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By Alameda County Environmental Health at 3:55 pm, Dec 13, 2013

**Classic Investments, LLC**

4145 Broadway  
Oakland, California 94611

November 18, 2013

Ms. Dilan Roe  
Alameda County Department of Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

**SUBJECT: SUBSURFACE INVESTIGATION REPORT CERTIFICATION**  
ACEH Case # RO 0000509  
Downtown Toyota  
4145 Broadway  
Oakland, CA

Dear Ms. Roe:

You will find enclosed one copy of the following document prepared by RGA Environmental, Inc. for the subject site.

- Subsurface Investigation Report dated November 18, 2013 (document 0271.R5).

In accordance with recommendations set forth in the report, I request that the case be closed in accordance with the Low Threat Closure Policy.

I declare, under penalty of perjury, that the information and/or recommendations contained in the above-mentioned report for the subject site is true and correct to the best of my knowledge.

Should you have any questions, please do not hesitate to call me at (510) 547-4635.

Cordially,  
Classic Investments, LLC

  
Daniel P. Varosh for Classic Investments, LLC

Cc: Mr. LeRoy Griffin, Oakland Fire Department, Emergency Services, 250 Frank Ogawa Plaza, Suite 3341, Oakland, CA 94612 (with enclosure)

0271.L11



November 18, 2013  
Report 0271.R5  
RGA Job# PZ33580

Mr. Ralph Fattore  
Classic Investments, LLC  
4145 Broadway  
Oakland, CA

SUBJECT: SUBSURFACE INVESTIGATION REPORT (B8 AND B9)  
RO # 0000509  
Downtown Toyota  
4145 Broadway  
Oakland, CA

Dear Mr. Fattore:

RGA Environmental, Inc. (RGA) has prepared this report documenting activities associated with drilling of two soil borings (B8 and B9) at the subject site to obtain additional information for evaluation of conformance with Low Threat Closure Policy (LTCP) criteria for the site.

This work was performed in accordance with a letter dated July 9, 2013 from the Alameda County Environmental Health Department (ACEH) discussing LTCP criteria for the site, an August 16, 2013 meeting at ACEH offices to discuss methods for evaluating compliance with LTCP criteria, and RGA's Subsurface Investigation Work Plan (B8 and B9) dated August 19, 2013 (document 0271.W2).

Drilling and sampling activities associated with boreholes B8 and B9 were performed on October 3, 4, and 7, 2013. Borehole B8 was located adjacent to the former waste oil UST excavation (the historical source area) and borehole B9 was located adjacent to historical borehole PS08 (the location where the highest historical groundwater petroleum concentration was detected). Boreholes B8 and B9 were continuously cored to depths of 20 and 15 feet below the ground surface (bgs), respectively. Soil and groundwater samples were collected from each borehole, and the presence of free product was evaluated on the surface of the water that accumulated in each borehole. No petroleum hydrocarbons were detected in the soil and water samples with the exception of two Polynuclear Aromatic Hydrocarbon (PAH) compounds that were detected in the soil sample collected from borehole B9 at a depth of 9.0 feet bgs. The two detected PAH compounds concentrations are below their respective LTCP Table 1 Concentrations of Petroleum Constituents That Will Have No Significant Risk of Adversely Affecting Human Health for each of residential, commercial/industrial, and utility worker exposure. The two detected PAH

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compounds concentrations are below their respective LTCP Table 1 Concentrations of Petroleum Constituents That Will Have No Significant Risk of Adversely Affecting Human Health for each of residential, commercial/industrial, and utility worker exposure. The two detected PAH compound concentrations are also below their respective San Francisco Bay Regional Water Quality Control Board (RWQCB) May 2013 Table A-1 shallow soil screening levels for each of residential and commercial land use. In addition, no free product was detected on the surface of the water that accumulated in the boreholes. Based on the sample results RGA recommends that the case be closed.

A Site Location Map is attached as Figure 1, a Site Vicinity Map is attached as Figure 2, and a Site Plan Detail showing borehole locations is attached as Figure 3. All work was performed under the direct supervision of a professional geologist.

## BACKGROUND

The site is surrounded by commercial properties located along Broadway, and residential housing for structures that are not located adjacent to Broadway. The site is presently used as an automotive repair and sales dealership facility. One 500-gallon underground waste oil tank was removed from the site on February 7, 1992. A detailed discussion of historical investigations at the site is provided in RGA's Subsurface Investigation Work Plan dated July 19, 2007 (document 0271.W1). Documentation of historical investigations at the site is provided in the following documents.

- Patterson Ranch Used Oil Storage Tank Removal report dated May 21, 1992 prepared by Burlington Environmental, Inc. (Burlington),
- Preliminary Site Assessment Report dated March 11, 1994 prepared by Burlington,
- Further Assessment of Groundwater report dated November 4, 1999 prepared by Geo-Logic,
- Subsurface Investigation Work Plan dated July 19, 2007 prepared by RGA,
- Well Survey Report dated February 23, 2010 prepared by RGA,
- Preferential Pathway Survey Report dated February 23, 2010 prepared by RGA.
- Site Conceptual Model Report dated May 4, 2011 prepared by RGA.

## FIELD ACTIVITIES

Prior to drilling, Alameda County Public Works Agency (ACPWA) permit W2013-0833 was obtained for the drilling of boreholes B8 and B9. In addition, the drilling locations were marked with white paint, Underground Service Alert (USA) was notified for underground utility location, and a health and safety plan was prepared.

### Continuous Coring and Depth-Discrete Groundwater Sample Collection

On October 3 and 4, 2013 RGA personnel oversaw drilling at locations B8 and B9 (see Figure 2). Drilling was performed by Vironex, Inc. of Concord, California (Vironex) using Geoprobe direct push technology. Continuous cores were collected at locations B8 and B9 to total depths of 20.0 and 15.0 feet bgs, respectively, using a Geoprobe Macrocore barrel sampler lined with transparent PVC sleeves.

The soil from the continuously cored boreholes was logged in the field in accordance with the Unified Soil Classification System (USCS) and was field screened with a photoionization detector (PID) equipped with a 10.6 eV bulb and calibrated with a 100 ppm isobutylene standard. PID values were recorded on the boring logs. The soil from the continuous cores was also field screened for odors, staining, and discoloration. Elevated PID values were measured and odors, staining, and discoloration were observed only in the soil from continuously cored borehole B9 as follows.

- In borehole B9 discoloration was observed between the depths of 9.0 and 12.5 feet bgs; and moderate petroleum odors with associated PID values of 43 to 52 ppm were encountered between the depths of 9.0 and 13.0 feet bgs.

Soil samples were retained for laboratory analysis from borehole B8 at depths of 2.5 and 7.5 feet bgs and from borehole B9 at depths of 2.5 and 9.0 feet bgs by sequentially covering the ends of the selected portion of the barrel sampler transparent PVC tube with aluminum foil and plastic endcaps, and then labeling and storing each tube in a cooler with ice pending delivery to the laboratory. Chain of custody procedures will be observed for all sample handling.

Groundwater was not encountered in continuously cored borehole B8 during drilling to a depth of 15.0 feet bgs on October 3, 2013. A temporary 1-inch diameter slotted PVC pipe was placed in the borehole and the casing was dry and remained dry during October 3, 2013. The borehole was temporarily capped with bentonite at the end of the day and allowed to recharge overnight. At the beginning of October 4, 2013 following determination that the temporary slotted PVC casing in borehole B8 was dry, the temporary PVC casing was removed from the borehole and the borehole was continuously cored to 20.0 feet bgs using methods described above. Groundwater was encountered at 18.0 feet bgs during drilling and a temporary 1-inch diameter slotted casing was placed in borehole B8 to a depth of 20.0 feet bgs. However, no water was detected in the temporary PVC casing. The borehole was temporarily capped again with bentonite and allowed to recharge over the weekend. On October 7, 2013 water was measured in borehole B8 at a depth of 11.1 feet bgs.

Groundwater was encountered in continuously cored borehole B9 at a depth of 12.0 feet bgs during drilling to a depth of 15.0 feet bgs on October 3, 2013. A temporary 1-inch diameter

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slotted casing was placed in the borehole, and the borehole was temporarily capped with a bentonite seal to allow any potential free product to enter the borehole. On October 4, 2013 water was measured in borehole B9 at a depth of 9.7 feet bgs.

Copies of the boring logs for the continuously cored boreholes are attached with this report as Appendix A.

Prior to groundwater sample collection in each borehole, the presence of free product on water in the borehole was evaluated in the following manner. A steel tape with petroleum-finding paste and water-finding paste was inserted into the borehole to determine if any measurable free product was present. No measurable free product was detected on the water in the borehole. The presence of free product was also evaluated by inserting a polyethylene tube into the temporary PVC pipe that was connected to a peristaltic pump. The pump was operated while the bottom of the tube was still above the liquid in the borehole and the tube was slowly inserted into the temporary PVC pipe until the surface of the fluid in the borehole was drawn into the tubing. The fluid that was drawn into the tube was discharged into a container and was evaluated for the presence of a separate phase layer, including evidence of a sheen and petroleum hydrocarbon odor. No separate phase layer, petroleum hydrocarbon odor, or sheen was observed on the water for either borehole.

A groundwater sample was collected from the temporary PVC pipe using new polyethylene tubing and silicone tubing for each borehole with a peristaltic pump. The borehole B9 groundwater sample was collected on October 4, 2013 and the borehole B8 groundwater sample was collected on October 7, 2013. Each groundwater sample was transferred to 40-milliliter VOAs directly from the discharge tubing. All of the VOAs were supplied by the laboratory and contained hydrochloric acid preservative. The sample bottles were labeled and placed in a cooler with ice pending delivery to the laboratory. Chain of custody procedures were observed for all sample handling.

All drilling and sampling equipment was cleaned with an Alconox solution followed by a clean water rinse prior to use in each borehole. Following completion of logging and sample collection activities, the boreholes were filled with neat cement grout. All soil generated during subsurface investigation was stored in a labeled five gallon bucket at the site pending characterization and proper disposal.

#### Investigation-Derived Waste Disposal

On November 4, 2013 one five gallon bucket of soil was removed from the site as non-hazardous waste by Icon Environmental, Inc. (Icon) of Union City California to the Icon Union facility for subsequent disposal at a facility designated for disposal of petroleum-impacted using non-hazardous waste manifest 10323. A copy of the non-hazardous waste manifest is attached with this report as Appendix B.

## GEOLOGY AND HYDROGEOLOGY

A detailed discussion of the site geology and hydrogeology is provided in RGA's May 4, 2011 Site Conceptual Model Report (document 0271.R4). The subsurface materials encountered in boreholes B8 and B9 are consistent with the predominantly clay and silt materials previously encountered in boreholes at the site. Coarse-grained materials encountered in the boreholes at the site consisted of clayey sand in borehole B8 between the depths of 10.0 and 10.5 feet bgs, and in borehole B9 between the depths of 9.0 to 11.0 and 12.0 to 13.0 feet bgs.

There are no groundwater monitoring wells at the site to provide historical groundwater level measurements or groundwater flow direction. Groundwater has historically been reported at depths ranging from approximately 9 to 14 feet bgs in the former waste oil UST pit and soil borings at the site. The static groundwater level in boreholes B8 and B9 was measured at 11.1 and 9.7 feet bgs, respectively prior to groundwater sample collection.

At the nearby site at 3943 Broadway, approximately 850 feet south of the subject site, water level measurements reported between November 2001 and June 2008 in 12 groundwater monitoring wells typically ranged between approximately 8 and 11 feet bgs, with most measurements between either 8 and 10 feet bgs or 9 and 11 feet bgs. Based on water level measurements in the groundwater monitoring wells at 3943 Broadway, the groundwater flow direction calculated by others has ranged from the west-southwest to the southwest. This west-southwest to southwest groundwater flow direction is consistent with the expected groundwater flow direction at the subject site based on the surface topography in the immediate vicinity of the subject site.

## LABORATORY ANALYSIS

All of the soil and groundwater samples collected from boreholes B8 and B9 were analyzed at McCampbell Analytical, Inc. (McCampbell) of Pittsburg, California. The soil samples were analyzed for PAHs using EPA Method 3550B in conjunction with EPA Method 8270C-SIM and for Volatile Organic Compounds (VOCs) using EPA Method 5030B in conjunction with EPA Method 8260B. The groundwater samples were analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-G) using EPA Method 5030B in conjunction with EPA Method 8021B and modified EPA Method 8015B, for Total Petroleum Hydrocarbons as Diesel (TPH-D) and Total Petroleum Hydrocarbons as Bunker Oil (TPH-BO) using EPA Methods 3510C and 3630C in conjunction with EPA Method 8015B using silica gel cleanup, for methyl-tert-butyl ether (MTBE), benzene, toluene, ethylbenzene, and xylenes (MBTEX) using EPA Method 5030B in conjunction with EPA Method 8260B.

The analytical results for the soil samples collected from boreholes B8 and B9 (B8-2.5, B8-7.5, B9-2.5, and B9-9.0) are summarized in Table 1, and the analytical results for the groundwater

samples B8-W and B9-W are summarized in Table 2. Copies of the laboratory analytical reports are attached to this report as Appendix C.

## DISCUSSION AND RECOMMENDATIONS

In accordance with the ACEH July 9, 2012 letter, the August 16, 2013 meeting at ACEH offices, and RGA's August 19, 2013 work plan borehole B8 was drilled adjacent to the former waste oil UST pit (the source area), and borehole B9 was drilled where the highest groundwater petroleum hydrocarbon concentration was detected at the site to evaluate LTCP criteria as follows:

- General Criteria d (Free Product),
- Media Specific Criteria for Groundwater,
- Media Specific Criteria for Direct Contact and Outdoor Air Criteria.

Review of Table 1 shows that no analytes were detected in soil samples B8-2.5, B8-7.5, B9-2.5, and B9-9.0 with the exceptions of the two PAHs chrysene and pyrene in sample B9-9.0 at concentrations of 0.016 and 0.026 milligrams per kilogram (mg/kg). Review of Table 2 shows that no analytes were detected in either groundwater sample B8-W or B9-W.

Review of the two detected PAHs shows that only chrysene is evaluated for the benzo(a)pyrene toxicity equivalent (BaPe) value when comparing PAH sample results with LTCP Table 1 Concentrations of Petroleum Constituents That Will Have No Significant Risk of Adversely Affecting Human Health screening levels. The BaPe procedure consists of multiplying all detected PAHs that are considered during the BaPe evaluation (benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene) by their corresponding toxicity equivalent factors, followed by a summation of these BaPe concentrations and comparison of the sum with the screening level. The toxicity equivalent factor for chrysene is 0.016. The BaPe value for the detected chrysene in sample B9-9.0 is calculated as follows:

$$0.016 \text{ mg/kg} \times 0.016 = 0.00026 \text{ mg/kg.}$$

Review of the detected soil sample results in Table 1 shows that no analytes were detected at concentrations that exceed their respective LTCP Table 1 Concentrations of Petroleum Constituents That Will Have No Significant Risk of Adversely Affecting Human Health for each of residential, commercial/industrial, and utility worker exposure. The two detected PAH compound concentrations are also below their respective San Francisco Bay Regional Water Quality Control Board (RWQCB) May 2013 Table A-1 shallow soil screening levels for each of residential and commercial land use.

The results of the evaluation of the three LTCP criteria that were identified by the ACEH as requiring further evaluation prior to consideration of the site for closure are as follows.

- General Criteria d (Free Product) – No free product was identified in either of the boreholes.
- Media Specific Criteria for Groundwater – The extent of petroleum hydrocarbons in groundwater at the site has been defined by the sample results which showed that no petroleum hydrocarbons were detected. The site satisfies Class 1 criteria for Groundwater-Specific Criteria.
- Media Specific Criteria for Direct Contact and Outdoor Air Criteria – No analytes were detected at concentrations exceeding their respective LTCP Table 1 Concentrations of Petroleum Constituents That Will Have No Significant Risk of Adversely Affecting Human Health for each of residential, commercial/industrial, and utility worker exposure.

Based on the absence of free product in either of the boreholes, the defined extent of petroleum hydrocarbons in groundwater, and the absence of compounds exceeding LTCP Table 1 criteria, RGA recommends that no further action be performed and that the case be closed in accordance with the LTCP.

#### DISTRIBUTION

A copy of this report will be uploaded to the ACDEH website, in accordance with ACDEH requirements. In addition, a copy of this report will be uploaded to the GeoTracker database.

#### LIMITATIONS

This report was prepared solely for the use of Classic Investments, LLC. The content and conclusions provided by RGA in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with the site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgment based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between borings and may not necessarily apply to the general site as a whole. If future subsurface or other conditions are revealed which vary from these findings, the newly revealed conditions must be evaluated and may invalidate the findings of this report.



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This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous materials or hazardous wastes left onsite, in accordance with existing laws and regulations.

This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. RGA is not responsible for the accuracy or completeness of information provided by other individuals or entities that is used in this report. This report presents our professional judgment based upon data and findings identified in this report and interpretation of such data based upon our experience and background, and no warranty, either express or implied, is made.

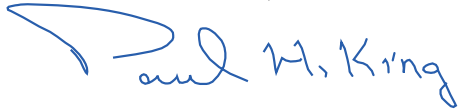
The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.

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Should you have any questions, please do not hesitate to contact us at (510) 658-4363.

Sincerely,

RGA Environmental, Inc.



Paul H. King  
California Professional Geologist #5901  
Expires: 12/31/13



Attachments:

Table 1 – Summary of Borehole Soil Sample Analytical Results  
Table 2 – Summary of Borehole Groundwater Sample Analytical Results

Figure 1 – Site Location Map  
Figure 2 – Site Vicinity Map  
Figure 3 – Site Plan Detail

Appendix A – Boring Logs  
Appendix B – Uniform Non-Hazardous Waste Manifest  
Appendix C – Laboratory Reports and Chain of Custody Documentation

PHK/ hd/mld/sjc  
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# **TABLES**

Table 1  
Summary of Borehole Soil Sample Analytical Results

Sample ID	Sample Date	Sample Depth (Ft bgs)	PAHs by EPA Method 8270C	Naphthalene	VOCs by EPA Method 8260B
B8-2.5	10/3/2013	2.5	All ND	ND<0.0050	All ND
B8-7.5	10/3/2013	7.5	All ND	ND<0.0050	All ND
B9-2.5	10/3/2013	2.5	All ND	ND<0.0050	All ND
B9-9.0	10/3/2013	9.0	All ND, except chrysene = 0.016, pyrene = 0.026	ND<0.0050	All ND
LTCP <sup>1</sup>		0 to 5	PAH = 0.063	9.7	Benzene = 1.9, Ethylbenzene = 21
		5 to 10	PAH = NA	9.7	Benzene = 2.8, Ethylbenzene = 32
LTCP <sup>2</sup>		0 to 5	PAH = 0.68	45	Benzene = 8.2, Ethylbenzene = 89
		5 to 10	PAH = NA	45	Benzene = 12, Ethylbenzene = 134
LTCP <sup>3</sup>		0 to 10	PAH = 4.5	219	Benzene = 14, Ethylbenzene = 314
ESL <sup>1</sup>		0 to 9.9	chrysene = 3.8, pyrene = 85	1.2	Various Various
ESL <sup>2</sup>		0 to 9.9	chrysene = 4.5, pyrene = 85	1.2	Various Various
<b>NOTES</b>					
Ft bgs = Feet Below Ground Surface.					
PAHs = Polynuclear Aromatic Hydrocarbons					
VOCs = Volatile Organic Compounds.					
ND = Not Detected.					
LTCP <sup>1</sup> =	Low Threat Closure Policy by State Water Resources Control Board August 17, 2012 Table 1 - Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health - Residential Exposure Scenario.				
LTCP <sup>2</sup> =	Low Threat Closure Policy by State Water Resources Control Board August 17, 2012 Table 1 - Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health - Commercial/Industrial Exposure Scenario.				
LTCP <sup>3</sup> =	Low Threat Closure Policy by State Water Resources Control Board August 17, 2012 Table 1 - Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health - Utility Worker Exposure Scenario.				
ESL <sup>1</sup>	= Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated May 2013, from Table A-1 – Shallow Soil Screening Levels, Groundwater is a current or potential drinking water resource. Residential Land Use.				
ESL <sup>2</sup>	= Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated May 2013, from Table A-2 – Shallow Soil Screening Levels, Groundwater is a current or potential drinking water resource. Commercial/Industrial Land Use.				
Results, LTCP values and ESLs reported in milligrams per kilogram (mg/kg) unless otherwise indicated.					

Table 2  
Summary of Borehole Groundwater Sample Analytical Results

Sample ID	Sample Date	TPH-G	TPH-D	TPH-BO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes
B8-W	10/7/2013	ND<50	ND<50	ND<100	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
B9-W	10/4/2013	ND<50	ND<50	ND<100	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<i>ESL<sup>1</sup></i>		<i>100</i>	<i>100</i>	<i>100</i>	<i>5.0</i>	<i>1.0</i>	<i>40</i>	<i>30</i>	<i>20</i>
<u>NOTES:</u>									
TPH-G = Total Petroleum Hydrocarbons as Gasoline.									
TPH-D = Total Petroleum Hydrocarbons as Diesel.									
TPH-BO = Total Petroleum Hydrocarbons as Bunker oil.									
MTBE = Methyl-tert-Butyl Ether.									
ND = Not Detected.									
<i>ESL<sup>1</sup></i> = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated May 2013, from Table F-1a – Groundwater Screening Levels, groundwater is a current or potential drinking water resource.									
Results and ESLs reported in micrograms per liter (µg/L) unless otherwise indicated.									

# **FIGURES**



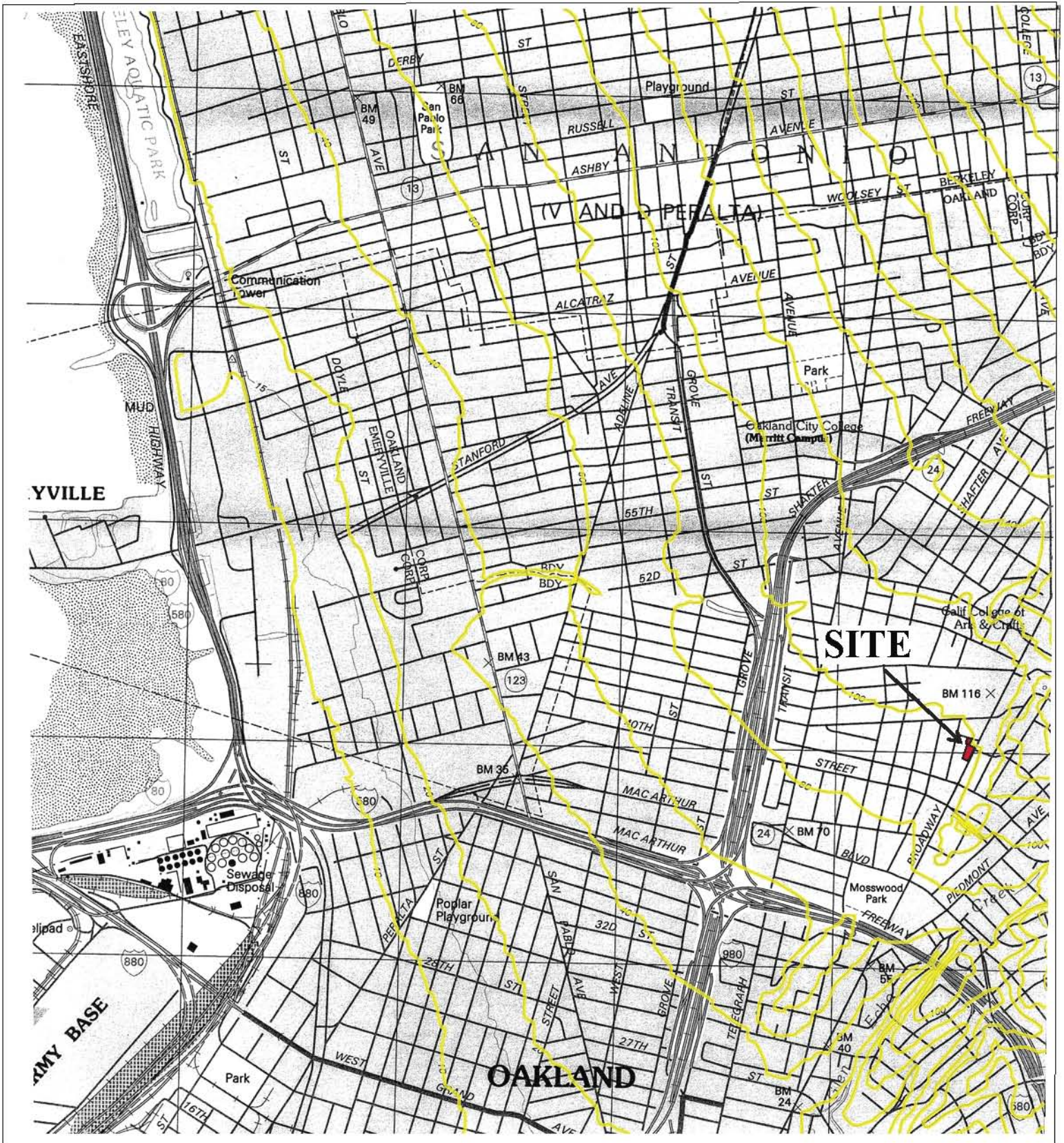
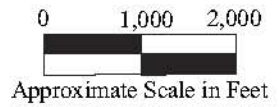


Figure 1  
 Site Location Map  
 Downtown Toyota  
 4145 Broadway  
 Oakland, California



Base Map From:  
 U.S. Geological Survey Oakland West,  
 California 7.5-minute Quadrangle  
 Photorevised 1993

RGA Environmental, Inc.  
 1466 66th Street  
 Emeryville, CA 94608





**LEGEND**

- ◇ PS12 Borehole, Previous Investigation (Burlington, 1994)
- B4 Borehole, Previous Investigation (Geo-Logic, 1999)
- ⊕ B7 Borehole, Previous Investigation (RGA, 2008)
- ⊕ B9 Borehole, Current Investigation
  
- SD Storm Drain - - - - -
- W Water - - - - -
- G Natural Gas - - - - -
- SS Sanitary Sewer - - - - -
- TE Telephone - - - - -
- E Electric - - - - -
- C Cable - - - - -
- Abandoned x x x x x
  
- ⊙ Manhole
- Storm Drain Grate
- Utility Pole

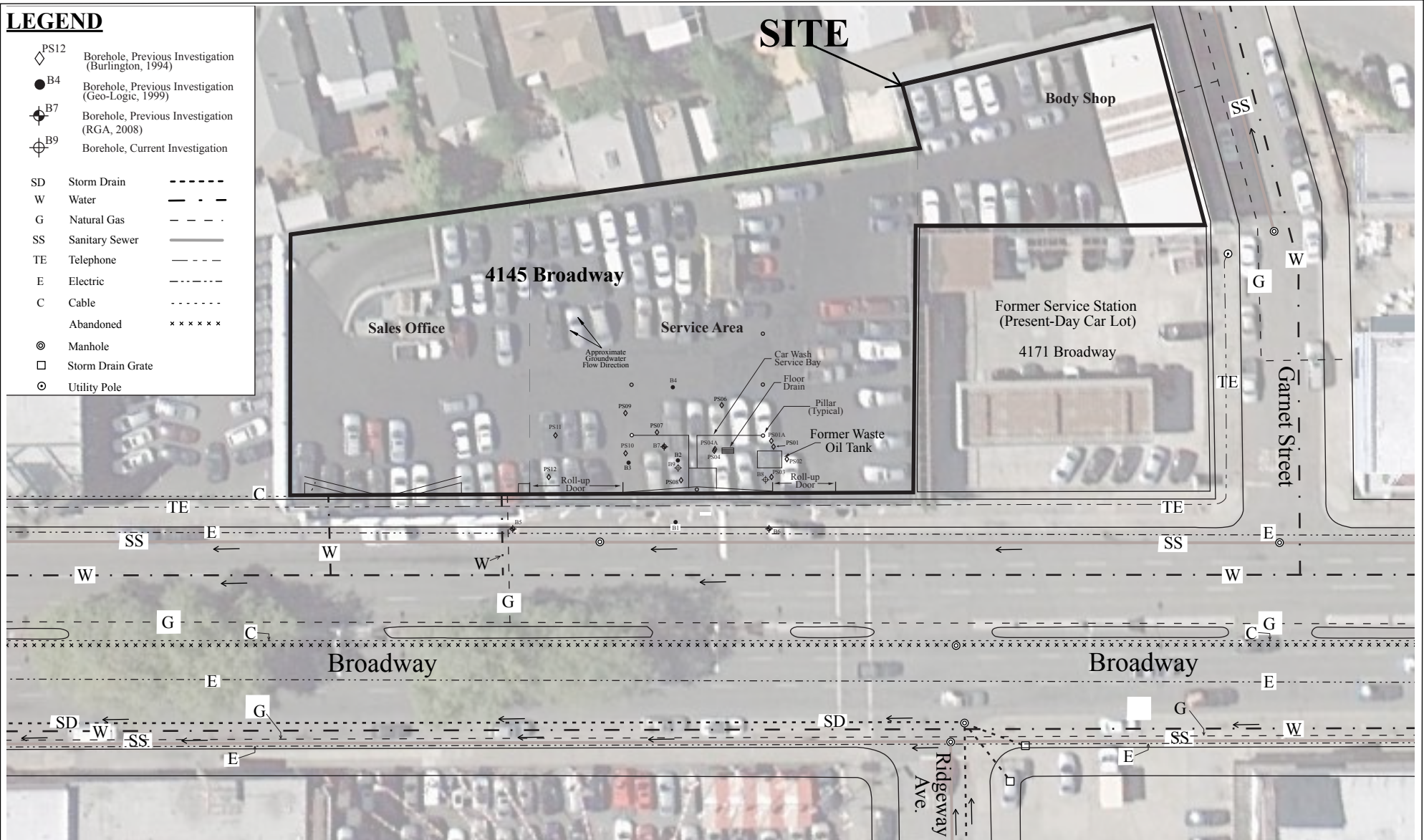
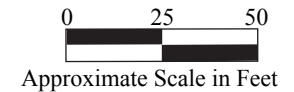


Figure 2  
 Site Vicinity Map  
 Downtown Toyota  
 415 Broadway  
 Oakland, California



Base Map from:  
 Andrew P. Anderson, Architect  
 Doten Pontiac Site Plan  
 June 1966, and Google Earth October 2009

RGA Environmental, Inc.  
 1466 66th Street  
 Emeryville, CA 94608





**LEGEND**

- ◇ PS12 Borehole, Previous Investigation (Burlington, 1994)
- B4 Borehole, Previous Investigation (Geo-Logic, 1999)
- ⊕ B9 Borehole, Current Investigation (RGA, 2013)
- Sanitary Sewer

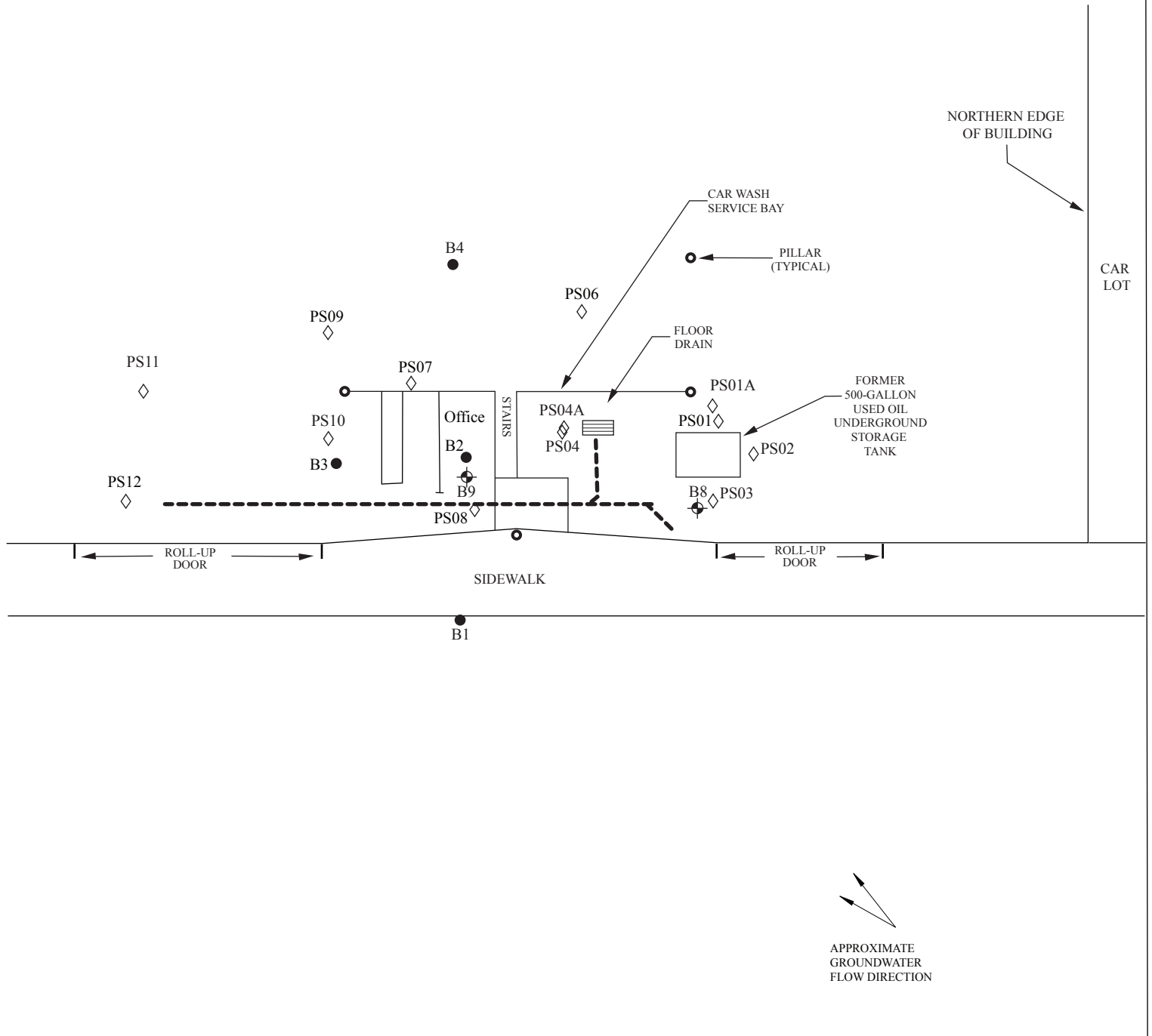
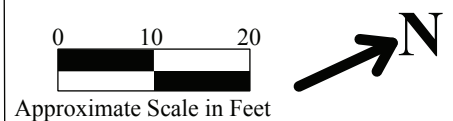


Figure 3  
Site Plan Detail  
Downtown Toyota  
4145 Broadway  
Oakland, California

RGA Environmental, Inc.  
1466 66th Street  
Emeryville, CA 94608



# **APPENDIX A**

## **Boring Logs**

# RG ENVIRONMENTAL, INC.

BORING NO.: B8		PROJECT NO.: 0271		PROJECT NAME: 4145 Broadway, Oakland		
BORING LOCATION: Approximately 2 ft. south and 3 ft. west of roll-up door				ELEVATION AND DATUM: None		
DRILLING AGENCY: Vironex, Inc.		DRILLER: Matt		DATE & TIME STARTED:	DATE & TIME FINISHED:	
DRILLING EQUIPMENT: Geoprobe Badger				10/03/13 0955	10/07/13 1000	
COMPLETION DEPTH: 20.0 Feet		BEDROCK DEPTH: Not Encountered		LOGGED BY:	CHECKED BY:	
FIRST WATER DEPTH: 18.0 Feet		NO. OF SAMPLES: 2 Soil, 1 Water		MLBD		
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Concrete (5-inch) and base rock.			No Well Constructed		On 10/03/13 borehole continuously cored from 0.0 to 15.0 ft. using a 3.0-foot long 2.0-inch O.D. Geoprobe Macrocore barrel sampler. The barrel sampler was lined with a 2.8-foot long 1.5-inch O.D. transparent PVC tube.
	0.5 to 4.0 ft. Black clay (CL); medium stiff, moist, with trace coarse sand. No Petroleum Hydrocarbon (PHC) odor. (0,5,95)	X		B8-2.5	0	
5	4.0 to 10.0 ft. Dark Brown gravelly sandy clay (CL); medium stiff, moist, with few coarse angular gravel to 0.25-inch diameter, and orange mottling. No PHC odor. (5,15,80)	X		B8-7.5	0	0.0 to 3.0 ft. 2.8 ft. recovery 3.0 to 6.0 ft. 2.8 ft. recovery 6.0 to 9.0 ft. 2.8 ft. recovery 9.0 to 12.0 ft. 2.8 ft. recovery 12.0 to 15.0 ft. 2.8 ft. recovery
10	10.0 to 10.5 ft. Dark brown clayey sand (SC); medium dense, moist, with light brown mottling. No PHC odor. (0,75,15)				0	Water not encountered during drilling to 15.0 ft. Temporary 1.0-inch diameter slotted PVC casing placed in borehole. Casing was dry at 1540.
	10.5 to 12.0 ft. Brown sandy silt (ML); medium stiff, moist, with orange mottling. No PHC odor. (0,30,70)				0	On 10/04/13 borehole was dry at 0730. Borehole advanced to 20.0 ft.
	12.0 to 17.5 ft. Dark brown sandy clay (CL); hard, moist, with some medium coarse sand. No PHC odor. (0,15,85)				0	15.0 to 18.0 ft. 2.8 ft. recovery 18.0 to 20.0 ft. 1.8 ft. recovery
15	17.5 to 18.0 ft. Dark brown gravelly sandy clay (CL); soft, wet, with some coarse angular gravel to 0.25-inch diameter. No PHC odor. (10,60,30) Wet at 17.5 ft. Saturated at 18.0 ft.				0	Water encountered during drilling at 18.0 ft. at 0800. Borehole was dry at 0930. Borehole was temporarily capped with bentonite to allow for recharge over the weekend.
	18.0 to 20.0 ft. Brown silty clay (CL); stiff, saturated. No PHC odor. (0,0,100)				0	Water level was measured at 11.1 ft. at 0844 on 10/07/13. Also on 10/07/13 borehole checked for free product using a steel tape and water and petroleum finding pastes. Free product also evaluated using a peristaltic pump and polyethylene tubing. No free product detected.
20						Water sample B8-W collected at 0910 using new unused disposable polyethylene tubing and a peristaltic pump. No odor or sheen on sample. Water level measured after water sample collection at 11.5 ft. at 0932. Borehole grouted on 10/07/13 using neat cement and a tremie pipe. Mr. Steve Miller with Alameda County Public Works Agency gave verbal approval to grout the borehole without his presence.
25						<u>Drilling Notes:</u> 1) Field estimates of percent gravel, sand, and fines are shown in parentheses. 2) Density determinations are qualitative and are not based on quantitative evaluation.
30						

BORING NO.: B9		PROJECT NO.: 0271		PROJECT NAME: 4145 Broadway, Oakland		
BORING LOCATION: Approximately 4 ft. south and 11 ft. east of northwest corner of office				ELEVATION AND DATUM: None		
DRILLING AGENCY: Vironex, Inc.		DRILLER: Matt		DATE & TIME STARTED:	DATE & TIME FINISHED:	
DRILLING EQUIPMENT: Geoprobe Badger				10/03/13 1345	10/04/13 0800	
COMPLETION DEPTH: 15.0 Feet		BEDROCK DEPTH: Not Encountered		LOGGED BY:	CHECKED BY:	
FIRST WATER DEPTH: 12.0 Feet		NO. OF SAMPLES: 2 Soil, 1 Water		MLBD		
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Concrete (5-inch) and base rock.			No Well Constructed		On 10/03/13 borehole continuously cored from 0.0 to 15.0 ft. using a 3.0-foot long 2.0-inch O.D. Geoprobe Macrocore barrel sampler. The barrel sampler was lined with a 2.8-foot long 1.5-inch O.D. transparent PVC tube.  0.0 to 3.0 ft. 2.8 ft. recovery 3.0 to 6.0 ft. 2.8 ft. recovery 6.0 to 9.0 ft. 2.8 ft. recovery 9.0 to 12.0 ft. 2.8 ft. recovery 12.0 to 15.0 ft. 2.8 ft. recovery  Water encountered during drilling at 12.0 ft. at 1430. Temporary 1.0-inch diameter slotted PVC casing placed in borehole.  On 10/03/13 water level was measured at 9.8 ft. at 1440 and at 9.8 ft. at 1450. Borehole was temporarily capped with bentonite to allow for potential free product to enter the borehole.  Water level was measured on 10/04/13 at 9.7 ft. at 0732. Borehole checked for free product using a steel tape and water and petroleum finding pastes. Free product was
	0.5 to 3.5 ft. Black clay (CL); medium stiff, moist, with trace coarse sand. No Petroleum Hydrocarbon (PHC) odor. (0,5,95)	X		B9-2.5		
5	3.5 to 7.0 ft. Dark brown silty clay (CL); medium stiff, moist, with few coarse sand. No PHC odor. (0,5,95)	CL				
	7.0 to 9.0 ft. Brown gravelly sandy clay (CL); medium stiff, moist, with few coarse angular gravel to 0.25-inch diameter, and orange mottling. No PHC odor. (5,15,80)			B9-9.0		
10	9.0 to 11.0 ft. Brown gravelly clayey sand (SC); medium dense, moist, with abundant coarse angular gravel to 0.5-inch diameter. Moderate PHC odor. (15,65,20) 9.0 to 10.0 ft. bluish-gray staining.	X		▼	52	
	11.0 to 12.0 ft. Brown clayey silt (ML); medium stiff, moist to wet, with black mottling and bluish-gray staining from 12.0 ft. to 12.5 ft. No PHC odor. (0,0,100) Wet at 11.5 ft. Saturated at 12.0 ft.	ML		▼	0.2	
	12.0 to 13.0 ft. Dark brown gravelly clayey sand (SC); soft, saturated, with abundant coarse angular gravel to 0.5-inch diameter. Moderate PHC odor. (20,40,40)	SC			43	
	13.0 to 14.0 ft. Brown gravelly sandy clay (CL); medium dense, saturated, with few coarse angular gravel to 0.5-inch diameter, and orange mottling. Slight PHC odor. (90,30,60)	CL			1.8	
15	14.0 to 15.0 ft. Brown clayey silt (ML); dense, saturated, with black mottling. No PHC odor. (0,0,100)	ML			0	
20						
25						
30						

## **APPENDIX B**

### **Uniform Non-Hazardous Waste Manifest**

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.	2. Page 1 of 1	3. Document Number <b>Nº 10323</b>
GENERATOR	4. Generator's Name and Mailing Address  Downtown Toyota of Oakland 4145 Broadway Oakland, CA 94611		Generator's Phone	
	5. Transporter Company Name  Icon Environmental Services	6. US EPA ID Number  CAL 000 362 980	7. Transporter Phone	
	8. Designated Facility Name and Site Address  Icon Environmental Services Inc 1220 Whipple Road Union City, CA 94587	9. US EPA ID Number  CAL 000 369 026	10. Facility's Phone  510-476-1740	
	11. Waste Shipping Name and Description a. Non-Hazardous waste, liquid Solid		12. Containers No. Type	13. Total Quantity
b.				
15. Special Handling Instructions and Additional Information WEAR PPE emergency contact 510-476-1740 attn: Charles Senta  P & D Environmental		Handling Codes for Wastes Listed Above 11a. 11b.		
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name x DANIEL VAROSHI		Signature 		Month Day Year 11 4 13
17. Transporter Acknowledgement of Receipt of Materials				
Printed/Typed Name Charles Senta		Signature 		Month Day Year 11 04 13
18. Discrepancy Indication Space				
19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 18.				
Printed/Typed Name		Signature		Month Day Year

# **APPENDIX C**

## **Laboratory Reports and Chain of Custody Documentation**

- **McC Campbell Work Order # 1310196: Soil Samples B8-2.5, B8-7.5, B9-2.5, and B9-9.0 PAHs and VOCs Results**
- **McC Campbell Work Order # 1310238: Groundwater Sample B8-W TPH and MBTEX Results**
- **McC Campbell Work Order # 1310187: Groundwater Sample B9-W TPH and MBTEX Results**



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1310196

**Report Created for:** RGA Environmental  
1466 66th Street  
Emeryville, CA 94608

**Project Contact:** Paul King  
**Project P.O.:**  
**Project Name:** PZ33580/0271.R5; Downtown Toyota

**Project Received:** 10/04/2013

Analytical Report reviewed & approved for release on 10/11/2013 by:

Question about  
your data?

[Click here to email  
McC Campbell](#)

Angela Rydelius,  
Laboratory Manager

***The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.***







## Glossary of Terms & Qualifier Definitions

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**WorkOrder:** 1310196

<b><u>Glossary</u></b> <b><u>Abbreviation</u></b>	<b><u>Description</u></b>
95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not detected at or above the indicated MDL or RL
NR	Analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
RD	Relative Difference
RL	Reporting Limit
RPD	Relative Percent Deviation
SPK Val	Spike Value
SPKRef Val	Spike Reference Value



# Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/4/13

**WorkOrder:** 1310196  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B8-2.5	1310196-001A	Soil	10/03/2013 10:40	GC10	82528
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	10/11/2013 04:09
tert-Amyl methyl ether (TAME)	ND		0.0050	1	10/11/2013 04:09
Benzene	ND		0.0050	1	10/11/2013 04:09
Bromobenzene	ND		0.0050	1	10/11/2013 04:09
Bromochloromethane	ND		0.0050	1	10/11/2013 04:09
Bromodichloromethane	ND		0.0050	1	10/11/2013 04:09
Bromoform	ND		0.0050	1	10/11/2013 04:09
Bromomethane	ND		0.0050	1	10/11/2013 04:09
2-Butanone (MEK)	ND		0.020	1	10/11/2013 04:09
t-Butyl alcohol (TBA)	ND		0.050	1	10/11/2013 04:09
n-Butyl benzene	ND		0.0050	1	10/11/2013 04:09
sec-Butyl benzene	ND		0.0050	1	10/11/2013 04:09
tert-Butyl benzene	ND		0.0050	1	10/11/2013 04:09
Carbon Disulfide	ND		0.0050	1	10/11/2013 04:09
Carbon Tetrachloride	ND		0.0050	1	10/11/2013 04:09
Chlorobenzene	ND		0.0050	1	10/11/2013 04:09
Chloroethane	ND		0.0050	1	10/11/2013 04:09
Chloroform	ND		0.0050	1	10/11/2013 04:09
Chloromethane	ND		0.0050	1	10/11/2013 04:09
2-Chlorotoluene	ND		0.0050	1	10/11/2013 04:09
4-Chlorotoluene	ND		0.0050	1	10/11/2013 04:09
Dibromochloromethane	ND		0.0050	1	10/11/2013 04:09
1,2-Dibromo-3-chloropropane	ND		0.0040	1	10/11/2013 04:09
1,2-Dibromoethane (EDB)	ND		0.0040	1	10/11/2013 04:09
Dibromomethane	ND		0.0050	1	10/11/2013 04:09
1,2-Dichlorobenzene	ND		0.0050	1	10/11/2013 04:09
1,3-Dichlorobenzene	ND		0.0050	1	10/11/2013 04:09
1,4-Dichlorobenzene	ND		0.0050	1	10/11/2013 04:09
Dichlorodifluoromethane	ND		0.0050	1	10/11/2013 04:09
1,1-Dichloroethane	ND		0.0050	1	10/11/2013 04:09
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	10/11/2013 04:09
1,1-Dichloroethene	ND		0.0050	1	10/11/2013 04:09
cis-1,2-Dichloroethene	ND		0.0050	1	10/11/2013 04:09
trans-1,2-Dichloroethene	ND		0.0050	1	10/11/2013 04:09
1,2-Dichloropropane	ND		0.0050	1	10/11/2013 04:09
1,3-Dichloropropane	ND		0.0050	1	10/11/2013 04:09
2,2-Dichloropropane	ND		0.0050	1	10/11/2013 04:09
1,1-Dichloropropene	ND		0.0050	1	10/11/2013 04:09

(Cont.)



## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/4/13

**WorkOrder:** 1310196  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B8-2.5	1310196-001A	Soil	10/03/2013 10:40	GC10	82528
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
cis-1,3-Dichloropropene	ND		0.0050	1	10/11/2013 04:09
trans-1,3-Dichloropropene	ND		0.0050	1	10/11/2013 04:09
Diisopropyl ether (DIPE)	ND		0.0050	1	10/11/2013 04:09
Ethylbenzene	ND		0.0050	1	10/11/2013 04:09
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	10/11/2013 04:09
Freon 113	ND		0.10	1	10/11/2013 04:09
Hexachlorobutadiene	ND		0.0050	1	10/11/2013 04:09
Hexachloroethane	ND		0.0050	1	10/11/2013 04:09
2-Hexanone	ND		0.0050	1	10/11/2013 04:09
Isopropylbenzene	ND		0.0050	1	10/11/2013 04:09
4-Isopropyl toluene	ND		0.0050	1	10/11/2013 04:09
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	10/11/2013 04:09
Methylene chloride	ND		0.0050	1	10/11/2013 04:09
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	10/11/2013 04:09
Naphthalene	ND		0.0050	1	10/11/2013 04:09
n-Propyl benzene	ND		0.0050	1	10/11/2013 04:09
Styrene	ND		0.0050	1	10/11/2013 04:09
1,1,1,2-Tetrachloroethane	ND		0.0050	1	10/11/2013 04:09
1,1,2,2-Tetrachloroethane	ND		0.0050	1	10/11/2013 04:09
Tetrachloroethene	ND		0.0050	1	10/11/2013 04:09
Toluene	ND		0.0050	1	10/11/2013 04:09
1,2,3-Trichlorobenzene	ND		0.0050	1	10/11/2013 04:09
1,2,4-Trichlorobenzene	ND		0.0050	1	10/11/2013 04:09
1,1,1-Trichloroethane	ND		0.0050	1	10/11/2013 04:09
1,1,2-Trichloroethane	ND		0.0050	1	10/11/2013 04:09
Trichloroethene	ND		0.0050	1	10/11/2013 04:09
Trichlorofluoromethane	ND		0.0050	1	10/11/2013 04:09
1,2,3-Trichloropropane	ND		0.0050	1	10/11/2013 04:09
1,2,4-Trimethylbenzene	ND		0.0050	1	10/11/2013 04:09
1,3,5-Trimethylbenzene	ND		0.0050	1	10/11/2013 04:09
Vinyl Chloride	ND		0.0050	1	10/11/2013 04:09
Xylenes, Total	ND		0.0050	1	10/11/2013 04:09
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	103		70-130		10/11/2013 04:09
Toluene-d8	105		70-130		10/11/2013 04:09
4-BFB	105		70-130		10/11/2013 04:09

(Cont.)



## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/4/13

**WorkOrder:** 1310196  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B8-7.5	1310196-002A	Soil	10/03/2013 10:50	GC10	82528
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	10/11/2013 04:51
tert-Amyl methyl ether (TAME)	ND		0.0050	1	10/11/2013 04:51
Benzene	ND		0.0050	1	10/11/2013 04:51
Bromobenzene	ND		0.0050	1	10/11/2013 04:51
Bromochloromethane	ND		0.0050	1	10/11/2013 04:51
Bromodichloromethane	ND		0.0050	1	10/11/2013 04:51
Bromoform	ND		0.0050	1	10/11/2013 04:51
Bromomethane	ND		0.0050	1	10/11/2013 04:51
2-Butanone (MEK)	ND		0.020	1	10/11/2013 04:51
t-Butyl alcohol (TBA)	ND		0.050	1	10/11/2013 04:51
n-Butyl benzene	ND		0.0050	1	10/11/2013 04:51
sec-Butyl benzene	ND		0.0050	1	10/11/2013 04:51
tert-Butyl benzene	ND		0.0050	1	10/11/2013 04:51
Carbon Disulfide	ND		0.0050	1	10/11/2013 04:51
Carbon Tetrachloride	ND		0.0050	1	10/11/2013 04:51
Chlorobenzene	ND		0.0050	1	10/11/2013 04:51
Chloroethane	ND		0.0050	1	10/11/2013 04:51
Chloroform	ND		0.0050	1	10/11/2013 04:51
Chloromethane	ND		0.0050	1	10/11/2013 04:51
2-Chlorotoluene	ND		0.0050	1	10/11/2013 04:51
4-Chlorotoluene	ND		0.0050	1	10/11/2013 04:51
Dibromochloromethane	ND		0.0050	1	10/11/2013 04:51
1,2-Dibromo-3-chloropropane	ND		0.0040	1	10/11/2013 04:51
1,2-Dibromoethane (EDB)	ND		0.0040	1	10/11/2013 04:51
Dibromomethane	ND		0.0050	1	10/11/2013 04:51
1,2-Dichlorobenzene	ND		0.0050	1	10/11/2013 04:51
1,3-Dichlorobenzene	ND		0.0050	1	10/11/2013 04:51
1,4-Dichlorobenzene	ND		0.0050	1	10/11/2013 04:51
Dichlorodifluoromethane	ND		0.0050	1	10/11/2013 04:51
1,1-Dichloroethane	ND		0.0050	1	10/11/2013 04:51
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	10/11/2013 04:51
1,1-Dichloroethene	ND		0.0050	1	10/11/2013 04:51
cis-1,2-Dichloroethene	ND		0.0050	1	10/11/2013 04:51
trans-1,2-Dichloroethene	ND		0.0050	1	10/11/2013 04:51
1,2-Dichloropropane	ND		0.0050	1	10/11/2013 04:51
1,3-Dichloropropane	ND		0.0050	1	10/11/2013 04:51
2,2-Dichloropropane	ND		0.0050	1	10/11/2013 04:51
1,1-Dichloropropene	ND		0.0050	1	10/11/2013 04:51

(Cont.)



## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/4/13

**WorkOrder:** 1310196  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B8-7.5	1310196-002A	Soil	10/03/2013 10:50	GC10	82528
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
cis-1,3-Dichloropropene	ND		0.0050	1	10/11/2013 04:51
trans-1,3-Dichloropropene	ND		0.0050	1	10/11/2013 04:51
Diisopropyl ether (DIPE)	ND		0.0050	1	10/11/2013 04:51
Ethylbenzene	ND		0.0050	1	10/11/2013 04:51
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	10/11/2013 04:51
Freon 113	ND		0.10	1	10/11/2013 04:51
Hexachlorobutadiene	ND		0.0050	1	10/11/2013 04:51
Hexachloroethane	ND		0.0050	1	10/11/2013 04:51
2-Hexanone	ND		0.0050	1	10/11/2013 04:51
Isopropylbenzene	ND		0.0050	1	10/11/2013 04:51
4-Isopropyl toluene	ND		0.0050	1	10/11/2013 04:51
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	10/11/2013 04:51
Methylene chloride	ND		0.0050	1	10/11/2013 04:51
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	10/11/2013 04:51
Naphthalene	ND		0.0050	1	10/11/2013 04:51
n-Propyl benzene	ND		0.0050	1	10/11/2013 04:51
Styrene	ND		0.0050	1	10/11/2013 04:51
1,1,1,2-Tetrachloroethane	ND		0.0050	1	10/11/2013 04:51
1,1,2,2-Tetrachloroethane	ND		0.0050	1	10/11/2013 04:51
Tetrachloroethene	ND		0.0050	1	10/11/2013 04:51
Toluene	ND		0.0050	1	10/11/2013 04:51
1,2,3-Trichlorobenzene	ND		0.0050	1	10/11/2013 04:51
1,2,4-Trichlorobenzene	ND		0.0050	1	10/11/2013 04:51
1,1,1-Trichloroethane	ND		0.0050	1	10/11/2013 04:51
1,1,2-Trichloroethane	ND		0.0050	1	10/11/2013 04:51
Trichloroethene	ND		0.0050	1	10/11/2013 04:51
Trichlorofluoromethane	ND		0.0050	1	10/11/2013 04:51
1,2,3-Trichloropropane	ND		0.0050	1	10/11/2013 04:51
1,2,4-Trimethylbenzene	ND		0.0050	1	10/11/2013 04:51
1,3,5-Trimethylbenzene	ND		0.0050	1	10/11/2013 04:51
Vinyl Chloride	ND		0.0050	1	10/11/2013 04:51
Xylenes, Total	ND		0.0050	1	10/11/2013 04:51
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	105		70-130		10/11/2013 04:51
Toluene-d8	104		70-130		10/11/2013 04:51
4-BFB	103		70-130		10/11/2013 04:51

(Cont.)



## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/4/13

**WorkOrder:** 1310196  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B9-2.5	1310196-003A	Soil	10/03/2013 13:50	GC16	82528
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	10/11/2013 15:16
tert-Amyl methyl ether (TAME)	ND		0.0050	1	10/11/2013 15:16
Benzene	ND		0.0050	1	10/11/2013 15:16
Bromobenzene	ND		0.0050	1	10/11/2013 15:16
Bromochloromethane	ND		0.0050	1	10/11/2013 15:16
Bromodichloromethane	ND		0.0050	1	10/11/2013 15:16
Bromoform	ND		0.0050	1	10/11/2013 15:16
Bromomethane	ND		0.0050	1	10/11/2013 15:16
2-Butanone (MEK)	ND		0.020	1	10/11/2013 15:16
t-Butyl alcohol (TBA)	ND		0.050	1	10/11/2013 15:16
n-Butyl benzene	ND		0.0050	1	10/11/2013 15:16
sec-Butyl benzene	ND		0.0050	1	10/11/2013 15:16
tert-Butyl benzene	ND		0.0050	1	10/11/2013 15:16
Carbon Disulfide	ND		0.0050	1	10/11/2013 15:16
Carbon Tetrachloride	ND		0.0050	1	10/11/2013 15:16
Chlorobenzene	ND		0.0050	1	10/11/2013 15:16
Chloroethane	ND		0.0050	1	10/11/2013 15:16
Chloroform	ND		0.0050	1	10/11/2013 15:16
Chloromethane	ND		0.0050	1	10/11/2013 15:16
2-Chlorotoluene	ND		0.0050	1	10/11/2013 15:16
4-Chlorotoluene	ND		0.0050	1	10/11/2013 15:16
Dibromochloromethane	ND		0.0050	1	10/11/2013 15:16
1,2-Dibromo-3-chloropropane	ND		0.0040	1	10/11/2013 15:16
1,2-Dibromoethane (EDB)	ND		0.0040	1	10/11/2013 15:16
Dibromomethane	ND		0.0050	1	10/11/2013 15:16
1,2-Dichlorobenzene	ND		0.0050	1	10/11/2013 15:16
1,3-Dichlorobenzene	ND		0.0050	1	10/11/2013 15:16
1,4-Dichlorobenzene	ND		0.0050	1	10/11/2013 15:16
Dichlorodifluoromethane	ND		0.0050	1	10/11/2013 15:16
1,1-Dichloroethane	ND		0.0050	1	10/11/2013 15:16
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	10/11/2013 15:16
1,1-Dichloroethene	ND		0.0050	1	10/11/2013 15:16
cis-1,2-Dichloroethene	ND		0.0050	1	10/11/2013 15:16
trans-1,2-Dichloroethene	ND		0.0050	1	10/11/2013 15:16
1,2-Dichloropropane	ND		0.0050	1	10/11/2013 15:16
1,3-Dichloropropane	ND		0.0050	1	10/11/2013 15:16
2,2-Dichloropropane	ND		0.0050	1	10/11/2013 15:16
1,1-Dichloropropene	ND		0.0050	1	10/11/2013 15:16

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## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/4/13

**WorkOrder:** 1310196  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B9-2.5	1310196-003A	Soil	10/03/2013 13:50	GC16	82528
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
cis-1,3-Dichloropropene	ND		0.0050	1	10/11/2013 15:16
trans-1,3-Dichloropropene	ND		0.0050	1	10/11/2013 15:16
Diisopropyl ether (DIPE)	ND		0.0050	1	10/11/2013 15:16
Ethylbenzene	ND		0.0050	1	10/11/2013 15:16
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	10/11/2013 15:16
Freon 113	ND		0.10	1	10/11/2013 15:16
Hexachlorobutadiene	ND		0.0050	1	10/11/2013 15:16
Hexachloroethane	ND		0.0050	1	10/11/2013 15:16
2-Hexanone	ND		0.0050	1	10/11/2013 15:16
Isopropylbenzene	ND		0.0050	1	10/11/2013 15:16
4-Isopropyl toluene	ND		0.0050	1	10/11/2013 15:16
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	10/11/2013 15:16
Methylene chloride	ND		0.0050	1	10/11/2013 15:16
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	10/11/2013 15:16
Naphthalene	ND		0.0050	1	10/11/2013 15:16
n-Propyl benzene	ND		0.0050	1	10/11/2013 15:16
Styrene	ND		0.0050	1	10/11/2013 15:16
1,1,1,2-Tetrachloroethane	ND		0.0050	1	10/11/2013 15:16
1,1,2,2-Tetrachloroethane	ND		0.0050	1	10/11/2013 15:16
Tetrachloroethene	ND		0.0050	1	10/11/2013 15:16
Toluene	ND		0.0050	1	10/11/2013 15:16
1,2,3-Trichlorobenzene	ND		0.0050	1	10/11/2013 15:16
1,2,4-Trichlorobenzene	ND		0.0050	1	10/11/2013 15:16
1,1,1-Trichloroethane	ND		0.0050	1	10/11/2013 15:16
1,1,2-Trichloroethane	ND		0.0050	1	10/11/2013 15:16
Trichloroethene	ND		0.0050	1	10/11/2013 15:16
Trichlorofluoromethane	ND		0.0050	1	10/11/2013 15:16
1,2,3-Trichloropropane	ND		0.0050	1	10/11/2013 15:16
1,2,4-Trimethylbenzene	ND		0.0050	1	10/11/2013 15:16
1,3,5-Trimethylbenzene	ND		0.0050	1	10/11/2013 15:16
Vinyl Chloride	ND		0.0050	1	10/11/2013 15:16
Xylenes, Total	ND		0.0050	1	10/11/2013 15:16
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	93		70-130		10/11/2013 15:16
Toluene-d8	96		70-130		10/11/2013 15:16
4-BFB	97		70-130		10/11/2013 15:16

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## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/4/13

**WorkOrder:** 1310196  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B9-9.0	1310196-004A	Soil	10/03/2013 14:05	GC10	82528
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	10/11/2013 05:33
tert-Amyl methyl ether (TAME)	ND		0.0050	1	10/11/2013 05:33
Benzene	ND		0.0050	1	10/11/2013 05:33
Bromobenzene	ND		0.0050	1	10/11/2013 05:33
Bromochloromethane	ND		0.0050	1	10/11/2013 05:33
Bromodichloromethane	ND		0.0050	1	10/11/2013 05:33
Bromoform	ND		0.0050	1	10/11/2013 05:33
Bromomethane	ND		0.0050	1	10/11/2013 05:33
2-Butanone (MEK)	ND		0.020	1	10/11/2013 05:33
t-Butyl alcohol (TBA)	ND		0.050	1	10/11/2013 05:33
n-Butyl benzene	ND		0.0050	1	10/11/2013 05:33
sec-Butyl benzene	ND		0.0050	1	10/11/2013 05:33
tert-Butyl benzene	ND		0.0050	1	10/11/2013 05:33
Carbon Disulfide	ND		0.0050	1	10/11/2013 05:33
Carbon Tetrachloride	ND		0.0050	1	10/11/2013 05:33
Chlorobenzene	ND		0.0050	1	10/11/2013 05:33
Chloroethane	ND		0.0050	1	10/11/2013 05:33
Chloroform	ND		0.0050	1	10/11/2013 05:33
Chloromethane	ND		0.0050	1	10/11/2013 05:33
2-Chlorotoluene	ND		0.0050	1	10/11/2013 05:33
4-Chlorotoluene	ND		0.0050	1	10/11/2013 05:33
Dibromochloromethane	ND		0.0050	1	10/11/2013 05:33
1,2-Dibromo-3-chloropropane	ND		0.0040	1	10/11/2013 05:33
1,2-Dibromoethane (EDB)	ND		0.0040	1	10/11/2013 05:33
Dibromomethane	ND		0.0050	1	10/11/2013 05:33
1,2-Dichlorobenzene	ND		0.0050	1	10/11/2013 05:33
1,3-Dichlorobenzene	ND		0.0050	1	10/11/2013 05:33
1,4-Dichlorobenzene	ND		0.0050	1	10/11/2013 05:33
Dichlorodifluoromethane	ND		0.0050	1	10/11/2013 05:33
1,1-Dichloroethane	ND		0.0050	1	10/11/2013 05:33
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	10/11/2013 05:33
1,1-Dichloroethene	ND		0.0050	1	10/11/2013 05:33
cis-1,2-Dichloroethene	ND		0.0050	1	10/11/2013 05:33
trans-1,2-Dichloroethene	ND		0.0050	1	10/11/2013 05:33
1,2-Dichloropropane	ND		0.0050	1	10/11/2013 05:33
1,3-Dichloropropane	ND		0.0050	1	10/11/2013 05:33
2,2-Dichloropropane	ND		0.0050	1	10/11/2013 05:33
1,1-Dichloropropene	ND		0.0050	1	10/11/2013 05:33

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## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/4/13

**WorkOrder:** 1310196  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B9-9.0	1310196-004A	Soil	10/03/2013 14:05	GC10	82528
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
cis-1,3-Dichloropropene	ND		0.0050	1	10/11/2013 05:33
trans-1,3-Dichloropropene	ND		0.0050	1	10/11/2013 05:33
Diisopropyl ether (DIPE)	ND		0.0050	1	10/11/2013 05:33
Ethylbenzene	ND		0.0050	1	10/11/2013 05:33
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	10/11/2013 05:33
Freon 113	ND		0.10	1	10/11/2013 05:33
Hexachlorobutadiene	ND		0.0050	1	10/11/2013 05:33
Hexachloroethane	ND		0.0050	1	10/11/2013 05:33
2-Hexanone	ND		0.0050	1	10/11/2013 05:33
Isopropylbenzene	ND		0.0050	1	10/11/2013 05:33
4-Isopropyl toluene	ND		0.0050	1	10/11/2013 05:33
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	10/11/2013 05:33
Methylene chloride	ND		0.0050	1	10/11/2013 05:33
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	10/11/2013 05:33
Naphthalene	ND		0.0050	1	10/11/2013 05:33
n-Propyl benzene	ND		0.0050	1	10/11/2013 05:33
Styrene	ND		0.0050	1	10/11/2013 05:33
1,1,1,2-Tetrachloroethane	ND		0.0050	1	10/11/2013 05:33
1,1,2,2-Tetrachloroethane	ND		0.0050	1	10/11/2013 05:33
Tetrachloroethene	ND		0.0050	1	10/11/2013 05:33
Toluene	ND		0.0050	1	10/11/2013 05:33
1,2,3-Trichlorobenzene	ND		0.0050	1	10/11/2013 05:33
1,2,4-Trichlorobenzene	ND		0.0050	1	10/11/2013 05:33
1,1,1-Trichloroethane	ND		0.0050	1	10/11/2013 05:33
1,1,2-Trichloroethane	ND		0.0050	1	10/11/2013 05:33
Trichloroethene	ND		0.0050	1	10/11/2013 05:33
Trichlorofluoromethane	ND		0.0050	1	10/11/2013 05:33
1,2,3-Trichloropropane	ND		0.0050	1	10/11/2013 05:33
1,2,4-Trimethylbenzene	ND		0.0050	1	10/11/2013 05:33
1,3,5-Trimethylbenzene	ND		0.0050	1	10/11/2013 05:33
Vinyl Chloride	ND		0.0050	1	10/11/2013 05:33
Xylenes, Total	ND		0.0050	1	10/11/2013 05:33
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	106		70-130		10/11/2013 05:33
Toluene-d8	101		70-130		10/11/2013 05:33
4-BFB	105		70-130		10/11/2013 05:33



## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/6/13

**WorkOrder:** 1310196  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B8-2.5	1310196-001A	Soil	10/03/2013 10:40	GC17	82537
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acenaphthene	ND		0.010	1	10/10/2013 12:21
Acenaphthylene	ND		0.010	1	10/10/2013 12:21
Anthracene	ND		0.010	1	10/10/2013 12:21
Benzo (a) anthracene	ND		0.010	1	10/10/2013 12:21
Benzo (b) fluoranthene	ND		0.010	1	10/10/2013 12:21
Benzo (k) fluoranthene	ND		0.010	1	10/10/2013 12:21
Benzo (g,h,i) perylene	ND		0.010	1	10/10/2013 12:21
Benzo (a) pyrene	ND		0.010	1	10/10/2013 12:21
Chrysene	ND		0.010	1	10/10/2013 12:21
Dibenzo (a,h) anthracene	ND		0.010	1	10/10/2013 12:21
Fluoranthene	ND		0.010	1	10/10/2013 12:21
Fluorene	ND		0.010	1	10/10/2013 12:21
Indeno (1,2,3-cd) pyrene	ND		0.010	1	10/10/2013 12:21
1-Methylnaphthalene	ND		0.010	1	10/10/2013 12:21
2-Methylnaphthalene	ND		0.011	1	10/10/2013 12:21
Naphthalene	ND		0.010	1	10/10/2013 12:21
Phenanthrene	ND		0.010	1	10/10/2013 12:21
Pyrene	ND		0.010	1	10/10/2013 12:21
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
1-Fluoronaphthalene	75		30-130		10/10/2013 12:21
2-fluorobiphenyl	67		30-130		10/10/2013 12:21

(Cont.)



## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/6/13

**WorkOrder:** 1310196  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B8-7.5	1310196-002A	Soil	10/03/2013 10:50	GC17	82537
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acenaphthene	ND		0.010	1	10/10/2013 14:43
Acenaphthylene	ND		0.010	1	10/10/2013 14:43
Anthracene	ND		0.010	1	10/10/2013 14:43
Benzo (a) anthracene	ND		0.010	1	10/10/2013 14:43
Benzo (b) fluoranthene	ND		0.010	1	10/10/2013 14:43
Benzo (k) fluoranthene	ND		0.010	1	10/10/2013 14:43
Benzo (g,h,i) perylene	ND		0.010	1	10/10/2013 14:43
Benzo (a) pyrene	ND		0.010	1	10/10/2013 14:43
Chrysene	ND		0.010	1	10/10/2013 14:43
Dibenzo (a,h) anthracene	ND		0.010	1	10/10/2013 14:43
Fluoranthene	ND		0.010	1	10/10/2013 14:43
Fluorene	ND		0.010	1	10/10/2013 14:43
Indeno (1,2,3-cd) pyrene	ND		0.010	1	10/10/2013 14:43
1-Methylnaphthalene	ND		0.010	1	10/10/2013 14:43
2-Methylnaphthalene	ND		0.010	1	10/10/2013 14:43
Naphthalene	ND		0.010	1	10/10/2013 14:43
Phenanthrene	ND		0.010	1	10/10/2013 14:43
Pyrene	ND		0.010	1	10/10/2013 14:43
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
1-Fluoronaphthalene	73		30-130		10/10/2013 14:43
2-fluorobiphenyl	64		30-130		10/10/2013 14:43

(Cont.)



## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/6/13

**WorkOrder:** 1310196  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B9-2.5	1310196-003A	Soil	10/03/2013 13:50	GC17	82537
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acenaphthene	ND		0.010	1	10/10/2013 15:11
Acenaphthylene	ND		0.010	1	10/10/2013 15:11
Anthracene	ND		0.010	1	10/10/2013 15:11
Benzo (a) anthracene	ND		0.010	1	10/10/2013 15:11
Benzo (b) fluoranthene	ND		0.010	1	10/10/2013 15:11
Benzo (k) fluoranthene	ND		0.010	1	10/10/2013 15:11
Benzo (g,h,i) perylene	ND		0.010	1	10/10/2013 15:11
Benzo (a) pyrene	ND		0.010	1	10/10/2013 15:11
Chrysene	ND		0.010	1	10/10/2013 15:11
Dibenzo (a,h) anthracene	ND		0.010	1	10/10/2013 15:11
Fluoranthene	ND		0.010	1	10/10/2013 15:11
Fluorene	ND		0.010	1	10/10/2013 15:11
Indeno (1,2,3-cd) pyrene	ND		0.010	1	10/10/2013 15:11
1-Methylnaphthalene	ND		0.010	1	10/10/2013 15:11
2-Methylnaphthalene	ND		0.010	1	10/10/2013 15:11
Naphthalene	ND		0.010	1	10/10/2013 15:11
Phenanthrene	ND		0.010	1	10/10/2013 15:11
Pyrene	ND		0.010	1	10/10/2013 15:11
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
1-Fluoronaphthalene	75		30-130		10/10/2013 15:11
2-fluorobiphenyl	67		30-130		10/10/2013 15:11

(Cont.)



## Analytical Report

**Client:** RGA Environmental  
**Project:** PZ33580/0271.R5; Downtown Toyota  
**Date Received:** 10/4/13 21:28  
**Date Prepared:** 10/6/13

**WorkOrder:** 1310196  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg

### Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
<b>B9-9.0</b>	<b>1310196-004A</b>	<b>Soil</b>	<b>10/03/2013 14:05</b>	<b>GC17</b>	<b>82537</b>
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acenaphthene	ND		0.010	1	10/10/2013 15:40
Acenaphthylene	ND		0.010	1	10/10/2013 15:40
Anthracene	ND		0.010	1	10/10/2013 15:40
Benzo (a) anthracene	ND		0.030	1	10/10/2013 15:40
Benzo (b) fluoranthene	ND		0.010	1	10/10/2013 15:40
Benzo (k) fluoranthene	ND		0.010	1	10/10/2013 15:40
Benzo (g,h,i) perylene	ND		0.010	1	10/10/2013 15:40
Benzo (a) pyrene	ND		0.010	1	10/10/2013 15:40
Chrysene	<b>0.016</b>		0.010	1	10/10/2013 15:40
Dibenzo (a,h) anthracene	ND		0.010	1	10/10/2013 15:40
Fluoranthene	ND		0.010	1	10/10/2013 15:40
Fluorene	ND		0.010	1	10/10/2013 15:40
Indeno (1,2,3-cd) pyrene	ND		0.010	1	10/10/2013 15:40
1-Methylnaphthalene	ND		0.010	1	10/10/2013 15:40
2-Methylnaphthalene	ND		0.010	1	10/10/2013 15:40
Naphthalene	ND		0.010	1	10/10/2013 15:40
Phenanthrene	ND		0.010	1	10/10/2013 15:40
Pyrene	<b>0.026</b>		0.010	1	10/10/2013 15:40
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
1-Fluoronaphthalene	73		30-130		10/10/2013 15:40
2-fluorobiphenyl	65		30-130		10/10/2013 15:40



# Quality Control Report

**Client:** RGA Environmental  
**Date Prepared:** 10/4/13  
**Date Analyzed:** 10/9/13 - 10/10/13  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** PZ33580/0271.R5; Downtown Toyota

**WorkOrder:** 1310196  
**BatchID:** 82528  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-82528

## QC SUMMARY REPORT FOR SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0474	0.0050	0.050	-	94.8	70-130
Benzene	ND	0.04551	0.0050	0.050	-	91	70-130
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.2278	0.050	0.20	-	114	70-130
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.04588	0.0050	0.050	-	91.8	70-130
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.04745	0.0040	0.050	-	94.9	70-130
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.04608	0.0040	0.050	-	92.2	70-130
1,1-Dichloroethene	ND	0.03606	0.0050	0.050	-	72.1	70-130
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** RGA Environmental  
**Date Prepared:** 10/4/13  
**Date Analyzed:** 10/9/13 - 10/10/13  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** PZ33580/0271.R5; Downtown Toyota

**WorkOrder:** 1310196  
**BatchID:** 82528  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-82528

## QC SUMMARY REPORT FOR SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.05038	0.0050	0.050	-	101	70-130
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.04785	0.0050	0.050	-	95.7	70-130
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.05007	0.0050	0.050	-	100	70-130
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.04911	0.0050	0.050	-	98.2	70-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.04139	0.0050	0.050	-	82.8	70-130
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	0.1155	0.1221		0.12	92	98	70-130
Toluene-d8	0.1238	0.126		0.12	99	101	70-130
4-BFB	0.01248	0.01223		0.012	100	98	70-130



# Quality Control Report

**Client:** RGA Environmental  
**Date Prepared:** 10/6/13  
**Date Analyzed:** 10/7/13  
**Instrument:** GC17  
**Matrix:** Soil  
**Project:** PZ33580/0271.R5; Downtown Toyota

**WorkOrder:** 1310196  
**BatchID:** 82537  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C-SIM  
**Unit:** mg/kg  
**Sample ID:** MB/LCS-82537  
 1310103-034AMS/MSD

## QC SUMMARY REPORT FOR SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.1517	0.010	0.20	-	75.8	30-130
Chrysene	ND	0.1693	0.010	0.20	-	84.6	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.1859	0.010	0.20	-	92.9	30-130
2-Methylnaphthalene	ND	0.1608	0.010	0.20	-	80.4	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.1742	0.010	0.20	-	87.1	30-130
Pyrene	ND	0.1784	0.010	0.20	-	89.2	30-130

### Surrogate Recovery

1-Fluoronaphthalene	0.3503	0.343		0.50	70	69	30-130
2-fluorobiphenyl	0.3072	0.3016		0.50	61	60	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	NR	NR	0	0.041	NR	NR	-	NR	
Chrysene	NR	NR	0	0.041	NR	NR	-	NR	
1-Methylnaphthalene	NR	NR	0	ND<0.02	NR	NR	-	NR	
2-Methylnaphthalene	NR	NR	0	ND<0.02	NR	NR	-	NR	
Phenanthrene	NR	NR	0	0.03	NR	NR	-	NR	
Pyrene	NR	NR	0	0.064	NR	NR	-	NR	

### Surrogate Recovery

1-Fluoronaphthalene	NR	NR	0		NR	NR	-	NR	
2-fluorobiphenyl	NR	NR	0		NR	NR	-	NR	





1534 Willow Pass Rd  
 Pittsburg, CA 94565-1701  
 (925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1310196

ClientCode: RGAE

- WaterTrax  
  WriteOn  
  EDF  
  Excel  
  EQuIS  
 Email  
  HardCopy  
  ThirdParty  
  J-flag

**Report to:**

Paul King  
 RGA Environmental  
 1466 66th Street  
 Emeryville, CA 94608  
 (510) 658-6916    FAX: (510) 834-0152

Email: paul.king@rgaenv.com; pdking0000@aol.c  
 cc:  
 PO:  
 ProjectNo: PZ33580/0271.R5; Downtown Toyota

**Bill to:**

Nick Hecht  
 RGA Environmental  
 1466 66th Street  
 Emeryville, CA 94608  
 nick.hecht@rgaenv.com

**Requested TAT:**

**5 days**

*Date Received:*    **10/04/2013**

*Date Printed:*    **10/04/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1310196-001	B8-2.5	Soil	10/3/2013 10:40	<input type="checkbox"/>	A	A											
1310196-002	B8-7.5	Soil	10/3/2013 10:50	<input type="checkbox"/>	A	A											
1310196-003	B9-2.5	Soil	10/3/2013 13:50	<input type="checkbox"/>	A	A											
1310196-004	B9-9.0	Soil	10/3/2013 14:05	<input type="checkbox"/>	A	A											

**Test Legend:**

1	8260B_S	2	8270D-PNA_S	3		4		5	
6		7		8		9		10	
11		12							

**Prepared by: Zoraida Cortez**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
 Hazardous samples will be returned to client or disposed of at client expense.





### Sample Receipt Checklist

Client Name: **RGA Environmental** Date and Time Received: **10/4/2013 9:28:10 PM**  
 Project Name: **PZ33580/0271.R5; Downtown Toyota** Login Reviewed by: **Zoraida Cortez**  
 WorkOrder N°: **1310196** Matrix: Soil Carrier: Rob Pringle (MAI Courier)

**Chain of Custody (COC) Information**

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

**Sample Receipt Information**

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

**Sample Preservation and Hold Time (HT) Information**

All samples received within holding time? Yes  No   
 Container/Temp Blank temperature Cooler Temp: 2.3°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted   
 Sample labels checked for correct preservation? Yes  No   
 Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

\* NOTE: If the "No" box is checked, see comments below.

-----  
 Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1310238

**Report Created for:** RGA Environmental  
1466 66th Street  
Emeryville, CA 94608

**Project Contact:** Paul King

**Project P.O.:**

**Project Name:** #PZ33580/0271; Downtown Toyota 4145 Broadway  
Oakland, CA

**Project Received:** 10/07/2013

Analytical Report reviewed & approved for release on 10/16/2013 by:

*Question about  
your data?*

[Click here to email  
McC Campbell](#)

Angela Rydelius,  
Laboratory Manager

***The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.***





## Glossary of Terms & Qualifier Definitions

**Client:** RGA Environmental  
**Project:** #PZ33580/0271; Downtown Toyota 4145 Broadway Oakland, CA  
**WorkOrder:** 1310238

<b><u>Glossary</u></b> <b><u>Abbreviation</u></b>	<b><u>Description</u></b>
95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not detected at or above the indicated MDL or RL
NR	Analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
RD	Relative Difference
RL	Reporting Limit
RPD	Relative Percent Deviation
SPK Val	Spike Value
SPKRef Val	Spike Reference Value



## Analytical Report

**Client:** RGA Environmental **WorkOrder:** 1310238  
**Project:** #PZ33580/0271; Downtown Toyota 4145 Broadway **Extraction Method:** SW5030B  
**Date Received:** 10/7/13 21:07 **Analytical Method:** SW8021B/8015Bm  
**Date Prepared:** 10/9/13 **Unit:** µg/L

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B8-W	1310238-001A	Water	10/07/2013 09:10	GC3	82686
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	10/09/2013 03:47
MTBE	---		5.0	1	10/09/2013 03:47
Benzene	---		0.50	1	10/09/2013 03:47
Toluene	---		0.50	1	10/09/2013 03:47
Ethylbenzene	---		0.50	1	10/09/2013 03:47
Xylenes	---		0.50	1	10/09/2013 03:47
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	104		70-130		10/09/2013 03:47



## Analytical Report

**Client:** RGA Environmental **WorkOrder:** 1310238  
**Project:** #PZ33580/0271; Downtown Toyota 4145 Broadway **Extraction Method:** SW5030B  
**Date Received:** 10/7/13 21:07 **Analytical Method:** SW8260B  
**Date Prepared:** 10/12/13 **Unit:** µg/L

### MTBE and BTEX by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B8-W	1310238-001B	Water	10/07/2013 09:10	GC28	82839
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Benzene	ND		0.50	1	10/12/2013 22:27
Ethylbenzene	ND		0.50	1	10/12/2013 22:27
Methyl-t-butyl ether (MTBE)	ND		0.50	1	10/12/2013 22:27
Toluene	ND		0.50	1	10/12/2013 22:27
Xylenes, Total	ND		0.50	1	10/12/2013 22:27
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	107		70-130		10/12/2013 22:27
Toluene-d8	99		70-130		10/12/2013 22:27



## Analytical Report

<b>Client:</b>	RGA Environmental	<b>WorkOrder:</b>	1310238
<b>Project:</b>	#PZ33580/0271; Downtown Toyota 4145 Broadway	<b>Extraction Method</b>	SW3510C/3630C
<b>Date Received:</b>	10/7/13 21:07	<b>Analytical Method:</b>	SW8015B
<b>Date Prepared:</b>	10/14/13	<b>Unit:</b>	µg/L

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
<b>B8-W</b>	<b>1310238-001A</b>	<b>Water</b>	<b>10/07/2013 09:10</b>	<b>GC9a</b>	<b>82872</b>
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		50	1	10/15/2013 14:14
TPH-Bunker Oil (C10-C36)	ND		100	1	10/15/2013 14:14
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	84		70-130		10/15/2013 14:14





## Quality Control Report

<b>Client:</b> RGA Environmental	<b>WorkOrder:</b> 1310238
<b>Date Prepared:</b> 10/8/13	<b>BatchID:</b> 82686
<b>Date Analyzed:</b> 10/8/13	<b>Extraction Method:</b> SW5030B
<b>Instrument:</b> GC3	<b>Analytical Method:</b> SW8021B/8015Bm
<b>Matrix:</b> Water	<b>Unit:</b> µg/L
<b>Project:</b> #PZ33580/0271; Downtown Toyota 4145 Broadway Oakland, CA	<b>Sample ID:</b> MB/LCS-82686 1310238-001AMS/MSD

### QC SUMMARY REPORT FOR SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	57.52	40	60	-	95.9	70-130
MTBE	ND	10.34	5.0	10	-	103	70-130
Benzene	ND	10.32	0.50	10	-	103	70-130
Toluene	ND	10.53	0.50	10	-	105	70-130
Ethylbenzene	ND	10.42	0.50	10	-	104	70-130
Xylenes	ND	31.66	0.50	30	-	106	70-130
<b>Surrogate Recovery</b>							
aaa-TFT	10.12	10.11		10	101	101	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	61.71	58.89	60	ND	103	98.2	70-130	4.67	20
MTBE	10.73	10.52	10	ND	107	105	70-130	2.03	20
Benzene	10.65	10.36	10	ND	107	104	70-130	2.83	20
Toluene	10.84	10.55	10	ND	108	105	70-130	2.70	20
Ethylbenzene	10.81	10.5	10	ND	108	105	70-130	2.88	20
Xylenes	32.69	31.94	30	ND	109	106	70-130	2.34	20
<b>Surrogate Recovery</b>									
aaa-TFT	10.19	9.973	10		102	100	70-130	2.17	20



# Quality Control Report

**Client:** RGA Environmental  
**Date Prepared:** 10/12/13  
**Date Analyzed:** 10/12/13 - 10/13/13  
**Instrument:** GC28  
**Matrix:** Water  
**Project:** #PZ33580/0271; Downtown Toyota 4145 Broadway  
 Oakland, CA

**WorkOrder:** 1310238  
**BatchID:** 82839  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-82839  
 1310225-001DMS/MSD

## QC SUMMARY REPORT FOR SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	-	0.50	-	-	-	-
Benzene	ND	19.04	0.50	20	-	95.2	70-130
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	-	2.0	-	-	-	-
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	-	0.50	-	-	-	-
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	-	0.50	-	-	-	-
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	-	0.50	-	-	-	-
1,1-Dichloroethene	ND	-	0.50	-	-	-	-
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

(Cont.)



# Quality Control Report

<b>Client:</b>	RGA Environmental	<b>WorkOrder:</b>	1310238
<b>Date Prepared:</b>	10/12/13	<b>BatchID:</b>	82839
<b>Date Analyzed:</b>	10/12/13 - 10/13/13	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC28	<b>Analytical Method:</b>	SW8260B
<b>Matrix:</b>	Water	<b>Unit:</b>	µg/L
<b>Project:</b>	#PZ33580/0271; Downtown Toyota 4145 Broadway Oakland, CA	<b>Sample ID:</b>	MB/LCS-82839 1310225-001DMS/MSD

## QC SUMMARY REPORT FOR SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	-	0.50	-	-	-	-
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	-	0.50	-	-	-	-
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	21.93	0.50	20	-	110	70-130
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	19.6	0.50	20	-	98	70-130
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	-	0.50	-	-	-	-
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	26.8	26.35		25	107	105	70-130
Toluene-d8	24.77	24.76		25	99	99	70-130
4-BFB	2.435	-		2.5	97	-	-

(Cont.)



## Quality Control Report

<b>Client:</b> RGA Environmental	<b>WorkOrder:</b> 1310238
<b>Date Prepared:</b> 10/12/13	<b>BatchID:</b> 82839
<b>Date Analyzed:</b> 10/12/13 - 10/13/13	<b>Extraction Method:</b> SW5030B
<b>Instrument:</b> GC28	<b>Analytical Method:</b> SW8260B
<b>Matrix:</b> Water	<b>Unit:</b> µg/L
<b>Project:</b> #PZ33580/0271; Downtown Toyota 4145 Broadway Oakland, CA	<b>Sample ID:</b> MB/LCS-82839 1310225-001DMS/MSD

### QC SUMMARY REPORT FOR SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzene	18.48	19.18	20	ND	92.4	95.9	70-130	3.70	20
Methyl-t-butyl ether (MTBE)	21.2	22.44	20	ND	106	112	70-130	5.65	20
Toluene	18.68	19.4	20	ND	93.4	97	70-130	3.77	20
<b>Surrogate Recovery</b>									
Dibromofluoromethane	26.8	26.68	25		107	107	70-130	0	20
Toluene-d8	24.55	24.3	25		98	97	70-130	1.03	20



## Quality Control Report

<b>Client:</b> RGA Environmental	<b>WorkOrder:</b> 1310238
<b>Date Prepared:</b> 10/14/13	<b>BatchID:</b> 82872
<b>Date Analyzed:</b> 10/15/13	<b>Extraction Method:</b> SW3510C/3630C
<b>Instrument:</b> GC9a	<b>Analytical Method:</b> SW8015B
<b>Matrix:</b> Water	<b>Unit:</b> µg/L
<b>Project:</b> #PZ33580/0271; Downtown Toyota 4145 Broadway Oakland, CA	<b>Sample ID:</b> MB/LCS-82872

### QC SUMMARY REPORT FOR SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	920.3	50	1000	-	92	70-130
<b>Surrogate Recovery</b>							
C9	482.8	549		625	77	88	70-130



1534 Willow Pass Rd  
 Pittsburg, CA 94565-1701  
 (925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1310238

ClientCode: RGAE

WaterTrax  
  WriteOn  
  EDF  
  Excel  
  EQuIS  
 Email  
  HardCopy  
  ThirdParty  
  J-flag

**Report to:**

Paul King  
 RGA Environmental  
 1466 66th Street  
 Emeryville, CA 94608  
 (510) 658-6916    FAX: (510) 834-0152

Email: paul.king@rgaenv.com; pdking0000@aol.c  
 cc:  
 PO:  
 ProjectNo: #PZ33580/0271; Downtown Toyota 4145  
 Broadway Oakland, CA

**Bill to:**

Nick Hecht  
 RGA Environmental  
 1466 66th Street  
 Emeryville, CA 94608  
 nick.hecht@rgaenv.com

**Requested TAT:**

**5 days**

*Date Received:* 10/07/2013

*Date Printed:* 10/07/2013

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1310238-001	B8-W	Water	10/7/2013 9:10	<input type="checkbox"/>	B	A											

**Test Legend:**

1	MBTEX-8260B_W	2	TPH(D)WSG_W	3		4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

**Prepared by: Daniel Loa**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
 Hazardous samples will be returned to client or disposed of at client expense.







### Sample Receipt Checklist

Client Name: **RGA Environmental** Date and Time Received: **10/7/2013 9:07:56 PM**  
 Project Name: **#PZ33580/0271; Downtown Toyota 4145 Broadway Oakland** Login Reviewed by: Daniel Loa  
 WorkOrder N°: **1310238** Matrix: Water Carrier: Rob Pringle (MAI Courier)

**Chain of Custody (COC) Information**

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

**Sample Receipt Information**

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

**Sample Preservation and Hold Time (HT) Information**

All samples received within holding time? Yes  No   
 Container/Temp Blank temperature Cooler Temp: 3.4°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted   
 Sample labels checked for correct preservation? Yes  No   
 Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

\* NOTE: If the "No" box is checked, see comments below.

-----  
 Comments:





# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1310187

**Report Created for:** RGA Environmental  
1466 66th Street  
Emeryville, CA 94608

**Project Contact:** Paul King

**Project P.O.:**

**Project Name:** #PZ33580/0271.R5; Downtown Toyota 4145  
Broadway Oakland, CA

**Project Received:** 10/04/2013

Analytical Report reviewed & approved for release on 10/11/2013 by:

Question about  
your data?

[Click here to email  
McC Campbell](#)

Angela Rydelius,  
Laboratory Manager

***The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.***





## Glossary of Terms & Qualifier Definitions

**Client:** RGA Environmental  
**Project:** #PZ33580/0271.R5; Downtown Toyota 4145 Broadway Oakland, CA  
**WorkOrder:** 1310187

<b><u>Glossary</u></b> <b><u>Abbreviation</u></b>	<b><u>Description</u></b>
95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not detected at or above the indicated MDL or RL
NR	Analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
RD	Relative Difference
RL	Reporting Limit
RPD	Relative Percent Deviation
SPK Val	Spike Value
SPKRef Val	Spike Reference Value



## Analytical Report

**Client:** RGA Environmental **WorkOrder:** 1310187  
**Project:** #PZ33580/0271.R5; Downtown Toyota 4145 Broad **Extraction Method:** SW5030B  
**Date Received:** 10/4/13 19:46 **Analytical Method:** SW8021B/8015Bm  
**Date Prepared:** 10/9/13 **Unit:** µg/L

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B9-W	1310187-001A	Water	10/04/2013 07:40	GC3	82555
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	10/09/2013 06:43
MTBE	---		5.0	1	10/09/2013 06:43
Benzene	---		0.50	1	10/09/2013 06:43
Toluene	---		0.50	1	10/09/2013 06:43
Ethylbenzene	---		0.50	1	10/09/2013 06:43
Xylenes	---		0.50	1	10/09/2013 06:43
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	104		70-130		10/09/2013 06:43



## Analytical Report

**Client:** RGA Environmental **WorkOrder:** 1310187  
**Project:** #PZ33580/0271.R5; Downtown Toyota 4145 Broad **Extraction Method:** SW5030B  
**Date Received:** 10/4/13 19:46 **Analytical Method:** SW8260B  
**Date Prepared:** 10/8/13 **Unit:** µg/L

### MTBE and BTEX by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B9-W	1310187-001B	Water	10/04/2013 07:40	GC28	82619
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Benzene	ND		0.50	1	10/08/2013 21:52
Ethylbenzene	ND		0.50	1	10/08/2013 21:52
Methyl-t-butyl ether (MTBE)	ND		0.50	1	10/08/2013 21:52
Toluene	ND		0.50	1	10/08/2013 21:52
Xylenes, Total	ND		0.50	1	10/08/2013 21:52
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
dibromofluoromethane	108		70-130		10/08/2013 21:52
toluene-d8	97		70-130		10/08/2013 21:52



## Analytical Report

<b>Client:</b>	RGA Environmental	<b>WorkOrder:</b>	1310187
<b>Project:</b>	#PZ33580/0271.R5; Downtown Toyota 4145 Broad	<b>Extraction Method</b>	SW3510C/3630C
<b>Date Received:</b>	10/4/13 19:46	<b>Analytical Method:</b>	SW8015B
<b>Date Prepared:</b>	10/4/13	<b>Unit:</b>	µg/L

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B9-W	1310187-001A	Water	10/04/2013 07:40	GC6B	82503
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		50	1	10/10/2013 22:09
TPH-Bunker Oil (C10-C36)	ND		100	1	10/10/2013 22:09
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	94		70-130		10/10/2013 22:09



## Quality Control Report

<b>Client:</b> RGA Environmental	<b>WorkOrder:</b> 1310187
<b>Date Prepared:</b> 10/4/13	<b>BatchID:</b> 82555
<b>Date Analyzed:</b> 10/5/13	<b>Extraction Method:</b> SW5030B
<b>Instrument:</b> GC3	<b>Analytical Method:</b> SW8021B/8015Bm
<b>Matrix:</b> Water	<b>Unit:</b> µg/L
<b>Project:</b> #PZ33580/0271.R5; Downtown Toyota 4145 Broadway Oakland, CA	<b>Sample ID:</b> MB/LCS-82555 1310119-055AMS/MSD

### QC SUMMARY REPORT FOR SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	51.65	40	60	-	86.1	70-130
MTBE	ND	9.572	5.0	10	-	95.7	70-130
Benzene	ND	10.86	0.50	10	-	109	70-130
Toluene	ND	11.03	0.50	10	-	110	70-130
Ethylbenzene	ND	10.87	0.50	10	-	109	70-130
Xylenes	ND	32.9	0.50	30	-	110	70-130
<b>Surrogate Recovery</b>							
aaa-TFT	10.38	10.68		10	104	107	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	54.91	54.99	60	ND	91.5	91.7	70-130	0.158	20
MTBE	10.13	10.93	10	ND	101	109	70-130	7.65	20
Benzene	10.5	10.34	10	ND	105	103	70-130	1.51	20
Toluene	10.69	10.6	10	ND	107	106	70-130	0.884	20
Ethylbenzene	10.66	10.61	10	ND	107	106	70-130	0.458	20
Xylenes	32.4	32.25	30	ND	108	108	70-130	0	20
<b>Surrogate Recovery</b>									
aaa-TFT	10.07	9.911	10		101	99	70-130	1.55	20



# Quality Control Report

**Client:** RGA Environmental  
**Date Prepared:** 10/8/13  
**Date Analyzed:** 10/8/13  
**Instrument:** GC28  
**Matrix:** Water  
**Project:** #PZ33580/0271.R5; Downtown Toyota 4145  
 Broadway Oakland, CA

**WorkOrder:** 1310187  
**BatchID:** 82619  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-82619  
 1310187-001BMS/MSD

## QC SUMMARY REPORT FOR SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	-	0.50	-	-	-	-
Benzene	ND	20.63	0.50	20	-	103	70-130
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	-	2.0	-	-	-	-
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	-	0.50	-	-	-	-
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	-	0.50	-	-	-	-
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	-	0.50	-	-	-	-
1,1-Dichloroethene	ND	-	0.50	-	-	-	-
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

(Cont.)



# Quality Control Report

**Client:** RGA Environmental  
**Date Prepared:** 10/8/13  
**Date Analyzed:** 10/8/13  
**Instrument:** GC28  
**Matrix:** Water  
**Project:** #PZ33580/0271.R5; Downtown Toyota 4145  
 Broadway Oakland, CA

**WorkOrder:** 1310187  
**BatchID:** 82619  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-82619  
 1310187-001BMS/MSD

## QC SUMMARY REPORT FOR SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	-	0.50	-	-	-	-
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	-	0.50	-	-	-	-
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	18.04	0.50	20	-	90.2	70-130
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	19.38	0.50	20	-	96.9	70-130
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	-	0.50	-	-	-	-
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

### Surrogate Recovery

Dibromofluoromethane	26.38	26.76		25	106	107	70-130
Toluene-d8	24.6	24.49		25	98	98	70-130
4-BFB	2.438	-		2.5	98	-	-

(Cont.)





## Quality Control Report

<b>Client:</b> RGA Environmental <b>Date Prepared:</b> 10/8/13 <b>Date Analyzed:</b> 10/8/13 <b>Instrument:</b> GC28 <b>Matrix:</b> Water <b>Project:</b> #PZ33580/0271.R5; Downtown Toyota 4145 Broadway Oakland, CA	<b>WorkOrder:</b> 1310187 <b>BatchID:</b> 82619 <b>Extraction Method:</b> SW5030B <b>Analytical Method:</b> SW8260B <b>Unit:</b> µg/L <b>Sample ID:</b> MB/LCS-82619 1310187-001BMS/MSD
---	---

### QC SUMMARY REPORT FOR SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzene	18.72	19.26	20	ND	93.6	96.3	70-130	2.87	20
Methyl-t-butyl ether (MTBE)	18.05	18.15	20	ND	90.2	90.8	70-130	0.579	20
Toluene	17.82	18.7	20	ND	89.1	93.5	70-130	4.80	20
<b>Surrogate Recovery</b>									
Dibromofluoromethane	26.8	26.43	25		107	106	70-130	1.36	20
Toluene-d8	24	23.87	25		96	95	70-130	0.538	20



## Quality Control Report

<b>Client:</b> RGA Environmental <b>Date Prepared:</b> 10/4/13 <b>Date Analyzed:</b> 10/7/13 <b>Instrument:</b> GC9a <b>Matrix:</b> Water <b>Project:</b> #PZ33580/0271.R5; Downtown Toyota 4145 Broadway Oakland, CA	<b>WorkOrder:</b> 1310187 <b>BatchID:</b> 82503 <b>Extraction Method:</b> SW3510C/3630C <b>Analytical Method:</b> SW8015B <b>Unit:</b> µg/L <b>Sample ID:</b> MB/LCS-82503
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### QC SUMMARY REPORT FOR SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	943.5	50	1000	-	94.3	70-130
<b>Surrogate Recovery</b>							
C9	504.2	505.3		625	81	81	70-130



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1310187

ClientCode: RGAE

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQuIS   
 Email   
 HardCopy   
 ThirdParty   
 J-flag

**Report to:**

Paul King  
RGA Environmental  
1466 66th Street  
Emeryville, CA 94608  
(510) 658-6916    FAX: (510) 834-0152

Email: paul.king@rgaenv.com; pdking0000@aol.c  
cc:  
PO:  
ProjectNo: #PZ33580/0271.R5; Downtown Toyota  
4145 Broadway Oakland, CA

**Bill to:**

Nick Hecht  
RGA Environmental  
1466 66th Street  
Emeryville, CA 94608  
nick.hecht@rgaenv.com

**Requested TAT:**

**5 days**

*Date Received:* 10/04/2013

*Date Printed:* 10/04/2013

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1310187-001	B9-W	Water	10/4/2013 7:40	<input type="checkbox"/>	A	B	A										

**Test Legend:**

1	G-MBTEX_W	2	MBTEX-8260B_W	3	TPH(D)WSG_W	4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.


**Prepared by: Daniel Loa**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
Hazardous samples will be returned to client or disposed of at client expense.

# CHAIN OF CUSTODY RECORD

1310187

		RGA Environmental, Inc. 1466 66th Street Emeryville, CA 94608 (510) 658-4363			NUMBER OF CONTAINERS	ANALYSIS(ES): TPH (G, D, BO) BY EPA 8015B VI SILICA GEL CLEANUP BTEX AND MTBE BY EPA 8260B					PRESERVATIVE	
PROJECT NUMBER: P233580 / 0271.R5		PROJECT NAME: DOWNTOWN TOYOTA 4145 BROADWAY X OAKLAND, CA										
SAMPLER BY: (PRINTED & SIGNATURE) MICHAEL BASS-DESCHENES <i>Michael Bass-Deschenes</i>												
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION						REMARKS		
B9-W	10/4/13	0740	H2O		6	X	X		ICE	NORMAL TAT		
					ICE# <u>2.3</u> GOOD CONDITION <input type="checkbox"/> APPROPRIATE HEADSPACE ABSENT <input type="checkbox"/> CONTAINERS DECHLORINATED IN LAB <input type="checkbox"/> PRESERVED IN LAB							
					PRESERVATION: VOAS <input type="checkbox"/> O&G <input type="checkbox"/> METALS <input type="checkbox"/> OTHER <input type="checkbox"/>							
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		Total No. of Samples (This Shipment)		LABORATORY:				
<i>Michael Bass-Deschenes</i>		10/4/13	1:53	<i>[Signature]</i>		1		McCAMPBELL ANALYTICAL, INC				
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		Total No. of Containers (This Shipment)		LABORATORY CONTACT:				
<i>[Signature]</i>		10/4/13	1:69	<i>[Signature]</i>		6		ANGELA RYDELIUS (877) 252-9262				
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)		SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( ) YES (X) NO						
Results and billing to: RGA Environmental, Inc. paul.king@rgaenv.com				REMARKS:								



### Sample Receipt Checklist

Client Name: **RGA Environmental** Date and Time Received: **10/4/2013 7:46:58 PM**  
 Project Name: **#PZ33580/0271.R5; Downtown Toyota 4145 Broadway Oakl** LogIn Reviewed by: **Daniel Loa**  
 WorkOrder N°: **1310187** Matrix: Water Carrier: Rob Pringle (MAI Courier)

**Chain of Custody (COC) Information**

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

**Sample Receipt Information**

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

**Sample Preservation and Hold Time (HT) Information**

All samples received within holding time? Yes  No   
 Container/Temp Blank temperature Cooler Temp: 2.3°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted   
 Sample labels checked for correct preservation? Yes  No   
 Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

\* NOTE: If the "No" box is checked, see comments below.

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 Comments: