



JONAS & ASSOCIATES INC.
Environmental Consultants

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April 26, 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 tables and figures for 1st & 2nd round of groundwater sampling.
Project: PACO Pumps, 9201 San Leandro Street, Oakland, California
PCO-220

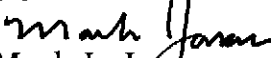
Dear Eva:

Thank you for meeting with us on April 15, 1993. We enjoy your congeniality and respect your knowledge and thoroughness.

Attached are modified tables and figures presenting the results of round one and round two groundwater samples for PACO Pumps facility at 9201 San Leandro Street. The only modifications made were with respect to MW3 third round TPH as gasoline and BTEX. As first reported by ChromaLab, the second round groundwater sample from MW3 did not find detectable concentrations of these constituents. Because of this, J&A contacted ChromaLab to determine if they can check their records with respect to the apparently anomalous results. They identified that a paperwork error had occurred and *the second round groundwater sample of MW3 did contain TPH as gasoline and BTEX*. The attached tables and figures present the up-to-date groundwater results. An attachment to this correspondence is a letter from ChromaLab to J&A addressing the MW3 issue. ChromaLab is currently checking all first and second quarter sampling results to determine if an error had occurred with other results. We will contact you if other findings occur. After ChromaLab found what had happened, they reported to have modified their sample documentation procedures so the error would not occur again.

Thank you for your patience.

Sincerely,
JONAS AND ASSOCIATES INC.


Mark L. Jonas
Project Manager

attachments: - modified figures and tables for 1st and 2nd round groundwater samples.
- 4/21/1993 letter from ChromaLab to J&A

cc: Dr. Jeff Sullivan, R.G.

Drawn by A.J. 12-10-1992

Drawing Number PC0220-12/92-F3-3

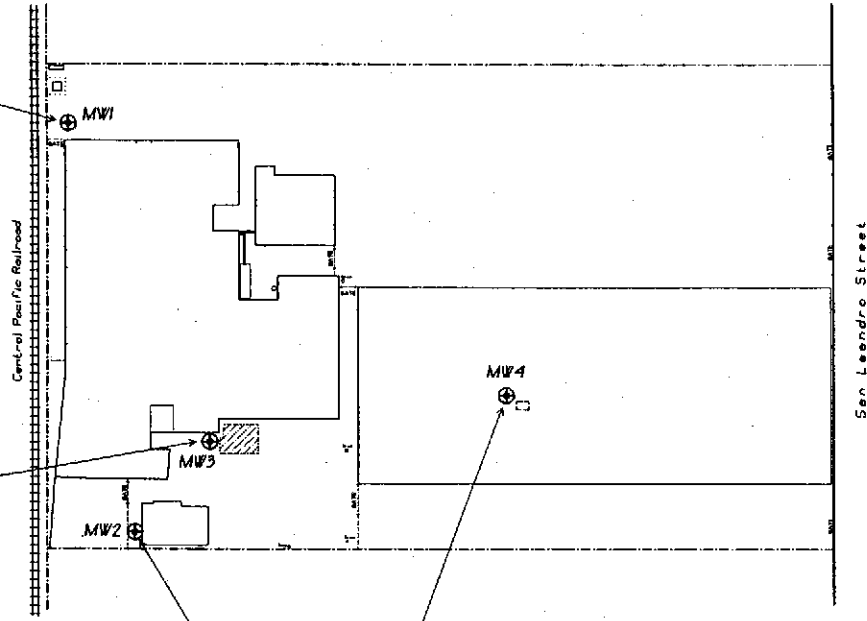
Figure 3-3

GW9-MW1-Q1	
sampled 11/15/1992 (mg/L)	
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	
sampled 11/16/1992 (mg/L)	
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	
sampled 11/16/1992 (mg/L)	
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

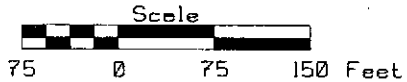
GW9-MW4-Q1	
sampled 11/16/1992 (mg/L)	
TPH-Gasoline	0.560
Benzene	0.066
Toluene	0.073
Ethyl Benzene	0.016
Total Xylenes	0.140
TEPH-Kerosene	ND(0.050)
TEPH-Diesel	ND(0.050)
TEPH-Motor Oil	ND(0.5)



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 PC0220-3/93F3-3

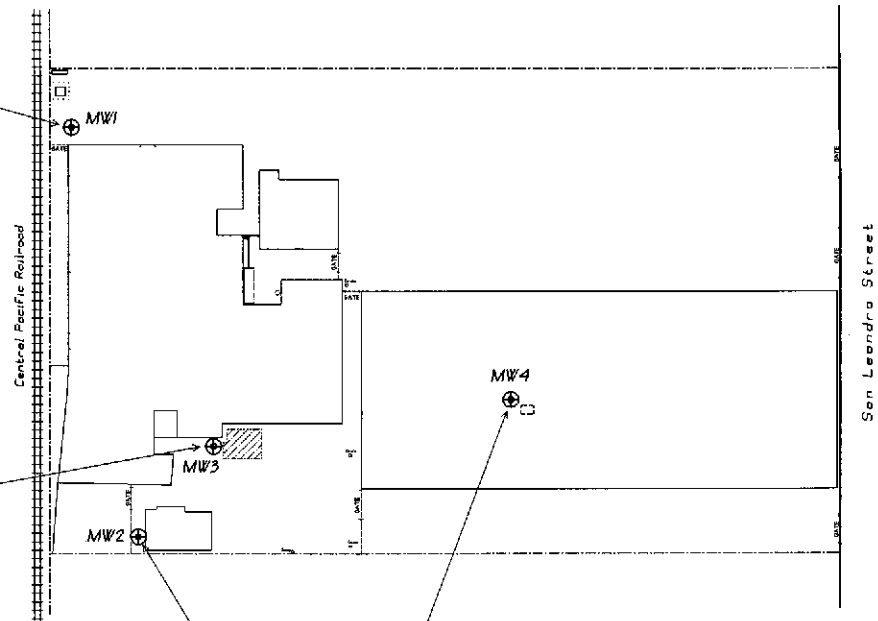
Figure 3-3

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	12.00
Benzene	1.00
Toluene	0.30
Ethyl Benzene	0.110
Total Xylenes	0.170
TEPH-Kerosene	ND (0.050)
TEPH-Diesel	0.290
TEPH-Motor Oil	ND (0.5)

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

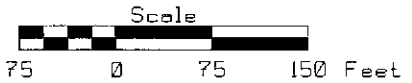
PACO Pumps Inc.
9201 San Leandro Street
Oakland, California

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
PC0220-3/93F3-3

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	"	"	"	12.00	1.00	0.30	0.110	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' <small>screen</small>	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' <small>screen</small>	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' 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	"	"	"	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' 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)	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' 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	"	"	"	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' screen	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.

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

RECEIVED
4/23/93 KA

April 21, 1993

Mr. Mark Jonas
Jonas & Associates, Inc.
1056 Dale Place
Concord, California 94518

RE: Project Name: 9201 PACO PUMPS
Project Number: PCO-220-02

Dear Mark:

Enclosed is the revised report on the referenced project. Originally GW9-MW3-Q2 was reported N.D. for Gas/BTEX. There was another sample with the same identification (105/MW3) as 0393129/GW9-MW3-Q2 (129/MW3). This second sample, 105/MW3, was analyzed after 039129/GW9-MW3-Q2 and mistakingly reported as 129/MW3.

Corrective action taken: All samples analyzed will have their entire identification printed out.

Jill Thomas, our QA Manager, will further review the data from Q1 and Q2 for analysis and will be sending you an additional letter.

Sincerely,



Eric Tam
Laboratory Director

ET:cc