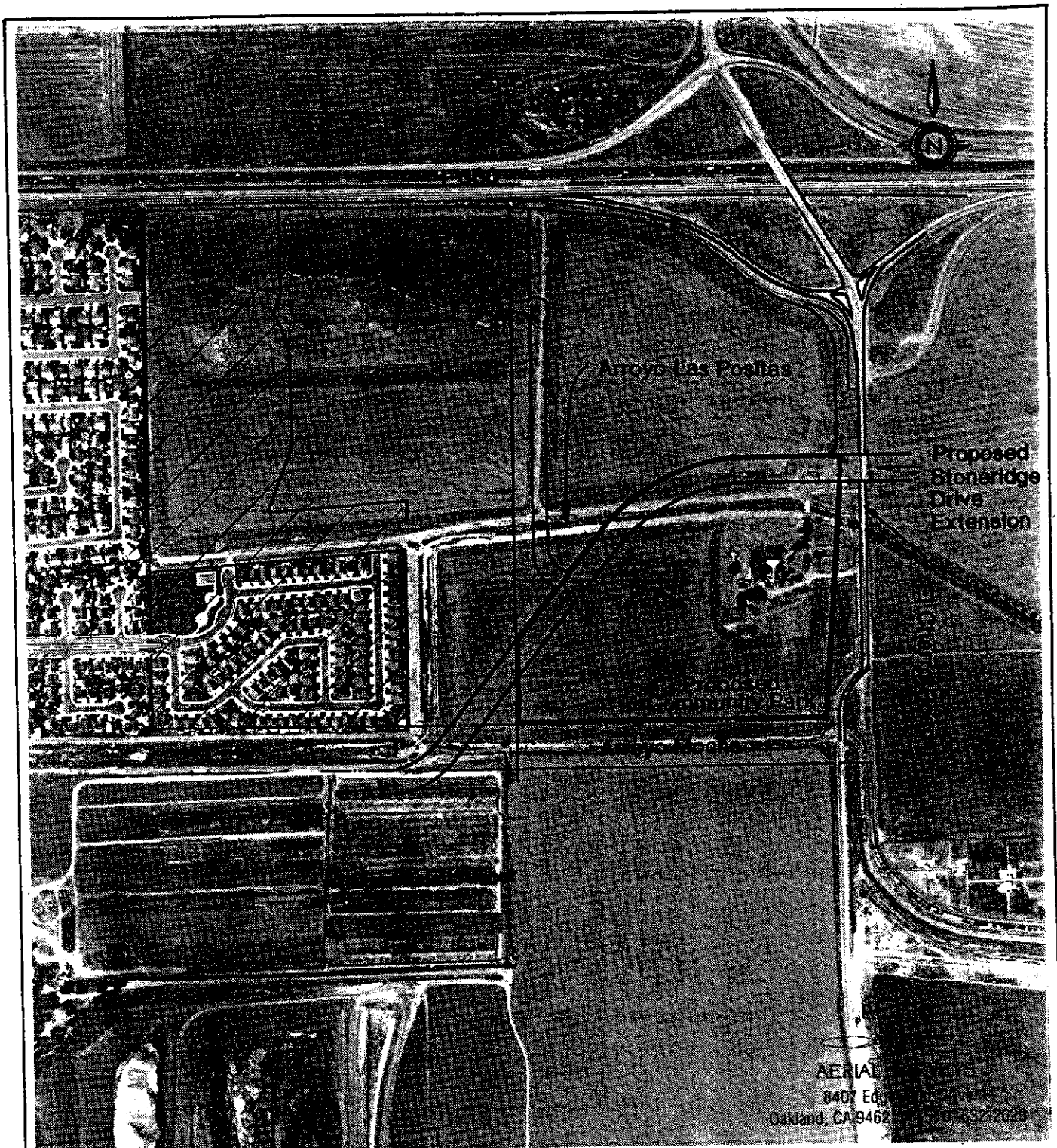
PROJECT NO.

DATE

K904-77-2015

November 1993

Figure 4

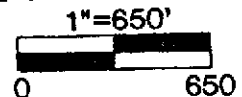


AERIAL SURVEYS
 8407 Edgemoor Ave
 Oakland, CA 94621
 (415) 432-2020

LEGEND

-  Existing Residential Area
-  Open Field
-  Subject Property

Approximate Scale (feet)



Base: Provided by Pacific Aerial Surveys, dated 7/23/90.

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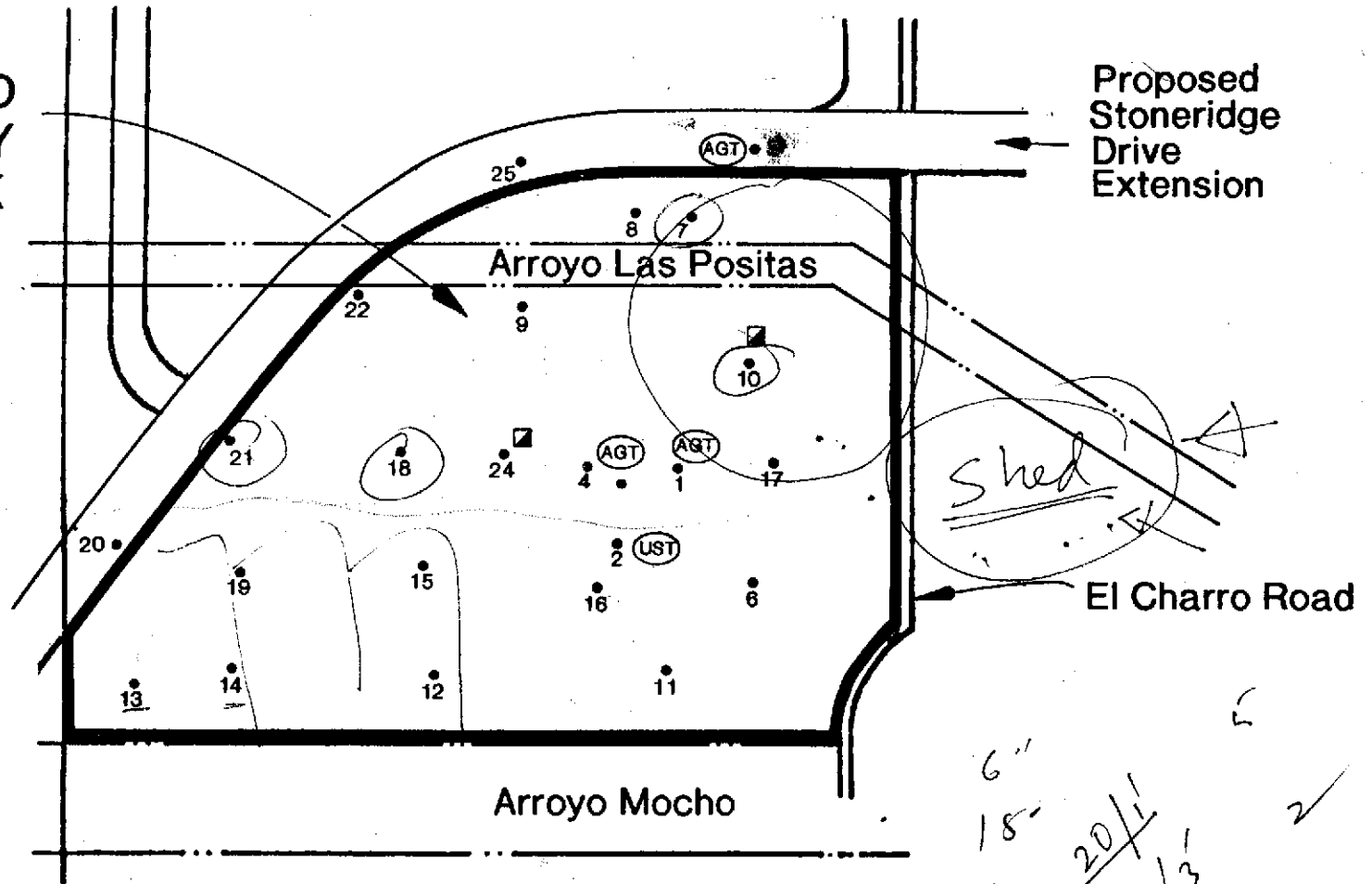
1990 AERIAL PHOTOGRAPH WITH
 PROPOSED SITE DEVELOPMENT PLAN

PROPOSED COMMUNITY-PARK
 Pleasanton, California

PROJECT NO.	DATE
K904-77-2015	November 1993

Figure 5

PROPOSED
COMMUNITY
PARK



LEGEND

- SITE BOUNDARY
- 8 • APPROXIMATE LOCATION OF BORING EB-8
- ELECTRICAL TRANSFORMER
- (AGT) ABOVE GROUND STORAGE TANK
- (UST) UNDER GROUND STORAGE TANK

APPROXIMATE SCALE IN FEET



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SITE EXPLORATION PLAN

PROPOSED COMMUNITY PARK
Pleasanton, California











PROJECT NO.	DATE	Figure 6
KE904-77-2015	November 1993	

Handwritten notes:
6"
18"
20/11
8/3
36"

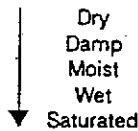
UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		grf	ltr	Description	Major Divisions		grf	ltr	Description									
Coarse Grained Soils	Gravel And Gravely Soils	grf	ltr	Well-graded gravels or gravel sand mixtures, little or no fines	Fine Grained Soils	grf	ltr	ml	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity									
				Poorly-graded gravels or gravel sand mixture, little or no fines				cl	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays									
				Silty gravels, gravel-sand-silt mixtures				ol	Organic silts and organic silt-clays of low plasticity									
				Clayey gravels, gravel-sand-clay mixtures				mh	Inorganic silts, micaceous or diatomaceous fine or silty soils, elastic silts									
	Sand And Sandy Soils	grf	ltr	Well-graded sands or gravelly sands, little or no fines				LL < 50	grf	ltr	ch	Inorganic clays of high plasticity, fat clays						
				Poorly-graded sands or gravelly sands, little or no fines							oh	Organic clays of medium to high plasticity						
				Silty sands, sand-silt mixtures							pt	Peat and other highly organic soils						
				Highly Organic Soils							grf	ltr	Clayey sands, and-clay mixtures	LL > 50	grf	ltr		

SYMBOLS

	Standard penetration split spoon sample		Blank casing
	Modified California (Porter) sample		Screened Casing
	Shelby tube sample		Cement grout
	Water level observed in boring		Bentonite
	Stable Water level in monitoring well		Filter Pack

Visual Relative Moisture Content Increasing Moisture Content



Note(1): Penetration resistance values are recorded as the number of blows of a 140-pound hammer falling 30-inches required to drive a sampler through the last 12 inches of an 18-inch drive. Blow count for samples obtained using a Modified California sampler (indicated by an asterisk) should be multiplied by a factor of 0.8 to obtain equivalent standard penetration resistance values.

Note(2): The lines separating strata on the logs represent approximate boundaries only. No warranty is provided as to the continuity of soil strata between borings. Logs represent the soil section observed at the boring location on the date of drilling only.

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BORING LOG LEGEND

PROPOSED COMMUNITY PARK SITE
Pleasanton, California

PROJECT NO.	DATE	FIGURE NO
KE904-77-2015	September 1993	A-1

DRILL RIG	CME 55	SURFACE ELEVATION		LOGGED BY	TM
DEPTH TO GROUNDWATER	35.0 FEET	BORING DIAMETER	8-inch	DATE DRILLED	8/30/93

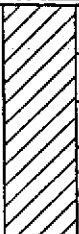









DESCRIPTION AND CLASSIFICATION		DEPTH (FEET)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	PID READING	REMARKS	WELL CONSTRUCTION
DESCRIPTION AND REMARKS	SOIL TYPE						
GRAVELLY SILT (ML), medium brown, dry, angular to subround, trace sand (very fine-grained).							
SILT (ML), dark brown, dry, with sand (fine-grained), trace clay.		5		30	0		
As above, mottled with tan and light brown, damp, trace white calache, trace white rootlets.		10		29	0		
CLAYEY SAND (SC), brown, moist, trace silt and gravel, subangular.		15		37	0		
As above, more gravel to 1" diameter.		20		57	0		
GRAVELLY SAND (SP), brown, moist, subangular, trace cobbles.		25		37	0		
SILTY CLAY (CL), dark brown, damp to moist, trace sand (very fine-grained), trace gravel to 1/4" diameter.							

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EXPLORATORY BORING LOG

PROPOSED COMMUNITY PARK SITE
Pleasanton, California

PROJECT NO.	DATE	BORING NO.	EB-1
KE904-77-2015	September 1993		

DRILL RIG	CME 55	SURFACE ELEVATION			LOGGED BY	TM	
DEPTH TO GROUNDWATER	35.0 FEET	BORING DIAMETER		8-inch	DATE DRILLED	8/30/93	
DESCRIPTION AND CLASSIFICATION		DEPTH (FEET)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	PID READING	REMARKS	WELL CONSTRUCTION
DESCRIPTION AND REMARKS	SOIL TYPE						
As above, brown, no gravel, trace light brown mottling.				33	0		
SANDY CLAY (CL), tan, wet, very fine-grained to fine-grained, trace silt.		35		40	0		
SILTY SAND (SM), brown, moist, fine-grained, with clay.		40		42	0		
Bottom of Boring = 41.5 Feet. Notes: 1. The stratification lines represent the approximate boundaries between soil types and the transition may be gradual. 2. PID readings in parts per million. 3. Boring backfilled with cement grout to grade.							
				EXPLORATORY BORING LOG			
				PROPOSED COMMUNITY PARK SITE Pleasanton, California			
				PROJECT NO.	DATE	BORING NO.	
				KE904-77-2015	September 1993	EB-1	

DRILL RIG	CME 55	SURFACE ELEVATION	LOGGED BY	TM
DEPTH TO GROUNDWATER	Not Enc.	BORING DIAMETER	DATE DRILLED	8/30/93

DESCRIPTION AND CLASSIFICATION	DEPTH (FEET)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	PID READING	REMARKS	WELL CONSTRUCTION
DESCRIPTION AND REMARKS	SOIL TYPE					
GRAVELLY SILT (ML), brown, dry, trace sand (very fine-grained).						
SILT (ML), dark brown with brown mottling, dry trace clay binder.	5		25	0		
As above, trace gravel and cobbles.	10		59	0		
GRAVELLY SAND (SP), brown and multi-colored, damp, coarse-grained, subround to subangular.	15		42	0		
As above, silty with cobbles, dry.	20		50/6"	0		
SILTY CLAY (CL), dark brown with tan mottling, dry to damp.	25		39	0		

HARZA KALDVEER
Consulting Engineers

EXPLORATORY BORING LOG

PROPOSED COMMUNITY PARK SITE
Pleasanton, California

PROJECT NO.	DATE	BORING NO.
KE904-77-2015	September 1993	EB-2

DRILL RIG	CME 55	SURFACE ELEVATION		LOGGED BY	TM
DEPTH TO GROUNDWATER	Not Enc.	BORING DIAMETER	8-inch	DATE DRILLED	8/30/93

DESCRIPTION AND CLASSIFICATION		DEPTH (FEET)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	PID READING	REMARKS	WELL CONSTRUCTION
DESCRIPTION AND REMARKS	SOIL TYPE						
SILT (ML), light brown, dry, trace clay binder.				48	0		WELL CONSTRUCTION
As above, trace sand (fine-grained).		35		65	0		
SILTY SAND (SM), brown with light brown mottling, damp, with gravel, trace clay.		40		92	0		
GRAVELLY SILT (ML), brown with tan mottling, dry, trace sand (very fine-grained).							
Bottom of Boring = 42 Feet.							
Notes:							
1. The stratification represent the approximate boundary between soil types and the transition may be gradual.							
2. PID readings in parts per million.							
3. Boring backfilled with cement grout to grade.							

HARZA KALDVEER
Consulting Engineers

EXPLORATORY BORING LOG		
PROPOSED COMMUNITY PARK SITE Pleasanton, California		
PROJECT NO.	DATE	BORING NO
KE904-77-2015	September 1993	EB-2

DRILL RIG	CME 55	SURFACE ELEVATION		LOGGED BY	TM
DEPTH TO GROUNDWATER	Not Enc.	BORING DIAMETER	8-inch	DATE DRILLED	8/30/93

DESCRIPTION AND CLASSIFICATION		DEPTH (FEET)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	PID READING	REMARKS	WELL CONSTRUCTION
DESCRIPTION AND REMARKS	SOIL TYPE						
GRAVELLY SILT (ML), brown, dry, trace sand (very fine-grained).							
SILT (ML), dark brown, dry/damp, trace clay binder.		5		15	0		
As above, with gravel and cobbles to 1" diameter.		10		39	0		
GRAVELLY SAND (SP), brown and multicolored, dry, coarse-grained, subround to subangular.		15		77	0		
As above, damp, trace clay binder.		20		71	0		
Bottom of Boring = 21.5 Feet							
Notes:							
1. The stratification lines represent the approximate boundary between soil types and the transition may be gradual.							
2. PID readings in parts per million.							
3. Boring backfilled with cement grout to grade.							

HARZA KALDVEER
Consulting Engineers

EXPLORATORY BORING LOG

PROPOSED COMMUNITY PARK SITE
Pleasanton, California

PROJECT NO.	DATE	BORING NO.	EB-3
KE904-77-2015	September 1993		

DRILL RIG		CME 55		SURFACE ELEVATION		LOGGED BY		TM			
DEPTH TO GROUNDWATER		Not Enc.		BORING DIAMETER		8-inch		DATE DRILLED		8/30/93	
DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	PID READING	REMARKS			WELL CONSTRUCTION	
DESCRIPTION AND REMARKS		SOIL TYPE									
GRAVELLY SILT (ML), brown, dry, trace sand (very fine-grained).											
SILT (ML), dark brown, dry to damp, trace clay binder.			5		20	0					
As above, mottled black and brown, trace sand (very fine-grained).			10		52	0					
GRAVELLY SAND (SP), multicolored, damp, coarse-grained, angular to 1" diameter.			15		30	0					
As above, damp, trace clay binder.			20		80	0					
Bottom of Boring = 21.5 Feet Notes: 1. The stratification lines represent the approximate boundary between soil types and the transition may be gradual. 2. PID readings in parts per million. 3. Boring backfilled with cement grout to grade.											
HARZA KALDVEER <i>Consulting Engineers</i>				EXPLORATORY BORING LOG							
				PROPOSED COMMUNITY PARK SITE Pleasanton, California							
				PROJECT NO.		DATE		BORING NO.		EB-4	
KE904-77-2015		September 1993									

DRILL RIG	CME 75	SURFACE ELEVATION	LOGGED BY	TM
DEPTH TO GROUNDWATER	35.0 FEET	BORING DIAMETER	DATE DRILLED	9/7/93

DESCRIPTION AND CLASSIFICATION		DEPTH (FEET)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	PID READING	REMARKS	WELL CONSTRUCTION
DESCRIPTION AND REMARKS	SOIL TYPE						
GRAVEL (GP), multicolored, dry, subround to 1" diameter		0 - 1					
SILT (ML), dark brown, dry to damp, trace clay binder.		1 - 5		26	0		
SILTY SAND (SM), brown with gray staining, damp, fine-grained, trace gravel (subround to round), trace clay binder, slight hydrocarbon odor.		5 - 10		18	53		
GRAVELLY SAND (SP), gray and multicolored, wet, subrounded, coarse-grained, slight hydrocarbon odor.		10 - 15		42	83		
SILTY CLAY (CL), brown with gray staining, moist, slight hydrocarbon odor.		15 - 20		35	13		
CLAY (CL), brown with slight gray staining, wet, trace silt, slight hydrocarbon odor.		20 - 25		48	57		

HARZA KALDVEER
Consulting Engineers

EXPLORATORY BORING LOG

PROPOSED COMMUNITY PARK SITE
Pleasanton, California

PROJECT NO.	DATE	BORING NO.	EB-5
KE904-77-2015	September 1993	NO	

DRILL RIG		CME 75		SURFACE ELEVATION		LOGGED BY		TM		
DEPTH TO GROUNDWATER		35.0 FEET		BORING DIAMETER		8-inch		DATE DRILLED		9/7/93
DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	PID READING	REMARKS		WELL CONSTRUCTION	
DESCRIPTION AND REMARKS		SOIL TYPE								
CLAYEY SILT (ML), tan-brown with slight gray discoloration, moist, trace sand (very fine-grained), trace white rootlets, moderate hydrocarbon odor.			29		172					
GRAVELLY SAND (SP), brown with gray and black staining, fine-grained, subround to subangular to 1/2" diameter, moderate hydrocarbon odor.			35		36	118				
CLAY (CL), brown with slight gray staining, trace silt, slight hydrocarbon odor.			40		29	0				
Bottom of Boring = 41.5 Feet Notes: 1. The stratification lines represent the approximate boundary between soil types and the transition may be gradual. 2. PID readings in parts per million. 3. Boring backfilled with cement grout to grade.										
HARZA KALDVEER Consulting Engineers					EXPLORATORY BORING LOG					
					PROPOSED COMMUNITY PARK SITE Pleasanton, California					
					PROJECT NO.	DATE	BORING NO		EB-5	
KE904-77-2015	September 1993									

APPENDIX B

CERTIFIED ANALYTICAL REPORTS
CHAIN-OF-CUSTODY RECORDS

HARZA KALDVEER

Harza Engineering Company of California

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 6, 1993

ChromaLab File No.: 9308420
Submission #: 9308000420

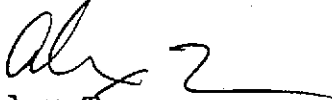
HARZA KALDVEER
Attn: T. Miller/D. Laduzinsky


Project Name: STAPLES RANCH
Project Number: N/A
Method of Analysis: EPA 8080 Matrix: soil
Date Sampled: August 30, 1993 Date Submitted: August 30, 1993
Date Extracted: September 3, 1993 Date Analyzed: September 3, 1993
Dilution Factor: None
Sample I.D.: IV EB-1/5'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 6, 1993

ChromaLab File No.: 9308420
Submission #: 9308000420

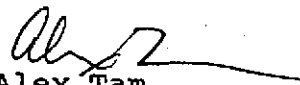
HARZA KALDVEER
Attn: T. Miller/D. Laduzinsky

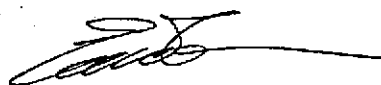
Project Name: STAPLES RANCH
Project Number: N/A
Method of Analysis: EPA 8080 Matrix: soil
Date Sampled: August 30, 1993 Date Submitted: August 30, 1993
Date Extracted: September 3, 1993 Date Analyzed: September 3, 1993
Dilution Factor: None
Sample I.D.: IV EB-1/10'

CHLORINATED PESTICIDE ANALYSIS

Compounds	Concentration ($\mu\text{g}/\text{kg}$)	Reporting Detection Limit ($\mu\text{g}/\text{kg}$)
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 6, 1993

ChromaLab File No.: 9308420
Submission #: 9308000420

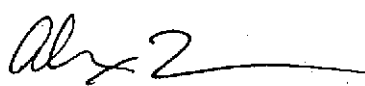
HARZA KALDVEER
Attn: T. Miller/D. Laduzinsky


Project Name: STAPLES RANCH
Project Number: N/A
Method of Analysis: EPA 8080 Matrix: soil
Date Sampled: August 30, 1993 Date Submitted: August 30, 1993
Date Extracted: September 3, 1993 Date Analyzed: September 3, 1993
Dilution Factor: None
Sample I.D.: IV EB-1/15'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 6, 1993

ChromaLab File No.: 9308420
Submission #: 9308000420

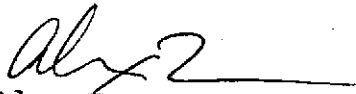
HARZA KALDVEER
Attn: T. Miller/D. Laduzinsky

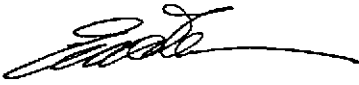
Project Name: STAPLES RANCH
Project Number: N/A
Method of Analysis: EPA 8080 Matrix: soil
Date Sampled: August 30, 1993 Date Submitted: August 30, 1993
Date Extracted: September 3, 1993 Date Analyzed: September 3, 1993
Dilution Factor: None
Sample I.D.: IV EB-4/5'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

24063

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 6, 1993

ChromaLab File No.: 9308420
Submission #: 9308000420

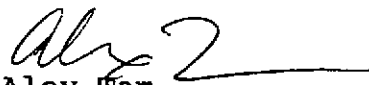
HARZA KALDVEER
Attn: T. Miller/D. Laduzinsky

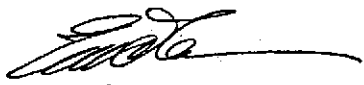
Project Name: STAPLES RANCH
Project Number: N/A
Method of Analysis: EPA 8080 Matrix: soil
Date Sampled: August 30, 1993 Date Submitted: August 30, 1993
Date Extracted: September 3, 1993 Date Analyzed: September 3, 1993
Dilution Factor: None
Sample I.D.: IV EB-4/10'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 7, 1993

ChromaLab File No.: 9308420

HARZA-KALDVEER

Attn: T. Miller/D. Laduzinsky

RE: Eighteen soil samples for Gasoline and BTEX analysis

Project Name: STAPLES RANCH

Date Sampled: August 30, 1993

Date Submitted: August 30, 1993


Date Analyzed: September 4, 1993

RESULTS:

Sample I.D.	Gasoline (mg/Kg)	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethyl Benzene (µg/Kg)	Total Xylenes (µg/Kg)
IVEB-1/10'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-1/20'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-1/30'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-1/35'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-1/40'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-2/10'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-2/20'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-2/30'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-2/35'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-2/40'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-3/5'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-3/10'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-3/15'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-3/20'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-4/5'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-4/10'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-4/15'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-4/20'	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	102%	106%	103%	105%	107%
DUP SPIKE RECOVERY	----	110%	106%	107%	108%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	5030/8015	8020	8020	8020	8020

ChromaLab, Inc.


Billy Trach
Analytical Chemist


Eric Tam
Laboratory Director

cc

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 6, 1993

ChromaLab File No.: 9308420
Submission #: 9308000420

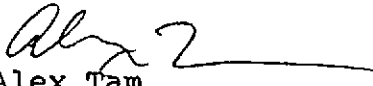
HARZA KALDVEER
Attn: T. Miller/D. Laduzinsky


Project Name: STAPLES RANCH
Project Number: N/A
Method of Analysis: EPA 8080 Matrix: soil
Date Sampled: August 30, 1993 Date Submitted: August 30, 1993
Date Extracted: September 3, 1993 Date Analyzed: September 3, 1993
Dilution Factor: None
Sample I.D.: IV EB-4/15'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 7, 1993

ChromaLab File No.: 9308420

HARZA-KALDVEER

Attn: T. Miller/D. Laduzinsky

RE: Eighteen soil samples for Diesel analysis

Project Name: STAPLES RANCH

Project Number: N/A

Date Sampled: August 30, 1993

Date Submitted: August 30, 1993

Date Extracted: September 3, 1993


Date Analyzed: September 3-4, 1993


RESULTS:

<u>Sample I.D.</u>	<u>Diesel (mg/Kg)</u>
IV EB-1/10'	N.D.
IV EB-1/20'	N.D.
IV EB-1/30'	N.D.
IV EB-1/35'	N.D.
IV EB-1/40'	N.D.
IV EB-2/10'	N.D.
IV EB-2/20'	N.D.
IV EB-2/30'	N.D.
IV EB-2/35'	N.D.
IV EB-2/40'	N.D.
IV EB-3/5'	N.D.
IV EB-3/10'	N.D.
IV EB-3/15'	N.D.
IV EB-3/20'	N.D.
IB EB-4/5'	N.D.
IV EB-4/10'	N.D.
IV EB-4/15'	N.D.
IV EB-4/20'	N.D.

BLANK	N.D.
SPIKE RECOVERY	95%
DUP SPIKE RECOVERY	91%
DETECTION LIMIT	1.0
METHOD OF ANALYSIS	3550/8015

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

jm

CHROMALAB, INC.

DOHS 1094

2239

SUBM #: 9308420
 CLIENT: HARZKALD
 DUE: 09/07/93
 REF: 13077

013077

Chain of Custody

DATE 8/30/93 PAGE 1 OF 3

PROJ. MGR. <u>Tara Miller/Dennis L. Harzkald</u>					ANALYSIS REPORT														NUMBER OF CONTAINERS			
COMPANY <u>Harza Kaldres</u>					TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)		TOTAL LEAD	EXTRACTION (ICLP, STLC)	
ADDRESS <u>425 Roland Way Oakland, CA 94612</u>					SAMPLERS (SIGNATURE) <u>Tara C. Miller</u> (PHONE NO.) <u>568-4001</u>																	
SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (ICLP, STLC)	NUMBER OF CONTAINERS	
IV EB-1/5'	8/30/93	1830	soil	brass liner																		1
IV EB-1/10'					X	X								X								2
IV EB-1/15'					X	X								X								1
IV EB-1/20'					X	X								X								1
IV EB-1/30'					X	X								X								1
IV EB-1/35'					X	X								X								1
IV EB-1/40'					X	X								X								1
IV EB-2/10'					X	X								X								1
IV EB-2/20'					X	X								X								1

PROJECT INFORMATION				SAMPLE RECEIPT				RELINQUISHED BY			RELINQUISHED BY			RELINQUISHED BY			
PROJECT NAME: <u>Staples Rand</u>				TOTAL NO. OF CONTAINERS				(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)
PROJECT NUMBER:				HEAD SPACE				<u>Tara C. Miller</u>	<u>1830</u>								
P.O. #				REC'D GOOD CONDITION/COLD				(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)
TAT <u>STANDARD 5-DAY</u>				CONFORMS TO RECORD				<u>Tara Miller</u>	<u>8/30/93</u>								
				24 48 72 OTHER				(COMPANY)		(COMPANY)		(COMPANY)		(COMPANY)		(COMPANY)	
SPECIAL INSTRUCTIONS/COMMENTS:								RECEIVED BY		RECEIVED BY		RECEIVED BY (LABORATORY)		RECEIVED BY		RECEIVED BY	
								<u>Gary Cook</u>	<u>18:30</u>	(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)
								<u>Gary Cook</u>	<u>8/30/93</u>	(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)
								<u>Chromalab</u>		(COMPANY)		(COMPANY)		(COMPANY)		(COMPANY)	

SUBM 9300920
 CLIENT: HARZKALD
 DUE: 09/07/93
 REF: 13077

13077

CHROMALAB, INC.

DOHS 1094

Chain of Custody

DATE 8/30/93 PAGE 2 OF 3

PROJ. MGR. <u>Tara Miller/Dennis L. Harza</u>					ANALYSIS REPORT														NUMBER OF CONTAINERS			
COMPANY <u>Harza Kalveer</u>					TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)		TOTAL LEAD	EXTRACTION (TCUP, STLC)	
ADDRESS <u>425 Roland Wy Oakland, CA 94612</u>					SAMPLERS (SIGNATURE)					(PHONE NO.)												
					<u>Tara C. Miller</u>					<u>568-4001</u>												
SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.																		
<u>IV EB-2/30'</u>	<u>8/30/93</u>	<u>1830</u>	<u>sub</u>	<u>BTEX line</u>		X	X															1
<u>IV EB-2/35'</u>						X	X															1
<u>IV EB-2/40'</u>						X	X															1
<u>IV EB-3/50'</u>						X	X															1
<u>IV EB-3/10'</u>						X	X															1
<u>IV EB-3/15'</u>						X	X															1
<u>IV EB-3/20'</u>						X	X															1
<u>IV EB-4/5'</u>						X	X						X									2
<u>IV EB-4/10'</u>						X	X						X									2

PROJECT INFORMATION					SAMPLE RECEIPT					RELINQUISHED BY 1.			RELINQUISHED BY 2.			RELINQUISHED BY 3.		
PROJECT NAME: <u>Staples Rand</u>					TOTAL NO. OF CONTAINERS					<u>Tara C. Miller</u>								
PROJECT NUMBER:					HEAD SPACE					(SIGNATURE) (TIME)			(SIGNATURE) (TIME)			(SIGNATURE) (TIME)		
P.O. #					REC'D GOOD CONDITION/COLD					<u>Tara Miller</u> <u>1830</u>			(PRINTED NAME) (DATE)			(PRINTED NAME) (DATE)		
					CONFORMS TO RECORD					<u>Harza Kalveer</u> <u>8/30/93</u>			(COMPANY)			(COMPANY)		
TAT	STANDARD 5-DAY		24	48	72	OTHER	RECEIVED BY 1.					RECEIVED BY 2.			RECEIVED BY (LABORATORY) 3.			
							<u>Gary Cook</u> <u>18/30</u>											
							(SIGNATURE) (TIME)					(SIGNATURE) (TIME)			(SIGNATURE) (TIME)			
							<u>Gary Cook</u> <u>8/30/93</u>					(PRINTED NAME) (DATE)			(PRINTED NAME) (DATE)			
							<u>Chromalab</u>					(COMPANY)			(LAB)			
							SPECIAL INSTRUCTIONS/COMMENTS:											

CHROMALAB, INC.

DOHS 1094

CLIENT: HARZKALD
 DUE: 09/07/93
 REF: 13077

13077

3

Chain of Custody

DATE 8/30/93 PAGE 3 OF 3

PROJ. MGR. <u>Tacia Miller/Bennis L</u> COMPANY <u>Harza Kaldveer</u> ADDRESS <u>425 Roland Wy</u> <u>Oakland, CA 94621</u>	ANALYSIS REPORT																	
SAMPLERS (SIGNATURE) <u>Tacia Miller</u> (PHONE NO.) <u>568-9001</u>	<table border="1" style="width:100%; border-collapse: collapse; font-size: small;"> <tr> <td style="width:5%;">TPH - Gasoline (EPA 5030, 8015)</td> <td style="width:5%;">TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)</td> <td style="width:5%;">TPH - Diesel (EPA 3510/3550, 8015)</td> <td style="width:5%;">PURGEABLE AROMATICS BTEX (EPA 602, 8020)</td> <td style="width:5%;">PURGEABLE HALOCARBONS (EPA 601, 8010)</td> <td style="width:5%;">VOLATILE ORGANICS (EPA 624, 8240, 524.2)</td> <td style="width:5%;">BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)</td> <td style="width:5%;">TOTAL OIL & GREASE (EPA 5520, B+F, E+F)</td> <td style="width:5%;">PCB (EPA 608, 8080)</td> <td style="width:5%;">PESTICIDES (EPA 608, 8080)</td> <td style="width:5%;">TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)</td> <td style="width:5%;">METALS: Cd, Cr, Pb, Zn, Ni</td> <td style="width:5%;">CAM METALS (17)</td> <td style="width:5%;">PRIORITY POLLUTANT METALS (13)</td> <td style="width:5%;">TOTAL LEAD</td> <td style="width:5%;">EXTRACTION (TCLP, STLC)</td> <td style="width:5%;">NUMBER OF CONTAINERS</td> </tr> </table>	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	NUMBER OF CONTAINERS
TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	NUMBER OF CONTAINERS		

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	NUMBER OF CONTAINERS
<u>IVEB-4/15'</u>	<u>8/30/93</u>	<u>1830</u>	<u>soil</u>	<u>Brass liner</u>		X	X							X							<u>2</u>
<u>IVEB-4/20'</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>		X	X														<u>1</u>

PROJECT INFORMATION				SAMPLE RECEIPT				RELINQUISHED BY 1			RELINQUISHED BY 2			RELINQUISHED BY 3							
PROJECT NAME: <u>Staples Ranch</u> PROJECT NUMBER: P.O. #				TOTAL NO. OF CONTAINERS HEAD SPACE REC'D GOOD CONDITION/COLD CONFORMS TO RECORD				RELINQUISHED BY <u>Tacia Miller</u> 1930 (SIGNATURE) (TIME) <u>Tacia Miller</u> 8/30/93 (PRINTED NAME) (DATE) <u>Harza Kaldveer</u> (COMPANY)			RELINQUISHED BY (SIGNATURE) (TIME) (PRINTED NAME) (DATE) (COMPANY)			RELINQUISHED BY (SIGNATURE) (TIME) (PRINTED NAME) (DATE) (COMPANY)							
TAT	STANDARD 5-DAY			24	48	72	OTHER	RECEIVED BY <u>Gary Cook</u> 18:30 (SIGNATURE) (TIME) <u>Gary Cook</u> 8/30/93 (PRINTED NAME) (DATE) <u>Chromalab</u> (COMPANY)			RECEIVED BY (SIGNATURE) (TIME) (PRINTED NAME) (DATE) (COMPANY)			RECEIVED BY (LABORATORY) (SIGNATURE) (TIME) (PRINTED NAME) (DATE) (LAB)							
SPECIAL INSTRUCTIONS/COMMENTS:																					

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 7, 1993

ChromaLab File No.: 9308438

HARZA-KALDVEER

Attn: T. Miller/D. Laduzinsky

RE: Five soil samples for Diesel analysis

Project Name: STAPLES RANCH

Project Number: KE907-77-2015

Date Sampled: August 31, 1993

Date Extracted: Sept. 7, 1993

Date Submitted: August 31, 1993

Date Analyzed: Sept. 7, 1993


RESULTS:

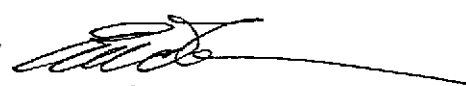
Sample I.D. Diesel (mg/Kg)

IVEB-5/5'	110
IVEB-5/10'	1200
IVEB-5/15'	1900
IVEB-5/20'	210
IVEB-5/25'	26

BLANK	N.D.
SPIKE RECOVERY	82%
DUP SPIKE RECOVERY	82%
DETECTION LIMIT	1.0
METHOD OF ANALYSIS	3550/8015

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

24067

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 8, 1993

ChromaLab File No.: 9308438

HARZA-KALDVEER

Attn: T. Miller/D. Laduzinsky

RE: Five soil samples for Gasoline and BTEX analysis

Project Name: STAPLES RANCH

Project Number: KE907-77-2015

Date Sampled: August 31, 1993

Date Submitted: August 31, 1993

Date Analyzed: September 7, 1993

RESULTS:

Sample I.D.	Gasoline (mg/Kg)	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethyl Benzene (µg/Kg)	Total Xylenes (µg/Kg)
IVEB-5/5'	4.0	N.D.	N.D.	N.D.	N.D.
IVEB-5/10'	2.0	N.D.	N.D.	N.D.	N.D.
IVEB-5/15'	24	N.D.	N.D.	19	110
IVEB-5/20'	6.8	N.D.	N.D.	N.D.	N.D.
IVEB-5/25'	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	99%	104%	109%	110%	110%
DUP SPIKE RECOVERY	----	101%	108%	110%	111%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	5030/8015	8020	8020	8020	8020

ChromaLab, Inc.



Billy Frach
Analytical Chemist



Eric Tam
Laboratory Director

cc

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 8, 1993

ChromaLab File No.: 9308438
Submission #: 9308000438

HARZA-KALDVEER

Attn: T. Miller/D. Laduzinsky

RE: Two soil samples for PCB analysis

Project Name: STAPLES RANCH

Project Number: KE907-77-2015

Date Sampled: August 31, 1993

Date Extracted: Sept. 7, 1993

Date Submitted: August 31, 1993

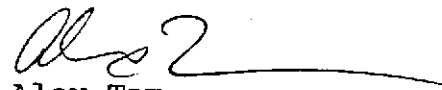
Date Analyzed: Sept. 8, 1993

RESULTS:

<u>Sample I.D.</u>	<u>PCB (mg/Kg)</u>
IVEB-10/1'	N.D.
IVEB-24/1'	N.D.

BLANK	N.D.
DETECTION LIMIT	0.1
METHOD OF ANALYSIS	8080

ChromaLab, Inc.



Alex Tam
Analytical Chemist



Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 8, 1993

ChromaLab File No.: 9308438
Submission #: 9308000438

HARZA-KALDVEER
Attn: T. Miller/D. Laduzinsky

Project Name: STAPLES RANCH
Project Number: KE907-77-2015
Method of Analysis: EPA 8080
Date Sampled: August 31, 1993
Date Extracted: Sept. 7, 1993

Matrix: soil
Date Submitted: August 31, 1993
Date Analyzed: Sept. 7, 1993
Dilution Factor: None

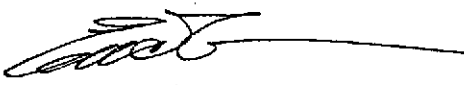
Sample I.D.: IVEB-5/5'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 8, 1993

ChromaLab File No.: 9308438
Submission #: 9308000438

HARZA-KALDVEER
Attn: T. Miller/D. Laduzinsky

Project Name: STAPLES RANCH
Project Number: KE907-77-2015
Method of Analysis: EPA 8080
Date Sampled: August 31, 1993
Date Extracted: Sept. 7, 1993

Matrix: soil
Date Submitted: August 31, 1993
Date Analyzed: Sept. 7, 1993
Dilution Factor: None

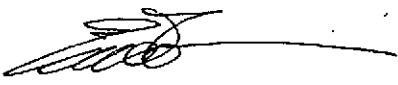
Sample I.D.: IVEB-5/10'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 8, 1993

ChromaLab File No.: 9308438
Submission #: 9308000438

HARZA-KALDVEER
Attn: T. Miller/D. Laduzinsky

Project Name: STAPLES RANCH
Project Number: KE907-77-2015
Method of Analysis: EPA 8080
Date Sampled: August 31, 1993
Date Extracted: Sept. 7, 1993

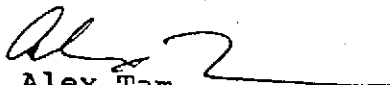
Matrix: soil
Date Submitted: August 31, 1993
Date Analyzed: Sept. 7, 1993
Dilution Factor: None

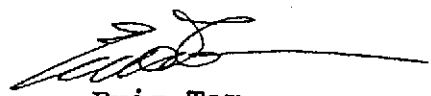
Sample I.D.: IVEB-5/15'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 8, 1993

ChromaLab File No.: 9308438
Submission #: 9308000438

HARZA-KALDVEER
Attn: T. Miller/D. Laduzinsky

Project Name: STAPLES RANCH
Project Number: KE907-77-2015
Method of Analysis: EPA 8080
Date Sampled: August 31, 1993
Date Extracted: Sept. 7, 1993

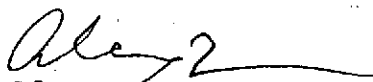
Matrix: soil
Date Submitted: August 31, 1993
Date Analyzed: Sept. 7, 1993
Dilution Factor: None

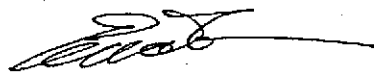
Sample I.D.: IVEB-7,8,9,25/1'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.B.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 8, 1993

ChromaLab File No.: 9308438
Submission #: 9308000438

HARZA-KALDVEER
Attn: T. Miller/D. Laduzinsky

Project Name: STAPLES RANCH
Project Number: KE907-77-2015
Method of Analysis: EPA 8080
Date Sampled: August 31, 1993
Date Extracted: Sept. 7, 1993

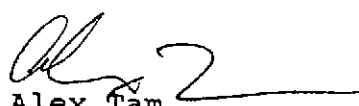
Matrix: soil
Date Submitted: August 31, 1993
Date Analyzed: Sept. 7, 1993
Dilution Factor: None

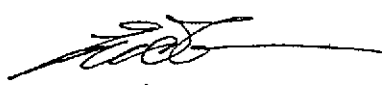
Sample I.D.: IVEB-18,21,22,23/1'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


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CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 8, 1993

ChromaLab File No.: 9308438
Submission #: 9308000438

HARZA-KALDVEER
Attn: T. Miller/D. Laduzinsky


Project Name: STAPLES RANCH
Project Number: KE907-77-2015
Method of Analysis: EPA 8080
Date Sampled: August 31, 1993
Date Extracted: Sept. 7, 1993
Sample I.D.: IVEB-13,14,19,20/1'

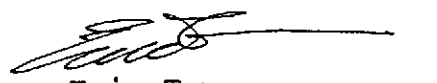
Matrix: soil
Date Submitted: August 31, 1993
Date Analyzed: Sept. 7, 1993
Dilution Factor: None

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 8, 1993

ChromaLab File No.: 9308438
Submission #: 9308000438

HARZA-KALDVEER
Attn: T. Miller/D. Laduzinsky

Project Name: STAPLES RANCH
Project Number: KE907-77-2015
Method of Analysis: EPA 8080
Date Sampled: August 31, 1993
Date Extracted: Sept. 7, 1993

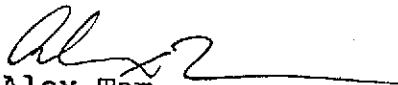
Matrix: soil
Date Submitted: August 31, 1993
Date Analyzed: Sept. 7, 1993
Dilution Factor: None

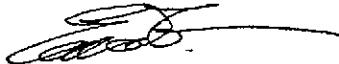
Sample I.D.: IVEB-6,11,12,15/1'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 8, 1993

ChromaLab File No.: 9308438
Submission #: 9308000438

HARZA-KALDVEER
Attn: T. Miller/D. Laduzinsky

Project Name: STAPLES RANCH
Project Number: KE907-77-2015
Method of Analysis: EPA 8080
Date Sampled: August 31, 1993
Date Extracted: Sept. 7, 1993

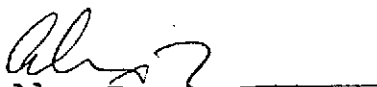
Matrix: soil
Date Submitted: August 31, 1993
Date Analyzed: Sept. 7, 1993
Dilution Factor: None

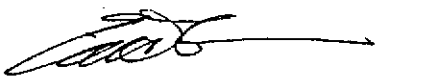
Sample I.D.: IVEB-10,16,17,24/1'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

2239 Ome
510 REF: 13094

SUBM #: 9308438
CLIENT: HARZKALD
DUE: 09/08/93

13094

438/14217-14231

Chain of Custody

DOHS 1094

DATE 8/01/93 PAGE 1 OF 4

PROJ. MGR. Tacia Miller (Dennis L)
COMPANY Hanza Kaldren
ADDRESS 425 Rdand Wy
Oakland, CA 94621

SAMPLERS (SIGNATURE) Tacia C. Miller (PHONE NO.) 568-4001

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	ANALYSIS REPORT																	NUMBER OF CONTAINERS	
					TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			
IV EB-5/5'	8/31/93	1730	Soil	6mss 1hr	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2
IV EB-5/10'					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3
IV EB-5/15'					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2
IV EB-5/20'					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1
IV EB-5/25'					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1
IV EB-24/1'					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1
IV EB-10/1'					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1

PROJECT INFORMATION		SAMPLE RECEIPT			
PROJECT NAME: <u>Stades Ranch</u>	TOTAL NO. OF CONTAINERS				
PROJECT NUMBER: <u>KC907-77-2015</u>	HEAD SPACE				
P.O. #	REC'D GOOD CONDITION/COLD				
TAT	STANDARD 5-DAY	24	48	72	OTHER

RELINQUISHED BY <u>Tacia C. Miller</u> 1733 (SIGNATURE) (TIME)	RELINQUISHED BY	RELINQUISHED BY
<u>Tacia Miller</u> 8/31/93 (PRINTED NAME) (DATE)		
<u>Hanza Kaldren</u> (COMPANY)		
RECEIVED BY	RECEIVED BY	RECEIVED BY (LABORATORY)
		<u>[Signature]</u> 17:49 (SIGNATURE) (TIME)
		<u>HRJ TRM</u> 8/31/93 (PRINTED NAME) (DATE)
		<u>CLL</u> (LAB)

SPECIAL INSTRUCTIONS/COMMENTS:

9308438

CHROMALAB, INC.

DOHS 1094

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798

Chain of Custody

DATE 8/31/93 PAGE 3 OF 4

PROJ. MGR. <u>Tara Miller/Dennis L</u>					ANALYSIS REPORT														NUMBER OF CONTAINERS					
COMPANY <u>Hanza Kadhwan</u>					TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)		TOTAL LEAD	EXTRACTION (TCLP, STLC)			
ADDRESS <u>425 Roland Wy Oakland, CA 94621</u>																								
SAMPLERS (SIGNATURE) <u>Tara C. Miller</u> (PHONE NO.) <u>568-4001</u>					SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.															
<u>IV EB-4/1'</u>					<u>8/31/93</u>	<u>1730</u>	<u>Soil</u>	<u>Brass</u>	<u>liner</u>															1
<u>IV EB-19/1'</u>																								1
<u>IV EB-20/1'</u>																								1
<u>IV EB-8/1'</u>																								1
<u>IV EB-11/1'</u>																								1
<u>IV EB-12/1'</u>																								1
<u>IV EB-15/1'</u>																								1
<u>IV EB-10/1'</u>																								1
<u>IV EB-16/1'</u>																								1

PROJECT INFORMATION				SAMPLE RECEIPT				RELINQUISHED BY 1.			RELINQUISHED BY 2.			RELINQUISHED BY 3.				
PROJECT NAME: <u>Staples Ranch</u>				TOTAL NO. OF CONTAINERS				<u>Tara C. Miller 1795</u>										
PROJECT NUMBER: <u>KE904-77-2015</u>				HEAD SPACE				<u>Tara Miller 8/31/93</u>										
P.O. #				REC'D GOOD CONDITION/COLD				<u>Hanza Kadhwan</u>										
CONFORMS TO RECORD				TAT														
				STANDARD 5-DAY														
				24														
				48														
				72														
				OTHER				RECEIVED BY 1.			RECEIVED BY 2.			RECEIVED BY (LABORATORY) 3.				
SPECIAL INSTRUCTIONS/COMMENTS: <u>Composite EB-13, EB-14, EB-19, EB-20</u> <u>Composite EB-5, EB-11, EB-12, EB-15</u> <u>Composite EB-10, EB-16, EB-17, EB-24</u>																		
				<u>Tara Miller</u>			<u>Hanza Kadhwan</u>			<u>Tara Miller</u>			<u>Tara Miller</u>			<u>Tara Miller</u>		
				<u>8/31/93</u>			<u>8/31/93</u>			<u>8/31/93</u>			<u>8/31/93</u>			<u>8/31/93</u>		

CHROMALAB, INC.

DOHS 1094

2239 Omega Road, #1 • San Ramon, California 94583.
510/831-1788 • Facsimile 510/831-8798

9308438

Chain of Custody

DATE 8/31/23 PAGE 4 OF 9

PROJ. MGR. <u>Tara Miller</u>					ANALYSIS REPORT																	NUMBER OF CONTAINERS								
COMPANY <u>Harza Kaldveer</u>					TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)										
ADDRESS <u>425 Roland Wy Oakland, CA 94621</u>					SAMPLERS (SIGNATURE) <u>Tara C. Miller</u>		(PHONE NO.) <u>568-4001</u>		SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.																	
					<u>Tara C. Miller</u>		<u>568-4001</u>		<u>IV EB-17/1'</u>	<u>8/21/23</u>	<u>1730</u>	<u>Sol</u>	<u>Braps</u>																	
					<u>Tara C. Miller</u>		<u>568-4001</u>		<u>IV EB-24/1'</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>																	

PROJECT INFORMATION				SAMPLE RECEIPT				RELINQUISHED BY 1.		RELINQUISHED BY 2.		RELINQUISHED BY 3.	
PROJECT NAME: <u>Stades Ranch</u>		TOTAL NO. OF CONTAINERS		RELINQUISHED BY 1. <u>Tara C. Miller 1745</u>		RELINQUISHED BY 2.		RELINQUISHED BY 3.					
PROJECT NUMBER: <u>KE24-77-2015</u>		HEAD SPACE		(SIGNATURE) <u>Tara Miller 8/31/23</u>		(SIGNATURE)		(SIGNATURE)					
P.O. #		REC'D GOOD CONDITION/COLD		(PRINTED NAME) <u>Harza Kaldveer</u>		(PRINTED NAME)		(PRINTED NAME)					
		CONFORMS TO RECORD		(DATE)		(DATE)		(DATE)					
TAT	<u>STANDARD</u> 5-DAY	24	48	72	OTHER	(COMPANY)		(COMPANY)					
SPECIAL INSTRUCTIONS/COMMENTS: <u>Composite EB-10, EB-16, EB-17, EB-24</u>				RECEIVED BY 1.		RECEIVED BY 2.		RECEIVED BY (LABORATORY) 3.					
				(SIGNATURE)		(SIGNATURE)		(SIGNATURE) <u>[Signature]</u>					
				(PRINTED NAME)		(PRINTED NAME)		(PRINTED NAME) <u>ERIC [Signature]</u>					
				(DATE)		(DATE)		(DATE) <u>8/31/23</u>					
				(COMPANY)		(COMPANY)		(LAB)					

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 13, 1993

ChromaLab File No.: 9309082

HARZA-KALDVEER //

Attn: T. Miller/D. Laduzinsky

RE: Three soil samples for Diesel analysis

Project Name: STAPLES RANCH

Project Number: KE904-77-2015

Date Sampled: Sept. 7, 1993

Date Submitted: Sept. 7, 1993

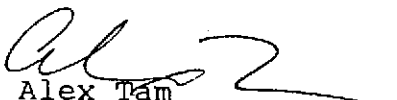
Date Extracted: Sept. 10, 1993

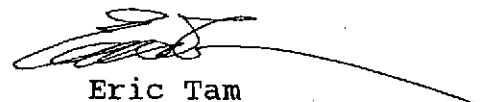
Date Analyzed: Sept. 10, 1993

RESULTS:

<u>Sample I.D.</u>	<u>Diesel (mg/Kg)</u>
IV EB-5/30'	1.5
IV EB-5/35'	28
IV EB-5/40'	57
BLANK	N.D.
SPIKE RECOVERY	95%
DUP SPIKE RECOVERY	95%
DETECTION LIMIT	1.0
METHOD OF ANALYSIS	3550/8015

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

cc

24004

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 14, 1993

ChromaLab File No.: 9309082

HARZA-KALDVEER

Attn: T. Miller/D. Laduzinsky

RE: Three soil samples for Gasoline and BTEX analysis

Project Name: STAPLES RANCH

Project Number: KE904-77-2015

Date Sampled: Sept. 7, 1993

Date Submitted: Sept. 7, 1993

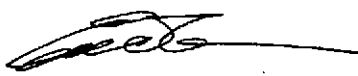
Date Analyzed: Sept. 13, 1993

RESULTS:

Sample I.D.	Gasoline (mg/Kg)	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethyl Benzene (µg/Kg)	Total Xylenes (µg/Kg)
IVEB-5/30'	N.D.	N.D.	N.D.	N.D.	N.D.
IVEB-5/35'	5.1	N.D.	N.D.	N.D.	N.D.
IVEB-5/40'	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	112%	102%	105%	115%	112%
DUP SPIKE RECOVERY	----	102%	104%	113%	110%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	5030/8015	8020	8020	8020	8020

ChromaLab, Inc.


Billy Thach
Analytical Chemist


Eric Tam
Laboratory Director

cc

2240337

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 13, 1993

ChromaLab File No.: 9309045
Submission #: 9309000045


HARZA-KALDVEER
Attn: T. Miller/D. Laduzinsky


Project Name: STAPLES RANCH
Project Number: KE904-77-2015
Method of Analysis: EPA 8080 Matrix: soil
Date Sampled: September 2, 1993 Date Submitted: September 2, 1993
Date Extracted: September 9, 1993 Date Analyzed: September 9, 1993
Dilution Factor: None
Sample I.D.: IV EB-6,13,14,16/ 3'

CHLORINATED PESTICIDE ANALYSIS

<u>Compounds</u>	<u>Concentration ($\mu\text{g}/\text{kg}$)</u>	<u>Reporting Detection Limit ($\mu\text{g}/\text{kg}$)</u>
ALDRIN	N.D.	1
DIELDRIN	N.D.	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDE	N.D.	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

September 13, 1993

ChromaLab File No.: 9309045
Submission #: 9309000045


HARZA-KALDVEER
Attn: T. Miller/D. Laduzinsky


Project Name: STAPLES RANCH
Project Number: KE904-77-2015
Method of Analysis: EPA 8080 Matrix: soil
Date Sampled: September 2, 1993 Date Submitted: September 2, 1993
Date Extracted: September 9, 1993 Date Analyzed: September 9, 1993
Dilution Factor: None
Sample I.D.: IV EB-7,10,18,21/ 3'

CHLORINATED PESTICIDE ANALYSIS

Compounds	Concentration ($\mu\text{g}/\text{kg}$)	Reporting Detection Limit ($\mu\text{g}/\text{kg}$)
ALDRIN	N.D.	1
DIELDRIN	2.3	1
ENDRIN ALDEHYDE	N.D.	5
ENDRIN	N.D.	1
HEPTACHLOR	N.D.	1
HEPTACHLOR EPOXIDE	N.D.	1
p,p' - DDT	N.D.	5
p,p' - DDT	1.2	1
p,p' - DDD	N.D.	5
ENDOSULFAN I	N.D.	5
ENDOSULFAN II	N.D.	5
α - BHC	N.D.	1
β - BHC	N.D.	1
γ - BHC (LINDANE)	N.D.	1
δ - BHC	N.D.	1
ENDOSULFAN SULFATE	N.D.	5
p,p' - METHOXYCHLOR	N.D.	5
TOXAPHENE	N.D.	5
PCB'S	N.D.	5
CHLORDANE	N.D.	5

ChromaLab, Inc.


Alex Tam
Analytical Chemist


Eric Tam
Laboratory Director



General Services Agency

Darlene A. Smith, Director

February 8, 1994

Harding Lawson Associates
Attention: Ms. Peggy Llewellyn
P.O. Box 6107
Novato, California 94948

**SUBJECT: REQUEST FOR PROPOSAL TO REMOVE PETROLEUM STORAGE
TANKS AND PREFORM SITE CHARACTERIZATION
- STAPLES RANCH, PLEASANTON, CALIFORNIA**

Dear Peggy:

County of Alameda (County) is pleased to invite Harding Lawson Associates to respond to this Request for Proposal (RFP). The County desires, due to a possible sale of the property to a residential developer, to obtain site closure as quickly as possible. Therefore, the Professional Services to be done by the successful winner of this RFP shall be the following:

1. Legal removal and disposal of one underground storage tank, referred to as UST-2 and two above ground storage tanks, referred to as AGT-4 and AGT-5. County may choose to remove a third above ground storage tank, referred to as AGT-1 at the same time.
2. Description of these tanks, as presently known to County, is stated in Table I, and the location of each tank on the property is shown on Figure 1. A picture of each tank is shown in Figure 2.
3. Per the results of a November 9, 1993 Phase 1 Preliminary Site Assessment done by Harza Kaldveer Consulting Engineers, TPH-Diesel contamination was found adjacent to AGT-5. Laboratory results for EB-5 as summarized in Table II and exploratory boring log (Figure 3) taken from Harza Kaldveer report for this soil is included. Based on this data plus site visit, the environmental

engineering consulting firm is to do a Phase 2 Site Characterization Study to delineate the vertical and lateral extent of soil contamination at AGT-5 and provide the County with an engineering estimate of the amount of contaminated and clean soil to be excavated and stockpiled for bio-remediation on or offsite, recommended general excavation method, equipment to be used, schedule, and a cost estimate to complete remedial work. In general, the environmental engineering consulting firm is to install a sufficient number of borings (minimum four) down to groundwater, collect samples at a minimum of every five feet, at obvious contamination or at changes between soil types. Soil samples will be field screened using a PID to detect the presence of contaminants. The environmental engineering consulting firm will determine which soil samples to have analyzed by a third party independent laboratory. Sample analysis will include TPH-Diesel and BTEX. Minimum of two soil samples per boring, one at the capillary fringe just above ground water, shall be analyzed by the laboratory. No groundwater samples shall be included in this phase of site investigation.

4. The petroleum storage tanks and the contaminated soil are located on County owned property commonly known as "Staples Ranch". The property has no street address. The site is located south of Interstate 580 and west of El Charro Road as shown on the Site Location Map, Figure 4.
5. In addition to the above, the winner shall prepare the environmental work plan for removing the petroleum tanks and doing the Phase 2 Site Characterization Study, subject to review and approval by County, prepare recommendations and a final report subject to County's review, and obtain all required approvals and permits from concerned local, County and State agencies.
6. The winner shall pay prevailing wages to all construction workers who do work under this RFP. The responder shall submit a description of the professional services including their recommended number of borings that they plan to install if awarded the contract, any exceptions and an activity schedule. The order of the services shall be first to remove said tanks, and then do the Site Characterization field work for AGT-5. For the purposes of evaluating each response, responder shall assume in determining the Lump

Sum Base Response Price that (1) only UST-2, AGT-4 and AGT-5 will be removed, (2) no contaminated soil associated with UST-2 is found or excavated, (3) ground water is at a depth of 40 feet, (4) four borings are installed and (5) two soil samples per boring to be analyzed by an independent third party laboratory and ten (10) day maximum turnaround on all laboratory analysis is acceptable to the County. The responder shall also provide, as a separate line item the following unit prices: (1) the unit price to legally remove and dispose of AGT-1 at the same time as AGT-4, AGT-5 and UST-2 if the County decides to include it's removal in the Scope of Services, and (2) for the Site Characterization Study, (a) unit price of additional soil samples submitted to the laboratory for analysis, (b) additional unit price per boring including field management and office overhead if done contiguous with the base case four borings, (c) additional unit prices per boring including field management and office overhead if done at a later date and (d) rig mobilization costs. After receipt of bids, the County shall determine if the third AGT will be included in the Scope of Services.

7. RFP walk will be conducted on Thursday, February 10, 1994 at 1:30 P.M. Please, meet me at the main entrance gate of said property, El Charro Road, Pleasanton. If you have any questions, please give me a call at (510) 535-6277.
8. Sealed RFP responses must be submitted no later than 12 noon on Thursday, February 24, 1994. County will not consider RFP responses received after 12 noon, February 24, 1994.
9. County shall award the Professional Services Contract based on the County's evaluation of the combination of (1) Scope of Professional Services proposed in Item 6 above, (2) responder's proposed schedule, (3) qualifications of key staff proposed for this project, (4) documentation on at least three projects of a similar nature that have been successfully completed, (5) the Lump-Sum Base Response Price and the above unit prices. County reserves the right not to award this RFP.
10. County of Alameda, State of California Standard Agreement (Exhibit A), Additional Provisions (Exhibit B), Certification of Insurance Service Contracts (Exhibit C) and Bonding Requirements (Exhibit D) shall be used.

Ms. Peggy Llewellyn
February 8, 1994
Page 4

11. The subcontracting of all or any part of this Professional Services Contract shall not relieve the Contractor from any of the obligations or conditions of this contract. As between the parties hereto, each subcontractor shall be considered the agent and employee of Contractor. The act and omissions of each subcontractor and all persons either directly or indirectly acting for subcontractor shall be deemed liable and responsible to County hereunder as if no subcontractor has been made.

Sincerely,

ENGINEERING & ENVIRONMENTAL
MANAGEMENT DEPARTMENT



Andrew B. Garcia, R.E.A.
Environmental Project Manager

attachments

CC: Mr. Jim P. de Vos, P.E.

ABG:abg.HZMOO393
93-7057 Bldg. #1262

TABLE I
 STAPLES RANCH
 PETROLEUM PRODUCTS STORAGE TANK DESCRIPTION

Tank Number	UST-2	AGT-1	AGT-4	AGT-5
Type of Tank	UST	AGT	AGT	AGT
Capacity: Gallons	500	250	325	250
Contents	Diesel	Heating Oil	Heating Oil	Diesel
Diameter	Unknown	Unknown	Unknown	Unknown
Materials	Steel	Steel	Steel	Steel
Year	Unknown	Unknown	Unknown	Unknown
In Use	No	Yes	No	No
Condition	Unknown	Good	Good	Good
Registration	No	No	No	No
Operating Permit	No	No	No	No
Surface Mat	Unknown	Soil	Soil	Soil
Notes	2" Diesel Residue	Full	Appears Empty	Appears Empty

TABLE II*
SOIL SAMPLE ANALYTICAL RESULTS
STORAGE TANK AND ELECTRICAL TRANSFORMER AREAS
 Results Reported in parts per million

Sample Location and Depth	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylene	EPA 8080 Pesticides	EPA 8080 PCBs
EB-1								
5'	--	--	--	--	--	--	ND	--
10'	ND	ND	ND	ND	ND	ND	ND	--
15'	--	--	--	--	--	--	ND	--
20'	ND	ND	ND	ND	ND	ND	--	--
30'	ND	ND	ND	ND	ND	ND	--	--
35'	ND	ND	ND	ND	ND	ND	--	--
40'	ND	ND	ND	ND	ND	ND	--	--
EB-2								
5'	--	--	--	--	--	--	ND	--
10'	ND	ND	ND	ND	ND	ND	ND	--
15'	--	--	--	--	--	--	ND	--
20'	ND	ND	ND	ND	ND	ND	--	--
30'	ND	ND	ND	ND	ND	ND	--	--
35'	ND	ND	ND	ND	ND	ND	--	--
40'	ND	ND	ND	ND	ND	ND	--	--
EB-3								
5'	ND	ND	ND	ND	ND	ND	ND	--
10'	ND	ND	ND	ND	ND	ND	ND	--
15'	ND	ND	ND	ND	ND	ND	ND	--
20'	ND	ND	ND	ND	ND	ND	--	--
EB-4								
5'	ND	ND	ND	ND	ND	ND	ND	--
10'	ND	ND	ND	ND	ND	ND	ND	--
15'	ND	ND	ND	ND	ND	ND	ND	--
20'	ND	ND	ND	ND	ND	ND	--	--
EB-5								
5'	110	4.0	ND	ND	ND	ND	ND	--
10'	1200	2.0	ND	ND	ND	ND	ND	--
15'	1900	24	ND	ND	ND	ND	ND	--
20'	210	6.8	ND	ND	ND	ND	--	--
25'	26	ND	ND	ND	ND	ND	--	--
30'	1.5	ND	ND	ND	ND	ND	--	--
35'	28	5.1	ND	ND	ND	ND	--	--
40'	57	ND	ND	ND	ND	ND	--	--
EB-10								
1'	--	--	--	--	--	--	--	ND
EB-24								
1'	--	--	--	--	--	--	--	ND

Notes:

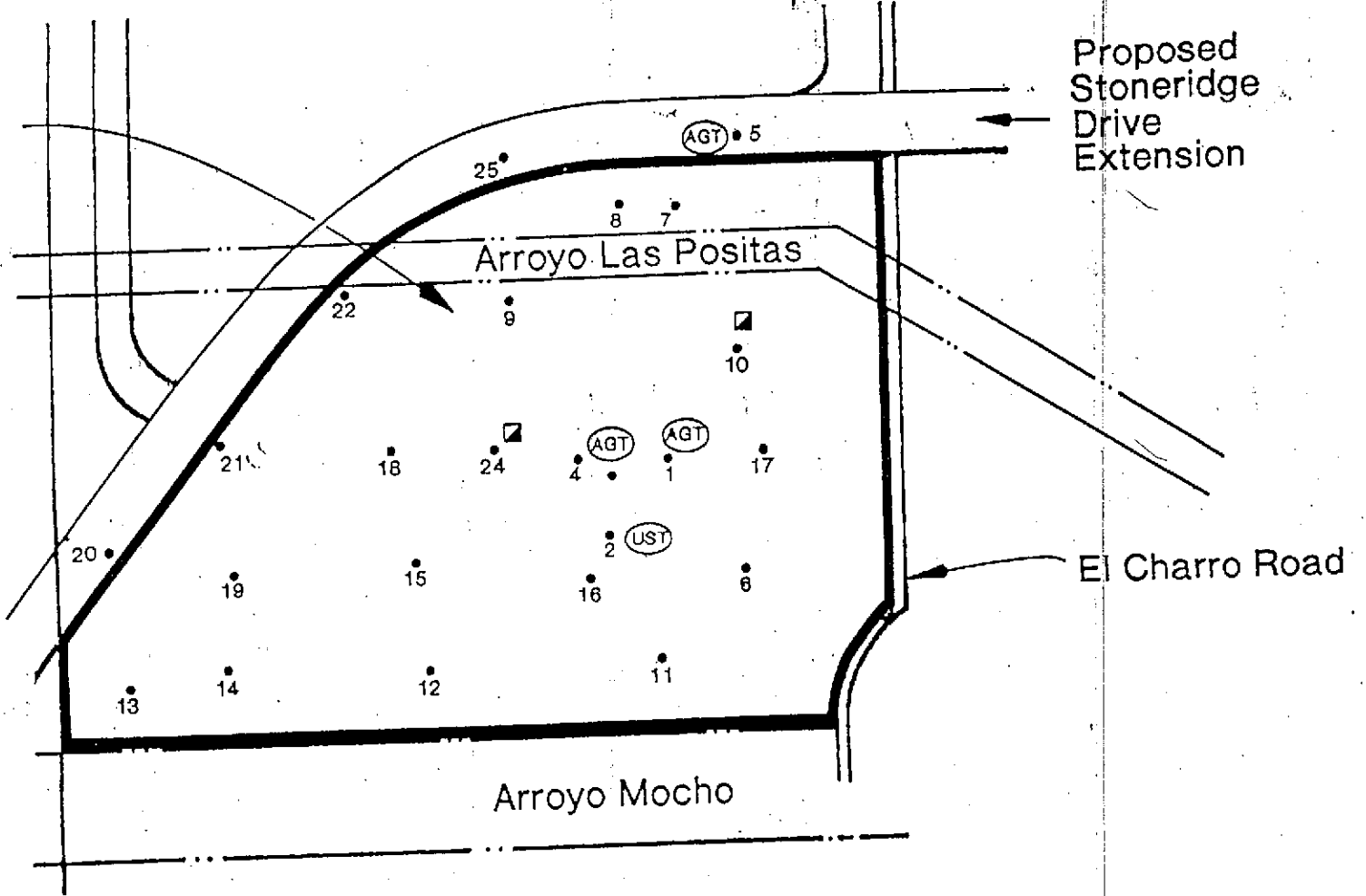
All results reported in parts per million

ND = Not detected

-- = Not tested

* Staples Ranch, data taken from 11/9/93 Phase 1 Preliminary Site Assessment done by Harza Kaldveer

PROPOSED COMMUNITY PARK



LEGEND

- SITE BOUNDARY
- 8 • APPROXIMATE LOCATION OF BORING EB-8
- ▣ ELECTRICAL TRANSFORMER
- (AGT) ABOVE GROUND STORAGE TANK
- (UST) UNDER GROUND STORAGE TANK

APPROXIMATE SCALE IN FEET

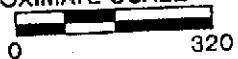


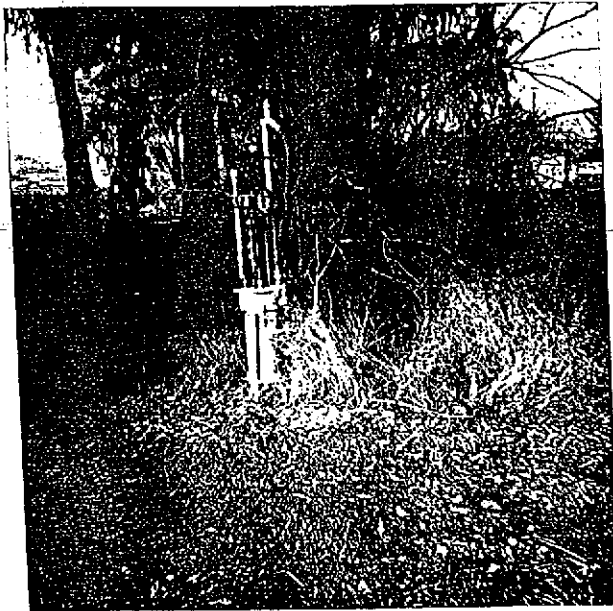
Figure 1 - Staples Ranch
HARZA KALDVEER
 Consulting Engineers

11/9/93 Phase 1 Report

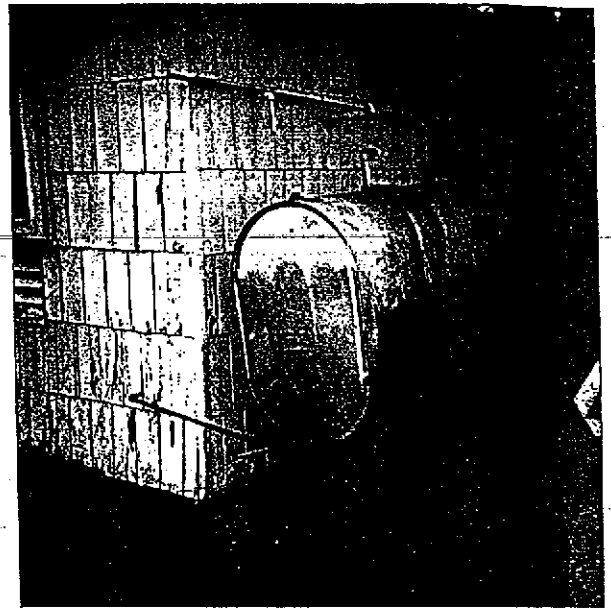
SITE EXPLORATION PLAN

PROPOSED COMMUNITY PARK
 Pleasanton, California

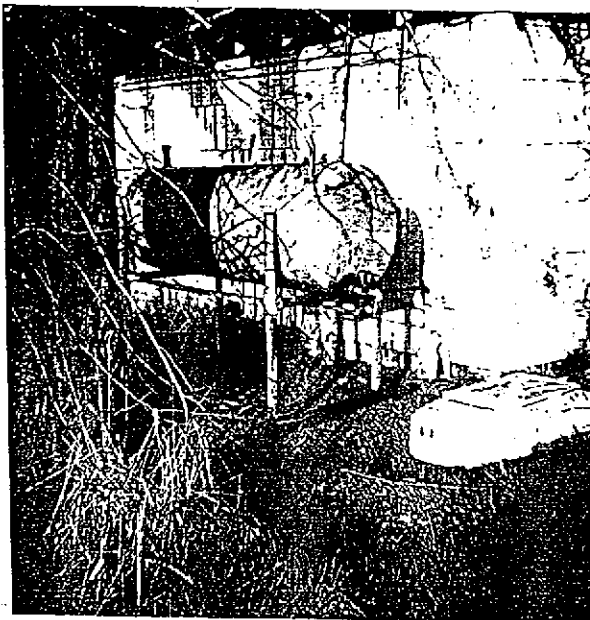
PROJECT NO.	DATE
KE904-77-2015	November 1993



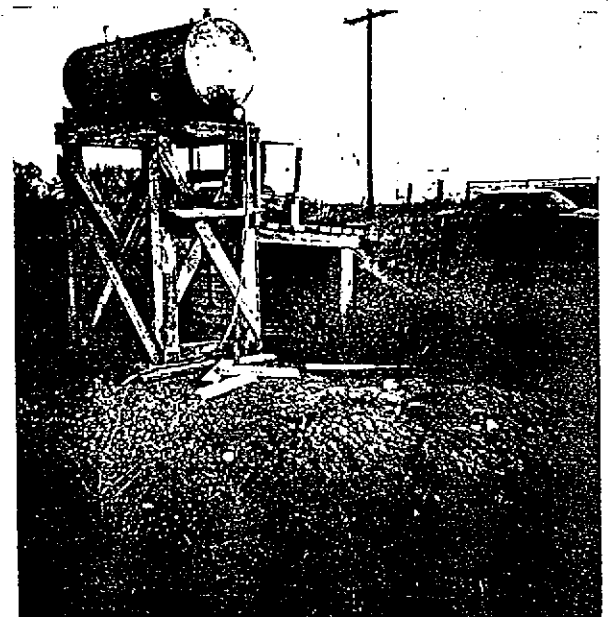
UST-2



AGT-1



AGT-4



AGT-5

Figure 2
Staples Ranch
Pictures of Storage
Tanks

DRILL RIG		CME 75		SURFACE ELEVATION		LOGGED BY		TM			
DEPTH TO GROUNDWATER		35.0 FEET		BORING DIAMETER		8-inch		DATE DRILLED		9/7/93	
DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	PID READING	REMARKS	WELL CONSTRUCTION			
DESCRIPTION AND REMARKS		SOIL TYPE									
GRAVEL (GP), multicolored, dry, subround to 1" diameter			0								
SILT (ML), dark brown, dry to damp, trace clay binder.			5								
			10		26	0					
SILTY SAND (SM), brown with gray staining, damp, fine-grained, trace gravel (subround to round), trace clay binder, slight hydrocarbon odor.			15		18	53					
GRAVELLY SAND (SP), gray and multicolored, wet, subrounded, coarse-grained, slight hydrocarbon odor.			20		42	83					
SILTY CLAY (CL), brown with gray staining, moist, slight hydrocarbon odor.			25		35	13					
CLAY (CL), brown with slight gray staining, wet, trace silt, slight hydrocarbon odor.			30		48	57					

Figure 3- Staples Ranch
HARZA KALDVEER
Consulting Engineers
 11/9/93 Phase 1 Report

EXPLORATORY BORING LOG
 PROPOSED COMMUNITY PARK SITE
 Pleasanton, California

PROJECT NO.	DATE	BORING NO	EB-5
KE904-77-2015	September 1993		

DRILL RIG		CME 75		SURFACE ELEVATION		LOGGED BY		TM			
DEPTH TO GROUNDWATER		35.0 FEET		BORING DIAMETER		8-inch		DATE DRILLED		9/7/93	
DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	PID READING	REMARKS			WELL CONSTRUCTION	
DESCRIPTION AND REMARKS		SOIL TYPE									
CLAYEY SILT (ML), tan-brown with slight gray discoloration, moist, trace sand (very fine-grained), trace white rootlets, moderate hydrocarbon odor.			35		29	172				14	
GRAVELLY SAND (SP), brown with gray and black staining, wet, fine-grained; subround to subangular to 1/2" diameter, moderate hydrocarbon odor.			40		36	118					
CLAY (CL), brown with slight gray staining, wet, trace silt, slight hydrocarbon odor.					29	0					
Bottom of Boring = 41.5 Feet Notes: 1. The stratification lines represent the approximate boundary between soil types and the transition may be gradual. 2. PID readings in parts per million. 3. Boring backfilled with cement grout to grade.											

Figure 3 - Continue HARZA KALDVEER Consulting Engineers		EXPLORATORY BORING LOG		
PROPOSED COMMUNITY PARK SITE Pleasanton, California				
PROJECT NO.		DATE		BORING NO.
KE904-77-2015		September 1993		EB-5

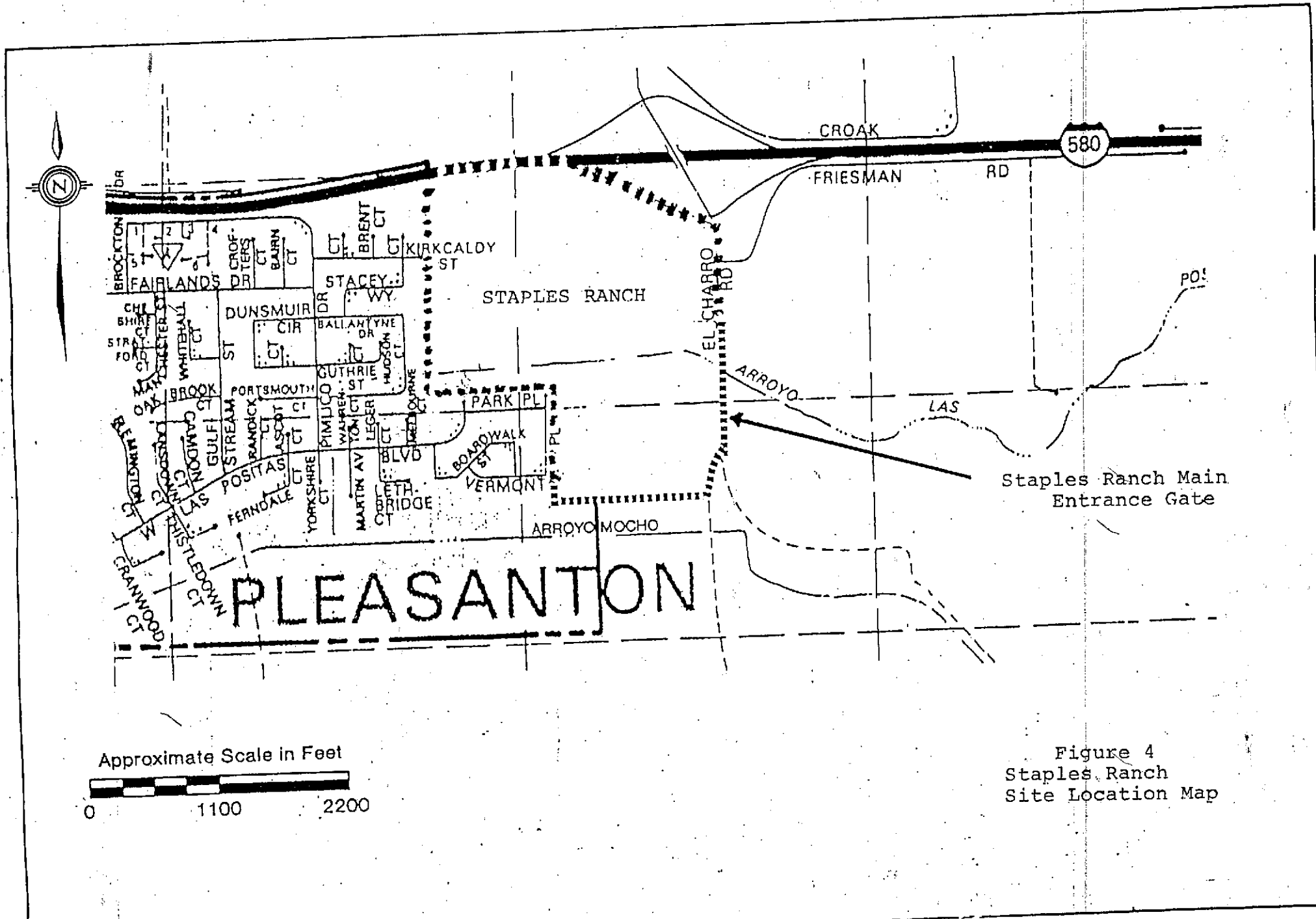


Figure 4
Staples Ranch
Site Location Map

COUNTY OF ALAMEDA, STATE OF CALIFORNIA

STANDARD AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 19____, by and between the COUNTY OF ALAMEDA, State of California, hereinafter called the "County", and

hereinafter called the Contractor.

WITNESSETH: That the Contractor for and in consideration of the covenants, conditions, agreements, and stipulations of the County hereinafter expressed, does hereby agree to furnish the County services and materials, as follows, and/or as described on exhibits attached to and incorporated herein.

(INSTRUCTIONS ONLY - DELETE BEFORE PRINTING: Set forth service to be rendered by Contractor, County Department receiving service, Contractor's qualifications, and additional provisions incorporated.)

CONTRACT PERIOD will be from _____ through _____.

COMPENSATION: County agrees to pay Contractor for services performed hereunder at a rate of \$ _____ per _____ and/or _____.

The total amount paid by County to Contractor under this agreement shall not exceed the sum of \$ _____.

ADDITIONAL PROVISIONS attached hereto constitute a part of this agreement.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the day and year first above written.

COUNTY OF ALAMEDA

CONTRACTOR

By _____
PURCHASING AGENT

CONTRACTOR

By _____

Title

Address

Telephone

BONDING REQUIREMENTS

EXHIBIT D

For all Contracts in excess of \$25,000, the Contractor will be required to furnish County with two bonds, said bonds to be executed on County prescribed bond forms and to be submitted concurrently with and as part of the executed contract documents submitted by the Contractor. Said bonds shall be surety bonds, shall be executed corporations duly and legally licensed to transact business in the State of California, shall be issued at the expense of the Contractor, shall be maintained by the Contractor and at the Contractor's expense during the entire life of the contract, and shall be in the amount of and for the purposes specified below.

i. FAITHFUL PERFORMANCE BOND

One bond shall be in the amount of one hundred percent (100%) of the contract price, and shall guarantee the faithful performance of the contract, and shall insure the County of Alameda during the life of the contract.

ii. PAYMENT BOND

One bond shall be in the amount of one hundred percent (100%) of the contract price, and shall be in accordance with the laws of the State of California to secure the payment of all claims for labor and materials used or consumed in the performance of the contract, and for the amounts due under the Unemployment Insurance Act of the State of California with respect to such work.