

ENVIRONMENTAL  
PROTECTION

96 MAY -9 AM 7:22

**KLEINFELDER**  
An employee owned company

May 8, 1996  
File No. 10-3003-37/002

*which way do sewer lines,  
and storm drain lines run  
in parcel? These could be  
potential source of PCE.*

Mr. John Moore  
J Patrick Land  
5627 Stoneridge Drive, Suite 320  
Pleasanton, California 94588

**SUBJECT: Environmental Investigation Report  
Dublin Boulevard Property  
Dublin, California**

Dear Mr. Moore:

Kleinfelder, Inc. (Kleinfelder) is pleased to present this letter report for soil and groundwater sample collection and analysis at the Dublin Boulevard property. The project site is located on the southwest corner of the intersection of Dublin Boulevard and Scarlett Drive in Dublin, California (see Site Location Map, Plate 1).

This work was conducted in accordance with our proposal number 10-YP6-206, dated April 25, 1996. As described in detail below, our scope of work included collection of four soil samples and two water samples from borings B-5 and B-6 (see Site Plan, Plate 2). The soil and groundwater samples were analyzed for halogenated volatile organic compounds (VOCs). The groundwater samples were also analyzed for total dissolved solids.

#### **BACKGROUND**

Kleinfelder recently completed a Phase I Environmental Site Assessment (ESA) and a groundwater investigation of the site. The results of this assessment, which was performed for Prestige Homes Real Estate, were presented in our report titled "Phase I Environmental Site Assessment Report, Dublin Boulevard Property, Dublin, California", dated March 29, 1996.

Our site history review indicated that the site has always been undeveloped. The site was purchased by J Patrick Land from U-Haul approximately six years ago. Previous site uses have been limited to construction of a building pad on the center of the site (U-Haul never

completed construction of the building) and use as a storage lot for plants by a landscaping company which rented the site from J Patrick Land.

Our review of regulatory lists indicated that several facilities along Scarlett Court have been reported as having had release incidents. Groundwater elevation data collected from monitoring wells installed at these facilities revealed that inferred groundwater flow direction in the site vicinity was to the south-southwest.

During Kleinfelder's preliminary investigation on March 5, 1996, two soil samples (one of fill material and one of native soil) were collected from the site. In addition, three groundwater samples were collected using the Hydropunch™ system. None of the suspected chemicals of concern were detected in the soil samples. Hydrocarbons were present in all of the groundwater samples and chlorinated solvents were detected in groundwater samples collected from the boring (B-4) located near the southwest corner of the site (the down-gradient direction with respect to inferred regional groundwater flow direction). The chlorinated solvents trichloroethene (TCE) and tetrachloroethene (PCE) were present at concentrations above their respective Maximum Contaminant Levels (MCLs). In addition, dichloroethene (DCE) was present in the groundwater sample from B-4 at a concentration below the MCL. These results are summarized in Table 1 of this report.

After review of these results, Ms. Eva Chu of the Alameda County Department of Environmental Health (ACDEH) requested that additional soil and groundwater samples be collected for analysis from borings located 10 feet north and 10 feet east of boring B-4. Soil samples were to be collected for analysis from the mid-level between the ground surface and the shallow groundwater table and from immediately above the shallow groundwater table. In addition, Ms. Chu requested that samples of groundwater from the lower portion of the shallow water bearing zone be obtained for analysis as the chlorinated solvents detected during the previous investigation tend to sink through the aquifer materials.

## **SCOPE OF WORK**

The purpose of the sampling and analysis performed during this investigation was to establish whether chlorinated solvents were present in deeper soils and the lower portion of the first aquifer in the vicinity of boring B-4, in accordance with Ms. Chu's request.

The following tasks were performed for this investigation:

- Collection of four soil samples from borings B-5 and B-6 for chemical analysis;
- Collection of two groundwater samples for chemical analysis;
- Analysis of the soil and groundwater samples; and

- Preparation of a brief letter report describing field procedures and analytical results.

## **FIELD ACTIVITIES**

Four additional soil samples and two additional groundwater samples were collected from the site on May 1, 1996. The samples were collected using a conventional drill rig equipped with hollow stem augers. Prior to drilling the borings, a permit was obtained from the Alameda County Flood Control and Water Conservation District- Zone 7.

The lithology of the two borings (B-5 and B-6) were logged in the field by a representative of Kleinfelder (see Boring Logs Plates A-1 through A-3 presented in Appendix A). Soil samples were collected for chemical analysis at depths of 5 feet and 11.5 feet below ground surface (bgs) from boring B-5 and at depths of 6.5 feet and 13 feet bgs from boring B-6. The soil samples were collected using a split spoon sampler. Groundwater was encountered at depths of approximately 12 feet in boring B-5 and 13.5 feet in boring B-6; therefore, soil samples collected from the 5 and 6.5 foot depths were at the mid-level between the ground surface and the shallow groundwater table while the soil samples collected from the 11.5 and 13 foot depth were located immediately above the shallow groundwater table.

Groundwater samples were collected using the Hydropunch™ system. The sampling tool was driven into the water bearing zone using the drilling rig. The Hydropunch™ unit uses an airtight and watertight sealed intake screen and sample chamber that is isolated from the surrounding environment as the tool is advanced. When the desired sampling location within the water bearing zone is reached, the Hydropunch sampler is advanced an additional 6 inches and then opened. Once the seal between the drive cone and the body of the tool is broken, groundwater flows from the surrounding formation into the sample chamber. After the sample was collected the unit is closed and retrieved from the bore hole.

A boring log of a groundwater monitoring well recently installed across Scarlett Drive from the site by another consultant and provided by Ms. Chu indicated that a clayey silt aquitard was present at a depth of approximately 20 feet in the site vicinity. Observations made by Kleinfelder's representative during drilling of borings B-5 and B-6 on the project site indicated that the soil encountered was generally clay with lenses of fine sand. Based on this information, borings B-5 and B-6 were advanced to a depth of approximately 20 feet and were terminated in a clay. Groundwater samples were collected from each boring from the lower portion of the water bearing material at depths of approximately 19 to 20 feet.

The soil samples collected for chemical analysis were capped with teflon and plastic end caps, labeled and placed into an ice cooled chest. The groundwater samples were retrieved using a dedicated disposable polyethelene bailer and decanted into the samples bottles provided by the laboratory. These bottles were appropriately labeled and placed

into an ice cooled chest. The samples were transported under chain-of-custody control to McCampbell Analytical, a laboratory certified by the State of California to perform the requested analysis.

The augers and sampling equipment were steam cleaned or washed in an Alconox water mixture and rinsed prior to use at each sampling location and prior to leaving the site. After collection of the samples, the borings were backfilled with cement grout.

The soil cuttings from the borings were placed on visqueen and left on-site for future disposal, pending receipt of analytical results. Soil cuttings from above and below the water table were placed in separate locations in an effort to reduce disposal costs. In addition, one 55-gallon drum of steam cleaning water was stored on-site pending receipt of analytical results. Disposal of the soil and steam cleaning water is the responsibility of J Patrick Land.

## **CHEMICAL ANALYSIS AND RESULTS**

The four additional soil samples and two groundwater samples were submitted to McCampbell Analytical, a laboratory certified by the State of California to perform the requested analysis. The samples were analyzed for the following:

- Soil and groundwater samples for halogenated VOCs using Environmental Protection Agency (EPA) Test Method 8010; and
- Groundwater samples only for Total Dissolved Solids using EPA Test Method 160.1.

No halogenated VOCs were present in the four soil samples analyzed at concentrations above the laboratory reporting limits. As noted above, analysis of soil samples collected during the previous investigation from the 0.5 to 1.0 foot depth interval at B-2 (fill material) and B-4 (native soil) revealed no chlorinated solvents above the laboratory reporting limits.

As noted in Table 1 below, the chlorinated solvents DCE, TCE, and PCE were detected in the groundwater samples collected from B-5 and B-6. For reference purposes, the analytical results for the groundwater samples collected from B-1, B-2, and B-4 during the previous investigation are also presented in the table. Please note that we were unable to obtain a groundwater sample from B-3.

Copies of the laboratory data sheets and the chain-of-custody forms are presented in Appendix B.

**TABLE 1**  
**Summary of Groundwater Analytical Results**  
**Dublin Boulevard Property**  
**Dublin, California**

Boring Number	Date Collected	DCE <sup>1</sup> µg/L <sup>7</sup>	TCE <sup>2</sup> µg/L	PCE <sup>3</sup> µg/L	TDS <sup>4</sup> mg/L <sup>8</sup>	Toluene µg/L	TPH-d <sup>5</sup> µg/L	TRPH <sup>6</sup> mg/L
B-1	3/5/96	<0.5	<0.5	<0.5	NA	0.63	83	<1.0
B-2	3/5/96	<0.5	<0.5	<0.5	NA	<0.5	170	3.2
B-4	3/5/96	2.6	13	27	NA	<0.5	1,400	<1.0
B-5	5/1/96	4.4	11	66	1,900	NA	NA	NA
B-6	5/1/96	4.1	14	53	1,700	NA	NA	NA
MCL		6	5	5	NE	1,000	NE	NE

Notes:

1. DCE = Cis 1,2-Dichloroethene
  2. TCE = Trichloroethene
  3. PCE = Tetrachloroethene
  4. TDS = Total Dissolved Solids
  5. TPH-d = Total Petroleum Hydrocarbons quantified as diesel
  6. TRPH = Total Recoverable Petroleum Hydrocarbons
  7. µg/L = Micrograms per liter, approximately equivalent to parts per billion
  8. mg/L = Milligrams per liter, approximately equivalent to parts per million
- NA = Not Analyzed for noted compound  
 NE = Not Established

### CONCLUSIONS AND RECOMMENDATIONS

In Kleinfelder's opinion, the concentrations of chlorinated solvents detected in the groundwater samples collected from the southwestern corner of the project site do not appear to be the result of an on-site spill for the following reasons:

- The absence of these compounds in the soil samples analyzed;
- The absence of these compounds in the groundwater samples collected from the up-gradient borings (B-1 and B-2);
- TPH-d was detected in all of the groundwater samples and chlorinated solvents were detected in only the downgradient boring which suggests that groundwater flow direction on-site may vary seasonally and chemicals of concern may be from an off-site source; and
- Lack of historical chemical usage on the site of these chemicals of concern.

The presence of the chlorinated solvents in the groundwater samples collected from this corner of the site may be due to a release incident on the adjoining properties or another nearby property. Numerous nearby facilities have been reported as having had release incidents in the past and it is possible that plumes have migrated onto the site from one or

more of these facilities. In addition, it is possible that an undocumented release may have occurred at one of these facilities in the past.

Kleinfelder recommends that closure of this issue be discussed with Ms. Chu of the ACDEH. As requested, Kleinfelder will contact Ms. Chu to arrange a meeting.

## LIMITATIONS

This report was prepared in general accordance with the accepted standard of practice that existed in Northern California at the time of the investigation. It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact art. Judgements leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. If J Patrick Land wishes to reduce the uncertainty beyond the level associated with this study, Kleinfelder should be notified for additional consultation.

Our firm has prepared this report for J Patrick Land's exclusive use for this particular project and in accordance with generally accepted engineering practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended.

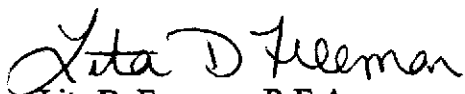
This document may be used only by J Patrick Land and only for the purpose stated, within a reasonable time from its issuance. Land use, site conditions (both on and offsite) or other factors may change over time, and additional work may be required with the passage of time.

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

We have enjoyed working with you in this project. Please call Lita (510) 484-1700 if you have any questions or if we can be of further service.

Sincerely,

**KLEINFELDER, INC.**



Lita D. Freeman, R.E.A.  
Project Manager



Alan D. Gibbs, R.G., R.E.A., C.H.G.  
Environmental Manager

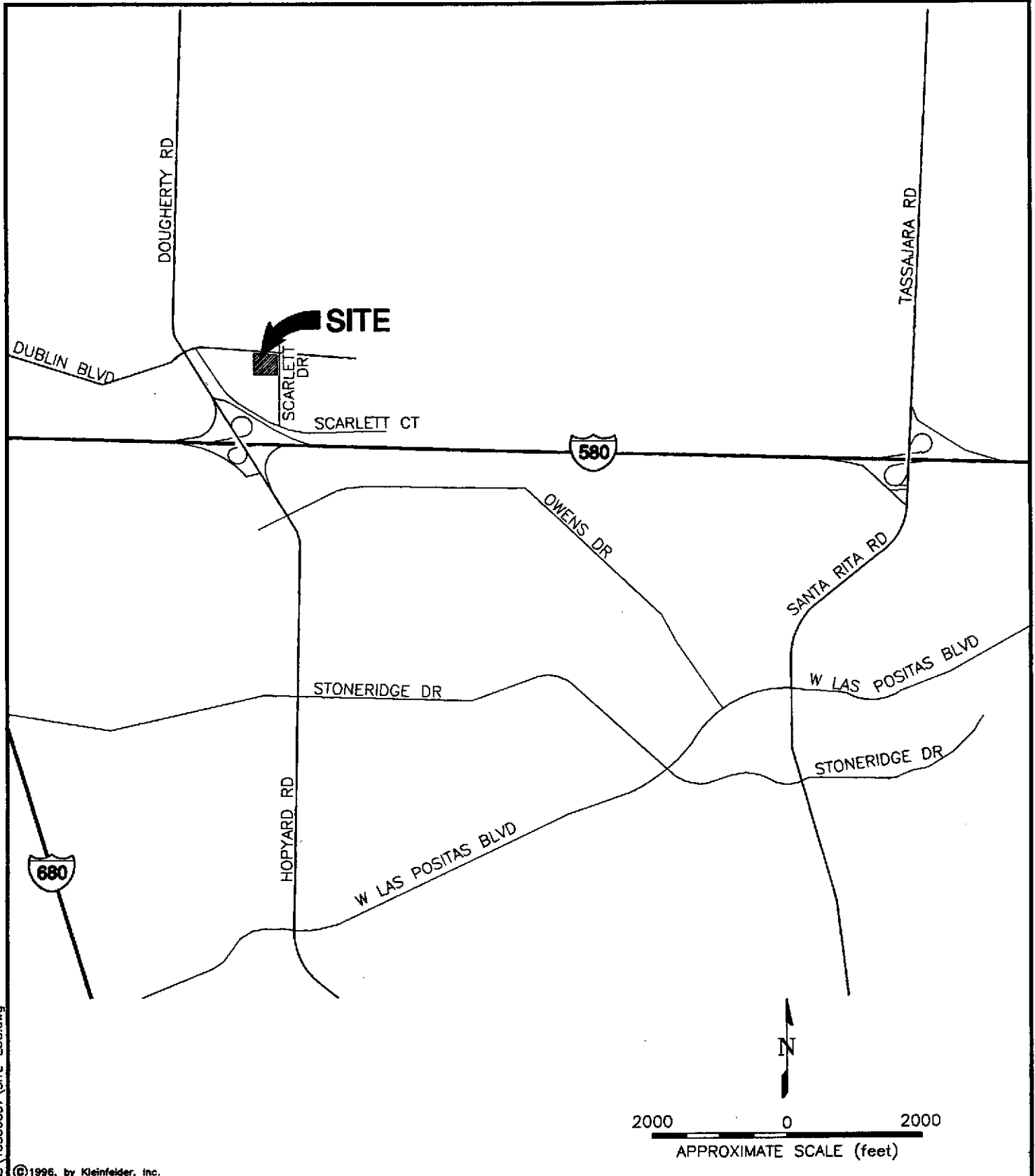
LDF:ADG:ks

**PLATES:**

Plate 1	Site Location Map
Plate 2	Site Plan With Hydropunch Sample Locations


**APPENDICES:**

Appendix A	Boring Log Legend and Boring Logs
Appendix B	Laboratory Data Sheets and Chain-of-Custody Forms
Appendix C	Application for Authorization to Use



CAD FILE: C:\KA\_PROJ\PLEAS\10300337\SITE-LOC.dwg

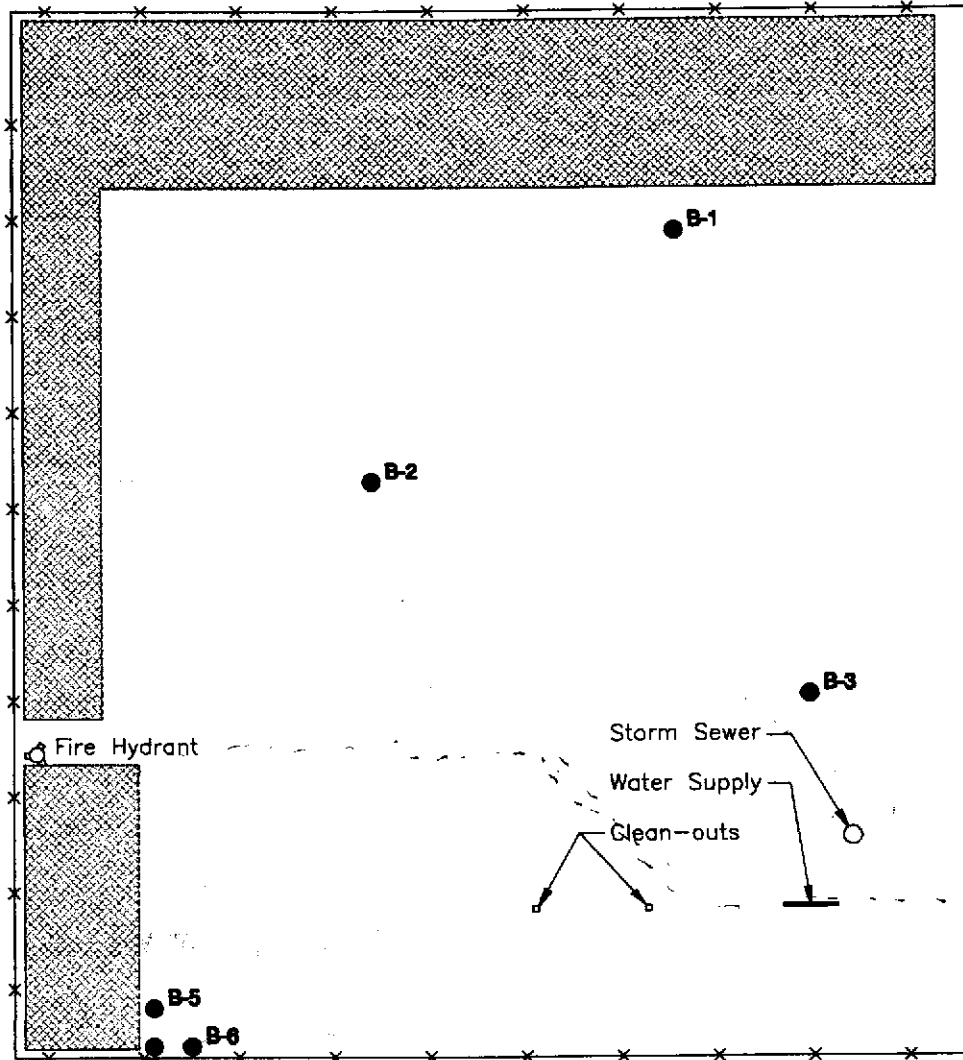
©1996, by Kleinfelder, Inc.

 <b>KLEINFELDER</b>	<b>SITE LOCATION MAP</b>	PLATE
	DUBLIN BOULEVARD PROPERTY DUBLIN, CALIFORNIA	<b>1</b>
DRAFTED BY: L. Sue      DATE: 5-3-96	PROJECT NO. 10-300337-002	
CHECKED BY: L. Freeman      DATE: 5-4-96		



DUBLIN BOULEVARD

U-Haul  
Property



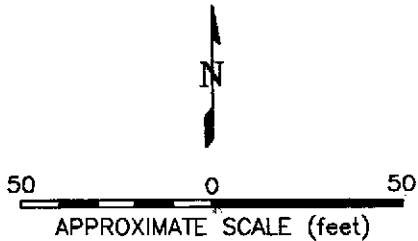
SCARLETT DRIVE

Drainage Channel

U-Haul  
Property

**LEGEND**

- FENCE
- CONCRETE PAD
- HYDROPUNCH SAMPLE
- INFERRED GROUNDWATER FLOW DIRECTION



©1996, by Kleinfelder, Inc.



**SITE PLAN WITH HYDROPUNCH  
SAMPLE LOCATIONS**

PLATE

**2**

DUBLIN BOULEVARD PROPERTY  
DUBLIN, CALIFORNIA

DRAFTED BY: L. Sue

DATE: 5-3-96

CHECKED BY: L. Freeman

DATE: 5-4-96

PROJECT NO. 10-300337-002

CAD FILE: C:\-KA\_PROG\PLEAS\10300337\SITEPLAN.dwg

# UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS	LTR	DESCRIPTION	MAJOR DIVISIONS	LTR	DESCRIPTION		
<b>COARSE GRAINED SOILS</b>	<b>GRAVEL AND GRAVELLY SOILS</b>	GW	Well-graded gravels or gravel sand mixtures, little or no fines.	<b>FINE GRAINED SOILS</b>	<b>SILTS AND CLAYS</b> LL < 50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
		GP	Poorly-graded gravels or gravel sand mixture little or no fines.			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean silty clays.
		GM	Silty gravels, gravel-sand-silt mixtures.			OL	Organic silts and organic silt-clays of low plasticity.
		GC	Clayey gravels, gravel-sand-clay mixtures.		<b>SILTS AND CLAYS</b> LL > 50	MH	Inorganic silts, micaceous or diatomaceous fine or silty soils, elastic silts.
	<b>SAND AND SANDY SOILS</b>	SW	Well-graded sands or gravelly sands, little or no fines.			CH	Inorganic clays of high plasticity, fat clays.
		SP	Poorly-graded sands or gravelly sands, little or no fines.			OH	Organic clays of medium to high plasticity.
		SM	Silty sands, sand, and silt mixtures.			<b>HIGHLY ORGANIC SOILS</b>	PT
	SC	Clayey sands, and clay mixtures.					

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li> Bulk, bag, or grab sample</li> <li> Standard Penetration Split Spoon Sampler (SPT), 2"φ</li> <li> Modified California (Porter) Sampler (MPS), 2.5"φ</li> <li> California Sampler, 3"φ</li> <li> Shelby Tube, 3"φ</li> <li>OVA      Organic Vapor Analyzer</li> <li>PID      Total organic vapors (parts per million) measured by a photo-ionization device</li> <li>FID      Total organic vapors (parts per million) measured by a flame-ionization device</li> </ul> | <ul style="list-style-type: none"> <li> Blank casing</li> <li> Screened casing</li> <li> Cement grout</li> <li> Bentonite</li> <li> Sand pack or gravel pack</li> <li> Sharp Contact (observed)</li> <li> Inferred Contact (contact not observed)</li> <li> Gradational Contact (observed)</li> <li> Water level observed in boring</li> <li> Stabilized water level</li> <li>NFWE      No free water encountered</li> </ul> |
|--|--|

**NOTES:** Blow counts represent 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 penetration.

The lines separating strata on the logs represent approximate boundaries only. The actual transition may be gradual. 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.

References to plasticity of cohesive soils are based on qualitative field observations and not on quantitative field or laboratory tests. Qualitative soil plasticity is noted solely to aid in stratigraphic correlation and is not intended for geotechnical characterization of soils.

© 1996, by Kleinfelder, Inc.



## BORING LOG LEGEND

PLATE

**A-1**

DRAFTED BY: L. Sue      DATE: 5-3-96

PROJECT  
DUBLIN BOULEVARD PROPERTY  
DUBLIN, CALIFORNIA

CHECKED BY: L. Freeman      DATE: 5-4-96

PROJECT NO. 10-300337-002

C:\FILE: C:\KA\_P\PLANS\10300337\BLDG-LEG.dwg

**LOG OF BORING**

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	<input checked="" type="checkbox"/> OVA (ppm) <input type="checkbox"/> PB <input type="checkbox"/> FB	USCS	Description	Remarks	Well Construction
1					NA	CL	CLAY - very dark grayish brown (10YP 3/2), moist, high plasticity, stiff, trace silt		
2									
3									
4	0250		9	100			as above, with some rootlets		
5				100					
6				100					
7				100					
8				100					
9	0249		10	100		CL-CH	CLAY - yellowish brown (10YR 5/4), moist, moderate to high plasticity, stiff, trace very fine grained sand		
10				100					
11	0248		5	100			as above, with very dark grayish brown (10YR 3/2) mottling	5-1-96 09:15	
12				100					
13	0247		13	100			decreasing mottling		
14				100			thin (1- to 2-inch thick) lenses of fine grained sand		
15				100					
16	0246		21	100			as above, very stiff		
17				100					
18									
19									
20							Groundwater Sample #0245 collected at 09:30		
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									

Designated Purpose(s) of Log

Site Characterization

Note: Logs are to be used only for designated purpose(s).

Logged by

K. Powers

Date

5-1-96

Drafted by

L. Sue

Date

5-3-96

Reviewed by

Alan Gibe

Date

Plate

A-2

### LOG OF BORING

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	<input checked="" type="checkbox"/> OVA (ppm) <input type="checkbox"/> PB <input type="checkbox"/> FB	USCS	Description	Remarks	Well Construction
1						CL	SANDY CLAY - yellowish brown (10YR 5/4), dry, medium plasticity, medium sand		
2						CH	CLAY - very dark grayish brown (10YR 3/2), moist, high plasticity, trace silt		
3									
4									
5									
6	0240		9	100			as above, stiff		
7				100					
8									
9							as above, mottled yellowish brown (10YR 5/4)		
10	0241		14	100					
11	0242		10	100		CH	CLAY - yellowish brown (10YR 5/4), dusky yellowish brown mottling, moist, high plasticity, stiff, trace silt		
12									
13	0243		13	100					
14							thin (1- to 2-inch thick) lenses of fine grained sand	5-1-96 10:30	
15							as above, no mottling		
16	0244		18	100					
17				100					
18				100					
19									
20							Groundwater Sample #0239 collected at 10:55		
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									

Designated Purpose(s) of Log  
 Site Characterization

Note: Logs are to be used only for designated purpose(s).

Logged by K. Powers	Date 5-1-96	Plate  <b>A-3</b>
Drafted by L. Sue	Date 5-3-96	
Reviewed by Alan Gibbs	Date	

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553  
Tele: 510-798-1620 Fax: 510-798-1622

05/07/96

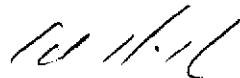
Dear Lita:

Enclosed are:

- 1). the results of 6 samples from your # 10-3003-37-002; Dublin Scarlett II project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,



Edward Hamilton

Kleinfelder 7133 Koll Center Parkway, # 100 Pleasanton, CA 94566	Client Project ID: # 10-3003-37-002; Dublin Scarlett II	Date Sampled: 05/01/96
	Client Contact: Lita Freeman	Date Received: 05/01/96
	Client P.O: R3581	Date Extracted: 05/01-05/03/96
		Date Analyzed: 05/01-05/03/96

**Volatile Halocarbons**

EPA method 601 or 8010

Lab ID	64657	64659	64662	64663
Client ID	0250 (B5-5)	0248 (B5-11.5)	0245 (B5)	0240 (B6-6.5)
Matrix	S	S	W	S
Compound	Concentration*			
Bromodichloromethane	ND	ND	ND < 2	ND
Bromoform <sup>(b)</sup>	ND	ND	ND < 2	ND
Bromomethane	ND	ND	ND < 2	ND
Carbon Tetrachloride <sup>(c)</sup>	ND	ND	ND < 2	ND
Chlorobenzene	ND	ND	ND < 2	ND
Chloroethane	ND	ND	ND < 2	ND
2-Chloroethyl Vinyl Ether <sup>(d)</sup>	ND	ND	ND < 2	ND
Chloroform <sup>(e)</sup>	ND	ND	ND < 2	ND
Chloromethane	ND	ND	ND < 2	ND
Dibromochloromethane	ND	ND	ND < 2	ND
1,2-Dichlorobenzene	ND	ND	ND < 2	ND
1,3-Dichlorobenzene	ND	ND	ND < 2	ND
1,4-Dichlorobenzene	ND	ND	ND < 2	ND
Dichlorodifluoromethane	ND	ND	ND < 2	ND
1,1-Dichloroethane	ND	ND	ND < 2	ND
1,2-Dichloroethane	ND	ND	ND < 2	ND
1,1-Dichloroethene	ND	ND	ND < 2	ND
cis 1,2-Dichloroethene	ND	ND	4.4	ND
trans 1,2-Dichloroethene	ND	ND	ND < 2	ND
1,2-Dichloropropane	ND	ND	ND < 2	ND
cis 1,3-Dichloropropene	ND	ND	ND < 2	ND
trans 1,3-Dichloropropene	ND	ND	ND < 2	ND
Methylene Chloride <sup>(f)</sup>	ND	ND	ND < 2	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND < 2	ND
Tetrachloroethene	ND	ND	66	ND
1,1,1-Trichloroethane	ND	ND	ND < 2	ND
1,1,2-Trichloroethane	ND	ND	ND < 2	ND
Trichloroethene	ND	ND	11	ND
Trichlorofluoromethane	ND	ND	ND < 2	ND
Vinyl Chloride <sup>(g)</sup>	ND	ND	ND < 2	ND
% Recovery Surrogate	111	109	105	111
Comments				

\* water and vapor samples are reported in ug/L, soil samples in ug/kg and all TCLP extracts in ug/L.

Reporting limit unless otherwise stated: water/TCLP extracts, ND < 0.5ug/L; soil, ND < 5ug/kg

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

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

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553  
Tele: 510-798-1620 Fax: 510-798-1622

Kleinfelder 7133 Koll Center Parkway, # 100 Pleasanton, CA 94566	Client Project ID: # 10-3003-37-002; Dublin Scarlett II	Date Sampled: 05/01/96
	Client Contact: Lita Freeman	Date Received: 05/01/96
	Client P.O: R3581	Date Extracted: 05/01-05/03/96
		Date Analyzed: 05/01-05/03/96

## Volatile Halocarbons

EPA method 601 or 8010

Lab ID	64666	64668		
Client ID	0243 (B6-13)	0239 (B6)		
Matrix	S	W		
Compound	Concentration *			
Bromodichloromethane	ND	ND < 2		
Bromoform <sup>(b)</sup>	ND	ND < 2		
Bromomethane	ND	ND < 2		
Carbon Tetrachloride <sup>(c)</sup>	ND	ND < 2		
Chlorobenzene	ND	ND < 2		
Chloroethane	ND	ND < 2		
2-Chloroethyl Vinyl Ether <sup>(d)</sup>	ND	ND < 2		
Chloroform <sup>(e)</sup>	ND	ND < 2		
Chloromethane	ND	ND < 2		
Dibromochloromethane	ND	ND < 2		
1,2-Dichlorobenzene	ND	ND < 2		
1,3-Dichlorobenzene	ND	ND < 2		
1,4-Dichlorobenzene	ND	ND < 2		
Dichlorodifluoromethane	ND	ND < 2		
1,1-Dichloroethane	ND	ND < 2		
1,2-Dichloroethane	ND	ND < 2		
1,1-Dichloroethene	ND	ND < 2		
cis 1,2-Dichloroethene	ND	4.1		
trans 1,2-Dichloroethene	ND	ND < 2		
1,2-Dichloropropane	ND	ND < 2		
cis 1,3-Dichloropropene	ND	ND < 2		
trans 1,3-Dichloropropene	ND	ND < 2		
Methylene Chloride <sup>(f)</sup>	ND	ND < 2		
1,1,2,2-Tetrachloroethane	ND	ND < 2		
Tetrachloroethene	ND	53		
1,1,1-Trichloroethane	ND	ND < 2		
1,1,2-Trichloroethane	ND	ND < 2		
Trichloroethene	ND	14		
Trichlorofluoromethane	ND	ND < 2		
Vinyl Chloride <sup>(g)</sup>	ND	ND < 2		
% Recovery Surrogate	111	105		
Comments				

\* water and vapor samples are reported in ug/L, soil samples in ug/kg and all TCLP extracts in ug/L.

Reporting limit unless otherwise stated: water/TCLP extracts, ND &lt; 0.5ug/L; soil, ND &lt; 5ug/kg

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

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

DHS Certification No. 1644

14 Edward Hamilton, Lab Director

Kleinfelder 7133 Koll Center Parkway, # 100 Pleasanton, CA 94566			Client Project ID: # 10-3003-37-002; Dublin Scarlett II	Date Sampled: 05/01/96		
						Date Received: 05/01/96
						Date Extracted: 05/03/96
						Date Analyzed: 05/03/96
			<b>Total Dissolved Solids</b>			
Analytical methods			EPA160.1, SM2540C			
Lab ID	Client ID	Matrix	TDS			
64662	0245 (B5)	W	1900			
64668	0239 (B6)	W	1700			
Reporting Limit or Method Accuracy unless otherwise stated; ND		W	10 mg/L			
means not detected above the reporting limit; N/A means not applicable		S	N/A			
Reporting Units		W,S	mg/L			



QC REPORT FOR EPA 8010/8020/EDB

Date: 05/03/96

Matrix: Soil

Analyte	Concentration (ug/kg)				% Recovery		
	Sample (#63138)	MS	MSD	Amount Spiked	MS	MSD	RPD
1,1-DCE	0	97	96	100	97	96	1.0
Trichloroethene	0	95	98	100	95	98	3.1
EDB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	0	100	98	100	100	98	2.0
Benzene	0	107	104	100	107	104	2.8
Toluene	0	102	104	100	102	104	1.9
Chlorobz (PID)	0	102	111	100	102	111	8.5

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

## QC REPORT FOR EPA 8010/8020/EDB

Date: 05/01/96

Matrix: Water

Analyte	Concentration (ug/L)				% Recovery		
	Sample (#63343)	MS	MSD	Amount Spiked	MS	MSD	RPD
1,1-DCE	0.0	8.8	9.5	10.0	88	95	7.7
Trichloroethene	0.0	9.0	9.5	10.0	90	95	5.4
EDB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	0.0	9.5	10.0	10.0	95	100	5.1
Benzene	0.0	10.3	11.3	10.0	103	113	9.3
Toluene	0.0	10.4	10.6	10.0	104	106	1.9
Chlorobz (PID)	0.0	9.7	9.8	10.0	97	98	1.0

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553

Tele: 510-798-1620 Fax: 510-798-1622

## QC REPORT FOR EPA 8010/8020/EDB

Date: 05/03/96

Matrix: Water

Analyte	Concentration (ug/L)				% Recovery		
	Sample (#63432)	MS	MSD	Amount Spiked	MS	MSD	RPD
1,1-DCE	0.0	9.1	9.7	10.0	91	97	6.4
Trichloroethene	0.0	9.1	9.8	10.0	91	98	7.4
EDB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	0.0	9.7	10.3	10.0	97	103	6.0
Benzene	0.0	11.2	11.6	10.0	112	116	3.5
Toluene	0.0	10.6	10.9	10.0	106	109	2.8
Chlorobz (PID)	0.0	9.6	10.2	10.0	96	102	6.1

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

PROJ NO		PROJECT NAME		NO OF CON TAINERS	ANALYSIS										REMARKS	
LP NO (P.O. NO.)		SAMPLERS: (Signature/Number)			8010	TDS	Hold									
DATE	SAMPLE ID TIME	SAMPLE ID														
MM DD YY	HH MM SS															
16-3003-37 002	DublinScarlett II															
R3581	KBR 3014															
5-1-96	8:10	0250	(B5-5)	1	X								Soil	64657		
5-1-96	8:20	0249	(B5-10)	1				X					Soil	H 64658		
	8:27	0248	(B5-11.5)	1	X								Soil			
	8:38	0247	(B5-13)	1				X					Soil	64659		
	8:45	0246	(B5-16.5)	1				X					Soil	H 64660		
	9:30	0245	(B5)	4	X	X							H2O	H 64661		
	10:10	0240	(B6-6.5)	1	X								Soil			
	10:15	0241	(B6-10)	1				X					Soil	64662		
	10:17	0242	(B6-11.5)	1				X					Soil			
	10:20	0243	(B6-13)	1	X								Soil	64663		
	10:37	0244	(B6-16.5)	1				X					Soil	H 64664		
↓	10:55	0239	(B6)	4	X	X							H2O			
													Note:			
													4 of the VOHS do not			
													have preservative, they			
													are marked NP.			
													H 64665			
													64666			

Please Fax results  
510-484-5838  
by Monday Morning

Relinquished by: (Signature) KBR	Date/Time 5-1-96 14:50	Received by: (Signature) Lita Freeman	Remarks 48 TAT please	Send Results To Attn: Lita Freeman
Relinquished by: (Signature) Lita Freeman	Date/Time 5-1-96 15:30	Received by: (Signature) Ken Hamacher		7133 KOLL CENTER PARK, H 64667
Relinquished by: (Signature) Ken Hamacher	Date/Time 5-1-96 16:50	Received for Laboratory by: (Signature) Midi Price		SUITE 100 PLEASANTON, CA 94566 (510) 484-1700 64668

**APPLICATION FOR AUTHORIZATION TO USE**

**Environmental Investigation Report  
Dublin Boulevard Property  
Dublin, California  
File Number: 10-3003-37/002  
May 8, 1996**

**TO: Kleinfelder, Inc.  
7133 Koll Center Parkway, Suite 100  
Pleasanton, California 94566  
(510) 484-1700**

**FROM:**

[Please clearly identify name and address of person/entity applying for permission to use of copy this document]

**To Whom It Concerns:**  
Applicant \_\_\_\_\_ hereby applies for permission to :  
[State here the use(s) contemplated]

for the purpose(s) of:  
[State here why you wish to do what is contemplated as set forth above]

Applicant understands and agrees that the Environmental Investigation Report for the Dublin Boulevard Property in Dublin, California is a copyrighted document, that Kleinfelder, Inc. is the copyright owner, and that unauthorized use or copying of this document is strictly prohibited without the express written permission of Kleinfelder, Inc. Applicant understands that Kleinfelder, Inc., may withhold such permission at its sole discretion, or grant such permission upon such terms and conditions as it deems acceptable, such as the payment of a re-use fee.

Dated: \_\_\_\_\_  
Applicant  
by \_\_\_\_\_  
Name  
its \_\_\_\_\_  
Title