



12/30/99

Rick Wilson Rick Wilson Consulting 43555 Grimmer Blvd, #M1106 Fremont, CA 94538

Dear Rick:

Attached are the final analytical reports for the samples collected on December 7, 1999 and submitted to Onsite Environmental Laboratories. These samples were analyzed for TRPH, TPHgas/BTEX, and TPHd. A copy of the completed chain of custody record is also enclosed.

If you have any questions regarding these reports please contact us at (510) 490-8571.

Sincerely,

Onsite Environmental Laboratories, Inc.

Peter C. Balas Principal

#### **PROFESSIONAL CERTIFICATION**

This report has been prepared by

Richard A. Wilson, P.E.

Registered Civil Engineer N. C37408, Expiration June 30, 2000

#### STATEMENT OF LIMITATIONS

The services described in this report were performed in a manner consistent with TEA's agreement with the client and in accordance with generally accepted professional consulting principles and practices.

Opinions and recommendations contained in this report apply to conditions existing at certain locations when services were performed and are intended only for the specific purposes, locations, time frames, and project parameters indicated. TEA cannot be responsible for the impact of any changes in environmental standards, practices, or regulations after performance of services.

Any use of this report by a third party is expressly prohibited without a written, specific authorization from the client and TEA. Such authorization will require a signed waiver and release agreement.

This report is issued with the understanding that the client, the property owner, or its representative is responsible for ensuring that the information, conclusions and recommendations contained herein are brought to the attention of the appropriate regulatory agencies, as required.

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Environment

# PRELIMINARY SUBSURFACE INVESTIGATION REPORT

#### LIVERMORE HONDA DEALERSHIP USED CAR LOT

3800 First Street Livermore, CA 94550

Prepared for:

First Republic Bank III Pine Street San Francisco, CA 94111

Prepared by:

Tom Edwards & Associates

2243 Del Monte Drive

San Vablo, CA 94806

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December 1999

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#### 1.0 INTRODUCTION

First Republic Bank has retained Tom Edwards and Associates, Inc. to conduct a Preliminary Subsurface Investigation of the used car lot of the Livermore Honda located at 3800/3884 First Street in Livermore, California. The purpose of the investigation is to determine if the soil beneath the used car lot (Site) has been impacted with petroleum hydrocarbons from past site operations and activities.

#### 1.1 Scope of Work

In summary the scope of work performed during the Preliminary Subsurface Investigation included:

- Underground Utility and Geophysical Surveys.
- Drilling six soil borings and collecting soil samples.
- Analyzing the soil samples for petroleum hydrocarbons.
- Identifying site soil types and geology.
- Defining the extent of soil contamination at the site.

#### 1.2 Site Location

The subject site is a triangular shape lot located at the corner of First Street and Portola Avenue in Livermore, California with Alameda County Assessor Parcel Number 099-0056-001-15. Site location is shown on Figure 1.

#### 1.3 Site History

Based on information obtained from the Golder Associates, Inc. Preliminary Environmental Site Assessment Report, October 8, 1998, since 1940 the site was used by the following owners and tenants:

1940-45	Coast Manufacturing and Supply Co.
1945-69	Hexcel Corp. and Coast Land Manufacturing Co.
1969-75	Standard Oil Service Station
1979-92	Dunn Chevrolet Dealership
1992- present	Livermore Honda Dealership

The Golder report stated "the status of Standard Oil service station closure (removal of possible USTs, associated piping, hoists, etc.) prior to the occupancy of the Chevrolet dealership is unknown".

#### 2.0 SITE DESCRIPTION

#### 2.1 Topography and Surface Waters

The topography in the immediate vicinity of the site is relatively flat, with a gradual slope towards the southeast. The approximate elevation of the site is 520 feet above mean sea level. There are no surface water bodies within a one-mile radius of the property.

#### 2.2 Regional Geologic and Hydrogeologic Setting

According to the information obtained from the Zone 7 Water Agency Preliminary Geologic Map of the Livermore Valley, 1998, the subsurface soils in the vicinity of the property consist of unconsolidated continental deposits of Pleistocene age. The Zone 7 Water Agency Groundwater Contour map of Fall 1996 indicates that the regional groundwater flow direction within the Livermore Valley is towards the northwest.

#### 2.3 Site-specific Geologic and Hydrogeologic Setting

Six soil borings were drilled at the site during this Preliminary Subsurface Investigation to determine if the soil the beneath the site has been impacted with petroleum hydrocarbons from past site operations. The borings were drilled using a Geoprobe 5400 Direct Push Technology drilling rig. Boring locations were selected based on the results of surface geophysical surveys performed at the site as part of this investigation. Four borings were drilled on the top of the suspected underground storage tanks (USTs) and one on the top of a 20-foot long piping run. No USTs and piping were encountered in the borings. Soil boring locations are shown on Figure 2.

All six borings were drilled to a depth of 20 feet below ground surface. Soils were described according to the procedures outlined in the Unified Soil Classification System (ASTM D-2487). Boring logs are presented in Appendix A. The investigation revealed that the site is underlain by inter-bedded clayey, silty and sandy gravel to a depth of 7 feet, and clay, silt and silty clay from 7 to 20 feet below ground surface. A site investigation report titled "Preliminary Soil and Groundwater Assessment in the Vicinity of Former USTs, Livermore Honda Dealership, STE in 1993" indicates that groundwater beneath the site is approximately 60 feet deep and flows towards the southwest.

#### 2.4 Previous Site Investigations

Soil Tech Engineering, Inc. conducted soil and groundwater assessments in Parcel No --- (the larger parcel of land currently occupied by the Honda dealership) in connection with the removal of three USTs from that parcel. The results of soil and groundwater assessments are summarized in Golder Associates, Inc. Preliminary Environmental Site Assessment Report, October 8, 1998. In summary, the contaminated soils were removed by over-excavation of the UST pits and four soil borings were drilled around the former USTs. Three of the borings were converted to groundwater monitoring wells. No TPH was detected in the soil samples collected from the borings. The monitoring wells were sampled quarterly for one year. No TPH was detected in the groundwater samples.

#### 3.0 SITE INVESTIGATION

This section describes the results of geophysical and geologic investigations conducted at the subject site.

#### 3.1 Underground Utility and Geophysical Surveys

Underground Service Alert (USA) performed underground utility surveys around the perimeter of the site to locate water, natural gas, power, sewer and telephone lines. No utility lines were located by USA. On site surface geophysical surveys were performed to locate potential USTs, hoists and associated piping beneath the site. The site was first surveyed using a Fisher model FX-3 differential induction magnetometer for ferrous objects. The survey located several underground ferrous objects such as piping and potential USTs. A second survey was performed using a White model TM-808 M-scope (metal detector). The M-scope detects ferrous and non-ferrous metallic objects. In addition, the M-scope detects underground voids or cavities, changes in conductivity of soil which could be due to presence of different soil types, loosely compacted fill, UST graves and potentially contaminated pockets of soil. All detected anomalies were marked on the pavement with orange color spray paint. For the most parts, the metal detector survey results matched the magnetometer survey results. The geophysical surveys detected six possible USTs or UST graves and associated piping at the site.

#### 3.2 Soil Sampling and Screening

Boring locations were selected based on the results of the surface geophysical survey. Four borings were drilled on the top of the suspected underground storage tanks (USTs) and one on the top of a 20-foot long piping run. No USTs and piping were encountered

in the borings. For all six borings, continuous soil samples were collected in 4-foot long, 1.5-inch diameter clear acrylic liners. The liner was placed inside a 2-inch diameter steel drive sampler and was pushed down into the soil with hydraulic blows of Geoprobe 5400 drill rig. The liner was then removed from the sampler and the soil type, color, odor, moisture and consistency were described. Six-inch long sections were cut from the 4-foot long liner at specified depth intervals, labeled and packaged as samples for chemical analysis. Soil samples were collected at 5, 10, 15 and 20 feet depth intervals in borings B-1 through B-6. Soil samples from 2 to 15 feet below grade in boring No. 2 had noticeable petroleum odor. These samples were screened in the field for organic compounds using a PID. The PID readings were noted on the boring log.

#### 3.3 Analytical Results of Soil Samples

The soil samples were delivered to Onsite Analytical Laboratory, a State-certified laboratory and analyzed for total recoverable petroleum hydrocarbons (TRPH) by EPA test method 418.1. Due to strong petroleum odors in Boring 2, the samples collected from the boring were also analyzed for total petroleum hydrocarbons (TPH) as gasoline, benzene, toluene, ethyl benzene and xylenes (BTEX), TPH as diesel and TPH as motor oil. The analytical results are summarized in Table 1. The laboratory analytical data sheets are presented in Appendix B. TRPH concentrations ranged from non-detect to 40,000 milligrams per kilogram (mg/kg). In general, the concentrations decreased with depth and became non-detect to very low at 15 and 20 feet below grade (fbg).

#### 4.0 SUMMARY AND CONCLUSIONS

The results of this Preliminary Subsurface Investigation indicate that soil beneath the western portion of the site (in and around Borings No. 1, 2 and 3) is impacted with various levels of petroleum hydrocarbons. Table 2 is a summary of TRPH impacted intervals and TRPH levels found in each soil boring:

Table 2

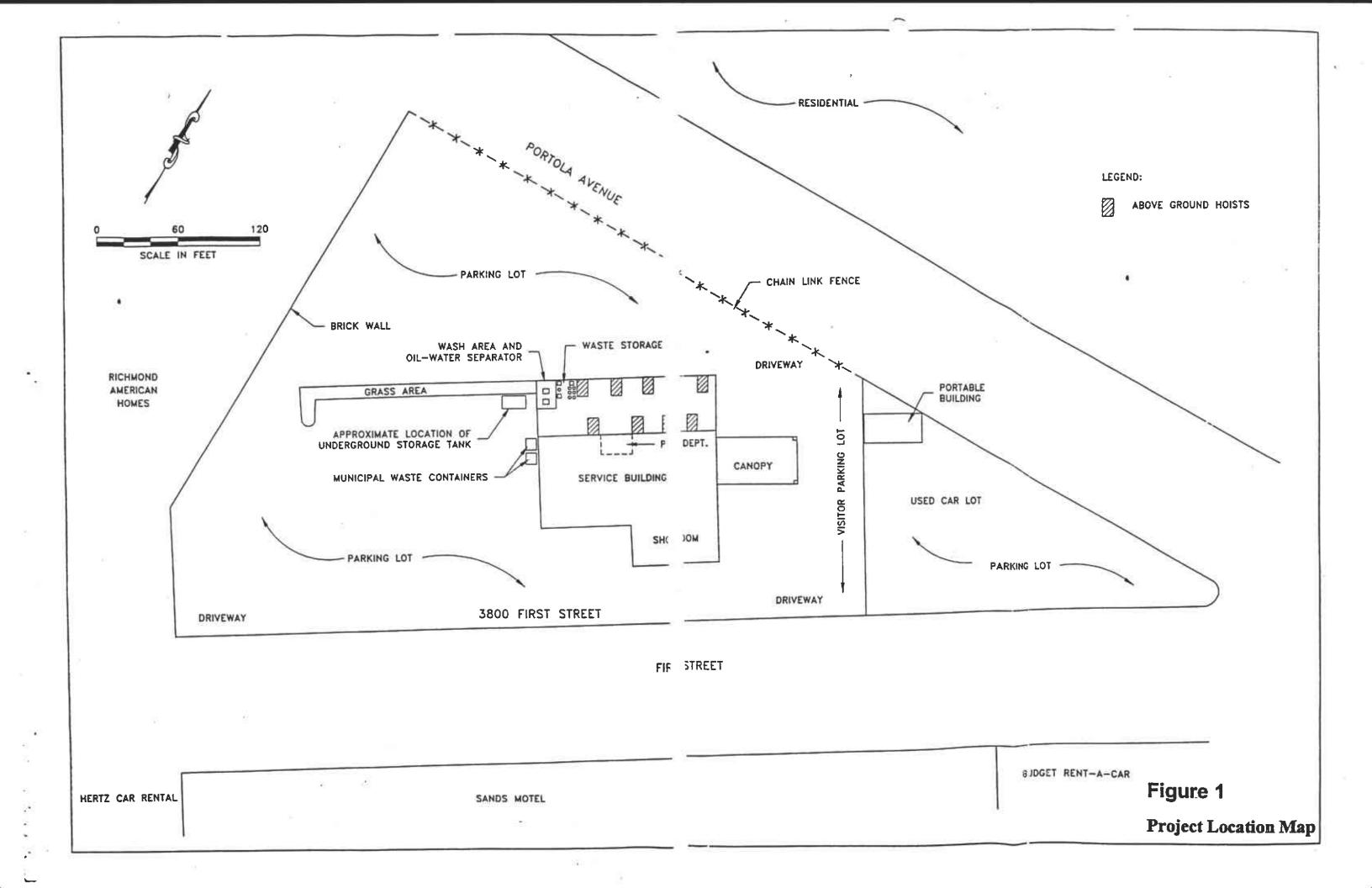
Boring No.	TRPH Impacted Intervals and TRPH Levels	
B-1	2-6' moderate, 18-20' very low	
B-2	2-13' very high, 13-20'very low	
B-3	8-12' high, 12-20' very low	
B-4	2-7' low, 7-20' very low	
B-5	3-7' very low	
B-6	3-7' very low	

The concentration of TRPH in soil samples collected from Boring No. 2 was the highest. These high TRPH levels have changed the soil color in Boring No. 2 from yellowish brown to greenish gray and olive gray from 2 to 15 feet below grade.

Based on analytical results of the samples and the geologic conditions of the site, petroleum hydrocarbons are confined within the upper 15 feet of the soil strata. In addition, due to presence of thick layers of clay, it is highly unlikely for the petroleum hydrocarbons to leach out of the soil and reach the groundwater, which is approximately 60 feet deep.

#### 5.0 RECOMMENDATIONS

Due to limited number of soil borings drilled at this site, it is not possible to determine if the subsurface soil in the unexplored areas of the used car lot has been impacted with petroleum hydrocarbons. We recommend drilling four additional soil borings in the unexplored areas of the site and around Borings No. 2 and 3 to better define the lateral and vertical extent of soil contamination. The depths of the new borings are not required to exceed 16-feet and soil samples are recommend to be collected from 4, 8, 12 and 16 feet below grade.



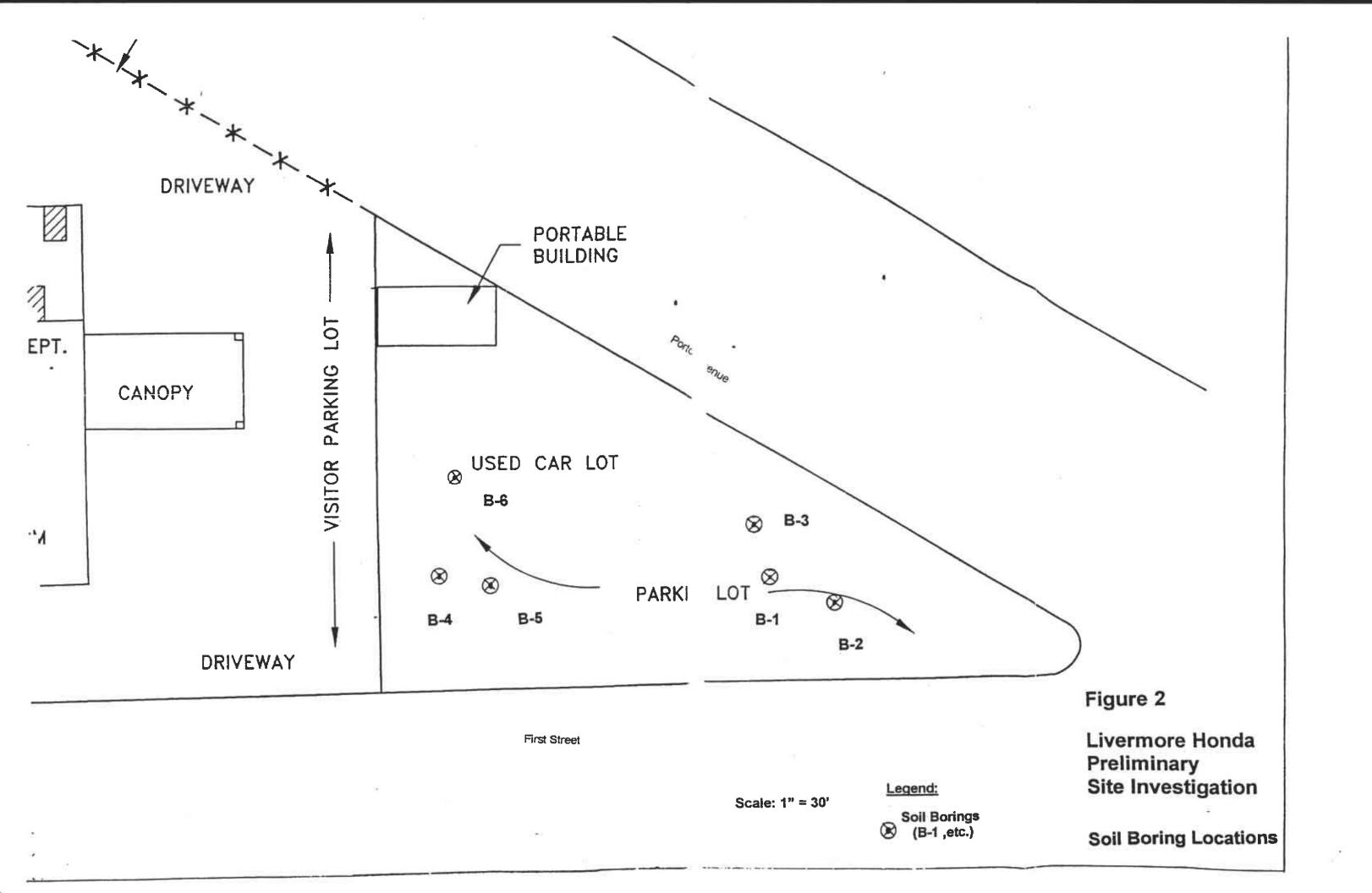


Table 1
Concentrations of Petroleum Hydrocarbons in Soil Samples \*
(Concentrations are in milligrams per kilogram)

Sample No.	TRPH	TPH	TPH	TPH	B/T/E/X
		Diesel	Motor Oil	Gasoline	
B-1-5'	1,000				
B-1-10'	13				
B-1-15'	ND				
B-1-20'	31				
B-2-5'	40,000	200	39,000	220	0.03/0.62/1.2/6.8
B-2-10'	10,000	630	14,000	280	ND/ND/0.01/0.054
B-2-15'	18	ND	ND	ND	ND/ND/ND/ND
B-2-20'	11				
B-3-5'	ND				
B-3-10'	8,500				
B-3-15'	11			_	
B-3-20'	14				
B-4-5'	160				
B-4-10'	15				
B-4-15'	ND				
B-4-20'	21				
B-5-5'	12				
B-5-10'	20				
B-5-15'	ND				
B-5-20'	ND				
B-6-5'	20				
B-6-10'	ND				
B-6-15'	ND				
B-6-20'	ND				

<sup>\*</sup> Blank cells indicate the samples were not analyzed for the compound.

ND- Not Detected

BTEX- Benzene, Toluene, Ethyl benzene and Xylenes

TRPH- Total Recoverable Petroleum Hydrocarbons

TPH- Total Petroleum Hydrocarbons as Diesel, Gasoline or Motor Oil

Appendix A

**Soil Boring Logs** 

	TEST BOR	ING L	.OG					B-1
					Page	_1	of	_1
PROJE	CT NAME: Livermore Honda	,		PROJ	ECT N	UMBE	R:	42299
CLIENT				DRILL	ING C	ONTR	ACTO	R: Fast Tek
DRILL	RIG: Geoprobe 5400			BORE	HOLE	DIAME	ETER:	2-inch
SAMPL	ING METHOD: Direct push, continuos core :	sampling	9	DEPT	нто	VATE	₹:	NA
START	DATE: 12/7/99 COMPLETION	DATE: 1	2/7/99	)		TOTA	L DEP	TH: 20 Feet
LOGGE	ED BY: Max Shahbazian, R.G.			APPR	OVED	BY:		
LOCAT	10N: 3800 First St., Livermore, CA			SURF	ACE E	LEVAT	TION:	NA
SOIL CLASS/ GRAPHIC LOG	DESCRIPTION	ОЕРТН	MODE	RECOVERY	BLOW COUNT RQD	SAMPLE NO.	PID READING (ppm)	REMARKS
	0'-6' Surface asphalt, Fill; silty, gravelly, sand, grayish brown to orange brown, dry to damp,	5				B1-5		Sample recovery varied between 90 and 100% Samples did not have
CL	6'-12' Clay; dark yellowish brown (10 YR 6/6) , damp, stiff	- - - - _10				B1-10		chemical or petroleum odors
ML	12'-20' Silt; dark yellowish brown, sandy damp, with dark yellowish brown clay lenses	_ _ _ _15 _ _ _ _ _ _ _ _ _ _ _ _ _ _ _				B1-15		

			TEST BOR	ING L	.OG			. NO	_	B-2 
PROJE	CT NAME:	Livermore Hono	lo	·		PROJ		UMBE		42299
CLIENT					DRILL	ING C	ONTR	ACTO	R: Fast Tek	
DRILL		First Republic B	di iK	<del></del>		ļ				2-inch
├		Geoprobe 5400	, continuos core	samnle	·	ļ		WATER		NA .
<del></del>	DATE:	12/7/99	COMPLETION	•	2/7/99			TOTA		·
LOGGE			1,				OVED	<u>.                                    </u>		
LOCAT		Max Shahbazia						LEVAT	TION:	NA
SOIL CLASS/ GRAPHIC LOG		3800 First St., I		DEPTH	MODE	RECOVERY	BLOW COUNT RQD	SAMPLE NO.	PID READING (ppm)	REMARKS
-	ŀ	Surface asphalt gravely, sand, gra dark brown, dry to	ıyish	- - -						Sample recovery varied between 90 and 100%
	4'-12' (5G 4/1), (	Clay; dark greer	nish gray	_5 _ _ _				B2-5	12	Samples from 2 to 15 feet below grade had petroleum odor
CL	12'-16' (5Y 5/2), c	Clay; light olive damp, stiff to hard						B2-10		
	16'-20' (10YR 6/6 gravel, sti	Clay; dark yello i), damp, silty, sa ff to hard	_	_ _20 _ _ _ _ _ _ 				B2-20		

		TEST BOR	ING L	og		WELL	NO		B-3
		<del>-</del>			ı		_1_		
PROJE	CT NAME: Livermore Hond	a		· ·	PROJ	ECT N	UMBEI	R:	42299
CLIENT	First Republic B	ank			DRILL	ING C	ONTRA	ACTO	R: Fast Tek
DRILL	RIG: Geoprobe 5400				BORE	HOLE	DIAME	TER:	2-inch
SAMPLING METHOD: Direct push, continuos core sa				)	DEPTI	HTO	NATER	₹:	NA
START	DATE: 12/7/99	COMPLETION	DATE: 1	2/7/99	)		TOTAI	L DEP	TH: 20 Feet
LOGGE	ED BY: Max Shahbazia	n, R.G.			APPR	OVED	BY:		
LOCAT	······································	•			SURF	ACE E	LEVAT	ION:	NA
SOIL CLASS/ GRAPHIC LOG	DESCRIPTIO		ОЕРТН	MODE	RECOVERY	BLOW COUNT RQD	SAMPLE NO.	PID READING (ppm)	REMARKS
SP/GM	6'-8' Clay; dark yello (10YR 6/6), damp, stiff	ayish wish brown with dusky yellow damp, stiff wish orange	- - - 5 - - - 10 - - - - -				B3-10 B3-15		Sample recovery varied between 90 and 100%  Sample at 4 feet had slight petroleum odor
	16'-20' Clay; dark yello (10YR 6/6), damp, stiff	wish orange	- _20 - - - - - - -				B3-20		

	TEST BOR	RING L	.og		WELL	. NO		B-4
						_1_		
PROJECT N	AME: Livermore Honda			PROJ	ECT N	UMBE	R:	42299
CLIENT:	First Republic Bank		·	DRILL	ING C	ONTR	ACTO	R: Fast Tek
DRILL RIG:	Geoprobe 5400			BORE	HOLE	DIAME	TER:	2-inch
SAMPLING N	METHOD: Direct push, continuos core	sampling	)	DEPT	нто	WATER	₹:	NA
START DAT	E: 12/7/99 COMPLETION	DATE: 1	2/7/99	)		TOTA	L DEP	TH: 20 Feet
LOGGED BY	Max Shahbazian, R.G.			APPR	OVED	BY:		
LOCATION:	3800 First St., Livermore, CA			SURF	ACE E	LEVAT	TION:	NA
SOIL CLASS/ GRAPHIC LOG	DESCRIPTION	ОЕРТН	MODE	RECOVERY	BLOW COUNT RQD	SAMPLE NO.	PID READING (ppm)	REMARKS
0'-7' Fill; s brown SP/GM 7'-20 (10 Y	Surface asphalt, silty, gravelly, sand, grayish in to orange brown, dry  Clay; dark yellowish orange (R 6/6), damp, stiff; becomes harder depth	- - - - - - - - - - - - - - - - - - -				B4-10 B4-15		Sample recovery varied between 90 and 100%  Samples did not have chemical or petroleum odors

			TEST BOR	ING L	.og		WELL	. NO		B-5
					·	<del>,</del>	Page	_1_	_ of	_1
PROJE	CT NAME:	Livermore Hono	la			PROJ	ECT N	IUMBE	R:	. 42299
CLIENT: First Republic Bank						DRILL	ING C	ONTR	ACTO	R: Fast Tek
DRILL	RIG:	Geoprobe 5400				BORE	HOLE	DIAM	ETER:	2-inch
SAMPL	LING METH	HOD: Direct push	, continuos core	samplin	g	DEPT	НТО	WATE	₹:	NA
START	DATE:	12/7/99	COMPLETION	DATE:	12/7/99	)		TOTA	L DEP	TH: 20 Feet
LOGGI	ED BY:	Max Shahbazia	n, R.G.			APPR	OVED	BY:		
LOCAT	TION:	3800 First St., I	Livermore, CA			SURF	ACE E	LEVAT	TION:	NA
SOIL CLASS/ GRAPHIC LOG		DESCRIPTIO	ON	ОЕРТН	MODE	RECOVERY	BLOW COUNT RQD	SAMPLE NO.	PID READING (ppm)	REMARKS
SP/GM	0'-4' Fill; silt, sa dry to dam	Surface asphalt and and gravel, re ap	•	- - -						Sample recovery varied between 90 and 100%
GC	4'-7' stiff, damp		, reddish brown,	_ _5 _ _				B5-5		Samples did not have chemical or
	7'-12' (10YR 5/4	Clay; moderate ), damp, stiff	yellowish brown	- - _10				B5-10		petroleum odors
CL	12'-20' (10YR 6/6	Clay; dark yello ), damp, silty, stil	•	 - - -15 - -				B5-15		·
				_ _20 _ _ _ _ _ _ _25				B5-20		

			TEST BOR	ING L	.OG		WELL			B-6 1
PROJE	CT NAME: Liven	more Hond	a			PROJ	ECT N	UMBE	R:	42299
CLIENT			DRILL	ING C	ONTR	ACTO	R: Fast Tek			
DRILL	DIC:	Republic B robe 5400	<del></del>		•	BORE	HOLE	DIAM	ETER:	2-inch
SAMPLING METHOD: Direct push, continuos core sampling				)	DEPT	нто	NATER	₹:	NA	
START	DATE: 1	2/7 <i>1</i> 99	COMPLETION	DATE: 1	2/7/99	)		TOTA	L DEP	TH: 20 Feet
LOGGE	ED BY: Max	Shahbaziar	n, R.G.			APPR	OVED	BY:		
LOCAT	ION: 3800	First St., L	ivermore, CA			SURF		LEVAT	ION:	NA
SOIL CLASS/ GRAPHIC LOG	DE	ESCRIPTIC	DN	DEPTH	MODE	RECOVERY	BLOW COUNT RQD	SAMPLE NO.	PID READING (ppm)	REMARKS
GC	Fill; clay, gravel, brown to orange	brown, dry ey gravels;	rish	- - - - - - - - -				B6-5		Sample recovery varied between 90 and 100%  Samples did not have chemical or
CL	(10 YR 5/4), dan	np, stiff ; dark yello	yellowish brown wish orange ff to hard	- _10 - - - - _15				B6-10		petroleum odors
				- - _20 - - - - - _				B6-20		

# Appendix B Analytical Laboratory Reports

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						Hours:						С	usto	ody Sea	als:	

Client Sign-off:
White Conv - Admin/Lab Yellow - Mobile Lab Pink - Client

#### LABORATORY QC REPORT Total Petroleum Hydrocarbons by GC/FID EPA 8015M



Report #:

Date analyzed: 12/14/99

Sample Field ID: B2-15'

3F041d.qac

Project Mgr:

Rick Wilson

Client:

Tom Edwards & Associates

Project:

Livermore Honda

Proj. No:

42299

Units:

Soil

Matrix:

mg/Kg

Lab ID Number		3F041-03	Spike	3F041-(	03 MS	3F041-03 MSD		RPD
			concentr.	Conc.	% Recov.	Conc.	% Recov.	%
Analyte	RL							
TPH as diesel	10	ND	860	690	80%	646	75%	6.6%
SURROGATE	QC Limîts							
o-Terphenyl	65%-135%	97%			92%		86%	
Dilution Factor	r (DF)	1			1		1	

Notes:

ND - Analytes not detected at, or above the stated detection limit

RL - Reporting limit

mg/Kg - Milligrams per kilogram

M - Matrix interference

% Recovery QC Limits: 65% - 135%

RPD QC Limit: <30%

## LABORATORY QC REPORT Total Petroleum Hydrocarbons by GC/FID EPA 8015M



Report #:

3F041d.qac

Project Mgr:

**Rick Wilson** 

Client:

Tom Edwards & Associates

Date analyzed: 12/14/99

Project:

Livermore Honda

Proj. No:

42299

Units:

Soil

Matrix:

mg/Kg

Lab ID Nur Date Analy		M.Blank s 12/14		
Analyte	RL s			
TPH as diesel	10	ND		
SURROGATE	QC Limits			
o-Terphenyl	65%-135%	91%		
Dilution Fact	or (DF)	1		

Notes:

ND - Analytes not detected at, or above the stated detection limit

RL - Reporting limit

mg/Kg - Milligrams per kilogram



## **Analytical Laboratory Report** Extractables by EPA 8015B

**Date Sampled:** 

12/7/99

Project Mgr: Rick Wilson

Date Received:

12/8/99

Client:

Tom Edwards & Associates

Date Analyzed:

12/14/99

Proj. Name:

Livermore Honda

Date Reported:

12/17/99

Proj. No:

42299

Report Number:

3F041.rpt

Matrix:

Soil

Lab Number:

3F041

Units:

mg/Kg

Field ID No. Lab ID No.		B2-5' 3F041-01	B2-10' 3F041-02	B2-15' 3F041-03	
Analyte	RL		<del>,</del>		
TPH as Diesel	0.005	200	630	ND	
TPH as Motor oil	0.005	39000 J	14000 J	ND	
SURROGATE	QC Lim.				
o-Terphenyl	65-135%	78%	73%	97%	
Dilution Factor		4	1	1	

ND - Analytes not detected at, or above the reporting limit

RL - Reporting Limit

J - Estimated value

mg/L - Milligrams per kilogram (ppm)

\* - Dilution run

^ - Sample chromatogram does not match standard chromatogram

#### LABORATORY QC REPORT Volatile Organics by EPA 8260B



Report #:

Date analyzed: 12/13/99

Sample Field ID: B2-15'

3F041v.qac

Project Mgr:

Rick Wilson

Client:

Tom Edwards & Associates

Project:

Livermore Honda

Proj. No:

42299

Units:

Soil

Matrix:

mg/Kg

Lab ID Number		3F041-03	Spike	3F041-	03 MS	3F041-0	RPD	
			concentr.	Conc.	% Recov.	Conc.	% Recov.	%
Analyte	RL							
Benzene	0.005	ND	0.050	0.0376	75%	0.0401	80%	6.6%
Toluene	0.005	ND	0.050	0.0378	76%	0.0384	77%	1.8%
Ethyl Benzene	0.005	ND	0.050	0.0364	73%	0.0362	72%	0.5%
Xylene (Total)	0.005	ND.	0.150	0.1010	67%	0.0996	66%	1.4%
SURROGATE	QC Limits							
Dibromofluoromethane	70-130%	99%			102%		102%	
1,2-Dichloroethane-d4	70-130%	89%_			90%		89%	
Toluene-d8	70-130%	106%			108%		108%	
4-Bromofluorobenzene	70-130%	104%			105%		106%	66 1.00 (60 ° 100
Dilution Factor	(DF)	1			1		1	5.0000000000000000000000000000000000000

Notes:

ND - Analytes not detected at, or above the stated detection limit

RL - Reporting limit

mg/Kg - Milligrams per kilogram

M - Matrix interference

% Recovery QC Limits: 65% - 135%

RPD QC Limit: <30%

#### LABORATORY QC REPORT Volatile Organics by EPA 8260B



Report #:

3F041v.qac

Project Mgr:

Rick Wilson

Client:

Tom Edwards & Associates

Date analyzed: 12/13,15/99

Project:

Livermore Honda

Proj. No:

42299

Units:

Soil

Matrix:

mg/Kg

<del>  - · · · · · · · · · · · · · · · · · · </del>	-		<del></del>	 Т	<del></del>
Lab ID Numb	er	M.Blank s	M.Blank s extr.		
Date Analyzed		12/13	12/15		
Analyte	RL s				
Benzene	0.005	ND	ND		
Toluene	0.005	ND	ND		
Ethyl Benzene	0.005	ND	ND		
Xylene (Total)	0.005	ND	ND		
TPH as gasoline	0.5	ND	ND		
SURROGATE	QC Limits				
Dibromofluoromethane	70-130%	107%	97%		
1,2-Dichloroethane-d4	70-130%	123%	110%		
Toluene-d8	70-130%	107%	92%		
4-Bromofluorobenzene	70-130%	101%	89%		
Dilution Factor	(DF)	11	100		

Notes:

ND - Analytes not detected at, or above the stated detection limit

RL - Reporting limit

mg/Kg - Milligrams per kilogram



### **Analytical Laboratory Report** Volatile Organics by EPA 8260B

**Date Sampled:** 

12/7/99

Project Mgr: Rick Wilson

Date Received:

12/8/99

Client:

Tom Edwards & Associates

Date Analyzed:

12/13,15/99

Proj. Name:

Livermore Honda

Date Reported:

12/17/99

Proj. No:

42299

Report Number:

3F041.rpt

Matrix:

Soil

Lab Number:

3F041

Units:

mg/Kg

Field ID No. Lab ID No.		B2-5' 3F041-01	B2-10' 3F041-02	B2-15' 3F041-03	
Analyte	RL				T
Benzene	0.005	0.030 J	ND	ND	
Toluene	0.005	0.62*	ND ·	ND	
Ethyl Benzene	0,005	1.2 *	0.010	ND	
Xylene (Total)	0,005	6.8 *	0.054	ND	
TPH as gasoline	0.5	220 *^	280 *^	ND	
SURROGATES	QC Lim.				<del></del>
Dibromofluoromethane	70-130%	142% / 89%*	124% / 95%*	99%	
1,2-Dichloroethane-d4	70-130%	172% / 91%*	123% / 90%*	88%	
Toluene-d8	70-130%	70% / 87%*	73% / 96%*	106%	
4-Bromofluorobenzene	70-130%	93% / 86%*	120% / 94%*	104%	
Dilution Factor	or	1 / 100*	1 / 100*	1	

#### NOTES:

ND - Analytes not detected at, or above the reporting limit

RL - Reporting Limit

J - Estimated value

mg/L - Milligrams per kilogram (ppm)

\* - Dilution run

^ - Sample chromatogram does not match standard chromatogram





Date Analyzed:

12/9/99

Project Mgr:

RICK WILSON

Client:

FIRST REPUBLIC BANK

Project Name: LIVERMORE HONDA

Matrix:

Soil

Report Number:

4F096.qac

Units:

mg/Kg

Lab ID No. :	M.Blank	LCS					
Analyte		Spike amount	Concentration	% Recovery			
TRPH	ND	100	99	99%			

Spiked sample ID:

B-6-20

Lab ID No. : 4F096-24		Spike amount	4F096-	24 MS	4F096-	RPD	
Analyte			Concentration	% Recovery	Concentration	% Recovery	%
ТКРН	ND	100	114	114%	102	102%	11.1%

#### NOTES:

ND - Analytes not detected at, or above the reporting limit mg/Kg - Milligrams per kilogram (PPM)

QC Limits: % Recovery

70% - 130%

RPD %

<30%

#### PROCEDURES:

TRPH - Total Recoverable Petroleum Hydrocarbons by EPA Method 418.1.

#### CERTIFICATION:

California Department of Health Services ELAP Certificate #1842

Onsite Environmental Laboratories, Inc., 5500 Boscell Common. Fremont. CA 94538 (510) 490-8571/(510) 490-8572/Pax

Tel: (510) 490-8571 Fax: (510) 490-8572

#### **Analytical Laboratory Report EPA METHOD 418.1**



Date Sampled:

12/7/99

Project Mgr:

RICK WILSON

Date Received:

12/7/99

Client:

FIRST REPUBLIC

Date Analyzed:

12/9/99 12/10/99 Project Name:

LIVERMORE HONDA

Date Reported: Report Number:

NA

Project No:

42299 Soil

Lab Number:

4F096

Matrix: Units:

mg/Kg

Lab ID No.	Field ID No.	Total Recoverable Petroleum Hydrocarbons	Dilution Factor
4F096-01	B-1-5	1000	20
4F096-02	B-1-10	13	į
4F096-03	B-1-15	ND	I
4F096-04	B-1-20	31	1
4F096-05	B-2-5	40000	80
4F096-06	B-2-10	10000	20
4F096-07	B-2-15	18	ł
4F096-08	B-2-20	11	ı

4F096-03	B-1-15	NĐ	I
4F096-04	B-1-20	31	1
4F096-05	B-2-5	40000	80
4F096-06	B-2-10	10000	20
4F096-07	B-2-15	18	}
4F096-08	B-2-20	11	ı
4F096-09	B-3-5	ND	ŀ
4F096-10	B-3-10	8500	80
4F096-11	B-3-15	11	ı
4F096-12	B-3-20	14	ı
4F096-13	B-4-5	160	ı
4F096-14	B-4-10	15	ı
4F09 <del>6</del> -15	B-4-15	ND	ı
4F096-16	B-4-20	21	ı
4F096-17	B-5-5	12	ı
4F096-18	B-5-10	20	1
4F096-19	B-5-15	ND	1
4F096-20	B-5-20	ND	1
4F096-21	B-6-5	20	1
4F096-22	B-6-10	ND	1
4F096-23	B-6-15	ND	1
4F096-24	B-6-20	ND	1

Reporting Limit

#### NOTES:

mg/Kg - Milligrams per kilogram (PPM)

#### PROCEDURES:

TRPH - Total Recoverable Petroleum Hydrocurbons by EPA Method 418.1.

California Department of Health Services ELAP Certificate #1842
Onsite Environmental Laboratories, Inc., 5500 Boscell Conumon, Fremont, CA 94538 (510) 490-8571/(510) 490-8572/Fax