



BACE Environmental

A Division Of
Brunsing Associates, Inc.

January 19, 1993

3826

93-1217-01-2-00
29.7

Ms. Normita Callison
Basalite-Keystone Retaining Wall Systems
4290 Roseville Road
North Highlands, CA 95660

**RE: QUARTERLY GROUNDWATER MONITORING REPORT: NOVEMBER 1992
PACIFIC SUPPLY COMPANY
1735 24TH STREET OAKLAND, CALIFORNIA**

Dear Ms. Callison:

This report has been prepared to document groundwater sampling performed by Brunsing Associates, Inc. (BAI) at the Pacific Supply Company property located at 1735 24th Street, Oakland, California on November 24, 1992.

Scope of Work

On-site monitoring wells MW-1 through MW-5 were tested for the existence of free product and groundwater samples were obtained on November 24, 1992. Off-site monitoring wells MW-6 and MW-7 were not sampled at this time. In addition, groundwater elevations were obtained from all seven monitoring wells and a groundwater elevation map was prepared.

why not?

Site Background

Monitoring wells MW-1 through MW-5 were constructed by BAI on Sept 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 the Report of Findings dated March 23, 1990.

Table 2 through Table 6 include a cumulative summary of the data available for the wells as documented in the March 23, 1990 Report of Findings and the July 7, 1992 and November 2, 1992 Quarterly Groundwater Monitoring Reports.

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 on-site wells. Samples were collected using disposable polyethylene bailers to avoid cross contamination. Water samples placed in approved sample containers in a cooler 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 enclosed. Groundwater samples were tested for petroleum hydrocarbons and lead using the following analytical methods:

- Total Petroleum Hydrocarbons (TPH) as gasoline
-EPA Method 5030/GCFID;
- Benzene, Toluene, Ethyl Benzene and Xylene (BTEX)
-EPA Method 5030/8020;
- Total Lead
-EPA Method 7421.

Groundwater Analytical Results

Analytical data reports from BACE Analytical & Field Services for the November 24, 1992 quarterly groundwater monitoring round are summarized on Table 1. Copies of the Laboratory Data Sheets are enclosed.

Groundwater Elevations

Depth to groundwater measurements were obtained on November 24, 1992 for MW-1 through MW-7. The groundwater depths and elevations relative to mean sea level are summarized on Table 7. As shown in Figure 1, variation in the groundwater elevations indicate a complex groundwater flow regime at the site.

Hydrocarbons Removed from Site

Based on the volume of purge water removed during the sampling performed in the previous quarter and estimated concentrations of TPH as gasoline; negligible quantities hydrocarbons were removed from the site. Purge water from the November 24, 1992 sampling event remains on the site in labeled 55-gallon drums pending appropriate disposal.



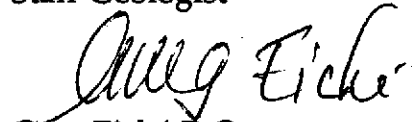
Ms. Callison
January 19, 1993
Page 3

If you have any questions please contact Mike Velzy at (415) 362-9030.

Sincerely,



Joel Bruxvoort
Staff Geologist



Greg Eiché R.G.
Senior Geologist

JBB:jbb

Enclosures: Table 1 through Table 7
Figure 1- Groundwater Elevation Contours
Analytical Data Sheets

cc: Jennifer Eberle, Alameda County Health Care Services
Jim Anderson, Pacific Supply Company
Larry Halsey, Pacific Coast Building Products
Rich Hiett, San Francisco Bay RWQCB



TABLE 1
SUMMARY OF GROUNDWATER ANALYSES
PACIFIC SUPPLY COMPANY

Descriptor	Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Xylene µg/L	Total Lead mg/L
MW-1	11/24/92	ND /	ND /	ND /	ND /	ND /	0.017 /
MW-2	11/24/92	4.2 /	370 /	15 /	3.4 /	9.5 /	ND /
MW-3	11/24/92	ND /	ND /	ND /	ND /	ND /	0.011 /
MW-4	11/24/92	0.14 /	3.2 /	3.2 /	ND /	1.0 /	0.005 /
MW-5	11/24/92	ND /	ND /	ND /	ND /	ND /	0.011 /



TABLE 2
 CUMULATIVE SUMMARY OF GROUNDWATER ANALYSES
 MONITORING WELL MW-1
 PACIFIC SUPPLY COMPANY

Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Xylene µg/L	Lead mg/L
10/14/88	1.1	1.1	ND	-	ND	-
12/29/89	ND	ND	ND	ND	ND	ND (1)
5/28/92	ND	ND	ND	ND	ND	0.003(2)
9/3/92	ND	ND	ND	ND	ND	0.12 (2)
11/24/92	ND	ND	ND	ND	ND	0.017 (2)

- (1) Analysis Completed For Organic Lead
 (2) Analysis Completed For Total Lead

TABLE 3
 CUMULATIVE SUMMARY OF GROUNDWATER ANALYSES
 MONITORING WELL MW-2
 PACIFIC SUPPLY COMPANY

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

- (1) Analysis Completed For Organic Lead
 (2) Analysis Completed For Total Lead

TABLE 4
 CUMULATIVE SUMMARY OF GROUNDWATER ANALYSES
 MONITORING WELL MW-3
 PACIFIC SUPPLY COMPANY

Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Xylene µg/L	Lead mg/L
10/14/88	3.4	ND	ND	-	2.8	-
12/29/89	ND	ND	ND	ND	ND	.205 (1)
5/28/92	ND	0.8	0.5	ND	ND	.016 (2)
9/3/92	ND	ND	ND	ND	ND	0.033 (2)
11/24/92	ND	ND	ND	ND	ND	0.011 (2)



TABLE 5
 CUMULATIVE SUMMARY OF GROUNDWATER ANALYSES
 MONITORING WELL MW-4
 PACIFIC SUPPLY COMPANY

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

- (1) Analysis Completed For Organic Lead
 (2) Analysis Completed For Total Lead

TABLE 6
 CUMULATIVE SUMMARY OF GROUNDWATER ANALYSES
 MONITORING WELL MW-5
 PACIFIC SUPPLY COMPANY

Sampling Date	TPH (gasoline) mg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Xylene µg/L	Lead mg/L
10/14/88	3.2	ND	ND	-	ND	-
12/29/89	ND	ND	ND	ND	ND	ND (1)
5/28/92	ND	ND	ND	ND	ND	.008 (2)
9/3/92	ND	ND	ND	ND	ND	0.034 (2)
11/24/92	ND	ND	ND	ND	ND	0.011 (2)

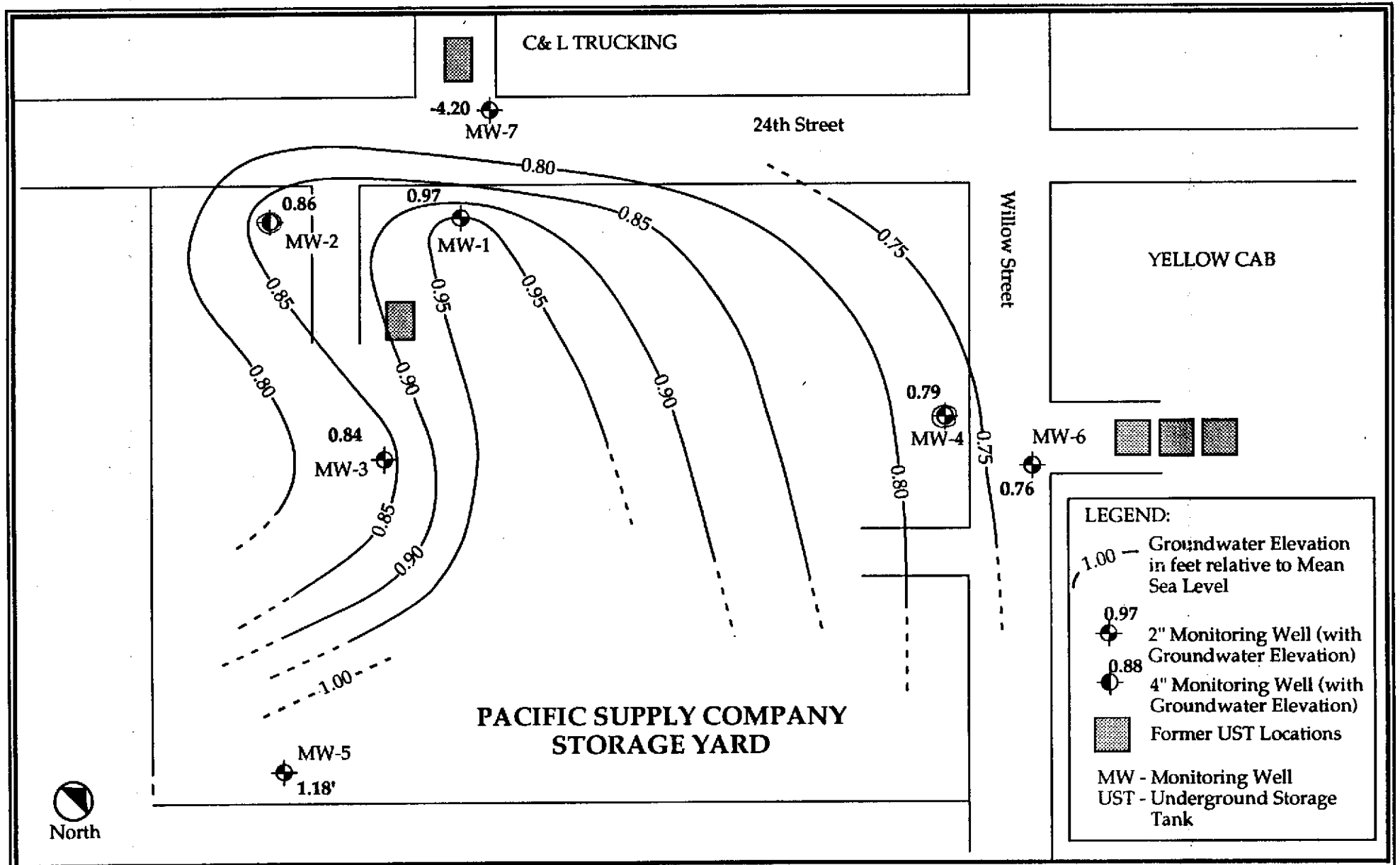
- (1) Analysis Completed For Organic Lead
 (2) Analysis Completed For Total Lead



TABLE 7
GROUNDWATER ELEVATION DATA
PACIFIC SUPPLY COMPANY

Location	Date of Reading	Elevation of Casing (ft above MSL)	Depth to Water (ft)	Groundwater Elevation (ft above MSL)
MW-1	11/24/92	8.87	7.90	0.97
MW-2	11/24/92	8.14	7.28	0.86
MW-3	11/24/92	9.13	8.29	0.84
MW-4	11/24/92	9.07	8.28	0.79
MW-5	11/24/92	8.93	7.75	1.18
MW-6	11/24/92	6.13	5.37	0.76
MW-7	11/24/92	5.03	9.23	-4.20





PROJECT NUMBER: 29.7
 PACIFIC SUPPLY COMPANY
 OAKLAND, CALIFORNIA

DRAWING NUMBER: 29.7-03

DRAWN BY: JBB 1/2/92

APPROVED BY: 0.90 GE 1/4/92

SCALE: 1 Inch = 30 Feet

**BRUNSIING
 ASSOCIATES, INC.**

⊕ LITS OF HQS **FIGURE 1**

NOVEMBER 24, 1992
 GROUNDWATER
 ELEVATION CONTOURS



BACE Analytical & Field Services, Inc.

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

December 9, 1992
Log No: 1639

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 November 24, 1992.

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

Page: 1 of 3

Sample Date: 11/24/92
Analysis Date: 12/4 - 7/92

BAFS Log No: 1639

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/L	Lab No: Descriptor:	Results - µg/L	
			1639-1 (MW - 1)	1639-2 (MW - 2)
Benzene	0.5		ND ✓	370 ✓
Toluene	0.5		ND ✓	15 ✓
Ethylbenzene	0.5		ND ✓	3.4 ✓
Xylene (total)	0.5		ND ✓	9.5 ✓

Dilution Factor: 1

METHOD: 5030 / GC FID

Parameter	Reporting Limit mg/L	Lab No: Descriptor:	Results - mg/L	
			1639-1 (MW - 1)	1639-2 (MW - 2)
TPH - gasoline	0.05		ND ✓	4.2 ✓

Dilution Factor: 1

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

BACE Analytical
& Field Services, Inc.



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

Page: 2 of 3

Sample Date: 11/24/92
Analysis Date: 12/4 - 7/92

BAFS Log No: 1639

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/L	Lab No: Descriptor:	Results - µg/L	
			1639-3 (MW - 3)	1639-4 (MW - 4)
Benzene	0.5		ND ✓	3.2 ✓
Toluene	0.5		ND ✓	3.2 ✓
Ethylbenzene	0.5		ND ✓	ND ✓
Xylene (total)	0.5		ND ✓	1.0 ✓

Dilution Factor: 1

METHOD: 5030 / GC FID

Parameter	Reporting Limit mg/L	Lab No: Descriptor:	Results - mg/L	
			1639-3 (MW - 3)	1639-4 (MW - 4)
TPH - gasoline	0.05		ND ✓	0.14 ✓

Dilution Factor: 1

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

BACE Analytical
& Field Services, Inc.



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

Page: 3 of 3

Sample Date: 11/24/92
Analysis Date: 12/4 - 7/92

BAFS Log No: 1639

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit $\mu\text{g/L}$	Lab No: Descriptor:	Results - $\mu\text{g/L}$ 1639-5 (MW - 5)
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 1639-5 (MW - 5)
TPH - gasoline	0.05		ND ✓

Dilution Factor: 1

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

BACE Analytical
& Field Services, Inc.



**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
11/24/92	1639-1	MW-1	ND	ND	ND	ND	ND
11/24/92	1639-2	MW-2	370	15	3.4	9.5	4.2
11/24/92	1639-3	MW-3	ND	ND	ND	ND	ND
11/24/92	1639-4	MW-4	3.2	3.2	ND	1.0	0.14
11/24/92	1639-5	MW-5	ND	ND	ND	ND	ND

** See original laboratory report dated 12/9/92
for complete results.*

QUALITY CONTROL SUMMARY

Client: Brunsing Associates, Inc.

BAFS Log No. : 1639

Client Contract: Joel Bruxvoort

Sample Date: 11/24/92

Analysis Date: 12/4-7/92

Parameter	% RECOVERY				
	CCV%*	Blank	Spike	Spike Dup	RPD
Benzene	101	ND	105	100	4.9
Toluene	98	ND	105	102	2.9
Ethylbenzene	100	ND	106	103	2.9
Xylene	95	ND	100	97	3.1
Gasoline	98	ND	110	110	<1

* Continuous Calibration Verification Standard

PROJ. NO. 297		PROJECT NAME Pacific Supply		NO. OF CONTAINERS	ANALYSIS										REMARKS								
L.P. NO.		SAMPLERS: (Signature) [Signature]			TPH	Lead	BTEX	Total Lead															
DATE	SAMPLE I.D.	TYPE																					
11/24/92	MW-1	Water		3-40L	X	X	X															11a39-1	
"	MW-1			1-1Ltr			X															- 2	
"	MW-2			3-40L	X	X	X															- 2	
"	MW-2			1-1Ltr			X															- 3	
"	MW-3			3-40L	X	X	X															- 3	
"	MW-3			1-1Ltr			X															- 4	
"	MW-4			3-40L	X	X	X															- 4	
"	MW-4			1-1Ltr			X															- 5	
"	MW-5			3-40L	X	X	X															- 5	
"	MW-5			1-1Ltr			X															- 5	
<div style="border: 1px solid black; width: 100%; height: 100%; transform: rotate(45deg); transform-origin: center; opacity: 0.5;"></div>																						<p>Total Pb samples transferred to LOC # 1368 for NE-J</p>	

LABORATORY:

Relinquished by: (Signature) [Signature]	Date/Time 11/24/92 4:PM	Received by: (Signature) [Signature]	Remarks Standard turnaround
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	
Relinquished by: (Signature)	Date/Time	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

received
DEC 22 1992

Joel Bruxvoort
Brunsing Associates, Inc.
PO Box 588
Windsor, CA 95492

Date: 12/18/1992
NET Client Acct No: 42100
NET Pacific Job No: 92.49533
Received: 11/30/1992

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)



Client Acct: 42100
Client Name: Brunsing Associates, Inc.
NET Job No: 92.49533

Date: 12/18/1992
Page: 2

Ref: Pacific Supply/29.7

ANALYTE: Lead (GFAA)
METHOD: EPA 7421
REPORTING LIMIT: 0.002 mg/L

Lab No.	Descriptor	Date Taken	Results	Units
145872	MW 1	11/30/1992	0.017 ✓	mg/L
145873	MW 2	11/30/1992	ND ✓	mg/L
145874	MW 3	11/30/1992	0.011 ✓	mg/L
145875	MW 4	11/30/1992	0.005 ✓	mg/L
145876	MW 5	11/30/1992	0.011 ✓	mg/L



Client Acct: 42100
Client Name: Brunsing Associates, Inc.
NET Job No: 92.49533

Date: 12/18/1992
Page: 3

Ref: Pacific Supply/29.7

QUALITY CONTROL DATA

<u>Parameter</u>	<u>Reporting Limits</u>	<u>Units</u>	<u>Cal Verf Stand % Recovery</u>	<u>Blank Data</u>	<u>Spike % Recovery</u>	<u>Duplicate Spike % Recovery</u>	<u>RPD</u>
Lead	0.002	mg/L	102	ND	108	108	<1



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, $100 \text{ [Value 1 - Value 2] / mean value}$.
- 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.

