GROUNDWATER MONITORING AND PRODUCT RECOVERY PROGRESS REPORT

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

Dec 95

PREPARED FOR

ARAMARK UNIFORM SERVICES, INC.
SCHAUMBURG, ILLINOIS

PREPARED BY

RMT, INC.
MARINA DEL REY, CA

DECEMBER 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

December 22, 1995

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 November 1995, at the referenced facility. In response to your letter dated November 6, 1995, the product recovery well (RAO-3) will be sampled during the first quarter of 1996. In the interim and with your approval, we have been adding approximately 15-gallons of a dilute solution (5%) of hydrogen peroxide (H_2O_2) to the product recovery well each month to remove residual product that may be present in the product recovery well screen and surrounding sand pack.

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

encl: Quarterly Groundwater Monitoring Report

cc: Samuel J. Niemann, The Wetlands Company

95 DEC 26 AM 9:19

RMT, INC.

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

TABLE OF CONTENTS

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 ADEHD 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 (BTEX) 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 6,202-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 BTEX 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 ADEHD. 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

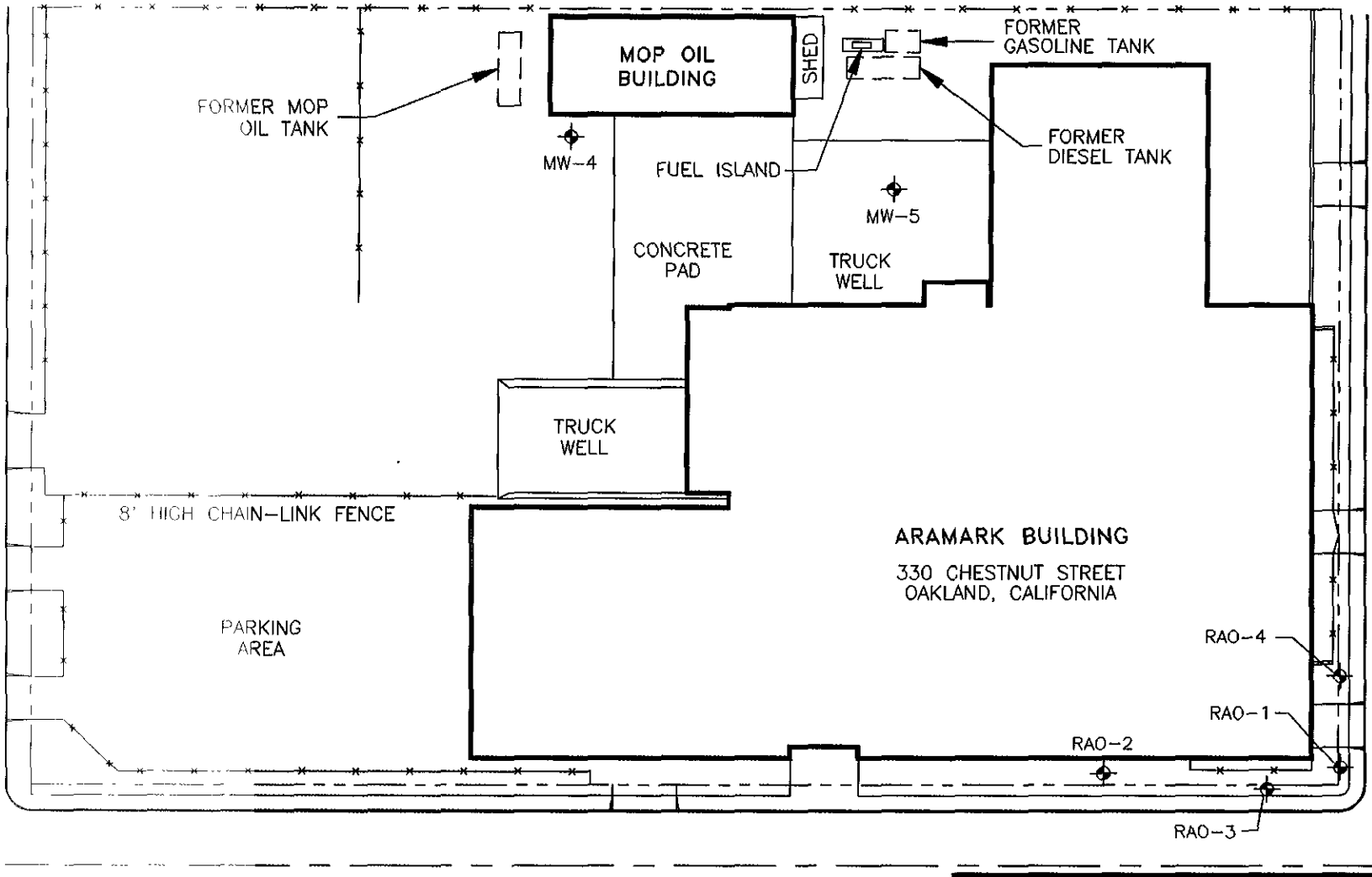
diesel fuel dispenser vault excavations, the former mop oil tank excavation, and in the vicinity of the eastern section of the loading dock identified the presence of petroleum hydrocarbons.

In response to the request from the ADEHD, 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). 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. 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 November 14, 1995, at the ARAMARK facility. The scope of work conducted during the groundwater investigation included the following:

- The purging and sampling of four groundwater monitoring wells, and
- The chemical analyses of groundwater samples for the presence of BTEX and TPH-D using EPA SW-846 Method 8020 and Method 8015M.
- The addition of approximately 15-gallons of a dilute solution (5%) of hydrogen peroxide (H_2O_2) to product recovery well RAO-3.



LEGEND:

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.
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 November 14, 1995, and included obtaining static water level measurements and groundwater samples from monitoring wells RAO-1, RAO-2, RAO-4, MW-4, and MW-5. Groundwater samples were not collected from monitoring well RAO-3 which is currently being utilized for product recovery.

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.

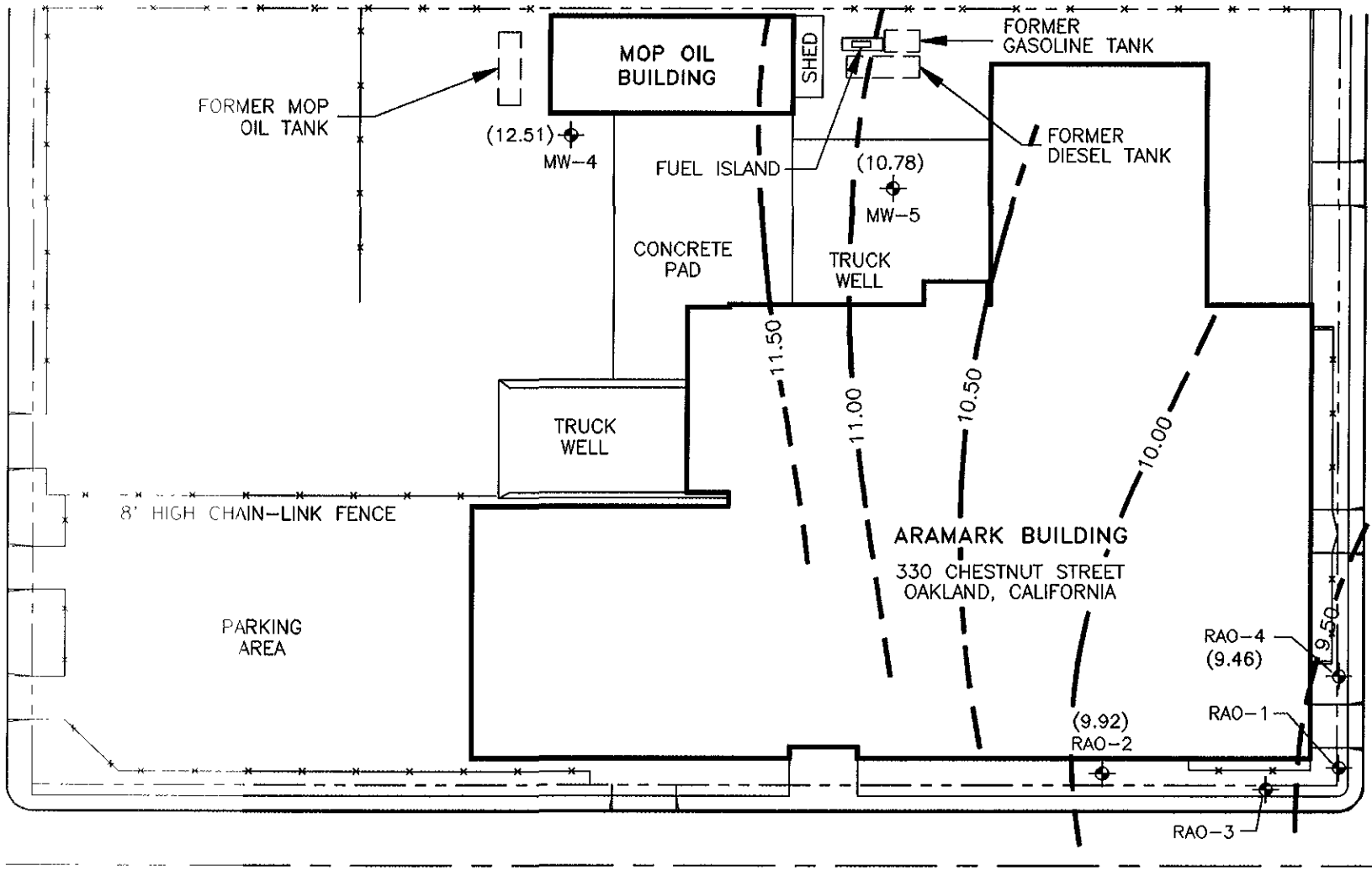
2.2 Groundwater Sample Collection

Groundwater samples were collected from monitoring wells RAO-2, RAO-4, MW-4, and MW-5. 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 and groundwater elevations obtained on November 14, 1995, 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 0.01 to 0.02-ft/ft.



LEGEND:

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

0 60 120

APPROXIMATE SCALE IN FEET

PROJECT:
ARAMARK UNIFORM SERVICES
OAKLAND, CALIFORNIA

SHEET TITLE:
WATER TABLE MAP - NOVEMBER 14, 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.
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	Monitoring well was dry		
RAO-2	19.57	9.65	9.92
RAO-4	19.30	9.84	9.46
MW-4	22.69	10.18	12.51
MW-5	21.09	10.31	10.78

2.4 Chemical Analyses of Groundwater

Groundwater samples collected from monitoring wells RAO-2, RAO-3, MW-4, and MW-5 were analyzed for the presence of BTEX and TPH-D using EPA SW-846 Method 8020 and Method 8015M, respectively. The results of the laboratory analyses identified the presence of petroleum hydrocarbons within the typical diesel fuel range collected from groundwater monitoring wells RAO-2, RAO-4, MW-4, and MW-5. However, it should be noted that the presence of TPH-D has never been identified in groundwater samples collected from monitoring wells RAO-2 and RAO-4. In addition, the chromatagraph generated for each of the groundwater samples did not resemble the diesel hydrocarbon standard. Although the source of the petroleum hydrocarbons is not known at this time (most likely either sampling equipment, sample vials, or laboratory contamination), as a precaution, additional QA/QC samples and duplicate samples will be collected during the February 1996 sampling event. The results of the laboratory analyses are summarized in Table 2 (former 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 Curtis & Tompkins, Ltd., of Berkeley, California.

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. A copy of the waste disposal manifest for the second quarter sampling event (May 1995) is included in Appendix C.

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	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[a]
	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
RAO-4	11-14-95	<0.5	<0.5	<0.5	<0.5	800[a]
	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 Laboratory report indicates that the results of the chemical analyses do not resemble the diesel hydrocarbon standard. Chromatagraphs are included in the laboratory reports.

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-D
MW-4	11-14-95	<0.5	<0.5	<0.5	<0.5	1,100[a]
	08-02-95	--	--	--	--	180
	05-05-95	--	--	--	--	500
MW-5	11-14-95	<0.5	<0.5	<0.5	<0.5	2,100[a]
	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 Laboratory report indicates that the results of the chemical analyses do not resemble the diesel hydrocarbon standard. Chromatagraphs are included in the laboratory reports.

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 diesel fuel UST excavation area. 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. During the period from December 1992 through May 1995, approximately 6,202-mL of free-product was recovered, however, product recovery activities conducted in October, November, and December 1995, did not result in the recovery of any additional free product. A summary of the product recovery operations is presented in Appendix D.

In addition, approximately 15-gallons of a dilute solution (5%) of hydrogen peroxide (H_2O_2) was added to product recovery well RAO-3 to help remove the residual petroleum hydrocarbon buildup on the well screen and in the surrounding sand pack. In accordance with the ACEHD letter dated November 6, 1995, the product recovery well (RAO-3) will be sampled during the first quarter of 1996.

APPENDIX A

GROUNDWATER SAMPLE COLLECTION DATA

GROUNDWATER SAMPLING INFORMATION

Project Name:	ARAMARK - OAKLAND
Project Number:	
Sampling Date:	11/14/95

Monitoring Well Location	Purge Number	Purge Volume (gal)	Temp (°C)	pH	Turbidity (NTU)	DTW (ft-bgs)	Cond (µS/cm) x1000
RAO-1	1	DRY	WELL				
	2						
	3						
RAO-2	1	1	16.0	7.7	186	9.65	1.43
	2	5	15.5	7.5	184		1.39
	3	10	15.5	7.6	198		1.38
RAO-4	1	1	15.0	6.9	44.8	9.84	1.34
	2	5	14.7	6.9	24.6		1.24
	3	10	15.2	7.1	36.6		1.21
MW-4	1	1	15.1	6.9	16.6	10.18	1.85
	2	5					
	3	10	DRY AT 1 gallon				
MW-5	1	1	15.6	7.5	575	10.31	2.55
	2	5	15.5	7.3	490		2.48
	3	10	DRY	AT 6	gallons		
	1						
	2						
	3						

APPENDIX B

LABORATORY REPORT

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: 29-NOV-95
Lab Job Number: 123384
Project ID: N/A
Location: Aramark-Oakland

Reviewed by: Teresa K Morris

Reviewed by: Tracy Babcock

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 123384
CLIENT: RMT, INC.
LOCATION: ARAMARK-OAKLAND

DATE SAMPLED: 11/14/95
DATE RECEIVED: 11/14/95
DATE EXTRACTED: 11/20/95
DATE ANALYZED: 11/24,25/95
DATE REPORTED: 11/29/95
BATCH NO: 9649

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

LAB ID	CLIENT ID	STODDARD RANGE (ug/L)	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)
123384-001	RAO-2	ND(500)	ND(500)	870*
123384-002	RAO-4	ND(500)	ND(500)	800*
123384-003	MW-4	ND(500)	ND(500)	2,100*
123384-004	MW-5	ND(500)	ND(500)	1,100*
METHOD BLANK	N/A	ND(500)	ND(500)	ND(500)

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

* Does not resemble Diesel Hydrocarbon standard.

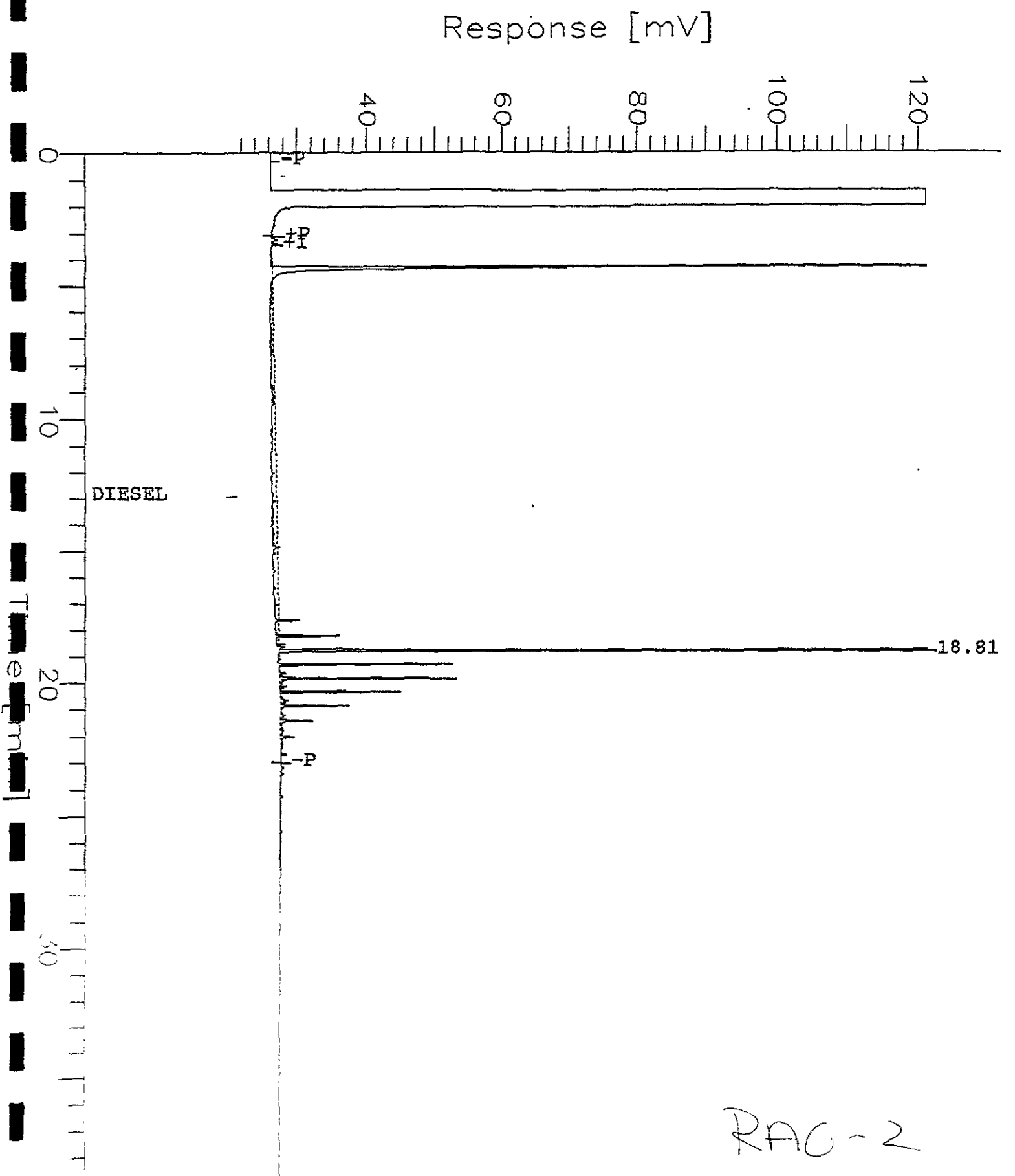
QA/QC SUMMARY: BS/BSD

RPD, %	6
RECOVERY, %	93

TEH Chromatogram

Sample Name : 1000:5
FileName : C:\2700\DATA\K5QB010.RAW
Method : TEHJC.ins
Start Time : 0.00 min End Time : 40.99 min
Scale Factor: 1.0 Plot Offset: 21 mV

Sample #: 123384-001 Page 1 of 1
Date : 11/29/95 11:05 AM
Time of Injection: 11/28/95 12:59 AM
Low Point : 21.15 mV High Point : 121.15 mV
Plot Scale: 100.0 mV

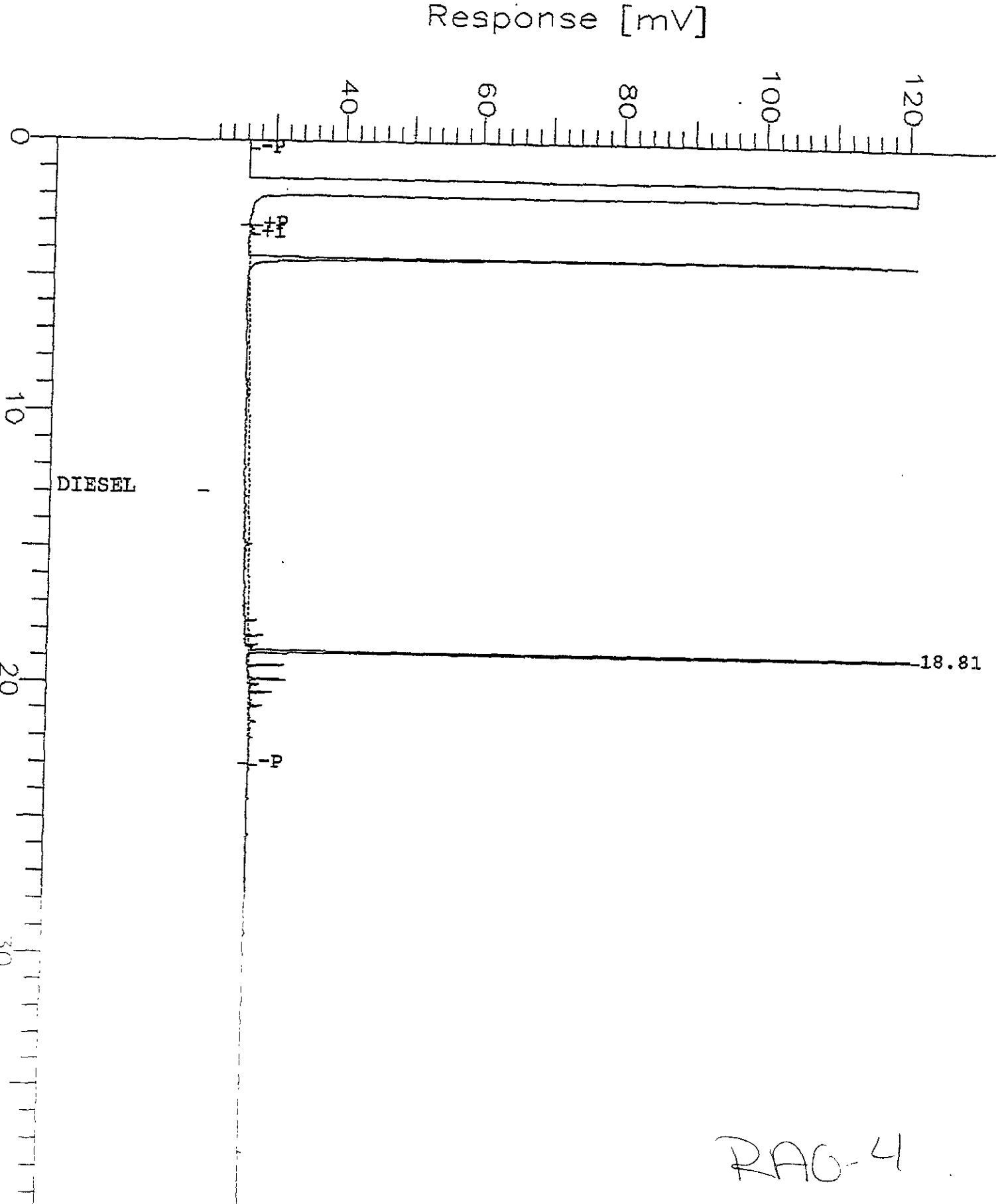


RAC-2

TEH Chromatogram

Sample Name : 1000:5
FileName : C:\2700\DATA\K5QB011.RAW
Method : TEHJC.ins
Start Time : 0.00 min End Time : 40.99 min
Scale Factor: 1.0 Plot Offset: 21 mV

Sample #: 123384-002 Page 1 of 1
Date : 11/29/95 11:05 AM
Time of Injection: 11/28/95 1:47 AM
Low Point : 21.17 mV High Point : 121.17 mV
Plot Scale: 100.0 mV

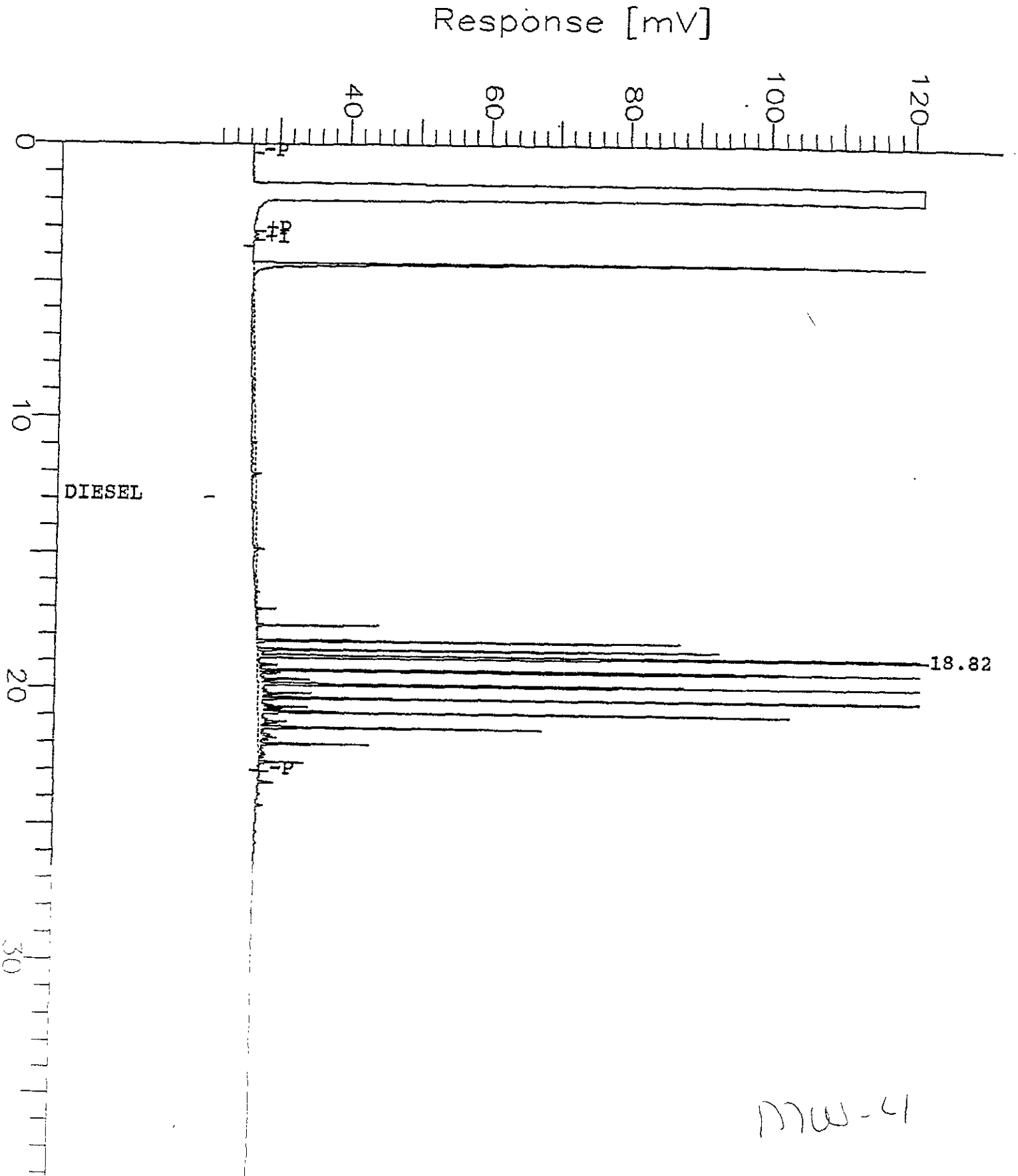


RAO-4

TEH Chromatogram

Sample Name : 870:5
FileName : C:\2700\DATA\K5QB012.RAW
Method : TEHJC.ins
Start Time : 0.00 min End Time : 40.99 min
Scale Factor: 1.0 Plot Offset: 21 mV

Sample #: 123384-003 Page 1 of 1
Date : 11/29/95 11:06 AM
Time of Injection: 11/28/95 2:35 AM
Low Point : 21.21 mV High Point : 121.21 mV
Plot Scale: 100.0 mV

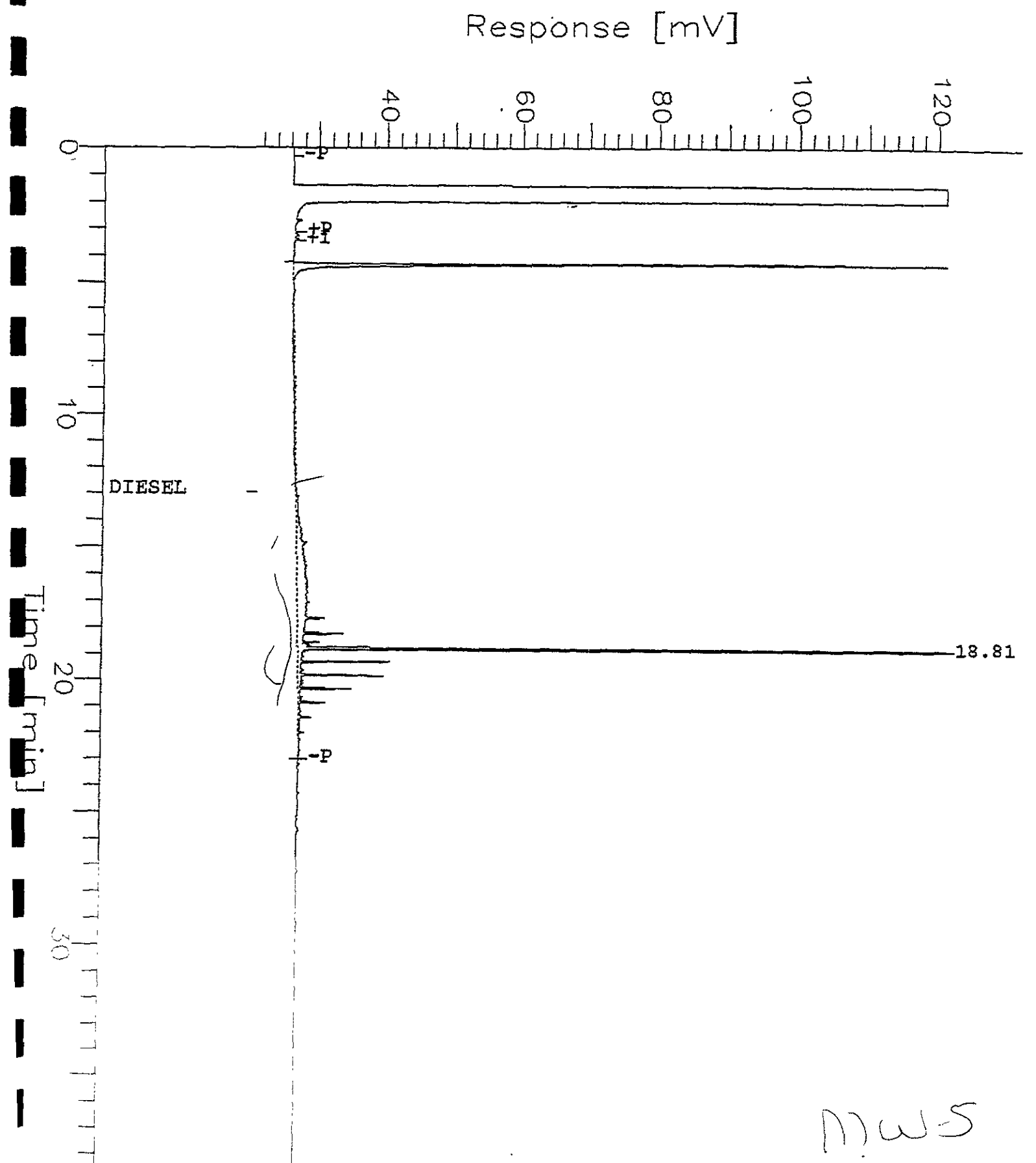


MW-4

TEH Chromatogram

Sample Name : 1000:5
FileName : C:\2700\DATA\K5QB013.RAW
Method : TEHJC.ins
Start Time : 0.00 min End Time : 40.99 min
Scale Factor: 1.0 Plot Offset: 21 mV

Sample #: 123384-004 Page 1 of 1
Date : 11/29/95 11:06 AM
Time of Injection: 11/28/95 3:23 AM
Low Point : 21.12 mV High Point : 121.12 mV
Plot Scale: 100.0 mV

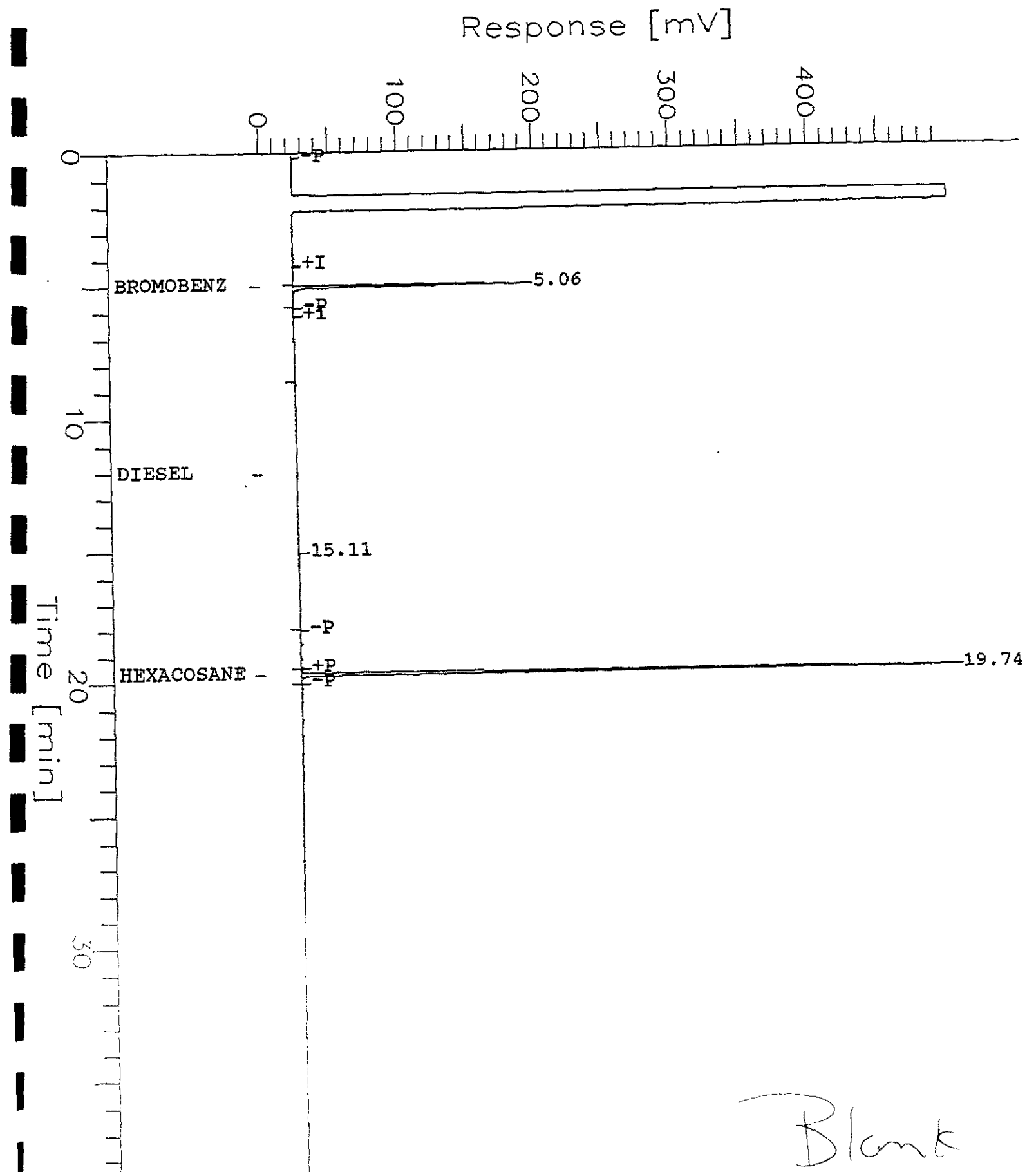


MW-5

TEH Chromatogram

Sample Name : BLK 11/20
FileName : c:\2700\data\K5NA013.raw
Method : TEHJC
Start Time : 0.00 min End Time : 40.99 min
Scale Factor: 0.0 Plot Offset: 0 mV

Sample #: QC45824 Page 1 of 1
Date : 11/27/95 10:54 AM
Time of Injection: 11/25/95 1:07 AM
Low Point : 0.00 mV High Point : 500.00 mV
Plot Scale: 500.0 mV

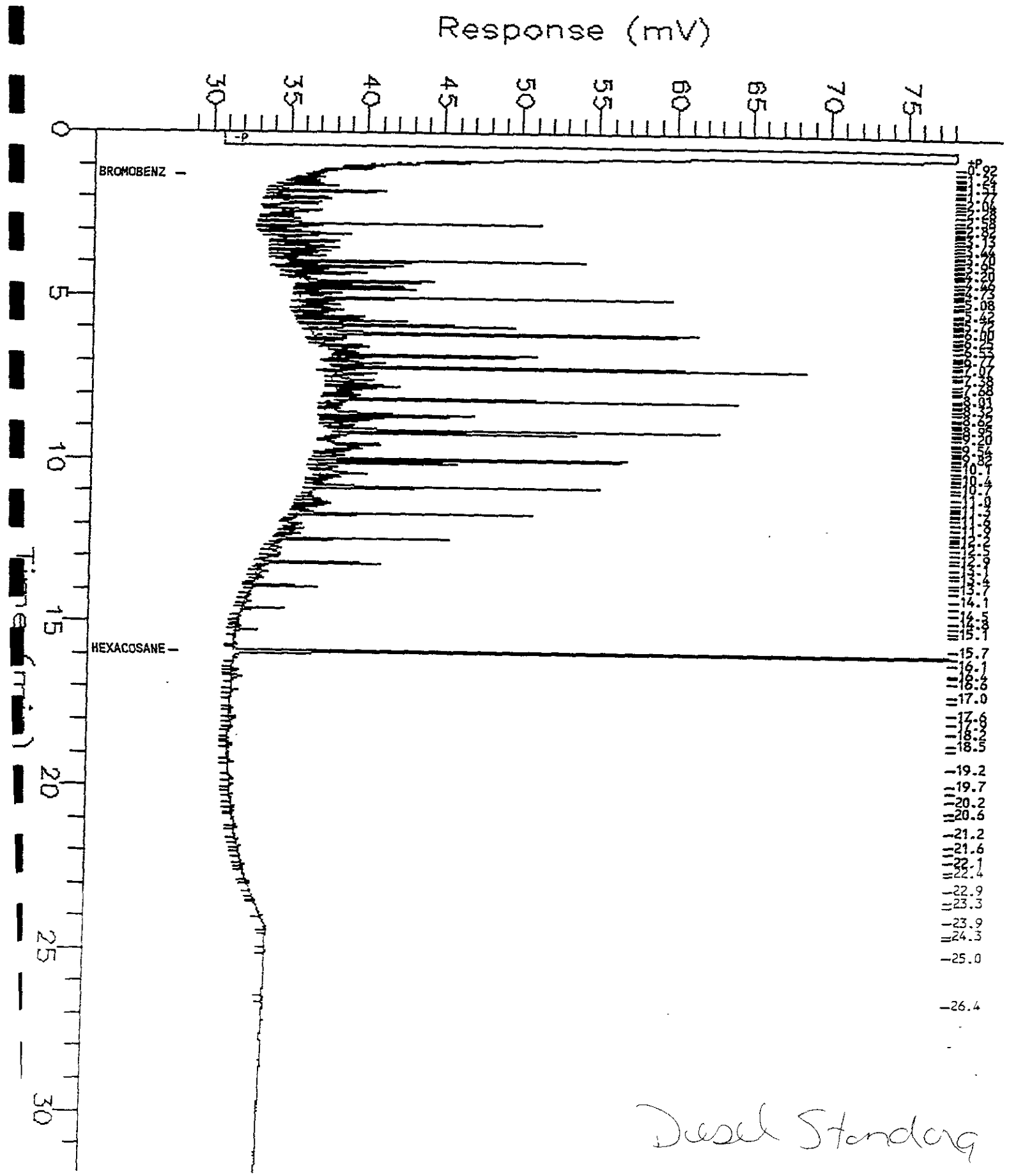


Blank

TEH Chromatogram - GC 13 Ch A

Sample Name : DIESEL 427.5MG/L
FileName : g:\gc13\cha\277A048.raw
Method : GC13DUAL.ins
Start Time : 0.00 min End Time : 31.92 min
Scale Factor: -1 Plot Offset: 28 mV

Sample #: 95WS1103A Page 1 of 1
Date : 10/5/95 10:44 PM
Time of Injection: 10/5/95 10:10 PM
Low Point : 28.13 mV High Point : 78.13 mV
Plot Scale: 50 mV



Diesel Standard

BTXE

Client: RMT, Inc.
Location: Aramark-Oakland

Analysis Method: BTXE
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
123384-001	RAO-2	24426	11/14/95	11/17/95	11/17/95	
123384-002	RAO-4	24426	11/14/95	11/17/95	11/17/95	
123384-003	MW-4	24426	11/14/95	11/17/95	11/17/95	
123384-004	MW-5	24426	11/14/95	11/17/95	11/17/95	

Analyte Diln Fac:	Units	123384-001 1	123384-002 1	123384-003 1	123384-004 1
Benzene	ug/L	<0.5	<0.5	<0.5	<0.5
Toluene	ug/L	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	ug/L	<0.5	<0.5	<0.5	<0.5
m,p-Xylenes	ug/L	<0.5	<0.5	<0.5	<0.5
o-Xylene	ug/L	<0.5	<0.5	<0.5	<0.5
Surrogate					
Trifluorotoluene	%REC	88	88	88	88
Bromobenzene	%REC	87	87	87	86

BTXE

Client: RMT, Inc.
Location: Aramark-Oakland

Analysis Method: BTXE
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
123384-005	BLANK	24426	11/14/95	11/16/95	11/16/95	

Analyte	Units	123384-005
Diln Fac:		1
Benzene	ug/L	<0.5
Toluene	ug/L	<0.5
Ethylbenzene	ug/L	<0.5
m,p-Xylenes	ug/L	<0.5
o-Xylene	ug/L	<0.5
Surrogate		
Trifluorotoluene	%REC	89
Bromobenzene	%REC	88

Curtis & Tompkins, Ltd

Lab #: 123384 BATCH QC REPORT

BTXE	
Client: RMT, Inc.	Analysis Method: BTXE
Location: Aramark-Oakland	Prep Method: EPA 5030

METHOD BLANK

Matrix:	Water	Prep Date:	11/16/95
Batch#:	24426	Analysis Date:	11/16/95
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC09125

Analyte	Result
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	88	58-130
Bromobenzene	88	62-131

Curtis & Tompkins, Ltd.

Lab #: 123384 BATCH QC REPORT

BTXE	
Client: RMT, Inc.	Analysis Method: BTXE
Location: Aramark-Oakland	Prep Method: EPA 5030
BLANK SPIKE/BLANK SPIKE DUPLICATE	
Matrix: Water	Prep Date: 11/16/95
Batch#: 24426	Analysis Date: 11/16/95
Units: ug/L	
Diln Fac: 1	

BS Lab ID: QC09123

Analyte	Spike Added	BS	%Rec #	Limits
Benzene	20	19.1	96	80-120
Toluene	20	19.2	96	80-120
Ethylbenzene	20	19.2	96	80-120
m,p-Xylenes	40	38.7	97	80-120
o-Xylene	20	19.2	96	80-120

Surrogate	%Rec	Limits
Trifluorotoluene	90	58-130
Bromobenzene	89	62-131

BSD Lab ID: QC09124

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Benzene	20	18.4	92	80-120	4	<11
Toluene	20	18.5	93	80-120	4	<13
Ethylbenzene	20	18.6	93	80-120	3	<25
m,p-Xylenes	40	37.6	94	80-120	3	<25
o-Xylene	20	18.7	94	80-120	3	<25

Surrogate	%Rec	Limits
Trifluorotoluene	89	58-130
Bromobenzene	88	62-131

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

RMT LABORATORIES
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

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

CHAIN OF CUSTODY RECORD

№ 051564

Bottles Prepared by | Date/Time 11/14/95

Project No 123384 | Client Aramark – Oakland

Container Inventory: 8015 - S/S, K, D.; 8020 - BTEX

Filtered (Yes/No)
Preserved (Code)

Code: A - None, B - HNO_3, C - H_2SO_4, D - NaOH, E - HCl, F - _____

Lab No	Yr 95 Date	Time	Sample Station ID	Total Number Of Containers	MATRIX	Comments:
	11/14		~~RAO-1~~	~~4~~	WATER	STANDARD TURNAROUND
-1			RAO-2	4		FAX 310 821 3280
-2			RAO-4	4		TARIQ
-3			MW-4	4		
-4			MW-5	4		
-5			BLANK	3		

SAMPLER Relinquished by (Sig.)	Date/Time	Received by (Sig.)	Date/Time
①	11/14/95 12:00	② Shipper Name & #	11/14/95 12:00
Relinquished by (Sig.) ③	Date/Time	Received by (Sig.) ④ Shipper Name & #	Date/Time
Relinquished by (Sig.) ⑤	Date/Time	Received by (Sig.) ⑥ Shipper Name & #	Date/Time

HAZARDS ASSOCIATED WITH SAMPLES

(For Lab Use Only)
Receipt Temp
Receipt pH

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

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

APPENDIX C

WASTE DISPOSAL MANIFESTS

NO. 004658

NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

EPA I.D. NO. NOT REQUIRED

NAME ARAMARK SERVICES, INC.

ADDRESS 927 WALDEN OFFICE SQUARE/ SITE: 330 CHESTNUT ST PROFILE NO.

CITY, STATE, ZIP SCHAUMBURG, IL. 60173/ OAKLAND, CA PHONE NO. (60C) 592-3222

CONTAINERS: No. _____ VOLUME _____ WEIGHT _____

TYPE: ☐ TANK TRUCK ☐ DUMP TRUCK ☐ DRUMS ☐ CARTONS ☐ OTHER _____

WASTE DESCRIPTION NON HAZARDOUS WATER GENERATING PROCESS SITE INVESTIGATION

COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. WATER			5.		
2. TPH			6.		
3.			7.		
4.			8. JOB # TPHC89		

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.

TYPED OR PRINTED FULL NAME & SIGNATURE _____ DATE _____

TRANSPORTER

NAME FALCON DISPOSAL SERVICE, INC. EPA I.D. NO. CAD000048934

ADDRESS 2531 EAST 67TH STREET SERVICE ORDER NO. _____

CITY, STATE, ZIP LONG BEACH, CALIFORNIA 90805 PICK UP DATE 5/6/95

PHONE NO. (310) 633-4400

TRUCK, UNIT, I.D. NO. 5451 DENNIS BARRICA 5/6/95

TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TSD FACILITY

NAME DEMENNO KERDOON EPA I.D. NO. CAT080013352

ADDRESS 2000 N. ALAMEDA STREET DISPOSAL METHOD

☐ LANDFILL ☐ OTHER _____

CITY, STATE, ZIP COMPTON, CA 90222

PHONE NO (310) 537 7100

TYPED OR PRINTED FULL NAME & SIGNATURE _____ DATE _____

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	
C/Q		RT/CD	HWDF NONE	DISCREPANCY

NSPORTATION
AD000048934
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

FALCON CUSTOMER #	SITE #
CUSTOMER NAME: Hramark Services, Inc.	REQUESTED BY: Jim or Kevin Bate
MAILING ADDRESS: 1827 Walden Office Square	CUSTOMER PHONE: (310) 578-1241
CITY: Schaumburg / STATE: IL / ZIP: 60173	PURCHASE ORDER #
JOB DATE: 5-6-95 / JOB TIME: 1200 / JOB CONTACT: KEVIN BATE	JOB CONTACT PHONE: (310) 777-9679 PCR / JOB #: TP1C89 / FS ☐
GENERATOR NAME: Hramark Services, Inc.	EPA ID #
ADDRESS: 330 Chestnut Street / 3rd	BOE #
CITY: Oakland / STATE: CA / ZIP	BIN DROPPED / BIN PICKED UP
ACCT # / WASTE STREAM APPROVAL # / DISPOSAL FACILITY / APPT. TIME / DATE	BIN DROPPED / BIN PICKED UP
MANIFESTED BY / MANIFEST # / DISPOSAL BILLED TO	BIN IN DISPATCH / BIN OUT DISPATCH

SERVICES REQUESTED: Remove 5 soil and possibly water drums

SERVICES PERFORMED:

Pick up 3x55 DM

Mail & Label

REMARKS: Historex will supply signed manifests on site.

CLIENT INITIAL

CUSTOMER SIGNATURE

TOTAL HOURS

DRIVER HAULER: Louis Barrick / EMP. NO.: 0527 / DRIVER SIGNATURE / TRUCK/TRAILER #: 5481

CUSTOMER

APPENDIX D

PRODUCT RECOVERY OBSERVATIONS

Appendix D

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

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)
01-29-94	0	0	8.76	8.76	0.00
03-10-94	0	0	8.63	8.63	0.00
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

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)
04-07-95	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
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
Total to Date	6,202				