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WELL INSTALLATION

AND LIMITED SUBSURFACE SOIL

CHEMISTRY TESTING AT

#3563  
KT  
1616-1618-1620 DOOLITTLE DRIVE

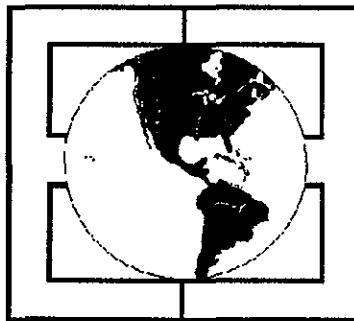
SAN LEANDRO, CALIFORNIA

94577

#3578

KT

Prepared by:



Earth

Engineers

Prepared for:

DALZIEL TRUSTS

December 11, 1996



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**ENVIRONMENTAL  
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97 JAN 22 AM 10:35

December 11, 1996

Mr. Alec H. Dalziel  
Dalziel Trusts  
Law Offices of Cullen and Wood  
490 2nd Street, Suite 300  
San Francisco, CA 94107

Subject: Well Installation and Limited Subsurface Soil Chemistry Testing: 1616-1618-1620 Doolittle Drive, San Leandro, California (Earth Engineers file reference 1087.002)

Dear Mr. Dalziel:

Enclosed is the Well Installation and Limited Subsurface Soil Chemistry Testing report prepared by Earth Engineers for the above-referenced properties. This report was prepared in conformance with accepted practices for such studies and Earth Engineers in-house quality assurance program. The undersigned pledges under penalty of perjury that the facts presented herein are based upon available information discovered by Earth Engineers and represent existing conditions at the subject sites up to the present time.

If you have any questions concerning this project, please call me at any time.

Sincerely,

R. Mark Armstrong, RG, REA, RPG  
Principal

WELL INSTALLATION  
AND LIMITED SUBSURFACE SOIL  
CHEMISTRY TESTING AT  
1616-1618-1620 DOOLITTLE DRIVE  
SAN LEANDRO, CALIFORNIA

Prepared for:

DALZIEL TRUSTS

December 11, 1996

Prepared by:

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1087.002

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## EXECUTIVE SUMMARY

Earth Engineers was retained by Mr. Alec Dalziel to perform well installation and limited subsurface soil chemistry testing at 1616-1618-1620 Doolittle Drive, San Leandro, California (the subject sites). The objectives of this well installation and limited subsurface soil chemistry testing were to assess soil quality at the subject sites in order to detect potential contamination stemming from a reported unauthorized releases at 1616-1618 Doolittle Drive, and to perform limited background research on the properties.

Earth Engineers subcontracted the advancement of four soil borings on-site and supervised the installation and completion of four monitoring wells.

Nine soil samples collected at the subject sites were submitted to Shasta Analytical Laboratory for analyses of Total Petroleum Hydrocarbons as Gasoline (TPHg) with Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) by California Department of Health Services (DHS) Method 8015 Modified with Environmental Protection Agency (EPA) Method 8020, and Total Petroleum Hydrocarbons as Diesel (TPHd) by California DHS Method 8015 Modified. Two soil samples were found to contain contamination. The first, at a depth of five feet below the surface at location EE-1 (S-5-MW1), was determined to contain TPHg at .29 ppm. The second, at a depth of 10 feet below the surface at location EE-1 (S-10-MW1), was determined to contain TPHd at 190 ppm. Soil samples from locations EE-2 and EE-3 detected petroleum hydrocarbons in the volatile range of diesel at concentrations of 13 ppm and 7.6 ppm, respectively. After reviewing chromatography data, it appears that the spikes detected in the data are residuals from degraded diesel. A summary of all the analyses of the soil samples taken during well installation can be found in Table 1.

The following is a summary of Earth Engineers findings, opinions, and recommendations, based on the limited subsurface investigation:

- Soil at a depth of 10 feet at location EE-1 contains TPHd at 190 ppm.
- The groundwater flow direction is suspected to be west toward the San Francisco Bay. Further studies will determine actual groundwater direction and gradient.

In conclusion, the level of contamination in the soil does not warrant further excavation.

Earth Engineers recommends:

- Pressure transit analysis be conducted to determine the storativity and transmissivity of the groundwater bearing sediments at the subject sites.
- All wells on the subject sites be monitored for TPHg with BTEX, and TPHd, on a quarterly basis until closure is obtained.

- A cost-based analysis be performed to determine the most economical method to obtain closure of the subject sites.

The research presented herein constitutes a sufficient basis for the above conclusion.

## 1. INTRODUCTION

This report presents the methods and findings of well installation and limited subsurface soil chemistry testing conducted by Earth Engineers for Mr. Alec Dalziel at 1616-1618-1620 Doolittle Drive, San Leandro, California. The investigation, performed during the months of September and October 1996, included limited historical research of the subject sites and of properties in the immediate vicinity of the subject sites, the advancement of four borings, and the conversion of the four borings to monitoring wells.

The investigation presented in this report was conducted by Earth Engineers on behalf of, and for the exclusive use of, Mr. Alec Dalziel, solely for the purpose of an environmental evaluation of the subject sites.

The purpose of this investigation was to assess on-site soil quality conditions in order to detect potential contamination that may have resulted from unauthorized releases of chemicals.

### 1.1 SCOPE OF WORK

The scope of this investigation included the following:

1. Preparing a Site-Specific Health and Safety Plan (as required by OSHA 29 CFR Part 1910) for Earth Engineers personnel and subcontractors prior to obtaining entry to the subject sites for the proposed subsurface work.
2. Coordinating with the client and a qualified drilling subcontractor for the advancement and installation of four borings/monitoring devices (four monitoring wells) on the subject sites.
3. Observing the advancement of four soil borings on-site and visually inspecting and classifying the subsurface soils encountered in the borings.
4. Collecting on-site subsurface soil samples for field screening of total VOCs with a Photoionization Detector (PID) and a UV scope, and having the soil samples analyzed for VOCs by EPA method 8240.

### 1.2 STUDY AREA DESCRIPTION

The subject sites are located at 1616-1618-1620 Doolittle Drive, San Leandro, California (see Figures 1 and 2).

### 1.3 BACKGROUND INFORMATION

The three subject properties are owned by Dalziel Trusts and leased to various tenants. The property at 1616 Doolittle Drive has been occupied since late 1990 by the NorCal Towing Company. The property at 1618 Doolittle Drive is occupied by the

Sullair Pacific Company, builders and servicers of rotary screw compressors. However, Dalziel Trusts is the responsible party for 1618 Doolittle Drive, and the county should change its records to reflect this responsibility. The property at 1620 Doolittle Drive is occupied by Oakland Sandblasting.

In 1990, the Muratore Corporation of San Francisco, representing the owners, retained the services of Harding Lawson Associates (HLA) to perform an underground storage tank investigation to determine if underground storage tanks had leaked. HLA's analytical data is depicted in Appendix D.

In May 1990, HLA performed site walkthroughs and geophysical surveys to locate and mark utility lines and tanks. The geophysical surveys were performed with ground penetrating radar (GPR) and electromagnetics (EM). A total of seven underground tanks (Tanks 1 through 7) were found. In June 1990, HLA drilled 14 soil borings in the vicinities of these seven tanks and collected soil samples for chemical analyses. Results of the investigation were presented in HLA's July 3, 1990, report entitled Underground Storage Tank Investigation, Doolittle Properties, 1616, 1618 and 1620 Doolittle Drive, San Leandro, California. HLA concluded that petroleum hydrocarbon constituents were present in the soil near the four tanks at 1618 Doolittle Drive, and that while soil samples near the three tanks at the other two facilities did not contain high levels of hydrocarbons (maximum detected 13 ppm), petroleum odors were noted in soils around one tank at 1616 Doolittle Drive. In a July 11, 1990, letter, HLA recommended the removal of the seven tanks and excavation and bioremediation of contaminated soil at the 1618 Doolittle Drive site.

Tank removal activities were delayed until expiration of the lease agreements at the three sites due to legal access and use of the tanks by one of the tenants.

In September and October 1990, Tanks 1 and 3, maintained and operated by Sullair Pacific at 1618 Doolittle Drive, were tested for integrity by the Triple T Company of Richmond, California. Test results found both tanks to be tight. HLA believed that the remaining two tanks at Sullair Pacific (Tanks 2 and 4) were never operated by the company. Sullair Pacific occupied the property in 1975 and did not use the two tanks because initial tank integrity testing for these tanks had failed. No documentation or test results from 1975 were reviewed by HLA.

While only one tank was examined by HLA at Oakland Sandblasting at 1620 Doolittle Drive, a total of four vent pipes were discovered by HLA, indicating the possibility of four additional tanks. No additional tanks were discovered by geophysical survey techniques, although large numbers of stored materials, including trailers and vehicles, were in the rear of the facility and limited the survey area.

#### 1.4 REGULATORY INFORMATION

There are numerous regulatory agencies that have some type of jurisdiction over the subject sites: the local fire department, San Leandro Department of Public Works, San Leandro Planning Department, Bay Area Air Quality Control Board, Regional

Water Quality Control Board (RWQCB), California Environmental Protection Agency, California Department of Health, Alameda County Water District, and Alameda County Health Care Services Agency.

#### LOCAL REGULATORY REVIEW

Alameda County Health Care Services Agency is the local oversight agency, and Mr. Dale Klettke, a Certified Hazardous Material Manager from the Division of Environmental Protection, Department of Environmental Health, is the Local Agency Liaison. Mr. Klettke's supervisor is Mr. Tom Peacock. Alameda County Health Care Services Agency will maintain the records for the subject sites. To obtain closure of these cases, the case will have to be reviewed by the RWQCB.

Well Installation Permit No. 96740 was obtained from the County of Alameda (see Appendix A).

#### STATE REGULATORY REVIEW

Alameda County Health Care Services Agency is the local oversight agency that now reviews the work done on the subject sites. The RWQCB is the agency that has the right to review and close sites of this nature. This set-up is not unique for these sites.

## 2. ENVIRONMENTAL SETTING

The area is zoned industrial, with railroad tracks upgradient of the subject sites. There is not any residential housing downgradient of the subject sites.

### 2.1 GEOLOGY AND HYDROGEOLOGY

Geologic information available for the subject sites was obtained primarily from HLA's reports, boring installation data, soil survey data, and personal experience. The sediments underlying the area are clays to gravelly clays, with intermingled sandy sediments in former stream beds only. The subject sites were formerly an alluvial plain and floodplain. No documentation as to the quality of the compaction was reviewed.

Depth to groundwater beneath the subject sites varies from approximately 13 feet based on subject site observations and review of a USGS 7.5 minute topographic map. Locations of groundwater monitoring wells installed by Earth Engineers are depicted in Figure 3. The groundwater flow direction is suspected to be west toward the San Francisco Bay. Further studies will determine actual groundwater direction and gradient.

### 2.2 SENSITIVE ENVIRONMENTAL RECEPTORS

The nearest environmental receptor to the subject sites is the biota in the San Francisco Bay. No municipal or agricultural use of the groundwater from the subject sites has been documented.

### 3. DESCRIPTION OF SUBSURFACE INVESTIGATION

Prior to conducting a subsurface investigation on-site, Earth Engineers prepared a Site-Specific Health and Safety Plan and required all subcontractor personnel to read the plan, participate in a site safety meeting before starting work, and sign the plan. A subsurface investigation was performed on-site by Earth Engineers in September and October 1996.

The subsurface investigation included the following: Electromagnetic and seismic reflection geophysical work was performed to determine tank locations. The subject sites were marked, the utilities located, and the concrete opened. The first 3 feet of soil was hand augered to check for obstacles. Bayland Drilling performed the drilling operations at the subject sites. The drilling rig used at the subject sites was a mobile B-53. Earth Engineers observed drilling to depths of approximately 15 feet at each of the four test locations. The borings were converted to monitoring wells with one-inch-diameter casing, filter sand, bentonite and concrete seals, locking caps, and Christy boxes.

#### 3.1 GEOPHYSICAL INVESTIGATION

Lines were walked with a G-858 Magnetometer (see Figure 4). Data was gathered approximately every three feet along these lines (see Appendix E). After Bouguer-type corrections for surface interference, the electromagnetic data excluded the entire site from having underground storage tanks except in three locations. The three suspected tank locations are all located at 1620 Doolittle Drive, two located behind Hunter Sandblasting and one inside Hunter Sandblasting's building (see Figure 5).

Seismic reflection work was conducted to determine if the electromagnetic data was accurate. The seismic reflection data confirmed the probability that all three tanks are present (see Appendix F). Additional physical examination will be performed to confirm the presence or absence of tanks at these locations on the subject site.

#### 3.2 DRILLING PROCEDURES

Four soil borings were advanced. Borings were logged and monitoring well installations were observed by an Earth Engineers geologist. Logs for all borings and monitoring well installations are provided in Appendix A. The selection of the four borings/monitoring well locations was based on adjacent potential source areas and the subject sites' topography. EE-1 was placed at 1618 Doolittle Drive directly downgradient of the release area from the four tanks removed by HLA and reported in June 1991. EE-2 was placed at 1616 Doolittle Drive directly downgradient of Tank #6 removed by HLA and reported in June 1991. EE-3 was placed at 1616 Doolittle Drive directly downgradient of Tank #5 removed by HLA and reported in June 1991.

All drilling equipment was steam cleaned prior to initial use and between boring locations to prevent cross-contamination. Soil borings were advanced by the rotary method using 4.25-inch inner diameter (I.D.) hollow-stem augers. A plug was inserted into the center of the hollow-stem augers to prevent soil from rising inside the auger.

No oil, grease, or any other petroleum-based products were used to lubricate augers or rods in such a manner as to contaminate the borehole. Care was taken to ensure that no oil, grease, or other lubricants leaked from the drill rig and entered the borehole.

### **3.3 SUBSURFACE SOIL SAMPLING**

After breaching with a concrete saw approximately six inches of concrete paving on the subject sites, each drilling location was hand augered to check for obstacles. During drilling, split-spoon samples were collected at a depth of 2 feet below the ground surface and at subsequent intervals (see Soil Boring/Monitoring Well Logs in Appendix A) for each of the four borings until groundwater was reached.

The split-spoon sampler was cleaned before each sample was taken. The cleaning process consisted of a detergent wash, followed by two tap water rinses, followed finally by a distilled deionized water rinse. The soil samples were visually classified and logged by both the drilling foreman and the on-site Earth Engineers geologist for soil characterization purposes. All soil samples were field screened for the presence of VOCs using a Microtip HL-200 Portable PID calibrated to an isobutylene standard in accordance with the procedures outlined in Appendix B. Selected soil samples were submitted to Shasta Analytical Laboratory for analysis.

### **3.4 MONITORING WELL INSTALLATION**

One groundwater monitoring well was installed in borehole EE-1 at 1618 Doolittle Drive. Two groundwater monitoring wells were installed in boreholes EE-2 and EE-3 at 1616 Doolittle Drive. One groundwater monitoring well was installed in borehole EE-4 at 1620 Doolittle Drive. The approximate well locations are shown on Figure 6 and were placed to detect potential contamination that may have resulted from the releases reported by HLA.

The monitoring wells were constructed of Schedule 40, 4.0-inch-diameter PVC riser pipe, attached with threaded joints to Schedule 40, 4-inch-diameter, 0.020-inch slotted PVC well screen.

To prevent possible contamination of the monitoring wells by VOCs, no glue, tape, or other solvent-containing materials were used to join pipe sections together. Clean silica filter sand was placed in the annulus of each borehole to minimize the amount of fine-grained sediment entering the monitoring wells.

A seal of bentonite clay pellets was installed above the sand filter pack to prevent the infiltration of surface water into the monitoring wells. Each monitoring well was fitted

with a flush-mounted curb box set in cement to prevent tampering and to provide protection from the elements. A locking cap was placed on each monitoring well and was locked with a 1600 dolphin lock. Details of the monitoring well construction are presented on the Soil Boring/Monitoring Well Logs included in Appendix A.

### **3.5 WELL DEVELOPMENT**

After installation, the monitoring wells were developed using a surge block and bailer. Due to the fair to good permeability of the surficial sediments at the subject sites, the monitoring wells exhibited good recharge during development activities. In general, the monitoring wells were developed until the groundwater appeared clear. Due to the stiffness of the clay at the subject sites, development was very rapid.

The purpose of well development is to restore the natural hydraulic conductivity of the formation and to remove the foreign sediment (fines) that may have been introduced into the borehole during drilling. Ideally, proper well development will yield turbid-free groundwater samples. The lithology of the screened sediment, however, will ultimately determine if clay- and/or silt-free samples can be obtained.

### **3.6 WATER LEVEL MEASUREMENTS**

All newly installed monitoring wells were measured for total depth and depth to groundwater using an electrical water level indicator and a fiberglass measuring tape. The same water level indicator and measuring tape were used for all measurements. The water level indicator and measuring tape were decontaminated before and between each well measurement using a tap water rinse, followed by a reagent-grade methanol rinse, followed finally by a distilled deionized water rinse to prevent potential cross-contamination of the monitoring wells. All well measurements were taken from the top of the PVC casing.

## 4. RESULTS OF ANALYTICAL DATA

This section presents results of the field screening program and laboratory analyses. Laboratory analytical reports from soil samples collected during the field investigation are presented in Appendix C.

### 4.1 RESULTS OF FIELD SCREENING OF SUBSURFACE SOILS FOR VOLATILE ORGANIC COMPOUNDS

All soil samples obtained during drilling were field screened for the presence of VOCs using a Microtip HL-200 with an 11.7-electron volt lamp PID calibrated to an isobutylene standard. The PID measures relative concentrations of total VOCs in the headspace of a sealed soil bag.

PID field screening of the soils collected during the drilling activities did not indicate a significant presence of total VOCs above the detection limit of the instrument (0.1 ppm, the unknown gas expressed as equivalent to the calibration gas). All soil headspace readings from soils collected at the subject sites are included in the Soil Boring/Monitoring Well Logs found in Appendix A.

A UV scope was used in the field to screen the soils for hydrocarbons. The color of the effervescence gives an indication of the type of hydrocarbons present. UV information is shown on the Soil Boring/Monitoring Well Logs in Appendix A.

### 4.2 SOIL ANALYSES

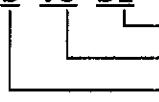
Soil samples were collected from depths of 5, 10, and 15 feet from all wells. The laboratory analytical reports are included in Appendix C and are summarized in Table 1.

TABLE 1. ANALYTICAL RESULTS OF SOIL SAMPLING, 1616-1618-1620  
DOOLITTLE DRIVE, SAN LEANDRO, CALIFORNIA

Sample ID	TPHd (ppm)	TPHg (ppm)	Ben (ppb)	Tol (ppb)	Eth (ppb)	Xyl (ppb)
S-5-MW1	N.D.	0.29	N.D.	N.D.	N.D.	N.D.
S-10-MW1	190	^N.D.	^N.D.	^N.D.	^N.D.	^N.D.
S-15-MW1	N.D.	0.9	N.D.	N.D.	N.D.	N.D.
S-5-MW2	* N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
S-10-MW2	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
S-5-MW3	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
S-10-MW3	# N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
S-5-MW4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
S-10-MW4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

\* Sample shows peaks in the volatile range of diesel at 13ppm  
# Sample shows peaks in the volatile range of diesel at 7.6ppm  
^ Sample detection limit is higher than usual

TPHd = Total Petroleum Hydrocarbons as diesel by 8015 Mod.  
TPHg = Total Petroleum Hydrocarbons as gasoline by 8015 Mod.  
Ben = Benzene by Method 8020  
Tol = Toluene by Method 8020  
Eth = Ethylbenzene by Method 8020  
Xyl = Xylenes by Method 8020  
ppm = parts per million  
ppb = parts per billion  
N.D. = below the reporting limits of the analysis  
N.T. = not tested  
Sample designation = S-.5-S1


 Sample location  
 Sample depth in feet  
 S=Soil sample, W=Water sample

## 5. QUALITY ASSURANCE/QUALITY CONTROL

This section provides information on sampling and analytical methodologies, sample documentation, and site-specific sample quality assurance procedures.

Samples were collected as described below.

At each location, concrete was cored and removed prior to commencing drilling operations. The soil was hand augered to a depth of 2 feet and inspected for obstacles. A 4.25-inch I.D. hollow stem auger on a diesel-powered drilling rig was advanced to a desired depth, and soil samples were retrieved from specific depth intervals using a split-spoon sampler. After sampling, the hollow stem auger was advanced approximately 5 feet at each location.

All samples were placed on ice immediately after collection and were delivered to the laboratory.

Chain-of-custody protocol was maintained from sample collection to delivery to the laboratory. Field information was recorded in a bound field notebook and/or sampling log sheets. Full documentation was made as to the location and depth of all samples collected. Each sample was labeled with Earth Engineers project number, the sample location and depth interval, the date and time, the initials of the sampler, and the requested analysis.

## 6. SUMMARY OF FINDINGS, OPINIONS, AND RECOMMENDATIONS

The following is a summary of Earth Engineers findings, opinions, and recommendations, based on the limited subsurface investigation:

- Soil on the subject sites contains TPHd at 190 ppm.
- The groundwater flow direction is suspected to be west toward the San Francisco Bay. Further studies will determine actual groundwater direction and gradient.

In summary:

- The level of contamination in this soil does not warrant further excavation.

Earth Engineers recommends:

- Pressure transit analysis be conducted to determine the storativity and transmissivity of the groundwater bearing sediments at the subject sites.
- All wells on the subject sites be monitored for TPHg with BTEX, and TPHd, on a quarterly basis until closure is obtained.
- A cost-based analysis be performed to determine the most economical method to obtain closure of the subject sites.

The research presented herein constitutes a sufficient basis for the above conclusion.

## LIMITATIONS

All the findings set forth in this Well Installation and Limited Subsurface Soil Chemistry Testing report are strictly limited in time and scope to the date of the evaluation(s). The conclusions presented in this report are limited by the time and budget constraints imposed by the client and are based solely on the services described in this report, and not on scientific tasks or procedures beyond the agreed-upon Statement of Work.

This Well Installation and Limited Subsurface Soil Chemistry Testing report may contain recommendations that are partially based on the analysis of data accumulated through subsurface exploration. However, further investigations may reveal additional data or variations from the current data that may require the recommendations to be reevaluated.

Limited chemical analyses were performed during the course of this site assessment. No further conjecture can be made regarding soil contamination other than from analytical data obtained from specific locations on the subject sites.

Some of the findings of this investigation are based on data provided by others. No warranty is expressed or implied with the usage of such data.

This report was prepared in accordance with generally accepted standards of environmental geological practice at the time the investigation was performed. This investigation was conducted solely as a tool in evaluating environmental conditions of the soil with respect to contamination at the subject sites. No soil engineering or geotechnical recommendations are implied or should be inferred. Evaluation of the geologic conditions at the subject sites for the purpose of this investigation is made from a limited number of observation points. Subsurface conditions may vary away from the data points available. Additional work, including further subsurface investigation, can reduce the inherent uncertainties associated with this type of investigation.

#### SERVICE CONSTRAINTS

Much of the information provided in this report is based upon personal interviews and research of available documents, records, and maps held by the appropriate government and private agencies. The report is therefore subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollection of those persons contacted.

The initial site investigation took into account the natural and manmade features of the subject sites, including any unusual or suspect phenomena. These factors, combined with the subject sites' geology, hydrology, topography, and past and present land uses, served as a basis for conclusions and recommendations.

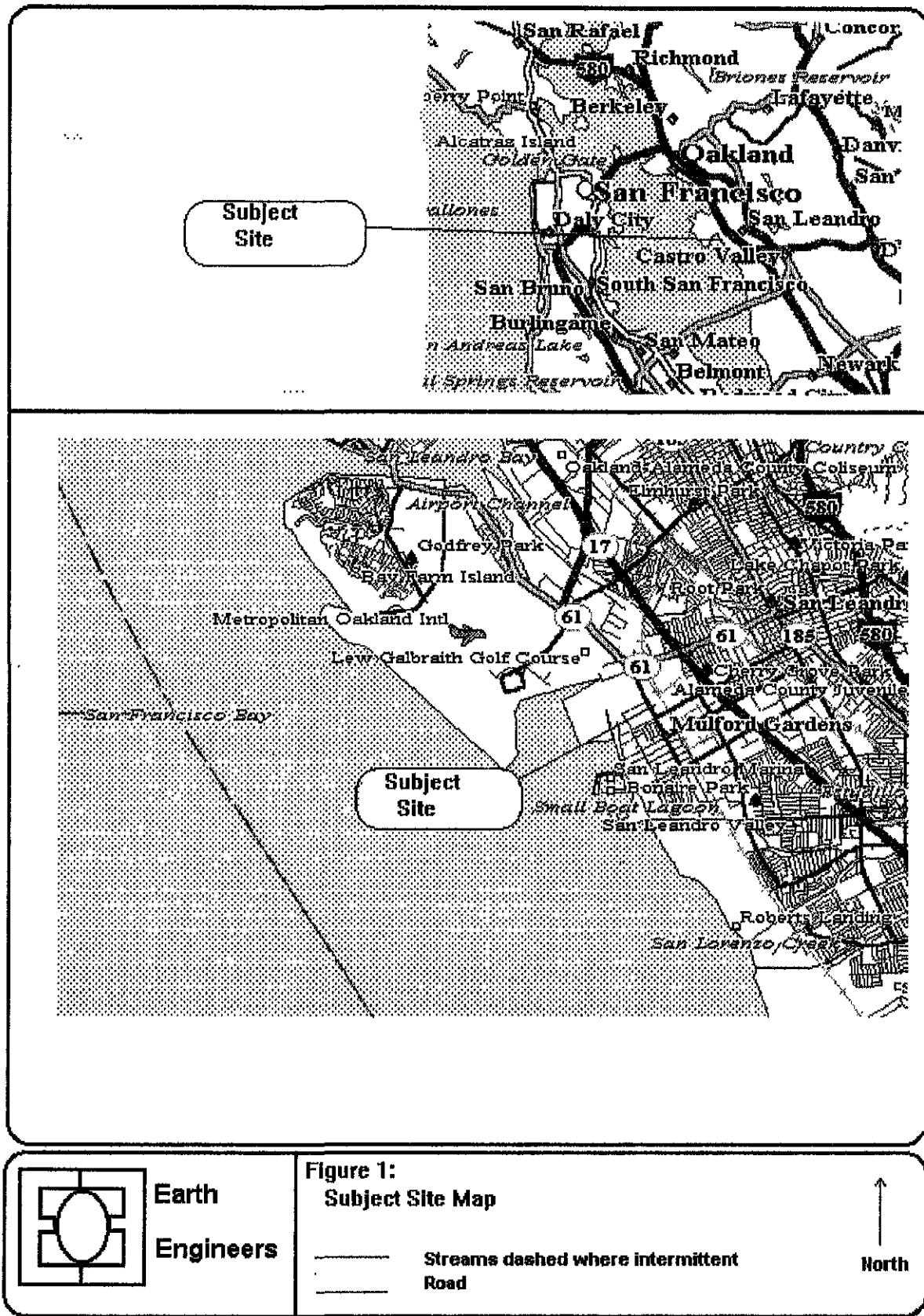
The presence of radioactive materials and biological hazards was not investigated.

## 7. REFERENCES

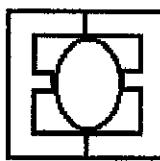
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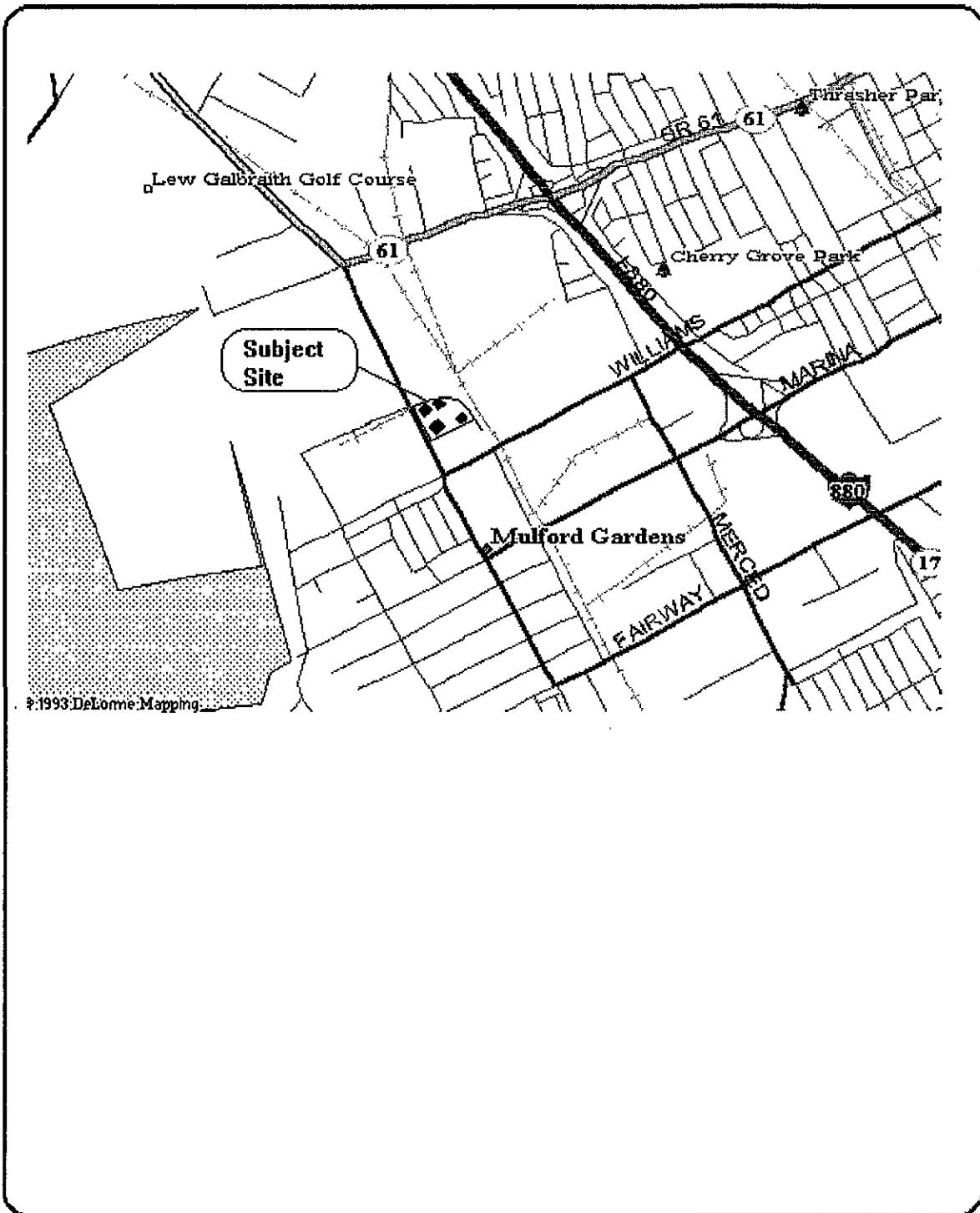
## FIGURES

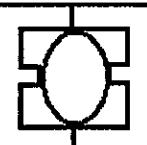


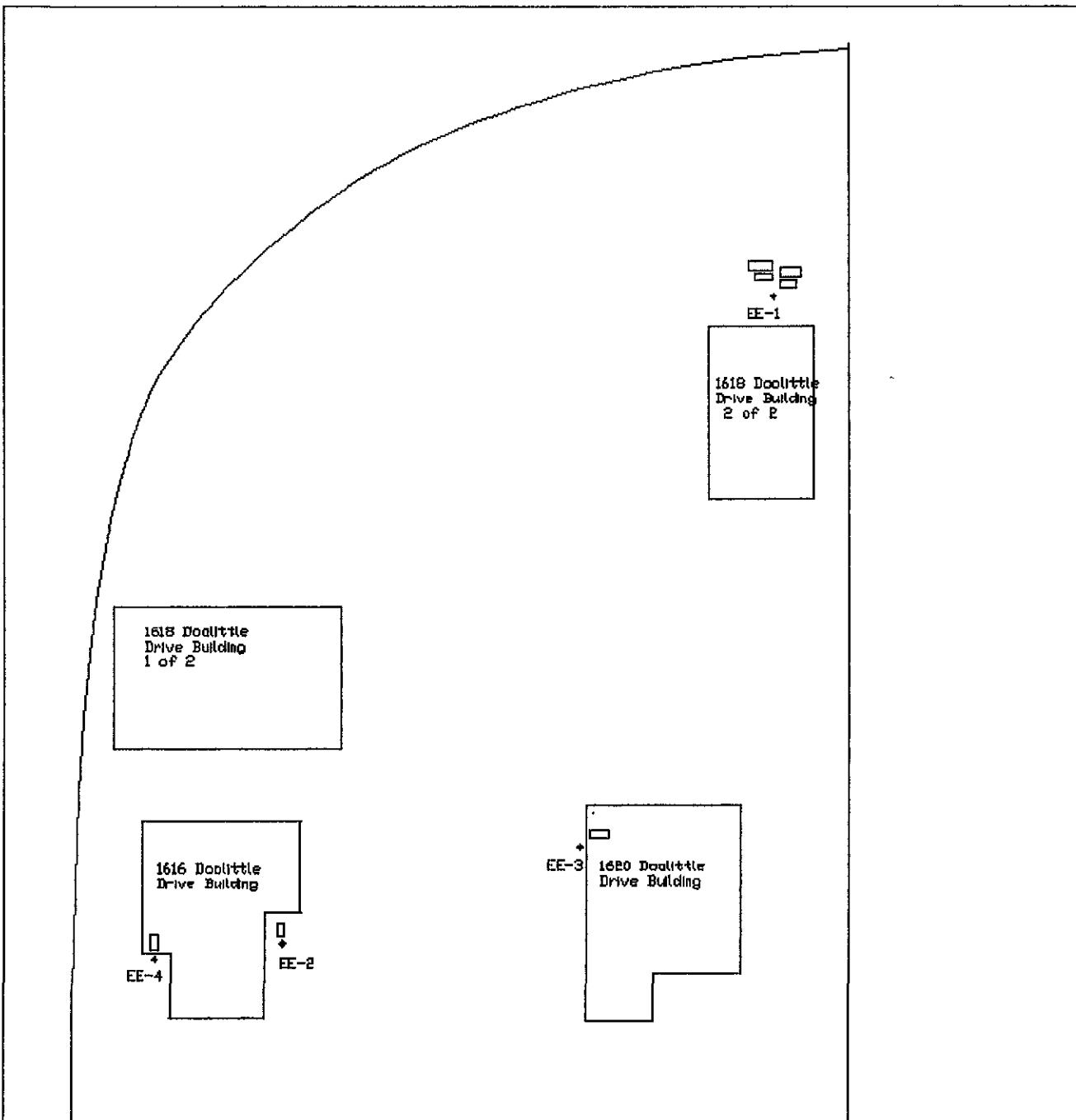
**Figure 1:**  
Subject Site Map



**Earth  
Engineers**

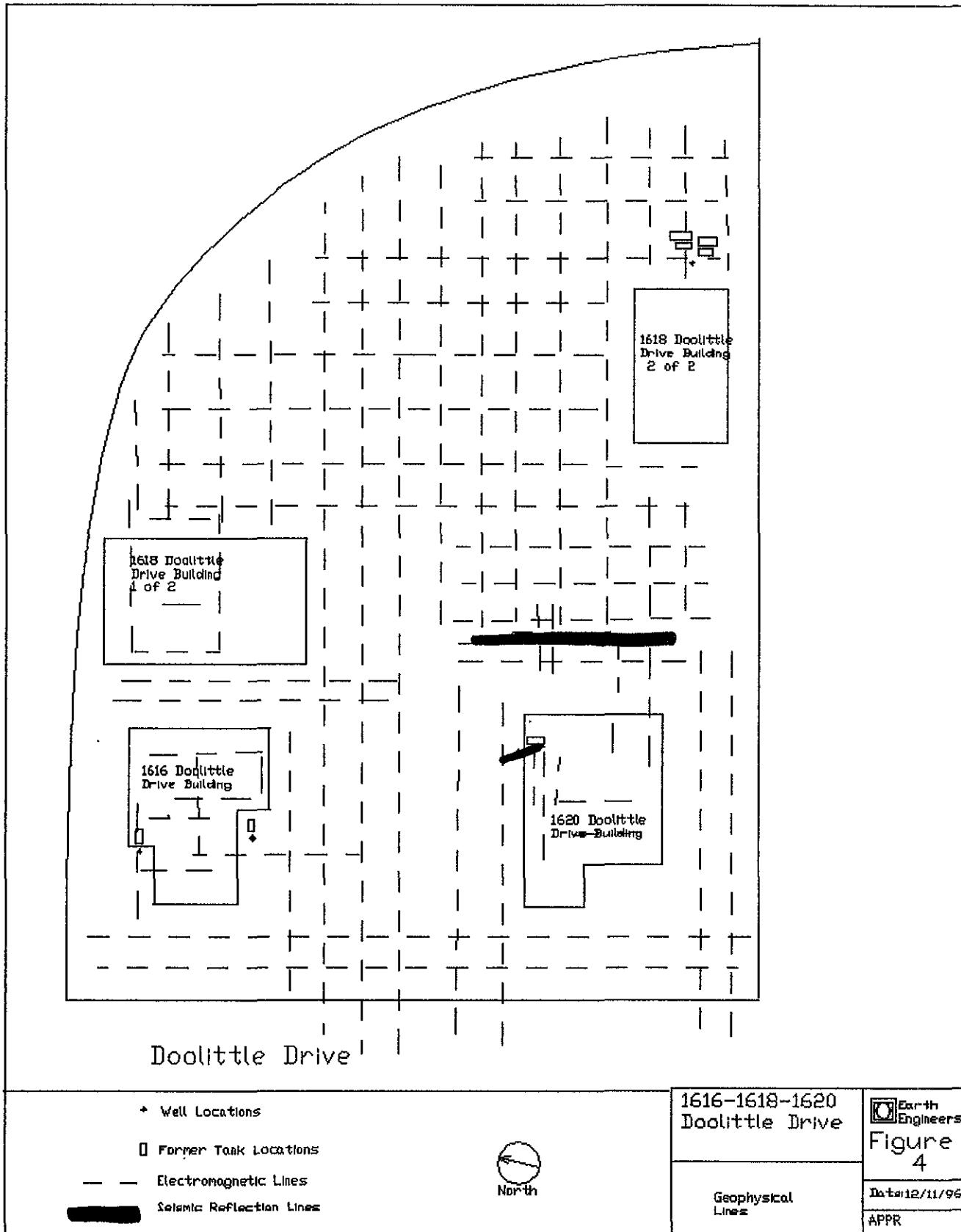


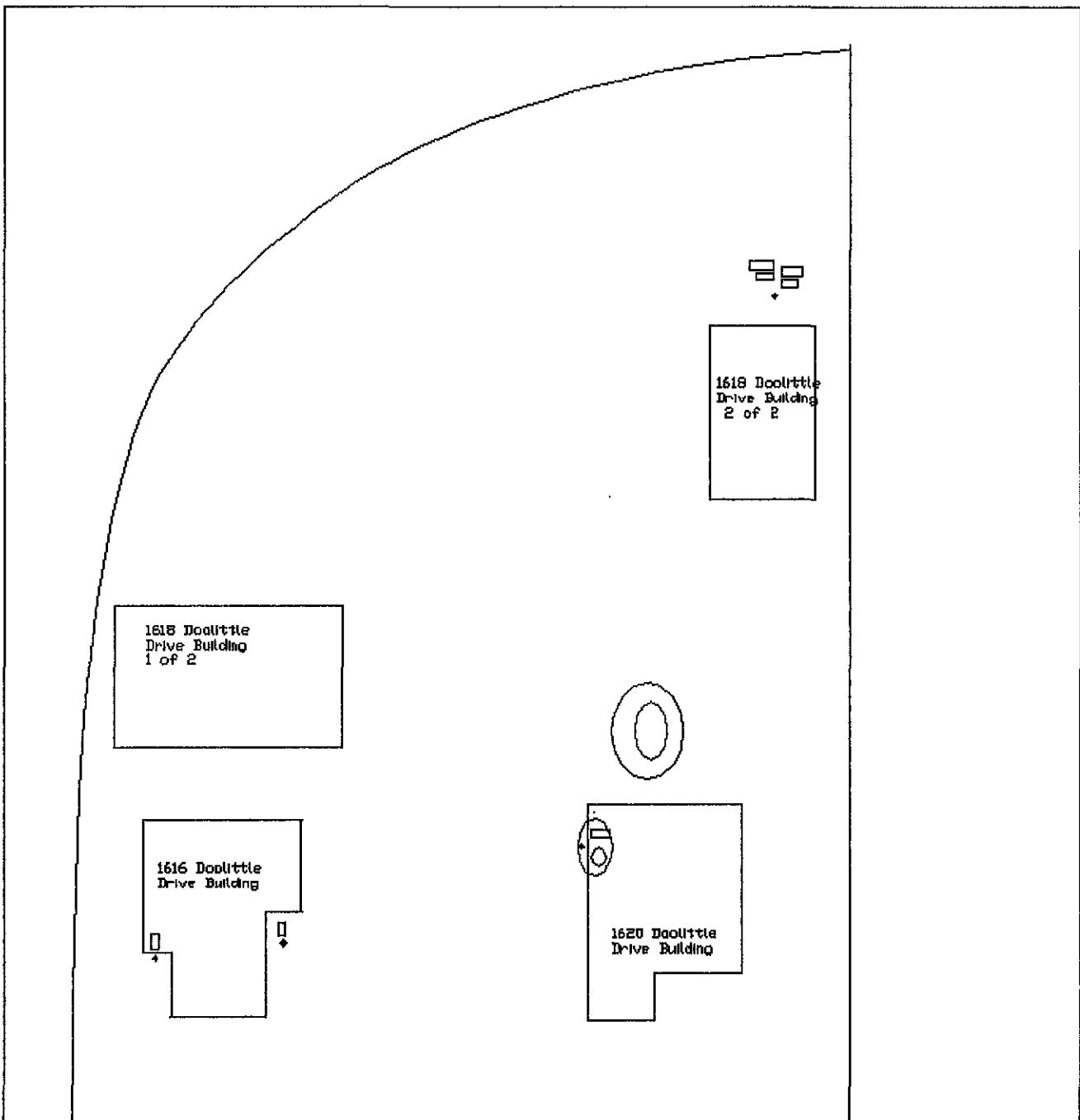
 Earth Engineers	<b>Figure 2:</b> Neighborhood Map	<p>Streams dashed where intermittent Road</p> <p>↑ North</p>
---	--------------------------------------	--



## Doolittle Drive

* Monitoring Well Locations	North	1616-1618-1620 Doolittle Drive	Earth Engineers
□ Former Tank Locations		Monitoring Well Locations	Figure 3
			Date 12/11/96
			APPR





## Doolittle Drive

- Vell Locations
- Former Tank Locations
- Magnetic Anomalies 1000 mHz contours



1616-1618-1620  
Doolittle Drive

Anomalies from  
Electromagnetic  
Data

Earth  
Engineers  
**Figure  
5**

Date: 12/11/96

APPR

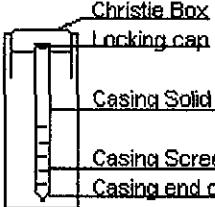
**APPENDIX A**  
**SOIL BORING/MONITORING WELL LOGS**  
**AND PERMITS**

## Unified Soil Classification System

<b>COARSE GRAINED SOILS</b> <b>&lt;60% passes #200 sieve</b>	<b>GRAVELS</b> <b>&lt;60% coarse fraction passes #4 sieve</b>	Gravels Little or no fines	GW	Well-graded gravels, gravel-sand mixtures, little fines
		Gravels with > 12 % fines	GP	Poorly-graded gravels, gravel-sands mixtures, little fines
		Silts & Clays	GM	Silty gravels, poorly graded gravel-sand-silt mixture
		Sands Little or no fines	GC	Clayey gravels, poorly graded gravel-sand-clay mixture
	<b>SANDS</b> <b>&gt;50% coarse fraction passes #4 sieve</b>	Sands with > 12 % fines	SW	Well-graded sands, gravelly sands, little or no fines
		Sands Little or no fines	SP	Poorly-graded sands, gravelly sands, little or no fines
		Sands with > 12 % fines	SM	Silty sands, poorly graded sand-gravel-silt mixture
		Sands with > 12 % fines	SC	Clayey sands, poorly graded sand-gravel-clay mixture
	<b>FINE GRAINED SOILS</b> <b>&gt;50% passes #200 sieve</b>	<b>SILTS &amp; CLAYS</b> <b>Liquid Limit &lt; 50</b>	ML	Inorganic silt & very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
			CL	Inorganic clays with low or medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts & clays with low plasticity
		<b>SILTS &amp; CLAYS</b> <b>Liquid Limit &gt; 50</b>	MH	Inorganic silts, micaceous or diatomaceous fine sand / silt
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic silts & clays of medium to high plasticity
<b>Highly Organic Soils</b>		PT	Peat, humus, swamp soils with high organic content	

### KEY to LOG SYMBOLS

- Water first encountered
- Water after stabilization
- Soil sample driven
- Soil sample analyzed
- Sample attempted no recovery

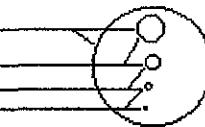


<b>Bentonite</b>
<b>Neat Cement</b>
<b>Sand Pack</b>
<b>Asphalt or Concrete</b>

<b>Modifiers</b>
Trace <5%
Some 5-12%
With >12%

**Grain Size**

Gravel	Coarse	Thumb to fist size
	Fine	Pea to Thumb size
Sand	Coarse	Rock salt to pea size
	Medium	Sugar to Rock salt
	Fine	Sugar to flour size
	Slits & Clay	Flour size and smaller



Coarse grain Apparent density	Cal. Mod blows/ft	Call Samp blows/ft	SPT blows/ft	Relative Density	Field Test
Very Loose	<4	<4	<5	0-15	Easily penetrated with 1/2 rod
Loose	5-12	5-15	4-10	15-30	Difficult to penetrate with 1/2" rod
Medium Dense	12-35	15-40	10-30	35-65	Easily to drive 1/2" rod with hammer
Dense	35-60	40-70	30-50	65-85	Difficult to drive 1/2" rod with hammer
Very Dense	<60	<70	<50	85-100	Penetrates only 2" max with 1/2 rod
<b>FINE GRAIN SOIL</b>					
Very Soft	<2	<2	<2	Exudes between fingers when squeezed	
Soft	2-5	2-5	2-4	Easily penetrated one inch by thumb	
Med Stiff	5-10	5-15	4-8	Penetrated over 1/2" by thumb moderate effort	
Stiff	10-30	15-35	8-15	Penetrate 1/2" by thumb great effort	
Very Stiff	30-45	35-50	15-30	Readily indented by thumbnail	
Hard	>45	>50	>30	Indented by thumbnail with difficulty	



Earth  
Engineers

1618 Doolittle  
San Leandro, CA

Drilling Co. Bayland Drilling  
Driller Kurt Smith  
EE Geologist R. Mark Armstrong

Drilling Method Hollow Stem Auger  
Hole Diameter 10 Inch  
Total Depth 15 Feet  
Sampling Method California Mod  
Hammer (lbs/fall) 140/1.5

Boring No. EE-1  
Sheet 1 of 1  
Date Drilled 10-17-96

Casing Size 2 inch  
Screen length 10 feet  
Screen Slot 020  
Filter Pack 2-12 sand  
Bentonite chip to four feet

Recovery	Sample Depth	Blows 6/in	Time	Moisture Content	Odor	PPM	Depth	Description	Well Conet
							0	Asphalt	
							1		
				Dry	0	2			
							3		
							4		
80	5	2/3/4	10:45	Dry	0	5			
							6		
							7		
							8		
							9		
80	10	3/2/3	10:55	Moist	10	10		ML Clay Silt, low organic content, with sands, tannish brown, dry, soft	
							11		
							12		
							13		
							14		
80	15	2/3/4	11:00	Wet	0	15		ML Clay Silt, low organic content, with sands, wet, soft, odor, Stained	
							16		
							17		
							18		
							19		
							20		
								Total Depth	



**Earth  
Engineers**

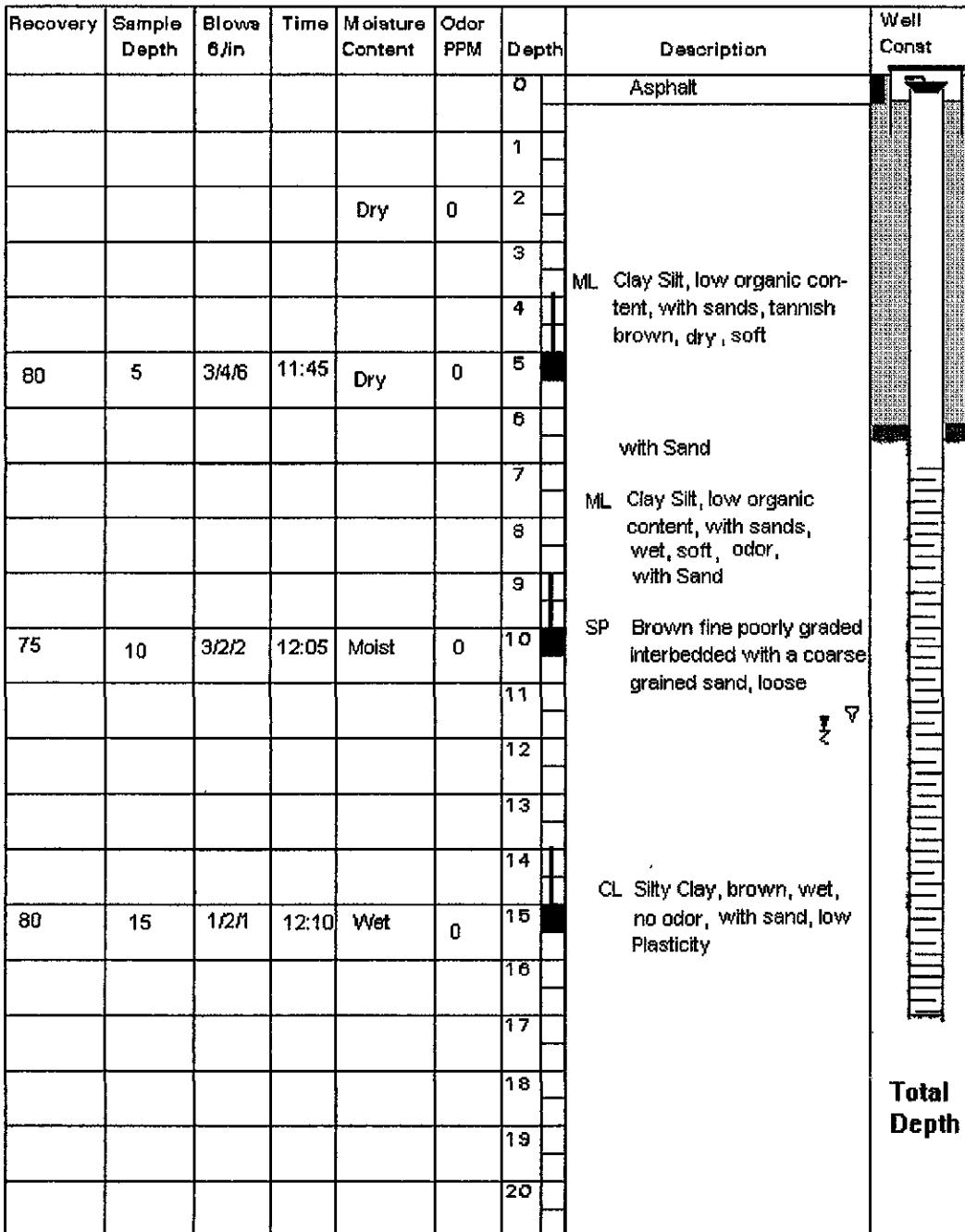
1616 Doolittle  
San Leandro, CA

Drilling Co. Bayland Drilling  
Driller Kurt Smith  
EE Geologist R. Mark Armstrong

Drilling Method Hollow Stem Auger  
Hole Diameter 10 Inch  
Total Depth 15 Feet  
Sampling Method California Mod  
Hammer (lbs/fall) 140/1.5

Boring No. EE-2  
Sheet 1 of 1  
Date Drilled 10-17-96

Casing Size 2 inch  
Screen length 10 feet  
Screen Slot 020  
Filter Pack 2-12 sand  
Bentonite chip to four feet





**Earth  
Engineers**

1620 Doolittle  
San Leandro, CA

Drilling Co. Bayland Drilling  
Driller Kurt Smith  
EE Geologist R. Mark Armstrong

Drilling Method Hollow Stem Auger  
Hole Diameter 10 Inch  
Total Depth 15 Feet  
Sampling Method California Mod  
Hammer (lba/fall) 140/1.5

Boring No. **EE-3**  
Sheet 1 of 1  
Date Drilled 10-17-96

Casing Size 2 inch  
Screen length 10 feet  
Screen Slot 020  
Filter Pack 2-12 sand  
Bentonite chip to four feet

Recovery	Sample Depth	Blows 6/in	Time	Moisture Content	Odor PPM	Depth	Description	Well Conat
						0	Concrete	
						1		
						2		
						3		
						4	ML Clay Silt, low organic content, with sands, tannish brown, dry , soft	
80	5	3/4/6	2:00	Dry	0	5		
						6		
						7		
						8		
						9		
75	10	2/2/3	2:10	Moist	0	10		
						11		
						12		
						13		
						14		
80	15	2/2/2	2:20	Wet	0	15	CL Silty Clay, brown, wet, no odor, with sand, low Plasticity	
						16		
						17		
						18		
						19		
						20		
							Total Depth	



Earth  
Engineers

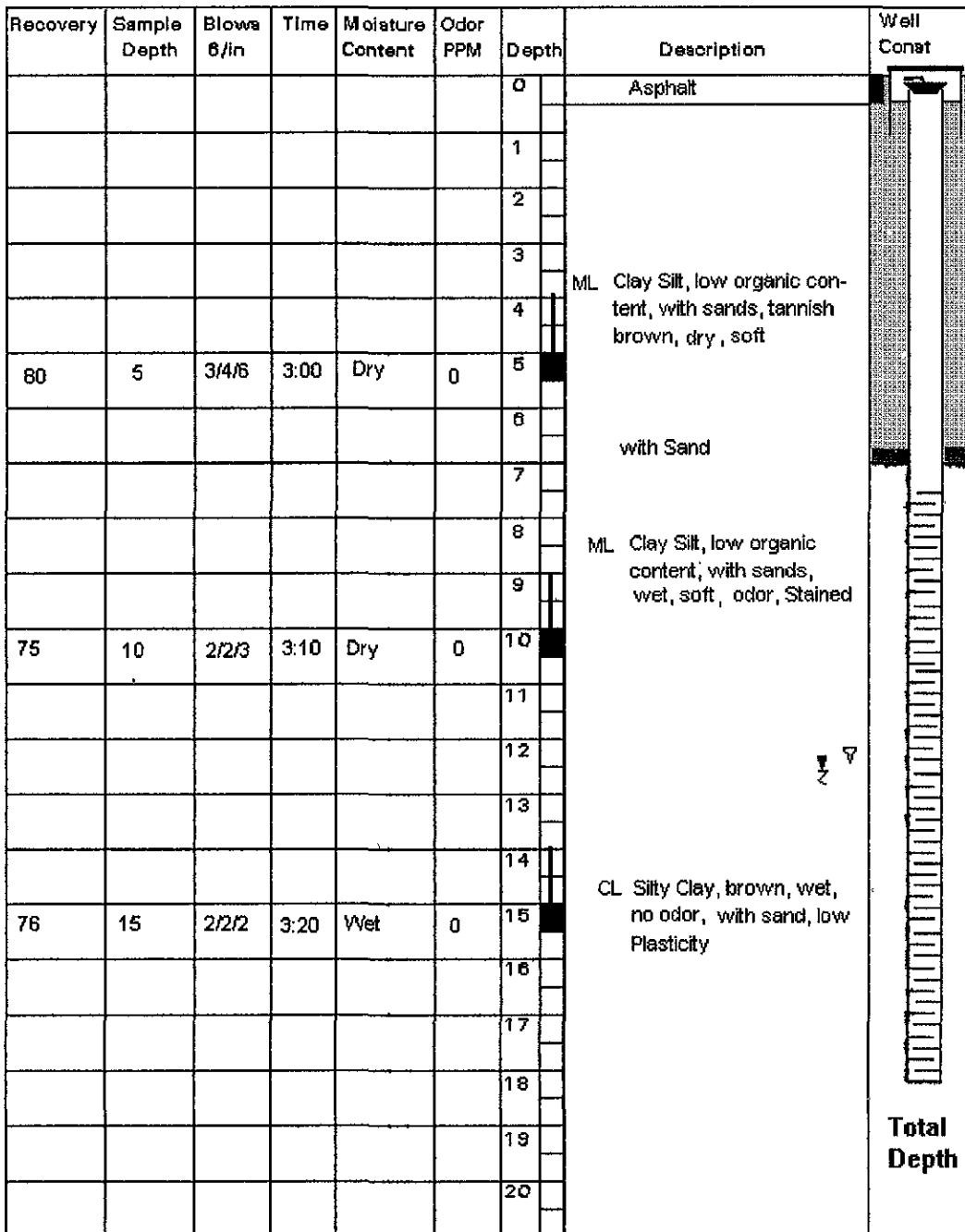
1616 Doolittle  
San Leandro, CA

Drilling Co. Bayland Drilling  
Driller Kurt Smith  
EE Geologist R. Mark Armstrong

Drilling Method Hollow Stem Auger  
Hole Diameter 10 inch  
Total Depth 15 Feet  
Sampling Method California Mod  
Hammer (lbs/fall) 140/1.5

Boring No. EE-4  
Sheet 1 of 1  
Date Drilled 10-17-96

Casing Size 2 inch  
Screen length 10 feet  
Screen Slot .020  
Filter Pack 2-12 sand  
Bentonite chip to four feet





## ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2800

FAX (510) 482-8914

## DRILLING PERMIT APPLICATION

## FOR APPLICANT TO COMPLETE

## FOR OFFICE USE

LOCATION OF PROJECT 1616-1618-1620 Doolittle, PERMIT NUMBER 96740  
San Leandro, California LOCATION NUMBER \_\_\_\_\_

## CLIENT

Name Dalziel Trusts  
Address 490 2nd St #300 City (415) 284-9271  
City San Francisco, CA Zip 94107

## PERMIT CONDITIONS

Circled Permit Requirements Apply

## APPLICANT

Name Earth Engineers  
Fax (800) 692-0787  
Address P.O. Box 640 Voice (800) 692-0787  
City Millbrae, CA Zip 94030

## TYPE OF PROJECT

Well Construction	Geotechnical Investigation
Cathodic Protection	General
Water Supply	Contamination
Monitoring	Well Destruction

## PROPOSED WATER SUPPLY WELL USE

Domestic	Industrial	Other
Municipal	Irrigation	_____

## DRILLING METHOD:

Mud Rotary	Air Rotary	Auger	<input checked="" type="checkbox"/>
Cable	Other	_____	_____

## DRILLER'S LICENSE NO.

374152

## WELL PROJECTS

Drill Hole Diameter	<u>8</u>	In.	Maximum
Casing Diameter	<u>2</u>	In.	Depth
Surface Seal Depth	<u>5</u>	ft.	Number

8 ft.  
20 ft.  
4

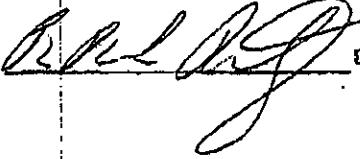
## GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum
Hole Diameter	_____	Depth

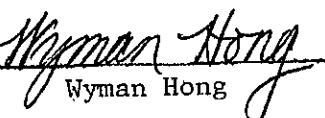
in.  
ft.

ESTIMATED STARTING DATE 10/12/96ESTIMATED COMPLETION DATE 10/12/96

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Date 9/25/96

Approved

  
Wyman Hong  
Date 9 Oct 96

61502

**APPENDIX B**

**FIELD SCREENING PROCEDURES**

## **FIELD INVESTIGATION PROCEDURES OF EARTH ENGINEERS**

### **Soil Sample Collection, Subjective Analysis, and Classification**

Soil samples were collected from each of the borings at intervals of 5 feet or less in depth from the ground surface to the total depth of the boring. The samples were collected using a California-modified, split-spoon sampler containing three 6-inch-long brass sleeves. Samples were collected by advancing the boring to a point immediately above the sampling depth and then driving the sampler through the hollow center of the auger and into the soil. The sampler was driven 18 inches with a hydraulic hammer repeatedly pounding the top of the rod attached to the sampler. The number of blows needed to drive the sampler each 6-inch increment was counted and recorded to evaluate the relative consistency of the soil.

After recovery of the sampler, the soil samples were removed, and one 6-inch sample was promptly sealed in its brass sleeve with aluminum foil, plastic caps, and tape. The sample was then labeled and placed in iced storage, pending transport to a laboratory certified by the State of California to undergo the required testing. A Chain of Custody Record for each sample was initiated by the field geologist and is included in Appendix C. For the soil sample from each interval, a second sleeve was used to describe the sample. Any product discoloration was noted by the field geologist on the Boring Log. A Photoionization Detector (PID) was used to evaluate the organic vapor concentrations present in the soil samples. Readings were collected by placing the rubber cup skirting the intake probe flush against the end of the soil sample immediately after the sleeve was removed from the sampler. The soil in the second sleeve was then placed in a plastic bag and the head space tested with the PID. Measurements from instruments such as a PID can be used to indicate relative organic vapor concentrations in soil but cannot be used to measure the level of hydrocarbon compounds with the confidence of laboratory analytical methods.

The Unified Soil Classification System was used to identify the soil encountered in the boreholes. A copy of this classification system was on-site and is included in Appendix A. Descriptions of the soil encountered in the boring are presented on the Logs of Borings. The PID readings are shown on the Logs of Borings in the column labeled "Odor."

Prior to reusing the California-modified, split-spoon sampler, the sampler was washed and triple rinsed. All equipment used on-site that may have come into contact with hydrocarbon contamination was steam cleaned before the equipment left the subject sites or entered a new boring.

APPENDIX C

LABORATORY ANALYTICAL REPORTS



# Shasta Analytical Laboratory

Client Earth Engineers  
Attention Mark Armstrong  
Address P.O. Box 1051  
Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

Source: N/A  
Lab. No.: 961226  
Sample I.D.: S-5-MW1  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1045  
Date Received: 10/18/96  
Date Extracted: 10/23/96  
Date Analyzed: 10/24 - 10/25/96

Parameter	Results	Reporting Limit	Units	Method
Diesel	ND	1.0	mg/Kg	8015 Mod.

Verified: Lynn Brown  
Laboratory Manager



# Shasta Analytical Laboratory

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961227  
Sample I.D.: S-10-MW1  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1055  
Date Received: 10/18/96  
Date Extracted: 10/23/96  
Date Analyzed: 10/24 - 10/25/96

---

Parameter	Results	Reporting Limit	Units	Method
Diesel	190	10	mg/Kg	8015 Mod.

Verified: Taylor Puckett  
Laboratory Manager



# Shasta Analytical Laboratory

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961228  
Sample I.D.: S-15-MW1  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1100  
Date Received: 10/18/96  
Date Extracted: 10/23/96  
Date Analyzed: 10/24 - 10/25/96

---

Parameter	Results	Reporting Limit	Units	Method
Diesel	ND	1.0	mg/Kg	8015 Mod.

Verified: Signature  
Laboratory Manager



# Shasta Analytical Laboratory

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961229  
Sample I.D.: S-5-MW2  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1145  
Date Received: 10/18/96  
Date Extracted: 10/23/96  
Date Analyzed: 10/24 - 10/25/96

---

Parameter	Results	Reporting Limit	Units	Method
Diesel	ND *	1.0	mg/Kg	8015 Mod.

\* Sample contains an unidentifiable pattern of peaks in the volatility range of diesel at an approximate concentration of 13 mg/Kg.

Verified: Mark Armstrong  
Laboratory Manager



# Shasta Analytical Laboratory

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961230  
Sample I.D.: S-10-MW2  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1205  
Date Received: 10/18/96  
Date Extracted: 10/23/96  
Date Analyzed: 10/24 - 10/25/96

---

Parameter	Results	Reporting Limit	Units	Method
Diesel	ND	1.0	mg/Kg	8015 Mod.

Verified: Terry Rehm  
                         Laboratory Manager



## Shasta Analytical Laboratory

Client                   Earth Engineers  
Attention              Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961231  
Sample I.D.: S-5-MW3  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1400  
Date Received: 10/18/96  
Date Extracted: 10/23/96  
Date Analyzed: 10/24 - 10/25/96

---

Parameter	Results	Reporting Limit	Units	Method
Diesel	ND	1.0	mg/Kg	8015 Mod.

Verified: Mark Armstrong  
Laboratory Manager



# Shasta Analytical Laboratory

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961232  
Sample I.D.: S-10-MW3  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1410  
Date Received: 10/18/96  
Date Extracted: 10/23/96  
Date Analyzed: 10/24 - 10/25/96

---

Parameter	Results	Reporting Limit	Units	Method
Diesel	ND *	1.0	mg/Kg	8015 Mod.

\* Sample contains an unidentifiable pattern of peaks in the volatility range of diesel at an approximate concentration of 7.6 mg/Kg.

Verified: Lynn Piven  
Laboratory Manager

**Shasta Analytical Laboratory**

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961233  
Sample I.D.: S-5-MW4  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1500  
Date Received: 10/18/96  
Date Extracted: 10/24/96  
Date Analyzed: 10/24 - 10/25/96

---

Parameter	Results	Reporting Limit	Units	Method
Diesel	ND	1.0	mg/Kg	8015 Mod.

Verified: John L. Larson  
Laboratory Manager



# Shasta Analytical Laboratory

Client Earth Engineers  
Attention Mark Armstrong  
Address P.O. Box 1051  
Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961234  
Sample I.D.: S-10-MW4  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1510  
Date Received: 10/18/96  
Date Extracted: 10/24/96  
Date Analyzed: 10/24 - 10/25/96

---

Parameter	Results	Reporting Limit	Units	Method
Diesel	ND	1.0	mg/Kg	8015 Mod.

Verified:

Lynn Purvis  
Laboratory Manager

**Shasta Analytical Laboratory**

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961226  
Sample I.D.: S-5-MW1  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1045  
Date Received: 10/18/96  
Date Extracted: N/A  
Date Analyzed: 10/23 - 10/24/96

---

Parameter	Results	Reporting Limit	Units	Method
Volatile Aromatics:				8020
Benzene	ND	0.5	ug/Kg	
Toluene	ND	0.5	ug/Kg	
Ethylbenzene	ND	0.5	ug/Kg	
Xylenes	ND	1.0	ug/Kg	
Surrogate Recovery:				
TFT	108%			
Gasoline	0.29	0.05	mg/Kg	8015 Mod.
Surrogate Recovery:				
TFT	112%			

Verified: Jay... P. ...  
Laboratory Manager

**Shasta Analytical Laboratory**

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961227  
Sample I.D.: S-10-MW1  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1055  
Date Received: 10/18/96  
Date Extracted: N/A  
Date Analyzed: 10/23 - 10/24/96

---

Parameter	Results	Reporting Limit	Units	Method
Volatile Aromatics:				8020
Benzene	ND	625 *	ug/Kg	
Toluene	ND	6250 *	ug/Kg	
Ethylbenzene	ND	6250 *	ug/Kg	
Xylenes	ND	6250 *	ug/Kg	
Surrogate Recovery:				
TFT	111%			
Gasoline	ND	12.5 *	mg/Kg	8015 Mod.
Surrogate Recovery:				
TFT	105%			

\* Higher detection limit than usual due to diesel present in the sample.

Verified: Jayson Kinnison  
Laboratory Manager



# Shasta Analytical Laboratory

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961228  
Sample I.D.: S-15-MW1  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1100  
Date Received: 10/18/96  
Date Extracted: N/A  
Date Analyzed: 10/23 - 10/24/96

---

Parameter	Results	Reporting Limit	Units	Method
Volatile Aromatics:				8020
Benzene	0.9	0.5	ug/Kg	
Toluene	ND	0.5	ug/Kg	
Ethylbenzene	ND	0.5	ug/Kg	
Xylenes	ND	1.0	ug/Kg	
Surrogate Recovery:				
TFT	102%			
Gasoline	ND	0.05	mg/Kg	8015 Mod.
Surrogate Recovery:				
TFT	100%			

Verified: John L. Larson  
Laboratory Manager



# Shasta Analytical Laboratory

Client Earth Engineers  
Attention Mark Armstrong  
Address P.O. Box 1051  
Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961229  
Sample I.D.: S-5-MW2  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1145  
Date Received: 10/18/96  
Date Extracted: N/A  
Date Analyzed: 10/23 - 10/24/96

---

Parameter	Results	Reporting Limit	Units	Method
Volatile Aromatics:				8020
Benzene	ND	0.5	ug/Kg	
Toluene	ND	0.5	ug/Kg	
Ethylbenzene	ND	0.5	ug/Kg	
Xylenes	ND	1.0	ug/Kg	
Surrogate Recovery:				
TFT	109%			
Gasoline	ND	0.05	mg/Kg	8015 Mod.
Surrogate Recovery:				
TFT	102%			

Verified:                     
Laboratory Manager

**Shasta Analytical Laboratory**

Client            Earth Engineers  
Attention        Mark Armstrong  
Address         P.O. Box 1051  
                  Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961230  
Sample I.D.: S-10-MW2  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1205  
Date Received: 10/18/96  
Date Extracted: N/A  
Date Analyzed: 10/23 - 10/24/96

---

Parameter	Results	Reporting Limit	Units	Method
Volatile Aromatics:				8020
Benzene	ND	0.5	ug/Kg	
Toluene	ND	0.5	ug/Kg	
Ethylbenzene	ND	0.5	ug/Kg	
Xylenes	ND	1.0	ug/Kg	
Surrogate Recovery:				
TFT	109%			
Gasoline	ND	0.05	mg/Kg	8015 Mod.
Surrogate Recovery:				
TFT	101%			

Verified: Lynn Parcell  
Laboratory Manager



# Shasta Analytical Laboratory

Client Earth Engineers  
Attention Mark Armstrong  
Address P.O. Box 1051  
Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961231  
Sample I.D.: S-5-MW3  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1400  
Date Received: 10/18/96  
Date Extracted: N/A  
Date Analyzed: 10/23 - 10/24/96

---

Parameter	Results	Reporting Limit	Units	Method
Volatile Aromatics:				8020
Benzene	ND	0.5	ug/Kg	
Toluene	ND	0.5	ug/Kg	
Ethylbenzene	ND	0.5	ug/Kg	
Xylenes	ND	1.0	ug/Kg	
Surrogate Recovery:				
TFT	107%			
Gasoline	ND	0.05	mg/Kg	8015 Mod.
Surrogate Recovery:				
TFT	95%			

Verified: Mark Armstrong  
Laboratory Manager



# Shasta Analytical Laboratory

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961232  
Sample I.D.: S-10-MW3  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1410  
Date Received: 10/18/96  
Date Extracted: N/A  
Date Analyzed: 10/24/96

---

Parameter	Results	Reporting Limit	Units	Method
Volatile Aromatics:				8020
Benzene	ND	0.5	ug/Kg	
Toluene	ND	0.5	ug/Kg	
Ethylbenzene	ND	0.5	ug/Kg	
Xylenes	ND	1.0	ug/Kg	
Surrogate Recovery:				
TFT	107%			
Gasoline	ND	0.05	mg/Kg	8015 Mod.
Surrogate Recovery:				
TFT	101%			

Verified: Laura Pearson  
Laboratory Manager



**Shasta Analytical Laboratory**

Client                   Earth Engineers  
Attention               Mark Armstrong  
Address               P.O. Box 1051  
                         Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961233  
Sample I.D.: S-5-MW4  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1500  
Date Received: 10/18/96  
Date Extracted: N/A  
Date Analyzed: 10/24/96

---

Parameter	Results	Reporting Limit	Units	Method
Volatile Aromatics:				8020
Benzene	ND	0.5	ug/Kg	
Toluene	ND	0.5	ug/Kg	
Ethylbenzene	ND	0.5	ug/Kg	
Xylenes	ND	1.0	ug/Kg	
Surrogate Recovery:				
TFT	110%			
Gasoline	ND	0.05	mg/Kg	8015 Mod.
Surrogate Recovery:				
TFT	101%			

Verified: Steve Lewis  
Laboratory Manager



# Shasta Analytical Laboratory

Client Earth Engineers  
Attention Mark Armstrong  
Address P.O. Box 1051  
Alturas, CA 96101

Date Reported: 10/28/96  
Job Number: N/A

DOHS Certification #1971

---

Source: N/A  
Lab. No.: 961234  
Sample I.D.: S-10-MW4  
Matrix: Soil  
Depth: N/A  
Date Collected: 10/17/96  
Time Collected: 1510  
Date Received: 10/18/96  
Date Extracted: N/A  
Date Analyzed: 10/24/96

---

Parameter	Results	Reporting Limit	Units	Method
Volatile Aromatics:				8020
Benzene	ND	0.5	ug/Kg	
Toluene	ND	0.5	ug/Kg	
Ethylbenzene	ND	0.5	ug/Kg	
Xylenes	ND	1.0	ug/Kg	
Surrogate Recovery:				
TFT	106%			
Gasoline	ND	0.05	mg/Kg	8015 Mod.
Surrogate Recovery:				
TFT	101%			

Verified: John P. Zeman  
Laboratory Manager

# CHAIN OF CUSTODY RECORD

PROJ. NO.	SITE NAME AND ADDRESS					TYPE/ NUMBER CONTAINERS							
SAMPLERS: SIGNATURE							REMARKS						
STA. NO. (LABEL)	DATE	TIME	COMP	GRAB	STATION LOCATION (NARRATIVE DESCRIPTION)								
S-5-mw1	10-17	10:45		✓	Well 1 behind Sullair MW1								961226
S-10-mw1	10-17	10:53		✓	S-10-mw1								961227
S-15-mw1	11:00			✓	S-15-mw1								961228
S-5-mw2		11:45		✓	S-5 MW2								961229
S-5-mw2		12:05		✓	S-10 - MW2								961230
S-5-mw3		2:00		✓	S-5 ~MW3~								961231
S-10-mw3		2:10			S - 10 - MW3								961232
S-5-mw4	3:00				S - 5 - MW4								961233
S-10-mw4	3:10				S - 10 - MW4								961234
Relinquished by: Signature		Date/Time		Received by: Signature		Date/Time		REMARKS:					
		10-18/11:30		Karen Stephen		10-18 11:30pm		Provide QA/QC Report & Calibration					
Relinquished by: Signature		Date/Time		Received by: Signature		Date/Time		EARTH ENGINEERS					
Relinquished by: Signature		Date/Time		Received by: Signature		Date/Time		P.O. Box 640					
								Millbrae, CA 94030					
								Tel/Fax (800) 692-0787					

APPENDIX D

HARDING LAWSON ASSOCIATES' ANALYTICAL DATA

the five soil samples tested for BTEX and the results of the chemical testing for two samples tested for volatile organic compounds.

**Table 1. Soil Sample Analysis Results  
Total Petroleum Hydrocarbons (TPH)  
Doolittle Properties  
San Leandro, California**

Sample Number	Sample Depth (feet)	Gasoline Range (mg/kg)	Diesel Range (mg/kg)
B-1-11.5	11.5	23	30
B-1-16.5	16.5	ND(10)	ND(10)
B-2-11.5	11.5	54	120
B-2-16.5	16.5	ND(10)	ND(10)
B-3-11.5	11.5	230	180
B-4-16.5	16.5	ND(10)	ND(10)
B-5-11.5	11.5	27	ND(10)
B-5-16.5	16.5	ND(10)	ND(10)
B-6-11.5	11.5	13	ND(10)
B-7-11.5	11.5	ND(10)	ND(10)
B-8-16.5	16.5	13	ND(10)
B-9-16.5	16.5	ND(10)	ND(10)
B-10-11	11.0	ND(10)	ND(10)
B-11-6	6.0	ND(10)	ND(10)
B-12-6	6.0	ND(10)	ND(10)
B-13-6	6.0	ND(10)	ND(10)
B-14-11	11.0	ND(10)	ND(10)

ND - Not detected above stated detection limit

mg/kg - milligrams per kilogram, equivalent to parts per million (ppm)

**Table 2. Soil Sample Analysis Results**  
**Benzene, Toluene, Ethyl Benzene, and Xylenes**  
**Doolittle Properties**  
**San Leandro, California**

Sample Number	Sample Depth (feet)	Benzene ( $\mu\text{g}/\text{kg}$ )	Toluene ( $\mu\text{g}/\text{kg}$ )	Ethyl Benzene ( $\mu\text{g}/\text{kg}$ )	Xylenes ( $\mu\text{g}/\text{kg}$ )
B-4-16.5	16.5	18	240	7	59
B-6-11.5	11.5	210	250	120	570
B-7-11.5	11.5	21	320	30	120
B-8-16.5*	16.5	ND(10)	38	72	85
B-9-16.5	16.5	ND(3)	68	13	77
B-12-6	6.0	ND(3)	46	ND(3)	ND(3)
B-13-6*	6.0	ND(10)	15	ND(15)	ND(15)

ND - Not detected above stated detection limit

$\mu\text{g}/\text{kg}$  - micrograms per kilogram, equivalent to parts per billion (ppb)

\* No other volatile organic compounds detected using EPA Test Method 8240.

Table 2. Results of Soil Sample Analyses  
 1618 Doolittle Drive (Sullair Pacific)  
 San Leandro, California

Sample No.	Location	Depth (feet)	TPH-Gasoline (ppm)	TPH-Diesel (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
T-1A	Tank	12	10,000	2,000	28,000	250,000	150,000	920,000
T-1B	Tank	12	5,600	1,600	32,000	240,000	95,000	610,000
T-2A	Tank	12	390	44	920	7,600	6,400	37,000
T-2B	Tank	12	4,900	120	48,000	350,000	79,000	580,000
T-3A	Tank	12	38	44	2,200	210	470	1,100
T-3B	Tank	12	220	340	1,200	3,400	3,400	17,000
T-4A	Tank	11.5	2	50	53	5	28	110
T-4B	Tank	11.5	180	18	2,100	8,800	2,800	18,000
P-1	Piping	3	2	86	ND<3	ND<3	ND<3	113
P-2	Pump	3	120*	4,400	ND<3	29	120	1,900
1618-S-1	Sidewall	11.5	120	23*	130	1,200	1,100	9,200
1618-S-2	Sidewall	11.5	3,200	320*	2,300	140,000	59,000	360,000
1618-S-3	Sidewall	10.5	150	10*	140	460	880	6,300
1618-S-4	Sidewall	11	1	ND<10	66	ND<3	20	9
1618-S-5	Sidewall	11	2	ND<10	95	45	25	130
1618-S-6	Sidewall	10	ND<10	ND<10	22	11	ND<3	9
1618-S-7	Sidewall	10.5	ND<10	ND<10	13	3	ND<3	10

ppm = parts per million

ppb = parts per billion

ND< = Not detected at reported detection limit

\* = Laboratory personnel report does not match typical pattern for that contaminant.

Table 3. Results of Soil and Water Sample Analyses  
1616 Doolittle Drive (NorCal Towing)  
San Leandro, California

Sample No.	Location	Depth (feet)	TPH-Gasoline (ppm)	TPH-Diesel (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total Oil & Grease (ppb)	8010 Volatiles (ppb)	8240 Volatiles (ppb)
T-5A	Sidewall	2	NA	NA	NA	NA	NA	NA	NA	ND	NA
T-5B	Tank	10	5	ND<10	200	90	79	290	NA	NA	NA
T-5C	Tank	11.5	150	94	180	190	900	3700	NA	NA	*
P-5A	Piping	2	ND<1	ND<10	ND<3	3	ND<3	ND<3	NA	NA	NA
P-5B	Pump	3	160	13*	26	1,800	1,300	21,000	NA	NA	NA
1616-S-1	Sidewall	10	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3	NA	NA	NA
1616-S-2	Sidewall	11	ND<10	ND<10	ND<3	ND<3	ND<3	ND<3	NA	NA	NA
1616-S-3	Sidewall	8.5	ND<10	ND<10	5	11	28	200	NA	NA	NA
T-6A	Tank	10	170	470*	110	110	140	1,800	ND<50	NA	74(toluene)
T-6B	Tank	10	ND<1	ND<10	3	4	ND<3	ND<3	ND<50	NA	ND
T-6C	Sidewall	10.5	ND<10	ND<10	ND<3	ND<3	ND<3	ND<3	NA	NA	NA
T-6D	Sidewall	10.5	ND<10	ND<10	ND<3	4	ND<3	9	NA	NA	NA
T-6W	Water	12	0.105	ND<.05	ND<0.3	0.3	ND<0.3	0.9	NA	NA	NA

ppm = parts per million

ppb = parts per billion

ND&lt;1 = Not detected at reported detection limit

ND = None detected at various detection limits as specified in laboratory reports

NA = Not analyzed

\* = 8240 Volatile Compounds detected: 99 ppb benzene, 40 ppb toluene, 180 ppb ethylbenzene, and 640 ppb xylenes.

Table 4. Results of Sample Analyses  
1620 Doolittle Drive (Oakland Sandblasting)  
San Leandro, California

Sample No.	Location	Depth (feet)	TPH-Gasoline (ppm)	TPH-Diesel (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	8240 Volatiles (ppb)
T-7A	Tank	11	ND<1	ND<10	ND<3	3	ND<3	3	ND
T-7B	Tank	11	ND<1	ND<10	ND<3	ND<3	ND<3	ND<3	ND

ppm = parts per million

ppb = parts per billion

ND&lt;1 = Not detected at reported detection limit

ND = None detected at various detection limits as specified in laboratory reports

**APPENDIX E**  
**ELECTROMAGNETIC RAW DATA**

0	47202.376	0.000	15:08:18.30	10/04/96	0	0	49201.053	0.000	15:07:22.50	10/04/96	0
0	47075.121	0.000	15:08:17.50	10/04/96	0	0	48795.087	0.000	15:07:21.80	10/04/96	0
0	46853.576	0.000	15:08:16.80	10/04/96	0	0	48476.676	0.000	15:07:21.10	10/04/96	0
0	46638.915	0.000	15:08:16.10	10/04/96	0	0	48270.104	0.000	15:07:20.40	10/04/96	0
0	46388.659	0.000	15:08:15.30	10/04/96	0	0	48222.278	0.000	15:07:19.70	10/04/96	0
0	46310.581	0.000	15:08:14.60	10/04/96	0	0	48260.781	0.000	15:07:19.10	10/04/96	0
0	46309.061	0.000	15:08:13.90	10/04/96	0	0	48367.203	0.000	15:07:18.30	10/04/96	0
0	46310.904	0.000	15:08:13.20	10/04/96	0	0	48465.327	0.000	15:07:17.50	10/04/96	0
0	46234.128	0.000	15:08:12.40	10/04/96	0	0	48495.708	0.000	15:07:16.70	10/04/96	0
0	46069.564	0.000	15:08:11.70	10/04/96	0	0	48437.655	0.000	15:07:15.90	10/04/96	0
0	46100.342	0.000	15:08:11.00	10/04/96	0	0	48438.414	0.000	15:07:15.10	10/04/96	0
0	46001.427	0.000	15:08:10.20	10/04/96	0	0	48479.003	0.000	15:07:14.40	10/04/96	0
0	46039.924	0.000	15:08:09.60	10/04/96	0	0	48488.298	0.000	15:07:13.60	10/04/96	0
0	45592.750	0.000	15:08:08.20	10/04/96	0	0	48492.138	0.000	15:07:12.90	10/04/96	0
0	45303.370	0.000	15:08:07.50	10/04/96	0	0	48462.814	0.000	15:07:12.10	10/04/96	0
0	45670.310	0.000	15:08:06.70	10/04/96	0	0	48428.626	0.000	15:07:11.40	10/04/96	0
0	46612.414	0.000	15:08:06.00	10/04/96	0	0	48368.967	0.000	15:07:10.70	10/04/96	0
0	47122.912	0.000	15:08:05.30	10/04/96	0	0	48273.026	0.000	15:07:09.90	10/04/96	0
0	47482.963	0.000	15:08:04.60	10/04/96	0	0	48083.707	0.000	15:07:09.00	10/04/96	0
0	47677.010	0.000	15:08:03.90	10/04/96	0	0	47792.071	0.000	15:07:08.30	10/04/96	0
0	47748.874	0.000	15:08:03.30	10/04/96	0	0	47232.933	0.000	15:07:07.60	10/04/96	0
0	47816.361	0.000	15:08:02.60	10/04/96	0	0	46097.816	0.000	15:07:06.90	10/04/96	0
0	47827.548	0.000	15:08:01.80	10/04/96	0	0	43822.605	0.000	15:07:06.10	10/04/96	0
0	47852.459	0.000	15:08:01.10	10/04/96	0	0	42981.787	0.000	15:07:05.30	10/04/96	0
0	47831.218	0.000	15:08:00.30	10/04/96	0	0	45316.254	0.000	15:07:04.60	10/04/96	0
0	47805.138	0.000	15:07:59.60	10/04/96	0	0	46838.777	0.000	15:07:04.00	10/04/96	0
0	47798.114	0.000	15:07:58.90	10/04/96	0	0	46130.667	0.000	15:07:03.50	10/04/96	0
0	47764.560	0.000	15:07:58.20	10/04/96	0	0	45678.172	0.000	15:07:02.60	10/04/96	0
0	47673.397	0.000	15:07:57.40	10/04/96	0	0	45576.294	0.000	15:07:01.90	10/04/96	0
0	47532.598	0.000	15:07:56.80	10/04/96	0	0	45447.996	0.000	15:07:01.30	10/04/96	0
0	47329.864	0.000	15:07:56.10	10/04/96	0	0	45174.429	0.000	15:07:00.60	10/04/96	0
0	47152.897	0.000	15:07:55.50	10/04/96	0	0	44579.366	0.000	15:06:59.80	10/04/96	0
0	46894.752	0.000	15:07:54.90	10/04/96	0	0	43916.035	0.000	15:06:59.20	10/04/96	0
0	46690.476	0.000	15:07:54.30	10/04/96	0	0	42435.197	0.000	15:06:58.40	10/04/96	0
0	46476.937	0.000	15:07:52.90	10/04/96	0	0	42036.369	0.000	15:06:57.70	10/04/96	0
0	46661.394	0.000	15:07:52.20	10/04/96	0	0	42717.081	0.000	15:06:57.10	10/04/96	0
0	46605.333	0.000	15:07:51.50	10/04/96	0	0	44129.955	0.000	15:06:56.30	10/04/96	0
0	46298.420	0.000	15:07:50.70	10/04/96	0	0	42517.534	0.000	15:06:55.70	10/04/96	0
0	46145.857	0.000	15:07:50.10	10/04/96	0	0	40631.076	0.000	15:06:54.90	10/04/96	0
0	45867.151	0.000	15:07:49.50	10/04/96	0	0	42112.033	0.000	15:06:54.10	10/04/96	0
0	45337.931	0.000	15:07:48.70	10/04/96	0	0	42887.501	0.000	15:06:53.40	10/04/96	0
0	44956.506	0.000	15:07:48.20	10/04/96	0	0	44687.369	0.000	15:06:10.10	10/04/96	0
0	44487.139	0.000	15:07:47.50	10/04/96	0	0	43763.949	0.000	15:06:08.80	10/04/96	0
0	44458.869	0.000	15:07:46.70	10/04/96	0	0	43255.282	0.000	15:06:07.80	10/04/96	0
0	44271.210	0.000	15:07:46.10	10/04/96	0	0	39725.851	0.000	15:06:07.00	10/04/96	0
0	44273.350	0.000	15:07:45.40	10/04/96	0	0	36158.304	0.000	15:06:06.20	10/04/96	0
0	43923.053	0.000	15:07:44.70	10/04/96	0	0	42239.908	0.000	15:06:05.60	10/04/96	0
0	43672.115	0.000	15:07:43.90	10/04/96	0	0	43764.768	0.000	15:06:04.90	10/04/96	0
0	43340.566	0.000	15:07:43.20	10/04/96	0	0	44304.910	0.000	15:06:04.30	10/04/96	0
0	43560.072	0.000	15:07:42.60	10/04/96	0	0	44675.246	0.000	15:06:03.70	10/04/96	0
0	43646.907	0.000	15:07:41.90	10/04/96	0	0	45217.018	0.000	15:06:03.00	10/04/96	0
0	43920.972	0.000	15:07:41.10	10/04/96	0	0	45633.613	0.000	15:06:02.30	10/04/96	0
0	43905.303	0.000	15:07:40.30	10/04/96	0	0	46412.752	0.000	15:06:01.70	10/04/96	0
0	43622.478	0.000	15:07:39.60	10/04/96	0	0	46668.598	0.000	15:06:01.00	10/04/96	0
0	43649.880	0.000	15:07:38.90	10/04/96	0	0	45996.077	0.000	15:06:00.30	10/04/96	0
0	43339.550	0.000	15:07:38.20	10/04/96	0	0	45836.105	0.000	15:05:59.60	10/04/96	0
0	43542.749	0.000	15:07:37.40	10/04/96	0	0	45513.575	0.000	15:05:58.90	10/04/96	0
0	43634.751	0.000	15:07:36.50	10/04/96	0	0	44911.118	0.000	15:05:58.10	10/04/96	0
0	43859.930	0.000	15:07:35.90	10/04/96	0	0	44407.927	0.000	15:05:57.40	10/04/96	0
0	43565.859	0.000	15:07:35.20	10/04/96	0	0	44315.398	0.000	15:05:56.70	10/04/96	0
0	42809.498	0.000	15:07:34.60	10/04/96	0	0	42520.295	0.000	15:05:55.30	10/04/96	0
0	40920.366	0.000	15:07:34.00	10/04/96	0	0	41682.584	0.000	15:05:54.60	10/04/96	0
0	40669.454	0.000	15:07:33.10	10/04/96	0	0	42282.657	0.000	15:05:53.90	10/04/96	0
0	39568.842	0.000	15:07:32.40	10/04/96	0	0	42605.737	0.000	15:05:53.10	10/04/96	0
0	38413.538	0.000	15:07:31.70	10/04/96	0	0	41530.107	0.000	15:05:52.20	10/04/96	0
0	41885.577	0.000	15:07:31.00	10/04/96	0	0	42051.536	0.000	15:05:51.50	10/04/96	0
0	39047.676	0.000	15:07:30.40	10/04/96	0	0	41990.241	0.000	15:05:50.70	10/04/96	0
0	38513.232	0.000	15:07:29.60	10/04/96	0	0	42078.226	0.000	15:05:50.20	10/04/96	0
0	41968.256	0.000	15:07:29.00	10/04/96	0	0	41245.552	0.000	15:05:49.50	10/04/96	0
0	43693.663	0.000	15:07:28.30	10/04/96	0	0	41927.588	0.000	15:05:48.80	10/04/96	0
0	44274.703	0.000	15:07:27.60	10/04/96	0	0	40143.863	0.000	15:05:48.20	10/04/96	0
0	45784.857	0.000	15:07:27.00	10/04/96	0	0	39758.573	0.000	15:05:47.60	10/04/96	0
0						0	40943.204	0.000	15:05:46.80	10/04/96	0



0	38632.636	0.000	15:03:21.10	10/04/96	0	0	46103.491	0.000	15:02:03.40	10/04/96	0
0	36046.861	0.000	15:03:20.40	10/04/96	0	0	47044.124	0.000	15:01:55.50	10/04/96	0
0	38919.780	0.000	15:03:19.60	10/04/96	0	0	47169.366	0.000	15:01:54.90	10/04/96	0
0	38858.762	0.000	15:03:18.90	10/04/96	0	0	47574.396	0.000	15:01:54.30	10/04/96	0
0	36433.356	0.000	15:03:18.10	10/04/96	0	0	47429.517	0.000	15:01:53.80	10/04/96	0
0	33716.699	0.000	15:03:17.20	10/04/96	0	0	46682.418	0.000	15:01:53.20	10/04/96	0
0	38191.691	0.000	15:03:16.40	10/04/96	0	0	45968.877	0.000	15:01:52.60	10/04/96	0
0	42076.303	0.000	15:03:15.40	10/04/96	0	0	45832.089	0.000	15:01:52.00	10/04/96	0
0	45176.280	0.000	15:03:14.60	10/04/96	0	0	45341.794	0.000	15:01:51.30	10/04/96	0
0	46802.200	0.000	15:03:13.70	10/04/96	0	0	45179.200	0.000	15:01:50.40	10/04/96	0
0	44594.380	0.000	15:03:13.00	10/04/96	0	0	45144.048	0.000	15:01:49.70	10/04/96	0
0	42692.766	0.000	15:03:12.20	10/04/96	0	0	45345.472	0.000	15:01:48.90	10/04/96	0
0	41282.026	0.000	15:03:11.40	10/04/96	0	0	45093.025	0.000	15:01:48.00	10/04/96	0
0	40548.619	0.000	15:03:10.80	10/04/96	0	0	43111.554	0.000	15:01:45.60	10/04/96	0
0	39318.656	0.000	15:03:08.90	10/04/96	0	0	41811.752	0.000	15:01:44.80	10/04/96	0
0	45538.861	0.000	15:03:06.60	10/04/96	0	0	41892.035	0.000	15:01:44.10	10/04/96	0
0	44049.907	0.000	15:03:05.70	10/04/96	0	0	42002.069	0.000	15:01:43.40	10/04/96	0
0	51394.262	0.000	15:02:51.20	10/04/96	0	0	48697.648	0.000	15:01:42.50	10/04/96	0
0	47615.569	0.000	15:02:50.40	10/04/96	0	0	50335.837	0.000	15:01:41.80	10/04/96	0
0	44834.541	0.000	15:02:49.60	10/04/96	0	0	44904.027	0.000	15:01:41.10	10/04/96	0
0	47372.466	0.000	15:02:48.80	10/04/96	0	0	44833.017	0.000	15:01:40.30	10/04/96	0
0	46793.786	0.000	15:02:47.20	10/04/96	0	0	46180.861	0.000	15:01:32.50	10/04/96	0
0	44997.199	0.000	15:02:46.40	10/04/96	0	0	46669.926	0.000	15:01:31.00	10/04/96	0
0	43713.565	0.000	15:02:45.70	10/04/96	0	0	46645.232	0.000	15:01:29.70	10/04/96	0
0	38630.799	0.000	15:02:44.60	10/04/96	0	0	46776.912	0.000	15:01:29.40	10/04/96	0
0	41878.802	0.000	15:02:42.30	10/04/96	0	0	46419.776	0.000	15:01:28.60	10/04/96	0
0	39807.377	0.000	15:02:41.50	10/04/96	0	0	48623.614	0.000	15:01:25.20	10/04/96	0
0	42737.756	0.000	15:02:40.90	10/04/96	0	0	47968.107	0.000	15:01:24.30	10/04/96	0
0	48070.874	0.000	15:02:40.20	10/04/96	0	0	48676.000	0.000	15:01:22.40	10/04/96	0
0	44494.546	0.000	15:02:39.30	10/04/96	0	0	49072.577	0.000	15:01:21.00	10/04/96	0
0	43115.193	0.000	15:02:38.70	10/04/96	0	0	48828.964	0.000	15:01:20.30	10/04/96	0
0	41527.595	0.000	15:02:38.10	10/04/96	0	0	48207.613	0.000	15:01:19.50	10/04/96	0
0	42094.319	0.000	15:02:37.40	10/04/96	0	0	48724.293	0.000	15:01:18.10	10/04/96	0
0	21936.052	0.000	15:02:36.70	10/04/96	0	0	48688.101	0.000	15:01:17.10	10/04/96	0
0	39550.125	0.000	15:02:35.80	10/04/96	0	0	47960.227	0.000	15:01:16.60	10/04/96	0
0	42372.534	0.000	15:02:35.00	10/04/96	0	0	47813.582	0.000	15:01:15.40	10/04/96	0
0	42243.286	0.000	15:02:34.20	10/04/96	0	0	48650.745	0.000	15:01:13.90	10/04/96	0
0	43447.709	0.000	15:02:33.50	10/04/96	0	0	48499.436	0.000	15:01:13.10	10/04/96	0
0	46186.320	0.000	15:02:32.90	10/04/96	0	0	48155.472	0.000	15:01:11.50	10/04/96	0
0	42690.656	0.000	15:02:32.20	10/04/96	0	0	48105.050	0.000	15:01:09.10	10/04/96	0
0	37905.718	0.000	15:02:31.60	10/04/96	0	0	48404.966	0.000	15:01:07.50	10/04/96	0
0	36753.106	0.000	15:02:30.90	10/04/96	0	0	48358.858	0.000	15:01:06.70	10/04/96	0
0	34375.184	0.000	15:02:29.40	10/04/96	0	0	48185.630	0.000	15:01:06.00	10/04/96	0
0	42229.768	0.000	15:02:27.70	10/04/96	0	0	47680.620	0.000	15:01:05.20	10/04/96	0
0	37770.035	0.000	15:02:26.90	10/04/96	0	0	47360.856	0.000	15:01:04.50	10/04/96	0
0	29517.764	0.000	15:02:26.20	10/04/96	0	0	46885.383	0.000	15:01:03.80	10/04/96	0
0	33829.735	0.000	15:02:25.40	10/04/96	0	0	46511.390	0.000	15:01:02.20	10/04/96	0
0	35657.150	0.000	15:02:24.70	10/04/96	0	0	45311.943	0.000	15:01:00.80	10/04/96	0
0	33277.759	0.000	15:02:24.00	10/04/96	0	0	43722.662	0.000	15:00:59.00	10/04/96	0
0	34689.088	0.000	15:02:23.20	10/04/96	0	0	43366.430	0.000	15:00:58.10	10/04/96	0
0	36864.445	0.000	15:02:22.50	10/04/96	0	0	44016.588	0.000	15:00:56.50	10/04/96	0
0	33853.756	0.000	15:02:21.80	10/04/96	0	0	51109.263	0.000	15:00:55.00	10/04/96	0
0	33440.122	0.000	15:02:21.10	10/04/96	0	0	41435.452	0.000	15:00:43.40	10/04/96	0
0	40546.497	0.000	15:02:20.30	10/04/96	0	0	38873.414	0.000	15:00:42.70	10/04/96	0
0	40622.398	0.000	15:02:19.50	10/04/96	0	0	39422.522	0.000	15:00:42.00	10/04/96	0
0	40399.224	0.000	15:02:18.80	10/04/96	0	0	41534.358	0.000	15:00:41.30	10/04/96	0
0	38408.224	0.000	15:02:18.10	10/04/96	0	0	44273.644	0.000	15:00:40.50	10/04/96	0
0	39291.836	0.000	15:02:17.30	10/04/96	0	0	46098.796	0.000	15:00:39.70	10/04/96	0
0	41087.681	0.000	15:02:16.60	10/04/96	0	0	47293.272	0.000	15:00:38.90	10/04/96	0
0	43593.837	0.000	15:02:15.80	10/04/96	0	0	48018.659	0.000	15:00:38.20	10/04/96	0
0	45195.344	0.000	15:02:15.10	10/04/96	0	0	48242.134	0.000	15:00:37.50	10/04/96	0
0	45755.616	0.000	15:02:14.40	10/04/96	0	0	48509.847	0.000	15:00:36.70	10/04/96	0
0	45425.604	0.000	15:02:13.50	10/04/96	0	0	48821.724	0.000	15:00:35.80	10/04/96	0
0	45114.900	0.000	15:02:12.80	10/04/96	0	0	49016.127	0.000	15:00:35.10	10/04/96	0
0	44103.193	0.000	15:02:12.10	10/04/96	0	0	49425.993	0.000	15:00:34.10	10/04/96	0
0	42488.043	0.000	15:02:11.20	10/04/96	0	0	49895.392	0.000	15:00:33.40	10/04/96	0
0	42814.420	0.000	15:02:10.20	10/04/96	0	0	50732.714	0.000	15:00:32.70	10/04/96	0
0	43364.890	0.000	15:02:09.40	10/04/96	0	0	51494.540	0.000	15:00:32.00	10/04/96	0
0	45256.535	0.000	15:02:08.60	10/04/96	0	0	51768.553	0.000	15:00:31.30	10/04/96	0
0	48371.155	0.000	15:02:07.90	10/04/96	0	0	50731.994	0.000	15:00:30.60	10/04/96	0
0	47584.387	0.000	15:02:07.20	10/04/96	0	0	49731.685	0.000	15:00:29.80	10/04/96	0
0	44654.890	0.000	15:02:06.50	10/04/96	0	0	49160.986	0.000	15:00:29.10	10/04/96	0
0	44411.387	0.000	15:02:05.80	10/04/96	0	0	48822.338	0.000	15:00:28.30	10/04/96	0
0	45018.970	0.000	15:02:05.00	10/04/96	0	0	48663.987	0.000	15:00:27.00	10/04/96	0

0	48695.167	0.000 15:00:26.20 10/04/96	0	44901.538	0.000 14:59:19.30 10/04/96	0
0	48732.874	0.000 15:00:18.30 10/04/96	0	43789.443	0.000 14:59:18.60 10/04/96	0
0	48646.142	0.000 15:00:19.60 10/04/96	0	41480.649	0.000 14:59:12.90 10/04/96	0
0	48655.053	0.000 15:00:20.30 10/04/96	0	41868.946	0.000 14:59:13.60 10/04/96	0
0	48607.446	0.000 15:00:21.00 10/04/96	0	36446.851	0.000 14:59:15.90 10/04/96	0
0	48623.216	0.000 15:00:21.70 10/04/96	0	42989.860	0.000 14:59:17.00 10/04/96	0
0	48544.651	0.000 15:00:22.40 10/04/96	0	46674.679	0.000 14:59:16.40 10/04/96	0
0	48558.465	0.000 15:00:23.00 10/04/96	0	43013.666	0.000 14:59:17.70 10/04/96	0
0	48493.082	0.000 15:00:24.00 10/04/96	0	42023.973	0.000 14:59:17.70 10/04/96	0
0	48751.991	0.000 15:00:25.20 10/04/96	0	43789.443	0.000 14:59:18.60 10/04/96	0
0	48807.706	0.000 15:00:24.00 10/04/96	0	43789.443	0.000 14:59:18.60 10/04/96	0
0	44629.228	0.000 14:59:26.30 10/04/96	0	45294.876	0.000 14:56:16.90 10/04/96	0
0	44126.497	0.000 14:59:27.10 10/04/96	0	42473.964	0.000 14:56:21.50 10/04/96	0
0	44764.602	0.000 14:59:28.50 10/04/96	0	43252.878	0.000 14:56:20.60 10/04/96	0
0	44186.602	0.000 14:59:28.80 10/04/96	0	47625.878	0.000 14:56:21.50 10/04/96	0
0	44141.090	0.000 14:59:29.00 10/04/96	0	46935.034	0.000 14:56:16.10 10/04/96	0
0	44033.228	0.000 14:59:29.70 10/04/96	0	46299.718	0.000 14:56:17.70 10/04/96	0
0	43521.565	0.000 14:59:30.40 10/04/96	0	45214.113	0.000 14:56:22.30 10/04/96	0
0	40808.460	0.000 14:59:30.80 10/04/96	0	44288.370	0.000 14:57:19.00 10/04/96	0
0	41724.227	0.000 14:59:31.20 10/04/96	0	47962.940	0.000 14:58:05.30 10/04/96	0
0	43852.967	0.000 14:59:31.70 10/04/96	0	47325.319	0.000 14:58:12.50 10/04/96	0
0	45404.184	0.000 14:59:31.80 10/04/96	0	47172.798	0.000 14:58:16.70 10/04/96	0
0	46935.148	0.000 14:59:31.90 10/04/96	0	47326.326	0.000 14:58:24.60 10/04/96	0
0	47000.891	0.000 14:59:33.50 10/04/96	0	47316.565	0.000 14:58:20.60 10/04/96	0
0	47886.267	0.000 14:59:34.10 10/04/96	0	47316.565	0.000 14:58:23.70 10/04/96	0
0	46650.495	0.000 14:59:41.50 10/04/96	0	43349.154	0.000 14:58:24.60 10/04/96	0
0	46606.862	0.000 14:59:44.50 10/04/96	0	46817.489	0.000 14:58:25.40 10/04/96	0
0	48195.079	0.000 14:59:47.50 10/04/96	0	46281.794	0.000 14:58:26.10 10/04/96	0
0	49641.028	0.000 14:59:48.30 10/04/96	0	45766.453	0.000 14:58:27.00 10/04/96	0
0	49911.649	0.000 14:59:49.00 10/04/96	0	44340.279	0.000 14:58:27.70 10/04/96	0
0	49131.087	0.000 14:59:49.60 10/04/96	0	44481.439	0.000 14:58:29.20 10/04/96	0
0	48522.210	0.000 14:59:50.20 10/04/96	0	44291.673	0.000 14:58:31.00 10/04/96	0
0	48050.568	0.000 14:59:51.00 10/04/96	0	44617.585	0.000 14:58:32.70 10/04/96	0
0	47341.093	0.000 14:59:51.80 10/04/96	0	44482.848	0.000 14:58:33.70 10/04/96	0
0	46969.704	0.000 14:59:52.10 10/04/96	0	45203.927	0.000 14:58:36.00 10/04/96	0
0	46704.813	0.000 14:59:53.00 10/04/96	0	44764.437	0.000 14:58:36.80 10/04/96	0
0	46334.260	0.000 14:59:54.00 10/04/96	0	44231.587	0.000 14:58:37.60 10/04/96	0
0	46800.973	0.000 14:59:54.80 10/04/96	0	44438.519	0.000 14:58:39.50 10/04/96	0
0	47140.442	0.000 14:59:57.40 10/04/96	0	46898.353	0.000 14:58:41.80 10/04/96	0
0	47842.710	0.000 14:59:58.40 10/04/96	0	42208.528	0.000 14:58:45.00 10/04/96	0
0	47131.106	0.000 14:59:59.20 10/04/96	0	39793.570	0.000 14:58:46.00 10/04/96	0
0	46316.259	0.000 14:59:59.60 10/04/96	0	40804.719	0.000 14:58:46.60 10/04/96	0
0	46207.230	0.000 15:00:00.70 10/04/96	0	43599.677	0.000 14:58:48.00 10/04/96	0
0	45778.411	0.000 15:00:01.40 10/04/96	0	46982.140	0.000 14:58:48.10 10/04/96	0
0	45706.532	0.000 15:00:02.70 10/04/96	0	45750.196	0.000 14:58:49.70 10/04/96	0
0	46268.503	0.000 15:00:03.40 10/04/96	0	41444.775	0.000 14:58:50.50 10/04/96	0
0	47335.319	0.000 15:00:04.80 10/04/96	0	41606.187	0.000 14:58:51.50 10/04/96	0
0	46225.449	0.000 15:00:05.60 10/04/96	0	42733.706	0.000 14:58:52.40 10/04/96	0
0	46255.550	0.000 15:00:06.30 10/04/96	0	44082.037	0.000 14:58:53.30 10/04/96	0
0	47235.319	0.000 15:00:07.80 10/04/96	0	43702.195	0.000 14:58:55.20 10/04/96	0
0	46225.449	0.000 15:00:08.60 10/04/96	0	44482.466	0.000 14:58:56.20 10/04/96	0
0	46235.319	0.000 15:00:09.30 10/04/96	0	44754.063	0.000 14:58:57.60 10/04/96	0
0	46349.597	0.000 15:00:10.90 10/04/96	0	45984.822	0.000 14:58:58.67 10/04/96	0
0	46800.973	0.000 15:00:12.70 10/04/96	0	46685.743	0.000 14:58:59.49 10/04/96	0
0	47141.416	0.000 15:00:14.30 10/04/96	0	46984.822	0.000 14:58:59.67 10/04/96	0
0	48146.709	0.000 15:00:15.80 10/04/96	0	42028.528	0.000 14:58:45.00 10/04/96	0
0	47131.106	0.000 15:00:16.60 10/04/96	0	39793.570	0.000 14:58:46.00 10/04/96	0
0	46316.259	0.000 15:00:17.00 10/04/96	0	40804.719	0.000 14:58:46.60 10/04/96	0
0	46207.230	0.000 15:00:18.00 10/04/96	0	43599.677	0.000 14:58:47.60 10/04/96	0
0	45778.411	0.000 15:00:19.80 10/04/96	0	46982.140	0.000 14:58:48.10 10/04/96	0
0	45706.532	0.000 15:00:20.70 10/04/96	0	45750.196	0.000 14:58:49.70 10/04/96	0
0	46268.503	0.000 15:00:21.40 10/04/96	0	41444.775	0.000 14:58:50.50 10/04/96	0
0	47235.319	0.000 15:00:22.10 10/04/96	0	41606.187	0.000 14:58:51.50 10/04/96	0
0	46225.449	0.000 15:00:23.80 10/04/96	0	42733.706	0.000 14:58:52.40 10/04/96	0
0	46800.973	0.000 15:00:24.60 10/04/96	0	44082.037	0.000 14:58:53.30 10/04/96	0
0	47141.416	0.000 15:00:25.40 10/04/96	0	46898.353	0.000 14:58:41.80 10/04/96	0
0	48146.709	0.000 15:00:26.30 10/04/96	0	42208.528	0.000 14:58:45.00 10/04/96	0
0	47131.106	0.000 15:00:27.10 10/04/96	0	39793.570	0.000 14:58:46.00 10/04/96	0
0	46316.259	0.000 15:00:28.00 10/04/96	0	40804.719	0.000 14:58:46.60 10/04/96	0
0	46207.230	0.000 15:00:28.90 10/04/96	0	43599.677	0.000 14:58:47.60 10/04/96	0
0	45778.411	0.000 15:00:29.80 10/04/96	0	46982.140	0.000 14:58:48.10 10/04/96	0
0	45706.532	0.000 15:00:30.70 10/04/96	0	45750.196	0.000 14:58:49.70 10/04/96	0
0	46268.503	0.000 15:00:31.40 10/04/96	0	41444.775	0.000 14:58:50.50 10/04/96	0
0	47235.319	0.000 15:00:32.10 10/04/96	0	41606.187	0.000 14:58:51.50 10/04/96	0
0	46225.449	0.000 15:00:32.90 10/04/96	0	42733.706	0.000 14:58:52.40 10/04/96	0
0	46800.973	0.000 15:00:33.80 10/04/96	0	44082.037	0.000 14:58:53.30 10/04/96	0
0	47141.416	0.000 15:00:34.60 10/04/96	0	46898.353	0.000 14:58:41.80 10/04/96	0
0	48146.709	0.000 15:00:35.50 10/04/96	0	42208.528	0.000 14:58:45.00 10/04/96	0
0	47131.106	0.000 15:00:36.40 10/04/96	0	39793.570	0.000 14:58:46.00 10/04/96	0
0	46316.259	0.000 15:00:37.30 10/04/96	0	40804.719	0.000 14:58:46.60 10/04/96	0
0	46207.230	0.000 15:00:38.20 10/04/96	0	43599.677	0.000 14:58:47.60 10/04/96	0
0	45778.411	0.000 15:00:39.10 10/04/96	0	46982.140	0.000 14:58:48.10 10/04/96	0
0	45706.532	0.000 15:00:40.00 10/04/96	0	45750.196	0.000 14:58:49.70 10/04/96	0
0	46268.503	0.000 15:00:40.90 10/04/96	0	41444.775	0.000 14:58:50.50 10/04/96	0
0	47235.319	0.000 15:00:41.80 10/04/96	0	41606.187	0.000 14:58:51.50 10/04/96	0
0	46225.449	0.000 15:00:42.70 10/04/96	0	42733.706	0.000 14:58:52.40 10/04/96	0
0	46800.973	0.000 15:00:43.60 10/04/96	0	44082.037	0.000 14:58:41.80 10/04/96	0
0	47141.416	0.000 15:00:44.50 10/04/96	0	46898.353	0.000 14:58:40.00 10/04/96	0
0	48146.709	0.000 15:00:45.40 10/04/96	0	42208.528	0.000 14:58:44.80 10/04/96	0
0	47131.106	0.000 15:00:46.30 10/04/96	0	39793.570	0.000 14:58:46.00 10/04/96	0
0	46316.259	0.000 15:00:47.20 10/04/96	0	40804.719	0.000 14:58:46.60 10/04/96	0
0	46207.230	0.000 15:00:48.10 10/04/96	0	43599.677	0.000 14:58:47.60 10/04/96	0
0	45778.411	0.000 15:00:49.00 10/04/96	0	46982.140	0.000 14:58:48.10 10/04/96	0
0	45706.532	0.000 15:00:49.90 10/04/96	0	45750.196	0.000 14:58:49.70 10/04/96	0
0	46268.503	0.000 15:00:50.80 10/04/96	0	41444.775	0.000 14:58:50.50 10/04/96	0
0	47235.319	0.000 15:00:51.70 10/04/96	0	41606.187	0.000 14:58:51.50 10/04/96	0
0	46225.449	0.000 15:00:52.60 10/04/96	0	42733.706	0.000 14:58:52.40 10/04/96	0
0	46800.973	0.000 15:00:53.50 10/04/96	0	44082.037	0.000 14:58:41.80 10/04/96	0
0	47141.416	0.000 15:00:54.40 10/04/96	0	46898.353	0.000 14:58:40.00 10/04/96	0
0	48146.709	0.000 15:00:55				

0	45367.888	0.000	14:56:09.30	10/04/96	0	0	45587.024	0.000	14:54:49.20	10/04/96	0
0	45720.249	0.000	14:56:08.40	10/04/96	0	0	46094.267	0.000	14:54:48.10	10/04/96	0
0	45322.476	0.000	14:56:07.50	10/04/96	0	0	47090.225	0.000	14:54:47.30	10/04/96	0
0	45785.635	0.000	14:56:06.80	10/04/96	0	0	47248.107	0.000	14:54:46.50	10/04/96	0
0	45643.664	0.000	14:56:05.60	10/04/96	0	0	47447.571	0.000	14:54:45.70	10/04/96	0
0	45579.666	0.000	14:56:05.00	10/04/96	0	0	47185.502	0.000	14:54:44.80	10/04/96	0
0	46128.812	0.000	14:56:04.10	10/04/96	0	0	46667.270	0.000	14:54:43.90	10/04/96	0
0	46551.171	0.000	14:56:03.10	10/04/96	0	0	45685.340	0.000	14:54:42.80	10/04/96	0
0	45742.232	0.000	14:56:01.90	10/04/96	0	0	45452.239	0.000	14:54:41.80	10/04/96	0
0	46278.146	0.000	14:56:00.90	10/04/96	0	0	45555.633	0.000	14:54:40.90	10/04/96	0
0	45731.185	0.000	14:55:59.70	10/04/96	0	0	46311.030	0.000	14:54:39.40	10/04/96	0
0	45033.325	0.000	14:55:58.70	10/04/96	0	0	45531.008	0.000	14:54:37.80	10/04/96	0
0	46077.864	0.000	14:55:57.30	10/04/96	0	0	46208.075	0.000	14:54:35.50	10/04/96	0
0	46962.392	0.000	14:55:56.30	10/04/96	0	0	46185.835	0.000	14:54:34.70	10/04/96	0
0	47356.432	0.000	14:55:55.20	10/04/96	0	0	46493.077	0.000	14:54:34.00	10/04/96	0
0	47124.069	0.000	14:55:54.10	10/04/96	0	0	46427.631	0.000	14:54:33.20	10/04/96	0
0	46635.503	0.000	14:55:53.10	10/04/96	0	0	46505.257	0.000	14:54:32.30	10/04/96	0
0	44379.610	0.000	14:55:51.50	10/04/96	0	0	47357.707	0.000	14:54:31.30	10/04/96	0
0	45023.270	0.000	14:55:50.20	10/04/96	0	0	47866.566	0.000	14:54:30.20	10/04/96	0
0	47093.463	0.000	14:55:48.90	10/04/96	0	0	47863.706	0.000	14:54:29.10	10/04/96	0
0	47387.829	0.000	14:55:47.10	10/04/96	0	0	47324.036	0.000	14:54:28.10	10/04/96	0
0	47172.994	0.000	14:55:46.40	10/04/96	0	0	46178.800	0.000	14:54:27.10	10/04/96	0
0	46212.009	0.000	14:55:45.30	10/04/96	0	0	46123.808	0.000	14:54:26.10	10/04/96	0
0	45091.985	0.000	14:55:44.40	10/04/96	0	0	49023.600	0.000	14:54:24.60	10/04/96	0
0	44281.089	0.000	14:55:43.40	10/04/96	0	0	48002.643	0.000	14:54:23.20	10/04/96	0
0	43260.169	0.000	14:55:42.60	10/04/96	0	0	47557.700	0.000	14:54:21.60	10/04/96	0
0	42517.482	0.000	14:55:41.60	10/04/96	0	0	46872.357	0.000	14:54:20.00	10/04/96	0
0	44260.630	0.000	14:55:40.60	10/04/96	0	0	46763.800	0.000	14:54:18.70	10/04/96	0
0	45758.264	0.000	14:55:39.50	10/04/96	0	0	47260.489	0.000	14:54:17.40	10/04/96	0
0	46155.879	0.000	14:55:38.50	10/04/96	0	0	46894.307	0.000	14:54:16.40	10/04/96	0
0	46292.451	0.000	14:55:36.60	10/04/96	0	0	46244.893	0.000	14:54:15.50	10/04/96	0
0	47144.632	0.000	14:55:35.40	10/04/96	0	0	45707.213	0.000	14:54:14.50	10/04/96	0
0	48609.453	0.000	14:55:34.20	10/04/96	0	0	44407.418	0.000	14:54:13.30	10/04/96	0
0	47890.107	0.000	14:55:33.20	10/04/96	0	0	39653.336	0.000	14:54:11.50	10/04/96	0
0	47411.799	0.000	14:55:32.30	10/04/96	0	0	40839.673	0.000	14:54:10.20	10/04/96	0
0	46457.270	0.000	14:55:30.60	10/04/96	0	0	46318.549	0.000	14:54:07.90	10/04/96	0
0	45557.261	0.000	14:55:28.10	10/04/96	0	0	46059.488	0.000	14:54:06.40	10/04/96	0
0	45441.368	0.000	14:55:26.50	10/04/96	0	0	46749.507	0.000	14:54:04.90	10/04/96	0
0	46183.912	0.000	14:55:25.20	10/04/96	0	0	45308.024	0.000	14:54:03.60	10/04/96	0
0	38234.678	0.000	14:55:23.60	10/04/96	0	0	45946.102	0.000	14:54:02.30	10/04/96	0
0	37383.863	0.000	14:55:22.30	10/04/96	0	0	48905.130	0.000	14:54:00.60	10/04/96	0
0	38533.265	0.000	14:55:20.80	10/04/96	0	0	46926.048	0.000	14:53:59.40	10/04/96	0
0	38160.011	0.000	14:55:19.90	10/04/96	0	0	47456.620	0.000	14:53:58.20	10/04/96	0
0	39677.383	0.000	14:55:19.00	10/04/96	0	0	48126.713	0.000	14:53:55.80	10/04/96	0
0	42444.152	0.000	14:55:17.10	10/04/96	0	0	46646.090	0.000	14:53:54.30	10/04/96	0
0	39804.996	0.000	14:55:16.20	10/04/96	0	0	48625.395	0.000	14:53:53.40	10/04/96	0
0	38047.431	0.000	14:55:14.50	10/04/96	0	0	50321.381	0.000	14:53:51.90	10/04/96	0
0	37858.079	0.000	14:55:13.00	10/04/96	0	0	49915.932	0.000	14:53:50.90	10/04/96	0
0	45612.580	0.000	14:55:12.20	10/04/96	0	0	48846.059	0.000	14:53:49.60	10/04/96	0
0	49403.042	0.000	14:55:11.40	10/04/96	0	0	48427.563	0.000	14:53:48.50	10/04/96	0
0	46168.213	0.000	14:55:10.60	10/04/96	0	0	47965.125	0.000	14:53:47.30	10/04/96	0
0	46152.212	0.000	14:55:09.90	10/04/96	0	0	48362.222	0.000	14:53:43.80	10/04/96	0
0	45410.570	0.000	14:55:08.80	10/04/96	0	0	46488.360	0.000	14:53:42.30	10/04/96	0
0	45451.678	0.000	14:55:07.60	10/04/96	0	0	46765.458	0.000	14:53:40.80	10/04/96	0
0	45962.377	0.000	14:55:06.80	10/04/96	0	0	47205.132	0.000	14:53:39.40	10/04/96	0
0	46441.082	0.000	14:55:05.90	10/04/96	0	0	45569.289	0.000	14:53:36.90	10/04/96	0
0	47005.615	0.000	14:55:05.00	10/04/96	0	0	45755.802	0.000	14:53:35.20	10/04/96	0
0	47474.752	0.000	14:55:04.40	10/04/96	0	0	41188.542	0.000	14:53:33.70	10/04/96	0
0	47803.725	0.000	14:55:03.80	10/04/96	0	0	44333.109	0.000	14:53:31.80	10/04/96	0
0	49122.912	0.000	14:55:02.90	10/04/96	0	0	44674.205	0.000	14:53:28.60	10/04/96	0
0	49883.280	0.000	14:55:02.10	10/04/96	0	0	46094.455	0.000	14:53:26.80	10/04/96	0
0	48236.770	0.000	14:55:01.30	10/04/96	0	0	45978.562	0.000	14:53:23.00	10/04/96	0
0	46559.343	0.000	14:55:00.60	10/04/96	0	0	45279.683	0.000	14:53:20.90	10/04/96	0
0	46621.421	0.000	14:54:59.20	10/04/96	0	0	41429.425	0.000	14:53:18.40	10/04/96	0
0	46247.407	0.000	14:54:58.40	10/04/96	0	0	41114.067	0.000	14:53:17.10	10/04/96	0
0	45976.885	0.000	14:54:57.30	10/04/96	0	0	43121.026	0.000	14:53:16.20	10/04/96	0
0	43864.777	0.000	14:54:56.30	10/04/96	0	0	25568.135	0.000	14:53:14.80	10/04/96	0
0	42976.642	0.000	14:54:55.30	10/04/96	0	0	35431.192	0.000	14:53:13.30	10/04/96	0
0	43706.225	0.000	14:54:54.40	10/04/96	0	0	47647.684	0.000	14:53:09.60	10/04/96	0
0	44752.875	0.000	14:54:53.10	10/04/96	0	0	46432.516	0.000	14:53:08.30	10/04/96	0
0	45565.696	0.000	14:54:52.30	10/04/96	0	0	46314.506	0.000	14:53:07.20	10/04/96	0
0	45635.768	0.000	14:54:51.30	10/04/96	0	0	46867.620	0.000	14:53:06.30	10/04/96	0
0	46052.151	0.000	14:54:50.60	10/04/96	0	0	47377.718	0.000	14:53:05.30	10/04/96	0

0	48054.570	0.000 14:53:04.20	10/04/96	0	0	50095.124	0.000 14:49:58.30	10/04/96	0
0	49065.488	0.000 14:53:02.70	10/04/96	0	0	50173.070	0.000 14:49:56.80	10/04/96	0
0	48956.232	0.000 14:53:01.50	10/04/96	0	0	50131.085	0.000 14:49:55.70	10/04/96	0
0	48639.263	0.000 14:53:00.50	10/04/96	0	0	50046.542	0.000 14:49:54.60	10/04/96	0
0	48314.826	0.000 14:52:59.30	10/04/96	0	0	48876.070	0.000 14:49:52.80	10/04/96	0
0	48077.485	0.000 14:52:58.10	10/04/96	0	0	49384.251	0.000 14:49:49.90	10/04/96	0
0	48177.147	0.000 14:52:57.00	10/04/96	0	0	49265.773	0.000 14:49:48.80	10/04/96	0
0	55742.488	0.000 14:52:54.90	10/04/96	0	0	48488.241	0.000 14:49:47.90	10/04/96	0
0	47039.290	0.000 14:51:15.80	10/04/96	0	0	49255.720	0.000 14:49:46.10	10/04/96	0
0	47690.028	0.000 14:51:13.20	10/04/96	0	0	49255.204	0.000 14:49:44.90	10/04/96	0
0	48671.828	0.000 14:51:09.00	10/04/96	0	0	49236.798	0.000 14:49:42.70	10/04/96	0
0	48322.908	0.000 14:51:08.30	10/04/96	0	0	48171.505	0.000 14:49:41.50	10/04/96	0
0	48298.588	0.000 14:51:07.60	10/04/96	0	0	49071.875	0.000 14:49:39.00	10/04/96	0
0					0	48668.545	0.000 14:49:37.30	10/04/96	0
0	47713.823	0.000 14:51:06.70	10/04/96	0	0	47543.938	0.000 14:49:35.80	10/04/96	0
0	47813.705	0.000 14:51:04.90	10/04/96	0	0	46430.807	0.000 14:49:34.20	10/04/96	0
0	47868.352	0.000 14:51:04.10	10/04/96	0	0	44637.432	0.000 14:49:31.70	10/04/96	0
0	48043.167	0.000 14:51:03.20	10/04/96	0	0	47203.047	0.000 14:49:31.20	10/04/96	0
0	48042.490	0.000 14:51:02.30	10/04/96	0	0	48510.111	0.000 14:49:29.80	10/04/96	0
0	47923.880	0.000 14:51:01.50	10/04/96	0	0	49332.262	0.000 14:49:28.30	10/04/96	0
0	47605.081	0.000 14:51:00.80	10/04/96	0	0	49198.781	0.000 14:49:26.80	10/04/96	0
0	46880.728	0.000 14:51:00.10	10/04/96	0	0	48947.861	0.000 14:49:25.50	10/04/96	0
0	46504.552	0.000 14:50:59.40	10/04/96	0	0	48636.440	0.000 14:49:24.00	10/04/96	0
0	46268.988	0.000 14:50:58.60	10/04/96	0	0	48281.413	0.000 14:49:22.60	10/04/96	0
0	46005.094	0.000 14:50:57.60	10/04/96	0	0	47661.003	0.000 14:49:21.30	10/04/96	0
0	47266.637	0.000 14:50:55.40	10/04/96	0	0	46662.405	0.000 14:49:20.20	10/04/96	0
0	47094.790	0.000 14:50:54.70	10/04/96	0	0	45660.777	0.000 14:49:18.90	10/04/96	0
0	47291.109	0.000 14:50:53.90	10/04/96	0	0	44388.943	0.000 14:49:01.00	10/04/96	0
0	47624.466	0.000 14:50:53.10	10/04/96	0	0	45650.570	0.000 14:48:59.20	10/04/96	0
0	47969.021	0.000 14:50:52.40	10/04/96	0	0	48716.903	0.000 14:48:58.10	10/04/96	0
0	48251.650	0.000 14:50:51.40	10/04/96	0	0	49692.473	0.000 14:48:57.10	10/04/96	0
0	48414.691	0.000 14:50:50.50	10/04/96	0	0	50405.500	0.000 14:48:55.40	10/04/96	0
0	48511.990	0.000 14:50:49.50	10/04/96	0	0	50914.716	0.000 14:48:53.90	10/04/96	0
0	48629.926	0.000 14:50:48.80	10/04/96	0	0	51401.271	0.000 14:48:52.70	10/04/96	0
0	48716.112	0.000 14:50:48.00	10/04/96	0					
0	49082.739	0.000 14:50:46.90	10/04/96	0	0	51849.711	0.000 14:48:51.50	10/04/96	0
0	49518.643	0.000 14:50:45.90	10/04/96	0	0	51748.303	0.000 14:48:50.00	10/04/96	0
0	49720.546	0.000 14:50:45.30	10/04/96	0	0	51442.467	0.000 14:48:48.60	10/04/96	0
0	49935.510	0.000 14:50:44.50	10/04/96	0	0	51367.213	0.000 14:48:47.30	10/04/96	0
0	50149.743	0.000 14:50:43.70	10/04/96	0	0	51163.445	0.000 14:48:46.10	10/04/96	0
0	50641.460	0.000 14:50:42.80	10/04/96	0	0	50666.268	0.000 14:48:44.80	10/04/96	0
0	51673.052	0.000 14:50:42.00	10/04/96	0	0	50167.946	0.000 14:48:43.50	10/04/96	0
0	55156.812	0.000 14:50:41.10	10/04/96	0	0	49770.378	0.000 14:48:42.00	10/04/96	0
0	58431.308	0.000 14:50:40.40	10/04/96	0	0	49586.914	0.000 14:48:40.80	10/04/96	0
0	56324.503	0.000 14:50:39.60	10/04/96	0	0	48709.766	0.000 14:48:39.30	10/04/96	0
0	54269.520	0.000 14:50:38.80	10/04/96	0	0	48705.836	0.000 14:48:37.90	10/04/96	0
0	52875.610	0.000 14:50:37.90	10/04/96	0	0	49408.381	0.000 14:48:36.40	10/04/96	0
0	52082.771	0.000 14:50:36.60	10/04/96	0	0	49039.352	0.000 14:48:34.80	10/04/96	0
0	51383.075	0.000 14:50:35.00	10/04/96	0	0	47668.143	0.000 14:48:33.70	10/04/96	0
0	51051.225	0.000 14:50:33.50	10/04/96	0	0	44447.803	0.000 14:48:32.10	10/04/96	0
0	52561.621	0.000 14:50:30.70	10/04/96	0	0	48237.821	0.000 14:48:21.30	10/04/96	0
0	51834.654	0.000 14:50:28.80	10/04/96	0	0	48120.542	0.000 14:48:19.70	10/04/96	0
0	51176.955	0.000 14:50:27.90	10/04/96	0	0	47532.173	0.000 14:48:18.40	10/04/96	0
0	50746.717	0.000 14:50:26.90	10/04/96	0	0	47176.229	0.000 14:48:16.70	10/04/96	0
0	50477.099	0.000 14:50:26.10	10/04/96	0	0	46372.577	0.000 14:48:15.80	10/04/96	0
0	50052.062	0.000 14:50:25.40	10/04/96	0	0	47106.682	0.000 14:48:14.20	10/04/96	0
0	48052.993	0.000 14:50:23.90	10/04/96	0	0	48142.382	0.000 14:48:09.20	10/04/96	0
0	49341.995	0.000 14:50:21.60	10/04/96	0	0	48026.092	0.000 14:48:07.80	10/04/96	0
0	49233.558	0.000 14:50:20.70	10/04/96	0	0	47780.616	0.000 14:48:06.50	10/04/96	0
0	48567.296	0.000 14:50:19.80	10/04/96	0	0	48048.897	0.000 14:48:05.20	10/04/96	0
0	48226.132	0.000 14:50:16.20	10/04/96	0	0	47204.343	0.000 14:48:04.00	10/04/96	0
0	47093.611	0.000 14:50:14.80	10/04/96	0	0	41930.574	0.000 14:48:02.80	10/04/96	0
0	44147.207	0.000 14:50:13.30	10/04/96	0	0	46866.524	0.000 14:47:55.00	10/04/96	0
0	33743.676	0.000 14:50:11.70	10/04/96	0	0	48632.741	0.000 14:47:53.70	10/04/96	0
0	46989.626	0.000 14:50:09.30	10/04/96	0	0	49171.215	0.000 14:47:52.60	10/04/96	0
0	47760.784	0.000 14:50:08.70	10/04/96	0	0	49381.500	0.000 14:47:51.50	10/04/96	0
0	48494.621	0.000 14:50:07.60	10/04/96	0	0	49473.740	0.000 14:47:50.00	10/04/96	0
0	48848.253	0.000 14:50:06.60	10/04/96	0	0	49580.739	0.000 14:47:48.80	10/04/96	0
0	49105.602	0.000 14:50:05.50	10/04/96	0	0	49696.945	0.000 14:47:47.50	10/04/96	0
0	49287.576	0.000 14:50:04.20	10/04/96	0	0	49785.120	0.000 14:47:46.00	10/04/96	0
0	49476.337	0.000 14:50:03.00	10/04/96	0	0	49916.864	0.000 14:47:44.80	10/04/96	0
0	49676.890	0.000 14:50:01.90	10/04/96	0	0	50161.646	0.000 14:47:43.20	10/04/96	0
0	49839.375	0.000 14:50:00.70	10/04/96	0	0	50380.000	0.000 14:47:41.70	10/04/96	0
0	49971.474	0.000 14:49:59.60	10/04/96	0	0	50543.741	0.000 14:47:40.20	10/04/96	0

0	50631.714	0.000	14:47:39.00	10/04/96	0	0	48914.809	0.000	14:45:56.30	10/04/96	0
0	50714.296	0.000	14:47:37.70	10/04/96	0	0	49024.797	0.000	14:45:55.30	10/04/96	0
0	50729.670	0.000	14:47:36.40	10/04/96	0	0	49146.543	0.000	14:45:27.90	10/04/96	0
0	50712.669	0.000	14:47:35.10	10/04/96	0	0	49143.616	0.000	14:45:26.90	10/04/96	0
0	50633.792	0.000	14:47:34.00	10/04/96	0	0	48731.435	0.000	14:45:22.20	10/04/96	0
0	50442.685	0.000	14:47:32.50	10/04/96	0	0	49203.500	0.000	14:45:20.20	10/04/96	0
0	50028.014	0.000	14:47:30.70	10/04/96	0	0	49208.543	0.000	14:45:19.10	10/04/96	0
0	49655.086	0.000	14:47:26.40	10/04/96	0	0	49200.853	0.000	14:45:18.00	10/04/96	0
0	49908.095	0.000	14:47:25.80	10/04/96	0	0	49164.763	0.000	14:45:16.80	10/04/96	0
0	50191.114	0.000	14:47:24.60	10/04/96	0	0	49132.508	0.000	14:45:15.70	10/04/96	0
0	50296.852	0.000	14:47:23.10	10/04/96	0	0	49092.932	0.000	14:45:14.60	10/04/96	0
0	50284.565	0.000	14:47:21.60	10/04/96	0	0	49028.991	0.000	14:45:13.70	10/04/96	0
0	50238.148	0.000	14:47:20.40	10/04/96	0	0	48971.989	0.000	14:45:12.80	10/04/96	0
0	50121.403	0.000	14:47:18.90	10/04/96	0	0	48899.494	0.000	14:45:12.00	10/04/96	0
0	50030.832	0.000	14:47:17.30	10/04/96	0	0	48415.442	0.000	14:45:11.50	10/04/96	0
0						0	48638.099	0.000	14:45:09.70	10/04/96	0
0	49930.582	0.000	14:47:15.80	10/04/96	0	0	47810.421	0.000	14:45:08.60	10/04/96	0
0	49817.464	0.000	14:47:14.40	10/04/96	0	0	48070.571	0.000	14:45:06.40	10/04/96	0
0	49721.914	0.000	14:47:13.00	10/04/96	0	0	47483.775	0.000	14:45:04.60	10/04/96	0
0	49607.516	0.000	14:47:11.60	10/04/96	0	0	46246.016	0.000	14:45:02.60	10/04/96	0
0	49549.492	0.000	14:47:10.00	10/04/96	0	0	47244.093	0.000	14:44:59.50	10/04/96	0
0	49499.375	0.000	14:47:08.80	10/04/96	0	0	47275.348	0.000	14:44:58.30	10/04/96	0
0	49483.126	0.000	14:47:07.50	10/04/96	0	0	47258.308	0.000	14:44:57.00	10/04/96	0
0	49493.565	0.000	14:47:06.10	10/04/96	0	0	45944.388	0.000	14:44:54.50	10/04/96	0
0	49512.362	0.000	14:47:04.90	10/04/96	0	0	46940.001	0.000	14:44:52.80	10/04/96	0
0	49533.437	0.000	14:47:03.50	10/04/96	0	0	44471.255	0.000	14:44:52.30	10/04/96	0
0	49333.972	0.000	14:47:02.10	10/04/96	0	0	41166.525	0.000	14:44:49.60	10/04/96	0
0	49083.028	0.000	14:47:00.70	10/04/96	0	0	48113.270	0.000	14:44:44.60	10/04/96	0
0	49045.440	0.000	14:46:59.00	10/04/96	0	0	44098.559	0.000	14:44:42.60	10/04/96	0
0	49112.954	0.000	14:46:57.60	10/04/96	0	0	42554.942	0.000	14:44:42.00	10/04/96	0
0	49139.558	0.000	14:46:56.30	10/04/96	0	0	40862.366	0.000	14:44:41.20	10/04/96	0
0	49132.101	0.000	14:46:55.00	10/04/96	0	0	42963.709	0.000	14:44:40.30	10/04/96	0
0	49170.381	0.000	14:46:53.10	10/04/96	0	0	45002.228	0.000	14:44:39.50	10/04/96	0
0	49168.871	0.000	14:46:51.50	10/04/96	0	0	47077.878	0.000	14:44:38.60	10/04/96	0
0	49115.514	0.000	14:46:50.00	10/04/96	0	0	48179.332	0.000	14:44:37.80	10/04/96	0
0	49095.642	0.000	14:46:49.20	10/04/96	0	0	48238.555	0.000	14:44:36.90	10/04/96	0
0	49083.537	0.000	14:46:48.20	10/04/96	0	0	48151.541	0.000	14:44:35.50	10/04/96	0
0	49104.605	0.000	14:46:46.90	10/04/96	0	0					
0	49182.989	0.000	14:46:45.40	10/04/96	0	0	48173.690	0.000	14:44:34.80	10/04/96	0
0	49301.482	0.000	14:46:43.90	10/04/96	0	0	48156.651	0.000	14:44:34.00	10/04/96	0
0	49370.237	0.000	14:46:42.50	10/04/96	0	0	48168.839	0.000	14:44:33.20	10/04/96	0
0	49432.217	0.000	14:46:40.80	10/04/96	0	0	48290.366	0.000	14:44:31.90	10/04/96	0
0	49417.677	0.000	14:46:39.30	10/04/96	0	0	48436.921	0.000	14:44:30.80	10/04/96	0
0	49384.546	0.000	14:46:37.80	10/04/96	0	0	48532.980	0.000	14:44:30.00	10/04/96	0
0	49351.491	0.000	14:46:36.40	10/04/96	0	0	48646.070	0.000	14:44:29.10	10/04/96	0
0	49349.153	0.000	14:46:35.20	10/04/96	0	0	48786.661	0.000	14:44:28.20	10/04/96	0
0	49377.168	0.000	14:46:33.60	10/04/96	0	0	48923.043	0.000	14:44:27.20	10/04/96	0
0	49398.233	0.000	14:46:32.70	10/04/96	0	0	49016.156	0.000	14:44:26.40	10/04/96	0
0	49463.777	0.000	14:46:31.10	10/04/96	0	0	49107.592	0.000	14:44:25.40	10/04/96	0
0	49511.563	0.000	14:46:29.70	10/04/96	0	0	49173.042	0.000	14:44:24.40	10/04/96	0
0	49570.792	0.000	14:46:28.10	10/04/96	0	0	49240.669	0.000	14:44:23.30	10/04/96	0
0	49631.643	0.000	14:46:26.70	10/04/96	0	0	49270.015	0.000	14:44:22.00	10/04/96	0
0	49686.650	0.000	14:46:25.20	10/04/96	0	0	49263.022	0.000	14:44:20.70	10/04/96	0
0	49547.783	0.000	14:46:23.30	10/04/96	0	0	49207.007	0.000	14:44:19.60	10/04/96	0
0	48047.415	0.000	14:46:21.50	10/04/96	0	0	49019.941	0.000	14:44:18.40	10/04/96	0
0	49093.655	0.000	14:46:19.90	10/04/96	0	0	49389.167	0.000	14:44:14.00	10/04/96	0
0	49162.362	0.000	14:46:19.30	10/04/96	0	0	49344.699	0.000	14:44:12.60	10/04/96	0
0	49189.043	0.000	14:46:18.40	10/04/96	0	0	49324.008	0.000	14:44:11.10	10/04/96	0
0	49279.825	0.000	14:46:17.40	10/04/96	0	0	48937.505	0.000	14:44:10.00	10/04/96	0
0	49392.160	0.000	14:46:16.10	10/04/96	0	0	49181.861	0.000	14:44:07.30	10/04/96	0
0	49247.756	0.000	14:46:14.90	10/04/96	0	0	0.000	0.000	14:44:06.50	10/04/96	0
0	49157.305	0.000	14:46:13.80	10/04/96	0	0	48911.259	0.000	14:44:06.00	10/04/96	0
0	49123.499	0.000	14:46:11.70	10/04/96	0	0	49051.627	0.000	14:44:03.20	10/04/96	0
0	49148.018	0.000	14:46:10.20	10/04/96	0	0	48710.683	0.000	14:44:02.60	10/04/96	0
0	49209.704	0.000	14:46:08.80	10/04/96	0	0	0.000	0.000	14:44:01.70	10/04/96	0
0	49287.972	0.000	14:46:07.70	10/04/96	0	0	48852.863	0.000	14:44:00.20	10/04/96	0
0	49372.519	0.000	14:46:06.10	10/04/96	0	0	48764.468	0.000	14:43:58.60	10/04/96	0
0	49390.261	0.000	14:46:04.60	10/04/96	0	0	48365.752	0.000	14:43:56.80	10/04/96	0
0	49377.647	0.000	14:46:03.30	10/04/96	0	0	46679.711	0.000	14:43:53.50	10/04/96	0
0	49305.481	0.000	14:46:01.90	10/04/96	0	0	42591.164	0.000	14:43:52.30	10/04/96	0
0	49082.597	0.000	14:46:00.60	10/04/96	0	0	48222.515	0.000	14:43:46.70	10/04/96	0
0	48769.859	0.000	14:45:59.10	10/04/96	0	0	46614.169	0.000	14:43:45.40	10/04/96	0
0	48814.043	0.000	14:45:57.60	10/04/96	0	0	46076.770	0.000	14:43:44.20	10/04/96	0
0						0	46724.833	0.000	14:43:40.90	10/04/96	0

0	48253.226	0.000	14:05:33.00	10/04/96	0	0	48137.820	0.000	14:00:59.70	10/04/96	0
0	48291.699	0.000	14:05:31.90	10/04/96	0	0	48657.731	0.000	14:00:58.00	10/04/96	0
0	48321.676	0.000	14:05:29.50	10/04/96	0	0	48549.758	0.000	14:00:56.60	10/04/96	0
0	48482.958	0.000	14:05:27.60	10/04/96	0	0	48600.385	0.000	14:00:55.20	10/04/96	0
0	48461.783	0.000	14:05:26.30	10/04/96	0	0	48650.003	0.000	14:00:53.80	10/04/96	0
0	48414.315	0.000	14:05:24.80	10/04/96	0	0	48668.892	0.000	14:00:52.40	10/04/96	0
0	48451.342	0.000	14:05:23.30	10/04/96	0	0	48657.957	0.000	14:00:51.10	10/04/96	0
0	48463.505	0.000	14:05:21.80	10/04/96	0	0	48649.069	0.000	14:00:50.00	10/04/96	0
0	48701.526	0.000	14:05:19.20	10/04/96	0	0	48647.987	0.000	14:00:48.70	10/04/96	0
0	49532.099	0.000	14:05:12.90	10/04/96	0	0	48538.114	0.000	14:00:43.40	10/04/96	0
0	49455.991	0.000	14:05:09.80	10/04/96	0	0	48732.003	0.000	14:00:42.20	10/04/96	0
0	49874.341	0.000	14:05:07.20	10/04/96	0	0	48723.323	0.000	14:00:41.10	10/04/96	0
0	50441.189	0.000	14:05:05.10	10/04/96	0	0	48735.228	0.000	14:00:39.80	10/04/96	0
0	50576.110	0.000	14:05:02.80	10/04/96	0	0	48766.545	0.000	14:00:38.70	10/04/96	0
0	50444.192	0.000	14:04:59.30	10/04/96	0	0	48728.605	0.000	14:00:37.30	10/04/96	0
0	47564.897	0.000	14:03:46.90	10/04/96	0	0	48697.654	0.000	14:00:36.10	10/04/96	0
0	47648.452	0.000	14:03:38.30	10/04/96	0	0	48714.748	0.000	14:00:35.00	10/04/96	0
0	47574.995	0.000	14:03:37.50	10/04/96	0	0	48923.391	0.000	14:00:34.00	10/04/96	0
0	47490.927	0.000	14:03:36.70	10/04/96	0	0	48502.163	0.000	14:00:32.90	10/04/96	0
0	47511.273	0.000	14:03:35.90	10/04/96	0	0	49134.497	0.000	14:00:31.40	10/04/96	0
0	47775.014	0.000	14:03:35.00	10/04/96	0	0	51684.203	0.000	14:00:16.90	10/04/96	0
0	47886.711	0.000	14:03:34.10	10/04/96	0	0	47921.075	0.000	14:00:15.50	10/04/96	0
0	47261.362	0.000	14:03:33.30	10/04/96	0	0	46822.543	0.000	14:00:14.30	10/04/96	0
0	46517.887	0.000	14:03:32.50	10/04/96	0	0	45519.461	0.000	14:00:12.90	10/04/96	0
0	45699.584	0.000	14:03:31.60	10/04/96	0	0	45973.082	0.000	14:00:11.60	10/04/96	0
0	45523.388	0.000	14:03:30.70	10/04/96	0	0	47342.029	0.000	14:00:10.10	10/04/96	0
0	46066.509	0.000	14:03:29.90	10/04/96	0	0	47913.550	0.000	14:00:08.90	10/04/96	0
0	46696.252	0.000	14:03:28.90	10/04/96	0	0	47495.461	0.000	14:00:07.70	10/04/96	0
0	50022.664	0.000	14:03:27.10	10/04/96	0	0	47516.921	0.000	14:00:04.40	10/04/96	0
0	50530.754	0.000	14:03:07.80	10/04/96	0	0	47552.720	0.000	13:59:50.60	10/04/96	0
0	47673.346	0.000	14:03:05.70	10/04/96	0	0	40930.425	0.000	13:58:53.30	10/04/96	0
0	48635.465	0.000	14:03:04.50	10/04/96	0	0	43032.804	0.000	13:58:52.10	10/04/96	0
0	48857.819	0.000	14:03:03.00	10/04/96	0	0	44389.747	0.000	13:58:50.80	10/04/96	0
0	48860.250	0.000	14:03:01.60	10/04/96	0	0	44570.631	0.000	13:58:49.60	10/04/96	0
0	48855.732	0.000	14:03:00.00	10/04/96	0	0	44478.417	0.000	13:58:48.30	10/04/96	0
0	48827.870	0.000	14:02:58.70	10/04/96	0	0	43775.602	0.000	13:58:38.50	10/04/96	0
0	48790.719	0.000	14:02:57.60	10/04/96	0	0	38879.168	0.000	13:58:37.00	10/04/96	0
0	48763.873	0.000	14:02:56.40	10/04/96	0	0	35251.476	0.000	13:58:35.90	10/04/96	0
0	48734.798	0.000	14:02:55.30	10/04/96	0	0	36987.656	0.000	13:58:34.70	10/04/96	0
0	48773.011	0.000	14:02:39.00	10/04/96	0	0	37894.098	0.000	13:58:33.50	10/04/96	0
0	48776.396	0.000	14:02:38.00	10/04/96	0	0	38592.799	0.000	13:58:28.80	10/04/96	0
0	48729.617	0.000	14:02:37.00	10/04/96	0	0	44507.981	0.000	13:57:53.70	10/04/96	0
0	48728.605	0.000	14:02:35.80	10/04/96	0	0	44512.195	0.000	13:57:52.10	10/04/96	0
0	48675.603	0.000	14:02:34.70	10/04/96	0	0	43909.237	0.000	13:57:48.90	10/04/96	0
0	48646.164	0.000	14:02:33.50	10/04/96	0	0	38380.194	0.000	13:57:44.70	10/04/96	0
0	48630.099	0.000	14:02:32.30	10/04/96	0	0	42480.793	0.000	13:57:43.50	10/04/96	0
0	48636.407	0.000	14:02:31.30	10/04/96	0	0	44196.731	0.000	13:57:42.10	10/04/96	0
0	48426.202	0.000	14:02:27.60	10/04/96	0	0	44608.555	0.000	13:57:40.60	10/04/96	0
0	51395.461	0.000	14:02:26.00	10/04/96	0	0	44638.273	0.000	13:57:38.20	10/04/96	0
0	51284.794	0.000	14:02:17.20	10/04/96	0	0	43324.480	0.000	13:57:34.40	10/04/96	0
0	48551.113	0.000	14:02:15.70	10/04/96	0	0	38239.529	0.000	13:57:32.40	10/04/96	0
0	46767.749	0.000	14:02:14.30	10/04/96	0	0	35739.093	0.000	13:57:30.80	10/04/96	0
0	45524.295	0.000	14:02:13.00	10/04/96	0	0	37097.191	0.000	13:57:29.40	10/04/96	0
0	46297.542	0.000	14:02:11.50	10/04/96	0	0	38489.013	0.000	13:57:27.90	10/04/96	0
0	47360.248	0.000	14:02:10.10	10/04/96	0	0	39482.677	0.000	13:57:26.40	10/04/96	0
0	47888.205	0.000	14:02:08.90	10/04/96	0	0	40217.606	0.000	13:57:24.80	10/04/96	0
0	47475.024	0.000	14:02:07.30	10/04/96	0	0	40497.108	0.000	13:57:20.60	10/04/96	0
0	47428.812	0.000	14:02:06.00	10/04/96	0	0	36880.498	0.000	13:57:18.90	10/04/96	0
0	47545.270	0.000	14:02:04.70	10/04/96	0	0	34558.023	0.000	13:57:17.30	10/04/96	0
0	47594.762	0.000	14:01:51.80	10/04/96	0	0	38017.136	0.000	13:57:15.50	10/04/96	0
0	47569.849	0.000	14:01:46.40	10/04/96	0	0	42325.105	0.000	13:57:13.20	10/04/96	0
0	47484.630	0.000	14:01:15.20	10/04/96	0	0	37945.650	0.000	13:57:11.40	10/04/96	0
0	47597.852	0.000	14:01:14.00	10/04/96	0	0	38724.658	0.000	13:57:10.10	10/04/96	0
0	48013.323	0.000	14:01:12.60	10/04/96	0	0	39584.267	0.000	13:57:08.30	10/04/96	0
0	47280.868	0.000	14:01:11.20	10/04/96	0	0	42486.077	0.000	13:57:06.50	10/04/96	0
0	46391.010	0.000	14:01:10.00	10/04/96	0	0	44154.898	0.000	13:57:04.60	10/04/96	0
0	45684.662	0.000	14:01:08.80	10/04/96	0	0	44625.076	0.000	13:57:01.60	10/04/96	0
0	46098.775	0.000	14:01:07.60	10/04/96	0	0	44804.536	0.000	13:56:31.20	10/04/96	0
0	47355.224	0.000	14:01:06.40	10/04/96	0	0	44390.470	0.000	13:56:29.20	10/04/96	0
0	48677.252	0.000	14:01:05.20	10/04/96	0	0	43880.468	0.000	13:56:27.80	10/04/96	0
0	50896.501	0.000	14:01:03.70	10/04/96	0	0	42515.487	0.000	13:56:26.10	10/04/96	0
0	50156.907	0.000	14:01:02.30	10/04/96	0	0	39190.517	0.000	13:56:23.80	10/04/96	0

0	38325.392	0.000	13:56:21.60	10/04/96	0	0	48257.920	0.000	13:49:52.50	10/04/96	0
0	39416.678	0.000	13:56:19.90	10/04/96	0	0	47528.658	0.000	13:49:37.70	10/04/96	0
0	40828.163	0.000	13:56:18.30	10/04/96	0	0	42897.037	0.000	13:49:25.50	10/04/96	0
0	38465.484	0.000	13:56:16.70	10/04/96	0	0	47371.314	0.000	13:49:19.10	10/04/96	0
0	34314.684	0.000	13:56:15.00	10/04/96	0	0	49697.461	0.000	13:49:11.90	10/04/96	0
0	36414.759	0.000	13:56:13.20	10/04/96	0	0	50984.742	0.000	13:49:02.40	10/04/96	0
0	40693.551	0.000	13:56:11.40	10/04/96	0	0	46520.237	0.000	13:48:55.50	10/04/96	0
0	38907.221	0.000	13:56:08.40	10/04/96	0	0	47040.882	0.000	13:48:49.80	10/04/96	0
0	37567.551	0.000	13:56:06.60	10/04/96	0	0	48867.416	0.000	13:48:37.00	10/04/96	0
0	35209.804	0.000	13:55:55.70	10/04/96	0	0	45390.282	0.000	13:48:30.90	10/04/96	0
0	42402.670	0.000	13:55:53.50	10/04/96	0	0	49820.106	0.000	13:48:24.00	10/04/96	0
0	44443.144	0.000	13:55:49.60	10/04/96	0	0	47554.114	0.000	13:48:17.30	10/04/96	0
0	43905.777	0.000	13:55:44.20	10/04/96	0	0	45686.687	0.000	13:47:58.20	10/04/96	0
0	38481.936	0.000	13:55:42.50	10/04/96	0	0	42020.000	0.000	13:47:52.20	10/04/96	0
0	33752.999	0.000	13:55:35.80	10/04/96	0	0	41161.598	0.000	13:47:46.50	10/04/96	0
0	36551.567	0.000	13:55:30.20	10/04/96	0	0	48877.444	0.000	13:47:40.70	10/04/96	0
0	31375.637	0.000	13:55:08.60	10/04/96	0	0	41011.248	0.000	13:47:34.60	10/04/96	0
0	37412.663	0.000	13:55:07.40	10/04/96	0	0	47375.550	0.000	13:47:28.50	10/04/96	0
0	41276.617	0.000	13:55:06.20	10/04/96	0	0	47586.799	0.000	13:47:22.40	10/04/96	0
0	43786.558	0.000	13:55:05.00	10/04/96	0	0	47616.677	0.000	13:47:16.50	10/04/96	0
0	44664.968	0.000	13:55:03.50	10/04/96	0	0	48275.773	0.000	13:47:10.60	10/04/96	0
0	44173.368	0.000	13:55:01.70	10/04/96	0	0					
0	42947.202	0.000	13:55:00.10	10/04/96	0	0	48028.512	0.000	13:47:04.70	10/04/96	0
0	38487.977	0.000	13:54:58.60	10/04/96	0	0	40051.215	0.000	13:46:56.80	10/04/96	0
0	35696.092	0.000	13:54:57.20	10/04/96	0	0	46274.688	0.000	13:46:46.30	10/04/96	0
0	36872.816	0.000	13:54:55.50	10/04/96	0	0	48009.215	0.000	13:44:07.70	10/04/96	0
0	38027.215	0.000	13:54:54.10	10/04/96	0	0	47923.238	0.000	13:43:46.60	10/04/96	0
0	39353.962	0.000	13:54:51.80	10/04/96	0	0	47564.769	0.000	13:43:40.80	10/04/96	0
0	40108.515	0.000	13:54:50.10	10/04/96	0	0	48044.078	0.000	13:43:34.60	10/04/96	0
0	40156.661	0.000	13:54:48.20	10/04/96	0	0	48535.868	0.000	13:43:29.10	10/04/96	0
0	34200.945	0.000	13:54:40.50	10/04/96	0	0	49011.178	0.000	13:43:22.60	10/04/96	0
0	40995.945	0.000	13:54:28.70	10/04/96	0	0	49218.588	0.000	13:43:16.10	10/04/96	0
0	38661.421	0.000	13:54:16.20	10/04/96	0	0	47424.480	0.000	13:43:09.50	10/04/96	0
0	41797.131	0.000	13:54:13.70	10/04/96	0	0	47447.573	0.000	13:43:03.20	10/04/96	0
0	44329.028	0.000	13:54:10.80	10/04/96	0	0	34839.494	0.000	13:42:54.40	10/04/96	0
0	43689.300	0.000	13:53:46.80	10/04/96	0	0	44885.352	0.000	13:42:47.80	10/04/96	0
0	42040.963	0.000	13:53:40.00	10/04/96	0	0	41787.289	0.000	13:42:38.10	10/04/96	0
0	47162.269	0.000	13:52:54.50	10/04/96	0	0	39990.167	0.000	13:42:34.70	10/04/96	0
0	48648.009	0.000	13:52:19.80	10/04/96	0	0	40499.746	0.000	13:42:29.10	10/04/96	0
0	48561.853	0.000	13:52:12.10	10/04/96	0	0	43975.389	0.000	13:42:21.50	10/04/96	0
0					0	0	42871.087	0.000	13:42:04.10	10/04/96	0
0	48378.313	0.000	13:52:10.40	10/04/96	0	0	45598.093	0.000	13:41:57.40	10/04/96	0
0	48037.052	0.000	13:52:08.70	10/04/96	0	0	47441.305	0.000	13:41:51.50	10/04/96	0
0	47371.227	0.000	13:52:07.00	10/04/96	0	0	48978.678	0.000	13:41:44.50	10/04/96	0
0	47368.717	0.000	13:52:05.30	10/04/96	0	0	49202.183	0.000	13:41:34.20	10/04/96	0
0	50007.820	0.000	13:51:58.10	10/04/96	0	0	48668.407	0.000	13:41:28.30	10/04/96	0
0	47100.531	0.000	13:51:56.10	10/04/96	0	0	47634.234	0.000	13:41:21.90	10/04/96	0
0	48892.097	0.000	13:51:54.20	10/04/96	0	0	46992.913	0.000	13:41:15.70	10/04/96	0
0	40256.515	0.000	13:51:52.30	10/04/96	0	0	46994.471	0.000	13:41:09.10	10/04/96	0
0	46701.135	0.000	13:51:45.10	10/04/96	0	0	44857.164	0.000	13:41:03.20	10/04/96	0
0	46021.132	0.000	13:51:30.50	10/04/96	0	0	49389.926	0.000	13:33:50.90	10/04/96	0
0	46343.201	0.000	13:51:28.20	10/04/96	0	0	49360.381	0.000	13:33:19.10	10/04/96	0
0	44519.087	0.000	13:51:26.40	10/04/96	0	0	49219.142	0.000	13:33:08.20	10/04/96	0
0	43290.237	0.000	13:51:24.60	10/04/96	0	0	48969.455	0.000	13:33:02.70	10/04/96	0
0	42132.915	0.000	13:51:17.80	10/04/96	0	0	48986.660	0.000	13:32:58.40	10/04/96	0
0	40804.424	0.000	13:51:15.80	10/04/96	0	0	48973.660	0.000	13:32:54.00	10/04/96	0
0	43530.960	0.000	13:51:14.30	10/04/96	0	0	48873.778	0.000	13:32:49.10	10/04/96	0
0	47146.314	0.000	13:51:12.80	10/04/96	0	0	48872.463	0.000	13:32:46.20	10/04/96	0
0	48435.233	0.000	13:51:06.00	10/04/96	0	0	48810.554	0.000	13:32:44.00	10/04/96	0
0	48323.443	0.000	13:51:04.50	10/04/96	0	0	48811.849	0.000	13:32:37.30	10/04/96	0
0	48014.906	0.000	13:51:02.30	10/04/96	0	0	48779.468	0.000	13:32:31.90	10/04/96	0
0	48459.375	0.000	13:51:00.50	10/04/96	0	0	48802.295	0.000	13:32:28.30	10/04/96	0
0	47668.180	0.000	13:50:58.10	10/04/96	0	0	48949.629	0.000	13:32:24.10	10/04/96	0
0	47262.833	0.000	13:50:52.70	10/04/96	0	0	49243.290	0.000	13:32:19.20	10/04/96	0
0	44177.277	0.000	13:50:47.90	10/04/96	0	0	49309.315	0.000	13:32:14.40	10/04/96	0
0	48169.013	0.000	13:50:42.00	10/04/96	0	0	49397.206	0.000	13:32:11.40	10/04/96	0
0	48043.820	0.000	13:50:36.00	10/04/96	0	0	49392.028	0.000	13:32:09.80	10/04/96	0
0	48053.092	0.000	13:50:29.50	10/04/96	0	0	49390.370	0.000	13:32:07.30	10/04/96	0
0	48415.522	0.000	13:50:15.90	10/04/96	0	0	49373.404	0.000	13:32:05.30	10/04/96	0
0	48983.911	0.000	13:50:13.00	10/04/96	0	0	49322.687	0.000	13:31:58.90	10/04/96	0
0	49299.292	0.000	13:50:10.60	10/04/96	0	0	49301.482	0.000	13:31:54.20	10/04/96	0
0	49639.025	0.000	13:50:07.10	10/04/96	0	0	49135.835	0.000	13:31:50.00	10/04/96	0
0	49696.552	0.000	13:49:58.90	10/04/96	0	0	48714.483	0.000	13:31:45.40	10/04/96	0
0	49375.938	0.000	13:49:55.60	10/04/96	0	0	48239.664	0.000	13:31:40.90	10/04/96	0

0	48026.697	0.000	13:31:36.90	10/04/96	0	0	48500.644	0.000	13:19:23.60	10/04/96	0
0	48288.185	0.000	13:31:31.70	10/04/96	0	0	48518.012	0.000	13:19:16.50	10/04/96	0
0	48689.530	0.000	13:31:26.00	10/04/96	0	0	48655.863	0.000	13:19:06.00	10/04/96	0
0	47657.004	0.000	13:31:10.50	10/04/96	0	0	48606.483	0.000	13:18:59.90	10/04/96	0
0	45819.099	0.000	13:30:25.20	10/04/96	0	0	49018.016	0.000	13:18:53.90	10/04/96	0
0	45843.315	0.000	13:30:22.80	10/04/96	0	0	49072.126	0.000	13:18:48.30	10/04/96	0
0	45545.797	0.000	13:30:18.80	10/04/96	0	0	48809.623	0.000	13:18:42.10	10/04/96	0
0	48186.063	0.000	13:30:10.40	10/04/96	0	0	48774.070	0.000	13:18:35.90	10/04/96	0
0	48563.882	0.000	13:30:06.90	10/04/96	0	0	48733.530	0.000	13:18:29.90	10/04/96	0
0	48328.274	0.000	13:30:00.40	10/04/96	0	0	48708.125	0.000	13:18:23.70	10/04/96	0
0	47955.144	0.000	13:29:55.90	10/04/96	0	0	48332.941	0.000	13:18:16.60	10/04/96	0
0	47339.829	0.000	13:29:50.60	10/04/96	0	0	46528.937	0.000	13:18:10.40	10/04/96	0
0	47219.428	0.000	13:29:45.20	10/04/96	0	0	0.000	0.000	13:18:09.40	10/04/96	0
0	47747.266	0.000	13:29:40.00	10/04/96	0	0	34713.331	0.000	13:18:01.50	10/04/96	0
0	48261.129	0.000	13:29:34.20	10/04/96	0	0	46266.461	0.000	13:17:54.50	10/04/96	0
0	49109.344	0.000	13:29:22.70	10/04/96	0	0	0.000	0.000	13:17:53.20	10/04/96	0
0	47553.165	0.000	13:29:09.80	10/04/96	0	0	48179.001	0.000	13:17:45.60	10/04/96	0
0	47563.171	0.000	13:27:36.80	10/04/96	0	0	49637.909	0.000	13:17:32.80	10/04/96	0
0	47250.744	0.000	13:27:15.80	10/04/96	0	0	50309.932	0.000	13:17:20.50	10/04/96	0
0	47011.760	0.000	13:26:42.40	10/04/96	0	0	47856.318	0.000	13:17:10.40	10/04/96	0
0	45887.285	0.000	13:26:29.10	10/04/96	0	0	48408.906	0.000	13:17:04.80	10/04/96	0
0	46421.106	0.000	13:26:24.70	10/04/96	0	0	48702.412	0.000	13:16:58.90	10/04/96	0
0	48971.322	0.000	13:26:16.60	10/04/96	0	0	48619.851	0.000	13:16:55.50	10/04/96	0
0	47735.318	0.000	13:26:05.70	10/04/96	0	0	0.000	0.000	13:16:54.00	10/04/96	0
0	45170.939	0.000	13:25:57.80	10/04/96	0	0	48640.579	0.000	13:16:48.60	10/04/96	0
0	42019.287	0.000	13:25:52.00	10/04/96	0	0	49188.676	0.000	13:16:43.60	10/04/96	0
0	42681.088	0.000	13:25:46.50	10/04/96	0	0	49418.408	0.000	13:16:38.00	10/04/96	0
0	46116.464	0.000	13:25:41.30	10/04/96	0	0	49512.671	0.000	13:16:33.30	10/04/96	0
0	47621.743	0.000	13:25:34.80	10/04/96	0	0	49642.485	0.000	13:16:28.00	10/04/96	0
0	0.000	0.000	13:24:26.50	10/04/96	0	0	49526.315	0.000	13:16:23.60	10/04/96	0
0	48089.956	0.000	13:24:10.20	10/04/96	0	0	49353.087	0.000	13:16:19.00	10/04/96	0
0	49306.314	0.000	13:24:03.00	10/04/96	0	0	49612.744	0.000	13:16:13.90	10/04/96	0
0	0.000	0.000	13:24:00.40	10/04/96	0	0	53803.619	0.000	13:16:01.20	10/04/96	0
0	48929.171	0.000	13:23:53.50	10/04/96	0	0	48813.569	0.000	13:15:53.70	10/04/96	0
0	48937.262	0.000	13:23:46.10	10/04/96	0	0	49203.538	0.000	13:15:47.40	10/04/96	0
0	49216.108	0.000	13:23:37.70	10/04/96	0	0	49355.942	0.000	13:15:42.90	10/04/96	0
0	40399.716	0.000	13:23:07.40	10/04/96	0	0	49163.574	0.000	13:15:37.20	10/04/96	0
0	0.000	0.000	13:23:05.90	10/04/96	0	0	48756.961	0.000	13:15:32.00	10/04/96	0
0	0.000	0.000	13:23:04.40	10/04/96	0	0	48018.134	0.000	13:15:28.10	10/04/96	0
0	48214.750	0.000	13:22:56.80	10/04/96	0	0	46455.954	0.000	13:15:22.30	10/04/96	0
0	48597.609	0.000	13:22:49.50	10/04/96	0	0	44028.478	0.000	13:15:05.50	10/04/96	0
0	48885.265	0.000	13:22:43.00	10/04/96	0	0	47415.357	0.000	13:14:58.30	10/04/96	0
0	49141.958	0.000	13:22:36.70	10/04/96	0	0	46911.442	0.000	13:14:54.50	10/04/96	0
0	48648.704	0.000	13:22:30.70	10/04/96	0	0	0.000	0.000	13:14:53.30	10/04/96	0
0	48024.768	0.000	13:22:23.90	10/04/96	0	0	48950.039	0.000	13:14:48.80	10/04/96	0
0	46843.487	0.000	13:22:18.80	10/04/96	0	0	47391.701	0.000	13:14:43.90	10/04/96	0
0	44822.663	0.000	13:22:16.10	10/04/96	0	0	0.000	0.000	13:14:42.80	10/04/96	0
0	44238.331	0.000	13:22:09.50	10/04/96	0	0	47535.141	0.000	13:14:39.10	10/04/96	0
0	44241.945	0.000	13:22:08.60	10/04/96	0	0	46397.594	0.000	13:14:33.40	10/04/96	0
0	48720.720	0.000	13:21:41.60	10/04/96	0	0	0.000	0.000	13:14:32.30	10/04/96	0
0	48855.953	0.000	13:21:35.40	10/04/96	0	0	47145.501	0.000	13:14:23.80	10/04/96	0
0	48521.765	0.000	13:21:29.50	10/04/96	0	0	44167.776	0.000	13:14:17.80	10/04/96	0
0	49117.308	0.000	13:21:23.70	10/04/96	0	0	47504.549	0.000	13:14:10.90	10/04/96	0
0	49437.789	0.000	13:21:17.90	10/04/96	0	0	0.000	0.000	13:14:09.90	10/04/96	0
0	49462.080	0.000	13:21:11.60	10/04/96	0	0	48557.235	0.000	13:14:04.60	10/04/96	0
0	49827.021	0.000	13:21:06.40	10/04/96	0	0	46313.834	0.000	13:13:51.80	10/04/96	0
0	49786.120	0.000	13:21:01.40	10/04/96	0	0	46141.227	0.000	13:13:40.70	10/04/96	0
0	49715.221	0.000	13:20:55.30	10/04/96	0	0	47844.466	0.000	13:13:36.60	10/04/96	0
0	49518.829	0.000	13:20:50.10	10/04/96	0	0	48488.012	0.000	13:13:32.10	10/04/96	0
0	49041.860	0.000	13:20:44.60	10/04/96	0	0	48845.361	0.000	13:13:27.50	10/04/96	0
0	0.000	0.000	13:20:43.50	10/04/96	0	0	48870.970	0.000	13:13:22.70	10/04/96	0
0	48704.646	0.000	13:20:38.60	10/04/96	0	0	48600.557	0.000	13:13:17.70	10/04/96	0
0	48534.283	0.000	13:20:31.80	10/04/96	0	0	0.000	0.000	13:13:14.80	10/04/96	0
0	48703.104	0.000	13:20:24.40	10/04/96	0	0	48133.322	0.000	13:13:10.10	10/04/96	0
0	48649.114	0.000	13:20:20.90	10/04/96	0	0	0.000	0.000	13:13:07.40	10/04/96	0
0	48209.733	0.000	13:20:15.60	10/04/96	0	0	48518.810	0.000	13:13:01.10	10/04/96	0
0	47557.464	0.000	13:20:10.40	10/04/96	0	0	48406.368	0.000	13:12:56.90	10/04/96	0
0	45721.138	0.000	13:20:03.50	10/04/96	0	0	48068.568	0.000	13:12:53.60	10/04/96	0
0	44588.015	0.000	13:19:45.50	10/04/96	0	0	47505.721	0.000	13:12:50.90	10/04/96	0
0	46911.371	0.000	13:19:39.90	10/04/96	0	0	47410.669	0.000	13:12:45.50	10/04/96	0
0	47896.487	0.000	13:19:34.60	10/04/96	0	0	47371.168	0.000	13:12:11.80	10/04/96	0

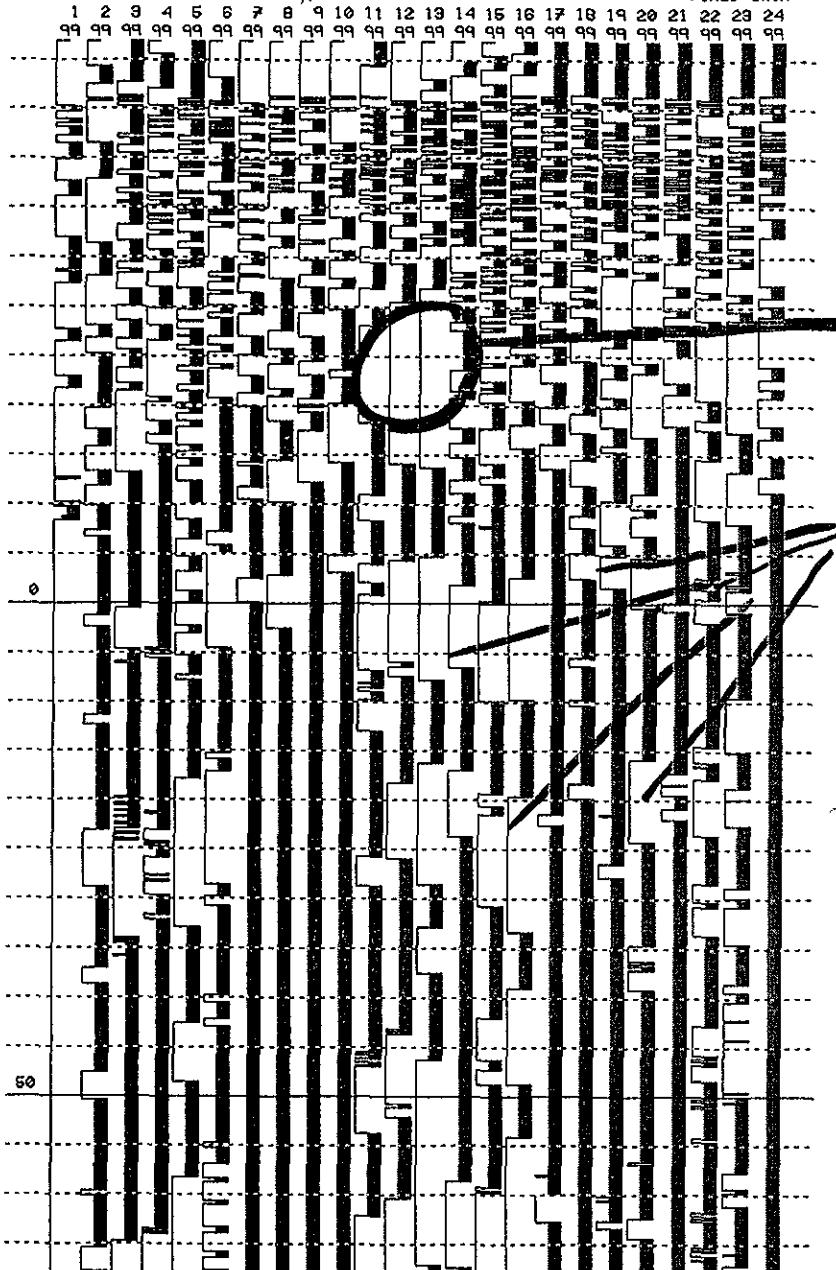
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0	29916.149	0.000	13:11:40.40	10/04/96	0	0	47694.123	0.000	12:59:58.50	10/04/96	0
0	45440.812	0.000	13:11:07.40	10/04/96	0	0	47798.375	0.000	12:59:48.70	10/04/96	0
0	38737.500	0.000	13:10:40.70	10/04/96	0	0	47820.196	0.000	12:59:39.50	10/04/96	0
0	38553.286	0.000	13:10:36.10	10/04/96	0	0	45817.879	0.000	12:59:31.70	10/04/96	0
0	40691.445	0.000	13:10:31.60	10/04/96	0	0	43975.372	0.000	12:59:24.30	10/04/96	0
0	46786.587	0.000	13:10:24.70	10/04/96	0	0	44284.282	0.000	12:59:17.00	10/04/96	0
0	46795.092	0.000	13:10:20.70	10/04/96	0	0	45225.029	0.000	12:59:09.90	10/04/96	0
0	47068.075	0.000	13:10:02.30	10/04/96	0	0	44778.527	0.000	12:59:03.40	10/04/96	0
0	49024.818	0.000	13:09:57.70	10/04/96	0	0	44096.499	0.000	12:58:55.60	10/04/96	0
0	49450.617	0.000	13:09:51.50	10/04/96	0	0	45587.095	0.000	12:58:49.90	10/04/96	0
0	49551.797	0.000	13:09:42.30	10/04/96	0	0	45304.338	0.000	12:58:43.70	10/04/96	0
0	49596.175	0.000	13:09:35.40	10/04/96	0	0	45312.327	0.000	12:58:29.10	10/04/96	0
0	49558.521	0.000	13:09:29.50	10/04/96	0	0	46574.955	0.000	12:58:20.80	10/04/96	0
0	49418.440	0.000	13:09:23.80	10/04/96	0	0	46349.996	0.000	12:58:13.80	10/04/96	0
0	49526.844	0.000	13:09:17.80	10/04/96	0	0	46844.857	0.000	12:58:06.10	10/04/96	0
0	49577.050	0.000	13:09:11.40	10/04/96	0	0	46659.824	0.000	12:57:59.80	10/04/96	0
0	49548.676	0.000	13:09:04.00	10/04/96	0	0	45166.515	0.000	12:57:52.60	10/04/96	0
0	49520.040	0.000	13:08:58.60	10/04/96	0	0	46789.878	0.000	12:57:45.90	10/04/96	0
0	49352.508	0.000	13:08:52.40	10/04/96	0	0	47508.237	0.000	12:57:40.10	10/04/96	0
0	49319.879	0.000	13:08:46.60	10/04/96	0	0	47727.039	0.000	12:57:34.50	10/04/96	0
0	49362.767	0.000	13:08:39.70	10/04/96	0	0	47692.284	0.000	12:57:29.00	10/04/96	0
0	49364.281	0.000	13:08:33.90	10/04/96	0	0	47545.206	0.000	12:57:23.40	10/04/96	0
0	49170.888	0.000	13:08:27.50	10/04/96	0	0	47094.251	0.000	12:57:17.20	10/04/96	0
0	49099.206	0.000	13:08:17.60	10/04/96	0	0	47285.917	0.000	12:57:11.30	10/04/96	0
0	48770.988	0.000	13:08:09.40	10/04/96	0	0	46718.678	0.000	12:57:05.20	10/04/96	0
0	0.000	0.000	13:07:56.60	10/04/96	0	0	47052.712	0.000	12:56:58.80	10/04/96	0
0	47454.244	0.000	13:07:51.60	10/04/96	0	0	47477.190	0.000	12:56:52.70	10/04/96	0
0	47496.880	0.000	13:07:47.00	10/04/96	0	0	47007.427	0.000	12:56:47.50	10/04/96	0
0	46941.754	0.000	13:07:43.40	10/04/96	0	0	46891.093	0.000	12:56:42.50	10/04/96	0
0	46980.989	0.000	13:07:33.00	10/04/96	0	0	47488.997	0.000	12:56:36.60	10/04/96	0
0	48529.038	0.000	13:07:26.70	10/04/96	0	0	46774.061	0.000	12:56:29.50	10/04/96	0
0	48691.289	0.000	13:07:20.60	10/04/96	0	0	47069.471	0.000	12:56:18.70	10/04/96	0
0	48834.769	0.000	13:07:14.40	10/04/96	0	0	47433.291	0.000	12:55:53.80	10/04/96	0
0	48684.976	0.000	13:07:08.30	10/04/96	0	0	47038.554	0.000	12:55:41.30	10/04/96	0
0	44396.556	0.000	13:07:01.90	10/04/96	0	0	47324.926	0.000	12:55:29.60	10/04/96	0
0	46086.638	0.000	13:06:55.90	10/04/96	0	0	47406.821	0.000	12:55:19.10	10/04/96	0
0	48115.213	0.000	13:06:48.60	10/04/96	0	0	47679.421	0.000	12:55:03.50	10/04/96	0
0	47804.965	0.000	13:06:41.90	10/04/96	0	0	48276.282	0.000	12:54:24.40	10/04/96	0
0	48760.285	0.000	13:06:34.60	10/04/96	0	0	49267.205	0.000	12:54:11.50	10/04/96	0
0	49850.395	0.000	13:06:25.20	10/04/96	0	0	49233.974	0.000	12:54:01.20	10/04/96	0
0	49022.764	0.000	13:06:16.80	10/04/96	0	0	49060.209	0.000	12:53:51.30	10/04/96	0
0	46921.834	0.000	13:05:34.30	10/04/96	0	0	49418.007	0.000	12:53:43.60	10/04/96	0
0	46925.708	0.000	13:05:29.00	10/04/96	0	0	49302.561	0.000	12:53:34.20	10/04/96	0
0	48333.400	0.000	13:05:23.80	10/04/96	0	0	48626.044	0.000	12:53:25.70	10/04/96	0
0	46749.993	0.000	13:05:17.30	10/04/96	0	0	48437.528	0.000	12:53:17.60	10/04/96	0
0	47217.507	0.000	13:05:10.30	10/04/96	0	0	48669.984	0.000	12:53:08.50	10/04/96	0
0	46787.272	0.000	13:05:01.60	10/04/96	0	0	48381.353	0.000	12:53:02.00	10/04/96	0
0	48006.136	0.000	13:04:55.30	10/04/96	0	0	48130.716	0.000	12:52:53.80	10/04/96	0
0	48327.944	0.000	13:04:45.90	10/04/96	0	0	47939.371	0.000	12:52:28.00	10/04/96	0
0	48897.478	0.000	13:04:34.60	10/04/96	0	0	48642.602	0.000	12:52:20.00	10/04/96	0
0	48064.667	0.000	13:04:24.70	10/04/96	0	0	48560.820	0.000	12:52:10.90	10/04/96	0
0	48417.452	0.000	13:04:17.50	10/04/96	0	0	48752.599	0.000	12:52:03.70	10/04/96	0
0	47599.304	0.000	13:04:08.20	10/04/96	0	0	48597.035	0.000	12:51:55.50	10/04/96	0
0	49927.529	0.000	13:04:01.40	10/04/96	0	0	48428.461	0.000	12:51:45.20	10/04/96	0
0	49399.519	0.000	13:03:52.10	10/04/96	0	0	48171.503	0.000	12:51:33.50	10/04/96	0
0	48489.449	0.000	13:03:44.60	10/04/96	0	0	48060.564	0.000	12:51:05.70	10/04/96	0
0	46787.439	0.000	13:03:39.30	10/04/96	0	0	48240.864	0.000	12:50:58.80	10/04/96	0
0	46395.088	0.000	13:03:31.70	10/04/96	0	0	47429.030	0.000	13:03:27.00	10/04/96	0
0	47444.914	0.000	13:02:59.70	10/04/96	0	0	47893.284	0.000	13:02:54.00	10/04/96	0
0	49484.873	0.000	13:02:49.10	10/04/96	0	0	49849.959	0.000	13:02:45.40	10/04/96	0
0	49049.555	0.000	13:02:26.10	10/04/96	0	0	47275.519	0.000	13:02:16.70	10/04/96	0
0	47623.655	0.000	13:01:16.40	10/04/96	0	0	47623.655	0.000	13:01:03.20	10/04/96	0
0	47611.247	0.000	13:00:50.80	10/04/96	0	0	47507.260	0.000	13:00:43.80	10/04/96	0
0	47854.774	0.000	13:00:29.80	10/04/96	0	0	46953.067	0.000	13:00:21.90	10/04/96	0
0	47443.354	0.000	13:00:21.90	10/04/96	0	0	47443.354	0.000	13:00:14.80	10/04/96	0

APPENDIX F  
SEISMIC REFLECTION PRINTOUTS

UNSAVED STACKED DATA  
LINE NUMBER 99-00  
SHOT LOC 998.00  
SAMPLE INTERVAL 125 uS  
ACQ FILT OUT  
DISP FILT OUT

GROUP INTERVAL 2.00  
PHONE 1 LOC 1.00  
RECORD LEN 128 MS

17:48:564/OCT/1996  
SHOT INTERVAL 0.00  
PHONE 24 LOC 47.00  
DELAY -10 MS  
STACKS 70  
FIXED GAIN



Inside building  
Reflection Line

Earth  
Engineers  
Figure

Date:

APPR

UNSAVED STACKED DATA

LINE NUMBER 00-00

SHOT LOC 0.00

SAMPLE INTERVAL 125 uS

ACQ FILT OUT

DISP FILT OUT

GROUP INTERVAL 2.00

PHONE 1 LOC 20.00

RECORD LEN 128 MS

OUT

OUT

17:03:194/OCT/1996

SHOT INTERVAL 0.00

PHONE 24 LOC 66.00

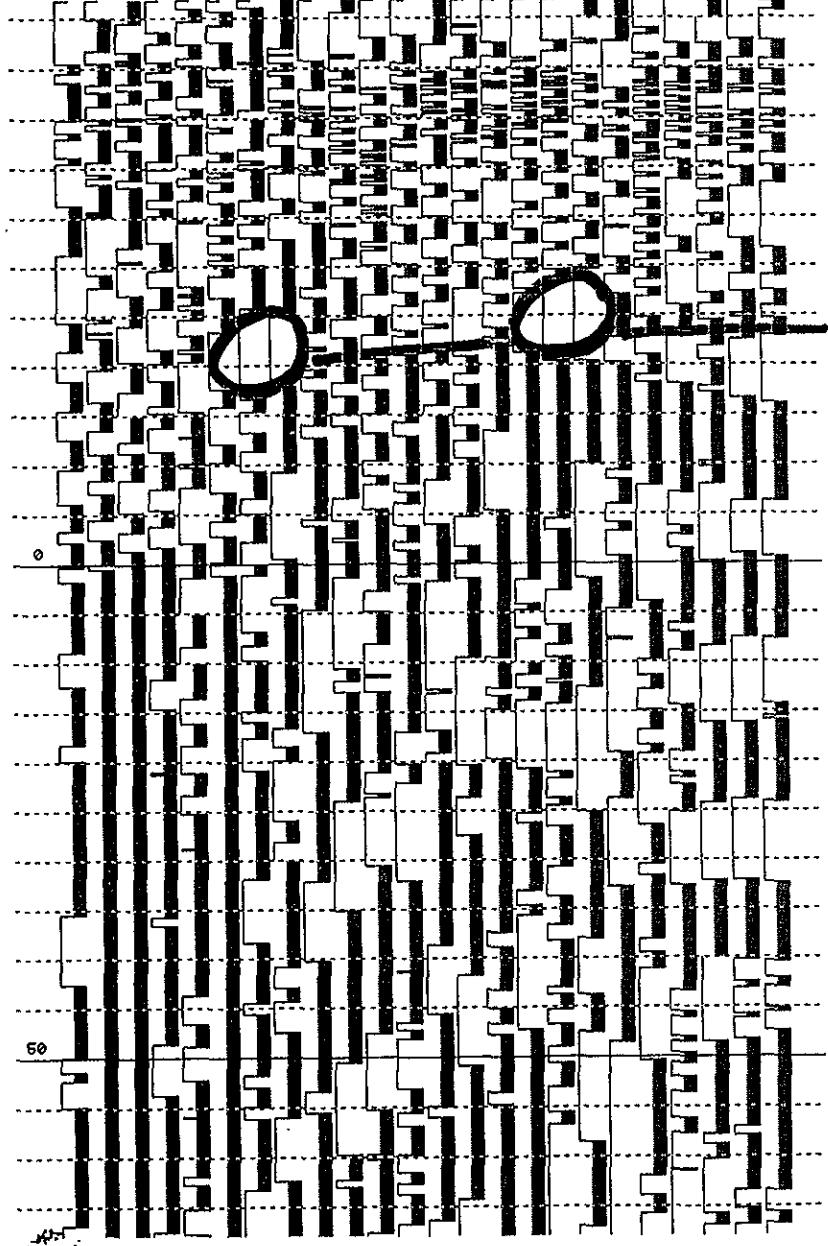
DELAY -10 MS

STACKS 51

FIXED GAIN

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

99 99



Probable tanks

Outside Building  
Reflection Line

 Earth  
Engineers  
Figure

Date:  
APPR