



BACE Environmental

A Division Of
Brunsing Associates, Inc.

ALCO
AZMAT

94 MAR 17 PM 2:45

March 7, 1994

Project No. 29.7

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

RE: **Quarterly Groundwater Monitoring Report: February 1994**
Pacific Supply Company
1735 24th Street
Oakland, California

3826

Dear Ms. Callison:

This report has been prepared to document groundwater monitoring performed by BACE Environmental, a Division of Brunsing Associates, Inc. (BAI) at the Pacific Supply Company property located at 1735 24th Street, Oakland, California. The monitoring was performed on February 1, 1994.

Scope of Work

The scope of work performed during this reporting period included testing for the existence of free product, calculating 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 (Plate 1).

Site Background

Monitoring wells MW-1 through MW-5 were constructed starting on September 13, 1988 as the first phase of a soil and groundwater investigation. Monitoring wells MW-6 and MW-7 were constructed 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 February 1, 1994 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 Plate 1, variations in the groundwater elevations suggest a complex groundwater flow regime at the site. Groundwater flow generally appears to be consistent with previous reports which indicate groundwater flowing beneath the site from the southwest corner of the property at well MW-5 to the north towards wells MW-1 and MW-2 and to the east towards wells MW-4 and MW-6. The local flow direction near wells MW-1 and MW-2 is to the west as typically observed during previous monitoring rounds. Monitoring well MW-7 continues to indicate an anomalously low groundwater elevation by a magnitude of several feet. *strange*

Groundwater Sampling

Groundwater monitoring wells MW-1 through MW-7 were sampled on February 1, 1994 using the methods described in Appendix A. Free product was not found in any of the wells. Water samples were transported to BACE Analytical and Field Services (BAFS) and National Environmental Testing, Inc. (NET) for analyses of 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
-SWRCB LUFT Method.

Groundwater Analytical Results

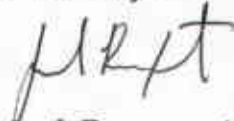
Analytical laboratory reports for the February 1, 1994 groundwater monitoring are summarized in Table 1 and shown on Plate 2. The laboratory reports and Chain-of-Custody form pertaining to the sampling of monitoring wells MW-1 through MW-7 are included in Appendix B.



Ms. Normita Callison
March 7, 1994
Page 3

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

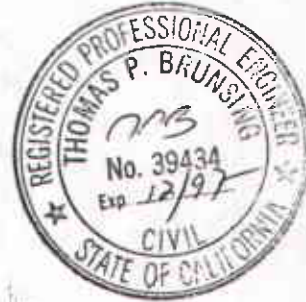
Sincerely,



Joel Bruxvoort
Staff Geologist



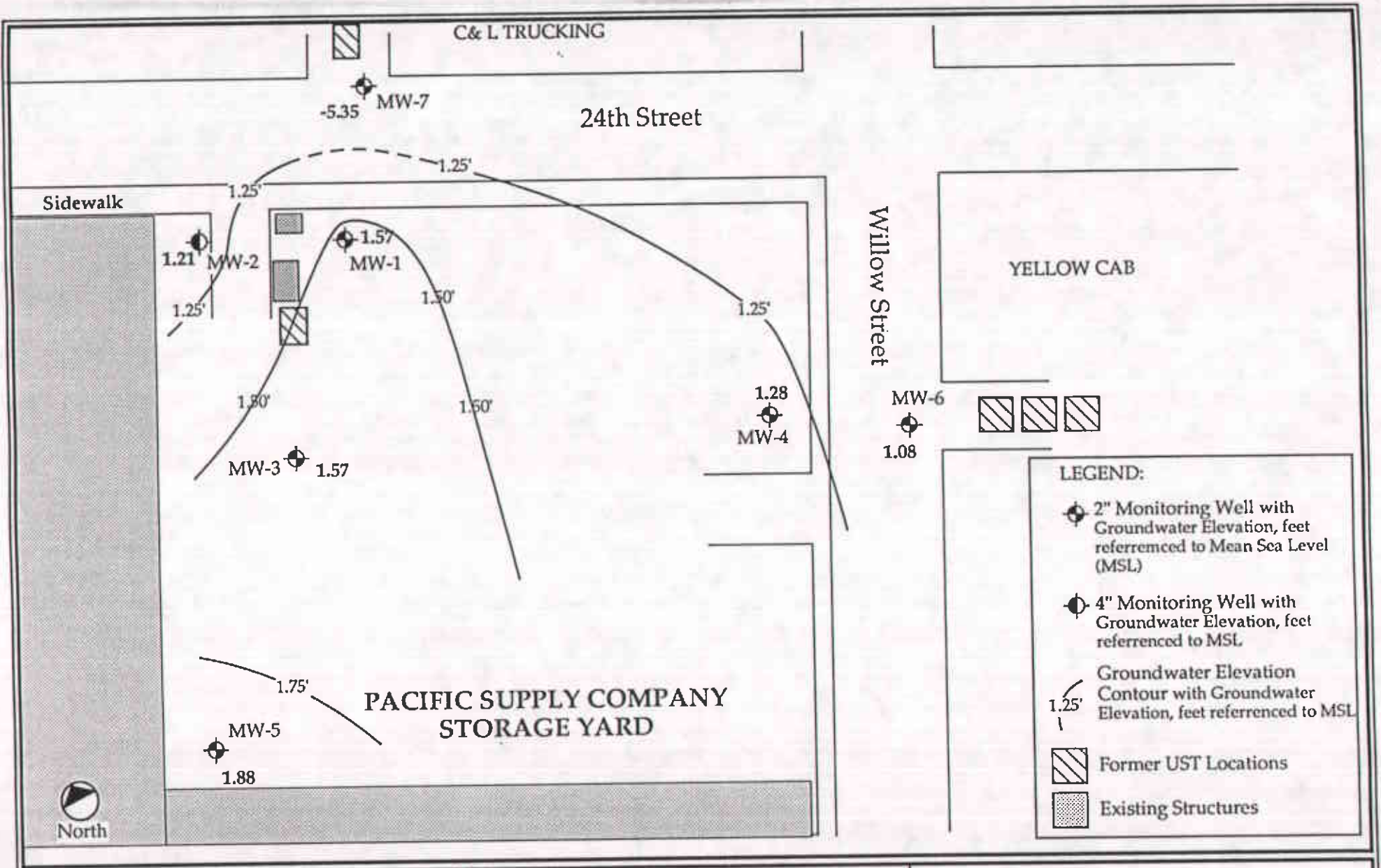
Thomas P. Brunsing, Ph.D., P.E., R.E.A.
Principal Engineer



Attachments: Table 1 - Analytical Data Summary
 Table 2 - Groundwater Elevation Data
 Plate 1- Groundwater Elevations
 Plate 2- Total Petroleum Hydrocarbons as Gasoline
 Appendix A- Monitoring Well Sampling Protocol
 Appendix B -Analytical Laboratory Reports

cc: Jennifer Eberle, Alameda County Health Agency
 Tony DeJohn, Pacific Supply Company





PROJECT NUMBER: 29.7
 PACIFIC SUPPLY COMPANY
 OAKLAND, CALIFORNIA

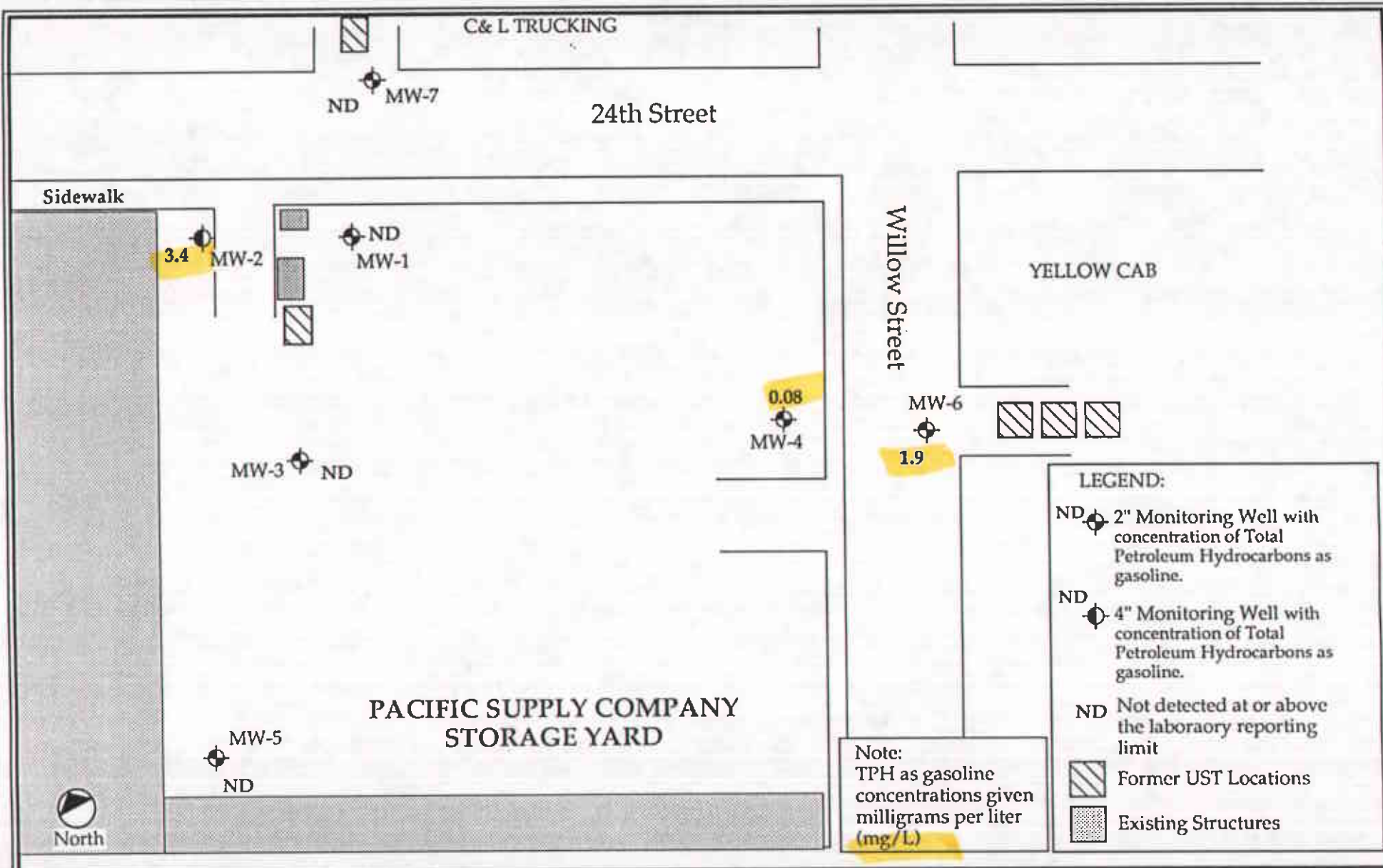
DRAWING NUMBER: 29.7-01

DRAWN BY:	JBB	3/1/94
APPROVED BY:	<i>JPG</i>	<i>3/2/94</i>

SCALE: 1 Inch = 50 Feet

BACE Environmental
A Division Of
Brunsing Associates, Inc.

Plate 1
 Groundwater Elevations
 Pacific Supply Company
 Oakland, California



PROJECT NUMBER: 29.7
 PACIFIC SUPPLY COMPANY
 OAKLAND, CALIFORNIA

DRAWING NUMBER: 29.7-07

DRAWN BY:	JBB	3/1/94
APPROVED BY:	<i>JAS</i>	3/17/94

SCALE: 1 Inch = 50 Feet

BACE Environmental
A Division Of
Brunsing Associates, Inc.

Plate 2
 Total Petroleum Hydrocarbons as Gasoline
 Pacific Supply Company
 Oakland, California

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)
MW-1	7/21/93	ND	ND	ND	ND	ND	ND (1)
MW-1	11/3/93	ND	ND	ND	ND	ND	ND (1)
MW-1	2/1/94	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)
MW-2	7/21/93	3.4	250	9.6	2.5	11	ND(1)
MW-2	11/4/93	2.5	230	7.8	2.1	9.9	ND(1)
MW-2	2/1/94	3.4	240	17	ND	15	ND(1)

(1) Organic lead

(2) Total lead

ND = not detected at laboratory reporting limit

µg/L = micrograms per liter

mg/L = milligrams per liter

- = not analyzed



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	0.205 (1)
MW-3	5/28/92	ND	0.8	0.5	ND	ND	0.016 (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)
MW-3	7/21/93	ND	ND	ND	ND	ND	ND(1)
MW-3	11/4/93	0.07	0.6	0.5	ND	ND	ND(1)
MW-3	2/1/94	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-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	0.030 (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)
MW-4	7/21/93	0.28	4.4	5.9	ND	ND	ND(1)
MW-4	11/4/93	0.08	1.3	1.6	ND	ND	ND(1)
MW-4	2/1/94	0.08	ND	ND	ND	ND	ND(1)

(1) Organic lead

(2) Total lead

ND = not detected at laboratory reporting limit

µg/L = micrograms per liter

mg/L = milligrams per liter

- = not analyzed



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	0.008 (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)
MW-5	7/21/93	ND	ND	ND	ND	ND	ND(1)
MW-5	11/4/93	ND	ND	ND	ND	ND	ND(1)
MW-5	2/1/94	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)
MW-6	7/21/93	0.59	ND	7.6	ND	ND	ND(1)
MW-6	11/4/93	1.5	ND	1.2	ND	0.7	ND(1)
MW-6	2/1/94	1.9	2.5	3.9	1.6	1.1	ND(1)

(1) Organic lead

(2) Total lead

ND = not detected at laboratory reporting limit

µg/L = micrograms per liter

mg/L = milligrams per liter

- = not analyzed



TABLE 1
ANALYTICAL DATA SUMMARY
PACIFIC SUPPLY COMPANY

Well Identification	Sampling Date	TPH (gasoline) mg/L	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethylbenzene $\mu\text{g/L}$	Xylenes $\mu\text{g/L}$	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)
MW-7	7/21/93	ND	ND	ND	ND	ND	ND(1)
MW-7	11/4/93	ND	ND	ND	ND	ND	ND(1)
MW-7	11/4/93	ND	ND	ND	ND	ND	ND(1)

(1) Organic lead

(2) Total lead

ND = not detected at laboratory reporting limit

$\mu\text{g/L}$ = micrograms per liter

mg/L = milligrams per liter

- = not analyzed



TABLE 2
GROUNDWATER ELEVATION DATA
PACIFIC SUPPLY COMPANY

Well Identification	Date Measured	Elevation of Casing (ft, MSL)	Depth to Water (ft)	Groundwater Elevation (ft, MSL)
MW-1	2/1/94	8.87	7.30	1.57
MW-2	2/1/94	8.14	6.93	1.21
MW-3	2/1/94	9.13	7.56	1.57
MW-4	2/1/94	9.07	7.79	1.28
MW-5	2/1/94	8.93	7.05	1.88
MW-6	2/1/94	6.13	5.05	1.08
MW-7	2/1/94	5.03	10.38	-5.35

MSL = referenced to Mean Sea Level

?



APPENDIX A

Monitoring Well Sampling Protocol



Monitoring Well Sampling Protocol

Prior to purging of monitoring well, groundwater level are measured and a single bailer full of water is retrieved from the well to check for floating product. The monitoring well is then purged until a minimum of three casing volumes of water are removed, water is relatively clear of sediment, and pH, conductivity, and temperature measurements of the water stabilizes.

A single groundwater sample is collected from each monitoring well following re-equilibration of the wells after purging. Individual log sheets are maintained throughout the sampling operations. The following information is recorded:

- Sample number
- Date and time sampled and purged
- Sampling location
- Types of sampling equipment used
- Name of sampler(s)
- Volume of water purged.

The sample was collected in the following manner:

- A hand-operated, factory-sealed, disposable, polyethylene bailer with sampling port is used for collecting all water samples. A factory provided attachment designed for use with volatile organic compounds (VOCs) is attached to the sampling port when collecting VOCs.
- The sample container(s) are obtained directly from the analytical laboratory.

The sample container is labeled with a self-adhesive tag. Field personnel label the tag, using waterproof ink, with the following information:

- Project number
- Sample number
- Date and time sample is obtained
- Initials of sample collector(s).



Following collection, the sample is immediately stored on blue ice in an appropriate container. A Chain-of-Custody Record is completed with the following information:

- Date the sample was taken
- Sample number and the number of containers
- Analyses required
- Remarks including preservatives added and any special conditions.

The original copy of the Chain-of-Custody Record accompanies the sample containers to a California-certified laboratory. The duplicate copy is retained by the BAI representative who sampled the well.

Sample bottles, bottle caps and septa are cleaned by the analytical laboratory subcontractor using standard EPA-approved protocols. Sample bottles, bottle caps, and septa are protected from solvent contact, dust or other contamination between time of receipt by the field sampler and time of actual usage at the sampling site.

Sampling equipment is cleaned both before and after their use at the sampling location. Thermometers, pH electrodes, and conductivity probes are also cleaned.

The following cleaning procedures are used:

- Scrub with a detergent-potable water solution or other solutions deemed appropriate using a hard bristle brush
- Rinse with potable water
- Double-rinse with organic-free or deionized water
- Package and seal equipment in plastic bags or other appropriate containers to prevent contact with solvents, dust, or other contaminants.

Cleaning solutions were added to storage tank for processing by permitted groundwater treatment system prior to discharging.





BACE Analytical & Field Services, Inc.

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

February 8, 1994
Log No: 1927

BACE Environmental
a division of
Brunsing Associates, Inc.
1735 E. Bayshore Road, Suite 1A
Redwood City, California 94063

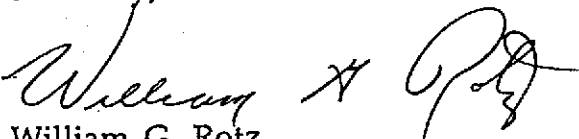
ATTN: Joel Bruxvoort

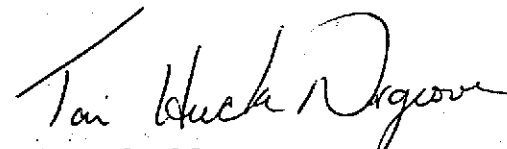
RE: Results of the analyses of groundwater samples obtained for project number
29.7 on February 1, 1994.

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: BACE Environmental
Client Contact: Joel Bruxvoort

Page: 2 of 5

Sample Date: 2/1/94
Analysis Date: 2/4/94

BAFS Log No: 1927

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/l	Lab No: Descriptor:	Results - µg/l	
			1927-1 (MW - 1)	1927-2 (MW - 2)
Benzene	0.5		ND	240 ✓
Toluene	0.5		ND	17 ✓
Ethylbenzene	0.5		ND	ND ✓
Xylenes (total)	0.5		ND	15 ✓

Dilution Factor: 1

METHOD: 5030 / GC FID

Parameter	Reporting Limit mg/l	Lab No: Descriptor:	Results - mg/l	
			1927-1 (MW - 1)	1927-2 (MW - 2)
TPH - gasoline	0.05		ND	3.4 ✓

Dilution Factor: 1

NOTE: ND = not detected.



Client: BACE Environmental
Client Contact: Joel Bruxvoort

Page: 3 of 5

Sample Date: 2/1/94
Analysis Date: 2/4/94

BAFS Log No: 1927

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/l	Lab No: Descriptor:	Results - µg/l	
			1927-3 (MW - 3)	1927-4 (MW - 4)
Benzene	0.5		ND	ND
Toluene	0.5		ND	ND
Ethylbenzene	0.5		ND	ND
Xylenes (total)	0.5		ND	ND

Dilution Factor: 1

METHOD: 5030 / GC FID

Parameter	Reporting Limit mg/l	Lab No: Descriptor:	Results - mg/l	
			1927-3 (MW - 3)	1927-4 (MW - 4)
TPH - gasoline	0.05		ND	0.08

Dilution Factor: 1

NOTE: ND = not detected.



Client: BACE Environmental
Client Contact: Joel Bruxvoort

Page: 4 of 5

Sample Date: 2/1/94
Analysis Date: 2/4/94

BAFS Log No: 1927

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/l	Lab No: Descriptor:	Results - µg/l	
			1927-5 (MW - 5)	1927-6 (MW - 6)
Benzene	0.5		ND	2.5 ✓
Toluene	0.5		ND	3.9 ✓
Ethylbenzene	0.5		ND	1.6 ✓
Xylenes (total)	0.5		ND	1.1 ✓

Dilution Factor: 1

METHOD: 5030 / GC FID

Parameter	Reporting Limit mg/l	Lab No: Descriptor:	Results - mg/l	
			1927-5 (MW - 5)	1927-6 (MW - 6)
TPH - gasoline	0.05		ND	1.9 ✓

Dilution Factor: 1

NOTE: ND = not detected.



Client: BACE Environmental
Client Contact: Joel Bruxvoort

Page: 5 of 5

Sample Date: 2/1/94
Analysis Date: 2/4/94

BAFS Log No: 1927

METHOD: EPA 5030/8020

Matrix: Water

Parameter	Reporting Limit µg/l	Lab No: Descriptor:	Results - µg/l 1927-7 (MW - 7)
Benzene	0.5		ND
Toluene	0.5		ND
Ethylbenzene	0.5		ND
Xylenes (total)	0.5		ND

Dilution Factor: 1

METHOD: 5030 / GC FID

Parameter	Reporting Limit mg/l	Lab No: Descriptor:	Results - mg/l 1927-7 (MW - 7)
TPH - gasoline	0.05		ND

Dilution Factor: 1

NOTE: ND = not detected.



SUMMARY OF
LABORATORY RESULTS *

Pacific Supply - Project No. 29.7

Sampling Date	Lab Number	Descriptor	Benzene µg/l	Toluene µg/l	Ethylbenzene µg/l	Xylenes µg/l	TPH (gasoline) mg/l
2/1/94	1927-1	MW 1	ND	ND	ND	ND	ND
2/1/94	1927-2	MW 2	240	17	ND	15	3.4
2/1/94	1927-3	MW 3	ND	ND	ND	ND	ND
2/1/94	1927-4	MW 4	ND	ND	ND	ND	0.08
2/1/94	1927-5	MW 5	ND	ND	ND	ND	ND
2/1/94	1927-6	MW 6	2.5	3.9	1.6	1.1	1.9
2/1/94	1927-7	MW 7	ND	ND	ND	ND	ND

* See original laboratory report dated 2/8/94 for complete results.



QUALITY CONTROL SUMMARY

Client: BACE Environmental
Client Contact: Joel Bruxvoort
Sample Date: 2/1/94
Analysis Date: 2/4/94

BAFS Log No. : 1927

Matrix: Water

Parameter	% RECOVERY				
	CCV%*	Blank	Spike	Spike Dup	RPD
Benzene	98	ND	99	103	4.0
Toluene	95	ND	99	100	1.0
Ethylbenzene	92	ND	96	102	6.1
Xylenes	95	ND	96	101	5.1
Gasoline	105	ND	102	103	1.0
Diesel	98	ND	90	88	2.2

* Continuous Calibration Verification Standard



PROJ. NO.		PROJECT NAME		NO. OF CONTAINERS	ANALYSIS TPH GAS BTEX Organic Lead	No 1559		REMARKS
L.P. NO.		SAMPLERS: (Signature)						
DATE	SAMPLE I.D.	TYPE						
2/1/94	MW-1A,B,C,D	water	4	X	X	X	X	1927-1
	MW-2A,B,C,D	"	4	X	X	X	X	-2
	MW-3A,B,C,D	"	4	X	X	X	X	-3
	MW-4A,B,C,D	"	4	X	X	X	X	-4
	MW-5A,B,C,D	"	4	X	X	X	X	-5
	MW-6A,B,C,D	"	4	X	X	X	X	-6
	MW-7A,B,C,D	"	4	X	X	X	X	-7
<p>"D" samples transferred to c/c No 2297 on 2-3-94 for sub to NET TAM 2/3</p>								

LABORATORY: BAFS

Relinquished by: (Signature) <i>Proterium</i>	Date/Time 2/1/94 12:00	Received by: (Signature) <i>HLT</i>
Relinquished by: (Signature) <i>HLT</i>	Date/Time 2/3/94 8:50	Received by: (Signature) <i>[Signature]</i>
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time →	Received for Laboratory by: (Signature) <i>Tai [Signature]</i>

Remarks
STAT



BRUNGING ASSOCIATES, INC.

Offices:

PO Box 588
Windsor CA 95492
707-838-3027

1735 E. Bayshore Rd., 2A
Redwood City CA 94063
415-364-9031

1515 Ninth Street
Rock Springs WY 82901
307-362-9277

BACE Analytical & Field Services, Inc.

P. O. Box 838 Windsor, CA 95492

707-838-8338 FAX 707-838-4420

Receipt Number: 1927

Date: 2/8/94

Log Number: 1927

BACE Environmental
a division of
Brunsing Associates, Inc.
1735 East Bayshore Road, Suite 1A
Redwood City, California 94063

Description	No.	Price Per Unit	Total
8015/8020 - Gasoline with BTXE, Routine	7	\$103.50	\$724.50
Expendable Field Supplies			
Voss Bailers	7 ea	\$8.00	\$56.00
Sampling Port	7 ea	\$1.00	\$7.00
Vinyl Gloves	8 pr	\$0.25	\$2.00
Rope (1/8")	140 ft	\$0.07	\$9.80
Nitrile Gloves	1 pr	\$2.25	\$2.25
Garbage Bags	7 ea	\$0.20	\$1.40
Equipment Rental			
Water Level Probe	1 day	\$15.00	\$15.00
pH/Conductivity Meter	1 day	\$15.00	\$15.00
PVC Bailer	1 day	\$5.00	\$5.00
		Total	\$837.95

Client Project Descriptor: 29.7

Client Contact: Joel Bruxvoort

For your records only. This is not an invoice.

You will receive a monthly invoice with a summary of the work performed.



NATIONAL
ENVIRONMENTAL
® TESTING, INC.

Santa Rosa Division
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Tami Hucke-Norgrove
Brunsing Associates, Inc.
PO Box 588
Windsor, CA 95492

Date: 02/17/1994
NET Client Acct. No: 42100
NET Pacific Job No: 94.00449
Received: 02/03/1994

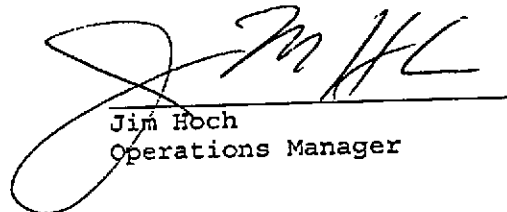
Client Reference Information

Pacific Supply, Project No. 29.7

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. 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:


Linda DeMartino
Project Coordinator


Jim Hoch
Operations Manager

Enclosure(s)





Client Acct: 42100
 Client Name: Brunson Associates, Inc.
 NET Job No: 94.00449

Date: 02/17/1994
 ELAP Certificate: 1386
 Page: 2

Ref: Pacific Supply, Project No. 29.7

SAMPLE DESCRIPTION: MW1D
 Date Taken: 02/01/1994
 Time Taken:
 NET Sample No: 184199

2, 09

Parameter	Results	Flags	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
Org. Lead (FLAA)	ND		12	mg/L	DOHS-LUFT	02/14/1994	02/15/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Client Acct: 42100
Client Name: Brunsing Associates, Inc.
NET Job No: 94.00449

Date: 02/17/1994
ELAP Certificate: 1386
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Ref: Pacific Supply, Project No. 29.7

SAMPLE DESCRIPTION: MW2D
Date Taken: 02/01/1994
Time Taken:
NET Sample No: 184200

Parameter	Results	Placs	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
Org. Lead (FLAA)	ND		12	mg/L	DOHS-LUFT	02/14/1994	02/15/1994

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Client Acct: 42100
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Date: 02/17/1994
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Ref: Pacific Supply, Project No. 29.7

SAMPLE DESCRIPTION: MW3D
Date Taken: 02/01/1994
Time Taken:
NET Sample No: 184201

Parameter	Results	Flacc	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
Org. Lead (FLAA)	ND		12	mg/L	DOHS-LUFT	02/14/1994	02/15/1994

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Client Acct: 42100
 Client Name: Brunsing Associates, Inc.
 NET Job No: 94.00449

Date: 02/17/1994
 ELAP Certificate: 1386
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Ref: Pacific Supply, Project No. 29.7

SAMPLE DESCRIPTION: MW4D
 Date Taken: 02/01/1994
 Time Taken:
 NET Sample No: 184202

Parameter	Results	Flags	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
Org. Lead (FLAA)	ND		12	mg/L	DOHS-LUFT	02/14/1994	02/15/1994

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Client Acct: 42100
Client Name: Brunsing Associates, Inc.
NET Job No: 54.00449

Date: 02/17/1994
ELAP Certificate: 1366
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Ref: Pacific Supply, Project No. 29.7

SAMPLE DESCRIPTION: MW5D
Date Taken: 02/01/1994
Time Taken:
NET Sample No: 184203

<u>Parameter</u>	<u>Results</u>	<u>Flacs</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Method</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>
Org. Lead (FLAA)	ND		12	mg/L	DOHS-LUFT	02/14/1994	02/15/1994

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Client Acct: 42100
Client Name: Brunsing Associates, Inc.
NET Job No: 94.00449

Date: 02/17/1994
ELAP Certificate: 1386
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Ref: Pacific Supply, Project No. 29.7

SAMPLE DESCRIPTION: MW6D
Date Taken: 02/01/1994
Time Taken:
NET Sample No: 184204

Parameter	Results	Flacs	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
Org. Lead (FLAA)	ND		12	mg/L	DOHS-LUFT	02/14/1994	02/15/1994

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Client Acct: 42100
Client Name: Bruning Associates, Inc.
NET Job No: 94.00449

Date: 02/17/1994
ELAP Certificate: 1366
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Ref: Pacific Supply, Project No. 29.7

SAMPLE DESCRIPTION: MW7D
Date Taken: 02/01/1994
Time Taken:
NET Sample No: 184205

Parameter	Results	Flags	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
Org. Lead (FLAA)	ND		12	mg/L	DOHS-LUFT	02/14/1994	02/15/1994

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Client Acct: 42100
Client Name: Brunsing Associates, Inc.
NET Job No: 94.00449

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CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

<u>Parameter</u>	<u>CCV Standard % Recovery</u>	<u>CCV Standard Amount Found</u>	<u>CCV Standard Amount Expected</u>	<u>Units</u>	<u>Date Analyzed</u>	<u>Analyst Initials</u>
Org. Lead (FLAA)	98.0	58.8	60.0	mg/L	02/15/1994	ket

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METHOD BLANK REPORT

<u>Parameter</u>	<u>Method</u> <u>Blank</u> <u>Amount</u> <u>Found</u>	<u>Reporting</u> <u>Limit</u>	<u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u> <u>Initials</u>
Org. Lead (FLAA)	ND	1.0	mg/L	02/15/1994	ket

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Client Acct: 42100
Client Name: Bruning Associates, Inc.
NET Job No: 94.00449

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike			Spike Amount	Sample Conc.	Matrix Spike		Units	Date Analyzed	Analyst Initials
	% Rec.	% Rec.	RPD			Spike Conc.	Dup. Conc.			
Org. Lead (FLAA)	47.5	46.3	2.6	96.0	ND	45.6	44.4	mg/L	02/15/1994	ket

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Client Acct: 42100
Client Name: Brunson Associates, Inc.
NET Job No: 94.00449

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LABORATORY CONTROL SAMPLE REPORT

<u>Parameter</u>	<u>LCS</u> <u>% Recovery</u>	<u>RPD</u>	<u>LCS</u> <u>Amount</u> <u>Found</u>	<u>LCS</u> <u>Amount</u> <u>Expected</u>	<u>Units</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u> <u>Initials</u>
Org. Lead (FLAA)	76.3		73.2	96.0	mg/L	02/15/1994	ket

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



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. Actual reporting limits and results have been multiplied by the listed dilution factor. Do not multiply the reporting limits or reported values by the dilution factor.
- dw : Result expressed as dry weight.
- 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 the 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., Rev. 1, December 1987.


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

PROJ. NO.		PROJECT NAME		NO. OF CONTAINERS	ANALYSIS										REMARKS							
L.P. NO.		SAMPLES: (Signature)			Organic load																	
DATE	SAMPLE I.D.	TYPE																				
2-1-94	MW1 D	Water	1	*																		
↓	MW2 D	↓	↓	*																		
	MW3 D			*																		
	MW4 D			*																		
	MW5 D			*																		
	MW6 D			*																		
	MW7 D			*																		

No 2297 (777E)

LABORATORY: NET

Relinquished by: (Signature) <i>Michael Dawson</i>	Date/Time 2/3/94 1439	Received by: (Signature) <i>Michael Dawson</i>	Remarks Temp. read. 2.7°C, 0.9°C, 2.5°C
Relinquished by: (Signature) <i>Michael Dawson</i>	Date/Time 2/3/94 1507	Received by: (Signature)	
Relinquished by: (Signature)	Date/Time 2/3/94 1507	Received for Laboratory by: (Signature) <i>Kemp</i>	

 **BRUNSING ASSOCIATES, INC.**

Offices:

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