JONAS & ASSOCIATES INC.
Environmental Consultants

Jonas & Associates Inc.

GROUNDWATER MONITORING REPORT
Sampling Round Eleven

PACO PUMPS, INC.
9201 San Leandro Street
Oakland, California

February 23, 1996

Report Prepared for:

PACO PUMPS, INC.
9201 San Leandro Street
Oakland, California 94603-1237

GROUNDWATER MONITORING REPORT
Sampling Round Eleven
PACO PUMPS, INC.
9201 San Leandro Street, Oakland, California

Jonas and Associates Inc. Job No. PCO-220

Prepared by:

Mr. Ellis Ishaya
Environmental Engineer
Jonas and Associates Inc.
2815 Mitchell Drive, Suite 209
Walnut Creek, California 94598
(510) 933-5360

Technical Review by:

Mark L. Jonas, R.G.
Registered Geologist #6392

February 23, 1996

GROUNDWATER MONITORING REPORT
Sampling Round Eleven

PACO PUMPS, INC.
9201 San Leandro Street
Oakland, California

February 23, 1996

Prepared for:

PACO PUMPS, INC.
Oakland, California

Prepared by:

Jonas and Associates Inc.
Walnut Creek, California
(510) 933-5360

GROUNDWATER MONITORING REPORT
Sampling Round Eleven

PACO PUMPS, INC.
9201 San Leandro Street
Oakland, California

TABLE OF CONTENTS

TABLE OF CONTENTS con't

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

GROUNDWATER MONITORING REPORT
Sampling Round Eleven

PACO PUMPS, INC.
9201 San Leandro Street
Oakland, California
February 23, 1996

1.0 INTRODUCTION

Jonas and Associates Inc. (J&A) has been retained by PACO Pumps Inc. (PACO or PACO Pumps) to perform the groundwater monitoring program at their former property located at 9201 San Leandro Street, in Oakland, California 94603-1237. To date, eleven groundwater sampling rounds have been performed at this facility. The first ten sampling rounds were presented in previous documents, identified in Section 5.0 References. This report presents the results of the eleventh groundwater sampling round, performed on November 29, 1995.

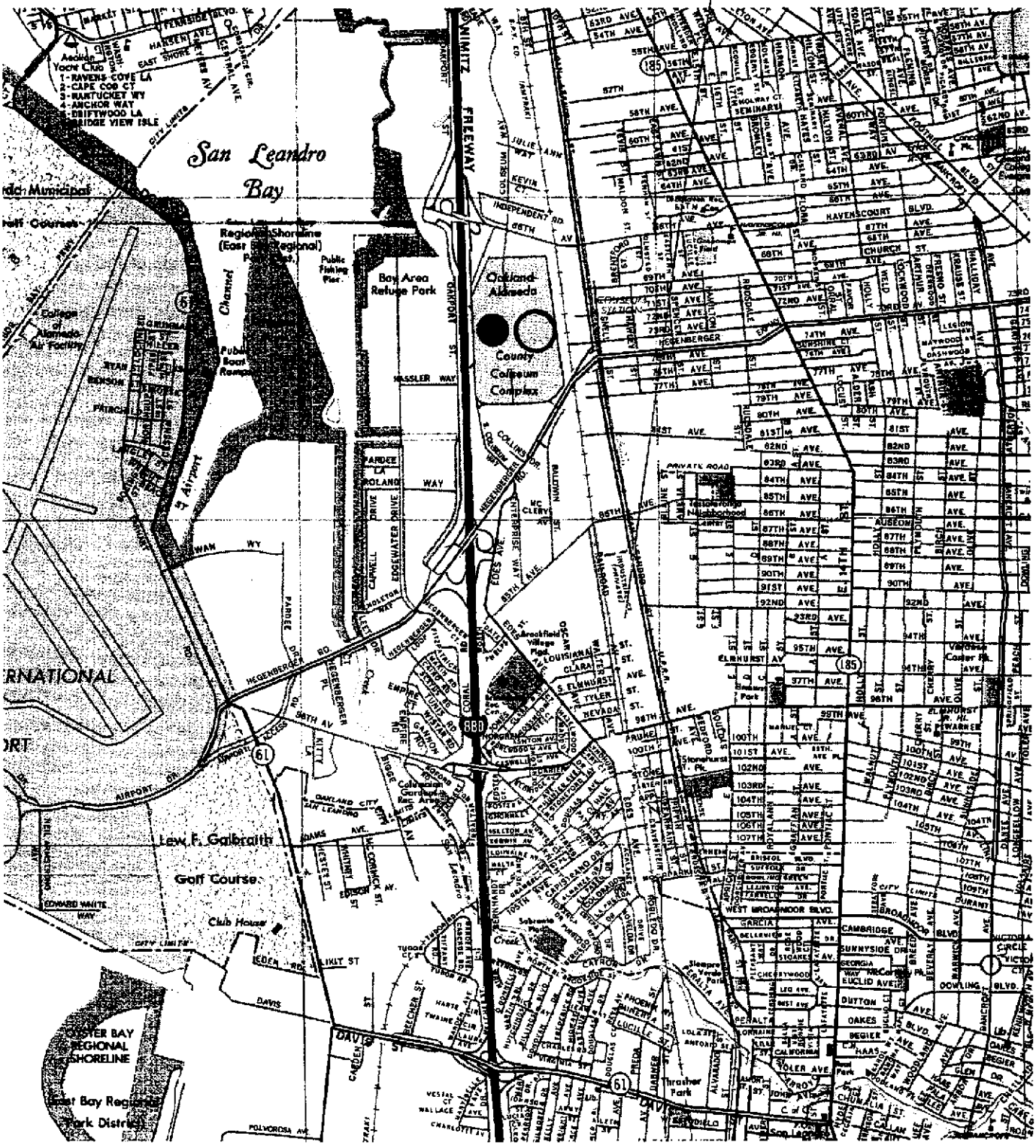
PACO Pumps' environmental representative for this project is Mr. John Lilla {(512) 314-8500}. The lead agency for this project is the Alameda County Health Care Services Agency, Department of Environmental Health, Hazardous Division (Alameda County Health Services). The address of Alameda County Health Services is 1131 Harbor Bay Parkway, 2nd Floor, Alameda, California 94502. The agency representative is Ms. Eva Chu {(510) 567-6762}.

1.1 Site Description

The PACO Pumps former facility presented in this report is located at 9201 San Leandro Street, in Oakland, California. Prior to May 1992, PACO Pumps had an active facility at this location. The facility contained a manufacturing, engineering, and storage building, a purchasing and data processing building, a warehouse, a welding shop, employee parking, and outside storage. Apparently, the property also had two underground tanks used for the storage of gasoline. The property is largely secured by a Cyclone fence and gates. PACO Pumps closed this facility and removed its equipment. Currently, this property is owned by a local company which primarily uses it to warehouse glassware. Adjacent to the PACO Pumps property is Saint Vincent DePaul Resale, where a previous investigation by Subsurface Consultants Inc. (1992) identified the presence of various chemicals on their site. Numerous drums were previously stored on the Saint Vincent DePaul's property.

The regional location of the property is presented in Figure 1-1. The facility is located in Township 2 South, Range 3 West, Section 22, Mount Diablo Baseline and Meridian. The land is essentially flat. Prior to moving, PACO Pumps' Environmental Protection Agency identification number for the facility was CAD088772629.

PACO PUMPS
9201 SAN LEANDRO STREET



REGIONAL LOCATION
PACO PUMPS
9201 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

1" = 1/2 MILE

Figure 1-1

DRAWING NUMBER:
PCO220-FIG 1

1.2 Scope of Report

This "Groundwater Monitoring Report, Sampling Round Eleven" is presented in four sections and three appendices. Section 1, Introduction, provides a brief description of the site and the scope of the report. Section 2, Monitoring Wells and Hydrogeology, presents general well construction details for the five monitoring wells, the results of elevation and location surveys, and a local hydrogeologic cross-section. Section 3, Groundwater Sampling and Analysis, presents Round Eleven groundwater sampling procedures and results, along with water level and free product measurements. Section 4, References, cites various references relevant to this report.

The appendices of the report include groundwater analysis summary tables, chain-of-custody records, and laboratory data sheets.

2.0 MONITORING WELLS AND HYDROGEOLOGY

This section of the report presents a brief history and construction details for the five monitoring wells located at the 9201 San Leandro Street former PACO Pumps' facility. In addition, a summary of the location and elevation surveys performed by Kier & Wright is provided. A local hydrogeologic cross-section is also presented using lithologic logs from on-site monitoring well boreholes.

2.1 Monitoring Wells

Five monitoring wells are located at the former PACO Pumps' facility. Four of these monitoring wells were drilled and installed during a period from November 3 through November 9, 1992. The J&A February 1993 "First Quarterly Status Report, PACO Pumps, 9201 San Leandro Street" presents the installation details and the rational for locating and sampling each of the monitoring wells. Monitoring well 9MW5 was drilled and installed on August 12, 1994. The installation details and rational for monitoring well 9MW5 are presented in the J&A August 1994 "Groundwater Monitoring Report, Sampling Round Six, PACO Pumps, 9201 San Leandro Street, Oakland, California". All of the monitoring wells are screened at an apparently transmissive fine sand to silty clay found underneath the facility. Figure 2-1 presents the locations of the five monitoring wells, the Round Eleven analyses performed at each well, the previous excavation site, suspected former underground storage tank locations, Saint Vincent DePaul, and other on-site structures.

2.1.1 Construction Details

All of the five monitoring wells are constructed in boreholes drilled to depths of 21 feet. One pilot borehole next to monitoring well 9MW3 was drilled down to a depth of 30 feet to collect lithologic samples for analyses. Each of five monitoring wells have a fifteen foot well screen set between approximately 5 to 20 feet below ground surface (bgs). The wells have a casing and screen diameter of four inches, placed in an 8½ inch borehole.

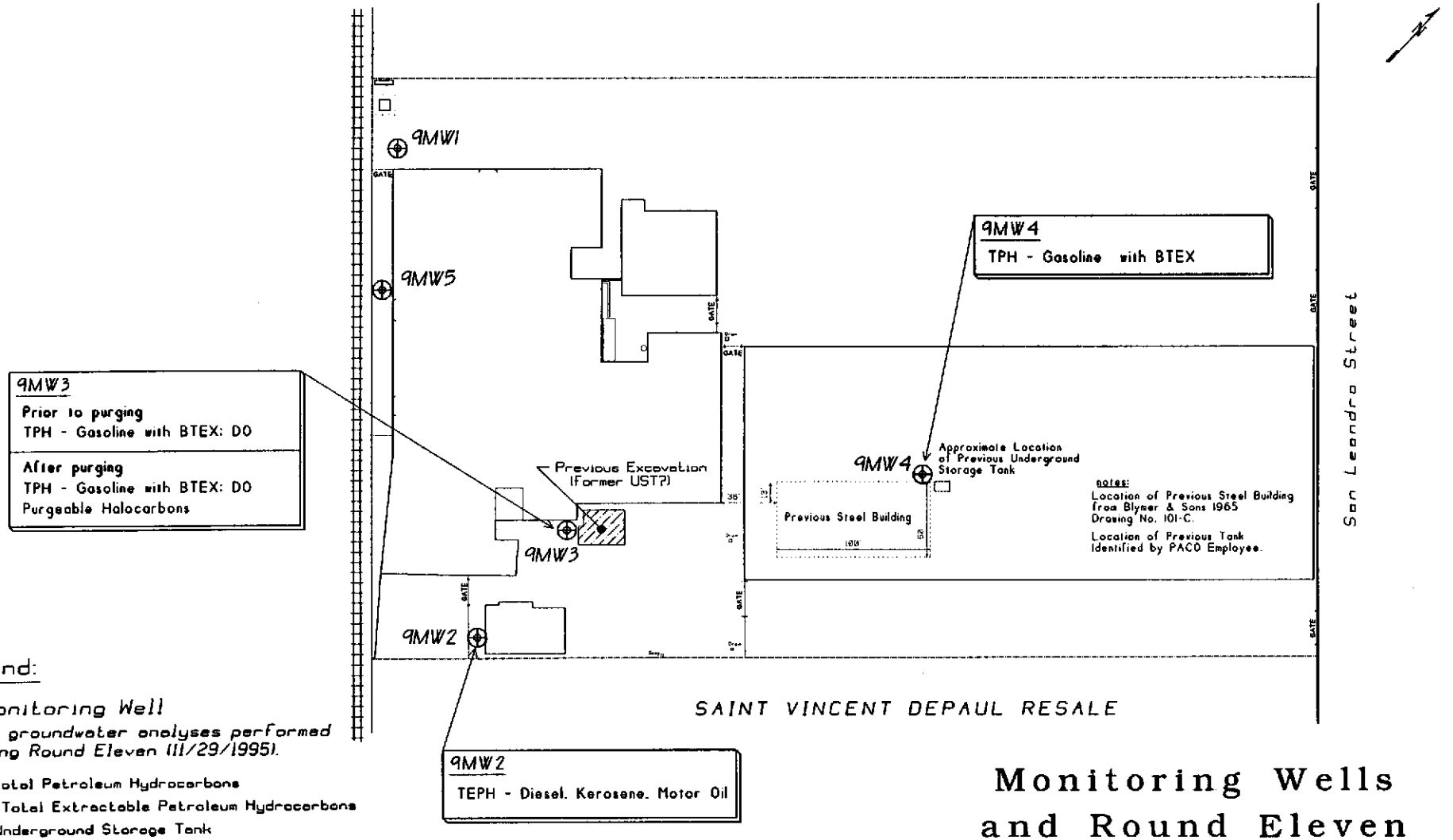
Monitoring well 9MW1 was constructed on November 4, 1992. The well was installed in a western corner of the facility adjacent to the former manufacturing building, and next to a transformer and the Central Pacific Railroad track. The lithology encountered during drilling ranged from an apparent fill, comprised of a silty gravel to a gravelly sand clay, to a sandy clay between 5 and 21 feet bgs. During drilling, first water was encountered at an approximate depth of 16 feet bgs. Measurement of first water is only approximate because of the difficulty in identifying water while drilling with a hollow stem auger. After the screen was installed, the well water level was measured at 9.74 feet bgs on November 15, 1992.

Monitoring well 9MW2 is located adjacent to the former welding shop and next to the Saint Vincent DePaul fence line. The well was installed on November 3, 1992. The lithology encountered during drilling was gravelly silty sand, probably a fill material,

Drawn by M.J. 02-02-1996

Drawing Number PCO220-11/95:G11F2-1

Figure 2-1



Legend:

⊕ Monitoring Well
With groundwater analyses performed during Round Eleven (11/29/1995).

TPH = Total Petroleum Hydrocarbons
TEPH = Total Extractable Petroleum Hydrocarbons
UST = Underground Storage Tank
DO = Dissolved Oxygen

Well	Date Installed	Total Depth	Casing Diameter	Borehole Diameter	Screen Depth	Sand Pack Depth
9AW1	11-4-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9AW2	11-3-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9AW3	11-4-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9AW4	11-9-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9AW5	8-12-1994	21'	4"	8.5"	5.25'-20.25'	4.25'-21'

Scale
50 0 50 100 Feet

Monitoring Wells and Round Eleven Groundwater Analyses

PACO Pumps Inc.
9201 San Leandro Street
Oakland, California

Prepared by
JONAS & ASSOCIATES INC.

Date: 02-02-1996
Locations Approx.

Figure 2-1

Drawing Number
PCO220-11/95:G11F2-1

and a sandy clay located from 4 feet to the bottom of the borehole at 21 feet bgs. First water was not clearly identified. On November 16, 1992 water level in monitoring well 9MW2 was measured at 10.45 feet bgs.

Monitoring well 9MW3 is located adjacent to a previous excavation where a former underground storage tank may have been present. No tank was found, but remnants of a former tank appears to have been identified during the excavation. The tank was reportedly used to store gasoline. Excavation activities and results were documented in the October 16, 1992 "Site Characterization Report and Work Plan, PACO Pumps, 9201 San Leandro Street, Oakland, California". The well was drilled next to the excavation area and constructed on November 4, 1992. During drilling of the borehole for monitoring well 9MW3, the lithology encountered was 2 feet of an apparent fill composed of gravelly silty sand and a sandy clay between 2 and 21 feet bgs. A pilot boring adjacent to 9MW3 also found sandy clay between 20 and 30 feet bgs. First water was not definitively identified. After the construction of monitoring well 9MW3, the well water level was measured at 10.64 bgs.

Monitoring well 9MW4 was constructed on November 9, 1992. The location of the well is apparently near a former UST, which was said to have been located below the floor of the current warehouse. Prior to drilling the borehole for the monitoring well, 1¼ feet of flooring and sub-base was cored with a diamond-studded core barrel. The flooring and sub-base appears to be 6" of concrete, 6" of rock, and 3" of asphalt. Below the flooring and sub-base was a sandy clay down to a depth of 21 feet. During drilling, first water was identified at an approximate depth of 13.5 feet bgs. On November 16, 1992 well water was measured at 9.41 feet bgs.

Monitoring well 9MW5 was constructed on August 12, 1994. The well was installed adjacent to the southwest fence line of the facility and next to the former manufacturing building and the Central Pacific Railroad track. The lithology encountered during drilling ranged from a gravelly sandy clay to a sandy clay between 2 and 21 feet bgs. During drilling activities, depth to first water was not able to be clearly identified. After the screen was installed, the well water level was measured at 8.22 feet bgs on August 24, 1994.

The following Table 2-1 present a summary of construction details for monitoring wells 9MW1, 9MW2, 9MW3, 9MW4, and 9MW5.

Table 2-1
Monitoring Well Construction Details
PACO PUMPS - 9201 San Leandro Street

Well Number	Date Completed	Casing Diameter	~ Depth in feet bgs					Borehole Diameter
			Screen {0.020"}	Sand Pack {#3 Sand}	Bentonite Seal	Portland Cement[1]	Borehole	
9MW1	11/4/1992	4"	5¼ - 20¼	4¼ - 21	3¾ - 4¼	¼ - 3¾	21	8½"
9MW2	11/3/1992	4"	5¼ - 20¼	4¼ - 21	3¾ - 4¼	¼ - 3¾	21	8½"
9MW3	11/4/1992	4"	5¼ - 20¼	4¼ - 21	3¾ - 4¼	¼ - 3¾	21	8½"
9MW4	11/9/1992	4"	5¼ - 20¼	4¼ - 21	3¾ - 4¼	¼ - 3¾	21	8½"
9MW5	8/12/1994	4"	5¼ - 20¼	4¼ - 21	3¾ - 4¼	¼ - 3¾	21	8½"

notes: [1] = Portland Cement mixed with ~5% bentonite for plasticity.
bgs = below ground surface

2.1.2 Monitoring Well Survey

During August 1993, monitoring wells 9MW1, 9MW2, 9MW3, and 9MW4 were surveyed by Kier & Wright Civil Engineers & Surveyors, Inc.. In September 1994 they surveyed monitoring well 9MW5. The locations of the wells were surveyed using the California State Coordinate System which identifies the well locations using Eastings and Northings, in feet. The monitoring wells were surveyed at a point representing the north side mark on top of the PVC casing. The survey was based on the City of Oakland Benchmark 721, located at 92nd Avenue and G Street. The following Table 2-2 presents the monitoring well survey results.

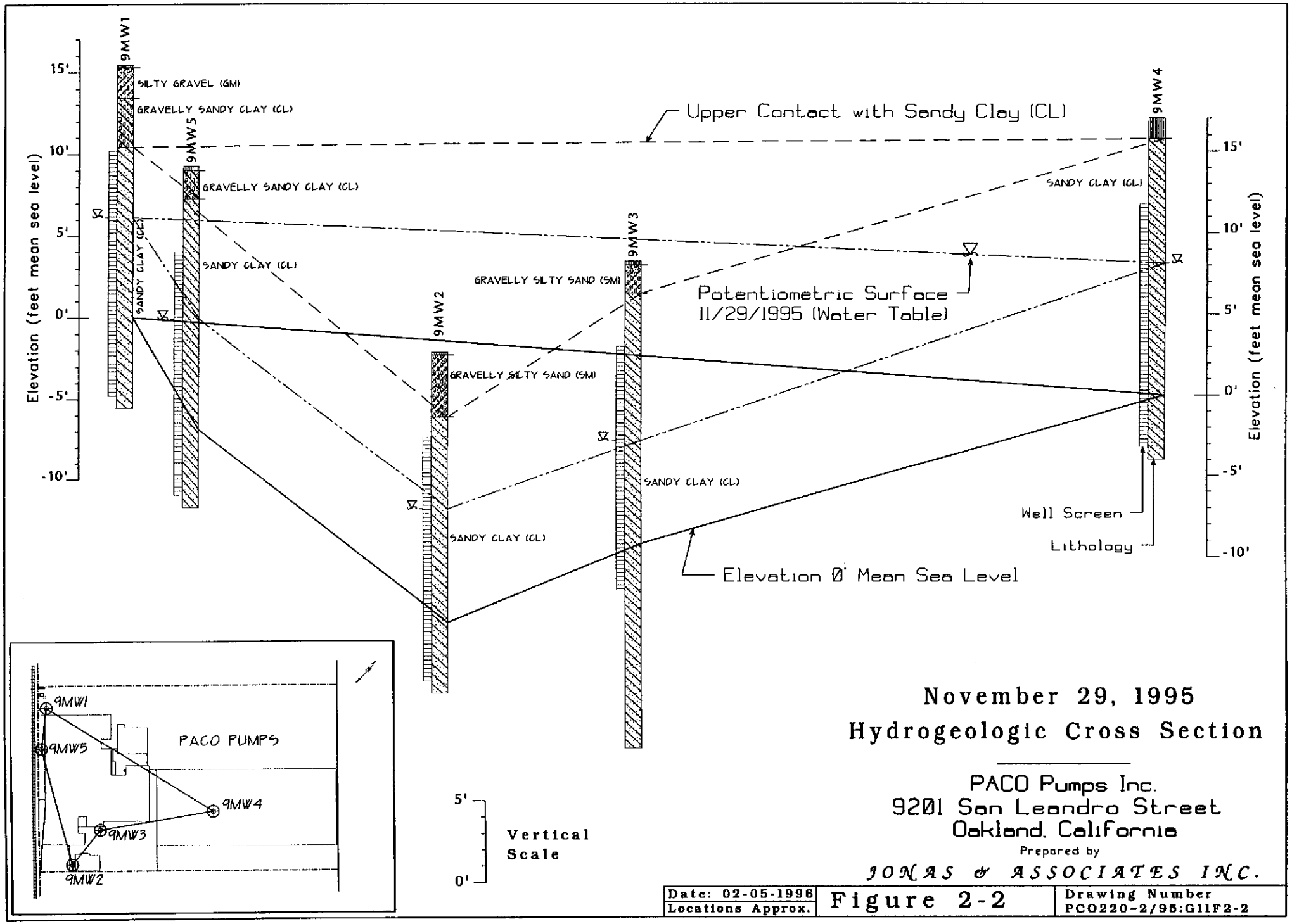
Table 2-2
Monitoring Well Survey Data
PACO PUMPS - 9201 San Leandro Street

Well	Easting	Northing	M.S.L. Elevation
9MW1	1512710.22	456699.01	Top PVC: 15.51'
9MW2	1512968.11	456507.34	Top PVC: 16.83'
9MW3	1512963.22	456602.8	Top PVC: 17.13'
9MW4	1513102.34	456789.38	Top PVC: 17.08'
9MW5	1512763.21	456638.62	Top PVC: 15.93'

Legend - M.S.L.: Mean Sea Level
Top PVC: Top north edge of PVC casing.

2.2 Hydrogeologic Cross Section

Figure 2-2 presents a hydrogeologic cross section using potentiometric and lithologic data associated with the monitoring wells.



November 29, 1995
Hydrogeologic Cross Section

PACO Pumps Inc.
9201 San Leandro Street
Oakland, California

Prepared by
JONAS & ASSOCIATES INC.

Date: 02-05-1996 Locations Approx.	**Figure 2-2**	Drawing Number PCO220-2/95:G11F2-2

3.0 ROUND ELEVEN GROUNDWATER SAMPLING AND ANALYSIS

Following is a discussion of the procedures and results associated with Round Eleven groundwater sampling of monitoring wells 9MW2, 9MW3, and 9MW4. Sampling for this round occurred on November 29, 1995 and represents fall seasonal conditions. Also included are Round Eleven water level and free product measurements.

A summary of all laboratory results from samples collected from the on-site monitoring wells is presented in Appendix A. The chain-of-custody record for the November 29, 1995 Round Eleven groundwater sampling event is presented in Appendix B. The laboratory data sheets associated with this sampling event are presented in Appendix C.

3.1 Groundwater Sampling Procedures

The eleventh round of groundwater sampling was performed on November 29, 1995 and represents fall groundwater conditions. During the sampling event, the general groundwater sampling procedures presented in the "Site Characterization Report and Work Plan" (J&A 1992) for the facility were followed. After samples were collected and labeled, they were placed into ice chests chilled with blue ice for transport to the Chromalab analytical laboratory. A chain-of-custody record was completed and signed by a representative of Jonas & Associates Inc., and upon delivery, by a representative of Chromalab Inc.. The analysis and results of groundwater samples collected during Round Eleven are presented in Section 3.2. The following section presents relevant information associated with sampling each of the five monitoring wells.

Sampling Monitoring Well 9MW2

Prior to purging, the water level in monitoring well 9MW2 was measured at 9.86 feet below the top of the casing. A clean, clear bailer was then used to collect a sample from the surface of the groundwater. No floating product was identified. The well was then purged of approximately 25 gallons of well water. During purging activities, the well appeared to recover relatively rapidly. Two liters were collected for analyses for Total Extractable Petroleum Hydrocarbons as -Diesel, -Kerosene, and -Motor Oil (TEPH-D,-K,-MO) (EPA Methods 3510/8015M). The Round Eleven groundwater samples from monitoring well 9MW2 are identified as GW9-MW2-Q11.

Sampling Monitoring Well 9MW3

During this sampling event, the water level in monitoring well 9MW3 was measured at 10.70 feet below the top of the casing. No floating product was identified. Prior to purging, two VOA containers with HCL were collected for analyses of TPH-G (EPA Methods 5030/8015M) and BTEX (EPA Method 602). Dissolved oxygen was also measured in the field from water collected from the well prior to purging. After approximately 22 gallons were purged from the well, two VOA containers with HCL were collected for analyses of TPH-G (EPA Methods 5030/8015M) and BTEX (EPA Method 602/8020). Two VOA containers were also collected for analysis of Volatile Halogenated Organics (EPA Methods 8010). The dissolved oxygen was also measured

after purging. During purging activities, recovery of the well was slower than the other monitoring wells. The Round Eleven groundwater samples for monitoring well 9MW3 are identified as GW9-MW3-Q11.

Sampling Monitoring Well 9MW4

During this sampling event, the groundwater level in monitoring well 9MW4 was measured at 8.93 feet below the top of the casing. No floating products were identified in this well. The well was purged of approximately 25 gallons. Recovery of the well during purging was relatively rapid. Two VOA containers with HCl were used to collect groundwater for analysis of TPH-G (EPA Methods 5030/8015M) and BTEX (EPA Method 602/8020). The Round Eleven groundwater samples for monitoring well 9MW4 are identified as GW9-MW4-Q11.

3.2 Groundwater Sampling Results

This section of the report presents the analytical results for the Round Eleven groundwater sampling event. Water level and free product measurements are also presented.

3.2.1 Analytical Results

As stated previously, summary tables, the Round Eleven chain-of-custody records and laboratory data sheets are presented in Appendix A, B, and C, respectively. The following Table 3-1 present a summary of the analyses performed and the analytes detected during the Round Eleven groundwater sampling event. Figure 3-1 provides a graphical display of the analytical results.

Jonas & Associates Inc.

Table 3-1
November 1995 - Round Eleven
Groundwater Sampling Results
PACO PUMPS - 9201 San Leandro Street
Oakland, California

Sample I.D.	Analysis	Detected Analytes	
GW9-MW1-Q11	not analyzed		
GW9-MW2-Q11	TEPH as Diesel, Kerosene, Motor Oil (3510/8015M)	Motor oil:	0.690 mg/L
		others not detected	
GW9-MW3-Q11P	TPH as Gasoline (5030/8015M)	TPH Gasoline:	3.0 mg/L
(prior to purging)	BTEX (602/8020)	Benzene:	0.780 mg/L
	Dissolved Oxygen	Toluene:	0.043 mg/L
		Ethyl Benzene:	0.032 mg/L
		Total Xylenes:	0.032 mg/L
		Dissolved Oxygen:	18. mg/L
		others not detected	
GW9-MW3-Q11	TPH as Gasoline (5030/8015M)	TPH Gasoline:	2.4 mg/L
	BTEX (602/8020)	Benzene:	0.830 mg/L
	Volatile Halogenated Organics (8010)	Toluene:	0.038 mg/L
	Dissolved Oxygen	Ethyl Benzene:	0.021 mg/L
		Total Xylenes	0.016 mg/L
		1,2-Dichloroethane:	0.180 mg/L
		Dissolved Oxygen:	3. mg/L
		others not detected	
GW9-MW4-Q11	TEPH as Gasoline (5030/8015M)	Benzene:	0.0045 mg/L
	BTEX (602/8020)	Toluene:	0.0007 mg/L
		Ethyl Benzene:	0.0010 mg/L
		Total Xylenes:	0.0007 mg/L
		others not detected	
GW9-MW5-Q11	not analyzed		

Legend - TPH: Total Petroleum Hydrocarbons
TEPH: Total Extractable Petroleum Hydrocarbons
BTEX: Benzene, Toluene, Ethyl Benzene, Total Xylenes
DO: Dissolved Oxygen

Drawn by M.J. 02-02-1996

Drawing Number PCO220-11/95:GF3-1

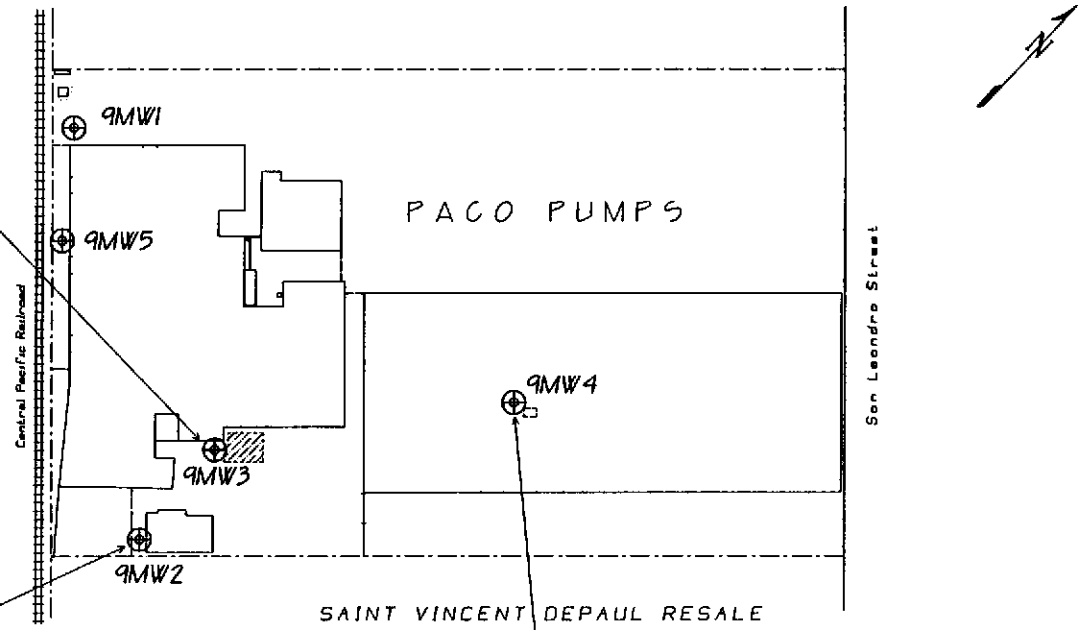
Figure 3-1

9MW3 (Water Elev.:+6.43')
November 29, 1995 sampling results:
(Prior to Purging)

	(mg/L)		(mg/L)
TPH-Gasoline	3.0	Ethyl Benzene	0.032
Benzene	0.780	Total Xylenes	0.032
Toluene	0.043	Dissolved Oxygen	18

(After Purging)

	(mg/L)		(mg/L)
TPH-Gasoline	2.4	Detected Method 8010 Volatile Halogenated Organics:	
Benzene	0.830	1,2-Dichloroethane	0.180
Toluene	0.038		
Ethyl Benzene	0.021		
Total Xylenes	0.016	Dissolved Oxygen	3



9MW2 (Water Elev.:+6.97')
November 29, 1995 sampling results:

	(mg/L)	(mg/L)
TEPH-Diesel	ND(0.050)	
TEPH-Kerosene	ND(0.050)	
TEPH-Motor Oil	0.690	

9MW4 (Water Elev.:+8.15')
November 29, 1995 sampling results:

	(mg/L)		(mg/L)
TPH-Gasoline	ND(0.05)	Ethyl Benzene	0.0010
Benzene	0.0045	Total Xylenes	0.0007
Toluene	0.0007		

Legend:

⊕ Monitoring Well

TPH = Total Petroleum Hydrocarbons

TEPH = Total Extractable Petroleum Hydrocarbons

ND(0.05) = Not Detected above laboratory detection limit in parentheses.

* = see notation on laboratory data sheet.

Well	Date Installed	Total Depth	Casing Diameter	Borehole Diameter	Screen Depth	Sand Pack Depth
9MW1	11-4-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9MW2	11-3-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9MW3	11-4-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9MW4	11-9-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9MW5	8-24-1994	21'	4"	8.5"	5.25'-20.25'	4.25'-21'

Scale
75 0 75 150 Feet

November 29, 1995 Groundwater Sampling Results

PACO Pumps Inc.
9201 San Leandro Street
Oakland, California

Prepared by
JONAS & ASSOCIATES INC.

Date: 02-02-1996
Locations Approx.

Figure 3-1

Drawing Number
PCO220-11/95:G11F3-1

3.2.2 Results of Water Level and Free Product Measurements

During this sampling round, water level measurements from all five monitoring wells were recorded and a determination was made with respect to the presence or absence of a floating product for the three monitoring wells that were sampled.

The following Table 3-2 provides a summary of the November 29, 1995 Round Eleven groundwater level and free product measurements. Water level elevations, with respect to mean sea level, were calculated using the results of the Kier & Wright surveys.

Table 3-2
Round Eleven - November 29, 1995
Groundwater Level and Free Product Measurement
PACO PUMPS - 9201 San Leandro Street
Oakland, California

Date	Well ID	Surveyed Casing Elevation	Water Level from Top of Casing		Pavement vs. Casing Top	Free Product
		M.S.L.	Depth	Elevation M.S.L.		
11/29/1995	9MW1	15.51'	9.28'	6.23'	0.40'	not sampled
11/29/1995	9MW2	16.83'	9.86'	6.97'	0.40'	no free product
11/29/1995	9MW3	17.13'	10.70'	6.43'	0.29'	no free product
11/29/1995	9MW4	17.08'	8.93'	8.15'	0.54'	no free product
11/29/1995	9MW5	15.93'	9.11'	6.82'	0.25'	not sampled

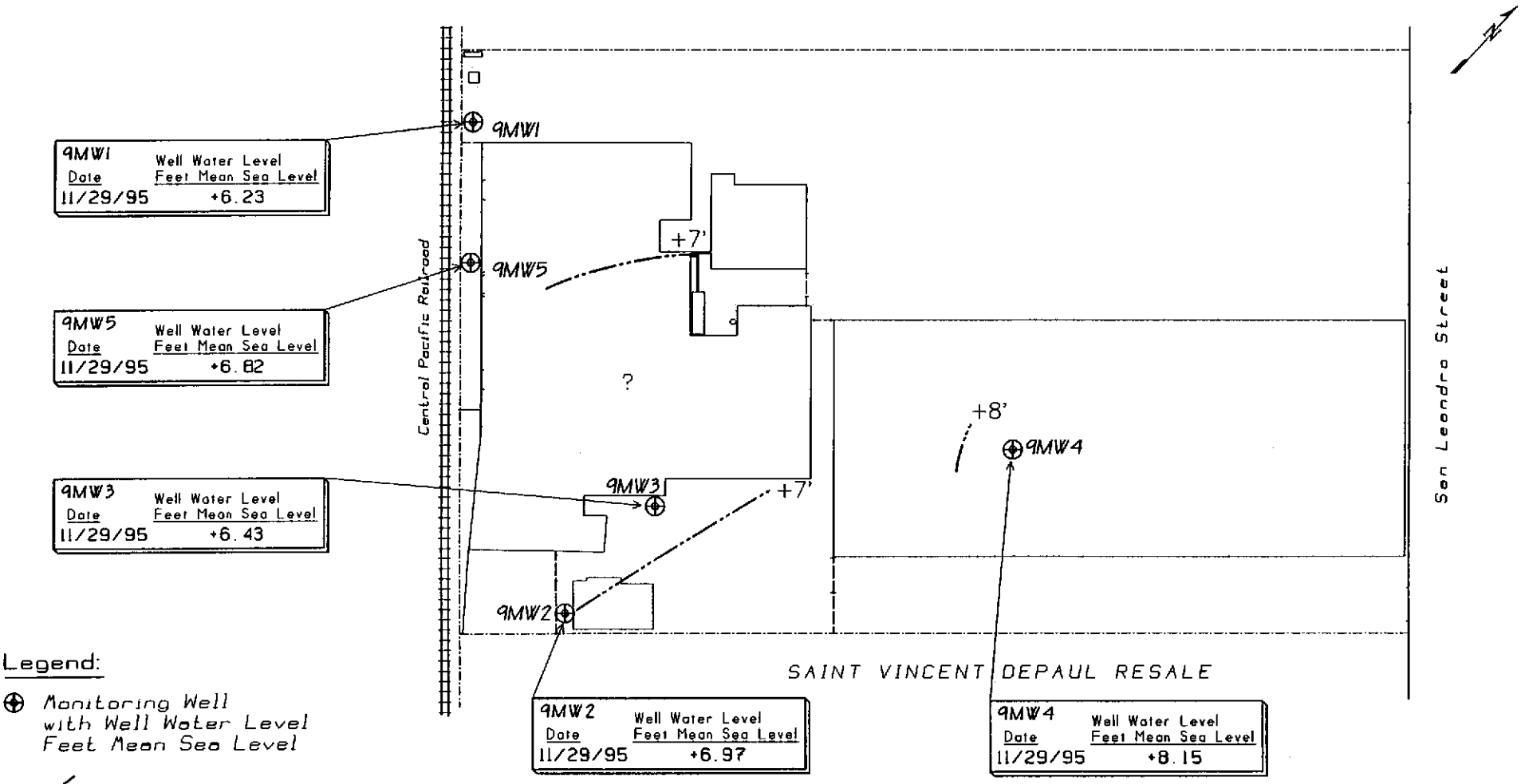
Notes - » Elevation with respect to mean sea level (M.S.L.) and Kier & Wright survey.

Figures 3-2, graphically presents the results of the well water levels collected during the Round Eleven sampling event.

Drawn by J.R. 02/02/1996

Drawing Number PCO220-11/95:G11F3-2

Figure 3-2



Legend:

⊕ Monitoring Well with Well Water Level Feet Mean Sea Level

11/29/95 Equipotential Line

Well	Date Installed	Total Depth	Casing Diameter	Borehole Diameter	Screen Depth	Sand Pack Depth
9AW1	11-4-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9AW2	11-3-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9AW3	11-4-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9AW4	11-9-1992	21'	4"	8.5"	5.25'-20.25'	4.25'-21'
9AW5	8-12-1994	21'	4"	8.5"	5.25'-20.25'	4.25'-21'

Scale

50 0 50 100 Feet

November 29, 1995 - Winter Season Potentiometrc/Water Table

PACO Pumps Inc.
9201 San Leandro Street
Oakland, California

Prepared by
Jonas & ASSOCIATES INC.

Date: 02-02-1996	Figure 3-2	Drawing Number
Locations Approx.		PCO220-11/95:G11F3-2

4.0 REFERENCES

Alameda County Health Care Services Agency, 1994, letter titled "Workplan Approval for PACO Pumps, 9201 San Leandro St. Oakland 94603", July 1, 1994 letter to J&A.

California Department of Water Resources, 1982. "Phase I Water Well Survey, Proposed Oakland Inner Harbor Deepening Project, Central District", September 1982.

Jonas & Associates Inc., 1992. "Site Characterization Report and Work Plan, PACO Pumps, 9201 San Leandro Street, Oakland, California", October 16, 1992.

_____, 1993. "First Quarterly Status Report, PACO Pumps, 9201 San Leandro Street, Oakland, California", February 24, 1993.

_____, 1993. "Groundwater Monitoring Report, Sampling Round One, Two, and Three, PACO Pumps, 9201 San Leandro Street, Oakland, California", December 10, 1993.

_____, 1994. "Groundwater Monitoring Report, Sampling Round One Through Four, PACO Pumps, 9201 San Leandro Street, Oakland, California", April 15, 1994.

_____, 1994. "Work Plan, Installation of Monitoring Well 9MW5, PACO Pumps, 9201 San Leandro Street, Oakland, California", June 13, 1994.

_____, 1994. "Groundwater Monitoring Report, Sampling Round Five, PACO Pumps, 9201 San Leandro Street, Oakland, California", June 28, 1994.

_____, 1994. "Groundwater Monitoring Report, Sampling Round Six, PACO Pumps, 9201 San Leandro Street, Oakland, California", August 24, 1994.

_____, 1994. "Groundwater Monitoring Report, Sampling Round Seven, PACO Pumps, 9201 San Leandro Street, Oakland, California", November 22, 1994

_____, 1995. "Groundwater Monitoring Report, Sampling Round Eight, PACO Pumps, 9201 San Leandro Street, Oakland, California", March 20, 1995.

_____, 1995. "Groundwater Monitoring Report, Sampling Round Nine and Ten, PACO Pumps, 9201 San Leandro Street, Oakland, California", October 15, 1995.

Subsurface Consultants Inc., 1992. "Soil Contamination Assessment Drum Storage Areas, St. Vincent DePaul Distribution Center, 9234 San Leandro Street, Oakland, California", December 16, 1992.

Appendix A

Summary Tables of Laboratory Results

Table A/GW1

TPH-GASOLINE & BTEX GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	TPH-Gasoline (5030/8015M) (mg/L)	Benzene (602/8020) (mg/L)	Toluene (602/8020) (mg/L)	Ethyl Benzene (602/8020) (mg/L)	Total Xylenes (602/8020) (mg/L)
Monitoring Well 9MW1									
GW9-MW1-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW1-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW1-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW1-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW1-Q9	5/31/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.05)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW2									
GW9-MW2-Q1	11/16/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0015)
GW9-MW2-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW2-Q3[1]	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW2-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.002)[2]	ND(0.002)[2]	ND(0.002)[2]	ND(0.002)[2]
GW9-MW2-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	0.0023	0.0008	ND(0.0005)	ND(0.0005)
GW9-MW2-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	0.0061	0.0014	0.0005	0.0006
GW9-MW2-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	0.0034	0.0018	ND(0.0005)	0.0005
GW9-MW2-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	0.0045	0.0013	ND(0.0005)	0.0005
GW9-MW2-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.05)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW3									
GW9-MW3-Q1	11/16/92	5¼'-20¼'$_{screen}$	water	CrLab	40.000	2.900	6.700	0.550	1.700
GW9-MW3-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	12.000	1.000	0.300	0.110	0.170
GW9-MW3-Q3[1]	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	3.400	0.420	0.063	0.036	0.037
GW9-MW3-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	5.600	0.910[2]	0.220[2]	0.047[2]	0.036[2]
GW9-MW3-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	5.200	0.890	0.180	0.045	0.043
GW9-MW3-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	5.200	0.580	0.076	0.029	0.022
GW9-MW3-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	2.200	0.670	0.130	0.031	0.028
GW9-MW3-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	2.900	0.780	0.120	0.031	0.033
GW9-MW3-Q9P	5/31/95	5¼'-20¼'$_{screen}$	water	CrLab	9.1	2.800	0.160	0.091	0.072
GW9-MW3-Q9	5/31/95	5¼'-20¼'$_{screen}$	water	CrLab	5.3	1.300	0.170	0.037	0.044
GW9-MW3-Q10P	8/28/95	5¼'-20¼'$_{screen}$	water	CrLab	1.4	ND(0.0005)	ND(0.0005)	0.0017	0.0079
GW9-MW3-Q10	8/28/95	5¼'-20¼'$_{screen}$	water	CrLab	4.8	2.500	0.150	0.053	0.044
GW9-MW3-Q11P	11/29/95	5¼'-20¼'$_{screen}$	water	CrLab	3.0	0.780	0.043	0.032	0.032
GW9-MW3-Q11	11/29/95	5¼'-20¼'$_{screen}$	water	CrLab	2.4	0.830	0.038	0.021	0.016

con't following page

TPH-GASOLINE & BTEX GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	TPH-Gasoline (5030/8015M) (mg/L)	Benzene (602/8020) (mg/L)	Toluene (602/8020) (mg/L)	Ethyl Benzene (602/8020) (mg/L)	Total Xylenes (602/8020) (mg/L)
Monitoring Well 9MW4									
GW9-MW4-Q1	11/16/92	5¼'-20¼'$_{screen}$	water	CrLab	0.560	0.066	0.073	0.016	0.130
GW9-MW41-Q1	11/16/92	5¼'-20¼'$_{screen}$	water	CrLab	0.520	0.063	0.067	0.015	0.140
GW9-MW4-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	0.750	0.067	0.012	0.029	0.062
GW9-MW4-Q3	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	0.250	0.021	0.0042	0.0084	0.011
GW9-MW4-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	0.180	0.028	0.0022	0.0062	0.010
GW9-MW4-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	0.130	0.014	0.0032	0.0061	0.0047
GW9-MW4-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	0.070	0.0067	0.0009	0.0028	0.0026
GW9-MW4-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	0.090	0.016	0.0017	0.0056	0.0034
GW9-MW4-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	0.090	0.017	0.0013	0.0055	0.0030
GW9-MW4-Q9	5/31/95	5¼'-20¼'$_{screen}$	water	CrLab	0.08	0.013	0.0006	0.0023	0.0012
GW9-MW4-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.05)	0.0036	ND(0.0005)	0.0014	0.0006
GW9-MW4-Q11	11/29/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.05)	0.0045	0.0007	0.0010	0.0007
Monitoring Well 9MW5									
GW9-MW5-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW5-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW5-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW90MW5-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.05)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)

notes: TPH: Total Petroleum Hydrocarbons

BTEX: Benzene, Toluene, Ethyl Benzene, Total Xylenes

[1] = probably corrected, apparently switched.

[2] = EPA Method 624

ND(0.1) = Not Detected above the laboratory detection limit in parentheses.

GW9-MW3-Q9P: Sampled prior to purging. For baseline study for use of Oxygen Release Compound (ORC).

GW9-MW3-Q9: Sampled after purging. Installed ORC after collection of sample.

GW9-MW3-Q10P: Sampled after removal of ORC and prior to purging.

GW9-MW3-Q10: Sampled after purging.

Table A/GW2

TEPH & PCB GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	TEPH-Diesel (3510/8015M) (mg/L)	TEPH-Kerosene (3510/8015M) (mg/L)	TEPH-Motor Oil (3510/8015M) (mg/L)	PCBs (608 mod.) (mg/L)
Monitoring Well 9MW1								
GW9-MW1-Q1	11/15/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	ND(0.05)
GW9-MW1-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	0.140	ND(0.050)	ND(0.5)	ND(0.0005)
GW9-MW1-Q3	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW1-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
Monitoring Well 9MW2								
GW9-MW2-Q1	11/16/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	0.590	9.5	-
GW9-MW2-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	0.430	0.210	4.3	-
GW9-MW2-Q3[1]	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	0.52	-
GW9-MW2-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	0.68	-
GW9-MW2-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW2-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	0.6	-
GW9-MW2-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	1.0	-
GW9-MW2-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	0.550	-
GW9-MW2-Q9	5/31/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.500)	-
GW9-MW2-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.500)	-
GW9-MW2-Q11	11/29/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	0.690	-
Monitoring Well 9MW3								
GW9-MW3-Q1	11/16/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW3-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	0.290	ND(0.050)	ND(0.5)	-
GW9-MW3-Q3[1]	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW3-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW3-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW3-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	0.082	ND(0.5)	-
GW9-MW3-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)[2]	ND(0.050)	ND(0.5)	-
GW9-MW3-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)[2]	ND(0.050)	ND(0.500)	-

con't on following page

TEPH & PCB GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	TEPH-Diesel (3510/8015M) (mg/L)	TEPH-Kerosene (3510/8015M) (mg/L)	TEPH-Motor Oil (3510/8015M) (mg/L)	PCBs (608 mod.) (mg/L)
Monitoring Well 9MW4								
GW9-MW4-Q1	11/16/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW41-Q1	11/16/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW4-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW4-Q3	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW4-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
Monitoring Well 9MW5								
GW9-MW5-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	0.130	ND(0.050)	ND(0.5)	-
GW9-MW5-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)[2]	ND(0.050)	ND(0.5)	-
GW9-MW5-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.050)[3]	ND(0.050)	ND(0.5)	-

notes: TEPH: Total Extractable Petroleum Hydrocarbons

PCBs: Polychlorinated Biphenyls

ND(0.004) = Not Detected above the laboratory detection limit in parentheses.

[1] = probably corrected, apparently switched.

[2] = Unknown compounds were found in the Diesel range with the estimated concentration of 0.083 mg/L.

[3] = Unknown compounds were found in the Diesel range with the estimated concentration of 0.190 ug/L.

Table A/GW3

VOLATILE ORGANIC COMPOUND GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET
{mg/L}

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Acetone	Benzene	Bromodichloro-methane	Bromoform	Bromo-methane	Carbon Tetrachloride	Chloro-benzene	Chloro-ethane	2-Chloroethyl Vinyl Ether	Chloroform	Chloro-methane
Monitoring Well 9MW1															
GW9-MW1-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW1-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW1-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW1-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW2															
GW9-MW2-Q1	11/15/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW2-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW2-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.005)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW2-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	-	0.0023	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW2-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	-	0.0061	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW2-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	-	0.0034	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW2-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	-	0.0045	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW2-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW3															
GW9-MW3-Q3[1]	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	0.450	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW3-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	0.910	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW3-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	-	0.890	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	-	0.580	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	-	0.670	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	-	0.780	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q9	5/31/95	5¼'-20¼'$_{screen}$	water	CrLab	-	1.300	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q10	8/28/95	5¼'-20¼'$_{screen}$	water	CrLab	-	2.500	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q11	11/29/95	5¼'-20¼'$_{screen}$	water	CrLab	-	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW4															
GW9-MW4-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	-	0.014	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW4-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	-	0.0067	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW4-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	-	0.016	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW4-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	-	0.017	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW5															
GW9-MW5-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW5-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW5-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW5-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)

con't on following page

VOLATILE ORGANIC COMPOUND GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET
{mg/L}

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Dibromo-chloromethane	1,2-Di-bromoethane	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1,1-Dichloro-ethane	1,2-Dichloro-ethane	1,1-Dichloro-ethene	cis 1,2-Dichloroethene	trans 1,2-Dichloroethene	1,2-Dichloro-propane
Monitoring Well 9MW1															
GW9-MW1-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW1-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW1-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW1-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW2															
GW9-MW2-Q1	11/15/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	-	ND(0.002)	ND(0.002)	ND(0.002)	0.0026	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW2-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	-	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW2-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	-	-	-	-	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW2-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0016	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW2-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0010	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW2-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0005	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW2-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0007	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW2-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW3															
GW9-MW3-Q3[1]	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	-	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	0.330	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW3-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	-	-	-	-	ND(0.002)	0.180	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW3-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.250	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.190	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.160	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.160	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q9	5/31/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q10	8/28/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.100	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q11	11/29/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.180	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW4															
GW9-MW4-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0025	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW4-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW4-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW4-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW5															
GW9-MW5-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW5-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW5-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW5-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)

con't on following page

VOLATILE ORGANIC COMPOUND GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET
{mg/L}

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	cis-1,3-Di-chloropropene	trans-1,3-Di-chloropropene	Ethyl-Benzene	Freon 113	2-Hexanone	Methyl Ethyl Ketone	Methyl Isobutyl Ketone	Methylene Chloride	Styrene	1,1,2,2-Tetra-chloroethane	Tetra-chloroethene
Monitoring Well 9MW1															
GW9-MW1-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW1-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW1-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW1-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW2															
GW9-MW2-Q1	11/15/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	ND(0.002)	ND(0.002)	-	-	ND(0.002)	ND(0.002)	ND(0.002)	-	ND(0.002)	ND(0.002)
GW9-MW2-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	ND(0.002)	ND(0.002)	-	-	ND(0.002)	ND(0.002)	ND(0.002)	-	ND(0.002)	ND(0.002)
GW9-MW2-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	ND(0.002)	ND(0.002)	-	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.005)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW2-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW2-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.0005	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW2-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW2-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW2-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	-	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW3															
GW9-MW3-Q3[1]	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	ND(0.002)	0.049	-	-	ND(0.002)	ND(0.002)	ND(0.002)	-	ND(0.002)	ND(0.002)
GW9-MW3-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	ND(0.002)	0.047	-	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.005)	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW3-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.045	ND(0.0005)	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW3-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.029	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW3-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.031	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW3-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.031	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW3-Q9	5/31/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.037	-	-	-	-	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
GW9-MW3-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.053	-	-	-	-	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
GW9-MW3-Q11	11/29/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	-	-	-	-	-	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW4															
GW9-MW4-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.0061	ND(0.0005)	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW4-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.0028	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW4-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.0056	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW4-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	0.0055	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW5															
GW9-MW5-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW5-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW5-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	-	ND(0.005)	-	ND(0.0005)	ND(0.0005)
GW9-MW5-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	-	-	ND(0.0005)	-	ND(0.0005)	ND(0.0005)

con't on following page

Table A/GW3[con't]

VOLATILE ORGANIC COMPOUND GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET
{mg/L}

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Toluene	1,1,1-Tri-chloroethane	1,1,2-Tri-chloroethane	Tri-chloroethene	Trichlorofluoro-methane	Trichloro-trifluoroethane	Vinyl Acetate	Vinyl Chloride	Total Xylenes
Monitoring Well 9MW1													
GW9-MW1-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	ND(0.0005)	ND(0.0005)
GW9-MW1-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
GW9-MW1-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
GW9-MW1-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW2													
GW9-MW2-Q1	11/15/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	-	-	ND(0.002)	ND(0.002)
GW9-MW2-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	-	-	ND(0.002)	ND(0.002)
GW9-MW2-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	-	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW2-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	0.0008	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	ND(0.0005)	ND(0.0005)
GW9-MW2-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	0.0014	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.0006
GW9-MW2-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	0.0018	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.0005
GW9-MW2-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	0.0013	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.0005
GW9-MW2-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
Monitoring Well 9MW3													
GW9-MW3-Q3[1]	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	0.050	ND(0.002)	ND(0.002)	0.0024	ND(0.002)	-	-	ND(0.002)	0.047
GW9-MW3-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	0.220	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	-	ND(0.002)	ND(0.002)	0.036
GW9-MW3-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	0.180	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	ND(0.0005)	0.043
GW9-MW3-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	0.076	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.022
GW9-MW3-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	0.130	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.028
GW9-MW3-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	0.120	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.033
GW9-MW3-Q9	5/31/95	5¼'-20¼'$_{screen}$	water	CrLab	0.170	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.044
GW9-MW3-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	0.150	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.044
GW9-MW3-Q11	11/29/95	5¼'-20¼'$_{screen}$	water	CrLab	-	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	-
Monitoring Well 9MW4													
GW9-MW4-Q5	5/26/94	5¼'-20¼'$_{screen}$	water	CrLab	0.0032	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	-	ND(0.0005)	0.0047
GW9-MW4-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	0.0009	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.0026
GW9-MW4-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	0.0017	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.0034
GW9-MW4-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	0.0013	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	0.0030
Monitoring Well 9MW5													
GW9-MW5-Q6	9/24/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
GW9-MW5-Q7	11/22/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
GW9-MW5-Q8	2/8/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	ND(0.0005)
GW9-MW5-Q10	8/9/95	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	-	ND(0.0005)	ND(0.0005)

notes: CrLab: Chromalab Inc.

[1] = probably corrected, apparently not GW9-MW2-Q3.

ND(0.002) = Not Detected above the laboratory detection limit in parentheses.

Table A/GW4

METALS GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET
{mg/L}

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Ag Silver	As Arsenic	Ba Barium	Be Beryllium	Cd Cadmium	Co Cobalt	Cr Chromium	Cu Copper	Hg Mercury	Mo Molybdenum	Ni Nickel
Monttoring Well 9MW1															
GW9-MW1-Q1	11/15/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.005)	ND(0.005)	0.18	0.002	ND(0.001)	ND(0.01)	ND(0.01)	0.007	ND(0.001)	ND(0.005)	ND(0.020)
GW9-MW1-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.005)	ND(0.005)	0.19	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.01)	ND(0.005)	0.003	ND(0.005)	ND(0.020)
GW9-MW1-Q3	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	0.011	ND(0.005)	0.27	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.01)	0.007	ND(0.001)	0.010	ND(0.020)
GW9-MW1-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.005)	ND(0.005)	0.12	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.01)	ND(0.005)	ND(0.001)	ND(0.005)	ND(0.02)

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Pb Lead	Sb Antimony	Se Selenium	Tl Thallium	V Vanadium	Zn Zinc
Monttoring Well 9MW1										
GW9-MW1-Q1	11/15/92	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.010)	ND(0.020)	0.021	ND(0.01)	ND(0.01)	ND(0.005)
GW9-MW1-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.010)	0.03	0.04	ND(0.01)	ND(0.01)	0.03
GW9-MW1-Q3	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.010)	ND(0.020)	ND(0.01)	ND(0.01)	ND(0.01)	0.015
GW9-MW1-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab	ND(0.01)	ND(0.02)	0.018	0.12	0.010	ND(0.005)
Monttoring Well 9MW2										
GW9-MW2-Q2	3/9/93	5¼'-20¼'$_{screen}$	water	CrLab			0.08			
GW9-MW2-Q3	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab			ND(0.01)			
GW9-MW2-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab			0.026			
Monttoring Well 9MW3										
GW9-MW3-Q3	7/21/93	5¼'-20¼'$_{screen}$	water	CrLab			ND(0.01)			
GW9-MW3-Q4	1/29/94	5¼'-20¼'$_{screen}$	water	CrLab			0.025			

notes: CrLab: Chromalab Inc.
ND(0.25) = Not Detected above the laboratory detection limit in parentheses.

Table A/GW5

INORGANIC GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Total Nitrogen (351.3/300) (mg/L)	Phosphorus (365.2) (mg/L)	Iron (3010AM/6010) (mg/L)	Manganese (3010AM/6010) (mg/L)	Potassium (3010AM/6010) (mg/L)
Monitoring Well 9MW3									
GW9-MW3-Q9	5/31/95	5¼'-20¼'$_{screen}$	water	GeoAnal	ND(0.2)	0.09			
				CrLab			3.2	3.3	1.4
GW9-MW3-Q10	8/28/95	5¼'-20¼'$_{screen}$	water	GeoAnal	ND(0.2)	1.0			
				CrLab			ND(0.1)	1.2	34

notes: GeoAnal: GeoAnalytical Laboratories, Inc.
CrLab: Chromalab Inc.
ND(0.25) = Not Detected above the laboratory detection limit in parentheses.
GW9-MW3-Q9: Sampled after purging, but prior to installation of Oxygen Release Compound (ORC) in well.
GW9-MW3-Q10: Sampled after removal of ORC and purging of the well.

Table A/GW6

DISSOLVED OXYGEN GROUNDWATER RESULTS
PACO PUMPS - 9201 SAN LEANDRO STREET

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Dissolved Oxygen (Hach OX-2P) (mg/L)
Monitoring Well 9MW3					
GW9-MW3-Q9	5/31/95	5¼'-20¼'$_{screen}$	water	field	11
GW9-MW3-Q10P	8/28/95	5¼'-20¼'$_{screen}$	water	field	64?
GW9-MW3-Q10	8/28/95	5¼'-20¼'$_{screen}$	water	field	20?
GW9-MW3-Q11P	11/29/95	5¼'-20¼'$_{screen}$	water	field	18
GW9-MW3-Q11	11/29/95	5¼'-20¼'$_{screen}$	water	field	3

notes: field: Performed in field with Hach Dissolved Oxygen Test Kit (Model OX-2P).
GW9-MW3-Q9: Sampled after purging, but prior to installation of Oxygen Release Compound (ORC) in well.
GW9-MW3-Q10P: Sampled after removal of ORC, but prior to purging of the well.
GW9-MW3-Q10: Sampled after removal of ORC and purging of the well.

Appendix B

Chain-of-Custody Records

397/111982-985

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

SUBM #: 9511397 REP: GC
CLIENT: JONAS
DUE: 12/06/95
REF #:25194

25194

Chain of Custody

DATE 11-29-95 PAGE 1 OF 1

PROJ MGR Mark Jonas/Vida Wright P.E.
COMPANY Jonas & Associates Inc.
ADDRESS 2815 Mitchell Drive, Suite 209
Walnut Creek, California 94598

SAMPLERS (SIGNATURE) (PHONE NO.) (510) 933-5360
(FAX NO.) Jonas & Associates Inc. (510) 933-5362

ANALYSIS REPORT

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, ~~TEX~~ K, MO (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)				NUMBER OF CONTAINERS
GW9-MW2-Q11	11-29	1347	GW				X																		2
GW9-MW3-Q11 P	11-29	1014	GW			X																			2
GW9-MW3-Q11	11-29	1132	GW			X			X																4
GW9-MW4-Q11	11-29	1456	GW			X																			2
						2 VOAs W/HCL	2 LITER		2 VOAs W/HCL																	

PROJECT INFORMATION

PROJECT NAME: Paco Pumps 9201 S.L.
PROJECT NUMBER: PCO-220
P.O. #:

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	10
HEAD SPACE	
REC'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	

TAT: STANDARD 5-DAY | | 24 | 48 | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:
5-Day TAT

RELINQUISHED BY 1
(SIGNATURE) 1620 (TIME)
ELLIS ISHAYA 11-29-95 (PRINTED NAME) (DATE)
Jonas & Associates Inc. (COMPANY)

RELINQUISHED BY 2
(SIGNATURE) 1850 (TIME)
(PRINTED NAME) 11-30-95 (DATE)
Chromalab (COMPANY)

RELINQUISHED BY 3
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY 1
(SIGNATURE) 1620 (TIME)
(PRINTED NAME) 11-29-95 (DATE)
Chromalab (COMPANY)

RECEIVED BY 2
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY (LABORATORY) 3
Mimie Pak 1850
(SIGNATURE) (TIME)
Mimie Pak 11/29/95
(PRINTED NAME) (DATE)
Chromalab, Inc.
(LAB)

CHROMALAB, INC.

Environmental Services (SDB)

December 6, 1995 *Submission #:* 9511397

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas/Vida Wright PE

Project: PACO PUMPS 9201 S.L. *Project#:* PCO-220
Received: November 29, 1995

re: 3 samples for Gasoline and BTEX analysis.
Method: EPA 5030/8015M/602/8020

Sampled: November 29, 1995 *Matrix:* WATER
Run: 9611-3 *Analyzed:* December 4, 1995

Spl #	Sample ID	Gasoline (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
111983	GW9-MW3-Q11 P	3.0	780	43	32	32
111984	GW9-MW4-Q11	N.D.	4.5	0.7	1.0	0.7
111985	GW9-MW3-Q11	2.4	830	38	21	16
Reporting Limits		0.05	0.5	0.5	0.5	0.5
Blank Result		N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)		85	112	114	114	115

Analyst

Eric Tam, Lab Director

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 6, 1995 *Submission #:* 9511397

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas/Vida Wright PE

Project: PACO PUMPS 9201 S.L. *Project#:* PCO-220
Received: November 29, 1995

re: One sample for Volatile Halogenated Organics analysis.
Method: EPA 8010

SampleID: **GW9-MW3-Q11**
Sample #: 111985 *Matrix:* WATER
Sampled: November 29, 1995 *Run:* 9643-O *Analyzed:* December 4, 1995

Analyte	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE RESULT (%)
CHLOROMETHANE	N.D.	0.5	N.D.	--
VINYL CHLORIDE	N.D.	0.5	N.D.	--
BROMOMETHANE	N.D.	0.5	N.D.	--
CHLOROETHANE	N.D.	0.5	N.D.	--
TRICHLOROFLUOROMETHANE	N.D.	0.5	N.D.	--
1,1-DICHLOROETHENE	N.D.	0.5	N.D.	90
METHYLENE CHLORIDE	N.D.	0.5	N.D.	--
TRANS-1,2-DICHLOROETHENE	N.D.	0.5	N.D.	--
CIS-1,2-DICHLOROETHENE	N.D.	0.5	N.D.	--
1,1-DICHLOROETHANE	N.D.	0.5	N.D.	--
CHLOROFORM	N.D.	0.5	N.D.	--
1,1,1-TRICHLOROETHANE	N.D.	0.5	N.D.	--
CARBON TETRACHLORIDE	N.D.	0.5	N.D.	--
1,2-DICHLOROETHANE	180	2	N.D.	--
TRICHLOROETHENE	N.D.	0.5	N.D.	110
1,2-DICHLOROPROPANE	N.D.	0.5	N.D.	--
BROMODICHLOROMETHANE	N.D.	0.5	N.D.	--
2-CHLOROETHYLVINYL ETHER	N.D.	0.5	N.D.	--
TRANS-1,3-DICHLOROPROPENE	N.D.	0.5	N.D.	--
CIS-1,3-DICHLOROPROPENE	N.D.	0.5	N.D.	--
1,1,2-TRICHLOROETHANE	N.D.	0.5	N.D.	--
TETRACHLOROETHENE	N.D.	0.5	N.D.	--
DIBROMOCHLOROMETHANE	N.D.	0.5	N.D.	--
CHLOROBENZENE	N.D.	0.5	N.D.	111
BROMOFORM	N.D.	0.5	N.D.	--
1,1,2,2-TETRACHLOROETHANE	N.D.	0.5	N.D.	--
1,3-DICHLOROBENZENE	N.D.	0.5	N.D.	--
1,4-DICHLOROBENZENE	N.D.	0.5	N.D.	--
1,2-DICHLOROBENZENE	N.D.	0.5	N.D.	--
TRICHLOROTRIFLUOROETHANE	N.D.	0.5	N.D.	--

Oleg Nemtsov
Chemist

Chip Poalinelli
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 7, 1995 *Submission #:* 9511397

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas/Vida Wright PE
Project: PACO PUMPS 9201 S.L. *Project#:* PCO-220
Received: November 29, 1995
re: 1 sample for Total Extractable Petroleum Hydrocarbons (TEPH) analysis.
Method: EPA 3510/8015M
Sampled: November 29, 1995 *Matrix:* WATER *Extracted:* December 5, 1995
Run: 9647-K *Analyzed:* December 7, 1995

Spl #	Sample ID	Kerosene (ug/L)	Diesel (ug/L)	Motor Oil (ug/L)
111982	GW9-MW2-Q11	N.D.	N.D.	690
	Reporting Limits	50	50	500
	Blank Result	N.D.	N.D.	N.D.
	Blank Spike Result (%)	--	75	--

Kayvan Kimyai
Chemist

Alex Tam
Semivolatiles Supervisor