Work Plan to Conduct Additional Soil and Grab Groundwater Sampling Former Cox Cadillac Property 230 Bay Place Oakland, California

> October 28, 2004 001-09171-12

Prepared for Bond Companies 350 W. Hubbard Street, Suite 4560 Chicago, Illinois 60610



Bond CC Oakland, LLC 350 W. Hubbard Street Suite 450 Chicago, Illinois 60610 (312) 853-0070 (312) 670-0408 facsimile

October 28, 2004

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached proposal or report is true and correct to the best of my knowledge.

By: Bond Capital Investors, LLC, its Member

By: Bond Investment Company, LLC, its Manager

[NV97] By: Robert J. Bond a Manager



October 27, 2004

001-09171-12

Mr. Don Hwang Hazardous Materials Specialist Local Oversight Program Alameda County Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Subject: Work Plan to Conduct Additional Soil and Grab Groundwater Sampling, Former Cox Cadillac Property, 230 Bay Place, Oakland, California

Dear Mr. Hwang:

On behalf of Bond CC Oakland, LLC, LFR Levine Fricke (LFR) has prepared this work plan to conduct additional soil and grab groundwater sampling at the Former Cox Cadillac property located at 230 Bay Place in Oakland, California ("the Site"). This work plan describes the Site's background and previous environmental investigations, a scope of work, and a schedule for the completion of the proposed investigation. The proposed scope of work was based on the findings of previous investigations conducted at the Site, discussions with Alameda County Environmental Health Services (ACEHS) staff, and requests made by ACEHS staff in letters dated August 31 and September 21, 2004.

We believe that the scope of work described in the work plan satisfactorily addresses the issues raised in your letters. Therefore, we are requesting that you review the work plan and approve it at your earliest convenience so that we may conduct the investigation work. If you have any questions or comments, please call either of the undersigned at telephone number (510) 652-4500.

Sincerely,

Charles H. Pardini, R.G. Principal Geologist Assistant Operations Manager

Enclosure

Kunde Astands

Kimberly A. Brandt, R.G., C.HG. Senior Associate Hydrogeologist

cc: Mr. Robert Bond, Bond CC Oakland, LLC Zachary Walton, Esq., Paul, Hastings, Janofsky & Walker LLP

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2 Site Plan Showing Utilities and Soil Boring Locations

CERTIFICATION

All hydrogeologic and geologic information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by an LFR Levine Fricke California Registered Geologist.

Ludius

Charles H. Pardini Principal Geologist California Registered Geologist (6444)

8 3 Date -65 No. 6444 ී

1.0 INTRODUCTION

This work plan presents a scope of work for the additional investigation of soil and groundwater affected by petroleum hydrocarbons at the Former Cox Cadillac Property, located at 230 Bay Place in Oakland, California ("the Site"). This work plan describes the Site's background and previous environmental investigations, a scope of work, and a schedule for the completion of the proposed investigation. The proposed scope of work was based on the findings of previous investigations conducted at the Site, discussions with Alameda County Environmental Health Services (ACEHS) staff, and requests made by ACEHS staff in letters dated August 31 and September 21, 2004.

1.1 Site Background

The Site was formerly occupied by Cox Cadillac and was used for automobile sales and service, including storage, maintenance, repair, and painting, and is currently vacant. The Site consists of approximately 2.2 acres and was formerly occupied by an approximately 6,500-square-foot automobile showroom. The remainder of the Site is covered with concrete and asphalt (Figure 1). Several soil and groundwater investigations have been conducted at the Site. The results of these investigations indicate the presence of petroleum hydrocarbons in soil and groundwater. A detailed description of the previous investigations' results will be presented in a report that is a revision of our report entitled "Results of the March and April 2004 Soil and Groundwater Investigation at the Former Cox Cadillac Property 230 Bay Place Oakland, California," dated August 4, 2004.

1.2 Objectives

The general objectives of the scope of work presented in this work plan are:

- to further assess the vertical extent of petroleum-affected soil and groundwater in the vicinity of the former waste oil and gasoline underground storage tanks (USTs) formerly located at the Site; and
- to further assess the soil and groundwater quality in the utility corridor, which contains underground utilities (gas, electrical, telephone, and sanitary sewer lines, and a storm drain) beneath the street at Bay Place.

2.0 SCOPE OF WORK

The following scope of work outlines tasks to be performed in support of the additional site characterization activities at the Site. To achieve the objectives outlined above, five soil borings will be advanced using the Geoprobe drilling method to a depth of approximately 40 feet below ground surface (feet bgs) in the vicinity of the waste oil and gasoline USTs formerly located at the Site. Thirty soil samples (six samples from

each boring) will be collected. In addition, an attempt will be made to collect 30 grab groundwater samples (six samples from each boring). The boring locations are depicted on Figure 1.

In addition, two soil borings (labeled on Figure 2 as A and B) will be advanced to beneath the base of the deepest utility corridor located beneath the street at Bay Place. These soil borings will be advanced using an air vacuum excavation system. Four soil samples (two samples from each location) will be collected. In addition, an attempt will be made to collect two grab groundwater samples (one sample from each location).

2.1 **Preparation for Fieldwork**

Fieldwork will be conducted in accordance with an updated Health and Safety Plan for the Site, which takes into account measures for safety at a site undergoing investigation. The appropriate drilling permits will be obtained for each location from the Alameda County Water District.

At least 48 hours before any subsurface work begins, Underground Services Alert will be notified to alert utility companies with facilities in the site vicinity. A private utility-locating subcontractor will also assist in locating underground utilities and clearing all drilling locations of subsurface utilities and other potential obstructions.

Encroachment permit(s) will also be obtained from the City of Oakland Department of Public Works (DPW) for the soil borings to be drilled in the public right-of-way near the underground utilities in Bay Place. It is our understanding that a DPW-approved traffic control plan will be required, and that access to the right-of-way will be limited to the hours of approximately 8:30 a.m. 4:00 p.m.

2.2 Soil Borings Near the Former USTs

Soil borings to be drilled near the former USTs will be advanced using the Geoprobe method by a driller with the required C-57 driller's license. Soil samples from small-diameter borings will be collected using a dual tube (rod) sampling system. The 2¼-inch-diameter rods will be "pushed" into the ground by displacing sediment into a core barrel. Core samples enter through a cutting shoe into an inner liner fitted with a core catcher. The dual tube system is fitted with an acetate liner and the soil is retrieved in the liner as the inner rods are lifted to the surface. The liner is removed from the inner rod and samples are collected by cutting sections of the liner. The ends of the liner will be sealed with Teflon sheets and plastic caps. Soil samples will be collected for laboratory analysis at approximately 5, 10, 15, 20, 30, and 40 feet bgs.

Each boring will be logged by an LFR geologist using the Unified Soil Classification System. Soil cuttings and samples will be field screened for organic compounds using a photoionization detector. A Hydropunch device will be used to collect the grab groundwater samples from the soil borings located near the former USTs. A modified Hydropunch sampler with a retrievable tip and stainless steel screen will be used to allow multiple depth groundwater sampling in the same borehole. The sample tool will be pushed to the desired groundwater sampling zone, then withdrawn slightly to expose an inlet screen. A steel bailer or lift pump will be utilized to pump the grab groundwater samples into sample collection containers. If a groundwater sample displays evidence of free-phase product during sampling, the Hydropunch tool will be withdrawn and cleaned to prevent the possibility of cross-contamination, and a new, adjacent boring will be drilled for collection of deeper samples. An attempt to collect grab groundwater samples at approximately 5, 10, 15, 20, 30, and 40 feet bgs will be made. Each sample retained for analysis will be labeled at the time of sampling and stored in an ice-chilled cooler for transportation to a California state-certified analytical laboratory under strict chain-of-custody protocols. Because the water-yielding sediments in some parts of the Site may yield very little or no water, it may not be possible to collect grab groundwater samples from all depths at each of the proposed locations.

Soil borings drilled using the Geoprobe method will be backfilled to near the ground surface with cement grout after the soil and groundwater samples are collected, and then plugged with asphalt concrete.

2.3 Soil Borings Near the Underground Utilities

Two soil borings to be drilled near the underground utilities will be advanced using an air vacuum excavation system. The locations of these two borings were selected based on their proximity to a maximum number of utility lines and because they are downgradient from the Site. A California state-licensed drilling subcontractor will drill the soil borings under the supervision of an LFR California Registered Geologist. The system works by removing the soil from the subsurface by using high-velocity compressed air. All downhole drilling and sampling equipment will be cleaned with high-pressure hot water (i.e., steam cleaned) before use at each drilling location.

The vacuum excavation system utilizes a high velocity air stream to penetrate, expand, and break up soil. The loosened portion of soil is removed from the hole with a vacuum. This system allows access to soil adjacent to the underground utility with a minimal risk of compromising the underground piping.

Effort will be made to collect samples of the material in the utility corridor. Because it is unknown what type of material (i.e., sand, pea gravel, native soil) was used to backfill the trenches in which the utilities were installed, it is proposed to collect the soil samples from each borehole at a depth just beneath the reported bottom of the utility at each location.

The depth of the bottom of the utilities near soil boring A is approximately 3 feet for the electrical line, and between approximately 6 and 8 feet for the storm drain (Figure 2). Therefore, a soil sample will be collected at approximate depths of 3 to

4 feet and 6 to 8 feet. The depth of the bottom of the utilities near soil boring B is approximately 3 feet for the telephone line, and approximately 6 feet for the sanitary sewer line (Figure 2). Therefore, a soil sample will be collected at approximate depths of 3 to 4 feet and 6 feet.

Soil samples will be collected from the two soil borings using hand tools and retained in acetate or brass sample liners. The hand tools will be washed with laboratory-grade soap and tap water between each sample location. Each sample will be labeled with the sample identification number, the time and date of collection, the analysis requested, and the initials of the sampler. The samples will be stored in an ice-chilled cooler and submitted to the laboratory under strict chain-of-custody protocols. Soil cuttings and samples will be screened in the field using a photoionization detector (PID) to evaluate the presence of volatile organic compounds, and results will be recorded on a drilling log at the time of drilling. It is anticipated that two to four PID measurements will be collected per soil boring.

Temporary groundwater monitoring wells are proposed to be installed in each borehole (Figure 2). These temporary wells will be completed in the boreholes with a nominal 1.0- to 2.0-inch diameter polyvinyl chloride well screen and casing. The well screen interval of each well will extend from the bottom of the borehole (anticipated to be approximately 12 feet bgs) to approximately 2 feet bgs. The remainder of each temporary well will be completed with blank well casing. These temporary wells will allow for the groundwater to stabilize prior to sampling and reduce the volatilization that may have occurred during the vacuum excavation. The annular space between the well screen and soil boring will be backfilled with appropriately graded sand, and the annular space between casing and the soil boring will be backfilled with bentonite pellets. The casing will have a locking well cap placed on it. The ground surface at each well will be covered with a steel plate to allow vehicles to pass over the well.

Groundwater samples will be collected from the temporary wells at least 24 hours after installation. Before collecting the samples from the wells, approximately 5 well-casing volumes of groundwater will be removed until field parameters (temperature, specific conductivity, and pH) have stabilized. Purged water will be stored on site in 55-gallon drums. Samples will be collected using a clean Teflon or disposable bailer. Groundwater samples will be poured from the bailer into laboratory-supplied sample containers and labeled with the boring identification number, the time and date of collection, the analysis requested, and the initials of the sampler. The samples will be stored in an ice-chilled cooler and maintained under strict chain-of-custody protocols until they are submitted to the analytical laboratory. Because the water-yielding sediments in some parts of the Site may yield very little or no water, it may not be possible to collect grab groundwater samples at all of the proposed locations.

After groundwater samples are collected from the temporary wells, the well materials will be removed from the subsurface and the soil boring will be backfilled with cement grout to near the ground surface, and then plugged with asphalt concrete to match the ground surface.

The following criteria will be used to assess if additional soil or groundwater samples are required to further assess the soil and groundwater quality in the utility corridor(s).

- If the analytical results for soil and/or groundwater samples collected from both soil borings (borings A and B) are less than the cleanup criteria for petroleum hydrocarbons and associated compounds, then no additional soil borings will be drilled.
- If the analytical results for soil and/or groundwater samples collected from soil boring A are greater than the cleanup criteria for petroleum hydrocarbons and associated compounds, and the analytical results for soil and/or groundwater samples collected from soil boring B are less than the cleanup criteria for petroleum hydrocarbons and associated compounds, then no additional soil borings will be drilled.
- If the analytical results for soil and/or groundwater samples collected from soil boring A are less than the cleanup criteria for petroleum hydrocarbons and associated compounds, and the analytical results for soil and/or groundwater samples collected from soil boring B are greater than the cleanup criteria for petroleum hydrocarbons and associated compounds, this situation would indicate another source of contaminants, and no additional soil borings will be drilled.
- If the analytical results for soil and/or groundwater samples collected from both soil borings A and B are greater than the cleanup criteria for petroleum hydrocarbons and associated compounds, then one additional soil boring will be drilled in Bay Place approximately 50 feet northwest of boring B, towards Harrison Street.

2.4 Quality Assurance/Quality Control Procedures

For quality assurance/quality control purposes, one trip blank will be included in each ice-chilled cooler, and one duplicate soil sample and one duplicate groundwater sample will be collected.

2.5 Investigation-Derived Waste

In the process of collecting environmental samples during the proposed field sampling program, different types of potentially contaminated investigation-derived wastes (IDW) will be generated that include the following:

- disposable sampling equipment
- soil cuttings
- decontamination fluids

The Environmental Protection Agency's (EPA's) National Contingency Plan requires that management of IDW comply with all applicable or relevant and appropriate requirements to the extent practicable. The sampling plan will follow the EPA's Office of Emergency and Remedial Response Directive 9345.3-02, dated May 1991, which provides the guidance for the management of IDW. In addition, other legal and practical considerations that may affect the handling of IDW will be considered.

Listed below are the procedures that will be followed for handling the IDW:

- Decontamination water will be placed in Department of Transportation (DOT)-approved Type 17H 55-gallon drums. The drums will be sealed so that they are watertight, pending receipt of analytical results.
- Soil cuttings will be placed in DOT-approved Type 17H 55-gallon drum or DOT-approved soil bins. The drums will be sealed, pending receipt of analytical results.

Following receipt of analytical results, all liquid IDW (decontamination water) and solid IDW (soil cuttings) will be disposed of at appropriate disposal/treatment/recycling facilities. All hazardous waste manifests will be signed by a representative of the property owner, with the property owner listed as generator of the wastes.

3.0 LABORATORY ANALYSIS

Soil, groundwater, duplicate, and trip blank samples will be submitted to a California state-certified laboratory for analysis. Samples will be analyzed for total petroleum hydrocarbons (TPH) as diesel (TPHd; no silica-gel cleanup will be used); TPH as gasoline (TPHg), including benzene, toluene, ethylbenzene, and total xylenes (BTEX); and methyl tertiary-butyl ether (MTBE). The trip blank will be analyzed for BTEX only, while the duplicate sample will be analyzed for TPHd (no silica-gel cleanup will be used), TPHg including BTEX, and MTBE. TPHd and TPHg analysis will be conducted using EPA Test Method 8015, modified and BTEX and MTBE analyzed for ethylene dibromide (EDB), ethane dichloride (EDC - also referred to as 1,2 dichloroethane), tert amyl methyl ether (TAME), ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), and tertiary butyl alcohol (TBA).

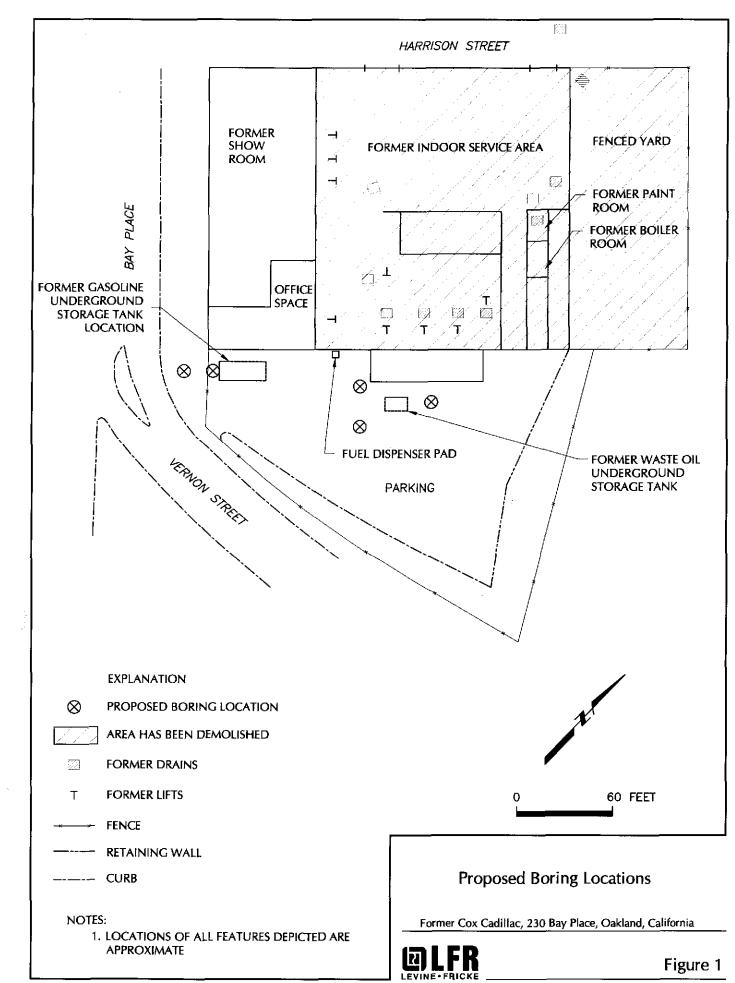
4.0 **REPORT PREPARATION**

LFR will prepare a report presenting the results of this investigation and recommendation for the next action toward site closure. Soil and groundwater data collected during this investigation will be tabulated and graphically illustrated for ease of interpretation by the reader. Data values will be compared to the approved cleanup levels for the Site.

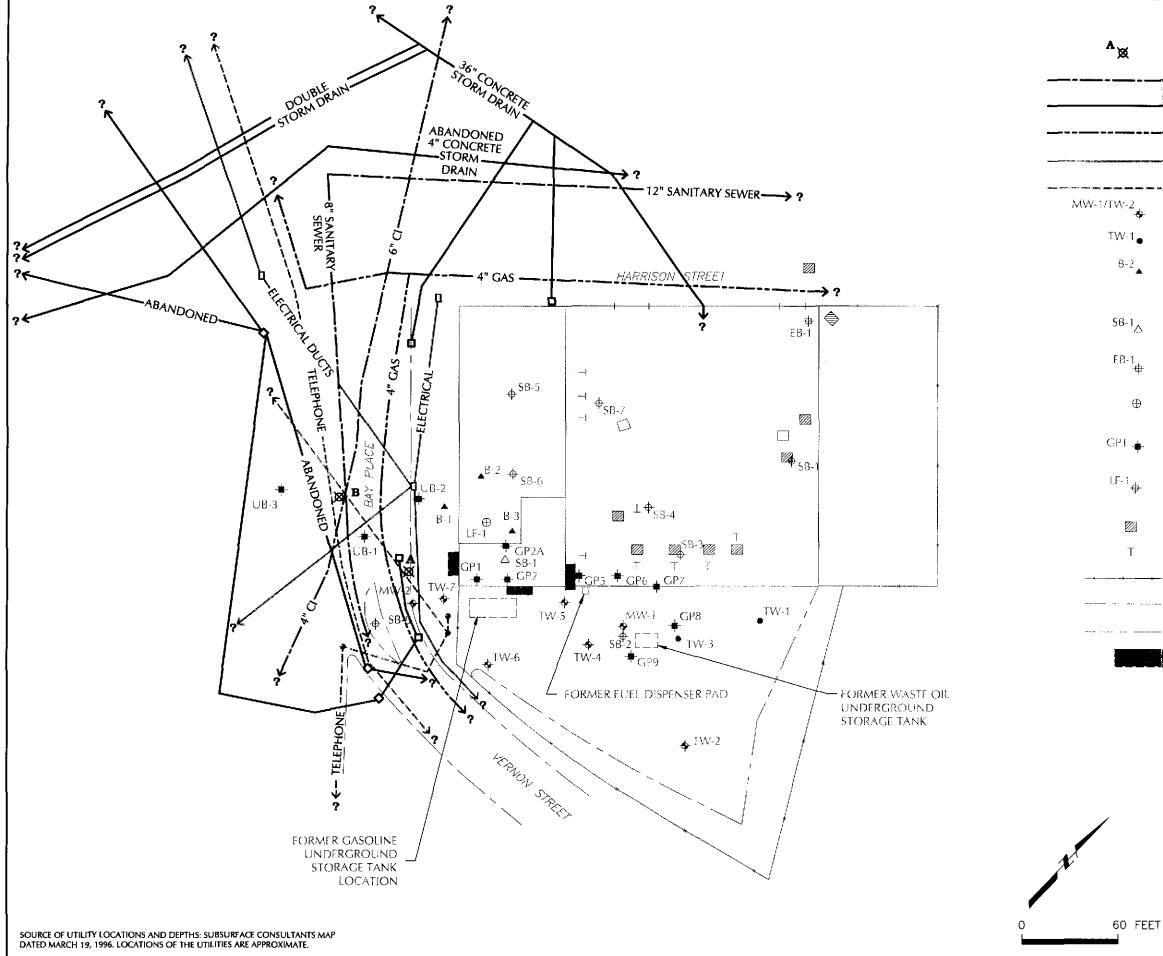
5.0 SCHEDULE

It is anticipated that LFR can complete the tasks described above, as follows:

- two days to drill and collect samples from five soil borings proposed to be drilled near the former USTs
- one to three days to drill and collect samples from two soil borings proposed to be drilled near the underground utilities
- ten working days for laboratory analysis
- two to three weeks for preparation of the report after receipt of electronic data from the laboratory



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EXPLANATION

	PROPOSED SOIL BORING LOCATION
	SANITARY SEWER - APPROXIMATELY 6 FEET BELOW GRADE
	STORM DRAIN - APPROXIMATELY 6-8 FEET BELOW GRADE
	GAS LINE - APPROXIMATELY 3 FEET BELOW GRADE
	ELECTRICAL LINE - APPROXIMATELY 3 FEET BELOW GRADE
.	TELEPHONE LINE - APPROXIMATELY 3 FEET BELOW GRADE
\$	MONITORING OR TEMPORARY WELL LOCATION
•	ABANDONED TEMPORARY WELL LOCATION
•	PREVIOUS SOIL BORING / GROUNDWATER SOIL SAMPLING LOCATION (INSTALLED BY PES ENVIRONMENTAL, INC., 1999)
5	SOIL SAMPLING LOCATION (INSTALLED BY LFR LEVINE - FRICKE, JULY 2000)
<u>+</u>	SOIL SAMPLING LOCATION (INSTALLED BY LOWNEY ASSOCIATES, JULY 2000)
Ð	SOIL SAMPLING LOCATION (INSTALLED BY LFR LEVINE • FRICKE, MAY 2001)
#	SOIL AND GRAB GROUNDWATER SAMPLING LOCATION (INSTALLED BY ETIC, NOV. 2003)
)	SOIL AND GRAB GROUNDWATER SAMPLING LOCATION (INSTALLED BY LFR LEVINE+FRICKE, MARCH 2004)
	DRAINS
	LIFTS
	FENCE
	RETAINING WALL
	CURB
1	TEST PIT LOCATION (INSTALLED BY LFR, APRIL 2004)

Site Plan Showing Utilities and Soil Boring Locations

Former Cox Cadillac, 230 Bay Place, Oakland, California



Figure 2