

**MONITORING WELL INSTALLATION REPORT
(MOP OIL/DIESEL FUEL UST INVESTIGATION)**


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

June 95

**PREPARED FOR
ARAMARK UNIFORM SERVICES, INC.
SCHAUMBURG, ILLINOIS**

**PREPARED BY
RMT, INC.
MARINA DEL REY, CA**

JUNE 1995



Kevin Bate
Project Engineer



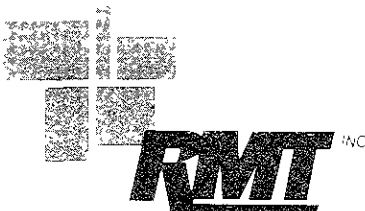
James W. Van Nortwick, Jr., Ph.D., P.E.
Project Manager

RMT, INC. — LOS ANGELES

4640 ADMIRALTY WAY SUITE 301

MARINA DEL REY CA 90292-6621

310/578-1241 310/821-3280 FAX



95 JUN 14 AM 9:55

June 13, 1995

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

**RE: MONITORING WELL INSTALLATION REPORT
(Mop Oil/Diesel Fuel UST Investigation)
ARAMARK Uniform Services, Inc.
330 Chestnut Street, Oakland, California**

Dear Ms. Eberle:

This letter transmits the results of the soil sampling and monitoring well installation activities conducted on May 5, 1995, at the referenced facility.

As you may note, the presence of petroleum hydrocarbons was not identified in the soil samples collected from soil borings located in the vicinity of the former mop oil and diesel fuel underground storage tanks. In addition, although the results of the chemical analyses performed on groundwater samples collected from the newly installed monitoring wells identified the presence of petroleum hydrocarbons, concentrations are generally less than 1-mg/L. Based on these results, and the fact that there is no risk-based criteria or California promulgated clean-up concentration level (MCL) for TPH in groundwater, further investigation and/or remedial action is not warranted.

If you have any questions regarding this report, please feel free to contact me at (310) 578-1241, or Bob Robbins at (608) 592-3222.

Sincerely,


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

enc: Monitoring Well Installation Report

cc: Robert J. Robbins, C.P.G.
Phillip J. Krejci



RMT, Inc. — LOS ANGELES
4640 ADMIRALTY WAY SUITE 301
MARINA DEL REY, CA 90292-6621
310/578-1241 310/821-3280 FAX
2013 10 ARAMARK UST OAKLAND UST-SS rpt

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1.	INTRODUCTION	1
1.1	Background	1
1.2	Purpose and Scope	1
2.	METHODS AND PROCEDURES	3
2.1	Soil Boring and Soil Sampling Methods	3
2.2	Monitoring Well Installation	3
2.3	Monitoring Well Development	4
2.4	Static Water Level Measurements	4
2.5	Monitoring Well Purging and Sampling	4
2.6	Equipment Decontamination	5
2.7	Investigation Derived Wastes	5
3.	FINDINGS AND RECOMMENDATIONS	6
3.1	Soil Quality	6
3.2	Groundwater Flow Direction	6
3.3	Groundwater Quality	8
3.4	Summary and Recommendations	9

List of Tables

Table 1	Chemical Analyses of Soil	6
Table 2	Static Water Level Measurements (May 5, 1995)	8
Table 3	Chemical Analyses of Groundwater	8

List of Figures

Figure 1	Site Plan	2
Figure 2	Water Table Map - May 1995	7

List of Appendices

Appendix A	Soil Boring Logs
Appendix B	Groundwater Sample Collection Data
Appendix C	Waste Disposal Manifests
Appendix D	Laboratory Report

Section 1
INTRODUCTION

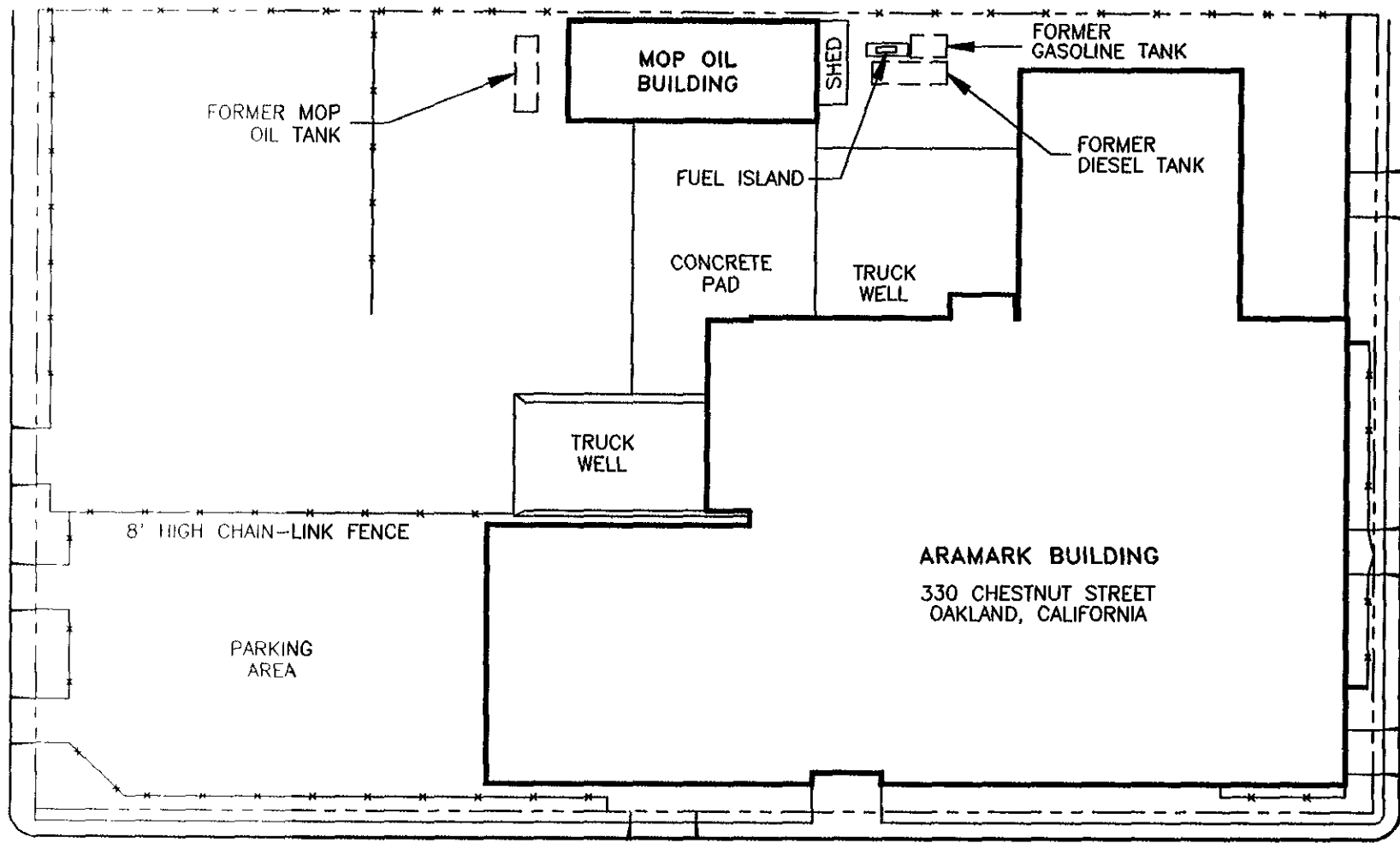
1.1 Background

ARAMARK Uniform Services, Inc., (ARAMARK), formerly Aratex Services, Inc., owns and operates an industrial laundry facility located at 330 Chestnut Street in Oakland, California. 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 Alameda County Health Care Service Agency, Department of Environmental Health (ACHCSA). 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. A site plan showing the location of the former underground storage tanks is presented in Figure 1.

1.2 Purpose and Scope


In March 1995, the ACHCSA requested that ARAMARK install groundwater monitoring wells in the vicinity of the former diesel fuel dispenser vaults and mop oil storage tank to determine the quality of the underlying groundwater. The purpose of this report is to summarize the methods and procedures used during the installation of the groundwater monitoring wells and the results of the soil and groundwater sampling activities conducted on May 5, 1995. The scope of work conducted during the soil and groundwater investigation included the following:

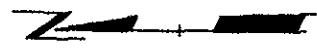
- The advancement of two soil borings and the installation of two monitoring wells,
- The purging and sampling of two groundwater monitoring wells, and
- The chemical analyses of soil and groundwater samples for the presence of BTEX and TPH using EPA SW-846 Method 8020 and Method 8015M.



CHESTNUT STREET

THIRD STREET

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 4840 Admiralty Way Suite 301 Marina Del Rey, CA 90292



0 60 120



APPROXIMATE SCALE IN FEET

Section 2 METHODS AND PROCEDURES

In response to the request from the ACHCSA, 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, in substantial accordance with the Monitoring Well Installation Workplan (March 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. A site plan showing the location of the monitoring wells is presented in Figure 2. The methods and procedures used to conduct the field activities are presented in the following sections.

2.1 Soil Boring and Soil Sampling Methods

Each soil boring was advanced to a depth of approximately 16-ft below ground surface (bgs) using a 10-inch diameter continuous-flight truck-mounted, hollow-stem auger equipment. Soil samples were collected at 5-foot intervals through-the-auger using a California modified split-spoon sampler. Each sample was described visually in the field by the on-site engineer for the following characteristics: soil name (based on the Unified Soil Classification System), grain size, color, and plasticity. Soil boring and monitoring well construction activities were performed by West Hazmat Drilling Corporation, of Newark, California, and a copy of the boring log is included in Appendix A. Soil samples selected for chemical analyses were stored on ice pending transport to a California-certified laboratory according to USEPA protocol, including chain-of-custody procedures.

2.2 Monitoring Well Installation

The monitoring wells were installed to a depth of approximately 16-ft bgs and constructed of flush-joint threaded 2-inch inside-diameter Schedule 40 PVC riser pipes, and factory-slotted Schedule 40 PVC screens with 0.010-inch slots. The monitoring well screen interval was extended from approximately 6 to 16-ft bgs. Washed silica sand was used as a filter pack around the monitoring well screen and was extended approximately 2-ft above the top of the screen to prevent infiltration of bentonite into the screened zone and a 3-ft thick bentonite pellet seal was placed on top of the sand to prevent the infiltration of the overlying cement/bentonite grout into the filter pack. Cement-bentonite grout was pumped through a tremie pipe to backfill the annular space to the ground surface. The monitoring well was fitted with a locking cap and a protective casing that was cemented into the grout below the ground surface.

The elevations of the top of the monitoring well casings (TOC) were determined by Kier and Wright Civil Engineers, of Pleasanton, California, a registered land surveyor. Elevations were referenced to the existing groundwater monitoring wells and were to the nearest 0.01-ft for the top of the monitoring well casing (TOC) and to the nearest 0.1-ft for ground surface elevations. Monitoring well construction details are shown in Appendix A.

2.3 Monitoring Well Development

Once monitoring well installation activities had been completed (but no sooner than 24 hours after well construction was complete), each monitoring well was developed until they produce relatively sediment-free water or until a minimum of ten static monitoring well (casing) volumes have been removed from the monitoring well. The pH, temperature, turbidity, and conductivity measured during development were recorded and are included in the monitoring well development logs presented in Appendix B.

2.4 Static Water Level Measurements

The depth to water was measured to the nearest 0.01-ft with an electric static water level indicator before purging and sample collection. The water level indicator tape was decontaminated between monitoring wells with non-phosphate soap and distilled water. The surveyed TOC elevations were then combined with the depth to water measurements to calculate the groundwater head for the monitoring well.

2.5 Monitoring Well Purging and Sampling

Once monitoring well development activities have been completed groundwater samples were collected from the newly installed monitoring wells. The static well volume was calculated for each monitoring well, and three monitoring well volumes of water were removed before sampling or until pH, temperature, and conductivity had stabilized to within 10 percent over at least two successive monitoring well volumes. The water was removed during the purging process in a manner that minimized agitation of the water. Temperature and conductivity were measured during the purging and sampling process, and were recorded as each successive monitoring well volume was removed. Sample pH was also measured in the field at the monitoring well using a standard pH meter and electrode that had been calibrated in the field to two pH buffers. A clean plastic liner was placed on the ground around the monitoring well to minimize contamination of sampling equipment with soil. After the 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. Groundwater samples were preserved using hydrochloric acid and stored on ice pending transport to a California-certified laboratory according to USEPA protocol,

including chain-of-custody procedures. One field blank sample, consisting of distilled water that had been subjected to the same field methods as the samples, was also collected.

2.6 Equipment Decontamination

All soil boring and soil sampling equipment was decontaminated between borings using power washing and steam cleaning. Down-hole drilling equipment and parts of the drilling rig likely to be in contact with contaminated soil, groundwater, and/or drilling fluids was decontaminated prior to initiation of the drilling program. Decontamination activities were performed using a high-pressure hot-water cleaner.

2.7 Investigation Derived Wastes

Soil cuttings and monitoring well development water, purge water, and decontamination fluids were placed in 55-gallon DOT approved drums and transported by Falcon Disposal Services, Inc., of Long Beach, California, to TPS Technologies, Inc., located in Adelanto, California, and Demenno Kerdoon, located in Compton, California, respectively. Waste disposal manifests are included in Appendix C.

Section 3
FINDINGS AND RECOMMENDATIONS

3.1 Soil Quality

Soil samples collected at depths of approximately 5 and 10-ft bgs in the vicinity of the former diesel fuel dispenser vaults were analyzed for the presence of total petroleum hydrocarbons as gasoline (TPH-G) and diesel (TPH-D), and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA SW-846 Methods 8015 and 8020, respectively. Soil samples collected at depths of approximately 5 and 10-ft bgs in the vicinity of the former mop oil storage tank were analyzed for the presence of total recoverable petroleum hydrocarbons (TRPH), and TPH-G, TPH-D, TPH as mineral spirits (TPH-MS), TPH as kerosene (TPH-K), and TPH as motor oil (TPH-MO), using a EPA SW-846 Methods 418.1 and 8015M, respectively.

The results of the chemical analyses did not identified the presence of petroleum hydrocarbons at concentrations above the method detection limits in soil samples collected from soil borings MW-4 and MW-5, however, the presence of TRPH was identified in both soil samples collected from soil boring MW-4 at a concentration of 14-mg/kg. The results of the chemical analyses are summarized in Table 1 and a copy of the laboratory report is included in Appendix D. All laboratory analyses were performed by Curtis & Tompkins, Ltd., of Berkeley, California.

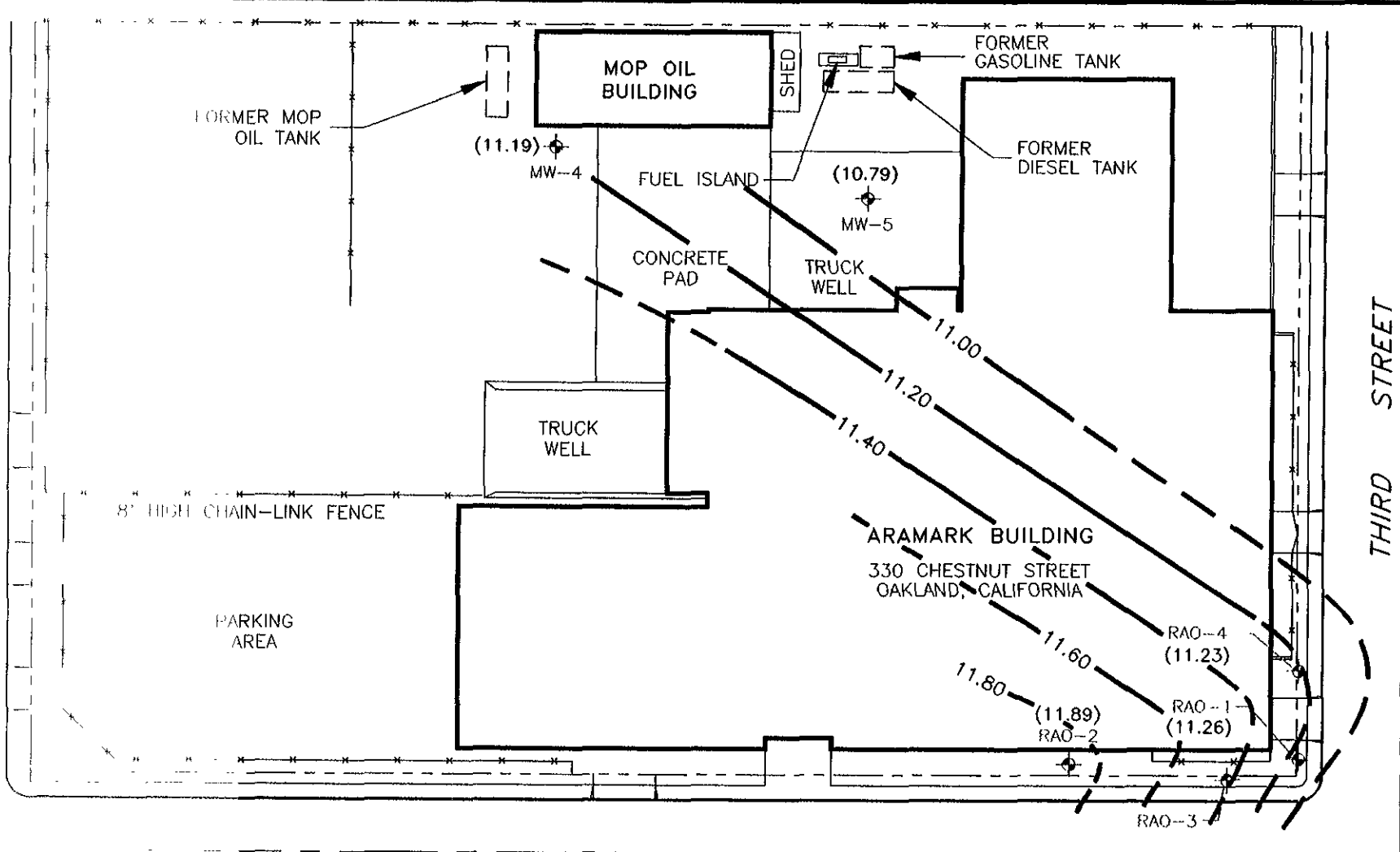
Table 1

Chemical Analyses of Soil



Soil Boring	Depth (ft-bgs)	Parameter (mg/kg)									
		Benzene	Toluene	Ethyl-Benzene	Xylenes	TRPH	TPH-G	TPH-MS	TPH-D	TPH-MO	TPH-K
MW-4	5	--	--	--	--	14	<10	<10	<40	<10	<10
	10	--	--	--	--	14	<10	<10	<40	<10	<10
MW-5	5	<5	<5	<5	<5	--	<10	<10	<40	<10	<10
	7.5	<5	<5	<5	<5	--	<10	<10	<40	<10	<10

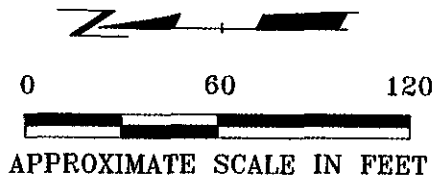
3.2 Groundwater Flow Direction

Static water level measurements and groundwater elevations obtained on May 5, 1995, are summarized in Table 2 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 0.008 (Note: static water level measurements obtained from monitoring wells RAO-1, RAO-2, and RAO-4 were used to help generate the water table map).



LEGEND:

-  GROUNDWATER MONITORING WELL
-  11.60 LINE OF EQUAL GROUNDWATER IN FEET ABOVE MEAN SEA-LEVEL DASHED WHERE INFERRED
- (11.89) GROUNDWATER ELEVATION (IN FEET ABOVE MSL)



CHESTNUT STREET

PROJECT: ARAMARK UNIFORM SERVICES
OAKLAND, CALIFORNIA

SHEET TITLE:
WATER TABLE MAP - MAY 5, 1995

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

Table 2
Static Water Level Measurements (May 5, 1995)

Monitoring Well Location	TOC Elevation (ft above MSL)	Depth to Water (ft below TOC)	Groundwater Elevation (ft above MSL)
RAO-1	19.08	7.82	11.26
RAO-2	19.57	7.64	11.93
RAO-4	19.30	8.07	11.23
MW-4	22.69	11.50	11.19
MW-5	21.09	10.30	10.79

TOC = Top of casing MSL = Mean sea level

3.3 Groundwater Quality

Groundwater samples collected from monitoring well MW-5 (former diesel fuel dispenser vault area) were analyzed for the presence of TPH-G/D, and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA SW-846 Methods 8015 and 8020, respectively. Groundwater samples collected from monitoring well MW-4 (former mop oil storage tank area) were analyzed for the presence of TRPH, and TPH-G, TPH-D, TPH-MS, TPH-K, and TPH-MO using a EPA SW-846 Methods 418.1 and 8015M, respectively. The results of the laboratory analyses are summarized in Table 3 and a copy of the laboratory report is included in Appendix D. All laboratory analyses were conducted by Curtis & Tompkins, Ltd., of Berkeley, California.

Table 3
Chemical Analyses of Groundwater

Sample Location	Parameter (µg/L)									
	Benzene	Toluene	Ethyl-Benzene	Xylenes	TRPH	TPH-G	TPH-MS	TPH-D	TPH-MO	TPH-K
MW-4	--	--	--	--	<1,000	--	260	240	<1,300	--
MW-5	<5	<5	<5	<5	--	<50	--	1,100	--	--
Blank	<5	<5	<5	<5	--	<50	200	<50	<1,300	--

3.4 Summary and Recommendations

The results of the chemical analyses performed on soil samples collected from soil borings located in the vicinity of the former mop oil and diesel fuel underground storage tanks did not identify the presence of petroleum hydrocarbons. In addition, although the results of the chemical analyses performed on groundwater samples collected from the newly installed monitoring wells identified the presence of total petroleum hydrocarbons, TPH-MS and TPH-D concentrations are generally less than 1-mg/L.

The RWQCB, San Francisco Bay Region has established guidelines for fuel underground storage tank investigations in their Tri-Regional Guidelines dated August 1990. In those guidelines, a 100 mg/kg TPH level is used for prioritizing sites for further action by the Board. Based on these findings, and the fact that there is no risk-based criteria or California promulgated clean-up concentration level (MCL) for TPH in groundwater further investigation and/or remedial action is not warranted.

↓
in soil

APPENDIX A
SOIL BORING LOGS



LOG OF TEST BORING

FN: 12013MW4

BORING NO.: MW-4

SHEET NO.: 1 OF 1

PROJECT NAME: ARAMARK OAKLAND

PROJECT NO.: 12013.13

LOCATION: OAKLAND (MOP OIL BUILDING)

INSTALLATION:

CONTRACTOR: WEST HAZMAT DRILLING

SURFACE ELEV.:

DRILLING METHOD: HOLLOW STEM AUGER

BOREHOLE DIA.: 8 INCHES

SAMPLING NOTES				VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS	GENERAL WELL CONSTRUCT.
INTERVAL		RECOVERY			
NO.	TYPE	BLOWS	DEPTH		
				Asphaltic concrete pavement	
				Coarse sub-angular, well graded gravel, sub grade (GW).	
MW4-5	SOIL	70	4/5/9	5	Well graded, fine grained sand (SW), dark brown, slightly moist, no staining, no odor.
MW4-7.5	SOIL	100	12/22/27		Well graded, fine sand (SW), light brown, slightly moist, no staining, no odor
MW4-10	SOIL	100	12/17/24	10	Same as above, wet.
				15	
				20	Total depth of boring = 17 feet bgs. Groundwater encountered at 13 feet.
				25	
				30	

GENERAL NOTES

DATE STARTED: 5/6/95
 DATE COMPLETED: 5/6/95
 RIG: MOBILE B-61
 CREW CHIEF: _____
 LOGGED: KEVIN BATE CHECKED: JIM VAN NORTWICK

WATER LEVEL OBSERVATIONS

WHILE DRILLING: 13 FEET
 AT COMPLETION: _____
 AFTER DRILLING: _____
 CAVE-IN DATE/TIME: _____ DEPTH: _____
 WATER DATE/TIME: _____ DEPTH: _____



LOG OF TEST BORING

FN: 12013MW5

BORING NO.: MW-5

SHEET NO.: 1 OF 1

PROJECT NAME: ARAMARK OAKLAND

PROJECT NO.: 12013.13

LOCATION: OAKLAND (MOP OIL BUILDING)

INSTALLATION:

CONTRACTOR: WEST HAZMAT DRILLING

SURFACE ELEV.:

DRILLING METHOD: HOLLOW STEM AUGER

BOREHOLE DIA.: 8 INCHES

SAMPLING NOTES				VISUAL CLASSIFICATION AND GENERAL OBSERVATIONS	GENERAL WELL CONSTRUCT.
INTERVAL		RECOVERY			
NO.	TYPE	BLOWS	DEPTH		
				Concrete pavement	
				Coarse sub-angular well graded gravel, sub grade (GW).	
MW5-5	SOIL	80	4/6/6	5	Well graded, fine grained sand (SW), dark brown, no staining, no odor.
MW5-7.5	SOIL	100	10/15/18		Same as above, moist.
MW5-10	SOIL	100	7/17/15	10	Same as above, wet.
				15	Total depth of boring = 15 feet bgs. Groundwater encountered at 10 feet.
				20	
				25	
				30	

GENERAL NOTES

DATE STARTED 5/6/95
 DATE COMPLETED 5/6/95
 RIG MOBILE B-51
 CREW CHIEF _____
 LOGGED KEVIN BATE CHECKED JIM VAN NORTWICK

WATER LEVEL OBSERVATIONS

WHILE DRILLING. 10 FEET
 AT COMPLETION _____
 AFTER DRILLING _____
 CAVE-IN DATE/TIME. _____ DEPTH _____
 WATER DATE/TIME _____ DEPTH _____

APPENDIX B
GROUNDWATER SAMPLE COLLECTION DATA

APPENDIX C
WASTE DISPOSAL MANIFESTS

Manifest

TPS Technologies Soil Recycling Non-Hazardous Soils

Manifest #

Date of Shipment:	Responsible for Payment:	Transporter Truck #:	Facility #:	Given by TPS:	Load #:
-			07	4932	11

Generator's Name and Billing Address: ARAMARK SERVICES, INC. 1327 WALDEN OFFICE SQUARE SCHAUMBURG, IL. 60173	Generator's Phone #: (630) 592-3222	Generator's US EPA ID No.:
	Person to Contact: ROBERT ROBBINS	
	FAX#: (630) 592-3223	Customer Account Number with TPS:

Consultant's Name and Billing Address: RMT, INC. 4640 ADMIRALTY WAY, STE 301 MARINA DEL REY, CA 90292	Consultant's Phone #: (310) 576-1241	Customer Account Number with TPS:
	Person to Contact: KEVIN BATE	
	FAX#: (310) 821-3280	

Generation Site (Transport from): (name & address) ARAMARK SERVICES, INC. 330 CHESTNUT STREET OAKLAND, CALIF.	Site Phone #: () -	BTEX Levels
	Person to Contact:	TPH Levels
	FAX#: () -	AVG. Levels

Designated Facility (Transport to): (name & address) TPS Technologies Inc. 12328 Hibiscus Avenue Adelanto, California 92301	Facility Phone #: (800) 862-8001	Facility Permit Numbers
	Person to Contact: Darren Bartlett	
	FAX#: (619) 246-8004	TPHC89

Transporter Name and Mailing Address: FALCON DISPOSAL 2531 E. 67TH STREET LONG BEACH, CA 90805	Transporter's Phone #: (310) 633-4400	Transporter's US EPA ID No.: CND0000048934
	Person to Contact: KEVIN SUTTON	Transporter's DOT No.: 427098
	FAX#: (310) 633-4444	Customer Account Number with TPS: 1000279

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>	3 Dm				
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>					

List any exception to items listed above:

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name:	Generator <input checked="" type="checkbox"/> Consultant <input type="checkbox"/>	Signature and date:	Month	Day	Year
Robert Robbins		[Signature]	11	1	95

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name:	Signature and date:	Month	Day	Year
Denise Barrica	[Signature]	10	06	95

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name:	Signature and date:
Darren R. Bartlett / Sandy Clements	

Generator and/or Consultant

Transporter

Recycling Facility

Please print or type.

TRANSPORTATION

EPA #CAD000048934
HAZ. WASTE #0210



FALCON DISPOSAL SERVICE, INC.

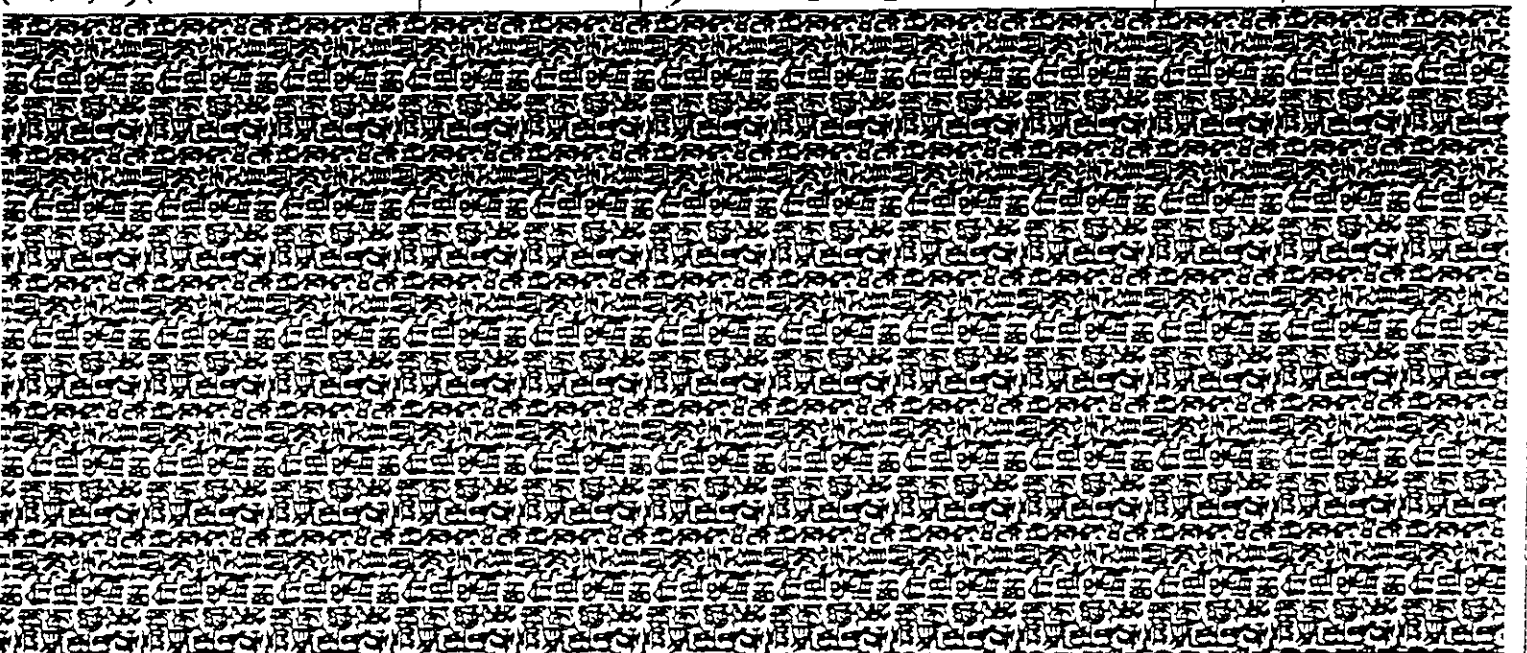
2531 EAST 67TH ST., LONG BEACH, CA 90805 • (310) 633-4400
1(800) 593-4285 • FAX: (310) 633-4444
A GREENFIELD ENVIRONMENTAL COMPANY

479403

①

CUSTOMER NAME <i>Hramark Services, Inc.</i>		REQUESTED BY <i>Tim or Kevin Bate</i>	
BILLING ADDRESS <i>1827 Waldon Office Square</i>		CUSTOMER PHONE <i>(310) 578-1241</i>	
<i>Schaumburg</i>	STATE <i>IL</i>	ZIP <i>60173</i>	PURCHASE ORDER #
DATE <i>5-6-95</i>	JOB TIME <i>1200</i>	JOB CONTACT <i>KEVIN BATE</i>	JOB CONTACT PHONE <i>(310) 777-9679</i>
GENERATOR NAME <i>Hramark Services Inc.</i>		EPA ID #	
ADDRESS <i>330 Chestnut Street / 43rd</i>		BOE #	
<i>Oakland</i>	STATE <i>CA</i>	ZIP	BIN DROPPED
CT # / WASTE STREAM APPROVAL #	DISPOSAL FACILITY	APPT. TIME / DATE	BIN DROPPED
MANIFESTED BY	MANIFEST #	DISPOSAL BILLED TO	BIN IN DISPATCH
SERVICES REQUESTED <i>Remove 5 soil and possibly water drums</i>		BIN PICKED UP	
SERVICES PERFORMED <i>PICK UP 3:55 PM</i>		BIN OUT DISPATCH	
<i>MARK & LABEL</i>		BIN PICKED UP	

MARKS <i>Customer will supply signed manifests on site</i>		CLIENT INITIAL	
CUSTOMER SIGNATURE <i>[Signature]</i>		TOTAL HOURS	
DRIVER NAME <i>ENKIS BARICKA</i>	EMP. NO. <i>0577</i>	DRIVER SIGNATURE <i>[Signature]</i>	TRUCK TRAILER # <i>5481</i>



NO. 004658

NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

EPA I.D. NO.

NOT REQUIRED

NAME ARAMARK SERVICES, INC.

ADDRESS 1927 WALDEN OFFICE SQUARE/ SITE: 330 CHESTNUT

CITY, STATE, ZIP SCHAUMBURG, IL. 60173/ OAKLAND, CA

PHONE NO. 609 592-3222

CONTAINERS: No. 1 Dr VOLUME 55-gal WEIGHT _____

TYPE: TANK TRUCK DUMP TRUCK DRUMS CARTONS OTHER _____

WASTE DESCRIPTION			GENERATING PROCESS		
COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. <u>WATER</u>	_____	_____	5. _____	_____	_____
2. <u>TPH</u>	_____	_____	6. _____	_____	_____
3. _____	_____	_____	7. _____	_____	_____
4. _____	_____	_____	8. <u>JOB # TPHC89</u>	_____	_____

PROPERTIES: pH _____ SOLID LIQUID SLUDGE SLURRY OTHER _____

HANDLING INSTRUCTIONS: WEAR APPROPRIATE SAFETY GEAR WHEN HANDLING.

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

[Signature]
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TRANSPORTER

EPA I.D. NO.

CAD000048934

NAME FALCON DISPOSAL SERVICE, INC.

ADDRESS 2531 EAST 67TH STREET

CITY, STATE, ZIP LONG BEACH, CALIFORNIA 90805

SERVICE ORDER NO. _____

PHONE NO. (310) 633-4400

PICK UP DATE 5/6/95

TRUCK, UNIT, I.D. NO. 5451

DENNIS BARRICA
TYPED OR PRINTED FULL NAME & SIGNATURE DATE 5/6/95

TSD FACILITY

EPA I.D. NO.

CAT000013352

NAME DEMENNO KERDOON

ADDRESS 2000 N. ALAMEDA STREET

CITY, STATE, ZIP COMPTON, CA 90222

DISPOSAL METHOD
 LANDFILL OTHER _____

PHONE NO. (310) 537-7100

[Signature]
TYPED OR PRINTED FULL NAME & SIGNATURE DATE 5/11/95

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	
C/O		RT/CO	HWDF	NONE

DISCREPANCY

APPENDIX D
LABORATORY REPORT



Since 1878

Curtis & Tompkins, Ltd. General Analytical Laboratories

2495 Da Vinci, Irvine CA 92714

Phone 714-252-9700

Fax 714-252-9701

LABORATORY REPORT

Laboratory Number: 211754

Page 1 of 5

Date Received: 05/08/95

Date Reported: 05/18/95

Issued To: **RMT, INC.**
4640 ADMIRALTY WAY
SUITE 301
MARINA DEL REY, CA 90292-6621
ATTN: KEVIN BATE

Project I.D.: 12013.13

Location: **ARAMARK - OAKLAND**

Report On: **FOUR SOIL SAMPLES ANALYZED AS SPECIFIED ON ATTACHED CHAIN OF CUSTODY**

This report certifies that the samples were received in good condition (i.e. intact, chilled, and/or preserved appropriately) and that strict chain of custody procedures were adhered to at all times. It further certifies that the methods of analysis used are in fact those listed within this report and that Curtis & Tompkins, Ltd. has current certification for all work performed in the laboratory. Exceptions to this statement are specifically noted in the analytical report or on the attached chain of custody.

Reviewed By

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS



Laboratory I.D.: 211754
 Client: RMT, INC.

Matrix: Solid
 Method: EPA 418.1

Page
 2 of 5

Laboratory I.D.	Sample I.D.	Result (mg/kg)	Analytical Notes	Date Analyzed	QC Batch	Analytical Notes									
1	MW4-5 ✓	14		05/12/95	7171										
2	MW4-10	14		05/12/95	7171										
Method Blank		ND		05/12/95	7171										
Detection Limit:		10													
						<table border="1"> <thead> <tr> <th></th> <th>Sample</th> <th>Method Blank</th> </tr> </thead> <tbody> <tr> <td>Date Sampled:</td> <td>05/05/95</td> <td>N/A</td> </tr> <tr> <td>Date Extracted:</td> <td>05/10/95</td> <td>05/10/95</td> </tr> </tbody> </table>		Sample	Method Blank	Date Sampled:	05/05/95	N/A	Date Extracted:	05/10/95	05/10/95
	Sample	Method Blank													
Date Sampled:	05/05/95	N/A													
Date Extracted:	05/10/95	05/10/95													

Quality Control Data Summary

Method Blank, Laboratory Control Sample, Matrix Spike/Matrix Spike Duplicate Data

Batch I.D.	Sample I.D.	Spike Amount (mg/kg)	LCS %Rec	QC Limits	Spike %Rec.	Spk Dup %Rec	QC Limits	RPD	QC Limits
7171	211741-012	100	103	80-120	98	98	75-125	<1	30

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS



Laboratory I.D.: 211754
 Client: RMT, INC.

Matrix: Solid
 Method: DHS LUFT Procedure (Modified EPA 8015)
 Extraction: DHS LUFT Procedure

Page
 3 of 5

Laboratory I.D.	Sample I.D.	Mineral Spirits (mg/kg)	Gasoline (mg/kg)	Kerosene (mg/kg)	Diesel (mg/kg)	Motor Oil Range (mg/kg)	Date Run	Surr. % Rec. BRO/HEX	QC Batch	Analytical Notes
1	MW4-5	ND	ND	ND	ND	ND	05/12/95	109 / 108	7190	a - Estimated reporting limit.
2	MW4-10	ND	ND	ND	ND	ND	05/12/95	104 / 101	7190	
ethod Blank		ND	ND	ND	ND	ND	05/12/95	78 / 91	7190	
Detection Limit:		10 a	10	10	10	40				
Surrogates Used: BRO = Bromobenzene HEX = Hexacosane										Date Sampled: 05/05/95 Date Extracted: 05/11/95

Quality Control Data Summary

Method Blank, Laboratory Control Sample, Matrix Spike/Matrix Spike Duplicate Data

Batch I.D.	Sample I.D.	Spike Amount (mg/kg)	LCS %Rec	QC Limits	Spike %Rec	Spk Dup %Rec	QC Limits	RPD	QC Limits
7190	PMS 838S	100	109	68 - 112	103	115	59 - 120	11	30

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE



Laboratory I.D.: 211754
 Client: RMT, INC.

Matrix: Solid
 Method: DHS LUFT Procedure (Modified EPA 8015)
 Extraction: EPA 5030 Purge & Trap

Page
 4 of 5

Laboratory I.D.	Sample I.D.	Result (ug/Kg)	Analytical Notes	Date Run	Surr. % Rec.	QC Batch	Analytical Notes
3	MW5-5	ND		05/15/95	102	7218	
4	MW5-7.5	ND		05/15/95	106	7218	
Method Blank		ND		05/15/95	102	7218	
Detection Limit:		500					
Surrogate Used: a,a,a-Trifluorotoluene (30-172)							

Quality Control Data Summary

Method Blank, Laboratory Control Sample, Matrix Spike/Matrix Spike Duplicate Data

Batch I.D.	Sample I.D.	Spike Amount (ug/kg)	LCS %Rec.	QC Limits	Spike %Rec.	Spk Dup %Rec.	QC Limits	RPD	QC Limits
7218	211798-002	1,000	94	80-120	92	95	56-131	3	21

BENZENE, TOLUENE, ETHYL BENZENE, & TOTAL XYLENES



Laboratory I.D.: 211754
 Client: RMT, INC.

Matrix: Solid
 Method: EPA 8020
 Extraction: EPA 5030 Purge & Trap

Page
 5 of 5

Laboratory I.D.	Sample I.D.	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Total Xylenes (ug/kg)	Date Run	Surr. % Rec.	QC Batch	Analytical Notes
3	MW5-5	ND	ND	ND	ND	05/15/95	101	7218	
4	MW5-7.5	ND	ND	ND	ND	05/15/95	105	7218	
Method Blank		ND	ND	ND	ND	05/15/95	101	7218	
Detection Limit:		5	5	5	5				
Surrogate Used: a,a,a-Trifluorotoluene									

Quality Control Data Summary

Laboratory Control Sample, Matrix Spike/Matrix Spike Duplicate Data

Batch I.D.	Sample I.D.	Spike Amount (ug/kg)	LCS %Rec	QC Limits	Spike %Rec	Spk Dup %Rec.	QC Limits	RPD	QC Limits
7218	211798-001	20	88	80-120	104	96	76-137	8	16



ABBREVIATIONS

BS/BSD - Blank Spike / Blank Spike Duplicate

BTEX - Benzene, Toluene, Ethyl Benzene, and Total Xylenes.

CCR - California Code of Regulations.

DHS - California Department of Health Services.

EPA - United States Environmental Protection Agency.

LCS - Laboratory Control Spike

LUFT - Leaking Underground Fuel Tank.

MDL - Method Detection Limit

NA - Not Applicable.

NC - Not Calculable

ND - Not Detected at or above the defined detection limit.

PQL - Practical Quantitation Limit

RPD - Relative percent difference.

STLC - Soluble Threshold Limit Concentration.

Surr. - Surrogates.

TCLP - Toxicity Characteristic Leaching Procedure.

TEH - Total Extractable Petroleum Hydrocarbons.

Title 26 - Title 26 of the California Code of Regulations (CCR).

TR~ - Trace, estimated value .

TTLC - Total Threshold Limit Concentration.

TVH - Total Volatile Hydrocarbons.

WET - Waste Extraction Test.

UNITS

cm ³ - Cubic centimeter	1umhos/cm - uS/cm - Micro Siemens/centimeter
Kg - kilogram.	ppb - Parts per billion
L - Liter.	ppm - Parts per million.
mg - Milligrams.	ug - Micrograms.
M3 - Cubic meter.	ppbv - Parts per billion per unit volume



Madison, WI 53717
744 Heartland Trail
Phone (608) 831-4444
FAX (608) 831-7530

Fox Valley, WI
Columbus, OH
Milwaukee, WI

Nashville, TN
Greenville, SC

Augusta, GA
Lansing, MI

Chicago, IL
Los Angeles, CA

Cincinnati, OH
Madison, WI

LABORATORIES

F-268 (R2/92)
(Use Black Ink Only)

CHAIN OF CUSTODY RECORD

No 052023

Bottles Prepared by _____ Date/Time _____

Project No 12013.13 Client ARAMARK - OAKLAND

Lab No	Yr	Date	Time	Sample Station ID	Total Number Of Containers	Container Inventory						Filtered (Yes/No) Preserved (Code)	Comments:	
						418.1-TRPH	80ISM-TPH *	80ISM/8020 (TPH-8/8020)	MATRIX					
	95	5/5		MW4-5	1	X	X	X	X	X	X	X	SOIL	211754
		5/5		MW4-10	1	X	X	X	X	X	X	X	SOIL	
		5/5		MW5-5	1	X	X	X	X	X	X	X	SOIL	
		5/5		MW5-7.5	1	X	X	X	X	X	X	X	SOIL	
													* TPH AS GASOLINE, DIESEL, MINERAL SPIRITS, KEROSENE, & MOTOR OIL	
													RESULTS TO: KEVIN BATE FAX 310-821-3280	
													NORMAL TAT	

- Code: A - None
- B - HNO3
- C - H₂SO4
- D - NaOH
- E - HCl
- F - _____

SAMPLER Relinquished by (Sig) ① <i>T. Plunice</i>	Date/Time 5/8/95	Received by (Sig) ② <i>John Hette</i>	Shipper Name & # 5890	Date/Time 5-8-95
	Date/Time	Received by (Sig) ④	Shipper Name & #	Date/Time
	Date/Time	Received by (Sig) ⑥	Shipper Name & #	Date/Time

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)

Receipt Temp 4°C Receipt pH _____

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



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

RMT, Inc.
4640 Admiralty Way
Suite 301
Marina Del Rey, CA 90292

Date: 18-MAY-95
Lab Job Number: 120987
Project ID: 12013.13
Location: Aramark Oakland

Reviewed by: _____

Reviewed by: _____

This package may be reproduced only in its entirety.



LABORATORY NUMBER: 120987
 CLIENT: RMT, INC.
 PROJECT ID: 12013.13
 LOCATION: ARAMARK OAKLAND

DATE SAMPLED: 05/11/95
 DATE RECEIVED: 05/11/95
 DATE ANALYZED: 05/12/95
 DATE REPORTED: 05/18/95
 BATCH NO: 20581

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions
 TVH by California DOHS Method/LUFT Manual October 1989
 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	TOTAL XYLENES (ug/L)
120987-001	MW5.595	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
120987-003	SPLBLK.595	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
METHOD BLANK	N/A	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY: BS/BSD

=====
 RPD, % 2
 RECOVERY, % 104
 =====



LABORATORY NUMBER: 120987
 CLIENT: RMT, INC.
 PROJECT ID: 12013.13
 LOCATION: ARAMARK OAKLAND

DATE SAMPLED: 05/11/95
 DATE RECEIVED: 05/11/95
 DATE EXTRACTED: 05/12/95
 DATE ANALYZED: 05/16/95
 DATE REPORTED: 05/18/95
 BATCH NO: 20588

Extractable Petroleum Hydrocarbons in Aqueous Solutions
 California DOHS Method
 LUFT Manual October 1989

LAB ID	CLIENT ID	MINERAL SPIRITS (ug/L)	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	MOTOR OIL RANGE (ug/L)
120987-001	MW5.595	N/A	N/A	1,100	N/A
120987-002	MW4.595	260*	**	240*	ND(1300)
METHOD BLANK		200*	**	ND(50)	ND(1300)

ND = Not detected at or above reporting limit. Reporting limit indicated in parentheses.

* Sample chromatogram does not resemble hydrocarbon standard.

** Kerosene range not reported due to overlap of hydrocarbon ranges.

QA/QC SUMMARY: BS/BSD

RPD, % 1
 RECOVERY, % 90



LABORATORY NUMBER: 120897
 CLIENT: RMT, INC.
 PROJECT ID: 12013.13
 LOCATION: ARAMARK OAKLAND

DATE SAMPLED: 05/11/95
 DATE RECEIVED: 05/11/95
 DATE EXTRACTED: 05/16/95
 DATE ANALYZED: 05/16/95
 DATE REPORTED: 05/18/95

EPA 418.1: Total Recoverable Petroleum Hydrocarbons by IR

LAB ID	CLIENT ID	RESULT (mg/L)	REPORTING LIMIT (mg/L)
120987-002	MW4.595	ND	1
METHOD BLANK		ND	1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY: BS/BSD

RPD, % 6
 RECOVERY, % 103

