

**WORKPLAN FOR SAN
LEANDRO
STREET PROJECT**

**For The Property Located At
4701 San Leandro Street
Oakland, California**

Prepared For:

Mr. Francis Collins
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Emeryville, CA 94608

Prepared By:

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Sequoia Project Code DUFY-06
October 20, 1993



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September 21, 1993

Ms. Madhulla Logan
Hazardous Material Specialist
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way
Oakland, CA 94621

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Re: Workplan for Soil Sampling at
4701 San Leandro Street
Oakland, California

Dear Ms. Logan:

This letter-workplan will address the procedures for collecting soil samples from the soil pile located at the referenced site. The workplan is in response to your correspondence of July 20, 1993.

SITE BACKGROUND

The subject site is located at 4701 San Leandro Street, Oakland. It is in an area zoned for light industrial and residential. There are about six warehouse buildings on the subject site. Some of the buildings are used as residential, and some are occupied by tenants who engaged in art works, or light industrial or commercial activities. In 1991, a Phase 1 site assessment was performed at the site. The assessment revealed the presence of three underground storage tanks.

On October 15 to 18, 1991, Verls Construction, Inc., (VCI), of San Leandro removed one steel underground storage tank and destroyed two concrete tanks. The steel tank was of 20,000 gallon's capacity, and the concrete tanks were of 10,000 gallon's capacity. The steel tank had a secondary containment. The

containment was constructed of concrete and reinforced metal rods. It had a thickness of about 3 feet at the top to 2 feet at the bottom. The top concrete covers of the concrete tanks were opened with a backhoe. It was observed that they did not contain any product. The tanks were used to store bunker oil during the second world war. After the steel tank removal and opening of the top of the concrete tanks, soil samples were collected. Prior to collecting the soil samples, the concrete bases of the tanks' locations were cut open with a concrete cutter. A portable drill rig was used to drill into the native soil. The soil samples were collected at about 2 feet below the concrete bottom with a modified closed spoon sampler containing a brass tube. See Fig 2 for detailed sampling locations.

Soil sampling activities were supervised by Mr. Barney Chan, Senior Hazardous Material Specialist, with the Alameda County Environmental Health Agency. The samples were sent to Carter Analytical laboratory, Inc. of Campbell, California. The samples were analyzed for metals, total petroleum hydrocarbons as gasoline (TPH-G), as diesel (TPH-D), aromatic hydrocarbons as benzene, toluene, ethyl benzene and xylene, (BTEX), oil and grease, chlorinated hydrocarbons, and semi volatile organics. The samples were analyzed using appropriate EPA methods.

Laboratory results showed that five of the six in-situ samples, collected from the tanks' locations contained detectable levels of TPH-G. The values ranged from 39.1 to 15 ppm. These samples also contained toluene and xylenes. The values of toluene range from 0.007 to 0.5 ppm, and xylenes ranged from 0.03 to 0.09 ppm. Soil samples from the steel tank contained ethyl benzene and xylenes. The results also showed that semi volatile organics and oil and grease were non-detect in all the samples. With the exception of dichloromethane and chloroform, chlorinated hydrocarbons were non-detect in all the samples. See Fig 1 for a summary presentation of the laboratory results. Detailed laboratory results, and accompanying report is with the Alameda County Environmental Health Agency.

Though the in-situ samples were below 40 ppm TPH-G, on December 11, 1991, further excavation was performed at the steel tank location. The excavation was performed to remove some over-spilled product trapped between the top concrete wall and the top layer of the overburden. After the excavation two confirmatory samples, SE-1 and SE-2, were collected, and sent to Carter Analytical Laboratory. See Fig 3 for detailed sampling locations. Following county directives the samples were analyzed for TPH-G, TPH-D, BTEX, oil and grease, chlorinated hydrocarbons, semi volatile organics and ICAP metals. Laboratory results showed that TPH-G, TPH-D, BTEX, semi volatile organics, chlorinated hydrocarbons, and oil and grease were non-detect in all the samples. However, the samples contained detectable levels of metal. The tank pits have since being backfilled with clean imported soil.

what depth?

Due to the inconclusive sampling of the excavated soil pile, this workplan will address a proposal to perform a detailed re-sampling of the soil pile, and eventual disposal.

SAMPLING PROCEDURE

The four soil piles have been moved together as one pile due to construction activities at the subject site. The pile measures about 30 feet in length, 15 wide and 8 feet high. Sequoia Environmental proposes to collect soil samples from the pile with a hand auger, and a core sampler. Soil samples will be collected at about 3 to 4 feet into the pile. Soil samples may be collected for every 50 cubic yard. One soil sample will be collected from the area between the building and the tanks' locations. This sample will be used to determine if the accidental discharge of chlorinated solvents in that particular area still exists. The samples will be sent to a state-certified environmental laboratory for chemical analyses. All applicable San Francisco Bay Regional Water Quality Control Board quality assurance and quality control guidelines will be observed while performing this project.

LABORATORY ANALYSIS

Under laboratory conditions the soil samples from the soil pile will be made to two composite samples. The two composite samples, and the sample from near the building will be analyzed for TPH-G, TPH-D, BTEX, oil and grease and chlorinated hydrocarbons.

WASTE MANAGEMENT

Following the laboratory results, the soil pile will be manifested and transported to an appropriate disposal site. All applicable local laws and regulations will be observed while performing this task.

CONCLUSION

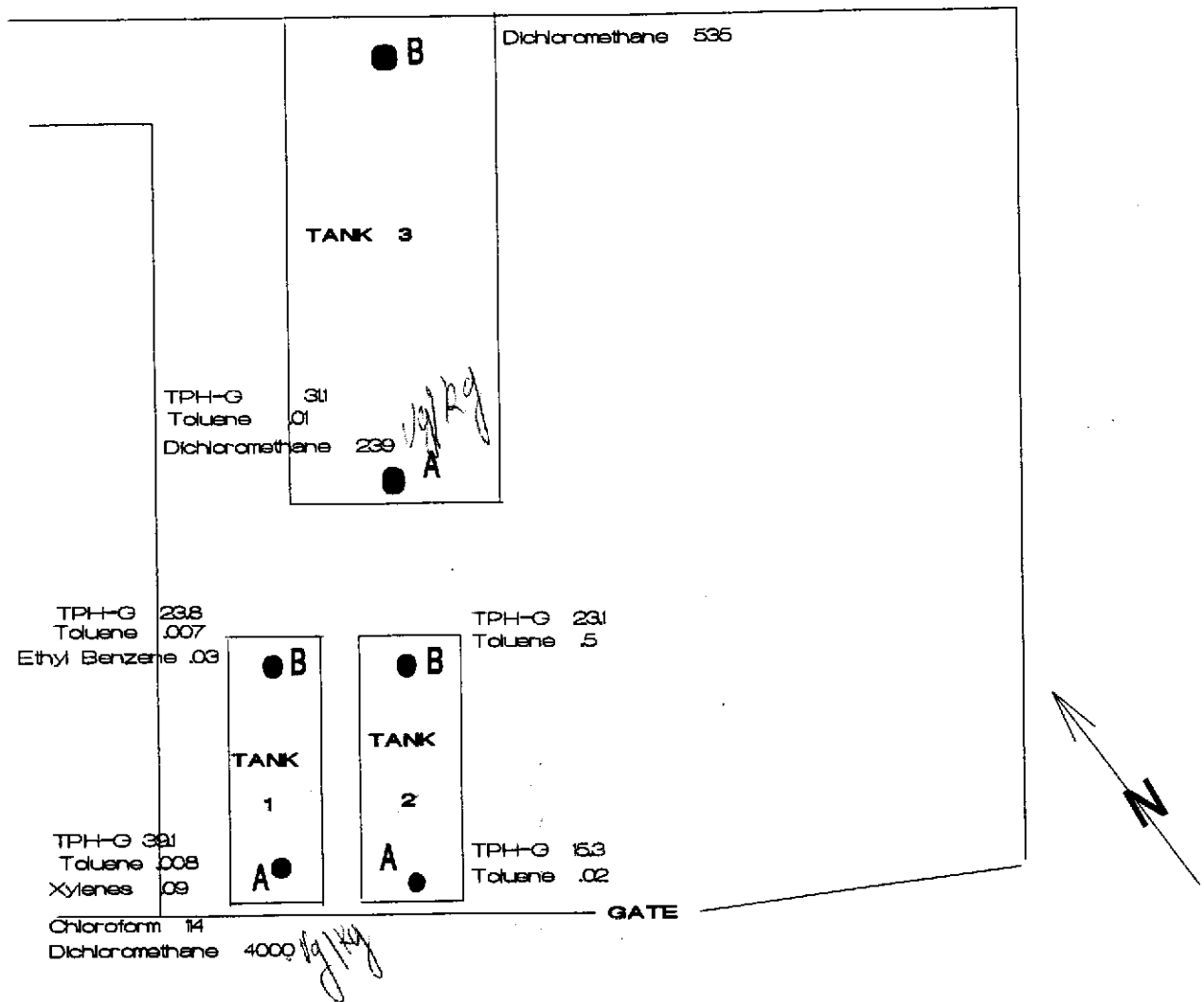
Following the completion of the laboratory results, Sequoia Environmental will prepare a comprehensive report. The report will contain a description of all the field activities, and the laboratory results. The report will be sent to your office for review, and approval.

Please feel free to call if you have any questions or concerns about the workplan. You can reach me at (510) 614 - 1900.

Sincerely,
Sequoia Environmental Consulting Services

Chris Wabuzoh

Chris Wabuzoh
Project Geologist
REA #02842



All laboratory results are in ppm

FIGURE 1

MAP TYPE	STE PLAN	● SAMPLES LOCATION
ADDRESS: 4701 San Leandro Street, Oakland, California		SCALE: Not To Scale
JOB CODE: SLPROJ		October 20, 1993
SEQUOIA ENVIRONMENTAL CONSULTING SERVICES		
SAN LEANDRO, CA.		(510) 614-1900

Post-it brand

Fax Transmittal Memo 7872

To **Ms. M. Lowery**
 Company **Alameda County**
 Location **Oakland**
 Fax # **(510) 569-4757** Telephone # **(510) 271-4320**
 Comments

No. of Pages **1** Today's Date **10-22** Time
 From **Chris Wabuzoh**
 Company **Segudia Environmental**
 Location **San Leandro** Dept. Charge
 Fax # **(510) 614-2423** Telephone # **(510) 614-1900**
 Original Disposition: Destroy Return Call for pickup

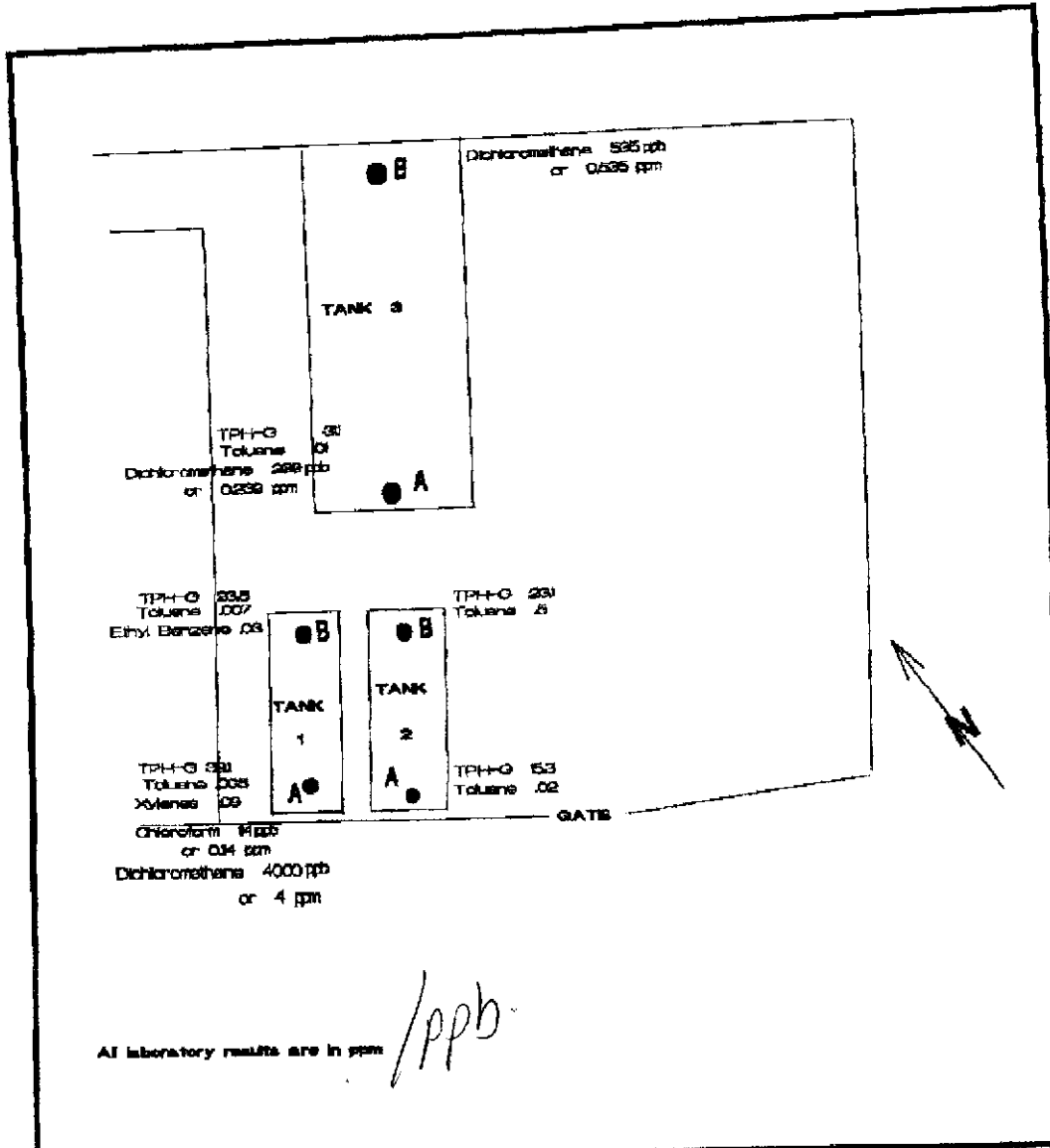


FIGURE 1

MAP TYPE	SITE PLAN	● SAMPLE LOCATION
ADDRESS: 4701 San Leandro Street, Oakland, California		SCALE: Not To Scale
JOB CODE: SLFRCU		October 20, 1993
SEGUDIA ENVIRONMENTAL CONSULTING SERVICES		SAN LEANDRO, CA. 610 614 1900

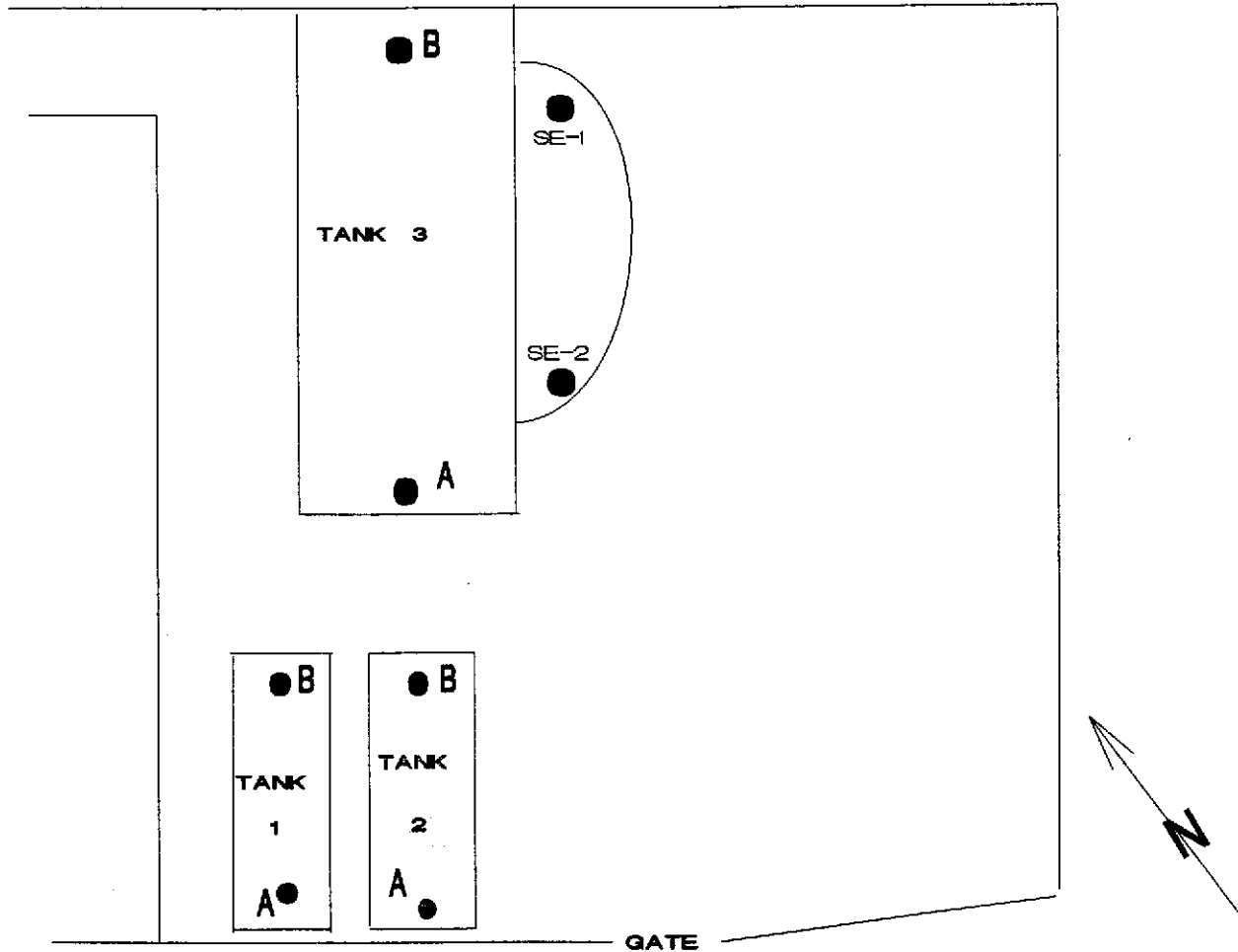


FIGURE 2

MAP TYPE	SITE PLAN	● SAMPLES LOCATION
ADDRESS: 4701 San Leandro Street, Oakland, California		SCALE: Not To Scale
JOB CODE: SLPROJ		October 20, 1993
SEQUOIA ENVIRONMENTAL CONSULTING SERVICES		SAN LEANDRO, CA. (510) 614-1900

BUILDING

PARKING LOT

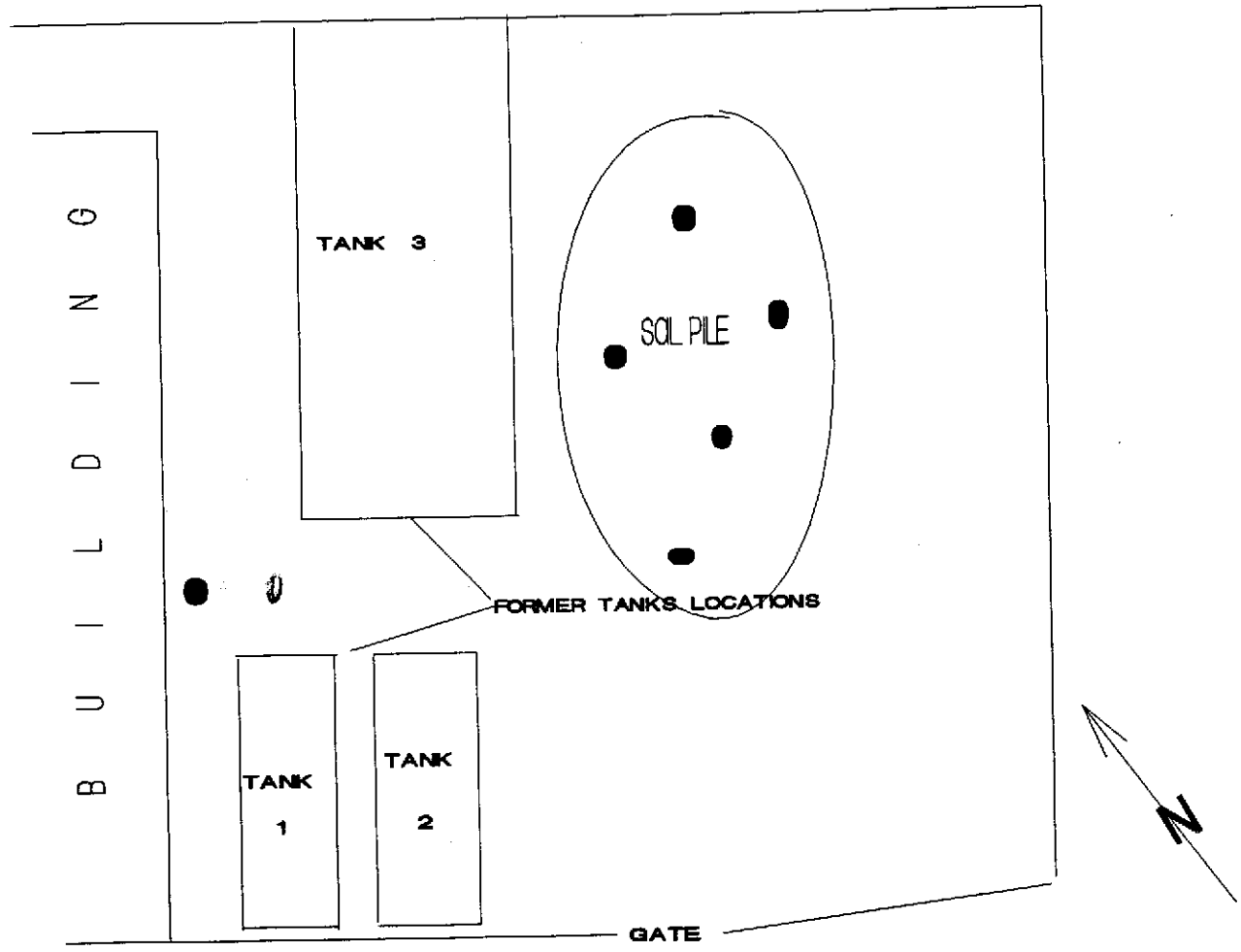


FIGURE 3

MAP TYPE	SITE PLAN	● PROPOSED SAMPLING LOCATION
ADDRESS: 4701 San Leandro Street, Oakland, California		SCALE: Not To Scale
JOB CODE: SLPROJ		October 20, 1993
SEQUOIA ENVIRONMENTAL CONSULTING SERVICES		SAN LEANDRO, CA (510) 814-1900