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**QUARTERLY GROUNDWATER MONITORING  
AND PRODUCT RECOVERY PROGRESS REPORT  
FOR**

**ARATEX SERVICES, INC.  
330 CHESTNUT STREET  
OAKLAND, CALIFORNIA**

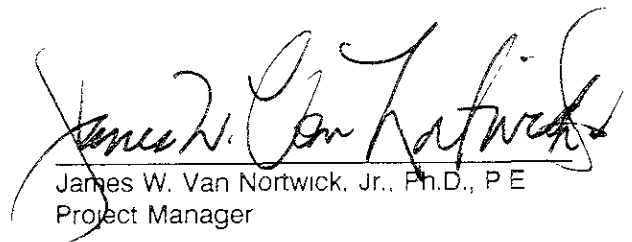
SEP 1993

**PREPARED FOR**

**ARATEX SERVICES, INC.  
SCHAUMBURG, ILLINOIS**

**PREPARED BY  
RMT, INC.  
SANTA MONICA, CALIFORNIA**

**SEPTEMBER 1993**



James W. Van Nortwick, Jr., Ph.D., P E  
Project Manager



West Coast Office  
Suite 370  
3250 Ocean Park Blvd.  
Santa Monica, CA 90405  
Phone: 213-452-5078  
FAX: 213-450-5787

September 8, 1993

Ms. Jennifer Eberle  
**Alameda County Health Care Services Agency**  
Department of Environmental Health  
Hazardous Materials Division  
80 Swan Way, Room 200  
Oakland, CA 94621

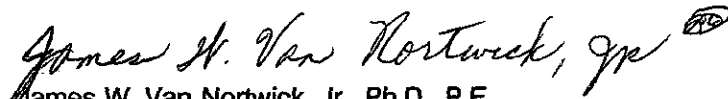
**Subject: Quarterly Groundwater Monitoring and Product Recovery Progress Report  
Aratex Services, Inc., 330 Chestnut Street, Oakland, California**

Dear Ms. Eberle:

This letter transmits the results of the groundwater monitoring and remedial activities conducted on August 2, 1993, at the referenced facility. As you may note, the results of the groundwater sampling activities did not identify the presence of petroleum products above the method detection limit and the ~~product recovery system~~ installed within the former underground storage tank excavation has recovered approximately 0.7-gallons of free-product to date.

A summary of site activities, previous chemical analyses, and product recovery activities are included for your review. If you have questions or comments regarding our investigation or this report, please feel free to contact me at (310) 452-5078.

Sincerely,

  
James W. Van Nortwick, Jr., Ph.D., P.E.  
Project Manager

enc: Quarterly Groundwater Monitoring Report

cc: Robert J. Robbins, C.P.G.  
Phillip Krejci  
Roger Simpson  
File: 516/Tank

93 SEP 10 AM 10:36

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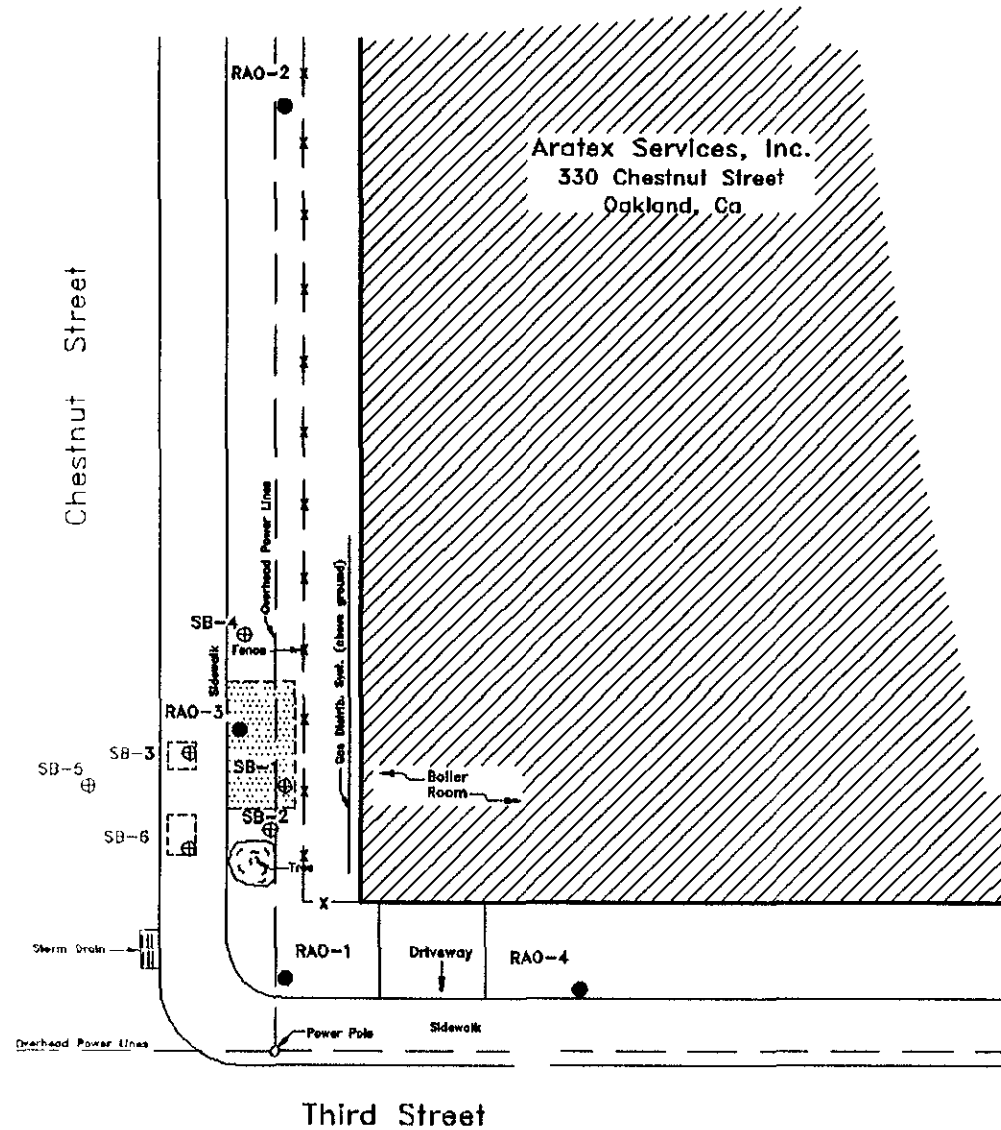
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**Section 1**  
**BACKGROUND**

Aratex Services, Inc., (ARATEX) owns and operates an industrial laundry facility located at 330 Chestnut Street in Oakland, California. A 2,000-gallon underground diesel fuel storage tank was formerly maintained at this facility to supply fuel for the operation of a back-up boiler. The diesel fuel storage tank was removed from the facility in December 1988, and a tank closure documentation report was submitted to the Alameda County Health Care Services Agency (ACHCSA). Based on the information presented in the tank documentation report, the ACHCSA requested that ARATEX conduct post-closure sampling activities to determine whether the soil and groundwater surrounding the underground storage tank had been impacted by petroleum hydrocarbons. In response to this request, ARATEX engaged the services of RMT, Inc., (RMT) to conduct a subsurface investigation

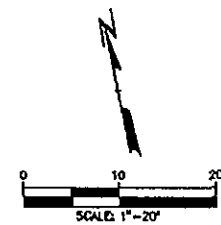
Remedial investigation activities were conducted by RMT from March 1989, through November 1992, and included the advancement of six soil borings and four groundwater monitoring wells in the vicinity of the former excavation area and soil and groundwater sampling activities. The results of chemical analyses performed on groundwater samples collected from monitoring wells RAO-1, RAO-2, RAO-4, during the period from November 1992 through May 1993 did not identify the presence of BTEX; however, groundwater sampling activities conducted in May 1993, identified the presence of benzene, toluene, and xylenes at concentrations slightly above the method detection limits in monitoring wells RAO-1, and RAO-2. A site plan showing the location of the monitoring wells is presented in Figure 1.

Because the results of the sampling activities indicated that the extent of petroleum hydrocarbon contamination was limited to the area immediately surrounding the former tank excavation and free-product was consistently observed in the groundwater monitoring well located within the former underground storage tank excavation, a product recovery canister was installed in December 1992. To date, the product recovery system has recovered approximately 0.7-gallons of free-product.



**Legend :**

- RAO-x ● Ground Water Monitoring Well ; RMT 6/89
- SB-x ⊕ Soil Boring ; RMT 8/90
- ▭ Bldg.
- ▨ Estimated limits of Dec.1988 Tank Removal and backfill
- x-x-x- Fence, 6-Foot high chain link



**SITE PLAN**  
Aratex Services, Inc.  
330 Chestnut Street  
Oakland, Ca

|                 |                  |
|-----------------|------------------|
| <b>RMT</b> INC. | DWN. BY: RAS     |
|                 | DATE: JUNE, 1993 |
|                 | PROJ. # 12013.07 |
|                 | FILE # 12013074  |

FIGURE 1

**Section 2**  
**FOURTH QUARTER GROUNDWATER MONITORING ACTIVITIES**

Groundwater sampling activities were conducted on August 2, 1993, and included obtaining static water level measurements and groundwater samples from monitoring wells RAO-1, RAO-2, and RAO-4. Groundwater samples were not collected from monitoring well RAO-3 due to the presence of a free-product layer.

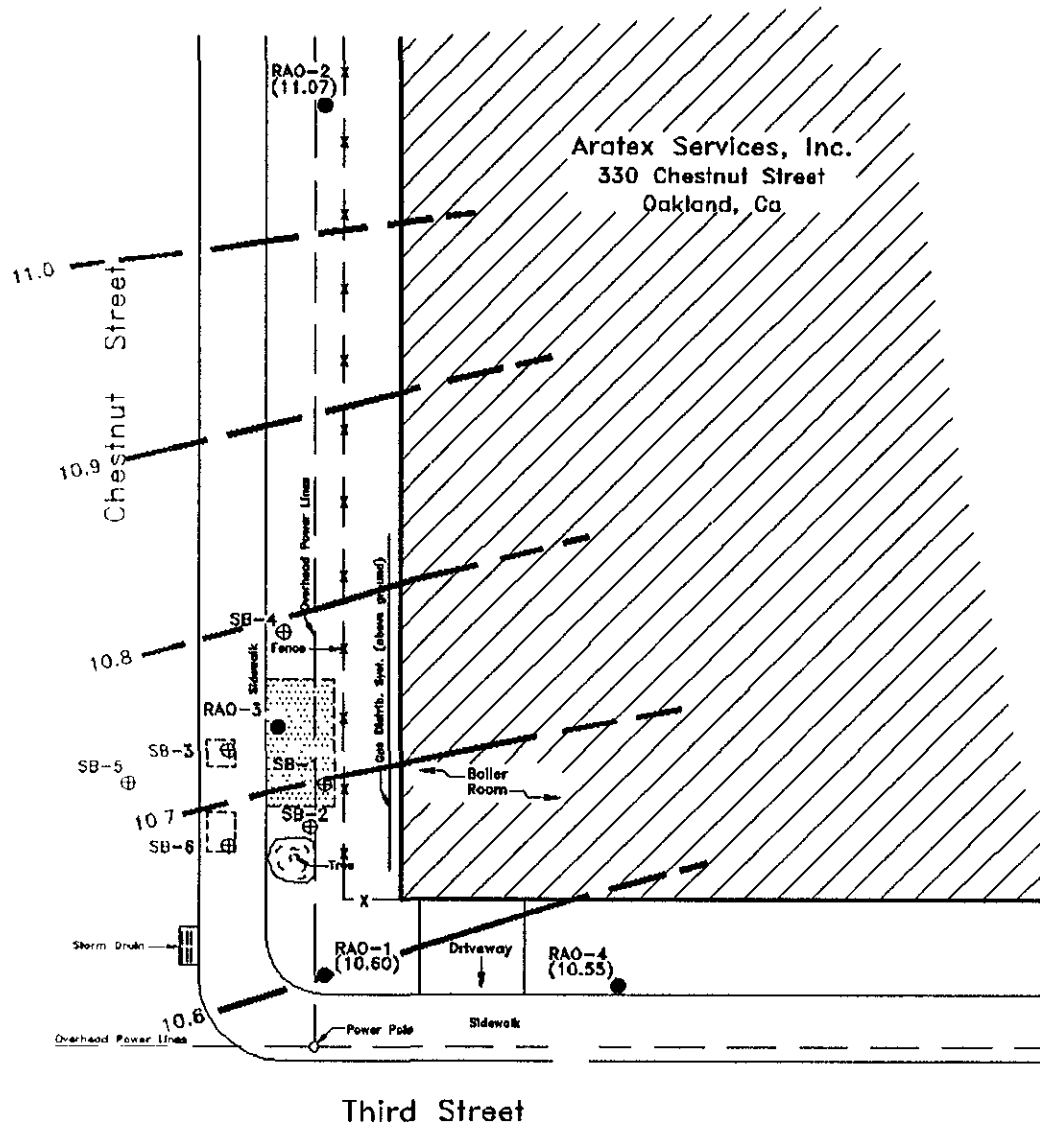
***Static Water Level Measurements***

Prior to collecting groundwater samples, the depth to groundwater or free-product was measured in each monitoring well using an electronic water level indicator. Three rounds of groundwater heights were taken to assess any variability in measurement. The potentiometric surface generated from the groundwater elevations is presented in Figure 2.

***Groundwater Sample Collection***

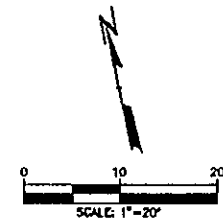
Groundwater samples were collected from monitoring wells RAO-1, RAO-2, and RAO-4. Prior to sampling, each monitoring well was purged using a bailer. A minimum of three well casing volumes (casing and sand pack volume) were extracted from each well before collecting groundwater samples. The temperature, pH, conductivity, and turbidity of the extracted groundwater was measured and recorded at least once per well casing volume. The well casing volume was determined by measuring and recording the static water level and calculating the well volume. The purging bailer was decontaminated between each sampling event by rinsing with tap water to remove particulates, washing with a tri-sodium phosphate solution, and rinsing with deionized water.

After each monitoring well had recharged to within 80 percent of its pre-purge volume (approximately 30-min) groundwater samples were collected utilizing a disposable Teflon bailer equipped with a teflon stopcock, and dispensed directly into 40-mL borosilicate vials with teflon septa and screw caps. All samples were preserved using hydrochloric acid and stored on ice pending transport to a commercial independent California-certified laboratory according to USEPA protocol, including chain-of-custody procedures. Groundwater sampling field logs are presented in Appendix A, and chain-of-custody documents are included in Appendix B.



**Legend :**

- RAO-x ● Ground Water Monitoring Well ; RMT 6/89
- SB-x ⊕ Soil Boring ; RMT 9/90
- ▭ Bldg.
- ▨ Estimated limits of Dec.1988 Tank Removal and backfill
- x-x-x- Fence, 6-Foot high chain link
- 10.6— Interpreted Water Table Elevation.
- (10.60) Water Table Elevation. AUGUST-2,1993



**POTENTIOMETRIC SURFACE**  
 Aratex Services, Inc.  
 330 Chestnut Street  
 Oakland, Ca



|          |              |
|----------|--------------|
| DWN. BY: | RAS          |
| DATE:    | AUGUST, 1993 |
| PROJ. #  | 12013.07     |
| FILE #   | 0705         |

FIGURE 2

***Chemical Analyses of Groundwater***

Groundwater samples collected from each monitoring well were analyzed for the presence of BTEX using EPA SW-846 Method 8020 and TPH-D using EPA SW-846 Method 8015 modified to detect diesel fuel compounds (California LUFT method). The results of the laboratory analyses are presented in Table 1 and a copy of the laboratory report is included in Appendix B. All laboratory analyses were performed by GTEL Environmental Laboratory, Inc., of Concord, California.

***Disposal of Purged Groundwater and Decontamination Water***

Groundwater extracted during monitoring well purging activities and water generated during pump decontamination operations were contained in 55-gal DOT-approved drums, labeled with the date, generator's name, site location, source, and stored in a secured area pending characterization and disposal. A copy of the disposal manifest will be submitted upon disposal.



TABLE 1  
Chemical Analyses of Groundwater

| Sample Location | Date              | Parameter ( $\mu\text{g/L}$ ) |                    |                    |                    |                   |
|-----------------|-------------------|-------------------------------|--------------------|--------------------|--------------------|-------------------|
|                 |                   | Benzene                       | Toluene            | Ethylbenzene       | Total Xylenes      | TPH-D             |
| RAO-1           | <del>3-2-93</del> | <del>&lt;0.3</del>            | <del>&lt;0.3</del> | <del>&lt;0.3</del> | <del>&lt;0.5</del> | <del>&lt;10</del> |
|                 | 5-11-93           | 0.4                           | 0.5                | <0.3               | 1.0                | <10               |
|                 | 2-19-93           | <0.3                          | <0.3               | <0.3               | <0.6               | <100              |
|                 | <del>2-92</del>   | <0.3                          | <0.3               | <0.3               | <0.5               | <10               |
| RAO-2           | <del>3-2-93</del> | <del>&lt;0.3</del>            | <del>&lt;0.3</del> | <del>&lt;0.3</del> | <del>&lt;0.5</del> | <del>&lt;10</del> |
|                 | 5-11-93           | 0.4                           | 1.0                | <0.3               | 1.0                | 56                |
|                 | 2-19-93           | <0.3                          | <0.3               | <0.3               | <0.6               | <100              |
|                 | <del>2-92</del>   | <0.3                          | <0.3               | <0.3               | <0.5               | <10               |
| RAO-4           | <del>3-2-93</del> | <del>&lt;0.3</del>            | <del>&lt;0.3</del> | <del>&lt;0.3</del> | <del>&lt;0.5</del> | <del>&lt;10</del> |
|                 | 5-11-93           | <0.3                          | <0.3               | <0.3               | <0.5               | <10               |
|                 | 2-19-93           | <0.3                          | <0.3               | <0.3               | <0.6               | <100              |
|                 | <del>2-93</del>   | <0.3                          | <0.3               | <0.3               | <0.5               | 840               |

### Section 3

#### PRODUCT RECOVERY ACTIVITIES

During groundwater monitoring activities conducted from March 1990, through November 1992, the presence of a free-product layer was identified in monitoring well RAO-3, located within the former underground storage tank excavation area. A product bail-down test was performed in monitoring well RAO-3 to determine the feasibility of implementing a product recovery system. The results of the product bail-down test indicated that product recovery was feasible, therefore, a removable floating product recovery canister was installed in the monitoring well RAO-3 on December 2, 1992. The canister consists of a buoy portion atop a product storage portion (the sump). The buoy is sheathed by a semi-permeable hydrophobic membrane which minimizes water infiltration into the product sump. The sump has a capacity of 500-mL and is emptied through a drain on the bottom of the canister.

The free product canister has been emptied on a regular basis since December 1992. Static water level and free-product level measurements indicate that the thickness of the free-product layer has ranged from approximately 0.01-ft to 0.40-ft during the remediation period. Product recovery logs also indicate that approximately 0.7 gallons of free product have been recovered. A summary of the product recovery operations is presented in Table 2.

TABLE 2  
Product Recovery Observations

| Date           | Volume of Product Removed (mL) | Volume of Water Removed (mL) | Depth to Product (ft-bgs) | Depth to Water (ft-bgs) | Thickness of Product (ft) |
|----------------|--------------------------------|------------------------------|---------------------------|-------------------------|---------------------------|
| 12-3-92        | trace                          | 20                           | 8.65                      | 8.67                    | 0.02                      |
| 12-4-92        | 0                              | 0                            | 8.61                      | 8.63                    | 0.02                      |
| 12-8-92        | 18                             | 0                            | 8.52                      | 8.52                    | 0.00                      |
| 12-9-92        | 10                             | 0                            | 8.24                      | 8.24                    | 0.00                      |
| 12-10-92       | 0                              | 3                            | 8.02                      | 8.02                    | 0.00                      |
| 12-14-92       | 30                             | 200                          | 8.28                      | 8.29                    | 0.01                      |
| 12-15-92       | trace                          | 0                            | 8.32                      | 8.32                    | 0.00                      |
| 12-16-92       | trace                          | 0                            | 8.52                      | 8.52                    | 0.00                      |
| 12-18-92       | 18                             | 0                            | 8.63                      | 8.66                    | 0.03                      |
| 12-21-92       | 10                             | 0                            | 8.39                      | 8.42                    | 0.03                      |
| 12-22-92       | 20                             | 30                           | 8.56                      | 8.58                    | 0.02                      |
| 12-23-92       | 18                             | 0                            | 8.35                      | 8.37                    | 0.02                      |
| 12-24-92       | 22                             | 0                            | 8.42                      | 8.53                    | 0.11                      |
| 12-28-92       | 15                             | 0                            | 8.53                      | 8.64                    | 0.01                      |
| 12-29-92       | 20                             | 0                            | 8.58                      | 8.60                    | 0.02                      |
| 12-30-92       | 18                             | 0                            | 8.22                      | 8.24                    | 0.02                      |
| December Total | 199                            | 253                          |                           |                         |                           |
| 1-4-93         | 23                             | 18                           | 8.45                      | 8.47                    | 0.02                      |
| 1-5-93         | 12                             | 0                            | 8.28                      | 8.30                    | 0.02                      |
| 1-6-93         | 10                             | 0                            | 8.05                      | 8.48                    | 0.43                      |
| 1-7-93         | 8                              | 0                            | 8.64                      | 8.66                    | 0.02                      |
| 1-8-93         | 3                              | 10                           | 8.36                      | 8.37                    | 0.01                      |
| 1-11-93        | 8                              | 0                            | 8.02                      | 8.16                    | 0.14                      |
| 1-12-93        | 13                             | 8                            | 7.68                      | 8.06                    | 0.38                      |
| 1-13-93        | 45                             | 0                            | 7.64                      | 8.04                    | 0.40                      |
| 1-14-93        | 40                             | 0                            | 8.00                      | 8.32                    | 0.32                      |

TABLE 2 (Continued)  
Product Recovery Observations

| Date                                    | Volume of Product Removed (mL) | Volume of Water Removed (mL) | Depth to Product (ft-bgs) | Depth to Water (ft-bgs) | Thickness of Product (ft) |
|---|--------------------------------|------------------------------|---------------------------|-------------------------|---------------------------|
| 1-15-93                                 | 40                             | 0                            | 7.98                      | 8.30                    | 0.32                      |
| 1-18-93                                 | 48                             | 0                            | 8.00                      | 8.11                    | 0.11                      |
| 1-19-93                                 | 50                             | 0                            | 8.00                      | 8.22                    | 0.22                      |
| 1-20-93                                 | 44                             | 0                            | 8.00                      | 8.02                    | 0.02                      |
| 1-21-93                                 | 5                              | 40                           | 7.84                      | 8.00                    | 0.16                      |
| 1-22-93                                 | 450                            | 42                           | 7.74                      | 7.98                    | 0.24                      |
| January Total                           | 79                             | 118                          |                           |                         |                           |
| 2-4-93                                  | 25                             | 500*                         | 7.99                      | 8.45                    | 0.46                      |
| February Total                          | 25                             | 500*                         |                           |                         |                           |
| 3-25-93                                 | 380                            | 70                           | 8.11                      | 8.20                    | 0.09                      |
| March Total                             | 380                            | 70                           |                           |                         |                           |
| 4-9-93                                  | 500                            | 18                           | 8.11                      | 8.20                    | 0.09                      |
| 4-23-93                                 | 210                            | 60                           | 7.49                      | 7.51                    | 0.02                      |
| April Total                             | 710                            | 78                           |                           |                         |                           |
| 5-3-93                                  | 560                            | 90                           | 8.54                      | 8.58                    | 0.04                      |
| 5-11-93                                 | 38                             | 114                          | 8.35                      | 8.45                    | 0.10                      |
| 5-20-93                                 | 1                              | 0                            | 8.39                      | 8.42                    | 0.03                      |
| May Total                               | 599                            | 204                          |                           |                         |                           |
| 6-2-93                                  | 5                              | 65                           | 8.37                      | 8.41                    | 0.04                      |
| 6-18-93                                 | 100                            | 0                            | 8.46                      | 8.57                    | 0.14                      |
| June Total                              | 105                            | 65                           |                           |                         |                           |
| 7-9-93                                  | 150                            | 0                            | 8.20                      | 8.25                    | 0.05                      |
| July Total                              | 150                            | 0                            |                           |                         |                           |
| Quarterly Total                         | 255                            | 65                           |                           |                         |                           |
| Total to Date                           | 2,967                          | 1,288                        |                           |                         |                           |
| *Valve on bottom of canister left open. |                                |                              |                           |                         |                           |

APPENDIX A  
GROUNDWATER SAMPLING FIELD LOGS

GROUNDWATER SAMPLING INFORMATION

|                    |                |
|--------------------|----------------|
| Job Name           | ARATEX-OAKLAND |
| Job Number         | 12013.07       |
| Date               | AUGUST 2,1993  |
| Pump Set @ __'BTOC |                |

MW-ROA-1

Notes: Depth to Water = 8.48      9 gal. Purged

| TIME  | PURGE VOL. | TOTAL VOL. | TEMP. (C) | COND. (mmhos/cm) | pH   | TURBIDITY (NTU) | DTW  | COMMENTS |
|-------|------------|------------|-----------|------------------|------|-----------------|------|----------|
|       | 0          | 0          | -         | -                | -    | -               | 8.48 | Pump On  |
| 12:10 | 3 gal      | 3 gal      | 21.2      | 1.28             | 7.10 | O.R.            |      |          |
| 12:15 | 3 gal      | 6 gal      | 21.4      | 1.3              | 7.12 | O.R.            |      |          |
| 12:20 | 3 gal      | 9 gal      | 21.1      | 1.4              | 7.08 | O.R.            |      |          |
|       |            |            |           |                  |      |                 |      |          |
|       |            |            |           |                  |      |                 |      |          |
|       |            |            |           |                  |      |                 |      |          |
|       |            |            |           |                  |      |                 |      |          |
|       |            |            |           |                  |      |                 |      |          |
|       |            |            |           |                  |      |                 |      |          |
| 12:30 |            |            |           |                  |      |                 |      | SAMPLE   |
|       |            |            |           |                  |      |                 |      |          |

GROUNDWATER SAMPLING INFORMATION

|                     |                |
|---------------------|----------------|
| Job Name            | ARATEX-OAKLAND |
| Job Number          | 12013.07       |
| Date                | AUGUST 2,1993  |
| Pump Set @ __ 'BTOC |                |

MW-ROA-2

Notes: Depth to Water = 8.50 10 gal Purged

| TIME  | PURGE VOL. | TOTAL VOL. | TEMP. (C) | COND. (mmhos/cm) | pH   | TURBIDITY (NTU) | DTW  | COMMENTS |
|-------|------------|------------|-----------|------------------|------|-----------------|------|----------|
|       | 0          | 0          | -         | -                | -    | -               | 8.50 | Pump On  |
| 12:45 | 3 gal      | 3 gal      | 20.9      | 0.30             | 6.98 | 910             |      |          |
| 12:50 | 3 gal      | 6 gal      | 21.2      | 0.55             | 7.00 | 900             |      |          |
| 12:55 | 4 gal      | 10 gal     | 21.0      | 0.55             | 7.10 | O.R.            |      |          |
|       |            |            |           |                  |      |                 |      |          |
|       |            |            |           |                  |      |                 |      |          |
|       |            |            |           |                  |      |                 |      |          |
|       |            |            |           |                  |      |                 |      |          |
|       |            |            |           |                  |      |                 |      |          |
|       |            |            |           |                  |      |                 |      |          |
| 1:00  |            |            |           |                  |      |                 |      | SAMPLE   |
|       |            |            |           |                  |      |                 |      |          |

GROUNDWATER SAMPLING INFORMATION

|            |                |
|------------|----------------|
| Job Name   | ARATEX-OAKLAND |
| Job Number | 12013.07       |
| Date       | AUGUST 2,1993  |
| Pump Set @ | 'BTOC          |

MW-ROA-4

Notes. Depth to Water = 8.75    10 gal Purged

| TIME | PURGE VOL. | TOTAL VOL. | TEMP. (C) | COND. (mmhos/cm) | pH   | TURBIDITY (NTU) | DTW  | COMMENTS |
|------|------------|------------|-----------|------------------|------|-----------------|------|----------|
|      | 0          | 0          | -         | -                | -    | -               | 8.75 | Pump On  |
| 1:20 | 3 gal      | 3 gal      | 20.9      | 1.9              | 7.29 | 695             |      |          |
| 1:25 | 3 gal      | 6 gal      | 20.4      | 1.8              | 7.34 | 725             |      |          |
| 1:38 | 4 gal      | 10 gal     | 20.9      | 1.9              | 7.50 | 701             |      |          |
|      |            |            |           |                  |      |                 |      |          |
|      |            |            |           |                  |      |                 |      |          |
|      |            |            |           |                  |      |                 |      |          |
|      |            |            |           |                  |      |                 |      |          |
|      |            |            |           |                  |      |                 |      |          |
| 1:35 |            |            |           |                  |      |                 |      | SAMPLE   |
|      |            |            |           |                  |      |                 |      |          |



APPENDIX B  
CHAIN-OF-CUSTODY DOCUMENTS / LABORATORY REPORT

# GTEL

ENVIRONMENTAL  
LABORATORIES, INC.

**Northwest Region**

4080 Pike Lane  
Suite C  
Concord, CA 94520  
(510) 685-7852  
(800) 544-3422 Inside CA  
FAX (510) 825-0720

Client Number: RMT01RMT01  
Consultant Project Number: 12013.07  
Project ID: Aratex Services  
Oakland, CA  
Work Order Number: C3-08-0013

August 16, 1993

Jim Van Nortwick  
RMT, Inc.  
3250 Ocean Park Blvd., Suite 370  
Santa Monica, CA 90405

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 08/02/83, under chain of custody record 28220.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.



Eileen F. Bullen  
Laboratory Director

Client Number: RMT01RMT01  
 Consultant Project Number: 12013.07  
 Project ID: Aratex Services  
 Oakland, CA  
 Work Order Number: C3-08-0013

**Table 1**  
**ANALYTICAL RESULTS**  
 Aromatic Volatile Organics in Water  
 EPA Methods 5030 and 8020<sup>a</sup>

| GTEL Sample Number         |                       | 01                  | 02       | 03       | 04         |
|----------------------------|-----------------------|---------------------|----------|----------|------------|
| Client Identification      |                       | ROA-1               | ROA-2    | ROA-4    | TRIP BLANK |
| Date Sampled               |                       | 08/02/93            | 08/02/93 | 08/02/93 | 08/02/93   |
| Date Analyzed              |                       | 08/12/93            | 08/12/93 | 08/12/93 | 08/12/93   |
| Analyte                    | Detection Limit, ug/L | Concentration, ug/L |          |          |            |
| Benzene                    | 0.3                   | <0.3                | <0.3     | <0.3     | <0.3       |
| Toluene                    | 0.3                   | <0.3                | <0.3     | <0.3     | <0.3       |
| Ethylbenzene               | 0.3                   | <0.3                | <0.3     | <0.3     | <0.3       |
| Xylene, total              | 0.5                   | <0.5                | <0.5     | <0.5     | <0.5       |
| BTEX, total                | --                    | --                  | --       | --       | --         |
| Detection Limit Multiplier |                       | 1                   | 1        | 1        | 1          |
| BFB surrogate, % recovery  |                       | 101                 | 99.4     | 94.9     | 101        |

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: RMT01RMT01  
 Consultant Project Number: 12013.07  
 Project ID: Aratex Services  
 Oakland, CA  
 Work Order Number: C3-08-0013

**Table 1 (Continued)**

**ANALYTICAL RESULTS**

**Aromatic Volatile Organics in Water**

**EPA Methods 5030 and 8020<sup>a</sup>**

|                            |                          |                     |  |  |  |
|----------------------------|--------------------------|---------------------|--|--|--|
| GTEL Sample Number         |                          | M081293             |  |  |  |
| Client Identification      |                          | METHOD<br>BLANK     |  |  |  |
| Date Sampled               |                          | --                  |  |  |  |
| Date Analyzed              |                          | 08/12/93            |  |  |  |
| Analyte                    | Detection<br>Limit, ug/L | Concentration, ug/L |  |  |  |
| Benzene                    | 0.3                      | <0.3                |  |  |  |
| Toluene                    | 0.3                      | <0.3                |  |  |  |
| Ethylbenzene               | 0.3                      | <0.3                |  |  |  |
| Xylene, total              | 0.5                      | <0.5                |  |  |  |
| BTEX, total                | --                       | --                  |  |  |  |
| Detection Limit Multiplier |                          | 1                   |  |  |  |
| BFB surrogate, % recovery  |                          | 99.9                |  |  |  |

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Client Number: RMT01RMT01  
 Consultant Project Number: 12013.07  
 Project ID: Aratex Services  
 Oakland, CA  
 Work Order Number: C3-08-0013

**Table 1**  
**ANALYTICAL RESULTS**  
 TPH as Diesel in Water  
 Method: Modified EPA 8015<sup>a</sup>

|                            |                          |                     |          |          |                 |
|----------------------------|--------------------------|---------------------|----------|----------|-----------------|
| GTEL Sample Number         |                          | 01                  | 02       | 03       | 081393<br>GCK   |
| Client Identification      |                          | ROA-1               | ROA-2    | ROA-4    | METHOD<br>BLANK |
| Date Sampled               |                          | 08/02/93            | 08/02/93 | 08/02/93 | --              |
| Date Extracted             |                          | 08/11/93            | 08/11/93 | 08/11/93 | 08/11/93        |
| Date Analyzed              |                          | 08/15/93            | 08/15/93 | 08/15/93 | 08/13/93        |
| Analyte                    | Detection<br>Limit, ug/L | Concentration, ug/L |          |          |                 |
| TPH as diesel              | 10                       | <10                 | <10      | <10      | <10             |
| Detection Limit Multiplier |                          | 1                   | 1        | 1        | 1               |
| OTP surrogate, % recovery  |                          | 91.8                | 117      | 108      | 108             |

a. O-Terphenyl surrogate recovery acceptability limits are 50-150%. Test Methods for Evaluating Solid Waste, SW-846, 3rd edition, Rev. O, U.S. EPA, November, 1986.

