GROUNDWATER MONITORING AND PRODUCT RECOVERY PROGRESS REPORT

ARAMARK UNIFORM SERVICES, INC.
330 CHESTNUT STREET
OAKLAND, CALIFORNIA

8-96

PREPARED FOR

ARAMARK UNIFORM SERVICES, INC.
SCHAUMBURG, ILLINOIS

PREPARED BY

RMT, INC.
MARINA DEL REY, CA

AUGUST 1996

Kevin Bate
Project Engineer

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

RMT, INC. – LOS ANGELES
4640 ADMIRALTY WAY SUITE 301
MARINA DEL REY, CA 90292-6621
310/578 1241 310/821-3280 FAX

September 17, 1996

Ms. Jennifer Eberle
Alameda County - Environmental Health Department
Environmental Protection Division
1131 Harbor Bay Parkway, #250
Alameda, CA 94502-6577

RE: Quarterly Groundwater Monitoring Progress Report
ARAMARK Uniform Services, Inc.
330 Chestnut Street, Oakland, California

Dear Ms. Eberle:

This letter transmits the results of the groundwater monitoring activities conducted in August 1996, at the referenced facility. In response to your letter dated November 6, 1995, the product recovery well (RAO-3) was sampled during the quarterly sampling activities, however, please note that the product recovery activities conducted during the third quarter monitoring period resulted in the recovery of approximately 30-mL of free-product. Based on these results (i.e., the presence of free product in the recovery well), it is not surprising that the results of the chemical analyses performed on groundwater samples identified the presence of significant concentrations of TPH-D and benzene (11,000 and 0.45-ug/L, respectively).

If you have any questions regarding this report, please feel free to contact me at (310) 578-1241, or Samuel J. Niemann at (317) 581-0668.

Sincerely,

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

encl: Quarterly Groundwater Monitoring Report

cc: Samuel J. Niemann, The Wetlands Company

RMT, INC. — LOS ANGELES
4640 ADMIRALTY WAY SUITE 301
MARINA DEL REY, CA 90292 6621
310/578-1241 310/821-3280 FAX

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Section 1
INTRODUCTION

1.1 Former Diesel Fuel UST Area

ARAMARK Uniform Services, Inc., (ARAMARK) 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 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 Environmental Health Department (ACEHD). Based on the information presented in the tank documentation report, the ACEHD requested that ARAMARK conduct post-closure sampling activities to determine whether the soil and groundwater surrounding the underground storage tank had been impacted by petroleum hydrocarbons.

Remedial investigation activities were conducted by RMT from March 1989, through November 1992, and included the advancement of soil borings and four groundwater monitoring wells (RAO-1 through RAO-4) in the vicinity of the former excavation area. The results of chemical analyses performed on groundwater samples collected from monitoring wells RAO-1 and RAO-2 identified the presence of total petroleum hydrocarbons (TPH) and benzene, toluene, and xylenes (BTX) and free-product was consistently observed in the groundwater monitoring well located within the former underground storage tank excavation (RAO-3). Because the results of the sampling activities indicated that the extent of petroleum hydrocarbon contamination was limited to the former tank excavation, a product recovery canister was installed in December 1992. To date, the product recovery system has recovered approximately 6,877-mL of free-product, however, the quantity of product recovered each sampling interval has significantly decreased. In addition, with the exception of the chemical analyses performed on groundwater samples collected during February 1995, the presence of TPH or BTX has not been identified in any groundwater sample collected since May 1993.

1.2 Former Diesel Fuel Dispenser and Mop Oil UST Area

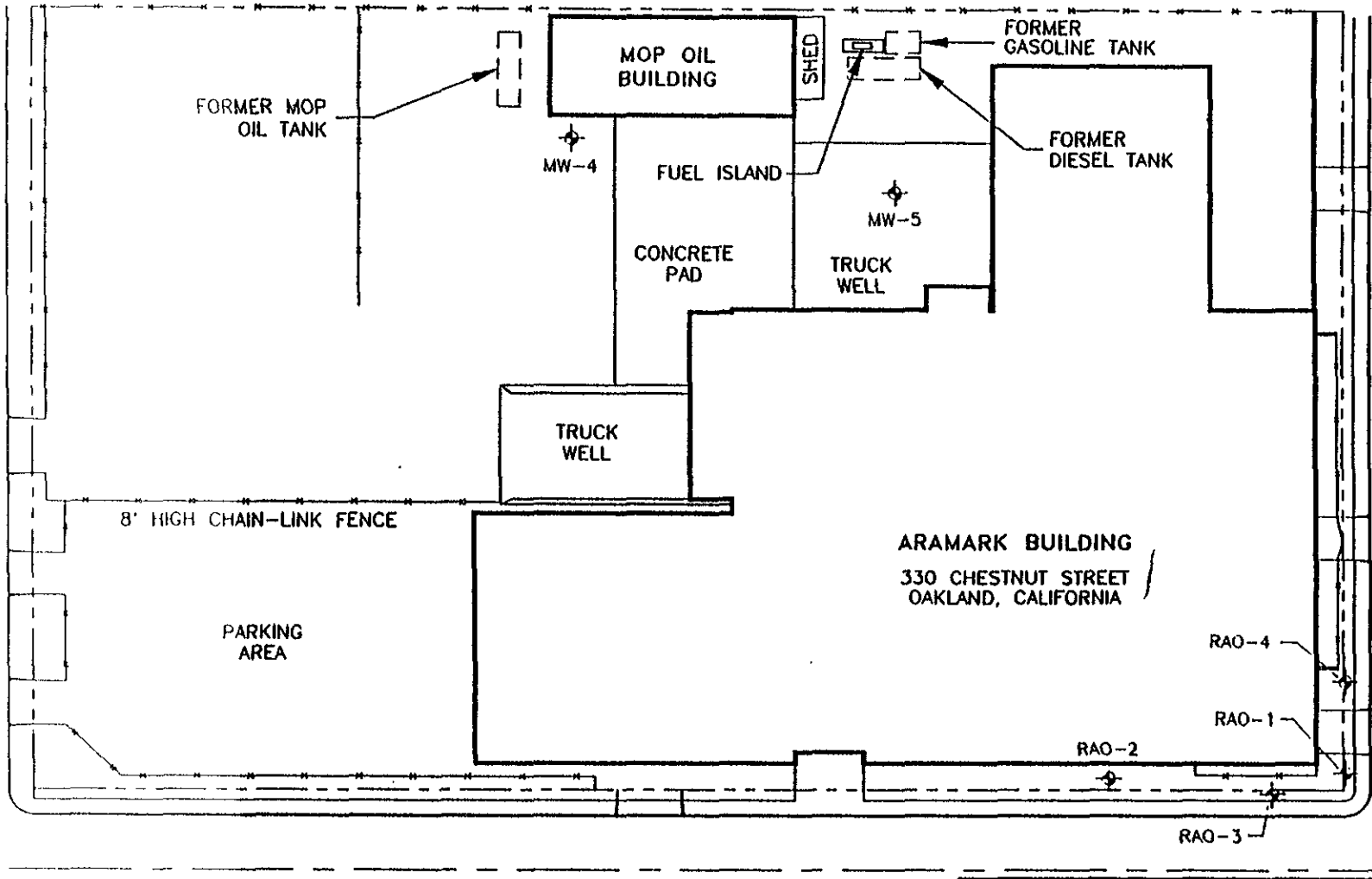
Two single walled, steel, underground petroleum hydrocarbon storage tanks were maintained at this facility to supply fuel for the delivery vehicles. In addition, an underground mop oil storage tank was also maintained at the facility. RMT, Inc. (RMT), was retained by ARAMARK to document the removal and disposal of the underground storage tanks and perform soil sampling as required by the ACEHD. Tank removal activities were conducted during the period of September 1993 through January 1994. The results of the chemical analyses performed on the soil samples collected from the floor of the former diesel fuel dispenser vault excavations, the former mop oil tank excavation, and in the vicinity of the eastern section of the loading dock identified the presence of petroleum hydrocarbons.

In response to the request from the ACEHD, ARAMARK engaged the services of RMT, Inc., to conduct soil and groundwater sampling activities in the vicinity of the former diesel fuel dispenser vaults and mop oil tank. Field activities were conducted on May 5, 1995 and included the advancement of two soil borings and the installation of two groundwater monitoring wells; MW-4 located in the vicinity of the former underground mop oil storage tank and MW-5 located in the vicinity of the former diesel fuel dispenser vaults (See Figure 1). Although the results of the chemical analyses performed on groundwater samples collected from the monitoring wells identified the presence of total petroleum hydrocarbons, TPH-MS and TPH-D concentrations are generally less than 2-mg/L. In addition, the presence of BTEX has never been identified at concentrations above the method detection limit in either monitoring well. A site plan showing the location of the former diesel fuel tanks and the mop oil tank is presented in Figure 1.

1.3 Purpose and Scope

The purpose of this report is to summarize the results of the groundwater monitoring activities conducted on August 6, 1996, at the ARAMARK facility. The scope of work conducted during the groundwater investigation included the following:

- Measurement of the depth to groundwater in monitoring wells RAO-1, RAO-2, RAO-3, RAO-4, MW-4, and MW-5,
- The purging and sampling of monitoring wells MW-4 and MW-5,
- The purging and sampling of product recovery well RAO-3 in accordance with ACEHD letter dated November 6, 1995, and
- The chemical analyses of groundwater samples collected from monitoring wells RAO-1, RAO-3, MW-4 and MW-5.



LEGEND:

MW-5 GROUNDWATER MONITORING WELL

0 60 120

APPROXIMATE SCALE IN FEET

PROJECT: ARAMARK UNIFORM SERVICES OAKLAND, CALIFORNIA

SHEET TITLE: SITE PLAN

DRAWN BY: CRB	SCALE: 1" = 60'-0"	PROJ. NO. 12013.11
CHECKED BY:		FILE NO. 1102
APPROVED BY:	DATE PRINTED:	FIGURE 1
DATE: MAY 1995		

RMT Inc. – Los Angeles
Phone: 310/578-1241
4640 Admiralty Way
Suite 301
Marina Del Rey, CA 90292

Section 2
GROUNDWATER MONITORING ACTIVITIES

Groundwater sampling activities were conducted on August 6, 1996, and included obtaining static water level measurements and groundwater samples from monitoring wells MW-4 and MW-5. Groundwater samples were also collected from product recovery well RAO-3. It should be noted that groundwater monitoring well RAO-1 was dry and therefore no groundwater samples could be collected.

2.1 Static Water Level Measurements

Prior to collecting groundwater samples, the depth to groundwater 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.

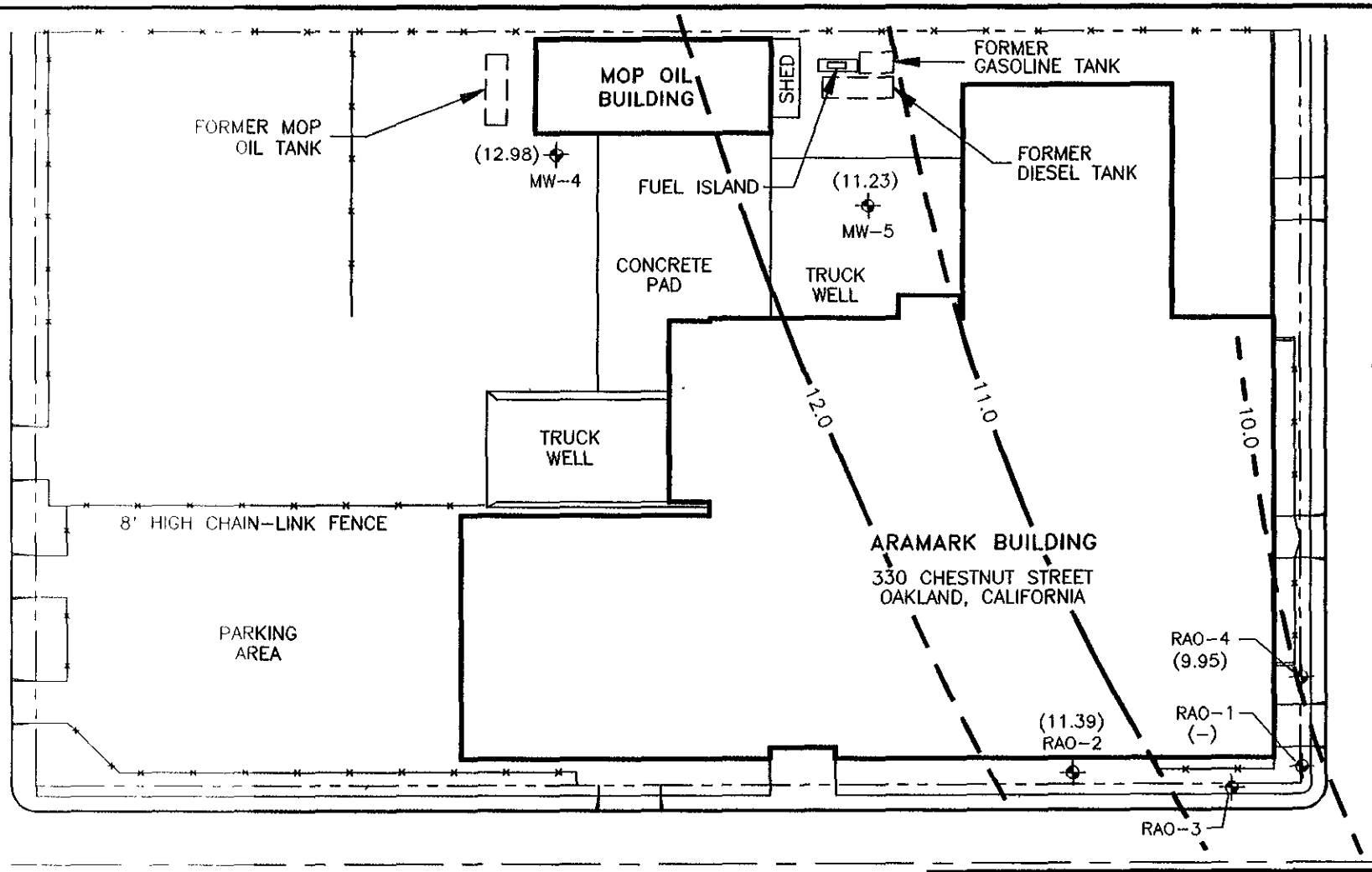
2.2 Groundwater Sample Collection

Groundwater samples were collected from monitoring wells MW-4 and MW-5, and from product recovery well RAO-3. 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, and conductivity 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 15-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 sample collection data are presented in Appendix A.

2.3 Groundwater Flow

Static water level measurements obtained on August 6, 1996, are summarized in Table 1 and the water table map generated from the water level data is presented in Figure 2. The groundwater flow direction is southeast with a gradient of approximately 0.0167-ft/ft.



LEGEND:

MW-5 — GROUNDWATER MONITORING WELL

12.0 — LINE OF EQUAL GROUNDWATER IN FEET ABOVE MEAN SEA-LEVEL DASHED WHERE INFERRED

(12.98) — GROUNDWATER ELEVATION (IN FEET ABOVE MSL)

0 60 120

APPROXIMATE SCALE IN FEET

PROJECT: **ARAMARK UNIFORM SERVICES OAKLAND, CALIFORNIA**

SHEET TITLE: **WATER TABLE MAP - AUGUST 6, 1996**

DRAWN BY: CRB	SCALE: 1" = 60'-0"	PROJ. NO. 12013.11
CHECKED BY:		FILE NO. 1102
APPROVED BY:	DATE PRINTED:	FIGURE 2
DATE: MAY 1995		

RMT, INC.
RMT Inc. - Los Angeles
Phone: 310/578-1241
4640 Admiralty Way
Suite 301
Marina Del Rey, CA 90292

Table 1

Static Water Level Measurement

Monitoring Well Location	TOC Elevation (ft above MSL)	Depth to Water (ft below TOC)	Groundwater Elevation (ft above MSL)
RAO-1	19.08	0.00	--
RAO-2	19.57	8.18	11.39
RAO-4	19.30	9.35	9.95
MW-4	22.69	9.71	12.98
MW-5	21.09	9.86	11.23

2.4 Chemical Analyses of Groundwater

Groundwater samples collected from product recovery well RAO-3 were analyzed for the presence of BTEX and TPH-D using EPA SW-846 Method 8020 and Method 8015M, respectively. Groundwater samples collected from monitoring wells MW-4 and MW-5 were analyzed for the presence of BTEX and TPH-D, TPH-K, and TPH-SS using EPA SW-846 Method 8020 and Method 8015M, respectively. The results of the laboratory analyses are summarized in Table 2 (diesel fuel UST Area) and Table 3 (former diesel fuel dispenser and mop oil UST area) and a copy of the laboratory report is included in Appendix B. All laboratory analyses were conducted by BC Laboratories, Inc., of Bakersfield, California.

Table 2

Chemical Analyses of Groundwater (Former Diesel Fuel UST Area)

Sample Location	Sampling Date	Parameter (ug/L)				
		Benzene	Toluene	Ethylbenzene	Xylenes	TPH-D
RAO-1	02-01-96	<0.5	<0.5	<0.5	<0.5	820a
	08-02-95	<0.5	<0.5	<0.5	<0.5	<50
	05-05-95	<0.5	<0.5	<0.5	<0.5	<50
	02-03-95	<0.5	<0.5	<0.5	<0.5	560
	11-18-94	<1.0	<1.0	<1.0	<1.0	<50
	08-12-94	<1.0	<1.0	<1.0	<1.0	<50
	04-28-94	<1.0	<1.0	<1.0	<1.0	<50
	01-29-94	<1.0	<1.0	<1.0	<1.0	<50
	11-11-93	<0.5	<0.5	<0.5	<0.5	<50
	08-02-93	<0.3	<0.3	<0.3	<0.5	<10
	05-11-93	0.4	0.5	<0.3	1.0	<10
RAO-2	11-14-95	<0.5	<0.5	<0.5	<0.5	870
	08-02-95	<0.5	<0.5	<0.5	<0.5	<50
	05-05-95	<0.5	<0.5	<0.5	<0.5	<50
	02-03-95	<0.5	<0.5	<0.5	<0.5	<50
	11-18-94	<1.0	<1.0	<1.0	<1.0	<50
	08-12-94	<1.0	<1.0	<1.0	<1.0	<50
	04-28-94	<1.0	<1.0	<1.0	<1.0	<50
	01-29-94	<1.0	<1.0	<1.0	<1.0	<50
	11-11-93	<0.5	<0.5	<0.5	<0.5	<50
	08-02-93	<0.3	<0.3	<0.3	<0.5	<10
	05-11-93	0.4	1.0	<0.3	1.0	56

Table 2 (Continued)

Chemical Analyses of Groundwater (Former Diesel Fuel UST Area)

Sample Location	Sampling Date	Parameter (ug/L)				
		Benzene	Toluene	Ethylbenzene	Xylenes	TPH-D
RAO-3	08-06-96	0.45	<0.3	<0.3	<0.6	11,000
	05-10-96[a]	1.8	<0.3	3.0	5.5	2,000,000
	02-01-96[a]	16	<0.5	55	<0.5	1,700,000
RAO-4	11-14-95	<0.5	<0.5	<0.5	<0.5	800
	08-02-95	<0.5	<0.5	<0.5	<0.5	<50
	05-05-95	<0.5	<0.5	<0.5	<0.5	<50
	02-03-95	<0.5	<0.5	<0.5	<0.5	<50
	11-18-94	<1.0	<1.0	<1.0	<1.0	<50
	08-12-94	<1.0	<1.0	<1.0	<1.0	<50
	04-28-94	<1.0	<1.0	<1.0	<1.0	<50
	01-29-94	<1.0	<1.0	<1.0	<1.0	<50
	11-11-93	<0.5	<0.5	<0.5	<0.5	<50
	08-02-93	<0.3	<0.3	<0.3	<0.5	<10
	05-11-93	<0.3	<0.3	<0.3	<0.5	<10

a = Free product was identified in product recovery well RAO-3

Table 3

Chemical Analyses of Groundwater (Former Dispenser and Mop Oil UST Area)

Sample Location	Sampling Date	Parameter (ug/L)						
		Benzene	Toluene	Ethylbenzene	Xylenes	TPH-SS	TPH-K	TPH-D
MW-4	08-06-96	<0.3	<0.3	<0.3	<0.6	<200	<200	<200
	05-10-96	<0.3	<0.3	<0.3	<0.3	<200	<200	<200
	02-01-96	<0.5	<0.5	<0.5	<0.5	<500	<500	<500
	11-14-95	<0.5	<0.5	<0.5	<0.5	–	–	1,100
	08-02-95	–	–	–	–	–	–	180
	05-05-95	–	–	–	–	–	–	500
MW-5	08-06-96	<0.3	<0.3	<0.3	<0.6	<200	<200	<200
	05-10-96	<0.3	<0.3	<0.3	<0.3	<200	<200	350
	02-01-96	<0.5	<0.5	<0.5	<0.5	840[a]	<500	<500
	11-14-95	<0.5	<0.5	<0.5	<0.5	–	–	2,100
	08-02-95	<0.5	<0.5	<0.5	<0.5	–	–	380
	05-05-95	<0.5	<0.5	<0.5	<0.5	–	–	1,100

a = The chromatogram does not resemble the stoddard hydrocarbon standard.

2.5 Disposal of Purged Groundwater

Groundwater extracted during monitoring well purging activities was contained in 55-gal DOT-approved drums, labeled with the date, generator's name, site location, source, and stored on-site pending off-site disposal.

Section 3
PRODUCT RECOVERY ACTIVITIES

In December 1992, a product recovery system, consisting of a removable canister (a buoy sheathed by a semi-permeable hydrophobic membrane atop a product storage sump) was installed in monitoring well RAO-3 located in the vicinity of the former diesel fuel UST excavation. During the period from December 1992 through May 1995, approximately 6,202-mL of free-product was recovered, however, product recovery activities conducted during the period from June 1995 through October 1995 did not result in the recovery of any additional free product. Based on these findings, in November 1995, the ACEHD requested that ARAMARK collect groundwater samples from the product recovery well to determine the groundwater quality in the vicinity of the former diesel fuel UST excavation, however, it was agreed that the sampling activities would be postponed until the residual petroleum hydrocarbon buildup on the well screen and in the surrounding sand pack could be remediated. With ACEHD approval, RMT added approximately 15-gallons of a dilute solution (5%) of hydrogen peroxide (H_2O_2) to product recovery RAO-3 on a monthly basis during the period between November 1995 and January 1996 to help remove the residual petroleum hydrocarbons present within the well packing. Product recovery activities conducted during the first and second quarter resulted in the recovery of approximately 400-mL and 800-mL of free-product, respectively.

Approximately 30-mL of free product was recovered from the product recovery well during the third quarter activities (June through August, 1996). A total of 7,882-mL of free-product has been recovered since product recovery operations began (December 1992). A summary of the product recovery operations is presented in Appendix C.

3rd Q =

APPENDIX A

GROUNDWATER SAMPLE COLLECTION DATA

GROUNDWATER SAMPLING INFORMATION

Project Name:	ARAMARK – OAKLAND
Project Number:	
Sampling Date:	8/6/96

Monitoring Well Location	Purge Number	Purge Volume (gal)	Temp (°C)	pH	Turbidity (NTU)	DTW (ft-bgs)	Cond (µS/cm)
MW-5	1	1	68.9	7.2	4.62	9.86	1.97
	2						
	3	DRY @ 2-gallon					
MW-4	1	1	68.3	7.2	8.91	9.71	1.86
	2						
	3	DRY @ ½-gallon					
RAO-3	1	1	69.1	7.3	6.62	—	1.63
	2	3	68.8	7.2	6.95		1.65
	3						
RAO-1	1		DRY WELL			Ø	
	2						
	3						
RAO-2	1					8.18	
	2						
	3						
RAO-4	1					9.35	
	2						
	3						

APPENDIX B

LABORATORY REPORT

BC LABORATORIES, INC.

August 21, 1996

TARIQ AHMAD
RMT INC.
4640 ADMIRALITY WAY
SUITE 301
MARINA DEL REY, CA 90292

Subject: Laboratory Submission No.: 96-09229
Samples Received: 08/06/96

Dear Mr. Ahmad:

The samples(s) listed on the Chain of Custody report were received by BC Laboratories, Inc. on 08/06/96.

Enclosed please find the analytical data for the testing requested. If you have any questions regarding this report please contact me at (805)327-4911, ext. 250.

Any unused sample will be stored on our premises for a minimum of 30 days (excluding bacteriologicals) at which time they will be disposed unless otherwise requested at the time of sample receipt. A disposal fee of $5 per sample may apply for solid sample matrices.

Please refer to submission number 96-09229 when calling for assistance.

Sincerely,

Cheryl Ferguson
Project Manager
BC Laboratories, Inc.

Purgeable Aromatics and Total Petroleum Hydrocarbons

RMT INC.
4640 ADMIRALITY WAY
SUITE 301
MARINA DEL REY, CA 90292
Attn: TARIQ AHMAD 310-578-1241

Date Reported: 08/12/96
Date Received: 08/06/96
Laboratory No.: 96-09229-2

Sample Description: ARAMARK-OAKLAND: RAO-3 SAMPLED BY TARIQ AHMAD

Sample Matrix: Water

Date Collected: 08/06/96
Date Extracted-8020: 08/08/96
Date Analyzed-8020: 08/09/96
Date Extracted-8015M(d): 08/08/96
Date Analyzed-8015M(d): 08/09/96

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
Benzene	0.45	µg/L	0.3
Toluene	None Detected	µg/L	0.3
Ethyl Benzene	None Detected	µg/L	0.3
Total Xylenes	None Detected	µg/L	0.6
Surrogate % Recovery	101.	%	70-130
Total Petroleum Hydrocarbons (diesel)	11000.	µg/L	1000.
Surrogate % Recovery	76.	%	57-137

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

BC LABORATORIES

Purgeable Aromatics and Total Petroleum Hydrocarbons

RMT INC.
4640 ADMIRALITY WAY
SUITE 301
MARINA DEL REY, CA 90292
Attn: TARIQ AHMAD 310-578-1241

Date Reported: 08/12/96
Date Received: 08/06/96
Laboratory No.: 96-09229-3

Sample Description: ARAMARK-OAKLAND: MW-4 SAMPLED BY TARIQ AHMAD

Sample Matrix: Water

Date Collected: 08/06/96
Date Extracted-8020: 08/08/96
Date Analyzed-8020: 08/09/96
Date Extracted-8015M(d): 08/08/96
Date Analyzed-8015M(d): 08/09/96

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
Benzene	None Detected	µg/L	0.3
Toluene	None Detected	µg/L	0.3
Ethyl Benzene	None Detected	µg/L	0.3
Total Xylenes	None Detected	µg/L	0.6
Surrogate % Recovery	80.	%	70-130
Total Petroleum Hydrocarbons (diesel)	None Detected	µg/L	200.
Surrogate % Recovery	122.	%	57-137

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

BC LABORATORIES

Purgeable Aromatics and Total Petroleum Hydrocarbons

RMT INC.
4640 ADMIRALITY WAY
SUITE 301
MARINA DEL REY, CA 90292
Attn: TARIQ AHMAD 310-578-1241

Date Reported: 08/12/96
Date Received: 08/06/96
Laboratory No.: 96-09229-4

Sample Description: ARAMARK-OAKLAND: MW-5 SAMPLED BY TARIQ AHMAD

Sample Matrix: Water

Date Collected: 08/06/96
Date Extracted-8020: 08/09/96
Date Analyzed-8020: 08/09/96
Date Extracted-8015M(d): 08/08/96
Date Analyzed-8015M(d): 08/09/96

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
Benzene	None Detected	µg/L	0.3
Toluene	None Detected	µg/L	0.3
Ethyl Benzene	None Detected	µg/L	0.3
Total Xylenes	None Detected	µg/L	0.6
Surrogate % Recovery	82.	%	70-130
Total Petroleum Hydrocarbons (diesel)	None Detected	µg/L	200.
Surrogate % Recovery	107.	%	57-137

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

BC LABORATORIES INC.

SAMPLE RECEIPT FORM - Rev. No. 2-11/95

LAB NUMBER: 96-9279	TIME RECEIVED: 1000AM	DATE RECEIVED: 8-16-96	RECEIVED BY: BB

SHIPPING SPECIFICATIONS

Federal Express ☐ UPS ☐ Hand Delivery ☐

BC Lab Field Service ☒ Other ☐ (Specify) _____

SHIPPING CONTAINER

Ice Chest ☒ Box ☐

None ☐ Other ☐ (Specify) _____

SAMPLE CONDITION

Temperature 13 °C Ice ☐ Blue Ice ☒ None ☐ If temperature is not between 2 and 6 °C please explain: _____

Custody Seals: Ice Chest ☐ Containers ☐ None ☒

All samples received? Yes ☒ No ☐ All samples intact? Yes ☒ No ☐ Description match COC? Yes ☒ No ☐

SAMPLE CONTAINERS

Sample #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
QT PE UNP																								
PT PE UNP																								
QT INORGANIC METALS																								
PT INORGANIC METALS																								
CN																								
N FORMS																								
SULFIDE																								
NO_3/NO_2																								
TOC																								
TOX																								
COD																								
PHENOL																								
TRIP BLANK																								
VOA VIAL		3	3	3																				
VOA SET																								
OIL & GREASE																								
ODOR																								
RADIOLOGICAL																								
BACT																								
504																								
507																								
508/608/8080																								
515.1/8150																								
525/625/8270																								
547																								
531.1																								
548																								
549																								
QA/QC																								
QT AMBER		1	1	1																				
8 OZ. JAR																								
32 OZ. JAR																								
SOIL SLEEVE																								

Comments _____

Completed by Jonathan Bowers

F:\WP60\DATA\DOCS\SHBLAH\FORMS\SAMREC

9729

CHAIN OF CUSTODY RECORD

DISTRIBUTION 5B NO. 64443

RMT, Inc. LABORATORIES

744 Heartland Trail, P.O. Box 8923 • Madison, WI 53708-8923 • Phone (608) 831-4444 • FAX (608) 831-7530

Project No | Project/Client: Aramark - Oakland

~~Project Manager~~/Contact Person: Tariq Ahmad

Lab No	Yr 96 Date	Time	Sample Station ID	Total Number Of Containers	MATRIX	Filtered (Yes/No)	Preserved (Code)	Analyses Requested: 8015 - DIESEL; 8020 - BTEX	Comments:
-1	8/6		RAO-1	4	WATER				didnt receive any bottles
-2			RAO-3	4					
-3			MW-4	4					
-4			MW-5	4					
-TB			BLANK	3					did not receive

PRESERVED CODES
A - NONE
B - HNO_3
C - H_2SO_4
D - NaOH
E - HCl
F - METHANOL
G - _____

SPECIAL INSTRUCTIONS

SAMPLER Relinquished by (Sig.) | Date/Time 8/6/96

Received by (Sig.) | Date/Time

Relinquished by (Sig.) | Date/Time

Received by (Sig.) | Date/Time

Relinquished by (Sig.) | Date/Time

Received by (Sig.) Jennifer Monahon | Date/Time 8/8/96 10pm

Custody Seal Present/Absent | Intact/Not Intact | Seal #'s

HAZARDS ASSOCIATED WITH SAMPLES
- ☐ Flammable
- ☐ Corrosive
- ☐ Highly Toxic
- ☐ Other (list) _____

Turn Around (circle one) Normal Rush
Report Due _____

(For Lab Use Only)
Receipt Temp: Temp Blank Y N
Receipt pH (Wet/Metals)

F-268 (R6/95)

NUMBERING CHECKED BY TB

WHITE - LABORATORY COPY YELLOW - REPORT APPENDIX PINK - SAMPLER/SUBMITTER

BC LABORATORIES, INC.

August 30, 1996

TARIQ AHMAD
RMT INC.
4640 ADMIRALITY WAY
SUITE 301
MARINA DEL REY, CA 90292

Subject: Laboratory Submission No.: 96-09229 - ADDITION
Samples Received: 08/06/96

Dear Mr. Ahmad:

Aramark Oakland samples MW-4 and MW-4 collected on 08/06/96 were received by BC Laboratories, Inc. on 08/06/96. Results were previously reported under separate cover.

Enclosed please find results for the additional testing requested. If you have any questions regarding this report please contact me at (805)327-4911, ext. 250.

Any unused sample will be stored on our premises for a minimum of 30 days (excluding bacteriologicals) at which time they will be disposed unless otherwise requested at the time of sample receipt. A disposal fee of $5 per sample may apply for solid sample matrices.

Please refer to submission number 96-09229 when calling for assistance.

Sincerely,

Cheryl Ferguson

Cheryl Ferguson
Project Manager
BC Laboratories, Inc.

4100 Atlas Ct · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

BC LABORATORIES

EPA 8015M
Fuel Identification / Quantitation Summary

RMT INC.
4640 ADMIRALITY WAY
SUITE 301
MARINA DEL REY, CA 90292
Attn: TARIQ AHMAD 310-578-1241

Date Reported: 08/26/96
Date Received: 08/06/96
Laboratory No.: 96-09229-3ADD'N

Sample Description: ARAMARK-OAKLAND: MW-4 SAMPLED BY TARIQ AHMAD

Sample Matrix: Water

Date Collected: 08/06/96
Date Extracted: 08/08/96
Date Analyzed: 08/22/96

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
Stoddard / White Spirits	None Detected	µg/L	200.
Kerosene / Jet Fuel	None Detected	µg/L	200.
Surrogate % Recovery	95.	%	57-137

METHOD: 8015M DOHS LUFT MANUAL
Boiling Range: 70 - 300 C

Mixtures of hydrocarbons are identified by a boiling point range and a fingerprint. Hydrocarbons that fall within a boiling range but do not exhibit the pattern are quantitated versus the fuel that corresponds with the boiling range, but are qualified with a note.

California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

BC LABORATORIES

EPA 8015M
Fuel Identification / Quantitation Summary

RMT INC.
4640 ADMIRALITY WAY
SUITE 301
MARINA DEL REY, CA 90292
Attn: TARIQ AHMAD 310-578-1241

Date Reported: 08/26/96
Date Received: 08/06/96
Laboratory No.: 96-09229-4ADD'N

Sample Description: ARAMARK-OAKLAND: MW-5 SAMPLED BY TARIQ AHMAD

Sample Matrix: Water

Date Collected: 08/06/96
Date Extracted: 08/08/96
Date Analyzed: 08/22/96

Constituents	Analysis Results	Reporting Units	Practical Quantitation Limit
Stoddard / White Spirits	None Detected	µg/L	200.
Kerosene / Jet Fuel	None Detected	µg/L	200.
Surrogate % Recovery	96.	%	57-137

METHOD: 8015M DOHS LUFT MANUAL
Boiling Range: 70 - 300 C

Mixtures of hydrocarbons are identified by a boiling point range and a fingerprint. Hydrocarbons that fall within a boiling range but do not exhibit the pattern are quantitated versus the fuel that corresponds with the boiling range, but are qualified with a note

California D.O.H.S. Cert. #1186

Stuart G. Buttram
Department Supervisor

APPENDIX C

PRODUCT RECOVERY OBSERVATIONS

PRODUCT RECOVERY AT ARAMARK, 330 CHESTNUT STREET, OAKLAND

Planned Date	Actual Date	Initials	Volume of Water (ml)	Volume of product (ml)	DTP (ft)	DTW (ft)	Product Thickness (ft)
7/12/96	7/12/96	ME	495	0	7.76	7.76	0.00
7/19/96	7/19/96	ME	400	10 ml	7.90	7.90	0.00
7/26/96	7/26/96	ME	425	0	7.85	7.85	0.00
8/2/96	8/2/96	ME	420	0	7.90	7.90	0.00
8/16/96	8/16/96	ME	430	0	7.82	7.82	0.00

PRODUCT RECOVERY AT ARAMARK, 330 CHESTNUT STREET, OAKLAND

Planned Date	Actual Date	Initials	Volume of Water (ml)	Volume of product (ml)	DTP (ft)	DTW (ft)	Product Thickness (ft)
1/12/96	1/12/96	MC	480	0	7.52	7.52	0
1/19/96	1/19/96	MC	460	0	7.54	7.54	0
1/26/96	1/26/96	MC	450	0	7.53	7.53	0
2/1/96	2/1/96	MC	1000	400	7.03	7.12	0.09
2/9/96	2/9/96	MC	480	275	7.34	7.36	0.02
2/16/96	2/16/96	MC	480	75	7.35	7.37	0.02
2/23/96	2/16/96	MC	360	100	7.33	7.36	0.03
3/1/96	3/1/96	MC	350	100	7.32	7.34	0.02
3/8/96	3/8/96	MC	360	90	7.34	7.36	0.02
3/15/96	3/15/96	MC	355	95	7.35	7.37	0.02
3/22/96	3/22/96	MC	360	90	7.33	7.35	0.02
3/29/96	3/29/96	MC	350	80	7.34	7.36	0.02
4/5/96	4/5/96	MC	355	90	7.44	7.47	0.03
4/12/96	4/12/96	MC	360	70	7.48	7.50	0.02
4/19/96	4/19/96	MC	350	75	7.58	7.60	0.02
4/26/96	4/26/96	MC	500	60	7.74	7.75	0.01
5/3/96	5/3/96	MC	460	50	7.75	7.75	0.00
5/10/96	5/10/96	MC	100	0	7.76	7.76	0.00
5/17/96	5/17/96	MC	480	0	7.78	7.78	0.00
5/24/96	5/24/96	MC	490	0	7.9	7.9	0.00
5/31/96	5/31/96	MC	495	10	7.60	7.60	0.00
6/8/96	6/8/96	MC	490	0	7.72	7.72	0.00
6/14/96	6/14/96	MC	490	10	7.72	7.72	0.00
6/21/96	6/21/96	MC	480	0	7.74	7.74	0.00
6/28/96	6/28/96	MC	490	0	7.76	7.76	0.00
7/5/96	7/5/96	MC	485	0	7.75	7.75	0.00

Product Recovery Observations

Sampling 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)
12-03-92	0	20	8.65	8.67	0.02
12-04-92	0	0	8.61	8.63	0.02
12-08-92	18	0	8.52	8.52	0.00
12-09-92	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	0	0	8.32	8.32	0.00
12-16-92	0	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
01-04-93	23	18	8.45	8.47	0.02
01-05-93	12	0	8.28	8.30	0.02
01-06-93	10	0	8.05	8.48	0.43
01-07-93	8	0	8.64	8.66	0.02
01-08-93	3	10	8.36	8.37	0.01
01-11-93	8	0	8.02	8.16	0.14
01-12-93	13	8	7.68	8.06	0.38
01-13-93	45	0	7.64	8.04	0.40
01-14-93	40	0	8.00	8.32	0.32
01-15-93	40	0	7.98	8.30	0.32
01-18-93	48	0	8.00	8.11	0.11
01-19-93	50	0	8.00	8.22	0.22
01-20-93	44	0	8.00	8.02	0.02
01-21-93	5	40	7.84	8.00	0.16
01-22-93	450	42	7.74	7.98	0.24
02-04-93	25	500	7.99	8.45	0.46
03-25-93	380	70	8.11	8.20	0.09
04-09-93	500	18	8.11	8.20	0.09
04-23-93	210	60	7.49	7.51	0.02
05-03-93	560	90	8.54	8.58	0.04
05-11-93	38	114	8.35	8.45	0.10
05-20-93	1	0	8.39	8.42	0.03
06-02-93	5	65	8.37	8.41	0.04
06-18-93	100	0	8.46	8.57	0.14
07-09-93	150	0	8.20	8.25	0.05
11-11-93	40	80	7.98	7.91	0.07
12-10-93	20	25	8.62	8.59	0.03
01-29-94	0	0	8.76	8.76	0.00
03-10-94	0	0	8.63	8.63	0.00

Product Recovery Observations

Sampling 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)
05-03-94	1,976	658	8.93	9.15	0.22
06-17-94	6	565	8.85	8.85	0.00
06-21-94	1	540	8.50	8.52	0.02
06-28-94	5	400	8.69	8.71	0.01
07-08-94	26	500	8.61	8.61	0.00
07-14-94	0	400	8.73	8.73	0.00
07-20-94	20	500	8.60	8.62	0.02
07-26-94	60	560	8.68	8.71	0.03
08-02-94	21	500	8.46	8.50	0.04
08-12-94	30	640	7.74	7.79	0.05
08-18-94	0	550	9.24	9.24	0.00
08-25-94	0	550	8.78	8.78	0.00
08-31-94	0	550	8.74	8.74	0.00
09-09-94	150	375	7.74	7.76	0.02
09-15-94	0	525	8.93	8.93	0.00
09-22-94	5	305	8.97	8.99	0.02
09-30-94	0	420	8.86	8.86	0.00
10-07-94	0	550	8.74	8.74	0.00
10-14-94	0	520	8.80	8.80	0.00
10-21-94	0	520	8.88	8.88	0.00
10-28-94	0	525	8.90	8.90	0.00
11-04-94	0	550	8.00	8.00	0.00
11-09-94	0	520	7.99	7.99	0.00
11-18-94	80	430	8.05	8.15	0.10
11-25-94	130	300	8.00	7.99	0.01
11-30-94	30	260	7.94	7.95	0.01
12-09-94	30	480	8.03	8.07	0.04
12-16-94	30	120	7.96	7.99	0.03
12-22-94	20	500	8.06	8.09	0.03
12-29-94	80	360	7.71	7.73	0.02
01-06-95	25	500	7.57	7.60	0.03
01-13-95	50	70	7.55	7.54	0.01
01-20-95	5	510	7.53	7.54	0.01
01-26-95	30	500	7.38	7.41	0.03
01-31-95	30	320	7.47	7.48	0.01
02-09-95	20	210	7.63	7.63	0.00
02-14-95	20	175	7 62	7 64	0 02
02-24-95	30	310	7 85	7 89	0 04
03-03-95	20	340	7.75	7 78	0.03
03-09-95	30	510	7.31	7 34	0 03
03-17-95	10	510	7 28	7 29	0 01
03-24-95	15	485	7 23	7 24	0 01
03-31-95	15	475	7 47	7 48	0 01
04-07-95	35	285	7 61	7 62	0 01
04-14-95	20	280	7 68	7 69	0 01
04-21-95	20	290	7 75	7 73	0 02
04-28-95	40	420	7 65	7 68	0 03
05-06-95	20	360	7 70	7 71	0 01

Product Recovery Observations

Sampling 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)
05-12-95	20	390	7.70	7.70	0.00
05-19-95	10	370	7.90	7.90	0.00
05-26-95	10	380	7.80	7.80	0.00
06-02-95	0	240	7.86	7.86	0.00
06-09-95	0	330	7.80	7.80	0.00
06-16-95	0	170	7.87	7.87	0.00
06-23-95	0	300	7.99	7.99	0.00
06-30-95	0	300	7.88	7.88	0.00
07-07-95	0	280	7.82	7.82	0.00
07-14-95	0	290	7.86	7.86	0.00
07-21-95	0	540	7.90	7.90	0.00
07-28-95	0	500	7.92	7.92	0.00
08-04-95	0	480	7.86	7.86	0.00
08-11-95	0	530	7.88	7.88	0.00
08-18-95	0	520	7.86	7.86	0.00
08-25-95	0	500	7.90	7.90	0.00
09-05-95	0	310	8.15	8.15	0.00
09-12-95	0	400	8.10	8.10	0.00
09-19-95	0	390	8.20	8.20	0.00
09-26-95	0	380	8.25	8.25	0.00
10-03-95	0	385	8.15	8.15	0.00
10-10-95	0	230	8.42	8.42	0.00
10-17-95	0	240	8.39	8.39	0.00
10-24-95	0	250	8.40	8.40	0.00
10-31-95	0	255	8.44	8.44	0.00
11-07-95	0	260	8.42	8.42	0.00
11-14-95	0	400	8.43	8.43	0.00
11-21-95	0	420	8.48	8.48	0.00
11-28-95	0	480	8.50	8.50	0.00
12-05-95	0	400	8.55	8.55	0.00
12-15-95	0	550	8.40	8.40	0.00
12-22-95	0	490	8.36	8.36	0.00
12-29-95	0	570	7.85	7.85	0.00
01-05-96	0	560	7.82	7.82	0.00
01-12-96	0	480	7.52	7.52	0.00
01-19-96	0	460	7.54	7.54	0.00
01-26-96	0	450	7 53	7 53	0 00
02-01-96	400	1000	7 03	7 12	0 09
02-09-96	275	480	7.34	7 36	0.02
02-16-96	75	400	7 35	7 37	0.02
02-23-96	100	360	7 33	7 36	0 03
03-01-96	100	350	7 32	7 34	0 02
03-08-96	90	360	7 34	7 36	0 02
03-15-96	95	355	7 35	7 37	0 02
03-22-96	90	360	7 33	7 35	0 02
03-29-96	80	350	7 34	7 36	0 02
04-05-96	90	355	7 44	7 47	0 03
04-12-96	70	360	7.48	7 50	0 02

Product Recovery Observations

Sampling 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)
04-19-96	75	350	7.58	7.60	0.02
04-26-96	60	500	7.74	7.75	0.01
05-03-96	50	460	7.75	7.76	0.01
05-10-96	0	100	7.76	7.76	0
05-17-96	0	480	7.78	7.78	0
05-24-96	0	490	7.90	7.90	0
05-31-96	10	495	7.60	7.60	0
06-08-96	0	490	7.72	7.72	0
06-14-96	10	490	7.72	7.72	0
06-21-96	0	480	7.74	7.74	0
06-28-96	0	490	7.76	7.76	0
07-05-96	0	485	7.75	7.75	0
07-12-96	0	495	7.76	7.76	0
07-19-96	10	400	7.90	7.90	0
07-26-96	0	425	7.85	7.85	0
08-02-96	0	420	7.90	7.90	0
08-16-96	0	430	7.82	7.82	0
Total to Date	7,382				

3rd Q