geo - logic *geotechnical and environmental consulting services*
1140 - 5th Avenue, Crockett, CA 94525 (510) 787-6867 - Fax (510) 787-1457

STID 1149

November 4, 1999

Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Responded to 11/16/99

Attention: Mr. Amir K. Gholami

RE: Further Assessment of Groundwater
Downtown Toyota, 4145 Broadway, Oakland

Mr. Gholami:

Attached please find a copy of the above-referenced report. Should you have any questions, please feel free to call me at (510) 787-6867.

Sincerely,

Geo-Logic

Joel G. Greger, C.E.G.
Certified Engineering Geologist
License No. EG 1633
Exp. Date 8/31/2000

Attachments

geo - logic *geotechnical and environmental consulting services*
1140 - 5th Avenue, Crockett, CA 94525 (510) 787-6867 - Fax (510) 787-1457

November 4, 1999
Paradiso Job No. 1103-07

Mr. Norman Alberts
Patterson Ranch, Inc.
211 Newell Avenue
Walnut Creek, California 94596

RE: Further Assessment of Groundwater
Downtown Toyota
4145 Broadway
Oakland, California 94611

Dear Mr. Alberts:

INTRODUCTION

This report summarizes the findings following completion of four exploratory borings at the subject site, in the vicinity of a former waste oil tank. The purpose of this work was to attempt to determine the extent of petroleum impacts to ground water. This work was performed at the request of the Alameda County Environmental Health Services (ACEHS) in response to their letter to Messrs. John and Frank Sabatte dated September 2, 1999. The work was performed in general accordance with Geo-Logic's work plan and work plan addendum dated July 9 and September 2, 1999, respectively.

The scope of the work performed by Geo-Logic for this investigation consisted of the following:

Coordination with regulatory agencies and permitting

Marking of boring locations, concrete cutting, and hand augering

Geologic logging of four borings

Soil and ground water sampling

Delivery of soil and ground water samples (including properly executed Chain of Custody documentation) to a certified analytical laboratory for laboratory analyses

Data analysis, interpretation, and preparation of this report

This work was performed in compliance with the State of California Water Resources Control Board's *Leaking Underground Fuel Tanks (LUFT) Manual* and *California Underground Storage Tank Regulations, 1994*, the California Regional Water Quality Control Board (CRWQCB) *Tri-Regional Board Staff Recommendations for Preliminary Investigation and Evaluation of Underground Tank Sites*, and ACEHS guidelines.

SITE DESCRIPTION

The site is located on the western side of Broadway between 41st and 42nd Streets in Oakland, California. An active Toyota dealership and car repair facility occupies the site. The topography in the site vicinity slopes gently to the southwest, towards San Francisco Bay.

PREVIOUS FIELD ACTIVITIES

One 500-gallon underground waste oil tank was previously located on the site, in a car detailing bay near the eastern perimeter of the site towards Broadway. The tank was removed under the supervision of Burlington Environmental, Inc. (Burlington), in February, 1992. Additional soil excavation, sampling, and backfilling were performed in April, 1992. The results of the tank removal and subsequent sampling were summarized in a report by Burlington dated May 21, 1992.

The analytical results of a soil sample collected from beneath the tank at 8 feet below grade indicated concentrations of Total Petroleum Hydrocarbons (TPH) as Stoddard Solvent of 130 parts per million (ppm), Total Extractable Hydrocarbons (TEH) as Motor Oil at 900 ppm, and Total Oil and Grease at 630 ppm. Following additional excavation, a soil sample collected at 9 feet below grade yielded non-detectable results for all of the analytes.

Groundwater was encountered in the excavation at 10 feet below grade. The analytical results of a groundwater sample from the excavation indicated 5,600 parts per billion TEH as Motor Oil, 180 ppb TPH as gasoline, and non-detectable results for TPH as diesel. BTEX constituents ranged from non-detectable (toluene) to 4.2 ppb (total xylenes).

In February, 1994, in response to a request for additional investigative work from the ACEHS, eleven borings were completed at the site by Burlington. Soil samples were collected from four borings adjacent to the former tank excavation (PSO1 through PSO4). Groundwater samples were collected in nine of the eleven borings (borings PS04 and PS10 were dry). The soil and groundwater samples were analyzed for Total Recoverable Petroleum Hydrocarbons (TRPH), TPH as gasoline, TPH as diesel, TEH as motor oil, and BTEX.

The analytical results of the soil samples from the borings adjacent to the former tank excavation yielded non-detectable results for all analytes, except for in boring PSO4. In this boring, all of the analytes were non-detectable except for TPH as gasoline, which was detected in each of two samples at concentrations of 11 and 32 ppm, and toluene, ethylbenzene, and total xylenes, which were detected at concentrations ranging from non-detectable to 0.14 ppm.

The analytical results of the ground water samples from the nine borings where water was encountered indicated concentrations of TPH as gasoline ranging up to 16,000 ppb, TEH as diesel ranging up to 50,000 ppb, TEH as Motor Oil ranging up to 36,000 ppb, and TRPH ranging up to 520,000. BTEX constituents were relatively low, with benzene ranging from non-detectable to 1.6 ppb. The highest concentrations of hydrocarbons were encountered in boring PSO8, located southwest of the former tank pit.

Based on these findings, in a letter to Messrs. Frank and John Sabatte dated May 12, 1999, the ACEHS requested additional delineation, specifically "southeast of PSO8 and northwest of PSO7, which represent the areas with highest contaminant concentrations to ensure the plume has not traveled offsite". An ACEHS letter dated September 2, 1999, in review of Geo-Logic's work plan dated July 9, 1999, requested additional sampling of soil and groundwater in between PSO7 and PSO8.

Per the request of the ACEHS in their letter dated May 12, 1999, Geo-Logic performed file reviews of several nearby sites, to verify the presumed direction of ground water flow. Based on these file reviews, the ground water flow direction was assumed to be to the southwest, consistent with the topographic slope of the site and vicinity, and consistent with the regional flow direction towards San Francisco Bay. This work was reported in Geo-Logic's work plan dated July 9, 1999.

RECENT FIELD ACTIVITIES

Prior to drilling, a permit was obtained from the City of Oakland Engineering Department (B-1). The boring locations were marked with white paint and Underground Service Alert was notified. In addition, a site-specific Health and Safety Plan was prepared. Prior to drilling, a concrete sawing contractor cored 4-inch diameter holes at each boring location, and the uppermost 4 to 5 feet were hand augered to verify the absence of underground utilities.

On October 25, 1999, the four exploratory borings, designated as B-1 through B-4 on the attached Figure 1, were completed in the downgradient vicinity of the former waste oil tank pit using a Geo-Probe direct-push drill rig. The borings were completed to depths of between 12 and 16 feet below grade. The subsurface soil conditions encountered are shown on the Boring Logs, attached to this report as Appendix A.

Soil samples were collected continuously for the entire depth of the borings, beginning at approximately 4 to 5 feet below grade, for laboratory analysis and lithologic logging purposes. The soil samples were field screened with a photo-ionization detector (PID). The only sample with hydrocarbons that were detectable using the PID was the capillary fringe sample from boring B-2, which also was the only soil sample where an odor of hydrocarbons was noted. The PID readings were recorded on the boring logs.

Prior to use, the drill rods were cleaned using a hot water pressure washer. The undisturbed soil samples were collected by driving a sampling tool containing a plastic liner ahead of the drill rods. The plastic liner holding the soil was then cut into samples which were screened with the PID and logged lithologically. Soil samples selected for laboratory analyses were sealed with Teflon-lined plastic caps, labeled, and placed in individually sealed plastic bags. The samples were then stored in a cooler, on ice, until delivery to a state-certified laboratory.

The subsurface soils encountered consisted predominantly of clayey silt and clayey silt with gravel. Groundwater was initially encountered at depths ranging between 9.5 (B-2) and 13.8 (B-4) feet below grade during drilling, except for in boring B-3, which remained dry on the day of drilling. Groundwater then rose up to 2.5 feet in the remaining boreholes. After retracting the drill rods, water samples were collected from these borings using clean teflon bailers. The samples were decanted into clean amber liters and VOA vials, which were then sealed with Teflon-lined screw caps, labeled, and stored and handled as described above.

In boring B-3, the boring was repeatedly extended and ground water sampling was attempted, however, ground water did not collect in the borehole even upon completion to 16 feet below grade. Therefore, a one-inch slotted PVC casing was installed in the borehole. The following day (October 26, 1999), ground water was measured at 8.9 feet below grade and a water sample was collected.

Following sample collection, the borings were backfilled with bentonite within the saturated zone, followed by neat cement grout. Quick setting concrete was used to finish sealing of the boreholes at grade. Drill cuttings generated from the borings were placed in a DOT-approved 5-gallon steel pail, which was labeled and stored onsite, pending proper disposal.

ANALYTICAL RESULTS

The soil and water samples from the borings were analyzed at McCampbell Analytical in Pacheco, California. All samples were accompanied by properly executed Chain of Custody documentation. The samples were analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline, TPH as diesel and TPH as Motor Oil by EPA method 5030/modified 8015, and benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020.

No detectable concentrations of any of the analytes were detected in the soil samples from borings B-1, B-3 and B-4. TPH as gasoline, TPH as diesel and TPH as motor oil were detected in the capillary fringe sample obtained from boring B-2 at 9 feet below grade. Toluene was also detected at a concentration of 0.081 ppm. The remaining BTEX constituents and MTBE were not detected. These findings are consistent with the PID field screening and field observations.

TPH as diesel and TPH as motor oil were detected in all of the four water samples, at concentrations ranging up to 8,600 ppb (diesel) and 11,000 ppb (motor oil). The highest concentrations were in boring B-2, with the next highest concentrations in B-3. TPH as gasoline

was also detected in B-2 and B-3 at concentrations of 5,200 and 110 ppb, respectively. Benzene, ethylbenzene, xylenes, and MTBE were non-detectable in all of the borings, except for 9.6 ppb of xylenes detected in B-2, and 7.8 ppb of MTBE detected in B-1. Toluene was detected in B-3 and B-4 at concentrations of 0.76 and 0.60 ppb, respectively.

The results of the soil analyses are summarized in Table 1, and the results of the water analyses are summarized in Table 2. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

DISTRIBUTION

A copy of this report should be sent to Mr. Amir Gholami of the ACEHS.

LIMITATIONS

Soil deposits and rock formations may vary in thickness, lithology, saturation, strength and other properties across any site. In addition, environmental changes, either naturally-occurring or artificially-induced, may cause changes in the extent and concentration of any contaminants. Our studies assume that the field and laboratory data are reasonably representative of the site as a whole, and assume that subsurface conditions are reasonably conducive to interpolation and extrapolation.

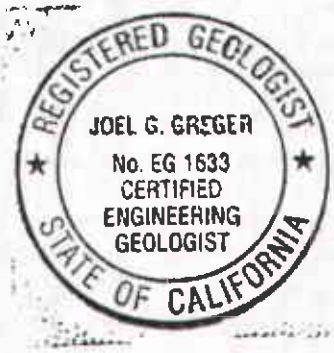
The results of this study are based on the data obtained from the field and laboratory analyses obtained from a state certified laboratory. We have analyzed this data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, either expressed or implied, regarding the above, including laboratory analyses, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

Should you have any questions regarding this report, please feel free to call me at (510) 787-6867.

Sincerely,

Geo-Logic

Joel G. Greger, C.E.G.
Certified Engineering Geologist
License No. EG 1633
Exp. Date 8/31/2000



Attachments: Tables 1 and 2
Figure 1 – Site Plan
Laboratory Analyses and Chain of Custody
Appendix A – Boring Logs

TABLE 1

SUMMARY OF LABORATORY ANALYSES- SOIL

Sample/depth	TPH Gas	TPH Diesel	TPH M.O.	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
			(Collected on October 25, 1999)					
B-1 (7')	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05
B-2 (9')	58	33	48	<0.005	0.081	0.012	<0.005	<0.05
B-3 (8.5')	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05
B-4 (12.5'	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05
Detection Limit	1.0	1.0	5.0	0.005	0.005	0.005	0.005	0.05

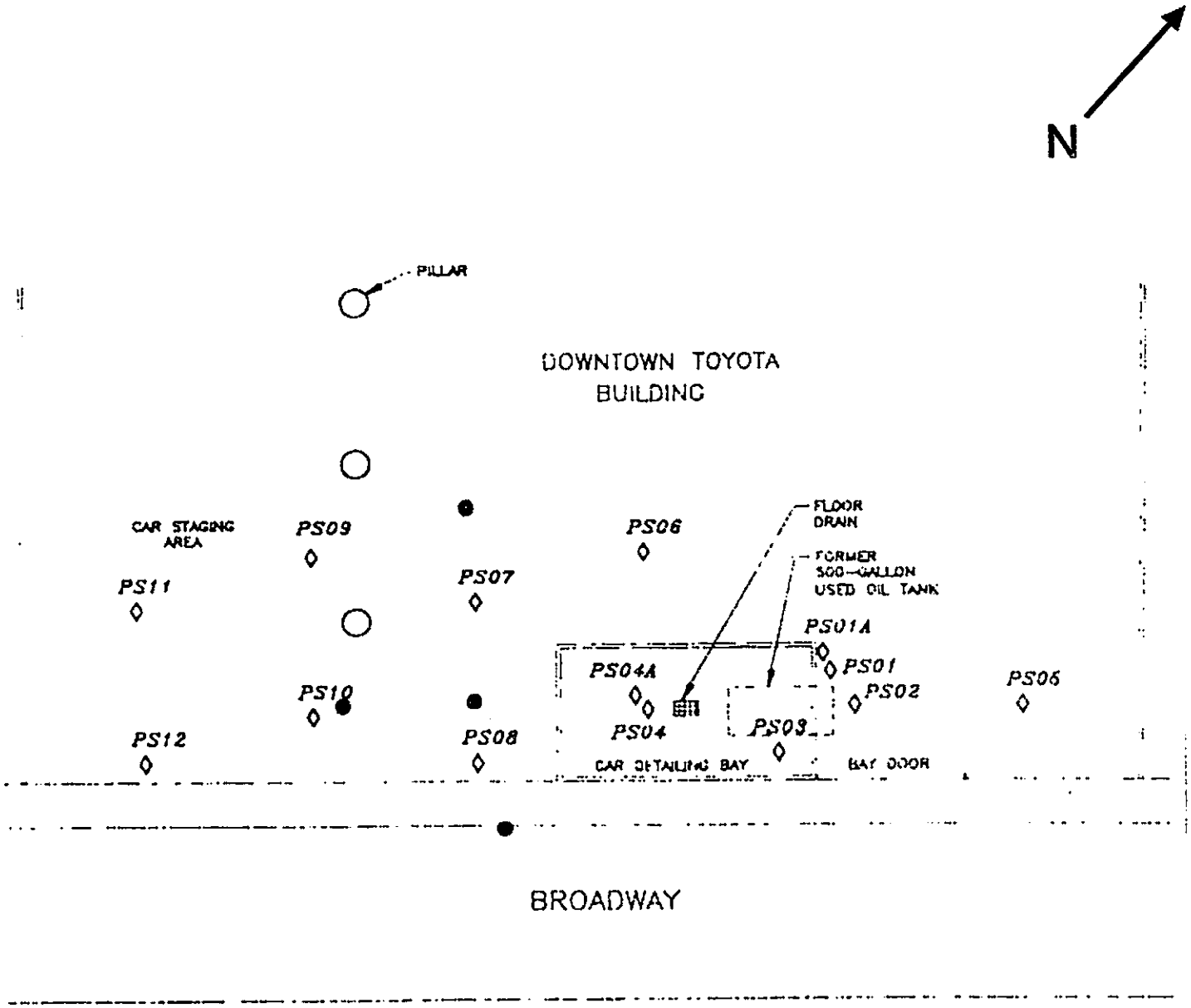
Results are in parts per million (ppm).

TABLE 2

SUMMARY OF LABORATORY ANALYSES - WATER

Sample/depth	TPH Gas	TPH Diesel	TPH M.O.	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
(Collected on October 25, 1999)								
B-1 (8.7')	<50	130	400	<0.5	<0.5	<0.5	<0.5	7.8
B-2 (9.5')	5200	8600	11,000	<0.5	<0.5	<0.5	9.6	<5.0
B-3 (8.9')	110	1600	2200	<0.5	0.76	<0.5	<0.5	<5.0
B-4 (12.8')	<50	140	340	<0.5	0.60	<0.5	<0.5	<5. 0
Detection Limit	50	50	250	0.5	0.5	0.5	0.5	5.0

Results are in parts per billion (ppb).



LEGEND

Exploratory boring, previous investigation

● Exploratory boring, this investigation

Approx. Scale: 1" = 20"

Site plan after Burlington Environmental, Inc., 1994

DOWNTOWN TOYOTA 4145 BROADWAY OAKLAND, CA	Figure No: 1	Date: November 3, 1999 Drawn By: JG/Geo-Logic

SITE PLAN

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Calcoast Analytical 4072 Watts Street Emeryville, CA 94608	Client Project ID: #1103-07; Downtown Toyota 4145 Broadway Oakland, CA	Date Sampled: 10/25/99
		Date Received: 10/25/99
	Client Contact: Joel Greger	Date Extracted: 10/25-10/27/99
	Client P.O:	Date Analyzed: 10/25-10/27/99

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)^	MTBE	Benzene	Toluene	Ethylben-zene	Xylenes	% Recovery Surrogate
24048	B 1 (7')	S	ND	ND	ND	ND	ND	ND	101
24049	B 2 (9')	S	58,g	ND	ND	0.081	0.012	ND	—*
24052	B 4 (12.5')	S	ND	ND	ND	ND	ND	ND	97
24053	B 1 (8.7')	W	ND	7.8	ND	ND	ND	ND	101
24054	B 2 (9.5')	W	5200,g	ND	ND	ND	ND	9.6	103
24056	B 4 (12.8')	W	ND	ND	ND	0.60	ND	ND	100
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L.

* cluttered chromatogram; sample peak coelutes with surrogate peak

^The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
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Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Calcoast Analytical 4072 Watts Street Emeryville, CA 94608	Client Project ID: #1103-07; Downtown Toyota 4145 Broadway Oakland, CA	Date Sampled: 10/25/99
		Date Received: 10/25/99
	Client Contact: Joel Greger	Date Extracted: 10/25/99
	Client P.O:	Date Analyzed: 10/25-10/28/99

Diesel Range (C10-C23) and Oil-Range (C18+) Extractable Hydrocarbons as Diesel and Motor Oil*

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)*	TPH(mo)*	% Recovery Surrogate
24048	B 1 (7')	S	ND	ND	99
24049	B 2 (9')	S	33,g,e	48	103
24052	B 4 (12.5')	S	ND	ND	106
24053	B 1 (8.7')	W	130,g,b	400	99
24054	B 2 (9.5')	W	8600,g,e	11,000	110
24056	B 4 (12.8')	W	140,g,b	340	107
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	250 ug/L	
		S	1.0 mg/kg	5.0 mg/kg	

*water samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

*The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (Stoddard Solvent); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

Calcoast Analytical, Inc.

24 hr 8021 Calco

Chain of Custody

Date 10/25/99 Page 1 of 1

Proj. Mgr. Joel Gregor - Geologic
Company: for Paradiso Mechanical
Address: PMB 1836
2000 Williams St
San Leandro CA 94577
(Phone No.)
Samples (signature) Joel Mr STO 7876827
(Fax No.)
STO 7876867

Analysis Report

Sample ID	Type	Date	Time	Preserve	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/ BTEX (EPA 602, 8020)	TPH - Diesel TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8021)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/8270, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	TPH as Motor Oil 5015	LUFT METALS (5, Cr, Pb, Zn, Ni)	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	8021 or 8260					NUMBER OF CONTAINERS
B1 (9')	Soil	10/25/99	9:30 Am		X	X	X									X						X				1
B2 (9')			11 Am		X	X	X									X						X				1
B3 (12.5')			2 Pm		X	X	X									X						X				1
B4 (9')			12:30 Pm		X	X	X									X						X				1
B4 (12.5')			↓		X	X	X									X						X				1
+3 B1 (8.5')	Water		10:30 Am		X	X	X									X						X				3
+3 B2 (9.5')			11:30 Am		X	X	X									X						X				3
B3 (15.5')	Soil		2:30 pm		X	X	X									X						X				1
+2 B4 (12.5')	Water	↓	1 pm		X	X	X									X						X				2

Hold Hold Hold

Project Information

Project Name: Downtown Toyota
Project No: 1103-07
PO #:
TAT: (Standard) 5-Day

Sample Receipt

	24	48	72	Other
Total No. of Containers				
Head Space				
Rec'd Good Condition/Cold				
Conforms To Record				

Special Instructions / Comments:
Refer to the following address for Job # on lab sheets for invoice:
Downtown Toyota
4145 Broadway
Oakland, CA
Paradiso Job No. 1103-07

Relinquished By: (Signature) Joel Mr
Joel G. Gregor
(Printed Name) 3:30
10/25/99
(Date) (Time)

Received By: (Signature) H. Ricca
(Printed Name) 10/25/99 1530
(Date) (Time)

1. Relinquished By: (Signature)
(Printed Name)
(Date) (Time)

1. Received By: (Signature)
(Printed Name)
(Date) (Time)

24048
24049
24050 H
24051 H
24052
24053
24054
24055 H
24056

C:\My Documents\Calcoast\Templates\Chain of Custody.doc MV

McCAMPBELL ANALYTICAL INC.
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Calcoast Analytical 4072 Watts Street Emeryville, CA 94608	Client Project ID: Downtown Toyota	Date Sampled: 10/25/99
		Date Received: 10/27/99
	Client Contact: Joel Greger	Date Extracted: 10/27/99
	Client P.O:	Date Analyzed: 10/27/99

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)*	MTBE	Benzene	Toluene	Ethylben-zene	Xylenes	% Recovery Surrogate
24155	B3(8.5)	S	ND	ND	ND	ND	ND	ND	99
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/l.

* cluttered chromatogram; sample peak coelutes with surrogate peak

"The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Calcoast Analytical 4072 Watts Street Emeryville, CA 94608	Client Project ID: Downtown Toyota	Date Sampled: 10/25/99
		Date Received: 10/27/99
	Client Contact: Joel Greger	Date Extracted: 10/27/99
	Client P.O:	Date Analyzed: 10/29-10/31/99

Diesel Range (C10-C23) and Oil-Range (C18+) Extractable Hydrocarbons as Diesel and Motor Oil*

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)'	TPH(mo)'	% Recovery Surrogate
24155	B3(8.5)	S	ND	ND	101
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	250 ug/L	
		S	1.0 mg/kg	5.0 mg/kg	

*water samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

' cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

'The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

Calcoast Analytical, Inc.

Chain of Custody

Date 10/25/99 Page 1 of 1

174066 ZCALCO28

Proj. Mgr.:	Joel Gregor-Geologic
Company:	for Paradiso Mechanical
Address:	POB 836, 7600 Williams St, San Leandro CA 94577
Samples (signature)	(Phone No.) 510 787 6867 (Fax No.) 510 787 1457

Analysis Report

Sample ID	Type	Date	Time	Preserve	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/ BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 8260)	BASE/NEUTRALS, ACIDS (EPA 625/625, 8270, 625)	TOTAL OIL & GREASE (EPA 5520, B&F, E&F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	in soil on 8/26	LUFT METALS Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	1/2 sample STLC - Pb	NUMBER OF CONTAINERS
B3(8.5)	Soil	10/25/99	2 pm		X	X										X						X	1

VOAs | O&G | METALS | OTHER

PRESERVATION APPROPRIATE ✓
CONTAINERS ✓

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

24155

Project Information		Sample Receipt				
Project Name	Downtown Toyota	Total No. of Containers				1
Project No	1103-07	Head Space				
PO #		Rec'd Good Condition/Cold				
TAT	Standard 5-Day	Conforms To Record				
		24	48	72	Other	

Special Instructions / Comments:

Refer to Job Name, Address + Job # on lab sheets + invoice, as follows:

Downtown Toyota
4145 Broadway
Oakland, CA
Paradiso Job No. 1103-07

	1.	2.
Relinquished By: (Signature)	Joel	Marla Parada
(Printed Name)	Joel G. Gregor	Marla Parada
(Date) / (Time)	10/27/99 6:25 AM	10/27/99 7:08 am
Received By: (Signature)	Marla Parada	Heidi Rucca
(Printed Name)	Marla Parada	H. Tucca
(Date) / (Time)	10/27/99 625 AM	10/27/99 0800

C:\My Documents\Calcoast\Templates\Chain of Custody(1)

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Calcoast Analytical 4072 Watts Street Emeryville, CA 94608	Client Project ID: Downtown Toyota	Date Sampled: 10/26/99
		Date Received: 10/26/99
	Client Contact: Kevin Yan	Date Extracted: 10/27/99
	Client P.O:	Date Analyzed: 10/27/99

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)*	MTBE	Benzene	Toluene	Ethylben-zene	Xylenes	% Recovery Surrogate
24154	B3(8.96')	W	110,b	ND	ND	0.76	ND	ND	100
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

a cluttered chromatogram; sample peak coelutes with surrogate peak

'The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Calcoast Analytical 4072 Watts Street Emeryville, CA 94608	Client Project ID: Downtown Toyota	Date Sampled: 10/26/99
		Date Received: 10/26/99
	Client Contact: Kevin Yan	Date Extracted: 10/28-11/01/99
	Client P.O:	Date Analyzed: 10/28-11/01/99

Diesel Range (C10-C23) and Oil-Range (C18+) Extractable Hydrocarbons as Diesel and Motor Oil*

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)*	TPH(mo)*	% Recovery Surrogate
24154	B3(8.96')	W	1600,g,c	2200	113
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	250	
		S	1.0 mg/kg	5.0	

*water samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

, cluttered chromatogram resulting in calculated surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

*The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant, no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (Stoddard Solvent); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

Calcoast Analytical, Inc.

\# 12

Chain of Custody

Date 10/26/99 Page 2 of

Proj. Mgr.:	Joel Gregor - Geologist
Company:	For Paradiso Mechanical
Address:	COS 1456 2600 Williams St San Leandro CA 94577
Samples (signature)	Joel G
(Phone No.)	(510) 787 6867
(Fax No.)	(510) 787 1457

Analysis Report

Sample ID	Type	Date	Time	Preserve	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/ BTEX (EPA 602, 8020)	TPH - Diesel TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/827, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	MTBE on 8020	LUFT METALS Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION TCLP, STLC	TPH as Motor Oil - 8015					[illegible]
B3(5596)	water	10/26/99	9:30AM			X	X									X						X					4

Project Information		Sample Receipt			
Project Name: Downtown Toyota		Total No. of Containers			
		Head Space			
Project No. 1103-07		Rec'd Good Condition/Cold			
PO #		Conforms To Record			
TAT	Standard (circled) 5-Day	24	48	72	Other

Special Instructions / Comments:

Refer to Job Name, Address
Job No. on lab sheets + invoice,
as follows:
Downtown Toyota
4145 Broadway
Oakland CA 94611
Paradiso Job # 1103-07

	1	2
Relinquished By (Signature)	Joel G	
(Printed Name)	Joel G. Gregor	
(Date) (Time)	10/26/99 10:05 AM	
Received By (Signature)	Heather Huber	
(Printed Name)	H. HUBER	
(Date) (Time)	10-26-99 10:10 AM	

APPENDIX A

BORING LOGS

BORING LOG

Paradiso Job No. 1103-07	Boring diameter 2"	Logged By: Joel Greger
Project: Downtown Toyota 4145 Broadway, Oakland	Well Cover Elevation NA	Date drilled: 10/25/99
Boring No. B-1	Drilling Method: GeoProbe	Drilling Company: Gregg Drilling

Penetration Blows/6"	Sample	Depth (ft)	G.W. level	Strati-graphy (USCS)	Description
		0			@0' -9" of asphaltic concrete
(Direct push) Continuously cored 4-13.5'				ML	@1'- CLAYEY SILT (ML), dark brown, slightly moist, very stiff, occasional subrounded gravels, gravelly at 3.5' (fill or disturbed native soil).
PID - 0		5			@4'- CLAYEY SILT (ML), as above, occasional sub-rounded to subangular gravels to 1-1/4" diameter, slightly moist to moist, very stiff (alluvium).
PID - 0					
	B1-7'	X			
PID - 0					@7.5'- color change to light brown, few gravels.
PID - 0		10			@8.5'- CLAYEY SILT with gravel (ML), very moist, to locally wet, very stiff, estimated at 45% sub-angular gravels to 1.5" diameter, gravels deeply weathered.
PID - 0					
PID - 0					Groundwater measured at 11.2', rose quickly to 8.7'.
		15			TOTAL DEPTH: 13.5' Backfilled with bentonite and neat cement grout

Site Address: Downtown Toyota 4145 Broadway Oakland, California	Figure No: B-1	Date: 10/28/99 Drawn By: JG/Geo-Logic

Log of Boring B-1

BORING LOG

Paradiso Job No. 1103-07	Boring diameter 2"	Logged By: Joel Greger
Project: Downtown Toyota 4145 Broadway, Oakland	Well Cover Elevation NA	Date drilled: 10/25/99
Boring No. B-2	Drilling Method: GeoProbe	Drilling Company: Gregg Drilling

Penetration Blows/6"	Sample	Depth (ft)	G.W. level	Stratigraphy (USCS)	Description
		0			@0' -4" of concrete over 8" of fill.
(Direct push) Continuously cored 4-12'					@1'- CLAYEY SILT (ML), dark brown, slightly moist, very stiff, locally with up to 10% subrounded gravels to 1/4" diameter, gravels deeply weathered (topsoil and alluvium).
PID - 0		5		ML	@4'- CLAYEY SILT (ML), as above except subangular gravels to 1-1/4" diameter, slightly moist to very moist, very stiff, thin gravel layer at 5' (alluvium).
PID - 0					@7.5'- color change to olive.
PID - 0					@8'- CLAYEY SILT with gravel (ML), very moist to saturated, very stiff, estimated at 45% subangular gravels to 1.5" diameter, gravels deeply weathered.
PID -142	B2-9'	X	▽		@ 9' - odor of hydrocarbons.
		10			@9.5'- color change to brown.
PID - 0					@10.8'- CLAYEY SILT (ML), saturated, very stiff, trace very fine-grained sand and subrounded gravels.
					TOTAL DEPTH: 12' Backfilled with bentonite and neat cement grout
		15			

Site Address: Downtown Toyota 4145 Broadway Oakland, California	Figure No: B-2	Date: 10/28/99 Drawn By: JG/Geo-Logic

Log of Boring B-2

BORING LOG

Paradiso Job No. 1103-07	Boring diameter 2"	Logged By: Joel Greger
Project: Downtown Toyota 4145 Broadway, Oakland	Well Cover Elevation NA	Date drilled: 10/25/99
Boring No. B-3	Drilling Method: GeoProbe	Drilling Company: Gregg Drilling

Penetration Blows/6"	Sample	Depth (ft)	G.W. level	Strati-graphy (USCS)	Description
		0			@0' -4" of concrete over 8" lof sand silt (fill).
(Direct push) Continuously cored from 4-16'				ML	@1'- CLAYEY SILT (ML), dark brown, slightly moist, very stiff, occasional rounded to subrounded gravels to 1/4" diameter (topsoil and alluvium). @4'- CLAYEY SILT (ML), dark brown, changing to brown at 5', moist, very stiff, occasional sub-rounded gravels to 1" diameter (alluvium). @6.8'- as above except with estimated 15% gravel, gravels subrounded, deeply weathered, to >2" diameter but predominantly <1/2", gravel content increasing with depth.
PID - 0		5			
PID - 0					
PID - 0	B3-8.5'		10/26/99	GM	@8'- Grades to SILTY GRAVEL (GM), light yellow-ish brown to dark green at 9', very moist to wet, hard, estimated at 75% subangular gravels to >2" diameter, 25% silt, trace clay and sand. Gravels deeply weathered. @12' - attempted to collect sample, water did not collect in borehole, gravel content decreasing.
PID - 0		10			
PID - 0					
PID - 0				ML	@13' - CLAYEY SILT (ML), light brown, saturated?, very stiff, with trace to 10% subrounded, deeply weathered gravels to 1/8" diameter. @14.5 and 16' - attempted to collect sample, water did not collect in borehole, installed 1" casing.
PID - 0		15			
					TOTAL DEPTH: 16' Backfilled with bentonite and neat cement grout

Site Address: Downtown Toyota 4145 Broadway Oakland, California	Figure No: B-3	Date: 10/28/99 Drawn By: JG/Geo-Logic

Log of Boring B-3

BORING LOG

Paradiso Job No. 1103-07	Boring diameter 2"	Logged By: Joel Greger
Project: Downtown Toyota 4145 Broadway, Oakland	Well Cover Elevation NA	Date drilled: 10/25/99
Boring No. B-4	Drilling Method: GeoProbe	Drilling Company: Gregg Drilling

Penetration Blows/6"	Sample	Depth (ft)	G.W. level	Strati-graphy (USCS)	Description
		0			@0' - 4" of asphaltic concrete.
(Direct push) Continuously cored 4-14'				ML	@0.3' - CLAYEY SILT (ML), dark brown, slightly moist, very stiff, locally with subrounded gravels to 2" diameter (fill).
PID - 0		5			@3.7' - CLAYEY SILT (ML), as above except native (topsoil and alluvium)
PID - 0					@ 5.7'- color changes to brown. @7.5'- CLAYEY SILT with gravel (ML), dark brown, moist, very stiff, est.at 35% subangular gravels to 1.5" diameter, gravels deeply weathered.
PID - 0				GM	@8' Grades to SILTY GRAVEL (GM), very moist, very stiff, estimated at 70% subangular gravel, deeply weathered.
PID - 0		10			
PID - 0	B4-12.5'		▽	ML	@11.6' - CLAYEY SILT (ML), yellowish brown, very moist to wet, very stiff, homogenous, with black MnO staining.
PID - 0			▽		@13.8' - groundwater, rose to 12.8'.
		15			TOTAL DEPTH: 14' Backfilled with bentonite and neat cement grout

Site Address: Downtown Toyota 4145 Broadway Oakland, California	Figure No: B-4	Date: 10/28/99 Drawn By: JG/Geo-Logic

Log of Boring B-4