Quarterly Report
April 1995

Prepared For:

Ingersoll-Rand
Equipment Sales
San Leandro, California

June 12, 1995

INGERSOLL-RAND

QUARTERLY REPORT
APRIL 1995

Prepared For:

Ingersoll-Rand Equipment Sales
1944 Marina Boulevard
San Leandro, California 94577

June 12, 1995

Prepared By:

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LIST OF ACRONYMS

BETX	benzene, ethylbenzene, toluene, xylene
Capsule	Capsule Environmental Engineering, Inc.
Clayton	Clayton Environmental Consultants
DCE	dichloroethylene
DTSC	Department of Toxic Substance Control
EPA	United States Environmental Protection Agency
gpm	gallons per minute
IRES	Ingersoll-Rand Equipment Sales
IT	IT Corporation
LUFT	Leaking Underground Fuel Tank
MCLs	maximum contaminant levels
mg/kg	milligram/kilogram
mg/l	milligrams/liter
PAR	Problem Assessment Report
scfm	standard cubic feet per minute
SVE	soil vapor extraction
TPH	total petroleum hydrocarbon
TPH-g	total petroleum hydrocarbon as gasoline
TCE	trichloroethene
μg/l	micrograms/liter
UST	underground storage tank
USTs	underground storage tanks
VOC	volatile organic compound
VOCs	volatile organic compounds
WCC	Woodward-Clyde Corporation

1.0 INTRODUCTION

Ingersoll-Rand Equipment Sales (IRES) has contracted with Capsule Environmental Engineering, Inc. (Capsule) to complete the implementation of the final corrective action design and related activities for its equipment sales and maintenance facility at 1944 Marina Boulevard in San Leandro, California.

As part of these activities, Capsule will be preparing and submitting quarterly activities reports for the facility. These reports are prepared to:

- Provide a summary of remedial activities, including such work as ground water monitoring, being conducted at the facility during the quarter
- Provide a benchmark of data and interpretation to evaluate the performance of remedial activities
- Comply with Alameda County and city of San Leandro reporting requirements

This report is the initial presentation of data after a period of intermittent project activity. As such, it will be more extensive than future quarterly reports in providing project background and current status.

1.1 SITE DESCRIPTION

IRES operates a construction equipment sales and maintenance facility at 1944 Marina Boulevard, San Leandro, Alameda County, California (See Figure 1). The eastern shore of San Francisco Bay is approximately 1.25 miles west of the facility. The local topography around the facility is fairly flat, sloping gently toward the bay. Facility land surface elevations range from 20 to 25 feet above sea level.

The facility is situated in an area of industrial and commercial development. It is bounded on the north by Southern Pacific Railroad tracks and on the south by Marina Boulevard. Immediately to the west of the facility is a manufacturer of packaging materials. To the east is an office filing equipment manufacturer.

The property's building has two tenants. The office filing equipment manufacturer occupies the eastern portion of the building. IRES occupies the western portion of the building that consists of an office and parts distribution area attached to a large bayed service area. To the north and west of the building is an outdoor equipment storage yard. The storage yard has perimeter fencing. The stored equipment includes both new and used construction machinery. Drilling rigs, compressors, compactors, and other equipment are commonly stored in this area while being readied for sale, repair, rental, and salvage.

1.2 SITE HISTORY

The facility building was constructed in 1955. IRES began leasing the building and adjoining yard area in 1974. There is no information on tenants prior to 1974. Land use prior to 1955 has not been determined.

1.3 UNDERGROUND STORAGE TANK (UST) ACTIVITIES CHRONOLOGY

In 1955 (or 1969), two USTs were installed; a 5,000 gallon unleaded gasoline tank, and a 10,000 gallon diesel tank. In 1987 (or 1969), a 500 gallon used oil tank was installed. All tanks passed biennial tank testing in 1987; however, in 1989 the unleaded gasoline tank was found to be leaking. All of the tanks were subsequently removed in October 1989. Tanks were replaced with two above ground tanks; a 500 gallon waste oil tank and a 1,000 gallon diesel tank.

Soil samples collected from the overburden removed from all three tanks contained detectable levels of hydrocarbons. No petroleum hydrocarbons were detected in soil samples collected from beneath the waste oil and diesel tanks. Total petroleum hydrocarbon as gasoline (TPH-g) levels of 7,770 and 3,200 milligram/kilogram (mg/kg) were found in samples obtained from beneath the gasoline tank.

In May 1989, an Unauthorized Underground Storage Tank Release Report was submitted to the San Leandro Fire Department. Site investigation activities commenced in 1989 under the direction of IT Corporation (IT).

In November 1989, three ground water monitoring wells, MW-1, MW-2, and MW-3 were installed on the site. Additionally, seven soil borings were installed in the immediate vicinity of the previously removed gasoline UST. The analytical results found hydrocarbons in an area of approximately 80-feet radius centered around the location of the former gasoline UST. Approximately 3 millimeters of floating product was found during the installation of monitoring well MW-3. Free product has not been seen at the site since this 1989 occurrence.

On December 20, 1989, a Problem Assessment Report (PAR) was submitted to Alameda County and the Regional Water Quality Board (ITES, 1989). The PAR summarized the tank removal, monitoring well installation, and boring findings. The PAR also proposed recovery wells to remove free product, followed by carbon filtration of ground water with effluent pumped to the sanitary sewer to remove dissolved product. Soil venting with carbon filtration of effluent air was recommended to remove product from the soil above the water table. This proposal was accepted by the Alameda County Department of Environmental Health on June 4, 1990.

During October 1990, 12 additional soil borings were installed. Four of the borings were completed as soil vapor extraction (SVE) wells. A fourth ground water monitoring well, MW-4, was installed near the west boundary of the property, approximately 200 feet west of the former UST to evaluate ground water conditions hydraulically downgradient from the UST. The analytical results from soil borings and monitoring well detected gasoline constituents in both soils around the former gasoline UST and in the ground water.

Aquifer and SVE tests were also conducted during the October 1990 fieldwork. The investigators reported a drought period for the area and indicated that low well yields in wells MW-3 and MW-4 may have been due, in part, to the low rainfall period. A SVE test indicated a radius of influence of over 100 feet. The work efforts were summarized in a Data Summary Report (IT, 1990).

In 1992, IT installed a SVE system using one well with a 100 standard cubic feet per minute (scfm) design flow rate to remove hydrocarbons from the unsaturated soils. An air permit was obtained for the system and removed vapors were treated through a two stage carbon bed system. System operation was discontinued after several months when water levels rose and the system collected condensate. IT reported that 800 pounds of product were removed during the initial operation although there is no supporting information for this claim.

In April 1992, eight cone penetrometer tests were performed and temporary wells were installed in the test holes. Four of these wells were installed off site, on the Page Packaging site to the west of IRES. Soil vapor samples and ground water samples were collected from several of the wells. These samples indicated downgradient off-site total petroleum hydrocarbon (TPH) levels of 680 to 53,000 micrograms/liter (μg/l) as compared to levels of 2,600 μg/l in MW-3 near the former gasoline UST.

In September 1992, an 8-inch diameter ground water extraction well, RW-1, was installed in the low permeability saturated sediments near the western property border. Three observation wells , OB-1, OB-2, and OB-3 were also installed. The pump test indicated that the well yield was limited but could be increased through the use of vacuum to approximately 1 gallon per minute (gpm).

In November 1994, five additional SVE vents were installed. These vents were installed to provide the SVE system with flexibility in vacuum configuration over a larger area, including the downgradient property boundary.

Comprehensive ground water sampling of monitoring wells has been performed in November 1989; June and October of 1994; and January, 1995. Additionally, a sample was taken from MW-4 in November 1990. The results indicated and confirmed the presence of gasoline-related volatile organic compounds (VOCs) and several chlorinated VOCs in low concentrations in site monitoring wells. These sampling events and results are discussed in detail in Section 2.3 of this report.

1.4 REGULATORY OVERVIEW

The Alameda County Health Care Service Agency, Hazardous Waste Program, is the primary regulatory, or local implementing, agency, responsible for regulatory oversite of the project. The city of San Leandro Fire Department and the Regional Water Quality Board are also an interested regulatory agencies to the project activities.

The remedial work is generally conducted under the Article 11, Corrective Action Requirements, of the California Code of Regulations, Title 23, Division 3, Chapter 16, Underground Storage Tank Regulations. Guidance documents are provided through the State of California's Leaking Underground Fuel Tank (LUFT) manual (1989) and the Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation (1990). Corrective action work also must comply with the Bay Area Air Board, California Environmental Protection Agency, and Zone 7 Water Management Agency requirements.

2.0 GROUND WATER SUMMARY

The facility's hydrogeologic setting and analytical data collected during the project are discussed in the following sections.

2.1 REGIONAL HYDROGEOLOGIC SETTING

The facility lies within the East Bay Plain. Young, unconsolidated sediments of Pleistocene and Holocene age, make up the soil materials of the plain. These sediments are up to 1,000 feet thick and rest on Jurassic-aged bedrock. The regional geology is dominated by northwest trending faults of the San Andreas fault system.

The shallow, unconsolidated sediments are comprised of bedded clays, silts, and sands. These sediments have eroded from the hills to the east of the plain and deposited in alluvial cones, similar to deltas. These cones coalesce to form the gently sloping East Bay Plain.

The shallow hydrogeologic setting has also been influenced by the rise and fall of sea level over recent geologic time.

Several investigators have described the near surface hydrogeology of the San Leandro area. Hickenbottom and Muir (1988) describe the near surface deposits as relatively thin deposits of silt and clay, fine sand and silt, and occasional thin beds of coarse sand.

Beneath these younger alluvial deposits is older alluvium comprised of fine to medium grained sands with lenses of silt and clay, and layers of unconsolidated and consolidated clay, silt and sand. In some areas, a unit identified as the bay mud comprised of plastic clay and silt separate the younger and older alluvium.

The more recent Department of Toxic Substance Control (DTSC) investigation, conducted by Woodward-Clyde Corporation (WCC, 1993), of the central San Leandro hydrogeology provides considerable information and discussion on the nature of shallow geologic setting. The existing topography and the collected data suggested to the WCC investigators that very shallow, laterally discontinuous subsurface channels may exist across the San Leandro area. These channels of more permeable sediments may provide preferential pathways for shallow ground water movement. The same report also concludes that an aquitard exists at a depth of 50 to 150 feet below mean sea level.

Recharge to the shallow alluvium occurs primarily from the infiltration of precipitation. Stream flow losses may also contribute to the shallow recharge. Recharge to deeper geologic units appears to occur at higher elevations where these units are nearer the surface. Infiltration from overlying shallower units to lower units appears to be a secondary, minor recharge pathway because of the presence of clay units.

The mean annual precipitation for the San Leandro ranges between 18 and 26 inches with the eastern upland areas recording the greater amounts. Hickenbottom and Muir (1988) report 22 to 24 inches per year for the project area.

2.2 FACILITY HYDROGEOLOGIC SETTING

During the remedial activities the facility's shallow subsurface has been investigated to a depth of 50 feet using both auger borings and cone penetrometer testing. The investigation work was conducted both on and off site.

The facility's shallow hydrogeologic setting is similar to that described for the San Leandro area. Subsurface geologic features are the result of the deposition of sediments in layers. The sediments are composed of silts, clays, and sands. The silts and clays are found in the upper 10 to 15 feet. A sand layer and gravel layer varying in thickness from 3 to 10 feet is found beneath the silt and clay layer. A dense, plastic clay, containing varying amounts of silt and sand, represents the deepest sediments evaluated.

The water table is approximately 15 feet below the land surface. Significant water table fluctuations have occurred during the period of record. These fluctuations and the hydraulic gradient are discussed in Section 2.3.2.

A hydraulic conductivity of approximately 7 ft^2/day was determined for MW-4 by pump testing. (IT, 1990). This value is within the literature range for a silty sand. (United States Environmental Protection Agency [EPA], 1987).

2.3 GROUND WATER DATA SUMMARY

Over the period of investigation and remediation, there have been a number of monitoring well sampling events. Figure 2 shows the locations of the monitoring wells. The events have been for the collection and analysis of VOCs. Table 1 and Figure 3 summarize the water level elevations for the well measurement and sampling events. Table 2 summarizes the information on the ground water sampling events and all detected VOCs found in ground water during the project period of record.

2.3.1 Sampling Event Chronology

A November 17, 1989, ground water sampling event, performed by IT Corporation, of monitoring wells MW-1, MW-2, and MW-3 is documented in the PAR. Stabilization tests were performed and samples were submitted with chain of custody forms.

A second IT Corporation ground water sampling event was conducted on November 17, 1990. MW-4 was sampled during this event. A stabilization test was performed and the sample was submitted with a chain of custody form. EPA Method 5030 and TPH LUFT with EPA Method 602 were used to perform the analysis. Other sampling may have been conducted but results were not found in the review of the project files.

Periodic sampling was initiated in June 1994. MW-1, MW-2, MW-3, MW-4, and OB-1 were put on a quarterly sampling schedule in order to provide additional information on the nature and extent of the VOC detections from the earlier sampling.

Capsule selected Clayton Environmental Consultants (Clayton) to perform the ground water sampling and analyses. Clayton performed the stabilization tests and completed the chain of custody forms for the June 1994 sampling event. For quality control comparison purposes during this initial sampling event, the samples were split and analyzed by two laboratories, Clayton and Aspen Research Laboratory. The methods used by both laboratories were EPA Methods 8260 and 8015/8020. For documentation purposes, the list of EPA Method 8260 and 8020 compounds is presented in Tables 3 and 4, respectively.

As shown in Table 2, the Clayton and Aspen results are comparable in terms of both the VOCs detected and the amount detected. The analytical results, stabilization tests, and chain of custody for the June event are found in Appendix A.

The October 1994 sampling event was performed by Clayton. In the initial sample results, the laboratory reported that acetone was detected in the ground water samples. The laboratory later stated in followup correspondence that the reported acetone was a laboratory error. The analytical results, the stabilization tests and the chain of custody, and associated followup correspondence for the October sampling can be found in Appendix B.

The January 1995 sampling event was performed by Clayton. The analytical results, the stabilization tests, and the chain of custody for the January 1995 sampling can be found in Appendix C.

2.3.2 Ground Water Level Data

Depth to water measurements have been taken at various times during site activities. Measuring point elevations have been recorded on at least three occasions. The measuring point elevation and water level data are provided in Table 1 and shown in Figure 3.

Water level elevations beneath the facility range between 12.5 to 14.5 feet above sea level. During the period of the project, water levels have generally risen 2 to 3 feet, reflecting increasing precipitation from several dry years in the mid to late 1980s to rainfall amounts in the 1990s that are nearer the historic mean. Rainfall at the nearby San Leandro Marina

rainfall gage has varied from a low of 10.13 inches in the 1989-1990 water year to a high of 19.33 inches during the 1994-1995 water year. (Alameda County, 1995).

Water level elevation hydrographs for the four monitoring wells are presented on Figure 3. Over the measurement period, the wells have responded relatively uniformly to fluctuating water levels. This supports the conclusion of a fairly uniform hydraulic gradients and ground water flow direction.

Figures 4, 5, and 6 present the water table elevation contour maps based on water level data collected during the June and October 1994 and January 1995 sampling events.

The June and October contours indicate a generally similar character with flow direction to the southwest. This direction is consistent with earlier findings (IT, 1990) of flow direction. The direction is also areally consistent with the Hydrogeology of Central San Leandro (WCC, 1993) findings.

Figure 6 presents the water table elevation contours for the January 1995 event. While the overall flow direction is to the southwest, there is a pronounced flexure to the contours. The area of the flexure coincides generally with an area of coarser sand identified during the 1990 boring program. As the water table rose into this more permeable material over the period from October 1994 to January 1995, it is likely that the contour flexure developed in response to the these conditions.

Because of the interlayered nature of the shallow subsurface, it is likely contours are not as uniform as portrayed. Variations in soil particle size and permeability can cause local variations in flow direction.

2.4 GROUND WATER ANALYTICAL DATA

Analytical results are discussed for the aromatic and chlorinated VOCs detected during the project period of record. While the water samples were not collected from a public water source, the California maximum contaminant levels (MCLs) are presented and discussed for comparison purposes with the detected amounts.

2.4.1 Chlorinated Organics

Chlorinated volatile organic compound (VOC) detections have been found in monitoring wells. Each detected compound is discussed below.

2.4.1.1 Trichloroethene (TCE)

MW-1 and MW-2, which are on the upgradient part of the facility, have consistently shown TCE detections ranging from 5 to 29 μg/l.

DTSC information indicates that TCE is a widely occurring VOC found in the shallow ground water in the San Leandro area (WCC, 1993). Given this information and the occurrences in upgradient wells, it likely that the TCE-impacted ground water detected in MW-1 and MW-2 is flowing onto the facility from an upgradient source.

1994 and 1995 sampling of MW-4 and OB-1 have indicated TCE detections ranging from 15 to 66 μg/l. These wells are on the downgradient side of the facility. The TCE detections suggest at least two possible source areas:

1) The continuation of the TCE-impacted ground water observed in the upgradient wells MW-1 and MW-2.

2) A localized, undocumented release on the facility property. While the facility formerly used a TCE parts cleaner, there are no soil sampling observations or analytical results to suggest an undocumented release on the property.

The California maximum contaminant level (MCL) for TCE is 0.005 milligrams/liter (mg/l), or 5 μg/l.

2.4.1.2 1,2-Dichloroethene (also known as dichloroethylene)

Cis- and trans-1,2-dichloroethene, ranging from 6 to 14 μg/l, have been detected in MW-4 and OB-1. Potential sources of these low concentrations include breakdown products of TCE and as a manufacturing artifact of TCE.

The California MCL for cis-1,2-dichloroethylene is 0.006 mg/l, or 6 μg/l. The California MCL for trans-1,2-dichloroethylene is 0.010 mg/l, or 10 μg/l.

2.4.1.3 Chlorobenzene

Chlorobenzene concentrations, ranging from 17 to 19 μg/l, have been detected in MW-3 during the June and October 1994 sampling events. Typical uses for the compound are solvent, heat transfer, and in the production of pesticides. (Sax and Lewis, 1987).

The California MCL for monochlorobenzene (chlorobenzene) is 0.070 mg/l, or 70 μg/l.

2.4.1.4 Dichlorobenzene Isomers

Three isomers of dichlorobenzene have been detected in MW-3 in concentrations ranging from 7 to 64 μg/l. The three isomers, 1,2-dichlorobenzene, 1,3-dichlorobenzene and 1,4-dichlorobenzene, have a wide variety of uses, including solvent, dye manufacturing, insecticides, and industrial odor control. 1,3 and 1,4-dichlorobenzene are generally used in fumigants and insecticides. (Sax and Lewis, 1987).

The California MCL for 1,2-dichlorobenzene is 0.6 mg/l, or 600 μg/l.

The California MCL for 1,4-dichlorobenzene is 0.005 mg/l, or 5 μg/l.

2.5 AROMATIC ORGANICS

Several gasoline component VOCs have been detected in samples from monitoring wells MW-3, MW-4, and OB-1. Each is discussed below.

2.5.1 Benzene

MW-3 benzene concentrations have varied from 9 μg/l in October 1994 to 970 mg/l in January 1995. This two order of magnitude fluctuation may be due to flushing of residual gasoline in unsaturated soils in the area of MW-3 which is near the former gasoline UST site. Concurrent with the higher benzene concentration is a water level elevation in MW-3 at a record high.

Benzene concentrations in MW-4 have been fairly steady throughout 1994 and early 1995 ranging from 260 to 470 μg/l. A sample from late 1990 reported 1,500 μg/l.

The California MCL for benzene is 0.001 mg/l, or 1 μg/l.

2.5.2 Ethylbenzene

This is another gasoline constituent detected in MW-3, MW-4, and OB-1. The highest concentrations are found in MW-4 with a range of 230 to 720 μg/l. Concentration ranges from MW-3 are 80 to 120 μg/l. The concentration difference may reflect a difference in the subsurface mobility of benzene and ethylbenzene.

The California MCL for ethylbenzene is 0.7 mg/l, or 700 μg/l.

2.5.3 Toluene

Toluene concentrations in MW-3 range from 4 to 410 μg/l. The higher concentrations are from the January 1995 sampling event. They coincide with increased benzene and xylene concentrations and support the concept of flushing of residual gasoline in unsaturated soils.

MW-4 toluene concentrations range from 19 to 110 μg/l for 1994 and 1995 sampling.

The California MCL for toluene is 0.15 mg/l or 150 μg/l.

2.5.4 Isomers of Xylene

MW-3 concentrations of o-xylene ranged from 31 to 820 μg/l with the higher values occurring during the January 1995 sampling event. Concentrations of p,m xylenes ranged from 100 to 1,100 μg/l with the highest values also occurring during January 1995. The higher benzene, toluene and xylene concentrations appear to be the result of soil flushing of residual gasoline near the MW-3 area.

Xylene isomers also occur in downgradient well MW-4 and OB-1. MW-4 concentrations ranged from 50 to 320 μg/l for o-xylene and 270 to 730 μg/l for p,m xylenes.

The California MCL for xylenes is 1.75 mg/l, or 1,750 μg/l for either a single isomer or the sum of the isomers.

2.5.5 Napthalene

This gasoline component has been detected in MW-3, MW-4 and OB-1. The MW-3 concentrations ranged from 18 to 100 μg/l and show a trend similar to the benzene, ethylbenzene, toluene, xylene (BETX) compounds with the highest value in the January 1995 sample.

There is no California MCL for napthalene.

2.5.6 Trimethylbenzene

Both 1,2,4 and 1,3,5 trimethylbenzene occur in MW-3 and MW-4. Total concentrations range from 63 to 720 μg/l. Generally, the higher concentrations are seen in MW-4. Concentrations of individual compounds have been fairly consistent throughout the sampling period.

There is no California MCL for trimethylbenzene.

2.5.7 Other Gasoline Components

A number of other gasoline related VOCs have also been detected in MW-3, MW-4, and OB-1. Concentrations of n-butylbenzene, isopropylbenzene (cumene), p-isopropylbenzene, and n-propylbenzene have been consistently detected during each sampling event. Most of the concentrations are 100 μg/l or less.

There are no California MCLs for these constituents.

3.0 CONCLUSIONS

As of January 1995, ground water elevations in facility monitoring wells are at a period of record highs.

The prevailing ground water flow direction is to the southwest.

The shallow subsurface soils and ground water near the former gasoline UST are impacted with VOCs. The BETX compounds in the ground water are less than 2 mg/l.

BETX compounds in MW-3 generally showed marked increases in concentrations during the January 1995 sampling event. The increases coincide with high ground water elevations and are likely the result of the dissolution of residual gasoline in the MW-3 area.

VOCs continue to be detected in the wells near the facility's downgradient boundary. The detected compounds include both gasoline constituents and chlorinated VOCs.

VOCs continue to be detected in the wells near the facility's downgradient boundary. The detected compounds include both gasoline constituents and chlorinated VOCs. The gasoline compounds concentrations are similar to those found upgradient. Although TCE concentrations are similar to slightly higher than those found in the upgradient wells, dichloroethylene (DCE), chlorobenzene, and dichlorobenzene have also been detected in MW-3 in low concentrations.

TCE has been detected in monitoring wells that are consistently upgradient. TCE has been identified by the DTSC as widespread in the shallow subsurface in the San Leandro area.

4.0 ACTIVITIES STATUS SUMMARY

The following corrective action activities are planned for the coming months.

In early May 1995, the existing SVE vents were tested and evaluated. The evaluation is being used as the design basis for upgrading the SVE system. Once design is completed, a contractor will be selected to perform the modifications to the system.

Additional investigation planning is currently underway. A scope of work has been submitted to Alameda County. The scope outlines the tasks necessary to complete the horizontal and vertical delineation of the hydrocarbon plume. Access agreements are being obtained with neighboring facilities.

Quarterly ground water sampling of selected wells will continue. Analytical results will be submitted as part of future quarterly reports.

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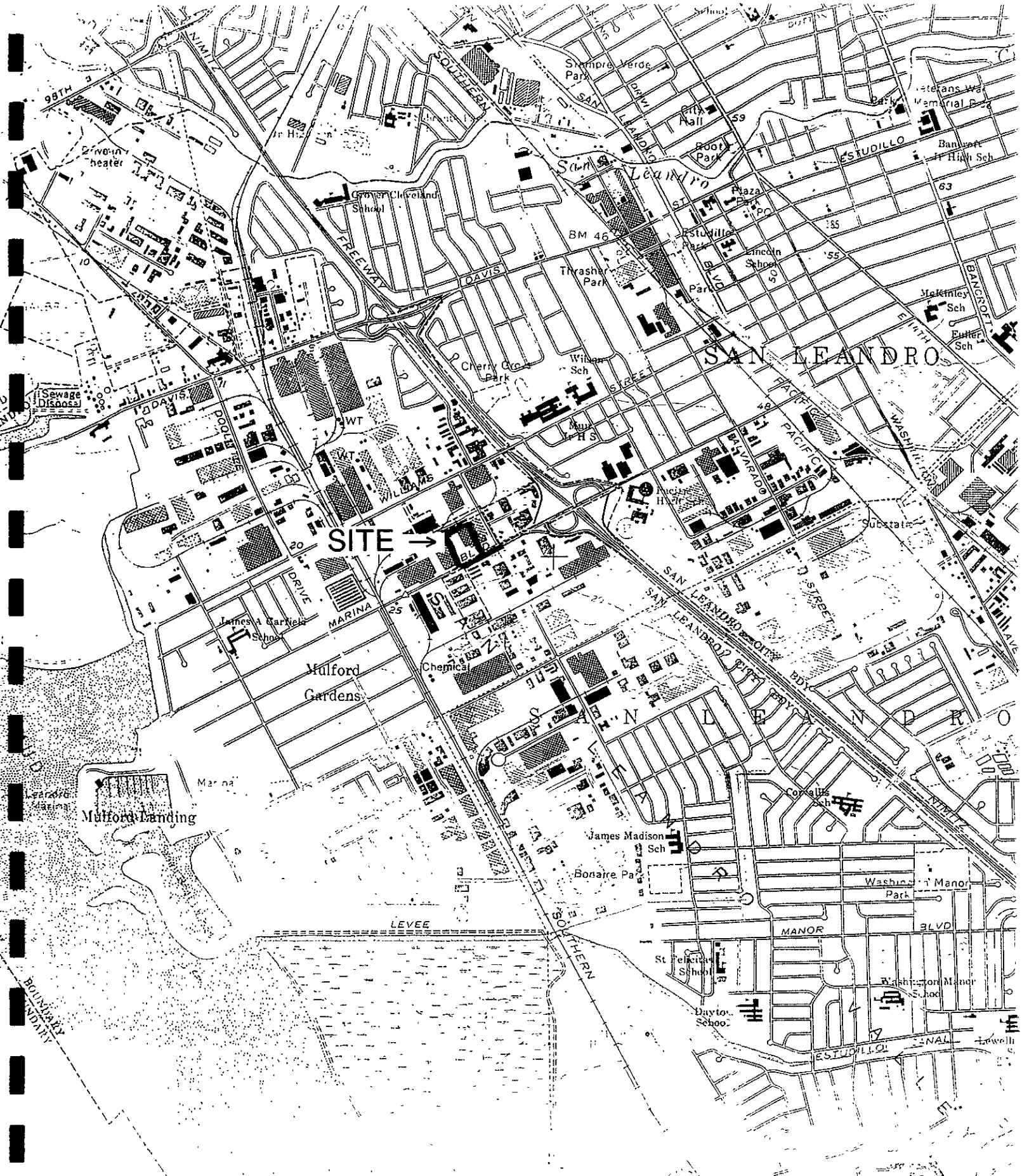
Sax, N.I, and R. J. Lewis, 1987, Hawley's Condensed Chemical Dictionary, Van Nostrand Reinhold, New York.

Woodward-Clyde Consultants, 1993, Hydrogeology of Central San Leandro and Remedial Investigation of Regional Ground Water Contamination San Leandro Plume, San Leandro, California, prepared for the California Environmental Protection Agency, Oakland, California.

Figure 1 - Site Location Map

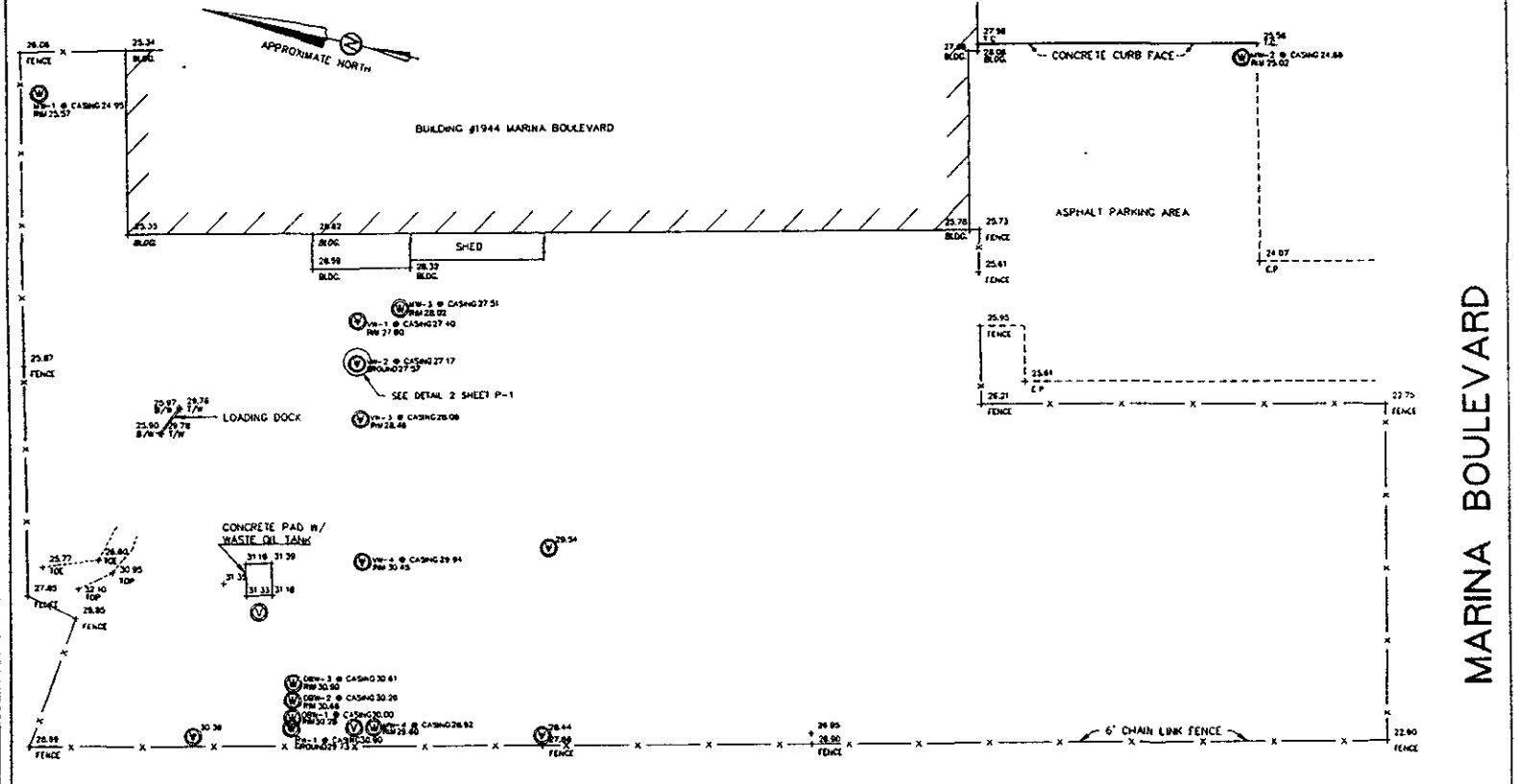


Source: San Leandro, California
7 ½ minute Quadrangle
U.S. Geological Survey
Photo revised 1980

Figure 1 - Site Location Map
San Leandro, California

Figure 2 - Site Map

FIGURE 2



LEGEND	
T C	TOP OF CURB
	BUILDING LINE
T/W	TOP OF WALL
B/W	BASE OF WALL
-x-	FENCE LINE
W	WELL EXISTING
V	SOIL VAPOR VENT
E P	EDGE OF PAVEMENT
TOP	TOP OF BANK
TOE	TOE OF SLOPE

BASIS OF ELEVATIONS: CITY OF SAN LEANDRO BENCHMARK ONION NAIL ON TOP OF CURB AT STORM WATER INLET SOUTHEAST CORNER OF THE INTERSECTION OF MARINA BOULEVARD AND MERCED STREET ELEVATION = 22.98'

ALL CASING ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF PVC PIPING

ALL RIM ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF STEEL RIM UNLESS OTHERWISE NOTED

* DENOTES APPROXIMATE LOCATION OF VW - 5 THRU 9

REVISION	DATE	DESCRIPTION

CAPSULE
ENVIRONMENTAL ENGINEERING, INC
1979 OAKCREST AVE SUITE 210
ST. PAUL, MINNESOTA 55113
(612) 636-7344

TITLE SITE MAP

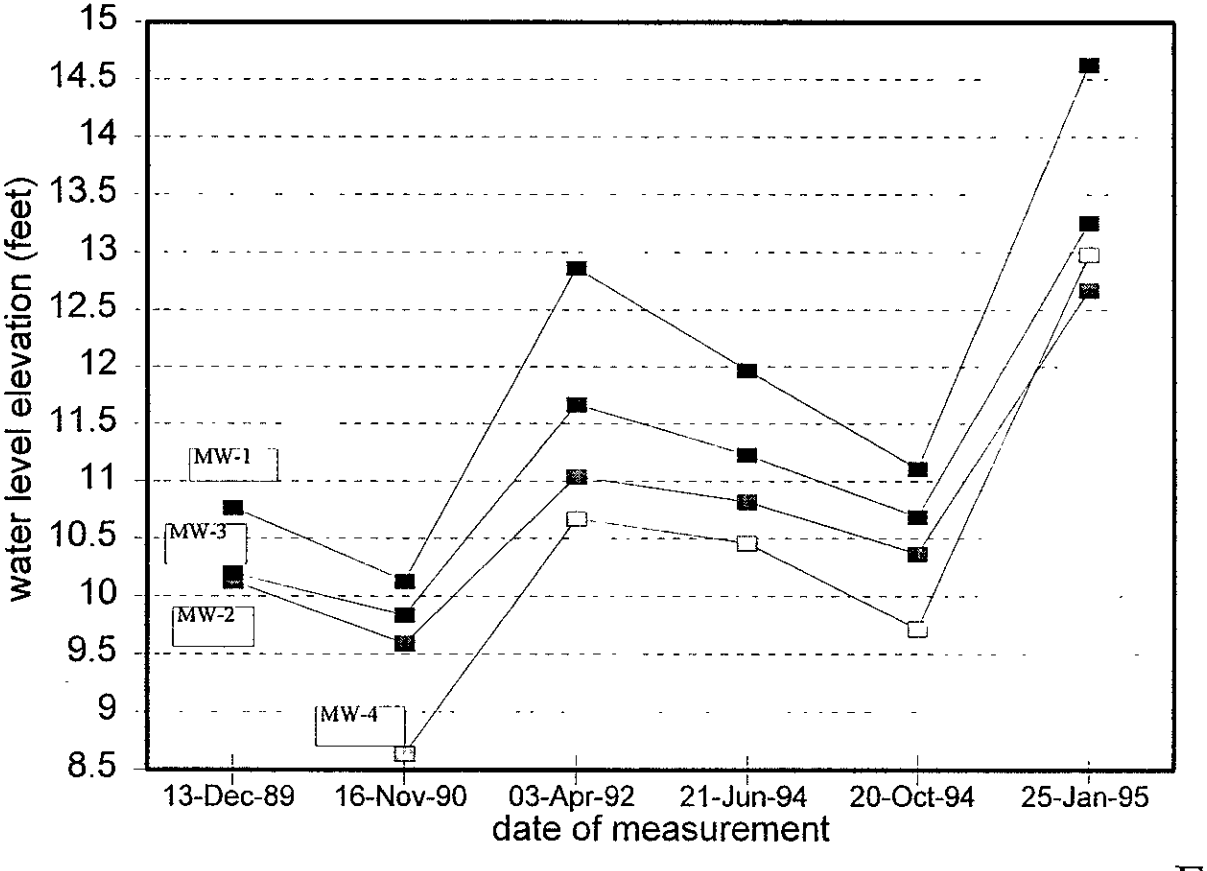
INGERSOLL-RAND CORPORATION
SAN LEANDRO CALIFORNIA

SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO	DRAWING NO	SHEET
NTS	MEC		02/16/94	001-142	FIG 2	

Figure 3 - Water Level Elevations

Water Level Elevations

San Leandro, California



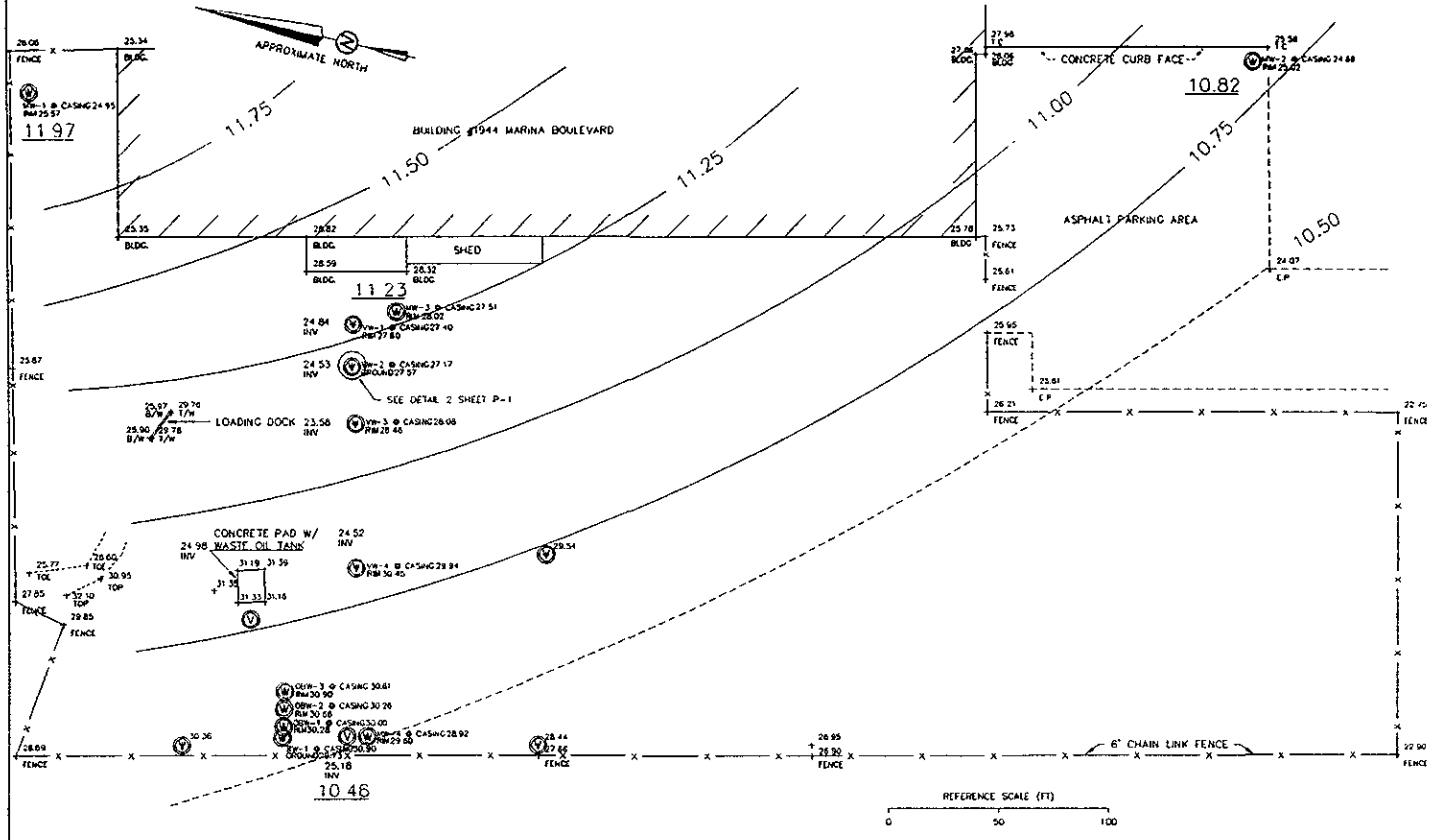
File H:\QUATTRO\SLWATLEV.WB1.Graph1

Figure 3

Figure 4 - Ground Water Contours, June 21, 1994

FIGURE 4

GROUNDWATER CONTOURS 6/21/94



MARINA BOULEVARD

LEGEND	
T/C	TOP OF CURB
	BUILDING LINE
T/W	TOP OF WALL
B/W	BASE OF WALL
	FENCE LINE
	WELL EXISTING
	SOIL VAPOR VENT
E/P	EDGE OF PAVEMENT
TOP	TOP OF BANK
TOE	TOE OF SLOPE

10.75 GROUND WATER LEVEL CONTOUR ON 6/21/94 (ABOVE MEAN SEA LEVEL)

10.82 WATER LEVEL ELEVATION ON 6/21/94

BASIS OF ELEVATIONS: CITY OF SAN LEANDRO BENCHMARK: CINCH NAIL ON TOP OF CURB AT STORM WATER INLET SOUTHEAST CORNER OF THE INTERSECTION OF MARINA BOULEVARD AND MERCED STREET, ELEVATION = 22.96

ALL CASING ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF PVC PIPING

ALL RIM ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF STEEL RIM UNLESS OTHERWISE NOTED

* DENOTES APPROXIMATE LOCATION OF VW - 5 THRU 9

CAPSULE
ENVIRONMENTAL ENGINEERING, INC
1970 OAKCREST AVE., SUITE 210
ST. PAUL, MINNESOTA 55113
(612) 638-2044

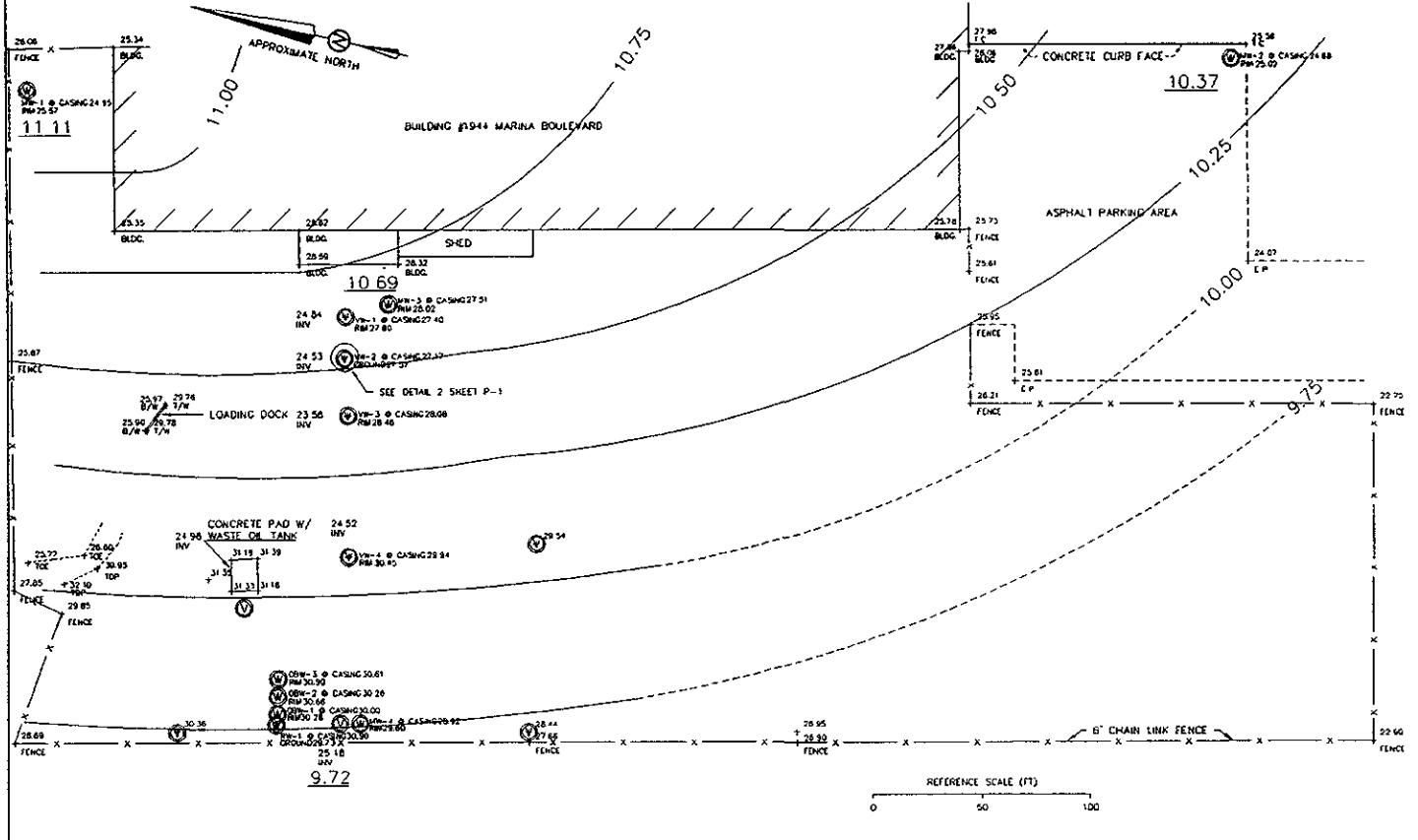
TITLE GROUNDWATER CONTOUR MAP 6/21/94
INGERSOLL-RAND CORPORATION
SAN LEANDRO, CALIFORNIA

SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO	DRAWING NO	SHEET
NTS	MEC		02/16/95	001-142	FIG 3	2 OF 2

REVISION	DATE	DESCRIPTION

Figure 5 - Ground Water Contours, October 20, 1994

FIGURE 5
GROUNDWATER CONTOURS 10/20/94



LEGEND	
T C	TOP OF CURB
	BUILDING LINE
T/W	TOP OF WALL
B/W	BASE OF WALL
	FENCE LINE
	WELL EXISTING
	SOIL VAPOR VENT
E P	EDGE OF PAVEMENT
TOP	TOP OF BANK
TOE	TOE OF SLOPE

10.25 GROUND WATER LEVEL CONTOUR ON 10/20/94 (ABOVE MEAN SEA LEVEL)

10.37 WATER LEVEL ELEVATION ON 10/20/94

BASIS OF ELEVATIONS: CITY OF SAN LEANDRO BENCHMARK CROSS NAIL ON TOP OF LIGHT AT STORM WATER INLET SOUTHEAST CORNER OF THE INTERSECTION OF MARINA BOULEVARD AND MERCED STREET ELEVATION = 22.96'

ALL CASING ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF PVC PIPING.

ALL RIM ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF STEEL RIM UNLESS OTHERWISE NOTED

* DENOTES APPROXIMATE LOCATION OF VW - 5 THRU 9

CAPSULE
ENVIRONMENTAL ENGINEERING, INC.
1970 OAKCREST AVE., SUITE 210
ST. PAUL, MINNESOTA 55113
(612) 456-2844

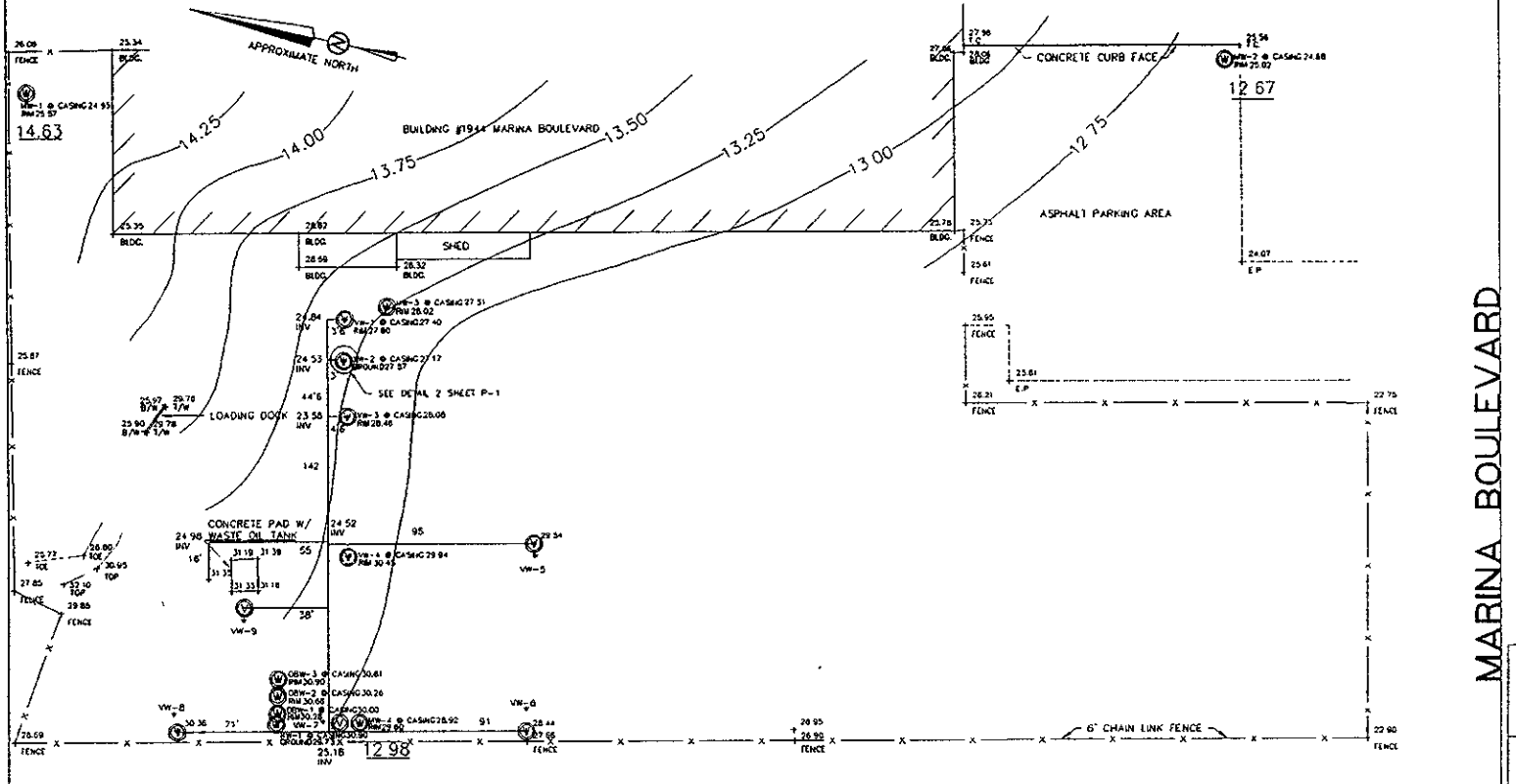
TITLE: GROUNDWATER CONTOUR MAP 10/20/94
INGERSOLL-RAND CORPORATION
SAN LEANDRO, CALIFORNIA

REVISION	DATE	DESCRIPTION

SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO	DRAWING NO	SHEET
NTS	MEC		12/16/94	001-142	FIG 2	2 OF 2

Figure 6 - Ground Water Contours, January 25, 1995

FIGURE 6
GROUNDWATER CONTOURS 1/25/95



LEGEND	
T C	TOP OF CURB
	BUILDING LINE
T/W	TOP OF WALL
B/W	BASE OF WALL
	FENCE LINE
	WELL EXISTING
	SOIL VAPOR VENT
E P	EDGE OF PAVEMENT
TOP	TOP OF BANK
TOE	TOE OF SLOPE

BASIS OF ELEVATIONS: CITY OF SAN LEANDRO BENCHMARK CACH 1966 ON TOP OF CURB AT STORM WATER INLET SOUTHEAST CORNER OF THE INTERSECTION OF MARINA BOULEVARD AND MERCED STREET ELEVATION = 22.96

ALL CASING ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF PVC PIPING

ALL RIM ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF STEEL RIM UNLESS OTHERWISE NOTED

* DENOTES APPROXIMATE LOCATION OF VW - 5 THRU 9

WELL LOCATION SURVEY
INGERSOLL RAND EQUIPMENT CORPORATION
LOCATED AT 1944 MARINA BOULEVARD
CITY OF SAN LEANDRO COUNTY OF ALAMEDA, CALIFORNIA
JUNE 1994

MORAN ENGINEERING
CIVIL ENGINEERS & LAND SURVEYORS
403 KENTUCKY AVENUE
BERKELEY CALIFORNIA
94707
(510) 527-7744

CAPSULE
ENVIRONMENTAL ENGINEERING INC
1970 OAKCREST AVE., SUITE 210
ST. PAUL, MINNESOTA 55113
(612) 636-7844

TITLE GROUNDWATER CONTOUR MAP 1/25/95
INGERSOLL - RAND CORPORATION
SAN LEANDRO, CALIFORNIA

REVISION	DATE	DESCRIPTION

SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO	ORIGINAL NO	SHEET
NTS	MEC	01/29/95	12/05/94	001-142	5-3	2 OF 2

Table 1 - Water Level Summary

TABLE 1
Water Level Summary Table

Project: Ingersoll-Rand Company, San Leandro, CA water level data
Date prepared: April 15, 1995
Prepared by: JJM

Well	Date of measurement	Measuring point elevation (feet)	Depth to water (feet)	Water level elevation (feet)
MW-1	13-Dec-89	24.78	14.01	10.77
	16-Nov-90	24.97	14.84	10.13
	03-Apr-92	24.97	12.10	12.87
	21-Jun-94	24.95	12.98	11.97
	20-Oct-94	24.95	13.84	11.11
	25-Jan-95	24.95	10.32	14.63
MW-2	13-Dec-89	24.70	14.57	10.13
	16-Nov-90	24.64	15.05	9.59
	03-Apr-92	24.64	13.60	11.04
	21-Jun-94	24.68	13.86	10.82
	20-Oct-94	24.68	14.31	10.37
	25-Jan-95	24.68	12.01	12.67
MW-3	13-Dec-89	27.33	17.13	10.20
	16-Nov-90	27.51	17.67	9.84
	03-Apr-92	27.57	15.90	11.67
	21-Jun-94	27.51	16.28	11.23
	20-Oct-94	27.51	16.82	10.69
	25-Jan-95	27.51	14.25	13.26
MW-4	16-Nov-90	28.92	20.28	8.64
	03-Apr-92	28.92	18.25	10.67
	21-Jun-94	28.92	18.46	10.46
	20-Oct-94	28.92	19.20	9.72
	25-Jan-95	28.92	15.94	12.98
OB-1	21-Jun-94	30.28	19.56	10.72
	20-Oct-94	30.28	20.28	10.00
	25-Jan-95	30.28	16.95	13.33

Notes:

elev.source for December 13, 1989: PAR, 1989

elev. source for Nov. 16, 1990: ELG Surveying letter, 11/21/90

elev. source for April 3, 1992: Report on Further Delineation, June 1992

elev. source for Oct. 20, 1994: Moran Engineering map, 6/94

Table 2 - Ground Water Analytical Data Summary, Page 1 of 2

Ground Water Analytical Date Summary, Page 2 of 2

Table 2: San Leandro Groundwater Analytical Data Summary

Well	Date Collected	Sample collection by	Lab	EPA Method	acetone (ug/l)	benzene (ug/l)	n-butyl-benzene (ug/l)	chloro-benzene (ug/l)	1,2-di-chloro-benzene (ug/l)	1,3-di-chloro-benzene (ug/l)	1,4-di-chloro-benzene (ug/l)	1,1-di-chloro-ethane (ug/l)	1,2-di-chloro-ethane (ug/l)	cis-1,2-dichloro-ethene (ug/l)	trans-1,2-dichloro-ethene (ug/l)	2,2-dichloro-propane (ug/l)	ethyl-benzene (ug/l)	isopropyl-benzene (ug/l)	p-iso-propyl-toluene (ug/l)
MW-1	17-Nov-89	IT	PAL	8010/8020		ND											ND		
	21-Jun-94	CEC	ARC	8260		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	21-Jun-94	CEC	ARC	8015															
	21-Jun-94	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	21-Jun-94	CEC	CEC	8015															
	20-Oct-94	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	20-Oct-94	CEC	CEC	8015/8020		<0.4											<0.3		
	25-Jan-95	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	25-Jan-95	CEC	CEC	8015/8020		<0.4											<0.3		
MW-2	17-Nov-89	IT	PAL	8010/8020		ND											ND		
	21-Jun-94	CEC	ARC	8260		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	21-Jun-94	CEC	ARC	8015															
	21-Jun-94	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	21-Jun-94	CEC	CEC	8015															
	20-Oct-94	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	20-Oct-94	CEC	CEC	8015/8020		<0.4											<0.3		
	25-Jan-95	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	25-Jan-95	CEC	CEC	8015/8020		<0.4											<0.3		
MW-3	17-Nov-89	IT	PAL																
	21-Jun-94	CEC	ARC	8260		27	<1.0	17	42	6.6	13	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	120	13	>1.0 & <5.0
	21-Jun-94	CEC	ARC	8015															
	21-Jun-94	CEC	CEC	8260	<20	34	7	19	45	7	14	<5	<5	<5	<5	<5	170	17	<5
	21-Jun-94	CEC	CEC	8015															
	20-Oct-94	CEC	CEC	8260	50	9	13	19	64	9	18	<5	<5	<5	<5	<5	90	20	<5
	20-Oct-94	CEC	CEC	8015/8020		8.9											96		
	25-Jan-95	CEC	CEC	8260	<100	970	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	80	<30	<30
	25-Jan-95	CEC	CEC	8015/8020		950											86		
MW-4	16-Nov-90	IT	MCL	5030		1500											720		
	21-Jun-94	CEC	ARC	8260		370	19	>1.0 & <5.0	>1.0 & <5.0	<1.0	<1.0	<1.0	11	>1.0 & <5.0	16	>1.0 & <5.0	230	43	>1.0 & <5.0
	21-Jun-94	CEC	ARC	8015															
	21-Jun-94	CEC	CEC	8260	<100	470	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	360	50	<30
	21-Jun-94	CEC	CEC	8015															
	20-Oct-94	CEC	CEC	8260	160	260	17	<5	7	<5	<5	<5	<5	<5	12	<5	240	66	<5
	20-Oct-94	CEC	CEC	8015/8020		360											270		
	25-Jan-95	CEC	CEC	8260	<100	400	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	420	<100	40
	25-Jan-95	CEC	CEC	8015/8020		470											520		
OB-1	21-Jun-94	CEC	ARC	8260		83	>1.0 & <5.0	<1.0	>1.0 & < 5.0	<1.0	<1.0	>1.0 & <5.0	<1.0	6.7	12	<1.0	10	28	<1.0
	21-Jun-94	CEC	ARC	8015															
	21-Jun-94	CEC	CEC	8260	<20	130	<5	<5	<5	<5	<5	<5	<5	9	14	<5	10	39	<5
	21-Jun-94	CEC	CEC	8015															
	20-Oct-94	CEC	CEC	8260	20	48	<5	<5	<5	<5	<5	<5	<5	9	10	<5	<5	30	<5
	20-Oct-94	CEC	CEC	8015/8020		48											5.2		
	25-Jan-95	CEC	CEC	8260	<20	80	<5	<5	<5	<5	<5	<5	<5	3	10	<5	32	30	44
	25-Jan-95	CEC	CEC	8015/8020		280											24		

ARC - Aspen Research Laboratories
CEC - Clayton Environmental Consultants
IT - International Technology Corporation
MCL - Mobile Chem Labs Inc
PAL - Precision Analytical Laboratory, Inc.

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prepared by JJM 5/95

Table 2: San Leandro Groundwater Analytical Data Summary

Well	Date Collected	Sample collection by	Lab	EPA Method	naphtha-lene (ug/l)	n-propyl-benzene (ug/l)	sec-butyl-benzene (ug/l)	tetra-chloro-ethene (ug/l)	toluene (ug/l)	1,2,4-trichloro-benzene (ug/l)	trichloro-ethene (ug/l)	1,2,4-trimethyl-benzene (ug/l)	1,3,5-trimethyl-benzene (ug/l)	vinyl chloride (ug/l)	xylenes (ug/l)	o-xylene (ug/l)	p,m xylenes (ug/l)	TPH gasoline (ug/l)	TPH EPA 8015 gasoline (ug/l)
MW-1	17-Nov-89	IT	PAL	8010/802					ND		29				ND			ND	
	21-Jun-94	CEC	ARC	8260	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	18	<1.0	<1.0	<1.0		<1.0	<1.0		
	21-Jun-94	CEC	ARC	8015															<50
	21-Jun-94	CEC	CEC	8260	<5	<5	<5	<5	<5	<5	20	<5	<5	<5		<5	<5		
	21-Jun-94	CEC	CEC	8015															<50
	20-Oct-94	CEC	CEC	8260	<5	<5	<5	<5	<5	<5	11	<5	<5	<5		<5	<5		
	20-Oct-94	CEC	CEC	8015/802					<0.3							<0.4	<0.4		<50
	25-Jan-95	CEC	CEC	8260	<5	<5	<5	<5	<5	<5	16	<5	<5	<5		<5	<5		
	25-Jan-95	CEC	CEC	8015/802					<0.3							<0.4	<0.4		<50
MW-2	17-Nov-89	IT	PAL	8010/802					ND		10				ND			ND	
	21-Jun-94	CEC	ARC	8260	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0		<1.0	<1.0		
	21-Jun-94	CEC	ARC	8015															<50
	21-Jun-94	CEC	CEC	8260	<5	<5	<5	<5	<5	<5	5	<5	<5	<5		<5	<5		
	21-Jun-94	CEC	CEC	8015															<50
	20-Oct-94	CEC	CEC	8260	<5	<5	<5	<5	<5	<5	6	<5	<5	<5		<5	<5		
	20-Oct-94	CEC	CEC	8015/802					<0.3							<0.4	<0.4		<50
	25-Jan-95	CEC	CEC	8260	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5		
	25-Jan-95	CEC	CEC	8015/802					<0.3							<0.4	<0.4		<50
MW-3	17-Nov-89																		
	21-Jun-94	CEC	ARC	8260	18	33	>1.0 & <5.0	<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0	63	<1.0		31	100		
	21-Jun-94	CEC	ARC	8015															2700
	21-Jun-94	CEC	CEC	8260	<5	43	<5	<5	<5	<5	<5	120	22	<5		40	150		
	21-Jun-94	CEC	CEC	8015															2900
	20-Oct-94	CEC	CEC	8260	29	43	6	<5	<5	<5	<5	150	46	<5		68	140		
	20-Oct-94	CEC	CEC	8015/802					4.4							69	160		2600
	25-Jan-95	CEC	CEC	8260	100	<30	<30	<30	410	<30	<30	350	80	<30		820	1000		
	25-Jan-95	CEC	CEC	8015/802					340							760	1100		7100
MW-4	16-Nov-90	IT	MCL	5030					2000						27000			32000	
	21-Jun-94	CEC	ARC	8260	46	54	>1.0 & <5.0	<1.0	19	<1.0	15	<1.0	110	>1.0 & <5.0		44	270		
	21-Jun-94	CEC	ARC	8015															8000
	21-Jun-94	CEC	CEC	8260	<30	60	<30	<30	<30	<30	<30	530	110	<30		50	530		
	21-Jun-94	CEC	CEC	8015															7600
	20-Oct-94	CEC	CEC	8260	96	78	8	<5	34	<5	27	300	100	<5		110	330		
	20-Oct-94	CEC	CEC	8015/802					33							120	520		7800
	25-Jan-95	CEC	CEC	8260	120	100	<30	<30	90	<30	<30	600	120	<30		310	550		
	25-Jan-95	CEC	CEC	8015/802					110							320	730		9700
OB-1	21-Jun-94	CEC	ARC	8260	>1.0 & <5.0	5.4	<1.0 & >5.0	<1.0	>1.0 & <5.0	<1.0	31	>1.0 & <5.0	<1.0	<1.0		>1.0 & <5.0	6.6		
	21-Jun-94	CEC	ARC	8015															2800
	21-Jun-94	CEC	CEC	8260	<5	6	<5	<5	<5	<5	42	<5	<5	<5		<5	7		
	21-Jun-94	CEC	CEC	8015															1600
	20-Oct-94	CEC	CEC	8260	<5	<5	<5	<5	<5	<5	66	<5	<5	<5		<5	<5		
	20-Oct-94	CEC	CEC	8015/802					0.3							0.9	5		2600
	25-Jan-95	CEC	CEC	8260	<5	<5	<5	<5	39	23	27	<5	<5	<5		21	45		
	25-Jan-95	CEC	CEC	8015/802					29							51	95		3900

ARC - Aspen Research Laboratories
CEC - Clayton Environmental Consultants
IT - International Technology Corporation
MCL - Mobile Chem Labs Inc
PAL - Precision Analytical Laboratory Inc

FILE H:\QUATTRO\SLWATSHT\WB1
prepared by JJM 5/95

CAPSULE®
ENVIRONMENTAL ENGINEERING, INC

June 12, 1995

Mr. Scott Seery, CHMM
Alameda County Health Care Services Agency
UST Local Oversight Program
80 Swan Way, Room 200
Oakland, California 94621

Dear Mr. Seery:

On behalf of the Ingersoll Rand Equipment Sales, Capsule Environmental Engineering, Inc., and our project partner, Braun Intertec Corporation, would like to submit the enclosed report, Quarterly Report April 1995. This report is part of Ingersoll Rand's corrective action activities to address the underground storage tank leak at 1944 Marina Boulevard, San Leandro.

As we agreed in our March 14, 1995, meeting with you, this initial report provides a summary and a copy of all analytical data for the July and October 1994 and January 1995 quarterly sampling events. Future reports will provide information on both monitoring and remediation activities for the quarter.

If you have any questions, comments or need additional information cited in the report, please contact either John McDermott or Dan Reinke at (800) 328-8246.

Sincerely,

Daniel P. Reinke, P.E.
Principal Engineer
Capsule Environmental Engineering, Inc.

Gerald E. Stuth, P.E.
Senior Project Manager
Braun Intertec Corporation

DPR:mmf
cc/enc: L. Feldman/Regional Water Quality Control Board, Oakland, CA
R. Heindl/Ingersoll-Rand Equipment Sales, Bethlehem, PA
A. Aguirre/Ingersoll Rand Equipment Sales, San Leandro, CA
M. Bakaldin/San Leandro Fire Department, San Leandro, CA

1970 Oakcrest Avenue, Suite 215 • St. Paul, MN 55113-2624 • (612) 636-2644 • Fax (612) 636-3106
Toll Free 1-800-328-8246

Table 3 - List of EPA Method 8260 Compounds

Table 3

List of EPA Method 8260 Compounds

acetone
benzene
bromobenzene
bromochlorobenzene
bromodichloromethane
bromoform
bromomethane
2-butanone
n-butylbenzene
carbon disulfide
carbon tetrachloride
chlorobenzene
chloroethane
chloroform
chloromethane
2-chlorotoluene
4-chlorotoulene
dibromochloromethane
1,2-dibromo-3-chloropropane
1,2 dibromoethane
dibromomethane
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene
dichlorodifluoromethane
1,1-dichloroethane
1,2-dichloroethane
1,1-dichloroethene
cis-1,2-dichloroethene
trans-1,2-dichloroethene
1,2-dichloropropane
1,3-dichloropropane
2,2-dichloropropene
1,1-dichloropropene
cis-1-3-dichloropropene
trans-1-3-dichloropropene
ethylbenzene
freon 113
hexachlorobutadiene
2-hexanone
isopropylbenzene
p-isopropyltoluene
methylene chloride
4-methyl-2-pentanone
naphthalene
n-propylbenzene
sec-butylbenzene
styrene
tert-butylbenzene
1,1,1,2-tetrachloroethane
1,1,2,2-tetrachloroethane
tetrachloroethene
toluene
1,2,3-trichlorobenzene
1,2,4-trichlorobenzene
1,1,1-trichloroethane
1,1,2-trichloroethane
trichloroethene
trichlorofluoromethane
1,2,3-trichloropropane
1,2,4-trimethylbenzene
1,3,5-trimethylbenzene
vinyl acetate
vinyl chloride
o-xylene
p,m xylenes

File: H:\QUATTRO\LIST8260.WB1
Date: April 25, 1995

Table 4 - List of EPA Method 8020 Compounds

Table 4

List of EPA Method 8015/8020 Compounds

benzene	o-xylenes
ethylbenzene	p,m-xylenes
toluene	gasoline

File: H:\QUATTRO\LIST8020.WB1
Date: April 25, 1995

APPENDIX A - June 1994 Analytical Results

Cap. to ECM
7/7/94

Aspen Research Corporation

436 West County Rd. D, St. Paul, MN 55112-3522
Tel: 612/631-9234 Fax: 612/631-9270

July 5, 1994

Mr. Bill Block
Capsule Environmental Engineering, Inc.
1970 Oakcrest Avenue, Suite 215
St. Paul, MN 55113

Reference: ARC Project #: 13356
Capsule Project Title: Clayton Environmental
Sampling Date: June 21, 1994
Sample Receipt Date: June 22, 1994

Dear Mr. Block:

We have completed the requested analysis on the above referenced project. Enclosed you will find a summary of the results obtained.

The analysis for the following parameters was performed according to Test Methods for the Evaluation of Solid Wastes, SW-846, 3rd Edition:

Parameter	Test Method
Volatiles	EPA Method 8260 modified
TPH as Gas	EPA Method 8015 modified

Aspen Research received two 40 ml vials for analysis. In the future, Aspen would like to receive at least three 40 ml vials for EPA 8260 and three 40 ml vials for TPH as Gas analysis. In order for Aspen to follow its quality control plan, we need to be provided with sufficient sample to test for matrix spike and matrix spike duplicates.

Thank you for using Aspen Research Corporation. As always, if you have questions, comments, or if we can be of further assistance, please do not hesitate to call.

Regards,

ASPEN RESEARCH CORPORATION

Jerry D. Olson

Jerry D. Olson

Analysis for Volatile Organic Compounds by Modified Method 8260, SW-846 Third Edition

Capsule Environmental Engineering, Project ID: Clayton Environmental, PN# 56418.00
Sampling Date: June 21, 1994
Aspen Research Corporation Project ID: 13356

Sample ID:	EQL	Meth Bl.	MW-1	MW-2	MW-3	MW-4	OB-1
ARC ID:	Water	00000	52340	52342	52344	52346	52348
Analyte	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Dichlorodifluoromethane	5.0	ND	ND	ND	ND	ND	ND
Chloromethane	5.0	ND	ND	ND	ND	ND	ND
Vinyl chloride	5.0	ND	ND	ND	ND	BEQL	ND
Bromomethane	5.0	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5.0	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	ND	ND	ND	ND	16	12
1,1-Dichloroethane	5.0	ND	ND	ND	ND	ND	BEQL
2,2-Dichloropropane	5.0	ND	ND	ND	ND	BEQL	ND
cis-1,2-Dichloroethene	5.0	ND	ND	ND	BEQL	BEQL	6.7
Chloroform	5.0	ND	ND	ND	ND	ND	ND
Bromochloromethane	5.0	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	5.0	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5.0	ND	ND	ND	ND	11	ND
Benzene	5.0	ND	ND	ND	27	370 *	83
Trichloroethene	5.0	ND	18	BEQL	ND	15	31
1,2-Dichloropropane	5.0	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5.0	ND	ND	ND	ND	ND	ND
Dibromomethane	5.0	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5.0	ND	ND	ND	ND	ND	ND
Toluene	5.0	ND	ND	ND	BEQL	19	BEQL
trans-1,3-Dichloropropene	5.0	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5.0	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5.0	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	ND	BEQL	BEQL	ND	ND	ND
Chlorodibromomethane	5.0	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	5.0	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	ND	ND	ND	17	BEQL	ND
1,1,1,2-Tetrachloroethane	5.0	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0	ND	ND	ND	120 *	230 *	10
m,p-Xylene	5.0	ND	ND	ND	100 *	270 *	6.6
o-Xylene	5.0	ND	ND	ND	31	44	BEQL
Styrene	5.0	ND	ND	ND	ND	ND	ND
Bromoform	5.0	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0	ND	ND	ND	13	43	28
1,1,2,2-Tetrachloroethane	5.0	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5.0	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5.0	ND	ND	ND	33	54	5.4
Bromobenzene	5.0	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5.0	ND	ND	ND	63	110 *	ND
2-Chlorotoluene	5.0	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5.0	ND	ND	ND	ND	ND	ND

Capsule Environmental Engineering, Project ID: Clayton Environmental, PM# 56418.00
Sampling Date: June 21, 1994
Aspen Research Corporation Project ID: 13356

Sample ID:	EQL	Meth 8I.	MW-1	MW-2	MW-3	MW-4	OB-1
ARC ID:	Water	00080	52340	52342	52344	52346	52348
Analyte	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
tert-Butylbenzene	5.0	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5.0	ND	ND	ND	78	210 *	BEQL
sec-Butylbenzene	5.0	ND	ND	ND	BEQL	BEQL	BEQL
4-Isopropyltoluene	5.0	ND	ND	ND	BEQL	BEQL	ND
1,3-Dichlorobenzene	5.0	ND	ND	ND	6.6	ND	ND
1,4-Dichlorobenzene	5.0	ND	ND	ND	13	ND	ND
n-Butylbenzene	5.0	ND	ND	ND	ND	19	BEQL
1,2-Dichlorobenzene	5.0	ND	ND	ND	42	BEQL	BEQL
1,2-Dibromo-3-chloropropane	5.0	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5.0	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5.0	ND	ND	ND	ND	ND	ND
Naphthalene	5.0	ND	ND	ND	18	46	BEQL
1,2,3-Trichlorobenzene	5.0	ND	ND	ND	ND	ND	ND
File Name:		>80177	>80172	>80173	>80174	>80175	>80176
Analysis Date:		940629	940629	940629	940629	940629	940629

Key:
EQL: Estimated Quantitation Limit. Analyst: Philip A. Favorini Date: 6-30-94
ND: Not Detected at a concentration greater than 20% of the stated EQL.
BEQL: Detected at a concentration less than the EQL but greater than ND.

* Values exceed linear range. Dilutions of samples not possible because only one vial provided for assay.

Jerry D. Olson 7-5-94

Clayton ENVIRONMENTAL CONSULTANTS

PN# 13356

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page ____ of ____
Project No.	
Batch No.	
Ind. Code	W.P.
Date Logged In	By

REPORT RESULTS TO

Name: MR. JERRY OLSON | Title:
Company: ASPEN RESEARCH CORP. | Dept.:
Mailing Address: 436 WEST COUNTY ROAD
City, State, Zip: ST. PAUL, MINNESOTA 55112-3522
Telephone No: (612) 631-9234 | Telefax No.:

Purchase Order No.: 47969 | Client Job No.: 56418.00

SEND INVOICE TO

Name: JOHN VARGAS
Company: CLAYTON ENVIRONMENTAL | Dept.: EMS
Address: P.O. BOX 9019
City, State, Zip: PLEASANTON, CA 94566

Date Results Req.: NORMAL TAT | Rush Charges Authorized? ☐ Yes ☒ No | Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)
REF: MR. EVERETT MILTON

* Explanation of Preservative: P = HCl

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	EPA 8260 1038	TPH-GAS/BTEX										FOR LAB USE ONLY
MW-1	6-21-94	H_2O	40 mLs	2	Xp	Xp										
MW-2	↓	↓	↓	2	Xp	Xp										
MW-3				2	Xp	Xp										
MW-4				2	Xp	Xp										
OB-1				2	Xp	Xp										

CHAIN OF CUSTODY

Collected by: RICHARD SILVA (print) | Collector's Signature: Richard Silva
Relinquished by: Richard Silva | Date/Time: 6-22-94/0820 | Received by: | Date/Time:
Relinquished by: | Date/Time: | Received at Lab by: Beth Braunschweig | Date/Time: 6/23/94 9:00
Method of Shipment: UPS-RED | Sample Condition Upon Receipt: ☐ Acceptable ☐ Other (explain)
8°C

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive Novi, MI 48375 (313) 344-177?	Raritan Center 160 Fieldcrest Ave. Edison, NJ 08837 (908) 225-6040	400 Chastain Center Blvd., N.W. Suite 490 Kennesaw, GA 30144 (404) 499-7500	1252 Quarry Lane Pleasanton, CA 94566 (510) 42? ?657

2/92

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - ?t Retains

Analysis of TPH as Gasoline
By Modified EPA Method 8015

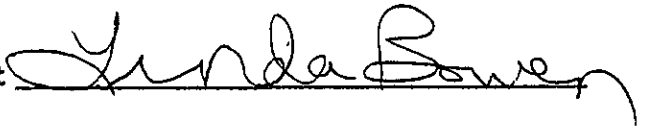
Client Project ID: PN# 56418.00
ARC Project ID: 13356
Date sampled: 6/21/94
Date analyzed: 6/29/94

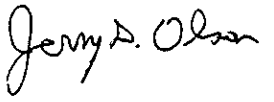
Sample ID:	ARC#	TPH (mg/L)	File Spec. f0000-	PQL (mg/L)
Laboratory Blank		BPQL	26.29	0.05
MW-1	52339	BPQL	26.31	0.05
MW-2	52341	BPQL	26.30	0.05
MW-3	52343	2.7	26.33	0.5*
MW-4	52345	8.0	26.34	0.5*
OB-1	52347	2.8	26.32	0.05

Spike recovery 106%
Spike dup recovery 110%

PQL = Practical Quantitation Limit
BPQL = Not detected at a level above the practical quantitation limit

* These samples were diluted 1:10 and the PQL was raised accordingly.

Analyst 

Reviewed by 

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

July 11, 1994

Mr. Everett Milton
CAPSULE ENVIRONMENTAL ENGINEERING, INC.
1970 Oakcrest Avenue, Suite 213
St. Paul, Minnesota 55113-2624

Clayton Project No. 56418.00

Subject: Analytical results of monitoring wells at the Ingersoll-Rand facility in San Leandro, California

Dear Mr. Milton:

Clayton Environmental Consultants, Inc. is pleased to present the enclosed analytical results for the groundwater sampling conducted on June 21, 1994 at the Ingersoll-Rand facility located at 1944 Marina Boulevard in San Leandro, California. The attached laboratory reports detail the analyses conducted for water samples collected from monitoring wells MW-1, MW-2, MW-3, and MW-4, and for observation well OB-1. Well field sampling forms describing the sampling of the wells are also enclosed.

If you have any questions regarding the sampling event, please call me at (510) 426-2676 or Richard Silva at (510) 426-2670.

Sincerely,

John F. Vargas, R.G.
Supervisor, Geosciences and Remediation
Western Operations

JFV/rjs
Enclosures

File: San Leandro (10006) Remediation
Regulatory
GW Monitoring

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

July 6, 1994

Mr. John Vargas
CLAYTON ENVIRONMENTAL CONS.
1252 Quarry Lane
Pleasanton, CA 94566

Client Ref.: 56418.00
Clayton Project No.: 94062.88

Dear Mr. Vargas:

Attached is our analytical laboratory report for the samples received on June 22, 1994. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of after August 5, 1994, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Suzanne Silvera, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
Western Operations

HAH/kli

Attachments

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-1	Date Sampled:	06/21/94
Lab Number:	9406288-01A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	06/30/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-1	Date Sampled:	06/21/94
Lab Number:	9406288-01A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	06/30/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	20	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-1	Date Sampled:	06/21/94
Lab Number:	9406288-01A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	06/30/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		**Recovery (%)**	**QC Limits (%)**
4-Bromofluorobenzene	460-00-4	114	74 - 121
Dibromofluoromethane	1868-53-7	97	80 - 120
Toluene-d8	2037-26-5	99	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-2	Date Sampled:	06/21/94
Lab Number:	9406288-02A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-2	Date Sampled:	06/21/94
Lab Number:	9406288-02A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	5	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-2	Date Sampled:	06/21/94
Lab Number:	9406288-02A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	115	74 - 121
Dibromofluoromethane	1868-53-7	94	80 - 120
Toluene-d8	2037-26-5	101	81 - 117

ND: Not detected at or above limit of detection
-: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-3	Date Sampled:	06/21/94
Lab Number:	9406288-03A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	34	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	7	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	19	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	45	5
1,3-Dichlorobenzene	541-73-1	7	5
1,4-Dichlorobenzene	106-46-7	14	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-3	Date Sampled:	06/21/94
Lab Number:	9406288-03A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	170	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	17	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	43	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-3	Date Sampled:	06/21/94
Lab Number:	9406288-03A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	120	5
1,3,5-Trimethylbenzene	108-67-8	22	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	40	5
p,m-Xylenes	--	150	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	106	74 - 121
Dibromofluoromethane	1868-53-7	92	80 - 120
Toluene-d8	2037-26-5	101	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-4	Date Sampled:	06/21/94
Lab Number:	9406288-04A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	100
Benzene	71-43-2	470	30
Bromobenzene	108-86-1	ND	30
Bromochloromethane	74-97-5	ND	30
Bromodichloromethane	75-27-4	ND	30
Bromoform	75-25-2	ND	30
Bromomethane	74-83-9	ND	30
2-Butanone	78-93-3	ND	100
n-Butylbenzene	104-51-8	ND	30
Carbon disulfide	75-15-0	ND	30
Carbon tetrachloride	56-23-5	ND	30
Chlorobenzene	108-90-7	ND	30
Chloroethane	75-00-3	ND	30
Chloroform	67-66-3	ND	30
Chloromethane	74-87-3	ND	30
2-Chlorotoluene	95-49-8	ND	30
4-Chlorotoluene	106-43-4	ND	30
Dibromochloromethane	124-48-1	ND	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	30
1,2-Dibromoethane	106-93-4	ND	30
Dibromomethane	74-95-3	ND	30
1,2-Dichlorobenzene	95-50-1	ND	30
1,3-Dichlorobenzene	541-73-1	ND	30
1,4-Dichlorobenzene	106-46-7	ND	30
Dichlorodifluoromethane	75-71-8	ND	30
1,1-Dichloroethane	75-34-3	ND	30
1,2-Dichloroethane	107-06-2	ND	30
1,1-Dichloroethene	75-35-4	ND	30
cis-1,2-Dichloroethene	156-59-2	ND	30
trans-1,2-Dichloroethene	156-60-5	ND	30

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-4	Date Sampled:	06/21/94
Lab Number:	9406288-04A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	30
1,3-Dichloropropane	142-28-9	ND	30
2,2-Dichloropropane	594-20-7	ND	30
1,1-Dichloropropene	563-58-6	ND	30
cis-1,3-dichloropropene	10061-01-5	ND	30
trans-1,3-dichloropropene	10061-02-6	ND	30
Ethylbenzene	100-41-4	360 ✓	30
Freon 113	76-13-1	ND	30
Hexachlorobutadiene	87-68-3	ND	30
2-Hexanone	591-78-6	ND	100
Isopropylbenzene	98-82-8	50 ✓	30
p-Isopropyltoluene	99-87-6	ND	30
Methylene chloride	75-09-2	ND	30
4-Methyl-2-pentanone	108-10-1	ND	100
Naphthalene	91-20-3	ND	30
n-Propylbenzene	103-65-1	60 ✓	30
sec-Butylbenzene	135-98-8	ND	30
Styrene	100-42-5	ND	30
tert-Butylbenzene	98-06-6	ND	30
1,1,1,2-Tetrachloroethane	630-20-6	ND	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	30
Tetrachloroethene	127-18-4	ND	30
Toluene	108-88-3	ND	30
1,2,3-Trichlorobenzene	87-61-6	ND	30
1,2,4-Trichlorobenzene	120-82-1	ND	30
1,1,1-Trichloroethane	71-55-6	ND	30
1,1,2-Trichloroethane	79-00-5	ND	30
Trichloroethene	79-01-6	ND	30
Trichlorofluoromethane	75-69-4	ND	30
1,2,3-Trichloropropane	96-18-4	ND	30

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	MW-4	Date Sampled:	06/21/94
Lab Number:	9406288-04A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	530	30
1,3,5-Trimethylbenzene	108-67-8	110	30
Vinyl acetate	108-05-4	ND	50
Vinyl chloride	75-01-4	ND	30
o-Xylene	95-47-6	50	30
p,m-Xylenes	--	530	30
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	107	74 - 121
Dibromofluoromethane	1868-53-7	96	80 - 120
Toluene-d8	2037-26-5	99	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Note: Detection limits increased due to dilution necessary for quantitation.

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	OB-1	Date Sampled:	06/21/94
Lab Number:	9406288-05A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	130	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	9	5
trans-1,2-Dichloroethene	156-60-5	14	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	OB-1	Date Sampled:	06/21/94
Lab Number:	9406288-05A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	10 v	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	39	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	6	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	42	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	OB-1	Date Sampled:	06/21/94
Lab Number:	9406288-05A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	7	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	113	74 - 121
Dibromofluoromethane	1868-53-7	90	80 - 120
Toluene-d8	2037-26-5	98	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	TRIP BLANK #0052094	Date Sampled:	06/21/94
Lab Number:	9406288-06A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	TRIP BLANK #0052094	Date Sampled:	06/21/94
Lab Number:	9406288-06A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	TRIP BLANK #0052094	Date Sampled:	06/21/94
Lab Number:	9406288-06A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	109	74 - 121
Dibromofluoromethane	1868-53-7	98	80 - 120
Toluene-d8	2037-26-5	98	81 - 117

ND: Not detected at or above limit of detection
-: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	FIELD BLANK	Date Sampled:	06/21/94
Lab Number:	9406288-07A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	FIELD BLANK	Date Sampled:	06/21/94
Lab Number:	9406288-07A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	FIELD BLANK	Date Sampled:	06/21/94
Lab Number:	9406288-07A	Date Received:	06/22/94
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	07/01/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	112	74 - 121
Dibromofluoromethane	1868-53-7	95	80 - 120
Toluene-d8	2037-26-5	102	81 - 117

ND: Not detected at or above limit of detection
-: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9406288-08A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	06/30/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9406288-08A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	06/30/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9406288-08A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	06/30/94
Preparation Method:	EPA 5030	Date Analyzed:	06/30/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	108	74 - 121
Dibromofluoromethane	1868-53-7	96	80 - 120
Toluene-d8	2037-26-5	98	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 94062.88

Sample Identification: See Below
Lab Number: 9406288
Sample Matrix/Media: WATER
Preparation Method: EPA 5030
Method Reference: EPA 8015 (Modified)

Date Received: 06/22/94
Date Prepared: 06/28/94
Date Analyzed: 06/28/94

Lab Number	Sample Identification	Date Sampled	TPH-G (ug/L)		Method Detection Limit (ug/L)
-01	MW-1	06/21/94	ND		50
-02	MW-2	06/21/94	ND		50
-03	MW-3	06/21/94	2900		50
-04	MW-4	06/21/94	7600		50
-05	OB-1	06/21/94	1600	a	50
-06	TRIP BLANK #0052094	06/21/94	ND		50
-07	FIELD BLANK	06/21/94	ND		50
-08	METHOD BLANK	--	ND		50

ND: Not detected at or above limit of detection
--: Information not available or not applicable

TPH-G = Volatile petroleum hydrocarbons from C6 to C12 quantitated as gasoline.
a Purgeable hydrocarbons quantitated as gasoline do not match typical gasoline pattern.

Clayton
ENVIRONMENTAL
CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page ____ of ____
Project No. 9406288	
Batch No.	
Ind. Code	W.P.
Date Logged In 6/23/94	By CA

REPORT RESULTS TO

Name JOHN VARGAS | Title
Company CLAYTON | Dept.
Mailing Address
City, State, Zip
Telephone No. | Telefax No.

SEND INVOICE TO

Purchase Order No. | Client Job No. 56418.00
Name JOHN VARGAS
Company CLAYTON | Dept.
Address
City, State, Zip

Date Results Req.: NORMAL TAT | Rush Charges Authorized? ☐ Yes ☒ No | Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative: P = HCl

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	EPA 8260	TPH-Gas/BTEX	(M)	FOR LAB USE ONLY
MW-1	6-21-94	H_2O	40 mLs	2	XP	XP		01 A-B
MW-2				2	XP	XP		02
MW-3				2	XP	XP		03
MW-4				2	XP	XP		04
OB-1				2	XP	XP		05
TRIP BLANK #0052094				2	XP	XP		06
FIELD BLANK	↓	↓	↓	2	XP	XP		07 ↓ ↓

CHAIN OF CUSTODY

Collected by: RICHARD SILVA (print) | Collector's Signature: Richard Silva
Relinquished by: Richard Silva | Date/Time 6-22-94/0820 | Received by: | Date/Time
Relinquished by: | Date/Time | Received at Lab by: Cheryl Allen | Date/Time 6/22/94 8:2
Method of Shipment: | Sample Condition Upon Receipt ☒ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive, Novi, MI 48375, (313) 344-1770
Raritan Center, 160 Fieldcrest Ave., Edison, NJ 08837, (908) 225-6040
400 Chastain Center Blvd., N.W., Suite 490, Kennesaw, GA 30144, (404) 499-7500
1252 Quarry Lane, Pleasanton, CA 94566, (510) 426-2657

2/92

DISTRIBUTION:
WHITE - Clayto
YELLOW - Cl
PINK -

Clayton
ENVIRONMENTAL
CONSULTANTS

Quality Assurance Results Summary

Matrix Spike/Matrix Spike Duplicate Results

for

Clayton Project No. 94062.88

Quality Assurance Results Summary
for
Clayton Project No. 94062.88

Clayton Lab Number: 9406288-MB
Ext./Prep. Method: EPA 5030
Date: 06/30/94
Analyst: JP
Std. Source: M940623-01W
Sample Matrix/Media: WATER

Analytical Method: EPA8260
Instrument ID: 05381
Date: 06/30/94
Time: 22:18
Analyst: JP
Units: UG/L

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
1,1-DICHLOROETHENE	ND	50.0	52.0	104	54.0	108	106	80	120	3.8	20
BENZENE	ND	50.0	51.0	102	51.0	102	102	80	120	0.0	20
CHLOROBENZENE	ND	50.0	51.0	102	52.0	104	103	80	120	1.9	20
TOLUENE	ND	50.0	52.0	104	53.0	106	105	80	120	1.9	20
TRICHLOROETHENE	ND	50.0	52.0	104	53.0	106	105	80	120	1.9	20

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 94062.88

Clayton Lab Number:	9406303-06A	Analytical Method:	EPA8015 8020
Ext./Prep. Method:	*EPA 5030*	Instrument ID:	05587
Date:	06/28/94	Date:	06/28/94
Analyst:	NAN	Time:	16:05
Std. Source:	V940621-03W	Analyst:	NAN
Sample Matrix/Media:	WATER	Units:	ug/L

Analyte		Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
BENZENE	(PID)	ND	8.96	9.30	104	8.81	98	101	81	118	5.4	20
ETHYLBENZENE	(PID)	ND	4.23	4.29	101	4.23	100	101	81	114	1.4	20
GASOLINE	(FID)	ND	500	558	112	556	111	111	80	150	0.4	25
TOLUENE	(PID)	ND	23.1	23.6	102	22.1	96	99	84	118	6.6	20
TOTAL XYLENE	(PID)	ND	20.8	21.2	102	21.0	101	101	85	115	0.9	20

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 5641B.00 Site: INGERSOLL-RAND Date: JUNE 21, 1994

Well # MW-1 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLEAR SKIES, COOL, SLIGHT BREEZE, ~75°F

Describe Equipment D-Con Before Sampling This Well: WASH WITH SOAP AND TRIPLE RINSE

Total Depth of Well: 18.84 feet Time: 1215 Depth to Water Before Pumping: 12.98 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch		Volume		Purge Factor		To Purge
5.86	feet *	.16	(.65)	=	3.809	gal *	5	=	19.05

Depth Purging From: 18 feet Time Surging Begins: 1230

Notes on Initial Discharge: BROWNISH, SILTY, NO ODOR

Time	Volume Purged	pH	Conductivity	T	Notes
1233	5-GAL	7.9	570	16.7	BROWNISH, NO ODOR
1236	10-GAL	7.8	589	17.4	PURGED DRY
1245	15-GAL	7.9	575	17.7	BROWNISH, NO ODOR
1245	20-GAL	7.9	579	17.8	PURGED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1304

	Rep #1	Rep #2	Rep #3	Rep #4
pH	8.1	8.0	8.0	7.9
Conductivity	576	569	568	569
T°C	18.2	17.7	17.7	17.8

Pre-Sample Collection Gallons Purged: 20

Time Sample Collection Begins: 1315

Time Sample Collection Ends: 1320

Total Gallons Purged: 23

Comments:

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 5418.00 Site: INGERSOLL-RAND Date: JUNE 21, 1994

Well # MW-2 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILERS FOR PURGING & SAMPLING

Field Conditions: CLEAR SKIES, COOL, WINDY ~75°F

Describe Equipment D-Con Before Sampling This Well: NOT APPLICABLE

Total Depth of Well: 14.70 feet Time: 1059 Depth to Water Before Pumping: 13.86 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch		Volume		Purge Factor		To Purge
0.84	feet *	.16	(.65)	=	0.546	gal *	5	=	2.73

Depth Purging From: 14 feet Time Surging Begins: 1105

Notes on Initial Discharge: CLEAR, NO ODOR

Time	Volume Purged	pH	Conductivity	T	Notes
1113	1-GAL	7.7	1351	19.5	CLEAR, NO ODOR
1116	2-GAL	7.5	1212	19.2	CLEAR, NO ODOR
1120	3-GAL	7.5	1204	19.2	CLEAR, NO ODOR

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1155

	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.7	7.7	7.6	7.6
Conductivity	1208	1203	1195	1190
T°C	19.0	19.1	19.2	19.2

Pre-Sample Collection Gallons Purged: 3

Time Sample Collection Begins: 1145

Time Sample Collection Ends: 1150

Total Gallons Purged: 4

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 56418.00 Site: INGERSOLL-RAND Date: JUNE 21 1990

Well # MW-3 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLEAR SKIES, WARM, WINDY ~75°F

Describe Equipment D-Con Before Sampling This Well: WASH WITH SOAP AND TRIPLE RINSE

Total Depth of Well: 20.20 feet Time: 1550 Depth to Water Before Pumping: 16.28 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume	Purge Factor	To Purge
3.92	feet *	.16	(.65)	= 2.548 gal *	5	= 12.74

Depth Purging From: 19 feet Time Surging Begins: 1600

Notes on Initial Discharge: GRAYISH, SILTY, STRONG ODOR

Time	Volume Purged	pH	Conductivity	T°C	Notes
1602	3-GAL	7.4	835	19.3	CLEAR, SLIGHT ODOR
1604	6-GAL	7.4	845	19.2	PURGED DRY
1620	9-GAL	7.5	854	19.5	GRAYISH, SLIGHT ODOR
1625	12-GAL	7.5	851	19.5	PURGED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1630

–	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.4	7.4	7.3	7.5
Conductivity	861	874	881	893
T°C	19.4	19.3	19.3	19.3

Pre-Sample Collection Gallons Purged: 12

Time Sample Collection Begins: 1635

Time Sample Collection Ends: 1640

Total Gallons Purged: 14

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 56418.00 Site: INGERSOLL-RAND Date: JUNE 21, 1994

Well # MW-4 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLEAR SKIES, WARM, WINDY, ~75°F

Describe Equipment D-Con Before Sampling This Well: WASH WITH SOAP AND TRIPLE RINSE

Total Depth of Well: 27.84 feet Time: 1402 Depth to Water Before Pumping: 18.46 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch		Purge Factor	To Purge
9.38 feet	*	.16	(.65)	= 6.097 gal	* 5	= 30.49

Depth Purging From: 27 feet Time Surging Begins: 1410

Notes on Initial Discharge: GRAYISH, SILTY, SLIGHT ODOR

Time	Volume Purged	pH	Conductivity	T °C	Notes
1414	10-GAL	7.4	998	19.0	CLEAR, SLIGHT ODOR
1416	15-GAL	7.3	1014	18.8	CLEAR, SLIGHT ODOR
1418	20-GAL	7.3	1024	18.6	CLEAR, "
1420	25-GAL	7.3	1038	18.8	CLEAR "
1422	30-GAL	7.3	1046	18.8	CLEAR "

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1433

-	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.3	7.4	7.3	7.2
Conductivity	1109	1088	1088	1063
T°C	19.0	18.8	18.7	18.6

Pre-Sample Collection Gallons Purged: 30

Time Sample Collection Begins: 1438

Time Sample Collection Ends: 1443

Total Gallons Purged: 33

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 5641 8.00 Site: INGERSOLL-RAND Date: JUNE 21, 1994

Well # OB-1 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLEAR SKIES, WARM, WINDY, ~75°F

Describe Equipment D-Con Before Sampling This Well: WASH WITH SOAP AND TRIPLE RINSE

Total Depth of Well: 49.64 feet Time: 1458 Depth to Water Before Pumping: 19.56 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume	Purge Factor	To Purge
30.08	feet *	(.16)	.65 =	4.81 gal *	5	= 24.06

Depth Purging From: 45 feet Time Surging Begins: 1505

Notes on Initial Discharge: CLEAR, NO ODOR

Time	Volume Purged	pH	Conductivity	T°C	Notes
1506	5-GAL	7.6	872	19.4	CLEAR, NO ODOR
1510	10-GAL	7.5	956	19.2	CLEAR, NO ODOR
1512	15-GAL	7.5	1036	19.1	CLEAR, NO ODOR
1514	20-GAL	7.4	1054	19.0	CLEAR, NO ODOR
1516	25-GAL	7.4	1061	19.0	CLEAR, NO ODOR

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1526

	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.5	7.5	7.5	7.5
Conductivity	1120	1105	1098	1097
T°C	18.9	18.8	18.7	18.7

Pre-Sample Collection Gallons Purged: 25

Time Sample Collection Begins: 1533

Time Sample Collection Ends: 1538

Total Gallons Purged: 27

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 5618.00 Site: INGERSOLL-RAND Date: 6-20-94

Well # RW-1 Sampling Team: RICHARD SILVA

Sampling Method: _____

Field Conditions: _____

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 51.14 feet Time: 2:05 Depth to Water Before Pumping: 20.33 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume	Purge Factor	To Purge
_____	feet *	.16	.65	= _____ gal. *	_____	= _____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 6418.00 Site: INGERSOLL-RAND Date: 6-20-94

Well # OB-1 Sampling Team: RICHARD SILVA

Sampling Method: _____

Field Conditions: _____

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 49.82 feet Time: 2:10 Depth to Water Before Pumping: 19.48 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume		Purge Factor		To Purge
_____	feet *	.16	.65	= _____	gal *	_____	=	_____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 56418.00 Site: INGERSOLL-RAND Date: 6-20-94

Well # OB-2 Sampling Team: RICHARD SILVA

Sampling Method: _____

Field Conditions: _____

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 45.48 feet Time: 2:13 Depth to Water Before Pumping: 19.70 feet

Volume Height of Water Column: _____ feet *	Diameter 2-inch	Diameter 4-inch	= Volume	Purge Factor	To Purge
	.16	.65	_____ gal *	_____	= _____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 5-415.00 Site: INGERSOLL-RAND Date: 6-20-94

Well # OB-3 Sampling Team: RICHARD SILVA

Sampling Method: _____

Field Conditions: _____

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 49.88 feet Time: 217 Depth to Water Before Pumping: 20.08 feet

Volume Height of Water Column: _____ feet *	Diameter 2-inch	Diameter 4-inch	= Volume	* Purge Factor	= To Purge
	.16	.65	_____ gal	_____	_____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 5666.000 Site: INGERSOLL-RAND Date: 2-20-94

Well # MW-4 Sampling Team: RICHARD SILVA

Sampling Method: _____

Field Conditions: _____

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 28.06 feet Time: 2:20 Depth to Water Before Pumping: 18.42 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume		Purge Factor		To Purge
_____	feet *	.16	(.65)	= _____ gal	*	_____	=	_____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # CT.415.00 Site: INGERSOLL-RAND Date: 6-20-94

Well # MW-1 Sampling Team: RICHARD SILVA

Sampling Method: _____

Field Conditions: _____

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 19.08 feet Time: 7:27 Depth to Water Before Pumping: 12.96 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume		Purge Factor		To Purge
_____	feet *	.16	(.65)	= _____	gal *	_____	=	_____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

EWATER.TBL (11/21/88)

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 6141F.00 Site: INGERSOLL-RAND Date: 6-20-94

Well # MW-2 Sampling Team: RICHARD SILVA

Sampling Method: _____

Field Conditions: _____

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 14.70 feet Time: 2:33 Depth to Water Before Pumping: 13.80 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume		Purge Factor		To Purge
_____	feet *	.16	(.65)	= _____ gal	*	_____	=	_____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 5.0112.00 Site: INGERSOLL-RAND Date: 6-20-94

Well # MW-3 Sampling Team: RICHARD SILVA

Sampling Method: _____

Field Conditions: TRACE

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 20.38 feet Time: 239 Depth to Water Before Pumping: 16.23 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume		Purge Factor		To Purge
_____	feet *	.16	(.65)	= _____	gal *	_____	=	_____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

-	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 5418.00 Site: INGERSOLL RAND Date: 6-20-94

Well # VW-1 Sampling Team: RICHARD SILVA

Sampling Method: _____

Field Conditions: _____

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 17.44 feet Time: 249 Depth to Water Before Pumping: 16.18 feet

Volume Height of Water Column: _____ feet *	Diameter 2-inch	Diameter 4-inch	= Volume	Purge Factor	To Purge
	.16	(65)	_____ gal *	_____	= _____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 56416.00 Site: INGERSOLL-RAND Date: 6-20-94

Well # VW-2 Sampling Team: RICHARD SILVA

Sampling Method: _____

Field Conditions: _____

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 17.08 feet Time: 2:53 Depth to Water Before Pumping: 15.95 feet

Volume Height of Water Column: _____ feet *	Diameter 2-inch	Diameter 4-inch	Volume	Purge Factor	To Purge
	.16	(.65)	= _____ gal *	_____	= _____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 564180a Site: INGERSOLL-RAND Date: 6-20-94

Well # VW-4 Sampling Team: _____

Sampling Method: _____

Field Conditions: _____

Describe Equipment D-Con Before Sampling This Well: _____

Total Depth of Well: 20.54 feet Time: 3:11 Depth to Water Before Pumping: 19.18 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume		Purge Factor		To Purge
_____	feet *	.16	(.65)	= _____	gal *	_____	=	_____

Depth Purging From: _____ feet Time Surging Begins: _____

Notes on Initial Discharge: _____

Time	Volume Purged	pH	Conductivity	T	Notes

EWATER.TBL (11/21/88)

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: _____

	Rep #1	Rep #2	Rep #3	Rep #4
pH				
Conductivity				
T°C				

Pre-Sample Collection Gallons Purged: _____

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: _____

Comments: _____

APPENDIX B - October 1994 Analytical Results

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

FILE

COPY

December 9, 1994

1994

Mr. William Block
CAPSULE ENVIRONMENTAL ENGINEERING, INC.
1970 Oakcrest Avenue, Suite 213
St. Paul, Minnesota 55113-2624

Clayton Project No. 59125.00

Subject: Analytical results of monitoring wells at the Ingersoll-Rand facility in San Leandro, California

Dear Mr. Block:

Clayton Environmental Consultants, Inc. is pleased to present the enclosed analytical results for the groundwater sampling conducted on October 20, and 21, 1994 at the Ingersoll-Rand facility located at 1944 Marina Boulevard in San Leandro, California.

Groundwater samples were collected from wells MW-1, MW-2, MW-3, MW-4 and OB-1. Prior to sampling the static water depths were measured and 4 to 5 casing volumes of water were purged according to standard Clayton Sampling Protocol. Two Department of Transportation (DOT) approved 55-gallon drums were left onsite to store the purge water. Upon completion of well sampling a sample from the purge drums was collected to characterize the purge water.

Groundwater samples from monitoring wells MW-1, MW-2, MW-3, and MW-4, observation well OB-1, and the purged water DS-1 were analyzed using Environmental Protection Agency (EPA) Methods 8260 for volatile organic compounds (VOCs), EPA Method 8015 modified for gasoline, and EPA 8020 for benzene, toluene, ethylbenzene, and xylenes (BTEX). In addition, the purged water DS-1 was analyzed for reactivity, corrosivity, and ignitability (RCI).

Attachment 1 includes laboratory reports detailing the analyses conducted for water samples collected from monitoring wells MW-1, MW-2, MW-3, and MW-4, observation well OB-1, and for the purged water DS-1. Attachment 2 includes well field sampling forms describing the sampling of the wells. The sampling protocols used for sample collection is included in Attachment 3.

If you have any questions regarding the sampling event, please call me at (510) 426-2676 or Richard Silva at (510) 426-2670.

Sincerely,

John F. Vargas, R.G.
Supervisor, Geosciences and Remediation
Western Operations

REGISTERED GEOLOGIST
JOHN F. VARGAS
NO. 5046
STATE OF CALIFORNIA

JFV/rjs
Enclosures

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

December 20, 1994

Mr. William Block
CAPSULE ENVIRONMENTAL ENGINEERING, INC.
1970 Oakcrest Avenue, Suite 213
St. Paul, Minnesota 55113-2624

Clayton Project No. 59125.00

Subject: Analytical results of monitoring wells at the Ingersoll-Rand facility in San Leandro, California

Dear Mr. Block:

As we discussed in our telephone conversation, we have reviewed the analytical results for the two sampling events at the Ingersoll-Rand facility. This site was sampled by Clayton on June 21, 1994 and October 20 and 21, 1994. Two issues were noted during our review. These issues are discussed below.

The detection limit for the analyte 2-Butonone in well MW-1, sampled in October, was reported as 5 µg/L, however the detection limit for 2-butonone in the other wells was reported as 20 µg/L. The detection limit was reported in error for well MW-1. Attached to this letter is a revised report for well MW-1. Please insert these results into the previous report.

The detection limits for well MW-4, sampled in June, were higher than those reported in October. The detection limits, reported in June and October, were the same for the other wells. There are two factors which contributed to the higher detection limits for well MW-4. Firstly, the available sample volume transported to Clayton's laboratory was half that collected. As you may recall the sample was split for comparison with another laboratory. In addition, the concentrations of several constituents in the sample from well MW-4 was significantly higher than the other wells. These two factors contributed to a higher dilution factor for well MW-4 and resulted in higher detection limits. Please note that the higher dilution factor was noted on the analytical report on page 13.

Acetone was detected in the samples, collected in October, from wells MW-3 and MW-4 at concentrations of 50 and 160 µg/L. Acetone was not detected in the samples collected in June. It is possible that the acetone is a laboratory contaminant. We are rerunning the samples to evaluate this possibility. We will forward the results to you as soon as we receive them.

If you have any further questions regarding the sampling event, please call me at (510) 426-2676.

Sincerely,

John F. Vargas, R.G.
Supervisor, Geosciences and Remediation
Western Operations

JFV/jfv
Attachment

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59129.00
Clayton Project No. 94102.69

Sample Identification:	MW-1	Date Sampled:	10/20/94
Lab Number:	9410269-01A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59129.00
Clayton Project No. 94102.69

Sample Identification:	MW-1	Date Sampled:	10/20/94
Lab Number:	9410269-01A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	11	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59129.00
Clayton Project No. 94102.69

Sample Identification:	MW-1	Date Sampled:	10/20/94
Lab Number:	9410269-01A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	97	74 - 121
Dibromofluoromethane	1868-53-7	93	80 - 120
Toluene-d8	2037-26-5	102	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 1 of 1
Project No.	
Batch No. 9410295	
Ind. Code	W.P.
Date Logged In 10/21/94	By KI

REPORT RESULTS TO

Name: JOHN VARGAS | Title:
Company: CLAYTON | Dept.:
Mailing Address:
City, State, Zip:
Telephone No.: | Telefax No.:

SEND INVOICE TO

Purchase Order No.: | Client Job No.:
Name:
Company: INGERSOLL-RAND | Dept.:
Address:
City, State, Zip:

Date Results Req.: NORMAL TAT | Rush Charges Authorized? ☐ Yes ☒ No | Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative: P = HCl

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	EPA 8260	GAS/BTEX	HOLD	FOR LAB USE ONLY
VB-1	10-21-94	H2O	40 mLs	2	XP			01A,B
OB-1	"	"	40 mLs	2		XP		02
DS-1	"	"	40 mLs	2	XP			03
DS-1	"	"	40 mLs	2		XP		04
TRIP BLANK #C1CC294	"	"	40 mLs	1			XP	05 A

CHAIN OF CUSTODY

Collected by: RICHARD SILVA (print) | Collector's Signature: Richard Silva
Relinquished by: Richard Silva | Date/Time 10-21-94/1810 | Received by: Carol Hammerberg | Date/Time 10/21/94 6:10pm
Relinquished by: | Date/Time | Received at Lab by: | Date/Time
Method of Shipment:

Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive
Novi, MI 48375
(313) 344-1770

Raritan Center
160 Fieldcrest Ave.
Edison, NJ 08837
(908) 225-6040

400 Chastain Center Blvd., N.W.
Suite 490
Kennesaw, GA 30144
(404) 499-7500

1252 Quarry Lane
Pleasanton, CA 94566
(510) 426-2657

2/92

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

ATTACHMENT 2

FIELD SAMPLING SURVEY FORMS

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 59125.00 Site: [illegible] RANCH Date: OCTOBER 4, 1994

Well # MW-4 Sampling Team: RICARDO SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: PARTLY CLOUDY, COOL, SLIGHT BREEZE

Describe Equipment D-Con Before Sampling This Well: SUBMERSIBLE PUMP WAS WASHED WITH DETERGENT AND TRIPLE RINSED

Total Depth of Well: 18.80 feet Time: 1000 Depth to Water Before Pumping: 13.84 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch		Volume		Purge Factor		To Purge
4.96	feet *	.16	.65	=	3.22	gal *	5	=	16.10

Depth Purging From: 18 feet Time Surging Begins: 1005

Notes on Initial Discharge: BROWNISH, SILTY, NO ODOR

Time	Volume Purged	pH	Conductivity	T	Notes
1008	4-GAL	8.2	595	17.7	CLEAR
1011	8-GAL	8.0	573	17.6	CLEAR, PURGED DRY
1033	12-GAL	8.2	541	17.7	CLEAR
1036	16-GAL	8.1	534	17.5	CLEAR, PURGED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1100

	Rep #1	Rep #2	Rep #3	Rep #4
pH	8.2	8.2	8.2	8.1
Conductivity	515	516	513	516
T°C	17.2	17.5	17.5	17.5

Pre-Sample Collection Gallons Purged: 16

Time Sample Collection Begins: 1105

Time Sample Collection Ends: 1109

Total Gallons Purged: 18

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 59125.00 Site: [illegible] Date: [illegible]

Well # MW-2 Sampling Team: [illegible] SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLEAR SKIES, COOL, SLIGHT BREEZE

Describe Equipment D-Con Before Sampling This Well: SUBMERSIBLE PUMP WAS WASHED WITH DETERGENT THEN TRIPLE RINSED

Total Depth of Well: 20.15 feet Time: 1122 Depth to Water Before Pumping: 14.31 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch		Volume		Purge Factor		To Purge
5.84	feet *	.16	(.65)	=	3.8C	gal *	5	=	19.0

Depth Purging From: 19 feet Time Surging Begins: 1138

Notes on Initial Discharge: BROWNISH, SILTY, NO ODOR

Time	Volume Purged	pH	Conductivity	T	Notes
1141	5-GAL	7.5	977	20.4	PURGED DRY BROWNISH, SILTY
1144	10-GAL	7.1	97C	20.7	CLEAR
1147	15-GAL	7.2	969	20.8	PURGED CLEAR, DRY
1150	20-GAL	7.0	961	20.6	CLEAR

EWATER.TBL (11/21/88)

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1200

	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.6	7.6	7.6	7.6
Conductivity	918	922	930	929
T°C	20.1	20.2	20.3	20.2

Pre-Sample Collection Gallons Purged: 20

Time Sample Collection Begins: 1205

Time Sample Collection Ends: 1210

Total Gallons Purged: 22

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 59125.00 Site: INGERSOLL RAND Date: OCTOBER 20, 1994

Well # MW-5 Sampling Team: RICHARD SILLA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLEAR SKIES, WARM, SLIGHT BREEZE

Describe Equipment D-Con Before Sampling This Well: SUBMERSIBLE PUMP WAS WASHED WITH DETERGENT AND TRIPLE RINSED

Total Depth of Well: 20.20 feet Time: 1430 Depth to Water Before Pumping: 16.82 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch		Volume		Purge Factor		To Purge
3.38	feet *	.16	(.65)	=	2.20	gal *	5	=	11.0

Depth Purging From: 20 feet Time Surging Begins: 1416

Notes on Initial Discharge: BLACKISH, SILTY, SLIGHT ODOR

Time	Volume Purged	pH	Conductivity	T	Notes
1419	3-GAL	7.4	734	20.7	CLEAR
1426	6-GAL	7.3	736	20.4	CLEAR, PURGED DRY
1452	9-GAL	7.5	717	20.6	CLEAR
1457	12-GAL	7.4	726	20.4	CLEAR, PURGED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1505

	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.7	7.7	7.7	7.7
Conductivity	703	703	703	697
T°C	20.3	20.4	20.3	20.3

Pre-Sample Collection Gallons Purged: 12

Time Sample Collection Begins: 1510

Time Sample Collection Ends: 1515

Total Gallons Purged: 14

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 59125.00 Site: INGERSOLL-RAND Date: OCTOBER 20, 1994

Well # MW-4 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLEAR SKIES, WARM, SLIGHT BREEZE

Describe Equipment D-Con Before Sampling This Well: SUBMERSIBLE PUMP WAS WASHED WITH DETERGENT AND TRIPLE RINSED

Total Depth of Well: 27.66 feet Time: 1255 Depth to Water Before Pumping: 19.20 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch		Purge Factor		To Purge
8.66	feet *	.16	(.65)	= 5.63 gal *	5	=	28.15

Depth Purging From: 27 feet Time Surging Begins: 1301

Notes on Initial Discharge: GRAYISH, SILTY, SLIGHT ODOR

Time	Volume Purged	pH	Conductivity	T	Notes
1304	5-GAL	6.8	789	19.3	CLEAR
1309	10-GAL	7.7	798	19.4	CLEAR
1311	15-GAL	7.6	801	19.3	CLEAR
1314	20-GAL	7.6	825	19.1	CLEAR
1317	25-GAL	7.6	811	19.1	LGT-GRAY, MURKY
1321	30-GAL	7.6	822	19.1	LGT-GRAY, MURKY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1331

	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.6	7.6	7.6	7.5
Conductivity	872	869	870	869
T°C	19.4	19.2	19.1	19.1

Pre-Sample Collection Gallons Purged: 30

Time Sample Collection Begins: 1335

Time Sample Collection Ends: 1340

Total Gallons Purged: 32

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 27125.00 Site: INGERSOLL-RAND Date: OCTOBER 24, 1994

Well # 013-1 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLEAR, SLIGHT OIL, LIGHT BREEZE

Describe Equipment D-Con Before Sampling This Well: SUBMERSIBLE PUMP WAS WASHED WITH DETERGENT AND TRIPLE RINSED

Total Depth of Well: 49.58 feet Time: 1135 Depth to Water Before Pumping: 20.28 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch		Purge Factor	To Purge
29.3 feet *	(16)	.65	= 4.69 gal *	5	=	23.45

Depth Purging From: 40 feet Time Surging Begins: 1145

Notes on Initial Discharge: CLEAR, NO ODOR

Time	Volume Purged	pH	Conductivity	T	Notes
1147	5-GAL	8.0	786	19.0	CLEAR
1149	10-GAL	8.0	766	18.9	CLEAR
1152	15 GAL	7.9	802	18.9	CLEAR
1155	20 GAL	7.9	813	18.9	CLEAR
1156	25 GAL	7.9	821	18.9	CLEAR

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1205

	Rep #1	Rep #2	Rep #3	Rep #4
pH	7.8	7.7	7.7	7.7
Conductivity	824	831	834	837
T°C	18.9	18.9	18.9	18.8

Pre-Sample Collection Gallons Purged: 25

Time Sample Collection Begins: 1210

Time Sample Collection Ends: 1215

Total Gallons Purged: 27

Comments: _____

ATTACHMENT 3

DRILLING, WELL CONSTRUCTION, AND SAMPLING PROTOCOLS FOR BOREHOLE/MONITORING WELL INSTALLATION

DRILLING, WELL CONSTRUCTION, AND SAMPLING PROTOCOLS FOR BOREHOLE/MONITORING WELL INSTALLATION

BOREHOLE INSTALLATION

Clayton Environmental Consultants, Inc. acquires the proper governmental agency permits to bore, drill, or destroy all proposed boreholes and monitoring wells that intersect with groundwater aquifers and writes a health and safety plan.

Clayton subcontracts only with drillers who possess a current C-57 water well contractor's license issued by the State of California and whose personnel have attended the OSHA 40-hour Hazardous Materials Safety Training. Prior to starting work, a "tailgate" safety meeting including discussion of the safety hazards and precautions relevant to the particular job will be held with all personnel working on the job. Well drillers are identified on permit applications.

Borings are drilled dry by hollow- or solid-stem, continuous flight augers. Augers, drill rods, and other working components of the drilling rig are steam-cleaned before arriving onsite to prevent the introduction of contaminants. These components are also steam-cleaned between borings away from boring locations. Cleaned augers, rods, and other components are stored, and/or covered when not in use.

Our bore logs include a detailed description of subsurface stratigraphy. Clayton examines the soil brought to the surface by drilling operations, and samples undisturbed soil every 5 feet or as otherwise specified. Soil cuttings are screened for hydrocarbon contamination using a photoionization detector. Boring logs are filled out in the field by a professional geologist, civil engineer, engineering geologist who is registered by the State of California, or a technician who is trained and working under the supervision of one of the previously mentioned persons, using the Unified Soil Classification System.

SOIL SAMPLING

Soil samples are taken every 5 feet, at areas of obvious contamination, or as otherwise specified, with a California modified split-spoon sampler that is lined with three six-inch brass tubes. The sampler and rod are inserted into the borehole to the current depth and a hammer of known weight and height above the sampler are allowed to free-fall onto the rod, advancing the assembly 18 inches into undisturbed soil. Clayton uses the number of blows necessary to drive the sampler into the ground to help evaluate the consistency of materials encountered. The sampler is then pulled from the borehole and disassembled, and the three brass tubes are separated for inspection and labeling.

Clayton uses new brass liners or liners cleaned with a trisodium phosphate (TSP) solution, double rinsed with clean tap water, and air dried prior to each sampling. The sampler is also cleaned with TSP and rinsed with tap water between sampling events.

Soil samples selected for laboratory analysis are left in the brass liners, sealed with aluminum foil and plastic caps, taped for air tightness, labeled, and immediately placed into a pre-cooled ice chest chilled to less than 4°C. Labels contain the following information: site name, date and time sampled, borehole number and depth, and the sampler's initials. The samples are transported under chain-of-custody to a state-certified laboratory. The laboratory analyzes soil samples within the prescribed holding time, storing them at temperatures below 4°C at all times.

Pending results of laboratory analysis, excess drilling and sampling cuttings are placed into Department of Transportation (DOT)-approved drums, labeled with the name of the site, address, and well number, and left at the site. Uncontaminated soil may be disposed of by the client. Soil found to contain levels of contaminants above local or state action levels will require that the client dispose of it in accordance with hazardous waste regulations. At the client's request, we will assist with the disposal of contaminated soil.

WELL CONSTRUCTION

Boreholes are converted to monitoring wells by placing 2-inch or 4-inch diameter well casing with flush-threaded joints and slotted screen into the borehole. Construction materials include polyvinyl chloride (PVC), stainless steel, or low carbon steel. The most suitable material for a particular installation will depend on the parameters to be monitored. All screens and casings used are in a contaminant-free condition when placed in the ground. No thread lubrication is used, other than teflon tape, for connecting the casing segments.

Wells extend at least 10 feet into the upper saturated zone, but do not extend through any clay layers greater than 5 feet that are below the shallow water table. The standard practice for wells installed at hydrocarbon contamination sites is to construct a well with a 20-foot long perforated interval extending 15 feet below and 5 feet above the water table in an unconfined aquifer. The top of the well is solid casing. The annular space of the borehole is backfilled with washed, kiln-dried sand to a point at least 1 foot above the slotted screen. A seal above the filter pack is formed by placing a 1- to 2-foot layer of bentonite pellets on top of the sand. The bentonite pellets are moistened by pouring clean tap water down the hole so that they can expand and seal the annulus. A neat cement grout is placed above the bentonite seal and brought to the ground surface.

Well casings are protected from surface contamination, accidental damage, and unauthorized entry or tampering with water-tight locking caps on the well casings. The caps are usually surrounded by a concrete vault. Wells are clearly identified with a metal tag or other device where the following information is recorded: well number, depth to water, depth of well, casing data including location of screened interval.

WELL DEVELOPMENT

The well seal in newly developed wells must set up for 48 to 72 hours prior to development. Since development of the well can volatilize contaminants present, the well must also settle for at least 48 to 72 hours between development and the first purging/sampling incident.

All monitoring wells are initially developed to clean the well and stabilize sand, gravel, and disturbed aquifer materials around the screened internal perforations. Wells are developed by

pumping (or bailing) and surging until water turbidity and specific conductance stabilize. In some cases, where wells are installed in low permeability formations and the wells purge dry, the well is allowed to recover and is purged dry three times. Clean tap water is introduced into the well if it does not recover rapidly enough.

Pending results by laboratory analysis, purge water from well development and sampling is placed into DOT-approved drums, labeled with the name of the site, address, well number, and left at the site. Uncontaminated water may be disposed of by the client. Water found to contain levels of contaminants above local or state action levels requires that the client dispose of it in accordance with hazardous waste requirements. At the client's request, we can assist with the disposal of contaminated purge water.

GROUNDWATER SAMPLING

To collect a representative sample of the groundwater, stagnant water within the well casing and filter material must be purged and fresh aquifer water allowed to replace it. The water is purged from the well by pumping or bailing at least three well volumes. Well volumes are calculated by measuring depth to groundwater to the nearest 0.01 foot upon arrival at the well before any purging has begun. Groundwater samples are collected only after purging has been of sufficient duration for pH, temperature, and electrical conductivity to stabilize. When purging low-yield wells, the wells are purged to dryness. When the well recovers to 80% of the depth measured upon arrival, samples are collected.

Field sampling logs maintained for each well include:

- Monitoring well identification
- Static water level, before and after pumping
- Well depth
- Condition of water prior to purging (e.g., amount of free product)
- Purge rate and volume
- pH, temperature, and conductivity during purging
- Time purged
- Time of sample collection
- Sampling method
- Name of sampler
- Climatic conditions

Water samples are collected using clean teflon bailers. All equipment that contacts samples is thoroughly cleaned before arrival at the site and between sampling events.

Water is collected in clean laboratory-supplied containers, labeled, placed immediately into an ice chest pre-cooled to 4°C, and transported to Clayton's laboratory for analysis. One trip blank will be furnished in accordance with our quality assurance/quality control (QA/QC) program.

All samples are collected in such a manner so as to minimize the volatilization of a sample due to agitation and/or transfer from bailer to sample container. Samples are collected so that contaminants most sensitive to volatilization are sampled first.

Preservatives are not added to any sample, unless instructed. If requested, they are supplied by Clayton's laboratory.

All sample containers are labeled in the field. Labels contain the following information: project name, sample identification number, project number, date and time of collection, and sampler's initials.

Under no circumstances are sealed sample containers opened by anyone other than the laboratory personnel who perform the requested analyses. If it is necessary for samples or sample chests to leave the immediate control of the sampler prior to delivery to the laboratory, for example during shipment by an overnight shipper, a custody seal is placed on each sample container and/or sample chest to ensure that the samples have not been tampered with during transportation. The custody seal is signed by the sampler, and the date and time that the seal was placed is recorded. The elapsed time between sample collection and delivery to the laboratory never exceeds 48 hours. Water samples are not held for more than 14 days prior to analysis and are kept at 4°C at all times.

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Western Operations

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P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

December 20, 1994

Mr. William Block
CAPSULE ENVIRONMENTAL ENGINEERING, INC.
1970 Oakcrest Avenue, Suite 213
St. Paul, Minnesota 55113-2624

Clayton Project No. 59125.00

Subject: Analytical results of monitoring wells at the Ingersoll-Rand facility in San Leandro, California

Dear Mr. Block:

As we discussed in our telephone conversation, we have reviewed the analytical results for the two sampling events at the Ingersoll-Rand facility. This site was sampled by Clayton on June 21, 1994 and October 20 and 21, 1994. Two issues were noted during our review. These issues are discussed below.

The detection limit for the analyte 2-Butonone in well MW-1, sampled in October, was reported as 5 µg/L, however the detection limit for 2-butonone in the other wells was reported as 20 µg/L. The detection limit was reported in error for well MW-1. Attached to this letter is a revised report for well MW-1. Please insert these results into the previous report.

The detection limits for well MW-4, sampled in June, were higher than those reported in October. The detection limits, reported in June and October, were the same for the other wells. There are two factors which contributed to the higher detection limits for well MW-4. Firstly, the available sample volume transported to Clayton's laboratory was half that collected. As you may recall the sample was split for comparison with another laboratory. In addition, the concentrations of several constituents in the sample from well MW-4 was significantly higher than the other wells. These two factors contributed to a higher dilution factor for well MW-4 and resulted in higher detection limits. Please note that the higher dilution factor was noted on the analytical report on page 13.

Acetone was detected in the samples, collected in October, from wells MW-3 and MW-4 at concentrations of 50 and 160 µg/L. Acetone was not detected in the samples collected in June. It is possible that the acetone is a laboratory contaminant. We are rerunning the samples to evaluate this possibility. We will forward the results to you as soon as we receive them.

If you have any further questions regarding the sampling event, please call me at (510) 426-2676.

Sincerely,

John F. Vargas, R.G.
Supervisor, Geosciences and Remediation
Western Operations

JFV/jfv
Attachment

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59129.00
Clayton Project No. 94102.69

Sample Identification:	MW-1	Date Sampled:	10/20/94
Lab Number:	9410269-01A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59129.00
Clayton Project No. 94102.69

Sample Identification:	MW-1	Date Sampled:	10/20/94
Lab Number:	9410269-01A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	11	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59129.00
Clayton Project No. 94102.69

Sample Identification:	MW-1	Date Sampled:	10/20/94
Lab Number:	9410269-01A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	97	74 - 121
Dibromofluoromethane	1868-53-7	93	80 - 120
Toluene-d8	2037-26-5	102	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

January 6, 1995

Mr. William V. Block
Process Chemist
CAPSULE ENVIRONMENTAL ENGINEERING, INC.
1970 Oakcrest Avenue, Suite 215
St. Paul, MN 55113-2624

Clayton Project No. 59125.00

Dear Mr. Block:

Clayton Environmental Consultants, Inc. is pleased to submit the revised analytical reports for the groundwater samples collected on October 20 and 21, 1994. Initially acetone was identified in the groundwater samples from monitoring wells MW-3 and MW-4. However, subsequent review of the analytical results indicated that acetone was not detected in the groundwater samples, and the reported acetone in the initial report was due to a laboratory error.

Thank you for the opportunity to provide these sampling services. If you have any questions, please call me at (510) 426-2676.

Sincerely,

John F. Vargas, R.G.
Supervisor, Geosciences and Remediation
Western Operations

JFV/jfv

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

December 22, 1994

Mr. John Vargas
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.
1252 Quarry Lane
Pleasanton, CA 94566

REVISED REPORT
Client Ref.: 59125.00
Clayton Project No.: 94102.69

Dear Mr. Vargas:

Attached is our revised analytical laboratory report for the samples received on October 20, 1994 and originally reported on November 3, 1994. Results for Acetone have been revised for samples MW-3 and MW-4. Due to a laboratory error, this compound was misidentified.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
Western Operations

HAH/caa

Attachments

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-1	Date Sampled:	10/20/94
Lab Number:	9410269-01A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-1	Date Sampled:	10/20/94
Lab Number:	9410269-01A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	11	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-1	Date Sampled:	10/20/94
Lab Number:	9410269-01A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	97	74 - 121
Dibromofluoromethane	1868-53-7	93	80 - 120
Toluene-d8	2037-26-5	102	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-2	Date Sampled:	10/20/94
Lab Number:	9410269-02A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-2	Date Sampled:	10/20/94
Lab Number:	9410269-02A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	6	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-2	Date Sampled:	10/20/94
Lab Number:	9410269-02A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	113	74 - 121
Dibromofluoromethane	1868-53-7	94	80 - 120
Toluene-d8	2037-26-5	102	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-3	Date Sampled:	10/20/94
Lab Number:	9410269-03A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	9	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	13	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	19	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	64	5
1,3-Dichlorobenzene	541-73-1	9	5
1,4-Dichlorobenzene	106-46-7	18	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-3	Date Sampled:	10/20/94
Lab Number:	9410269-03A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	90	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	20	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	29	5
n-Propylbenzene	103-65-1	43	5
sec-Butylbenzene	135-98-8	6	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-3	Date Sampled:	10/20/94
Lab Number:	9410269-03A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	150	5
1,3,5-Trimethylbenzene	108-67-8	46	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	68	5
p,m-Xylenes	--	140	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	114	74 - 121
Dibromofluoromethane	1868-53-7	96	80 - 120
Toluene-d8	2037-26-5	100	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-4	Date Sampled:	10/20/94
Lab Number:	9410269-04A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	260	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	17	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	7	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	12	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-4	Date Sampled:	10/20/94
Lab Number:	9410269-04A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	240	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	66	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	96	5
n-Propylbenzene	103-65-1	78	5
sec-Butylbenzene	135-98-8	8	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	34	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	27	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-4	Date Sampled:	10/20/94
Lab Number:	9410269-04A	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/28/94
Preparation Method:	EPA 5030	Date Analyzed:	10/28/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	300	5
1,3,5-Trimethylbenzene	108-67-8	100	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	110	5
p,m-Xylenes	--	330	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	118	74 - 121
Dibromofluoromethane	1868-53-7	89	80 - 120
Toluene-d8	2037-26-5	97	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9410269-07A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	10/27/94
Preparation Method:	EPA 5030	Date Analyzed:	10/27/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	20
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9410269-07A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	10/27/94
Preparation Method:	EPA 5030	Date Analyzed:	10/27/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9410269-07A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	10/27/94
Preparation Method:	EPA 5030	Date Analyzed:	10/27/94
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	96	74 - 121
Dibromofluoromethane	1868-53-7	93	80 - 120
Toluene-d8	2037-26-5	100	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-1	Date Sampled:	10/20/94
Lab Number:	9410269-01C	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/31/94
Preparation Method:	EPA 5030	Date Analyzed:	10/31/94
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	76	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-2	Date Sampled:	10/20/94
Lab Number:	9410269-02C	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/31/94
Preparation Method:	EPA 5030	Date Analyzed:	10/31/94
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	90	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-3	Date Sampled:	10/20/94
Lab Number:	9410269-03C	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/31/94
Preparation Method:	EPA 5030	Date Analyzed:	10/31/94
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	8.9	0.4
Ethylbenzene	100-41-4	96	0.3
Toluene	108-88-3	4.4	0.3
o-Xylene	95-47-6	69	0.4
p,m-Xylenes	--	160	0.4
Gasoline	--	2600	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	112	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	MW-4	Date Sampled:	10/20/94
Lab Number:	9410269-04C	Date Received:	10/20/94
Sample Matrix/Media:	WATER	Date Prepared:	10/31/94
Preparation Method:	EPA 5030	Date Analyzed:	10/31/94
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	360	0.4
Ethylbenzene	100-41-4	270	0.3
Toluene	108-88-3	33	0.3
o-Xylene	95-47-6	120	0.4
p,m-Xylenes	--	520	0.4
Gasoline	--	7800	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	102	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9410269-07A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	10/31/94
Preparation Method:	EPA 5030	Date Analyzed:	10/31/94
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	90	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification: COMPOSITE DRUM SAMPLE DS-1
Lab Number: 9410269-06
Sample Matrix/Media: WATER

Date Sampled: 10/20/94
Date Received: 10/20/94

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Flash Point	>200	--	Degrees F	--	10/31/94	--	EPA 1010
Reactive Cyanide	<0.1	0.1	mg/L	--	11/01/94	--	EPA 335.2
Reactive Sulfide	<10	10	mg/L	--	11/02/94	--	SW 7.3.4.2
pH	7.2	--	S.U.	--	10/20/94	--	EPA 150.1

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59125.00
Clayton Project No. 94102.69

Sample Identification: METHOD BLANK
Lab Number: 9410269-07
Sample Matrix/Media: WATER

Date Sampled: --
Date Received: --

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Reactive Cyanide	<0.1	0.1	mg/L	--	11/01/94	--	EPA 335.2
Reactive Sulfide	<10	10	mg/L	--	11/02/94	--	SW 7.3.4.2

ND: Not detected at or above limit of detection
--: Information not available or not applicable

APPENDIX C - January 1995 Analytical Results

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

FILE
ID#:
SERVICE:
BG, CF, CO, MT, PL
CORRESPONDENCE:

February 13, 1995

Mr. Jay S. Mattsfield
CAPSULE ENVIRONMENTAL ENGINEERING, INC.
1970 Oakcrest Avenue, Suite 213
St. Paul, Minnesota 55113-2624

Clayton Project No. 60899.03

Subject: Analytical results of monitoring wells at the Ingersoll-Rand facility in San Leandro, California

Dear Mr. Block:

Clayton Environmental Consultants, Inc. is pleased to present the enclosed analytical results for the groundwater sampling conducted on January 25, 1995 at the Ingersoll-Rand facility located at 1944 Marina Boulevard in San Leandro, California.

Groundwater samples were collected from wells MW-1, MW-2, MW-3, MW-4 and OB-1. Prior to sampling the static water depths were measured and 4 to 5 casing volumes of water were purged according to standard Clayton Sampling Protocol. Two Department of Transportation (DOT) approved 55-gallon drums were left onsite to store the purge water. Upon completion of well sampling a sample from the purge drums was collected to characterize the purge water.

Groundwater samples from monitoring wells MW-1, MW-2, MW-3, and MW-4, observation well OB-1, and the purged water DC-1 were analyzed using Environmental Protection Agency (EPA) Methods 8260 for volatile organic compounds (VOCs), EPA Method 8015 modified for gasoline, and EPA 8020 for benzene, toluene, ethylbenzene, and xylenes (BTEX). In addition, the purged water DC-1 was analyzed for reactivity, corrosivity, and ignitability (RCI).

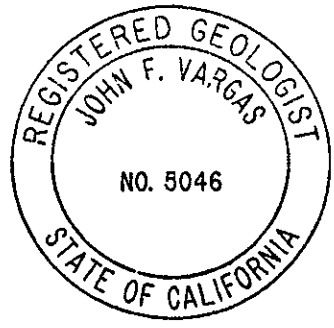
Attachment 1 includes laboratory reports detailing the analyses conducted for water samples collected from monitoring wells MW-1, MW-2, MW-3, and MW-4, observation well OB-1, and for the purged water DC-1. Attachment 2 includes well field sampling forms describing the sampling of the wells. The sampling protocols used for sample collection is included in Attachment 3.

If you have any questions regarding the sampling event, please call me at (510) 426-2676 or Richard Silva at (510) 426-2670.

Sincerely,

John F. Vargas, R.G.
Supervisor, Geosciences and Remediation
Western Operations

JFV/rjs
Enclosures



ATTACHMENT 1

ANALYTICAL RESULTS

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

February 8, 1995

Mr. John Vargas
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.
1252 Quarry Lane
Pleasanton, CA 94566

Client Ref.: 56418.00
Clayton Project No.: 95012.73

Dear Mr. Vargas:

Attached is our analytical laboratory report for the samples received on January 25, 1995. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after March 10, 1995, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/caa

Attachments

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-1	Date Sampled:	01/25/95
Lab Number:	9501273-01A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	5
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-1	Date Sampled:	01/25/95
Lab Number:	9501273-01A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	16	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-1	Date Sampled:	01/25/95
Lab Number:	9501273-01A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	99	74 - 121
Dibromofluoromethane	1868-53-7	101	80 - 120
Toluene-d8	2037-26-5	98	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-2	Date Sampled:	01/25/95
Lab Number:	9501273-02A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	5
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-2	Date Sampled:	01/25/95
Lab Number:	9501273-02A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-2	Date Sampled:	01/25/95
Lab Number:	9501273-02A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	97	74 - 121
Dibromofluoromethane	1868-53-7	104	80 - 120
Toluene-d8	2037-26-5	99	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-3	Date Sampled:	01/25/95
Lab Number:	9501273-03A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	100
Benzene	71-43-2	970	30
Bromobenzene	108-86-1	ND	30
Bromochloromethane	74-97-5	ND	30
Bromodichloromethane	75-27-4	ND	30
Bromoform	75-25-2	ND	30
Bromomethane	74-83-9	ND	30
2-Butanone	78-93-3	ND	100
n-Butylbenzene	104-51-8	ND	30
Carbon disulfide	75-15-0	ND	30
Carbon tetrachloride	56-23-5	ND	30
Chlorobenzene	108-90-7	ND	30
Chloroethane	75-00-3	ND	30
Chloroform	67-66-3	ND	30
Chloromethane	74-87-3	ND	30
2-Chlorotoluene	95-49-8	ND	30
4-Chlorotoluene	106-43-4	ND	30
Dibromochloromethane	124-48-1	ND	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	30
1,2-Dibromoethane	106-93-4	ND	30
Dibromomethane	74-95-3	ND	30
1,2-Dichlorobenzene	95-50-1	ND	30
1,3-Dichlorobenzene	541-73-1	ND	30
1,4-Dichlorobenzene	106-46-7	ND	30
Dichlorodifluoromethane	75-71-8	ND	30
1,1-Dichloroethane	75-34-3	ND	30
1,2-Dichloroethane	107-06-2	ND	30
1,1-Dichloroethene	75-35-4	ND	30
cis-1,2-Dichloroethene	156-59-2	ND	30
trans-1,2-Dichloroethene	156-60-5	ND	30

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-3	Date Sampled:	01/25/95
Lab Number:	9501273-03A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	30
1,3-Dichloropropane	142-28-9	ND	30
2,2-Dichloropropane	594-20-7	ND	30
1,1-Dichloropropene	563-58-6	ND	30
cis-1,3-dichloropropene	10061-01-5	ND	30
trans-1,3-dichloropropene	10061-02-6	ND	30
Ethylbenzene	100-41-4	80	30
Freon 113	76-13-1	ND	30
Hexachlorobutadiene	87-68-3	ND	30
2-Hexanone	591-78-6	ND	100
Isopropylbenzene	98-82-8	ND	30
p-Isopropyltoluene	99-87-6	ND	30
Methylene chloride	75-09-2	ND	30
4-Methyl-2-pentanone	108-10-1	ND	100
Naphthalene	91-20-3	100	30
n-Propylbenzene	103-65-1	ND	30
sec-Butylbenzene	135-98-8	ND	30
Styrene	100-42-5	ND	30
tert-Butylbenzene	98-06-6	ND	30
1,1,1,2-Tetrachloroethane	630-20-6	ND	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	30
Tetrachloroethene	127-18-4	ND	30
Toluene	108-88-3	410	30
1,2,3-Trichlorobenzene	87-61-6	ND	30
1,2,4-Trichlorobenzene	120-82-1	ND	30
1,1,1-Trichloroethane	71-55-6	ND	30
1,1,2-Trichloroethane	79-00-5	ND	30
Trichloroethene	79-01-6	ND	30
Trichlorofluoromethane	75-69-4	ND	30
1,2,3-Trichloropropane	96-18-4	ND	30

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-3	Date Sampled:	01/25/95
Lab Number:	9501273-03A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	350	30
1,3,5-Trimethylbenzene	108-67-8	80	30
Vinyl acetate	108-05-4	ND	50
Vinyl chloride	75-01-4	ND	30
o-Xylene	95-47-6	820	30
p,m-Xylenes	--	1000	30
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	98	74 - 121
Dibromofluoromethane	1868-53-7	101	80 - 120
Toluene-d8	2037-26-5	97	81 - 117

ND: Not detected at or above limit of detection
-: Information not available or not applicable

Note: Detection limits increased due to dilution necessary for quantitation.

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-4	Date Sampled:	01/25/95
Lab Number:	9501273-04A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	100
Benzene	71-43-2	400	30
Bromobenzene	108-86-1	ND	30
Bromochloromethane	74-97-5	ND	30
Bromodichloromethane	75-27-4	ND	30
Bromoform	75-25-2	ND	30
Bromomethane	74-83-9	ND	30
2-Butanone	78-93-3	ND	100
n-Butylbenzene	104-51-8	ND	30
Carbon disulfide	75-15-0	ND	30
Carbon tetrachloride	56-23-5	ND	30
Chlorobenzene	108-90-7	ND	30
Chloroethane	75-00-3	ND	30
Chloroform	67-66-3	ND	30
Chloromethane	74-87-3	ND	30
2-Chlorotoluene	95-49-8	ND	30
4-Chlorotoluene	106-43-4	ND	30
Dibromochloromethane	124-48-1	ND	30
1,2-Dibromo-3-chloropropane	96-12-8	ND	30
1,2-Dibromoethane	106-93-4	ND	30
Dibromomethane	74-95-3	ND	30
1,2-Dichlorobenzene	95-50-1	ND	30
1,3-Dichlorobenzene	541-73-1	ND	30
1,4-Dichlorobenzene	106-46-7	ND	30
Dichlorodifluoromethane	75-71-8	ND	30
1,1-Dichloroethane	75-34-3	ND	30
1,2-Dichloroethane	107-06-2	ND	30
1,1-Dichloroethene	75-35-4	ND	30
cis-1,2-Dichloroethene	156-59-2	ND	30
trans-1,2-Dichloroethene	156-60-5	ND	30

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-4	Date Sampled:	01/25/95
Lab Number:	9501273-04A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	30
1,3-Dichloropropane	142-28-9	ND	30
2,2-Dichloropropane	594-20-7	ND	30
1,1-Dichloropropene	563-58-6	ND	30
cis-1,3-dichloropropene	10061-01-5	ND	30
trans-1,3-dichloropropene	10061-02-6	ND	30
Ethylbenzene	100-41-4	420	30
Freon 113	76-13-1	ND	30
Hexachlorobutadiene	87-68-3	ND	30
2-Hexanone	591-78-6	ND	100
Isopropylbenzene	98-82-8	40	30
p-Isopropyltoluene	99-87-6	ND	30
Methylene chloride	75-09-2	ND	30
4-Methyl-2-pentanone	108-10-1	ND	100
Naphthalene	91-20-3	120	30
n-Propylbenzene	103-65-1	100	30
sec-Butylbenzene	135-98-8	ND	30
Styrene	100-42-5	ND	30
tert-Butylbenzene	98-06-6	ND	30
1,1,1,2-Tetrachloroethane	630-20-6	ND	30
1,1,2,2-Tetrachloroethane	79-34-5	ND	30
Tetrachloroethene	127-18-4	ND	30
Toluene	108-88-3	90	30
1,2,3-Trichlorobenzene	87-61-6	ND	30
1,2,4-Trichlorobenzene	120-82-1	ND	30
1,1,1-Trichloroethane	71-55-6	ND	30
1,1,2-Trichloroethane	79-00-5	ND	30
Trichloroethene	79-01-6	ND	30
Trichlorofluoromethane	75-69-4	ND	30
1,2,3-Trichloropropane	96-18-4	ND	30

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-4	Date Sampled:	01/25/95
Lab Number:	9501273-04A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	600	30
1,3,5-Trimethylbenzene	108-67-8	120	30
Vinyl acetate	108-05-4	ND	50
Vinyl chloride	75-01-4	ND	30
o-Xylene	95-47-6	310	30
p,m-Xylenes	--	550	30
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	98	74 - 121
Dibromofluoromethane	1868-53-7	100	80 - 120
Toluene-d8	2037-26-5	97	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Note: Detection limits increased due to dilution necessary for quantitation.

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	OB-1	Date Sampled:	01/25/95
Lab Number:	9501273-05A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	180	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	5
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	8	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	OB-1	Date Sampled:	01/25/95
Lab Number:	9501273-05A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	32	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	44	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	11	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	39	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	23	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	27	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	OB-1	Date Sampled:	01/25/95
Lab Number:	9501273-05A	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	21	5
p,m-Xylenes	--	45	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	98	74 - 121
Dibromofluoromethane	1868-53-7	96	80 - 120
Toluene-d8	2037-26-5	99	81 - 117

ND: Not detected at or above limit of detection
-: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9501273-07A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds			
Acetone	67-64-1	ND	20
Benzene	71-43-2	ND	5
Bromobenzene	108-86-1	ND	5
Bromochloromethane	74-97-5	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	5
2-Butanone	78-93-3	ND	5
n-Butylbenzene	104-51-8	ND	5
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	5
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	5
2-Chlorotoluene	95-49-8	ND	5
4-Chlorotoluene	106-43-4	ND	5
Dibromochloromethane	124-48-1	ND	5
1,2-Dibromo-3-chloropropane	96-12-8	ND	5
1,2-Dibromoethane	106-93-4	ND	5
Dibromomethane	74-95-3	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
Dichlorodifluoromethane	75-71-8	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9501273-07A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2-Dichloropropane	78-87-5	ND	5
1,3-Dichloropropane	142-28-9	ND	5
2,2-Dichloropropane	594-20-7	ND	5
1,1-Dichloropropene	563-58-6	ND	5
cis-1,3-dichloropropene	10061-01-5	ND	5
trans-1,3-dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
Freon 113	76-13-1	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-Hexanone	591-78-6	ND	20
Isopropylbenzene	98-82-8	ND	5
p-Isopropyltoluene	99-87-6	ND	5
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	20
Naphthalene	91-20-3	ND	5
n-Propylbenzene	103-65-1	ND	5
sec-Butylbenzene	135-98-8	ND	5
Styrene	100-42-5	ND	5
tert-Butylbenzene	98-06-6	ND	5
1,1,1,2-Tetrachloroethane	630-20-6	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,2,3-Trichlorobenzene	87-61-6	ND	5
1,2,4-Trichlorobenzene	120-82-1	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Trichlorofluoromethane	75-69-4	ND	5
1,2,3-Trichloropropane	96-18-4	ND	5

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9501273-07A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	01/28/95
Preparation Method:	EPA 5030	Date Analyzed:	01/28/95
Method Reference:	EPA 8260	Analyst:	JP

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
Volatile Organic Compounds (Continued)			
1,2,4-Trimethylbenzene	95-63-6	ND	5
1,3,5-Trimethylbenzene	108-67-8	ND	5
Vinyl acetate	108-05-4	ND	10
Vinyl chloride	75-01-4	ND	5
o-Xylene	95-47-6	ND	5
p,m-Xylenes	--	ND	5
Surrogates		Recovery (%)	QC Limits (%)
4-Bromofluorobenzene	460-00-4	99	74 - 121
Dibromofluoromethane	1868-53-7	97	80 - 120
Toluene-d8	2037-26-5	99	81 - 117

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-1	Date Sampled:	01/25/95
Lab Number:	9501273-01C	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/27/95
Preparation Method:	EPA 5030	Date Analyzed:	01/27/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
TEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	92	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-2	Date Sampled:	01/25/95
Lab Number:	9501273-02C	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/27/95
Preparation Method:	EPA 5030	Date Analyzed:	01/27/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	91	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-3	Date Sampled:	01/25/95
Lab Number:	9501273-03C	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/27/95
Preparation Method:	EPA 5030	Date Analyzed:	01/27/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	950	0.4
Ethylbenzene	100-41-4	86	0.3
Toluene	108-88-3	340	0.3
o-Xylene	95-47-6	760	0.4
p,m-Xylenes	--	1100	0.4
Gasoline	--	7100	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	104	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	MW-4	Date Sampled:	01/25/95
Lab Number:	9501273-04C	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/30/95
Preparation Method:	EPA 5030	Date Analyzed:	01/30/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	470	0.4
Ethylbenzene	100-41-4	520	0.3
Toluene	108-88-3	110	0.3
o-Xylene	95-47-6	320	0.4
p,m-Xylenes	--	730	0.4
Gasoline	--	9700	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	79	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	OB-1	Date Sampled:	01/25/95
Lab Number:	9501273-05C	Date Received:	01/25/95
Sample Matrix/Media:	WATER	Date Prepared:	01/27/95
Preparation Method:	EPA 5030	Date Analyzed:	01/27/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	280	0.4
Ethylbenzene	100-41-4	24	0.3
Toluene	108-88-3	29	0.3
o-Xylene	95-47-6	15	0.4
p,m-Xylenes	--	35	0.4
Gasoline	--	3900	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	110	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9501273-07A	Date Received:	--
Sample Matrix/Media:	WATER	Date Prepared:	01/27/95
Preparation Method:	EPA 5030	Date Analyzed:	01/27/95
Method Reference:	EPA 8015/8020	Analyst:	WAS

Analyte	CAS #	Concentration (ug/L)	Method Detection Limit (ug/L)
BTEX/Gasoline			
Benzene	71-43-2	ND	0.4
Ethylbenzene	100-41-4	ND	0.3
Toluene	108-88-3	ND	0.3
o-Xylene	95-47-6	ND	0.4
p,m-Xylenes	--	ND	0.4
Gasoline	--	ND	50
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	76	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification: See Below
Lab Number: 9501273
Sample Matrix/Media: WATER
Method Reference: EPA 1010

Date Received: 01/25/95
Date Analyzed: 02/06/95

Lab Number	Sample Identification	Date Sampled	Flash Point (Degrees F)	Method Detection Limit (Degrees F)
06	DC-1	01/25/95	>200	--

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification: See Below
Lab Number: 9501273
Sample Matrix/Media: WATER
Method Reference: EPA 335.2

Date Received: 01/25/95
Date Analyzed: 02/02/95

Lab Number	Sample Identification	Date Sampled	Reactive Cyanide (mg/L)	Method Detection Limit (mg/L)
-06	DC-1	01/25/95	<0.1	0.1
-07	METHOD BLANK	--	<0.1	0.1

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification: See Below
Lab Number: 9501273
Sample Matrix/Media: WATER
Method Reference: SW 7.3.4.2

Date Received: 01/25/95
Date Analyzed: 02/03/95

Lab Number	Sample Identification	Date Sampled	Reactive Sulfide (mg/L)	Method Detection Limit (mg/L)
06	DC-1	01/25/95	<10	10
-07	METHOD BLANK	--	<10	10

ND: Not detected at or above limit of detection
-: Information not available or not applicable

Results are reported on a wet-weight basis, as received.

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 56418.00
Clayton Project No. 95012.73

Sample Identification: See Below
Lab Number: 9501273
Sample Matrix/Media: WATER
Method Reference: EPA 150.1

Date Received: 01/25/95
Date Analyzed: 01/26/95

Lab Number	Sample Identification	Date Sampled	pH (S.U.)	Method Detection Limit (S.U.)
-06	DC-1	01/25/95	7.1	--

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 1 of 1
Project No.	
Batch No.	9501273
Ind. Code	W.P.
Date Logged In 1/26	By

REPORT RESULTS TO

Name: JOHN VARGAS | Title:
Company: CLAYTON | Dept.:
Mailing Address:
City, State, Zip:
Telephone No.: | Telefax No.:

Purchase Order No.: | Client Job No.:

SEND INVOICE TO

Name:
Company: INGERSOLL-RAND | Dept.:
Address:
City, State, Zip:

Date Results Req.: STANDARD TAT | Rush Charges Authorized? ☐ Yes ☒ No | Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative: P = HCl

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	EPA 8260	BTEX	RCI	TCLP	FOR LAB USE ONLY
MW-1	1-25-95	H_2O	40 mLs	4	XP	XP			01A,B,C,D
MW-2			40 mLs	4	XP	XP			02
MW-3			40 mLs	4	XP	XP			03
MW-4			40 mLs	4	XP	XP			04
OB-1			40 mLs	4	XP	XP			05
DC-1			1 LITER	1			X		06A
TRIP BLANK #			40 mLs	2				XP	~~07A,B~~ See Below

CHAIN OF CUSTODY

Collected by: RICHARD SILVA (print) | Collector's Signature: RICHARD SILVA
Relinquished by: Richard Silva | Date/Time 1-25-95/525 | Received by: | Date/Time
Relinquished by: | Date/Time | Received at Lab by: | Date/Time 1/25/95 5:
Method of Shipment: hand carried by client | Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

* Did Not Receive TB's 1/26/95

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive, Novi, MI 48375, (810) 344-1770
Raritan Center, 160 Fieldcrest Ave., Edison, NJ 08837, (908) 225-6040
400 Chastain Center Blvd., N.W., Suite 490, Kennesaw, GA 30144, (404) 499-7500
1252 Quarry Lane, Pleasanton, CA 94566, (510) 426-2657

2/92

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

Clayton
ENVIRONMENTAL
CONSULTANTS

Quality Assurance Results Summary

Matrix Spike/Matrix Spike Duplicate Results

for

Clayton Project No. 95012.73

Quality Assurance Results Summary
for
Clayton Project No. 95012.73

Clayton Lab Number:	9501273-06A	Analytical Method:	EPA7_3_4_2
Ext./Prep. Method:	EPA7.3.4.2	Instrument ID:	00008
Date:	02/03/95	Date:	02/03/95
Analyst:	HYW	Time:	17:40
Std. Source:	BAKER 61170	Analyst:	HYW
Sample Matrix/Media:	WATER	Units:	mg/L

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
REACTIVE SULFIDE	ND	54.4	49.6	91	50.4	93	92	65	120	1.6	20

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 95012.73

Clayton Lab Number:	9501273-MB	Analytical Method:	EPA8260
Ext./Prep. Method:	EPA5030	Instrument ID:	02831
Date:	01/27/95	Date:	01/27/95
Analyst:	JP	Time:	23:19
Std. Source:	M941123-01W	Analyst:	JP
Sample Matrix/Media:	WATER	Units:	UG/L

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
1,1-DICHLOROETHENE	ND	50.0	55.0	110	52.0	104	107	80	120	5.6	20
BENZENE	ND	50.0	56.0	112	55.0	110	111	80	120	1.8	20
CHLOROBENZENE	ND	50.0	55.0	110	52.0	104	107	80	120	5.6	20
TOLUENE	ND	50.0	58.0	116	55.0	110	113	80	120	5.3	20
TRICHLOROETHENE	ND	50.0	53.0	106	51.0	102	104	80	120	3.8	20

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 95012.73

Clayton Lab Number:	9501273-01C	Analytical Method:	EPA8015_8020
Ext./Prep. Method:	EPA 5030	Instrument ID:	05587
Date:	01/27/95	Date:	01/27/95
Analyst:	WAS	Time:	13:19
Std. Source:	V950111-01W	Analyst:	WAS
Sample Matrix/Media:	WATER	Units:	UG/L

Analyte		Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
BENZENE	(PID)	ND	8.25	7.72	94	6.79	82	88	81	118	13	20
ETHYLBENZENE	(PID)	ND	7.91	7.37	93	6.55	83	88	81	114	12	20
GASOLINE	(FID)	ND	500	470	94	400	80	87	80	150	16	25
TOLUENE	(PID)	ND	40.0	36.9	92	32.7	82	87	84	118	12	20
TOTAL XYLENE	(PID)	ND	45.4	41.0	90	36.5	80	85	85	115	12	20

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 95012.73

Clayton Lab Number:	9501270-04K	Analytical Method:	EPA335_2
Ext./Prep. Method:	EPA335.2	Instrument ID:	07487
Date:	01/31/95	Date:	02/02/95
Analyst:	HYW	Time:	16:00
Std. Source:	MALL 6881	Analyst:	HYW
Sample Matrix/Media:	WATER	Units:	mg/L

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
CYANIDE	ND	0.400	0.422	106	0.419	105	105	70	119	0.9	20

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

ATTACHMENT 2

FIELD SAMPLING SURVEY FORMS

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 4CB89.03 Site: INGERSOLL-RAND Date: JANUARY 25, 1995

Well # MW-1 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: PARTLY CLOUDY, WINDY, COOL

Describe Equipment D-Con Before Sampling This Well: SUBMERSIBLE PUMP WAS WASHED WITH DETERGENT THEN TRIPLE RINSED

Total Depth of Well: 18.88 feet Time: 1125 Depth to Water Before Pumping: 10.32 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch		Purge Factor		To Purge
8.56 feet	*	.16	(.65)	= 5.56 gal	* 4	=	22.24

Depth Purging From: 18 feet Time Surging Begins: 1031

Notes on Initial Discharge: CLEAR

Time	Volume Purged	pH	Conductivity	T	Notes
1033	5-GAL	6.0	507	16.6	CLEAR
1035	10-GAL	6.4	505	16.7	CLEAR
1038	15-GAL	6.8	522	17.0	CLEAR
1040	23-GAL	6.8	549	17.2	CLEAR, PURGED DRY

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1155

	Rep #1	Rep #2	Rep #3	Rep #4
pH	6.6	6.7	6.8	6.9
Conductivity	537	535	533	535
T°C	16.8	16.9	16.9	17.0

Pre-Sample Collection Gallons Purged: 23

Time Sample Collection Begins: 1200

Time Sample Collection Ends: 1205

Total Gallons Purged: 24

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 6068903 Site: INGERSOLL-RAND Date: JANUARY 25, 1995

Well # MW-2 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: PARTLY CLOUDY, SLIGHT BREEZE, COOL

Describe Equipment D-Con Before Sampling This Well: SUBMERSIBLE PUMP WAS WASHED WITH DETERGENT THEN TRIPLE RINSED

Total Depth of Well: 20.14 feet Time: 1020 Depth to Water Before Pumping: 12.01 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume		Purge Factor		To Purge
8.13 feet	*	.16	(.65)	= 5.28 gal	*	4	=	21.14

Depth Purging From: 19 feet Time Surging Begins: 1030

Notes on Initial Discharge: BROWNISH, SILTY, H_2S ODOR

Time	Volume Purged	pH	Conductivity	T	Notes
1033	5-GAL	6.8	1740	19.8	CLEAR
1035	10-GAL	6.4	1639	19.7	CLEAR
1037	15-GAL	6.6	1551	19.7	CLEAR
1039	20-GAL	6.8	1559	19.7	CLEAR

EWATER.TBL (11/21/88)

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1050

	Rep #1	Rep #2	Rep #3	Rep #4
pH	6.9	6.9	6.9	6.9
Conductivity	1536	1549	1548	1546
T°C	19.3	19.5	19.6	19.6

Pre-Sample Collection Gallons Purged: 22

Time Sample Collection Begins: 1055

Time Sample Collection Ends: 1100

Total Gallons Purged: 23

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 6CE88.03 Site: INGERSOLL-RAND Date: JANUARY 25, 1995

Well # MW-3 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: CLOUDY, LIGHT RAIN, COLD

Describe Equipment D-Con Before Sampling This Well: SUBMERSIBLE PUMP WAS WASHED WITH DETERGENT THEN TRIPLE RINSED

Total Depth of Well: 20.23 feet Time: 1410 Depth to Water Before Pumping: 14.25 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch	Volume		Purge Factor		To Purge
5.98	feet *	.16	(.65)	= 3.89 gal	*	4	=	15.52

Depth Purging From: 19 feet Time Surging Begins: 1419

Notes on Initial Discharge: CLEAR

Time	Volume Purged	pH	Conductivity	T	Notes
1421	5-GAL	6.9	824	19.4	CLEAR
1423	10-GAL	6.4	909	19.7	CLEAR
1425	15-GAL	6.7	954	19.8	CLEAR
1427	17-GAL	6.7	958	19.7	CLEAR

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1440

	Rep #1	Rep #2	Rep #3	Rep #4
pH	6.8	6.8	6.8	6.8
Conductivity	1009	1025	1027	1037
T°C	19.4	19.3	19.5	19.4

Pre-Sample Collection Gallons Purged: 17

Time Sample Collection Begins: 1445

Time Sample Collection Ends: 1450

Total Gallons Purged: 18

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 6C699.23 Site: INGERSOLL-RAND Date: JANUARY 25, 1995

Well # MW-4 Sampling Team: RICHARD SICVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: PARTLY CLOUDY, SLIGHT BREEZE, COOL

Describe Equipment D-Con Before Sampling This Well: SUBMERSIBLE PUMP WAS WASHED WITH DETERGENT THEN TRIPLE RINSED

Total Depth of Well: 27.86 feet Time: 1230 Depth to Water Before Pumping: 15.94 feet

Volume Height of Water Column:		Diameter 2-inch	Diameter 4-inch		Volume		Purge Factor		To Purge
11.92	feet *	.16	(.65)	=	7.75	gal *	4	=	31.0

Depth Purging From: 27 feet Time Surging Begins: 1235

Notes on Initial Discharge: CLEAR

Time	Volume Purged	pH	Conductivity	T	Notes
1237	10-GAL	5.6	943	19.5	CLEAR
1239	15-GAL	5.8	972	19.5	CLEAR
1241	20-GAL	5.7	899	19.5	CLEAR
1243	25-GAL	5.7	856	19.5	CLEAR
1245	31-GAL	5.8	884	19.5	CLEAR

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1300

	Rep #1	Rep #2	Rep #3	Rep #4
pH	5.8	5.8	5.8	5.8
Conductivity	727	716	716	722
T°C	19.1	19.2	19.2	19.2

Pre-Sample Collection Gallons Purged: 31

Time Sample Collection Begins: 1305

Time Sample Collection Ends: 1310

Total Gallons Purged: 32

Comments: _____

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM

Job # 6CH99.03 Site: INGERSOLL-RAND Date: JANUARY 25, 1995

Well # OB-1 Sampling Team: RICHARD SILVA

Sampling Method: DISPOSABLE BAILER

Field Conditions: PARTLY CLOUDY, WINDY, COOL

Describe Equipment D-Con Before Sampling This Well: SUBMERSIBLE PUMP HOSES WASHED WITH DETERGENT THEN TRIPLE RINSED

Total Depth of Well: 49.62 feet Time: 1318 Depth to Water Before Pumping: 16.95 feet

Volume Height of Water Column:		Diameter 2-inch	4-inch		Volume		Purge Factor		To Purge
32.67	feet *	(.16)	.65	=	5.23	gal *	4	=	20.92

Depth Purging From: 48 feet Time Surging Begins: 1325

Notes on Initial Discharge: CLEAR

Time	Volume Purged	pH	Conductivity	T	Notes
1328	5-GAL	5.8	1134	19.1	CLEAR
1331	10-GAL	5.9	1192	19.2	CLEAR
1334	15-GAL	5.9	1257	19.1	CLEAR
1337	20-GAL	5.8	1285	19.2	CLEAR

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

WATER SAMPLING FIELD SURVEY FORM
(CONTINUED)

Time Field Parameter Measurement Begins: 1350

	Rep #1	Rep #2	Rep #3	Rep #4
pH	5.7	5.7	5.8	5.8
Conductivity	1245	1185	1226	1251
T°C	18.9	18.8	18.9	18.9

Pre-Sample Collection Gallons Purged: 20

Time Sample Collection Begins: _____

Time Sample Collection Ends: _____

Total Gallons Purged: 21

Comments: _____

ATTACHMENT 3

DRILLING, WELL CONSTRUCTION, AND SAMPLING PROTOCOLS FOR BOREHOLE/MONITORING WELL INSTALLATION

DRILLING, WELL CONSTRUCTION, AND SAMPLING PROTOCOLS FOR BOREHOLE/MONITORING WELL INSTALLATION

BOREHOLE INSTALLATION

Clayton Environmental Consultants, Inc. acquires the proper governmental agency permits to bore, drill, or destroy all proposed boreholes and monitoring wells that intersect with groundwater aquifers and writes a health and safety plan.

Clayton subcontracts only with drillers who possess a current C-57 water well contractor's license issued by the State of California and whose personnel have attended the OSHA 40-hour Hazardous Materials Safety Training. Prior to starting work, a "tailgate" safety meeting including discussion of the safety hazards and precautions relevant to the particular job will be held with all personnel working on the job. Well drillers are identified on permit applications.

Borings are drilled dry by hollow- or solid-stem, continuous flight augers. Augers, drill rods, and other working components of the drilling rig are steam-cleaned before arriving onsite to prevent the introduction of contaminants. These components are also steam-cleaned between borings away from boring locations. Cleaned augers, rods, and other components are stored, and/or covered when not in use.

Our bore logs include a detailed description of subsurface stratigraphy. Clayton examines the soil brought to the surface by drilling operations, and samples undisturbed soil every 5 feet or as otherwise specified. Soil cuttings are screened for hydrocarbon contamination using a photoionization detector. Boring logs are filled out in the field by a professional geologist, civil engineer, engineering geologist who is registered by the State of California, or a technician who is trained and working under the supervision of one of the previously mentioned persons, using the Unified Soil Classification System.

SOIL SAMPLING

Soil samples are taken every 5 feet, at areas of obvious contamination, or as otherwise specified, with a California modified split-spoon sampler that is lined with three six-inch brass tubes. The sampler and rod are inserted into the borehole to the current depth and a hammer of known weight and height above the sampler are allowed to free-fall onto the rod, advancing the assembly 18 inches into undisturbed soil. Clayton uses the number of blows necessary to drive the sampler into the ground to help evaluate the consistency of materials encountered. The sampler is then pulled from the borehole and disassembled, and the three brass tubes are separated for inspection and labeling.

Clayton uses new brass liners or liners cleaned with a trisodium phosphate (TSP) solution, double rinsed with clean tap water, and air dried prior to each sampling. The sampler is also cleaned with TSP and rinsed with tap water between sampling events.

Soil samples selected for laboratory analysis are left in the brass liners, sealed with aluminum foil and plastic caps, taped for air tightness, labeled, and immediately placed into a pre-cooled ice

chest chilled to less than 4°C. Labels contain the following information: site name, date and time sampled, borehole number and depth, and the sampler's initials. The samples are transported under chain-of-custody to a state-certified laboratory. The laboratory analyzes soil samples within the prescribed holding time, storing them at temperatures below 4°C at all times.

Pending results of laboratory analysis, excess drilling and sampling cuttings are placed into Department of Transportation (DOT)-approved drums, labeled with the name of the site, address, and well number, and left at the site. Uncontaminated soil may be disposed of by the client. Soil found to contain levels of contaminants above local or state action levels will require that the client dispose of it in accordance with hazardous waste regulations. At the client's request, we will assist with the disposal of contaminated soil.

WELL CONSTRUCTION

Boreholes are converted to monitoring wells by placing 2-inch or 4-inch diameter well casing with flush-threaded joints and slotted screen into the borehole. Construction materials include polyvinyl chloride (PVC), stainless steel, or low carbon steel. The most suitable material for a particular installation will depend on the parameters to be monitored. All screens and casings used are in a contaminant-free condition when placed in the ground. No thread lubrication is used, other than teflon tape, for connecting the casing segments.

Wells extend at least 10 feet into the upper saturated zone, but do not extend through any clay layers greater than 5 feet that are below the shallow water table. The standard practice for wells installed at hydrocarbon contamination sites is to construct a well with a 20-foot long perforated interval extending 15 feet below and 5 feet above the water table in an unconfined aquifer. The top of the well is solid casing. The annular space of the borehole is backfilled with washed, kiln-dried sand to a point at least 1 foot above the slotted screen. A seal above the filter pack is formed by placing a 1- to 2-foot layer of bentonite pellets on top of the sand. The bentonite pellets are moistened by pouring clean tap water down the hole so that they can expand and seal the annulus. A neat cement grout is placed above the bentonite seal and brought to the ground surface.

Well casings are protected from surface contamination, accidental damage, and unauthorized entry or tampering with water-tight locking caps on the well casings. The caps are usually surrounded by a concrete vault. Wells are clearly identified with a metal tag or other device where the following information is recorded: well number, depth to water, depth of well, casing data including location of screened interval.

WELL DEVELOPMENT

The well seal in newly developed wells must set up for 48 to 72 hours prior to development. Since development of the well can volatilize contaminants present, the well must also settle for at least 48 to 72 hours between development and the first purging/sampling incident.

All monitoring wells are initially developed to clean the well and stabilize sand, gravel, and disturbed aquifer materials around the screened internal perforations. Wells are developed by pumping (or bailing) and surging until water turbidity and specific conductance stabilize. In some cases, where wells are installed in low permeability formations and the wells purge dry, the well

is allowed to recover and is purged dry three times. Clean tap water is introduced into the well if it does not recover rapidly enough.

Pending results by laboratory analysis, purge water from well development and sampling is placed into DOT-approved drums, labeled with the name of the site, address, well number, and left at the site. Uncontaminated water may be disposed of by the client. Water found to contain levels of contaminants above local or state action levels requires that the client dispose of it in accordance with hazardous waste requirements. At the client's request, we can assist with the disposal of contaminated purge water.

GROUNDWATER SAMPLING

To collect a representative sample of the groundwater, stagnant water within the well casing and filter material must be purged and fresh aquifer water allowed to replace it. The water is purged from the well by pumping or bailing at least three well volumes. Well volumes are calculated by measuring depth to groundwater to the nearest 0.01 foot upon arrival at the well before any purging has begun. Groundwater samples are collected only after purging has been of sufficient duration for pH, temperature, and electrical conductivity to stabilize. When purging low-yield wells, the wells are purged to dryness. When the well recovers to 80% of the depth measured upon arrival, samples are collected.

Field sampling logs maintained for each well include:

- Monitoring well identification
- Static water level, before and after pumping
- Well depth
- Condition of water prior to purging (e.g., amount of free product)
- Purge rate and volume
- pH, temperature, and conductivity during purging
- Time purged
- Time of sample collection
- Sampling method
- Name of sampler
- Climatic conditions

Water samples are collected using clean teflon bailers. All equipment that contacts samples is thoroughly cleaned before arrival at the site and between sampling events.

Water is collected in clean laboratory-supplied containers, labeled, placed immediately into an ice chest pre-cooled to 4°C, and transported to Clayton's laboratory for analysis. One trip blank will be furnished in accordance with our quality assurance/quality control (QA/QC) program.

All samples are collected in such a manner so as to minimize the volatilization of a sample due to agitation and/or transfer from bailer to sample container. Samples are collected so that contaminants most sensitive to volatilization are sampled first.

Preservatives are not added to any sample, unless instructed. If requested, they are supplied by Clayton's laboratory.

All sample containers are labeled in the field. Labels contain the following information: project name, sample identification number, project number, date and time of collection, and sampler's initials.

Under no circumstances are sealed sample containers opened by anyone other than the laboratory personnel who perform the requested analyses. If it is necessary for samples or sample chests to leave the immediate control of the sampler prior to delivery to the laboratory, for example during shipment by an overnight shipper, a custody seal is placed on each sample container and/or sample chest to ensure that the samples have not been tampered with during transportation. The custody seal is signed by the sampler, and the date and time that the seal was placed is recorded. The elapsed time between sample collection and delivery to the laboratory never exceeds 48 hours. Water samples are not held for more than 14 days prior to analysis and are kept at 4°C at all times.

To document and trace samples from time of collection, a signed chain-of-custody record is filled out by the sampler and accompanies the samples through the laboratory analyses. The completed chain-of-custody is included with the analytical report from the laboratory.

REFERENCES

Groundwater Monitoring Guidelines, Revised February 1990. Alameda County District Groundwater Protection Program.

Leaking Underground Fuel Tank (LUFT) Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Tank Closure, May 1988. State of California LUFT Task Force.

Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks, Revised November 1989. North Coast, San Francisco Bay, and Central Valley regions of the California State Water Quality Control Board.

Standards for the Construction and Destruction of Wells and Other Deep Excavations in Santa Clara County, Revised June 1989. Santa Clara Valley Water District.

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

FILE
ID# 100-061
SITE: Leased
BLDG: 02, MT, PL
G. WATER MONITORING / DISPOSAL
CORRESPONDENCE:

February 13, 1995

Mr. Jay Mattsfield
Manager, Field Support Operations
CAPSULE ENVIRONMENTAL ENGINEERING, INC.
1970 Oakcrest Avenue, Suite 215
Saint Paul, Minnesota 55113-2624

Clayton Project No. 59125.00

Subject: Analytical Report and Chain-of-Title for the Schlage Lock Company located in San Leandro, California

Dear Mr. Mattsfield:

Clayton Environmental Consultants, Inc. is pleased to submit the enclosed analytical report and the chain-of-title as requested for the subject property.

If you have any questions or need additional information, call me or Mr John Vargas at (510) 426-2600.

Sincerely,

Richard J. Silva

Richard J. Silva, R.E.A.
Geologist

RJS/rjs

Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 1 of 1
Project No.	
Batch No.	9410269
Ind. Code	W.P.
Date Logged In 10/28/94	By

REPORT RESULTS TO

Name: JOHN VARGAS | Title:
Company: CLAYTON | Dept.:
Mailing Address:
City, State, Zip:
Telephone No.: | Telefax No.:

Date Results Req.: NORMAL TAT | Rush Charges Authorized? ☐ Yes ☐ No | Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)
HOLD BTEX AND GAS/BTEX - IT40

* Explanation of Preservative: ANALYZE BTEX & GAS/BTEX T=HCL 9.45am 10-21-94 RK

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

SEND INVOICE TO

Purchase Order No.: | Client Job No.:
Name: JOHN VARGAS
Company: CLAYTON ENVIRONMENTAL | Dept.: FMS
Address: P.O. BOX 9019
City, State, Zip: PLEASANTON, CA 94566

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	EPA 8240	GAS/BTEX	HOLD	RCI	FOR LAB USE ONLY
MW-1	10-20-94	H_2O	40 mLs	2	Xp				01 A,B
MW-1			40 mLs	2		Xp			C,D
MW-2			40 mLs	2	Xp				02 A,B
MW-2			40 mLs	2		Xp			C,D
MW-3			40 mLs	2	Xp				03 A,B
MW-3			40 mLs	2		Xp			C,D
MW-4			40 mLs	2	Xp				04 A,B
MW-4			40 mLs	2		Xp			C,D
TRIP BLANK # 01002294	↓	↓	40 mLs	2			Xp		05 A,B
(COMPOSITE DRUM SAMPLE) DS-1	10-20-94	H_2O	500 mLs (FL)	2				X	06 A,B

CHAIN OF CUSTODY

Collected by: RICHARD SILVA (print) | Collector's Signature:
Relinquished by: | Date/Time 10-21-94 9:45am | Received by: | Date/Time
Relinquished by: | Date/Time | Received at Lab by: | Date/Time 10/24/94
Method of Shipment:

Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain) 540

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive
Novi, MI 48375
(313) 344-1770

Raritan Center
160 Fieldcrest Ave
Edison, NJ 08837
(908) 225-6040

400 Chastain Center Blvd., N.W.
Suite 490
Kennesaw, GA 30144
(404) 499-7500

1252 Quarry Lane
Pleasanton, CA 94566
(510) 426-2657

2/92

DISTRIBUTION.
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 1 of 1
Project No.	
Batch No. 9410295	
Ind. Code	W.P.
Date Logged In 10/21/94	By KJ

REPORT RESULTS TO

Name: JOHN VARGAS | Title:
Company: CLAYTON | Dept.:
Mailing Address:
City, State, Zip:
Telephone No.: | Telefax No.:

SEND INVOICE TO

Purchase Order No.: | Client Job No.:
Name:
Company: INGERSOLL-RAND | Dept.:
Address:
City, State, Zip:

Date Results Req.: NORMAL TAT | Rush Charges Authorized? ☐ Yes ☒ No | Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)

* Explanation of Preservative: P = HCl

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	ANALYSIS REQUESTED: EPA 8260	GAS/BTEX	HOLD	FOR LAB USE ONLY
VB-1	10-21-94	H2O	40 mLs	2	XP			01A,B
OB-1			40 mLs	2		XP		02
DS-1			40 mLs	2	XP			03
DS-1			40 mLs	2		XP		04
TRIP BLANK #CICC294			40 mLs	1			XP	05A

CHAIN OF CUSTODY

Collected by: RICHARD SILVA (print) | Collector's Signature: Richard Silva
Relinquished by: Richard Silva | Date/Time 10-21-94/1810 | Received by: Carol Hammerberg | Date/Time 10/21/94 6:10pm
Relinquished by: | Date/Time | Received at Lab by: | Date/Time
Method of Shipment:

Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive, Novi, MI 48375, (313) 344-1770
Raritan Center, 160 Fieldcrest Ave., Edison, NJ 08837, (908) 225-6040
400 Chastain Center Blvd., N.W., Suite 490, Kennesaw, GA 30144, (404) 499-7500
1252 Quarry Lane, Pleasanton, CA 94566, (510) 426-2657

2/92

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

December 20, 1994

Mr. Dariush Dastmalchi
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.
1252 Quarry Lane
Pleasanton, CA 94566

Client Ref.: 59124.00
Clayton Project No.: 94121.19

Dear Mr. Dastmalchi:

Attached is our analytical laboratory report for the samples received on December 7, 1994. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of after January 19, 1995, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
Western Operations

HAH/tjb

Attachments

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59124.00
Clayton Project No. 94121.19

Sample Identification:	CS-1	Date Sampled:	12/07/94
Lab Number:	9412119-01A	Date Received:	12/07/94
Sample Matrix/Media:	SOLID	Date Prepared:	12/09/94
Preparation Method:	EPA 5030	Date Analyzed:	12/12/94
Method Reference:	EPA 8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	107	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59124.00
Clayton Project No. 94121.19

Sample Identification:	METHOD BLANK	Date Sampled:	--
Lab Number:	9412119-02A	Date Received:	--
Sample Matrix/Media:	SOLID	Date Prepared:	12/09/94
Preparation Method:	EPA 5030	Date Analyzed:	12/12/94
Method Reference:	EPA 8020	Analyst:	WAS

Analyte	CAS #	Concentration (mg/kg)	Method Detection Limit (mg/kg)
BTEX			
Benzene	71-43-2	ND	0.005
Ethylbenzene	100-41-4	ND	0.005
Toluene	108-88-3	ND	0.005
o-Xylene	95-47-6	ND	0.005
p,m-Xylenes	--	ND	0.005
Surrogates		Recovery (%)	QC Limits (%)
a,a,a-Trifluorotoluene	98-08-8	89	50 - 150

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59124.00
Clayton Project No. 94121.19

Sample Identification: CS-1
Lab Number: 9412119-01
Sample Matrix/Media: SOLID

Date Sampled: 12/07/94
Date Received: 12/07/94

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Arsenic	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Barium	120	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Beryllium	0.3	0.1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Cadmium	<0.5	0.5	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Chromium	28	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Cobalt	10	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Copper	23	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Lead	12	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Mercury	<0.1	0.1	mg/kg	12/12/94	12/12/94	EPA 7471	EPA 7471
Molybdenum	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Nickel	40	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Selenium	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Silver	<0.5	0.5	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
TRPH	400	30	mg/kg	12/08/94	12/12/94	EPA 9071	EPA 9073
Thallium	4	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Vanadium	30	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Zinc	47	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TRPH = Total Recoverable Petroleum Hydrocarbons

Analytical Results
for
Clayton Environmental Consultants, Inc.
Client Reference: 59124.00
Clayton Project No. 94121.19

Sample Identification: METHOD BLANK
Lab Number: 9412119-02
Sample Matrix/Media: SOLID

Date Sampled: --
Date Received: --

Analyte	Concentration	Method Detection Limit	Units	Date Prepared	Date Analyzed	Prep Method	Method Reference
Antimony	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Arsenic	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Barium	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Beryllium	<0.1	0.1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Cadmium	<0.5	0.5	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Chromium	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Cobalt	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Copper	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Lead	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Mercury	<0.1	0.1	mg/kg	12/12/94	12/12/94	EPA 7471	EPA 7471
Molybdenum	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Nickel	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Selenium	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Silver	<0.5	0.5	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
TRPH	ND	30	mg/kg	12/08/94	12/09/94	EPA 9071	EPA 9073
Thallium	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Vanadium	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A
Zinc	<1	1	mg/kg	12/15/94	12/16/94	EPA 3050	EPA 6010A

ND: Not detected at or above limit of detection
--: Information not available or not applicable

Results are reported on a wet-weight basis, as received.
TRPH = Total Recoverable Petroleum Hydrocarbons

Clayton ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Clayton Use Only	Page 1 of 1
Project No.	
Batch No.	9412119
Ind. Code	W.P.
Date Logged In 12/8/94	By

RESULTS TO

Name: DARIUSH DASTMALCHI | Title:
Company: CLAYTON | Dept.:
Mailing Address:
City, State, Zip:
Telephone No.: | Telefax No.:

Purchase Order No.: | Client Job No.: 5912H.08

SEND INVOICE TO

Name:
Company: INGERSOLL-RAND | Dept.:
Address:
City, State, Zip:

Date Results Req.: NORMAL TAT | Rush Charges Authorized? ☐ Yes ☐ No | Phone / Fax Results ☐ ☐

Special Instructions: (method, limit of detection, etc.)

Explanation of Preservative:

Samples are: (check if applicable)
☐ Drinking Water
☐ Collected in the State of New York

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TRPH	CAM 17	BTEX	FOR LAB USE ONLY
CS-1	12-7-94	SOLID	2x6 BRASS	1	X	X	X	01A

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added. *)

CHAIN OF CUSTODY

Collected by: RICHARD SILVA (print) | Collector's Signature: Richard Silva
Relinquished by: Richard Silva | Date/Time 12-7-94/1310 | Received by: | Date/Time
Relinquished by: | Date/Time | Received at Lab by: | Date/Time 12/7/94 1:10
Method of Shipment: | Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

22345 Roethel Drive Novi, MI 48375 (810) 344-1770	Raritan Center 160 Fieldcrest Ave. Edison, NJ 08837 (908) 225-6040	400 Chastain Center Blvd., N.W. Suite 490 Kennesaw, GA 30144 (404) 499-7500	1252 Quarry Lane Pleasanton, CA 94566 (510) 426-2657

2/92

DISTRIBUTION:
WHITE - Clayton Laboratory
YELLOW - Clayton Accounting
PINK - Client Retains

Clayton
ENVIRONMENTAL
CONSULTANTS

Quality Assurance Results Summary

Matrix Spike/Matrix Spike Duplicate Results

for

Clayton Project No. 94121.19

Quality Assurance Results Summary
for
Clayton Project No. 94121.19

Clayton Lab Number: 9411299-01B
Ext./Prep. Method: EPA3050
Date: 12/15/94
Analyst: RAH
Std. Source: VHG401953A
Sample Matrix/Media: SOIL

Analytical Method: EPA6010
Instrument ID: 03891
Date: 12/16/94
Time: 16:09
Analyst: RAH
Units: MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
ANTIMONY	1.80	50.0	41.4	79	44.4	85	82	68	112	7.0	25
ARSENIC	ND	50.0	42.0	84	42.9	86	85	72	115	2.1	25
BARIUM	136	50.0	186	100	180	88	94	54	151	3.3	25
BERYLLIUM	ND	50.0	46.0	92	46.3	93	92	80	110	0.7	25
CADMIUM	ND	50.0	47.9	96	47.9	96	96	76	113	0.0	25
CHROMIUM	51.4	50.0	102	101	98.0	93	97	64	127	4.0	25
COBALT	11.0	50.0	57.2	92	56.9	92	92	72	116	0.5	25
COPPER	20.2	50.0	71.6	103	69.2	98	100	67	133	3.4	25
LEAD	17.4	50.0	63.9	93	63.2	92	92	64	121	1.1	25
MAGNESIUM	8,830	50.0	9,630	SOR	8,900	SOR	SOR	75	125	7.9	25
MANGANESE	367	50.0	425	SOR	416	SOR	SOR	50	150	2.1	25
MOLYBDENUM	ND	50.0	44.2	88	45.2	90	89	75	113	2.2	25
NICKEL	63.4	50.0	113	99	108	89	94	61	124	4.5	25
SELENIUM	ND	50.0	46.8	94	47.2	94	94	73	111	0.9	25
SILVER	ND	50.0	46.8	94	47.0	94	94	79	115	0.4	25
SODIUM	138	50.0	189	102	183	90	96	75	125	3.2	25
STRONTIUM	40.2	50.0	87.4	94	86.2	92	93	79	117	1.4	25
THALLIUM	4.30	50.0	48.3	88	48.1	88	88	62	118	0.4	25
VANADIUM	31.5	50.0	80.6	98	79.2	95	97	70	122	1.8	25
ZINC	49.9	50.0	99.2	99	96.8	94	96	64	133	2.4	25

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 94121.19

Clayton Lab Number:	9412035-04A	Analytical Method:	EPA7471
Ext./Prep. Method:	EPA7471	Instrument ID:	05583
Date:	12/12/94	Date:	12/12/94
Analyst:	RAH	Time:	13:06
Std. Source:	A941012C	Analyst:	RAH
Sample Matrix/Media:	SOIL	Units:	MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
MERCURY	ND	1.00	0.970	97	0.990	99	98	75	125	2.0	25

LCS = Laboratory Control Sample
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UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 94121.19

Clayton Lab Number:	9412119-01A	Analytical Method:	EPA8015 8020
Ext./Prep. Method:	EPA 5030	Instrument ID:	05587
Date:	12/09/94	Date:	12/12/94
Analyst:	WAS	Time:	14:33
Std. Source:	V941111-01W	Analyst:	WAS
Sample Matrix/Media:	SOIL	Units:	MG/KG

Analyte		Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
BENZENE	(PID)	ND	0.0379	0.0369	97	0.0358	94	96	53	140	3.0	28
ETHYLBENZENE	(PID)	ND	0.0339	0.0336	99	0.0322	95	97	56	134	4.3	25
GASOLINE	(FID)	ND	2.50	2.20	88	2.18	87	88	41	164	0.9	37
TOLUENE	(PID)	ND	0.174	0.166	95	0.158	91	93	60	139	4.9	22
TOTAL XYLENE	(PID)	ND	0.187	0.180	96	0.170	91	94	61	129	5.7	26

LCS = Laboratory Control Sample
LCL = Lower Control Limit
UCL = Upper Control Limit
ND = Not detected at or above limit of detection
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 94121.19

Clayton Lab Number:	9412119-01A	Analytical Method:	EPA418_1
Ext./Prep. Method:	EPA418_1	Instrument ID:	TAHYD
Date:	12/08/94	Date:	12/12/94
Analyst:	MBN	Time:	06:00
Std. Source:	E941130-01W	Analyst:	AMN
Sample Matrix/Media:	SOIL	Units:	MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
TOTAL PETROLEUM HYDROCARBONS	405	206	497	45	517	55	50	50	150	4.0	25

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 94121.19

Clayton Lab Number: 9412119-LCS
Ext./Prep. Method: EPA418 1
Date: 12/08/94
Analyst: MBN
Std. Source: ERA 91029 # 1
Sample Matrix/Media: SOIL

Analytical Method: EPA418 1
Instrument ID: TAHYD
Date: 12/12/94
Time: 06:15
Analyst: AMN
Units: MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
TOTAL PETROLEUM HYDROCARBONS	ND	905	563	62	563	62	62	50	150	0.0	25

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

Quality Assurance Results Summary
for
Clayton Project No. 94121.19

Clayton Lab Number: 9412083-LCS
Ext./Prep. Method: EPA418 1
Date: 12/08/94
Analyst: MBN
Std. Source: ERA # 1 91029
Sample Matrix/Media: SOIL

Analytical Method: EPA418 1
Instrument ID: THANA
Date: 12/09/94
Time: 05:00
Analyst: AMN
Units: MG/KG

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
TOTAL PETROLEUM HYDROCARBONS	ND	905	412	46	412	46	46*	50	150	0.0	25

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

CAPSULE
ENVIRONMENTAL ENGINEERING INC.

PROJECT CALCULATION SHEET

Project Name: San Leandro
Project Number: 001-327
Task Number: 430
Re: Gradient Calculation

By: JJM
Date: 10/25/95
Page: 1 of 2
cc:

Calculate the groundwater gradient in the area of MW-4, VW-8 and VW-9, using June 1995 water level data

Using approximate distances from Moran Engr. map, the attached gradient calculation was prepared on the attached map.

$$i = \frac{\Delta \text{ head}}{\text{distance}}$$

from VW-9 to the perpendicular on the 11.45 foot contour is approximately 55 feet

$$i = \frac{11.60 \text{ feet} - 11.45 \text{ feet}}{55 \text{ ft}}$$

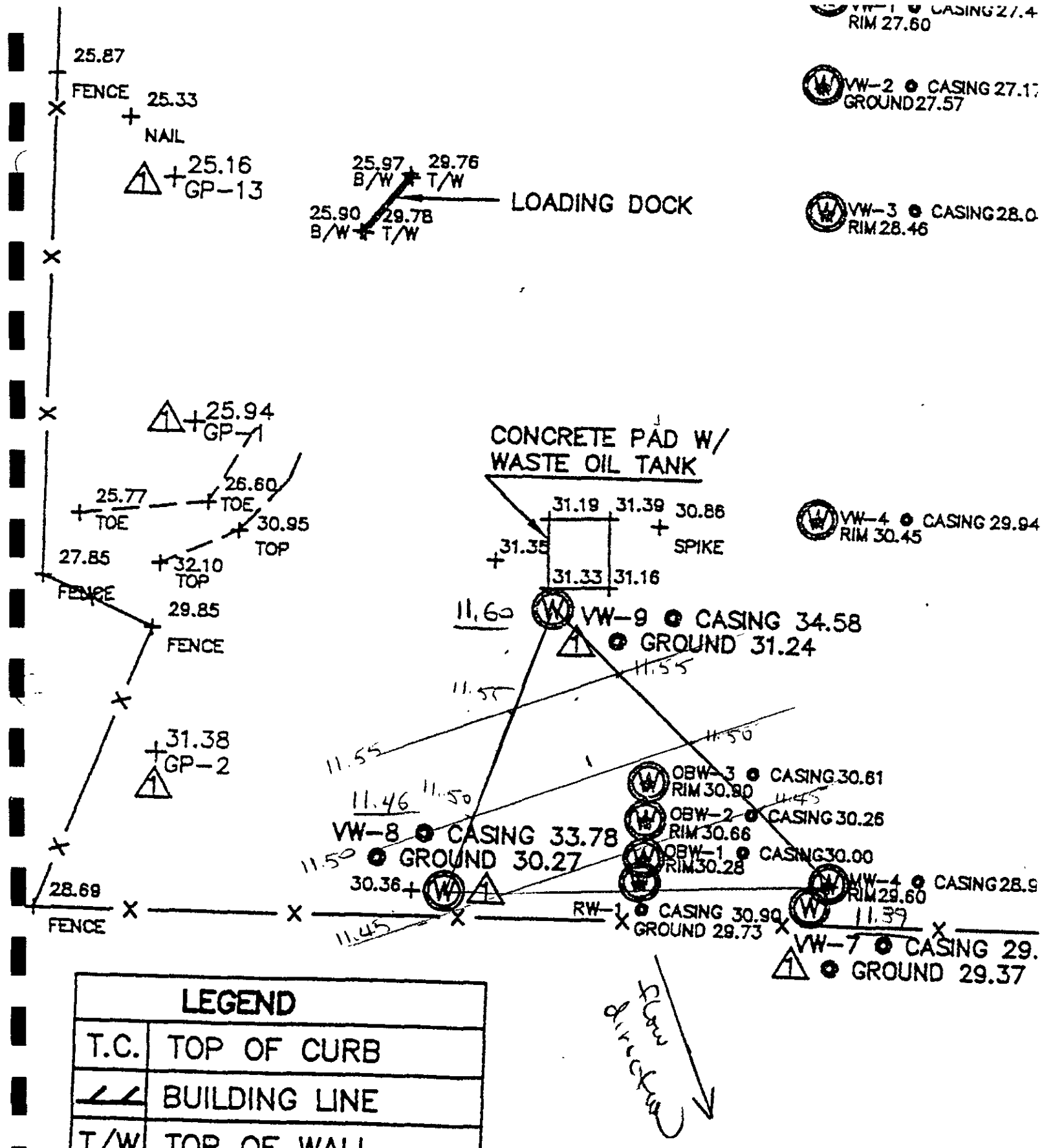
$$= \frac{0.15 \text{ ft}}{55 \text{ ft}}$$

$$= .0027$$

~~$i = 0.0027$~~

hydraulic gradient in area is approximately 0.003

Checked by: JJM
Date: 10/27/95



LEGEND	
T.C.	TOP OF CURB
⟋⟋	BUILDING LINE
T/W	TOP OF WALL
B/W	BASE OF WALL
-x-	FENCE LINE
(W)	WELL
E.P.	EDGE OF PAVEMENT

GRAPHIC SCALE

25 0 25 50

Table 1
Project: San Leandro Groundwater Sampling Points and Analytical Methods for June 1995 Sampling Event

Well	Water Level	EPA 8015/8020	EPA 8260	Dissolved Nitrate (1)	In Situ Dissolved Oxygen
MW-1	X			X	X
MW-2	X			X	X
MW-3	X	X	X	X	X
MW-4	X	X	X	X	X
OB-1	X	X	X	X	X
VW-5	X	X	X	X	X
VW-6	X	X	X	X	X
VW-8	X	X	X	X	X
VW-9	X	X	X	X	X

Note (1): nitrate analysis by EPA method 353.2

File: i:\staff\lmeland\excel\sanlean\jun95sum.xls

Table 2
Water Level Summary Table

Project: Ingersoll-Rand Company, San Leandro, CA water level data
Date prepared: April 15, 1995
Latest update: August 24, 1995
Prepared by: JJM

Well	Date of measurement	Measuring point elevation (feet)	Depth to water (feet)	Water level elevation (feet)
MW-1	13-Dec-89	24.78	14.01	10.77
	16-Nov-90	24.97	14.84	10.13
	03-Apr-92	24.97	12.10	12.87
	21-Jun-94	24.95	12.98	11.97
	20-Oct-94	24.95	13.84	11.11
	25-Jan-95	24.95	10.32	14.63
	25-Apr-95	24.95	10.82	14.13
	30-Jun-95	24.95	11.92	13.03
MW-2	13-Dec-89	24.70	14.57	10.13
	16-Nov-90	24.64	15.05	9.59
	03-Apr-92	24.64	13.60	11.04
	21-Jun-94	24.68	13.86	10.82
	20-Oct-94	24.68	14.31	10.37
	25-Jan-95	24.68	12.01	12.67
	25-Apr-95	24.68	12.54	12.14
	30-Jun-95	24.68	13.22	11.46
MW-3	13-Dec-89	27.33	17.13	10.20
	16-Nov-90	27.51	17.67	9.84
	03-Apr-92	27.57	15.90	11.67
	21-Jun-94	27.51	16.28	11.23
	20-Oct-94	27.51	16.82	10.69
	25-Jan-95	27.51	14.25	13.26
	25-Apr-95	27.51	14.60	12.91
	30-Jun-95	27.51	15.44	12.07
MW-4	16-Nov-90	28.92	20.28	8.64
	03-Apr-92	28.92	18.25	10.67
	21-Jun-94	28.92	18.46	10.46
	20-Oct-94	28.92	19.20	9.72
	25-Jan-95	28.92	15.94	12.98
	25-Apr-95	28.92	16.52	12.40
	30-Jun-95	28.92	17.53	11.39
OB-1	21-Jun-94	30.28	19.56	10.72
	20-Oct-94	30.28	20.28	10.00
	25-Jan-95	30.28	16.95	13.33
	25-Apr-95	30.28	17.53	12.75
	30-Jun-95	30.28	18.57	11.71
VW-5	30-Jun-95	33.16	21.65	11.51
VW-6	30-Jun-95	31.92	20.62	11.30
VW-8	30-Jun-95	33.78	22.32	11.46
VW-9	30-Jun-95	34.58	22.98	11.60

Notes:

elev.source for December 13, 1989: PAR, 1989
elev. source for Nov. 16, 1990: ELG Surveying letter, 11/21/90
elev. source for April 3, 1992: Report on Further Delineation, June 1992
elev. source for June 21, 1994 and later dates: Moran Engineering map, 6/94
elev. source for vent wells: Moran Engineering map,7/95

FILE: H:\SLWATLEV.WB1

Table 3: San Leandro Groundwater Analytical Data Summary

Well	Date Collected	Sample collection by	Lab	EPA Method	acetone (ug/l)	benzene (ug/l)	bromobenzene (ug/l)	bromochloromethane (ug/l)	bromodichloromethane (ug/l)	bromoform (ug/l)	bromomethane (ug/l)	2-butanone (ug/l)	n-butylbenzene (ug/l)	carbon disulfide (ug/l)	carbon tetrachloride (ug/l)	chlorobenzene (ug/l)	chloroethane (ug/l)	chloroform (ug/l)	chloromethane (ug/l)	2-chlorotoluene (ug/l)	4-chlorotoluene (ug/l)	dibromochloromethane (ug/l)	1,2-dibromo-3-chloropropane (ug/l)	1,2-dibromoethane (ug/l)	dibromomethane (ug/l)	1,2-dichlorobenzene (ug/l)	1,3-dichlorobenzene (ug/l)	1,4-dichlorobenzene (ug/l)	dichlorodifluoromethane (ug/l)	1,1-dichloroethane (ug/l)	1,2-dichloroethane (ug/l)	1,1-dichloroethene (ug/l)	cis-1,2-dichloroethene (ug/l)	trans-1,2-dichloroethene (ug/l)	1,2-dichloropropane (ug/l)	1,3-dichloropropane (ug/l)	2,2-dichloropropane (ug/l)	1,1-dichloropropene (ug/l)
MW-1	17-Nov-89	IT	PAL	8010/8020		ND																																
	21-Jun-94	CEC	ARC	8260		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	21-Jun-94	CEC	ARC	8015																																			
	21-Jun-94	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	21-Jun-94	CEC	CEC	8015																																			
	20-Oct-94	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	20-Oct-94	CEC	CEC	8015/8020		<0.4																																	
	25-Jan-95	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	25-Jan-95	CEC	CEC	8015/8020		<0.4																																	
MW-2	17-Nov-89	IT	PAL	8010/8020		ND																																	
	21-Jun-94	CEC	ARC	8260		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	21-Jun-94	CEC	ARC	8015																																			
	21-Jun-94	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	21-Jun-94	CEC	CEC	8015																																			
	20-Oct-94	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	20-Oct-94	CEC	CEC	8015/8020		<0.4																																	
	25-Jan-95	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	25-Jan-95	CEC	CEC	8015/8020		<0.4																																	
MW-3	17-Nov-89	IT	PAL																																				
	21-Jun-94	CEC	ARC	8260		27	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	17	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	42	66	13	<1.0	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	21-Jun-94	CEC	ARC	8015																																			
	21-Jun-94	CEC	CEC	8260	<20	34	<5	<5	<5	<5	<5	<20	7	<5	<5	19	<5	<5	<5	<5	<5	<5	<5	<5	<5	45	7	14	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	21-Jun-94	CEC	CEC	8015																																			
	20-Oct-94	CEC	CEC	8260	50	9	<5	<5	<5	<5	<5	<20	13	<5	<5	19	<5	<5	<5	<5	<5	<5	<5	<5	<5	64	9	18	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	20-Oct-94	CEC	CEC	8015/8020		8.9																																	
	25-Jan-95	CEC	CEC	8260	<100	970	<30	<30	<30	<30	<30	<100	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
	25-Jan-95	CEC	CEC	8015/8020		950																																	
	26-Apr-95	CEC	CEC	8260	<20	1100	<5	<5	<5	<5	<5	<20	<5	<5	<5	15	<5	<5	<5	<5	<5	<5	<5	<5	<5	43	6	11	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	26-Apr-95	CEC	CEC	8015/8020		1200																																	
	30-Jun-95	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	56	9	17	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	30-Jun-95	CEC	CEC	8015/8020		16																																	
MW-4	16-Nov-90	IT	MCL	5030		1500							19		<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0	<1.0	11	<1.0	>1.0 & <5.0	18	<1.0	<1.0	>1.0 & <5.0	<1.0
	21-Jun-94	CEC	ARC	8260		370	<1.0	<1.0	<1.0	<1.0	<1.0																												
	21-Jun-94	CEC	ARC	8015																																			
	21-Jun-94	CEC	CEC	8260	<100	470	<30	<30	<30	<30	<30	<100	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
	21-Jun-94	CEC	CEC	8015																																			
	20-Oct-94	CEC	CEC	8260	160	280	<5	<5	<5	<5	<5	<20	17	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	20-Oct-94	CEC	CEC	8015/8020		360																																	
	25-Jan-95	CEC	CEC	8260	<100	400	<30	<30	<30	<30	<30	<100	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
	25-Jan-95	CEC	CEC	8015/8020		470																																	
	26-Apr-95	CEC	CEC	8260	<20	470	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	11	<5	<5	<5	<5	<5	<5	<5
	26-Apr-95	CEC	CEC	8015/8020		500							13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	30-Jun-95	CEC	CEC	8260	<20	600	<5	<5	<5	<5	<5	<20																											
	30-Jun-95	CEC	CEC	8015/8020		390																																	
OB-1	21-Jun-94	CEC	ARC	8260		83	<1.0	<1.0	<1.0	<1.0	<1.0		>1.0 & <5.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	6.7	12	<1.0	<1.0	<1.0	<1.0
	21-Jun-94	CEC	ARC	8015																																			
	21-Jun-94	CEC	CEC	8260	<20	130	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	9	14	<5	<5	<5	<5
	21-Jun-94	CEC	CEC	8015																																			
	30-Oct-94	CEC	CEC	8260	120	48	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	9	10	<5	<5	<5	<5
	30-Oct-94	CEC	CEC	8015/8020		48																																	
	25-Jan-95	CEC	CEC	8260	<20	180	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	8	10	<5	<5	<5	<5
	25-Jan-95	CEC	CEC	8015/8020		280																																	
	26-Apr-95	CEC	CEC	8260	<20	190	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	7	15	<5	<5	<5	<5
	26-Apr-95	CEC	CEC	8015/8020		200																																	
	30-Jun-95	CEC	CEC	8260	<20	160	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	12	15	<5	<5	<5	<5
	30-Jun-95	CEC	CEC	8015/8020		140																																	
VW-5	30-Jun-95	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	30-Jun-95	CEC	CEC	8015/8020		<0.4																																	
VW-6	30-Jun-95	CEC	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	30-Jun-95	CEC	CEC	8015/8020		<0.4																																	
VW-8	28-Jul-95	CEC	CEC	8260	<20	260	<5	<5	<5	<5	<5	<20	9	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	8	<5	<5	<5	<5	<5	<5	<5	<5
	28-Jul-95	CEC	CEC	8015/8020		280																																	
VW-9	28-Jul-95	CEC	CEC	8260	<20	9600	<5	<5	<5	<5	<5	<20	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	33	<5	6	<5	<5	<5	<5	<5	<5
	28-Jul-95	CEC	CEC	8015/8020		7500																																	

ARC - Ascarn Research Laboratories
CEC - Clayton Environmental Consultants
IT - International Technology Corporation

MCL - Mobile Chem Labs Inc
PAL - Precision Analytical Laboratory Inc

FILE: H:\CLIATTRO\SLWA\NEW WB1
prepared by: JLM 1/95
updated 8/22/95

Table 3. San Leandro Groundwater Analytical Data Summary

VW-I	Date Collected	Sample collection by	Lab	EPA Method	cis-1,3-dichloropropene (ug/l)	trans-1,3-dichloropropene (ug/l)	ethylbenzene (ug/l)	freon 113 (ug/l)	hexachlorobutadiene (ug/l)	2-hexanone (ug/l)	isopropylbenzene (ug/l)	p-isopropyltoluene (ug/l)	methylene chloride (ug/l)	4-methyl-2-pentanone (ug/l)	naphthalene (ug/l)	n-propylbenzene (ug/l)	sec-butylbenzene (ug/l)	styrene (ug/l)	tert-butylbenzene (ug/l)	1,1,1,2-tetrachloroethane (ug/l)	1,1,2,2-tetrachloroethane (ug/l)	tetrachloroethene (ug/l)	toluene (ug/l)	1,2,3-trichlorobenzene (ug/l)	1,2,4-trichlorobenzene (ug/l)	1,1,1-trichloroethane (ug/l)	1,1,2-trichloroethene (ug/l)	trichloroethene (ug/l)	trichlorofluoromethane (ug/l)	1,2,3-trichloropropane (ug/l)	1,2,4-trimethylbenzene (ug/l)	1,3,5-trimethylbenzene (ug/l)	vinyl acetate (ug/l)	vinyl chloride (ug/l)	xylenes (ug/l)	o-xylene (ug/l)	p,m xylenes (ug/l)	TPH gasoline (ug/l)	TPH EPA 8015 gasoline (ug/l)
MW-1	17-Nov-89	IT	PAL	8010/8021			ND																ND					29							ND				
	21-Jun-94	CEC	ARC	8260	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0	<1.0	<1.0	18	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0		<50
	21-Jun-94	CEC	ARC	8015																								20											
	21-Jun-94	CEC	CEC	8260	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5										<50
	21-Jun-94	CEC	CEC	8015																								11											
	20-Oct-94	CEC	CEC	8260	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.3	<5	<5	<5	<10	<5						<0.4	<0.4			<50
	20-Oct-94	CEC	CEC	8015/802			<0.3																					16											
	25-Jan-95	CEC	CEC	8260	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.3	<5	<5	<5	<10	<5						<0.4	<0.4			<50
	25-Jan-95	CEC	CEC	8015/802			<0.3																																
MW-2	17-Nov-89	IT	PAL	8010/8021			ND																ND					10							ND				
	21-Jun-94	CEC	ARC	8260	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0	<1.0		<1.0		<1.0	<1.0		<50
	21-Jun-94	CEC	ARC	8015																								5											
	21-Jun-94	CEC	CEC	8260	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5										<50
	21-Jun-94	CEC	CEC	8015																								6											
	20-Oct-94	CEC	CEC	8260	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.3	<5	<5	<5	<10	<5						<0.4	<0.4			<50
	20-Oct-94	CEC	CEC	8015/802			<0.3																	<0.3															
	25-Jan-95	CEC	CEC	8260	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5						<0.4	<0.4			<50
	25-Jan-95	CEC	CEC	8015/802			<0.3																	<0.3															
MW-3	17-Nov-89																																						
	21-Jun-94	CEC	ARC	8260	<1.0	<1.0	120		<1.0		13	>1.0 & <5.0	<1.0		18	33	>1.0 & <5.0	<1.0	<1.0	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0	<1.0	<1.0	63		<1.0			31	100			2700
	21-Jun-94	CEC	ARC	8015																								120											
	21-Jun-94	CEC	CEC	8260	<5	<5	170	<5	<5	<20	17	<5	<5	<5	<5	43	<5	<5	<5	<5	<5	<5	<5	44	<5	<5	<5	<5	<5	22	<10	<5			40	150			2900
	21-Jun-94	CEC	CEC	8015																								150											
	20-Oct-94	CEC	CEC	8260	<5	<5	90	<5	<5	<20	20	<5	<5	<5	<5	29	43	6	<5	<5	<5	<5	<5	44	<5	<5	<5	<5	<5	46	<10	<5			69	140			2800
	20-Oct-94	CEC	CEC	8015/802			96																					150							69	160			
	25-Jan-95	CEC	CEC	8260	<30	<30	80	<30	<30	<100	<30	<30	<30	<100	100	<30	<30	<30	<30	<30	<30	<30	<30	410	<30	<30	<30	<30	<30	350	80	<30	<30		820	1000			7100
	25-Jan-95	CEC	CEC	8015/802			86																	340											760	1100			
	26-Apr-95	CEC	CEC	8260	<5	<5	640	<5	<5	<20	29	<5	<5	<20	150	83	5	<5	62	<5	<5	<5	<5	1600	<5	<5	<5	<5	<5	650	160	<10	<5		900	2100			14000
	26-Apr-95	CEC	CEC	8015/802			720																	1700											940	1500			
	30-Jun-95	CEC	CEC	8260	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	14	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	54	40	<10	<5		26	41			1600
	30-Jun-95	CEC	CEC	8015/802			20																	17											33	99			
MW-4	16-Nov-90	IT	MCL	5030			720																	2000										27000				32000	
	21-Jun-94	CEC	ARC	8260	<1.0	<1.0	230		<1.0		43	>1.0 & <5.0	<1.0		46	54	>1.0 & <5.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	<1.0	<1.0	<1.0	<1.0	110		>1.0 & <5.0			44	270			8000
	21-Jun-94	CEC	ARC	8015																																			
	21-Jun-94	CEC	CEC	8260	<30	<30	360	<30	<30	<100	50	<30	<30	<100	<30	60	<30	<30	<30	<30	<30	<30	<30	60	<30	<30	<30	<30	<30	530	110	<50	<30		50	530			7600
	21-Jun-94	CEC	CEC	8015																								27											
	20-Oct-94	CEC	CEC	8260	<5	<5	240	<5	<5	<5	86	<5	<5	<20	96	78	8	<5	<5	<5	<5	<5	<5	34	<5	<5	<5	<5	<5	300	100	<10	<5		110	350			7800
	20-Oct-94	CEC	CEC	8015/802			270																	33											120	520			
	25-Jan-95	CEC	CEC	8260	<30	<30	420	<30	<30	<30	<100	40	<30	<30	120	100	<30	<30	<30	<30	<30	<30	<30	90	<30	<30	<30	<30	<30	600	120	<50	<30		310	550			9700
	25-Jan-95	CEC	CEC	8015/802			320																	110											320	730			
	26-Apr-95	CEC	CEC	8260	<5	<5	390	<5	<5	<20	51	<5	<5	<20	54	61	6	<5	<5	<5	<5	<5	<5	17	<5	<5	<5	<5	<5	490	81	<10	<5		60	490			6100
	26-Apr-95	CEC	CEC	8015/802			250																	11											24	210			
	30-Jun-95	CEC	CEC	8260	<5	<5	570	<5	<5	<5	90	<5	<5	<20	96	110	10	<5	<5	<5	<5	<5	<5	19	<5	<5	<5	<5	<5	660	130	<10	<5		74	520			7800
	30-Jun-95	CEC	CEC	8015/802			380																	18											53	400			
OB-1	21-Jun-94	CEC	ARC	8260	<1.0	<1.0	10		<1.0		28	<1.0	<1.0		>1.0 & <5.0	5.4	<1.0 & >5.0	<1.0	<1.0	<1.0	<1.0	<1.0	>1.0 & <5.0	<1.0	<1.0	<1.0	<1.0	31	<1.0	<1.0	>1.0 & <5.0	<1.0		<1.0		>1.0 & <5.0	8.6			2800
	21-Jun-94	CEC	ARC	8015																								42											
	21-Jun-94	CEC	CEC	8260	<5	<5	10	<5	<5	<20	39	<5	<5	<20	<5	6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	98	<5	<5	<5		<5	7			1600
	21-Jun-94	CEC	CEC	8015																								98											
	20-Oct-94	CEC	CEC	8260	<5	<5	<5	<5	<5	<20	30	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5		<5	<5			2900
	20-Oct-94	CEC	CEC	8015/802			5.2																	33											0.9	5			
	25-Jan-95	CEC	CEC	8260	<5	<5	32	<5	<5	<20	30	44	<5	<20	<5	11	<5	<5	<5	<5	<5	<5	<5	38	<5	23	<5	<5	<5	27	<5	<5	<5		21	45			3900
	25-Jan-95	CEC	CEC	8015/802			24																	29											15	35			
	26-Apr-95	CEC	CEC	8260	<5	<5	10	<5	<5	<20	38	<5	<5	<20	<5	8	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	57	<5	<5	<5		<5	8			2400
	26-Apr-95	CEC	CEC	8015/802			7.4																	34						5					2	6.2			
	30-Jun-95	CEC	CEC	8260	<5	<5	17	<5	<5	<20	48	<5	<5	<20	<5	11	<5	<5	<5	<5	<5	<5	<5	7	<5	<5	<5	<5	<5	55	<5	<5	8		2	15			2600
	30-Jun-95	CEC	CEC	8015/802			15																	7											3.1	13			

VW-5	30-Jun-95	CEC	CEC	8260	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5		<5	<5			<50
	30-Jun-95	CEC	CEC	8015/802			<0.3																	<0.3											<0.4	<0.4			
VW-6	30-Jun-95	CEC	CEC	8260	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5		<5	<5			<50
	30-Jun-95	CEC	CEC	8015/802			<0.3																	<0.3											<0.4	<0.4			
VW-8	28-Jul-95	CEC	CEC	8260	<5	<5	210	<5	<5	<20	21	<5	<5	<20	46	57	6	<5	<5	<5	<5	<5	<5	44	<5	<5	<5	<5	<5	270	61	<10	<5		130	210			5300
	28-Jul-95	CEC	CEC	8015/802			230																	570											89	180			
VW-9	28-Jul-95	CEC	CEC	8260	<5	<5	970	<5	<5	<20	48	<5	<5	<20	240	120	9	<5	<5	<5	<5	<5	<5	2600	<5	<5	<5	<5	<5	650	190	<10	<5		1100	1900			30000
	28-Jul-95	CEC	CEC	8015/802			1100																	3500											1200	2400			

ARC - Azcen Research Laboratories
CEC - Clayton Environmental Consultants
IT - International Technology Corporation

MCL - Mobile Chem Labs, Inc
PAL - Precision Analytical Laboratory, Inc

FILE H:\QUATTRO\SJM\NEW\WB1
prepared by JJM 1/95
updated 5/22/95

Table 4 SanLeandro Geoprobe Groundwater Analytical Data
Summary of Analytical Results for Geoprobe Investigation, June 1995
Project: San Leandro California
Prepared by: JJM 8/23/95

Geoprobe Location	Date Collected	Sample Collection By	Lab	EPA Method	acetone (ug/l)	benzene (ug/l)	bromo-benzene (ug/l)	bromo-chloro methane (ug/l)	bromo dichloro-methane (ug/l)	bromo-form (ug/l)	bromo-methane (ug/l)	2-buta-none (ug/l)	n-butyl-benzene (ug/l)	carbon disulfide (ug/l)	carbon tetra-chloride (ug/l)	chloro-benzene (ug/l)	chloro-ethane (ug/l)	chloro-form (ug/l)	chloro-methane (ug/l)	2-chloro-toluene (ug/l)	4-chloro-toluene (ug/l)	dibromo-chloro-methane (ug/l)	1,2-dibromo-3-chloro-propane (ug/l)	1,2 di-bromo ethane (ug/l)	dibromo-methane (ug/l)	1,2-di-chloro-benzene (ug/l)	1,3-di-chloro-benzene (ug/l)	1,4-di-chloro-benzene (ug/l)	dichloro-difluoro-methane (ug/l)	1,1-di-chloro-ethane (ug/l)	1,2-di-chloro-ethene (ug/l)	1,1-di-chloro-ethene (ug/l)	cis-1,2-dichloro-ethene (ug/l)	trans-1,2-dichloro-ethene (ug/l)	1,2-dichloro-propane (ug/l)	1,3-dichloro-propane (ug/l)	2,2-dichloro-propane (ug/l)
GP-1		CAP	CEC																																			
GP-1	6/28/95	CAP	CEC	8015/8020		<20																																
GP-2	6/28/95	CAP	CEC	8260	<1000	<300	<300	<300	<300	<300	<300	<1000	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
GP-2	6/28/95	CAP	CEC	8015/8020		74																																
GP-3		CAP	CEC																																			
GP-3		CAP	CEC																																			
GP-4		CAP	CEC																																			
GP-4	6/28/95	CAP	CEC	8015/8020		44																																
GP-5		CAP	CEC																																			
GP-5		CAP	CEC																																			
GP-6	6/29/95	CAP	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
GP-6	6/29/95	CAP	CEC	8015/8020		<0.4																																
GP-7	6/27/95	CAP	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	14	<5	<5	<5	<5	<5
GP-7	6/27/95	CAP	CEC	8015/8020		<0.4																																
GP-8	6/29/95	CAP	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
GP-8	6/29/95	CAP	CEC	8015/8020		<0.4																																
GP-9	6/27/95	CAP	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
GP-9	6/27/95	CAP	CEC	8015/8020		<0.4																																
GP-10		CAP	CEC																																			
GP-10		CAP	CEC																																			
GP-11	6/29/95	CAP	CEC	8260	<400	<100	<100	<100	<100	<100	<100	<400	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
GP-11	6/29/95	CAP	CEC	8015/8020		120																																
GP-12	6/27/95	CAP	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
GP-12	6/27/95	CAP	CEC	8015/8020		0.4																																
GP-13	6/28/95	CAP	CEC	8260	<20	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
GP-13	6/28/95	CAP	CEC	8015/8020		<0.4																																

CAP - Capsule Environmental Engineering
CEC - Clayton Environmental Consultants

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Table 4 SanLeandro Geoprobe Groundwater Analytical Data
Summary of Analytical Results for Geoprobe Investigation, June, 19
Project: San Leandro, California
Prepared by JJM, 8/23/95

Geoprobe Location	Date Collected	Sample Collection By	Lab	EPA Method	1,1-dichloro-propene (ug/l)	cis-1-3-dichloro-propene (ug/l)	trans-1,3-dichloro-propene (ug/l)	ethyl-benzene (ug/l)	freon 113 (ug/l)	hexachlo-robuta-diene (ug/l)	2-hexa-none (ug/l)	isopropyl-benzene (ug/l)	p-iso-propyl-toluene (ug/l)	methy-lene chloride (ug/l)	4-methyl-2-pent-anone (ug/l)	naphtha-lene (ug/l)	n-propyl-benzene (ug/l)	sec-butyl-benzene (ug/l)	styrene (ug/l)	tert-butyl-benzene (ug/l)	1,1,1,2-tetra-chloro-ethane (ug/l)	1,1,2,2-tetra-chloro-ethene (ug/l)	tetra-chloro-ethene (ug/l)	toluene (ug/l)	1,2,3-trichloro-benzene (ug/l)	1,2,4-trichloro-benzene (ug/l)	1,1,1-trichloro-ethane (ug/l)	1,1,2 trichloro-ethene (ug/l)	trichloro-ethene (ug/l)	trichloro-fluoro-methane (ug/l)	1,2,3-trichloro-propane (ug/l)	1,2,4-trimethyl-benzene (ug/l)	1,3,5-trimethyl-benzene (ug/l)	vinyl acetate (ug/l)	vinyl chloride (ug/l)	o-xylene (ug/l)	p,m xylenes (ug/l)	TPH EPA 8015 gasoline (ug/l)
GP-1		CAP	CEC																					<20												<20	820	22000
GP-1	6/28/95	CAP	CEC	8015/8020				910																900														
GP-2	6/28/95	CAP	CEC	8260	<300	<300	<300	3600	<300	<300	<1000	<300	<300	<300	<1000	600	600	<300	<300	<300	<300	<300	<300	1400	<300	<300	<300	<300	<300	<300	<300	3800	1100	<600	<300	4200	9400	
GP-2	6/28/95	CAP	CEC	8015/8020				2800																												3500	8200	58000
GP-3		CAP	CEC																																			
GP-3		CAP	CEC																																			
GP-4		CAP	CEC																					38												19	46	380
GP-4	6/28/95	CAP	CEC	8015/8020				21																														
GP-5		CAP	CEC																																			
GP-5		CAP	CEC																																			
GP-6	6/29/95	CAP	CEC	8260	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.3	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5		
GP-6	6/29/95	CAP	CEC	8015/8020				<0.3																<0.3												<0.4	<0.4	<50
GP-7	6/27/95	CAP	CEC	8260	<5	<5	<5	9	<5	<5	<20	<5	<5	<5	<20	18	<5	<5	<5	<5	<5	<5	<5	<5	<0.3	<5	<5	<5	<5	<5	<5	<5	21	<5	<10	<5	6	18	
GP-7	6/27/95	CAP	CEC	8015/8020				<0.3																<0.3												<0.4	<0.4	<50
GP-8	6/29/95	CAP	CEC	8260	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.3	<5	<5	<5	41	<5	<5	<5	21	<5	<10	<5	6	18	
GP-8	6/29/95	CAP	CEC	8015/8020				<0.3																<0.3												<0.4	<0.4	<50
GP-9	6/27/95	CAP	CEC	8260	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.3	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	
GP-9	6/27/95	CAP	CEC	8015/8020				<0.3																<0.3												<0.4	<0.4	<50
GP-10		CAP	CEC																																			
GP-10		CAP	CEC																																			
GP-11	6/29/95	CAP	CEC	8260	<100	<100	<100	900	<100	<100	<400	<100	<100	<100	<400	500	200	<100	<100	<100	<100	<100	<100	<100	5.7	<100	<100	<100	<100	<100	<100	<100	2000	500	<200	<100	400	1800	
GP-11	6/29/95	CAP	CEC	8015/8020				770																													320	1500	14000
GP-12	6/27/95	CAP	CEC	8260	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.3	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	
GP-12	6/27/95	CAP	CEC	8015/8020				0.4																<0.3												<0.4	0.5	<50
GP-13	6/28/95	CAP	CEC	8260	<5	<5	<5	<5	<5	<5	<20	<5	<5	<5	<20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<0.3	<5	<5	<5	<5	18	<5	<5	<5	<5	<10	<5	<5	<5	
GP-13	6/28/95	CAP	CEC	8015/8020				<0.3																<0.3												<0.4	<0.4	<50

CAP - Capsule Environmental Engineering
CEC - Clayton Environmental Consultants

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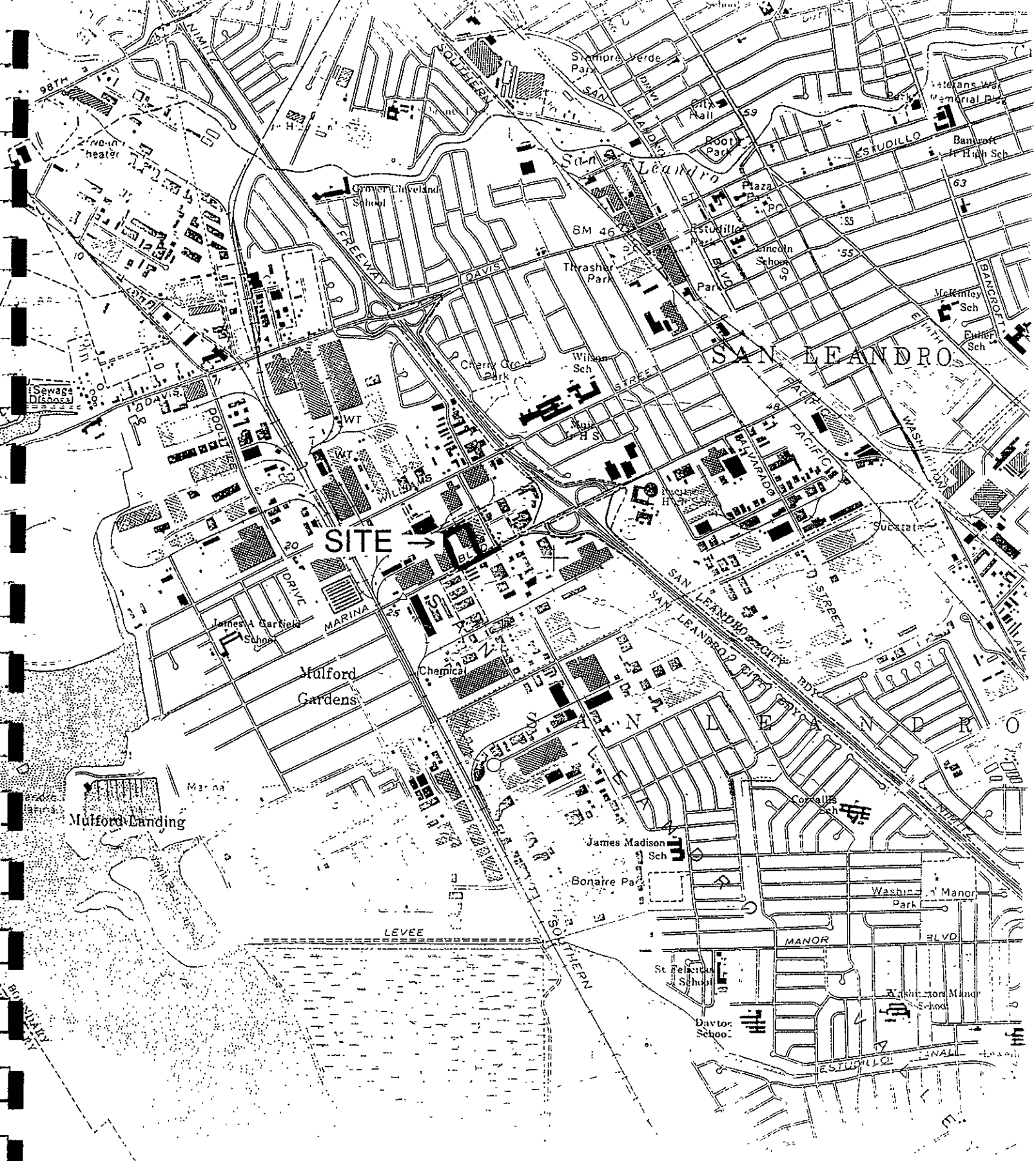
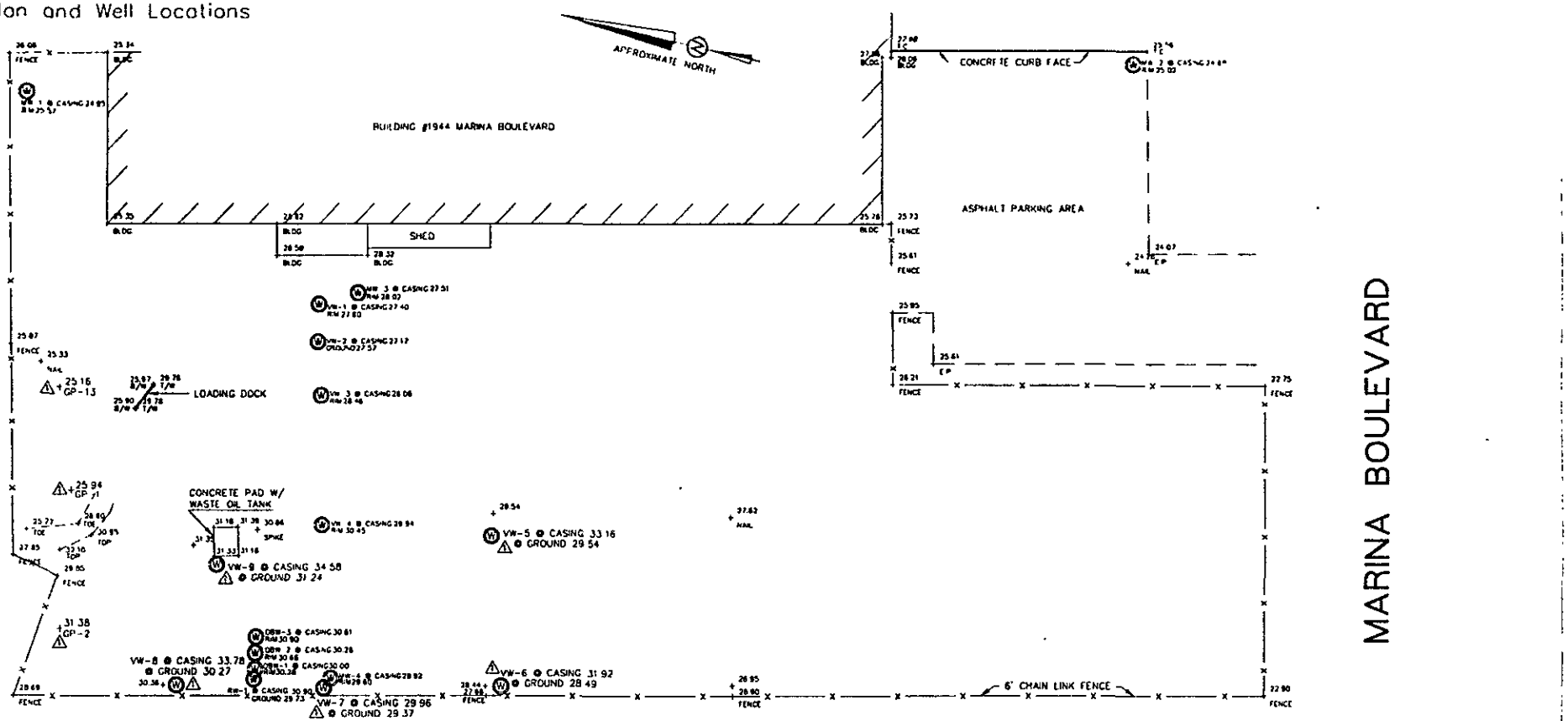


Source: San Leandro, California
7 ½ minute Quadrangle
U.S. Geological Survey
Photo revised 1980

Figure 1 - Site Location Map
San Leandro, California

FIGURE 2
Site Plan and Well Locations



LEGEND	
T.C.	TOP OF CURB
	BUILDING LINE
T/W	TOP OF WALL
B/W	BASE OF WALL
-x-	FENCE LINE
W	WELL
E.P.	EDGE OF PAVEMENT
TOP	TOP OF BANK
TOE	TOE OF SLOPE

GRAPHIC SCALE
25 0 25 50

BASIS OF ELEVATIONS: CITY OF SAN LEANDRO BENCHMARK, CINCH NAIL ON TOP OF CURB AT STORM WATER INLET SOUTHEAST CORNER OF THE INTERSECTION OF MARINA BOULEVARD AND MERCED STREET, ELEVATION = 22.96'

ALL CASING ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF PVC PIPING

ALL RIM ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF STEEL RIM UNLESS OTHERWISE NOTED

JUNE 1994

WELL LOCATION SURVEY
INGERSOLL-RAND EQUIPMENT CORPORATION
LOCATED AT 1944 MARINA BOULEVARD
* CITY OF SAN LEANDRO COUNTY OF ALAMEDA CALIFORNIA

MORAN ENGINEERING
CIVIL ENGINEERS & LAND SURVEYORS
483 KENTUCKY AVENUE
BERKELEY, CALIFORNIA
94707
(510) 527-7744

CAPSULE
ENVIRONMENTAL ENGINEERING, INC.
1970 OAKCREST AVE., SUITE 210
ST. PAUL, MINNESOTA 55113
(612) 636-3644

TITLE: WELL LOCATION SITE PLAN
INGERSOLL-RAND CORPORATION
SAN LEANDRO, CALIFORNIA

REVISION	DATE	DESCRIPTION

SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO	DRAWING NO	Sheet
STATED	LJM		10/30/95	001-142	S-1	of

Water Level Elevations

San Leandro, California

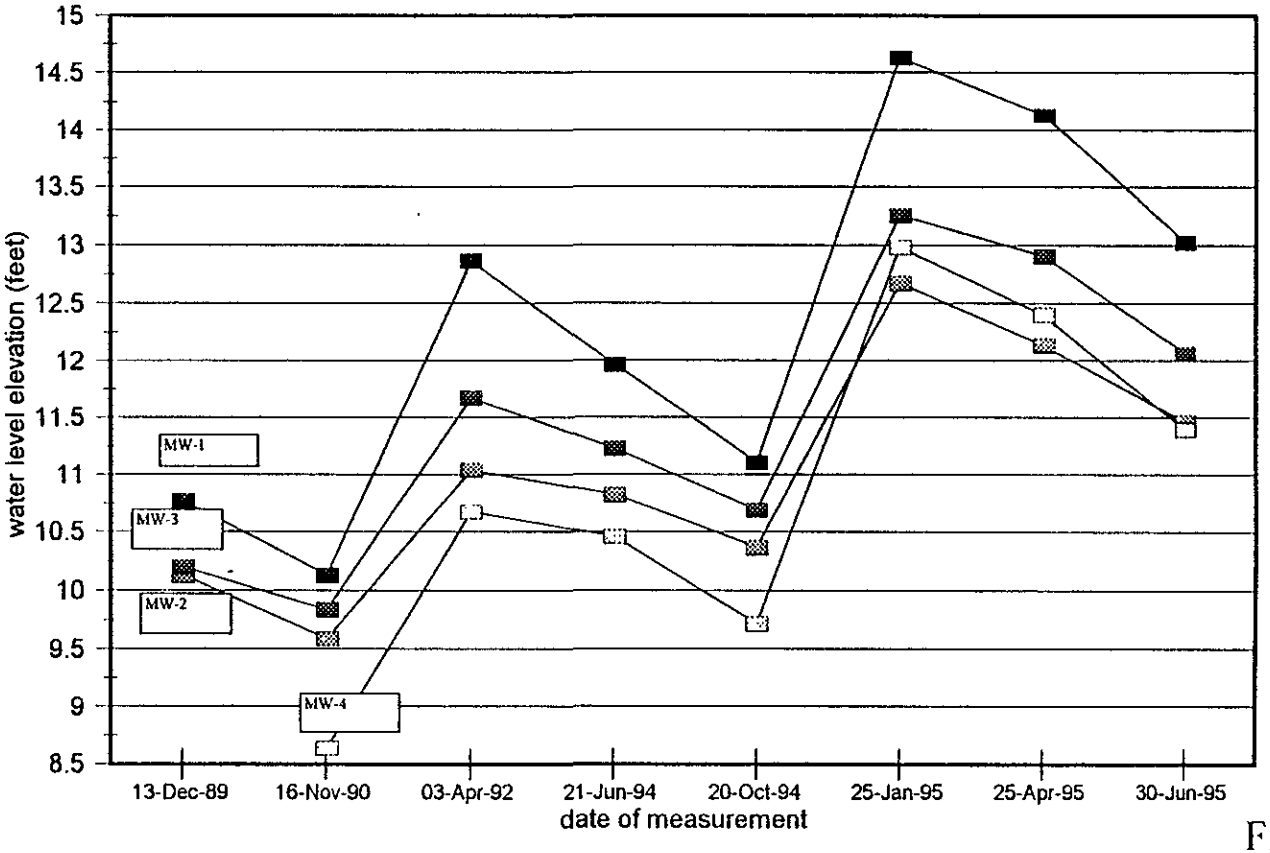
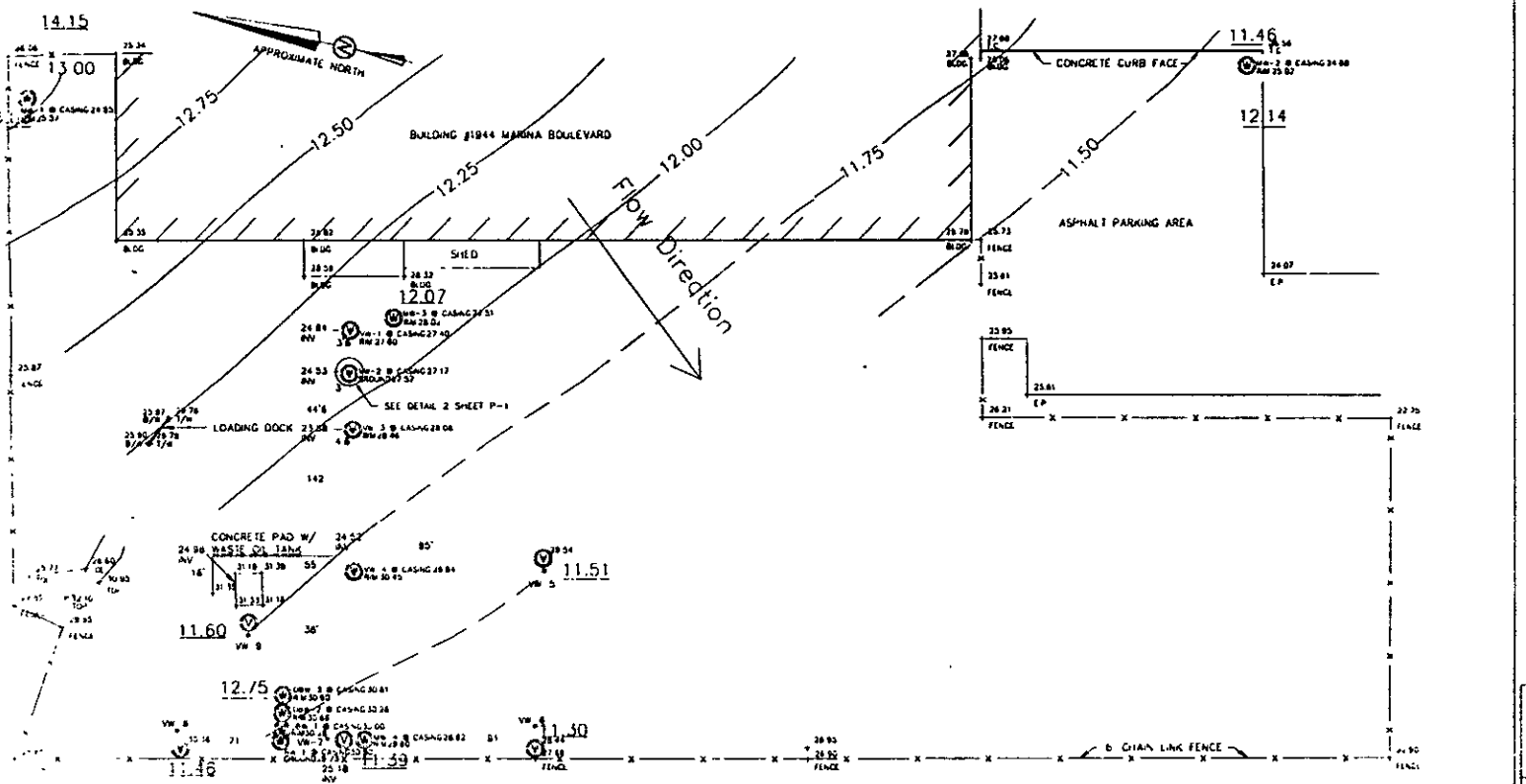


Figure 3

File: H:\QUATTRO\SLWATLEV\WBI Graph1

FIGURE 4
GROUNDWATER CONTOURS 6/30/95



LEGEND	
T C	TOP OF CURB
B/L	BUILDING LINE
T/W	TOP OF WALL
B/W	BASE OF WALL
-x-	FENCE LINE
	WELL EXISTING
	SOIL VAPOR VENT
E P	EDGE OF PAVEMENT
TOP	TOP OF BANK
TOE	TOE OF SLOPE

BASIS OF ELEVATIONS: CITY OF SAN LEANDRO BENCHMARK, CROSS NAIL ON TOP OF CURB AT STORM WATER INLET SOUTHEAST CORNER OF THE INTERSECTION OF MARINA BOULEVARD AND MERCED STREET ELEVATION = 22.98

ALL CASING ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF PVC PIPING

ALL RIM ELEVATIONS WERE TAKEN AT THE SOUTHWEST EDGE OF STEEL RIM UNLESS OTHERWISE NOTED

* DENOTES APPROXIMATE LOCATION OF VW - 5 THRU 9

Approximate Scale: 1" = 85'

WELL LOCATION SURVEY
INGERSOLL-RAND EQUIPMENT CORPORATION
LOCATED AT 944 MARINA BOULEVARD
CITY OF SAN LEANDRO COUNTY OF ALAMEDA, CALIFORNIA
JUNE 1994

MORAN ENGINEERING
CIVIL ENGINEERS & LAND SURVEYORS
483 HEARST AVENUE
BERKELEY, CALIFORNIA
94707
(510) 527-7744

CAPSULE
ENVIRONMENTAL ENGINEERING, INC
1078 MARIETTA AVE. SUITE 206
ST. PAUL, MINNESOTA 55117
(612) 636-0044

TITLE GROUNDWATER CONTOUR MAP 6/30/95
INGERSOLL-RAND CORPORATION
SAN LEANDRO, CALIFORNIA

REVISION	DATE	DESCRIPTION

SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO	DRAWING NO	SHEET
N/S	VEC		01/29/95	1203/94	6 OF 42	S-5

FIGURE 5

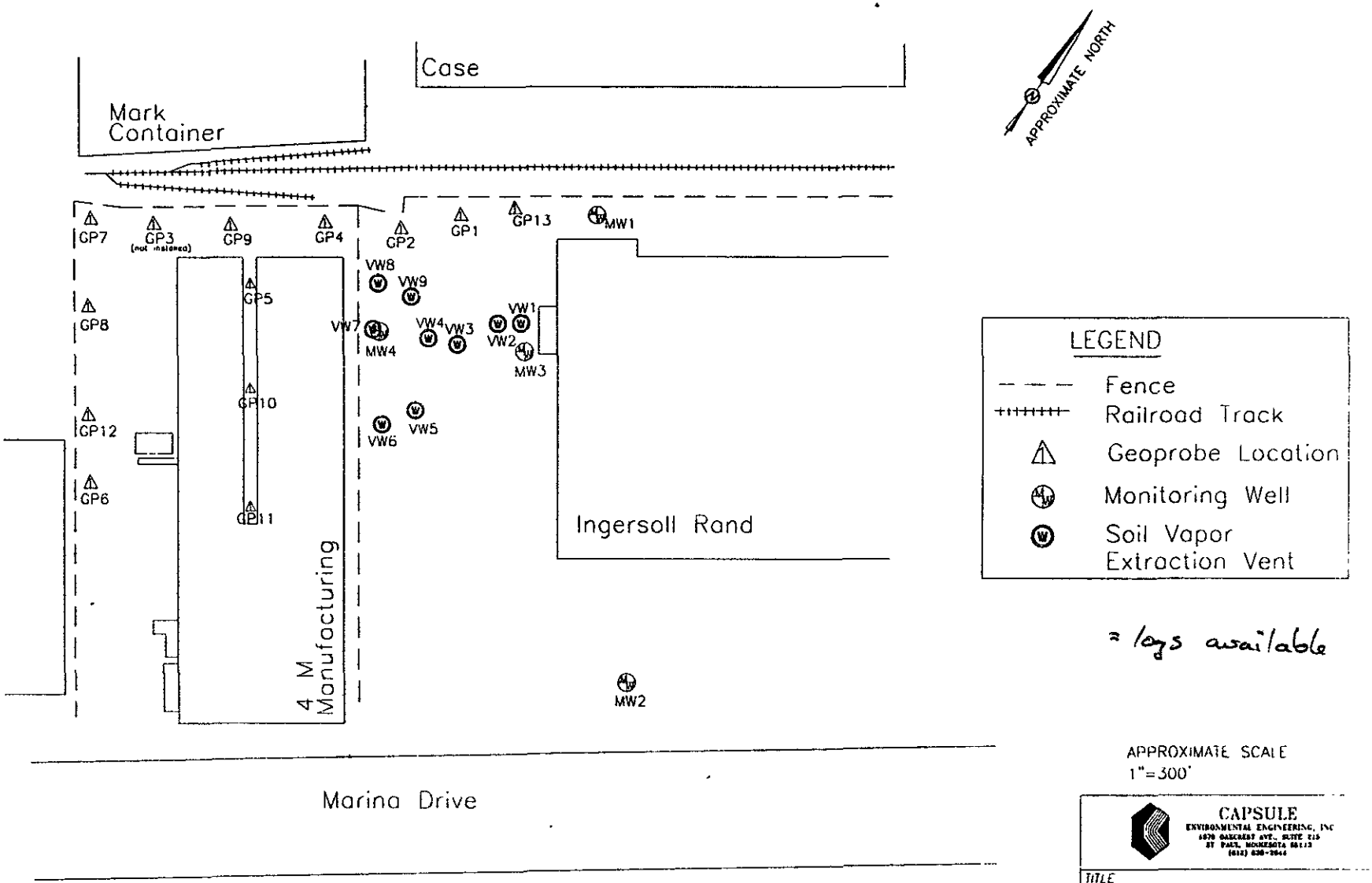
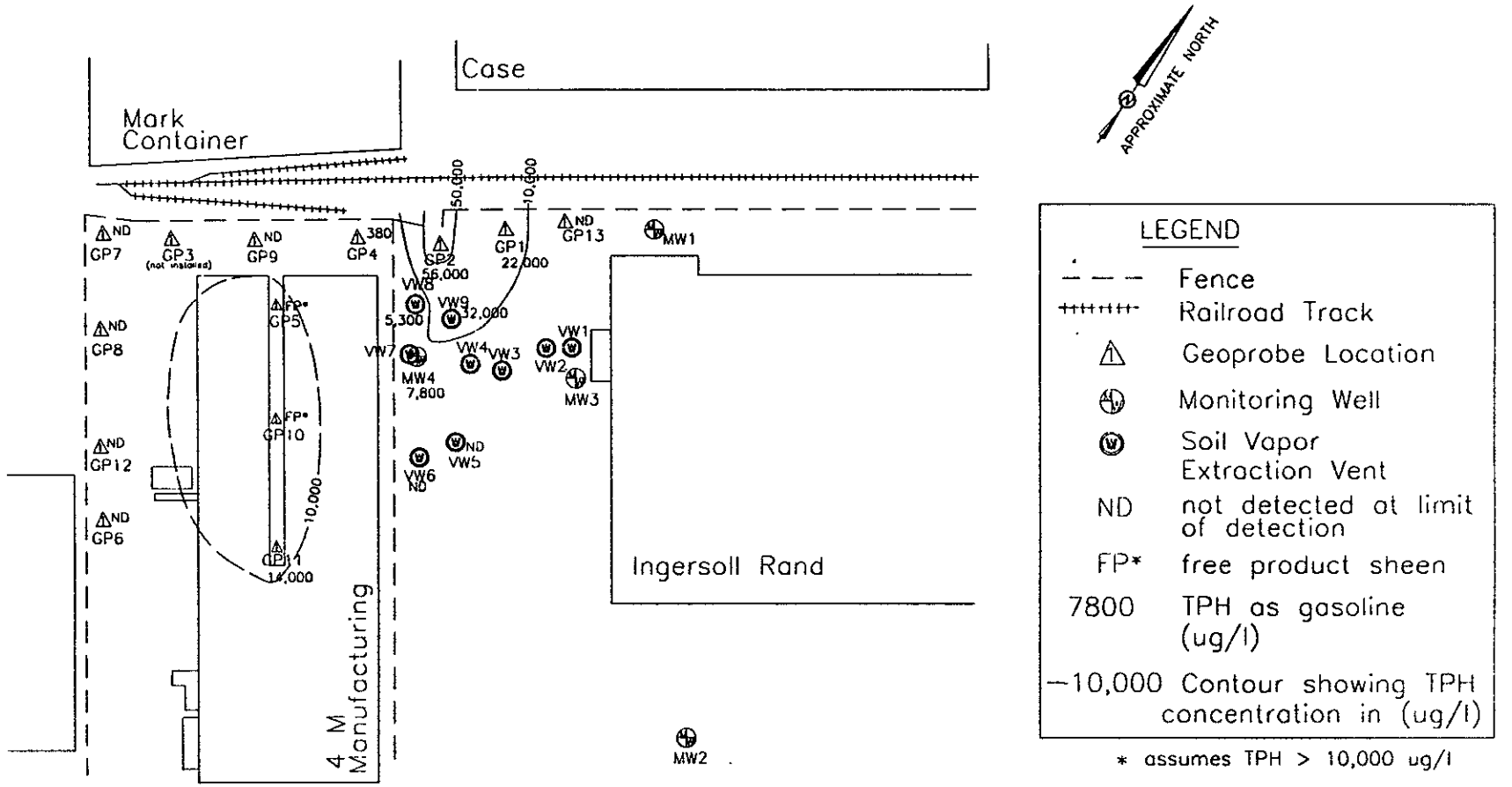

Case
Mark Container
APPROXIMATE NORTH
GP7
GP3
(not installed)
GP9
GP4
GP2
GP1
GP13
MW1
VW8
VW9
GP5
GP8
VW7
MW4
VW4
VW3
VW1
VW2
MW3
GP10
GP12
VW6
VW5
GP6
GP11
Ingersoll Rand
4 M Manufacturing
MW2
Marina Drive
LEGEND
Fence
Railroad Track
Geoprobe Location
Monitoring Well
Soil Vapor Extraction Vent
= logs available
APPROXIMATE SCALE
1"=300'
CAPSULE
ENVIRONMENTAL ENGINEERING, INC
TITLE
SAN LEANDRO, CA
GEOPROBE SAMPLING LOCATIONS

FIGURE 6
TPH Concentrations and Contours

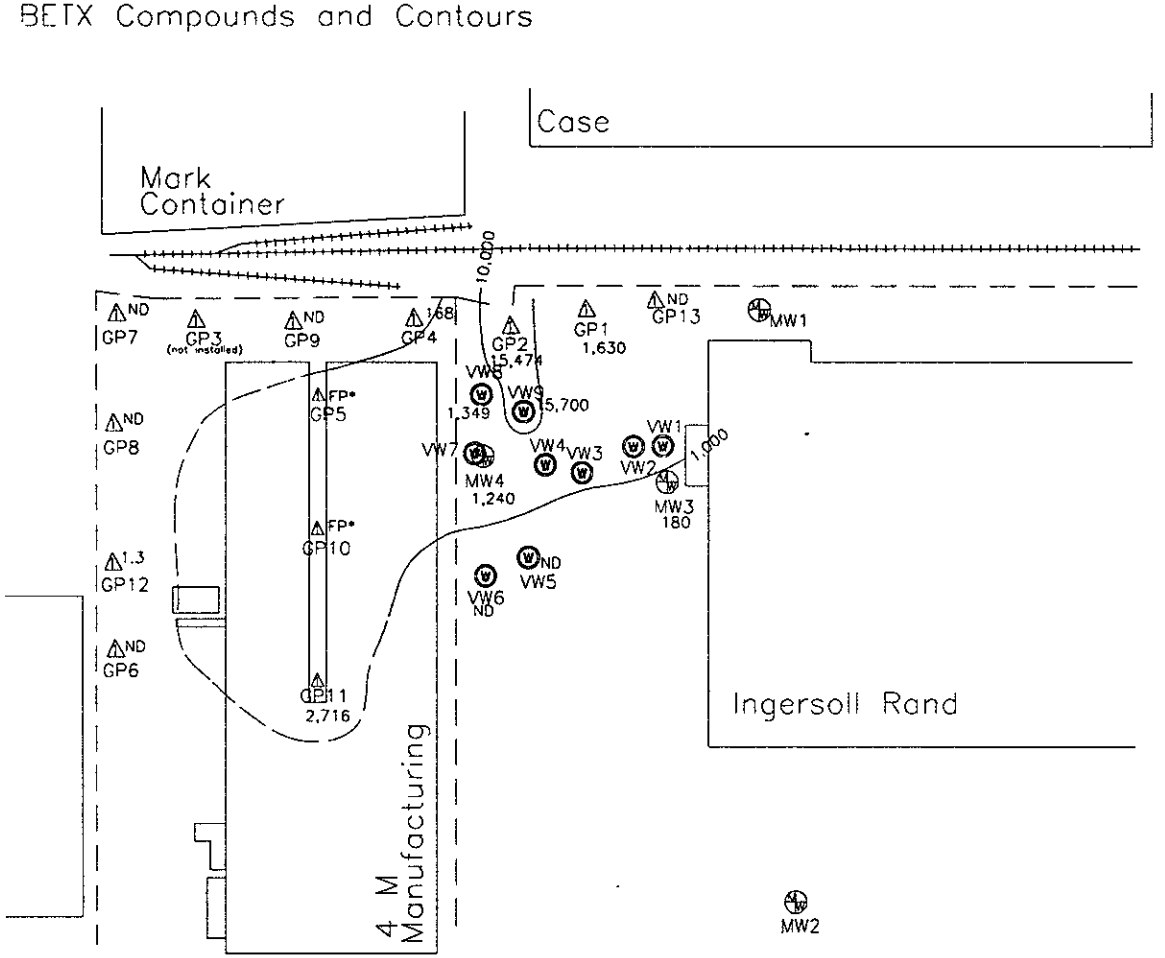


CAPSULE
ENVIRONMENTAL ENGINEERING, INC
1970 OAKCREST AVE., SUITE 210
ST. PAUL, MINNESOTA 55113
(612) 638-2066

TITLE
SAN LEANDRO, CA
TPH Concentrations and Contours

REVISION	DATE	DESCRIPTION	SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO	DRAWING NO	SHEET
			STATED	L.M		10/1/98	01-327-450		of

FIGURE 7
Sum of BETX Compounds and Contours



APPROXIMATE NORTH

LEGEND

– – –	Fence
+++++++	Railroad Track
△	Geoprobe Location
MW	Monitoring Well
VW	Soil Vapor Extraction Vent
ND	not detected at limit of detection
FP*	free product sheen
2716	sum of BETX concentration (ug/l) (EPA 8020)
–1,000	contour showing BETX concentration (ug/l)

* assumes sum of BETX > 1,000 ug/l

APPROXIMATE SCALE
1"=300'

CAPSULE
ENVIRONMENTAL ENGINEERING, INC.
1970 OAKCREST AVE., SUITE 215
ST PAUL, MINNESOTA 55113
(612) 636-2544

TITLE
SAN LEANDRO, CA
Sum of BETX Compounds and Contours

REVISION	DATE	DESCRIPTION	SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO.	DRAWING NO.	Sheet
			STATED	LJM		10/1/9801-327-400			1 OF 1