



JONAS & ASSOCIATES INC.
Environmental Consultants

1056 Dale Place • Concord, California 94518 • (510) 676-8554

April 14, 1993

Ms. Eva Chu
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 350
Oakland, California 94621
(510) 271-4530
(510) 569-4757 fax

Subject: Transmittal of Table and Figures Presenting Groundwater Sampling Results
Project: PACO Pumps, 9201 San Leandro Street, Oakland, California
PCO-220

Dear Ms. Chu:

Attached are tables and figures presenting the results of round one and round two groundwater sampling. We hope this information will be useful for our meeting tomorrow at 10:30 on this project.

Later today I will send you similar tables and figures for PACO Pumps facility at 845 92nd Avenue.

Sincerely,
JONAS & ASSOCIATES INC.
Mark L. Jonas
Mark L. Jonas

attachment: four tables, two figures
ltrb4-14.pc0

Drawn by
BJ
12-10-1992

Drawing Number
PC0220-12/92:F3-3

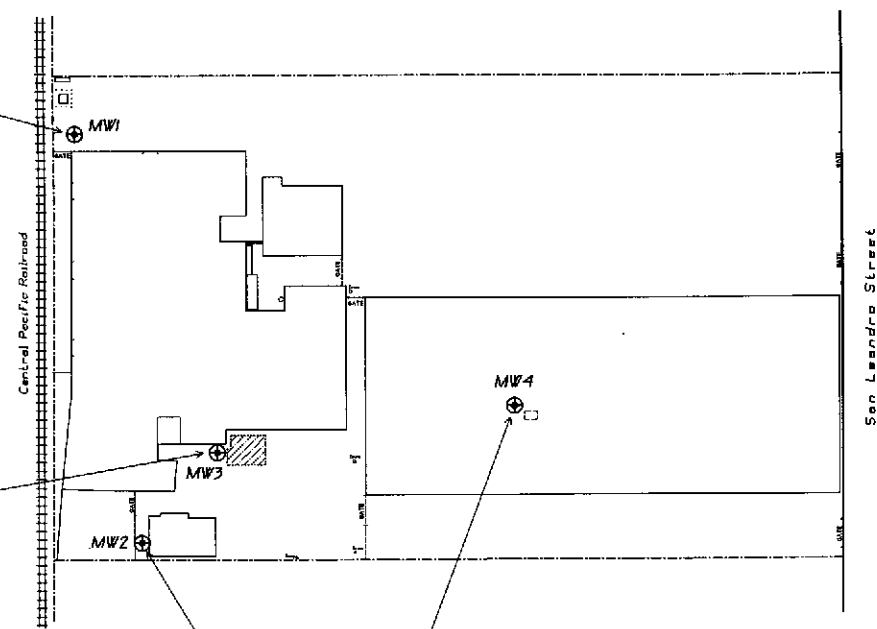
Figure 3-3

GW9-MW1-Q1		(mg/L)
sampled 11/15/1992		
TEPH-Kerosene	ND	(0.050)
TEPH-Diesel	ND	(0.050)
TEPH-Motor Oil	ND	(0.5)
PCBs	ND	(0.05)
Barium		0.18
Beryllium		0.002
Copper		0.007
Selenium		0.021

GW9-MW3-Q1		(mg/L)
sampled 11/16/1992		
TPH-Gasoline		40.000
Benzene		2.900
Toluene		6.700
Ethyl Benzene		0.550
Total Xylenes		1.700
TEPH-Kerosene	ND	(0.050)
TEPH-Diesel	ND	(0.050)
TEPH-Motor Oil	ND	(0.5)

GW9-MW2-Q1		(mg/L)
sampled 11/16/1992		
TPH-Gasoline	ND	(0.050)
Benzene	ND	(0.0005)
Toluene	ND	(0.0005)
Ethyl Benzene	ND	(0.0005)
Total Xylenes	ND	(0.0015)
TEPH-Kerosene		0.590
TEPH-Diesel	ND	(0.050)
TEPH-Motor Oil		9.5
1,1-Dichloroethane		0.0026

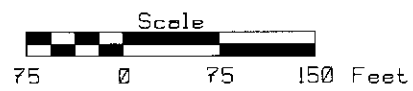
GW9-MW4-Q1		(mg/L)
sampled 11/16/1992		
TPH-Gasoline		0.560
Benzene		0.066
Toluene		0.073
Ethyl Benzene		0.016
Total Xylenes		0.140
TEPH-Kerosene	ND	(0.050)
TEPH-Diesel	ND	(0.050)
TEPH-Motor Oil	ND	(0.5)



Legend:

⊕ Monitoring Well

TPH = Total Petroleum Hydrocarbons
 TEPH = Total Extractable Petroleum Hydrocarbons
 PCBs = Polychlorinated biphenyls
 ND(0.050) = Not Detected above the laboratory detection limit in parentheses.



Results of Round One Sampling of Monitoring Wells

PACO Pumps Inc.
 9201 San Leandro Street
 Oakland, California

Prepared by

JONAS & ASSOCIATES INC.

Date: 12-10-1992
 Locations Approx.

Figure 3-3

Drawing Number
 PC0220-12/92:F3-3

Drawn by A.J. 3-9-1993
 Drawing Number PC0220-3/93:F3-3
 Figure 3-3

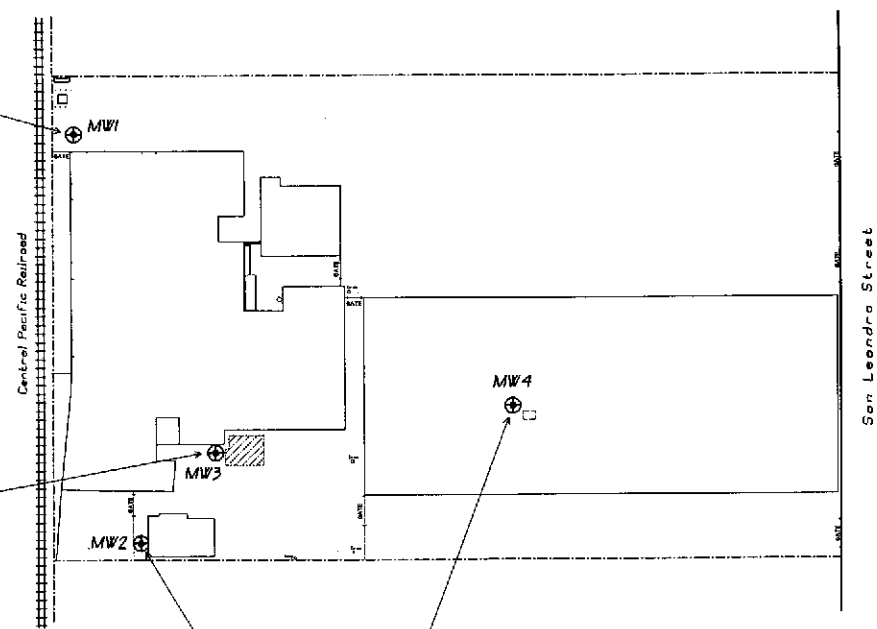
GW9-MW1-Q2	
sampled 3/9/1993 (mg/L)	
TEPH-Kerosene	ND(0.050)
TEPH-Diesel	0.140
TEPH-Motor Oil	ND(0.5)
PCBs	ND(0.0005)
Barium	0.19
Mercury	0.003
Antimony	0.03
Selenium	0.04
Zinc	0.03

GW9-MW3-Q2	
sampled 3/9/1993 (mg/L)	
TPH-Gasoline	ND(0.050)
Benzene	1.0 ND(0.0005)
Toluene	0.30 ND(0.0005)
Ethyl Benzene	ND(0.0005)
Total Xylenes	ND(0.0005)
TEPH-Kerosene	ND(0.050)
TEPH-Diesel	0.290
TEPH-Motor Oil	ND(0.5)

Wings - see letter dated 4/24/93 from Jones

GW9-MW2-Q2	
sampled 3/9/1993 (mg/L)	
TPH-Gasoline	ND(0.050)
Benzene	ND(0.0005)
Toluene	ND(0.0005)
Ethyl Benzene	ND(0.0005)
Total Xylenes	ND(0.0005)
TEPH-Kerosene	0.210
TEPH-Diesel	0.430
TEPH-Motor Oil	4.3
Selenium	0.08

GW9-MW4-Q2	
sampled 3/9/1993 (mg/L)	
TPH-Gasoline	0.750
Benzene	0.067
Toluene	0.012
Ethyl Benzene	0.029
Total Xylenes	0.062
TEPH-Kerosene	ND(0.050)
TEPH-Diesel	ND(0.050)
TEPH-Motor Oil	ND(0.5)



Results of Round Two Sampling of Monitoring Wells

PACO Pumps Inc.
 9201 San Leandro Street
 Oakland, California

Prepared by

JONAS & ASSOCIATES INC.

Legend:

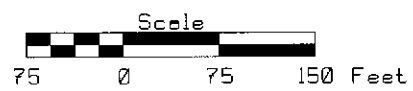
⊕ Monitoring Well

TPH = Total Petroleum Hydrocarbons

TEPH = Total Extractable Petroleum Hydrocarbons

PCBs = Polychlorinated biphenyls

ND(0.050) = Not Detected above the laboratory detection limit in parentheses.



Date: 3-9-1993
 Locations Approx.

Figure 3-3

Drawing Number PC0220-3/93:F3-3

FIRST & SECOND ROUND GROUNDWATER RESULTS FOR TPH-GASOLINE & BTEX
PACO PUMPS - 9201 SAN LEANDRO STREET

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	TPH-Gasoline (5030/8015) (mg/L)	Benzene (602) (mg/L)	Toluene (602) (mg/L)	Ethyl Benzene (602) (mg/L)	Total Xylenes (602) (mg/L)
GW9-MW2-Q1	11/16/92	~ 5'-20' _{screen}	water	CrLab	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0015)
GW9-MW2-Q2	3/9/93	"	"	"	ND(0.050)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GW9-MW3-Q1	11/16/92	~ 5'-20' _{screen}	water	CrLab	40.00	2.90	6.70	0.550	1.70
GW9-MW3-Q2	3/9/93	"	"	"	ND(0.050) 12.00	ND(0.0005) 1.00	ND(0.0005) 0.30	ND(0.0005) 0.10	ND(0.0005) 0.170
GW9-MW4-Q1	11/16/92	~ 5'-20' _{screen}	water	CrLab	0.560	0.066	0.073	0.016	0.130
GW9-MW41-Q1	11/16/92	"	"	"	0.520	0.063	0.067	0.015	0.140
GW9-MW4-Q2	3/9/93	"	"	"	0.750	0.067	0.012	0.029	0.062

notes: TPH: Total Petroleum Hydrocarbons
 BTEX: Benzene, Toluene, Ethyl Benzene, Total Xylenes
 CrLab: Chromalab, Inc. (San Ramon, California)
 ND(0.1) = Not Detected above the laboratory detection limit in parentheses.

FIRST & SECOND ROUND GROUNDWATER RESULTS FOR TEPH & PCB
PACO PUMPS - 9201 SAN LEANDRO STREET

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	TEPH-Diesel (3510/8015) (mg/L)	TEPH-Kerosene (3510/8015) (mg/L)	TEPH-Motor Oil (3510/8015) (mg/L)	PCBs (608 mod.) (mg/L)
GW9-MW1-Q1	11/15/92	~ 5'-20' _{screen}	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	ND(0.05)
GW9-MW1-Q2	3/9/93	"	"	"	0.140	ND(0.050)	ND(0.5)	ND(0.0005)
GW9-MW2-Q1	11/16/92	~ 5'-20' _{screen}	water	CrLab	ND(0.050)	0.590	9.5	-
GW9-MW2-Q2	3/9/93	"	"	"	0.430	0.210	4.3	-
GW9-MW3-Q1	11/16/92	~ 5'-20' _{screen}	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW3-Q2	3/9/93	"	"	"	0.290	ND(0.050)	ND(0.5)	-
GW9-MW4-Q1	11/16/92	~ 5'-20' _{screen}	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW41-Q1	11/16/92	"	"	"	ND(0.050)	ND(0.050)	ND(0.5)	-
GW9-MW4-Q2	3/9/93	"	"	"	ND(0.050)	ND(0.050)	ND(0.5)	-

notes: TEPH: Total Extractable Petroleum Hydrocarbons
CrLab: Chromalab, Inc. (San Ramon, California)
ND(0.004) = Not Detected above the laboratory detection limit in parentheses.

FIRST & SECOND ROUND GROUNDWATER RESULTS FOR METALS
 PACO PUMPS - 9201 SAN LEANDRO STREET
 {milligrams chemical per liter liquid}

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
GW9-MW1-Q1	11/15/92	~5'-20' _{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	"	"	"	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)

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Pb Lead	Sb Antimony	Se Selenium	Tl Thallium	V Vanadium	Zn Zinc
GW9-MW1-Q1	11/15/92	~5'-20' _{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	"	"	"	ND(0.010)	0.03	0.04	ND(0.01)	ND(0.01)	0.03
GW9-MW2-Q2	3/9/93	"	"	"			0.08			

notes: CrLab: Chromalab Inc.

ND(0.25) = Not Detected above the laboratory detection limit in parentheses.

FIRST & SECOND ROUND GROUNDWATER RESULTS FOR VOLATILE ORGANICS
 PACO PUMPS - 9201 SAN LEANDRO STREET
 {milligrams chemical per liter liquid}

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
GW9-MW2-Q1	11/15/92	~ 5'-20' <small>screen</small>	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	"	"	"	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)

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Dibromo- chloromethane	1,2-Dichloro- benzene	1,3-Dichloro- benzene	1,4-Dichloro- benzene	1,1-Dichloro- ethane	1,2-Dichloro- ethane	1,1-Dichloro- ethene	trans 1,2- Dichloroethene	cis 1,2- Dichloroethene	1,2-Dichloro- propane	cis-1,3-Di- chloropropene
GW9-MW2-Q1	11/15/92	~ 5'-20' <small>screen</small>	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)	ND(0.002)
GW9-MW2-Q2	3/9/93	"	"	"	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)

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	trans-1,3-Di- chloropropene	Ethyl- Benzene	Methyl Ethyl Ketone	Methyl Isobutyl Ketone	Methylene Chloride	1,1,2,2-Tetra- chloroethane	Tetra- chloroethene	Toluene	1,1,1-Tri- chloroethane	1,1,2-Tri- chloroethane	Tri- chloroethene
GW9-MW2-Q1	11/15/92	~ 5'-20' <small>screen</small>	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	"	"	"	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)

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Trichlorofluoro- methane	Vinyl Chloride	Total Xylenes
GW9-MW2-Q1	11/15/92	~ 5'-20' <small>screen</small>	Water	CrLab	ND(0.002)	ND(0.002)	ND(0.002)
GW9-MW2-Q2	3/9/93	"	"	"	ND(0.002)	ND(0.002)	ND(0.002)

notes: CrLab: Chromalab Inc.
 ND(0.002) = Not Detected above the laboratory detection limit in parentheses.