

SECOR
International Incorporated

April 27, 1998

Mr. Mark Hersh
City of Oakland
PWA/Environmental Services Division
1333 Broadway, Suite 330A
Oakland, California 94612

SUMMARY REPORT FOR LIMITED SOIL AND GROUNDWATER INVESTIGATION AT 9TH STREET AND BROADWAY IN OAKLAND, CALIFORNIA

Dear Mr. Hersh:

SECOR International Incorporated (SECOR) is pleased to submit this Summary Report presenting the procedures and results of a limited soil and groundwater investigation conducted at a City of Oakland property located at the 9th Street and Broadway block in Oakland, California (the Site, see Figure 1, Site Location Map). SECOR performed this investigation on behalf of and under contract to the City of Oakland PWA/Environmental Services Division (PWA).

BACKGROUND

The Site currently is an asphalt covered parking lot bounded by Broadway, 9th Street, Franklin Street, and the southern edge of the Transpacific Building located in the Chinatown Redevelopment Project Area. Previous Site uses include but may not be limited to printing shops, paint supply dealers, a battery shop, a garage, a laundry, and a janitorial supply distributor (Harding Lawson Associates, 1993). The Bay Area Rapid Transit District (BART) KAL and KAR lines traverse the Site (see Figure 2). The top of the shallower of the two tunnels is approximately 17 feet below ground surface (bgs).

The Site is located within the Chinatown Redevelopment Project Area, which is bounded by Broadway, 9th, 11th, and Webster Streets. As part of a groundwater monitoring program for the Chinatown Redevelopment Project Area, two groundwater monitoring wells were installed at the Site (MW-20 and MW-21) and one well was installed near the northeast corner of the Site (MW-7). Monitoring well locations are depicted on Figure 2. The wells are approximately 35 feet deep. Soil samples collected from the borings for MW-20 and MW-21 did not reveal the presence of volatile organic compounds (VOCs) or petroleum hydrocarbons. During construction at the Pacific Renaissance Plaza (PRP) building east of the Site, two underground storage tanks (USTs) were discovered beneath the sidewalk on the east side of Franklin Street. Petroleum hydrocarbon contaminated soil was observed to extend beyond the PRP excavation toward the Site.

In January and May 1993, Harding Lawson Associates (HLA), under contract with the City of Oakland Redevelopment Agency, advanced 27 soil borings on-Site. HLA boring locations are depicted on Figure 2. Twenty-two soil samples from depths of 10 feet or less were analyzed for organic compounds. Total petroleum hydrocarbons as diesel (TPHd) was detected in 13 of these shallow soil samples. The sample collected from Boring 6 at 1.5 feet bgs contained TPHd at 1,600 milligrams per kilogram (mg/kg). All other shallow samples contained less than 100 mg/kg TPHd. None of the shallow samples contained TPH as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX). Samples collected at 1.5 to 5.0 feet bgs in Borings 6, 17, 19, and 20 contained tetrachloroethene (PCE) at concentrations ranging from 0.0026 to 0.022 mg/kg. Twenty-one shallow soil samples were analyzed for priority pollutant metals. One of the 21 soil samples contained zinc at an elevated concentration of 17,000 mg/kg in Boring 17 at 5.0 feet bgs. All other detected priority pollutant metals were at concentrations below the average metal concentrations in soil for the San Francisco Bay area. Two of the samples contained lead at concentrations considerably higher than in other

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samples from the site. Soil samples collected from Boring 6 at 1.5 feet bgs and Boring 17 at 5.0 feet bgs contained lead at concentrations of 230 mg/kg and 320 mg/kg, respectively. TPHd, TPHg, and BTEX were detected in soil samples collected from Borings 11, 15, 17, and 27 at 24.5 to 25 feet bgs located in the southern portion of the Site. Concentrations of TPHd ranged from 470 mg/kg to 1,000 mg/kg, concentrations of TPHg ranged from 350 mg/kg to 2,000 mg/kg, and concentrations of BTEX ranged from non-detect to 15 mg/kg. No petroleum hydrocarbons were detected in the 25-foot samples from Borings 3, 4, 10, or 16, or in the 20-foot samples from Borings 2, 11, 15, or 27. Analysis of groundwater samples collected from wells MW-7, MW-20, and MW-21 in June 1993 did not reveal the presence of TPHd, TPHg, and BTEX.

OBJECTIVES AND WORK SCOPE

The environmental investigation conducted by HLA in 1993 revealed the following three areas of potential environmental concern at the Site: 1) low concentrations of diesel-range petroleum hydrocarbons present in shallow soil (2 feet or less) across a large portion of the Site; 2) relatively high concentrations of gasoline- and diesel-range petroleum hydrocarbons and BTEX present in soil between 24 and 25 feet bgs near the southern boundary of the Site; and 3) localized areas of shallow soil containing elevated total lead and zinc concentrations.

Based on discussions with PWA, SECOR understands that the City of Oakland Redevelopment Agency is now considering constructing a high-rise building on the Site. Construction of the building's foundation and basement would likely require excavation of soils to an approximate depth of 15 feet below ground surface across the Site. Prior to proceeding with the redevelopment project, PWA requested SECOR to perform a limited soil and groundwater investigation to confirm the previous investigation findings and provide supplemental data regarding soil and groundwater conditions beneath the Site. This data is intended to be used by PWA to develop an appropriate mitigation plan that is consistent with the proposed Site usage and protective of human health.

Based on these objectives, SECOR and PWA agreed upon a limited investigative work scope which including collecting and chemically analyzing groundwater samples from three existing wells on and near the Site, advancing four soil borings on-Site for the purpose of collecting and chemically analyzing soil and groundwater grab samples, and preparing a brief summary report describing the findings and recommendations.

Preliminary Field Activities

Prior to initiation of field activities, SECOR obtained a drilling permit from the Alameda County Public Works Agency (ACPWA) and prepared a Site specific Health and Safety Plan to address the proposed scope of work. The proposed soil boring locations were cleared with respect to underground utilities and other obstructions by California Utility Surveys (CUS) and Underground Service Alert (USA) was notified.

Soil Borings

Four boreholes (SB-1 through SB-4) were advanced at the locations shown on Figure 2 on January 21, 1998 by V&W Drilling, Inc. (V&W) of Rio Vista, California under the supervision of a SECOR geologist. Borings were located outside of the BART easement. Soil borings were proposed to be advanced to first encountered groundwater, which was estimated to occur between 25 and 30 feet bgs. Borings SB-1 and SB-2 were advanced to 32 and 30 feet bgs, respectively; however, groundwater was not encountered within

the depths explored. Borings SB-3 and SB-4 could not be advanced beyond 25 feet and 4 feet bgs, respectively, due to subsurface obstructions. Groundwater was also not encountered at these boring locations.

The soil borings were continuously cored using a hydraulically and pneumatically driven "geoprobe-type" sampler equipped with a 2-1/8 inch outside diameter core barrel. Two nested sampling rods were driven simultaneously; small diameter inner sampling rods were used to obtain and retrieve the soil cores, and larger diameter outer rods served as temporary drive casing. The use of drive casing prevented sloughing of the formation while the inner rods were withdrawn from the borehole. This ensured that the drive sampler was sampling soil from the desired depth interval, rather than soil that had sloughed in from higher up in the borehole.

As the drive casing and inner rods were advanced, soil was driven into a 1-5/8-inch diameter, four-foot-long sample barrel attached to the end of the inner rods. Soil samples were collected using 1-1/2-inch diameter and four-foot long Teflon™ sleeves fitted inside the sample barrel. After being driven to the desired sample depth, inner rods were removed from the borehole with a hydraulic winch. The tubes containing the soil samples were removed from the drive sampler and retained for lithologic description and potential chemical analyses. Upon completion, each soil boring was backfilled to the surface with grout.

A SECOR geologist described the soil encountered according to the Unified Soil Classification System (USCS) and maintained a boring log of these descriptions (attached). A representative soil sample from each sample interval was screened in the field for the presence of volatile organic compounds (VOCs) using an organic vapor meter 580B Photoionization Detector (PID). Screening results were documented on the boring logs.

Each sample for possible chemical analysis was collected in tubes, covered at each end with Teflon™ tape, capped with plastic end caps, labeled, and placed in an ice-filled cooler for preservation. Soil samples selected for chemical analysis were transported to Chromalab Environmental Services (Chromalab) located in Pleasanton, California, a state-certified laboratory, along with completed chain-of-custody records. Soil samples were analyzed for TPHg and TPHd by EPA Method 8015 modified, BTEX and methyl tertiary butyl ether (MTBE) by EPA Method 8020, halogenated volatile organic compounds (VOCs) by EPA Method 8010, and total lead by EPA 6010.

Monitoring Well Sampling

Three groundwater monitoring wells located on and near the Site (MW-7, MW-20, and MW-21) were sounded and sampled on January 20, 1998 (Figure 2). Each well was purged by removing a minimum of three casing volumes of water prior to sample collection, with measurements of pH, conductivity, temperature, and visual estimates of turbidity observed to ensure collection of representative groundwater samples. Groundwater samples were collected using clean disposable bailers and transferred directly into laboratory-supplied sample containers. The samples were submitted to Chromalab along with completed chain-of-custody records. The groundwater samples collected during the investigation were analyzed for TPHg and TPHd by EPA Method 8015 modified, BTEX and MTBE by EPA Method 8020, and VOCs by EPA Method 8010. Hydrologic and Water Sample Field Data Sheets are attached.

Decontamination and Material Containment

All downhole drilling and sampling equipment were decontaminated prior to drilling each location and demobilization from the Site. All soil cuttings and water generated during field activities were placed in 55-gallon drums and temporarily stored on-Site pending characterization for disposal.

SUBSURFACE CONDITIONS

Soil Types

Clay-dominated soil and sand-dominated soil were the two main soil types encountered during advancement of the four soil borings. The clay-dominated soil consists of clay, silty clay, and gravelly clay ranging in color from yellow to black and in consistency from stiff to hard. The sand-dominated soil consists of sandy silt, silty sand, and sand ranging in color from brownish yellow to dark yellowish brown and in consistency from medium dense to dense. A petroleum-like odor was observed at 27 feet bgs in the SB-1 location.

Groundwater Flow Direction

On January 20, 1998, the depth to groundwater measured in wells (MW-7, MW-20, and MW-21) ranged from 23.32 feet to 26.37 feet bgs. Depth-to-groundwater measurements and corresponding groundwater elevations are presented on Table 1. Groundwater elevations calculated from the January 20, 1998 groundwater measurements were used to construct the groundwater elevation contour map presented as Figure 3. Based on the groundwater elevation contours depicted in Figure 3, groundwater flows towards the west under an average hydraulic gradient of 0.012 feet per foot (ft/ft). This is consistent with the direction of groundwater flow interpreted by previous investigators (HLA, 1991).

ANALYTICAL RESULTS

Soil

Ten soil samples collected from SB-1 through SB-4 were submitted for chemical analysis. The analytical results for soil samples are summarized on Table 2 and a complete laboratory report attached. With the exception of a single sample (SB-2 at 29.5 feet bgs), all soil samples analyzed were reported to contain detectable concentrations of TPHd ranging from 1.1 mg/kg to 180 mg/kg. The maximum TPHd concentration was reported in boring SB-1 at 27 feet bgs. The soil sample collected from SB-1 at 27 feet bgs was also reported to contain xylenes at a concentration of 1.6 mg/kg. The soil sample collected from SB-4 at 3.5 feet bgs was reported to contain lead at a concentration of 20 mg/kg. No other analytes were detected in the soil samples.

Groundwater

Analytical results for groundwater samples collected from wells MW-7, MW-20, and MW-21 are summarized on Table 3 and a complete laboratory report attached. TPHg, TPHd, BTEX, or MTBE were not detected in groundwater samples analyzed. Chloroform and 1,2-dichloroethane (1,2-DCA) were reported in well MW-20 at concentrations of 17 micrograms per liter ($\mu\text{g/l}$) and 2.0 $\mu\text{g/l}$, respectively (Table 3). Chloroform and tetrachloroethene (PCE) were also reported in well MW-21 at concentrations of 27 ($\mu\text{g/l}$) and 4.8 $\mu\text{g/l}$, respectively.

DISCUSSION AND RECOMMENDATIONS

The results of this limited soil and groundwater investigation indicate the following:


- Low concentrations (below 100 ppm) of diesel-range petroleum hydrocarbons (TPHd) were present in nearly all soil samples analyzed. The source of these low concentrations in soil is unknown; however, given the very low concentrations and chemical composition of these hydrocarbons, their presence is not judged to pose a public health risk or threaten groundwater quality underlying the Site.
- Petroleum odors and analytical results for soil samples from boring SB-1 confirm the presence of a zone of petroleum hydrocarbon-affected soil beginning at approximately 25 feet bgs along the southern Site boundary. However, the results of this investigation indicate that the petroleum hydrocarbons present in this area have undergone significant degradation since 1993. This is evidenced by a change in composition from predominantly gasoline-range to diesel-range hydrocarbons, significantly lower concentration, and the absence of BTEX.
- Analytical results confirm that lead-affected soils are very localized as described in HLA's 1993 report and that lead does not appear to be a widespread contaminant of concern in Site soil.
- Groundwater underlying the Site has not been affected by petroleum hydrocarbons or contain significant concentrations of other chemicals of concern.

In general, the findings of this investigation are consistent with the previous investigation results and reveal that soil within the upper 15 feet and groundwater underlying the Site do not contain significant chemical contaminant concentrations. The zone of petroleum hydrocarbon-affected soil underlying the southern Site boundary is at least ten feet below the proposed excavation depth; and therefore, should not pose a direct exposure risk during construction. However, prior to beginning construction, SECOR recommends performing a risk assessment to evaluate whether any potential human health risks to future building occupants are posed by the residual petroleum hydrocarbons present at depth.

Please do not hesitate to contact us at (415) 882-1548 with any questions or comments.

Sincerely,

SECOR International Incorporated



Liping Zhang
Project Geologist



Bruce Scarbrough
Principal Geologist

Attachments:

Table 1 - Well Construction Details and Groundwater Elevations

Table 2 - Soil Analytical Results

Table 3 - Groundwater Analytical Results

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Figure 1 - Site Location Map
Figure 2 - Site Plan with Soil Boring Locations
Figure 3 - Groundwater Elevation Contour Map

Boring Logs
Hydrologic and Water Sample Field Data Sheets
Laboratory Analytical Reports and Chain-of-Custody Records

TABLE 1
WELL CONSTRUCTION DETAILS AND GROUNDWATER ELEVATIONS
 9th Street and Broadway
 Oakland, California

Well	Total Depth ^(a)	Casing Diameter ^(b)	Top of Casing Elevation ^(c)	Depth to Groundwater ^(d) 1/20/98	Groundwater Elevation ^(e) 1/20/98
MW-7	40.90	4	39.10	23.32	15.78
MW-20	39.50	4	37.86	23.45	14.41
MW-21	35.20	4	38.08	26.37	11.71

Notes:

- (a) Measured in feet below ground surface.
- (b) Measured in inches.
- (c) Measured in feet above mean sea level.
- (d) Measured in feet below top of PVC casing.

TABLE 2
SOIL ANALYTICAL RESULTS
 9th Street and Broadway
 Oakland, California

Sample Number	Date	Depth ^(a)	TPH _g ^(b) (mg/kg) ^(c)	TPH _d ^(d) (mg/kg)	BTX ^(e) (mg/kg)	MtBE ^(f) (mg/kg)	VOCs ^(g) (mg/kg)	Lead (mg/kg)
SB-1-7	1/21/98	7.0-7.5	ND ^(h)	5.0 ⁽ⁱ⁾	ND	ND	ND	ND
SB-1-23	1/21/98	23.0-23.5	ND	1.5 ⁽ⁱ⁾	ND	ND	ND	ND
SB-1-27	1/21/98	27.0-27.5	ND ⁽ⁱ⁾	180 ^(k)	X:1.6	ND	ND	ND
SB-2-7.5	1/21/98	7.5-8.0	ND	7.9 ⁽ⁱ⁾	ND	ND	ND	ND
SB-2-15	1/21/98	15.0-15.5	ND	1.1 ⁽ⁱ⁾	ND	ND	ND	ND
SB-2-29.5	1/21/98	29.5-30.0	ND	ND	ND	ND	ND	ND
SB-3-7.5	1/21/98	7.5-8.0	ND	13 ⁽ⁱ⁾	ND	ND	ND	ND
SB-3-15.5	1/21/98	15.5-16.0	ND	2.4 ^(l,m)	ND	ND	ND	ND
SB-3-25	1/21/98	25.0-25.5	ND	8.9 ⁽ⁱ⁾	ND	ND	ND	ND
SB-4-3.5	1/21/98	3.5-4.0	ND	1.5 ^(k)	ND	ND	ND	20

Notes:

- (a) Measured in feet below ground surface
- (b) Total petroleum hydrocarbons as gasoline.
- (c) Milligrams per kilogram.
- (d) Total petroleum hydrocarbons as diesel.
- (e) Benzene, toluene, ethylbenzene, and xylenes.
- (f) Methyl tertiary butyl ether.
- (g) Halogenated volatile organic compounds.
- (h) Not detected at specified reporting limit.
- (i) Hydrocarbon reported does not match the pattern of lab's diesel standard, see certified analytical report.
- (j) Hydrocarbon found in gasoline range is uncharacteristic of gasoline profile. If quantified using gasoline's response factor, concentration would equal 120 mg/kg, see certified analytical report.
- (k) Hydrocarbon reported is in the early diesel range and does not match lab's diesel standard, see certified analytical report.
- (l) Estimated concentration due to overlapping fuel patterns, see certified analytical report.
- (m) Hydrocarbon reported has characteristics of weathered/aged diesel, see certified analytical report.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS
 9th Street and Broadway
 Oakland, California

Sample Number	Date	TPH _g ^(a) (ug/l) ^(b)	TPH _d ^(c) (ug/l)	BTEX ^(d) (ug/l)	MtBE ^(e) (ug/l)	VOCs ^(f) (ug/l)
MW-7	1/20/98	ND ^(g)	ND	ND	ND	ND
MW-20	1/20/98	ND	ND	ND	ND	chloroform:17 1,2-DCA ^(h) :2.0
MW-21	1/20/98	ND	ND	ND	ND	chloroform:27 PCE ⁽ⁱ⁾ :4.8

Notes:

- (a) Total petroleum hydrocarbons as gasoline.
- (b) Micrograms per liter.
- (c) Total petroleum hydrocarbons as diesel.
- (d) Benzene, toluene, ethylbenzene, and xylenes.
- (e) Methyl tertiary butyl ether.
- (f) Halogenated volatile organic compounds.
- (g) Not detected at specified reporting limit.
- (h) 1,2-Dichloroethane
- (i) Tetrachloroethene.



REFERENCE: U.S. GEOLOGICAL SURVEY, 7.5 MINUTE SERIES
 OAKLAND WEST, CALIFORNIA QUADRANGLE.
 PHOTOREVISED 1980.



NORTH

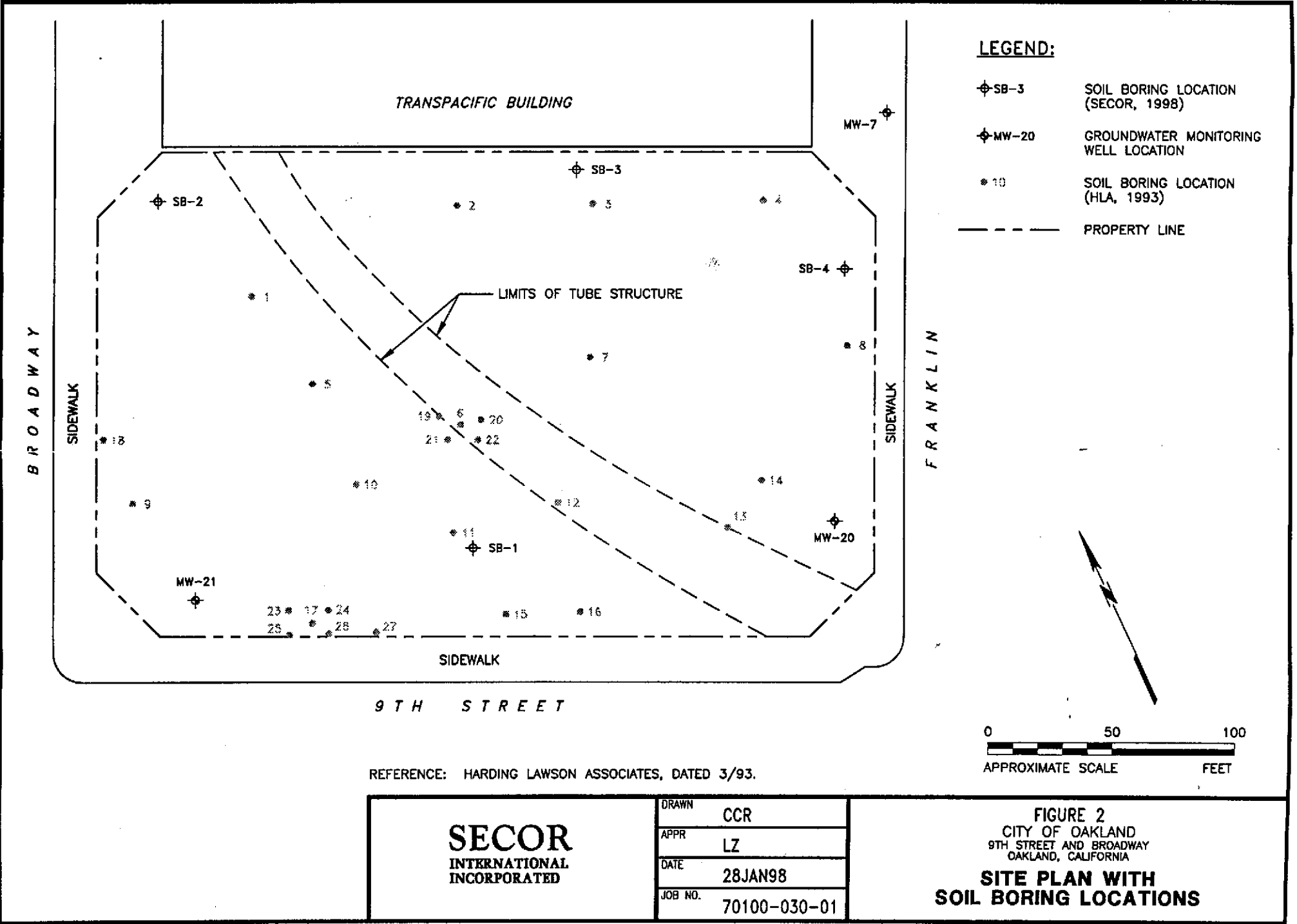


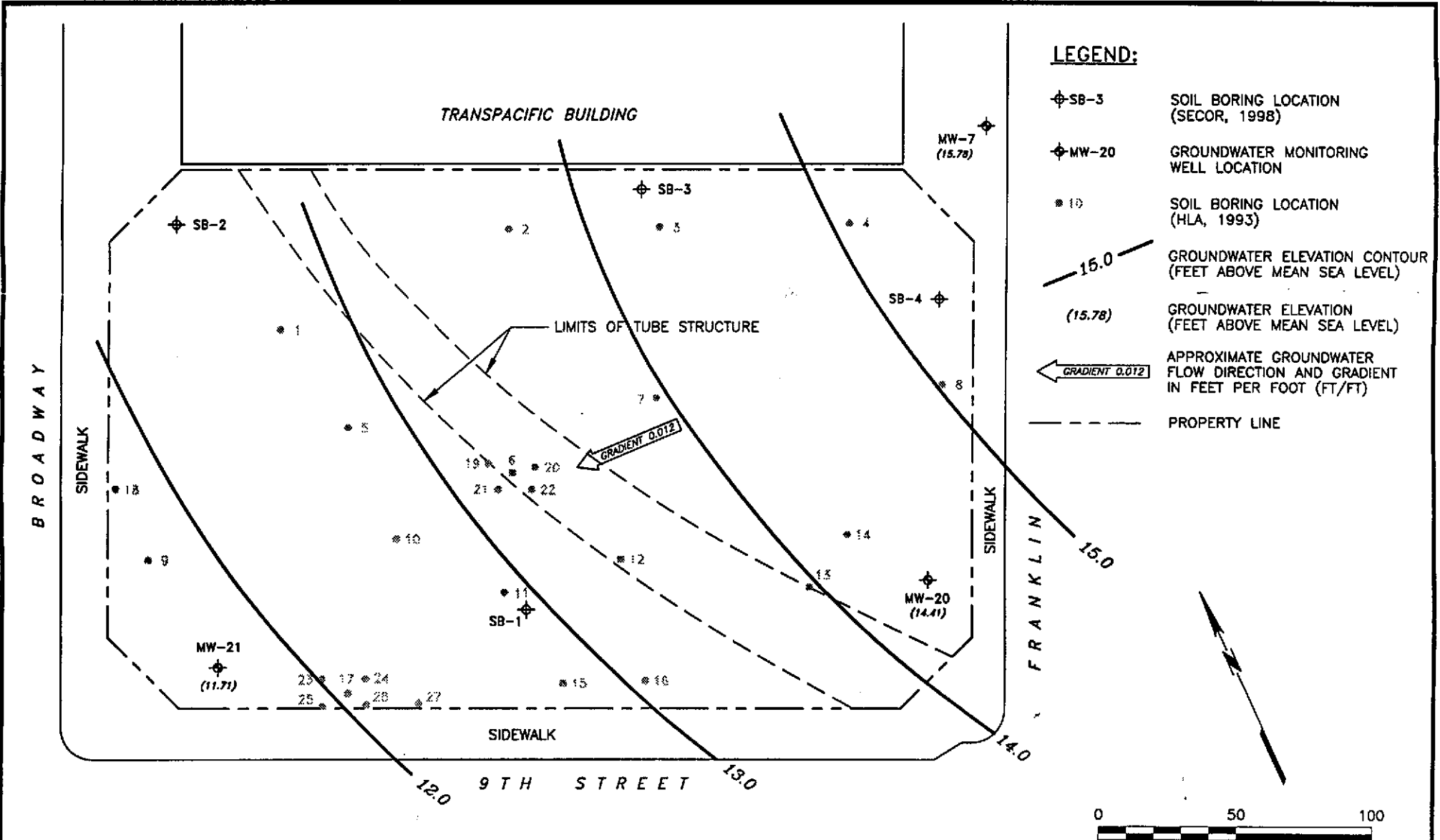
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FIGURE 1
CITY OF OAKLAND
9TH STREET AND BROADWAY
OAKLAND, CALIFORNIA
SITE LOCATION MAP

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REFERENCE: HARDING LAWSON ASSOCIATES, DATED 3/93.

<p>SECOR INTERNATIONAL INCORPORATED</p>	DRAWN	CCR
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	JOB NO.	70100-030-01

FIGURE 3
 CITY OF OAKLAND
 9TH STREET AND BROADWAY
 OAKLAND, CALIFORNIA
**GROUNDWATER ELEVATION
 CONTOUR MAP - JANUARY 20, 1998**


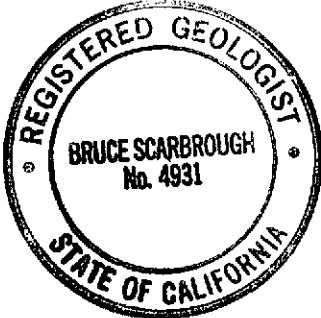
Project: CITY OF OAKLAND - 9TH STREET AND BROADWAY			Log of Boring/Monitoring Well:		
Boring Location: MIDDLE OF THE SOUTHERN PORTION		Project No.: 70100-030-01			SB-1
Subcontractor and Equipment: V&W DRILLING, GEOPROBE		Logged By: L.Z.	Drawn By: C.R.		
Sampling Method: CONTINUOUS CORE		Monitoring Device: OVM 580B			Comments:
Start Date/Time: 1/21/98//0750		Finish Date/Time: 1/21/98//1020			
First Water (bgs): NA		Stabilized Water Level (bgs): NA			

Sample Number	Blows/foot	PID (ppm)	Depth (Feet)	Recovery	USCS Symbol	Water Level	Surface Elevation: NA	Casing Top Elevation: NA	Boring Abandonment/ Well Construction Details
							LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)		
SB-1-7			0				ASPHALT AND ROAD BASE		 Backfilled with Grout
			1				DARK YELLOWISH BROWN (10YR 3/4) SANDY SILT (ML) with fine gravel and clay, fine- to coarse-grained sand, hard, moist (10,20,60,10)		
			2				DARK BROWN (10YR 3/3) SAND (SP) fine-grained, medium dense, moist (0,100,0,0)		
			3						
		0	4						
			5						
			6						
			7						
		1	8				increase clay content to 5%		
			9						
			10						
			11						
			12						
SB-1-15			13				YELLOWISH BROWN (10YR 5/8) SILTY SAND (SM) fine-grained, medium dense, moist (0,85,15,0)		
			14						
			15						
			16						
		0	17						
			18						
			19						
			20						

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Reviewed By: *[Signature]* Date: 4-27-98
 Revised By: _____ Date: _____

Sample Number	Blows/foot	PID (ppm)	Depth (Feet)	Recovery	USCS Symbol	Water Level	LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)	Boring Abandonment/ Well Construction Details
SB-1-23		0	20				DARK YELLOWISH BROWN (10YR 4/6) SILTY CLAY (CL) trace fine-grained sand, very stiff, moist (0,5,30,65)	
			21				DARK YELLOWISH BROWN (10YR 4/6) SAND (SP) fine-grained, dense, moist (0,100,0,0)	
			22				DARK GREENISH GRAY (5G 4/1) SILTY CLAY (CL) stiff, moist (0,0,20,80)	
			23				DARK YELLOWISH BROWN (10YR 4/4) SAND (SP) fine-grained, dense, moist (0,100,0,0)	
SB-1-27		627	24				chemical odor	
			25					
			26					
			27					
			28					
			29					
			30					
			31					
			32					
			33					
								
			34					
			35					
			36					
			37					
			38					
			39					
			40					
			41					
			42					

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SECOR

Reviewed By: *Bruce Scarbrough* Date: 4-27-98
 Revised By: _____ Date: _____

Project: CITY OF OAKLAND - 9TH STREET AND BROADWAY			Log of Boring/Monitoring Well:		
Boring Location: NORTHWEST CORNER		Project No.: 70100-030-01		SB-2	
Subcontractor and Equipment: V&W DRILLING, GEOPROBE		Logged By: L.Z.	Drawn By: C.R.		
Sampling Method: CONTINUOUS CORE		Monitoring Device: OVM 580B		Comments:	
Start Date/Time: 1/21/98//1340		Finish Date/Time: 1/21/98//1455			
First Water (bgs): NA		Stabilized Water Level (bgs): NA			


Sample Number	Blows/foot	PID (ppm)	Depth (Feet)	Recovery	USCS Symbol	Water Level	Surface Elevation: NA Casing Top Elevation: NA		Boring Abandonment/ Well Construction Details
							LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)		
			0				ASPHALT AND ROAD BASE		
			1				YELLOWISH BROWN (10YR 5/4) CLAY (CL) with sand, trace fine gravel, fine- to coarse-grained sand, hard, dry (5,10,0,85)		
SB-2-3.5		0	3				YELLOW (10YR 7/6) GRAVELLY CLAY (CL) with sand, fine gravel, fine- to coarse-grained sand, hard, moist (25,10,0,65)		
		0	7				VERY DARK GRAYISH BROWN (10YR 3/2) CLAY (CL) with fine gravel, trace coarse-grained sand, hard, moist (10,5,0,85)		
			9				VERY DARK BROWN (10YR 2/2) SILTY CLAY (CL) trace coarse-grained sand, hard, moist (0,5,25,70)		
		0	10				DARK GREENISH GRAY (5GY 4/1) CLAY (CL) hard, moist (0,0,0,100)		
SB-2-11.5			11				BLACK (N2.5) CLAY (CL) trace coarse-grained sand, hard, moist (0,5,0,95)		
			13				CONCRETE		
SB-2-15		0	15				BROWNISH YELLOW (10YR 6/8) SAND (SP) fine-grained, dense, moist (0,100,0,0)		
		0	16						
			17						
		0	19						
SB-2-19.5			20						

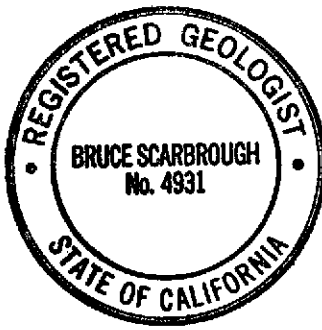
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Reviewed By: *[Signature]* Date: 4-27-98
 Revised By: _____ Date: _____

Sample Number	Blows/foot	PID (ppm)	Depth (feet)	Recovery	USCS Symbol	Water Level	LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)	Boring Abandonment/ Well Construction Details
SB-2-22.5	0		20				color becomes Light Yellowish Brown (10YR 6/4) increase silt content to 10%	 Backfilled with Grout
SB-2-26.5	0	21						
SB-2-29.5	0	22						
			23					
			24					
			25					
			26					
			27					
			28					
			29					
			30					
			31					
			32					
			33					
			34					
			35					
			36					
			37					
			38					
			39					
			40					
			41					
			42					



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Reviewed By: *Bruce Scarbrough* Date: 4-27-98
 Revised By: _____ Date: _____

Project: CITY OF OAKLAND - 9TH STREET AND BROADWAY			Log of Boring/Monitoring Well:		
Boring Location: MIDDLE OF THE NORTHERN PORTION		Project No.: 70100-030-01		SB-3	
Subcontractor and Equipment: V&W DRILLING, GEOPROBE		Logged By: L.Z.	Drawn By: C.R.		
Sampling Method: CONTINUOUS CORE		Monitoring Device: OVM 580B		Comments:	
Start Date/Time: 1/21/98//1140		Finish Date/Time: 1/21/98//1330			
First Water (bgs): NA		Stabilized Water Level (bgs): NA			

Sample Number	Blows/foot	PID (ppm)	Depth (Feet)	Recovery	USCS Symbol	Water Level	Surface Elevation: NA	Casing Top Elevation: NA	Boring Abandonment/ Well Construction Details
							LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)		
			0				ASPHALT AND ROAD BASE		
			1						
			2				YELLOWISH BROWN (10YR 5/6) SAND (SP) fine-grained, dense, moist (0,100,0,0)		
SB-3-3.5	0		3				DARK YELLOWISH BROWN (10YR 4/4) GRAVELLY CLAY (CL) with sand, fine to coarse gravel, fine-grained sand, stiff, moist (15,10,0,75)		
			4						
			5				YELLOWISH BROWN (10YR 5/6) SAND (SP) trace gravel, fine gravel, fine-grained sand, dense, moist, wood pieces (5,95,0,0)		
			6						
SB-3-7.5	0		7						
			8						
			9						
			10						
			11						
SB-3-11.5	0		12						
			13						
			14						
			15						
SB-3-15.5	0		16						
			17						
			18						
			19						
SB-3-19.5	0		20						

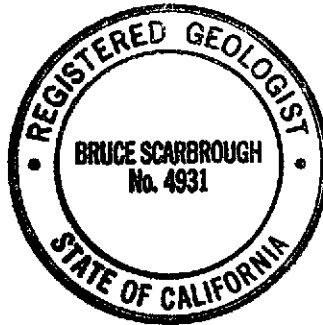


199801.301420 X:\LOGS\CITYOAK\9THST\SB-3

SECOR

Reviewed By: *Bauer* Date: 4-27-98
 Revised By: _____ Date: _____

Sample Number	Blows/foot	PID (ppm)	Depth (Feet)	Recovery	USCS Symbol	Water Level	LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)	Boring Abandonment/ Well Construction Details
SB-3-21.5		0	20					
SB-3-23.5		0	21					
SB-3-25			22					
			23					
			24					
			25				Rig hit hard material and stopped at 25 feet.	Backfilled with Grout
			26					
			27					
			28					
			29					
			30					
			31					
			32					
			33					
			34					
			35					
			36					
			37					
			38					
			39					
			40					
			41					
			42					




199801.301420 X:\LOGS\CITYOAK\9THST\SB-3

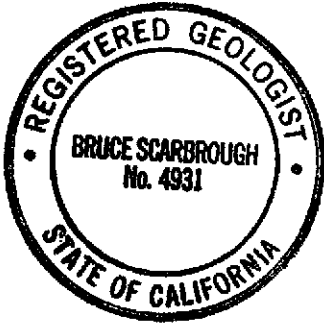
SECOR

Reviewed By: Bruce Scarbrough
 Revised By: _____

Date: 4-27-98
 Date: _____

Project: CITY OF OAKLAND - 9TH STREET AND BROADWAY			Log of Boring/Monitoring Well:	
Boring Location: NORTHEAST CORNER		Project No.: 70100-030-01		SB-4
Subcontractor and Equipment: V&W DRILLING, GEOPROBE		Logged By: L.Z.	Drawn By: C.R.	
Sampling Method: CONTINUOUS CORE		Monitoring Device: OVM 580B		Comments:
Start Date/Time: 1/21/98//1025		Finish Date/Time: 1/21/98//1135		
First Water (bgs): NA		Stabilized Water Level (bgs): NA		

Sample Number	Blows/foot	PID (ppm)	Depth (feet)	Recovery	USCS Symbol	Water Level	Surface Elevation: NA	Casing Top Elevation: NA	Boring Abandonment/ Well Construction Details
							LITHOLOGIC DESCRIPTION (color, grain size, consistency, moisture, other)		
SB-4-3.5			0				ASPHALT AND ROAD BASE		 Backfilled with Grout
			1				LIGHT YELLOWISH BROWN (2.5YR 6/4) SAND (SP) (FILL) fine-grained, loose, dry (0,100,0,0)		
			2				DARK YELLOWISH BROWN (10YR 4/6) SAND (SP) with silt, fine-grained, medium dense, moist (0,90,10,0)		
			3				DARK YELLOWISH BROWN (10YR 3/4) SILTY CLAY (CL) with fine to coarse gravel and fine- to coarse-grained sand, hard, moist (10,10,20,60) Rig hit hard material and stopped at 4 feet		
			4						
			5						
			6						
			7						
			8						
			9						
			10						
			11						
			12						
			13						
			14						
			15						
			16						
			17						
			18						
			19						
			20						



199801.301436 X:\LOGS\CITYOAK\9THST\SB-4

SECOR

Reviewed By: *Bruce Scarbrough* Date: 4-27-98
 Revised By: _____ Date: _____

HYDROLOGIC AND WATER SAMPLE FIELD DATA SHEETS

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70100-030-01
 PURGED BY: LB
 SAMPLED BY: LB

WELL ID: MW-7
 SAMPLE ID: MW-7
 CLIENT NAME: City of Oakland
 LOCATION: 9th Street

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

CASING DIAMETER (inches): 2 _____ 3 _____ 4 4.5 _____ 6 _____ Other _____

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>11.6</u>
DEPTH TO WATER (feet): <u>23.32</u>	CALCULATED PURGE (gal): <u>35</u>
DEPTH OF WELL (feet): <u>40.90</u>	ACTUAL PURGE VOL. (gal): <u>35</u>

DATE PURGED: 1-20-98 Start (2400 Hr) 1100 End (2400 Hr) 1210
 DATE SAMPLED: 1-20-98 Start (2400 Hr) _____ End (2400 Hr) 1220

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): _____

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	pH (unit)	E.C. (umho/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU) Visual
<u>1125</u>	<u>12</u>	<u>5.45</u>	<u>506</u>	<u>56.7</u>	<u>clear</u>	<u>cloudy</u>
<u>1145</u>	<u>24</u>	<u>5.34</u>	<u>531</u>	<u>59.7</u>	<u>v</u>	<u>v</u>
<u>1210</u>	<u>35</u>	<u>5.29</u>	<u>529</u>	<u>57.1</u>	<u>v</u>	<u>v</u>
_____	_____	_____	_____	_____	_____	_____

D.O. (ppm): _____ COLOR, COBALT (0-100): _____

Clear
 Cloudy
 Yellow
 Brown

ODOR: _____

PURGING EQUIPMENT

2" Bladder Pump Baller (Teflon®)
 Centrifugal Pump Baller (PVC)
 Submersible Pump Baller (Stainless Steel)
 Well Wizard™ Dedicated

Other: Disposable baller

SAMPLING EQUIPMENT

2" Bladder Pump Baller (Teflon®)
 DDL Sampler Baller (PVC/dipstick)
 Submersible Pump Baller (Stainless Steel)
 Well Wizard™ Dedicated

Other: _____

WELL INTEGRITY: Good LOCK #: No

REMARKS: _____

SIGNATURE: [Signature] Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70/00-030-01
 PURGED BY: LF
 SAMPLED BY: LF

WELL ID: MW-20
 SAMPLE ID: MW-20
 CLIENT NAME: City of Oakland
 LOCATION: 9th Street

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____
 CASING DIAMETER (inches): 2 _____ 3 _____ 4 4.5 _____ 6 _____ Other _____

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>10.6</u>
DEPTH TO WATER (feet): <u>23.45</u>	CALCULATED PURGE (gal): <u>32</u>
DEPTH OF WELL (feet): <u>39.50</u>	ACTUAL PURGE VOL. (gal): _____

DATE PURGED: 1-20-98 Start (2400 Hr) 1240 End (2400 Hr) 1315
 DATE SAMPLED: 1-20-98 Start (2400 Hr) _____ End (2400 Hr) 1330

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): _____

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umho/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU) Visual
<u>1215</u>	<u>12</u>	<u>6.09</u>	<u>646</u>	<u>65.9</u>	<u>clear</u>	<u>clear</u>
<u>1305</u>	<u>22</u>	<u>6.02</u>	<u>646</u>	<u>64.6</u>	<u>v</u>	<u>v</u>
<u>1315</u>	<u>32</u>	<u>6.13</u>	<u>651</u>	<u>64.5</u>	<u>1</u>	<u>v</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

D.O. (ppm): _____ COLOR, COBALT (0-100): _____

Clear
 Cloudy
 Yellow
 Brown

ODOR: _____

PURGING EQUIPMENT

____ 2" Bladder Pump ____ Baller (Teflon®)
 ____ Centrifugal Pump ____ Baller (PVC)
 ____ Submersible Pump ____ Baller (Stainless Steel)
 ____ Well Wizard™ ____ Dedicated

Other: Disposable Bailer

SAMPLING EQUIPMENT

____ 2" Bladder Pump ____ Baller (Teflon®)
 ____ DDL Sampler Baller (PVC/Disposable)
 ____ Submersible Pump ____ Baller (Stainless Steel)
 ____ Well Wizard™ ____ Dedicated

Other: _____

WELL INTEGRITY: Good LOCK #: Yes

REMARKS: Water in the box.

SIGNATURE: [Signature] Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70/00-030-01
 PURGED BY: L7
 SAMPLED BY: L7

WELL ID: MW-21
 SAMPLE ID: MW-21
 CLIENT NAME: City of Oakland
 LOCATION: 9th St

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

CASING DIAMETER (Inches): 2 _____ 3 _____ 4 4.5 _____ 6 _____ Other _____

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>5.8</u>
DEPTH TO WATER (feet): <u>26.37</u>	CALCULATED PURGE (gal): <u>17.5</u>
DEPTH OF WELL (feet): <u>35.20</u>	ACTUAL PURGE VOL. (gal): <u>17.5</u>

DATE PURGED: 1-20-98 Start (2400 Hr) 1505 End (2400 Hr) 1530
 DATE SAMPLED: 1-20-98 Start (2400 Hr) _____ End (2400 Hr) 1540

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): _____

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	pH (unit)	E.C. (umho/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU) visual
<u>1517</u>	<u>7</u>	<u>4.60</u>	<u>222</u>	<u>62.2</u>	<u>Clear</u>	<u>Clear</u>
<u>1522</u>	<u>12</u>	<u>4.42</u>	<u>204</u>	<u>60.4</u>	<u>✓</u>	<u>✓</u>
<u>1530</u>	<u>17.5</u>	<u>4.44</u>	<u>214</u>	<u>61.2</u>	<u>✓</u>	<u>✓</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

D.O. (ppm): _____ COLOR, COBALT (0-100): _____
 ODOR: _____
 Clear
 Cloudy
 Yellow
 Brown

PURGING EQUIPMENT

2" Bladder Pump Baller (Teflon®)
 Centrifugal Pump Baller (PVC)
 Submersible Pump Baller (Stainless Steel)
 Well Wizard™ Dedicated

Other: Disposable Baller

SAMPLING EQUIPMENT

2" Bladder Pump Baller (Teflon®)
 DDL Sampler Baller (PVC/Disposable)
 Submersible Pump Baller (Stainless Steel)
 Well Wizard™ Dedicated

Other: _____

WELL INTEGRITY: Good LOCK #: Yes
 REMARKS: _____

SIGNATURE: [Signature] Page 1 of 1

**LABORATORY ANALYTICAL REPORTS
AND
CHAIN-OF-CUSTODY RECORDS**

CHROMALAB, INC.

Environmental Services (SDB)

RECEIVED

MAR - 2 1998

February 20, 1998

Submission #: 9801242

SECOR SAN FRANCISCO

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 22, 1998

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-1-27

Spl#: 167299

Matrix: SOIL


Sampled: January 21, 1998


Run#:10795

Analyzed: January 22, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	20	N.D.	121	2
MTBE	N.D.	1.2	N.D.	104	2
BENZENE	N.D.	1.2	N.D.	99	2
TOLUENE	N.D.	1.2	N.D.	101	2
ETHYL BENZENE	N.D.	1.2	N.D.	114	2
XYLENES	1.6	1.2	N.D.	114	2

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration would equal 120mg/Kg.


Vincent Vancil
Chemist


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

DRAFT

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-1-27

Spl#: 167299

Matrix: SOIL


Sampled: January 21, 1998

Run#:10795

Analyzed: January 22, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE FACTOR (%)	DILUTION FACTOR
GASOLINE	N.D.	20	N.D.	--	2
MTBE	N.D.	1.2	N.D.	--	2
BENZENE	N.D.	1.2	N.D.	--	2
TOLUENE	N.D.	1.2	N.D.	--	2
ETHYL BENZENE	N.D.	1.2	N.D.	--	2
XYLENES	1.6	1.2	N.D.	--	2

Note: Hydrocarbon found in Gasoline Range is uncharacteristic of Gasoline Profile. If quantified using Gasoline's response factor, concentration would equal 120mg/Kg.



Vincent Vancil
Chemist



Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-1-7

Spl#: 167297

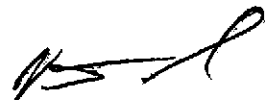
Matrix: SOIL


Sampled: January 21, 1998

Run#:10786

Analyzed: January 22, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	100	1
MTBE	N.D.	0.0050	N.D.	97	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	100	1
XYLENES	N.D.	0.0050	N.D.	103	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

415-882-4406

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

AS V132 O:BTEXQC0220
VINCE 08:08

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-1-23

Spl#: 167298


Matrix: SOIL

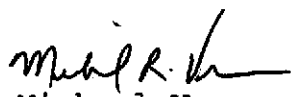
Sampled: January 21, 1998

Run#: 10786

Analyzed: January 22, 1998

<u>ANALYTE</u>	<u>RESULT</u> (mg/Kg)	<u>REPORTING</u> <u>LIMIT</u> (mg/Kg)	<u>BLANK</u> <u>RESULT</u> (mg/Kg)	<u>BLANK</u> <u>SPIKE</u> (%)	<u>DILUTION</u> <u>FACTOR</u>
GASOLINE	N.D.	1.0	N.D.	100	1
MTBE	N.D.	0.0050	N.D.	97	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	100	1
XYLENES	N.D.	0.0050	N.D.	103	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

AS V132 O: BTEXQC0220
VINCE 00:08

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-2-7.5

Spl#: 167300

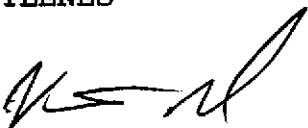
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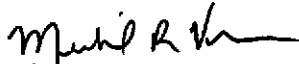
Sampled: January 21, 1998

Run#:10786

Analyzed: January 22, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	100	1
MTBE	N.D.	0.0050	N.D.	97	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	100	1
XYLENES	N.D.	0.0050	N.D.	103	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

415-882-4406

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

AS Y132 O: BTEXQC0220
VINCE 08:11

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-2-15

Spl#: 167301

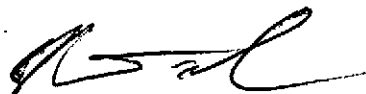
Matrix: SOIL

Sampled: January 21, 1998

Run#:10786

Analyzed: January 22, 1998

<u>ANALYTE</u>	<u>RESULT</u> <u>(mg/Kg)</u>	<u>REPORTING</u> <u>LIMIT</u> <u>(mg/Kg)</u>	<u>BLANK</u> <u>RESULT</u> <u>(mg/Kg)</u>	<u>BLANK</u> <u>SPIKE</u> <u>(%)</u>	<u>DILUTION</u> <u>FACTOR</u>
GASOLINE	N.D.	1.0	N.D.	100	1
MTBE	N.D.	0.0050	N.D.	97	1
BENZENE	N.D.	0.0050	N.D.	96	1
TOLUENE	N.D.	0.0050	N.D.	97	1
ETHYL BENZENE	N.D.	0.0050	N.D.	100	1
XYLENES	N.D.	0.0050	N.D.	103	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-2-29.5

Spl#: 167302

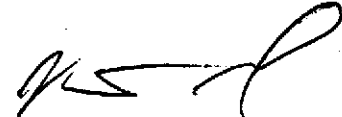
Matrix: SOIL

Sampled: January 21, 1998

Run#:10792

Analyzed: January 22, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	101	1
MTBE	N.D.	0.0050	N.D.	90	1
BENZENE	N.D.	0.0050	N.D.	87	1
TOLUENE	N.D.	0.0050	N.D.	83	1
ETHYL BENZENE	N.D.	0.0050	N.D.	81	1
XYLENES	N.D.	0.0050	N.D.	81	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

415-882-4406

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

AS Y132 O: BTEXQC0220
VINCE 08-06

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-3-7.5

Spl#: 167303

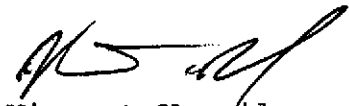
Matrix: SOIL

Sampled: January 21, 1998

Run#:10792

Analyzed: January 22, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	101	1
MTBE	N.D.	0.0050	N.D.	90	1
BENZENE	N.D.	0.0050	N.D.	87	1
TOLUENE	N.D.	0.0050	N.D.	83	1
ETHYL BENZENE	N.D.	0.0050	N.D.	81	1
XYLENES	N.D.	0.0050	N.D.	81	1



Vincent Vancil
Chemist



Michael Verona
Operations Manager

415-882-4406

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

AS V132 O:STEXQC0220
VINCE 00:08

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-3-15.5

Spl#: 167304

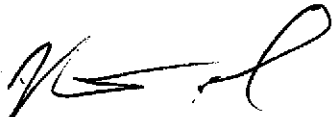
Matrix: SOIL


Sampled: January 21, 1998

Run#:10792

Analyzed: January 22, 1998

ANALYTE	RESULT	REPORTING	BLANK	BLANK	DILUTION
	(mg/Kg)	LIMIT	RESULT	SPIKE	FACTOR
		(mg/Kg)	(mg/Kg)	(%)	
GASOLINE	N.D.	1.0	N.D.	101	1
MTBE	N.D.	0.0050	N.D.	90	1
BENZENE	N.D.	0.0050	N.D.	87	1
TOLUENE	N.D.	0.0050	N.D.	83	1
ETHYL BENZENE	N.D.	0.0050	N.D.	81	1
XYLENES	N.D.	0.0050	N.D.	81	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

415-882-4406

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

AS V132 O: BTEXQC0220
VINCE 08:08

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-3-25

Spl#: 167305

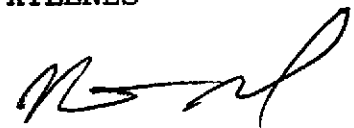
Matrix: SOIL

Sampled: January 21, 1998

Run#:10792

Analyzed: January 22, 1998

<u>ANALYTE</u>	<u>RESULT</u> (mg/Kg)	<u>REPORTING</u> <u>LIMIT</u> (mg/Kg)	<u>BLANK</u> <u>RESULT</u> (mg/Kg)	<u>BLANK</u> <u>SPIKE</u> (%)	<u>DILUTION</u> <u>FACTOR</u>
GASOLINE	N.D.	1.0	N.D.	101	1
MTBE	N.D.	0.0050	N.D.	90	1
BENZENE	N.D.	0.0050	N.D.	87	1
TOLUENE	N.D.	0.0050	N.D.	83	1
ETHYL BENZENE	N.D.	0.0050	N.D.	81	1
XYLENES	N.D.	0.0050	N.D.	81	1



Vincent Vancil
Chemist



Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: SB-4-3.5

Spl#: 167306

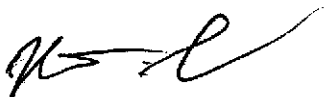
Matrix: SOIL


Sampled: January 21, 1998

Run#:10792

Analyzed: January 22, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	101	1
MTBE	N.D.	0.0050	N.D.	90	1
BENZENE	N.D.	0.0050	N.D.	87	1
TOLUENE	N.D.	0.0050	N.D.	83	1
ETHYL BENZENE	N.D.	0.0050	N.D.	81	1
XYLENES	N.D.	0.0050	N.D.	81	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

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Federal ID #68-0140157

AS V132 0: BTEXQC0220
VINCE 09:08

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: **Blank spike and duplicate** report for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Matrix: SOIL
Lab Run#: 10786

Analyzed: January 22, 1998

Analyte	Spike Amount		Spike Amount Found		Spike Recov		Control % Limits RPD	% RPD Lim	
	BSP (mg/Kg)	Dup	BSP (mg/Kg)	Dup	BSP (%)	Dup (%)			
GASOLINE	0.500	0.500	0.498	0.490	99.6	98.0	75-125	1.62	35
MTBE	0.100	0.100	0.0967	0.104	96.7	104	75-125	7.27	35
BENZENE	0.100	0.100	0.0963	0.0971	96.3	97.1	77-123	0.82	35
TOLUENE	0.100	0.100	0.0974	0.0986	97.4	98.6	78-122	1.22	35
ETHYL BENZENE	0.100	0.100	0.100	0.102	100	102	70-130	1.98	35
XYLENES	0.300	0.300	0.310	0.317	103	106	75-125	2.87	35

BS Smpl #: 167398
BSD Smpl #: 167399

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Federal ID #68-0140157

OC_BSD1226 VANCE 08-07-01

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: **Blank spike and duplicate** report for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Matrix: SOIL
Lab Run#: 10792

Analyzed: January 22, 1998

Analyte	Spike Amount		Spike Amount Found		Spike Recov		Control % Limits	RPD	% RPD Lim
	BSP (mg/Kg)	Dup	BSP (mg/Kg)	Dup	BSP (%)	Dup (%)			
GASOLINE	0.500	0.500	0.504	0.485	101	97.0	75-125	4.04	35
MTBE	0.100	0.100	0.0899	0.104	89.9	104	75-125	14.5	35
BENZENE	0.100	0.100	0.0868	0.0969	86.8	96.9	77-123	11.0	35
TOLUENE	0.100	0.100	0.0832	0.0922	83.2	92.2	78-122	10.3	35
ETHYL BENZENE	0.100	0.100	0.0807	0.0877	80.7	87.7	70-130	8.31	35
XYLENES	0.300	0.300	0.243	0.264	81.0	88.0	75-125	8.28	35

BS Smpl #: 167464
BSD Smpl #: 167466

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Federal ID #68-0140157

GC_BSD1226 VVCE 05-07-01

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: **Surrogate** report for 5 samples for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 10786
Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
167297-1	SB-1-7	TRIFLUOROTOLUENE	79.5	65-135
167297-1	SB-1-7	4-BROMOFLUOROBENZENE	80.6	65-135
167298-1	SB-1-23	TRIFLUOROTOLUENE	83.2	65-135
167298-1	SB-1-23	4-BROMOFLUOROBENZENE	82.4	65-135
167299-1	SB-1-27	TRIFLUOROTOLUENE	168	65-135
167299-1	SB-1-27	4-BROMOFLUOROBENZENE	--	65-135
167299-2	SB-1-27	TRIFLUOROTOLUENE	8.60	65-135
167299-2	SB-1-27	4-BROMOFLUOROBENZENE	49.9	65-135
167300-1	SB-2-7.5	TRIFLUOROTOLUENE	58.3	65-135
167300-1	SB-2-7.5	4-BROMOFLUOROBENZENE	71.6	65-135
167300-2	SB-2-7.5	TRIFLUOROTOLUENE	88.7	65-135
167300-2	SB-2-7.5	4-BROMOFLUOROBENZENE	81.7	65-135
167301-1	SB-2-15	TRIFLUOROTOLUENE	63.8	65-135
167301-1	SB-2-15	4-BROMOFLUOROBENZENE	71.8	65-135

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
167397-1	Reagent blank (MDB)	TRIFLUOROTOLUENE	93.2	65-135
167397-1	Reagent blank (MDB)	4-BROMOFLUOROBENZENE	95.9	65-135
167398-1	Spiked blank (BSP)	TRIFLUOROTOLUENE	99.9	65-135
167398-1	Spiked blank (BSP)	4-BROMOFLUOROBENZENE	112	65-135
167399-1	Spiked blank duplicate (BSD)	TRIFLUOROTOLUENE	95.5	65-135
167399-1	Spiked blank duplicate (BSD)	4-BROMOFLUOROBENZENE	104	65-135

V132
QCSURR1229 VINCE 23-Jan-98 09:0

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: **Surrogate** report for 5 samples for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 10792
Matrix: SOIL

<u>Sample#</u>	<u>Client Sample ID</u>	<u>Surrogate</u>	<u>% Recovered</u>	<u>Recovery Limits</u>
167302-1	SB-2-29.5	TRIFLUOROTOLUENE	79.4	65-135
167302-1	SB-2-29.5	4-BROMOFLUOROBENZENE	67.7	65-135
167303-1	SB-3-7.5	TRIFLUOROTOLUENE	65.8	65-135
167303-1	SB-3-7.5	4-BROMOFLUOROBENZENE	57.2	65-135
167304-1	SB-3-15.5	TRIFLUOROTOLUENE	69.6	65-135
167304-1	SB-3-15.5	4-BROMOFLUOROBENZENE	59.9	65-135
167305-1	SB-3-25	TRIFLUOROTOLUENE	98.4	65-135
167305-1	SB-3-25	4-BROMOFLUOROBENZENE	82.6	65-135
167306-1	SB-4-3.5	TRIFLUOROTOLUENE	85.9	65-135
167306-1	SB-4-3.5	4-BROMOFLUOROBENZENE	67.2	65-135

<u>Sample#</u>	<u>QC Sample Type</u>	<u>Surrogate</u>	<u>% Recovered</u>	<u>Recovery Limits</u>
167462-1	Reagent blank (MDB)	TRIFLUOROTOLUENE	76.2	65-135
167462-1	Reagent blank (MDB)	4-BROMOFLUOROBENZENE	61.1	65-135
167464-1	Spiked blank (BSP)	TRIFLUOROTOLUENE	80.9	65-135
167464-1	Spiked blank (BSP)	4-BROMOFLUOROBENZENE	87.9	65-135
167466-1	Spiked blank duplicate (BSD)	TRIFLUOROTOLUENE	95.8	65-135
167466-1	Spiked blank duplicate (BSD)	4-BROMOFLUOROBENZENE	79.6	65-135

V132
QCSURR1229 VINCE 23-Jan-98 09:0

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01

re: 1 sample for TPH - Diesel analysis.
Method: EPA 8015M

Sampled: January 21, 1998 Matrix: SOIL Run#: 10780 Extracted: January 22, 1998
Analyzed: January 23, 1998

Spl#	CLIENT SPL ID	DIESEL (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
167300	SB-2-7.5	7.9	1.0	N.D.	80.1	1

Note: Estimated concentration due to overlapping fuel patterns.



Bruce Havlik
Chemist



Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 22, 1998

Project#: 70100-030-01


re: 9 samples for TPH - Diesel analysis.
Method: EPA 8015M

Matrix: SOIL Extracted: January 22, 1998
Run#: 10780 Analyzed: January 22, 1998
Sampled: January 21, 1998

Spl#	CLIENT SPL ID	DIESEL (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
167297	SB-1-7	5.0	1.0	N.D.	80.1	1
Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.						
167298	SB-1-23	1.5	1.0	N.D.	80.1	1
Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.						
167299	SB-1-27	180	1.0	N.D.	80.1	1
Note: Hydrocarbon reported is in the early Diesel Range and does not match our Diesel Standard.						
167302	SB-2-29.5	N.D.	1.0	N.D.	80.1	1
167303	SB-3-7.5	13	1.0	N.D.	80.1	1
Note: Hydrocarbon reported does not match the pattern of our Diesel standard.						
167304	SB-3-15.5	2.4	1.0	N.D.	80.1	1
Note: Hydrocarbon reported has characteristics of weathered/aged Diesel. Estimated concentration due to overlapping fuel patterns.						
167305	SB-3-25	8.9	1.0	N.D.	80.1	1
Note: Estimated concentration due to overlapping fuel patterns.						
167306	SB-4-3.5	1.5	1.0	N.D.	80.1	1
Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.						

Matrix: SOIL Extracted: January 22, 1998
Run#: 10780 Analyzed: January 23, 1998
Sampled: January 21, 1998

Spl#	CLIENT SPL ID	DIESEL (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
167301	SB-2-15	1.1	1.0	N.D.	80.1	1
Note: Hydrocarbon reported does not match the pattern of our Diesel Standard.						


Bruce Havlik
Chemist


Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon


Project: CITY OF OAKLAND
Received: January 22, 1998

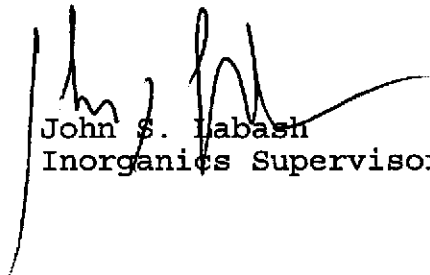
Project#: 70100-030-01

re: 10 samples for Lead analysis.
Method: EPA 3050A/7420A

Sampled: January 21, 1998 Matrix: SOIL Run#: 10793 Extracted: January 23, 1998
Analyzed: January 23, 1998

Spl#	CLIENT SPL ID	LEAD (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
167297	SB-1-7	N.D.	5.0	N.D.	102	1
167298	SB-1-23	N.D.	5.0	N.D.	102	1
167299	SB-1-27	N.D.	5.0	N.D.	102	1
167300	SB-2-7.5	N.D.	5.0	N.D.	102	1
167301	SB-2-15	N.D.	5.0	N.D.	102	1
167302	SB-2-29.5	N.D.	5.0	N.D.	102	1
167303	SB-3-7.5	N.D.	5.0	N.D.	102	1
167304	SB-3-15.5	N.D.	5.0	N.D.	102	1
167305	SB-3-25	N.D.	5.0	N.D.	102	1
167306	SB-4-3.5	20	5.0	N.D.	102	1


Christopher Arndt
Chemist


John S. Labash
Inorganics Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 22, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: SB-1-7

Spl#: 167297

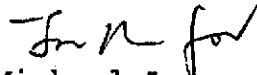
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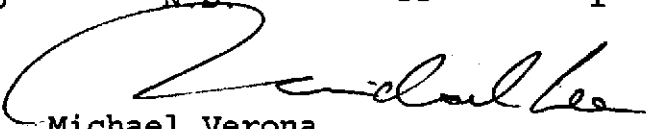
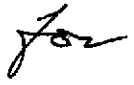
Sampled: January 21, 1998

Run#: 10785

Analyzed: January 22, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	106	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	93.5	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1


Michael Lee
Chemist


Michael Verona
Operations Manager


CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 22, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: SB-1-27

Spl#: 167299

Matrix: SOIL

Sampled: January 21, 1998

Run#: 10785

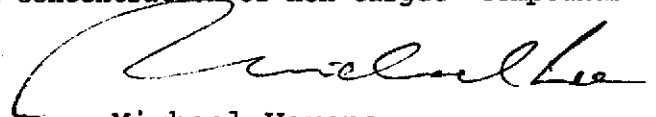
Analyzed: January 22, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	25	N.D.	--	5
BROMOFORM	N.D.	25	N.D.	--	5
BROMOMETHANE	N.D.	50	N.D.	--	5
CARBON TETRACHLORIDE	N.D.	25	N.D.	--	5
CHLOROBENZENE	N.D.	25	N.D.	106	5
CHLOROETHANE	N.D.	50	N.D.	--	5
2-CHLOROETHYLVINYLETHER	N.D.	250	N.D.	--	5
CHLOROFORM	N.D.	25	N.D.	--	5
CHLOROMETHANE	N.D.	50	N.D.	--	5
DIBROMOCHLOROMETHANE	N.D.	25	N.D.	--	5
1,2-DICHLOROBENZENE	N.D.	25	N.D.	--	5
1,3-DICHLOROBENZENE	N.D.	25	N.D.	--	5
1,4-DICHLOROBENZENE	N.D.	25	N.D.	--	5
1,1-DICHLOROETHANE	N.D.	25	N.D.	--	5
1,2-DICHLOROETHANE	N.D.	25	N.D.	--	5
1,1-DICHLOROETHENE	N.D.	25	N.D.	104	5
1,2-DICHLOROETHENE (CIS)	N.D.	25	N.D.	--	5
1,2-DICHLOROETHENE (TRANS)	N.D.	25	N.D.	--	5
1,2-DICHLOROPROPANE	N.D.	25	N.D.	--	5
CIS-1,3-DICHLOROPROPENE	N.D.	25	N.D.	--	5
TRANS-1,3-DICHLOROPROPENE	N.D.	25	N.D.	--	5
METHYLENE CHLORIDE	N.D.	25	N.D.	--	5
1,1,2,2-TETRACHLOROETHANE	N.D.	25	N.D.	--	5
TETRACHLOROETHENE	N.D.	25	N.D.	--	5
1,1,1-TRICHLOROETHANE	N.D.	25	N.D.	--	5
1,1,2-TRICHLOROETHANE	N.D.	25	N.D.	--	5
TRICHLOROETHENE	N.D.	25	N.D.	93.5	5
VINYL CHLORIDE	N.D.	25	N.D.	--	5
TRICHLOROFLUOROMETHANE	N.D.	25	N.D.	--	5

Note: Reporting limits raised due to high concentration of non target compounds.



Michael Lee
Chemist



Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 22, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: SB-2-7.5

Spl#: 167300

Matrix: SOIL

Sampled: January 21, 1998

Run#: 10785

Analyzed: January 22, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROENZENE	N.D.	5.0	N.D.	106	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	93.5	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1

Michael Lee

Michael Lee
Chemist

Michael Verona

Michael Verona
Operations Manager

Jan

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 22, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: SB-2-15

Spl#: 167301

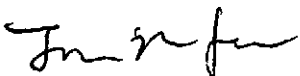
Matrix: SOIL

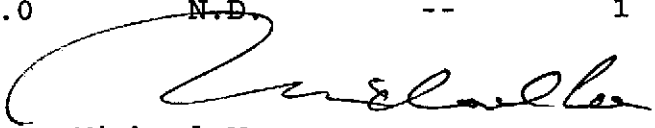
Sampled: January 21, 1998

Run#: 10785

Analyzed: January 22, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROENZENE	N.D.	5.0	N.D.	106	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	93.5	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1


Michael Lee
Chemist


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 22, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: SB-2-29.5

Spl#: 167302

Matrix: SOIL

Sampled: January 21, 1998

Run#: 10785

Analyzed: January 22, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROENZENE	N.D.	5.0	N.D.	106	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	93.5	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1

Michael Lee
Chemist

Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 22, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: SB-3-7.5

Spl#: 167303

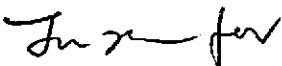
Matrix: SOIL

Sampled: January 21, 1998

Run#: 10785

Analyzed: January 22, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROENZENE	N.D.	5.0	N.D.	106	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLEETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	93.5	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1



Michael Lee
Chemist



Michael Verona
Operations Manager



CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 22, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: SB-3-15.5

Spl#: 167304

Matrix: SOIL

Sampled: January 21, 1998

Run#: 10785

Analyzed: January 22, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROBENZENE	N.D.	5.0	N.D.	106	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	93.5	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1

Michael Lee
Chemist

Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 22, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: SB-3-25

Spl#: 167305


Matrix: SOIL

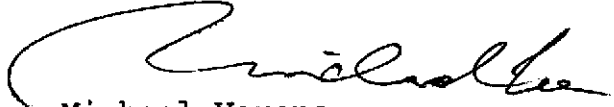
Sampled: January 21, 1998

Run#: 10785

Analyzed: January 22, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROENZENE	N.D.	5.0	N.D.	106	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLEETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	93.5	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1


Michael Lee
Chemist


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 22, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: SB-4-3.5

Spl#: 167306

Matrix: SOIL


Sampled: January 21, 1998

Run#: 10785

Analyzed: January 22, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROENZENE	N.D.	5.0	N.D.	106	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	93.5	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1


Michael Lee
Chemist


Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 23, 1998

Submission #: 9801242

SECOR-SF

Atten: Charles Melancon
Project: CITY OF OAKLAND
Received: January 22, 1998
re: One sample for Volatile Organics by GC/MS analysis.
Method: SW846 Method 8260A Sept 1994

Project#: 70100-030-01

Client Sample ID: SB-1-23

Spl#: 167298


Matrix: SOIL


Sampled: January 21, 1998

Run#: 10785

Analyzed: January 22, 1998

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE FACTOR (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--	1
BROMOFORM	N.D.	5.0	N.D.	--	1
BROMOMETHANE	N.D.	10	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--	1
CHLOROENZENE	N.D.	5.0	N.D.	106	1
CHLOROETHANE	N.D.	10	N.D.	--	1
2-CHLOROETHYLVINYLETHER	N.D.	50	N.D.	--	1
CHLOROFORM	N.D.	5.0	N.D.	--	1
CHLOROMETHANE	N.D.	10	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,3-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,4-DICHLOROENZENE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	104	1
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	--	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--	1
TETRACHLOROETHENE	N.D.	5.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--	1
TRICHLOROETHENE	N.D.	5.0	N.D.	93.5	1
VINYL CHLORIDE	N.D.	5.0	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--	1


Michael Lee
Chemist


Michael Verona
Operations Manager

01242/167297-167306

31104

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: San Francisco
 Address: 90 New Montgomery St Suite 620
San Francisco, CA 94105

Additional documents are attached, and are a part of this Record.
 Job Name: City of Oakland
 Location: 9th St & Broadway

Project # 70100-030-01 Task # _____
 Project Manager Charles Melancon
 Laboratory Chromalab
 Turnaround Time 24 Hours

Analysis Request

SUBM #: 9801242 REP: AS
 CLIENT: SECOR-SF
 DUE: 01/23/98
 REF #: 37784

Sampler's Name Liping Zhang
 Sampler's Signature [Signature]

Sample ID	Date	Time	Matrix	HCID	TPHq/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	MTBE	Comments/ Instructions	Number of C
SB-1-7	1/21	0810	Soil		X	X				X			X			X		1
SB-1-23		0905			X	X				X			X			X		1
SB-1-27		0935			X	X				X			X			X		1
SB-2-7.5		1350			X	X				X			X			X		1
SB-2-15		1355			X	X				X			X			X		1
SB-2-29.5		1450			X	X				X			X			X		1
SB-3-7.5		1155			X	X				X			X			X		1
SB-3-15.5		1210			X	X				X			X			X		1
SB-3-25		1320			X	X				X			X			X		1
SB-4-3.5		1120			X	X				X			X			X		1

RUSH

Special Instructions/Comments:

Relinquished by: [Signature]
 Sign [Signature]
 Print Liping Zhang
 Company SECOR
 Time _____ Date _____
 Relinquished by: [Signature]
 Sign [Signature]
 Print Francis Salimpou
 Company Chromalab
 Time 9:40 Date 1/22/98

Received by: [Signature]
 Sign [Signature]
 Print Francis Salimpou
 Company Chromalab
 Time 8:30 Date 1/22/98
 Received by: [Signature]
 Sign [Signature]
 Print [Signature]
 Company Chromalab
 Time 0945 Date 1/22/98

Sample Receipt
 Total no. of containers: 10
 Chain of custody seals: _____
 Rec'd. in good condition/cold: _____
 Conforms to record: _____
 Client: SECOR
 Client Contact: Charles Melancon
 Client Phone: (415) 882-1548

CHROMALAB, INC.

Environmental Service (SDB)

Sample Receipt Checklist

Client Name: SECOR-SF

Date/Time Received: 01/22/98 | 0830

Reference/Submis: 37784 | 9801242

Received by: AS

Checklist completed by: [Signature]

1-22-98

Reviewed by: [Signature] 1/22/98

Signature

Date

Initials | Date

Matrix: SOIL

Carrier name: Client - C/L

- Shipping container/cooler in good condition? Yes No Not Present
 - Custody seals intact on shipping container/cooler? Yes No Not Present
 - Custody seals intact on sample bottles? Yes No Not Present
 - 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
 - Samples in proper container/bottle? Yes No
 - Sample containers intact? Yes No
 - Sufficient sample volume for indicated test? Yes No
 - All samples received within holding time? Yes No
 - Container/Temp Blank temperature in compliance? Yes No Temp: 3.0°C
 - Water - VOA vials have zero headspace? Yes No VOA vials submitted Yes No
 - Water - pH acceptable upon receipt? Adjusted? Checked by _____ chemist for VOAs
- Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

CHROMALAB, INC.

Environmental Services (SDB)

January 28, 1998

Submission #: 9801230

SECOR-SF
90 NEW MONTGOMERY ST. , SUITE 620
SAN FRANCISCO, CA 94105

Attn: Charles Melancon

RE: Analysis for project CITY OF OAKLAND, number 70100-030-01.

REPORTING INFORMATION

Samples were received cold and in good condition on January 21, 1998. They were refrigerated upon receipt and analyzed as described in the attached report. ChromaLab followed EPA or equivalent methods for all testing reported.

No discrepancies were observed or difficulties encountered with the testing.



Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

RECEIVED

FEB 11 1998

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 21, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: MW-7

Spl#: 167166

Matrix: WATER

Sampled: January 20, 1998

Run#: 10783

Analyzed: January 21, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	0.50	N.D.	--	1
BROMOFORM	N.D.	0.50	N.D.	--	1
BROMOMETHANE	N.D.	1.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.	--	1
CHLORO BENZENE	N.D.	0.50	N.D.	102	1
CHLOROETHANE	N.D.	1.0	N.D.	--	1
2-CHLOROETHYL VINYLETHER	N.D.	0.50	N.D.	--	1
CHLOROFORM	N.D.	0.50	N.D.	--	1
CHLOROMETHANE	N.D.	1.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.	--	1
1,2-DICHLORO BENZENE	N.D.	0.50	N.D.	--	1
1,3-DICHLORO BENZENE	N.D.	0.50	N.D.	--	1
1,4-DICHLORO BENZENE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	95.6	1
1,2-DICHLOROETHENE (CIS)	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	0.50	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
METHYLENE CHLORIDE	N.D.	3.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	--	1
TETRACHLOROETHENE	N.D.	0.50	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROETHENE	N.D.	0.50	N.D.	100	1
VINYL CHLORIDE	N.D.	0.50	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.	--	1

Oleg Nemtsov
Chemist

Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 21, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: MW-20

Spl#: 167167

Matrix: WATER

Sampled: January 20, 1998


Run#: 10783

Analyzed: January 21, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	0.50	N.D.	--	1
BROMOFORM	N.D.	0.50	N.D.	--	1
BROMOMETHANE	N.D.	1.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.	--	1
CHLORO BENZENE	N.D.	0.50	N.D.	102	1
CHLOROETHANE	N.D.	1.0	N.D.	--	1
2-CHLOROETHYL VINYLETHER	N.D.	0.50	N.D.	--	1
CHLOROFORM	17	0.50	N.D.	--	1
CHLOROMETHANE	N.D.	1.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.	--	1
1,2-DICHLORO BENZENE	N.D.	0.50	N.D.	--	1
1,3-DICHLORO BENZENE	N.D.	0.50	N.D.	--	1
1,4-DICHLORO BENZENE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHANE	2.0	0.50	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	95.6	1
1,2-DICHLOROETHENE (CIS)	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	0.50	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
METHYLENE CHLORIDE	N.D.	3.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	--	1
TETRACHLOROETHENE	N.D.	0.50	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROETHENE	N.D.	0.50	N.D.	100	1
VINYL CHLORIDE	N.D.	0.50	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.	--	1



Oleg Nemtsov
Chemist



Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND

Project#: 70100-030-01

Received: January 21, 1998

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

Method: SW846 Method 8260A Sept 1994

Client Sample ID: MW-21

Spl#: 167168

Matrix: WATER

Sampled: January 20, 1998

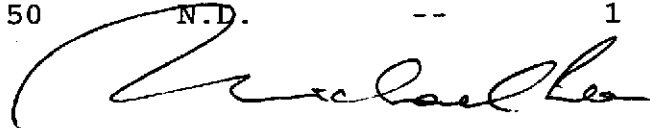
Run#: 10783

Analyzed: January 21, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
BROMODICHLOROMETHANE	N.D.	0.50	N.D.	--	1
BROMOFORM	N.D.	0.50	N.D.	--	1
BROMOMETHANE	N.D.	1.0	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.	--	1
CHLOROBENZENE	N.D.	0.50	N.D.	102	1
CHLOROETHANE	N.D.	1.0	N.D.	--	1
2-CHLOROETHYLVINYLEETHER	N.D.	0.50	N.D.	--	1
CHLOROFORM	27	0.50	N.D.	--	1
CHLOROMETHANE	N.D.	1.0	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	95.6	1
1,2-DICHLOROETHENE (CIS)	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHENE (TRANS)	N.D.	0.50	N.D.	--	1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
METHYLENE CHLORIDE	N.D.	3.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	--	1
TETRACHLOROETHENE	4.8	0.50	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROETHENE	N.D.	0.50	N.D.	100	1
VINYL CHLORIDE	N.D.	0.50	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.	--	1



Oleg Nemtsov
Chemist



Michael Verona
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 21, 1998

Project#: 70100-030-01

re: **Surrogate** report for 3 samples for Volatile Organics by GC/MS analysis.

Method: SW846 Method 8260A Sept 1994
Lab Run#: 10783
Matrix: WATER

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
167166-1	MW-7	4-BROMOFLUOROBENZENE	98.2	86-115
167166-1	MW-7	D4-1,2-DICHLOROETHANE	105	76-114
167166-1	MW-7	D8-TOLUENE	101	88-110
167167-1	MW-20	4-BROMOFLUOROBENZENE	96.2	86-115
167167-1	MW-20	D4-1,2-DICHLOROETHANE	114	76-114
167167-1	MW-20	D8-TOLUENE	95.6	88-110
167168-1	MW-21	4-BROMOFLUOROBENZENE	97.8	86-115
167168-1	MW-21	D4-1,2-DICHLOROETHANE	114	76-114
167168-1	MW-21	D8-TOLUENE	100	88-110

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
167385-1	Reagent blank (MDB)	4-BROMOFLUOROBENZENE	115	86-115
167385-1	Reagent blank (MDB)	D4-1,2-DICHLOROETHANE	100	76-114
167385-1	Reagent blank (MDB)	D8-TOLUENE	95.6	88-110
167384-1	Spiked blank (BSP)	4-BROMOFLUOROBENZENE	93.6	86-115
167384-1	Spiked blank (BSP)	D4-1,2-DICHLOROETHANE	90.6	76-114
167384-1	Spiked blank (BSP)	D8-TOLUENE	104	88-110
167386-1	Spiked blank duplicate (BSD)	4-BROMOFLUOROBENZENE	95.6	86-115
167386-1	Spiked blank duplicate (BSD)	D4-1,2-DICHLOROETHANE	93.8	76-114
167386-1	Spiked blank duplicate (BSD)	D8-TOLUENE	93.8	88-110

V053
QCSURR1229 OLEG 22-Jan-98 15:31

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

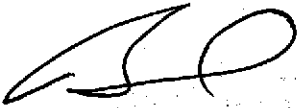
Project: CITY OF OAKLAND
Received: January 21, 1998


Project#: 70100-030-01

re: 3 samples for TPH - Diesel analysis.
Method: EPA 8015M

Sampled: January 20, 1998 Matrix: WATER Extracted: January 21, 1998
Run#: 10757 Analyzed: January 22, 1998

Spl#	CLIENT SPL ID	DIESEL (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
167166	MW-7	N.D.	50	N.D.	93.6	1
167167	MW-20	N.D.	50	N.D.	93.6	1
167168	MW-21	N.D.	50	N.D.	93.6	1


Bruce Havlik
Chemist


Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 21, 1998

Project#: 70100-030-01

re: **Blank spike and duplicate** report for TPH - Diesel analysis.

Method: EPA 8015M

Matrix: WATER
Lab Run#: 10757

Analyzed: January 22, 1998

Analyte	Spike Amount		Spike Amount Found		Spike Recov		Control % Limits RPD	% RPD Lim	
	BSP (ug/L)	Dup	BSP (ug/L)	Dup	BSP (%)	Dup (%)			
DIESEL	2500	2500	2340	2520	93.6	101	60-130	7.60	25

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 21, 1998

Project#: 70100-030-01

re: **Surrogate** report for 3 samples for TPH - Diesel analysis.

Method: EPA 8015M
Lab Run#: 10757
Matrix: WATER

<u>Sample#</u>	<u>Client Sample ID</u>	<u>Surrogate</u>	<u>% Recovered</u>	<u>Recovery Limits</u>
167166-1	MW-7	O-TERPHENYL	115	60-130
167167-1	MW-20	O-TERPHENYL	115	60-130
167168-1	MW-21	O-TERPHENYL	94.3	60-130

<u>Sample#</u>	<u>QC Sample Type</u>	<u>Surrogate</u>	<u>% Recovered</u>	<u>Recovery Limits</u>
167162-1	Reagent blank (MDB)	O-TERPHENYL	94.8	60-130
167163-1	Spiked blank (BSP)	O-TERPHENYL	100	60-130
167164-1	Spiked blank duplicate (BSD)	O-TERPHENYL	110	60-130

S005
QCSURR1229 MVERONA 22-Jan-98 1

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 21, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-7

Spl#: 167166

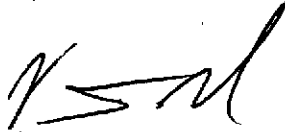
Matrix: WATER


Sampled: January 20, 1998

Run#:10770

Analyzed: January 21, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	106	1
MTBE	N.D.	5.0	N.D.	96	1
BENZENE	N.D.	0.50	N.D.	106	1
TOLUENE	N.D.	0.50	N.D.	109	1
ETHYL BENZENE	N.D.	0.50	N.D.	104	1
XYLENES	N.D.	0.50	N.D.	105	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

415-882-4406

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

AS V132 0: BTEXQC0220
VINCE 14:50

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 21, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-20

Spl#: 167167

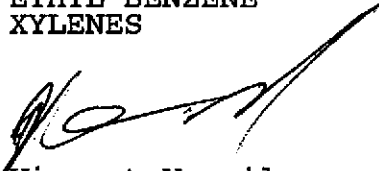
Matrix: WATER

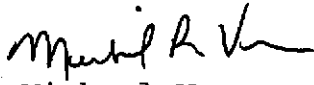
Sampled: January 20, 1998

Run#:10770

Analyzed: January 21, 1998

<u>ANALYTE</u>	<u>RESULT</u> (ug/L)	<u>REPORTING</u> <u>LIMIT</u> (ug/L)	<u>BLANK</u> <u>RESULT</u> (ug/L)	<u>BLANK</u> <u>SPIKE</u> (%)	<u>DILUTION</u> <u>FACTOR</u>
GASOLINE	N.D.	50	N.D.	106	1
MTBE	N.D.	5.0	N.D.	96	1
BENZENE	N.D.	0.50	N.D.	106	1
TOLUENE	N.D.	0.50	N.D.	109	1
ETHYL BENZENE	N.D.	0.50	N.D.	104	1
XYLENES	N.D.	0.50	N.D.	105	1


Vincent Vancil
Chemist


Michael Verona
Operations Manager

415-882-4406

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

AS V132 O: BTEXQC0220
VINCE 14:50

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 21, 1998

Project#: 70100-030-01

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-21

Spl#: 167168

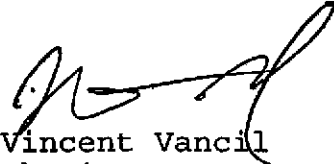
Matrix: WATER

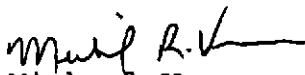
Sampled: January 20, 1998

Run#:10770

Analyzed: January 21, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	106	1
MTBE	N.D.	5.0	N.D.	96	1
BENZENE	N.D.	0.50	N.D.	106	1
TOLUENE	N.D.	0.50	N.D.	109	1
ETHYL BENZENE	N.D.	0.50	N.D.	104	1
XYLENES	N.D.	0.50	N.D.	105	1


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Chemist


Michael Verona
Operations Manager

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AS V132 O:BTEXQC0220
VINCE 14:50

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 21, 1998

Project#: 70100-030-01

re: **Blank spike and duplicate** report for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Matrix: WATER
Lab Run#: 10770

Analyzed: January 21, 1998

Analyte	Spike Amount		Spike Amount Found		Spike Recov		Control Limits	% RPD	% Lim
	BSP (ug/L)	Dup	BSP (ug/L)	Dup	BSP (%)	Dup (%)			
GASOLINE	500	500	532	524	106	105	75-125	0.94	20
MTBE	100	100	95.9	93.0	95.9	93.0	75-125	3.07	20
BENZENE	100	100	106	98.8	106	98.8	77-123	7.03	20
TOLUENE	100	100	109	100	109	100	78-122	8.61	20
ETHYL BENZENE	100	100	104	95.7	104	95.7	70-130	8.31	20
XYLENES	300	300	314	287	105	95.7	75-125	9.27	20

CHROMALAB, INC.

Environmental Services (SDB)

January 22, 1998

Submission #: 9801230

SECOR-SF

Atten: Charles Melancon

Project: CITY OF OAKLAND
Received: January 21, 1998

Project#: 70100-030-01

re: **Surrogate** report for 3 samples for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod
Lab Run#: 10770
Matrix: WATER

<u>Sample#</u>	<u>Client Sample ID</u>	<u>Surrogate</u>	<u>% Recovered</u>	<u>Recovery Limits</u>
167166-1	MW-7	TRIFLUOROTOLUENE	90.6	65-135
167166-1	MW-7	4-BROMOFLUOROBENZENE	82.7	65-135
167167-1	MW-20	TRIFLUOROTOLUENE	90.3	65-135
167167-1	MW-20	4-BROMOFLUOROBENZENE	82.6	65-135
167168-1	MW-21	TRIFLUOROTOLUENE	91.4	65-135
167168-1	MW-21	4-BROMOFLUOROBENZENE	80.7	65-135

<u>Sample#</u>	<u>QC Sample Type</u>	<u>Surrogate</u>	<u>% Recovered</u>	<u>Recovery Limits</u>
167250-1	Reagent blank (MDB)	TRIFLUOROTOLUENE	109	65-135
167250-1	Reagent blank (MDB)	4-BROMOFLUOROBENZENE	91.2	65-135
167251-1	Spiked blank (BSP)	TRIFLUOROTOLUENE	101	65-135
167251-1	Spiked blank (BSP)	4-BROMOFLUOROBENZENE	82.7	65-135
167252-1	Spiked blank duplicate (BSD)	TRIFLUOROTOLUENE	93.8	65-135
167252-1	Spiked blank duplicate (BSD)	4-BROMOFLUOROBENZENE	81.9	65-135

V132
QCSURR1229 VINCE 22-Jan-98 14:4

230/167166-167168

Chain-of Custody Number: 31112

SECOR Chain-of Custody Record

Field Office: San Francisco
 Address: 90 New Montgomery St #620
San Francisco, CA 94105

Additional documents are attached, and are a part of this Record.
 Job Name: City of Oakland
 Location: 9th St Oakland

Project # 70/00-030-0/ Task # _____
 Project Manager Charles Melancon
 Laboratory Chromalab
 Turnaround Time 24-Hour

Analysis Request

SURM #: 9801230 REP: AS
 CLIENT: SECOR-SF
 DUE: 01/22/98
 REF #: 37772

Sampler's Name Liping Zhang
 Sampler's Signature [Signature]

Sample ID	Date	Time	Matrix	HCID	Analysis Request													Number of C		
					TPH/BTEX/WTPH-G 8015 (modified)/8020	TPH/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	MTBE	Comments/ Instructions			
MW-7	1/20/98	1520	Water		X	X				X										7
MW-20	↓	1530	↓		X	X				X										3
MW-21	↓	1540	↓		X	X				X										3

RUSH

Special Instructions/Comments:

Relinquished by: _____
 Sign _____
 Print Liping Zhang
 Company SECOR
 Time _____ Date _____

Received by: _____
 Sign _____
 Print B. Melancon
 Company Chromalab
 Time 1710 Date 1-21-98

Sample Receipt
 Total no. of containers: 21
 Chain of custody seals: _____
 Rec'd. in good condition/cold: _____
 Conforms to record: _____
 Client: SECOR
 Client Contact: Charles Melancon
 Client Phone: (415) 852-1148

01/21/98 WED 14: 882 1673 002

37172

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: San Francisco
 Address: 90 New Montgomery St. #620
San Francisco, CA 94105

Additional documents are attached, and are a part of this Record.
 Job Name: City of Oakland
 Location: 9th St, Oakland

Project # 70/00-030-01 Task # _____
 Project Manager Charles Melancon
 Laboratory Chromalab
 Turnaround Time 24 - Hour

Analysis Request

Sampler's Name Liping Zhang
 Sampler's Signature [Signature]

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	MTBE	Comments/ Instructions	Number of Containers
MW-7	1/20/98	1220	Water		X	X				X						X		7
MW-20	↓	1330	↓		X	X				X						X		7
MW-21	↓	1540	↓		X	X				X						X		7

RUSH

Special Instructions/Comments:

Relinquished by: _____
 Sign [Signature]
 Print Liping Zhang
 Company SECOR
 Time _____ Date _____

Received by: [Signature]
 Sign B. Morrow
 Print B. Morrow
 Company Chromalab
 Time 1410 Date 1/21/98

Sample Receipt
 Total no. of containers: 21
 Chain of custody seals: _____
 Rec'd. in good condition/cold: _____
 Conforms to record: _____

Relinquished by: _____
 Sign [Signature]
 Print _____
 Company _____
 Time 1438 Date _____

Received by: [Signature]
 Sign [Signature]
 Print B. Morrow
 Company Chromalab
 Time 14 Date _____

Client: SECOR
 Client Contact: Charles Melancon
 Client Phone: (415) 882-1548

Chris Prueby 1/21/98 1548

CHROMALAB

Change request received by: AS

Date Requested: 1/21/98

SAMPLE STATUS CHANGE FORM

Requested by

(Client's name)

Submission#	Client Samp.ID	Old Status Description	Description of Changes	Requested by (Client's name)
98023	all	8010	8280 only (8010 compon)	Secord

Changes were done in lims by(login):

Rowley

On: 1/22/98

CC: Lab.Director Dept.manager Analyst Proj.Manager

CHROMALAB, INC.

Environmental Service (SDB)

Sample Receipt Checklist

Client Name: SECOR-SF

Date/Time Received: 01/21/98 | 1410

Reference/Submis: 37772 9801270

Received by: Bm

Checklist completed by: Chris Rowley

1/21/98

Reviewed by: MMN 1-21-98

Signature

Date

Initials | Date

Matrix: H2O

Carrier name: Client - C/L

Shipping container/cooler in good condition?

Yes No Not Present

Custody seals intact on shipping container/cooler?

Yes No Not Present

Custody seals intact on sample bottles?

Yes No Not Present

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

Samples in proper container/bottle?

Yes No

Sample containers intact?

Yes No

Sufficient sample volume for indicated test?

Yes No

All samples received within holding time?

Yes No

Container/Temp Blank temperature in compliance?

Temp: 3.0 °C Yes No

Water - VOA vials have zero headspace?

No VOA vials submitted Yes No

Water - pH acceptable upon receipt? YB

Adjusted? Checked by MMN

chemist for VOAs

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____