## WAREHAM DEVELOPMENT

July 28, 2005

Alameda County Health Care Services Agency Attention: Finance Department 1131 Harbor Bay Parkway Alameda, CA 94502

Subject:

Regulatory Oversight

R.O. 2621

5885 Hollis Street Emeryville, California

To Whom It May Concern:

Enclosed is a check for \$6,000 for the initial deposit on the regulatory oversight account (R.O. 2621) for the 5885 Hollis Street property. Wareham Development is planning to redevelop the property in Emeryville and has recently submitted several documents for review. Based upon discussions with Ms. Donna Drogos, the enclosed check is required to allow for assignment of an Alameda County Health Care Services Agency case worker for the subject property.

Due to the proposed schedule for construction at the property, Wareham Development is amenable to overtime staff charges to expedite review of the documents. Please call me at (415) 457-4964 if you have any questions.

Sincerely yours,

Geoffrey B. Sears

enclosure

cc: Donna Drogos, Alameda County Health Care Services Agency (w/o enclosure)
Ignacio Dayrit, City of Emeryville (w/o enclosure)

Alameda County

Alameda County

Lemilonmental Health

14 July 2005 Project 4069.01

Ms. Donna Drogos Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, 2nd Floor Alameda, CA 94502

Subject: Site Management Plan

5885 Hollis Street Emeryville, California

Dear Ms. Drogos:

On behalf of Wareham Development, Treadwell & Rollo has prepared the enclosed Site Management Plan (SMP) for the proposed development of the 5885 Hollis Street property for your approval. Correspondence in 2000 and 2001 with Susan Hugo of the Alameda County Health Care Services Agency indicated that there were several environmental issues to be addressed prior to redevelopment of the property (under STID#6687). The previous redevelopment plan, by Marks Management, was for commercial use. Marks Management, the current property owner, is no longer planning on implementing their redevelopment plan. Wareham Development intends to purchase the property and demolish the existing buildings and construct a multi-story office building (likely to be laboratory space) with a sub-grade, mechanically-ventilated parking garage at the Site.

The enclosed SMP has been prepared to address concerns raised by the Alameda County Health Care Services Agency in 2001 regarding the Marks Management Development, as well as issues identified during Treadwell & Rollo's 2005 Phase II Environmental Site Assessment conducted during Wareham Development's due diligence period. A copy of the 3 March 2005 Phase II Environmental Site Assessment Report is also included for your review, although the data from the 2005 report is incorporated into the SMP.

Michael P. McGuire. P.E.

Principal Engineer

.Please call me at (510) 874-4500 at extension 554 (Glenn) if you have any questions.

Sincerely yours,

TREADWELL & ROLLO, INC.

Glenn M. Leong Senior Scientist

41690102.OAK

cc: Geoff Sears, Wareham Development Ignacio Dayrit, City of Emeryville

**Treadwell & Rollo, Inc.** Environmental & Geotechnical Consultants 501 14th Street, Third Floor, Oakland, CA 94612 Telephone (510) 874-4500 Facsimile (510) 874-4507

3 March 2005 Project 4069.01

Mr. Geoffrey Sears Wareham Development 1120 Nye Street, Suite 400 San Rafael, CA 94901

Subject:

Dear Mr. Sears:

Phase II Environmental Site Assessment Report Home Report Street Emeryville, California

3:
ollo, Inc. is pleased to Treadwell & Rollo, Inc. is pleased to present this Phase II Environmental Site Assessment Report for the property at 5885 Hollis Street in Emeryville, California. Our scope of services for this project consisted of completing a Phase II soil and groundwater investigation in accordance with our 30 December 2004 proposal to Wareham Development.

We appreciate the opportunity to assist Wareham Development with this project. Please let us know if you have any questions or comments regarding this report.

DAVID R. KLEESATTE

Sincerely,

TREADWELL & ROLLO, INC.

David R. Kleesattel, R.G.

Senior Geologist

Attachment

Michael P. McGuire, P.E. Principal Engineer

# PHASE II ENVIRONMENTAL SITE ASSESSMENT 5885 HOLLIS STREET Emeryville, California

Wareham Development San Rafael, California

3 March 2005 Project No. 4069.01

## Treadwell&Rollo

**Environmental and Geotechnical Consultants** 

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# PHASE II ENVIRONMENTAL SITE ASSESSMENT 5885 HOLLIS STREET Emeryville, California

#### 1.0 INTRODUCTION

This report presents the results of a Phase II Environmental Site Assessment (ESA) performed by Treadwell & Rollo, Inc. (Treadwell & Rollo) for the property located at 5885 Hollis Street in Emeryville, CA, as shown on Figure 1. This ESA was performed in accordance with the scope of work outlined in our proposal dated 30 December 2004, which was authorized by Wareham Development.

The project site is approximately 220 feet by 550 feet in plan dimension and is bounded by Hollis Street to the east, 59th Street to the north, Peladeau Street to the west, and a Chevron Service Station and Powell Street to the south (Figure 2). The site is currently occupied with four buildings: a one-story concrete building that occupies 5805 through 5885 Hollis Street, a one-story concrete building that occupies 5810 through 5890 Peladeau Street, and two one-story metal-framed buildings that occupy 5805 Hollis Street. The remaining area is asphalt-paved parking.

We understand that Wareham Development is considering potential development plans for the site which may include removing the existing buildings and constructing new residential or commercial buildings on the site.

#### 2.0 OBJECTIVE AND SCOPE OF SERVICES

The objective of this Phase II ESA was to assess whether hazardous substances or petroleum products may have affected soil and/or groundwater beneath the site. Recognized environmental conditions were previously identified in the ESA prepared by Weiss Associates, dated 14 March 1995, and the Treadwell & Rollo report titled *Environmental Site Characterization*, 5885 Hollis Street, Emeryville, California, dated 12 May 2000. These recognized environmental conditions

Intermountain Terminal Company truck storage area and parts warehouse. Also, a Chevron Service Station is located immediately adjacent to the project site to the south. Treadwell & Rollo concluded that these past and current activities may have affected soil and groundwater at the site. In addition, the site is potentially underlain by artificial (imported) fill material, which often contains elevated concentrations of lead. For these reasons, Treadwell & Rollo proposed to sample soil and groundwater at the site. The scope of work for the Phase II ESA is described below.

To investigate possible contamination of site soil and groundwater from previous potential sources of contaminants, Treadwell & Rollo installed nine environmental soil borings (TR-19 through TR-22, TR-25, and TR-28 through TR-31 on Figure 2), collected soil samples, and collected grab groundwater samples from four of the borings. Five additional sampling locations were proposed based on previous site operations, but were inaccessible due to existing buildings at the site. Soil and groundwater samples were selectively analyzed for Total Extractable Petroleum Hydrocarbons (TEPH), which includes diesel fuel and motor oil, Total Petroleum Hydrocarbons quantified as Gasoline (TPH-G), benzene, toluene, ethylbenzene and total xylenes (BTEX), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and total lead.

#### 3.0 FIELD INVESTIGATION

On 20 January 2005, five borings were advanced by Precision Sampling Inc., using a limited access Vibra Push XD Series drill rig equipped with direct push technology, and four borings were advanced using a hand auger because of space constraints, along and behind the buildings at the south end of the project site. An Alameda County Drilling Permit was obtained, and the proposed drilling locations were cleared through Underground Services Alert (USA) and a private utility locator retained by Treadwell & Rollo. The borings were advanced through asphalt or concrete ground cover at the locations shown in Figure 2. The nine borings were advanced between 6.5 and 13 feet below ground surface (bgs) for the purpose of soil and groundwater sampling.

During advancement of the borings, a Treadwell & Rollo field scientist logged the borings and retrieved representative samples of the soil encountered for further classification. Logs of borings TR-19 through TR-22, TR-25, and TR-28 through TR-31 are presented in Appendix A on Figures A-1 through A-9. The soil was classified in accordance with the classification system presented on Figure A-10.

Soil samples were collected from borings TR-20 through TR-22, TR-25, and TR-28 through TR-30 at 2.0 feet and 6.0 feet bgs and from borings TR-19 and TR-31 at approximately 2.5 feet and 6.0 feet bgs. In borings TR-19, TR-20, TR-29, TR-30, and TR-31 subsurface soil samples were retrieved from the direct-push borings in two-inch-diameter, three-foot-long butyrate tubes. Six-inch-long sections selected by our field scientist were cut, capped with Teflon<sup>TM</sup> sheeting and plastic caps, labeled, and submitted for laboratory analysis. In borings TR-21, TR-22, TR-25, and TR-28 subsurface soil samples were collected in stainless steel sampling tubes using a manual hand auger. Sample tubes were capped with Teflon<sup>TM</sup> sheeting and plastic caps, labeled, and submitted for laboratory analysis. The soil sampling equipment was decontaminated by steam-cleaning before and between each sampling event.

In borings TR-25, TR-29, TR-30, and TR-31 one-inch PVC temporary wells were installed to assist in groundwater collection. Grab groundwater samples were collected with dedicated disposable bailers and placed in Volatile Organic Analysis (VOA) bottles, containing hydrochloric acid as a preservative, or one-liter Amber bottles, depending on the required analyses. All analytical samples were placed in an iced-filled cooler and transported via courier using standard chain-of-custody protocol to Curtis & Tompkins, Ltd., a California-certified analytical laboratory in Berkeley, California for laboratory analysis.

After sampling was completed, the temporary PVC well casings were removed and all borings were grouted in accordance with permit specifications. Drill cuttings were drummed and properly disposed by Precision Sampling Inc.

#### 4.0 SUBSURFACE CONDITIONS

The results of our investigation indicate the asphalt paved portions of the site are blanketed by approximately 3 to 6 inches of asphalt over aggregate base. The aggregate base is generally underlain by clays and clayey sands. Fine to course sands were encountered at shallow intervals up to 3 feet bgs. Clay observed from the surface to 13 feet bgs apparently becomes stiffer (based on visual observations) with increasing depth. Hydrocarbon odors were noted in soil from borings TR-20, TR-25, TR-28, TR-30, and TR-31.

Groundwater was measured at between 9 and 10 feet bgs in boring TR-31. This approximate groundwater depth may not represent a stabilized level, as the actual groundwater level in a test boring can take from several hours to days to stabilize.

#### 5.0 LABORATORY ANALYSES AND RESULTS

Soil and groundwater samples collected in the field were analyzed to evaluate the presence of contaminants in the subsurface materials at the site resulting from releases from the recognized environmental conditions noted above. Samples were analyzed by Curtis & Tompkins of Berkeley, California. The analytical results are summarized on Tables 1 and 2. The complete laboratory reports and chain of custody forms are enclosed in Appendix B.

#### 5.1 Laboratory Analyses

To investigate possible contamination of site soil and groundwater from potential sources of contaminants, Treadwell & Rollo advanced nine shallow borings to depths ranging between 6.5 to 13 feet across the site. The deeper borings (TR-25, TR-29, TR-30, and TR-31) were advanced to groundwater, which was encountered at a depth of approximately 9 to 10 feet.

Soil and groundwater samples were collected from selected depths within each boring and analytical testing was performed on the collected samples. Selected samples were analyzed for:



- Total Extractable Petroleum Hydrocarbons (TEPH), which includes diesel fuel and motor oil by EPA Method 8015M
- Total Petroleum Hydrocarbons quantified as Gasoline (TPH-G) by EPA Method 8015M
- benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8260B
- volatile organic compounds (VOCs) by EPA Method 8260B
- polychlorinated biphenyls (PCBs) by EPA Method 8082
- total lead (Pb) by EPA Method 6010B.

#### 5.2 Evaluation Criteria

Analytical results for soil samples are presented in Table 1. Results for groundwater samples are presented in Table 2. Because the redevelopment plans may include either residential or commercial use, the analytical data were compared to established screening levels for residential properties because these criteria are typically more conservative.

Soil sample results were also compared to threshold concentrations to evaluate whether the soil may safely be left onsite or, if disposed off-site, whether it would constitute a hazardous waste. Regarding soil which may remain on site, no absolute standards for acceptable levels of contamination yet exist. However, the California Regional Water Quality Control Board (RWQCB) has developed Environmental Screening Levels (ESLs). The ESLs discussed in this report are threshold surface soil concentrations considered safe for residential site use where groundwater is not a drinking water source, unless otherwise noted. If a concentration for a particular compound exceeds the residential surface soil ESL for said compound, it is assumed that the concentration will also exceed all other ESLs for that compound, as the residential surface soil ESL is the most conservative.

For evaluating disposal requirements, if development plans require the soil to be excavated and disposed off site, results are compared to regulatory criteria that define waste as hazardous (Class I) or non-hazardous (Class II or III) waste. These criteria include the California Soluble

Threshold Limit Concentration (STLC) and Total Threshold Limit Concentration (TTLC), and the Federal Regulatory Level (RL), as set forth in Title 22 of the California Code of Regulations (CCR). The TTLC specifies in milligrams per kilogram (mg/kg) the total amount of a substance in soil that will require the soil to be disposed as a California hazardous waste. The STLC specifies in milligrams per liter (mg/l) the concentration of the soluble fraction of a substance in soil, as determined by the California Waste Extraction Test (WET), which will require the soil to be disposed as a California hazardous waste. Generally, when the total concentration of a substance is an order of magnitude (10 times) greater in mg/kg than the STLC in mg/l, the soil should be tested for that substance using the WET, although the total concentration may be less than the TTLC. Thus, a soil may qualify as a California hazardous waste when the soluble fraction of a contaminant exceeds the STLC and the total concentration of the contaminant is less than the TTLC.

The RL specifies in mg/l the concentration of the soluble fraction of a substance in soil, as determined by the Toxicity Characteristic Leaching Procedure (TCLP), that will require the soil be disposed as a Federal, or Resource Conservation and Recovery Act (RCRA), hazardous waste. In general, if the total concentration of a substance in soil exceeds 20 times the RL, the soil should be tested for the soluble fraction of the substance using the TCLP, which will then be compared directly to the RL.

#### 5.3 Soil Analytical Results

TPH-D was detected in 17 of 18 soil samples analyzed. TPH-D concentrations in the samples ranged from less than 1.0 milligrams per kilogram (mg/kg) in TR-19 (at 6.0 feet bgs) to a maximum of 1,100 mg/kg in TR-31 (at 2.5 feet bgs). All detections of TPH-D were reported with one or more laboratory analytical qualifiers. Three laboratory qualifiers for TPH-D were reported, indicating individual samples may exhibit a chromatographic pattern which does not resemble the laboratory standard for diesel fuel, lighter hydrocarbons may have contributed to the analytical concentration, or heavier hydrocarbons may have contributed to the analytical

concentration. In one sample, TR-31 (at 2.5 feet bgs), the TPH-D concentration exceeds the residential surface soil ESL for TPH-D of 500 mg/kg.

TPH-MO was detected in 14 of 18 soil samples analyzed. TPH-MO concentrations in the samples ranged from less than 5.0 mg/kg in several samples to a maximum of 2,700 mg/kg in TR-31 (at 2.5 feet bgs). Several detections of TPH-MO were reported with one or more laboratory qualifiers. Two laboratory qualifiers for TPH-MO were reported, indicating that lighter or heavier hydrocarbons may have contributed to the analytical concentration. In four samples, TR-19 (at 2.5 feet bgs), TR-29 (at 2.0 feet bgs), TR-30 (at 2.0 feet bgs), and TR-31 (at 2.5 feet bgs), the TPH-MO concentrations exceed the residential surface soil ESL for TPH-MO of 500 mg/kg.

TPH-G was detected in seven of 18 soil samples analyzed. TPH-G concentrations in the samples ranged from less than 1.0 mg/kg in several samples to a maximum of 2,100 mg/kg in TR-25 (at 6.0 feet bgs). Several detections of TPH-G were reported with a laboratory qualifier indicating the sample exhibits chromatographic pattern which does not resemble the laboratory standard. In three samples, TR-20 (at 6.0 feet bgs), TR-25 (at 6.0 feet bgs), and TR-28 (at 6.0 feet bgs), the TPH-G concentrations exceed the residential surface soil ESL for TPH-p of 100 mg/kg.

Total lead was detected in all four soil samples analyzed. Total lead concentrations in the samples ranged from 5.6 mg/kg in TR-28 (at 2.0 feet bgs) to a maximum of 14 mg/kg in TR-25 (at 2.0 feet bgs). No total lead concentrations exceed the residential surface soil ESL for lead of 200 mg/kg. No total lead concentrations were greater than ten times the STLC for lead, therefore no soluble lead tests were performed.

PCBs were detected in one soil sample analyzed. Aroclor-1260 was detected in soil sample TR-25 (at 2.0feet bgs) at a concentration of 11 micrograms per kilogram (ug/kg). This concentration is below the residential surface soil ESL for PCBs of 220 ug/kg.

#### 5.4 Groundwater Results

Groundwater was measured in one boring (TR-31) at 9.88 feet bgs. TPH-D was detected in three of four groundwater samples analyzed. TPH-D concentrations ranged from 270 micrograms per liter (ug/l) in TR-31 (GW) to 640 ug/l in TR-30 (GW). All TPH-D detections had laboratory qualifiers indicating that both lighter and heavier hydrocarbons contributed to the total analytical concentration. In one sample, TR-30 (GW), the TPH-D concentration was equal to, but did not exceed the residential groundwater ESL for TPH-D of 640 ug/l.

TPH-MO was also detected in three of four samples analyzed. TPH-MO concentrations ranged from 340 ug/l in TR-29 to a maximum of 1,500 ug/l in TR-31. The TPH-MO detection in TR-29 had a laboratory qualifier indicating that lighter hydrocarbons contributed to the total analytical concentration. In two of the samples, TR-30 (GW) and TR-31 (GW), the TPH-MO concentrations exceed the residential groundwater ESL for TPH-MO of 640 ug/l.

TPH-G was detected in one groundwater sample analyzed. TPH-G was detected in TR-25 (GW) at a concentration of 150,000 ug/l. This concentration is in excess of the residential groundwater ESL of 500 ug/l, and may suggest the presence of free-phase hydrocarbons in the subsurface.

Benzene was detected in one groundwater sample analyzed (TR-25 (GW)) at a concentration of 2,500 ug/l. This concentration exceeds the residential groundwater ESL for Benzene of 46 ug/l.

Toluene was detected in three of four samples analyzed. Toluene concentrations ranged from 0.56 ug/l in TR-29 (GW) to a maximum of 0.85 ug/l in TR-30 (GW). All Toluene concentrations were below the residential groundwater ESL of 130 ug/l.

Ethylbenzene was detected in one sample analyzed (TR-25 (GW)) at a concentration of 3,600 ug/l. This concentration exceeds the residential groundwater ESL for Ethylbenzene of 290 ug/l.

Xylenes were detected in all four samples analyzed. In sample TR-25 (GW), total xylenes were detected at a concentration of 1,720 ug/l. In the remaining three samples, m,p-xylenes were detected at concentrations ranging from 0.57 ug/l in TR-31 (GW) to 0.85 ug/l in TR-30 (GW). In one sample, TR-25 (GW), the total xylenes concentration exceeds the residential groundwater ESL for total xylenes of 13 ug/l.

#### 6.0 CONCLUSIONS

We have completed a Phase II Environmental Site Assessment for the site located 5885 Hollis Street in Emeryville, California. The project site is approximately 220 feet by 550 feet in plan dimension and is bounded by Hollis Street to the east, 59th Street to the north, Peladeau Street to the west, and a Chevron Service Station and Powell Street to the south (Figure 2). The site is currently occupied with four buildings: a one-story concrete building that occupies 5805 through 5885 Hollis Street, a one-story concrete building that occupies 5810 through 5890 Peladeau Street, and two one-story metal-framed buildings that occupy 5805 Hollis Street. The remaining area is asphalt-paved parking.

The results of the Phase II soil and groundwater sampling event (January 2005) are summarized below:

- TPH-D was detected in 17 of 18 soil samples analyzed and three of four groundwater samples analyzed. In TR-31-2.5, the TPH-D concentration exceeds the residential surface soil ESL for TPH-D. TPH-D concentrations in one groundwater sample were equal to, but did not exceed the residential groundwater ESL.
- TPH-MO was detected in 14 of 18 soil samples analyzed and three of four groundwater samples tested. In four soil samples, TR-19-2.5, TR-29-2.0, TR-30-2.0, and TR-31-2.5, TPH-MO concentrations exceed the residential surface soil ESL for TPH-MO. In two groundwater samples, TR-30 (GW) and TR-31 (GW), TPH-MO concentrations exceed the residential groundwater ESL for TPH-MO.

- TPH-G was detected in 7 of 18 soil samples analyzed and one of four groundwater samples analyzed. In three soil samples, TR-20-6.0, TR-25-6.0, and TR-28-6.0, TPH-G concentrations exceed the residential surface soil ESL for TPH-G. In TR-25 (GW), the TPH-G concentration exceeds the residential groundwater ESL and may suggest the presence of free-phase hydrocarbons in the subsurface in the vicinity of boring TR-25.
- Benzene was detected in one groundwater sample, TR-25 (GW), which exceeds the residential groundwater ESL for benzene.
- Toluene was detected in three of four samples analyzed. No concentrations exceed the residential groundwater ESL for toluene.
- Xylenes were detected in all four samples analyzed. In one groundwater sample, TR-25
   (GW), the analytical concentration exceeds the residential ESL for xylenes.
- Total lead was detected in all four samples tested. No detected concentration exceeds the
  residential surface soil ESL for total lead. No total lead concentration was greater than
  ten times the STLC for soluble lead.

Based on these findings, Treadwell & Rollo makes the following recommendations:

- Surface soil exceeding the ESLs for residential property use may require mitigation if the
  future site use includes residential development. If the future development is primarily
  commercial use, the soil and groundwater data collected for this investigation should be
  reviewed to evaluate whether mitigation is appropriate.
- A Soil Management Plan (SMP) may need to be prepared to describe soil handling and disposal procedures during construction to protect worker and public safety.
- The relatively high concentration of benzene in the groundwater at one location (TR-25)
  may require mitigation to control vapors emanating from the groundwater surface.

  Additional investigation may be required to define the lateral extent of benzene
  concentrations in groundwater.

#### 7.0 LIMITATIONS

Treadwell & Rollo performed this assessment in accordance with our proposal to Wareham Development., dated 30 December 2004. The screening level approach to site evaluation utilized in this investigation has inherent limitations. For example, the distribution of chemical concentrations in the soil can vary spatially and over time. The chemical analysis results, valid as of the time of collection, are based on data collected at the sample locations only.

All conclusions and recommendations in this report concerning the subject property are the professional opinions of the Treadwell & Rollo, Inc., personnel involved with the project, and this report should not be considered a legal interpretation of existing environmental regulations. Opinions presented herein apply to site conditions existing at the time of our assessment, and cannot necessarily be taken to apply to site changes or conditions of which we are not aware and have not had the opportunity to evaluate.

#### REFERENCES

California Code of Regulations, Title 22, Section 66261.24: Characteristic of Toxicity.

California Regional Water Quality Control Board, 2003: Screening for Environmental Concerns At Sites With Contaminated Soil and Groundwater, Interim Final – July 2003(Updated 2004), July 2003.

Treadwell & Rollo, Inc., 2000: Environmental SiteCharacterizationt, 5885 Hollis Street, Emeryville, California, dated 12 May 2000.

Weiss Associates, 1995: Environmental Site Assessment of Emeryville Industrial Court, Emeryville, California, dated 14 March 1995.

# **Table 1 Chemical Compounds in Soil Samples**

Emeryville Industrial Court 5885 Hollis Street

Emeryville, California

Sample	Sample	TPH-D	ТРН-МО	TPH-G	Aroclor-1260	Other PCBs	Lead
ID	Date	mg/kg	mg/kg	mg/kg	ug/kg	ug/kg	mg/kg
TR-19-2.5'	1/20/05	97 H Y	910	< 1.0	NA	NA	NA
TR-19-6.0'	1/20/05	< 1.0	< 5.0	< 1.1	NA	NA	NA
TR-20-2.0'	1/20/05	65 L Y	26 H	15	NA	NA	NA
TR-20-6.0'	1/20/05	320 L	22 L	500 Y	NA	NA	NA
TR-21-2.0'	1/20/05	1.7 H Y	< 5.0	< 1.0	NA	NA	NA
TR-21-6.0'	1/20/05	69 H L	42 L	19	NA	NA	NA
TR-22-2.0'	1/20/05	5.5 H Y	32	< 1.0	NA	NA	NA
TR-22-6.0'	1/20/05	8.5 H Y	10 H L	1.7 L Y	NA	NA	NA
TR-25-2.0'	1/20/05	11 H Y	62	< 1.1	11	ND	14
TR-25-6.0'	1/20/05	44 H L Y	16	2,100 Y	NA	NA	ΝA
TR-28-2.0'	1/20/05	4.3 H Y	54	< 0.93	< 9.6	ND	5.6
TR-28-6.0'	1/20/05	140 H L Y	280	160 Y	NA	NA	NA
TR-29-2.0'	1/20/05	160 H Y	1,600	< 1.0	NA	NA	9.2
TR-29-6.0'	1/20/05	2.8 H Y	6.6 L	< 1.1	NA	NA	NA
TR-30-2.0'	1/20/05	65 H Y	510	< 1.1	NA	NA	11
TR-30-6.0'	1/20/05	63 L	< 5.0	2.8 H Y	NA	NA	NA
TR-31-2.5'	1/20/05	1,100 H L Y	2,700	< 1.0	NA	NA	NA
TR-31-6.0'	1/20/05	3.1 H L Y	< 5.0	< 1.1	NA	NA	NA

Results presented in units indicated at top of table, mg/kg = milligrams per kilogram (parts per million), ug/kg = micrograms per kilogram (parts per billion)

TPH-G = Total Petroleum Hydrocarbons quantified as gasoline

TPH-D = Total Petroleum Hydrcarbons quantified as diesel fuel

TPH-MO = Total Petroleum Hydrocarbons quantified as motor oil

PCBs = Polychlorinated Biphenyls

ND = Not detected at or greater than laboratory detection limit which varies, see laboratory report

< 1 = indicates not detected at the indicated laboratory detection limit

Y = Laboratory flag indicating sample exhibits chromatographic pattern which does not resemble standard

H = Laboratory flag indicating heavier hydrocarbons contributred to quantitation

L = Laboratory flag indicating lighter hydrocarbons contributed to quantitation

 $N\dot{A} = not analyzed$ 

# Table 2 Organic Compounds in Groundwater Samples

# Emeryville Industrial Court 5885 Hollis Street

Emeryville, California

Sample	Sample	TPH-D	ТРН-МО	TPH-G	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Other VOCs
ID	Date	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
TR-25 (GW)	1/20/05	NA	NA	150,000 Y	2,500	< 10	3,600	1,100	620	NA
TR-29 (GW)	1/20/05	280 H Y	340 L	< 50	< 0.5	0.61 C	< 0.5	0.60 C	< 0.5	NA
TR-30 (GW)	1/20/05	640 H Y	960	< 50	< 0.5	0.85 C	< 0.5	0.85 C	< 0.5	NA
TR-31 (GW)	1/20/05	270 H Y	1,500	< 50	< 0.5	0.56 C	< 0.5	0.57 C	< 0.5	ND

Results presented in units indicated at top of table.

ug/l = micrograms per liter (parts per billion)

TPH-G = Total Petroleum Hydrocarbons quantified as gasoline

TPH-D = Total Petroleum Hydrcarbons quantified as diesel fuel

TPH-MO = Total Petroleum Hydrocarbons quantified as motor oil

VOCs = Volatile Organic Compounds (see laboratory data sheets for complete list of VOCs analyzed)

< 1 = indicates not detected at the indicated laboratory detection limit

ND = Not detected at or greater than the laboratory detection limit which varies, see laboratory report

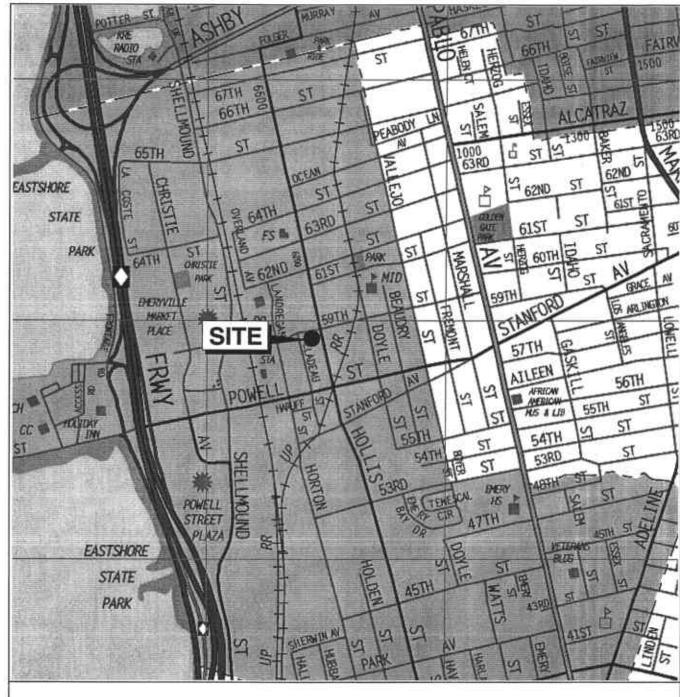
C = Presence confirmed, but RPD (Relative Percent Difference) between columns exceeds 40%

Y = Laboratory flag indicating sample exhibits chromatographic pattern which does not resemble standard

H = Laboratory flag indicating heavier hydrocarbons contributed to quantitation

L = Laboratory flag indicating lighter hydrocarbons contributed to quantitation

NA = not analyzed



Base map: The Thomas Guide Alameda County 1999



No scale

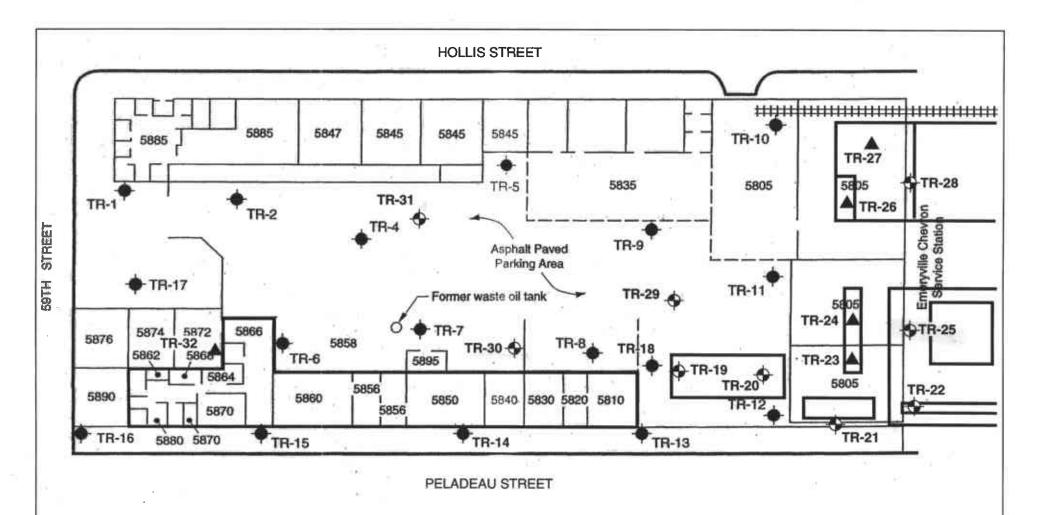
EMERYVILLE INDUSTRIAL COURT Emeryville, California

Treadwell&Rollo

SITE LOCATION MAP

Date 02/15/05 | Project No. 4069.01

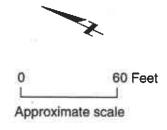
Figure 1



#### **EXPLANATION**

- TR-1 Approximate location of previous exploratory boring by Treadwell & Rollo, Inc.
- TR-23 A Proposed sampling locations that could not be accessed because of current buildings

Bold lines indicate former facility locations



# 5885 HOLLIS STREET

Emeryville, California

### SITE PLAN

Date 03/03/05 Project No. 4069.01

Figure 2

Treadwell&Rollo

		_	_		_	_	ville, California	Log of Bor		PAGE	1 OF
_	g location			Site I	Plan	Figu			Logged by: Drilled By:	E. Deratzian Precision Sampli	ina In
-	started:	10000	TI A CT		_		Date finished: 1/20/05		Dillieu by.	1 10031011 Oaitipii	ng m
	ng method			Push	1						
_	mer weig	1000000000	_	**			Hammer type:				
Sam	oler: Co			Core		1.00					
9	SA	MPL	-	20	OVM (ppm)	LITHOLOGY	M	ATERIAL DESCRIP	TION		
(feet)	Sample Number	Sample	Blow	Recovery (inches)	MM	150	935				
-	-	69		20	-	2	ASPHALT				
1-		220				П	NO RECOVERY				
2-		•									
70	TR-19-2.5	E A	-			SW	SAND with CLAY (SW)				_
3-		П	1			CL	\ yellow-brown, medium	dense, moist, subround	ed, well grade	ed, no odor, 90	
4-		Ш					percent fine to coarse s CLAY (CL)	and, 10 percent fines			_
5-		Ш					green-gray, medium stit	f, moist, very plastic, n	o odor, 5 perc	ent fine sand, 95	
6-	TR-19-6.0	Щ	-			CL	SILTY CLAY with GRAY	/EL (CL)			
7-	16-15-0.0	Ш	Ė				green-gray with orange percent fine sand, 85 per	mottling, stiff, moist, pla	astic, no odor,	10 percent grave	l, 5
							percent line sand, 65 pe	ercent lines			
8-											
9-											
0-							91				
1-											
2-											
3-											
4-						H					
5-						1 1					
6-											
7-											
200											
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3-											
4-											
5-											
6-											
7-											
										12	
8-											
9-											
0											
	g terminated g backfilled							T T	Troo	dwell&Rol	6
	ncountered	during	drilling	7.		ons only		L	Project No.:	MACIOUM	U

Borin	g location	1:	See	Site	Plan	Figu	re 2	*	Logged by: E. Mo	PAGE 1 OF
Date	started:	E. Property	100 200 2				Date finished: 1/20/05		Drilled By: Precis	ion Sampling Inc.
	ng method	_			1		**			
	mer weigl				_		Hammer type: -			
	oler: Co	ntinu MPL		Core						
(feet)	Sample Number	Sample	Blow	Recovery (inches)	OVM (ppm)	LITHOLOGY	М	ATERIAL DESCRIP	TION	
1-	_			a. –	450		ASPHALT CONCRETE SLAB			
2-	TR-20-2.0	SUM CO	- 1			SP	SAND (SP)			
3-							gray, medium dense, r	noist, subrounded, mod 5 percent fines	erately graded, no od	or, 85 percent
5-						CL	CLAY (CL) brown, stiff, moist, very percent fine sand, 90 p strong hydrocarbon od	r plastic, weak hydrocar percent fines or from 4 to 7 feet	bon odor from 2.0 to	4.0 feet, 10
6- 7-	TR-20-6.0		-			CL	CLAY (CL) green-gray, stiff, moist 95 percent fines	, very plastic, strong hyd	drocarbon odor, 5 per	cent fine sand,
8-										
9-										
10-										
11-										
12-										
13-										
14-										
15-										
6-									3	
17-										
18-										
19- 20-										
21-										
22-										
23-									2	
24-										
25-										
26-										
27-										
28-										
29-										
30										
Borir Borir	ig terminater ig backfilled incountered	with c	ement	grout					Treadwe	NI&Rollo
	properties ba				srvatio	ons onl			Project No.: 4069.01	Figure: A-:

**EMERYVILLE INDUSTRIAL COURT** PROJECT: **Log of Boring TR-21** 5885 HOLLIS STREET Emeryville, California PAGE 1 OF 1 Boring location: See Site Plan, Figure 2 Logged by: E. Morita Drilled By: Precision Sampling Inc. Date started: 1/20/05 1/20/05 Date finished: Drilling method: Direct Push Hammer weight/drop: --Hammer type: --Sampler: Continuous Core SAMPLES LITHOLOGY DEPTH (feet) MATERIAL DESCRIPTION Blow DVM. Number SM SILTY SAND (SM) medium brown, loose, moist, subangular, slightly plastic, poorly graded, no odor, 1 ML 90 percent sand, 10 percent fines SANDY SILT (ML) TR-21-2.0 CL gray-black, very soft, moist, slightly plastic, poorly graded, no odor, 70 percent sand, 30 percent fines
GRAVELLY CLAY (CL)
black, medium stiff, wet, plastic, poorly graded, no odor, 15 percent gravel, 5 ML 3 percent fine sand, 80 percent fines CL 5 SANDY SILT (ML) light brown, soft, moist, subangular, slightly plastic, moderately graded, no odor, 25 percent sand, 75 percent fines SILTY CLAY (CL) 6 TR-21-6.0 7light brown, soft to medium stiff, moist, subrounded, plastic, no odor, 10 percent sand, 90 percent fines 8-9-10-12-13-14-15-16-17-18-19-20-21-22-23-24-GPJ T&R GDT 3/3/05 25-26-27-28-29-Boring terminated at 6.5 feet below ground surface, Boring backfilled with cement grout. Groundwater was Treadwell&Rollo not encountered during drilling. Soil properties based on visual observations only. Project No.: 4069.01

			INDUSTRIAL COURT DLLIS STREET ville, California	Log of Bor	ing TR-22
Boring location: See	e Site Pla	an, Figur	e 2		Logged by: E. Morita
Date started: 1/20/05	i		Date finished: 1/20/05		Drilled By: Precision Sampling Inc.
Drilling method: Han	d Auger				
Hammer weight/drop:	-		Hammer type: -		
Sampler: 2x6 Stainle		Samplin	g Tube		
SAMPLES  Sample Number & Management & Manage	Recovery (inches)	гиногову	M	ATERIAL DESCRIP	TION
1- 2- TR-22-2.0	<u> </u>	CL	ASPHALT CLAY with SAND (CL) dark brown, moist, sub- percent fines	angular, slightly plastic,	no odor, 25 percent fine sand, 75
3- 4- 5-		CL	Concrete slab from 2.5 CLAY with SILT and so yellow-brown, medium gravel, 5 percent sand,	me GRAVEL (CL) stiff, moist, plastic, mod	erately graded, no odor, 15 percent
7— 8— 9—					₽ S
10-					
12					
13-					
14-					
15-					
16-					
17-					
18-		11			
19-					
20-					
21-					
22-		11			
23-					8
24-					
25-					
26-					
27—					
28-					
29-					
1010					

Boring location: S	ee Site Plan, Fi	gure 2	Logged by: E. N	PAGE 1 OF 1
Date started: 1/20/		Date finished: 1/20/05	Drilled By: Pre	cision Sampling Inc.
Drilling method: Ha	nd Auger			
Hammer weight/drop	o:	Hammer type:		
	iless Steel Sam	pling Tube		
SAMPLE Sample Number	Count (Sount (Inches) (Inches)	MATE	RIAL DESCRIPTION	
1-		ASPHALT SANDY CLAY with GRAVE dark brown-black, soft, mois	L (CL) st, subrounded, slightly plastic, moder percent sand, 65 percent fines	ately graded, no
7R-25-2.0	C			19
5-	<u> </u>	olive green mottled with tan	, medium stiff, moist, slightly plastic, n on odor, 10 percent gravel, 15 percent	noderately t fine sand, 75
7— 8—	C	CLAY with SAND (CL)	ightly plastic, poorly graded, strong hy rcent fines	/drocarbon odor,
9	c	olive mottled with light brow	n, stiff, moist to wet, subangular, plast	tic, poorly
10-		□ \ graded, weak hydrocarbon	odor, 15 percent gravel, 5 percent fine fragments throughout, slight sheen of	e sand, 80
11-				5.4
12-				
8/69		× ×		
14-				
15-				
16-				
17-				
18-				
19-				
20-				
21-				
22-				
23-				
24-				
25—				
26-				
27-				3
28-				9
20				5.4
29-				8
19/20		rface,	Tracdu	eli&Rollo

PRO	DJECT;			EME	51	385 HC	INDUSTRIAL COURT DLLIS STREET ille, California	Log of Bor	ing TR-28	PAGE 1 OF
Borin	g location	n:	See	Site	_	, Figure		1.	Logged by: E. M	orita
Date	started:	1/2	-				Date finished: 1/20/05		Drilled By: Pred	ision Sampling Inc.
Drillin	ng metho	d: 1	Hand	Auge	er					
Ham	mer weig	ht/di	rop:				Hammer type: -			
Sam	pler: 2x	6 St	ainles	s Ste	el S	amplin	g Tube			
Ξ_	SA	MP	LES		ê	λĐ		ATERIAL DESCRIP	TION	
(feet)	Sample Number	Sample	Blow	Recovery (inches)	OVM (ppm)	гтногосу	Wi	ATERIAL DESCRIP	TION	
1-	TR-28-2.0	İ				CL	ASPHALT CLAY with SAND (CL) gray to black, soft, wet, fines	plastic, no odor, 10 pe	rcent medium sand,	90 percent
3- 4-					v	CL	CLAY with GRAVEL (C yellow-brown, subangu percent gravel, 10 perc	L) lar, slightly plastic, mois ent medium sand, 78 p	st, weak hydrocarbo ercent fines	on odor, 12
5- 6- 7-	TR-28-6.0		F			CL	CLAY (CL) olive, plastic, moist, me sand, 80 percent fines	edium to strong hydroca	rbon odor, 20 perce	ent medium
8- 9- 10- 11- 12- 13- 15- 16- 17- 18- 19- 20- 21-										7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
22-										
23-		1								
24-									#1	
25-										
26-										
27-										
28-										
29-										
Borit	ng terminate ng backfilled encountered	with	cemen:	l grout.	groun Gro	d surface undwaler	a. Was		Treadw	ell&Rollo
	properties b				ervatio	ons only,			Project No.: 4069.01	Figure:

**EMERYVILLE INDUSTRIAL COURT** PROJECT: Log of Boring TR-29 **5885 HOLLIS STREET** Emeryville, California PAGE 1 OF 1 Logged by: E. Deratzian See Site Plan, Figure 2 Boring location: Drilled By: Precision Sampling Inc. Date started: 1/20/05 Date finished: 1/20/05 Drilling method: Direct Push Hammer weight/drop: --Hammer type: Sampler: Continuous Core SAMPLES LITHOLOGY DEPTH MATERIAL DESCRIPTION (feet) ASPHALT SAND with GRAVEL (SP) SP brown, loose, moist, subrounded, moderately graded, no odor, 10 percent gravel, 85 percent fine to medium sand, 5 percent fines 2. TR-29-2.0 CLAY with SILT (CL) CL black, medium stiff, moist, non-plastic, no odor, 10 percent fine sand, 90 percent 3. CLAY with GRAVEL (CL) orange-brown, medium stiff, moist, subrounded to subangular, slightly plastic, no 5odor, 15 percent gravel, 5 percent fine to medium sand, 80 percent fines, angular chert fragments throughout 6 TR-29-6.0 7-8-CL 10-11-12-13~ 14-15-16-17-18-19-20-21-22-23 24-406901.GPJ T&R.GDT 3/3/05 25-26-27-28-29-Boring terminated at 13.0 feet below ground surface Boring backfilled with coment grout. Soil properties based on visual observations only. Treadwell&Rollo 4069.01

Pori-	ng locatio	n.	Q <sub>0</sub>	Site			ville, California	Log of Bor	Logged by: E. Deratzian	GE 1 OF
750 111	started:	_	-	SILE	riaii	rigu	Date finished: 1/20/05		Drilled By: Precision Sa	i ampling Inc.
	ng metho			t Pusi	h		pate milonos. mzoros		ķī	
	mer weig		100000	-			Hammer type:			
Sam	pler: Co	ntir	nuous	Core						
Ξ.	SA	AMP	LES		(w	ď	04.00	*************************	TION	
(feet)	Sample Number	Sample	Blow	Recovery (inches)	OVM (ppm)	гиногоду	M	ATERIAL DESCRIP	TION	
1-		П				sw	ASPHALT GRAVELLY SAND (SW brown, loose moist su	/) brounded to subangula	r, well graded, no odor, 20	percent
2-	TR-30-2.0					CL	gravel, 75 percent fine CLAY with SILT (CL)	to coarse sand, 5 perce	nt fines	
3-			T			CL			, 10 percent fine sand, 90 μ	percent
5-							orange-brown, stiff, mo gravel, 5 percent fine to	ist, subrounded to suba	ngular, plastic, no odor, 15 ent fines, angular chert thro	percent oughout
6— 7— 8—	TR-30-6.0					CL	CLAY (CL) gray, stiff, moist, weak 95 percent fines	hydrocarbon odor starti	ng at 5.5 feet, 5 percent find	e sand,
9— 10— 11—				-		CL	CLAY with GRAVEL (C brown with gray mottlin weak hydrocarbon odor percent fines	g, stiff, moist, subround	ed to subangular, slightly p gravel, 5 percent fine sand,	lastic, , 85
12— 13—	1	Ш	+							
14— 15—										
16-										
17-										
18-										
19-										
20-										
21-										
22-										
23-										
24-										
25-										
26										
27-										
28-										8
29-										3
30 -	ıg terminate	d at 1	13.0 fe	t below	grou	nd surf	ace.	10		
Borir	g backfilled properties be	with	cemen	f grout.					Treadwell&F	Tollo
									Project No.: Figure:	A-1

PR(	DJECT:				5	885	E INDUSTRIAL COURT HOLLIS STREET yville, California	Log of Bor	ing TR-31	PAGE 1 OF
Borin	ng locatio	n:	See	Site	Plar	ı, Fig	ure 2		Logged by: E. D	eratzian
Date	started:	1/2	0/05	9			Date finished: 1/20/05	7	Drilled By: Pred	ision Sampling Inc
Drilli	ng metho	d: [	Direct	t Pust	1					
	mer weig		_	-			Hammer type:			
Sam	pler: Co			Core		List				
(feet)	Sample Number	MPI Sample	Blow	Recovery (inches)	OVM (ppm)	птногост	M	ATERIAL DESCRIP	TION	
1-				æ	- 5		ASPHALT NO RECOVERY			
3-	TR-31-2.5		E			SW	SAND with GRAVEL (S brown, loose, moist, su percent fine to coarse s	brounded to subangula	r, well graded, 15 pe	ercent gravel, 80
5- 6-	TR-31-6.0					CL	CLAY with SILT (CL) black, stiff, moist, non-p percent fines NO RECOVERY		oon odor, 10 percen	t fine sand, 90
7- 8-						CL	CLAY with SILT (CL) yellow-brown with orang percent fine sand, 90 per CLAY with GRAVEL (Colive-brown with orange	ercent fines L)		/
9— 10—							gravel, 5 percent fine sa  CLAY (CL)  yellow-brown with gray	and, 85 percent fines		
11— 12— 13—						CL	percent fine sand, 90 pe	ercent fines	noist, slightly plastic	s, 110 odor, 10
14-										il c
16-										
17-										
18-										
19-										
20-										
21-										
22-										
23-										
24-										
25-										
26-										
27.0										
27-										
28-										
29-										
Borin enco	g terminated g backfilled untered at a	with c depth	ement of 9.8	grout. 8 feet d	Ğrot Juring	ındwat g drillin	er was g		Treadwo	eli&Rollo
Soil p	properties ba	sed o	n visu	al obse	rvatic	ns oni	y.		Project No.: 4069.01	Figure: A-

.

			UNIFIED SOIL CLASSIFICATION SYSTEM
M	ajor Divisions	Symbols	Typical Names
200		GW	Well-graded gravels or gravel-sand mixtures, little or no fines
Soils > no. 2	Gravels (More than half of	GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
(More than half of coarse fraction > no. 4 sieve size)  Sands (More than half of coarse fraction < no. 4 sieve size)		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
		sw	Well-graded sands or gravelly sands, little or no fines
arse	(More than half of	SP	Poorly-graded sands or gravelly sands, little or no fines
8 5	coarse fraction < no. 4 sieve size)	SM	Silty sands, sand-silt mixtures
Ĕ	110. 4 31646 3126)	sc	Clayey sands, sand-clay mixtures
soil soil		ML	Inorganic silts and clayey silts of low plasticity, sandy silts, gravelly silts
0 0 0	Silts and Clays LL = < 50	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
half Sieve		OL	Organic silts and organic silt-clays of low plasticity
Grained than half 200 sieve		МН	Inorganic silts of high plasticity
Fine -Grained (more than half < no. 200 sieve	Silts and Clays LL = > 50	СН	Inorganic clays of high plasticity, fat clays
E E V		ОН	Organic silts and clays of high plasticity
Highly	y Organic Soils	PT	Peat and other highly organic soils

GRAIN SIZE CHART									
	Range of Gra	ain Sizes							
Classification	U.S. Standard Sieve Size	Grain Size in Millimeters							
Boulders	Above 12"	Above 305							
Cobbles	12" to 3"	305 to 76.2							
Gravel coarse fine	3" to No. 4 3" to 3/4" 3/4" to No. 4	76.2 to 4.76 76.2 to 19.1 19.1 to 4.76							
Sand coarse medium fine	No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40 No. 40 to No. 200	4.76 to 0.074 4.76 to 2.00 2.00 to 0.420 0.420 to 0.074							
Silt and Clay	Below No. 200	Below 0.074							

Unstabilized groundwater level Stabilized groundwater level

## SAMPLE DESIGNATIONS/SYMBOLS

Sample taken with split-barrel sampler other than Standard Penetration Test sampler. Darkened area indicates soil recovered

Classification sample taken with Standard Penetration Test sampler

Undisturbed sample taken with thin-walled tube

Disturbed sample

Sampling attempted with no recovery

Core sample

Analytical laboratory sample

Sample taken with Direct Push sampler

#### **SAMPLER TYPE**

- С Core barrel
- CA California split-barrel sampler with 2.5-inch outside diameter and a 1.93-inch inside diameter
- D&M Dames & Moore piston sampler using 2.5-inch outside diameter, thin-walled tube
- 0 Osterberg piston sampler using 3.0-inch outside diameter, thin-walled Shelby tube
- PT Pitcher tube sampler using 3.0-inch outside diameter, thin-walled Shelby tube
- Sprague & Henwood split-barrel sampler with a 3.0-inch S&H outside diameter and a 2.43-inch inside diameter
- SPT Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside diameter and a 1.5-inch inside diameter
- Shelby Tube (3.0-inch outside diameter, thin-walled tube) advanced with hydraulic pressure

### **EMERYVILLE INDUSTRIAL COURT**

Emeryville, California

#### **CLASSIFICATION CHART**

Treadwell&Rollo

Date 02/15/05 Project No. 4069.01 Figure A-10



	Curtis & Tompkins Labor	atories Analyt	ical Report
Lab #: Client:	177265 Treadwell & Rollo	Location: Prep:	Emeryville Industrial Ct EPA 5030B
Project#: Matrix:	4069.01 Water	Sampled:	01/20/05
Units: Batch#:	ug/L 98469	Received:	01/20/05

Field ID: Type: Lab ID:

TR-29(GW) SAMPLE 177265-013 Diln Fac: Analyzed: 1.000 01/20/05

Analyte
Gasoline C7-C12 Résult Analysis EPA 8015B EPA 8021B ND 50 0.50 Benzene ND Toluene 0.61 C 0.50 EPA 8021B Ethylbenzene ND 0.50 0.50 EPA 8021B m,p-Xylenes o-Xylene EPA 8021B 0.60 C <u>0.š</u>ŏ ND EPA 8021B

Surrogate	*REC	dimits:	ne la Analysis
Trifluorotoluene (FID)	116	70-141	EPA 8015B
Bromofluorobenzene (FID)	120	80-143	EPA 8015B
Trifluorotoluene (PID)	97	59-133	EPA 8021B
Bromofluorobenzene (PID)	103	76-128	EPA 8021B

Field ID: Type: Lāb ID:

TR-30(GW) SAMPLE 177265-014 Diln Fac: Analyzed:

1.000 01/20/05

. Analyt	e Resu	lt.			Analysis
Gasoline C7-C12	ND		50	EPA	8015B
Benzene	ND		0.50	EPA	8021B
Toluene	(	0.85 C	0.50	EPA	8021B
Ethylbenzene	ND		0.50	EPA	8021B
m,p-Xylenes	(	0.85 C	0.50	EPA	8021B
o-Xylene	ND		0.50	EPA	8021B

o con Estado — Sitrodologaisê	*REC	Limits	Analysis	o a calle a cara a cara e e e e e e e e e e e e e e e e e e
Trifluorotoluene (FID)	115	70-141	EPA 8015B	
Bromofluorobenzene (FID)	121	80-143	EPA 8015B	
Trifluorotoluene (PID)	93	59-133	EPA 8021B	
Bromofluorobenzene (PID)	102	76-128	EPA 8021B	

b= See narrative
ND= Not Detected
RL= Reporting Limit

<sup>\*=</sup> Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard

<sup>&</sup>gt;LR= Response exceeds instrument's linear range Page 1 of 3



	Curtis & Tompkins Labo	ratories Analyt	acal Report
Lab #: Client: Project#:	177265 Treadwell & Rollo 4069.01	Location: Prep:	Emeryville Industrial Ct EPA 5030B
Matrix: Units: Batch#:	Water ug/L 98469	Sampled: Received:	01/20/05 01/20/05

Field ID:

TR-31 (GW) SAMPLE

Diln Fac: Analyzed:

1.000 01/21/05

Type: Lab ID:

177265-015

Analyte	Resultable (February	RIC CONTRACTOR	Analysis	
Gasoline C7-C12	ND	50	EPA 8015B	
Benzene	ND	0.50	EPA 8021B	
Toluene	0.56 C	0.50	EPA 8021B	
Ethylbenzene	ND	0.50	EPA 8021B	
m,p-Xylenes	0.57 C	0.50	EPA 8021B	
o-Xylene	ЙD	0.50	EPA 8021B	

Surrogatè	*REC	Limits	Analys	5
Trifluorotoluene (FID)	117	70-141	EPA 8015B	
Bromofluorobenzene (FID)	123	80-143	EPA 8015B	
Trifluorotoluene (PID)	93	59-133	EPA 8021B	
Bromofluorobenzene (PID)	101	76-128	EPA 8021B	

Field ID:

TR-25 (GW) SAMPLE 177265-020 Diln Fac: Analyzed: 20.00 01/21/05

Type: Lab ID:

Analyte	Result .	RL	Analysis	
Gasoline C7-C12	150,000 Y	1,000	EPA 8015B	
Benzene	2,500	10	EPA 8021B	
Toluene	ND	10	- EPA 8021B	
Ethvlbenzene	3,600	10	EPA 8021B	
m,p-Xylenes	1,100	. 10	EPA 8021B	
o-Xylene	620	10	EPA 8021B	

. Surrogate	ARDC Limits Anglysis
Trifluorotoluene (FID)	158 * 70-141 EPA 8015B
Bromofluorobenzene (FID)	232 * >LR b 80-143 EPA 8015B
Trifluorotoluene (PID)	123 59-133 EPA 8021B
Bromofluorobenzene (PID)	149 * 76-128 EPA 8021B

<sup>\*=</sup> Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40% Y= Sample exhibits chromatographic pattern which does not resemble standard b= See narrative ND= Not Detected

RL= Reporting Limit >LR= Response exceeds instrument's linear range Page 2 of 3



	Curtis & Tompkins Labor	atories Analyt	ical Report
Lab #: Client: Project#:	177265 Treadwell & Rollo 4069.01	Location: Prep:	Emeryville Industrial Ct EPA 5030B
Matrix: Units: Batch#:	Water ug/L 98469	Sampled: Received:	01/20/05 01/20/05

Type: Lab ID:

BLANK QC280081 Diln Fac: Analyzed:

1.000 01/20/05

B. Analyte	Result : In the Result : In the Inc.	id a grad ( <b>RII</b> ) ballak aras a	Analysi	<b>.</b>
Gasoline C7-C12	ND	50	EPA 8015B	
Benzene -	ND	0.50	EPA 8021B	
Toluene	ИD	0.50	EPA 8021B	
Ethylbenzene	ND	0.50	EPA 8021B	
m,p-Xylenes	ND	0.50	EPA 8021B	
o-Xylene	ND	0.50	EPA 8021B	

Surrogate	*REC	Limits	Analysi	S
Trifluorotoluene (FID)	117	70-141	EPA 8015B	
Bromofluorobenzene (FID)	121	80-143	EPA 8015B	
Trifluorotoluene (PID)	104	59-133	EPA 8021B	
Bromofluorobenzene (PID)	107	76-128	EPA 8021B	

<sup>\*=</sup> Value outside of QC limits; see narrative C= Presence confirmed, but RPD between columns exceeds 40%

Y= Sample exhibits chromatographic pattern which does not resemble standard b= See narrative
ND= Not Detected
RL= Reporting Limit
>LR= Response exceeds instrument's linear range
Page 3 of 3



Total Volatile Hydrocarbons Emeryville Industrial Ct EPA 5030B Location: Lab #: Client: Treadwell & Rollo Prep: EPA 8015B 98470 Project# 4069.01 <u>Analysis</u> Matrix: Soil Batch#: 01/20/05 mg/Kg Units: Sampled: Basis: as réceived Received: 01/20/05

Field ID:

TR-19-2.51 SAMPLE

Diln Fac: Analyzed:

1,000 01/20/05

Type: Lab ID:

177265-001

Analyte	Result
Canolino C7-C12	ND

 Surrogate Trifluorotoluene (FID) 95 Bromofluorobenzene (FID)

Field ID:

TR-19-6.0' SAMPLE

Diln Fac:

1.000 01/20/05

Type: Lab ID:

177265-002

Analyte

Analyzed:

Gasoline C7-C12 ND AREC Limits Siligrogate

Trifluorotoluene (FID) 92 92 68-135 75-148 Bromofluorobenzene (FID)

Field ID:

TR-20-2.0'

Diln Fac:

1.000

Type: Lab ID:

SAMPLE 177265-003 Analyzed:

01/21/05

Analyte
Gasoline C7-C12 Result

Surrogate : Surrogate	%REC	Limits	
Trifluorotoluene (FID)	103	68-135	
Bromofluorobenzene (FID)	102	75-148	

Field ID:

TR-20-6.0'

Diln Fac:

25.00

Type: Lab ID:

SAMPLE 177265-004 Analyzed:

01/21/05

Analyte	Result	RL	
Gasoline C7-C12	500 Ý	25	

Surzogate	AREC Limits	ane by 1000 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 -
Trifluorotoluene (FID)	152 * 68-135	
Bromofluorobenzene (FID)	141 75-148	

\*= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected

RL= Reporting Limit Page 1 of 5



Total Volatile Hydrogarbons Emeryville Industrial Ct EPA 5030B EPA 8015B 98470 Location: Lab #: Treadwell & Rollo Client: Prep: Project#: 4069.01 Analysis: Batch#: Soil Matrix: Sampled: 01/20/05 01/20/05 mg/Kg Units: Basis: as received Received:

Field ID: Type:

TR-21-2.0'

SAMPLE

177265-005

Diln Fac: Analyzed: 1.000 01/20/05

Lấb ID:

Mali Enter A re	, napulu		
Gasoline C7-C12	ND	1.0	
			•
Surrogate	*RBC Limits		

Trifluorotoluene (FID) 68-135 75-148 Bromofluorobenzene (FID)

Field ID: Type:

TR-21-6.0'

SAMPLE

177265-006

Diln Fac: Analyzed:

1.000 01/20/05

Lab ID: Arial Vice Result

Gasoline C7-C12	19	1.1
Trifluorotoluene (FID)	142 * 68-135	
Bromofluorobenzene (FID)	112 75-148	

Field ID:

TR-29-2.0'

Type: Lāb ID: SAMPLE 177265-007 Diln Fac:

1.000

Analyzed:

01/20/05

Analyte		Result	<b>P</b> 0.	
Surrogate	458(	Limits		
Trifluorotoluene (FID) Bromofluorobenzene (FID)	95 95	68-135 75-148		

Field ID: Type: Lab ID:

TR-29-6.0'

SAMPLE

177265-008

Diln Fac:

1.000

Analyzed:

01/21/05

and Vite	Result	RL 52
Gasoline C7-C12	ND -	1,1

Surrogate	1RE	2 Limits	
Trifluorotoluene (FID)	97	68-135	
Bromofluorobenzene (FID)	96	75-148	

\*= Value outside of QC limits; see narrative

H= Heavier hydrocarbons contributed to the quantitation L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit Page 2 of 5

6.0



Total Volatile Hydrocarbons Emeryville Industrial Ct EPA 5030B Location: Lab #: 177265 Treadwell & Rollo Client: Prep: EPA 8015B 98470 01/20/05 01/20/05 Project#: 4069.01 <u>Analysis</u> Matrix: Soil Batch#: mg/Kg Units: Sampled: as réceived Received: Basis:

Field ID:

TR-30-2.0' SAMPLE

Diln Fac: Analyzed: 1.000 01/21/05

Type: Lab ID:

177265-009

Analyte	Résult:	Riv	
Gasoline C7-C12	ND	1.1	

Block - 4 - 1 to 25 - 5 to 5 to 5 co 5 co 5 to 5 co	*RE(	Limits	Na dia tao
Trifluorotoluene (FID)	100	68-135	
Bromofluorobenzene (FID)	100	75-148	

Field ID:

TR-30-6.0' SAMPLE

Diln Fac: Analyzed:

1.000 01/21/05

Type: Lab ID:

177265-010

Analyte
Gasoline C7-C12

			•
ANY Surrogate	Contraction of the Contraction o	SPACE OF CLUMB ALL AND COMPANY	
	O FUE		
Trifluorotoluene (FID)	89	68-135	
	0.2	76_140	
Bromofluorobenzene (FID)	92	75-148	

Field ID:

TR-31-2.5' SAMPLE

Diln Fac:

1.000 01/21/05

Type: Lãb ID: 177265-011

Analyzed:

E Analyte	Result -		A.	
Gasoline C7-C12	ИD	· · · · · · · · · · · · · · · · · · ·	1.0	 
Surrogate Surrogate	VREC Limits	aran a sa sa sa sa 32000.		

Succonate	*RE	C Limits	man i de la companya
Trifluorotoluene (FID)	89	68-135	
Bromofluorobenzene (FID)	9 <u>1</u>	75-148	

Field ID:

Gasoline C7-C12

TR-31-6.0' SAMPLE

Diln Fac:

1.000 01/21/05

Type: Lab ID:

177265-012

Analyte

Analyzed:

ed Surviciate	8RI	EC Limits	
Trifluorotoluene (FID)	96	68-135	
Bromofluorobenzene (FID)	98	75-148	

ND

<sup>\*=</sup> Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit Page 3 of 5



Total Volatile Hydrocarbons Emeryville Industrial Ct EPA 5030B Lab #: Location: Prep: Analysis: Client: Treadwell & Rollo EPA 8015B 98470 Project#: 4069.01 Batch#: Matrix: Soil 01/20/05 mg/Kg Units: Sampled: Basis: as received Received: 01/20/05

Field ID:

TR-22-2.0'

SAMPLE

Diln Fac: Analyzed: 1.000 01/21/05

Type: Lab ID:

177265-016

Analyte	Result	
Gasoline C7-C12	ND	1.0

Succession in the second secon	* PRE	C Limits	
Trifluorotoluene (FID)	97	68-135	1
Bromofluorobenzene (FID)	99	.75-148	

Field ID:

TR-22-6.0'

SAMPLE

Diln Fac:

1.000 01/21/05

Type: Lab ID:

177265-017

Analyzed:

Analyte - # # #	Result RL	
Gasoline C7-C12	1.7 L Y 1.1	

: 1. Surrogate	%REC	Limits	
Trifluorotoluene (FID)	112	68-135	****
Bromofluorobenzene (FID)	99	75-148	<u></u>

Field ID:

TR-25-2.0'

Diln Fac:

1.000

Type: Lab ID:

SAMPLE

177265-018

Analyzed:

01/21/05

Analyte		Result	<b>QL</b>
Gasoline C7-C12	Ŋ	ID	1.1
Surrogate	AREC	Limits	
Trifluorotoluene (FID)	95	68-135	· · · · · · · · · · · · · · · · · · ·
Bromofluorobenzene (FID)	94	75-148	

Field ID: Type: Lab ID:

TR-25-6.0'

Diln Fac:

SAMPLE 177265-019 Analyzed:

100.0 01/21/05

Analyte	The Result	. RL	Silver to the second
Gasoline C7-C12	2,100 Y	100	

Surregate	* *REC	Tembris .	
Trifluorotoluene (FID)	145 *	68-135	
Bromofluorobenzene (FID)	144	75-148	

 $^{\star=}$  Value outside of QC limits; see narrative H= Heavier hydrocarbons contributed to the quantitation L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected RL= Reporting Limit Page 4 of 5



Total Volatile Hydrocarbons Emeryville Industrial Ct EPA 5030B Location: Lab #: Client: Treadwell & Rollo Prep: EPA 8015B 98470 4069.01 <u>Analysis:</u> Project#: Matrix: Soil Batch#: 01/20/05 01/20/05 Units: mg/Kg Sampled: Basis: as received Received:

Field ID:

TR-28-2.0'

Type: Lab ID:

Diln Fac:

SAMPLE 177265-021

Analyzed:

1.000 01/21/05

Analyte	align de la companya de la la companya de la compa	RECEIVED AND THE PROPERTY OF T	
Gasoline C7-C12	ND	0.93	

Surrogate Trifluorotoluene (FID) 68-135 Bromofluorobenzene (FID) 75-148

Field ID:

TR-28-6.0'

Diln Fac:

5.000

Type: Lab ID:

SAMPLE 177265-022 Analyzed:

01/21/05

Analyte in the same	Result	Recorded to the second of the	
Gasoline C7-C12	160 Y	5.0	

Standard to the standard stand	*REC	Limits	
Trifluorotoluene (FID)	114	68-135	
Bromofluorobenzene (FID)	146	75-148	

Type:

BLANK

Diln Fac:

1,000

Lab ID:

QC280084

Analyzed:

01/20/05

Analyte	Result	
Gasoline C7-C12	ND	1.0

Surrogate	*REC	Limits	
Trifluorotoluene (FID)	94	68-135	
Bromofluorobenzene (FID)	. 98	75-148	

<sup>\*=</sup> Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected



Total Extractable Hydrocarbons Emeryville Industrial Ct EPA 3520C Lab #: Location: 177265 Treadwell & Rollo Client: Prep: EPA 8015B 4069.01 Project#: <u>Analysis</u> 01/20/05 Matrix: Water Sampled: ug/L 01/20/05 Units: Received: 1.000 01/24/05 01/25/05 Prepared: Diln Fac: 9<u>8577</u> Analyzed: Batch#:

Field ID:

TR-29 (GW)

Lab ID:

177265-013

Type:

SAMPLE

in Analyte	Result	real la <b>Ri</b> person	跨山地 医水子子 多色光 计多位性
Diesel C10-C24	280 H Y	50	
Motor Oil C24-C36	340 L	300	

Surrogate \*REC limits 124 Hexacosane

Field ID:

TR-30 (GW)

Lab ID:

177265-014

Type:

SAMPLE

Analyte	Result		
Diesel C10-C24	640 H Y	50	1
Motor Oil C24-C36	960	300	

Surrogate	*REC	Limits	
Hexacosane	101	53-143	

Field ID:

TR-31(GW)

Lab ID:

177265-015

Type:

SAMPLE

Analyte	Result	RL
Diesel C10-C24	270 H Y	50
Motor Oil C24-C36	1 500	300

Suttonat	A COPP TIMILA	
Date Sultiviat	B BML LIMITS	
Hevacesne	102 53-143	· ·

Type: Lab ID:

BLANK QC280484 Cleanup Method: EPA 3630C

所知間 (三期間 <b>見がたわy</b> ate) 。 加加			
Diesel C10-C24	ND	50	
Motor Oil C24-C36	ND	300	

Sutrogate	. AREC	Limits	
Hexacosane	94	53-143	

H= Heavier hydrocarbons contributed to the quantitation

L= Lighter hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected.

RL= Reporting Limit Page 1 of 1

12.0



Total Extractable Hydrocarbons Lab #: Emeryville Industrial Ct Location: SHAKER TABLE EPA 8015B Client: Treadwell & Rollo Prep: Project# 4069.01 <u> Analysis:</u> 01/20/05 Matrix: Soil Sampled: Units: mg/Kg Received: 01/20/05 Basis: as réceived

Field ID: Type:

TR-19-2.5' SAMPLE 177265-001 Batch#: Prepared: 98572 01/24/05 01/24/05

Lāb ID: Diln Fac: 10.00

Analyzed:

Analyte
Diesel C10-C24
Motor Oil C24-C36 Result 97 H Y 10 50 910

Surrogate RREC Limits DO Hexacosane 55-134

Field ID:

TR-19-6.0' SAMPLE 177265-002 Batch#:

98572 01/24/05

Lāb ID: Diln Fac:

Type:

1.000

Prepared: Analyzed:

01/24/05

Analyte
Diesel C10-C24 Result ND 1.0 Motor Oil C24-C36 5.0 ND

Suntagater: SREC Limits Hexacosane

Field ID:

Type: Lab ID: Diln Fac: TR-20-2.0'

SAMPLE 177265-003 1.000

Batch#:

01/24/05 01/24/05

Prepared: Analyzed:

65 L Y 26 H Diesel C10-C24 1.0 Motor Oil C24-C36 5.0

Surrogate RREC. Limits Hexacosane

H= Heavier hydrocarbons contributed to the quantitation

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out ND= Not Detected

RL= Reporting Limit Page 1 of 7



Total Extractable Hydrocarbons Lab #: Emeryville Industrial Ct 177265 Location: SHAKER TABLE EPA 8015B Treadwell & Rollo Client: Prep: 4069.01 <u>Analysi</u> Project#: 01/20/05 Matrix: Soil Sampled: 01/20/05 Units: mg/Kg Received: as received Basis:

Field ID: Type:

TR-20-6.0' SAMPLE 177265-004 Batch#: Prepared: Analyzed:

01/24/05

Lab ID: Diln Fac:

1.000

01/24/05

Analyte	gangia in december dan bar <b>Result</b> cara sepremberak	arang jaga <b>. B</b> ili pagaman da da pag	eventura, al cara e de la característico de la característico
Diesel C10-C24	320 L	1.0	
Motor Oil C24-C36	22 L	5.0	

\*REC Limits s Surrogate 101 Hexacosane

Field ID:

TR-21-2.0' SAMPLE 177265-005 Batch#:

98572 01/24/05 01/24/05

Type: Lab ID: Diln Fac:

1,000

Prepared: Analyzed:

Analyte Diesel C10-C24 Motor Oil C24-C36

Result 1.0 1.7 H Y 5.0

\* Surrogate \*REC Limits Hexacosane

Field ID:

TR-21-6.0' SAMPLE Type: Lab ID: 177265-006 Diln Fac: 1.000

Batch#: Prepared: Analyzed: 98572 01/24/05 01/24/05

AnalVte Result Diesel C10-C24 69 H L 1.0 Motor Oil C24-C36

ND

Surrogate : RREC Himits Hexacosane

H= Heavier hydrocarbons contributed to the quantitation L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out ND= Not Detected RL= Reporting Limit Page 2 of 7



Total Extractable Hydrocarbons Emeryville Industrial Ct Location: Prep: Analysis: SHAKÊR TABLE Client: Treadwell & Rollo EPA 8015B 01/20/05 Project#: 4069.01 Soil Matrix: Sampled: 01/20/05 Received: Units: mg/Kg Basis: aš rēceived

Field ID:

TR-29-2.0' SAMPLE 177265-007

Batch#: Prepared: 98572 01/24/05 01/24/05

Type: Lab ID: Diln Fac:

50.00

Analyzed:

Office and the second second	and the second of the second	Ris	
Diesel C10-C24	160 H Y	50	,
Motor Oil C24-C36	1,600	250	

Surrogate AREC Limits Hexacosane

Field ID:

TR-29-6.0' SAMPLE 177265-008 Batch#:

98572

Type: Lab ID:

Prepared: Analyzed: 01/24/05 01/24/05

Diln Fac:

1.000

Analyte	Result	RL I	
Diesel C10-C24	2.8 H Y	1.0	
Motor Oil C24-C36	6.6 L	5.0	

Sucrogate SREC Limits Hexacosane 103

Field ID:

Diln Fac:

Type: Lab ID:

TR-30-2.0'

SAMPLE 177265-009 20.00

Batch#:

98572

Prepared: Analyzed: 01/24/05 01/24/05

RIGHT CONTRACTOR Analyte 20 100 Diesel C10-C24 65 H Motor Oil C24-C36 510

property and the state of the s	**************************************	Limits %	
Hexacosane	DO	55-134	

H= Heavier hydrocarbons contributed to the quantitation

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit Page 3 of 7



Total Extractable Hydrocarbons Emeryville Industrial Ct SHAKER TABLE Location: Lab #: 177265 Client: Treadwell & Rollo Prep: EPA 8015B 01/20/05 4069.01 Analysis: Project#: Sampled: Matrix: Soil Received: 01/20/05 mg/Kg Units: Basis: as received

Field ID:

TR-30-6.0' SAMPLE

Batch#: Prepared: 98613

Type: Lab ID:

177265-010 1,000

Analyzed:

01/25/05 01/25/05

Diln Fac:

Analyte
Diesel C10-C24 63 L 1.0 5.0 Motor Oil C24-C36

Surrogate Sercostinits Hexacosane 55 - 134

Field ID:

TR-31-2.5'

Batch#:

98613

Type: Lab ID: SAMPLE 177265-011 Prepared:

01/25/05

Analyzed:

Diln Fac:

20.00

01/25/05

Analyta	Result	RL	
Diesel C10-C24	1,100 H L Y	20	
Motor Oil C24-C36	2,700	100	

Surrequte : \*REC Limits Hexacosan<u>e</u> DO

Field ID:

TR-31-6.0'

Batch#:

98613

Type:

Prepared:

Lâb ID:

SAMPLE

01/25/05 01/25/05

177265-012

Analyzed:

Diln Fac:

1.000

Amelyte
Diesel C10-C24
Motor Oil C24-C36 L 3.1 H L Y 1.0 5.0 ND

N'S Survoqate RREC Limits Hexacosane

H= Heavier hydrocarbons contributed to the quantitation

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit Page 4 of 7

19.0



Total Extractable Hydrocarbons Emeryville Industrial Ct SHAKER TABLE EPA 8015B Location: Lab #: 177265 Client: Treadwell & Rollo Prep: Project#: 4069,01 <u>Analysis:</u> Sampled: 01/20/05 Matrix: Soil Received: 01/20/05 mg/Kg Units: Basis: as received

Field ID: Type:

TR-22-2.0' SAMPLE

Batch#: Prepared: 98613 01/25/05 01/25/05

Lab ID: Diln Fac: 177265-016 1.000

Analyzed:

Diesel C10-C24 5.5 H Y 1.0 Motor Oil C24-C36 32 5.0	were the Exchange Daniel Wite and a series and	n kasultu 2	an a traditar a company mais a managa a completiva passa a completiva de la	
Motor Oil C24-C36 32 5.0	Diesel C10-C24	5 5 H V	1.0	1
		32	5.0	

Superogation Attro-Hexacosane 97 55-134

Field ID:

TR-22-6.0' SAMPLE 177265-017 Batch#: Prepared:

Analyzed:

98613 01/25/05 01/25/05

Type: Lab ID: Diln Fac:

1.000

 
 Analyte
 Result

 Diesel C10-C24
 8.5 H Y

 Motor Oil C24-C36
 10 H L
 RL: 1.0

**%REC Limits** 85 55-134 Surrocate 85 Hexacosane

Field ID: TR-25-2.01 SAMPLE Type: 177265-018 Lab ID: Diln Fac: 1.000

Batch#: Prepared:

98613 01/25/05 01/25/05

Analyzed:

Analyte .	Rostile		
Diesel C10-C24	11 H Y	1.0	
Motor Oil C24-C36	62	5.0	

Surrogate. %REC Limits 102 Hexacosane

H= Heavier hydrocarbons contributed to the quantitation

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit Page 5 of 7



Total Extractable Hydrocarbons Emeryville Industrial Ct Lab #: Location: Client: Treadwell & Rollo Prep: SHAKĒR TABLE EPA 8015B 01/20/05 4069.01 Project#: <u>Analysis</u> Matrix: Soil Sampled: 01/20/05 Units: mg/Kg Received: aš réceived Basis:

Field ID: Type:

TR-25-6.0' SAMPLE

Batch#: Prepared: 98613 01/25/05

Lab ID: Diln Fac: 177265-019 1.000

Analyzed:

01/25/05

Analyte Result Diesel C10-C24 Motor Oil C24-C36 1.0 44 H L Y 5.0 16

%REC Limits Surrogate 118 Hexacosane

Field ID:

TR-28-2.0' SAMPLE

Batch#:

98613 01/25/05

Type: Lab ID:

177265-021

Prepared: Analyzed:

01/25/05

Diln Fac:

1.000

Analyte
Diesel C10-C24 Result " 1.0 4.3 H Y Motor Oil C24-C36

# Surrogate Hexaco.sane

Field ID:

TR-28-6.0' Type: Lab ID: SAMPLE 177265-022 Diln Fac: 1.000

Batch#:

98613

Prepared: Analyzed: 01/25/05 01/25/05

Poslyte. Result Diesel C10-C24 Motor Oil C24-C36 140 н ь Ү 1.0 280 5.0

Sutrogate Limits %REC Hexacosane

Type: Lab ID: Diln Fac: BLANK QC280468  $\tilde{1}.000$ 

Batch#: Prepared: 98572 01/24/05

Analyzed:

01/24/05

Diesel C10-C24 ND 1.0Motor Oil C24-C36 5.0 ND

#REC Limits 8 <u>55-134</u> Survivoral et Hexacosane

H= Heavier hydrocarbons contributed to the quantitation

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit Page 6 of 7



Total Extractable Hydrocarbons Lab #: Location: Emeryville Industrial Ct 177265 SHAKER TABLE EPA 8015B 01/20/05 Treadwell & Rollo Client: Prep: Project#: 4069.01 <u> Analysis:</u> Matrix: Soil Sampled: Units: mg/Kg Received: 01/20/05 <u>aś réceived</u> <u>Basis:</u>

Lab ID: Diln Fac: Batch#:

BLANK QC280603  $\bar{1}.000$ 98613

Prepared: Analyzed:

01/25/05 01/25/05 Cleanup Method: EPA 3630C

Analyte -Result Diesel C10-C24 Motor Oil C24-C36 ND 1.0  $\tilde{5}.\tilde{0}$ ND

Surrogate ... RREC Limits 102 Hexacosane

H= Heavier hydrocarbons contributed to the quantitation L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

DO= Diluted Out ND= Not Detected

RL= Reporting Limit Page 7 of 7



	Purgeable	e Organics by GC/	(MS
Lab #:	177265	Location:	Emeryville Industrial Ct
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	4069.01	Analysis:	EPA 8260B
Field ID:	TR-31 (GW)	Batch#:	98515
Lab ID:	177265-015	Sampled:	01/20/05
Matrix:	Water	Received:	01/20/05
Units:	ug/L	Analyzed:	01/21/05
Diln Fac:	1.000	-	

Analyte for Analyte	Result	and the second s
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0 .
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ИD	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND .	0.5
Benzene	ND	0.5
Trichloroethene	ИD	0.5
1,2-Dichloropropane	ИD	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ИD	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	. ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected RL= Reporting Limit Page 1 of 2



	Purgeable	e Organics by GC/	MS i
Lab #:	177265	Location:	Emeryville Industrial Ct
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	4069.01	Analysis:	EPA 8260B
Field ID:	TR-31(GW)	Batch#:	98515
Lab ID:	177265-015	Sampled:	01/20/05
Matrix:	Water	Received:	01/20/05
Units:	ug/L	Analyzed:	01/21/05
Diln Fac:	1.000		

Analyte	Result	en produce and the RC and the second produce and the second described
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0,5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ИD	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND-	0.5
1,2-Dibromo-3-Chloropropane	ND .	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene .	ND	. 0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	*REC	Tamita
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	108	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected RL= Reporting Limit Page 2 of 2



Polychlorinated Biphenyls (PCBs) Emeryville Industrial EPA 3545 EPA 8082 Location: Lab #: 177265 Client: Treadwell & Rollo Prep: Project#: 4069.01 <u> Analysis:</u> 98566 Matrix: Batch#: Soil 01/20/05 ug/Kg Sampled: Units: 01/20/05 as received Received: Basis: 01/24/05 1.000 Diln Fac: Prepared:

Field ID:

TR-25-2.0' SAMPLE

Analyzed:

01/25/05

Type: Lab ID:

177265-018

Cleanup Method: EPA 3665A

Analyte Result 19 Aroclor-1221 ND 9.7 Aroclor-1232 ND Aroclor-1242 9.7 ND 9.7 9.7 Aroclor-1248 ND Aroclor-1254 ND Aroclor-1260 9.7

Surrogate %REC Limits 62-140 48-149 TCMX Decachlorobiphenyl

Field ID:

TR-28-2.0' SAMPLE

Type: Lab ID:

177265-021

Analyzed: 01/25/05 Cleanup Method: EPA 3665A

Analyte	Résult		j. j.
Aroclor-1016	ND	9.6	
Aroclor-1221	ИD	19	
Aroclor-1232	ND	9.6	
Aroclor-1242	ND	9.6	
Aroclor-1248	ИД	9.6	
Aroclor-1254	ND	9.6	
Aroclor-1260	ND	9.6	

Surrogate	RREC	Limits	
TCMX	85	62-140	
Decachlorobiphenyl	89	48-149	

Type: Lab ID: BLANK QC280444 Analyzed:

01/24/05 Cleanup Method: EPA 3665A

Analyte	The second of the second secon	THE OWNER STREET	2世   小面存在,2018年7月   1
Aroclor-1016	ND	9.6	
Aroclor-1221	ND	19	
Aroclor-1232	ND	9.6	•
Aroclor-1242	ND	9.6	•
Aroclor-1248	ND	9.6	
Aroclor-1254	ИD	9.6	
Aroclor-1260	ИD	9.6	

ı	Surrogate in the second	**************************************	Limits	
ı	TCMX	81	62-140	
ı	Decachlorobiphenyl	97	48-149	

ND= Not Detected RL= Reporting Limit Page 1 of 1



		Lead	
Lab #:	177265	Location:	Emeryville Industrial Ct
Client:	Treadwell & Rollo	Prep:	EPA 3050B
Project#:	4069.01	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	98505
Matrix:	Soil	Sampled:	01/20/05
Units:	mg/Kg	Received:	01/20/05
Basis:	as received	Prepared:	01/21/05
Diln Fac:	1.000	Analyzed:	01/21/05

Pield ID	Type - Lab ID	Result	RL RL
TR-29-2.0'	SAMPLE 177265~007	9.2	0.14
TR-30-2.0'	SAMPLE 177265-009	11	0.15
TR-25-2.0'	SAMPLE 177265-018	14	0.15
TR-28-2.0'	SAMPLE 177265-021	5.6	0.12
	BLANK QC280201	ND	0.15

177265

## Treadwell&Rollo

## **CHAIN OF CUSTODY RECORD**

Page \_\_\_ of \_\_\_\_

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SOP Volume:

Client Services

Section:

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Page:

1 of 1

Filename: F:\qc\forms\qc\cooler.doc

Effective Date: Revision:

10-May-99 1 Number 1 of 3

Filename:

F:\QC\Forms\QC\Cooler.wpd



Curtis & Tompkins, Ltd.

Logi	n#: 177265 Date Received: 1-20-05 Number of Coolers nt: Treadwell & Project: 4064.01	
Clie	nt: Trendwell + Pello Project: 4049.01	_
		$\mathcal{L}_{2}$
A.	Preliminary Examination Phase	66 K
	Date Opened: 1-20-05 By (print): Tray Windson (sign)	- 4 MAMON C
1.	Preliminary Examination Phase  Date Opened: 1-20-05 By (print): Tray Windson (sign) Did cooler come with a shipping slip (airbill, etc.)?	YES (NO)
•	If YES, enter carrier name and airbill number:	_
2.	Were custody seals on outside of cooler?	YESONO
	How many and where? Seal date: Seal nan	ne: ,//
3.	Were custody seals unbroken and intact at the date and time of arrival?	YES NO NZ/
4.	Were custody papers dry and intact when received?	
5.	Were custody papers filled out properly (ink, signed, etc.)?	
6.	Did you sign the custody papers in the appropriate place?	(YES NO
7.	Was project identifiable from custody papers?	
	If YES, enter project name at the top of this form.	•
8.	If required, was sufficient ice used? Samples should be 2-6 degrees C	YES NO
	Type of ice: Wet Temperature: Cold N	o temp blank
		$\sim 10^{\circ}$
В.	Login Phase	n k l /- //
	Date Logged In: 1-20-05 By (print): Tray Windsor (sign) W	J-G WMIN W
1.	Describe type of packing in cooler: In plastic ziplac type bags	glass in paper to
2.	—; • • • • • • • • • • • • • • • • • • •	
3.	Were labels in good condition and complete (ID, date, time, signature, et	c.)?.!.YES' NO
4.	Did bottle labels agree with custody papers?	SYES NO
5.	Were appropriate containers used for the tests indicated?	YES NO
6.	Were correct preservatives added to samples?	YES NO
7.	Was sufficient amount of sample sent for tests indicated?	YES NO
8.	Were bubbles absent in VOA samples? If NO, list sample Ids below	(YES NO
9.	Was the client contacted concerning this sample delivery?	YES NO
	If YES, give details below.	<b>.</b>
	Who was called? By whom?	Date:
Addi	itional Comments:	
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