REVISED ENVIRONMENTAL REVIEW PLANNED DEVELOPMENT PROJECT MARINA VILLAGE HOMES ALAMEDA, CALIFORNIA

Prepared for

Encinal Real Estate, Inc.
2020 Sherman Avenue
Alameda, CA 94501

September 1996

Woodward-Clyde

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Woodward-Clyde
Engineering & sciences applied to the earth & its environment

September 27, 1996
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Mr. Peter Wang
Encinal Real Estate
202 Sherman Avenue
Alameda, CA 94501

Subject: Revised Environmental Review, Planned Development Project
Marina Village Homes, Alameda, California

Dear Mr. Wang;

We are pleased to submit four copies of the subject Environmental Review. This report summarizes previous environmental consulting work on the site and provides results of Woodward-Clyde Consultants' activities at the 2020 Sherman Avenue site, and the Beltline Railroad Easement. This report includes the results of laboratory analyses of groundwater and Estuary sediment, and additional soil samples for total lead.

Please call if you have any questions.

Sincerely,

Albert P. Ridley, C.E.G.
Senior Consultant

Enclosure: Revised Environmental Review

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1.0
INTRODUCTION

This Environmental Summary Report has been prepared to summarize the known environmental conditions at the subject site. A single-family residential development is planned at the site. The site is located on the west side of the Alaska Basin at the north end of Sherman Street in Alameda, California. The following report summarizes the results of previous environmental studies at the site and describe the preliminary results of an investigation, by Woodward-Clyde Consultants, of the central portion of the project property formerly occupied by the Alameda Beltline Railroad and the Santa Fe Railroad, see Figure 1.

1.1 SITE HISTORY

According to Encinal Terminals, the site has been used for shipping operations since the 1920s. In 1906 the land was raised by placing fill material over the shallow tidal flats to develop the property for use. The Alaska Packers Association operated on the eastern part of the site from 1906 until about the 1924. Del Monte Corporation owned the site from 1924 until 1976, when it was purchased by the present owner.

1.1.1 Aerial Photographs

A review of available aerial photographs provides some additional information regarding the property usage:

Photo Dated 4-14-50

The western 2/3 of the site is in use as rail spurs which extend southward from the Oakland Estuary and turn westward and connect to numerous parallel rail spurs on the west side of Sherman Street. A ferry dock is in place which appears to provide a point for loading and unloading rail cars from the Atchison Topeka and Santa Fe Ferry to the Alameda Beltline Railroad. A one story "L" shaped building is located at the southwest end of the site near Sherman Street. A concrete foundation exists today in the area of that former building. An

interview with Mr. Phil Copple, of the Alameda Beltline Railroad, indicates that Mr. Copple recalls that that "L" shaped building was used as a bunkhouse for rail workers.

A strip of land east of the rail lines and parallel to the Alaska Basin is occupied by a large warehouse, to the south, and yard areas, to the north, with stacks of material in transit. Several cargo vessels are docked at the edge of the Alaska Basin.

Photo Dated 7-3-59

In this photograph the yard area north of the warehouse appears to have been paved with a dark colored pavement, probably asphaltic concrete. Either transport trailers or cargo containers are parked in spaces that are outlined by white paint in a series of rows extending north south in the newly paved yard area. To the west most of the rail lines have been removed except for several lines connecting the Ferry terminal to the Alameda Beltline. A new warehouse has been constructed on the northwestern part of the site. That warehouse exists today and has a concrete slab on grade floor and metal sides and roof. A paved yard area appears to have been constructed on the west and north side of that warehouse.

A boat harbor is under construction west of the Ferry Terminal. Older buildings west of the property have been demolished.

Photo Dated 5-19-71

The property appears to be approximately in the same condition as in the 1959 photograph. However, the land west of the property has been paved and is in use for storage of material in shipment. The boat harbor to the west is in use and boats are moored at their docks. The rail Ferry is still in use as the photograph shows a ferry docked at the site.

Photo Dated 6-22-81

The former warehouse at the edge of the Alaska Basin has been removed and only the floor outline remains. The portion of the site formerly in use for storage of materials is not in use and no ships are shown at the dock.

The warehouse in the northwest corner of the site appears to be in use and some materials are stored outside of the west side of the building. The Ferry dock has been removed and the rail lines connecting the Ferry to the Alameda Beltline have been removed also.

Photo Dated 4-8-92

The site appears essentially as it does today, with only one warehouse building on the site. About 100 semi trailers or cargo containers are stored at the southeast corner of the site. The land west of the site, and north of Atlantic Avenue, has been developed with new commercial buildings, and residential structures.

1.1.2 Sanborn Insurance Maps

Sanborn Insurance Maps of the site area have been obtained for the years 1948, 1950, and two maps for 1987. These maps are included in Appendix A.

1948 Map

This map identifies the warehouse at the southeast corner of the site as the "Encinal Terminals Transit Shed Unit C". The building is shown to be built on concrete and wood pilings, with a concrete floor and 2 rows of wood posts. Rail sidings are located on the east and west side of this building.

1950 Map

There are no observable changes shown on the 1950 map. It appears to show the same conditions as in 1948.

1987 Maps

These maps show the warehouse at the northwest corner of the site essentially as it is today. It identifies the property to the west of this site as "Ship Container Storage Yard" "Not In

Use". The Marina View Towers are shown to the west of the site along with the Marina Village Motel and the residential development north of Independence Drive.

None of the maps identifies tanks or petroleum storage on the site.

2.0
PREVIOUS ENVIRONMENTAL STUDIES

Previous environmental studies have been performed at the site by MSE Environmental in 1990(a)(b), Kaldveer Associates (1990), and by Geomatrix Consultants in 1993, 1994, and 1995. The most significant work at the site is by Geomatrix Consultants who performed soil and groundwater exploration and prepared a Site Characterization Report(1995) for 2020 Sherman Avenue. Geomatrix Consultants also directed soil excavation at 2020 Sherman Avenue to remediate detected 1,1-DCA in soil at the southeast corner of the warehouse building. The findings of Geomatrix Consultants are summarized below and selected tables and figures are included in Appendix B.

2.1 GEOMATRIX REPORT, AUGUST 1995

The initial exploration by Geomatrix included collection of grab groundwater samples from temporary direct-push borings. That work was expanded to include installation of groundwater monitoring wells and excavation of soil of soil with detected 1,1-DCA. In the discussion of background in the Geomatrix report (1995) a brief summary of previous reports is given.

Phase I Environmental Survey by MSE Environmental 1990 (a)

They describe this report as a discussion of site history, regulatory records review, and aerial photo review. The records reviewed did not indicate the presence of underground tanks on the property.

Phase II Environmental Survey by MSE Environmental 1990(b)

They describe this study as containing a magnetics and radar search for underground tanks, and analysis of two grab groundwater samples for petroleum hydrocarbons and benzene, toluene, ethylbenzene, and xylenes (BTEX). No analyte compounds were detected.

Soil and Groundwater Investigation by Kaldveer (1990)

Eight borings were drilled and one grab groundwater sample was collected and analyzed from two of the borings. Soil samples were collected from depths of 2 and 6 feet in the borings. Soil samples from each depth were composited into four samples representative of the northern and southern site areas. Soil and groundwater samples were analyzed for petroleum hydrocarbons, volatile and semivolatile organics, pesticides, and California Code of Regulations 17 metals. In groundwater 1,1-dichloroethane (1,1-DCA) and 1,1,1-trichloroethane (1,1,1-TCA) were detected in one sample and low concentrations of motor oil were detected in both samples. Metal concentrations in water were below the State of California Maximum Contaminant Levels (MCL) for drinking water, except for chromium, arsenic, lead, and thallium. In soil, 1,1-DCA, pyrenes, benzo(b)fluoranthene, and low concentrations of motor oil were detected in individual samples.

A site plan by Kaldveer Associates indicated that between August 1990 and September 1990 shallow groundwater monitoring wells MW-1 to MW-8 were installed. Only wells MW-2, MW-4, MW-5 and MW-8 could be re-located by Geomatrix Consultants (see Appendix C). Geomatrix presented the results of laboratory analyses by others in their Tables 1 and 2 (Appendix B).

Geomatrix performed a series of grab groundwater investigations in 1984 which resulted in the location of downgradient limit of groundwater containing 1,1-DCA. A groundwater monitoring well MW-10 was installed at the downgradient limit of the groundwater zone with 1,1-DCA to monitor migration of the groundwater. Geomatrix prepared a Screening Health Evaluation for 1,1-DCA in groundwater to evaluate the potential risk to future residents due to detected concentrations of 1,1-DCA in groundwater (see Appendix B). They concluded that the estimated lifetime excess cancer risk for a hypothetical future on-site resident is 3 in 10 million, which is lower than the range of risks generally considered acceptable by regulatory agencies.

The source of 1,1-DCA was identified as an area of soil with 1,1-DCA at the southeast corner of the warehouse at 2020 Sherman Avenue. Geomatrix developed a Workplan for Excavation of that soil and after approval by the Alameda County Department of Environmental Health

proceeded to excavate about 300 to 400 cubic yards of soil. Confirmation soil samples from the bottom and sides of the excavation showed that for three sides and most of the bottom of the excavation soil had been removed with 1,1-DCA to a concentration near the detection limit of 2.5 parts per billion (ug/kg). However, at the east side of the excavation, where the Beltline property halted excavation, soil from 170 to 1,700 parts per billion (ug/kg) remain at a depth of about 6 feet below the surface. The excavated soil was placed on an asphaltic concrete paved area west of the warehouse for aeration and natural degradation of the volatile organics.

2.2 WOODWARD-CLYDE 1996

2.2.1 Sampling of Aerated Soil

In response to a letter from Ms. Logan at Alameda County, Woodward-Clyde Consultants collected six composite samples from the stockpiled soil in July of 1996 and submitted it to the analytical laboratory for analysis for VOCs. A report was submitted to Ms. Madhulla Logan, at the Alameda County Department of Environmental Health, which documented that no 1,1-DCA and no other VOCs were detected in the stockpiled soil. It was concluded that the soil aeration was complete and that the soil could be re-used on site as fill material.

2.2.2 Development of Soil Excavation Plan

A soil excavation plan is being prepared concurrently with this report. The plan has been discussed with Ms. Logan and we anticipate prompt approval. The excavation plan will outline procedures for removal of the remaining soil with 1,1-DCA. The proposed cleanup concentration for 1,1-DCA will be at or near the detection limit of 2.5 parts per billion. We anticipate that soil excavation will proceed within about one week after approval and require about one week to complete. Confirmation samples will be analyzed by a portable laboratory on-site. A report will be prepared documenting the confirmation sample results.

2.2.3 Fate and Transport Study

In response to a letter from Ms. Logan, at Alameda County, Woodward-Clyde Consultants has submitted an Approach for the Fate and Transport Study to Alameda County. Ms. Logan requested that a Fate and Transport Study be performed to evaluate potential impacts to the Oakland Estuary from possible migration of 1,1-DCA in groundwater. That study has been completed and was submitted to Alameda County in late August 1996.

3.0
RAILROAD RIGHT-OF-WAY INVESTIGATION RESULTS

Woodward-Clyde Consultants was retained to perform a Soil and Groundwater Investigation of the Alameda Beltline and Atchison Topeka and Santa Fe Railroad right-of-way parcels. The investigation included seven direct-push borings, ten shallow soil samples, two near shore soil samples and three estuary sediment samples. Soil samples were collected the borings and analyzed in the laboratory. Groundwater samples were collected from the seven borings and analyzed in the laboratory. Logs of the borings are included in Appendix C, along with the available analytical laboratory reports for the soil samples. A brief discussion of the findings is presented below.

3.1 GROUNDWATER GRADIENT

The groundwater level was measured in each of the seven borings ~~prior~~ to groundwater sampling. A 1-inch diameter PVC slotted casing was placed in each boring as a temporary piezometer. The seven borings were drilled to depths of about 10 feet. The location and relative elevation of the top of the casings was measured by a licensed surveyor. A temporary bench mark was established on the asphaltic concrete roadway crossing the site. The relative elevations of groundwater are shown on Figure 1. These are not elevations above sea level, but are only relative to the temporary bench mark. The depth to groundwater from the top of casing ranged from 4.41 feet in B-6 to 2.86 feet in B-5. The groundwater gradient in the southern portion of the railroad right-of-way is generally lower towards the northwest. The groundwater gradient is generally lower towards the north in the northern part of the railroad right-of-way (B-5, B-6 and B-7).

Borings encountered a silty gravel fill material between 4 and 7 feet in thickness overlying a dark gray organic clay known as Bay Mud. Groundwater occurred in the borings at about the bottom of the fill material (see Appendix C).

3.2 LABORATORY ANALYSES OF SOIL SAMPLES

Soil samples from borings and shallow soil samples were analyzed for: Title 22 metals, Total Petroleum Hydrocarbons as diesel and gasoline and motor oil by EPA Method 8015M, and for purgeable and extractable VOCs by EPA Methods 8260 and 8270, for herbicides by EPA Method 8150, for PCBs by EPA Method 8081, for Total Organic Carbon, and Organic Tin.

The laboratory program has not been completed and only reports of Title 22 metals, TPH diesel, gasoline, and motor oil, EPA 8260, and EPA 8150 are available. Summaries of available laboratory results are shown in Tables I, II, and III.

Table I summarizes the laboratory reported detections of Volatile Organics (EPA 8260), TPH as diesel, gasoline and motor oil (EPA 8015M). No diesel, or gasoline were reported by the laboratory for the soil samples submitted for analysis. Carbon disulfide was detected in shallow sediment samples M-1 (0.015 mg/kg) M-2 (0.077 mg/kg), and in B-4 at 2-1/2 feet (0.020 mg/kg). This is well below the residential PRG of 16 mg/kg for carbon disulfide. Methyl ethyl ketone (2-butanone) was detected at 0.047 mg/kg at 2-1/2 feet in B-4. This is also well below the residential PRG of 8,700 mg/kg for MEK in soil. However, each of the 19 soil samples analyzed for motor oil reported some detection above the reporting limit. Five soil samples (S-1, S-3, S-4, S-6 and B-1) were reported to have motor oil exceeding 1,000 mg/kg, which is the generally accepted cleanup level for TPH motor oil by the California Regional Water Quality Control Board. There is no PRG for motor oil as it is not listed by the EPA. The concentrations of motor oil reported ranged from 1,300 mg/kg in soil at B-1 to 2,900 mg/kg in soil sample S-1. The reported motor oil may be a result of the presence of broken asphaltic concrete pavement in the soil samples which could create a false result. Pieces of broken asphaltic concrete (A.C.) pavement were observed at the surface in the vicinity of S-1, S-3, S-4, S-6 and B-1 at the southern end of the railroad right-of-way. The presence of the soil with motor oil exceeding the 1,000 mg/kg guidance could be mitigated by excavation and disposal at a waste management facility, or it could be treated by bio-remediation to degrade the petroleum using natural soil organisms. If the motor oil results are due to the presence of asphaltic concrete in the soil, the soil with A.C. could be excavated and disposed, or could be encapsulated beneath planned street pavement.

The reported results of analyses of soil for the presence of chlorinated herbicides is summarized in Table II. No herbicides were reported by the laboratory above the reporting limit. However, the laboratory did note the presence of pentachlorophenol (a wood preservative) in soil samples B-7, B-3, and S-7. Analyses of these samples by EPA Method 8270 shows no detection of pentachlorophenol above the reporting limit.

Table III summarizes the laboratory reported detections of Title 22 metals in soil samples. These results can be compared to the USEPA Preliminary Remediation Goals (PRG) for metals in soil for a residential scenario. These results can also be compared to the Total Toxic Limit Concentrations (TTLC)from Title 22. If the reported concentration of metals exceeds the TTLC then the soil would be considered a hazardous waste if it was excavated and disposed. The PRGs are used for planning purposes for evaluating if there might be an increased health risk to residents from soil. Generally if the reported concentration of the metal or compound is below the PRG the USEPA indicates that there is no excess human health risk to potential residents.

For the 17 metals analyzed only two metals appear to exceed the PRGs. Beryllium is reported at 0.58 mg/kg in sample S-9 and 0.52 mg/kg in sample S-10, which slightly exceeds the PRG of 0.14 mg/kg. These two samples are located in an area outside of the residential lots and may, therefore, not require mitigating measures. If this are was considered for an activity where humans may ingest or inhale this soil then a mitigating measure might include excavation of this soil or encapsulation beneath a cover layer.

Lead (Table III) was reported at a concentration of 419 mg/kg in shallow soil from B-1, 6,440 mg/kg from shallow soil from B-5, and at 6,140 mg/kg in shallow soil from S-1, which exceed the County of Alameda Guidance of 400 mg/kg lead in shallow soil for a residential site. Additional exploration was performed during the week of September 20th using a backhoe to remove a shallow layer of soil near the previous reported detections of lead exceeding 400 mg/kg. More than 100 soil samples (Table IIIa) were collected and analyzed by a portable laboratory, at the site, using Energy Dispersive X-ray Fluorescence methods, as shown on Figures 2, 3, 4, and 5.

each sample not 95%

As shown on Figures 2, and 3 shallow samples of soil (0-6 inches deep) in the area of the former rail line in the area of B-5 and B-6 show that lead in most soil exceeds the 400 mg/kg cleanup goal for residential property. The area with lead in surface soil in this portion of the parcel covers an area of about 120 feet wide and about 800 feet long. Of more than 25 soil samples collected (Table IIIa) in the southern portion of the site, the Triangle Area, only one remaining sample(Number SS-44 at 600 mg/kg lead) exceeds the 400 mg/kg cleanup goal.

At boring B-1 exploration of the extent of soil with lead was performed with a backhoe, to a depth of about 1-foot, in an area about 5-feet wide and 16-feet long (Figure 4). Analysis of a sample from the bottom of the excavation (Number B1-B1) showed a concentration of only 220 mg/kg lead. Analysis of soil samples (Table IIIa) from the sides of this exploration are reported to contain a maximum of 160 mg/kg of lead. The excavated soil was stockpiled and covered with plastic sheeting for later disposal.

At the location of previous soil sample S-1 a backhoe was used to explore the extent of soil with lead to a depth of about 1-foot(Figure 4). Analysis of two soil samples from the bottom showed a detection of only 83 mg/kg lead for sample S1-B1, and 94 mg/kg lead for sample S1-B2. The dimensions of this exploration was about 15-feet by 20-feet and 1-foot deep. Lead was detected in sidewall samples (Table IIIa) at 160 mg/kg for sample S1-P3, 100 mg/kg for sample S1-P2, and 87 mg/kg for sample S1-P1. The excavated soil was stockpiled and covered with plastic sheeting for later disposal.

At the eastern edge of the former Geomatrix excavation of soil containing 1,1-DCA (Figure 5) two surface soil samples were collected and analyzed for total lead. The sample named "Check-1" is reported to have a concentration of only 93 mg/kg lead, and "Check-2" contained a concentration of only 200 mg/kg lead, as shown in Table IIIa.

As shown in Figure 6, a backhoe exploration area 1-foot deep and 10-feet by 10-feet in plan dimension was not sufficient to explore the lateral limit of soil with lead exceeding 400 mg/kg near boring B-5. Soil samples (Table IIIa) from the sides of this exploration contained lead at 5,300 mg/kg in sample B5-P1, 2,500 mg/kg in B5-P2, and 7,200 mg/kg in B5-P3. The soil exploration was expanded to 30-feet by 30-feet in plan dimension, and 1-foot deep. A sample from the west side of the exploration, B5-P7, contained only 110 mg/kg lead. However, a

sample from the south wall, B5-P4 contained 950 mg/kg lead, and a north wall sample, B5-P5 contained 1,600 mg/kg lead, and the east wall sample, B5-P6, contained 20,000 mg/kg lead. The excavated soil was stockpiled for later disposal.

More than 50 additional shallow soil samples (Table IIIa) were collected and analyzed for lead in an effort to explore the extent of soil with lead exceeding the 400 mg/kg cleanup goal. The results of that sampling and analyses of soil for lead indicates that the near surface soil over an area about 120 feet wide and about 800 feet long, in the Rail Line Area, contains lead exceeding 400 mg/kg, as shown in Figure 2.

Possible mitigation methods for shallow soils with lead might include excavation of soil exceeding the Alameda County Department of Environmental Health cleanup goal of 400 mg/kg lead, and disposal at an approved off-site waste management facility. At the exploration locations near B-1 and S-1 the exploration efforts appear to have removed soil exceeding the 400 mg/kg cleanup goal. However, shallow soil at sample point SS-44 in the Triangle area with 600 mg/kg lead indicates additional soil needs to be excavated to remove soil exceeding the cleanup goal for lead, in the Triangle Area.

Shallow soil samples were also analyzed for Organic Tin. As shown in Table IV, Organic Tin was not detected in soil samples above the reporting limit.

Shallow soil samples were also analyzed for Semi-Volatile Organics using EPA Method 8270. As shown in Table V, the analytes in the EPA 8270 analyses were not detected in the soil samples above the reporting limits.

Shallow soil samples were analyzed for Herbicides using EPA Method 8150. As shown in Table VI, herbicides were not detected in the soil samples above the reporting limits.

Table VII summarizes the reported detections of PCBs in soil samples using EPA Method 8081. PCBs were not detected in soil samples except for samples B-1, S-4, and S-10. Aroclor 1260 was detected at 49 ug/kg in B-1, 49 ug/kg in S-4, and 42 ug/kg in S-10. These reported concentrations are below the USEPA PRG for residential soil of 66 ug/kg for PCBs.

3.3 LABORATORY ANALYSES OF ESTUARY SEDIMENT AND GROUNDWATER

Three sediment samples were collected from the bottom of the Estuary where the Railroad property extends into the Estuary. Groundwater samples were collected from seven exploratory borings. Both the Estuary sediment and the grab groundwater samples from the borings were submitted to the analytical laboratory for selected analyses. The results of those analyses are discusses below.

3.3.1 Laboratory Analyses of Estuary Sediment

Three sediment samples, BM-1, BM-2, and BM-3, were collected from the bottom of the Estuary at the locations shown on Figure 1. Each sample was collected with a Ponar dredge from a small boat. Ten gallons of sediment was collected at each sample location. Sediment was placed in new two 5-gallon plastic buckets, supplied by the laboratory, and sealed with a plastic top, and taken directly to the laboratory. Pore water was extracted by the laboratory and analyzed for Organic Tin, PCBs by EPA Method 8081, and metals using EPA Method 6010. The results of the laboratory analyses are discussed below.

As shown in Table VIII, Organic Tin was not detected in the pore water of the three estuary sediment samples above the reporting limit. As shown in Table IX, PCBs were not detected in the pore water (elutriate) from the three sediment samples above the reporting limit of 1 ug/l.

Table X is a summary of the laboratory reporting of analyses of Title 22 metals analyses of the pore water from the three sediment samples. These results show no detection of most metals above the reporting limits, with a few exceptions. The laboratory reported for sample BM-1 pore water detection of 40.8 ug/l nickel, and 6.4 ug/l selenium. For sample BM-2 the laboratory reported 11.4 ug/l arsenic, and 28.4 ug/l molybdenum. No metals were reported above the reporting limit for sample BM-3.

If this sediment were to be dredged it would need to meet certain criteria for impact to marine waters. As shown on Table X the pore water concentration of arsenic (11.4 ug/l) does not exceed the California Water Quality Objective for Marine Surface Waters of 36 ug/l. In addition, the detection of 6.4 ug/l of selenium does not exceed the California Water Quality Objective of 71 ug/l. However, pore water from sample MB-1 has a reported detection of 40.8 ug/l nickel, which exceeds the California Water Quality Objective of 8.3 ug/l for nickel. There is no established Water Quality Objective for molybdenum, which was reported at 28.4 ug/l for pore water from sample BM-2. Some special handling of soil from the area of BM-1 would be required if it were to be dredged.

3.3.2 Laboratory Analyses of Groundwater Samples

Groundwater grab samples from borings B-1 to B-7 were submitted to the laboratory for analysis for Total Petroleum Hydrocarbons as diesel, gasoline, and motor oil by EPA Method 8015 modified. These samples were also analyzed for: Volatile Organics by EPA Method 8260; Semi-Volatile Organics by EPA Method 8270; PCBs by EPA Method 8081; Title 22 Metals by EPA Method 6061A; and Herbicides by EPA Method 8150.

Volatile Organics The reported detections of Volatile Organics in groundwater are shown in Table XI. All of the analytes in the EPA 8260 analyses were below the reporting limit except for 2-Butanone(also known as Methyl Ethyl Ketone-MEK). MEK is reported from the groundwater samples from B-1 at 60 ug/l, B-5 at 370 ug/l, B-6 at 180 ug/l, and B-7 at 100 ug/l. There is no established California Maximum Contaminant Level (MCL) for MEK in drinking water, and there is no established Water Quality Objective for Marine Surface Waters for MEK. The detections of MEK do not exceed the USEPA Preliminary Remediation Goals for MEK in tap water is 1,900 ug/l.

Semi-Volatile Organics Table XII summarized the detections of Semi-Volatile Organics detected in groundwater using EPA Method 8270. None of the analytes for the 8270 Method were detected above the reporting limits, which ranged from 10 to 500 ug/l. The laboratory reports are included in Appendix C.

PCBs As shown in Table XIII the laboratory reports that no PCBs were detected above the reporting limit, of 1 ug/l, for groundwater samples from B-1, B-2, B-3, B-4 and B-7.

TPH Gasoline, Diesel, Motor Oil Table XIV shows a summary of laboratory reported detections of TPH gasoline, diesel and motor oil in groundwater samples. The laboratory notes that the concentrations reported as gasoline in B-5 and B-6 are primarily due to the presence of a discrete peak not indicative of gasoline. TPH gasoline is reported at 80 ug/l in B-5 and 60 ug/l in B-6.

The laboratory also notes that the concentrations reported as diesel for all the samples are due to the presence of a combination of diesel and discrete peaks not indicative of diesel fuel. Diesel is reported in all of the groundwater samples at concentrations ranging from 130 ug/l (B-4) to 550 ug/l (B-7).

Motor oil is reported all of the groundwater samples exceeding the reporting limit of 100 ug/l except for the sample from B-4. Motor oil is reported in groundwater ranging from 190 ug/l (B-5) to 1,700 ug/l (B-3).

There are no established drinking water standards for TPH gasoline, diesel or motor oil. In addition California has not established a Water Quality Objective for Marine Surface Waters for TPH gasoline, diesel or motor oil. For a recent project at the Hamilton Air Force Base Water Quality Objective of 2,500 ug/l for diesel and 1,100 ug/l gasoline was established to protect marine waters. The concentrations reported in groundwater at this site do not exceed those Water Quality Objectives.

Title-22 Metals Table XV summarizes the reported detections of metals in groundwater from borings B-1 to B-7. For the 17 metal analytes all reported results were below the reporting limits except; arsenic in B-5, B-6 and B-7, cobalt in B-5, lead in B-5, selenium in B-1, B-2, B-5, B-6, and B-7, and zinc in B-1, and B-5. When compared to the California Drinking Water Maximum Contaminant Levels (Table XI) only lead at 42.5 ug/l and selenium at 60.7 ug/l exceed the California MCLs in groundwater from B-5. The reporting limits are not low enough to compare the metals detections to the California Water Quality Objectives for Marine Surface Waters. However, while selenium in water from B-5 exceeds the MCL of

50 ug/l it does not exceed the Water Quality Objective of 71 ug/l. In B-5 the reported concentration of lead in groundwater, 42.5 ug/l, exceeds the MCL of 15 ug/l, and the Water Quality Objective of 5.6 ug/l.

what PPO)

Herbicides Table XVI summarizes the reported detection of herbicides in groundwater collected from borings B-1, B-2, B-3, B-4 and B-7. None of the herbicides in the EPA 8150 analysis were reported above their reporting limit except Dichlorprop in B-1. Dichlorprop is reported at 1.27 ug/l in groundwater from B-1. Our review of the regulations shows that there is no established California or Federal MCL for Dichlorprop in drinking water, nor is there an established Water Quality Objective for Marine Surface Waters. — what about PPO for surface waters.

Total Dissolved Solids and Salinity Total dissolved solids (Table XV) in the groundwater samples ranged from 10 mg/l in B-2 to 15,400 mg/l in B-5. The California Recommended Secondary Drinking Water Standard for Total Dissolved Solids is 500 mg/l. It is unlikely that groundwater beneath the site would be considered drinking water. Salinity in groundwater samples (Table XI) ranged from 0.0053 parts per thousand in B-2, to 12.1 parts per thousand in B-4. Samples of groundwater were not sufficient to perform Total Dissolved Solids and Salinity tests on samples from B-6 and B-7. Because of borings B-6 and B-7 being near to the estuary it is likely that the Total Dissolved Solids and Salinity would be similar to B-5.

4.0
SUMMARY AND CONCLUSIONS

4.1 PREVIOUS STUDIES

A Phase I Environmental Survey 1990 (a) and a Phase II Environmental Survey 1990 (b)was prepared by MSE Environmental. They describe this report as a discussion of site history, regulatory records review, and aerial photo review. The records reviewed did not indicate the presence of underground tanks on the property.

A Soil and Groundwater Investigation was performed by Kaldveer (1990). Eight borings were drilled and one grab groundwater sample was collected and analyzed from two of the borings. In groundwater 1,1-dichloroethane (1,1-DCA) and 1,1,1-trichloroethane (1,1,1-TCA) were detected in one sample and low concentrations of motor oil were detected in both samples. Metal concentrations in water were below the State of California Maximum Contaminant Levels (MCL) for drinking water, except for chromium, arsenic, lead, and thallium. In soil, 1,1-DCA, pyrenes, benzo(b)fluoranthene, and low concentrations of motor oil were detected in individual samples.

A site plan by Kaldveer Associates indicated that between August 1990 and September 1990 shallow groundwater monitoring wells MW-1 to MW-8 were installed. Only wells MW-2, MW-4, MW-5 and MW-8 could be re-located by Geomatrix Consultants (see Appendix B). Geomatrix presented the results of laboratory analyses by others in their Tables 1 and 2 (Appendix B).

Geomatrix Consultants has performed soil and groundwater studies at 2020 Sherman Avenue and detected 1,1-DCA in soil and groundwater. The source of 1,1-DCA was identified as an area of soil with 1,1-DCA at the southeast corner of the warehouse at 2020 Sherman Avenue. Geomatrix developed a Workplan for Excavation of that soil and after approval by the Alameda County Department of Environmental Health proceeded to excavate about 300 to 400 cubic yards of soil. Geomatrix prepared a Screening Health Evaluation for 1,1-DCA in groundwater to evaluate the potential risk to future residents due to detected concentrations of 1,1-DCA in groundwater (see Appendix B). They concluded that the estimated lifetime

excess cancer risk for a hypothetical future on-site resident is 3 in 10 million, which is lower than the range of risks generally considered acceptable by regulatory agencies.

4.2 WOODWARD-CLYDE STUDIES AT 2020 SHERMAN AVENUE

Woodward-Clyde Consultants is preparing a Fate and Transport study of the potential impact of remaining 1,1-DCA to the Oakland Estuary. This study is being prepared in accordance with the approach approved by Alameda County. Woodward-Clyde Consultants has prepared an Excavation Plan to excavate remaining soil with 1,1-DCA. Excavation of soil with 1,1-DCA will be documented in a separate report.

4.3 RAILROAD RIGHT-OF-WAY

4.3.1 Soil

Woodward-Clyde Consultants has performed an investigation of soil and groundwater conditions in the Alameda Beltline and Atchison Topeka and Santa Fe right-of-way. The results of laboratory analyses of soil samples indicate that some shallow soils contain elevated concentrations of lead. Alameda County has provided a guidance of 400 mg/kg lead as the maximum allowable lead concentration in soil for a residential development. As described in Section 3.2, in the Alameda Beltline and Atchison Topeka and Santa Fe right-of-way, soil with lead exceeding 400 mg/kg in shallow soil extends over an area about 120 feet wide and 800 feet long near borings B-5, B-6, and B-7. Some soil with lead exceeding 400 mg/kg also remains in the Triangle Area of the right-of-way between S-1 and S-6. In addition some shallow soils are reported to contain TPH motor oil exceeding the 1,000 mg/kg regulatory limit. The presence of metals above the maximum allowable concentration in shallow soils can be mitigated by excavation and disposal, or on-site encapsulation prior to residential development. The reported presence of TPH motor oil above limits can also be mitigated by excavation and disposal off site or on-site treatment and encapsulation.

Carbon disulfide detected in samples of shallow sediment (M-1, M-2) and soil at a depth of 2-1/2 feet in B-4 does not exceed the residential PRG of 16 mg/kg. Methyl ethyl ketone (2-butanone) detected at 0.047 mg/kg at 2-1/2 feet in B-4 is below the residential PRG of 8,700

mg/kg. PCBs detected in soil samples B-1, S-4, and S-10 are at a concentration below the USEPA PRG for residential soil.

Organic tin was not detected in shallow soil samples above the reporting limit. Semi-Volatile Organics (EPA 8270) and Herbicides (EPA 8150) were not detected in shallow soil samples above their reporting limits.

4.3.2 Estuary Sediment

Pore water from Estuary Sediment was analyzed for Organic Tin, PCBs, and Title 22 Metals. No Organic Tin or PCBs were detected in the pore water above the reporting limit. The reported concentration of nickel 40.8 ug/l exceeds the California Water Quality Objective for Marine Surface Waters for Sample BM-1. Some special handling of this soil would be required if it were dredged.

4.3.3 Groundwater

Laboratory analyses of groundwater samples from borings shows no detection of semi-volatile organics (EPA 8270) or PCBs (EPA 8081). Detections of MEK in groundwater do not exceed the USEPA PRG for tap water of 1,900 ug/l.

TPH gasoline is reported at 80 ug/l in B-5 and 60 ug/l in B-6, which is below the Water Quality Objective of 1,100 ug/l for gasoline developed for a recent project at Hamilton Air Force Base. TPH diesel is reported up to 550 ug/l (B-7) which is below the Water Quality Objective of 2,500 ug/l developed for Hamilton AFB. Motor oil is reported in groundwater ranging from 190 ug/l (B-5) to 1,700 ug/l (B-3). There is no Marine Water Quality Objective for motor oil. In addition, there are no California or Federal MCLs for TPH gasoline, diesel, or motor oil.

The results of laboratory analyses of groundwater samples from borings shows only lead (42.5 ug/l) and selenium (60.7 ug/l) exceed the California MCLs. However, because the Total Dissolved Solids generally exceed the California recommended 500 mg/l for drinking water this groundwater is unlikely to be considered drinking water. The concentration of lead in B-

5 (42.5 ug/l) exceeds the Marine Water Quality Objective of 5.6 ug/l. Because of the distance from B-5 to the Estuary there is a low potential for lead in groundwater at B-5 impacting the water in the Estuary.

No Herbicides were detected in groundwater from the borings, except Dichlorprop, at 1.27 ug/l in water from B-1. There is no California MCL or Marine Water Quality Objective for Dichlorprop.

4.4 LIMITATIONS

We have performed our services in accordance with our Agreement; no guarantees are either expressed or implied. Unless we have actual knowledge to the contrary, information obtained from interviews or provided to us has been assumed to be correct and complete. We do not have assumed any liability for misrepresentation of information or for items not visible, accessible, or present on the property at the time of our site visits.

There is no investigation which is thorough enough to preclude the presence of materials on the Property which presently, or in the future, may be considered hazardous. Because regulatory evaluation criteria are constantly changing, concentrations of contaminants present and considered to be acceptable may, in the future, become subject to different regulatory standards and require remediation.

Opinions and judgments expressed herein, which are based on our understanding and interpretation of current regulatory standards, should not be construed as legal opinions. This document and the information contained herein have been prepared solely for the use of Encinal Terminals. Any reliance on this report by third parties shall be at such party's sole risk.

5.0
REFERENCES

Aerial Photographs; No. AV28-14-43, dated 4-15-50; No. AV-337-05-31, dated 7-3-59; No. AV-995-03-15, dated 5-19-71; No. AV-2040-05-18, dated 6-22-81; No. AV-4230-10-30, dated 4-8-92.

Geomatrix Consultants, 1995, Semi-Annual Monitoring Report, January-June 1995 and Site Characterization Report, 2020 Sherman Avenue, Alameda, California, report dated August 28, 1995.

MSE Environmental, Inc., 1990a, Phase I Environmental Survey Regarding Alaska Basin, Alameda, California, January 26.(in Geomatrix Consultants, 1995)

MSE Environmental, Inc. 1990b, Phase II Environmental Survey Regarding Alaska Basin, Alameda, California, March 16. (in Geomatrix Consultants, 1995)

Kaldveer, 1990, Site plan and laboratory reports from Med-Tox Associates, unpublished, August. (in Geomatrix Consultants, 1995)

TABLE I

RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES FOR VOCs AND TPH DIESEL, GASOLINE AND MOTOR OIL

	8260	Diesel 8015Md	Motor Oil 8015M	Gasoline 8015M
	mg/kg	mg/kg	mg/kg	mg/kg
S-1	ND	ND	2,900*	ND
S-2	ND	ND	510	ND
S-3	ND	ND	1,400*	ND
S-4	ND	ND	2,300*	ND
S-5	ND	ND	680	ND
S-6	ND	ND	2,100*	ND
S-7	ND	ND	62	ND
S-8	ND	ND	570	ND
S-9	ND	ND	150	ND
S-10	ND	ND	390	ND
M-1-Carbon Disulfide	0.015**	ND	96	ND
M-2-Carbon Disulfide	0.077**	ND	27	ND
B-1	ND	ND	1,300*	ND
B-2-2	ND	ND	950	ND
B-3		ND	880	ND
B-4-2.5'-Carbon Disulfide	0.020**	ND	17	ND
2-Butanone	0.047**			
B-5		ND	250	ND
B-6		ND	730	ND
B-7		ND	470	ND

*Note: California RWQCB cleanup level for TPH as motor oil is 1,000 mg/kg

**Note: USEPA PRG for residential soil is 16 mg/kg for carbon disulfide, and 8,700 mg/kg for 2-butanone (methyl ethyl ketone).

TABLE II

RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES FOR CHLORINATED HERBICIDES

results in mg/kg

	EPA 8150 Chlorinated Herbicides
B-1	ND
B-2	ND
B-3	ND
B-4	ND
B-5	ND
B-6	ND
B-7	ND
S-1	ND
S-2	ND
S-3	ND
S-4	ND
S-5	ND
S-6	ND
S-7	ND
S-8	ND
S-9	ND
S-10	ND
M-1	ND
M-2	ND

TABLE III

RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES FOR TITLE 22 METALS

results in mg/kg

	B-1	B-2	B-3	B-4	B-5	B-6	B-7	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10	M-1	M-2	EPA Res PRG mg/kg	Title 22 TTLC
Antimony	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	31	500
Arsenic	5.1	7	3.5	6.9	8.6	12.8	6.2	5.2	9.3	7.2	2.5	2.7	4.7	7	8.7	6.7	6.3	3.5	3.2	32	500
Barium	73.9	78.1	50.5	37.1	163	112	243	72	82.5	112	57.1	42.7	81.8	91.1	100	3.8	99.1	10.9	24.2	5,300	10,000
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.69	<0.5	0.58	0.52	<0.5	<0.5	0.14	75
Cadmium	0.87	<0.5	<0.5	<0.5	0.88	0.91	<0.5	<0.5	0.62	<0.5	<0.5	<0.5	<0.5	0.7	0.82	0.61	0.8	<0.5	<0.5	38	100
Chromium	36.8	30.9	47.2	51.4	192	48.6	108	157	34.9	38.1	28.8	27.5	37.7	42	49	64.2	31.7	16.1	44.4	210	2,500
Cobalt	7.9	8	7.3	9.4	17	13.9	23.2	14.8	9.2	9.3	5.5	6	9.8	14.7	13.2	10	14.2	5.7	7.8	4,600	8,000
Copper	138	62.9	22.2	35.5	61.4	119	21.7	35	39.3	103	20.1	41.8	20.9	58.8	65.4	39.5	68.9	22.2	28.8	2,800	2,500
Lead	419	159	35.5	11.1	6,440	192	22.9	6,140	74.4	179	22.2	28.8	32.7	80.8	188	26.5	214	25.5	10	130*	1,000
Mercury	0.14	0.089	0.1	0.088	0.21	0.18	0.084	0.051	0.19	0.16	0.04	0.071	0.064	0.15	0.25	0.3	0.19	0.038	<0.033	**	20
Molybdenum	<1	1.4	<1	1.1	2.7	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	1	<1	<1	380	3,500
Nickel	34.5	42.7	40.4	48.8	72.5	75.7	143	87.2	29.6	48.9	29.1	33.6	36.7	64.3	59.6	58	52.2	23.2	44.2	150*	2,000
Selenium	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	380	100
Silver	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	380	500
Thallium	<1	1.3	<1	<1	2.4	1.9	<1	<1	<1	<1	<1	<1	<1	<1	1.4	<1	1.3	<1	<1	**	700
Vanadium	34.2	27.5	28.9	45.8	41.7	39.9	31	30.2	39.3	31.4	24	29.8	38.4	40.3	45.3	53.1	53.9	26.4	38.2	540	2,400
Zinc	122	105	55.1	57.7	2,950	134	73.9	93.4	121	127	43.6	55.5	56.3	120	142	95.5	242	76.9	62.4	23,000	5,000

[ ] exceeds Preliminary Remediation Goal (PRG)

* Cal Modified PRG

**No PRG listed

TABLE III a

LEAD ANALYTICAL RESULTS FOR SOIL
ABL RAILROAD RIGHT-OF -WAY
RAIL LINE AREA

Location	Date Sampled and Analyzed	Result [mg/kg]
CHECK-1	11-Sep-96	93
CHECK-2	11-Sep-96	200
B5-P1	11-Sep-96	5,300
B5-P2	11-Sep-96	2,500
B5-P3	11-Sep-96	7,200
B5-B1	11-Sep-96	88
B5-B2	11-Sep-96	270
B5-P4	11-Sep-96	950
B5-P5	11-Sep-96	1,600
B5-P6	11-Sep-96	20,000
B5-P7	11-Sep-96	110
SS-4	11-Sep-96	560
SS-5	11-Sep-96	260
SS-6	11-Sep-96	390
B5-P8	12-Sep-96	1,200
B5-P10	12-Sep-96	5,100
B5-P9	12-Sep-96	1,300
B5-P11	12-Sep-96	260
SS-7	12-Sep-96	6,100
SS-8	12-Sep-96	5,500
SS-9	12-Sep-96	1,700
SS-10	12-Sep-96	840
SS-11	12-Sep-96	1,000
SS-14	12-Sep-96	390
SS-12	12-Sep-96	2,900
SS-13	12-Sep-96	830
SS-16	12-Sep-96	1,200
SS-17	12-Sep-96	630
SS-15	12-Sep-96	110
SS-18	12-Sep-96	380
SS-19	12-Sep-96	690
SS-20	12-Sep-96	100
SS-21	12-Sep-96	690
SS-22	12-Sep-96	1,600
SS-23	12-Sep-96	190
SS-5-P1	12-Sep-96	180
SS-5-P2	12-Sep-96	230
SS-5-P3	12-Sep-96	110
SS-6-P1	12-Sep-96	2,200

TABLE III a

LEAD ANALYTICAL RESULTS FOR SOIL
ABL RAILROAD RIGHT-OF -WAY
RAIL LINE AREA

Location	Date Sampled and Analyzed	Result [mg/kg]
SS-6-P2	12-Sep-96	260
SS-6-P3	12-Sep-96	570
SS-24	12-Sep-96	273
SS-25	12-Sep-96	1,100
SS-26	12-Sep-96	430
SS-27	12-Sep-96	340
SS-28	12-Sep-96	600
SS-29	12-Sep-96	1,000
SS-31	12-Sep-96	400
SS-32	12-Sep-96	410
SS-33	12-Sep-96	6,400
SS-30	12-Sep-96	620
SS-34	13-Sep-96	320
SS-35	13-Sep-96	320
SS-49	13-Sep-96	1,600
SS-50	13-Sep-96	1,700
SS-51	13-Sep-96	460
SS-52	13-Sep-96	17,000
SS-53	13-Sep-96	630
SS-57	13-Sep-96	1,700
SS-58	13-Sep-96	300
SS-59	13-Sep-96	860
SS-60	13-Sep-96	110
SS-61	13-Sep-96	190
SS-62	13-Sep-96	410
SS-63	13-Sep-96	370

Note:

Analysis was performed using Energy Dispersive X-ray Fluorescence.

Lead concentrations that exceed the target level of 400 mg/kg.

TABLE III b
LEAD ANALYTICAL RESULTS FOR SOIL
ABL RAILROAD RIGHT-OF -WAY
TRIANGLE AREA

Location	Date Sampled and Analyzed	Result [mg/kg]
S1-P1	11-Sep-96	66
S1-P2	11-Sep-96	68
S1-P3	11-Sep-96	74
S1-B1	11-Sep-96	83
S1-B2	11-Sep-96	94
B1-P1	11-Sep-96	87
B1-P2	11-Sep-96	100
B1-P3	11-Sep-96	160
B1-B1	11-Sep-96	220
SS-1	11-Sep-96	97
SS-2	11-Sep-96	110
SS-3	11-Sep-96	98
SS-36	13-Sep-96	79
SS-37	13-Sep-96	100
SS-38	13-Sep-96	110
SS-39	13-Sep-96	87
SS-40	13-Sep-96	150
SS-41	13-Sep-96	63
SS-42	13-Sep-96	98
SS-43	13-Sep-96	120
SS-44	13-Sep-96	600
SS-45	13-Sep-96	200
SS-46	13-Sep-96	150
SS-47	13-Sep-96	97
SS-48	13-Sep-96	200
SS-55	13-Sep-96	160
SS-44-P1	13-Sep-96	39
SS-44-P2	13-Sep-96	60
SS-44-P3	13-Sep-96	90
SS-56	13-Sep-96	200

Note:

Analysis was performed using Energy Dispersive X-ray Fluorescence.

Lead concentrations that exceed the target level of 400 mg/kg.

TABLE IV

RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES FOR ORGANIC TIN

by C.A. Krone, et al. Method

Results in ug/kg

Analyte	Reporting Limit	Sample Number																	
		B-1	B2-2	B-3	B4-2.5	B-5	B-6	B-7	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10	M-1	M-2
Tributyltin	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	< 5
Dibutyltin	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	< 5	ND	ND	ND	ND	ND	< 5
Butyltin	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = not detected above the reporting limit

TABLE V

RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES FOR SEMI-VOLATILE ORGANICS
by EPA Method 8270
Results in ug/kg

	Sample Number																		
Analyte	**B-1**	**B2-2**	**B-3**	**B4-2.5**	**B-5**	**B-6**	**B-7**	**S-1**	**S-2**	**S-3**	**S-4**	**S-5**	**S-6**	**S-7**	**S-8**	**S-9**	**S-10**	**M-1**	**M-2**
All Standard Analytes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = not detected above the reporting limit
See laboratory reports for reporting limits

TABLE VI

RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES FOR HERBICIDES
by EPA Method 8150
Results in ug/kg

Analyte	Reporting Limit	Sample Number B-1	B2-2	B-3	B4-2.5	B-5	B-6	B-7	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10	M-1	M-2
2,4-D	< 200	< 1,000	ND	ND	ND	ND	ND	ND	ND	< 1,000	ND	< 1,000	< 1,000	< 1,000	ND	ND	ND	ND	ND	ND
2,4-DB	< 200	< 1,000	ND	ND	ND	ND	ND	ND	ND	< 1,000	ND	< 1,000	< 1,000	< 1,000	ND	ND	ND	ND	ND	ND
2,4,5-T	< 40	< 200	ND	ND	ND	ND	ND	ND	ND	< 200	ND	< 200	< 200	< 200	ND	ND	ND	ND	ND	ND
2,4,5-TP (silver)	< 40	< 200	ND	ND	ND	ND	ND	ND	ND	< 200	ND	< 200	< 200	< 200	ND	ND	ND	ND	ND	ND
Dalapon	< 800	< 4,000	ND	ND	ND	ND	ND	ND	ND	< 4,000	ND	< 4,000	< 4,000	< 4,000	ND	ND	ND	ND	ND	ND
Dicamba	< 60	< 300	ND	ND	ND	ND	ND	ND	ND	< 300	ND	< 300	< 300	< 300	ND	ND	ND	ND	ND	ND
Dichlorprop	< 140	< 700	ND	ND	ND	ND	ND	ND	ND	< 700	ND	< 700	< 700	< 700	ND	ND	ND	ND	ND	ND
Dinoseb	< 20	< 100	ND	ND	ND	ND	ND	ND	ND	< 100	ND	< 100	< 100	< 100	ND	ND	ND	ND	ND	ND
MCPA	< 20,000	< 100,000	ND	ND	ND	ND	ND	ND	ND	< 100,000	ND	< 100,000	< 100,000	< 100,000	ND	ND	ND	ND	ND	ND
MCPP	< 20,000	< 100,000	ND	ND	ND	ND	ND	ND	ND	< 100,000	ND	< 100,000	< 100,000	< 100,000	ND	ND	ND	ND	ND	ND

ND = not detected above the reporting limit

TABLE VII

RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES FOR PCBs
by EPA Method 8081
Results in ug/kg

Analyte	Reporting Limit	Sample Number																		
		B-1	B2-2	B-3	B4-2.5	B-5	B-6	B-7	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10	M-1	M-2
Aroclor 1016	33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	33	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	49	ND	ND	ND	ND	ND	42	ND	ND

ND = not detected above the reporting limit

Note: Residential Soil PRG for PCBs = 66 ug/kg

TABLE VIII

RESULTS OF LABORATORY ANALYSES OF ELUTRIATE SAMPLES FOR ORGANIC TIN BY C.A. KRONE, et al,. METHOD (1988)

Results in ug/l

Analyte	Sample Number		
	BM-1	BM-2	BM-3
Tributyltin	<0.05	<0.05	<0.05
Dibutyltin	<0.05	<0.05	<0.05
Butyltin	<0.05	<0.05	<0.05

Note: Laboratory reports show BM-1 as MW-1, BM-2 as MW-2, and BM-3 as MW-3

TABLE IX

LABORATORY RESULTS OF ANALYSES OF ELUTRIATE SAMPLES FOR PCBs USING EPA METHOD 8081

Results in ug/l

Analyte	Sample Numbers		
	BM-1	BM-2	BM-3
Aroclor-1016	<1	<1	<1
Aroclor-1221	<1	<1	<1
Aroclor-1232	<1	<1	<1
Aroclor-1242	<1	<1	<1
Aroclor-1248	<1	<1	<1
Aroclor-1254	<1	<1	<1
Aroclor-1260	<1	<1	<1

TABLE X

RESULTS OF LABORATORY ANALYSES OF ELUTRIATE SAMPLES FOR T-22 METALS USING EPA METHOD 6010, and pH and Salinity

Results in ug/l

Analyte	Sample Numbers			California Water Quality Objective
	BM-1	BM-2	BM-3	
Antimony	<60	<60	<60	
Arsenic	<10	11.4	<10	36
Barium	<100	<100	<100	
Beryllium	<5	<5	<5	
Cadmium	<5	<5	<5	
Chromium	<10	<10	<10	
Cobalt	<50	<50	<50	
Copper	<25	<25	<25	
Lead	<30	<30	<30	
Mercury	<0.20	<0.20	<0.20	
Molybdenum	<10	28.4	<10	
Nickel	40.8	<40	<40	8.3
Selenium	6.4	<5	<5	71
Silver	<10	<10	<10	
Thallium	<10	<10	<10	
Vanadium	<50	<50	<50	
Zinc	<20	<20	<20	
pH	7.2	7.4	7.2	
Salinity in ppt	24.4	25.1	24.7	

Note: California Water Quality Objective for Marine Surface Waters with Salinities Greater or Equal to 5 ppt- chronic exposure.

TABLE XI

RESULTS OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES FOR VOLATILE ORGANICS, BY EPA METHOD 8260

Results in ug/l

Analyte	Sample Number							Calif. MCL	Fed MCL	PRG Tap Water
	B-1	B-2	B-3	B-4	B-5	B-6	B-7			
2-Butanone (MEK)	60	<20	<20	<20	370	180	100	none	none	1,900

TABLE XII

RESULTS OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES FOR SEMI-VOLATILE ORGANICS, BY EPA METHOD 8270

Results in ug/l

Analyte	Sample Number						
	B-1	B-2	B-3	B-4	B-5	B-6	B-7
All Compounds	ND	ND	ND	ND	ND	ND	ND

Note: ND= not detected above the reporting limit of 10 to 500 ug/l

TABLE XIII

RESULTS OF LABORATORY ANALYSES OF GROUNDWATER SAMPLES FOR PCBs, BY EPA METHOD 8081

Results in ug/l

Analyte	Sample Number					Calif. MCL
	B-1	B-2	B-3	B-4	B-7	
Aroclor-1016	<1	<1	<1	<1	<1	0.5
Aroclor-1221	<1	<1	<1	<1	<1	0.5
Aroclor-1232	<1	<1	<1	<1	<1	0.5
Aroclor-1242	<1	<1	<1	<1	<1	0.5
Aroclor-1248	<1	<1	<1	<1	<1	0.5
Aroclor-1254	<1	<1	<1	<1	<1	0.5
Aroclor-1260	<1	<1	<1	<1	<1	0.5

TABLE XIV

RESULTS OF LABORATORY ANALYSES OF GROUNDWATER FOR TPH GASOLINE, DIESEL,AND MOTOR OIL, BY EPA METHOD 8015

Results in ug/l

	Sample Number						
Analyte	B-1	B-2	B-3	B-4	B-5	B-6	B-7
TPH Gasoline	<50	<50	<50	<50	80	60	<50
TPH Diesel	150	160	270	130	290	330	550
TPH MOTOR OIL	340	230	1700	<100	190	310	240

TABLE XV

RESULTS OF LABORATORY ANALYSES OF GROUNDWATER FOR T-22 METALS BY EPA METHOD 6010A

Results in in ug/l

Analyte	Sample Numbers							Calif. MCL	California Water Quality Objective
	B-1	B-2	B-3	B-4	B-5	B-6	B-7		
Antimony	<60	<60	<60	<60	<60	<60	<60	NL	500
Arsenic	<10	<10	<10	<10	19.6	30	12.2	50	36
Barium	<100	<100	<100	<100	<100	<100	<100	1,000	NL
Beryllium	<5	<5	<5	<5	<5	<5	<5	1,000*	5.3
Cadmium	<5	<5	<5	<5	<5	<5	<5	5	9.3
Chromium	<10	<10	<10	<10	<10	<10	<10	50	50
Cobalt	<50	<50	<50	<50	53.5	<50	<50	NL	NL
Copper	<25	<25	<25	<25	<25	<25	<25	1,000**	2.9
Lead	<3	<3	<3	<3	42.5	<30	<30	15*	5.6
Merculry	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	2	2.1
Molybdenum	<10	<10	<10	<10	10.6	<10	<10	NL	NL
Nickel	<40	<40	<40	<40	<40	<40	<40	100	8.3
Seleneum	15.4	16.5	<25	<5	60.7	36	34.7	50	71
Silver	<10	<10	<10	<10	<10	<10	<10	100**	23
Thallium	<50	<10	<50	<10	<100	<20	<20	2	NL
Vanadium	<50	<50	<50	<50	<50	<50	<50	NL	NL
Zinc	21.1	<20	<20	<20	2440	<20	<20	5,000	86
Tot. Dis. Solids,mg/l	1300	10	836	20	15400	nt	nt	500**	NL
Salinity, ppt	1	0.0053	0.65	1.7	12.1	nt	nt	NL	NL

Note: nt=not tested
NL= none listed
* = Federal Action Level
** = Recommended Secondary Drinking Water Standard

TABLE XVI

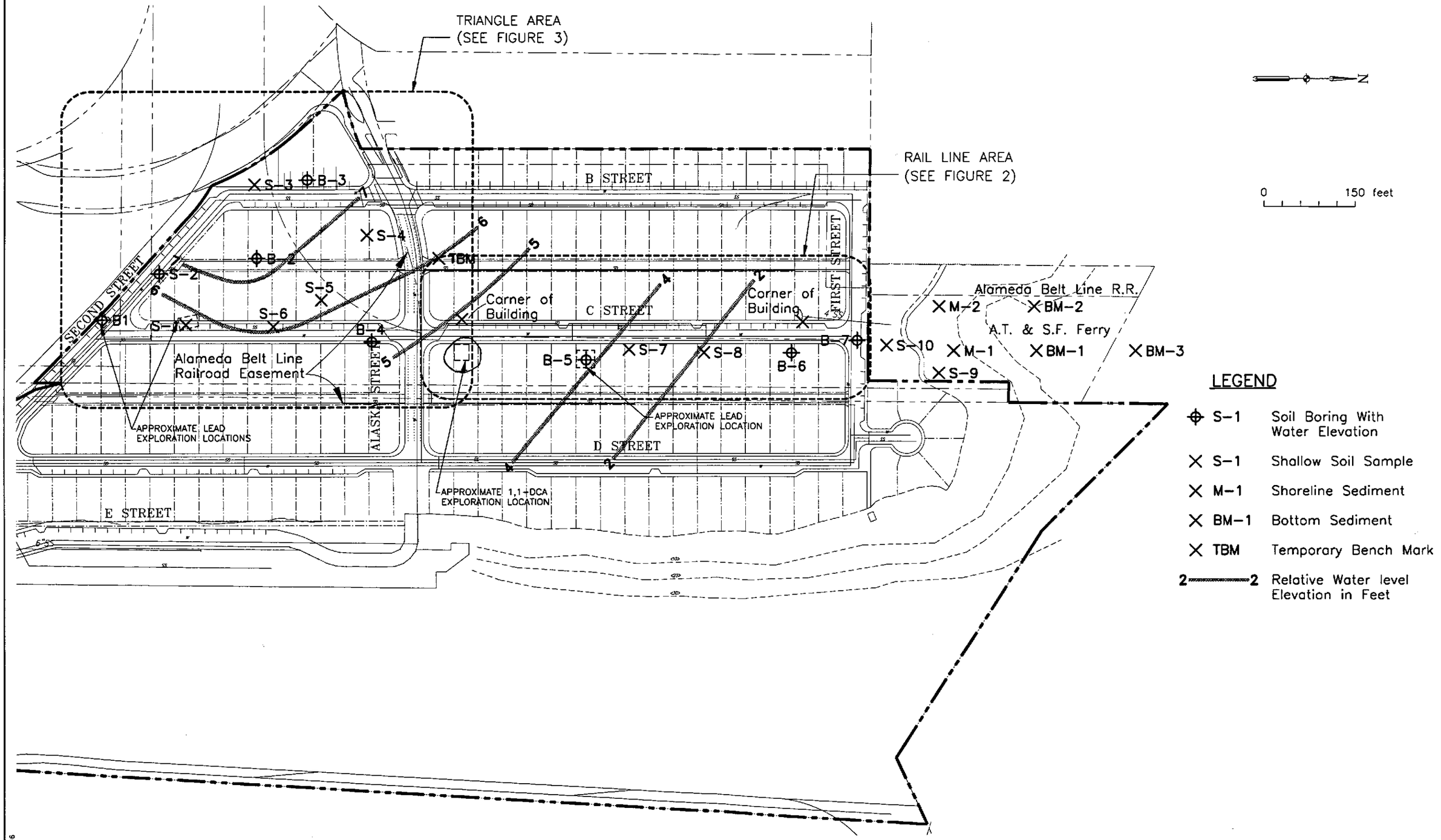
RESULTS OF LABORATORY ANALYSES OF GROUNDWATER FOR HERBICIDES BY EPA METHOD 8150

Results in ug/l

Analyte	Sample Number					Calif MCL	Fed MCL	PRG Tap Water
	B-1	B-2	B-3	B-4	B-7			
2,4-D	<1	<1	<1	<1	<1.33	70	NL	370
2,4DB	<1	<1	<1	<1	<1.33	NL	NL	290
2,4,5-T	<0.200	<0.200	<0.200	<0.200	<0.266	NL	NL	370
2,4,5-TP(Silvex)	<0.200	<0.200	<0.200	<0.200	<0.266	NL	50	290
Dalapon	<4	<4	<4	<4	<5.32	200	NL	1,100
Dicamba	<0.300	<0.300	<0.300	<0.300	<0.399	NL	NL	1,100
Dichlorprop	1.27	<0.700	<0.700	<0.700	<0.931	NL	NL	NL
Dinoseb	<0.100	<0.100	<0.100	<0.100	<0.133	7	NL	37
MCPA	<100	<100	<100	<100	<133	NL	NL	NL
MCPP	<100	<100	<100	<100	<133	NL	NL	NL

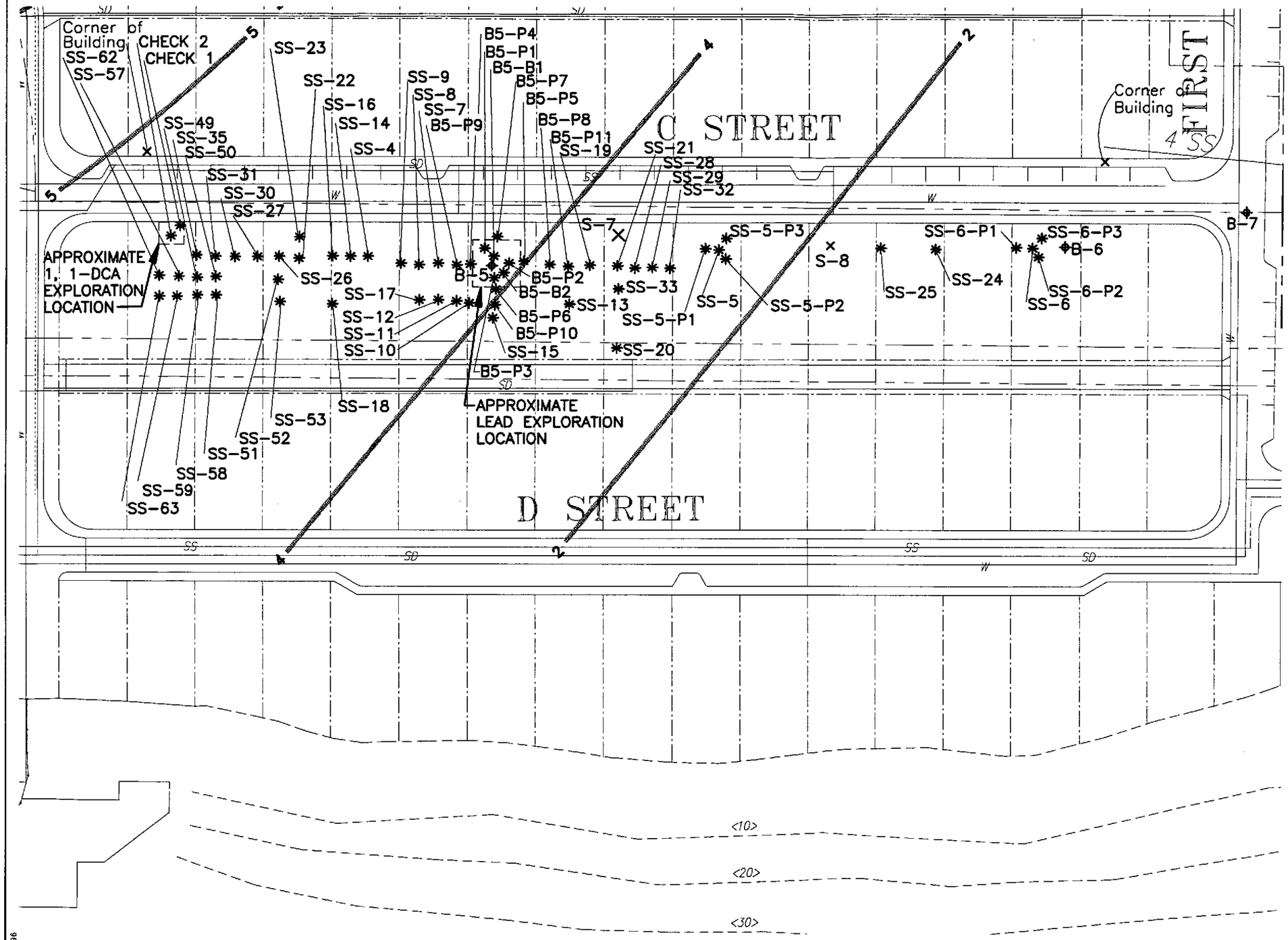
Note: NL = None listed

FIGURES



ENC-01 092496

Project No. 961163NA	ENCINAL REAL ESTATE, INC.	SAMPLING LOCATIONS MARINA VILLAGE HOMES PROJECT	Figure 1
Woodward-Clyde Consultants			

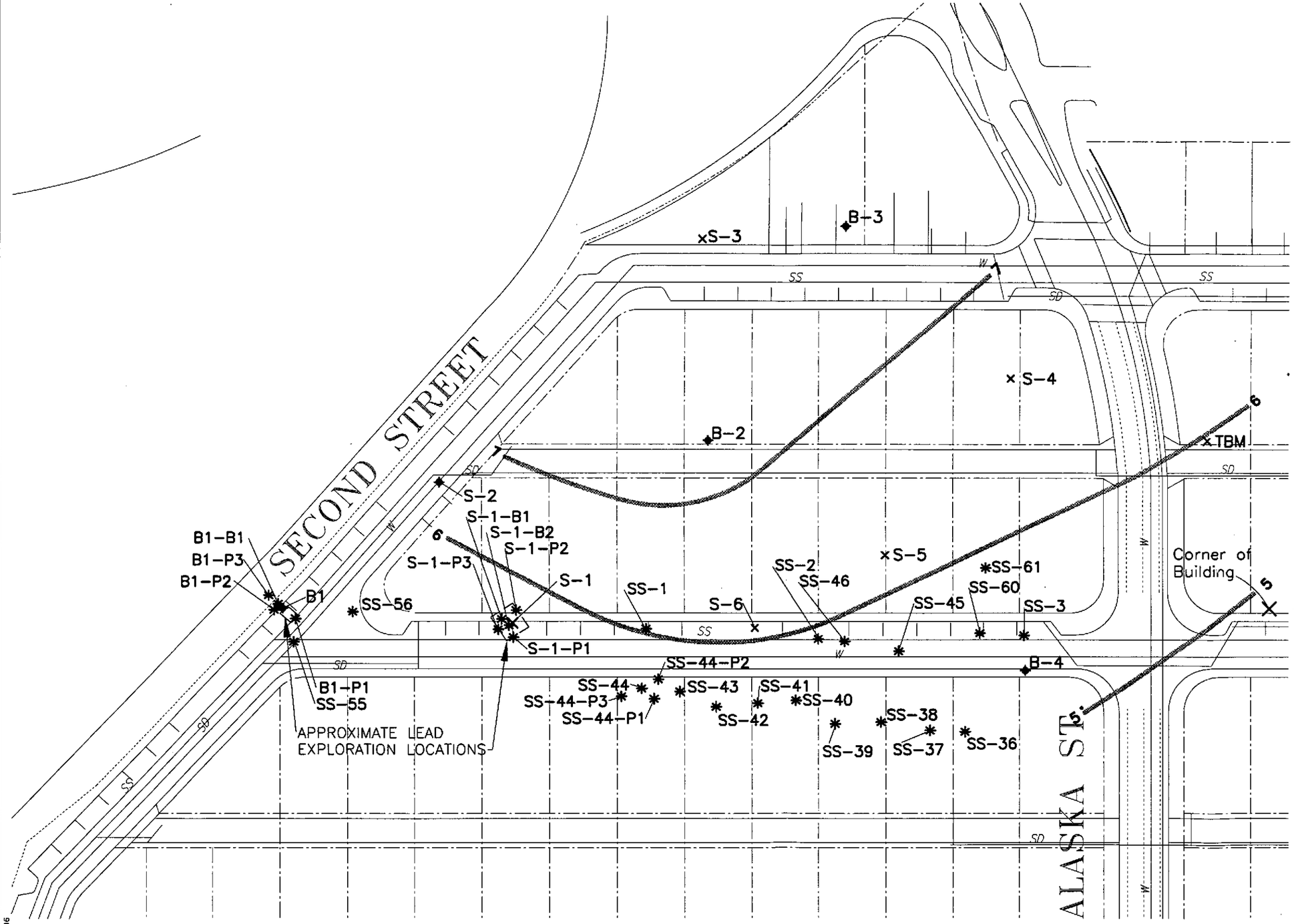


LEGEND

- ⊕ B-5 — Soil Boring With Water Elevation
- × S-7 — Shallow Soil Sample Location
- ✱ SS-24 — Surface Soil Sample
- 2——2 — Relative Water level Elevation in Feet

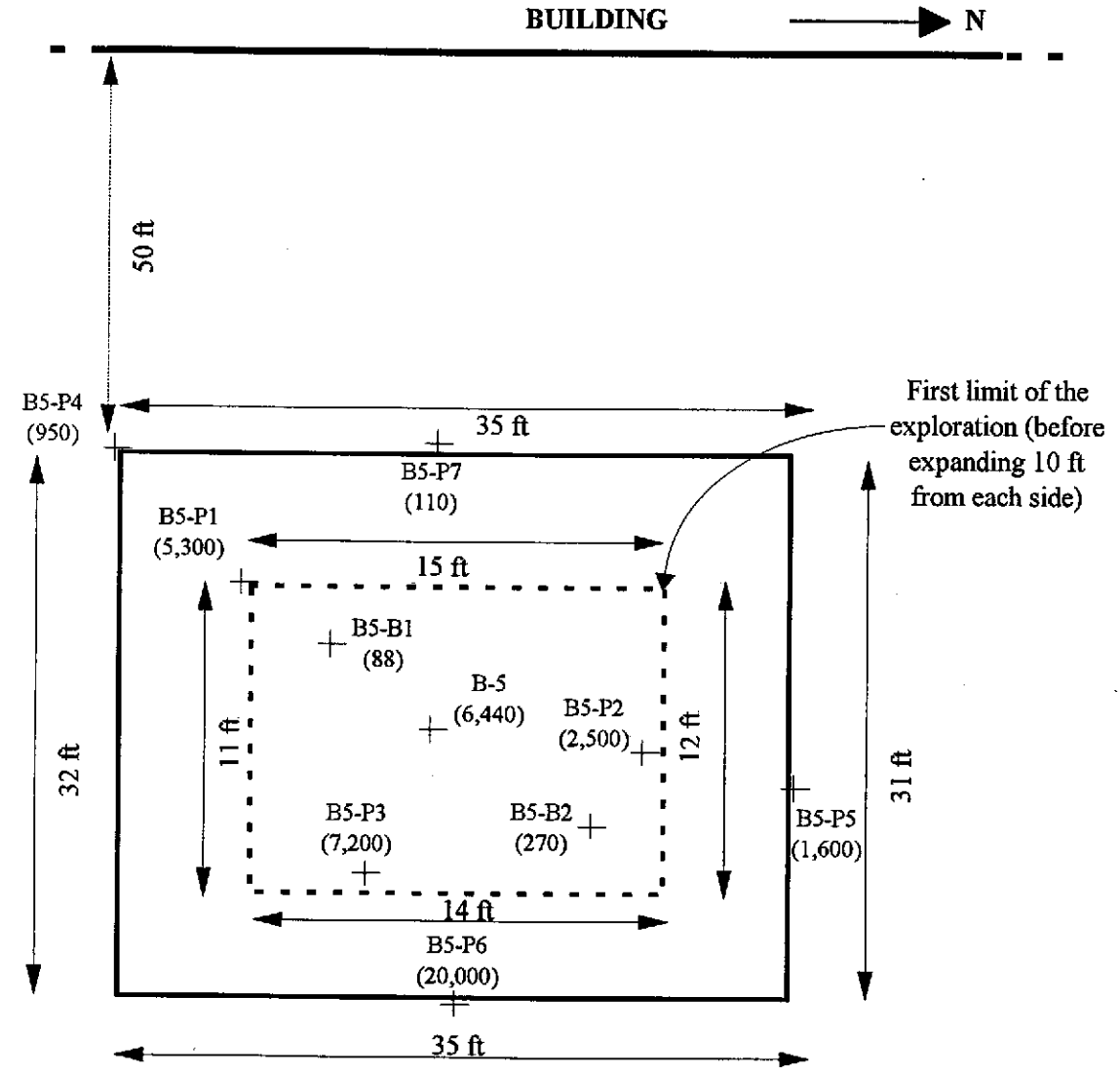
ENC-03 092496

Project No. 961163NA	ENCINAL REAL ESTATE, INC.	LEAD SAMPLING LOCATIONS– ABL RAILROAD RIGHT-OF-WAY RAIL LINE AREA	Figure 2
Woodward-Clyde Consultants			



Project No. 961163NA	ENCINAL REAL ESTATE, INC.	LEAD SAMPLING LOCATIONS ABL RAILROAD RIGHT-OF-WAY TRIANGLE AREA	Figure 3
Woodward-Clyde Consultants			

ENC-04 092496



B5-P6
(20,000) + Legend:
Soil sample location
(lead concentration [mg/kg])
Soil samples collected at 1 foot deep
(exploration not to scale)

Project No. 961163NA	ENCINAL REAL ESTATE. INC.	B-5 LEAD EXPLORATION	Figure 4
Woodward-Clyde Consultants			

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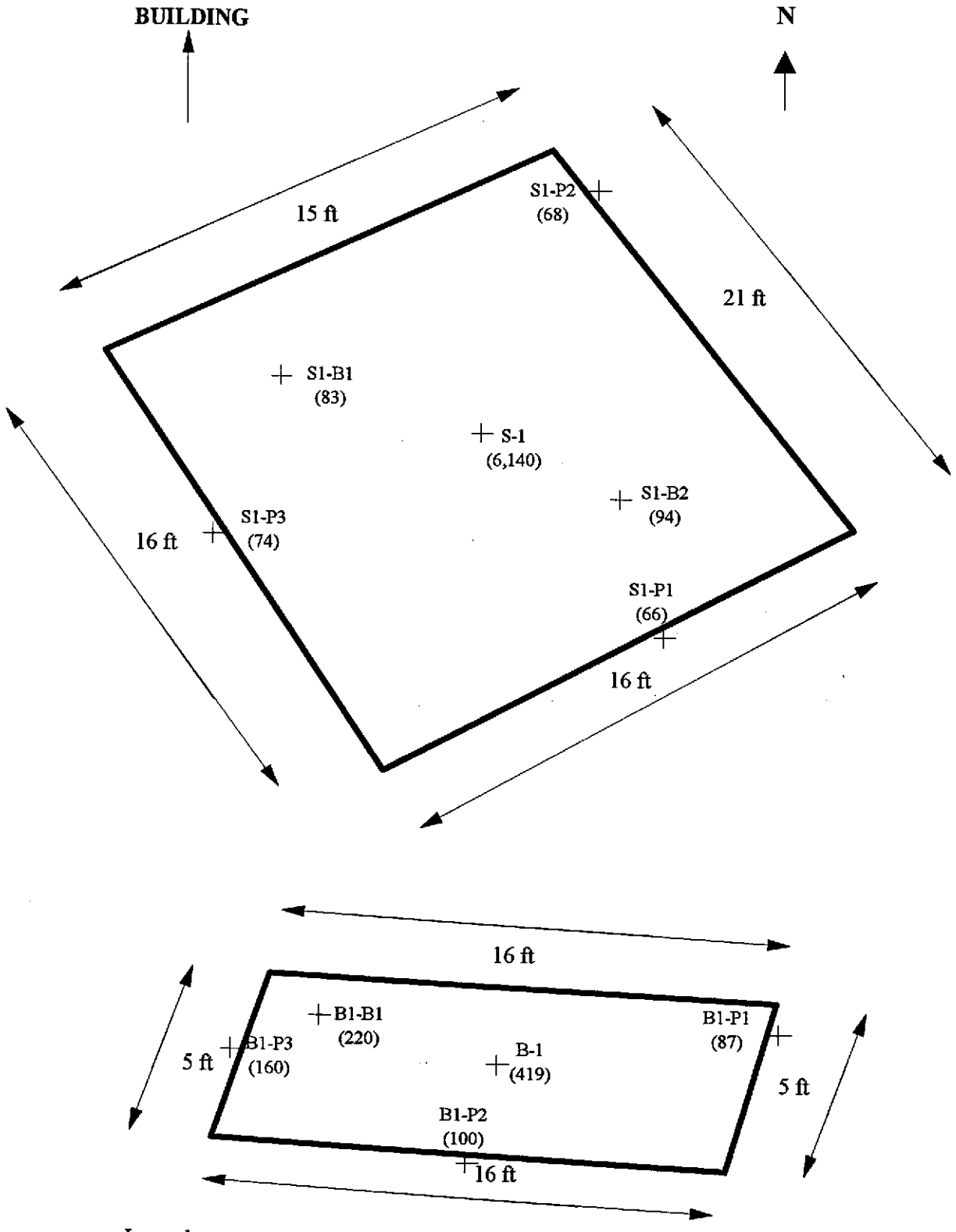

S1-P1
(66)

Legend:
Soil sample location
(lead concentration [mg/kg])
Soil samples collected at 1 foot deep
(exploration not to scale)

Project No. 961163NA	ENCINAL REAL ESTATE. INC.	S-1 AND B-1 LEAD EXPLORATION	Figure 5
Woodward-Clyde Consultants			

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APPENDIX A
SANBORN MAPS

Sanborn Map Legend

"Linking technology with tradition"

TILE 1st / BRICK 1st / PYROBAR 1st — Fire proof construction (OR FIRE RESISTIVE CONST'N)

ADOBE — Adobe building

HEIGHT OF BUILDING IN FEET FROM GROUND TO ROOF LINE 57' — Stone building

(C.BR.) — Concrete, lime cinder or cement brick

(C.B.) — Hollow concrete or cement block const'n

(CONC.) — Concrete or reinforced concrete const'n

(TILE) — Tile building

NUMBER OF STORIES 4 — Brick building with frame cornice

TWO STORIES 2B AND BSMT COMPOSITION ROOF — Brick building with stone front

SHINGLE ROOF X — Brick building with frame side (DIVIDED BY FRAME PARTITION)

(VEND) — Brick veneered building

BRICK 1ST — Brick and frame building

FRAME, BRICK LINED — Frame building, brick lined

F = FLAT S = STORE — Frame building, metal clad

D = DWELLING — Frame building

A in B = AUTO. IN BSMT — Iron building

LOFT — Tenant building occupied by various manufacturing or occupancies

(ASB.CL.) — Frame building covered with asbestos

NON COMBUSTIBLE ROOF COVERING OF METAL, SLATE, TILE OR ASBESTOS SHINGLES :) — Brick building with brick or metal cornice

SKYLIGHT LIGHTING TOP STORY ONLY — Fire wall 6 inches above roof

3. SKYLIGHT LIGHTING THREE STORIES — Fire wall 12 inches above roof

W.G. WIRED GLASS SKYLIGHT — Fire wall 18 inches above roof

Fire wall 36 inches above roof

FIRE WALL 48 INCHES ABV. RF. 48

Figures 8,12,16 indicate thickness of wall in inches

Wall without opening and size in inches

Wall with openings on floors as designated

Opening with single iron or tin clad door

Opening with double iron or tin clad doors

Opening with standard fire doors

Openings with wired glass doors

W.T. WATER TANK

BRICK 8" — Drive or passage way

Stable

A. — Auto. (House or private garage)

(C.B.) / (C.B. & BR.) — Solid brick with interior walls of C.B. or C.B. and brick mixed

C.B. & BR. CONST'N — Mixed construction of C.B. and brick with one wall of solid brick.

C.B. & BR. CONST'N (BR. FACED) — Mixed construction of C.B. and brick with one wall faced with 4" brick.

C.B. & BR. CONST'N — Mixed construction of C.B. and brick throughout.

MANSARD ROOF — DOTS REPRESENT OPENINGS, STEMS INDICATE STORIES, COUNTING FROM LEFT TO RIGHT, LOOKING TOWARD BUILDING

Window opening in first story.
Window openings in second and third stories.
Window openings in second, fourth stories
Windows with wired glass.
Windows with iron or tin clad shutters.
10 TO 22 — Window openings tenth to twenty-second stories

6" W.PIPE — Water pipes and size in inches.

6" W.PIPE (PRIVATE) — Water pipes of private supply

House numbers shown nearest to buildings are official or actually up on buildings.

Old house numbers shown furthest from buildings.

E Open elevator.
FE Frame enclosed elevator.
ET Frame enclosed elevator with traps.
ESC Frame enclosed elevator with self closing traps.
CBET Concrete block enclosed elevator with traps.
TESC Tile enclosed elevator with self closing traps.
BE Brick enclosed elevator with wired glass door.

FP-1962 (conc.) A-1-a — A fire-resistive building built in 1962 with concrete walls and reinforced concrete frame, floors and roof.

FPX-1962 (METAL PANELS) E-2-b NONCOMB CEIL'G — A fire-resistive building built in 1962 with metal panel walls, indirectly protected steel frame, concrete floors and roof on metal lath, noncombustible ceilings.

NC-1962 (C.B.) H-2-d — A noncombustible building built in 1962 with concrete block walls; unprotected steel columns and beams; concrete floors on metal lath and steel deck roof.

BLOCK — CURB LINE — 50' — LINE

Width of street (BETWEEN BLOCK LINES, NOT CURB LINES.)

24 — Reference to adjoining page.

\+ — Fire engine house, as shown on key map.

Fire pump.

(36) — Under page number refers to corresponding page of previous edition.

5 Block number.

V.P. Vertical pipe or stand pipe.

AFA Automatic fire alarm.

IEP Independent electric plant.

AS Automatic sprinklers.

ACS Automec. chemical sprinklers.

AS 1st ONLY — Automatic sprinklers in part of building only. (NOTE UNDER SYMBOL INDICATES PROTECTED PORTION OF BUILDING)

NS — Not sprinklered.

Outside vertical pipe on fire escape.

FA — Fire alarm box.

Single hydrant.

D.H. — Double hydrant.

T.H. — Triple hydrant.

Q.H. H.P.F.S. — Quadruple hydrant of the "High Pressure Fire Service."

FA H.P.F.S. — Fire alarm box of the "High Pressure Fire Service"

20"W.Pipe (H.P.F.S.) — Water pipes of the "High Pressure Fire Service"

+ + 12" + + — Water pipes and hydrants of the "High Pressure Fire Service" as shown on key map.

IR. CH. Iron chimney

IR. CH. (WITH SPARK ARRESTOR) Iron chimney

BR. CH. S.A. Brck. chmny.

15 Ground elevation

V.P.B. Vertical steam boiler

G.T. Gasoline tank

(O.U.) Open under

Siamese fire dept. connection

Single fire dept. connection.

CODING OF STRUCTURAL UNITS FOR FIREPROOF AND NON-COMBUSTIBLE BUILDINGS

FRAMING

CODE	STRUCTURAL UNIT
A.	Reinforced Concrete Frame.
B.	Reinforced Concrete Joists, Columns, Beams, Trusses, Arches, Masonry Piers.
C.	Protected Steel Frame.
D.	Individually Protected Steel Joists, Columns, Beams, Trusses, Arches.
E.	Indirectly Protected Steel Frame.
F.	Indirectly Protected Steel Joists, Columns, Beams, Trusses, Arches.
G.	Unprotected Steel Frame.
H.	Unprotected Steel Joists, Columns, Beams, Trusses, Arches.
O.	Masonry Bearing Walls.

FLOORS

CODE	STRUCTURAL UNIT
1.	Reinforced Concrete. Reinforced Concrete with Masonry Units. Pre-cast Concrete or Gypsum Slabs or Planks.
2.	Concrete on Metal Lath, Incombustible Form Boards, Paper-backed Wire Fabric, Steel Deck, and Cellular, Ribbed or Corrugated Steel Units.
3.	Open Steel Deck or Grating.

ROOF

CODE	STRUCTURAL UNIT
a.	Reinforced Concrete. Reinforced Concrete with Masonry Units. Reinforced Gypsum Concrete. Pre-cast Concrete or Gypsum Slabs or Planks.
b.	Concrete or Gypsum on Metal Lath, Incombustible Form Boards, Paper-backed Wire Fabric, Steel Deck, and Cellular, Ribbed or Corrugated Steel Units.
c.	Incombustible Composition Boards with or without Insulation. Masonry or Metal Tiles.
d.	Steel Deck, Corrugated Metal or Asbestos Protected Metal with or without Insulation.

LAND USE CODE APPLICABLE TO CHANGES DIAGRAMMED AFTER 5/69

R	RESIDENTIAL	M	MANUFACTURING
RT	RESIDENTIAL-TRANSIENT	P	PUBLIC OR INSTITUTIONAL
C	COMMERCIAL	U	UTILITY
W	WAREHOUSE	T	TRANSPORTATION

NUMERICAL PREFIX INDICATES THE NUMBER OF ESTABLISHMENTS IN EACH CATEGORY

The coding for framing, floor and roof structural units as shown above is used in describing the construction of fire-resistive buildings. In addition, reports for fire-resistive buildings will show the date built and wall construction when other than brick.

FP buildings have masonry floors and roof; concrete and/or directly or indirectly protected steel framing; and clay brick, stone or poured concrete walls.

FPX buildings are FP buildings with inferior walls such as concrete block, cement brick, metal or glass panels, etc.

NC buildings have unprotected steel framing and fire-resistive but non-masonry floors and roof.

Sanborn Map Abbreviations

"Linking technology with tradition"

Abbreviation	Meaning
A	Automobile (usually designates the location of a garage)
A in B	Automobile located in basement
A S	Automatic sprinkler
Abv	Above
ACS	Automatic chemical sprinkler
AFA	Automatic fire alarm
Agr	Agricultural
Appts	Apparatus
Apts	Apartments
Asb Cl	Asbestos clad
Att'd	Attended
Aud'it'm	Auditorium
Auto Ho	Automobile house, or garage
B	Basement, boiler or occasionally brick
B&S	Boots and shoes
BPOE	Benevolent & Protective Order of Elks
B Sm	Blacksmith
B'ld'g	Building
B'lr.	Boiler
B's't	Basement
Bak'y	Bakery
Balc	Balcony
Bap	Baptist
Bbl	Barrel
Bbls	Barrels
BE	Brick enclosed elevator
Bill'ds	Billiards
Bl Sm	Blacksmith
Blk Sm	Blacksmith
Bst	Basement
C B	Cement brick or concrete block construction
C Br	Concrete brick or cement block construction
Cap'cy	Capacity
Carptr	Carpenter
CBET	Concrete enclosed elevator with traps
Chem	Chemical
Chinaw	Chinaware or porcelain
Chine	Chinese
Cl	Clad
Clo	Clothing
Co	Company
Comp	Composition construction (i.e. stucco) or compressor
Conc	Concrete
Conf'y	Confectionary (candy store)
Confec'y	Confectionary (candy store)
Constr'n	Construction
Corp'n	Corporation
D	Dwelling
DH	Double (fire) hydrant
DG	Dry goods
Drs	Doctor's office
Dwg	Dwelling
E	Open elevator
E Fl	Each Floor
El	Electric
Elec	Electrician
Eng	Engine
Ent	Entertainment
Episc'l	Episcopal
ESC	Elevator with self-closing traps
ET	Elevator with traps
Exch	Telephone exchange
Expr	Express (as used to designate a delivery service)
F	Flat (as used to designate a delivery service)
FA	Fire alarm
FE	Fire escape
F Pump	Fire pump
Fill'g Sta	Filling station, or gas station
Fl	Floor
Fr Attic	Frame constructed attic
Frat	Fraternity
Fur	Furnishings
Furn'g	Furnishings
Furne	Furniture
GAR	Grand Army of the Republic
GT	Gasoline tank
Gal	Gallery
Gall	Gallery
Gall'y	Gallery
Gen'l	General (as used to designate a general store)
Gents	Gentlemen's
Greas'g	Greasing
Gro	Grocery or groceries
HPFS	High pressure fire service
H'dw	Hardware
Hack	Hackney or delivery service
Hardw	Hardware
Ho	Hotel or house (as used to designate a warehouse)
Htr	Heater
Hyd	Hydrant
ICRR	Illinois Central Railroad
Imp	Implements
Ins	Insurance
Insrs	Instruments
Ir Cl	Iron clad
K of C	Knights of Columbus
Lab	Laboratory
Lodg'g	Lodging
Luth	Lutheran
Luth'n	Lutheran
ME	Methodist Episcopal
Mach'y	Machinery
Mak'r	Maker
Manf'y	Manufactory or factory
Mdse	Merchandise
Mfy	Manufactory or factory
Mill'y	Millinery
Mkg	Making
Mo	Motor
NS	Not sprinklered
OU	Open under
Off	Office
PO	Post office
Paint'g	Painting
Pat Med	Patent medicines
Plumb'g	Plumbing
Print'g	Printing
QH	Quadruple (fire) hydrant
RC	Roman Catholic
R'f	Roof
R'm	Room
Rep	Repair
Rep'g	Repairing
Repos'ry	Repository
Restr't	Restaurant
Rf	Roof
Rm	Room
S	Store
SA	Spark arrestor
S Vac	Store portion of building is vacant
Sal	Saloon
Sky'ts	Skylights
Sm	Smith, as in gunsmith or blacksmith
Sm Ho	Smokehouse
Sp'k'l'rs	Sprinklers
Sr'ge	Storage
St'y	Story
Sta	Station
Stat'y	Stationery
TH	Triple (fire) hydrant
Tel	Telephone
Tenem'ts	Tenements
TESC	Tile enclosed elevator with self-closing traps
Tinw	Tinware
Trimm'g	Trimming
U	Upright
Up	Upright
VP	Vertical pipe
Vac	Vacant
Ven'd	Veneered
Ven'r'd	Veneered
W	Ware, as in warehouse or wareroom
WC	Water closet or toilet
WG	Wire glass skylights
W Ho	Warehouse
WPA	Works Progress Administration
W'ks	Works
Whol	Wholesale
Wkg	Working
Woodwkg	Woodworking

EDR Sanborn, Inc.
3530 Post Road, Southport, CT 06490
Tel: (800) 352-0050 Fax: (800) 231-6802

Sanborn™ Map Report

Inquiry #: 125589-1 **Order Date:** 07/11/96 **Completion Date:** 07/18/96

P.O. #:

Site Name: Alameda Belt Line RR

Address: Atlantic Ave + Sherman St

City/State: Alameda, CA 94501

Cross Streets: N/A

Ship to: Mr. Al Ridley
Woodward-Clyde Consultants

Address: 500 12th Street Ste. 100

City/State: Oakland, CA 94607

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client-supplied information, and fire insurance maps for the following years were identified.

1987 - 2 maps
1950 - 1 map
1948 - 1 map

EDR Sanborn, Inc.

Total maps: 4

In an effort to improve Sanborn Map turnaround time EDR Sanborn, Inc will temporarily (until 8/1/96) fulfill some client orders on 11" x 17" size sheets. Additional machines capable of printing 18" x 24" size prints will be placed in service during the month of July to meet the increasing demand for 18" x 24" prints.

Thank you for your patience as we make the steps necessary to increase the production capacity and turnaround time of Sanborn Map prints.

APPENDIX B
GEOMATRIX CONSULTANTS 1995 DATA

APPENDIX B
GEOMATRIX CONSULTANTS 1995 DATA

GEOMATRIX

SEMI-ANNUAL MONITORING REPORT
JANUARY–JUNE 1995
and
SITE CHARACTERIZATION REPORT

Encinal Real Estate
2020 Sherman Avenue
Alameda, California

Prepared for

Encinal Terminals
1521 Buena Vista Avenue
Alameda, California

August 1995
Project No. 2530.02

Geomatrix Consultants

100 Pine Street, 10th Floor
San Francisco, CA 94111
(415) 434-9400 • FAX (415) 434-1365

GEOMATRIX

August 28, 1995
Project 2530.02

Mr. Peter Wang
Encinal Terminals
1521 Buena Vista Avenue
Alameda, California 94501-0251

Subject: Semi-Annual Monitoring Report, January–June 1995
and Site Characterization Report
2020 Sherman Avenue
Alameda, California

Dear Mr. Wang:

Enclosed are two copies of the subject report prepared by Geomatrix at your request to address Alameda County Health Care Services Agency (ACHCSA) concerns at the subject site. We are sending one copy each to Madhulla Logan at ACHCSA and Kevin Graves at the Regional Water Quality Control Board (RWQCB).

Thank you for this opportunity to be of service. Please call either of the undersigned if you require further information.

Sincerely yours,

GEOMATRIX CONSULTANTS, INC.

Cheri Y. Page

Cheri Y. Page, R. G.
Project Geologist

Thomas E. Graf, P.E.
Principal Engineer

CONTR/25302RPT.LTR
Enclosures

cc: Madhulla Logan - ACHCSA
Kevin Graves - RWQCB

GEOMATRIX

TABLE 1

SUMMARY OF PREVIOUS SOIL SAMPLE RESULTS

Encinal Real Estate
2020 Sherman Avenue
Alameda, California

Compounds detected in milligrams per kilogram (mg/kg)

Boring Numbers	Sample Depth (feet)	EPA Method 8240	EPA Method 8270	EPA Method 8080	EPA Method 8015	Metals[1]	
EB-2 EB-3 EB-4 EB-8 (composite)	2	ND[2]	ND	ND	motor oil: 180/110[3]	Antimony Arsenic Barium Beryllium Cadmium Cobalt Chromium Copper Cyanide Mercury Molybdenum Nickel Lead Selenium Silver Thallium Vanadium Zinc	ND 8 59 0.3 ND 7.5 43 20 1.2 ND ND 39 31 ND ND 23 37 42
EB-2 EB-3 EB-4 EB-8 (composite)	6	ND	benzo(b)fluoranthene: 0.35 benzo(a)pyrene: 0.34 pyrene: 0.76	ND	motor oil: 40/70	Antimony Arsenic Barium Beryllium Cadmium Cobalt Chromium Copper Cyanide Mercury Molybdenum Nickel Lead Selenium Silver Thallium Vanadium Zinc	ND 20 52 0.6 ND 15 54 26 0.85 ND 0.6 74 4 ND ND 39 50 120

TABLE 1

SUMMARY OF PREVIOUS SOIL SAMPLE RESULTS

Boring Numbers	Sample Depth (feet)	EPA Method 8240	EPA Method 8270	EPA Method 8080	EPA Method 8015	Metals[1]	
EB-1 EB-5 EB-6 EB-7 (composite)	2	ND	ND	ND	motor oil: 180/110	Antimony Arsenic Barium Beryllium Cadmium Cobalt Chromium Copper Cyanide Mercury Molybdenum Nickel Lead Selenium Silver Thallium Vanadium Zinc	ND 13 54 0.4 ND 7.7 43 54 0.5 0.3 ND 38 9 ND ND 49 37 51
EB-1 EB-5 EB-6 EB-7 (composite)	6	1,1-DCA: 0.4	ND	ND	motor oil: 40/70	Antimony Arsenic Barium Beryllium Cadmium Cobalt Chromium Copper Cyanide Mercury Molybdenum Nickel Lead Selenium Silver Thallium Vanadium Zinc	ND 9 24 0.3 ND 5.7 35 16 0.4 ND ND 29 2 ND ND 20 33 29

Notes:
[1] CCR 17 metals and cyanide
[2] ND = not detected
[3] Results are for duplicate samples

GEOMATRIX

TABLE 2

SUMMARY OF PREVIOUS GROUNDWATER SAMPLE RESULTS

Encinal Real Estate
2020 Sherman Avenue
Alameda, California

Compounds detected in micrograms per liter (µg/l)

Sample Location I.D.	EPA Method 602	EPA Method 8015	EPA Method 624	EPA Method 625	EPA Method 608	CAM 17 Metals	
TB-1[1]	ND[2]	ND	NA[3]	NA	NA	NA	
TB-2[1]	ND	ND	NA	NA	NA	NA	
EB-1[4]	NA	Motor oil: 300	1,1-DCA: 1500 1,1,1-TCA: 17	ND	ND	Antimony Arsenic Barium Beryllium Cadmium Cobalt Chromium Copper Mercury Molybdenum Nickel Lead Selenium Silver Thallium Vanadium Zinc	ND 170 540 3 ND 58 330 200 1.3 ND 280 50 ND ND 280 320 300

TABLE 2

SUMMARY OF PREVIOUS GROUNDWATER SAMPLE RESULTS

Sample Location I.D.	EPA Method 602	EPA Method 8015	EPA Method 624	EPA Method 625	EPA Method 608	CAM 17 Metals	
EB-2[4]	NA	Motor oil: 200	ND	ND	ND	Antimony	ND
						Arsenic	150
						Barium	770
						Beryllium	4
						Cadmium	ND
						Cobalt	50
						Chromium	360
						Copper	200
						Mercury	ND
						Molybdenum	ND
						Nickel	330
						Lead	ND
						Selenium	ND
						Silver	ND
						Thallium	650
						Vanadium	420
						Zinc	310

Notes:

1 Work conducted by MSE Environmental, Inc., in 1990.
2 ND = not detected.
3 NA = not analyzed.
4 Work conducted by Kaldveer Associates in 1990.

GEOMATRIX

TABLE 3
SUMMARY OF WATER-LEVEL ELEVATIONS[1]
January 1994 through June 1995
Encinal Real Estate
2020 Sherman Avenue
Alameda, California

Date	Well I.D.	Elevation of Measuring Point (ft)	Depth to Water (ft)	Groundwater Elevation (ft)	Gradient
1/20/94	MW-2	9.97	1.74	8.23	0.0079
	MW-4	14.14	4.99	9.15	
	MW-5	13.51	3.60	9.91	
	MW-8	13.11	3.56	9.55	
1/24/94	MW-2	9.97	0.30[2]	9.67	----[2]
	MW-4	14.14	4.52[2]	9.62	
	MW-5	13.51	2.53[2]	10.98	
	MW-8	13.11	0.40[2]	12.71	
3/29/94	MW-2	9.97	0.73	9.24	0.0067
	MW-4	14.14	4.40	9.74	
	MW-5	13.51	2.86	10.65	
	MW-8	13.11	2.55	10.56	
4/08/94[3]	MW-2	9.97	0.89	9.08	0.0060
	MW-4	14.14	4.45	9.69	
	MW-5	13.51	3.16	10.35	
	MW-8	13.11	2.93	10.18	
4/08/94[4]	MW-2	9.97	0.80	9.17	0.0058
	MW-4	14.14	4.40	9.74	
	MW-5	13.51	3.10	10.41	
	MW-8	13.11	2.95	10.16	
3/20/95	MW-2	9.97	NA[5]	NA[5]	----[2]
	MW-4	14.14	3.43[2]	10.71	
	MW-5	13.51	NA[5]	NA[5]	
	MW-8	13.11	0.45[2]	12.66	
	MW-10	11.92	2.72[2]	9.20	
6/29/95	MW-2	9.97	NA[6]	NA[6]	0.0089
	MW-4	14.14	3.94	10.16	
	MW-5	13.51	3.15	10.56	
	MW-8	13.11	2.40	10.47	
	MW-10	11.92	4.67	6.85	

Notes:
1. Measuring points are marked on the north rim of the well casing, and were surveyed by Bates and Bailey of Berkeley, California, on 26 January 1994 and 20 March 1995 relative to NGVD.
2. Water levels measured during period of heavy rain, and may not represent equilibrium conditions.
3. Water levels measured in the morning.
4. Water levels measured in the afternoon.
5. Measurement not available due to flooding.
6. Well inaccessible due to placement of fill over wellhead.

GEOMATRIX

TABLE 4

GROUNDWATER SAMPLE RESULTS[1]
JANUARY 1994 THROUGH JUNE 1995
Encinal Real Estate
2020 Sherman Avenue
Alameda, California

Sample	1,1-DCE µg/l	1,1-DCA µg/l	1,2-DCE µg/l	1,2-DCA µg/l	1,1,1-TCA µg/l	TCE µg/l	PCE µg/l	Benzene µg/l	Toluene µg/l	Ethylbenzene µg/l	Xylenes µg/l	Arsenic[2] µg/l	Chromium[2] µg/l	Lead[2] µg/l	Thallium[2] µg/l
January 1994															
GW-1	3	54	<6	<0.9	<0.02	<0.07	<0.02	<0.5	<0.8	<1	<3	NA	NA	NA	NA
GW-2	<0.07	<0.2	<3	<0.4	<0.01	<0.03	<0.01	<0.2	<0.4	<0.7	<2	NA	NA	NA	NA
GW-3	160	1800	<14	<2	74	<0.6	2	<1	8	<3	<8	NA	NA	NA	NA
GW-4	2	110	<3	<0.4	6	0.7	0.05	<0.2	<0.4	<0.7	<2	NA	NA	NA	NA
GW-5	4	240	<3	<0.4	<0.01	<0.03	<0.01	<0.2	<0.4	<0.7	<2	NA	NA	NA	NA
GW-6	1	230	<6	<0.9	<0.02	<0.07	<0.02	<0.5	<0.8	<1	<3	NA	NA	NA	NA
GW-7	1	200	<6	<0.9	<0.02	<0.07	<0.02	<0.5	<0.8	<1	<3	NA	NA	NA	NA
GW-8	11	140	<3	<0.4	<0.01	<0.03	<0.01	<0.2	<0.4	<0.7	<2	NA	NA	NA	NA
GW-9	<0.07	20	<3	<0.4	<0.01	<0.03	<0.01	<0.2	<0.4	<0.7	<2	NA	NA	NA	NA
P-1	4	390	<6	<0.9	<0.02	<0.07	<0.02	<0.5	<0.8	<1	<3	NA	NA	NA	NA
P-2	<0.5	4	0.6	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	0.009	<0.01	<0.04	<0.1
P-3	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
P-4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
B-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.002	<0.01	<0.04	<0.1
April 1994															
GW-18[3]	<5	<5	<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA
GW-19[3]	<5	<5	<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA
GW-20[3]	<5	<5	<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA
GW-21[3]	<5	22	<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 4

GROUNDWATER SAMPLE RESULTS[1]
JANUARY 1994 THROUGH JUNE 1995

Sample	1,1-DCE µg/l	1,1-DCA µg/l	1,2-DCE µg/l	1,2-DCA µg/l	1,1,1-TCA µg/l	TCE µg/l	PCE µg/l	Benzene µg/l	Toluene µg/l	Ethylbenzene µg/l	Xylenes µg/l	Arsenic[2] µg/l	Chromium[2] µg/l	Lead[2] µg/l	Thallium[2] µg/l
November 1994															
GW-22	<5	<5	<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA
GW-23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GW-24	<5	<5	<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA
GW-25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	NA	NA	NA	NA	NA	NA	NA	NA
GW-26	<5	<5	<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA
GW-27	<5	<5	<5	<5	<5	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA
GW-28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
March 1995															
MW-10[3,4]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
June 1995															
MW-10[3,4,5]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA - not analyzed
DCA - dichloroethane
TCA - trichloroethane
DCE - dichloroethene; 1,2-DCE results are total for cis-1,2-DCE and trans-1,2-DCE
TCE - trichloroethene
PCE - tetrachloroethene

1 All samples are groundwater grab samples except for samples from monitoring well MW-10. Volatile organic analysis for samples P-1 and GW-1 through GW-9 were performed in the field by Tracer Research Corporation. Analyses for samples GW-18 through GW-21 were performed by Onsite Environmental Laboratories, Inc. Analyses for samples GW-22 through GW-28 were performed by Inchcape Testing Services. All other analyses were performed by AEN Laboratory.

2 Metals samples were filtered in the field.

3 Vinyl chloride results for these samples were not detected.

4 This sample was also analyzed for total dissolved solids by EPA Method 160.1, with a reported result of 3,600 mg/l in March 1995 and 1,800 mg/l in June 1995.

5 This sample was also analyzed for general minerals with the following results:

Bicarbonate Alkalinity, 110 mg $CaCO_3$/l;
Carbonate Alkalinity, <2 mg $CaCO_3$/l;
Hydroxide Alkalinity, <2 mg $CaCO_3$/l
Calcium, 110 mg/l;
Chloride, 130 mg/l;
Copper, <0.01 mg/l;
Iron, 150 mg/l;
Magnesium, 92 mg/l;
Manganese, 7.3 mg/l;
pH, 5.9;
Sodium, 160 mg/l;
Sulfate, 1000 mg/l;
Conductivity, 2300 µmhos/cm;
Hardness, 650 mg $CaCO_3$/l; and
Zinc, 0.05 mg/l.

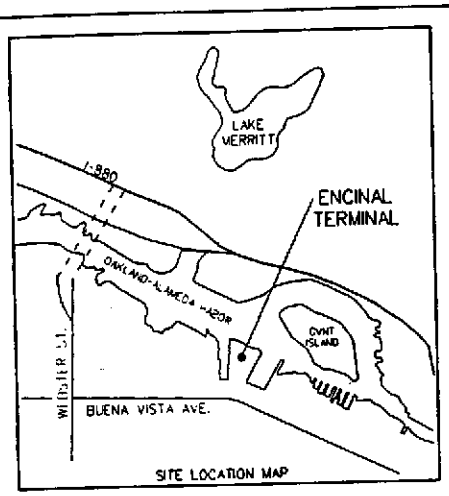
TABLE 5

SOIL SAMPLE RESULTS
JANUARY 1994
Encinal Real Estate
2020 Sherman Avenue
Alameda, California

Composite Sample Identification[1]	Benzene µg/l	Toluene µg/l	Ethylbenzene µg/l	Xylene µg/l	Gasoline mg/kg	Diesel mg/kg	Oil mg/kg
P-1-2.5, P-3-2.0, B-1-2.0, B-2-2.0	<5	<5	<5	<5	<0.2	<10	610
P-1-6.0, P-3-4.5, B-1-6.0, B-2-6.0	<5	<5	<5	<5	<0.2	5	20

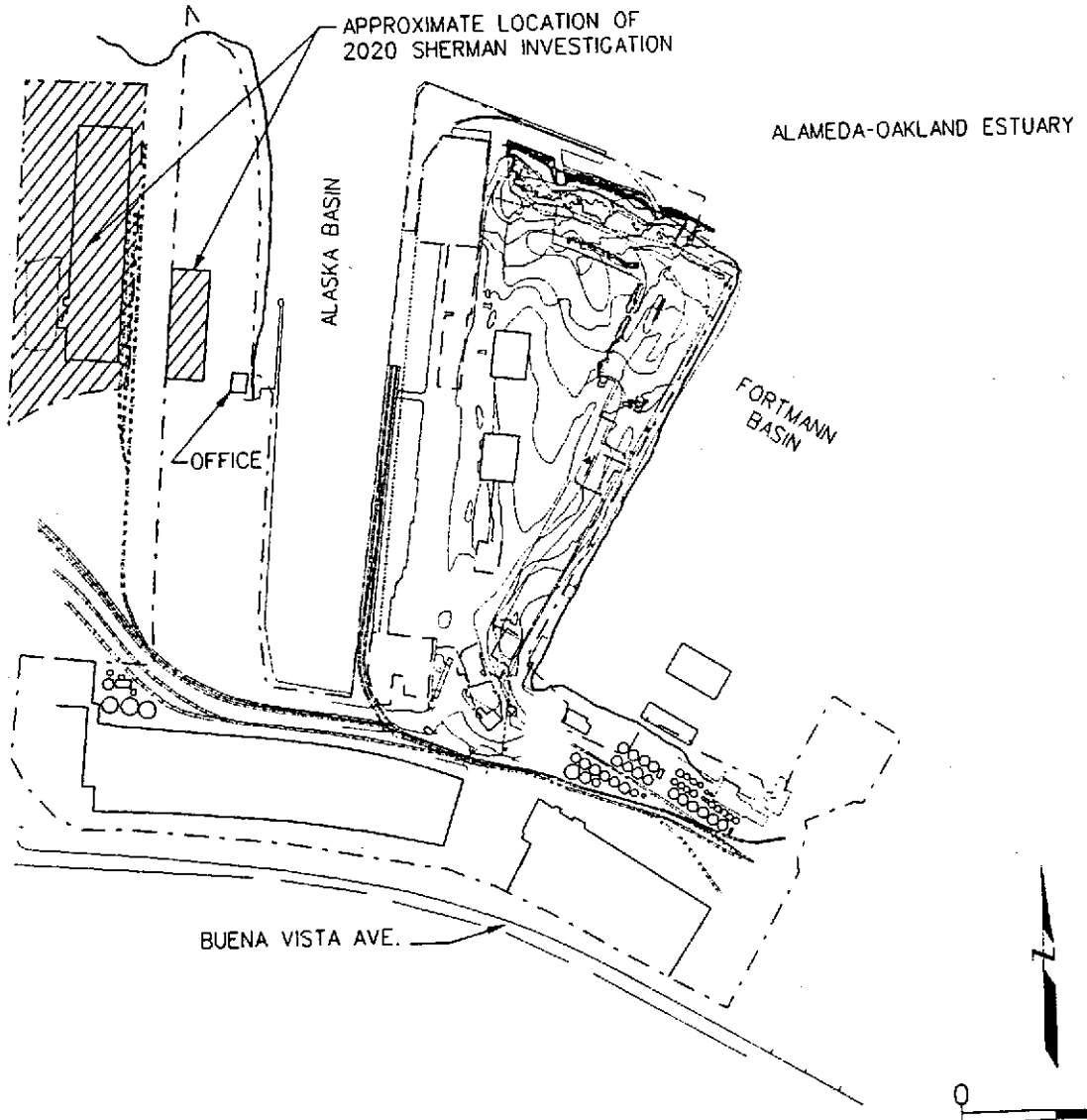
Note:

[1] Composite sample identification is comprised of the boring number and its depth below ground surface.



EXPLANATION

- FENCE
- RAILROAD
- PROPERTY BOUNDARY- ENCINAL TERMINALS
- PROPERTY BOUNDARY- ENCINAL REAL ESTATE (2020 SHERMAN AVENUE)



BASEMAP SOURCE:
KISTER, SAVIO, AND REI
PROPERTY MAP OF MARCH 1987 WITH APRIL 1994 REVISIONS:
AND FUGRO - McCLELLAND, PHASE I ENVIRONMENTAL SITE
ASSESSMENT FOR CAPITAL HOLDING COMPANY
5 JANUARY 1994

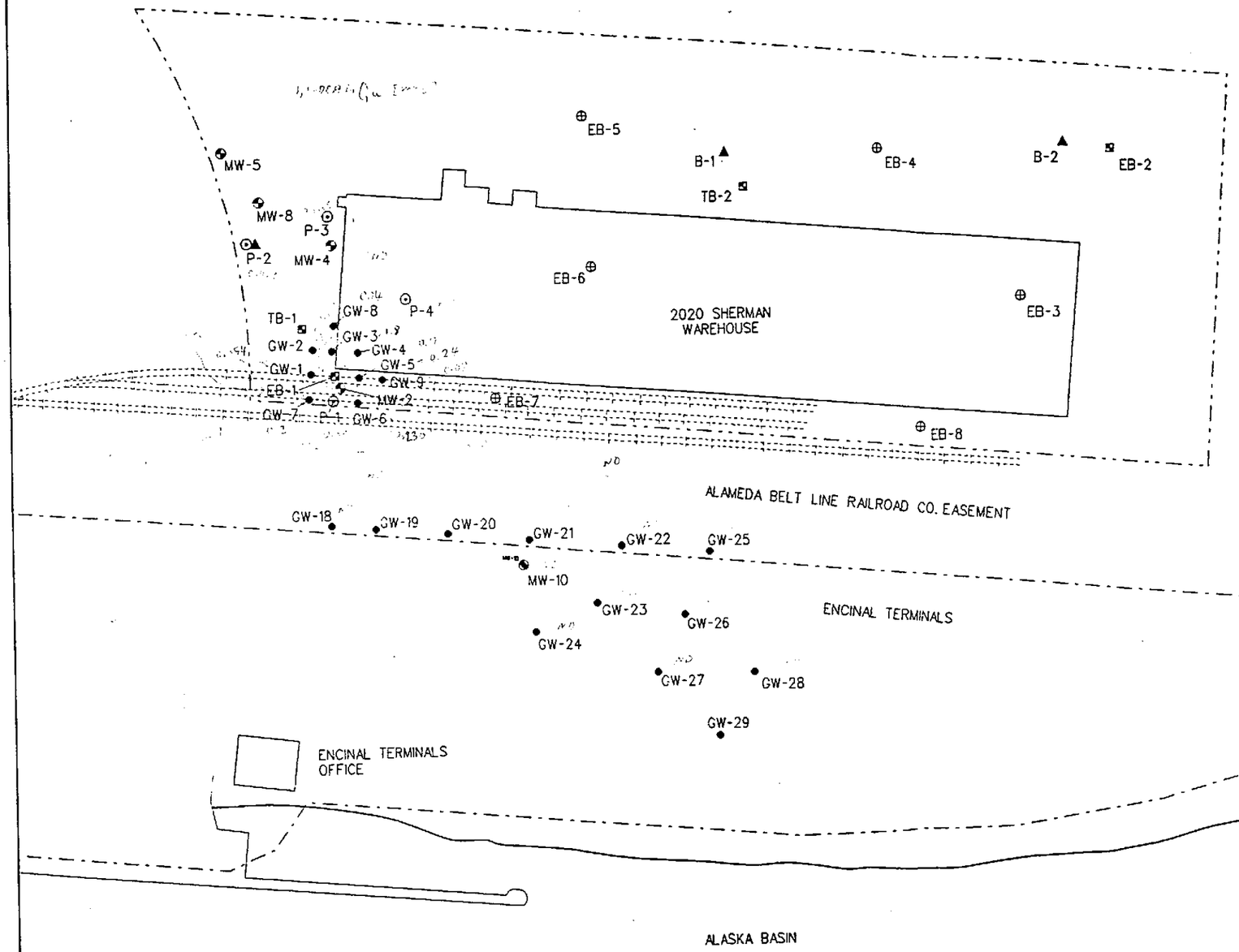
GEOMATRIX

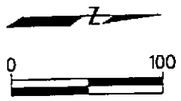
SITE LOCATION MAP
ENCINAL REAL ESTATE - 2020 SHERMAN AVENUE
ALAMEDA, CALIFORNIA

Figure 1

Project No. 2530.02

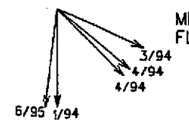
ENCL795a/Encl_01.dgn: Rev: 07-05-95





EXPLANATION

- MW-5 ⊕ APPROXIMATE MONITORING WELL LOCATION
- EB-4 ⊕ APPROXIMATE PREVIOUS SOIL SAMPLING LOCATION
- GW-3 ● APPROXIMATE GROUNDWATER GRAB SAMPLE LOCATION FOR 1,1-DCA ANALYSIS
- EB-2 ⊠ APPROXIMATE PREVIOUS GROUNDWATER GRAB SAMPLING LOCATION
- B-1 ▲ APPROXIMATE GROUNDWATER GRAB SAMPLE LOCATION FOR METAL ANALYSIS
- P-4 ⊙ APPROXIMATE TEMPORARY PIEZOMETER LOCATION
- PROPERTY BOUNDARY-ENCINAL REAL ESTATE (2020 SHERMAN AVENUE)
- PROPERTY BOUNDARY-ENCINALTERMINALS
- RAILROAD

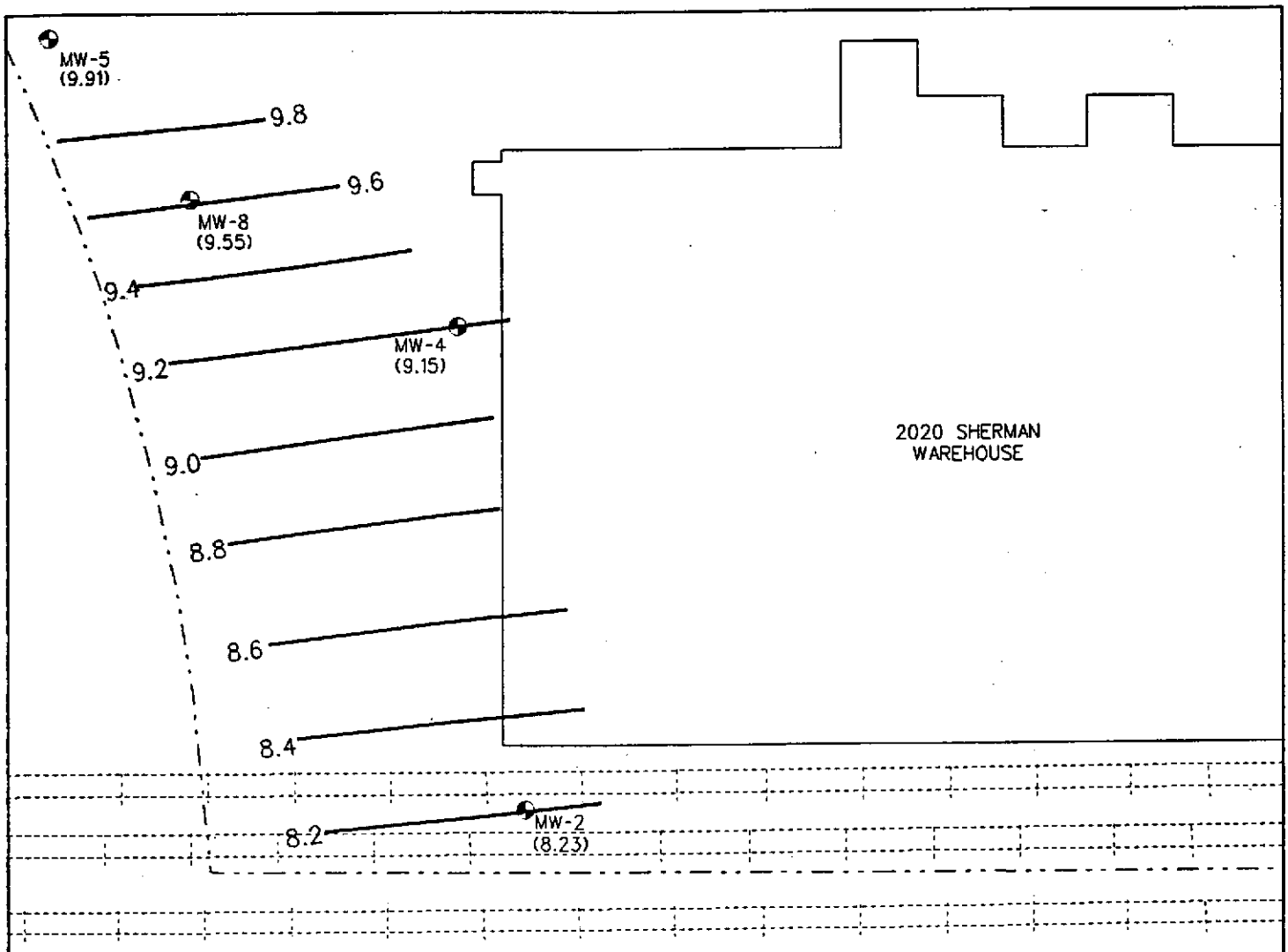


MEASURED DIRECTIONS OF GROUNDWATER FLOW

BASEMAP SOURCE:
KISTER, SAVIO, AND REI, INC. PROPERTY
MAP OF 3 MARCH 1987 WITH APRIL 1994 REVISIONS:

GROUNDWATER AND SOIL SAMPLE LOCATIONS · ENCINAL REAL ESTATE 2020 SHERMAN AVENUE ALAMEDA, CALIFORNIA

GEOMATRIX	Project No. 2530.02	Figure 2



EXPLANATION

- APPROXIMATE PROPERTY LINE
- MW-4 (9.15) MONITORING WELL WITH GROUNDWATER ELEVATION IN FEET
- MW-10 MONITORING WELL INSTALLED AT A LATER DATE
- 8.4 LINE OF EQUAL GROUNDWATER ELEVATION WITH ELEVATION NOTED IN FEET

MW-10

0 40

SCALE IN FEET

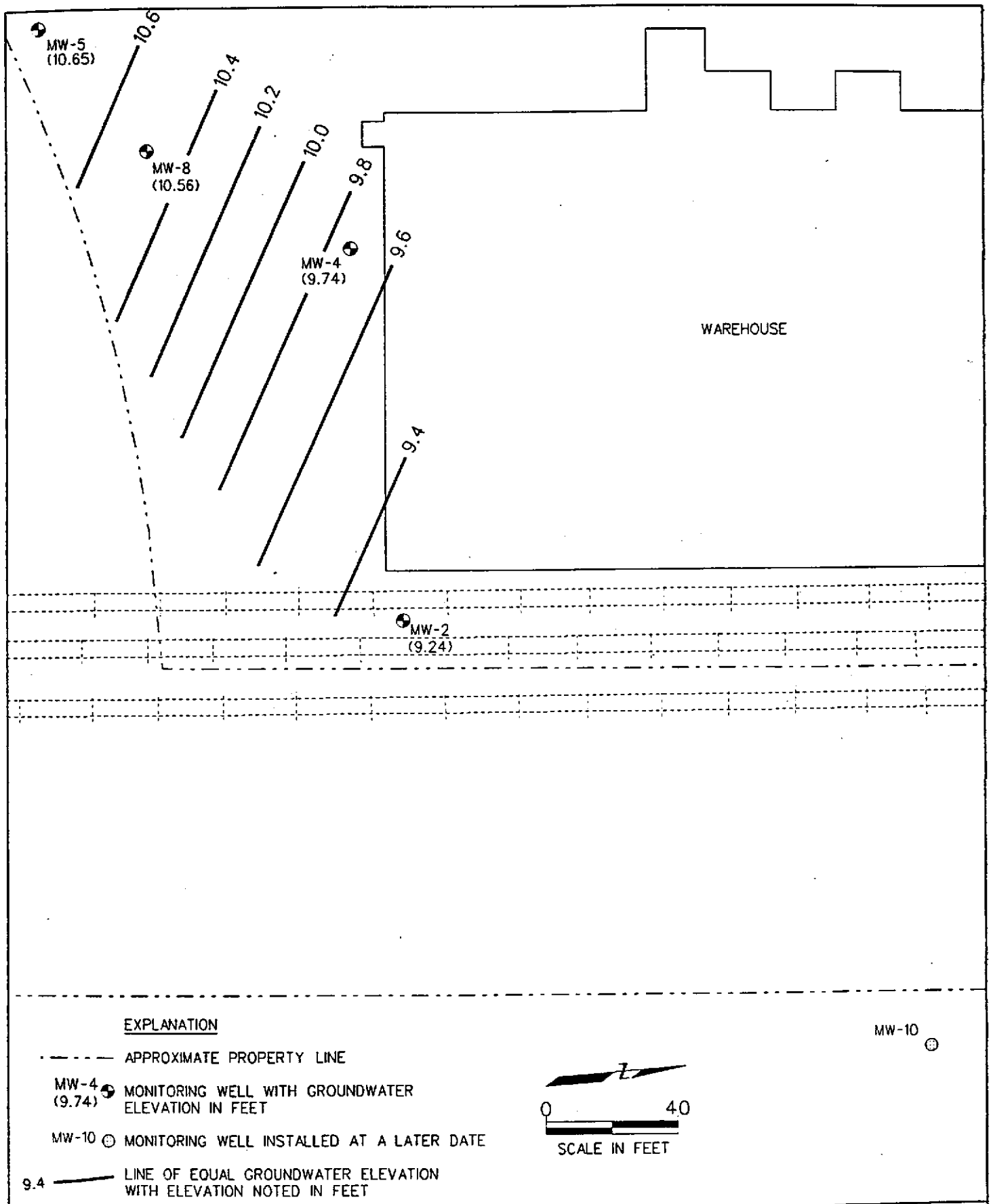
GEOMATRIX

GROUNDWATER ELEVATION MAP - 20 JANUARY 1994
ENCINAL REAL ESTATE
2020 SHERMAN AVENUE
ALAMEDA, CALIFORNIA

Figure 3

Project No. 2530.02

Encl795q\Encl_03.dgn: Rev: 07-19-95



GEOMATRIX

GROUNDWATER ELEVATION MAP - 29 MARCH 1994
ENCINAL REAL ESTATE
2020 SHERMAN AVENUE
ALAMEDA, CALIFORNIA

Figure 4

Project No. 2530.02

Encl795q\Encl_04.dgn: Rev: 07-19-95

SCREENING HEALTH EVALUATION

A screening-level evaluation was conducted to assess the potential health risks associated with the volatilization of 1,1-dichloroethane (1,1-DCA) from groundwater and subsequent inhalation of vapors by a hypothetical future on-site resident. The screening evaluation was composed of the following steps:

- Estimating vapor flux from groundwater,
- Estimating ambient air concentration,
- Estimating lifetime average daily dose, and
- Estimating lifetime excess cancer risk.

A brief description of each step is provided below; detailed calculations are presented in Attachment 1.

ESTIMATING VAPOR FLUX FROM GROUNDWATER

The vapor flux of 1,1-DCA from groundwater was estimated using the Farmer Model, a simple screening tool recommended by the U.S. EPA as a first step in estimating vapor flux from soil or groundwater (EPA, 1992). The Farmer model assumes that the chemical's concentration in groundwater can be used to estimate the chemical's concentration in soil gas. Once in the vapor phase, the model assumes that the chemical diffuses through the soil at a rate dependent on a number of chemical and physical properties, including the soil porosity and the chemical's air diffusion coefficient. The Farmer model likely overestimates vapor flux from groundwater, because it does not take into account reduction in the source over time or the effect of the capillary fringe on vapor phase diffusion. The vapor flux estimated by the Farmer model is expressed in units of milligrams chemical per square meter per second (mg/m^2-sec).

ESTIMATING AMBIENT AIR CONCENTRATION

The ambient concentration of 1,1-DCA in air was estimated using a box model, which is used by the U.S. EPA to calculate preliminary remediation goals (EPA, 1991a). A box model is a simple mass-balance equation that uses the concept of a theoretically enclosed space or box over the area of interest. The model assumes that compounds enter the box via vapor flux and are removed by wind or ventilation. The box model fails to fully take into account the various processes of dispersion and may predict relatively high ambient air

concentrations even at relatively low vapor flux rates. The ambient air concentration estimated by the box model is expressed in units of milligrams chemical per cubic meters of air (mg/m^3).

ESTIMATING LIFETIME AVERAGE DAILY DOSE

The lifetime average daily dose (LADD) of 1,1-DCA was estimated using standard default assumptions that take into account the amount of air inhaled per day, body weight, and the frequency and duration of exposure. The default assumptions used in this evaluation are recommended by the Department of Toxic Substances Control (DTSC) of the California EPA and the U.S. EPA (DTSC, 1992; EPA, 1991b). The (LADD) is expressed in units of milligrams chemical per kilogram body weight per day (mg/kg-day).

ESTIMATING LIFETIME EXCESS CANCER RISK

The lifetime excess cancer risk was estimated for the hypothetical future on-site resident by multiplying the LADD by the carcinogenic potency slope factor (SF). The SF, which is expressed in units of risk per milligrams chemical per kilogram body weight per day $[(mg/kg\text{-}day)^{-1}]$, is the 95 percent upper confidence limit of the probability of a carcinogenic response per unit daily intake over a lifetime. By using the 95 percent upper confidence limit, the estimate of carcinogenic response is conservative and usually overestimates the risk posed by the chemical.

CONCLUSIONS

Based on the maximum detected concentration of 1.8 milligrams per liter (mg/l), the estimated lifetime excess cancer risk for the hypothetical future on-site resident is 3 in 10 million (3×10^{-7}), which is lower than the range of risks generally considered acceptable by regulatory agencies. Based on this screening evaluation, the presence of 1,1-DCA in groundwater at the Encinal Terminal site should not pose an unacceptable health risk to a hypothetical future on-site resident. It should also be noted that the U.S. EPA does not agree with the California EPA that 1,1-DCA is a possible human carcinogen. As discussed in a memorandum presented in Attachment 2, the potential noncarcinogenic health risks also could be evaluated; however, it is likely that the above evaluation based on carcinogenic health risks is more health conservative.

REFERENCES

Department of Toxic Substances Control (DTSC), 1992, Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted

Facilities: California EPA, Department of Toxic Substances Control, Sacramento, California

United States Environmental Protection Agency (EPA), 1991a, Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part B, Development of Risk-based Preliminary Remediation Goals), Interim: Publication 9285.7-01B, Office of Emergency and Remedial Response, Washington, D.C.

EPA, 1991b, Human Health Evaluation Manual, Supplemental Guidance "Standard Default Exposure Factors:" OSWER Directive 9285.6-03, Washington, D.C.

EPA, 1992, Air/Superfund National Technical Guidance Study Series, Assessing Potential Indoor Air Impacts for Superfund Sites: EPA-451/R-92-002, Office of air Quality Planning and Standards, Triangle Park, North Carolina

GEOMATRIX

ATTACHMENT 1

SCREENING CALCULATION OF VOLATILIZATION OF 1,1-DICHLOROETHANE VAPORS FROM GROUNDWATER AND ESTIMATED EXCESS CANCER RISK TO A HYPOTHETICAL FUTURE ON-SITE RESIDENT

Step 1 Estimate of Vapor Flux from Groundwater using the Farmer Model

$$\text{Vapor Flux (mg/cm}^2\text{-sec)} = \frac{Dg \times (C_2 - C_1)}{L}$$

where:

D_g = Soil-gas diffusion coefficient (cm^3/cm-sec)
= D_g^{air} (cm^3/cm-sec) $\times$ $[(P_a)^{10/3} \div (P_t)^2]$
C_2 = Vapor concentration of contaminant at bottom of soil layer (mg/cm^3)
C_1 = Vapor concentration of contaminant at surface (assumed to be 0)
L = Thickness of clean soil layer

Inputs - Soil

P_t = 0.35 (average value of 0.50 for clay, 0.20 for silty sand; default value for compacted soil; EPA, 1988)
P_a = 0.20 (assumes 15% moisture content; professional judgment)
L = 6 ft or 180 cm (site-specific)

Inputs - 1,1-Dichloroethane (1,1-DCA)

$$C_2 = C_w \times 1\ell/1000\ cm^3 \times \frac{K_{henry}}{R \times T}$$

where:

C_w = 1,1-DCA concentration in groundwater (1.8 mg/ℓ; maximum value)
K_{henry} = 5.2×10^{-3} atm-m^3/mol (average of values from Montgomery and Welkom, 1989)
R = Universal gas constant (8.21×10^{-5} atm-m^3/mol-°K)
T = Temperature of soil (298°K)

therefore:

$$C_2 = 1.8\ mg/\ell \times 1\ell/1000\ cm^3 \times \frac{5.2 \times 10^{-3}\ atm\text{-}m^3/mol}{8.21 \times 10^{-5}\ atm\text{-}m^3/mol\text{-}°K \times 298°K}$$

$$= 3.9 \times 10^{-4}\ mg/cm^3$$

$$D_g = D_g^{air} \times (P_a^{10/3} \div P_t^2)$$

where:

D_g^{air} = 0.094 cm^3/cm-sec (Shen, 1981; non-specific dichloroethanes)

therefore:

$$D_g^{air} = 0.094\ cm^3/cm\text{-}sec \times (0.2^{10/3} \div 0.35^2)$$
$$= 0.094\ cm^3/cm\text{-}sec \times (4.7 \times 10^{-3} \div 1.2 \times 10^{-1})$$
$$= 3.6 \times 10^{-3}\ cm^3/cm\text{-}sec$$

therefore:

$$\text{Vapor Flux} = \frac{3.6 \times 10^{-3}\ cm^3/cm\text{-}sec \times 3.9 \times 10^{-4}\ mg/cm^3}{180\ cm}$$

$$= 7.8 \times 10^{-9}\ mg/cm^2\text{-}sec \quad \text{or} \quad 7.8 \times 10^{-5}\ mg/m^2\text{-}sec$$

Step 2 Estimating Ambient Air Concentration using the Box Model

$$\text{Air } (mg/m^3) = \frac{\text{Flux } (mg/m^2\text{-}sec) \times \text{EA } (m^2)}{\text{WS (m/sec)} \times \text{Height (m)} \times \text{Width (m)}}$$

where:

Flux = Vapor flux (7.8×10^{-5} mg/m^2-sec; calculated above)
EA = Emissions area (5000 ft^2 or 460 m^2; default residential lot, DTSC, 1994)
WS = Wind speed (2 m/sec; professional judgment)
Height = Height of box (2 m; professional judgment)
Width = Width of box (21 m; square root of emissions area)

therefore:

$$\text{Air} = \frac{7.8 \times 10^{-5}\ \text{mg/m}^2\text{-sec} \times 460\ \text{m}^2}{2\ \text{m/sec} \times 2\ \text{m} \times 21\ \text{m}}$$

$$= 4.2 \times 10^{-4}\ \text{mg/m}^3$$

Step 3 Estimating Lifetime Average Daily Dose (LADD)

$$\text{LADD (mg/kg-day)} = \frac{\text{Air (mg/m}^3\text{)} \times \text{BR (m}^3\text{/day)} \times \text{B (\%)} \times \text{EF (days/yr)} \times \text{ED (yr)}}{\text{BW (kg)} \times \text{AT (days)}}$$

where:

- Air = Air concentration (4.2×10^{-4} mg/m^3; calculated above)
- BR = Breathing rate (20 m^3/day; DTSC, 1992; EPA, 1991)
- B = Bioavailability (100%; maximum)
- EF = Exposure frequency (350 days/yr; DTSC, 1992; EPA, 1991)
- ED = Exposure duration (30 yrs; DTSC, 1992; EPA, 1991)
- BW = Body weight (70 kg; DTSC, 1992; EPA, 1991)
- AT = Averaging time (70 yrs × 365 days/yr or 25550 days; DTSC, 1992; EPA, 1991)

therefore:

$$\text{LADD} = \frac{4.2 \times 10^{-4}\ \text{mg/m}^3 \times 20\ \text{m}^3\text{/day} \times 100\% \times 350\ \text{days/yr} \times 30\ \text{yrs}}{70\ \text{kg} \times 25550\ \text{days}}$$

$$= 5.0 \times 10^{-5}\ \text{mg/kg-day}$$

Step 4 Estimating Lifetime Excess Cancer Risk

$$\text{Risk} = \text{LADD} \times \text{SF}$$

where:

- LADD = Lifetime average daily dose (5.0×10^{-5} mg/kg-day; calculated above)
- SF = Slope factor [0.0057 (mg/kg-day)$^{-1}$; OEHHA, 1992]

therefore:

$$\text{Risk} = 5.0 \times 10^{-5}\ \text{mg/kg-day} \times 0.0057\ \text{(mg/kg-day)}^{1}$$
$$= 3 \times 10^{-7}$$

REFERENCES

Department of Toxic Substances Control (DTSC), 1992, Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities: California EPA, Department of Toxic Substances Control, Sacramento, California

DTSC, 1994, Preliminary Endangerment Assessment Guidance Manual: California EPA, Department of Toxic Substances Control, Sacramento, California

Montgomery, J.H. and L.M. Welkom, 1989, Groundwater Chemicals Desk Reference, Lewis Publishers, Chelsea, Michigan.

Office of Environmental Health Hazard Assessment (OEHHA), Expedited Cancer Potency Values and Proposed Regulatory Levels for Certain Proposition 65 Carcinogens: California EPA, Office of Environmental Health Hazard Assessment, Reproductive and Cancer Hazard Assessment Section, Sacramento, California.

Shen, T.T., 1981, Estimating Hazardous Air Emissions from Disposal Sites: Pollution Engineering, 13(8):31-34.

United States Environmental Protection Agency (EPA), Superfund Exposure Assessment Manual: EPA/540/1-88/001, Office of Remedial Response, Washington, D.C.

EPA, 1991, Human Health Evaluation Manual, Supplemental Guidance "Standard Default Exposure Factors:" OSWER Directive 9285.6-03, Washington, D.C.

GEOMATRIX

MEMORANDUM

TO: Elizabeth Nixon **DATE:** 12 May 1994

FROM: Greg Brorby

SUBJECT: Toxicity Criteria Available for Evaluating Exposures to 1,1-Dichloroethane
Encinal Terminals
Project #2530

Following our conversation of your meeting with the Alameda County Department of Environmental Health and the Regional Water Quality Control Board (RWQCB) on the Encinal Terminals site, I wanted to summarize the availability of toxicity criteria for evaluating exposure to 1,1-dichloroethane (1,1-DCA).

Currently, there are no toxicity criteria for 1,1-DCA listed on EPA's Integrated Risk Information System (IRIS). According to IRIS, a risk assessment is currently under review by an EPA work group to establish oral and inhalation reference doses (RfDs). RfDs are used to evaluate noncarcinogenic health effects. No such assessment is under review to establish oral or inhalation slope factors, which are used to evaluate carcinogenic health risks.

My original calculations from January of this year were based on a oral slope factor developed by the Office of Environmental Health Hazard Assessment (OEHHA) of the California EPA for the purposes of developing an Acceptable Daily Intake (ADI) under Proposition 65. I do not know why the State of California and EPA do not agree as to the carcinogenicity of 1,1-DCA; however, the State has taken a more conservative view than EPA for several chemicals, most notably hexavalent chromium.

EPA Region IX issues Preliminary Remediation Goals (PRGs) for numerous chemicals on a quarterly basis. PRGs for 1,1-DCA are listed in their most recent table, dated 1 February 1994, based on noncarcinogenic health effects. Region IX cites EPA's Health Effects Assessment Summary Tables (HEAST) as the source of the RfDs used in their calculations. Toxicity criteria listed in HEAST are provisional, having undergone review and having the concurrence of individual Agency Program Offices. These provisional criteria could be used to evaluate the potential noncarcinogenic health effects associated with inhalation exposure to 1,1-DCA vapors being released by groundwater at the Site, but it is likely that the evaluation based on carcinogenic health risks is more health conservative.

Please let me know if I can be of any additional assistance.

APPENDIX C
PRELIMINARY WOODWARD-CLYDE CONSULTANTS DATA

Woodward-Clyde Consultants PROJECT NAME Encinal Terminals NO. 96116 3NA

BORING LOCATION B1		ELEVATION AND DATUM 8.76 Local + BM	
DRILLING AGENCY Precision	DRILLER Shawn	DATE STARTED 7/22/96 DATE FINISHED	
DRILLING EQUIPMENT MD-1		COMPLETION DEPTH 10'	SAMPLER
DRILLING METHOD Direct push	DRILL BIT	NO. OF SAMPLES DIST. 1	UNDIST.
SIZE AND TYPE OF CASING 1" PVC		WATER ELEV. FIRST 4.5'	COMPL. 24 HRS
TYPE OF PERFORATION 0.010" slots	FROM 2.5 TO 10 FT.	LOGGED BY W. Copeland	CHECKED BY:
SIZE AND TYPE OF PACK none	FROM TO FT.		
TYPE OF SEAL	FROM TO FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG: Lithology	GRAPHIC LOG: Piezometer Installation	Water Content	Piezometer Data	SAMPLES: Type No	SAMPLES: Recov ft	SAMPLES: Penetra Resist (Blows/6 in)	REMARKS (Drill Rate, Fluid loss, Odor, etc.)
0	gravel, crushed asphalt fill					X			start @ 1:20
1									B1 - collected in 40z glass jars
2	Fill								Depth to water 3.84' on 7-26-96
3				▽					
4	Gravelly SILT - M. brown, dry, gravel to 1" diam								Rubble
5				▽	ATD				
6	Fill ?								
7	SAND - gray, moist, f-m grained, some silt								
8	Bay Mud								
9	CLAY - dk. gray, wet, contains black blebs of material (prob. organic-rich clay)								Smells organic
10	Bottom of Boring @ 10'								9.9 -5.4 4.5

FIELD LOG OF BORING NO. B1 SHEET 1 of 1

Woodward-Clyde Consultants PROJECT NAME Encinal Terminals NO. 96116WA

BORING LOCATION BZ		ELEVATION AND DATUM 11.24' local TBM	
DRILLING AGENCY Precision Sampling	DRILLER	DATE STARTED / DATE FINISHED 7/22/96	
DRILLING EQUIPMENT MD-1 Charles Machine Works OK		COMPLETION DEPTH 10'	SAMPLER
DRILLING METHOD direct push	DRILL BIT	NO. OF SAMPLES DIST.	UNDIST. 1
SIZE AND TYPE OF CASING 1" PVC		WATER ELEV. FIRST 5'	COMPL. 24 HRS
TYPE OF PERFORATION 0.010" slots	FROM 2.5' TO 10 FT.	LOGGED BY W. Copeland	CHECKED BY:
SIZE AND TYPE OF PACK none	FROM TO FT.		
TYPE OF SEAL	FROM TO FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG: Lithology	GRAPHIC LOG: Piezometer Installation	Water Content	Piezometer Data	SAMPLES: Type No	SAMPLES: Recov in	SAMPLES: Penetra Resist (Blows/6 in)	REMARKS (Drill Rate, Fluid loss, Odor, etc.)
1	Brown SANDY SILT - dry, f-c grained sand, some gravel to 1" diam								begin pushing @ 10:30
2	Fill						NR		
3	SAND - brown, moist, m-f grained,							1	BZ-2
4	trace silt			▽					Depth to water 3.95' on 7-26-96
5	becomes gray to dk gray			▽	ATD				
6	CLAY - dk gray, wet, trace silt (BAY MUD)							2	
7									
8								3	
9									
10	Bottom of Boring @ 10'								

FIELD LOG OF BORING NO. BZ SHEET 1 of 1

Woodward-Clyde Consultants PROJECT NAME Encinal Terminals NO. 961163NA

BORING LOCATION B3		ELEVATION AND DATUM 12.34' local TBM	
DRILLING AGENCY Precision	DRILLER	DATE STARTED / DATE FINISHED 7/22/96	
DRILLING EQUIPMENT MD-1		COMPLETION DEPTH 10'	SAMPLER
DRILLING METHOD Direct Push	DRILL BIT	NO. OF SAMPLES DIST. 1	UNDIST. 0
SIZE AND TYPE OF CASING 1" PVC		WATER ELEV. FIRST 4'	COMPL. 24 HRS
TYPE OF PERFORATION 0.010	FROM 2.5' TO 10 FT.	LOGGED BY W. Copeland	CHECKED BY:
SIZE AND TYPE OF PACK none	FROM TO FT.		
TYPE OF SEAL	FROM TO FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG: Lithology	GRAPHIC LOG: Piezometer Installation	Water Content	Piezometer Data	SAMPLES: Type No	SAMPLES: Recov ft	SAMPLES: Penetra Resist (Blows/6 in)	REMARKS (Drill Rate, Fluid loss, Odor, etc.)
1	gravel, crushed asphalt fill					X		B3	First run - rock blocked end of liner, no recovery
2	Fill								No Recovery 1st pass -> Stopped over about 4'- still no recovery Finish @ 12:15
3									
4	SAND - brown and reddish brown, moist, m-f grained, trace silt			▽	ATD				@ 11:45
5	becomes CLAYEY SAND, dk gray								Sample B3 by D. Wallenstein in 4 oz glass jars
6	CLAY - dark gray, wet, trace silt (BAY MUD)								Depth to water 4.36' on 7-26-96
7									
8									
9									12:00
10	Bottom of Boring @ 10'								10.2 - 6.1 = 4.1

FIELD LOG OF BORING NO. B3 SHEET 1 of 1

Woodward-Clyde Consultants PROJECT NAME Encinal Terminals NO. 96116.3NA

BORING LOCATION B4		ELEVATION AND DATUM 8.68' local TBM	
DRILLING AGENCY Precision	DRILLER Shawn	DATE STARTED / DATE FINISHED 7/22/96	
DRILLING EQUIPMENT MD-1		COMPLETION DEPTH 10'	SAMPLER
DRILLING METHOD direct push	DRILL BIT	NO. OF SAMPLES / DIST.	UNDIST. 1
SIZE AND TYPE OF CASING 1" PVC		WATER ELEV. / FIRST 3.7	COMPL. / 24 HRS
TYPE OF PERFORATION 0.010"	FROM 2.5' TO 10' FT.	LOGGED BY W. Copeland	CHECKED BY:
SIZE AND TYPE OF PACK none	FROM TO FT.		
TYPE OF SEAL	FROM TO FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG: Lithology	GRAPHIC LOG: Piezometer Installation	Water Content	Piezometer Data	SAMPLES: Type No	SAMPLES: Recov In	SAMPLES: Penetro Resist (Blows/6 in)	REMARKS (Drill Rate, Fluid Loss, Odor, etc.)
1	Fill								boring in ~2' depression
2	SAND - reddish brown, moist, f-m grained, trace silt								B4-2.5
3	CLAY - dk gray, moist, trace silt								
4	Fill				ATD				Depth to water 3.42' on 7-26-96
5									
6	SAND - dk gray, wet, f-m grain								
7	CLAY - dk gray, wet, varying amounts of sand from some sand to none								
8	Contains CLAYEY SAND lenses								
9	Bay Mud								
10									10.0 - 6.3 = 3.7

FIELD LOG OF BORING NO. B4 SHEET 1 of 1

Woodward-Clyde Consultants PROJECT NAME Encinal Terminals NO. 961163NA

BORING LOCATION B5		ELEVATION AND DATUM 6.89 Local TBM	
DRILLING AGENCY Precision	DRILLER Shawn	DATE STARTED / DATE FINISHED 7/22/96	
DRILLING EQUIPMENT HD-1		COMPLETION DEPTH 10'	SAMPLER
DRILLING METHOD direct push	DRILL BIT	NO. OF SAMPLES DIST. 1	UNDIST. 0
SIZE AND TYPE OF CASING 1" PVC		WATER ELEV. FIRST 9.5	COMPL. 24 HRS
TYPE OF PERFORATION 0.010 slots	FROM TO FT.	LOGGED BY W. Copeland	CHECKED BY:
SIZE AND TYPE OF PACK none	FROM TO FT.		
TYPE OF SEAL	FROM TO FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG: Lithology	GRAPHIC LOG: Piezometer Installation	Water Content	Piezometer Data	SAMPLES: Type No	SAMPLES: Recov ft	SAMPLES: Penetra Resist (Blows/ 6 in.)	REMARKS (Drill Rate, Fluid Loss, Odor, etc.)
1	gravel fill					X			No recovery B5 - collected by D. Wallenstein in 4 oz glass jars
2	Silty Gravel, Rubble Fill								
3				▽					
4									rubble (gravel, silt)
5	CLAY - dark gray, moist occasional very thin (<1") layers of silt, sand, & gravel, Bay Mud? no groundwater encountered ATD								Depth to water 2.36' on 7-26-96
6									
7									
8									
9				▽					WL Approx 2 hours after drilling
10	Bottom of Boring @ 10'								

FIELD LOG OF BORING NO. B5 SHEET 1 of 1

Woodward-Clyde Consultants PROJECT NAME Encinal Terminals NO. 96116.3NA

BORING LOCATION B6		ELEVATION AND DATUM ≈ 9.91' local TBM	
DRILLING AGENCY Precision	DRILLER Shawn	DATE STARTED / DATE FINISHED 7/22/96	
DRILLING EQUIPMENT MD-1		COMPLETION DEPTH 10'	SAMPLER
DRILLING METHOD direct push	DRILL BIT	NO. OF SAMPLES DIST. 1	UNDIST.
SIZE AND TYPE OF CASING 1" PVC		WATER ELEV. FIRST	COMPL. 24 HRS
TYPE OF PERFORATION 0.010 slots	FROM TO FT.	LOGGED BY W. Copeland	CHECKED BY:
SIZE AND TYPE OF PACK	FROM TO FT.		
TYPE OF SEAL	FROM TO FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG: Lithology	GRAPHIC LOG: Piezometer Installation	Water Content	Piezometer Data	SAMPLES: Type No	SAMPLES: Recov ft	SAMPLES: Penetr Resist (Blows/6 in)	REMARKS (Drill Rate, Fluid loss, Odor, etc.)
1	gravel SANDY SILT - dk brown, some gravel to 1" diam. Fill					X			B6 - collected by W Copeland in 4oz glass jars.
2									
3									
4				▽					Little recovery (gravel, silt) using catcher.
5	gravelly CLAY - dk gray, moist, some sand CLAY - dk gray, moist, occasional very thin (<½") lenses of silt (BAY MUD) (Bay Mud)								Depth to water 4.41' on 7-26-96
6									
7	No groundwater ATD.								
8									
9									
10	Bottom of Boring @ 10'								

FIELD LOG OF BORING NO. B6 SHEET 1 of 1

Woodward-Clyde Consultants

PROJECT NAME Encinal Terminals NO. 961163NA

BORING LOCATION B7		ELEVATION AND DATUM 4.57 local TBM	
DRILLING AGENCY Precision	DRILLER Shawn	DATE STARTED / DATE FINISHED 7/22/96	
DRILLING EQUIPMENT MD-1		COMPLETION DEPTH 10'	SAMPLER
DRILLING METHOD direct push	DRILL BIT	NO. OF SAMPLES DIST. 1	UNDIST.
SIZE AND TYPE OF CASING 1" PVC		WATER ELEV. FIRST	COMPL. 24 HRS
TYPE OF PERFORATION 0.010" slots	FROM 2.5' TO 10' FT.	LOGGED BY W. Copeland	CHECKED BY:
SIZE AND TYPE OF PACK none	FROM TO FT.		
TYPE OF SEAL	FROM TO FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG: Lithology	GRAPHIC LOG: Piezometer Installation	Water Content	Piezometer Date	SAMPLES: Type No	SAMPLES: Recov ft	SAMPLES: Penetra Resist (Blows/6 in)	REMARKS (Drill Rate, Fluid loss, Odor, etc)
0	Gravel								
1	SANDY SILT - dk brown, dry, some gravel to 1" diam					X			B7 - collected in 4 oz glass jars
2	Fill								
3				▽					
4									Poor recovery
5	CLAY - dark gray, moist, trace silt in very thin layers								Depth to water 3.59' on 7-26-96
6	Bay Mud								
7	No groundwater ATD								
8									
9									
10	Bottom of Boring @ 10'								

FIELD LOG OF BORING NO. B7 SHEET 1 of 1

Inchcape Testing Services
Anametrix Laboratories

1961 Concourse Drive, Suite E
San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198

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CHAIN-OF-CUSTODY RECORD

PROJECT NUMBER	PROJECT NAME	Send Report Attention of:	Report Due	Verbal Due
961163NA	Marina Village	Al Ridley, Woodward-Clyde, 500 12th St. Suite 100, Oakland CA 94607	/ /	/ /

	Sample Number	Date	Time	Comp	Matrix	Station Location	Number of Cntnrs	Type of Containers	Title 22 metals	TPH by 8015	VOCs by 8260	SVOCs by 8270	PCBs by 8081	herbicides by 8150	TOC	Organic Tin		Condition of Samples	Initial
1	B-7	7-22	17:00	0	S		2	8oz jar	X	X	X	X	X	X	X	X			
2	B-6	7-22	16:45		↓		2	8oz jar	X	X	X	X	X	X	X	X			
3	B-5	↓	16:00		↓		2	8oz jar	↓	↓	↓	↓	↓	↓	↓	↓			
4	S-8	↓	16:15		↓		2	8oz jar	↓	↓	↓	↓	↓	↓	↓	↓			
5	B-3	↓	13:00		↓		2	8oz jar	↓	↓	↓	↓	↓	↓	↓	↓			
6	S-10	↓	14:00		↓		2	6" brass tube	↓	↓	↓	↓	↓	↓	↓	↓			
7	M-1	↓	15:15		↓		2	6" brass tube	↓	↓	↓	↓	↓	↓	↓	↓			
8	S-4	↓	11:30		↓		2	6" brass tube	↓	↓	↓	↓	↓	↓	↓	↓			
9	S-9	↓	15:00		↓		2	6" brass tube	↓	↓	↓	↓	↓	↓	↓	↓			
10	S-1	↓	12:00		↓		2	6" brass tube	↓	↓	↓	↓	↓	↓	↓	↓			
11	S-6	↓	10:30		↓		2	6" brass tube	↓	↓	↓	↓	↓	↓	↓	↓			
12	S-2	↓	9:30		↓		2	6" brass tube	↓	↓	↓	↓	↓	↓	↓	↓			

Sampled by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
David Wellington	7-23-96 ~~18:00~~ 1015	Laura Olson	7-23-96 1015
Relinquished by: (Signature)	**Date/Time**	**Received by: (Signature)**	**Date/Time**
Laura Olson	7-23-96 1145		
Relinquished by: (Signature)	**Date/Time**	**Received by Lab:**	**Date/Time**
		[signature]	7/23/96 1145

Remarks: Normal TAT

COMPANY: Woodward-Clyde Consultants
ADDRESS: 500 12th St., Suite 100
PHONE: 510-874-3192 FAX: 510-874-4268

Inchcape Testing Services
Anametrix Laboratories
1961 Concourse Drive, Suite E
San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198

 960716 (27)

CHAIN-OF-CUSTODY RECORD

PROJECT NUMBER	PROJECT NAME
961163 NA	Marina Village

Send Report Attention of:	Report Due	Verbal Due
Al Ridley	/ /	/ /

	Sample Number	Date	Time	Comp	Matrix	Station Location	Number of Cntnrs	Type of Containers	Type of Analysis: Title 22 metals	TPH by 8015	VOCs by 8260	SVOCs by 8270	PCBs by 8081	herbicides 8150	TOC	organic fin	Condition of Samples	Initial
13	B4-2.5	7-22-96	10:00	C	S		1	12" teflon										
14	S-5		11:00				2	2" brass tubes										
15	S-7		13:30				2	2" brass tubes										
16	M-2		14:30				2	2" brass tube										
17	S-3		10:00				2	2" brass tube										
18	B2-2		11:00				~~2~~ 1	12" teflon tube										
19	B-1		17:30				2	8oz jar										

Sampled by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Daniel Wallenstein	7-22-96 ~~18:00~~ 1015	Laura Olson	7-23-96 1015
Relinquished by: (Signature)	**Date/Time**	**Received by: (Signature)**	**Date/Time**
Laura Olson	7-23-96 1145		
Relinquished by: (Signature)	**Date/Time**	**Received by Lab:**	**Date/Time**
			7/23/96 1145

Remarks: Normal TAT

COMPANY: Woodward-Clyde Consultants
ADDRESS: 500 12th St, suite 100
PHONE : 510-874-3192 FAX : 510-874-3268

GC/MS REPORT DESCRIPTION

Organic Analysis Data Sheets (OADS)
OADS forms contain tabulated results for target compounds. The OADS are grouped by method and within each method, organized sequentially in order of increasing Inchcape Testing Services ID Number.

Tentatively Identified Compounds (TICs)
TIC forms contain tabulated results for non-target compounds detected in GC/MS analyses. TICs must be requested at the time samples are submitted to Inchcape Testing Services. TIC forms immediately follow the OADS form for each sample. If TICs are requested but not found, then TIC forms will not be included with the report.

Surrogate Recovery Summary (SRS)
SRS forms contain quality assurance data. An SRS form will be printed for each method. They will list surrogate percent recoveries for all samples and any method blanks. Any surrogate recovery outside the established limits will be flagged with an "*" and the total number of surrogates outside the limits will be listed in the column labeled "Total Out."

Matrix Spike Recovery, Laboratory Control Sample Forms
These forms contain quality assurance data. They summarize percent recovery and relative percent difference information for matrix spikes, laboratory control samples and their duplicates. This information is a statement of accuracy and precision. Any percent recovery or relative percent difference outside established limits will be flagged with an "*".

Qualifiers
Inchcape Testing Services uses several data qualifiers (Q) in its report forms. These qualifiers give additional information on the compounds reported. They should help a data reviewer to verify the integrity of the analytical results. The following is a list of qualifiers and their meanings:

- **U** - Indicates that the compound was analyzed but not detected at or above the specified reporting limit.
- **B** - Indicates that the compound was detected in the associated method blank.
- **J** - Indicates that the compound was detected at an amount below the specified reporting limit. Consequently, the amount should be considered an estimated value.
- **E** - Indicates that the amount reported exceeded the linear range of the instrument calibration.
- **D** - Indicates that the compound was detected in an analysis performed at a secondary dilution.
- **A** - Indicates that the tentatively identified compound is a suspected aldol condensation product. This is common in EPA Method 8270 analyses.

Absence of a qualifier indicates that the compound was detected at a concentration at or above the specified reporting limit.

REPORTING CONVENTIONS

- Due to a size limitation in our data processing step, only the first eight (8) characters of your project ID and sample ID will be printed on the report form. However, the report cover letter and report summary pages do display up to twenty (20) characters of your project and sample IDs.
- Amounts reported are gross values, i.e., <u>not</u> corrected for method blank contamination.

REPORT SUMMARY
INCHCAPE, INC. (408)432-8192

MR. AL RIDLEY
WOODWARD-CLYDE CONSULTANTS
500 12TH STREET, SUITE 100
OAKLAND, CA 94607-4014

Workorder # : 9607196
Date Received : 07/23/96
Project ID : 961163NA
Purchase Order: N/A
Department : GCMS
Sub-Department: GCMS

SAMPLE INFORMATION:

INCHCAPE SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9607196- 1	B-7	SOIL	07/22/96	8260
9607196- 2	B-6	SOIL	07/22/96	8260
9607196- 3	B-5	SOIL	07/22/96	8260
9607196- 4	S-8	SOIL	07/22/96	8260
9607196- 5	B-3	SOIL	07/22/96	8260
9607196- 6	S-10	SOIL	07/22/96	8260
9607196- 7	M-1	SOIL	07/22/96	8260
9607196- 8	S-4	SOIL	07/22/96	8260
9607196- 9	S-9	SOIL	07/22/96	8260
9607196-10	S-1	SOIL	07/22/96	8260
9607196-11	S-6	SOIL	07/22/96	8260
9607196-12	S-2	SOIL	07/22/96	8260
9607196-13	B4-2.5	SOIL	07/22/96	8260
9607196-14	S-5	SOIL	07/22/96	8260
9607196-15	S-7	SOIL	07/22/96	8260
9607196-16	M-2	SOIL	07/22/96	8260
9607196-17	S-3	SOIL	07/22/96	8260
9607196-18	B2-2	SOIL	07/22/96	8260
9607196-19	B-1	SOIL	07/22/96	8260
9607196- 1	B-7	SOIL	07/22/96	8270
9607196- 2	B-6	SOIL	07/22/96	8270
9607196- 3	B-5	SOIL	07/22/96	8270
9607196- 4	S-8	SOIL	07/22/96	8270
9607196- 5	B-3	SOIL	07/22/96	8270

REPORT SUMMARY
INCHCAPE, INC. (408)432-8192

MR. AL RIDLEY
WOODWARD-CLYDE CONSULTANTS
500 12TH STREET, SUITE 100
OAKLAND, CA 94607-4014

Workorder # : 9607196
Date Received : 07/23/96
Project ID : 961163NA
Purchase Order: N/A
Department : GCMS
Sub-Department: GCMS

SAMPLE INFORMATION:

INCHCAPE SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9607196- 6	S-10	SOIL	07/22/96	8270
9607196- 7	M-1	SOIL	07/22/96	8270
9607196- 8	S-4	SOIL	07/22/96	8270
9607196- 9	S-9	SOIL	07/22/96	8270
9607196-10	S-1	SOIL	07/22/96	8270
9607196-11	S-6	SOIL	07/22/96	8270
9607196-12	S-2	SOIL	07/22/96	8270
9607196-13	B4-2.5	SOIL	07/22/96	8270
9607196-14	S-5	SOIL	07/22/96	8270
9607196-15	S-7	SOIL	07/22/96	8270
9607196-16	M-2	SOIL	07/22/96	8270
9607196-17	S-3	SOIL	07/22/96	8270
9607196-18	B2-2	SOIL	07/22/96	8270
9607196-19	B-1	SOIL	07/22/96	8270

REPORT SUMMARY
INCHCAPE, INC. (408)432-8192

MR. AL RIDLEY
WOODWARD-CLYDE CONSULTANTS
500 12TH STREET, SUITE 100
OAKLAND, CA 94607-4014

Workorder # : 9607196
Date Received : 07/23/96
Project ID : 961163NA
Purchase Order: N/A
Department : GCMS
Sub-Department: GCMS

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.
- Vinyl chloride, 1,1-dichloroethene and chloroform in the continuing calibration standard on 7/29/96 on MSD2 did not meet the twenty percent deviation requirement for the EPA Method 8260 analysis. The percent deviations were 26, 24 and 22 respectively. The associated samples were not reanalyzed due to the laboratory oversight.

8-9-96
Department Supervisor Date

08/19/96
Chemist Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-01
Sample ID	: B-7	Lab File ID	: MRL19601
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 08/02/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	17	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID : 961163NA
Sample ID : B-6
Matrix : SOIL
Date Sampled : 07/22/96
Date Analyzed : 07/29/96
Instrument ID : msd2.i

Anametrix ID : 9607196-02
Lab File ID : MPL19602
% Moisture :
Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	12	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-03
Sample ID	: B-5	Lab File ID	: MPL19603
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 07/29/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	ND	U
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID : 961163NA
Sample ID : S-8
Matrix : SOIL
Date Sampled : 07/22/96
Date Analyzed : 07/29/96
Instrument ID : msd2.i

Anametrix ID : 9607196-04
Lab File ID : MPL19604

% Moisture :
Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	14	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-05
Sample ID	: B-3	Lab File ID	: MPL19605
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 07/29/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	14	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-06
Sample ID	: S-10	Lab File ID	: MPL19606
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 07/30/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	13	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-07
Sample ID	: M-1	Lab File ID	: MPL19607
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 07/30/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	13	B
67-64-1	Acetone	20	33	B
75-15-0	Carbon Disulfide	5	15	
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID : 961163NA
Sample ID : S-4
Matrix : SOIL
Date Sampled : 07/22/96
Date Analyzed : 07/30/96
Instrument ID : msd2.i

Anametrix ID : 9607196-08
Lab File ID : MPL19608
% Moisture :
Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	12	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-09
Sample ID	: S-9	Lab File ID	: MPL19609
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 07/30/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	12	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID : 961163NA
Sample ID : S-1
Matrix : SOIL
Date Sampled : 07/22/96
Date Analyzed : 07/30/96
Instrument ID : msd2.i

Anametrix ID : 9607196-10
Lab File ID : MPL19610

% Moisture :
Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	14	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-11
Sample ID	: S-6	Lab File ID	: MPL19611
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 07/30/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	13	B
67-64-1	Acetone	20	21	B
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-12
Sample ID	: S-2	Lab File ID	: MPL19612
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 07/30/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	13	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-13
Sample ID	: B4-2.5	Lab File ID	: MPL19613
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 07/30/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	14	B
67-64-1	Acetone	20	160	B
75-15-0	Carbon Disulfide	5	20	
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	47	
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

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INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID : 961163NA
Sample ID : S-5
Matrix : SOIL
Date Sampled : 07/22/96
Date Analyzed : 07/30/96
Instrument ID : msd2.i

Anametrix ID : 9607196-14
Lab File ID : MPL19614

% Moisture :
Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	13	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID : 961163NA
Sample ID : S-7
Matrix : SOIL
Date Sampled : 07/22/96
Date Analyzed : 07/30/96
Instrument ID : msd2.i

Anametrix ID : 9607196-15
Lab File ID : MPL19615

% Moisture :
Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	14	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID : 961163NA
Sample ID : M-2
Matrix : SOIL
Date Sampled : 07/22/96
Date Analyzed : 07/30/96
Instrument ID : msd2.i

Anametrix ID : 9607196-16
Lab File ID : MPL19616

% Moisture :
Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	17	B
67-64-1	Acetone	20	38	B
75-15-0	Carbon Disulfide	5	77	
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-17
Sample ID	: S-3	Lab File ID	: MPL19617
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 07/30/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	15	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID : 961163NA
Sample ID : B2-2
Matrix : SOIL
Date Sampled : 07/22/96
Date Analyzed : 07/30/96
Instrument ID : msd2.i

Anametrix ID : 9607196-18
Lab File ID : MPL19618
% Moisture :
Dilution Factor : 1.0
Conc. Units : ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	15	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8260
INCHCAPE TESTING SERVICES - ANAMETRIX LABORATORIES
(408)432-8192

Project ID	: 961163NA	Anametrix ID	: 9607196-19
Sample ID	: B-1	Lab File ID	: MPL19619
Matrix	: SOIL		
Date Sampled	: 07/22/96	% Moisture	:
Date Analyzed	: 07/30/96	Dilution Factor	: 1.0
Instrument ID	: msd2.i	Conc. Units	: ug/Kg

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
74-87-3	Chloromethane	10	ND	U
74-83-9	Bromomethane	10	ND	U
75-01-4	Vinyl Chloride	10	ND	U
75-00-3	Chloroethane	10	ND	U
75-09-2	Methylene Chloride	5	16	B
67-64-1	Acetone	20	ND	U
75-15-0	Carbon Disulfide	5	ND	U
75-35-4	1,1-Dichloroethene	5	ND	U
75-34-3	1,1-Dichloroethane	5	ND	U
156-59-2	Cis-1,2-Dichloroethene	5	ND	U
67-66-3	Chloroform	5	ND	U
107-06-2	1,2-Dichloroethane	5	ND	U
78-93-3	2-Butanone	20	ND	U
71-55-6	1,1,1-Trichloroethane	5	ND	U
56-23-5	Carbon Tetrachloride	5	ND	U
75-27-4	Bromodichloromethane	5	ND	U
78-87-5	1,2-Dichloropropane	5	ND	U
10061-01-5	cis-1,3-Dichloropropene	5	ND	U
79-01-6	Trichloroethene	5	ND	U
124-48-1	Dibromochloromethane	5	ND	U
79-00-5	1,1,2-Trichloroethane	5	ND	U
71-43-2	Benzene	5	ND	U
10061-02-6	trans-1,3-Dichloropropene	5	ND	U
75-25-2	Bromoform	5	ND	U
108-10-1	4-Methyl-2-Pentanone	10	ND	U
591-78-6	2-Hexanone	10	ND	U
127-18-4	Tetrachloroethene	5	ND	U
79-34-5	1,1,2,2-Tetrachloroethane	5	ND	U
108-88-3	Toluene	5	ND	U
108-90-7	Chlorobenzene	5	ND	U
100-41-4	Ethylbenzene	5	ND	U
100-42-5	Styrene	5	ND	U
1330-20-7	Xylene (Total)	5	ND	U
108-05-4	Vinyl acetate	5	ND	U
75-69-4	Trichlorofluoromethane	5	ND	U
76-13-1	Trichlorotrifluoroethane	5	ND	U
156-60-5	Trans-1,2-dichloroethene	5	ND	U
541-73-1	1,3-Dichlorobenzene	5	ND	U
106-46-7	1,4-Dichlorobenzene	5	ND	U
95-50-1	1,2-Dichlorobenzene	5	ND	U

REPORT SUMMARY
INCHCAPE, INC. (408)432-8192

MR. AL RIDLEY
WOODWARD-CLYDE CONSULTANTS
500 12TH STREET, SUITE 100
OAKLAND, CA 94607-4014

Workorder # : 9607196
Date Received : 07/23/96
Project ID : 961163NA
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

INCHCAPE SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9607196- 1	B-7	SOIL	07/22/96	TPHd
9607196- 2	B-6	SOIL	07/22/96	TPHd
9607196- 3	B-5	SOIL	07/22/96	TPHd
9607196- 4	S-8	SOIL	07/22/96	TPHd
9607196- 5	B-3	SOIL	07/22/96	TPHd
9607196- 6	S-10	SOIL	07/22/96	TPHd
9607196- 7	M-1	SOIL	07/22/96	TPHd
9607196- 8	S-4	SOIL	07/22/96	TPHd
9607196- 9	S-9	SOIL	07/22/96	TPHd
9607196-10	S-1	SOIL	07/22/96	TPHd
9607196-11	S-6	SOIL	07/22/96	TPHd
9607196-12	S-2	SOIL	07/22/96	TPHd
9607196-13	B4-2.5	SOIL	07/22/96	TPHd
9607196-14	S-5	SOIL	07/22/96	TPHd
9607196-15	S-7	SOIL	07/22/96	TPHd
9607196-16	M-2	SOIL	07/22/96	TPHd
9607196-17	S-3	SOIL	07/22/96	TPHd
9607196-18	B2-2	SOIL	07/22/96	TPHd
9607196-19	B-1	SOIL	07/22/96	TPHd
9607196- 1	B-7	SOIL	07/22/96	TPHg
9607196- 2	B-6	SOIL	07/22/96	TPHg
9607196- 3	B-5	SOIL	07/22/96	TPHg
9607196- 4	S-8	SOIL	07/22/96	TPHg
9607196- 5	B-3	SOIL	07/22/96	TPHg

REPORT SUMMARY
INCHCAPE, INC. (408)432-8192

MR. AL RIDLEY
WOODWARD-CLYDE CONSULTANTS
500 12TH STREET, SUITE 100
OAKLAND, CA 94607-4014

Workorder # : 9607196
Date Received : 07/23/96
Project ID : 961163NA
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

INCHCAPE SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9607196- 6	S-10	SOIL	07/22/96	TPHg
9607196- 7	M-1	SOIL	07/22/96	TPHg
9607196- 8	S-4	SOIL	07/22/96	TPHg
9607196- 9	S-9	SOIL	07/22/96	TPHg
9607196-10	S-1	SOIL	07/22/96	TPHg
9607196-11	S-6	SOIL	07/22/96	TPHg
9607196-12	S-2	SOIL	07/22/96	TPHg
9607196-13	B4-2.5	SOIL	07/22/96	TPHg
9607196-14	S-5	SOIL	07/22/96	TPHg
9607196-15	S-7	SOIL	07/22/96	TPHg
9607196-16	M-2	SOIL	07/22/96	TPHg
9607196-17	S-3	SOIL	07/22/96	TPHg
9607196-18	B2-2	SOIL	07/22/96	TPHg
9607196-19	B-1	SOIL	07/22/96	TPHg

REPORT SUMMARY
INCHCAPE, INC. (408)432-8192

MR. AL RIDLEY
WOODWARD-CLYDE CONSULTANTS
500 12TH STREET, SUITE 100
OAKLAND, CA 94607-4014

Workorder # : 9607196
Date Received : 07/23/96
Project ID : 961163NA
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.
- The gasoline surrogate recoveries for samples S-6 and S-5 are outside of quality control limits due to a soil matrix effect. This was verified through reanalysis of the samples. Both sets of data are reported.
- The diesel recoveries for the matrix spike and spike duplicate on sample S-5 are outside of quality control limits due to the relatively high background level of motor oil present in the sample. The diesel recoveries for the associated laboratory control sample and laboratory control sample duplicate are within quality control limits.
- Due to the viscous nature of the samples, the final diesel extract volumes for samples B-6, S-1, and S-6 are greater than 1 mL.

Cheryl Balmer 8/6/96
Department Supervisor Date

Irma Shor 8/2/96
Chemist Date

TOTAL PETROLEUM HYDROCARBONS AS DIESEL

INCHCAPE TESTING SERVICES/ ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Workorder	9607196	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/1/96
Date Extracted:	7/24/96	Concentration Units:	mg/Kg
Instrument ID:	HP27		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
9607196-01	B-7	7/22/96	7/29/96	10	100	ND	85%
9607196-02	B-6	7/22/96	8/1/96	20	200	ND	79%
9607196-03	B-5	7/22/96	7/30/96	5	50	ND	86%
9607196-04	S-8	7/22/96	7/30/96	10	100	ND	85%
9607196-05	B-3	7/22/96	7/30/96	10	100	ND	92%
9607196-06	S-10	7/22/96	7/30/96	5	50	ND	78%
9607196-07	M-1	7/22/96	7/30/96	1	10	ND	106%
9607196-09	S-9	7/22/96	7/30/96	2	20	ND	75%
9607196-10	S-1	7/22/96	7/30/96	25	250	ND	78%
9607196-11	S-6	7/22/96	7/30/96	25	250	ND	76%
9607196-12	S-2	7/22/96	7/30/96	5	50	ND	79%
9607196-13	B4-2.5	7/22/96	8/1/96	1	10	ND	97%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as C10-C28 is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3550.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

Issued on 8/2/96 at 4:19 pm

TOTAL PETROLEUM HYDROCARBONS AS DIESEL

INCHCAPE TESTING SERVICES/ ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Workorder	9607196	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/1/96
Date Extracted:	7/24/96	Concentration Units:	mg/Kg
Instrument ID:	HP27		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
9607196-14	S-5	7/22/96	7/30/96	10	100	ND	79%
9607196-15	S-7	7/22/96	7/30/96	2	20	ND	77%
9607196-16	M-2	7/22/96	7/30/96	1	10	ND	89%
9607196-18	B2-2	7/22/96	7/29/96	10	100	ND	89%
BL24H2F1	Method Blank	------	8/1/96	1	10	ND	97%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as C10-C28 is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3550.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

Issued on 8/2/96 at 4:19 pm

TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL

INCHCAPE TESTING SERVICES/ ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Workorder	9607196	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/1/96
Date Extracted:	7/24/96	Concentration Units:	mg/Kg
Instrument ID:	HP27		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
9607196-01	B-7	7/22/96	7/29/96	10	100	470	85%
9607196-02	B-6	7/22/96	8/1/96	20	200	730	79%
9607196-03	B-5	7/22/96	7/30/96	5	50	250	86%
9607196-04	S-8	7/22/96	7/30/96	10	100	570	85%
9607196-05	B-3	7/22/96	7/30/96	10	100	880	92%
9607196-06	S-10	7/22/96	7/30/96	5	50	390	78%
9607196-07	M-1	7/22/96	7/30/96	1	10	96	106%
9607196-09	S-9	7/22/96	7/30/96	2	20	150	75%
9607196-10	S-1	7/22/96	7/30/96	25	250	2900	78%
9607196-11	S-6	7/22/96	7/30/96	25	250	2100	76%
9607196-12	S-2	7/22/96	7/30/96	5	50	510	79%
9607196-13	B4-2.5	7/22/96	8/1/96	1	10	17	97%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as motor oil is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3550.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL

INCHCAPE TESTING SERVICES/ ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Workorder	9607196	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/1/96
Date Extracted:	7/24/96	Concentration Units:	mg/Kg
Instrument ID:	HP27		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
9607196-14	S-5	7/22/96	7/30/96	10	100	680	79%
9607196-15	S-7	7/22/96	7/30/96	2	20	62	77%
9607196-16	M-2	7/22/96	7/30/96	1	10	27	89%
9607196-18	B2-2	7/22/96	7/29/96	10	100	950	89%
BL24H2F1	Method Blank	------	8/1/96	1	10	ND	97%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as motor oil is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3550.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

Issued on 8/2/96 at 4:21 pm

TOTAL PETROLEUM HYDROCARBONS AS DIESEL

INCHCAPE TESTING SERVICES/ ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Workorder	9607196	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/2/96
Date Extracted:	7/30/96	Concentration Units:	mg/Kg
Instrument ID:	HP27		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
9607196-08	S-4	7/22/96	8/1/96	50	500	ND	86%
9607196-17	S-3	7/22/96	8/2/96	20	200	ND	90%
9607196-19	B-1	7/22/96	8/1/96	20	200	ND	79%
BL30H1F1	Method Blank	-----	8/1/96	1	10	ND	99%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as C10-C28 is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3550.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL

INCHCAPE TESTING SERVICES/ ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory Workorder	9607196	Client Project ID:	961163NA
Matrix:	SOIL	Date Released:	8/2/96
Date Extracted:	7/30/96	Concentration Units:	mg/Kg
Instrument ID:	HP27		

Laboratory ID	Client ID	Date Sampled	Date Analyzed	Dilution Factor	Reporting Limit	Amount Found	Surrogate Recovery
9607196-08	S-4	7/22/96	8/1/96	50	500	2300	86%
9607196-17	S-3	7/22/96	8/2/96	20	200	1400	90%
9607196-19	B-1	7/22/96	8/1/96	20	200	1300	79%
BL30H1F1	Method Blank	-----	8/1/96	1	10	ND	99%

ND: Not detected at or above the reporting limit for the method.
TPHd: Total Petroleum Hydrocarbons as motor oil is determined by GC/FID (modified EPA Method 8015) following sample extraction by EPA Method 3550.
Surrogate recovery quality control limits for o-terphenyl are 75-117%.
All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-01	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	B-7
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/26/96	Surrogate Recovery:	62%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

Issued on 8/1/96 at 1:09 pm

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-02	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	B-6
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	55%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

Issued on 8/1/96 at 1:11 pm

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-03	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	B-5
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/26/96	Surrogate Recovery:	56%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

Issued on 8/1/96 at 5:31 pm

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-04	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-8
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/26/96	Surrogate Recovery:	60%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

Issued on 8/1/96 at 1:20 pm

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES
(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-05	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	B-3
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/26/96	Surrogate Recovery:	59%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.
TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.
Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.
Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.
All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-06	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-10
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	55%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES
(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-07	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	M-1
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/26/96	Surrogate Recovery:	69%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.
TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.
Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.
Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.
All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-08	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-4
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	96%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-09	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-9
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	60%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

Issued on 8/1/96 at 1:25 pm

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-10	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-1
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	64%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

Issued on 8/1/96 at 1:26 pm

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-11 RE	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-6
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	45%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

Issued on 8/1/96 at 1:28 pm

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-11	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-6
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/26/96	Surrogate Recovery:	45%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

Issued on 8/1/96 at 1:29 pm

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-12	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-2
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	75%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-13	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	B4-2.5
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/26/96	Surrogate Recovery:	64%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES
(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-14 RE	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-5
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	24%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.
TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.
Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.
Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.
All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-14	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-5
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/26/96	Surrogate Recovery:	25%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-15	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-7
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/26/96	Surrogate Recovery:	53%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-16	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	M-2
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	73%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

Issued on 8/1/96 at 1:37 pm

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-17	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	S-3
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	58%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-18	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	B2-2
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/29/96	Surrogate Recovery:	61%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

INCHCAPE TESTING SERVICES/ENVIRONMENTAL LABORATORIES

(408) 432-8192

DATA SUMMARY FORM

Laboratory ID:	9607196-19	Client Project ID:	961163NA
Matrix:	SOIL	Client Sample ID:	B-1
Date Sampled:	7/22/96	Instrument ID:	HP12
Date Analyzed:	7/30/96	Surrogate Recovery:	70%
Date Released:	8/1/96	Concentration Units:	mg/Kg

COMPOUND	Dilution Factor	Reporting Limit	Amount Found
Gasoline	5	0.5	ND

ND: Not detected at or above the reporting limit for the method.

TPHg: Total Petroleum Hydrocarbons as gasoline is determined by GC/FID (modified EPA Method 8015) following sample purge and trap by EPA Method 5030.

Reporting limits are determined by dividing the dilution factor by 10 to generate an RLMF (reporting limit multiplication factor) which is then multiplied by the reporting limit for an undiluted sample. RLMFs of less than one are rounded up to one.

Surrogate recovery quality control limits for p-Bromofluorobenzene are 53-147%.

All testing procedures follow California Department of Health Services approved methods.

REPORT SUMMARY
INCHCAPE, INC. (408)432-8192

MR. AL RIDLEY
WOODWARD-CLYDE CONSULTANTS
500 12TH STREET, SUITE 100
OAKLAND, CA 94607-4014

Workorder # : 9607196
Date Received : 07/23/96
Project ID : 961163NA
Purchase Order: N/A
Department : METALS
Sub-Department: METALS

SAMPLE INFORMATION:

INCHCAPE SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9607196- 1	B-7	SOIL	07/22/96	T 22-MET
9607196- 2	B-6	SOIL	07/22/96	T 22-MET
9607196- 3	B-5	SOIL	07/22/96	T 22-MET
9607196- 4	S-8	SOIL	07/22/96	T 22-MET
9607196- 5	B-3	SOIL	07/22/96	T 22-MET
9607196- 6	S-10	SOIL	07/22/96	T 22-MET
9607196- 7	M-1	SOIL	07/22/96	T 22-MET
9607196- 8	S-4	SOIL	07/22/96	T 22-MET
9607196- 9	S-9	SOIL	07/22/96	T 22-MET
9607196-10	S-1	SOIL	07/22/96	T 22-MET
9607196-11	S-6	SOIL	07/22/96	T 22-MET
9607196-12	S-2	SOIL	07/22/96	T 22-MET
9607196-13	B4-2.5	SOIL	07/22/96	T 22-MET
9607196-14	S-5	SOIL	07/22/96	T 22-MET
9607196-15	S-7	SOIL	07/22/96	T 22-MET
9607196-16	M-2	SOIL	07/22/96	T 22-MET
9607196-17	S-3	SOIL	07/22/96	T 22-MET
9607196-18	B2-2	SOIL	07/22/96	T 22-MET
9607196-19	B-1	SOIL	07/22/96	T 22-MET

REPORT SUMMARY
INCHCAPE, INC. (408)432-8192

MR. AL RIDLEY
WOODWARD-CLYDE CONSULTANTS
500 12TH STREET, SUITE 100
OAKLAND, CA 94607-4014

Workorder # : 9607196
Date Received : 07/23/96
Project ID : 961163NA
Purchase Order: N/A
Department : METALS
Sub-Department: METALS

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.
- Matrix spike and matrix spike duplicate recoveries for sample S-4 were outside Inchcape Testing Services (ITS-SJ) control limits for antimony and chromium. A post digestion spike analysis was performed, and results were within control limits, indicating no spectral interferences.

8/1/96
Department Supervisor Date

7/31/9
Chemist Date

INCHCAPE TESTING SERVICES
SAN JOSE LABORATORIES
(408) 432-8192
DATA REPORT

ITS-SJ Sample ID: **9607196-01**
Client Sample ID: **B-7**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst: JD
Supervisor: AAA

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	ND	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	6.2	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	243	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	ND	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	ND	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	108	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	23.2	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	21.7	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	22.9	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	0.084	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	143	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	31.0	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	73.9	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-02**
Client Sample ID: **B-6**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst:
Supervisor:

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**12.8**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**112**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**0.91**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**48.6**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**13.9**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**119**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**192**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.18**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**75.7**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**1.9**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**39.9**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**134**	

COMMENTS:

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ITS-SJ Sample ID: **9607196-03**
Client Sample ID: **B-5**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst:
Supervisor: MW

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**8.6**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**163**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**0.88**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**192**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**17.0**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**61.4**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	20	mg/Kg	6.0	**6440**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.21**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**2.7**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**72.5**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**2.4**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**41.7**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	20	mg/Kg	40.0	**2950**	

COMMENTS:

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ITS-SJ Sample ID: **9607196-04**
Client Sample ID: **S-8**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst:
Supervisor:

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**8.7**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**100**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**0.82**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**49.0**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**13.2**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**65.4**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**188**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.25**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**59.6**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**1.4**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**45.3**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**142**	

COMMENTS:

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ITS-SJ Sample ID: **9607196-05**
Client Sample ID: **B-3**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst: B
Supervisor: MS

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**3.5**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**50.5**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**47.2**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**7.3**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**22.2**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**35.5**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.10**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**40.4**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**28.9**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**55.1**	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-06**
Client Sample ID: **S-10**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst: TV
Supervisor: WA

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**6.3**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**99.1**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**0.52**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**0.80**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**31.7**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**14.2**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**68.9**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**214**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.19**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**1.0**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**52.2**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**1.3**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**53.9**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**242**	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-07**
Client Sample ID: **M-1**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst: /
Supervisor:

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**3.5**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**10.9**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**16.1**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**5.7**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**22.2**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**25.5**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.038**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**23.2**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**26.4**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**76.9**	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-08**
Client Sample ID: **S-4**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst:
Supervisor:

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**2.5**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**57.1**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**28.8**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**5.5**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**20.1**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**22.2**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.040**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**29.1**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**24.0**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**43.6**	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-09**
Client Sample ID: **S-9**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst: **[illegible]**
Supervisor: **[illegible]**

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	ND	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	6.7	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	53.8	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	0.58	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	0.61	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	64.2	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	10.0	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	39.5	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	26.5	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	0.30	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	58.0	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	53.1	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	95.5	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-10**
Client Sample ID: **S-1**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst: D
Supervisor: WT

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**5.2**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**72.0**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**157**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**14.8**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**35.0**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	20	mg/Kg	6.0	**6140**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.051**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**87.2**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**30.2**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**93.4**	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-11**
Client Sample ID: **S-6**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst: TNK
Supervisor:

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**4.7**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**81.8**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**37.7**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**9.8**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**20.9**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**32.7**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.064**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**36.7**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**38.4**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**56.3**	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-12**
Client Sample ID: **S-2**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst: P
Supervisor: MA

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**9.3**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**82.5**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**0.62**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**34.9**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**9.2**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**39.3**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**74.4**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.19**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**29.6**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**39.3**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**121**	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-13**
Client Sample ID: **B4-2.5**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst: [illegible]
Supervisor: [illegible]

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**6.9**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**37.1**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**51.4**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**9.4**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**35.0**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**11.1**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.088**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**1.1**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**48.8**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**45.8**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**57.7**	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-14**
Client Sample ID: **S-5**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst:
Supervisor:

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**2.7**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**42.7**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**27.5**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**6.0**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**41.8**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**28.8**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.071**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**33.6**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**29.8**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**55.5**	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-15**
Client Sample ID: **S-7**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst:
Supervisor:

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	ND	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	7.0	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	91.1	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	0.69	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	0.70	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	42.0	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	14.7	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	58.8	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	80.8	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	0.15	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	64.3	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	40.3	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	120	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-16**
Client Sample ID: **M-2**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst:
Supervisor:

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**3.2**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**24.2**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**44.4**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**7.8**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**28.8**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**10.0**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**ND**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**44.2**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**38.2**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**62.4**	

COMMENTS:

INCHCAPE TESTING SERVICES
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ITS-SJ Sample ID: **9607196-17**
Client Sample ID: **S-3**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst: D
Supervisor: WA

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	ND	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	7.2	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	112	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	ND	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	ND	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	38.1	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	9.3	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	103	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	179	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	0.16	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	1.0	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	48.9	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	ND	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	31.4	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	127	

COMMENTS:

INCHCAPE TESTING SERVICES
SAN JOSE LABORATORIES
(408) 432-8192
DATA REPORT

ITS-SJ Sample ID: **9607196-18**
Client Sample ID: **B2-2**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst:
Supervisor:

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**7.0**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**78.1**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**30.9**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**8.0**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**62.9**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**159**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.089**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**1.4**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**42.7**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**1.3**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**27.5**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**105**	

COMMENTS:

INCHCAPE TESTING SERVICES
SAN JOSE LABORATORIES
(408) 432-8192
DATA REPORT

ITS-SJ Sample ID: **9607196-19**
Client Sample ID: **B-1**
Client Project Number: **961163NA**
Matrix: **SOIL**

SDG #: **N/A**
Date Sampled: **07/22/96**
Analyst:
Supervisor:

Analyte	Prep. Method	Prep. Batch	Analytical Method	Instr. ID	Date Prepared	Date Analyzed	Dil. Factor	Units	Reporting Limit	Results	Q
Antimony	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	6.0	**ND**	
Arsenic	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**5.1**	
Barium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	10.0	**73.9**	
Beryllium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**ND**	
Cadmium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.50	**0.87**	
Chromium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**36.8**	
Cobalt	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**7.9**	
Copper	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.5	**138**	
Lead	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	0.30	**419**	
Mercury	7471A	13301	7471A	HGA2	07/29/96	07/30/96	1	mg/Kg	0.033	**0.14**	
Molybdenum	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Nickel	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	4.0	**34.5**	
Selenium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Silver	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Thallium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	1.0	**ND**	
Vanadium	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	5.0	**34.2**	
Zinc	3050A	13300	6010A	ICP2	07/29/96	07/30/96	1	mg/Kg	2.0	**122**	

COMMENTS:

Inchcape Testing Services
Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED: 24-JUL-1996 REPORT NUMBER: D96-8105
REPORT DATE: 31-JULY-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 concourse Drive, Ste. E
San Jose, CA 95131
ATTENTION : Mr. Richard Phaler
PROJECT : 9607196

CASE NARRATIVE COMMENTS:

EPA 8150 Chlorinated Herbicides

Samples -1. -5, -15 appear to contain pentachlorophenol. Samples -8, -10, -11, -12, -14, and -19 were diluted as a precautionary measure. No confirmed hits were detected even at normal DL levels. Sample -14 contains a compound within its matrix that eluted at the same time as the surrogate compound on both columns, causing the surrogate recovery to be high. No target compound hits were detected.

No other issues were noted during the sample analysis of this job.

If you have any questions, please call Mr. John Todd at (214) 238-5591.

Joseph D. Shafer
Laboratory Manager

Inchcape Testing Services
Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

ANALYTICAL REPORT

DATE RECEIVED : 24-JUL-1996
REPORT NUMBER : D96-8105
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler
PROJECT : 9607196 961163NA

Included in this data package are the analytical results for the sample group which you have submitted to Inchcape Testing Services for analysis. These results are representative of the samples as received by the laboratory.

The information contained herein has undergone extensive review and is deemed accurate and complete. Sample analysis and quality control were performed in accordance with all applicable protocols. Any deviations from these protocols or observations of interest are detailed in an accompanying Case Narrative. Please refrain from reproducing this report except in its entirety.

If you have any questions regarding this report and its associated materials please call your Project Manager at (214) 238-5591.

We appreciate the opportunity to serve you and look forward to providing continued service in the future.

Martin Jeffus
General Manager

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-1
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 01 B-7
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES				
TEST REQUESTED	DETECTION LIMIT		RESULTS	
2,4-D	200	µg/Kg	< 200	µg/Kg
2,4-DB	200	µg/Kg	< 200	µg/Kg
2,4,5-T	40.0	µg/Kg	< 40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	< 40.0	µg/Kg
Dalapon	800	µg/Kg	< 800	µg/Kg
Dicamba	60.0	µg/Kg	< 60.0	µg/Kg
Dichlorprop	140	µg/Kg	< 140	µg/Kg
Dinoseb	20.0	µg/Kg	< 20.0	µg/Kg
MCPA	20000	µg/Kg	< 20000	µg/Kg
MCPP	20000	µg/Kg	< 20000	µg/Kg

REPORT NUMBER : D96-8105-1
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	87.5 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-1
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 01 B-7
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	94.9 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834037E			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-2
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 02 B-6
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2,4-D	200 µg/Kg	< 200 µg/Kg
2,4-DB	200 µg/Kg	< 200 µg/Kg
2,4,5-T	40.0 µg/Kg	< 40.0 µg/Kg
2,4,5-TP(Silvex)	40.0 µg/Kg	< 40.0 µg/Kg
Dalapon	800 µg/Kg	< 800 µg/Kg
Dicamba	60.0 µg/Kg	< 60.0 µg/Kg
Dichlorprop	140 µg/Kg	< 140 µg/Kg
Dinoseb	20.0 µg/Kg	< 20.0 µg/Kg
MCPA	20000 µg/Kg	< 20000 µg/Kg
MCPP	20000 µg/Kg	< 20000 µg/Kg

REPORT NUMBER : D96-8105-2
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	94.5 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-2
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 02 B-6
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	90.9 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834037E			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-3
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 03 B-5
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-3
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	92.5 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-3
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 03 B-5
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	89.8 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834037E			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-4
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 04 S-8
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-4
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	94.8 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-4
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 04 S-8
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	94.5 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834037E			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-5
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 05 B-3
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-5
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	87.0 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-5
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 05 B-3
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	91.9 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834037E			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-6
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 06 S-10
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES			
TEST REQUESTED	DETECTION LIMIT		RESULTS
2,4-D	200 µg/Kg	<	200 µg/Kg
2,4-DB	200 µg/Kg	<	200 µg/Kg
2,4,5-T	40.0 µg/Kg	<	40.0 µg/Kg
2,4,5-TP(Silvex)	40.0 µg/Kg	<	40.0 µg/Kg
Dalapon	800 µg/Kg	<	800 µg/Kg
Dicamba	60.0 µg/Kg	<	60.0 µg/Kg
Dichlorprop	140 µg/Kg	<	140 µg/Kg
Dinoseb	20.0 µg/Kg	<	20.0 µg/Kg
MCPA	20000 µg/Kg	<	20000 µg/Kg
MCPP	20000 µg/Kg	<	20000 µg/Kg

REPORT NUMBER : D96-8105-6
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	77.8 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-6
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 06 S-10
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	98.4 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834037E			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-7
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 07 M-1
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-7
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	77.5 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-7
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 07 M-1
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	77.0 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834038F			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-8
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 08 S-4
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 5
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	1000	µg/Kg	<	1000	µg/Kg
2,4-DB	1000	µg/Kg	<	1000	µg/Kg
2,4,5-T	200	µg/Kg	<	200	µg/Kg
2,4,5-TP(Silvex)	200	µg/Kg	<	200	µg/Kg
Dalapon	4000	µg/Kg	<	4000	µg/Kg
Dicamba	300	µg/Kg	<	300	µg/Kg
Dichlorprop	700	µg/Kg	<	700	µg/Kg
Dinoseb	100	µg/Kg	<	100	µg/Kg
MCPA	100000	µg/Kg	<	100000	µg/Kg
MCPP	100000	µg/Kg	<	100000	µg/Kg

REPORT NUMBER : D96-8105-8
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	115 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-8
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 08 S-4
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	91.1 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834038F			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-9
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 09 S-9
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-9
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	93.7 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-9
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 09 S-9
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	94.4 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834038F			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-10
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 10 S-1
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-10
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	121 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-10
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 10 S-1
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	98.8 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834038F			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-11
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 11 S-6
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 5
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	1000	µg/Kg	<	1000	µg/Kg
2,4-DB	1000	µg/Kg	<	1000	µg/Kg
2,4,5-T	200	µg/Kg	<	200	µg/Kg
2,4,5-TP(Silvex)	200	µg/Kg	<	200	µg/Kg
Dalapon	4000	µg/Kg	<	4000	µg/Kg
Dicamba	300	µg/Kg	<	300	µg/Kg
Dichlorprop	700	µg/Kg	<	700	µg/Kg
Dinoseb	100	µg/Kg	<	100	µg/Kg
MCPA	100000	µg/Kg	<	100000	µg/Kg
MCPP	100000	µg/Kg	<	100000	µg/Kg

REPORT NUMBER : D96-8105-11
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA				
SURROGATE COMPOUND	SPIKE LEVEL		SPIKE RECOVERED	
2,4-Dichlorophenyl acetic acid (SS)	1000	µg/Kg	114	%

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-11
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 11 S-6
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	98.9 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834038F			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-12
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 12 S-2
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 5
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	1000	µg/Kg	<	1000	µg/Kg
2,4-DB	1000	µg/Kg	<	1000	µg/Kg
2,4,5-T	200	µg/Kg	<	200	µg/Kg
2,4,5-TP(Silvex)	200	µg/Kg	<	200	µg/Kg
Dalapon	4000	µg/Kg	<	4000	µg/Kg
Dicamba	300	µg/Kg	<	300	µg/Kg
Dichlorprop	700	µg/Kg	<	700	µg/Kg
Dinoseb	100	µg/Kg	<	100	µg/Kg
MCPA	100000	µg/Kg	<	100000	µg/Kg
MCPP	100000	µg/Kg	<	100000	µg/Kg

REPORT NUMBER : D96-8105-12
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA				
SURROGATE COMPOUND	SPIKE LEVEL		SPIKE RECOVERED	
2,4-Dichlorophenyl acetic acid (SS)	1000	µg/Kg	114	%

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-12
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 12 S-2
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	95.6 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834038F			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-13
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 13 B4-2.5
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-13
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	87.7 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-13
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 13 B4-2.5
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	61.8 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834038F			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-14
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 14 S-5
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 5
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	1000	µg/Kg	<	1000	µg/Kg
2,4-DB	1000	µg/Kg	<	1000	µg/Kg
2,4,5-T	200	µg/Kg	<	200	µg/Kg
2,4,5-TP(Silvex)	200	µg/Kg	<	200	µg/Kg
Dalapon	4000	µg/Kg	<	4000	µg/Kg
Dicamba	300	µg/Kg	<	300	µg/Kg
Dichlorprop	700	µg/Kg	<	700	µg/Kg
Dinoseb	100	µg/Kg	<	100	µg/Kg
MCPA	100000	µg/Kg	<	100000	µg/Kg
MCPP	100000	µg/Kg	<	100000	µg/Kg

REPORT NUMBER : D96-8105-14
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA					
SURROGATE COMPOUND	SPIKE LEVEL		SPIKE RECOVERED		
2,4-Dichlorophenyl acetic acid (SS)	1000	µg/Kg	200	%	*

* Interference matrix effect.

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-14
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 14 S-5
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	93.3 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834038F			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-15
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 15 S-7
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-15
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	94.2 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-15
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 15 S-7
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	78.3 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834038F			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-16
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 16 M-2
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-16
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	84.4 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-16
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 16 M-2
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	56.7 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834038F			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-17
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 17 S-3
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-17
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	101 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-17
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 17 S-3
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Solids /1	0.01 %	94.6 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834039G		

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-18
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 18 B2-2
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 1
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	200	µg/Kg	<	200	µg/Kg
2,4-DB	200	µg/Kg	<	200	µg/Kg
2,4,5-T	40.0	µg/Kg	<	40.0	µg/Kg
2,4,5-TP(Silvex)	40.0	µg/Kg	<	40.0	µg/Kg
Dalapon	800	µg/Kg	<	800	µg/Kg
Dicamba	60.0	µg/Kg	<	60.0	µg/Kg
Dichlorprop	140	µg/Kg	<	140	µg/Kg
Dinoseb	20.0	µg/Kg	<	20.0	µg/Kg
MCPA	20000	µg/Kg	<	20000	µg/Kg
MCPP	20000	µg/Kg	<	20000	µg/Kg

REPORT NUMBER : D96-8105-18
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	104 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-18
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 18 B2-2
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	96.0 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834039G			

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-19
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 19 B-1
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996
PREPARATION METHOD : EPA 8150
PREPARED BY : HCS
PREPARED ON : 25-JUL-1996
ANALYSIS METHOD : EPA 8150 /1
ANALYZED BY : MAK
ANALYZED ON : 29-JUL-1996
DILUTION FACTOR : 5
METHOD FACTOR : 2000
QC BATCH NO : AB816-91

CHLORINATED HERBICIDES					
TEST REQUESTED	DETECTION LIMIT		RESULTS		
2,4-D	1000	µg/Kg	<	1000	µg/Kg
2,4-DB	1000	µg/Kg	<	1000	µg/Kg
2,4,5-T	200	µg/Kg	<	200	µg/Kg
2,4,5-TP(Silvex)	200	µg/Kg	<	200	µg/Kg
Dalapon	4000	µg/Kg	<	4000	µg/Kg
Dicamba	300	µg/Kg	<	300	µg/Kg
Dichlorprop	700	µg/Kg	<	700	µg/Kg
Dinoseb	100	µg/Kg	<	100	µg/Kg
MCPA	100000	µg/Kg	<	100000	µg/Kg
MCPP	100000	µg/Kg	<	100000	µg/Kg

REPORT NUMBER : D96-8105-19
ANALYSIS METHOD : EPA 8150 /1

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
2,4-Dichlorophenyl acetic acid (SS)	1000 µg/Kg	124 %

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED : 24-JUL-1996

REPORT NUMBER : D96-8105-19
REPORT DATE : 31-JUL-1996

SAMPLE SUBMITTED BY : ITS/San Jose
ADDRESS : 1961 Concourse Drive, Ste. E
: San Jose, CA 95131
ATTENTION : Mr. Richard Phaler

SAMPLE MATRIX : Soil
ID MARKS : 19 B-1
PROJECT : 9607196 961163NA
DATE SAMPLED : 22-JUL-1996

MISCELLANEOUS ANALYSES			
TEST REQUESTED		DETECTION LIMIT	RESULTS
Total Solids	/1	0.01 %	97.5 %
Analyzed using ASTM D2216 mod. on 30-JUL-1996 by SAB QC Batch No : 834039G			