RO-240

GRIBI Associates

Geological and Environmental Consulting Services

May 31, 2002

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Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Attention: Eva Chu

Subject: Workplan to Conduct Soil and Groundwater Investigation
Former Fountain Cleaners UST Site
2006 Encinal Avenue
Alameda, California
GA Project No. 219-01-01

Dear Ladies and Gentlemen:

Gribi Associates is pleased to submit this workplan on behalf of Mr Michael Yue for the former Fountain Cleaners site located at 2006 Encinal Avenue in Alameda, California (see Figure 1 and Figure 2). This workplan proposes: (1) the drilling and sampling of approximately three soil borings using hand auger coring equipment; and (2) the collection and laboratory analysis of three soil samples and three grab groundwater samples. The goal of this investigation will be to assess soil and groundwater conditions near the former underground storage tank (UST) system located on the southern portion of the property and to determine if the site is eligible for regulatory closure.

SITE BACKGROUND

The site is located near the southern corner of the intersection of Encinal Avenue and Chestnut Street in a mixed residential and commercial area. The Fountain Cleaners facility formerly operated in a single-story building located on the western portion of the subject property. A two story building is located near the southern property line. The northeastern portion of the site consists of a paved parking lot and the southeastern portion of the site where the former UST basin is located is unpaved.

In 1989, seven USTs were removed from a common excavation cavity on the southeast side of the site. The tanks ranged from 550 gallons to 2,000 gallons in size and contained gasoline, fuel oil, diesel, and cleaning solvents. During the removal of the USTs, several holes were noted in the 1,000 gallon fuel oil UST and the 2,000-gallon spent solvent UST. Laboratory results from the soil samples collected from the UST excavation cavity showed low to moderate levels of gasoline- and diesel-range hydrocarbons. Subsequent to the removal of the USTs, a groundwater monitoring well,

MW-1, was installed immediately west from the backfilled UST excavation cavity in 1994. Laboratory results from the quarterly groundwater monitoring conducted at the site have indicated elevated levels of TPH-G, with low levels of benzene and some halogenated volatile organic compounds (HVOCs).

PROJECT APPROACH

Based on our review of site documents and on our understanding of Alameda County Health Agency requirements, we recommend the drilling and sampling of three investigative soil borings on the west side of the site. The soil borings will be drilled using hand auger equipment, and one soil sample and one grab groundwater sample from each boring will be analyzed for petroleum hydrocarbons and HVOC constituents.

WORKPLAN ELEMENTS

The proposed soil and groundwater investigation will include the following workplan elements. All activities will be conducted in accordance with applicable local, State, and Federal guidelines and statutes.

Prefield Activities

Prior to implementing this workplan, written approval will be obtained from the Alameda County Environmental Health. In addition, a soil boring permit will be obtained from the Alameda County Department of Public Works. Prior to initiating drilling activities, proposed boring locations will be marked with white paint and Underground Services Alert (USA) will be notified at least 48 hours prior to drilling.

Location of Soil Borings

Based on historical soil and groundwater laboratory analytical data and the expected southerly groundwater flow direction, the three proposed borings will be arrayed southeast, south, and southwest from the of the former UST location. The proposed locations of the three soil borings are shown on Figure 2.

Drilling and Sampling of Soil Borings

The three investigative soil borings will be advanced to about 12 feet in depth using a cleaned stainless steel hand auger. After each hand auger bucket is brought to the surface and exposed, the soil will be examined, logged, and field screened for hydrocarbons by a qualified geologist using sight and smell. Following examination and sampling, the soil cuttings generated during this

investigation will be returned to the borehole. Upon completion, the six investigative borings will be grouted to match existing grade using a cement\sand slurry.

Subsurface soils will be sampled at approximately five-foot intervals starting at about five feet in depth. After the sample and hand auger bucket are raised to the surface, each sample will be collected directly from the hand auger bucket using the following method: (1) Exposed soil will be scraped away; (2) A clean 2-inch by 6-inch brass tube will be completely filled with undisturbed soil, taking care to minimize excess void in the tube; (3) The tube will then be quickly sealed with aluminum foil and plastic end caps, wrapped tightly with tape and labeled; and (4) The sealed tube will immediately be placed in cold storage for transport to the laboratory.

In addition to collecting the soil samples, grab groundwater samples will be collected from each boring. The groundwater samples will be collected as follows: (1) 1-1/4-inch diameter well casing will be placed in the boring; (2) using a clean stainless steel bailer, groundwater will be poured directly from the bailer into laboratory-supplied containers; and (3) each sample container will be tightly sealed, labeled, and placed in cold storage for transport to the laboratory under formal chain-of-custody.

Laboratory Analysis of Soil and Water Samples

Approximately three soil and three grab groundwater samples will be analyzed for the following parameters:

USEPA 8015M Total Extractable Petroleum Hydrocarbons (TPEH)
USEPA 8015M Total Petroleum Hydrocarbons as Gasoline (TPH-G)
USEPA 8020 Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)
USEPA 8020 Methyl-t-Butyl Ether (MTBE)

In addition, the three grab groundwater samples will be analyzed for the following parameters:

USEPA 8260 Halogenated Volatile Organic Compounds (HVOCs)

All analyses will be conducted by a California-certified analytical laboratory with two-week turn around on lab results.

Preparation of Summary Report

A report of findings will be prepared for submittal to the Alameda County Health Agency. This report will describe all investigative methods and results, and will include tabulated laboratory analytical results, as well as laboratory data reports and chain-of-custody records.

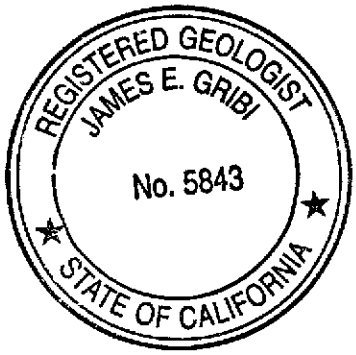
PROJECT SCHEDULE

Subject to your approval, Mr. Yue is prepared to begin project activities immediately, with completion of the soil boring investigation activities within about six to eight weeks.

Gribi Associates appreciates the opportunity to present this workplan for your review. Please contact us if you have questions or require additional information.

Very truly yours,

James E. Gribi
Registered Geologist
California No. 5843



Eric G. Hetrick
Project Geologist

Enclosure
cc: Mr. Michael Yue

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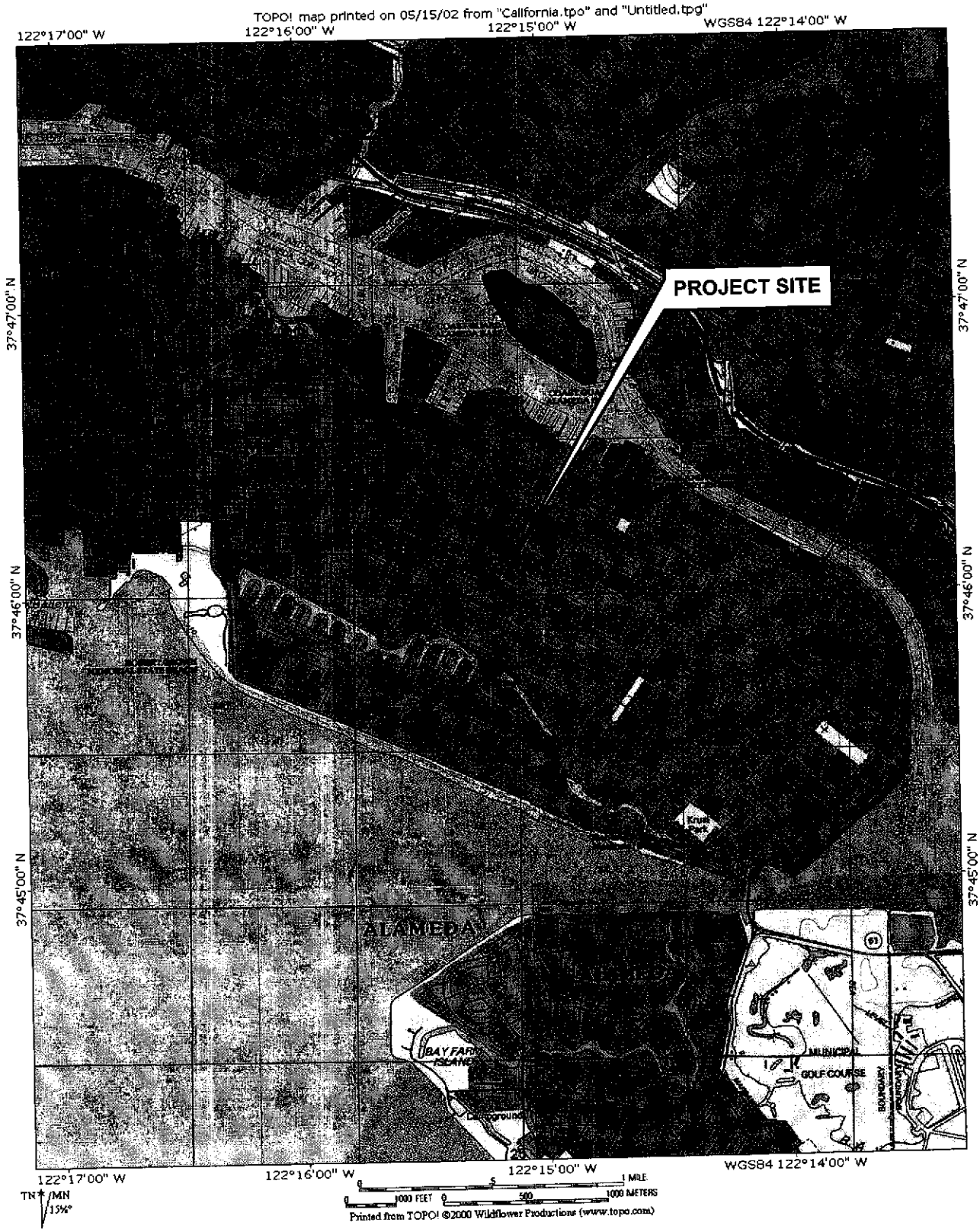
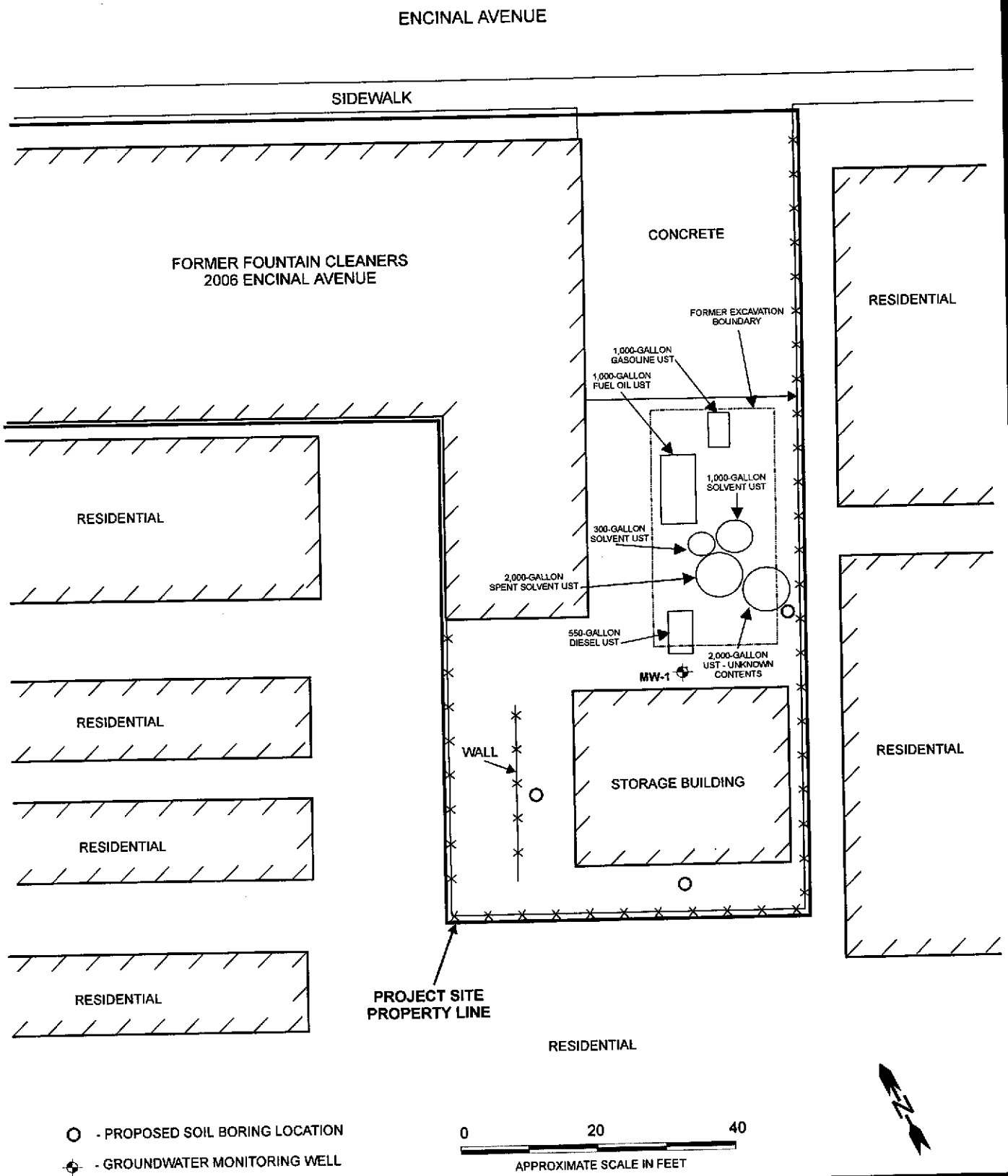


DESIGNED BY:	CHECKED BY:	**SITE VICINITY MAP**	DATE: 05/15/02	FIGURE: 1
DRAWN BY: EGH	SCALE:	2006 ENCINAL AVENUE ALAMEDA, CALIFORNIA	**GRIBI Associates**	
PROJECT NO: 219-01-01				



DESIGNED BY:	CHECKED BY:	**SITE MAP** FORMER FOUNTAIN CLEANERS 2006 ENCINAL AVENUE ALAMEDA, CALIFORNIA	DATE: 5/31/02	FIGURE: 2
DRAWN BY: EGH	SCALE:		**GRIBI Associates**	
PROJECT NO: 146-01-01				