PRO Honas & Associates Inc.

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GROUNDWATER MONITORING REPORT Sampling Round Seven

FORMER OAKLAND GENERAL TIRE 1201 14th Avenue Oakland, California

March 2, 1999

Report Prepared for:

CONTINENTAL GENERAL TIRE, INC. 1800 Continental Boulevard Charlotte, North Carolina 28273

GROUNDWATER MONITORING REPORT Sampling Round Seven Former Oakland General Tire 1201 14th Avenue Oakland, California

Jonas and Associates Inc. Job No. GT-213

Prepared by:

Mark L. Jonas, R.G.

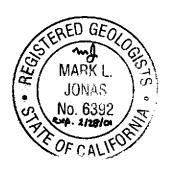
Project Manager

Jonas and Associates Inc.

2815 Mitchell Drive, Suite 209

Walnut Creek, California 94598

(925) 933-5360



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TABLE OF CONTENTS

TABLE OF CONTENTS		
LIST OF TABLES	 	 i
LIST OF FIGURES	 	 i
LIST OF APPENDICES	 	 i
1.0 INTRODUCTION	 	 1
1.1 Site Description	 	 1
1.2 Scope of Report	 	 3
2.0 MONITORING WELLS AND HYDROGEOLOGY	 	 4
2.1 Monitoring Wells	 	 4
2.1.1 Construction Details	 	 4
2.1.2 Monitoring Well Survey	 	 7
2.1.2 Monitoring Well Survey	 	 7
3.0 ROUND SEVEN GROUNDWATER SAMPLING AND ANALYSIS		
3.1 Groundwater Sampling Procedures	 	 6
3.2 Groundwater Sampling Results	 	 11
3.2.1 Analytical Results For January 1999 Sampling Event	 	 11
3.2.2 Results of Water Level and Free Product Measurements		
		1 -
A O DEFEDENCES		 1:

Jonas & Associates Inc.

TABLE OF CONTENTS^{con't}

IST OF TABLES	
<u>Pa</u>	ge
able 2-1: Monitoring Well Construction Details	7
able 2-2: Monitoring Well Survey Data	1
able 3-1: January 1999 - Round Seven Groundwater Results 1	11
able 3-2: Round Seven Groundwater Level & Free Product Measurements	13
IST OF FIGURES	
<u>Pa</u>	
15 11 11 11 15 11 11 11 11 11 11 11 11 1	2
Edit E 1, Homeonie , one min riound bottom of the contract of	5
15010 - 2. 11, 01 05 00 00 01 01 01 01 01 01 01 01 01 01 01	8
Add to 1, the same of the same	12
igure 3-2: January 1999 - Winter Season Potentiometric/Water Table 1	14
IST OF APPENDICES	
appendix A: Summary Tables of Laboratory Results	
ppendix B: Chain of Custody Records	
appendix C: Laboratory Reports	



JONAS & ASSOCIATES INC.

Environmental Consultants TECTION

2815 Mitchell Drive, Suite 209 • Walnut Creek, CA 94598 • Tels (510) 933-5360; 94 Fry (510) 933-5362

March 2, 1999

Ms. Madhulla Logan
Hazardous Materials Specialist
Department of Environmental Health
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502
(510) 567-6764; 337-9335 fax

Subject: Transmittal of the "Groundwater Monitoring Report, Sampling Round Seven,

Former Oakland General Tire, 1201 14th Avenue, Oakland, California."

Project: Former Oakland General Tire

1201 14th Avenue, Oakland, California

J&A #: PCO-220

Dear Madhulla:

Attached is the March 2, 1999 "Groundwater Monitoring Report, Sampling Round Seven, Former Oakland General Tire, 1201 14th Avenue, Oakland, California". This report presents the procedures and results associated with the Round Seven (January 27, 1999) groundwater sampling event. Procedures and results associated with Round Six (October 13, 1998) are presented in the October 16, 1998 "Hydraulic Lift Excavation Report."

With quarterly monitoring the next sampling round is scheduled for April 1999. But we would like you to consider a semi-annual event with a sampling round in July 1999. We will call you to discuss this option.

Please call if you have any questions or comments.

Sincerely,

manh

JONAS AND ASSOCIATES INC.

Mark L. Jonas, R.G.

Project/Manager

attachment:

One copy of the March 2, 1999 "Groundwater Monitoring Report, Sampling Round Seven, Former Oakland General Tire, 1201 14th Avenue, Oakland, California."

cc: Mr. Mike McNally (Continental General Tire Inc.)

GROUNDWATER MONITORING REPORT Sampling Round Seven

FORMER OAKLAND GENERAL TIRE 1201 14th Avenue, Oakland, California March 2, 1999

1.0 INTRODUCTION

Jonas and Associates Inc. (J&A) has been retained by Continental General Tire, Inc. (General Tire) to perform the groundwater monitoring program at their former property located at 1201 14th Avenue, in Oakland, California 94606. To date, seven groundwater sampling rounds have been performed at this facility. The first five rounds are presented in previous groundwater monitoring reports, identified in Section 4.0 References. Procedures and results associated with sampling round six were presented in the October 16, 1998 "Hydraulic Lift Excavation Report." The following report presents the results of the seventh groundwater sampling round performed on January 27, 1999.

General Tire's environmental representative for this project is Mr. Mike McNally {(704) 583-8561}. The lead agency for this project is the Alameda County Health Care Services Agency, Department of Environmental Health, Hazardous Division (Alameda County Health Services). The address of Alameda County Health Services is 1131 Harbor Bay Parkway, 2nd Floor, Alameda, California 94502. The agency representative is Ms. Madhulla Logan {(510) 567-6764}.

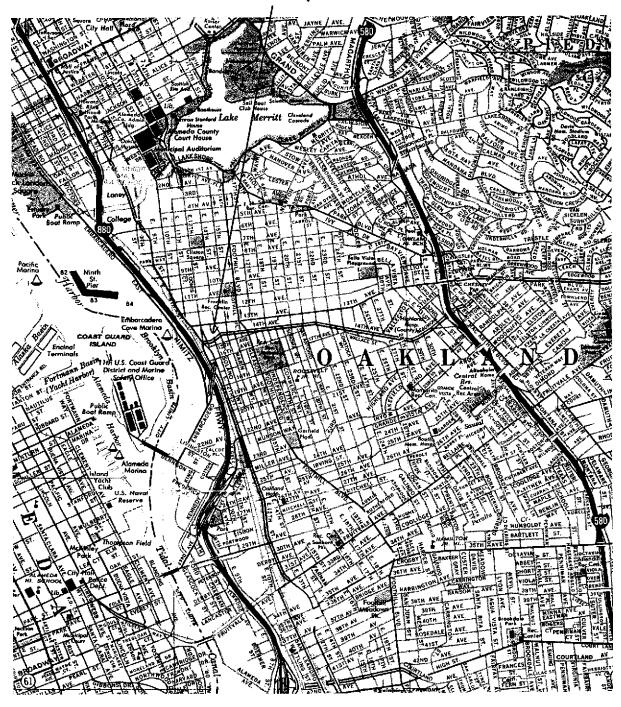
1.1 Site Description

The former Oakland General Tire facility presented in this report is located at 1201 14th Avenue, in Oakland, California, in the County of Alameda. Prior to 1991, General Tire had an active facility at this location. The facility was primarily associated with tire sales and installation, with some minor auto repair (EMG, 1990). The property was sold in December 1998.

On the property is a single story, irregularly shaped building. It was built in 1960 and is situated along the north edge of a triangular shaped lot with dimensions of approximately 126' by 248' by 279'. Adjacent to the Oakland General Tire property is Style Center Cleaners, located at 1353 East 14th Street. Style Center Cleaners is an active dry cleaning facility and may be contributing to local groundwater contamination.

Across 14th Avenue and to the south is a restaurant located in what appears to have been a gas station. To the west are railroad tracks and the Nimitz Freeway. Beyond the Nimitz Freeway is the Port of Oakland To the east and on the corner of East 12th Street and 14th Avenue is Armstrong Tire, which appears to operate a business similar to General Tire. Figure 1-1 presents the regional location of the former Oakland General Tire facility.

1201 14th Avenue Oakland, California





REGIONAL LOCATION GENERAL TIRE, CO. I 20 I I 4TH AVENUE OAKLAND, CALIFORNIA

I" = 1/2 MILE | Figure 1-1

Drawing Number GT213~11/95~F1-1

1.2 Scope of Report

This "Groundwater Monitoring Report, Sampling Round Seven" is presented in four sections and three appendices. Section 1, Introduction, provides a brief description of the site and the scope of the report. Section 2, Monitoring Wells and Hydrogeology, presents general well construction details for the four monitoring wells, the results of elevation and location surveys, and a local hydrogeologic cross-section. Section 3, Groundwater Sampling and Analysis, present Round Seven groundwater sampling procedures and results, along with water level and free product measurements. Section 4, References, cites various references relevant to this report.

The appendices of the report include groundwater analysis summary tables, chain-of-custody records, and laboratory data sheets.

2.0 MONITORING WELLS AND HYDROGEOLOGY

This section of the report presents a brief history and construction details of the four monitoring wells located at the former Oakland General Tire 1201 14th Avenue facility. In addition, a summary of the location and elevation surveys performed by Kier & Wright is provided. A local hydrogeologic cross-section is also presented using lithologic logs from on-site monitoring well boreholes.

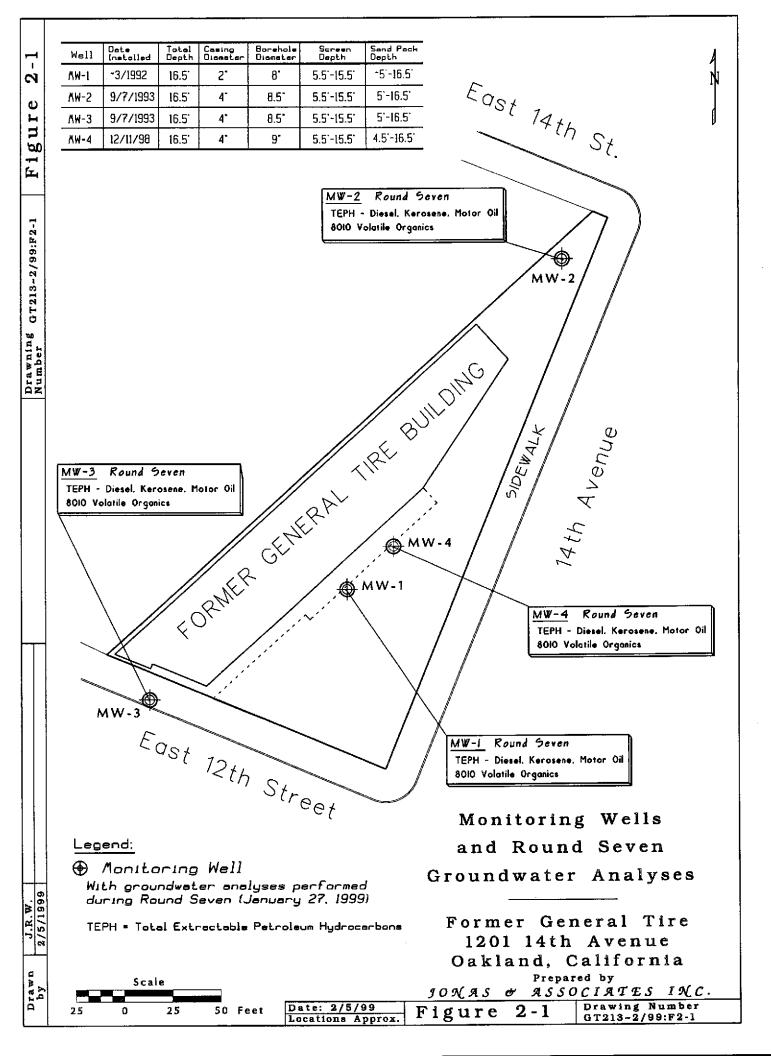
2.1 Monitoring Wells

Four monitoring wells are located at the former Oakland General Tire facility. The first monitoring well was drilled and installed by H⁺GCL Environmental Scientist and Engineers (H⁺GCL) around March 1992. The H⁺GCL April 1992 "Phase II Investigation, 1201 14th Avenue, Oakland, California" presents the installation details and a lithologic log associated with monitoring well MW-1. Monitoring wells MW-2 and MW-3 were drilled and installed on September 7, 1993, by Advance Drilling Company, Inc. (C-57 License #607458). The installation details and rational for monitoring wells MW-2 and MW-3 are presented in the J&A October 26, 1994 "Environmental Site Investigation Report, General Tire Oakland Facility, General Tire, Inc., 1201 14th Avenue, Oakland, California". Monitoring well MW-4 was installed on December 11, 1998 with a graphic description in the December 23, 1998 "Site Remediation" report. All of the monitoring wells are apparently screened in transmissive sandy silty clay to silty clay found underneath the facility. Figure 2-1 presents the locations of the four monitoring wells, the Round Seven analyses performed for each well, the site boundary, the building on the site, and the adjacent Style Center Cleaners.

2.1.1 Construction Details

All of the four monitoring wells are constructed in boreholes drilled to depths of 16.5 feet. Each of the monitoring wells have a ten foot well screen set approximately 5.5 to 15.5 feet below ground surface (bgs). Monitoring well MW-1 has a casing and screen diameter of two inches, which was placed in an 8 inch borehole. Monitoring wells MW-2, MW-3, and MW-4 have a casing and screen diameter of four inches, each placed in an $8\frac{1}{2}$ to 9 inch borehole.

As reported by H+GCL (1992), monitoring well MW-1 was installed at the Oakland General Tire facility. It apparently was constructed around March 1992. The well was installed in front of and on the southeast side of the only building on the site. The lithology encountered during drilling reported ranged from a silty sand, clay and cobbles, fill material, and sandy clay. During drilling, first water was encountered at an approximate depth of 7.5 feet bgs. The monitoring well was then installed using a 2-inch PVC casing and screen with a slot size of 0.01 inches. The monitoring well screen was set at a depth range of 5.5 to 15.5 feet bgs. A christy-box was then installed, with the top of the PVC casing set 0.29 feet (Kier & Wright, 1993) below the asphalt ground surface. After the screen was installed, the well water level was measured at 9.02 feet bgs on October 5, 1993.



Jonas & Associates Inc.

Monitoring well MW-2 is located adjacent to and southeast of Style Center Cleaners. The rationale for installing this well was to provide an upgradient characterization of water quality entering onto the facility. Subsequent water level measurements have found that monitoring well MW-2 is an upgradient well. As stated previously, the well was installed on September 7, 1993. The lithology encountered during drilling ranged from a sandy silty clay to a silty clay. First water was measured at an approximate depth of 12.1 feet bgs. The monitoring well has a 4-inch PVC casing and a screen with a slot size of 0.020 inches. The well screen was set at a depth range of 5.5 to 15.5 feet bgs. A christy-box was installed with the top of the PVC casing set 0.59 feet (Kier & Wright, 1993) below the ground surface. On October 5, 1993 water level in monitoring well MW-2 was measured at 7.39 feet bgs.

Monitoring well MW-3 was also constructed on September 7, 1993. The well was installed in the sidewalk, adjacent to the southwest border of the former Oakland General Tire facility. The well was installed to determine the water table direction and gradient across the site. The lithology encountered during drilling ranged from sandy silty clay to clayey sand to a silty clay between 5.5 and 16.5 feet bgs. During drilling, first water was not able to be clearly identified because of the predominance of silty clay in the borehole. The monitoring well was then installed using a 4-inch PVC casing and screen with a slot size of 0.020 inches. The screen was set between a depth range of 5.5 to 15.5 feet bgs. A christy-box was installed, with the top of the PVC casing set 0.44 feet (Kier & Wright, 1993) below the pavement. On October 5, 1993 the water level in monitoring well was measured at 10.94 feet bgs.

Monitoring well MW-4 was installed on December 11, 1998 as a result of excavation activities associated with removal of hydraulic lifts from the facility. This well is located downgradient of several former excavations. Monitoring well MW-4 is located approximately 35 feet northwest of monitoring well MW-1. The lithology encountered during drilling was predominantly a sandy silty clay. First water was measured at an approximate depth of 8 feet bgs. The monitoring well has a 4-inch PVC casing and a screen with a slot size of 0.020 inches. The well screen was set at a depth range of 5.5 to 15.5 feet bgs. A christy-box was installed. The approximate elevation of monitoring well MW-4 is assumed to be similar to monitoring well MW-1, with a surface elevation of 18.6 feet and top of the PVC casing at 18.3 feet. On January 27, 1999 water level in monitoring well MW-4 was measured at 6.1 feet bgs.

The following Table 2-1 present a summary of construction details for monitoring wells MW-1, MW-2, MW-3, and MW-4.

Table 2-1 Monitoring Well Construction Details Former Oakland General Tire - 1201 14th Avenue

	Date	Casing		Borehole				
Well Number	Completed	Diameter	Screen	Sand Pack	Bentonite Seal	Portland Cement ¹	Borehole	Diameter
MW-1	~3/1992	2"	5½ - 15½	~5 - 16½	?	?	161/2	8"
MW-2	9/7/1993	4"	51/2 - 151/2	5 - 161/2	41/2 - 5	~ 1/4 - 41/2	161/2	81/2"
MW-3	9/7/1993	4"	5½ - 15½	5 - 161/2	4½ - 5	~ 1/4 - 41/2	161/2	81/2"
MW-4	12/11/1998	4"	5½ - 15½	41/2 - 161/2	31/2 - 41/2	~ 1/4 - 31/2	161/2	9"

2.1.2 Monitoring Well Survey

During November 1993, monitoring wells MW-1, MW-2, and MW-3 were surveyed by Kier & Wright. The locations of the wells were surveyed using the California State Coordinate System, which identifies the well locations using Eastings and Northings, in feet. The monitoring wells were surveyed at a punch mark at the north rim of the christy-box and at a north notch in the PVC casing. The survey was based on the City of Oakland Benchmark 1521, located at 15th Avenue and 14th Street. Because of its proximity to monitoring well MW-1 and relatively flat surface, the elevation of monitoring well MW-4 is assume to be similar to MW-1. The following Table 2-2 presents the monitoring well survey results and assumed elevation of monitoring well MW-4.

Table 2-2 Monitoring Well Survey Data Former Oakland General Tire - 1201 14th Avenue

Well	Easting	Northing	M.S.L. ¹ Elevation
MW-1	1495579.17'	474023.22'	Top PVC ² : 18.29' rim ³ : 18.58'
MW-2	1495664.73'	474169.72'	Top PVC: 20.18' rim: 20.77'
MW-3	1495474.96'	473977.93'	Top PVC: 19.55' rim: 19.99'
MW-4			Top PVC: 18.3'4 rim: 18.6'4

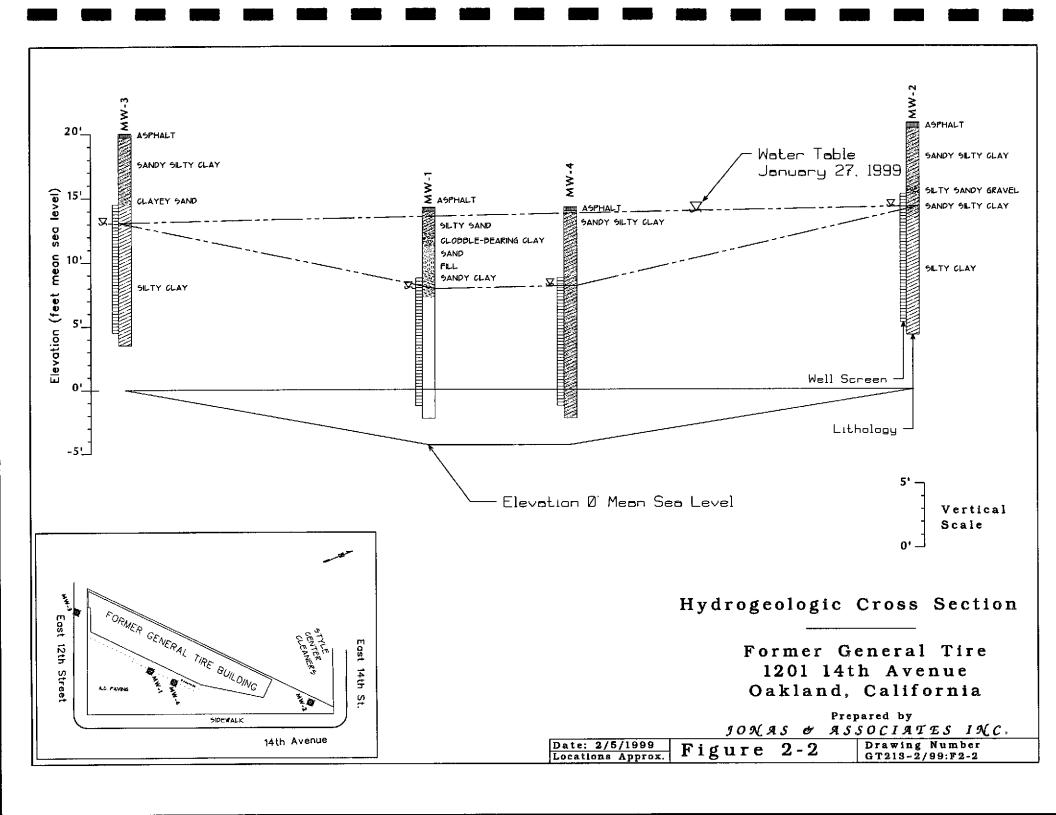
¹ M.S.L. = Mean Sea Level.

2.2 Hydrogeologic Cross Section

Figure 2-2 presents a hydrogeologic cross section using potentiometric and lithologic data associated with the monitoring wells.

³ rim = North rim of christy-box.

² Top PVC = Top north edge of PVC casing. ⁴ Assumed to be similar to MW-1.



3.0 ROUND SEVEN GROUNDWATER SAMPLING AND ANALYSIS

Following is a discussion of the procedures and results associated with Round Seven groundwater sampling of monitoring wells MW-1, MW-2, MW-3, and MW-4. Sampling for Round Seven occurred on January 27, 1999 and represents winter seasonal conditions. Also presented in this section are water level and free product measurements.

A summary of all laboratory results from samples collected from the on-site monitoring wells are presented in Appendix A. The chain-of-custody records for the January 27, 1999 Round Seven are presented in Appendix B. The laboratory data sheets associated with these sampling events are presented in Appendix C.

3.1 Groundwater Sampling Procedures

During the January 27, 1999 sampling event, the general groundwater sampling procedures presented in the "Environmental Site Investigation Work Plan" (J&A 1993) for the facility were followed. After samples were collected and labeled, they were placed into ice chests chilled with blue ice for transport to the Chromalab analytical laboratory. Chain-of-custody records were completed and signed by representatives of Jonas & Associates Inc. and, upon delivery, by a representative of Chromalab. The analysis and results of groundwater samples collected during Round Seven are presented in Section 3.2. The following section presents relevant information associated with the sampling of each of the four monitoring wells.

Sampling Monitoring Well MW-1

Prior to purging the well, the depth to groundwater in monitoring well MW-1 was measured at 6.02 feet below the top of the casing. This measurement was collected on January 27, 1999. The water level was measured with an electronic water level indicator on a stretch-resistant measuring tape. After measuring the depth to groundwater, a clear bailer was placed into the well to collect a water sample for visual observations. No petroleum products were identified floating on groundwater in monitoring well MW-1. After assessing for the presence of floating product, approximately 8 gallons of groundwater was removed from the 2" well. A well volume was calculated at approximately 1.7 gallons. Temperature and pH were measured initially and after each four gallons of purging. These parameters appeared to stabilize and were recorded on a groundwater sampling form. Monitoring well MW-1 appeared to recover moderately well during purging activities. Purged water was collected in a dated and labeled 55-gallon drum for temporary storage. After purging the well, groundwater samples were collected with a clean bailer. Two one-liter containers were collected for analysis of Total Extractable Petroleum Hydrocarbons as -Diesel, -Kerosene, and -Motor Oil (TEPH -Diesel, -Kerosene, & -Motor Oil; EPA Method 3550/8015M); and three Volatile Organic Analysis (VOA) containers with HCl preservative were collected for analyses for Volatile Halogenated Organics (8010

Compounds by EPA Method 8260A). The Round Seven groundwater samples from monitoring well MW-1 are identified as GT3-MW1.

Sampling Monitoring Well MW-2

Prior to purging the well on January 27, 1999, the depth to groundwater in monitoring well MW-2 was measured at 5.88 feet below the top of the casing. The water level was measured with an electronic water level indicator on a stretch-resistant measuring tape. After measuring the depth to groundwater, a clear bailer was placed into the well to collect a water sample for visual observations. No petroleum products were identified floating on groundwater in monitoring well MW-2. After assessing for the presence of floating product, approximately 15 gallons of groundwater were removed from the well. A well volume was calculated at approximately 7 gallons. During purging activities, the temperature and pH of the extracted groundwater were measured and appeared to stabilize. During purging the well went dry and was allowed to recover prior to sampling. Two one-liter containers were collected for analysis of TEPH -Diesel, -Kerosene, & -Motor Oil (EPA Method 3550/8015M); and three VOA containers with HCl preservative were collected for analyses for Volatile Halogenated Organics (8010 Compounds by EPA Method 8260A). The Round Seven groundwater sample from monitoring well MW-2 is identified as GT3-MW2.

Sampling Monitoring Well MW-3

For the Round Seven sampling event, on January 27, 1999, the groundwater level in monitoring well MW-3 was measured at 6.50 feet below the top of the casing. After measuring the depth to groundwater, a clear bailer was placed into the well to collect a water sample for visual observations. No floating product was observed. After assessing for the presence of floating products, approximately 13 gallons of groundwater was removed from the well. A well volume was calculated at approximately 6.5 gallons. Temperature and pH of the purge water were measured and appeared to stabilize. During purging the well went dry and after the well recovered, two one-liter containers were collected for analysis of TEPH -Diesel, -Kerosene, & -Motor Oil (EPA Method 3550/8015M); and three VOA containers with HCl preservative were collected for analyses for Volatile Halogenated Organics (8010 Compounds by EPA Method 8260A). The Round Seven groundwater sample from monitoring well MW-3 is identified as GT3-MW3.

Sampling Monitoring Well MW-4

Prior to purging the well on January 27, 1999, the depth to groundwater in monitoring well MW-4 was measured at 5.82 feet below the top of the casing. No floating petroleum products were identified. The well was pumped dry after purging approximately 9.5 gallons of groundwater. After the well recovered, two one-liter containers were collected for analysis of TEPH -Diesel, -Kerosene, & -Motor Oil (EPA Method 3550/8015M); and three VOA containers with HCl preservative were collected for analyses for Volatile Halogenated Organics (8010 Compounds by EPA Method

8260A). The Round Seven groundwater sample from monitoring well MW-4 is identified as GT3-MW4.

3.2 Groundwater Sampling Results

This section of the report presents the analytical results for the Round Seven groundwater sampling event. Water level and free product measurements are also presented.

3.2.1 Analytical Results For January 1999 Sampling Event

As stated previously, summary tables, the Round Seven chain-of-custody records, and laboratory data sheets are presented in Appendix A, B, and C, respectively. The following Table 3-1 present a summary of the analyses performed and the analytes detected during the Round Seven groundwater sampling event. Figure 3-1 provides a graphical display of the Round Seven analytical results.

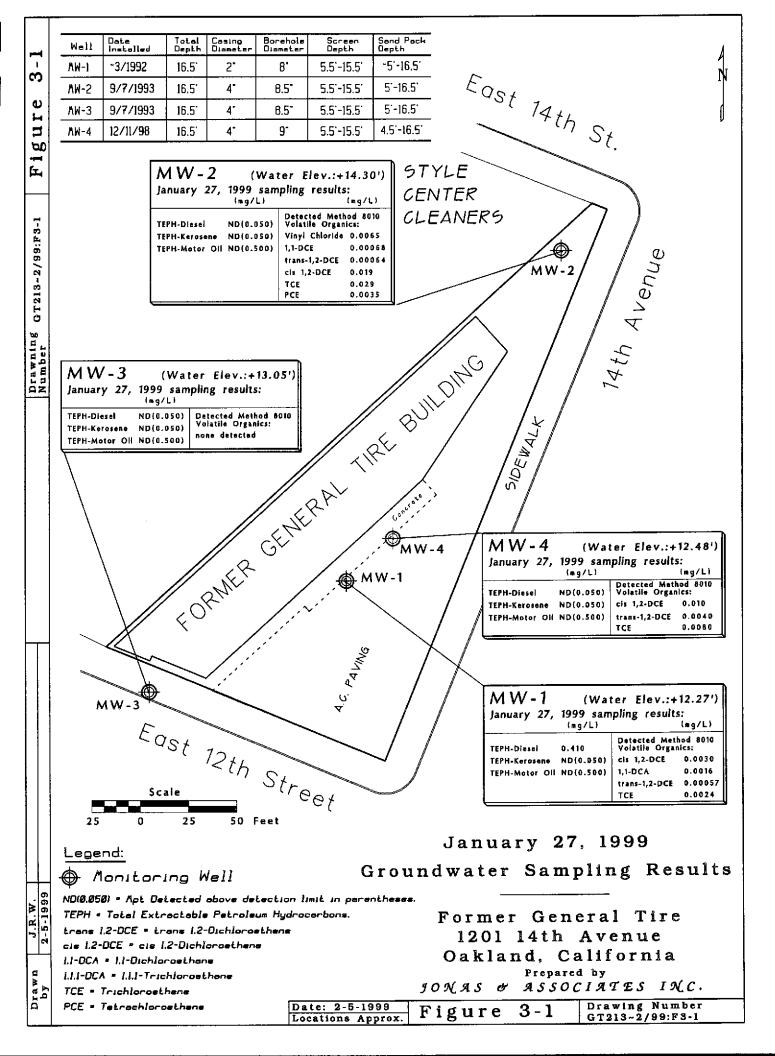
Table 3-1 January 1999 - Round Seven Groundwater Sampling Results

Sample I.D.	Analysis	Detected Analytes	(in mg/L)
GT3-MW1	TEPH as Diesel, Kerosene, Motor Oil (3550/8015M) Volatile Halogenated Organics (8010)	Diesel 1,1-DCA cis 1,2-DCE trans 1,2-DCE TCE	0.410 0.0016 0.0030 0.00057 0.0024
GT3-MW2	TEPH as Diesel, Kerosene, Motor Oil (3550/8015M) Volatile Halogenated Organics (8010)	none detected 1,1-DCE cis 1,2-DCE trans-1,2-DCE PCE TCE Vinyl Chloride	0.00068 0.019 0.00064 0.0035 0.029 0.0065
GT3-MW3	TEPH as Diesel, Kerosene, Motor Oil (3550/8015M) Volatile Halogenated Organics (8010)	none detected	
GT3-MW4	TEPH as Diesel, Kerosene, Motor Oil (3550/8015M) Volatile Halogenated Organics (8010)	none detected cis 1,2-DCE trans 1,2-DCE TCE	0.010 0.004 0.008

<u>Legend</u> - TEPH: Total Extractable Petroleum Hydrocarbons

cis 1,2-DCE: cis 1,2-Dichloroethene; 1,1-DCA: 1,1-Dichloroethane;

TCE: Trichloroethene; PCE: Tetrachloroethene



3.2.2 Results of Water Level and Free Product Measurements

During each sampling round, water level measurements are recorded and a determination is made with respect to the presence or absence of a floating product or sheen.

The following Table 3-2 provides a summary of groundwater levels and free product measurements for the January 27, 1999 Round Seven, respectively. Water level elevations, with respect to mean sea level, were calculated using the results of the Kier & Wright surveys.

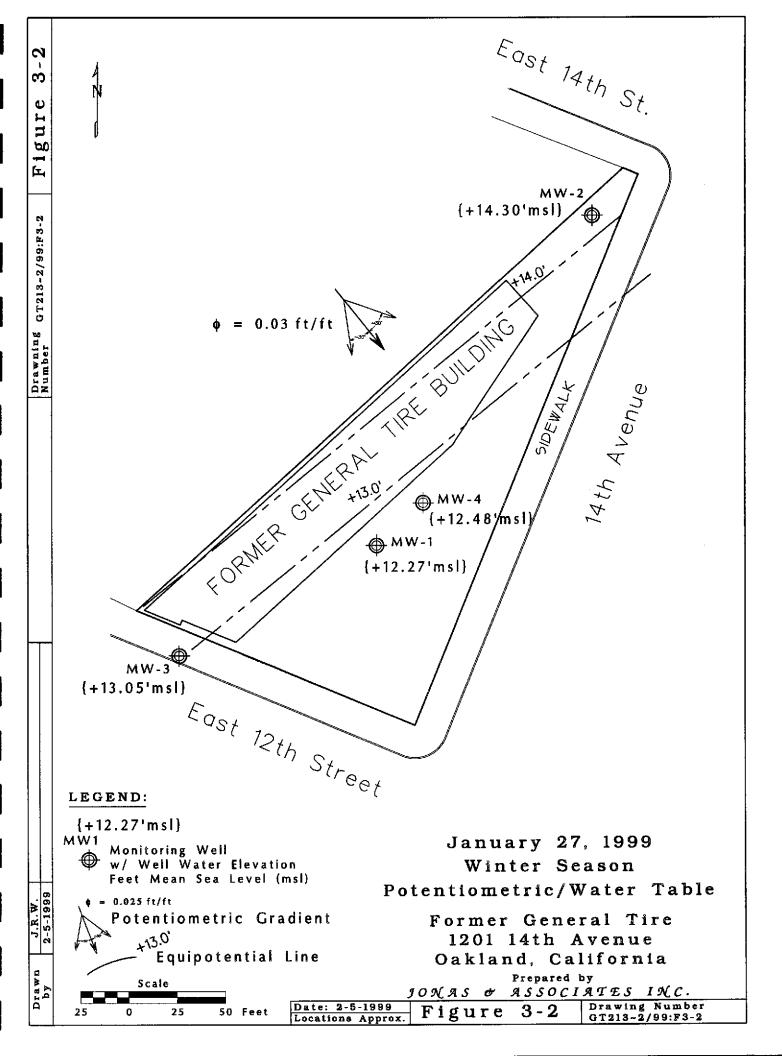
Table 3-2 Round Seven - January 1999 Groundwater Level and Free Product Measurement

Date	Well ID	Surveyed Casing Elevation	Water Level from Top of Casing		Pavement vs. Casing Top	Free Product
		M.S.L.	Depth	Elevation M.S.L.		
1/27/1999	MW-1	+18.29'	6.02'	+12.27'	-0.29'	no floating product
1/27/1999	MW-2	+20.18'	5.88'	+14.30'	-0.59'	no floating product
1/27/1999	MW-3	+19.55'	6.50'	+13.05'	-0.44'	no floating product
1/27/1999	MW-4	+18.3'2	5.82'	+12.48'	-0.3*2	no floating product

notes: 1/ Elevation with respect to mean sea level (M.S.L.) and Kier & Wright survey.

2/ Assumed based on elevation of MW-1.

Figure 3-2 graphically presents the results of the well water levels collected during the Round Seven sampling events, respectively. As identified in this figure, based upon groundwater elevation data from monitoring wells MW-1, MW-2, MW-3, and MW-4, the apparent direction of groundwater flow during January 1999 is in a southeasterly direction, from the Style Center Cleaners to the former Oakland General Tire facility.



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Appendix A

Summary Tables of Laboratory Results

Table A/GW1

GROUNDWATER RESULTS TEPH -DIESEL, -KEROSENE, & -MOTOR OIL FORMER OAKLAND GENERAL TIRE - 1201 14^{TH} AVENUE

Sample I.D.	Sampling Depth Matrix Lab Date (feet)		Lab	TEPH-Diesel (3510/8015) (mg/L)	TEPH-Kerosene (3510/8015) (mg/L)	TEPH-Motor Oil (3510/8015) (mg/L)	
Monitoring W	ell MW-1						
02	3/11/92	5½'-15½' screen	water	CT	0.190	-	•
MW1-10593	10/5/93	5½'-15½' _{screen}	water	CrLab	ND (0.050)	ND (0.050)	ND (0.5)
MW1-61794	6/17/94	5½'-15½' screen	water	CrLab	ND (0.050)	ND(0.050)	ND(0.5)
GT3-MW1-Q3	5/17/95	5½'-15½' _{screen}	water	CrLab	ND (0.050)	ND(0.050)	ND(0.500)
GT3-MW1-Q4	8/10/95	5½'-15½' _{screen}	water	CrLab	ND (0.050)	ND(0.050)	ND(0.500)
GT3-MW1-Q5	8/22/96	5½'-15½' screen	water	CrLab	0.050	ND(0.050)	ND(0.500)
GT3-MW1	10/13/98	5½'-15½' screen	water	CrLab	0.140	ND(0.050)	ND(0.500)
GT3-MW1	1/27/99	5½'-15½' _{screen}	water	CrLab	0.410	ND(0.050)	ND (0.500)
Monitoring W	ell MW-2						
MW2-10593	10/5/93	5½'-15½' screen	water	CrLab	ND (0.050)	0.4901	0.7
MW2-61794	6/17/94	51/21-151/21 screen	water	CrLab	ND (0.050)	ND(0.050)	ND(0.5)
GT3-MW2-Q3	5/17/95	5½'-15½' screen	water	CrLab	ND(0.050)	ND(0.050)	ND(0.500)
GT3-MW2-Q4	8/10/95	5½'-15½' _{screen}	water	CrLab	ND(0.050)	ND(0.050)	ND(0.500)
GT3-MW2-Q5	8/22/96	5½'-15½'	water	CrLab	ND (0.050)	ND(0.050)	ND(0.500)
GT3-MW2	10/13/98	5½'-15½' _{screen}	water	CrLab	ND (0.050)	ND(0.050)	ND(0.500)
GT3-MW2	1/27/99	5½'-15½' _{screen}	water	CrLab	ND(0.050)	ND(0.050)	ND(0.500)
Monitoring W	ell MW-3						
MW3-10593	10/5/93	5½'-15½' screen	water	CrLab	ND (0.050)	ND(0.050)	ND(0.5)
MW3-61794	6/17/94	5½'-15½' _{screen}	water	CrLab	ND(0.050)	ND(0.050)	ND(0.5)
GT3-MW3-Q3	5/17/95	5½'-15½' _{screen}	water	CrLab	ND(0.050)	ND(0.050)	ND(0.500)
GT3-MW3-Q4	8/10/95	5½'-15½' screen	water	CrLab	ND(0.050)	ND(0.050)	ND (0.500)
GW9-MW3-Q5	8/22/96	5½'-15½' _{soreen}	water	CrLab	ND(0.050)	ND (0.050)	ND (0.500)
GT3-MW3	10/13/98	5½'-15½' _{screen}	water	CrLab	ND(0.050)	ND(0.050)	ND(0.500)
GT3-MW3	1/27/99	5½'-15½' _{screen}	water	CrLab	ND(0.050)	ND (0.050)	ND (0.500)
Monitoring W	ell MW-4						
MW-4	12/15/98	5½'-15½' screen	water	CrLab	ND(0.050)	ND (0.050)	ND(0.500)
GT3-MW4	1/27/99	5½'-15½' _{screen}	water	CrLab	ND (0.050)	ND(0.050)	ND(0.500)

notes:

TEPH: Total Extractable Petroleum Hydrocarbons.

ND(0.004) = Not Detected above the laboratory detection limit in parentheses.

1 = Unknown hydrocarbon found in early Kerosene quantified as Kerosene.

Table A/GW2

GROUNDWATER RESULTS VOLATILE ORGANICS FORMER OAKLAND GENERAL TIRE - 1201 14th Avenue

 $\{mg/L\}$

Sample	Sampling	Depth	Matrix	Lab	Bromodichloro		Bromo-	Carbon	Chloro-	Chloro-	2-Chloroethyl		Chloro-		1,2-Dichloro-
1.D.	Date	(feet)			methane	Bromoform	methane	Tetrachloride	benzene	ethane	Vinyl Ether	Chloroform	methane	chloromethane	benzene
Monttoring V	Vell MW-1														
03	3/11/92	5½'-15½'	water	CT	ND(0.001)	ND(0.001)	ND (0.002)	ND(0.001)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.001)	ND(0.002)	ND(0.001)	ND(0.001)
MW1-10593	10/5/93	5½'-15½'		CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)
MW1-61794	6/17/94	51/2'-151/2' screen		CrLab	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND(0,0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)
GT3-MW1-Q3	5/17/95	51/2'-151/2' ecreen		CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0,0005)	ND(0,0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)
GT3-MW1-Q4	8/10/95	5½'-15½' _{soreen}	water	CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)
GT3-MW1-Q5	8/22/96	51/2'-151/2' screen	water	CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	0.00080	ND(0.0005)	ND(0.0005)	ND (0.0005)
GT3-MW1	1/27/99	5½-15½ ecreen		CrLab	ND(0.0005)	ND (0.0005)	ND(0.0010)	ND (0.0005)	ND(0.0005)	ND(0.0010)	ND(0.0005)	ND (0.0005)	ND(0.0010)	ND(0.0005)	ND(0.0005)
Monitoring V		E4/1.4E1/1		~ -11-	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0,0005)	ND(0.0005)	ND (0.000E)
MW2-10593	10/5/93 6/17/94	5½'-15½' _{screen}		CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005) ND (0.0005)
MW2-61794		5½'-15½' _{screen}		CrLab CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0,0005)	ND(0.0005)
GT3-MW2-Q3 GT3-MW2-Q4		5½'-15½' ecreen 5½'-15½'		CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW2-Q4		5½'-15½' screen		CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0012	ND(0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW2-GS	1/27/99	5½'-15½' screen		CrLab	ND(0.0005)	ND (0.0005)	ND(0.0003)	ND (0.0005)	ND(0.0005)	ND(0.0010)	ND(0.0005)	ND(0.0005)	ND(0.0000)	ND(0.0005)	ND(0.0005)
GI3-MWZ	1/2//88	372 - 1372 somen	Walci	CILAD	145(0.0000)	140(0,0000)	140(0.0010)	140 (0.0003)	140 (0.0000)	ND(0.0010)	140(0.0000)	ND(0.0003)	145(0.0010)	145(0.0003)	ND(0.0005)
Monitoring V	Vell <u>MW-3</u>														
MW3-10593	10/5/93	51/2'-151/2' screen	water	CrLab	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)
MW3-61794	6/17/94	5½'-15½ _{screen}		CrLab	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)
GW9-MW3-Q	3 5/17/95	51/2'-151/2' screen	water	CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)
GW9-MW3-Q	4 8/10/95	5½'-15½' screen	water	CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW3-Q5	8/22/96	5½'-15½' _{screen}	water	CrLab	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)
GT3-MW3	1/27/99	5½'-15½' _{screen}	water	CrLab	ND(0.0005)	ND (0.0005)	ND(0.0010)	ND(0.0005)	ND(0.0005)	ND (0.0010)	ND (0.0005)	ND (0.0005)	ND(0.0010)	ND (0.0005)	ND(0.0005)
Monttoring \	Vell MW-4														
MW-4	12/15/98	5½'-15½'	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0010)	ND(0.0005)	ND(0.0005)	ND(0.0010)	ND(0.0005)	ND(0.0005)	ND(0.0010)	ND(0.0005)	ND(0.0005)
GT3-MW4	1/27/99	5½'-15½' screen		CrLab	ND(0.0005)	ND(0.0005)	ND(0.0010)	ND(0.0005)	ND(0.0005)	ND(0.0010)	ND (0.0005)	ND(0.0005)	ND(0.0010)	ND (0.0005)	ND (0.0005)
		act ver				· · · · · ·	<u> </u>	, , ,				. ,	. , ,	• • •	

Table A/GW2^{con't}

GROUNDWATER RESULTS VOLATILE ORGANICS FORMER OAKLAND GENERAL TIRE - 1201 14th Avenue

{mg/L}

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	1,3-Dichloro- benzene	1,4-Dichloro- benzene	1,1-Dichloro- ethane	1,2-Dichloro- ethane	-	cis 1,2- Dichloroethene	, -	1,2-Dichloro- propane		trans-1,3-Di- chloropropene	Freon 113
			·											<u> </u>	
Monitoring V	Vell MW-1														
03	3/11/92	5½'-15½'		CT	ND(0.001)	ND(0.001)	0.015	ND(0.001)	ND(0.001)	0.019	0.004	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
MW1-10593	10/5/93	5½'-15½' _{scree}	, water	CrLab	ND(0.0005)	ND(0.0005)	0.0013	ND(0.0005)	ND(0.0005)	0,00070	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)
MW1-61794	6/17/94	51/21-151/21 person	, water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.00033	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW1-Q3	5/17/95	5½'-15½' _{всеее}	, water	CrLab	ND (0.0005)	ND(0.0005)	0.0060	ND (0.0005)	ND (0.0005)	0.0042	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW1-Q4	8/10/95	51/2'-151/2' scree	, water	CrLab	ND(0.0005)	ND(0.0005)	0.0010	ND (0.0005)	ND(0.0005)	0,0010	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW1-Q5	8/22/96	5½'-15½'	, water	CrLab	ND(0.0005)	ND (0.0005)	0.00060	ND(0.0005)	ND(0.0005)	0.00090	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)
GT3-MW1	1/27/99	5½'-15½'	, water	CrLab	ND(0,0005)	ND(0.0005)	0.0016	ND(0.0005)	ND(0.0005)	0.0030	0.00057	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)
Monitoring V	Vell MW-2														
MW2-10593	10/5/93	5½'-15½'	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.0010	0.031	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)
MW2-61794	6/17/94	51/2'-151/2'		CrLab	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	0.0017	0.048	0.0013	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)
GT3-MW2-Q3	5/17/95	51/2'-151/2'	water	CrLab	ND(0,0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.013	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW2-Q4	8/10/95	5½'-15½' sores	. water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0,017	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)
GT3-MW2-Q5	8/22/96	51/2'-151/2' acree		CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.00080	0.026	0.00070	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW2	1/27/99	5½'-15½'		CrLab	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	0.00068	0.019	0.00064	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)
Monttoring V	Vell MW-3											ü			
MW3-10593	10/5/93	5½'-15½'	water	CrLab	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)
MW3-61794	6/17/94	5½'-15½'		CrLab	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)
GT3-MW3-Q3	5/17/95	51/2'-151/2'		CrLab	ND(0.0005)	ND (0.0005)	ND(0,0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)
GT3-MW3-Q4	8/10/95	51/2'-151/2'		CrLab	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)
GT3-MW3-Q5		51/2'-151/2' scree	••	CrLab	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)
GT3-MW3	1/27/99	51/2'-151/2'	**	CrLab	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)
Monttoring V	Vell MW-4														
MW-4	12/15/98	5½'-15½'	water	CrLab	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	0.0046	0.0021	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW2	1/27/99	5½'-15½'		CrLab	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)	0.010	0.0040	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)

Table A/GW2^{con't}

GROUNDWATER RESULTS VOLATILE ORGANICS FORMER OAKLAND GENERAL TIRE - 1201 14th Avenue {mg/L}

Sample	Sampling	Depth	Matrix	Lab	Methylene	1,1,2,2-Tetra-	Tetra-	1,1,1-Tri-	1,1,2-Tri-	Tri-	Trichlorofluoro	Vinyl
I.D.	Date	(feet)			Chloride	chloroethane	chloroethene	chloroethane	chloroethane	chloroethene	methane	Chloride
Monitorina W	Zoff MTIZ-1											
03	3/11/92	5½'-15½'	water	CT	ND(0.020)	ND(0.001)	ND(0.001)	0.003	ND(0.001)	0.012	ND(0,001)	ND(0.002)
MW1-10593	10/5/93	5½'-15½' screen		CrLab	ND(0,020)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
MW1-61794	6/17/94	5½'-15½'		CrLab	ND(0.020)	0.00058	ND (0.0005)	ND (0.0005)	0.00057	ND(0.0005)	ND (0.0005)	ND(0.0005)
GT3-MW1-Q3	5/17/95	5½'-15½ screen		CrLab	ND(0.020)	ND(0.0005)	ND(0.0005)	0.0006	ND (0.0005)	0.0013	ND(0,0005)	ND(0.0005)
GT3-MW1-Q4	8/10/95	51/2'-151/2' screen		CrLab	ND(0,020)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW1-Q5	8/22/96	51/2'-151/2' screen		CrLab	ND(0.020)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
GT3-MW1	1/27/99	51/2'-151/2' screen		CrLab	ND(0.0050)	ND (0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	0.0024	ND(0,0005)	ND (0.0005)
Monitoring W	tali MW-9											
MW2-10593	10/5/93	5½'-15½'	water	CrLab	ND(0.020)	ND (0.0005)	0.040	ND (0.0005)	ND(0.0005)	0.046	ND(0.0005)	0.0015
MW2-61794	6/17/94	51/2'-151/2' screen		CrLab	ND(0.020)	ND (0.0005)	0.044	ND (0.0005)	ND(0.0005)	0.087	ND(0.0005)	0.0053
GT3-MW2-Q3	5/17/95	51/2'-151/2'screen		CrLab	ND(0.020)	ND (0.0005)	0.0044	ND (0.0005)	ND(0.0005)	0.017	ND(0,0005)	ND(0.0005)
GT3-MW2-Q3	, .	5½'-15½' _{screen}		CrLab	ND(0.020)	ND (0.0005)	0.0060	ND (0.0005)	ND(0.0005)	0.026	ND(0.0005)	0.0020
GT3-MW2-Q4	8/22/96	51/2'-151/2' screen		CrLab	ND(0.020)	ND (0.0005)	0.016	ND (0.0005)	ND(0.0005)	0.064	ND(0.0005)	0.0023
GT3-MW2	1/27/99	5½-15½ screen		CrLab	ND(0.0050)	ND(0.0005)	0.0035	ND(0.0005)	ND(0.0005)	0.029	ND(0.0005)	0.0065
Maniford of H	tall MII/ 9											
Monitoring W MW3-10593	10/5/93	51/2'-151/2'	water	CrLab	ND (0.020)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)
MW3-61794	6/17/94	51/2'-151/2'		CrLab	ND(0.020)	ND(0.0005)	ND(0,0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)
GW9-MW3-Q3		51/2'-151/2' screen		CrLab	ND(0.020)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0,0005)	•	ND(0.0005)
GW9-MW3-Q4		51/2'-151/2' screen		CrLab	ND(0.020)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0,0005)
GW9-MW3-Q5		51/2'-151/2' screen		CrLab	ND(0.020)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)
GT3-MW3	1/27/99	51/2'-151/2' screen		CrLab	ND(0.005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
Manitoning II	tall MILL A											
Monitoring W MW-4 ¹	12/15/98	51/2'-151/2' screen	water	CrLab	ND(0,0050)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND(0.0005)	0.0048	ND (0.0005)	ND (0.0005)
GT3-MW4	1/27/99	5½'-15½' screen		CrLab	ND(0.0050)	ND(0.0005)	ND (0.0005)	ND (0.0005)	ND (0.0005)	0.0080	ND(0.0005)	ND (0.0005)

note: 1 = Other Method 8260A Volatile Organic Analytes Not Detected, and

Method 8270A Polynuclear Aromatic Hydrocarbons (PAHs) Not Detected (see 12/23/98 J&A "Site Remediation" Report).

Table A/GW3

GROUNDWATER RESULTS ORGANOCHLORINE PESTICIDES and PCBs FORMER OAKLAND GENERAL TIRE - 1201 14th Avenue {mg/L}

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	alpha BHC	beta BHC	gamma BHC	delta BHC	Heptachlor	Aldrin	Heptachlor Epoxide	Endosulfan I	Dieldrin	4,4'-DDE	Endrin
Monitoring 03	<u>Well MW-1</u> 3/11/92 57	⁄2'-15½' _{scre}	_{en} water	ст	ND(0.00005)	ND(0.00005)	ND (0.00005)	ND (0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND(0.00005)	ND (0.0005)	ND(0.0001)	ND(0.0001)
Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	I Endosulfan II	Endosulfan Sulfate	4,4'-DDD	Endrin Aldehyde	4,4'-DDT	Chlordane	Methoxy- chlor	Toxaphene			
Monitoring 03	Well MW-1 3/11/92 51	⁄2 '-1 5½′ _{scre}	_{en} water	СТ	ND(0.0001)	ND (0.0001)	ND(0.0001)	ND(0.0001)	ND(0.0001)	ND (0.0005)	ND(0.0005)	ND (0.001)			

PCBs:

Sample I.D.	Sampling Date	Depth (feet)	Matrix	Lab	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260
Monitoring 03	Well MW-1 3/11/92 59	∕2'-15½' _{scre}	J	ст	ND(0.0005)	ND (0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND (0.0005)	ND(0.0005)

Table A/GW4

GROUNDWATER RESULTS

METALS
FORMER OAKLAND GENERAL TIRE - 1201 14th Avenue {mg/L}

Sample	Sampling	Depth M	latrix	Lab		Nickel			
I.D.	Date	(feet)			Cadmium		Lead		Zinc
Monitoring	Well MW-4				-		•		
MW-4 ¹	12/15/98 51	⁄2'-15½' _{screen} v	vater	CrLab	ND (0.0020)	ND(0.0050)	ND(0.0050)	0.0067	0.016

1 = fittered notes:

Appendix B
Chain-of-Custody Records

CHROMALAB, INC.

PAUT 37 18668 - 2468 -

SUBH #: 5951334 REF: 60

Chain	of	Cus	tody
-/40			,

CLIENT: JONAS DATE 1/27/99 PAGE _/____ of . Environmental Services (SDB) (DOHS 1094) DUE: 82/84/99 REF #:44341 Mark L. Jonas, R.G. PROJ MGR Jonas & Associates Inc. COMPANY TPH-Diesel (EPA 8015M) TOTAL OIL AND GREAS (SM 5520 B+F, E+F) NUMBER OF CONTAINERS ADDRESS 2815 Mitchell Drive, Suite 209 PURGEABLE HALOCAR (HVOCs) (EPA8010 by TOTAL RECOVERABLE HYDROCARBONS (EPA O PESTICIDES(EPA BOSK) CAM 17 METALS (EPA 6010/7470/7471) D Spec. Cond. O TDS TEPH (EPA 8015M) EKerosens, Stissel, I PNA's by C 8270 Walnut Creek, California 94598 SEMIVOLATILES (EPA 8270) EXTRACTION STLC LUFT METALS: Cd. Cr. Pb, Ni, 3 TOTAL LEAD SAMPLERS (SIGNATURE) (925) 933-5360 man (925) 933-5362 (FAX NO.) SAMPLE ID. DATE TIME MATRIX PRESERV. a a GT3-MW1-96 X X 5 water 1/27/99 1245 X X 5 GT3-MW2-Q6 1/27/99 water. 1400 GT3-MW3-Q6 5 1/27/99 water 1200 X GT3-MW4-Q6 water 1/27/99 1315 #/HCL PROJECT INFORMATION SAMPLE RECEIPT RELINQUISHED, BY **RELINQUISHED BY** 2 RELINQUISHED BY PROJECT NAME TOTAL NO OF CONTAINERS 20 General Tire - Oakland 0:08 (SIGNATURE) PROJECT HAMBER HEAD SPACE GT-213 TEMPERATURE PRINTED NAMEL P.O. # CONFORMS TO RECORD Jonas & Associates Inc. STANDARD. COMPANY COMPANY OTHER RECEIVED BY RECEIVED BY Report: @ Routine @ Level 2 @ Level 3 @ Level 4 SPECIAL INSTRUCTIONS/COMMENTS: ISIGNATURE PRINTED HAME Clubules

COMPANY

Environmental Services (SDB)

February 3, 1999

Submission #: 9901334

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas

Project: GENERAL TIRE-OAKLAND

Project#: GT-213

Received: January 28, 1999

re: One sample for TEPH analysis.

Method: EPA 8015M

Client Sample ID: GT3-MW1-26

Spl#: 226828 Sampled: January 27, 1999

Extracted: February 1, 1999 Matrix: WATER

Run#:17195 Analyzed: February 2, 1999

ANALYTE		RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
DIESEL Note:	Hydrocarbon Standard.	410 reported does not man	50 tch the pattern	N.D. n of our Die	82.4 sel	1
MOTOR OIL KEROSENE		N.D. N.D.	500 50	N.D. N.D.		1

Analyst

Environmental Services (SDB)

February 3, 1999

Submission #: 9901334

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas

Project: GENERAL TIRE-OAKLAND

Project#: GT-213

Received: January 28, 1999

re: One sample for TEPH analysis.

Method: EPA 8015M

Client Sample ID: GT3-MW2-26 %

Sp1#: 226829 Sampled: January 27, 1999

Matrix: WATER

Extracted: February 1, 1999

Run#:17195 Analyzed: February 2, 1999

	ANALYTE		RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK : SPIKE (%)	DILUTION FACTOR
l	DIESEL		N.D.	50	N.D.	82.4	1
	Note:	Surrogate Red	coveries demonstrate	e Matrix interf	erence.		
!	MOTOR OIL		N.D.	500	N.D.		1
	KEROSENE		N.D.	50	N.D.		1

Bruce Havlik

Analyst

Environmental Services (SDB)

February 3, 1999

Submission #: 9901334

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas

Project: GENERAL TIRE-OAKLAND

Project#: GT-213

Received: January 28, 1999

re: One sample for TEPH analysis.

Method: EPA 8015M

Client Sample ID: GT3-MW3-Q6 📆

Spl#: 226830

Matrix: WATER

Extracted: February 1, 1999

Sampled: January 27, 1999

Run#:17195

Analyzed: February 2, 1999

BLANK DILUTION REPORTING BLANK RESULT LIMIT RESULT SPIKE **FACTOR** <u>ANALYTE</u> (ug/L) <u>(ug/L)</u> <u>(ug/L)</u> DIESEL N.D.

Surrogate Recoveries demonstrate Matrix interference. Note: MOTOR OIL N.D. 500 N.D. KEROSENE. N.D. 50 N.D.

Bruce Havlik

Analyst

Environmental Services (SDB)

February 3, 1999

Submission #: 9901334

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas

Project: GENERAL TIRE-OAKLAND

Project#: GT-213

Received: January 28, 1999

re: One sample for TEPH analysis.

Method: EPA 8015M

Client Sample ID: GT3-MW4-Q6

Spl#: 226831

Matrix: WATER

Extracted: February 1, 1999

Sampled: January 27, 1999 Run#:17195 Analyzed: February 2, 1999

	RESULT	REPORTING LIMIT	BLANK RESULT	BLANK SPIKE	DILUTION FACTOR
ANALYTE	(uq/L)	(uq/L)	(ug/L)	(%)	
DIESEL	N.D.	50	N.D.	82.4	1
MOTOR OIL	N.D.	500	N.D.		1
KEROSENE	N.D.	50	N.D.		1

Carolyn House Analyst

Bruce Havlil

Environmental Services (SDB)

February 1, 1999

Submission #: 9901334

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas

Project: GENERAL TIRE-OAKLAND

Project#:

GT-213

Received: January 28, 1999

re: One sample for Volatile Halogenated Organics by GC/MS analysis.

Method: 8010 Compounds by Method 8260A Sept 1994

Client Sample ID: GT3-MW1-Q6 ~;

Spl#: 226828 Matrix: WATER

Analyzed: January 29, 1999 Run#: 17192 Sampled: January 27, 1999

1 ,		•		_	
	RESULT	REPORTING LIMIT	BLANK RESULT	SPIKE	DILUTION FACTOR
ANALYTE	(ug/L)	(ug/L)	(uq/L)	(%)	
BROMODICHLOROMETHANE	N.D.	0.50	N.D.		1
BROMOFORM	N.D.	0.50	N.D.		1
BROMOMETHANE	N.D.	1.0	N.D.		1 1 1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.		1
CHLOROBENZENE	N.D.	0.50	N.D.	101	1
CHLOROETHANE	N.D.	1.0	N.D.		1
2-CHLOROETHYLVINYLETHER	N.D.	0.50	N.D.		1
CHLOROFORM	N.D.	0.50	N.D.		1
CHLOROMETHANE	N.D.	1.0	N.D.		1 1 1 1 1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.		
1,2-DICHLOROBENZENE	N.D.	0.50	N.D.	·	1
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.		1 1 1 1
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.		1
1,2-DIBROMOETHANE	N.D.	0.50	N.D.		1
1,1-DICHLOROETHANE	1.6	0.50	N.D.		
1,2-DICHLOROETHANE	N.D.	0.50	N.D.		. 1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	3.0	0.50	N.D.		1
1,2-DICHLOROETHENE (TRANS)	0.57	0.50	N.D.		1
1,2-DICHLOROPROPANE	N.D.	0.50	$\mathtt{N.D.}_{\gamma}$		1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	$\mathtt{N.D.}^{\checkmark}$		1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.		1
METHYLENE CHLORIDE	N.D.	5.0	N.D.		1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	- -	1 1 1
TETRACHLOROETHENE	N.D.	0.50	N.D.		1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.		1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.		1
TRICHLOROETHENE	2.4	0.50	N.D.	93.0	1
VINYL CHLORIDE	N.D.	0.50	N.D.		1
TRICHLOROTRIFLUOROETHANE	N.D.	0.50	N.D.		1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.		1

June Zhao Analyst

Operations Manager

Environmental Services (SDB)

February 1, 1999

Submission #: 9901334

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas

Project: GENERAL TIRE-OAKLAND

-- 20 1000

Project#: GT-213

Received: January 28, 1999

re: One sample for Volatile Halogenated Organics by GC/MS analysis.

Method: 8010 Compounds by Method 8260A Sept 1994

Client Sample ID: GT3-MW2-Q6 🍑

Spl#: 226829

Matrix: WATER

Sampled: January 27, 1999

Run#: 17192

Analyzed: January 29, 1999

ANALYTE	RESULT (uq/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK DI SPIKE F (%)	LUTION FACTOR
BROMODICHLOROMETHANE	N.D.	0.50	N.D.		1
BROMOFORM	N.D.	0.50	N.D.		1 1 1 1 1
BROMOMETHANE	N.D.	1.0	N.D.		1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.		1
CHLOROBENZENE	N.D.	0.50	N.D.	101	1
CHLOROETHANE	N.D.	1.0	N.D.		1
2-CHLOROETHYLVINYLETHER	N.D.	0.50	N.D.		1
CHLOROFORM	N.D.	0.50	N.D.		1
CHLOROMETHANE	N.D.	1.0	N.D.		1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.		1
1,2-DICHLOROBENZENE	N.D.	0.50	N.D.		1
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.		1
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.		1
1,2-DIBROMOETHANE	N.D.	0.50	N.D.		1 1 1 1 1 1 1 1 1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.		1
1,2-DICHLOROETHANE	N.D.	0.50	N.D.		1
1,1-DICHLOROETHENE	0.68	0.50	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	19	0.50	N.D.		1
1,2-DICHLOROETHENE (TRANS)	0.64	0.50	N.D.		1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.		1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.		1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.		1
METHYLENE CHLORIDE	Ŋ.D.	5.0	N.D.		1
1,1,2,2-TETRACHLOROETHANE	Ŋ.D.	0.50	N.D.		1
TETRACHLOROETHENE	3.5	0.50	Ŋ.D.		1
1,1,1-TRICHLOROETHANE	N.D.	0.50	Ŋ.D.		1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.		1
TRICHLOROETHENE	29_	0.50	N.D.	93.0	1 1 1 1 1 1
VINYL CHLORIDE	6.5	0.50	N.D.		1
TRICHLOROTRIFLUOROETHANE	N.D.	0.50	N.D.		1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.		ī
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June 7ha

June Zhao Analyst Michael Verona Operations Manager

Environmental Services (SDB)

February 1, 1999

Submission #: 9901334

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas

Project: GENERAL TIRE-OAKLAND

Project#:

GT-213

Received: January 28, 1999

re: One sample for Volatile Halogenated Organics by GC/MS analysis.

Method: 8010 Compounds by Method 8260A Sept 1994

Client Sample ID: GT3-MW3-Q6

Spl#: 226830

Matrix: WATER

Sampled: January 27, 1999

Run#: 17192

Analyzed: January 29, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK D SPIKE (%)	ILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	0.50	N.D.		1
BROMOFORM	N.D.	0.50	N.D.		1
BROMOMETHANE	N.D.	1.0	N.D.		1 1 1 1 1 1 1 1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.		1
CHLOROBENZENE	N.D.	0.50	N.D.	101	1
CHLOROETHANE	N.D.	1.0	N.D.		1
2-CHLOROETHYLVINYLETHER	N.D.	0.50	N.D.		1
CHLOROFORM	N.D.	0.50	N.D.		1
CHLOROMETHANE	N.D.	1.0	N.D.		1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.		1
1,2-DICHLOROBENZENE	N.D.	0.50	N.D.		1
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.	- -	1
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.	- -	1
1,2-DIBROMOETHANE	N.D.	0.50	N.D.		1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.		1
1,2-DICHLOROETHANE	N.D.	0.50	N.D.		1 1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	104	
1,2-DICHLOROETHENE (CIS)	N.D.	0.50	N.D.		1
1,2-DICHLOROETHENE (TRANS)	N.D.	0.50	N.D.	·	1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.		l
CIS-1,3-DICHLOROPROPENE	N.D.	√ 0.50	N.D.		1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.		1
METHYLENE CHLORIDE	N.D.	5.0	N.D.		1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.		1
TETRACHLOROETHENE	N.D.	0.50	N.D.		1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.		1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.		1
TRICHLOROETHENE	N.D.	0.50	N.D.	93.0	1 1 1 1 1 1 1 1
VINYL CHLORIDE	N.D.	0.50	N.D.		1
TRICHLOROTRIFLUOROETHANE	N.D.	0.50	N.D.		1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.		1

J

June Zhao Analyst Michael Verona $^{orall}$

Operations Manager

Environmental Services (SDB)

February 1, 1999

Submission #: 9901334

GT-213

JONAS & ASSOCIATES, INC.

Atten: Mark Jonas

Project: GENERAL TIRE-OAKLAND

Received: January 28, 1999

re: One sample for Volatile Halogenated Organics by GC/MS analysis.

Project#:

Method: 8010 Compounds by Method 8260A Sept 1994

Client Sample ID: GT3-MW4-26 ***

Spl#: 226831

Matrix: WATER

Sampled: January 27, 1999

Run#: 17192

Analyzed: January 29, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK DILUTION SPIKE FACTOR (%)
BROMODICHLOROMETHANE	N.D.	0.50	N.D.	1
BROMOFORM	N.D.	0.50	N.D.	1
BROMOMETHANE	N.D.	1.0	N.D.	1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.	1
CHLOROBENZENE	N.D.	0.50	N.D.	101 1
CHLOROETHANE	N.D.	1.0	N.D.	1
2-CHLOROETHYLVINYLETHER	N.D.	0.50	N.D.	1
CHLOROFORM	N.D.	0.50	N.D.	1
CHLOROMETHANE	N.D.	1.0	N.D.	1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.	1
1,2-DICHLOROBENZENE	N.D.	0.50	N.D.	1
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.	1
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.	<u>1</u>
1,2-DIBROMOETHANE	N.D.	0.50	N.D.	1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.	· 1
1,2-DICHLOROETHANE	N.D.	0.50	N.D.	1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	104 1
1,2-DICHLOROETHENE (CIS)	10	0.50	N.D.	- - 1
1,2-DICHLOROETHENE (TRANS)	4.0	0.50	N.D.	1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.	1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	1
TETRACHLOROETHENE	N.D.	0.50	N.D.	1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.	1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.	1
TRICHLOROETHENE	8.0	0.50	N.D.	93.0 1
VINYL CHLORIDE	N.D.	0.50	N.D.	1
TRICHLOROTRIFLUOROETHANE	N.D.	0.50	N.D.	1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.	1
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June Zhao Analyst Michael Verona⁷⁰ Operations Manager