BACE Environmental
A Division Of
Brunsing Associates, Inc.

May 12, 1993

Project No. 29.7

Ms. Normita Callison
Pacific Coast Building Products
4290 Roseville Road
North Highlands, CA 95660

3826

RE: QUARTERLY GROUNDWATER MONITORING REPORT: MARCH 1993
PACIFIC SUPPLY COMPANY
1735 24TH STREET
OAKLAND, CALIFORNIA

Dear Ms. Callison:

This report has been prepared to document groundwater sampling performed by BACE Environmental, a Division of Brunsing Associates, Inc. (BAI) at the Pacific Supply Company property located at 1735 24th Street, Oakland, California on March 9, 1993.

Scope of Work

The scope of work performed during this reporting period included testing for the existence of free product, calculated groundwater elevations, and collecting groundwater samples for on-site monitoring wells MW-1 through MW-5 and off-site wells MW-6 and MW-7 on March 9, 1993.

Site Background

Monitoring wells MW-1 through MW-5 were constructed by BAI staff on September 13, 1988 as the first phase of a soil and groundwater investigation. Monitoring wells MW-6 and MW-7 were constructed by BAI on December 19, 1989 as Phase II of the same investigation. The construction and sampling of these wells are documented in BAI's Report of Findings, dated March 23, 1990.

Table 1 is a cumulative summary of the groundwater analytical data available for the wells as documented in the March 23, 1990 Report of Findings and subsequent Quarterly Groundwater Monitoring Reports.

Groundwater Elevations

Depth to groundwater measurements were obtained on March 9, 1993 for wells MW-1 through MW-7. The groundwater depths and elevations relative to mean sea level are summarized in Table 2. As shown on Figure 1, variation in the groundwater elevations indicate a complex groundwater flow regime at the site.

Groundwater Sampling and Sample Handling

Prior to well purging, the monitoring wells were tested for the presence of free product using petroleum indicating paste applied to a steel tape. Free product was not found in any of the wells. Samples were collected using disposable polyethylene bailers to avoid cross contamination. Water samples were placed in approved sample containers, then in a ice chest containing blue ice for transport to BACE Analytical and Field Services (BAFS) under chain-of-custody procedures. Copies of the Chain-of-Custody forms are attached. Groundwater samples were tested for petroleum hydrocarbon constituents and organic lead using the following analytical methods:

- Total Petroleum Hydrocarbons (TPH) as gasoline
  -EPA Test Method 5030/GCFID;
- Benzene, Toluene, Ethylbenzene and Xylenes (BTEX)
  -EPA Test Method 5030/8020;
- Organic Lead
  -DTSC LUFT Method.

Groundwater Analytical Results

Analytical laboratory reports for the March 9, 1993 groundwater monitoring are summarized in Table 1. A copy of the laboratory reports are attached.

Hydrocarbons Removed from Site

Based on the volume of purge water removed during the sampling and the concentrations of TPH as gasoline; negligible quantities hydrocarbons were removed from the site during this reporting period. Purge water from the March 9, 1993 sampling event remains at the site in labeled 55-gallon drums pending appropriate disposal.

follow up!

If you have any questions, please contact Mike Velzy at (415) 364-9030.

Sincerely,

Joel Bruxvoort
Staff Geologist

Thomas P. Brunsing Ph.D, P.E., R.E.A
Principal Engineer

JBB:jbb

Attachments: Table 1 – Analytical Data Summary
Table 2 – Groundwater Elevation Data
Figure 1- Groundwater Elevation Contours
Analytical Laboratory Report

cc: Jennifer Eberle, Alameda County Health Care Services
Tony Dejohn, Pacific Supply Company
Larry Halsey, Pacific Coast Building Products

TABLE 1
ANALYTICAL DATA SUMMARY
PACIFIC SUPPLY COMPANY

Well Identification	Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-1	10/14/88	1.1	1.1	ND	–	ND	–
MW-1	12/29/89	ND	ND	ND	ND	ND	ND (1)
MW-1	5/28/92	ND	ND	ND	ND	ND	0.003(2)
MW-1	9/3/92	ND	ND	ND	ND	ND	0.12 (2)
MW-1	11/24/92	ND	ND	ND	ND	ND	0.017 (2)
MW-1	3/9/93	ND	ND	ND	ND	ND	ND (1)

Well Identification	Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-2	10/14/88	11	23	20	–	16	–
MW-2	12/29/89	4	200	6.7	ND	ND	0.22 (1)
MW-2	5/28/92	8.9	550	48	ND	13	ND (2)
MW-2	9/3/92	2.1	760	6.2	1.8	5.1	0.006 (2)
MW-2	11/24/92	4.2	370	15	3.4	9.5	ND (2)
MW-2	3/9/93	4.3	280	14	3.7	7.1	ND (1)

(1) Analysis Completed For Organic Lead
(2) Analysis Completed For Total Lead
ND = not detected
µg/L = micrograms per liter
mg/L = milligrams per liter

TABLE 1
ANALYTICAL DATA SUMMARY
PACIFIC SUPPLY COMPANY

Well Identification	Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-3	10/14/88	3.4	ND	ND	–	2.8	–
MW-3	12/29/89	ND	ND	ND	ND	ND	.205 (1)
MW-3	5/28/92	ND	0.8	0.5	ND	ND	.016 (2)
MW-3	9/3/92	ND	ND	ND	ND	ND	0.033 (2)
MW-3	11/24/92	ND	ND	ND	ND	ND	0.011 (2)
MW-3	3/9/93	0.1	1.8	ND	ND	ND	ND (1)

Well Identification	Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-4	10/14/88	4.6	1.2	ND	–	2.2	–
MW-4	12/29/89	0.5	0.7	ND	ND	ND	ND (1)
MW-4	5/28/92	0.27	8.8	1	ND	3.2	.030 (2)
MW-4	9/3/92	0.20	4.5	4.4	ND	1.9	0.022 (2)
MW-4	11/24/92	0.14	3.2	3.2	ND	1.0	0.005 (2)
MW-4	3/9/93	0.47	10	ND	ND	2.5	ND (1)

(1) Analysis Completed For Organic Lead
(2) Analysis Completed For Total Lead
ND = not detected
µg/L = micrograms per liter
mg/L = milligrams per liter

TABLE 1
ANALYTICAL DATA SUMMARY
PACIFIC SUPPLY COMPANY

Well Identification	Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-5	10/14/88	3.2	ND	ND	–	ND	–
MW-5	12/29/89	ND	ND	ND	ND	ND	ND (1)
MW-5	5/28/92	ND	ND	ND	ND	ND	.008 (2)
MW-5	9/3/92	ND	ND	ND	ND	ND	0.034 (2)
MW-5	11/24/92	ND	ND	ND	ND	ND	0.011 (2)
MW-5	3/9/93	ND	ND	ND	ND	ND	ND (1)

Well Identification	Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-6	12/29/89	1.1	5.4	4.5	ND	ND	ND (1)
MW-6	3/9/93	2.3	2.3	2.8	ND	3.1	ND (1)

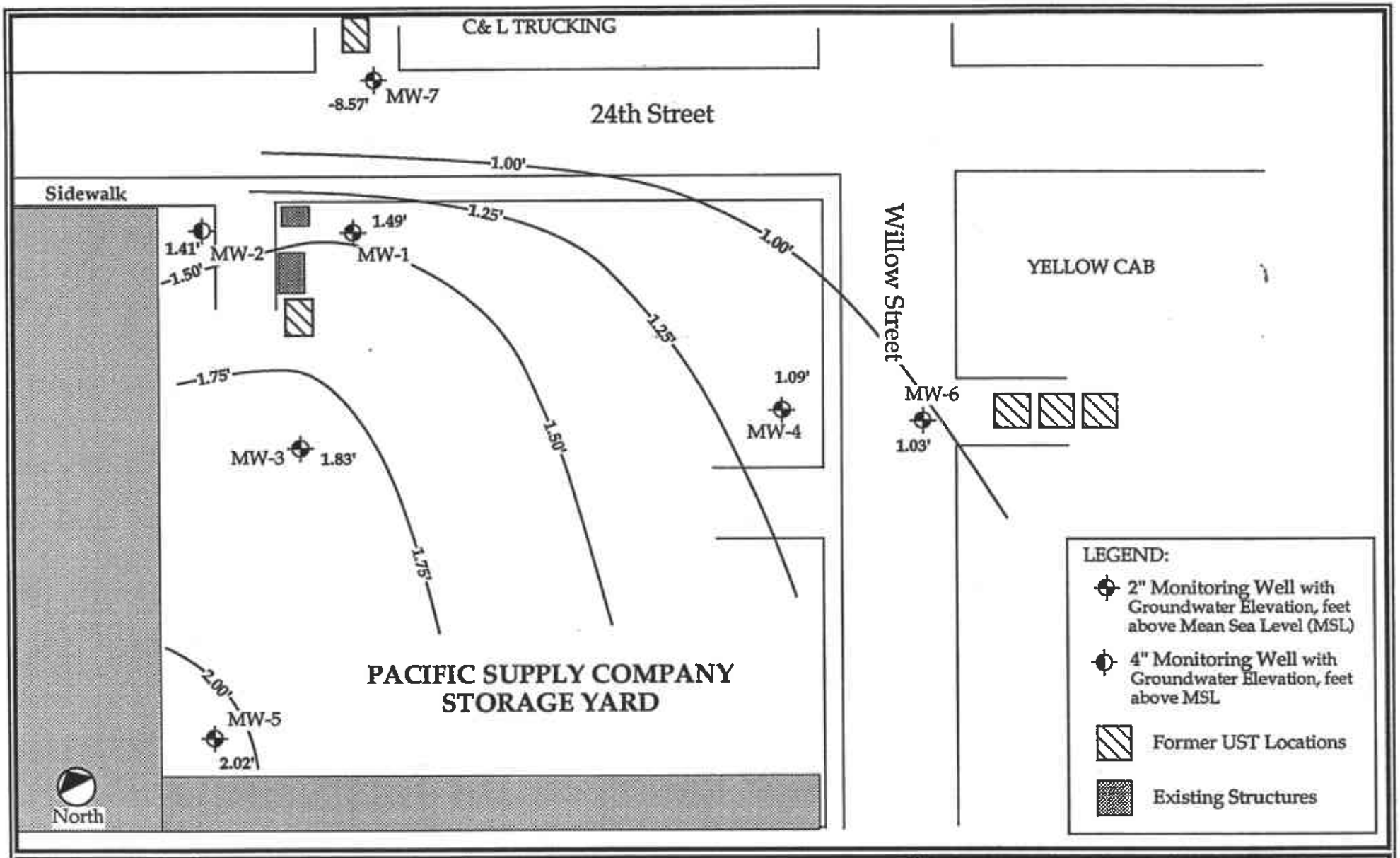
Well Identification	Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Lead mg/L
MW-7	12/29/89	ND	ND	ND	ND	ND	0.235 (1)
MW-7	3/9/93	ND	ND	ND	ND	ND	ND (1)

(1) Analysis Completed For Organic Lead
(2) Analysis Completed For Total Lead
ND = not detected
µg/L = micrograms per liter
mg/L = milligrams per liter

TABLE 2
GROUNDWATER ELEVATION DATA
PACIFIC SUPPLY COMPANY

Well Identification	Date Measured	Elevation of Casing (ft above MSL)	Depth to Water (ft)	Groundwater Elevation (ft above MSL)
MW-1	3/9/93	8.87	7.38	1.49
MW-2	3/9/93	8.14	6.73	1.41
MW-3	3/9/93	9.13	7.30	1.83
MW-4	3/9/93	9.07	7.98	1.09
MW-5	3/9/93	8.93	6.91	2.02
MW-6	3/9/93	6.13	5.10	1.03
MW-7	3/9/93	5.03	13.60	-8.57

MSL = Mean Sea Level



PROJECT NUMBER: 29.7 PACIFIC SUPPLY COMPANY OAKLAND, CALIFORNIA		
DRAWING NUMBER: 29.7-01		
DRAWN BY:	JBB	4/22/93
APPROVED BY:	MEV	5/11/93
SCALE: 1 Inch = 50 Feet		

BRUNSING ASSOCIATES, INC.

FIGURE 1

Groundwater Elevation Contours

BACE Analytical & Field Services, Inc.

P. O. Box 838, Windsor, CA 95492
707-838-8338 FAX 707-838-4420

March 25, 1993
Log No: 1692

Brunsing Associates, Inc.
1735 E. Bayshore Road, Suite 2A
Redwood City, California 94063

ATTN: Joel Bruxvoort

RE: **Results of the analyses of groundwater samples obtained for project number 29.7 on March 9, 1993.**

Dear Mr. Bruxvoort,

This letter serves to confirm the analytical results previously communicated to you. Should any questions arise concerning procedure or results, please feel free to contact us.

Sincerely,

William G. Rotz
Director, Mobile Analytical Services

Tami Hucke Norgrove
Laboratory Manager

Client: Brunsing Associates, Inc.
Client Contact: Joel Bruxvoort

Sample Date: 3/9/93
Analysis Date: 3/22/93

BAFS Log No: 1692

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/L	Lab No: Descriptor:	Results - µg/L 1692-1 (MW - 1)	1692-2 (MW - 2)
Benzene	0.5		ND	280
Toluene	0.5		ND	14
Ethylbenzene	0.5		ND	3.7
Xylene (total)	0.5		ND	7.1
Dilution Factor:	1			

METHOD: 5030 / GC FID

Parameter	Reporting Limit mg/L	Lab No: Descriptor:	Results - mg/L 1692-1 (MW - 1)	1692-2 (MW - 2)
TPH - gasoline	0.05		ND	4.3
Dilution Factor:	1			

NOTE: ND = not detected.
nr= not requested.

Client: Brunsing Associates, Inc.
Client Contact: Joel Bruxvoort

Sample Date: 3/9/93
Analysis Date: 3/22/93

BAFS Log No: 1692

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/L	Lab No: Descriptor:	Results - µg/L 1692-3 (MW - 3)	1692-4 (MW - 4)
Benzene	0.5		1.8	10
Toluene	0.5		ND	ND
Ethylbenzene	0.5		ND	ND
Xylene (total)	0.5		ND	2.5
Dilution Factor:	1			

METHOD: 5030 / GC FID

Parameter	Reporting Limit mg/L	Lab No: Descriptor:	Results - mg/L 1692-3 (MW - 3)	1692-4 (MW - 4)
TPH - gasoline	0.05		0.10	0.47
Dilution Factor:	1			

NOTE: ND = not detected.
nr= not requested.

Client: Brunsing Associates, Inc.
Client Contact: Joel Bruxvoort

Sample Date: 3/9/93
Analysis Date: 3/22/93

BAFS Log No: 1692

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/L	Lab No: Descriptor:	Results - µg/L 1692-5 (MW - 5)	1692-6 (MW - 6)
Benzene	0.5		ND	2.3
Toluene	0.5		ND	2.8
Ethylbenzene	0.5		ND	ND
Xylene (total)	0.5		ND	3.1
Dilution Factor:	1			

METHOD: 5030 / GC FID

Parameter	Reporting Limit mg/L	Lab No: Descriptor:	Results - mg/L 1692-5 (MW - 5)	1692-6 (MW - 6)
TPH - gasoline	0.05		ND	2.3
Dilution Factor:	1			

NOTE: ND = not detected.
nr= not requested.

Client: Brunsing Associates, Inc.
Client Contact: Joel Bruxvoort

Sample Date: 3/9/93
Analysis Date: 3/22/93

BAFS Log No: 1692

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/L	Lab No: Descriptor:	Results - µg/L 1692-7 (MW - 7)
Benzene	0.5		ND
Toluene	0.5		ND
Ethylbenzene	0.5		ND
Xylene (total)	0.5		ND
Dilution Factor:	1		

METHOD: 5030 / GC FID

Parameter	Reporting Limit mg/L	Lab No: Descriptor:	Results - mg/L 1692-7 (MW - 7)
TPH - gasoline	0.05		ND
Dilution Factor:	1		

NOTE: ND = not detected.
nr= not requested.

SUMMARY OF LABORATORY RESULTS *

Pacific Supply - Project No. 29.7

Sampling Date	Lab Number	Descriptor	Benzene ug/L	Toluene ug/L	Ethylbenzene ug/L	Xylene ug/L	TPH (gasoline) mg/L
3/9/93	1692-1	MW-1	ND	ND	ND	ND	ND
3/9/93	1692-2	MW-2	280	14	3.7	7.1	4.3
3/9/93	1692-3	MW-3	1.8	ND	ND	ND	0.10
3/9/93	1692-4	MW-4	10	ND	ND	2.5	0.47
3/9/93	1692-5	MW-5	ND	ND	ND	ND	ND
3/9/93	1692-6	MW-6	2.3	2.8	ND	3.1	2.3
3/9/93	1692-7	MW-7	ND	ND	ND	ND	ND

**See original laboratory report dated 3/25/93 for complete results.*

QUALITY CONTROL SUMMARY

Client: Brunsing Associates, Inc.
Client Contact: Joel Bruxvoort
Sample Date: 3/9/93
Analysis Date: 3/22/93

BAFS Log No. : 1692

Parameter	% RECOVERY				
	CCV%*	Blank	Spike	Spike Dup	RPD
Benzene	96	ND	99	98	1.0
Toluene	98	ND	99	103	4.0
Ethylbenzene	98	ND	96	99	3.1
Xylene	101	ND	97	101	4.0
Gasoline	95	ND	104	102	1.9

* Continuous Calibration Verification Standard

PROJ. NO.	PROJECT NAME						№ 1379
29.7	Pacific Supply Company						
L.P. NO.	SAMPLERS: (Signature) [signature]						

DATE	SAMPLE I.D.	TYPE	NO. OF CONTAINERS	ANALYSIS: TPH-gasoline	BTEX	Organic Lead	REMARKS
3-9-93	MW-1	water	1-1LA			X	1692-1
↓	MW-1	↓	2-40ml	X	X		
	MW-2		1-1L			X	-2
	MW-2		2-40ml	X	X		
	MW-3		1-1LA			X	-3
	MW-3		2-40ml	X	X		
	MW-4		1-1LA			X	-4
	MW-4		2-40ml	X	X		
	MW-5		1-1LA			X	-5
	MW-5		2-40ml	X	X		
	MW-6		1-1LA			X	-6
	MW-6		2-40ml	X	X		
	MW-7		1-1LA			X	-7
	MW-7		2-40ml	X	X		

lead samples sent to NET Pacific on BAFS CofC #1397 DRD

LABORATORY: BAFS

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Remarks
[signature]	3-10-93 9:50		Detection Limits & Methods as per Trilogional Rec. Standard TAT
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	
Relinquished by: (Signature)	Date/Time 3/10/93 9:50	Received for Laboratory by: (Signature) [signature]	

BRUNSING ASSOCIATES, INC.

Main office:
P. O. Box 588
Windsor, CA 95492
707-838-3027

Branch offices:
1607 Industrial Drive
Belmont, Ca 94002
415-637-0170

601 N. State Street
Ukiah, CA 95482
707-468-7412

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Dean Aaland
BACE Analytical
930 Shiloh Road Bldg 44
PO Box 749
Windsor, CA 95492

Date: 03/26/1993
NET Client Acct No: 32500
NET Pacific Job No: 93.01012
Received: 03/18/1993

Client Reference Information

Pacific Supply/29.7

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Jules Skamarack
Laboratory Manager

Enclosure(s)

Ref: Pacific Supply/29.7

ANALYTE: Org. Lead (FLAA)
METHOD: DOHS-LUFT
REPORTING LIMIT: 1.0 mg/L

Lab No.	Descriptor	Results	Units	Date Taken
153007	MW-1	ND	mg/L	03/09/1993
153008	MW-2	ND	mg/L	03/09/1993
153009	MW-3	ND	mg/L	03/09/1993
153010	MW-4	ND	mg/L	03/09/1993
153011	MW-5	ND	mg/L	03/09/1993
153012	MW-6	ND	mg/L	03/09/1993
153013	MW-7	ND	mg/L	03/09/1993

Client Acct: 32500
Client Name: BACE Analytical
NET Job No: 93.01012

Date: 03/26/1993
Page: 3

Ref: Pacific Supply/29.7

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Org. Lead	1.0	mg/L	99	ND	95	97	2.7

NET®

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
*	:	Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
ICVS	:	Initial Calibration Verification Standard (External Standard).
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg (ppm)	:	Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
mg/L	:	Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	:	Milliliters per liter per hour.
MPN/100 mL	:	Most probable number of bacteria per one hundred milliliters of sample.
N/A	:	Not applicable.
NA	:	Not analyzed.
ND	:	Not detected; the analyte concentration is less than applicable listed reporting limit.
NTU	:	Nephelometric turbidity units.
RPD	:	Relative percent difference, 100 [Value 1 - Value 2]/mean value.
SNA	:	Standard not available.
ug/Kg (ppb)	:	Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	:	Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

(2615)

№ 1397

PROJ. NO.	PROJECT NAME	NO. OF CON-TAINERS	ANALYSIS: Organic Lead											REMARKS
29.7	Pacific Supply													
L.P. NO.	SAMPLERS: (Signature)													

DATE	SAMPLE I.D.	TYPE	NO. OF CONTAINERS	Organic Lead											REMARKS
3-9-93	MW-1	water	1	*											Samples transferred
↓	MW-2	↓	1	↓											from BAI COC #1379
↓	MW-3	↓	1	↓											DRAJ
↓	MW-4	↓	1	↓											
↓	MW-5	↓	1	↓											
↓	MW-6	↓	1	↓											
↓	MW-7	↓	1	↓											

LABORATORY: NET Pacific

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Remarks
[signature]	3/18/93 15:55		by 3-24-93 5 day TAT
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	
	3/18/93 15:55	Janine [signature]	

BACE ANALYTICAL AND FIELD SERVICES, INC.

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