ONE ENVIRONMENT

ENVIRONMENTAL PROTECTION

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June 10, 1998

Mr. Larry Seto
Alameda County Health Care Services
1121 Harbor Bay Parkway
Alameda, CA 94502-6577

RE: Roadway Express, 1708 Wood Street, Oakland, CA 94607

Dear Mr. Seto:

Per your request, enclosed is a copy of the Preliminary Soil and Groundwater Investigation Report.

If you have any questions, please contact me at (562) 987-1096.

Sincerely,

Cheryl Madden
Geologist, REA

Cc: Robert Zimmerman, Roadway Express, 1077Gorge Blvd.
Long Beach, CA 90803
Files

240 Termino Avenue • Long Beach, California 90803 • Phone: 562-987-1096 • Fax: 562-987-9120 •
oneenviro@earthlink.net

Environmental Solutions

PRELIMINARY
SOIL AND GROUNDWATER
INVESTIGATION REPORT

Roadway Express
1708 WOOD STREET
OAKLAND, CALIFORNIA

Prepared for:
ROADWAY EXPRESS, Inc.

Prepared by:
BCon Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

June 5, 1998
Project Number: 97-29OE01

BCon Environmental

Site Assessments - Asbestos - Lead

June 5, 1998

Ms. Cheryl A. Madden
Roadway Express Inc.
240 Termino Avenue,
Long Beach, California 90803

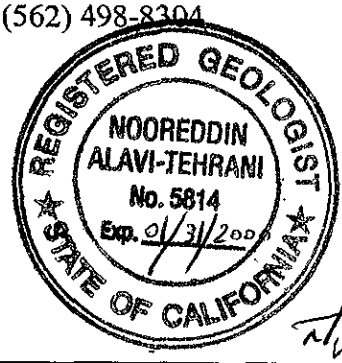
RE: Soil and Groundwater Investigation
Roadway Express, Inc.
1708 Wood Street, Oakland, California

BCon Environmental is pleased to submit this Preliminary Soil and Groundwater Investigation Report for the subject property. Included are field data collected during the drilling and sampling at the Site, and results of laboratory soil and groundwater analysis.

BCon Environmental appreciates the opportunity to be of service to Roadway Express Inc. If you have any questions, please contact the undersigned at (562) 498-8304.

Sincerely,

BCON ENVIRONMENTAL



Mark Barwinski, R.E.A.
Programs Manager

Nooreddin Alavi-Tehrani, Ph.D., R.G.
California Registered Geologist

2251 Ohio Avenue • Signal Hill, California 90806 • Phone: 562-498-8304 • Fax: 562-498-8345 • OnCourse@gte.net

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

BCon Environmental (BCon) was contracted by Roadway Express, Inc. (Client) to conduct a Phase II Subsurface Soil and Groundwater Investigation of the subject site (Site) located at 1708 Wood Street, in the City of Oakland, California. The Site was comprised of two parcels of land extending over an area of approximately 5.5 acres (See Figure 1 – Site Vicinity Location Map).

The Site consists of a main truck yard operated by Roadway Express Inc. Approximately 20% of the property in occupied by service buildings and truck shipping areas. The remaining 80% of the property is used as parking for trucks.

1.1 Background Information

On July 11, 1996, one 10,000-gallon diesel fuel underground storage tank (UST) was removed from the Site. Soil samples collected at the UST excavation did not reveal evidence of contaminants. However, soil sampled beneath the dispenser was found to contain 11,000 parts-per-million (ppm) of total petroleum hydrocarbons as diesel fuel (TPH-D). Additionally, 7,400 ppm of TPH-D was detected in the sample collected from the soil excavated and stockpiled as part of the UST removal activities (One Environment, 1996).

BCon Environmental has learned that two other USTs (a 10,000-gallon gasoline UST and a 2,000-gallon motor oil UST) were removed from the Site on March 31, 1987. Two observation wells were installed in the area where the USTs were formerly located. Analytical testing reported in April 1987 indicated that no contaminants were detected in the soil samples collected from beneath the former location of the gasoline UST. However, laboratory results indicated that Oil and Grease (O&G) by Solid Waste (SW) Method 5520 were detected in the soil samples collected from beneath the former location of the motor oil UST, with concentration ranging from 610 to 770 milligrams per kilogram (mg/kg). Additionally, 500 micrograms per liter (µg/l) of volatile hydrocarbons and 21 milligrams per liter (mg/l) of O&G were detected in water samples collected from the existing observation wells as indicated by R.S. Eagen & Company in 1987.

1.2 Project Objective

The objective of this investigation was to ascertain the presence or absence of petroleum hydrocarbons in the subsurface soil and/or groundwater in the location of the three former USTs as well as in the area of the former fuel dispenser island (see Figure 2 – Site Plot Plan). To meet this objective BCon Environmental implemented the following tasks:

- Reviewed previous tank removal activity reports, work plan and other available environmental investigation data, and incorporated the pertinent information into this report.
- Prepared a site-specific Health and Safety Plan.

- Obtained appropriate drilling permits from the Alameda County Public Works Agency (Lead Agency).
- Performed a site reconnaissance as well as contacted Underground Dig Alert for underground utilities clearance and identification of boring locations.
- Drilled soil borings in suspected locations and obtained soil and/or groundwater samples from these borings.
- Conducted groundwater sampling from two existing observation wells on site.
- Analyzed the soil and/or groundwater samples in the laboratory for suspected regulated chemicals.
- Evaluated the data and prepared the final report.

2.0 REGIONAL GEOLOGY AND HYDROGEOLOGY

2.1 Topographic Setting

The main topographic features of the study area are the San Francisco Bay, the Coyote Hills and Alameda Creek. The subject property is located in the north east portion of San Francisco Bay Area. Figure 1 – Site Vicinity Location Map shows a section of the United States Geological Survey 7.5-minute series topographic map of Oakland West Quadrangle. According to Figure 1 the Site exists at an elevation of approximately 10 feet above Mean Sea Level (MSL), and local topographic gradient is approximately 4 feet vertical per 1000 feet horizontal, approximately 20 feet per mile to the west, towards the San Francisco Bay Area (USGS 1980).

2.2 Regional Geology

According to the Geological map of California (1977), Divisions of Mines and Geology (CDMG), as well as Geology of Northern California, bulletin 190 (CDMG-1966), the subject property is located on the northern central portion of the Coast Ranges and it is situated near the central east portion of the San Francisco Bay area, approximately one mile west of downtown Oakland. The California Coast Ranges province is characterized by particular kinds of igneous, metamorphic and sedimentary rocks associated with different geological structures from Pre-Jurassic up to Quaternary and Recent Age. Geologically, the site is located in the upper most sequence of Quaternary deposits of Pleistocene to Recent Age (CDMG-1977). These deposits are unconsolidated materials formed during present cycles of alluviation by streams and material within shoreline features including lagoonal and playa lake. The major structural feature of the area is the Hayward and San Andreas fault systems within principal north-westerly trending structure. The site is situated almost 2.5 miles west of the Hayward fault and 15 miles east of the San Andreas fault zone (See Figure 3 – Regional Geology Map).

Earthquake intensities vary throughout the Bay area, depending upon the magnitude of earthquake, the distance of the site from the causative fault, and the type of materials underlying the site. Nevertheless, the site will be subjected to at least one moderate to severe earthquake that will cause strong ground shaking.

2.3 Regional Hydrogeology

Aquifer materials in the region surrounding the San Francisco Bay include limestone, sandstone, fractured shale, basalt, serpentine and alluvium. From the standpoint of both areal extent and total production, the alluvium is much more important than any of the other aquifer types. Widespread gray clay commonly called "blue clay" by well drillers may indicate former marine deposits within alluvium adjacent to the present San Francisco Bay area (CDMG-1966).

Most of the water used in the San Francisco Bay area comes from surface streams and to satisfy the requirements of the metropolitan area much of this surface water must be imported from streams in the Sierra Nevada Mountains.

3.0 SUBSURFACE INVESTIGATION

3.1 Approach and Rational

The subsurface geologic conditions at the site have been explored by drilling eight boreholes (B-1 to B-8) in the suspected areas. All boreholes were drilled to depths between 8 to 11 feet below ground surface (bgs), with the exception of boring B-2, which was advanced to a depth of 14 feet. Due to low cohesiveness of the pea gravel encountered at the former UST location, a sample could not be collected from B-2. The boring locations and depths were selected to provide information regarding the possible presence of regulated chemicals below the groundsurface. All boreholes were drilled in the close vicinity of the former USTs as well as the dispenser island to evaluate the presence or absence of petroleum hydrocarbons in the subsurface soil and/or groundwater, see Figure 4 – Site Plan and Boring Location.

3.2 Preparation for Investigation

Prior to drilling, a permit was obtained from the Alameda County Public Works Agency (ACPWA) for this investigation (see Appendix A). The ACPWA was also notified prior to conducting the field work. Underground service alert was notified at least two working days prior to field work to mark utilities in the area where subsurface activities were to be conducted.

The Health and Safety Plan provided by BCon Environmental was used for this investigation (see Appendix B). All field personnel including drilling company staff were given copies of this document for review and a "tailgate" meeting was conducted.

3.3 Drilling and Subsurface Soil Sampling

Field work for the site assessment commenced on July 24, 1997 and was completed on the same day. Soil samples were obtained using a truck-mounted rig employing Geoprobe-type push-rod

technology to obtain continuous and/or discrete soil samples at the required depth. All borings were drilled to a total depth ranging between 8 to 11 feet below ground surface and soil samples collected from each boring at the soil/groundwater interface point at different depths ranging from 2 feet bgs at boring B-8 to 7 feet bgs at boring B-4.

Soil samples were obtained by use of the Geoprobe drive sampler, which is connected to the end of the probe rods. This device remains sealed by a piston tip until the probe rods are driven to the desired sampling depth. The tip is then released by means of a stop-pin and it retracts into the sampler. A Geoprobe sample (2.5" diameter by 18" long plastic tube) was used to obtain the soil samples.

A HNU-PID meter calibrated against a hexane gas standard was utilized on the soil contained in the top and bottom tube at each sampling interval with the borings to determine if volatile hydrocarbon vapors were emanating directly from the soil. Each sample was placed in an air tight sealable plastic bag. The samples were allowed to sit in the sun for approximately five minutes, and then the headspace in the bags were analyzed. The results of these tests were recorded on the boring logs (see Appendix C) and are listed in Table 1.

To provide detailed information on site lithology, soil samples were recorded on the boring log and described according to the United Soil Classification System (USCS) by a BCon Geologist under supervision of a California Registered Geologist. Boring logs are provided in Appendix C.

Samplers were cleaned before collection of each soil sample to prevent cross-contamination. Cleaning was performed using an inorganic detergent followed by rinsing in deionized water. Each sampler was air dried and loaded with clean, disposable sample liners prior to sampling.

Soil samples collected for chemical analysis were retained inside the protective acetate sample liners during retrieval. The sample ends were sealed with Teflon tape and capped with polyethylene lids. The samples were marked with sample identification labels and sealed inside ziplock plastic bags. All soil samples selected for laboratory analysis were delivered to the state-certified off site laboratory at the same day and/or the day after drilling and sampling events.

3.4 Groundwater Sample Collection

3.4.1 Temporary Well Sample Collection

Groundwater samples from each drive point and/or borehole were obtained using a temporary well. The temporary well sampling well method provided a reasonable and technically sound alternative to the Hydropunch sampling method.

A borehole was drilled and/or pushed to the estimated groundwater table interface depths using Geoprobe-type push-rod technique, in the same manner as in the Hydropunch II method. The rod was then advanced 2 to 5 feet in the saturated zone to allow the placement of the 3 to 5 feet section of 2-inch o.d. schedule 40 PVC screen below the water table. The PVC screen was threaded to a blank casing and installed through the borehole and extended about 2 feet above the ground surface. Groundwater samples were collected by lowering a 1.5 inch i.d. disposable

Teflon bailer into the PVC casing and screen. No purging was conducted. Temperature, pH and specific conductants were measured during this groundwater sampling and all recorded in the boring logs (see Appendix C).

Unlike the permanent monitoring well installation that are purged and sampled quarterly, the temporary well and Hydropunch-type sampling provide a one-time, single point sample, therefore no purging is required. Rigorous equipment decontamination procedures were followed during the groundwater sampling to prevent cross-contamination between sample locations. No visible signs of floating hydrocarbon product was detected in any of these temporary wells.

3.4.2 Monitoring Well Sample Collection

Prior to well purging, the depths to static groundwater level and total depths were measured in two existing wells to establish a quantity of one well volume from each monitoring well. Each well was also monitored to determine whether floating hydrocarbon product was present. Floating hydrocarbon product was not detected in both existing monitoring wells on site.

Prior to sampling, the wells were purged using a hand-held bailer. Water temperature, specific conductance, turbidity and pH, were measured using a HyDAC 910 Digital Conductivity-Temperature-pH tester. These measurements were recorded on well sampling record forms (see Appendix D). Groundwater was sampled when at least three consecutive measurements of pH, conductivity, turbidity, and temperature were within 10 percent of each other and the water level recovered to at least 80 percent of the original static level.

The groundwater sample was collected by lowering a new disposable bailer on new rope into the monitoring well. The bailer was allowed to fill and was then gently retrieved from the monitoring well. Once at the surface, a portion of the groundwater sample was transferred into appropriate containers provided by VOC Analytical Laboratory. All groundwater samples, including grab samples from boreholes as well as samples from existing observation wells, were labeled, logged on a chain-of-custody and stored in a cooler with ice for delivery to the laboratory.

4.0 WASTE HANDLING

The fluids accumulated during monitoring well purging, decontamination as well as soil cutting and other waste generated during drilling and soil sampling, were stored temporarily on site in sealed, labeled metal drums pending laboratory analysis and proper disposal by Roadway Express.

5.0 LABORATORY ANALYSIS

Soil and groundwater samples collected from the borings and groundwater samples collected from existing monitoring wells were submitted to VOC Analytical Laboratory of Anaheim,

California. VOC Analytical is a laboratory approved and certified by the State Department of Health Services to perform the required analysis. A summary of the laboratory results for soil is on Table 2 and for groundwater is on Table 3. Selected samples were analyzed for one or more of the following:

- Total petroleum hydrocarbons (TPH) as gasoline and/or diesel by modified EPA Method 8015 according to the state Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) and State Water Resource Control Board (CAWRCB) Leaking Underground Fuel Tank (LUFT) Manual procedures.
- Oil and Grease (IR) by EPA method 413.2.
- Oil and Grease Hydrocarbons by EPA method 418.1
- Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) by EPA method 8020.

The laboratory reports, QA/QC data, and chain-of-custody forms are contained in Appendix E.

6.0 FINDINGS

6.1 Encountered Soils

The soils encountered while drilling and sampling borings B-5 through B-8 generally consisted of grayish silty clay with depth between one to nine feet bgs. The soils encountered in borings B-1, B-3 and B-4 generally consisted of silty sand and fine sand with silty clay intervals. The soils that were encountered were logged and are presented on the boring logs in Appendix C. Figure 4 shows the locations of the borings and lines of geologic cross-sections A-A' and B-B'. Figures 5 and 6 depict the generalized stratigraphy interpreted from the boring logs.

6.2 Groundwater Conditions

Groundwater was encountered in all borings ranging between 2 feet bgs in boring B-8, located in the east portion of the subject site, to 7 feet bgs in B-7 located at the western portion of the project area. Also, the depth of the groundwater measured in two existing observation wells ranged from 1.16 to 1.33 feet bgs in monitoring wells MW-1 and MW-2, respectively.

Due to the lack of survey data in regard to elevation of top of casing as well as no sufficient monitoring wells (at least 3 monitoring wells required) on site; the groundwater elevation was not measured and groundwater contour maps were not constructed. However, based on the available data from two existing observation wells and depth to the groundwater during drilling activities as well as local topographic and surface gradient at the subject site, it appears the general groundwater flow is to the west towards the San Francisco Bay Area.

Groundwater measurements indicate a pH ranging from 4.02 in borehole B-1 to 6.6 in borehole B-4. The measure of specific conductivity of the groundwater ranged from 3.05 x 1000 µmhos

(micromhos) in borehole B-4 to 5.21 x 1000 µmhos in borehole B-8, respectively. Additionally, specific conductivity measurements ranging from 0.78 x 1000 µmhos in observation well MW-2 to 1.73 x 1000 µmhos in observation well MW-1 were obtained (see boring logs and groundwater field data sheets for details).

6.3 Laboratory Analytical Results

6.3.1 Soil Samples

Summary of soil samples analytical results are presented in Table 2. Results of petroleum hydrocarbon analysis of soil samples collected from borings during this assessment indicates only two samples analyzed contained TPH (as diesel) concentrations above a detection limit of 1.0 milligrams per kilogram (mg/kg). Laboratory results indicates, boring B-3 at 6 feet bgs and boring B-5 at 3.5 feet bgs contained TPH (as diesel) with concentrations of 240 mg/kg and 5.4 mg/kg, respectively. Additionally, samples B-1 at 4 feet bgs was found to contain 24 mg/kg, and B-7 at 3 feet bgs was found to contain 23 mg/kg of Oil & Grease when analyzed by EPA method 413.2 (see Table 2).

Laboratory results of collected soil samples from this phase of site investigation did not indicate the presence of any TPH (as gasoline) and/or BTEX higher than the laboratory detection limit (see Table 2 and Figures 7 & 8 for more details).

6.3.2 Groundwater Samples

Summary of the groundwater samples analytical results are presented in Table 3. Results of petroleum hydrocarbon analysis of seven groundwater samples collected from seven borings as well as two water samples from two existing monitoring wells indicated that seven of nine samples contained TPH (as diesel) concentration above a detection limit of 0.05 milligrams per liter (mg/l). The highest TPH-D concentration was found in the groundwater sample collected from boring B-7, with a concentration of 120 mg/l (see Table 3). Laboratory results also indicate only the groundwater sample collected from boring B-7 contained TPH as a gasoline with a concentration of 840 micrograms per liter (µg/l), (see Table 3). Concentrations of BTEX were not detected in any of the nine groundwater samples collected from boreholes and/or existing monitoring wells. However, laboratory results indicates a relative low concentration of Oil & Grease by EPA methods 418.1 and/or 413.2 detected in six to seven groundwater samples. The highest concentration of Oil & Grease was found in grab groundwater samples collected from boring B-7 with a concentration of 8.8 mg/l by EPA methods 413.2 (see Table 3 and Figures 9 and 10 for details).

6.3.3 Quality Assurance/Quality Control

One trip blank sample was transported in the cooler along with the soil and groundwater samples and analyzed for TPH (gasoline) and BTEX. Laboratory results revealed TPH (Gasoline) and BTEX compounds below the laboratory detection limits. Therefore, this data indicated that there were no apparent signs of cross-contamination of samples by the handling and/or shipping procedures.

7.0 CONCLUSION

Based on the data evaluated by this Phase II assessment, BCon communicates the following:

- Groundwater under the site was encountered at depths of approximately 2 to 7 feet below ground surface at the time of drilling. Depth to groundwater was measured between 1.16 to 1.33 feet below ground surface in two existing observation wells.

- Concentrations of Total Petroleum Hydrocarbons (TPH) as diesel were detected in only two soil samples from borings B-3 and B-5. Boring B-3 contained the highest concentration of TPH-D (240 mg/kg) which was located in the south eastern portion of the former waste oil UST. However, laboratory analysis indicate TPH (gasoline) and BTEX were not detected in all soil samples and relatively low concentrations of Oil & Grease by EPA method 413.2 were detected in borings 1, 2, 6, and 7 (see Table 2).

- Groundwater samples collected from seven of nine borings and/or wells on-site contained TPH-D concentrations above the laboratory detection limit. Groundwater sample collected from boring B-7 contained the highest TPH-D (120 mg/l). TPH (gasoline) was also detected in groundwater samples collected from boring B-7 with a concentration of 840 µg/l. No BTEX were detected in any of the nine groundwater samples collected during this phase of the assessment.

- The borings contained soil and groundwater affected by Petroleum Hydrocarbons (Borings B-3 and B-7). These borings are located on the east and southern portion of the former UST area (see Figure 4 and cross-sections in Figures 5 through 10).

- Identified Petroleum Hydrocarbon contaminants are in the diesel and Oil & Grease Range.

- Free floating Hydrocarbon Product was not encountered in any of the permanent or temporary wells.

8.0 REFERENCES

California Division of Mines and Geology (1966): Geology of Northern California Bulletin 190.

California Division of Mines and Geology (1977): Geology Map of California.

One Environment, "Report on Underground Storage Tank Removal and Site Closure for Roadway Express, Inc., Report on Underground Storage Tank Removal and Site Closure Roadway Express Inc., 1708 Wood Street, Oakland, California 94607. July 22, 1996

9.0 LIMITATIONS

The samples collected and used for analysis and the observations presented are considered to be representative of the project area. However, soil and geologic conditions, as well as groundwater conditions, may vary significantly between borings.

Our services have been performed in accordance with generally accepted engineering and environmental principles and practices within the area at the time of our investigation. No other warranty (either expressed or implied) is made as to the professional advice provided. It should be recognized that certain limitations are inherent in the evaluation of subsurface conditions, and that certain conditions may not be detected during an investigation of this type. If you wish to reduce the level of uncertainty associated with this study, we can be contacted for additional consultation.

The analysis and conclusions contained in this report are based on the site conditions as they existed at the time of our reconnaissance. Changes in the information or the data obtained or in the proposed land use could result in changes in our conclusions. If such changes do occur, we should be advised so that we can review our report in light of those changes. Additionally, it is the sole responsibility of the owner to properly dispose of any materials left on-site according to existing laws and regulations.

TABLES

TABLE 1
HNU-PID Field Readings
July 1997

Boring No.	Depth Below Ground Surface (feet)	Sample No.	Field HNU-PID Reading (ppm)
B-1	3	-	0
B-1	4	B-1-4'	2
B-1	8	-	9.6
B-2	2	-	-
B-2	4	-	-
B-3	3	-	0
B-3	6	B-3-6'	7
B-4	4	-	7.9
B-4	7	B-4-7'	7.5
B-5	0	-	6
B-5	3.5	B-5-3.5'	0
B-5	8.5	-	0
B-6	5	B-6-5'	9.3
B-6	8.5	-	5
B-7	3	B-7-3'	0
B-7	9	-	125
B-8	2	B-8-2'	0
B-8	6	-	0
B-8	8	-	0

Note: ppm = Parts per million.
- = Not sampled.

A soil sample could not be collected from B-2 due to low cohesiveness of the pea gravel encountered at the former UST location.

TABLE 2
Summary of Soil Analytical Data
July 1997

Sample No.	Boring No.	Depth Below Grade Surface (ft)	TPH Diesel EPA Method 8015 M (mg/kg)	TPH Gas EPA Method 8015M (mg/kg)	Benzene EPA Method 8020 (mg/kg)	Toluene EPA Method 8020 (mg/kg)	Ethylbenzene EPA Method 8020 (mg/kg)	Xylenes EPA Method 8020 (mg/kg)	Oil & Grease (IR) EPA Method 413.2 (mg/kg)
B-1-4'	B-1	4'	<1	<1	<0.005	<0.005	<0.005	<0.02	**24**
B-3-6'	B-3	6'	**240**	<1	<0.005	<0.005	<0.005	<0.02	**42**
B-4-7'	B-4	7'	<1	<1	<0.005	<0.005	<0.005	<0.02	<10
B-5-3.5'	B-5	3.5'	**5.4**	<1	<0.005	<0.005	<0.005	<0.02	<10
B-6-5'	B-6	5'	<1	<1	<0.005	<0.005	<0.005	<0.02	**24**
B-7-3'	B-7	3'	<1	<1	<0.005	<0.005	<0.005	<0.02	**23**
B-8-2'	B-8	2'	<1	<1	<0.005	<0.005	<0.005	<0.02	<10
Detection Limit			1	1	0.005	0.005	0.005	0.02	10

TPH = Total Petroleum Hydrocarbons.
mg/kg = Milligrams per kilogram or parts per million.

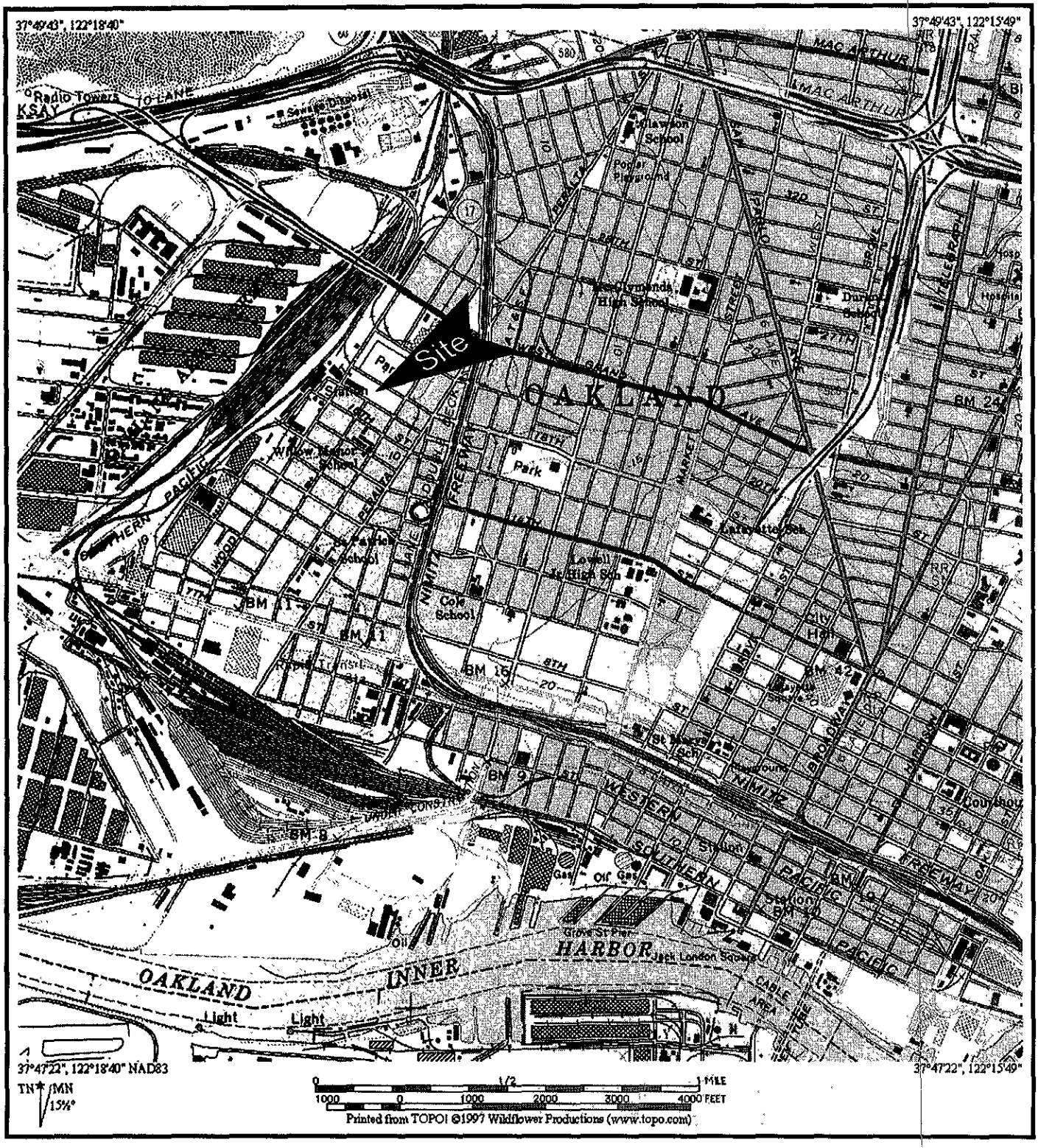
A soil sample could not be collected from B-2 due to low cohesiveness of the pea gravel encountered at the former UST location.

TABLE 3
Summary of Groundwater Analytical Data
July 1997

Sample No.	Boring No.	TPH Diesel EPA Method 8015 M (mg/L)	TPH Gas EPA Method 8015M (µg/L)	Benzene EPA Method 8020 (µg/L)	Toluene EPA Method 8020 (µg/L)	Ethylbenzene EPA Method 8020 (µg/L)	Total Xylenes EPA Method 8020 (µg/L)	Oil & Grease Hydrocarbon Method 418.1 (mg/L)	Oil & Grease IR Method 413.2 (mg/L)
B-1-W	B-1	<0.05	<50	<0.5	<0.5	<0.5	<2	**0.53**	<0.5
B-3-W	B-3	**0.50**	<50	<0.5	<0.5	<0.5	<2	<0.5	**0.54**
B-4-W	B-4	**0.56**	<50	<0.5	<0.5	<0.5	<2	**0.55**	<0.5
B-5-W	B-5	<0.05	<50	<0.5	<0.5	<0.5	<2	**0.68**	<0.5
B-6-W	B-6	**2.0**	<50	<0.5	<0.5	<0.5	<2	<0.5	**0.69**
B-7-W	B-7	**120**	**840**	<3	<3	<3	<10	**8.0**	**8.8**
B-8-W	B-8	**2.0**	<50	<0.5	<0.5	<0.5	<2	**0.87**	**0.61**
MW-1	MW-1	**1.2**	<50	<0.5	<0.5	<0.5	<2	**0.56**	**1.4**
MW-2	MW-2	**0.94**	<50	<0.5	<0.5	<0.5	<2	**5.9**	**6.2**
Detection Limit		0.05	50	0.5	0.5	0.5	2.0	0.5	0.5

Detection limits may differ due to sample dilution (see laboratory report for details).
TPH = Total Petroleum Hydrocarbons.
mg/L = Milligrams per liter.
µg/L = Micrograms per liter.

FIGURES



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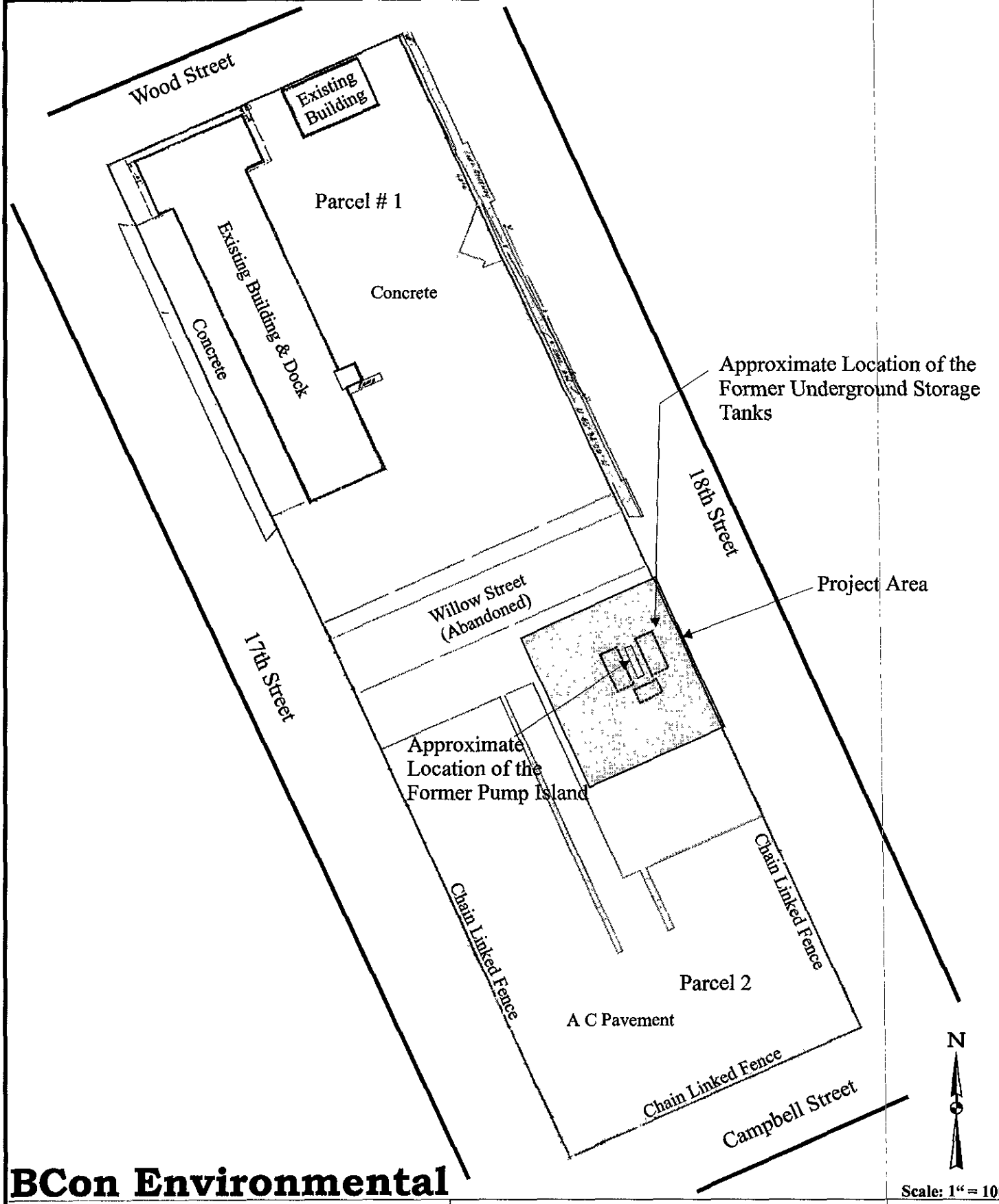
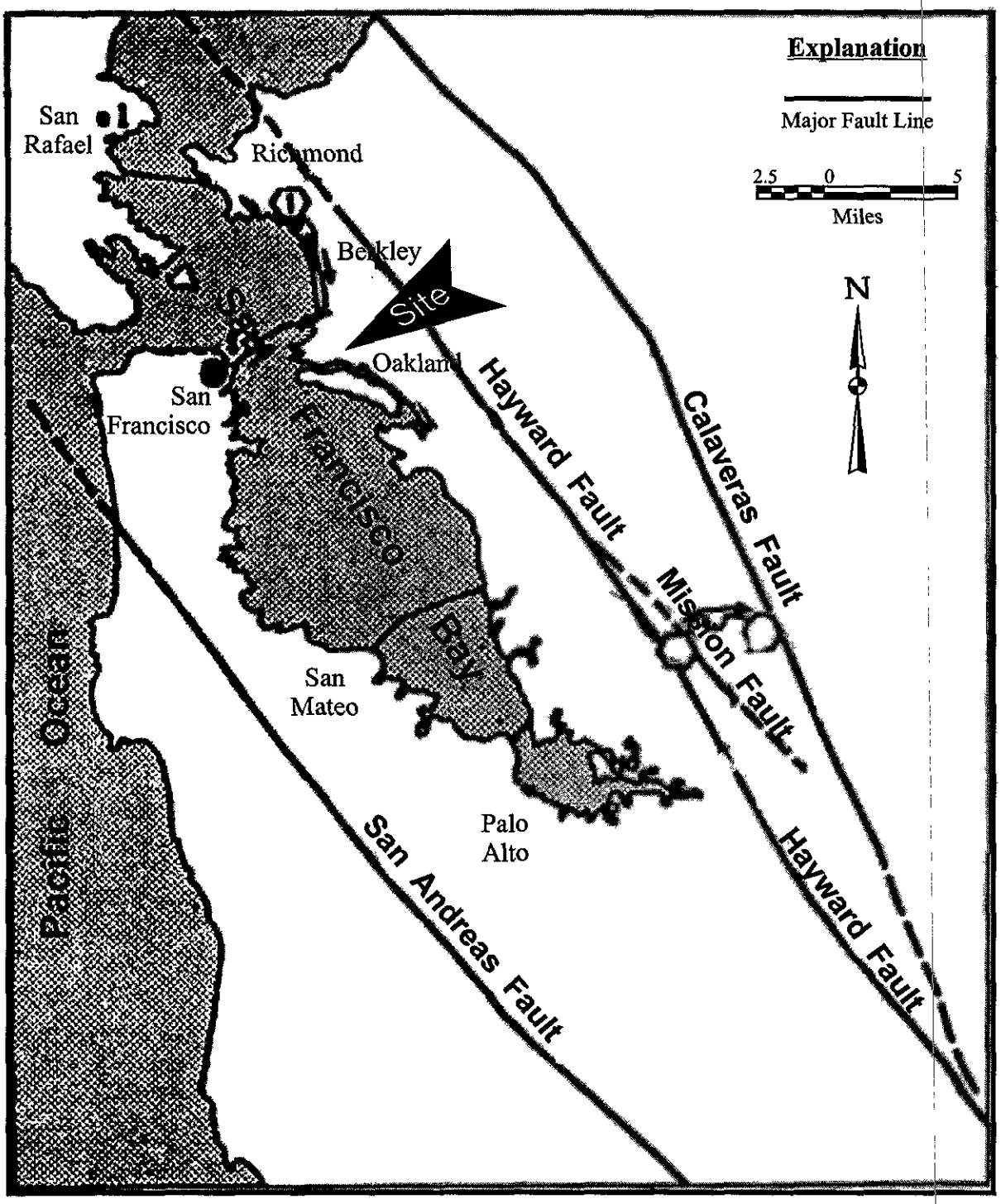
Project: **Roadway Express - Oakland**	**Figure 1: Site Vicinity Location Map**
1708 Wood Street Oakland, California	
File No.: 97-29OE01-Fig1 | Date: January 1998 | Designed by: M.B. | Drawn by: M.B.	



BCon Environmental

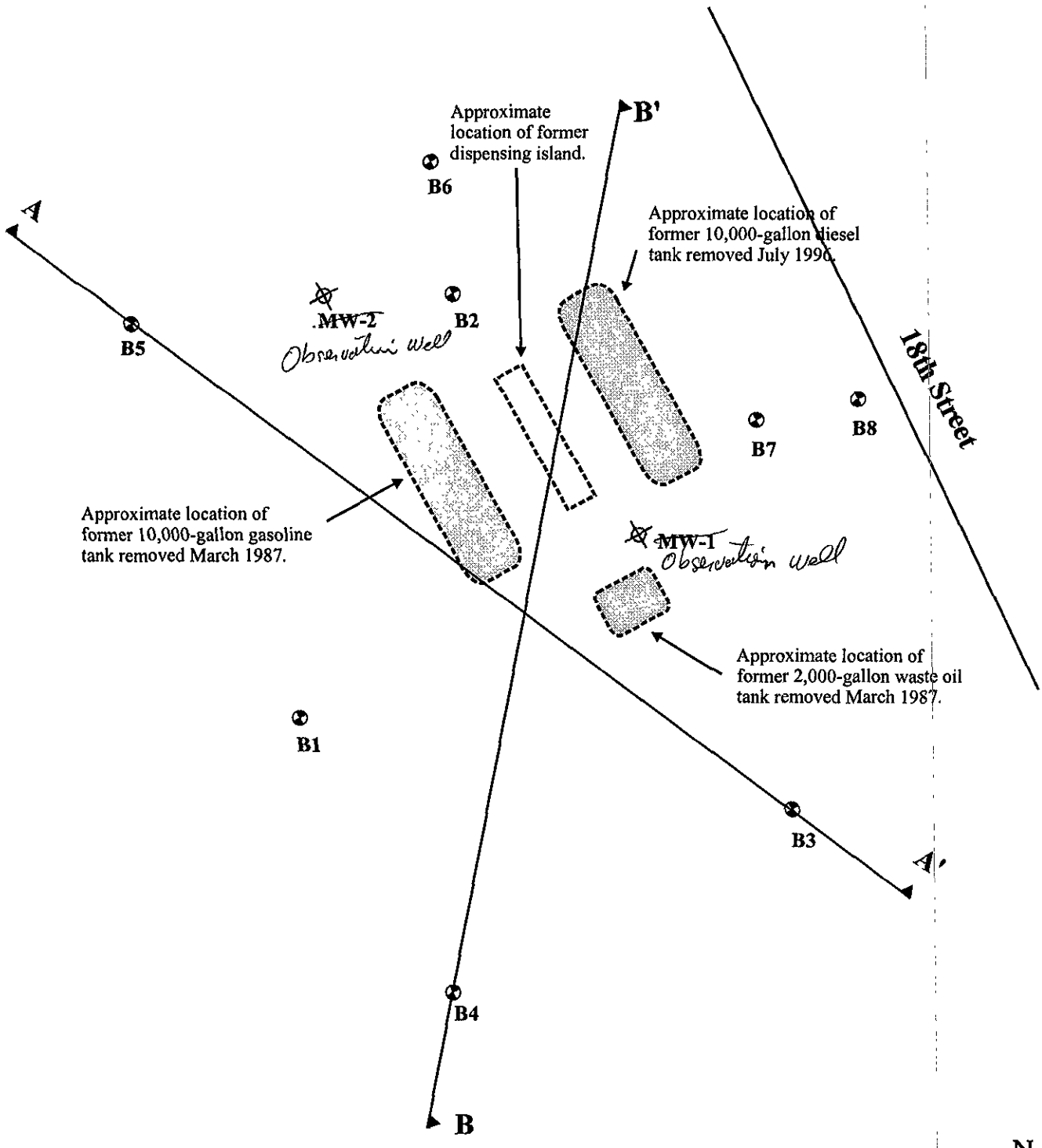
Project: **Roadway Express - Oakland** 1708 Wood Street Oakland, California	**Figure 2: Site Plot Plan**
File No.: 97-29OE01-Fig2 | Date: January 1998 | Designed by: M.B. | Drawn by: M.B.	



Regional geology map of the subject site modified after CDMG (1966)

BCon Environmental

Project: **Roadway Express - Oakland** 1708 Wood Street Oakland, California	**Figure 3: Regional Geology Map**
File No.: 97-29OE01-Fig3 | Date: January 1998 | Designed by: M.B. | Drawn by: M.B.	



Note:
The former location of USTs and dispensing island was identified based on the available data provided by Roadway Express.

Legend

MW-1	Existing observation wells
B8	Soil borings performed by BCon Environmental
A A'	Line of cross-section

N

Scale: 1" = 20' on center

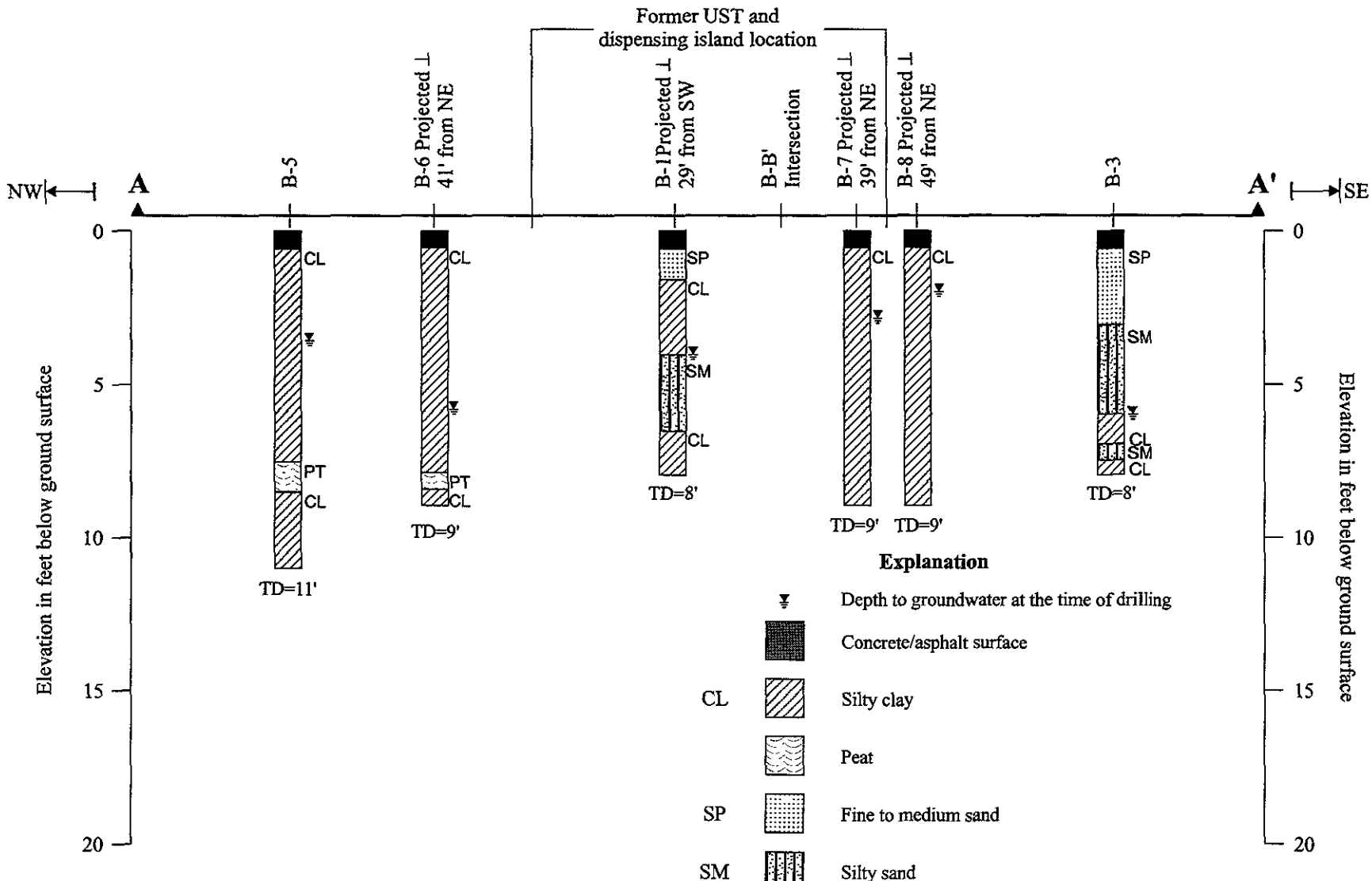
BCon Environmental

Project: **Roadway Express - Oakland**

1708 Wood Street
Oakland, California

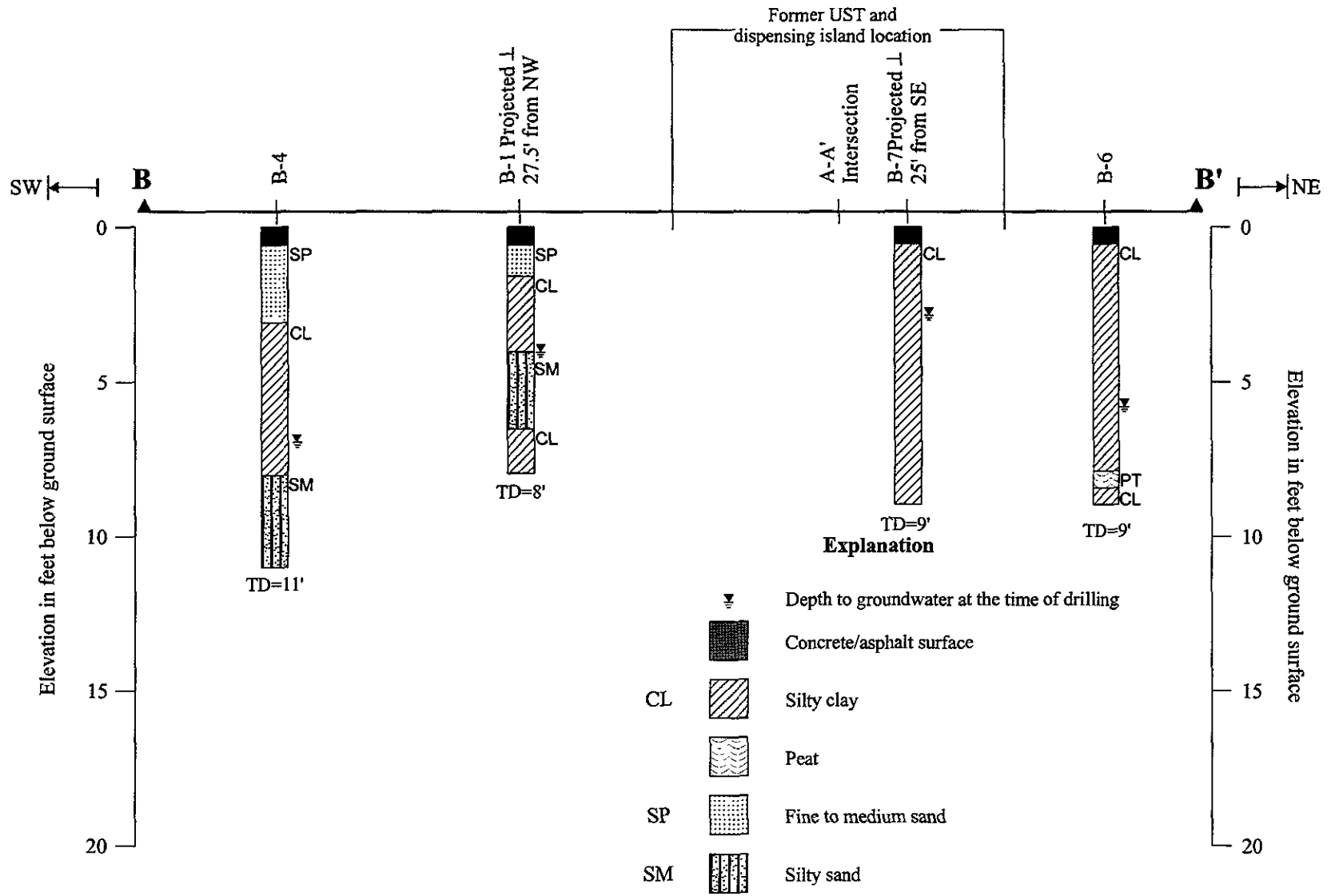
Figure 4: Site Plan And Boring Location

File No.: 97-29OE01-Fig4	Date: January 1998	Designed by: L.M.	Drawn by: M.B.



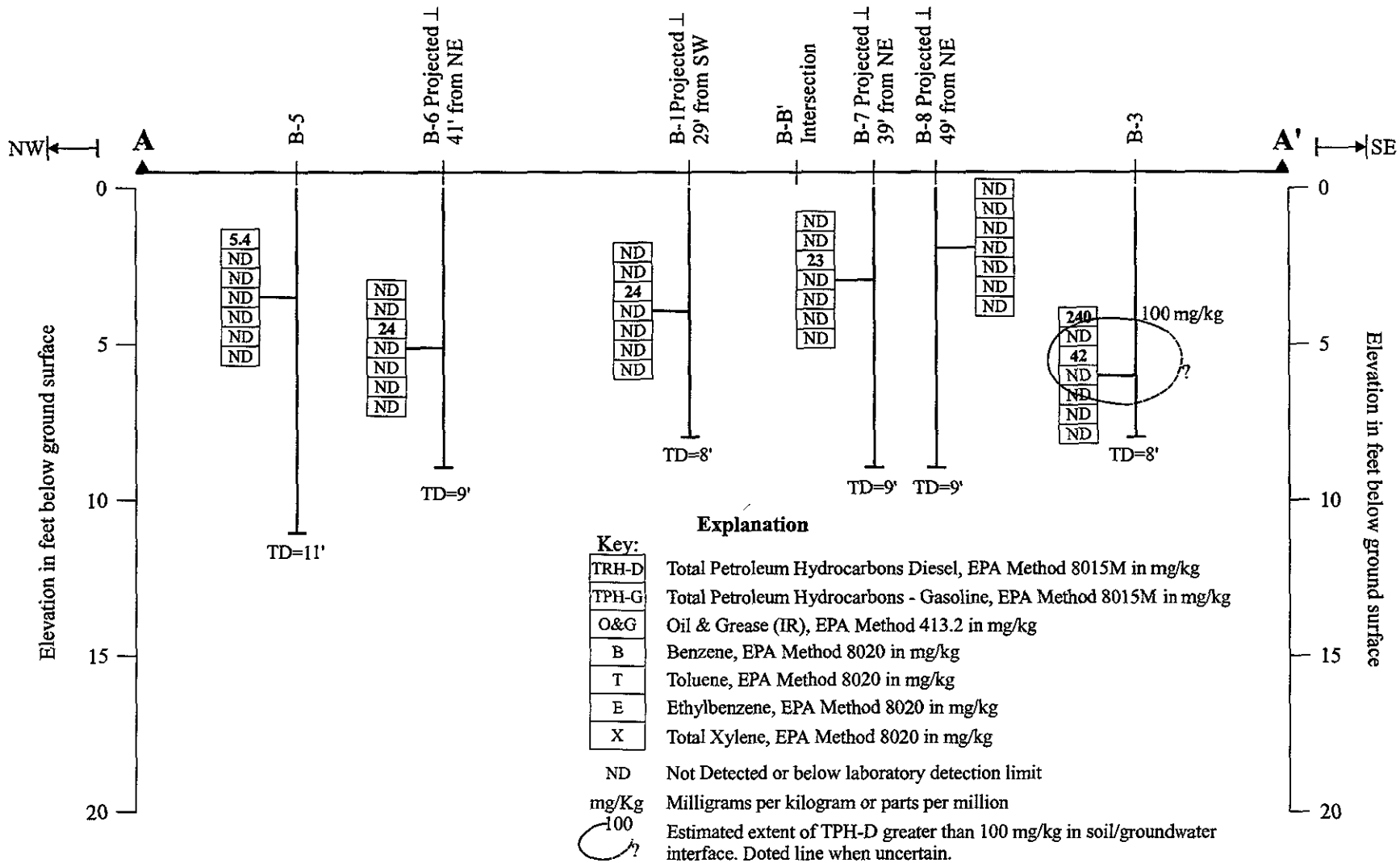
BCon Environmental

Project: **Roadway Express - Oakland** 1708 Wood Street Oakland, California	**Figure 5: Cross-Section A - A'**		1"=5' Scale 1"=20'
File No.: 97-29OE01-Fig5	Date: January 1998	Designed by: L.M.	Drawn by: M.B.



BCon Environmental

Project: **Roadway Express - Oakland** 1708 Wood Street Oakland, California	**Figure 6: Cross-Section B - B'**		Scale 1"=5' 1"=20'
File No.: 97-29OE01-Fig6	Date: January 1998	Designed by: L.M.	Drawn by: M.B.



Explanation

Key:	
TRH-D	Total Petroleum Hydrocarbons Diesel, EPA Method 8015M in mg/kg
TPH-G	Total Petroleum Hydrocarbons - Gasoline, EPA Method 8015M in mg/kg
O&G	Oil & Grease (IR), EPA Method 413.2 in mg/kg
B	Benzene, EPA Method 8020 in mg/kg
T	Toluene, EPA Method 8020 in mg/kg
E	Ethylbenzene, EPA Method 8020 in mg/kg
X	Total Xylene, EPA Method 8020 in mg/kg
ND	Not Detected or below laboratory detection limit
mg/Kg	Milligrams per kilogram or parts per million
100	Estimated extent of TPH-D greater than 100 mg/kg in soil/groundwater interface. Doted line when uncertain.

Note:
1) Refer to Figure 4 for line of cross-section.
2) This interpretive cross-section is intended to portray general subsurface conditions based on indications from borings drilled for this project. It is likely that additional borings may encounter somewhat different conditions than shown herein.

BCon Environmental

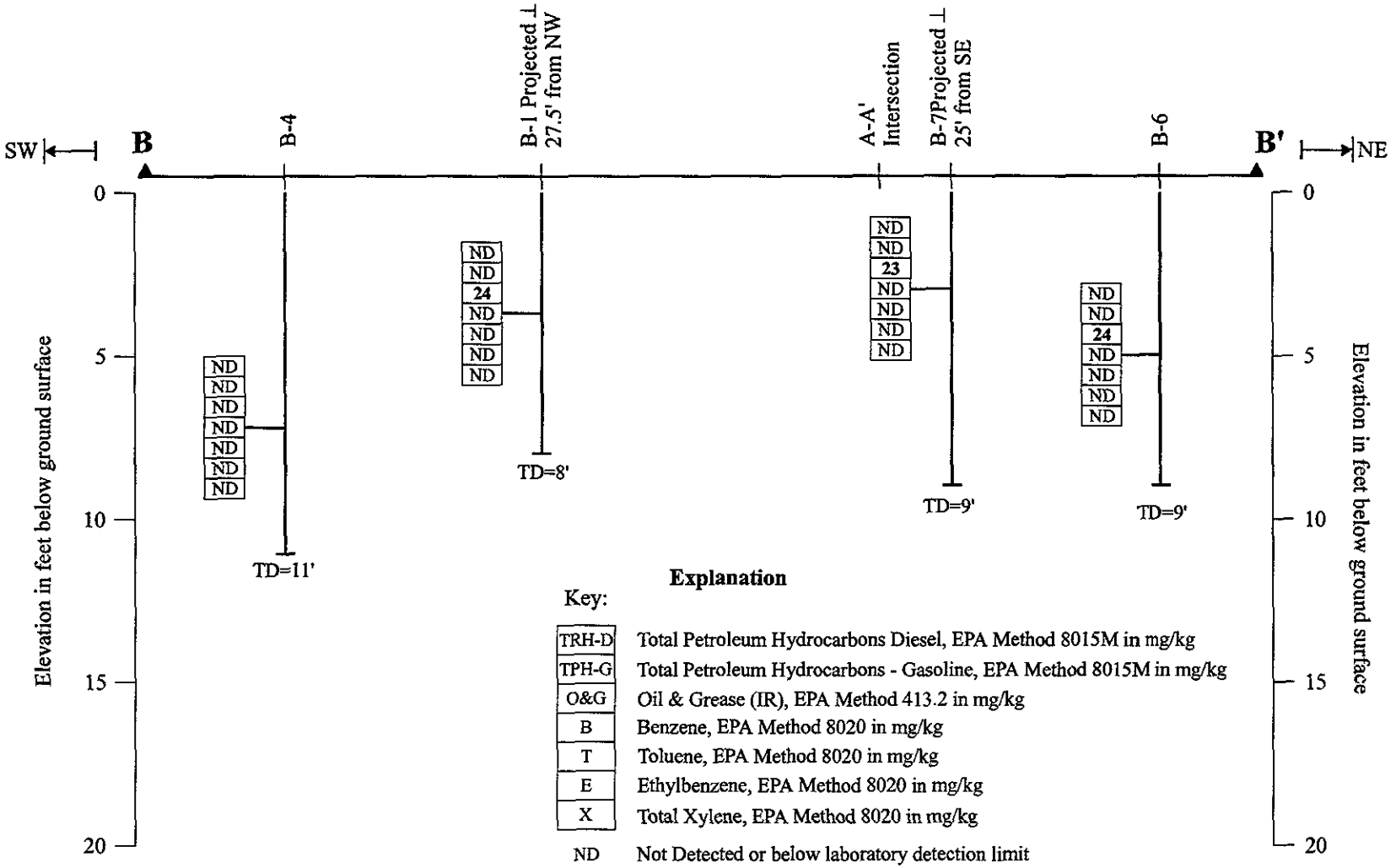
Project: **Roadway Express - Oakland**

1708 Wood Street
Oakland, California

Figure 7: Cross-Section A - A' For Soil Chemical Analysis

Scale 1"=5' / 1"=20'

File No.: 97-29OE01-Fig7 | Date: January 1998 | Designed by: L.M. | Drawn by: M.B.



Explanation

Key:

TRH-D	Total Petroleum Hydrocarbons Diesel, EPA Method 8015M in mg/kg
TPH-G	Total Petroleum Hydrocarbons - Gasoline, EPA Method 8015M in mg/kg
O&G	Oil & Grease (IR), EPA Method 413.2 in mg/kg
B	Benzene, EPA Method 8020 in mg/kg
T	Toluene, EPA Method 8020 in mg/kg
E	Ethylbenzene, EPA Method 8020 in mg/kg
X	Total Xylene, EPA Method 8020 in mg/kg
ND	Not Detected or below laboratory detection limit
mg/Kg	Milligrams per kilogram or parts per million

Note:
1) Refer to Figure 4 for line of cross-section.
2) This interpretive cross-section is intended to portray general subsurface conditions based on indications from borings drilled for this project. It is likely that additional borings may encounter somewhat different conditions than shown herein.

BCon Environmental

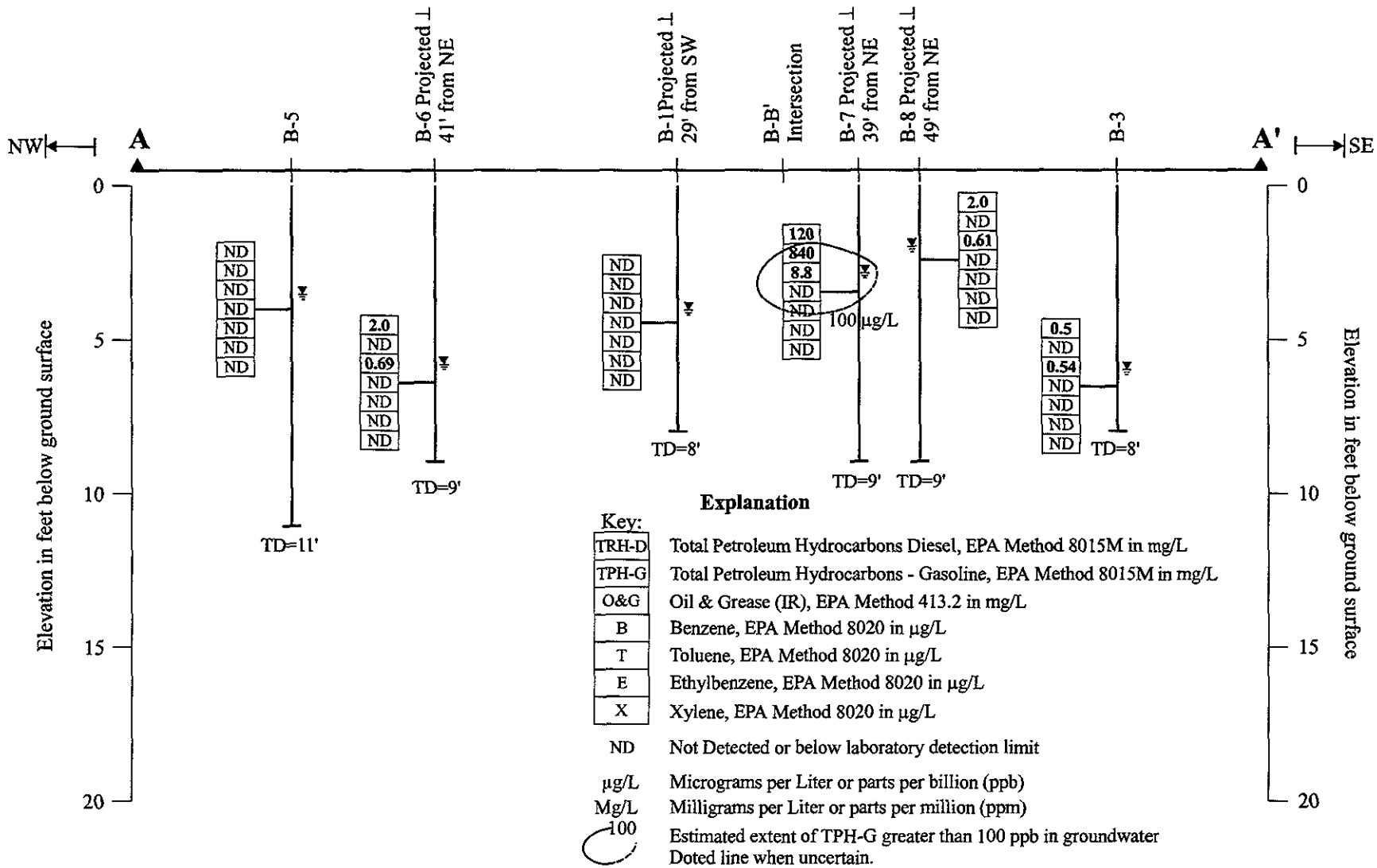
Project: **Roadway Express - Oakland**

1708 Wood Street
Oakland, California

Figure 8: Cross-Section B - B'
For Soil Chemical Analysis

Scale
1"=5'
1"=20'

File No.: 97-29OE01-Fig8 | Date: January 1998 | Designed by: L.M. | Drawn by: M.B.



Explanation

Key:

TRH-D	Total Petroleum Hydrocarbons Diesel, EPA Method 8015M in mg/L
TPH-G	Total Petroleum Hydrocarbons - Gasoline, EPA Method 8015M in mg/L
O&G	Oil & Grease (IR), EPA Method 413.2 in mg/L
B	Benzene, EPA Method 8020 in µg/L
T	Toluene, EPA Method 8020 in µg/L
E	Ethylbenzene, EPA Method 8020 in µg/L
X	Xylene, EPA Method 8020 in µg/L
ND	Not Detected or below laboratory detection limit
µg/L	Micrograms per Liter or parts per billion (ppb)
Mg/L	Milligrams per Liter or parts per million (ppm)
100	Estimated extent of TPH-G greater than 100 ppb in groundwater Doted line when uncertain.

Note:
1) Refer to Figure 4 for line of cross-section.
2) This interpretive cross-section is intended to portray general subsurface conditions based on indications from borings drilled for this project. It is likely that additional borings may encounter somewhat different conditions than shown herein.

BCon Environmental

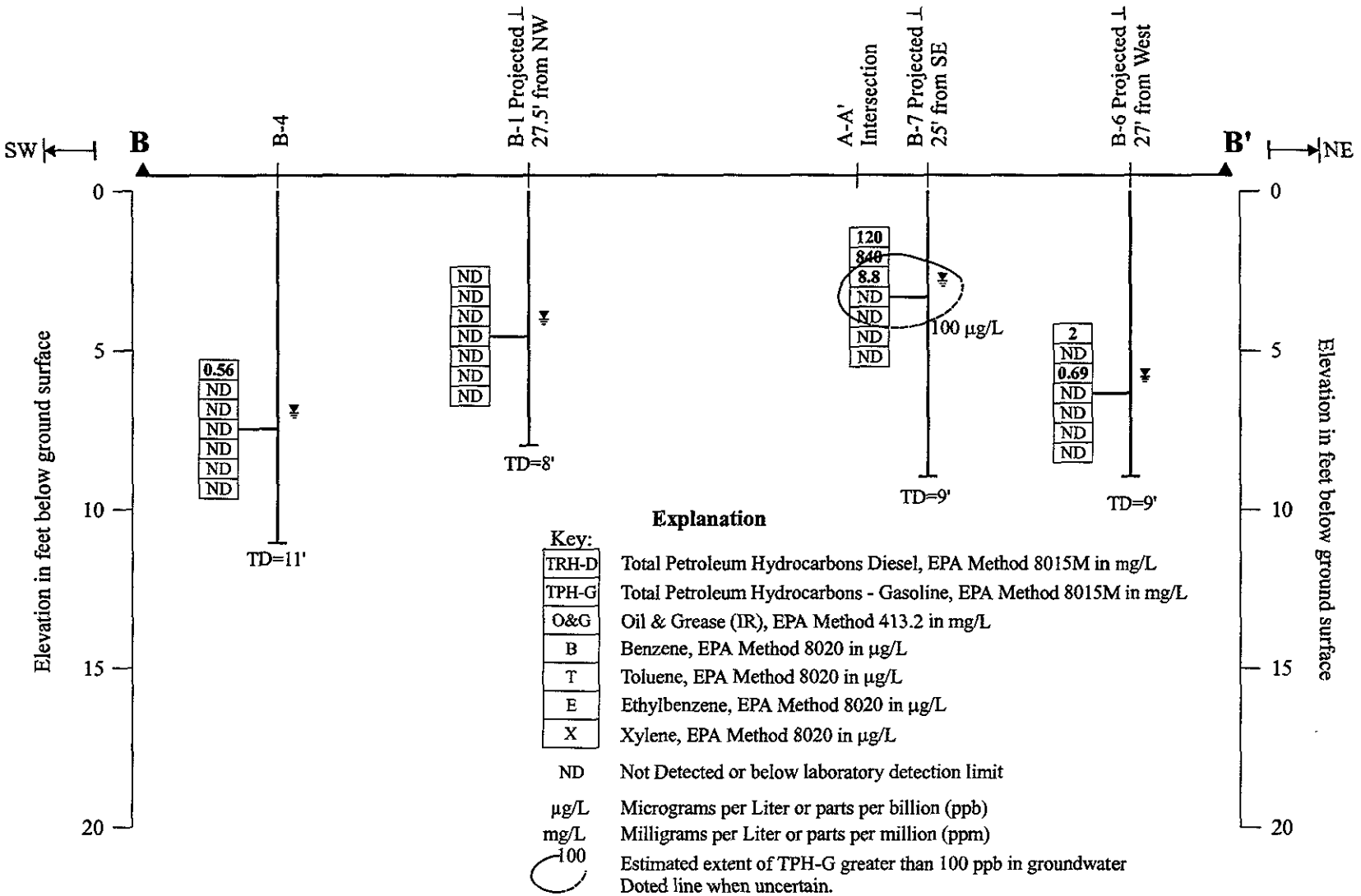
Project: **Roadway Express - Oakland**

1708 Wood Street
Oakland, California

Figure 9: Cross-Section A - A' For Water Chemical Analysis

Scale 1"=5' 1"=20'

File No.: 97-29OE01-Fig9 | Date: January 1998 | Designed by: L.M. | Drawn by: M.B.



Explanation

Key:

TRH-D	Total Petroleum Hydrocarbons Diesel, EPA Method 8015M in mg/L
TPH-G	Total Petroleum Hydrocarbons - Gasoline, EPA Method 8015M in mg/L
O&G	Oil & Grease (IR), EPA Method 413.2 in mg/L
B	Benzene, EPA Method 8020 in µg/L
T	Toluene, EPA Method 8020 in µg/L
E	Ethylbenzene, EPA Method 8020 in µg/L
X	Xylene, EPA Method 8020 in µg/L
ND	Not Detected or below laboratory detection limit
µg/L	Micrograms per Liter or parts per billion (ppb)
mg/L	Milligrams per Liter or parts per million (ppm)
100	Estimated extent of TPH-G greater than 100 ppb in groundwater Doted line when uncertain.

Note:
1) Refer to Figure 4 for line of cross-section.
2) This interpretive cross-section is intended to portray general subsurface conditions based on indications from borings drilled for this project. It is likely that additional borings may encounter somewhat different conditions than shown herein.

BCon Environmental

Project: **Roadway Express - Oakland**

1708 Wood Street
Oakland, California

Figure 10: Cross-Section B - B' For Water Chemical Analysis

Scale 1"=5' 1"=20'

File No.: 97-29OE01-Fig10 | Date: January 1998 | Designed by: L.M. | Drawn by: M.B.

APPENDICES

APPENDIX A
BOREHOLE PERMITS
ALAMEDA COUNTY PUBLIC WORKS AGENCY

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

MARK BARWINSKI

Date 7/16/97

2251 OHIO AVE

SIGNAL HILL CA 90806

Dear MARK:

Enclosed are drilling permit number(s) 97WR025 for

- ☐ a geotechnical investigation
- ☑ a contamination investigation
- ☐ a monitoring well construction project
- ☐ a water supply well construction project
- ☐ a cathodic protection well project
- ☐ the destruction of well(s)

at 1708 WOOD ST
OAKLAND

for your client ROADWAY EXPRESS INC

Please note that permit condition:

- ☐ A-1 requests that an application be submitted five days prior to your proposed start of work.
- ☑ A-2 requires that a well (construction) (~~destruction~~) report be submitted after completion of the work.

The report should include:

- ☑ permit number
- ☑ drilling and completion logs
- ☑ location sketch
- ☐ date of destruction
- ☐ a description of methods and materials used to destroy the well
- ☐ a Water Well Drillers Report (for drillers)

Please submit the original of your completion report. We will forward your submittal to the California Department of Water Resources.

If you have any questions, please contact Alvin Kan at (510) 670-5248 or myself at (510) 670-5575.

Sincerely,

Andreas Godfrey

Andreas Godfrey
Engineer-Scientist

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY, FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1708 Wood Street
Oakland, CA 94607

California Coordinates Source ______ ft. Accuracy ± ___ ft.
CCN ______ ft. CCE ______ ft.
APN ______
N37° 48.932' W122° 17.733'

CLIENT
Name Roadway Express Inc.
Address 290 ... Av Phone 562-927-1096
City Long Beach, CA Zip 90803

APPLICANT
Name BCM Environmental
Mark Barwinski Fax 562-498-...
Address 2251 Ohio Av Phone 562-...
City Signal Hill CA Zip 90806

TYPE OF PROJECT
Well Construction
- Cathodic Protection ☐
- Water Supply ☐
- Monitoring ☐

Geotechnical Investigation
- General ☐
- Contamination ☒
- Well Destruction ☐

PROPOSED WATER SUPPLY WELL USE
- New Domestic ☐
- Municipal ☐
- Industrial ☐
- Replacement Domestic ☐
- Irrigation ☐
- Other ______ ☐

DRILLING METHOD:
- Mud Rotary ☐
- Cable ☐
- Air Rotary ☐
- Auger ☐
- Other ☒ push probe

DRILLER'S LICENSE NO. 705927

WELL PROJECTS
Drill Hole Diameter ______ in.
Casing Diameter ______ in.
Surface Seal Depth ______ ft.
Maximum Depth ______ ft.
Number ______

GEOTECHNICAL PROJECTS
Number of Borings 7
Hole Diameter ______ in.
Maximum Depth 15 ft.

ESTIMATED STARTING DATE 07/24/97
ESTIMATED COMPLETION DATE 07/25/97

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [signature] DATE 07/16/97

FOR OFFICE USE

PERMIT NUMBER 97WR025
WELL NUMBER ______
APN ______

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

(D.) GEOTECHNICAL
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. [In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.]

E. CATHODIC
Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
See attached.

G. SPECIAL CONDITIONS

APPROVED [signature] DATE 7/16/97

APPENDIX B
SITE HEALTH AND SAFETY PLAN

SITE SAFETY PLAN
1708 Wood Street
Oakland, California
97-29OE01

1.0 INTRODUCTION

1.1 Purpose

The purpose of the site specific safety plan is to establish requirements for protecting the health and safety of all persons in and around the site activities. The site safety plan contains safety information in accordance with Title 29 CFR 1910.120 for hazardous waste operations and emergency responses.

1.2 Scope of Work

The scope of work will consist of drilling seven Geoprobe borings. The scope of work may change as field conditions change or as agreed to by the involved parties.

No threat to health and safety is expected to occur during the planned soil assessment activities.

2.0 EMERGENCY RESPONSE PLAN

2.1 On/Off-Site Medical Care

Any person requiring medical assistance will be taken to the designated hospital for prompt attention. There will always be a first aid kit available on-site while workers performing site remedial activities are in/around the work area.

2.2. On/Off-Site Emergency Response Procedures

Emergency response procedures include, depending upon the particular emergency, contacting the local police, fire department, ambulance, and hospital in specific emergencies. In the event of life threatening injury, first aid/CPR procedures should be started while the emergency teams are notified. Emergency Phone #911.

2.3 Evacuation Routes and Procedures

In the event of evacuation, there will be a pre-arranged staging area for personnel to meet. Always be upwind of contaminants. Evacuation routes include any direction on surface city streets.

2.4 Hospitals

The nearest hospital is:

Name:	Highland General Hospital
Address:	1411 E. 31st Street, Oakland.
Contact:	Emergency Room/Ask for a nurse
Phone #:	510-437-4369

A map showing a route to the hospital is attached. See end of Site Safety Plan.

3.0 SITE/HAZARD CHARACTERIZATION

3.1	Materials of concern	-Aromatic Hydrocarbons: Benzene, toluene, ethylbenzene, xylene, chemical exposure.
3.2	Affected area	- Immediately around the extraction wells and below the ground surface.
3.3	Topography	- There will be loose soils within the specific drilling areas. Outside of these areas there will be a paved parking lot, sidewalk and street.
3.4	Physical Hazards/ Associated Risk Hazards	- These hazards include slips, trips, and falls, sharp and heavy objects, holes, uneven ground, potential heat stress, drilling rig movement, lifting hazards, dust, and noise, as well as risks that could include the use of first aid/CPR procedures. BTEX presents respiratory, dermal, and ingestion hazards that could rely on first aid and immediate medical attention.
3.5	Chemical Hazards	- Chemical materials, explosion and fire.
3.6	Fire/ Explosion - Concern	Potential ignition of flammables due to oxygen enrichment and sparks from the drilling. - An inert gas will be used simultaneously when drilling is in progress. This gas will purge the holes thus forcing any combustible out into the atmosphere. As a result, any explosive potential should be eliminated or greatly reduced. While drilling, employees will be at a safe distance from possible subsurface explosion.

4.0 TOXICOLOGY/REGULATORY COMPLIANCE

Toxicology data regarding Site Hazards:

	STEL[1]	TWA[2]	Reference
Benzene	5 ppm	1 ppm	- OSHA pel/Action O.5 ppm
Toluene 150 ppm	100 ppm		- ACGIH TLV
Ethylbenzene	125 ppm	100 ppm	- ACGIH TLV
Xylenes 150 ppm	100 ppm		- ACGIH TLV

[1] STEL = short term exposure limit per ACGIH
[2] TWA = time weighted average per ACGIH

Effects of overexposure due to inhalation, ingestion, skin or eye contact may initially include: Eye irritation, tearing or blurring of vision; non specific discomfort, such as nausea, headache or weakness. All have the potential health effects of causing central nervous system depression, decreased alertness, sleepiness, loss of consciousness, and defatting dermatitis due to skin contact. Benzene suppresses bone marrow function, causing blood changes, chronic exposure can cause leukemia. Because there is a potential for benzene exposure with other aromatic hydrocarbons during vaporization, benzene related health effects should be considered when exposure to any of these agents is suspected. (Material safety data sheets are available upon request.)

5.0 SITE CONTROL

5.1 On-Site Control

Barricades with caution tape will be used to control unauthorized access into the work area. There will not be a security guard or additional off-site control. Site control will continue as long as there are personnel working.

5.2 Communication

Due to the close proximity of all field crew members, the necessity for radio communication is alleviated. The following standard hand signals will be used in case of failure of oral communications:

Hand gripping throat----------	Out of air, can't breathe
Grip partner's wrist or----------	Leave area immediately
both hands around waist	
Hands on top of head----------	Need assistance
Thumbs up----------	OK, I am all right, I understand
Thumbs down----------	No, negative

5.3 Buddy System

The buddy system will be used as a protective measure so that employees can keep watch on one another to provide quick aid if needed.

6.0 MONITORING PROGRAM

PID - To identify the concentrations of aromatic hydrocarbons, a photoionization detector (PID) will be used for background readings, screening of soil samples, and periodic monitoring to assure that proper protective equipment is being used. If free product is discovered, work must stop and the field team leader must be notified

CGI - To identify explosive atmosphere within the work area, a combustible gas indicator (CGI) will be used.

7.0 WORKER PROTECTION PROGRAM

7.1 Responsibility

It is the responsibility of each separate contractor working on this site to provide for its employees the appropriate health and safety training. On sites where hazardous materials may be encountered, this training should consist of that outlined under section 9.0 in this plan. BCon Environmental requires that the employees of the contractors that will be working on-site with its personnel have this training and appropriate refresher courses. Each employer will supply their employees with the required safety equipment. BCon Environmental personnel will monitor the site for hazardous conditions and recommend appropriate protective action when deemed necessary. Because BCon Environmental is not an employer of the separate contractors, it is the responsibility of each contractor to respond to the recommendations for action based on BCon Environmental's monitoring results. BCon Environmental may, if conditions dictate, terminate operations for purposes of maintaining the health and safety of all personnel on-site.

7.2 Respiratory Protection

All personnel will need a half face respirator that is NIOSH/MSHA approved for volatile organic chemicals (i.e. BTEX - Aromatic Hydrocarbons) when the quantity of Benzene is unknown, O.S.H.A. regulations stipulate employees will don a respirator when monitoring

results indicate contamination levels of 1.0 ppm TWA. Use of respirators will not be mandatory when PID readings are within ambient background levels. Organic vapors of 1 ppm above background level will be the indicator for using respiratory protection. Those employees NOT directly involved with the drilling procedure will be upwind and out of reach of organic compounds vapors. To determine an exclusion zone for those individuals where respirators will be not required, the PID can be used as a screening device. Reading above 1 ppm background will be designated as the contamination zone (respirator use). Readings at background levels will be designated as the safe zone (no respirator use). These zones will change as field conditions change.

7.3 Hearing and Head Protection

Hearing and head protection will be used when required while persons are on-site.

7.4 Eye Protection

All safety glasses/goggles must meet OSHA/ANSI Standards Z87.1. If a potential for liquid chemical exposure exists, splash guard protection shall be worn to prevent dermal and eye contact.

7.5 Clothing

Under non-hazardous contact personnel will need to wear long pants, long sleeved shirts, and minimum 6 inch high work boots. If little hazardous contact is anticipated, personnel will wear level D personal protective equipment including a hard hat, nitrile or disposable vinyl gloves, work boots, and safety glasses. Metal toe safety boots are required within 15 feet of all heavy equipment.

7.6 Facial

To properly wear a negative pressure respirator, personnel will need to be clean shaven. Mustaches should not extend below the corners of the upper lip. If any person/persons are unshaven, they cannot don any respirator.

7.7 Record Keeping

Each company will keep individual records for their employees. BCon Environmental will keep monitoring records for all background, area, and soil samples. These results can be viewed by any and all personnel on-site.

8.0 PERSONAL HYGIENE

To eliminate the risk of ingesting contaminants, all personnel should wash their hands prior to eating lunch or snacks throughout the day.

9.0 TRAINING

Each company will provide only those employees that have had appropriate training before they are allowed to engage in operations that could expose them to safety and health hazards. Employers should have records available, if needed, to verify that on-site employees have received the minimum equivalent of 40 hours training for work at hazardous waste sites as specified in the OSHA Hazardous Waste Operations and Emergency Response Standard (Title 29 CFR 1910.120(e)).

10.0 MEDICAL EVALUATIONS

Employees need to have had a pre-placement exam to determine individual health status before working in areas that could contain different level exposures. A pulmonary function examination should be available before employees are required to use respiratory protection devices. Employees must know the proper procedures to don personal protective equipment that will be used if necessary.

11.0 DECONTAMINATION PROCEDURES

11.1 Prevention of Contamination

Contamination prevention should always be kept in mind while working. Good work practices that minimize contact will be utilized to the extent possible. To prevent contamination while handling soil sampling equipment, disposable gloves should be worn if possible.

By encasing the source of contaminants (i.e. soil) there will be further increase in the prevention of potential contamination to employees. Contact with contamination may occur from soil samples and items with which they are handled. Contaminants can always permeate ones clothing. It is often difficult or impossible to detect and remove permeated chemicals and as a result prolonged exposure can occur. Each individual needs to be aware of factors that affect the extent of permeation.

- Contact time
- Concentration (High --> Low)
- Temperature
- Molecular Size and Pore Space
- Physical State (gas, liquid, solid)
- Persistence

11.2 Methods

On-site decontamination procedures will include washing with water and soap solutions to clean the skin and clothing when there is contact with contaminants. Any equipment used on-site will be decontaminated before leaving the site using water and TSP solution.

12.0 TRANSPORTATION AND DISPOSAL OF WASTE MATERIAL

Waste materials will be properly stored on-site until the level of contamination can be characterized. When characterization is complete, waste materials will be properly routed to the most appropriate location. If the waste is not significantly contaminated, it will remain on-site. Significantly contaminated soil will be properly disposed of off-site or remediated on-site with the necessary permits and equipment. When transportation/treatment occur, a site safety and health plan will be developed for that activity or this plan will be modified to include that activity.

13.0 ON-SITE ORGANIZATION AND COORDINATION

The following signators have reviewed the site safety plan and are aware of its contents. A safety meeting was conducted with all involved parties. All issues set forth in the site safety plan have been discussed prior to starting work.

	SIGNATURE
Project Team Leader	
Public Information Officer	
Record Keeper	
Field Team Members	Liz McDonough
Contractor	Frank Doran VIRONEX


Site
Oakland
Hospital
1411 E. 321 St Street
Oakland
510-437-4369
Alameda
© 1990 Thomas Street Atlas USA

APPENDIX C
SOIL BORING LOGS AND USCS

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN No. 200 SIEVE SIZE	GRAVELS MORE THAN 50% OF COARSE FRACTION IS LARGER THAN No. 4 SIEVE SIZE	CLEAN GRAVELS (LITTLE OR NO FINES)	GW	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			GP	POORLY GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES.
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES.
	SANDS MORE THAN 50% OF COARSE FRACTION IS SMALLER THAN No. 4 SIEVE SIZE	CLEAN SANDS (LITTLE OR NO FINES)	SW	WELL GRADED SANDS, GRAVELLY-SANDS, LITTLE OR NO FINES
			SP	POORLY GRADED SANDS OR GRAVELLY-SANDS, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SM	SILTY SANDS, SAND-SILT MIXTURES.
			SC	CLAYEY SANDS, SAND-CLAY MIXTURES.
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN No. 200 SIEVE SIZE	SILTS AND CLAYS (LIQUID LIMIT LESS THAN 50)		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCKY FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS AT LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS (LIQUID LIMIT MORE THAN 50)		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEUS FINE SAND OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS.
HIGHLY ORGANIC SOILS			PT	PEAT AND OTHE HIGHLY ORGANIC SOILS

PARTICLE SIZE LIMITS

SILT OR CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	MEDIUM		
No.200	No.40	No.10	No.4	3/4 in.	3 in	12 in	

THE UNIFIED SOIL CLASSIFICATION SYSTEM, CORPS OF ENGINEERS, U.S. ARMY TECH. MEMO. No.3-357, VOL.1, MARCH, 1953 (REV. APR. 1960)

UNIFIED SOIL CLASSIFICATION SYSTEM

Log of Sub-surface Exploration

Drilled By: Vironex Environmental

B-1

Equipment type: Geoprobe ®

Date: 07/24/97 | Total Depth: 8 ft. | Depth to GW: 4 ft.

Diameter: | Logged By: Mark Barwinski

Comments: Continuous core sampling from 0 ft to 8 ft.

Std. Pen / Bulk/Bag / Ring / Elev. (Feet)	PID (PPM)	Sample Number	Blows Per feet	USCS Letter / Graphic	Lithology Description
					Asphalt surface, 4" thick.
				SP	Reddish brown coarse sand (SP), damp, medium dense, poorly graded, well sorted.
				CL	Dark gray silty clay (CL), soft, wet, slight hydrogen sulfide odor.
	0				
	2	B-1-4'		=	Groundwater encountered at approximately 4' bgs.
5		B-1-W @ 5 ft.		SM	Tan fine grained silty sand (SM), loose, wet, slight hydrogen sulfide odor.
				CL	Dark gray, silty clay (CL), soft, moist, some plastic.
	9.6				Total boring depth 8 ft.
10					
15					
20					

Field Parameter Data:
Total depth = 8 feet.
Groundwater encountered at 4 feet.
Borehole backfilled with cement-grout from bottom of borehole up to surface and capped with a concrete plug.

Water readings:

pH:	4.02
Temp:	73.1 F
Turbidity:	Cloudy
Conductivity:	3.08 x 1000 µmohs.
Time:	12:20 PM
Weather:	Sunny, calm winds, approximately 75 F

BCon Environmental
Site Assessments - Asbestos - Lead
2251 Ohio Avenue, Signal Hill, Ca 90806
(562) 498-8304 Fax (562) 498-8345

Project Name: Roadway Express - Oakland Terminal

Project Location: 1708 Wood Street, Oakland, California

File No.: 98-B01.cdr | Project No.: 97-29OE01 | Page: 1 of 1

Log of Sub-surface Exploration

Drilled By: Vironex Environmental

B-2

Equipment type: Geoprobe ®

Date: 07/24/97 | Total Depth: 14 ft. | Depth to GW: 4 ft.

Diameter: | Logged By: Mark Barwinski

Comments: Unable to collect sample due to low soil cohesiveness

Std. Pen | Bulk/Bag | Ring | Elev. (Feet) | PID (PPM) | USCS Letter | Graphic | Sample Number | Blows Per feet

Lithology Description

Asphalt surface, 4" thick.

Pea gravel

Groundwater encountered at approximately 4' bgs.

No sample collected due to low cohesiveness of the pea gravel at the former UST location.

No sample collected due to low cohesiveness of the pea gravel at the former UST location.

No sample collected due to low cohesiveness of the pea gravel at the former UST location. Boring abandoned at 14 ft.

Field Parameter Data:
Total depth = 14 feet.
Groundwater encountered at 4 feet.
Borehole backfilled with cement-grout from bottom of borehole up to surface and capped with a concrete plug. No water sample collected.

Water readings:

pH:	-
Temp:	-
Turbidity:	-
Conductivity:	-
Time:	-
Weather:	-

BCon Environmental
Site Assessments - Asbestos - Lead
2251 Ohio Avenue, Signal Hill, Ca 90806
(562) 498-8304 Fax (562) 498-8345

Project Name: Roadway Express - Oakland Terminal

Project Location: 1708 Wood Street, Oakland, California

File No.: 98-B02.cdr | Project No.: 97-29OE01 | Page: 1 of 1

Note: This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

Log of Sub-surface Exploration

B-3

Drilled By: Vironex Environmental

Equipment type: Geoprobe ®

Date: 07/24/97 | Total Depth: 8 ft. | Depth to GW: 6 ft.

Diameter: | Logged By: Liz McDargh

Comments: Continuous core sampling from 0 ft to 8 ft.

Std. Pen / Bulk/Bag / Ring	Elev. (Feet)	PID (PPM)	Sample Number	Blows Per feet	USCS Letter / Graphic	Lithology Description
						Asphalt surface, 4" thick.
					SP	Reddish brown coarse sand (SP), damp, medium dense, poorly graded, well sorted. Unable to collect a sample due to low cohesiveness of the soil.
		0			SM	Dark gray silty sand (SM), fine grained, loose to medium dense, moist. Last 3 inches is clayey silt (ML). No hydrocarbon odor (HC).
	5					
		7	B-3-6' B-3-W @ 7ft.		▼ CL	Groundwater encountered at approximately 6' bgs. Brown to gray silty clay (CL), with pebbles, soft to stiff, moist, slight hydrocarbon odor to 7 ft.
					SM	
					CL	Dark gray silty sand (SM), fine grained, moist, dense.
						Dark gray lean clay (CL), soft to firm, moist, no hydrocarbon odor.
						Total boring depth 8 ft.
	10					
	15					
	20					

Field Parameter Data:

Total depth = 8 feet.
Groundwater encountered at 6 feet.
Borehole backfilled with cement-grout from bottom of borehole up to surface and capped with a concrete plug.

Water readings:

pH:	5.83
Temp:	74.7 F
Turbidity:	Cloudy
Conductivity:	5.17 x 1000 µmohs.
Time:	12:25 PM
Weather:	Sunny, calm winds, approximately 75 F

BCon Environmental
Site Assessments - Asbestos - Lead
2251 Ohio Avenue, Signal Hill, Ca 90806
(562) 498-8304 Fax (562) 498-8345

Project Name: Roadway Express - Oakland Terminal

Project Location: 1708 Wood Street, Oakland, California

File No.: 98-B03.cdr | Project No.: 97-29OE01 | Page: 1 of 1

Log of Sub-surface Exploration

B-4

Drilled By: Vironex Environmental

Equipment type: Geoprobe ®

Date: 07/24/97 | Total Depth: 11 ft. | Depth to GW: 7 ft.

Diameter: | Logged By: Mark Barwinski

Comments: Continuous core sampling from 0 ft to 11 ft.

Std. Pen / Bulk/Bag / Ring / Elev. (Feet) | PID (PPM) | Sample Number | Blows Per feet | USCS Letter / Graphic

Elev. (Feet)	PID (PPM)	Sample Number	USCS	Lithology Description
				Asphalt surface, 4" thick.
			SP	Reddish brown coarse sand (SP), damp, medium dense, poorly graded, well sorted. Unable to collect a sample due to low cohesiveness of the soil.
5	7.9		CL	Gray to brown silty clay (CL), soft, moist, slight hydrogen sulfide odor.
	7.5	B-4-7'		Groundwater encountered at approximately 7' bgs.
				Gray to brown silty clay (CL), wet, slight hydrocarbon odor.
		B-4-W @ 8 ft.	SM	Gray silty sand (SM), with pebbles, fine to medium grained sand, wet, loose, slight hydrocarbon odor.
10				Gray silty sand (SM), fine to medium dense, wet, slight hydrocarbon odor. Gray coarse grained sand at 11 feet.
				Total boring depth 11 ft.
15				
20				

Field Parameter Data:
Total depth = 11 feet.
Groundwater encountered at 7 feet.
Borehole backfilled with cement-grout from bottom of borehole up to surface and capped with a concrete plug.

Water readings:

pH:	6.60
Temp:	88.0 F
Turbidity:	Cloudy
Conductivity:	3.05 x 1000 µmohs.
Time:	1:30 PM
Weather:	Sunny, calm winds, approximately 75 F

BCon Environmental
Site Assessments - Asbestos - Lead
2251 Ohio Avenue, Signal Hill, Ca 90806
(562) 498-8304 Fax (562) 498-8345

Project Name: Roadway Express - Oakland Terminal

Project Location: 1708 Wood Street, Oakland, California

File No.: 98-B04.cdr | Project No.: 97-29OE01 | Page: 1 of 1

Log of Sub-surface Exploration

Drilled By: Vironex Environmental

B-5

Equipment type: Geoprobe ®

Date: 07/24/97 | Total Depth: 11 ft. | Depth to GW:3.5-4 ft.

Diameter: | Logged By: Mark Barwinski

Comments: Continuous core sampling from 0 ft to 11 ft.

Std. Pen / Bulk/Bag / Ring	Elev. (Feet)	PID (PPM)	Sample Number	Blows Per feet	USCS Letter / Graphic	Lithology Description
						Asphalt surface, 4" thick.
		6			CL	Gray organic silty clay (CL), moist, soft to stiff, some plasticity, slight organic odor.
		0	B-5-3.5' B-5-W @ 4 ft.		▼	Groundwater encountered at approximately 3.5' to 4' bgs. Gray silty clay (CL), moist to wet, stiff, no hydrocarbon odor. Trace of coarse sand.
	5				PT	Dark brown peat (PT), organic odor.
		0			CL	Gray silty clay (CL), stiff, moist.
	10					Total boring depth 11 ft.
	15					
	20					

Field Parameter Data:
Total depth = 11 feet.
Groundwater encountered at 3.5 to 4 feet.
Borehole backfilled with cement-grout from bottom of borehole up to surface and capped with a concrete plug.

Water readings:

pH:	5.8
Temp:	73.6 F
Turbidity:	Cloudy
Conductivity:	4.61 x 1000 µmohs.
Time:	3:15 PM
Weather:	Sunny, calm winds, approximately 75 F

BCon Environmental
Site Assessments - Asbestos - Lead
2251 Ohio Avenue, Signal Hill, Ca 90806
(562) 498-8304 Fax (562) 498-8345

Project Name: Roadway Express - Oakland Terminal

Project Location: 1708 Wood Street, Oakland, California

File No.: 98-B05.cdr | Project No.: 97-29OE01 | Page: 1 of 1

Log of Sub-surface Exploration

Drilled By: Vironex Environmental

B-6

Equipment type: Geoprobe ®

Date: 07/24/97 | Total Depth: 9 ft. | Depth to GW: 5 ft.

Diameter: | Logged By: Mark Barwinski

Comments: Continuous core sampling from 0 ft to 9 ft.

Std. Pen | Bulk/Bag | Ring | Elev. (Feet) | PID (PPM) | Sample Number | Blows Per feet | USCS Letter | Graphic

Elev. (Feet)	PID (PPM)	Sample Number	USCS Letter	Lithology Description
				Asphalt surface, 4" thick.
			CL	Gray silty clay (CL), stiff, moist.
5	9.3	B-6-5' B-6-W @ 6 ft.		Groundwater encountered at approximately 5' bgs. Gray silty clay (CL), stiff, wet, slight hydrocarbon odor. Some interbeds with gray to tan fine sand.
	5		PT	Dark brown peat (PT), organic odor.
			CL	Gray silty clay (CL), moist to wet, stiff, some plasticity.
10				Total boring depth 9 ft.
15				
20				

Field Parameter Data:
Total depth = 9 feet.
Groundwater encountered at 5 feet.
Borehole backfilled with cement-grout from bottom of borehole up to surface and capped with a concrete plug.

Water readings:

pH:	5.2
Temp:	80.8 F
Turbidity:	Cloudy
Conductivity:	4.75 x 1000 µmohs.
Time:	4:25 PM
Weather:	Sunny, calm winds, approximately 75 F

BCon Environmental
Site Assessments - Asbestos - Lead
2251 Ohio Avenue, Signal Hill, Ca 90806
(562) 498-8304 Fax (562) 498-8345

Project Name: Roadway Express - Oakland Terminal

Project Location: 1708 Wood Street, Oakland, California

File No.: 98-B06.cdr | Project No.: 97-29OE01 | Page: 1 of 1

Log of Sub-surface Exploration

B-7

Drilled By: Vironex Environmental

Equipment type: Geoprobe ®

Date: 07/24/97 | Total Depth: 9 ft. | Depth to GW: 3 ft.

Diameter: | Logged By: Mark Barwinski

Comments: Continuous core sampling from 0 ft to 9 ft.

Std. Pen / Bulk/Bag / Ring	Elev. (Feet)	PID (PPM)	Sample Number	Blows Per feet	USCS Letter	Graphic	Lithology Description
							Asphalt surface, 4" thick.
					CL		Gray silty clay (CL), stiff, moist, slight hydrocarbon odor.
		0	B-7-3' B-7-W @ 4 ft.				Groundwater encountered at approximately 3' bgs. Gray silty clay (CL), stiff, moist, slight hydrocarbon odor.
	5						Gray silty clay (CL), wet, stiff, slight hydrogen sulfide odor, some interbedded with gray to tan fine sand.
		125					Gray silty clay (CL), moist to wet, stiff, some plasticity, some hydrocarbon odor. Total boring depth 9 ft.
	10						
	15						
	20						

Field Parameter Data:

Total depth = 9 feet.
Groundwater encountered at 3 feet.
Borehole backfilled with cement-grout from bottom of borehole up to surface and capped with a concrete plug.

Water readings:

pH:	4.9
Temp:	79.6 F
Turbidity:	Cloudy
Conductivity:	4.71 x 1000 µmohs.
Time:	5:30 PM
Weather:	Sunny, calm winds, approximately 75 F

BCon Environmental
Site Assessments - Asbestos - Lead
2251 Ohio Avenue, Signal Hill, Ca 90806
(562) 498-8304 Fax (562) 498-8345

Project Name: Roadway Express - Oakland Terminal

Project Location: 1708 Wood Street, Oakland, California

File No.: 98-B07.cdr | Project No.: 97-29OE01 | Page: 1 of 1

Log of Sub-surface Exploration

B-8

Drilled By: Vironex Environmental

Equipment type: Geoprobe ®

Date: 07/24/97 | Total Depth: 9 ft. | Depth to GW: 2 ft.

Diameter: | Logged By: Mark Barwinski

Comments: Continuous core sampling from 0 ft to 9 ft.

Std. Pen / Bulk/Bag / Ring	Elev. (Feet)	PID (PPM)	Sample Number	Blows Per feet	USCS Letter / Graphic	Lithology Description
						Asphalt surface, 4" thick.
					CL	Gray silty clay (CL), stiff, moist, slight hydrocarbon odor.
		0	B-8-2' B-8-W @ 3 ft.			Groundwater encountered at approximately 2' bgs.
	5	0				Gray silty clay (CL) clayey silt (ML), wet, stiff, slight hydrogen sulfide odor.
		0				Gray silty clay (CL), moist to wet, stiff, some plasticity.
	10					Total boring depth 9 ft.
	15					
	20					

Field Parameter Data:
Total depth = 9 feet.
Groundwater encountered at 2 feet.
Borehole backfilled with cement-grout from bottom of borehole up to surface and capped with a concrete plug.

Water readings:

pH:	5.3
Temp:	70.7 F
Turbidity:	Cloudy
Conductivity:	5.21 x 1000 µmohs.
Time:	6:30 PM
Weather:	Sunny, calm winds, approximately 75 F

BCon Environmental
Site Assessments - Asbestos - Lead
2251 Ohio Avenue, Signal Hill, Ca 90806
(562) 498-8304 Fax (562) 498-8345

Project Name: Roadway Express - Oakland Terminal

Project Location: 1708 Wood Street, Oakland, California

File No.: 98-B08.cdr | Project No.: 97-29OE01 | Page: 1 of 1

APPENDIX D
GROUNDWATER FIELD DATA SHEETS

Groundwater Sampling Log

BCon Environmental

Site Assessments - Asbestos - Lead
2251 Ohio Avenue, Signal Hill, California 90806
(562) 498-8304 Fax (562) 498-8345
Email: oncourse@gte.net

Date:	7/24/97
Project No.:	97-29OE01
Client:	Roadway Express, Inc.
Well No.:	MW-1
Well Diameter (Inches):	4 In.
Sampled By:	Mark Barwinski

WELL PURGING INFORMATION

ONE CASING VOLUME OF WATER CALCULATED USING THE FOLLOWING:

Total Depth of Well (ft)		Depth to Water Level (ft. bgs)		Depth of Free Product (ft. bgs)		
8.42	-	1.16				
	→	7.26 Well Volume Factor	X	0.65 One Casing Volume of Water (gal.)	=	4.719 One Casing Volume of Water (gal.)

Well Volume Factors

Well Casing ID (Inches)	Volume Factor
2.0	0.16
4.0	0.65
6.0	1.47

Gallons Purged	Temp (F)	Conductivity (Micro-ohms/cm) x 10^3	pH	Turbidity (NTU)	Remarks
1.5	68.2	1.47	6.2	Muddy	
2.5	74.0	1.03	7.1	Muddy	
10.0	89.3	1.73	6.5	Cloudy	
11.0	80.7	1.12	6.8	Cloudy	
13.5	78.3	1.08	6.7	Slightly Cloudy	
15.0	79.3	1.11	6.6	Slightly Cloudy	

WELL SAMPLING INFORMATION

Time sampled: 5:30 PM
Method: Disposable bailer
Comments:

Groundwater Sampling Log

BCon Environmental

Site Assessments - Asbestos - Lead
2251 Ohio Avenue, Signal Hill, California 90806
(562) 498-8304 Fax (562) 498-8345
Email: oncourse@gte.net

Date:	7/24/97
Project No.:	97-29OE01
Client:	Roadway Express, Inc.
Well No.:	MW-2
Well Diameter (Inches):	4 In.
Sampled By:	Mark Barwinski

WELL PURGING INFORMATION

ONE CASING VOLUME OF WATER CALCULATED USING THE FOLLOWING:

Total Depth of Well (ft)		Depth to Water Level (ft. bgs)		Depth of Free Product (ft. bgs)		
8.91	-	1.33				
	→	7.58 Well Volume Factor	X	0.65 One Casing Volume of Water (gal.)	=	4.927 One Casing Volume of Water (gal.)

Well Volume Factors

Well Casing ID (Inches)	Volume Factor
2.0	0.16
4.0	0.65
6.0	1.47

Gallons Purged	Temp (F)	Conductivity (Micro-ohms/cm) x 10^3	pH	Turbidity (NTU)	Remarks
1.5	79.2	0.89	6.4	Muddy	
2.5	78.6	0.85	6.9	Muddy	
6.0	73.1	0.81	6.7	Cloudy	
11.0	73.4	0.79	6.6	Cloudy	
12.0	72.5	0.78	6.7	Slightly Cloudy	
15.0	72.7	0.79	6.8	Slightly Cloudy	

WELL SAMPLING INFORMATION

Time sampled: 6:00 PM
Method: Disposable bailer
Comments:

APPENDIX E
LABORATORY REPORT AND CHAIN-OF-CUSTODY RECORDS

Our Quality Control Is Your Quality Assurance

August 12, 1997 LOG NO.: G97-07-536

BCON Environmental
Attn. Mr. Mark Barwinski
2251 Ohio Avenue
Signal Hill, CA 90806

Reference: Client Project: Roadway, Oakland CA.

Dear Mr. Barwinski,

Enclosed is the analytical report for the chemical testing of samples collected in support of the above-referenced project. Samples were identified and tracked in the VOC system as log number **G97-07-536**. When making inquiries about this report, please provide the log number.

The contents of this package are based on the requirements specified in the BC Analytical, A Division of V.O.C. Analytical Laboratories, Inc. "Quality Assurance Management Plan". The case narrative addresses batch specific quality control as it pertains to this document.

If you have any questions, please do not hesitate to call me at (714) 978-0113.

Sincerely,

Patty Mata
Project Manager

LOG NO.: G97-07-536

CASE NARRATIVE

The following narrative addresses all project specific data quality objectives with respect to: holding times, method blanks, lab control standards, matrix spike and duplicate samples. Analytical anomalies encountered during sample analysis are also discussed as necessary.

Sample receipt:
Samples were received under COC from a courier and delivered to VOC's Glendale lab on 7/26/97. All containers were received intact and properly preserved. Cooler temperature was measured at 8 °C upon receipt.

Sample B-7-W was received with bottle label "B-4-W" sampled at 14:00. M. Barwinski requested a correction to be made to bottle label to read "B-7-W".

None of the samples in this project had Oil &Grease results above limits noted on COC. No additional tests were performed on samples.

Diesel (Method 8015M):
Samples B-7-W and B-3-6' required dilution to keep target analytes within calibration range. The surrogate concentrations were diluted below detectable levels and were reported as NC.

One of the two surrogate recoveries was above the control limits for samples B-1-W and MW-1. The second surrogate for each sample had acceptable recovery and were used to control the samples.

The aqueous MSD had a recovery above control limits. The MS, LCS and LCSD had acceptable recoveries and were used to control the batch.

The soil batch was controlled by a LCS/LCSD set in place of a MS/MSD set. The LCS/LCSD had acceptable recoveries.

Oil & Grease (Method 413.2/418.1):
The aqueous batches were controlled by LCS/LCSD sets in place of MS/MSD sets. The LCS/LCSD sets had recoveries within the control limits of 35-171 percent.

BTEX (Method 8020):
Benzene had a soil MS recovery above the control limits. The MSD, LCS and LCSD had acceptable recoveries and were used to control the batch.

No other anomalies were encountered during the analysis of this project.

ACRONYMS AND FLAG DEFINITIONS

Flag Definitions:

*	Replicate values. Used when replicate results are entered into the MS/MSD column of the QC report.
B	Blank contamination. Used when associated method blank concentration is greater than the PQL.
J	Estimated value. Used for sample results greater than or equal to MDL, but less than the PQL.
NC	Not calculated. Used when sample result is greater than two times the spike amount added, or when extracted surrogates were diluted below detectable levels.
Q	Quality objectives were not met. Used for Method Blank, Laboratory Control Samples, Matrix Spikes, Matrix Duplicates and Surrogates.

Acronyms:

COC	Chain of Custody
FLG	Flag
LC	Actual LCS/LCSD concentration recovered
LCL	Lower Control Limit
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LT	True LCS/LCSD concentration
MB	Method Blank
MS	Matrix Spike
MSD	Matrix Spike Duplicate
R1	Unspiked sample concentration
RDL	Reporting Detection Limit
%REC	Percent Recovery
Rep.	Surrogate Reported value
RPD	Relative Percent Difference
S1	Actual MS concentration
S2	Actual MSD concentration
T	True concentration of MS/MSD
Theo.	Surrogate Theoretical value
UCL	Upper Control Limit
UTD	Unable to determine

ANALYTICAL REPORT

Our Quality Control Is Your Quality Assurance

LOG NO: G97-07-536
Received: 28 JUL 97
Mailed: AUG 12 1997

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-1	07-536-2	07-536-3
DATE SAMPLED	*24 JUL 97*	*24 JUL 97*	*24 JUL 97*
SAMPLE DESCRIPTION	B-1-W	B-3-W	B-4-W
AQUEOUS			
DRO (8015M)			
Date Analyzed	08/05/97	08/05/97	08/06/97
Date Extracted	07/30/97	07/30/97	07/30/97
Dilution Factor, Times	1	1	1
TPH (Diesel Range), mg/L	<0.05	0.50	0.56
Carbon Range, .	C10-C25	C10-C25	C10-C25
Surrogates **			
Naphthalene Reported, mg/L	*0.0554*	*0.0423*	*0.0520*
Naphthalene Theoretical, mg/L	0.0500	0.0500	0.0500
o-Terphenyl Reported, mg/L	0.0549	0.0460	0.0473
o-Terphenyl Theoretical, mg/L	0.0500	0.0500	0.0500

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-1	07-536-2	07-536-3
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-1-W	B-3-W	B-4-W
AQUEOUS			
BTEX (8020)/GRO (8015M)			
Date Analyzed	07/29/97	07/29/97	07/29/97
Dilution Factor, Times	1	1	1
Benzene, ug/L	<0.5	<0.5	<0.5
Toluene, ug/L	<0.5	<0.5	<0.5
Ethylbenzene, ug/L	<0.5	<0.5	<0.5
Total Xylene Isomers, ug/L	<2	<2	<2
Carbon Range, .	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range), ug/L	<50	<50	<50
Surrogates **			
a,a,a-Trifluorotoluene Rep., ug/L	50.3	50.0	50.7
a,a,a-Trifluorotoluene Th., ug/L	50.0	50.0	50.0

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-4	07-536-5	07-536-6
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-5-W	B-6-W	B-7-W
AQUEOUS			
DRO (8015M)			
Date Analyzed	08/06/97	08/06/97	08/06/97
Date Extracted	07/30/97	07/30/97	07/30/97
Dilution Factor, Times	1	1	50
TPH (Diesel Range), mg/L	<0.05	2.0	120
Carbon Range, .	C10-C25	C10-C25	C10-C25
Surrogates **			
Naphthalene Reported, mg/L	0.0460	0.0513	0 NC
Naphthalene Theoretical, mg/L	0.0500	0.0500	0.0500
o-Terphenyl Reported, mg/L	0.0459	0.0470	0 NC
o-Terphenyl Theoretical, mg/L	0.0500	0.0500	0.0500

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-4	07-536-5	07-536-6
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-5-W	B-6-W	B-7-W
AQUEOUS			
BTEX (8020)/GRO (8015M)			
Date Analyzed	07/29/97	07/29/97	07/30/97
Dilution Factor, Times	1	1	5
Benzene, ug/L	<0.5	<0.5	<3
Toluene, ug/L	<0.5	<0.5	<3
Ethylbenzene, ug/L	<0.5	<0.5	<3
Total Xylene Isomers, ug/L	<2	<2	<10
Carbon Range, .	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range), ug/L	<50	<50	840
Surrogates **			
a,a,a-Trifluorotoluene Rep., ug/L	49.2	50.4	262
a,a,a-Trifluorotoluene Th., ug/L	50.0	50.0	250

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-7	07-536-8	07-536-9
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	MW-1	MW-2	B-8
AQUEOUS			
DRO (8015M)			
Date Analyzed	08/06/97	08/06/97	08/06/97
Date Extracted	07/30/97	07/30/97	07/30/97
Dilution Factor, Times	1	1	1
TPH (Diesel Range), mg/L	1.2	0.94	2.0
Carbon Range, .	C10-C25	C10-C25	C10-C25
Surrogates **			
Naphthalene Reported, mg/L	0.0566	0.0530	0.0521
Naphthalene Theoretical, mg/L	0.0500	0.0500	0.0500
o-Terphenyl Reported, mg/L	0.0590	0.0525	0.0539
o-Terphenyl Theoretical, mg/L	0.0500	0.0500	0.0500

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-7	07-536-8	07-536-9
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	MW-1	MW-2	B-8
AQUEOUS			
BTEX (8020)/GRO (8015M)			
Date Analyzed	07/29/97	07/29/97	07/29/97
Dilution Factor, Times	1	1	1
Benzene, ug/L	<0.5	<0.5	<0.5
Toluene, ug/L	<0.5	<0.5	<0.5
Ethylbenzene, ug/L	<0.5	<0.5	<0.5
Total Xylene Isomers, ug/L	<2	<2	<2
Carbon Range, .	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range), ug/L	<50	<50	<50
Surrogates **			
a,a,a-Trifluorotoluene Rep., ug/L	52.8	49.8	51.0
a,a,a-Trifluorotoluene Th., ug/L	50.0	50.0	50.0

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-10	07-536-11	07-536-12
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-1-4'	B-3-6'	B-4-7'
NON-AQUEOUS			
Oil & Grease,IR (413.2), mg/kg	24	42	<10

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-10	07-536-11	07-536-12
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-1-4'	B-3-6'	B-4-7'
NON-AQUEOUS			
TPH (8015M)			
Date Analyzed	08/05/97	08/05/97	08/05/97
Date Extracted	07/31/97	07/31/97	07/31/97
Dilution Factor, Times	1	10	1
TPH (Diesel Range), mg/kg	<1	240	<1
Carbon Range, .	C10-C25	C10-C25	C10-C25
Surrogates **			
Naphthalene Reported, mg/kg	2.01	0 NC	1.61
Naphthalene Theoretical, mg/kg	2.00	1.00	2.00
o-Terphenyl Reported, mg/kg	2.08	0 NC	1.82
o-Terphenyl Theoretical, mg/kg	2.00	1.00	2.00

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-10	07-536-11	07-536-12
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-1-4'	B-3-6'	B-4-7'
NON-AQUEOUS			
BTEX (8020)/GRO (8015M)			
Date Analyzed	07/29/97	07/29/97	07/29/97
Dilution Factor, Times	1	1	1
Benzene, mg/kg	<0.005	<0.005	<0.005
Toluene, mg/kg	<0.005	<0.005	<0.005
Ethylbenzene, mg/kg	<0.005	<0.005	<0.005
Total Xylene Isomers, mg/kg	<0.02	<0.02	<0.02
Carbon Range, .	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range), mg/kg	<1	<1	<1
Surrogates **			
a,a,a-Trifluorotoluene Rep., mg/kg	0.0469	0.0482	0.0517
a,a,a-Trifluorotoluene Th., mg/kg	0.0500	0.0500	0.0500

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
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2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-13	07-536-14	07-536-15
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-5-3.5'	B-6-5'	B-7-3'
NON-AQUEOUS			
Oil & Grease, IR (413.2), mg/kg	<10	24	23

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-13	07-536-14	07-536-15
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-5-3.5'	B-6-5'	B-7-3'
NON-AQUEOUS			
TPH (8015M)			
Date Analyzed	08/05/97	08/05/97	08/05/97
Date Extracted	07/31/97	07/31/97	07/31/97
Dilution Factor, Times	1	1	1
TPH (Diesel Range), mg/kg	5.4	<1	<1
Carbon Range, .	C10-C25	C10-C25	C10-C25
Surrogates **			
Naphthalene Reported, mg/kg	0.977	0.945	0.643
Naphthalene Theoretical, mg/kg	1.00	1.00	1.00
o-Terphenyl Reported, mg/kg	0.953	0.920	0.794
o-Terphenyl Theoretical, mg/kg	1.00	1.00	1.00

LOG NO: G97-07-536

Received: 28 JUL 97

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Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-13	07-536-14	07-536-15
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-5-3.5'	B-6-5'	B-7-3'
NON-AQUEOUS			
BTEX (8020)/GRO (8015M)			
Date Analyzed	07/29/97	07/29/97	07/29/97
Dilution Factor, Times	1	1	1
Benzene, mg/kg	<0 005	<0.005	<0.005
Toluene, mg/kg	<0.005	<0.005	<0.005
Ethylbenzene, mg/kg	<0.005	<0.005	<0.005
Total Xylene Isomers, mg/kg	<0.02	<0.02	<0.02
Carbon Range, .	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range), mg/kg	<1	<1	<1
Surrogates **			
a,a,a-Trifluorotoluene Rep., mg/kg	0.0517	0.0500	0.0531
a,a,a-Trifluorotoluene Th., mg/kg	0.0500	0.0500	0.0500

LOG NO: G97-07-536

Received: 28 JUL 97

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BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO		07-536-16	
DATE SAMPLED		24 JUL 97	
SAMPLE DESCRIPTION		B-8-2'	
NON-AQUEOUS			
Oil & Grease,IR (413.2), mg/kg		<10	

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-16
DATE SAMPLED	24 JUL 97
SAMPLE DESCRIPTION	B-8-2'
NON-AQUEOUS	
TPH (8015M)	
Date Analyzed	08/05/97
Date Extracted	07/31/97
Dilution Factor, Times	1
TPH (Diesel Range), mg/kg	<1
Carbon Range, .	C10-C25
Surrogates **	
Naphthalene Reported, mg/kg	0.805
Naphthalene Theoretical, mg/kg	1.00
o-Terphenyl Reported, mg/kg	0.852
o-Terphenyl Theoretical, mg/kg	1.00

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-16
DATE SAMPLED	24 JUL 97
SAMPLE DESCRIPTION	B-8-2'
NON-AQUEOUS	
BTEX (8020)/GRO (8015M)	
Date Analyzed	07/29/97
Dilution Factor, Times	1
Benzene, mg/kg	<0.005
Toluene, mg/kg	<0.005
Ethylbenzene, mg/kg	<0.005
Total Xylene Isomers, mg/kg	<0.02
Carbon Range, .	C6-C12
TPH (Gasoline Range), mg/kg	<1
Surrogates **	
a,a,a-Trifluorotoluene Rep., mg/kg	0.0561
a,a,a-Trifluorotoluene Th., mg/kg	0.0500

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-17
DATE SAMPLED	24 JUL 97
SAMPLE DESCRIPTION	Trip Blank #970504
AQUEOUS	
BTEX (8020)/GRO (8015M)	
Date Analyzed	07/29/97
Dilution Factor, Times	1
Benzene, ug/L	<0.5
Toluene, ug/L	<0.5
Ethylbenzene, ug/L	<0.5
Total Xylene Isomers, ug/L	<2
Carbon Range, .	C5-C12
TPH (Gasoline Range), ug/L	<50
Surrogates **	
a,a,a-Trifluorotoluene Rep., ug/L	50.2
a,a,a-Trifluorotoluene Th., ug/L	50.0

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-18	07-536-19	07-536-20
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-1-W	B-3-W	B-4-W
AQUEOUS			
Oil & Grease, Hydrocarbon (418.1), mg/L	0.53	<0.5	0.55
Oil & Grease, IR (413.2), mg/L	<0.5	0.54	<0.5

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-21	07-536-22	07-536-23
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	B-5-W	B-6-W	B-7-W
AQUEOUS			
Oil & Grease, Hydrocarbon (418.1), mg/L	0.68	<0.5	8.0
Oil & Grease,IR (413.2), mg/L	<0.5	0.69	8.8

LOG NO: G97-07-536

Received: 28 JUL 97

Mr. Mark Barwinski
BCON Environmental
2251 Ohio Avenue
Signal Hill, CA 90806

REPORT OF ANALYTICAL RESULTS

LOG NO	07-536-24	07-536-25	07-536-26
DATE SAMPLED	24 JUL 97	24 JUL 97	24 JUL 97
SAMPLE DESCRIPTION	MW-1	MW-2	B-8
AQUEOUS			
Oil & Grease, Hydrocarbon (418.1), mg/L	0.56	5.9	0.87
Oil & Grease, IR (413.2), mg/L	1.4	6.2	0.61

Greta Galoustian, Laboratory Director

: ORDER PLACED FOR CLIENT: BCON Environmental 9707536 :
: VOC ANALYTICAL : GLEN LAB : 09:02:51 12 AUG 1997 - P. 1 :

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9707536*1	B-1-W	DIESEL.3520	08.05.97	8015M	536-01	97172	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-23	975111	7424
9707536*2	B-3-W	DIESEL.3520	08.05.97	8015M	536-01	97172	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-23	975111	7424
9707536*3	B-4-W	DIESEL.3520	08.06.97	8015M	536-01	97172	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-23	975111	7424
9707536*4	B-5-W	DIESEL.3520	08.06.97	8015M	536-01	97172	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-23	975111	7424
9707536*5	B-6-W	DIESEL.3520	08.06.97	8015M	536-01	97172	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-23	975111	7424
9707536*6	B-7-W	DIESEL.3520	08.06.97	8015M	536-01	97172	1020
		GAS.TPH.BTEX	07.30.97	8015M	536-23	975112	7424
9707536*7	MW-1	DIESEL.3520	08.06.97	8015M	536-01	97172	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-23	975111	7424
9707536*8	MW-2	DIESEL.3520	08.06.97	8015M	536-01	97172	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-23	975111	7424
9707536*9	B-8	DIESEL.3520	08.06.97	8015M	536-01	97172	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-23	975111	7424
9707536*10	B-1-4'	DIESEL.3550	08.05.97	8015M	536-01	97175	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-33	9766110	
		IR.O&G	08.03.97	413.2	533-17	97436	8106
9707536*11	B-3-6'	DIESEL.3550	08.05.97	8015M	536-01	97175	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-33	9766110	
		IR.O&G	08.03.97	413.2	533-17	97436	8106
9707536*12	B-4-7'	DIESEL.3550	08.05.97	8015M	536-01	97175	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-33	9766110	
		IR.O&G	08.03.97	413.2	533-17	97436	8106
9707536*13	B-5-3.5'	DIESEL.3550	08.05.97	8015M	536-01	97175	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-33	9766110	
		IR.O&G	08.03.97	413.2	533-17	97436	8106
9707536*14	B-6-5'	DIESEL.3550	08.05.97	8015M	536-01	97175	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-33	9766110	
		IR.O&G	08.03.97	413.2	533-17	97436	8106
9707536*15	B-7-3'	DIESEL.3550	08.05.97	8015M	536-01	97175	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-33	9766110	
		IR.O&G	08.03.97	413.2	533-17	97436	8106
9707536*16	B-8-2'	DIESEL.3550	08.05.97	8015M	536-01	97175	1020
		GAS.TPH.BTEX	07.29.97	8015M	536-33	9766110	
		IR.O&G	08.03.97	413.2	533-17	97436	8106
9707536*17	Trip Blank #970504	GAS.TPH.BTEX	07.29.97	8015M	536-23	975111	7424
9707536*18	B-1-W	IR.O&G.HC	07.30.97	418.1	533-17	97435	8106
		IR.O&G	07.30.97	413.2	533-17	97434	8106
9707536*19	B-3-W	IR.O&G.HC	07.30.97	418.1	533-17	97435	8106
		IR.O&G	07.30.97	413.2	533-17	97434	8106

Notes: Equipment = VOC Analytical identification number for a particular piece of analytical equipment.

ID.NO = VOC Analytical employee identification number of analyst.

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE..... ANALYZED	METHOD.....	EQUIP.	BATCH..	ID.NO
9707536*20	B-4-W	IR.O&G.HC	07.30.97	418.1	533-17	97435	8106
		IR.O&G	07.30.97	413.2	533-17	97434	8106
9707536*21	B-5-W	IR.O&G.HC	07.30.97	418.1	533-17	97435	8106
		IR.O&G	07.30.97	413.2	533-17	97434	8106
9707536*22	B-6-W	IR.O&G.HC	07.30.97	418.1	533-17	97435	8106
		IR.O&G	07.30.97	413.2	533-17	97434	8106
9707536*23	B-7-W	IR.O&G.HC	07.30.97	418.1	533-17	97435	8106
		IR.O&G	07.30.97	413.2	533-17	97434	8106
9707536*24	MW-1	IR.O&G.HC	07.30.97	418.1	533-17	97435	8106
		IR.O&G	07.30.97	413.2	533-17	97434	8106
9707536*25	MW-2	IR.O&G.HC	07.30.97	418.1	533-17	97435	8106
		IR.O&G	07.30.97	413.2	533-17	97434	8106
9707536*26	B-8	IR.O&G.HC	07.30.97	418.1	533-17	97435	8106
		IR.O&G	07.30.97	413.2	533-17	97434	8106

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Notes: Equipment = VOC Analytical identification number for a particular piece of analytical equipment.

ID.NO = VOC Analytical employee identification number of analyst.

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 09:03:10 12 AUG 1997 - P. 1 :

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG	LCL	UCL
9707536*1									
8015M	Naphthalene	97172	08/05/97	0.0554	0.0500	111		55	127
	o-Terphenyl	97172	08/05/97	0.0549	0.0500	110	Q	69	108
8015M	a,a,a-Trifluorotoluene	Re975111	07/29/97	50.3	50.0	101		76	126
9707536*2									
8015M	Naphthalene	97172	08/05/97	0.0423	0.0500	85		55	127
	o-Terphenyl	97172	08/05/97	0.0460	0.0500	92		69	108
8015M	a,a,a-Trifluorotoluene	Re975111	07/29/97	50.0	50.0	100		76	126
9707536*3									
8015M	Naphthalene	97172	08/06/97	0.0520	0.0500	104		55	127
	o-Terphenyl	97172	08/06/97	0.0473	0.0500	95		69	108
8015M	a,a,a-Trifluorotoluene	Re975111	07/29/97	50.7	50.0	101		76	126
9707536*4									
8015M	Naphthalene	97172	08/06/97	0.0460	0.0500	92		55	127
	o-Terphenyl	97172	08/06/97	0.0459	0.0500	92		69	108
8015M	a,a,a-Trifluorotoluene	Re975111	07/29/97	49.2	50.0	98		76	126
9707536*5									
8015M	Naphthalene	97172	08/06/97	0.0513	0.0500	103		55	127
	o-Terphenyl	97172	08/06/97	0.0470	0.0500	94		69	108
8015M	a,a,a-Trifluorotoluene	Re975111	07/29/97	50.4	50.0	101		76	126
9707536*6									
8015M	Naphthalene	97172	08/06/97	NC	0.0500	NC	NC	55	127
	o-Terphenyl	97172	08/06/97	NC	0.0500	NC	NC	69	108
8015M	a,a,a-Trifluorotoluene	Re975112	07/30/97	262	250	105		76	126
9707536*7									
8015M	Naphthalene	97172	08/06/97	0.0566	0.0500	113		55	127
	o-Terphenyl	97172	08/06/97	0.0590	0.0500	118	Q	69	108
8015M	a,a,a-Trifluorotoluene	Re975111	07/29/97	52.8	50.0	106		76	126
9707536*8									
8015M	Naphthalene	97172	08/06/97	0.0530	0.0500	106		55	127
	o-Terphenyl	97172	08/06/97	0.0525	0.0500	105		69	108
8015M	a,a,a-Trifluorotoluene	Re975111	07/29/97	49.8	50.0	100		76	126
9707536*9									
8015M	Naphthalene	97172	08/06/97	0.0521	0.0500	104		55	127
	o-Terphenyl	97172	08/06/97	0.0539	0.0500	108		69	108
8015M	a,a,a-Trifluorotoluene	Re975111	07/29/97	51.0	50.0	102		76	126
9707536*10									

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG	LCL	UCL
8015M	Naphthalene	97175	08/05/97	2.01	2.00	101		52	145
	o-Terphenyl	97175	08/05/97	2.08	2.00	104		50	150
8015M	a,a,a-Trifluorotoluene	Re9766110	07/29/97	0.0469	0.0500	94		71	131
9707536*11									
8015M	Naphthalene	97175	08/05/97	NC	1.00	NC	NC	52	145
	o-Terphenyl	97175	08/05/97	NC	1.00	NC	NC	50	150
8015M	a,a,a-Trifluorotoluene	Re9766110	07/29/97	0.0482	0.0500	96		71	131
9707536*12									
8015M	Naphthalene	97175	08/05/97	1.61	2.00	81		52	145
	o-Terphenyl	97175	08/05/97	1.82	2.00	91		50	150
8015M	a,a,a-Trifluorotoluene	Re9766110	07/29/97	0.0517	0.0500	103		71	131
9707536*13									
8015M	Naphthalene	97175	08/05/97	0.977	1.00	98		52	145
	o-Terphenyl	97175	08/05/97	0.953	1.00	95		50	150
8015M	a,a,a-Trifluorotoluene	Re9766110	07/29/97	0.0517	0.0500	103		71	131
9707536*14									
8015M	Naphthalene	97175	08/05/97	0.945	1.00	95		52	145
	o-Terphenyl	97175	08/05/97	0.920	1.00	92		50	150
8015M	a,a,a-Trifluorotoluene	Re9766110	07/29/97	0.0500	0.0500	100		71	131
9707536*15									
8015M	Naphthalene	97175	08/05/97	0.643	1.00	64		52	145
	o-Terphenyl	97175	08/05/97	0.794	1.00	79		50	150
8015M	a,a,a-Trifluorotoluene	Re9766110	07/29/97	0.0531	0.0500	106		71	131
9707536*16									
8015M	Naphthalene	97175	08/05/97	0.805	1.00	81		52	145
	o-Terphenyl	97175	08/05/97	0.852	1.00	85		50	150
8015M	a,a,a-Trifluorotoluene	Re9766110	07/29/97	0.0561	0.0500	112		71	131
9707536*17									
8015M	a,a,a-Trifluorotoluene	Re975111	07/29/97	50.2	50.0	100		76	126

VOC ANALYTICAL, GLENDALE
QC REPORT FOR 9707536
DATE PRINTED: 12 AUG 1997

AQUEOUS SAMPLES		METHOD BLANK			LAB CONTROL								MATRIX QC									
					LCS		LCSD					RPD	RPD	MS		MSD					RPD	RPD
	UNITS	RESULT	RDL	FLG	%REC	FLG	%REC	FLG	LCL	UCL	RPD	UCL	FLG	%REC	FLG	%REC	FLG	LCL	UCL	RPD	UCL	FLG
Batch: IR*97434 Method: 413.2 - Oil and Grease by IR																						
Oil & Grease,IR	mg/L	0.31	0.5	-	134	-	126	-	35	171	6	30	-	-	-	-	-	-	-	-	-	-
Batch: IR*97435 Method: 418.1 - Petroleum Hydrocarbons, Total, Spectrophotometric, Infrared																						
Oil & Grease, Hydrocarbon	-	0	-	-	139	-	149	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
Batch: GAS*975111 Method: 8015M - Modified 8015																						
Benzene	ug/L	0	0.5	-	102	-	-	-	76	155	-	-	-	87	-	91	-	70	153	5	25	-
Toluene	ug/L	0	0.5	-	103	-	-	-	76	122	-	-	-	86	-	84	-	70	124	2	25	-
Ethylbenzene	ug/L	0	0.5	-	103	-	-	-	76	119	-	-	-	95	-	93	-	71	119	2	25	-
Total Xylene Isomers	ug/L	0	2	-	108	-	-	-	74	118	-	-	-	84	-	84	-	72	117	0	25	-
TPH (Gasoline Range)	ug/L	0	50	-	107	-	-	-	80	124	-	-	-	103	-	109	-	71	130	6	25	-
[a,a,a-Trifluorotoluene]	Percent	101	-	-	100	-	-	-	76	126	-	-	-	116	-	113	-	76	126	-	-	-
Batch: GAS*975112 Method: 8015M - Modified 8015																						
Benzene	ug/L	0	0.5	-	98	-	-	-	76	155	-	-	-	93	-	89	-	70	153	4	25	-
Toluene	ug/L	0	0.5	-	101	-	-	-	76	122	-	-	-	86	-	82	-	70	124	4	25	-
Ethylbenzene	ug/L	0	0.5	-	101	-	-	-	76	119	-	-	-	95	-	92	-	71	119	3	25	-
Total Xylene Isomers	ug/L	0.19	2	-	105	-	-	-	74	118	-	-	-	84	-	82	-	72	117	3	25	-
TPH (Gasoline Range)	ug/L	0	50	-	107	-	-	-	80	124	-	-	-	105	-	106	-	71	130	1	25	-
[a,a,a-Trifluorotoluene]	Percent	102	-	-	103	-	-	-	76	126	-	-	-	111	-	109	-	76	126	-	-	-
Batch: DIESEL*97172 Method: 8015M - Modified 8015																						
TPH (Diesel Range)	mg/L	0	0.05	-	84	-	90	-	53	155	8	-	-	96	-	85	Q	88	122	12	20	-
[Naphthalene]	Percent	92	-	-	96	-	100	-	55	127	-	-	-	100	-	-	-	55	127	-	-	-
[o-Terphenyl]	Percent	97	-	-	91	-	94	-	69	108	-	-	-	95	-	88	-	69	108	-	20	-

NON-AQUEOUS SAMPLES		METHOD BLANK			LAB CONTROL								MATRIX QC									
					LCS		LCSD					RPD	RPD	MS		MSD					RPD	RPD
	UNITS	RESULT	RDL	FLG	%REC	FLG	%REC	FLG	LCL	UCL	RPD	UCL	FLG	%REC	FLG	%REC	FLG	LCL	UCL	RPD	UCL	FLG
Batch: IR*97436 Method: 413.2 - Oil and Grease by IR																						
Oil & Grease,IR	mg/kg	0	10	-	119	-	118	-	35	171	1	-	-	82	-	81	-	19	153	2	30	-
Batch: GAS*9766110 Method: 8015M - Modified 8015																						
Benzene	mg/kg	0	0.005	-	94	-	-	-	88	150	-	-	-	136	Q	124	-	67	134	9	25	-
Toluene	mg/kg	0	0.005	-	95	-	-	-	75	130	-	-	-	90	-	93	-	65	137	8	25	-
Ethylbenzene	mg/kg	0	0.005	-	97	-	-	-	83	118	-	-	-	103	-	93	-	51	150	10	25	-
Total Xylene Isomers	mg/kg	0	0.02	-	103	-	-	-	80	117	-	-	-	90	-	82	-	53	140	9	25	-
TPH (Gasoline Range)	mg/kg	0	1	-	92	-	-	-	79	123	-	-	-	76	-	81	-	45	134	7	30	-
[a,a,a-Trifluorotoluene]	Percent	91	-	-	93	-	-	-	71	131	-	-	-	97	-	95	-	71	131	-	-	-
Batch: DIESEL*97175 Method: 8015M - Modified 8015																						
TPH (Diesel Range)	mg/kg	0	1	-	85	-	91	-	37	166	7	38	-	-	-	-	-	-	-	-	-	-
[Naphthalene]	Percent	79	-	-	69	-	79	-	55	127	-	-	-	-	-	-	-	-	-	-	-	-
[o-Terphenyl]	Percent	79	-	-	66	-	75	-	50	150	-	-	-	-	-	-	-	-	-	-	-	-

VOC ANALYTICAL, GLENDALE
SUPPLEMENTAL QC REPORT FOR 9707536
DATE PRINTED: 12 AUG 1997

AQUEOUS SAMPLES

Batch: IR*97434 Method: 413.2 - Oil and Grease by IR

		B7071399*1	C7072737*1	.....	C7072738*1	.....	N/A	.....	.....	.....	.....
	UNITS	MB	LC	LT	LC	LT	R1	R2	S1	S2	T
Oil & Grease, IR	mg/L	0.31	4.07	3.04	3.84	3.04	-	-	-	-	-

Batch: IR*97435 Method: 418.1 - Petroleum Hydrocarbons, Total, Spectrophotometric, Infrared

		B7071401*1	C7072735*1	.....	C7072736*1	.....	N/A	.....	.....	.....	.....
	UNITS	MB	LC	LT	LC	LT	R1	R2	S1	S2	T
Oil & Grease, Hydrocarbon	mg/L	0	4.24	3.04	4.53	3.04	-	-	-	-	-

Batch: GAS*975111 Method: 8015M - Modified 8015

		B7071404*1	C7072747*1	.....	N/A	.....	9707471*1	.....	.....	.....	.....
	UNITS	MB	LC	LT	LC	LT	R1	R2	S1	S2	T
Date Analyzed	Date	07/29/97	07/29/97	07/29/97	-	-	07/29/97	-	07/29/97	07/29/97	07/28/97
Dilution Factor	Times	1	1	1	-	-	1	-	1	1	1
Benzene	ug/L	0	51.2	50.0	-	-	<0.3	-	13.2	13.9	15.2
Toluene	ug/L	0	51.5	50.0	-	-	<0.3	-	83.6	82.2	97.4
Ethylbenzene	ug/L	0	51.7	50.0	-	-	<0.3	-	19.3	19.0	20.4
Total Xylene Isomers	ug/L	0	162	150	-	-	<0.6	-	100	100	119
Carbon Range	.	C6-C12	C6-C12	C6-C12	-	-	C6-C12	-	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range)	ug/L	0	1180	1100	-	-	<100	-	1130	1200	1100
a,a,a-Trifluorotoluene Rep.	ug/L	50.5	50.1	50.0	-	-	49.6	-	58.2	56.6	50.0
a,a,a-Trifluorotoluene Th.	ug/L	50.0	50.0	50.0	-	-	50.0	-	50.0	50.0	50.0

Batch: GAS*975112 Method: 8015M - Modified 8015

		B7071528*1	C7072981*1	.....	N/A	.....	9707570*2	.....	.....	.....	.....
	UNITS	MB	LC	LT	LC	LT	R1	R2	S1	S2	T
Date Analyzed	Date	07/30/97	07/30/97	07/30/97	-	-	07/30/97	-	07/30/97	07/30/97	07/30/97
Dilution Factor	Times	1	1	1	-	-	1	-	1	1	1
Benzene	ug/L	0	49.2	50.0	-	-	<0.5	-	14.1	13.6	15.2
Toluene	ug/L	0	50.4	50.0	-	-	<0.5	-	83.6	80.3	97.4
Ethylbenzene	ug/L	0	50.4	50.0	-	-	<0.5	-	19.3	18.8	20.4
Total Xylene Isomers	ug/L	0.19	158	150	-	-	<0.5	-	99.8	97.0	119
Carbon Range	.	C6-C12	C6-C12	C6-C12	-	-	C6-C12	-	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range)	ug/L	0	1180	1100	-	-	<50	-	1160	1170	1100
a,a,a-Trifluorotoluene Rep.	ug/L	51.1	51.5	50.0	-	-	48.6	-	55.3	54.6	50.0
a,a,a-Trifluorotoluene Th.	ug/L	50.0	50.0	50.0	-	-	50.0	-	50.0	50.0	50.0

AQUEOUS SAMPLES

Batch: DIESEL*97172 Method: 8015M - Modified 8015

		B708319*1	C708643*1		C708644*1		9707520*6	.....	.....	.....	.....
	UNITS	MB	LC	LT	LC	LT	R1	R2	S1	S2	T
Date Analyzed	Date	08/06/97	08/06/97	08/06/97	08/06/97	08/06/97	08/05/97	-	08/06/97	08/06/97	08/06/97
Date Extracted	Date	07/30/97	07/30/97	07/30/97	07/30/97	07/30/97	07/30/97	-	07/30/97	07/30/97	07/30/97
Dilution Factor	Times	1	1	1	1	1	1	-	1	1	1
TPH (Diesel Range)	mg/L	0	0.835	1.00	0.904	1.00	<0.5	-	0.957	0.845	1.00
Carbon Range	-	C8-C32	C10-C25	C10-C25	C10-C25	C10-C25	C10-C25	-	C10-C25	C10-C25	C10-C25
Naphthalene Reported	mg/L	0.0460	0.0479	0.0500	0.0498	0.0500	0.0493	-	0.0502	0.0.0421	0.0500
Naphthalene Theoretical	mg/L	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	-	0.0500	0.0500	0.0500
o-Terphenyl Reported	mg/L	0.0484	0.0457	0.0500	0.0469	0.0500	0.0521	-	0.0477	0.0441	0.0500
o-Terphenyl Theoretical	mg/L	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	-	0.0500	0.0500	0.0500

NON-AQUEOUS SAMPLES

Batch: IR*97436 Method: 413.2 - Oil and Grease by IR

		B708078*1	C708170*1	.....	C708171*1	.....	9707536*10	.....	.....	.....	.....
	UNITS	MB	LC	LT	LC	LT	R1	R2	S1	S2	T
Oil & Grease,IR	mg/kg	0	181	152	180	152	24	-	252	247	301

Batch: GAS*9766110 Method: 8015M - Modified 8015

		B7071409*1	C7072754*1	.....	N/A	.....	9707536*10	.....	.....	.....	.....
	UNITS	MB	LC	LT	LC	LT	R1	R2	S1	S2	T
Date Analyzed	Date	07/29/97	07/29/97	07/29/97	-	-	07/29/97	-	07/29/97	07/29/97	07/29/97
Dilution Factor	Times	1	1	1	-	-	1	-	1	1	1
Benzene	mg/kg	0	0.0469	0.0500	-	-	<0.005	-	0.0206	0.0189	0.0152
Toluene	mg/kg	0	0.0475	0.0500	-	-	<0.005	-	0.0877	0.0806	0.0974
Ethylbenzene	mg/kg	0	0.0485	0.0500	-	-	<0.005	-	0.0210	0.0190	0.0204
Total Xylene Isomers	mg/kg	0	0.154	0.150	-	-	<0.01	-	0.107	0.0981	0.119
Carbon Range	.	C6-C12	C6-C12	C6-C12	-	-	C6-C12	-	C6-C12	C6-C12	C6-C12
TPH (Gasoline Range)	mg/kg	0	1.01	1.10	-	-	<0.05	-	0.833	0.892	1.10
a,a,a-Trifluorotoluene Rep.	mg/kg	0.0455	0.0463	0.0500	-	-	0.0469	-	0.0487	0.0473	0.0500
a,a,a-Trifluorotoluene Th.	mg/kg	0.0500	0.0500	0.0500	-	-	0.0500	-	0.0500	0.0500	0.0500

Batch: DIESEL*97175 Method: 8015M - Modified 8015

		B708001*1	C708005*1	.....	C708006*1	.....	N/A	.....	.....	.....	.....
	UNITS	MB	LC	LT	LC	LT	R1	R2	S1	S2	T
Date Analyzed	Date	08/05/97	08/01/97	08/01/97	08/01/97	08/01/97	-	-	-	-	-
Date Extracted	Date	07/31/97	07/31/97	07/31/97	07/31/97	07/31/97	-	-	-	-	-
Dilution Factor	Times	1	1	1	1	1	-	-	-	-	-
TPH (Diesel Range)	mg/L	0	34.0	40.0	36.5	40.0	-	-	-	-	-
Carbon Range	.	C8-C32	C8-C32	C8-C32	C8-C32	C8-C32	-	-	-	-	-
Naphthalene Reported	mg/L	1.58	1.38	2.00	1.58	2.00	-	-	-	-	-
Naphthalene Theoretical	mg/L	2.00	2.00	2.00	2.00	2.00	-	-	-	-	-
o-Terphenyl Reported	mg/L	1.58	1.32	2.00	1.49	2.00	-	-	-	-	-
o-Terphenyl Theoretical	mg/L	2.00	2.00	2.00	2.00	2.00	-	-	-	-	-

VOC Analytical Laboratories

1212 E. KATELLA AVE
ANAHEIM, CA 92805

1085 SHARY CIRCLE
CONCORD, CA 94518

801 WESTERN AVE
GLENDALE, CA 91201

4411 S. BROADWAY Ste. D-1
PHOENIX, AZ 85040

V.O.C. Log # _____

Quote # _____

Chain of Custody Record

Company Name: BCON ENVIRONMENTAL

Address: 2261 Ohio Ave

City: Signal Hill State: CA Zip: 90806

Attn: Mark Barwinski Fax # 562-498-8345

Project Name / Number: Roadway Oakland, CA PO#

Sampler Name / Signature: Phone # 562-498-8304

#	Sample Label (Client ID)	Collected Date	Collected Time	Matrix Code*	#of Cont
1	B-1-W	7/24/97	Varies	GW	7
2	B-2-W	not Sampled			
3	B-3-W	7/24/97		GW	7
4	B-4-W			GW	7
5	B-5-W			GW	7
6	B-6-W			GW	7
7	B-7-W			GW	7
8	MW-1			GW	7
9	MW-2			GW	7
0					

LAB ANALYSIS

Sample	pH	Pres Codes	Parameters	TPH Diesel	TPH Gas (BTEX / BOAO)	O+G (5520)	HVOC (601)	SVOC (625 / 8270)	Field Filtered (Y/N)	Integrity OK (Y/N)
1				✓	✓	✓	*	*		
2							*	*		
3				✓	✓	✓	*	*		
4				✓	✓	✓	*	*		
5				✓	✓	✓	*	*		
6				✓	✓	✓	*	*		
7				✓	✓	✓	*	*		
8				✓	✓	✓	*	*		
9				✓	✓	✓	*	*		

Matrix Codes*

SD	Solid Waste	OL	Oil
GW	Ground Water	SL	Sludge
EFF	Effluent	SO	Soil Sediment
AFW	Analyte Free H_2O	AQ	Aqueous
WW	Waste Water	NA	Nonaqueous
DW	Drinking Water	PE	Petroleum
SU	Surface Water	O	Other _____ (Please Specify)

Pres Codes

A- None	E- HCl
B- HNO_3	F- MeOH
C- H_2SO_4	I- Ice
D- NaOH	O- Other

REMARKS

*If O+G ≥ 10 ppm then analyze for HVOCs and SVOCs (only analyze highest Sample)

Item	Relinquished by	Date	Time	Received by	Date	Time
		7/24/97	5:55pm	John Van Ryper	7/25	5:55p
		7/25	17:20			

Short Hold: Y___ N___

Ice: Y___ N___

QA/QC Report Level: None___ 1___ 2___ 3___ Other___

COC OK: Y N

Initials

T.A.T. Request: standard

RUSH: Date required

Custody Seals: Y N

Temp Control: ___°C

Local Job: Y N

C.O.C. # 1000353

VOC Analytical Laboratories

1212 E. KATELLA AVE.
ANAHEIM, CA 92805

X 1085 SHARY CIRCLE
CONCORD, CA 94518

801 WESTERN AVE
GLENDALE, CA 91201

4411 S. BROADWAY Ste D-1
PHOENIX, AZ 85040

V.O.C. Log # _____

Chain of Custody Record

Quote # _____

Company Name: BCON Environmental

Address: 2251 OHIO AVE

City: Signal Hill State: CA Zip: 90806

Attn: MARK Barwinski Fax # 562-498-8345

Project Name / Number: Roadway, Oakland, CA

Sampler Name / Signature: Mark Barwinski Phone # 562-498-8304

LAB ANALYSIS

#	Sample Label (Client ID)	Collected Date	Collected Time	Matrix Code*	#of Cont	Sample	pH	Pres Codes	TPH Diesel	TPH Gas (8015)	BTEX (8020)	Oil & Grease (5520)	HVOC (8010)	SVOC (8270)	Field Filtered (Y/N)	Integrity OK (Y/N)
1	MW-2	7/24/97		GW					✓	✓	✓	✓	**	**		
2	B-8-2'	7/24/97		SO					✓	✓	✓	✓	*	*		
3	B-8	7/24/97		GW					✓	✓	✓	✓	*	*		
4																
5																
6																
7																
8																
9																
10																

* if O&G ≥ 100 ppm then Rev. HVOC + SVOC for soil sample w/ HIGHEST READING.

** if O&G ≥ 10 ppm then Rev HVOC + SVOC for that WATER SAMPLE.

Matrix Codes *

SD	Solid Waste	OL	Oil
GW	Ground Water	SL	Sludge
EFF	Effluent	SO	Soil Sediment
AFW	Analyte Free H_2O	AQ	Aqueous
WW	Waste Water	NA	Nonaqueous
DW	Drinking Water	PE	Petroleum
SU	Surface Water	O	Other (Please Specify)

Pres Codes

A- None	E- HCl
B- HNO_3	F- MeOH
C- H_2SO_4	I- Ice
D- NaOH	O- Other

REMARKS

* IF O+G > 100 ppm for MW2 or MW1, Then analyze highest Sx for HVOC + SVOC

** IF O+G > 10 ppm for B-1 thru B-8, Then analyze highest Sx for HVOC + SVOC.

Short Hold	Ice	Item	Relinquished by	Date	Time	Received by	Date	Time
Y____ N____	Y____ N____			7/25/97	3:30 pm		7/25	3:30

QA/QC Report Level	COC OK	Initials
None____ 1____ 2____ 3____ Other____	Y N	

T.A.T. Request	RUSH	Custody Seals	Temp Control	Local Job
Standard	Date required	Y N	____°C	Y N

C.O.C. # 1000354

VOC Analytical Laboratories

1212 E. KATELLA AVE. ANAHEIM, CA 92805
1085 SHARY CIRCLE CONCORD, CA 94518
801 WESTERN AVE. GLENDALE, CA 91201
4411 S. BROADWAY Ste D-1 PHOENIX, AZ 85040

V.O.C. Log # _____

Chain of Custody Record

Quote # _____

Company Name: BCON ENVIRONMENTAL
Address: 2251 OHIO AVE
City: SIGNAL HILL State: CA Zip: 90806
Attn: MARK BARWINSKI Fax #: 562-498-8345
Project Name / Number: ROADWAY, DAMAGE PO#
Sampler Name / Signature: Phone #: 562-498-8304

#	Sample Label (Client ID)	Collected Date	Collected Time	Matrix Code*	#of Cont
1	B-1-4'	7/24/97	Various	SO	1
2	B-3-6'			SO	1
3	B-4-7'			SO	1
4	B-5-3.5'			SO	1
5	B-6-5'			SO	1
6	B-7-3'			SO	1
7	970504	7/24/97		GW	1
8					
9					
10					

LAB ANALYSIS

Sample	pH	Pres Codes	Parameters	TPH Diesel	TPH Gas (8015)	BTEX (8020)	OTG (SW5520)	HVOCs (8010)	SVOCs (8270)	Field Filtered (Y/N)	Integrity OK (Y/N)
				✓	✓	✓	✓	*	*		
				✓	✓	✓	✓	*	*		
				✓	✓	✓	✓	*	*		
				✓	✓	✓	✓	*	*		
				✓	✓	✓	✓	*	*		
				✓	✓	✓	✓	*	*		

Matrix Codes *

SD	Solid Waste	OL	Oil
GW	Ground Water	SL	Sludge
EFF	Effluent	SO	Soil Sediment
AFW	Analyte Free H_2O	AQ	Aqueous
WW	Waste Water	NA	Nonaqueous
DW	Drinking Water	PE	Petroleum
SU	Surface Water	O	Other _____ (Please Specify)

Pres Codes

A- None	E- HCl
B- HNO_3	F- MeOH
C- H_2SO_4	I- Ice
D- NaOH	O- Other

REMARKS

*If or 6 ≥ 100ppm then analyze #1S for HVOCs & SVOCs. (only analyze highest sample)

TRIP BLANK

Short Hold	Ice	Item	Relinquished by	Date	Time	Received by	Date	Time
Y ___ N ___	Y ___ N ___			7/24/97	5:55pm		7/25	8:55
QA/QC Report Level: None ___ 1. ___ 2. ___ 3. ___ Other ___	COC OK Y N	Initials						
T.A.T. Requested	RUSH Date required	Custody Seals Y N	Temp Control ___ °C	Local Job Y N				

C.O.C. # 1000352