Environmental Consultants

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Stamped Copy

**SCS ENGINEERS**

April 6, 1990
File No. 317089

Mr. Verl Rothlisberger
Verl's Construction, Inc.
753 Peralta Avenue
San Leandro, California 94577

Subject: Delineation of Soil Contamination
342 - 105th Avenue
Oakland, California

Dear Mr. Rothlisberger:

SCS Engineers is pleased to offer this proposal to delineate the extent of soil contamination for Mr. Verl Rothlisberger of Verl's Construction, Inc. at a site at 342-105th Avenue in Oakland, California. This proposal describes a phased program of: supervision of excavation; soil sampling and analysis; preparation of a report of findings, conclusions and recommendations.

## SCOPE OF WORK

Three tasks will comprise the work involved in a soil contamination assessment and are described in the following paragraphs.

### Task One - Supervision of Excavation

In order to determine the extent of soil contamination, excavation will be completed extending outward from the existing tank pit. A qualified representative of SCS Engineers will supervise the excavation and conduct the sampling program. The excavations will be accomplished in 20' sections. The overburden (approximately 7'-0") will be placed in the prior excavation as backfill. The contaminated soil (approximately 18" to 24") will be removed and placed on 6 mil. visqueen for later remediation. Samples will be taken at the outer extremes of the excavation in clean native soil.

The justification for this excavating is twofold: (1) Removes contaminated soil from excavation at time of sampling, limiting additional excavating time: (2) Safety concerns although the site is fenced and secure.

If sample analyses exhibit contamination, the area in question will be resampled and analyzed. All field samples will be qualitatively tested with a PID to determine approximate extent of soil contamination.

**Task 2 - Soil Sampling and Analysis**

When it is apparent that contamination is not present in the soil, a sample of the soil will be collected. It is anticipated that 5-8 samples will be obtained. These samples will be preserved, and shipped to a State-certified laboratory, and analyzed using EPA protocol 8015 for Diesel and 8020 for Benzene, Xylene, Toluene and Ethyl Benzene. Should also run TOG 5030

**Task 3 - Preparation of Findings, Conclusions, and Recommendations**

When the field work and chemical testing is complete, a final report for Mr. Verl Rothlisberger will be prepared by our staff which will include a summary of all activities conducted under this phase and the results of that work. A sample location diagram will be prepared based on completion of field work. This proposal does not include sampling of excavated materials.

The results of the chemical testing and subsurface conditions will be discussed in the conclusion and recommendations for future actions or non-action will be made.

**Cost Proposal**

Due to the nature of the work, it is difficult to determine the precise extent of our involvement, at the proposal state. The costs noted below, therefore, are approximate but would not be exceeded, if no delays, unusual field conditions or changes in the scope of our activities are encountered.

| | | SCS Labor | Contractor Materials | Total |
|---|---|---|---|---|
| Task #1 | Supervision of excavation and sample collection | 1,500 | - 0 - | 1,500 |
| Task #2 | Soil sample analysis | 50 | 1,904 | 1,954 |
| Task #3 | Prepare final report and results of site evaluation | 820 | - 0 - | 820 |
| | TOTAL, ALL TASKS: | | | 4,274 |

**Project Schedule**

The work will be completed three to four weeks after completion of excavation, assuming no delays occur over which SCS Engineers has no control.

We trust this proposal is satisfactory, and we urge you to contact this office if we can supply additional information or answer any questions. We have prepared a contract that we normally utilize in projects of this nature. A signed copy returned to us is sufficient notice to begin the work.

Sincerely,

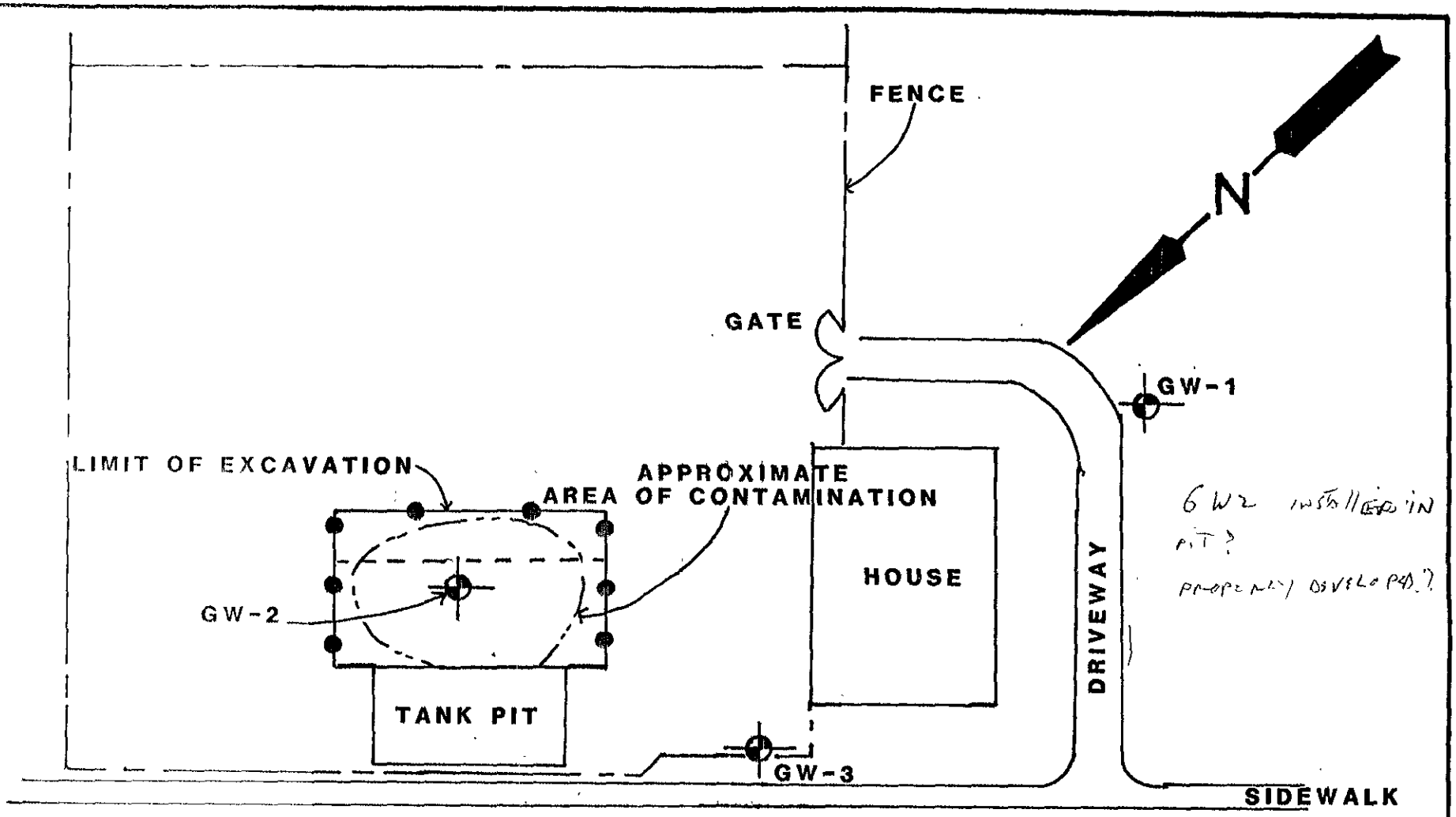
D. Edward MacDaniel
Associate Staff Geologist
SCS Engineers

John P. Cummings, Ph.D., R.E.A., R.E.P.
Office Director
SCS Engineers

Kent A. Madenwald, P.E., R.G., R.E.P.
Project Manager
SCS Engineers

DEM/JPC/KAM/egh

Enclosure




GW2 INSTALLED IN PIT? PROPERTY DEVELOPED?

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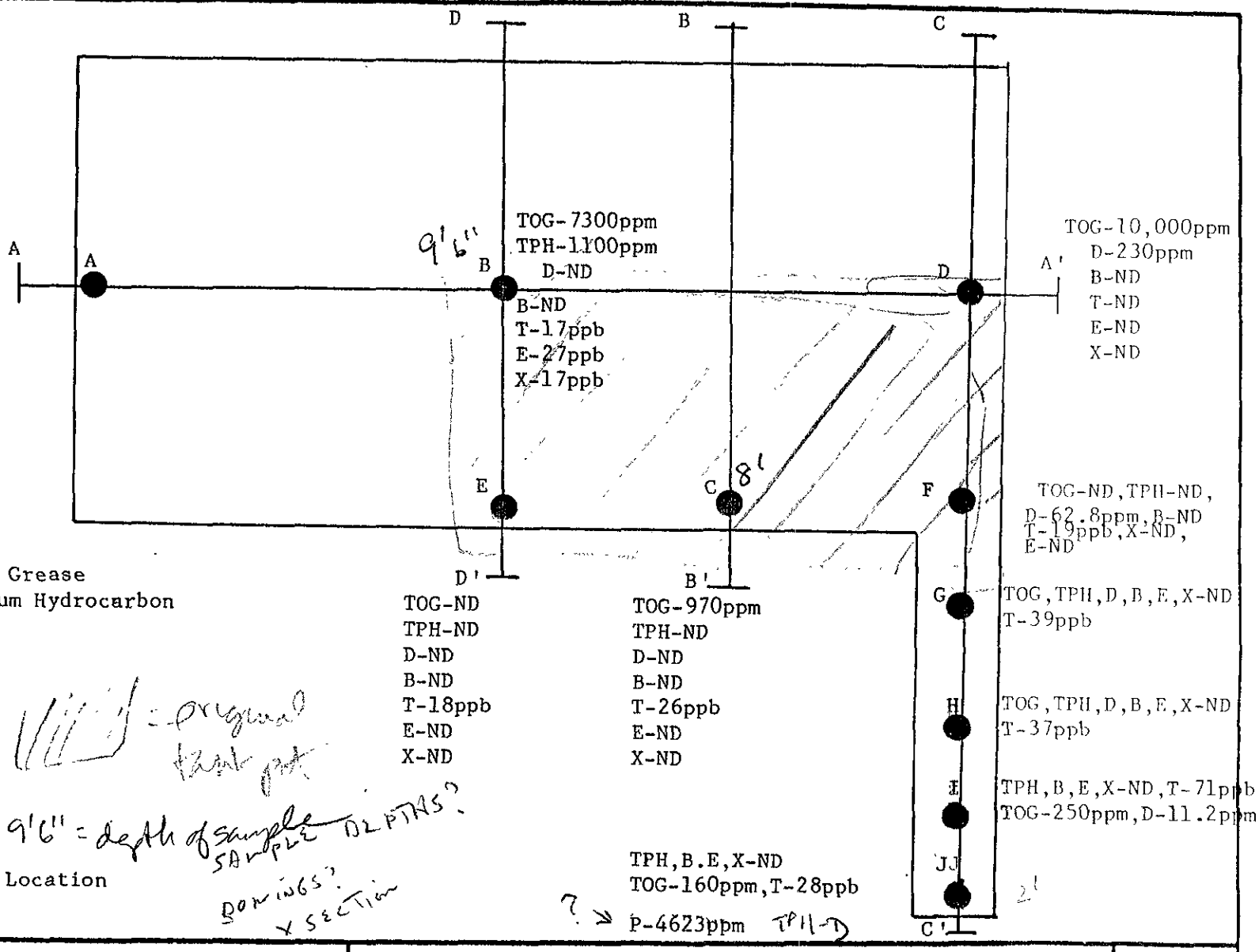
Area of Excavation and Sampling Locations
342 - 105th Avenue
Oakland, California

Project No. 317089 Date: 4-6-90

Plate 1

105th Av




TOG-Total Oil And Grease
TPH-Total Petroleum Hydrocarbon
D-Diesel
B-Benzene
T-Toluene
E-Ethyl Benzene
X-Xylene
ND-Not Detected

= original tank pit

9'6" = depth of sample SAMPLE LOCATIONS?

BORINGS? X SECTION

? → P-4623ppm TPH-D

● — Sampling Location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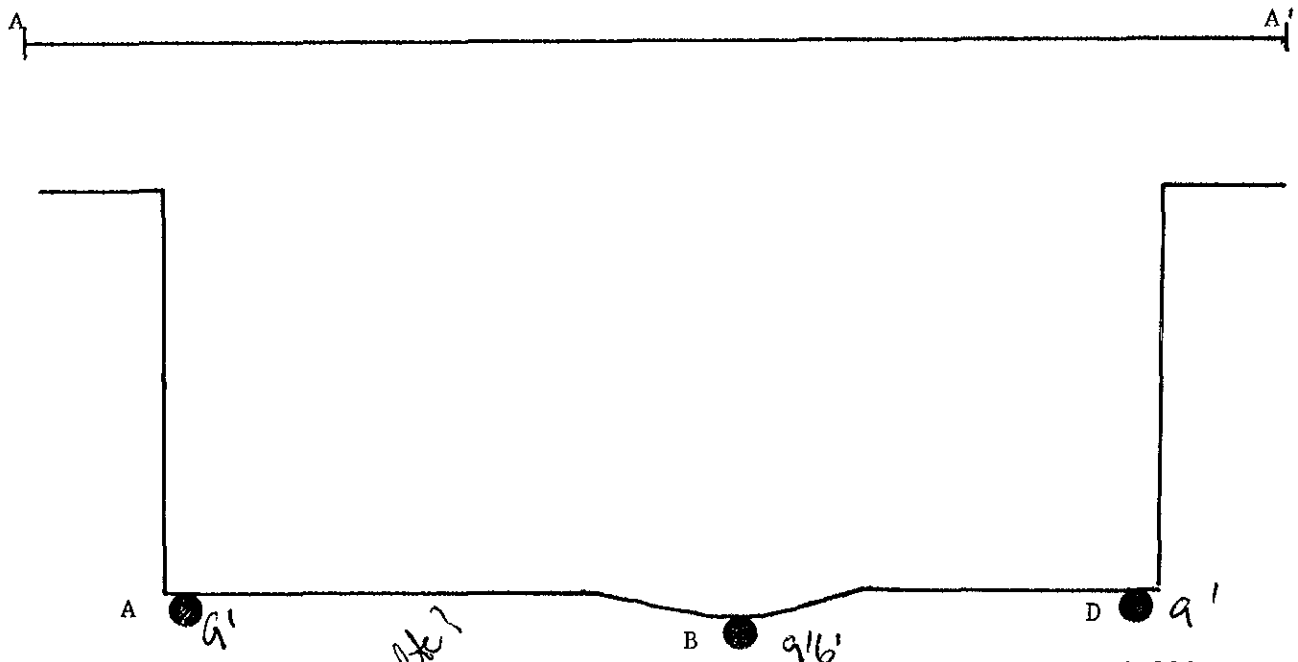
SAMPLING LOCATIONS AND CROSS-SECTIONS
342-105th Avenue
Oakland, California

Project No. 317089

Date: 3-30-90

Plate 2




TOG-4100ppm
D-ND
B-ND
T-ND
E-17ppb
X-38ppb

depths, etc?
location?

TOG-7300ppm
TPH-1100ppm
D-ND
B-ND
T-17ppb
E-27ppb
X-17ppb

TOG-10,000ppm
D-230 ppm
B-ND
T-ND
E-ND
X-ND

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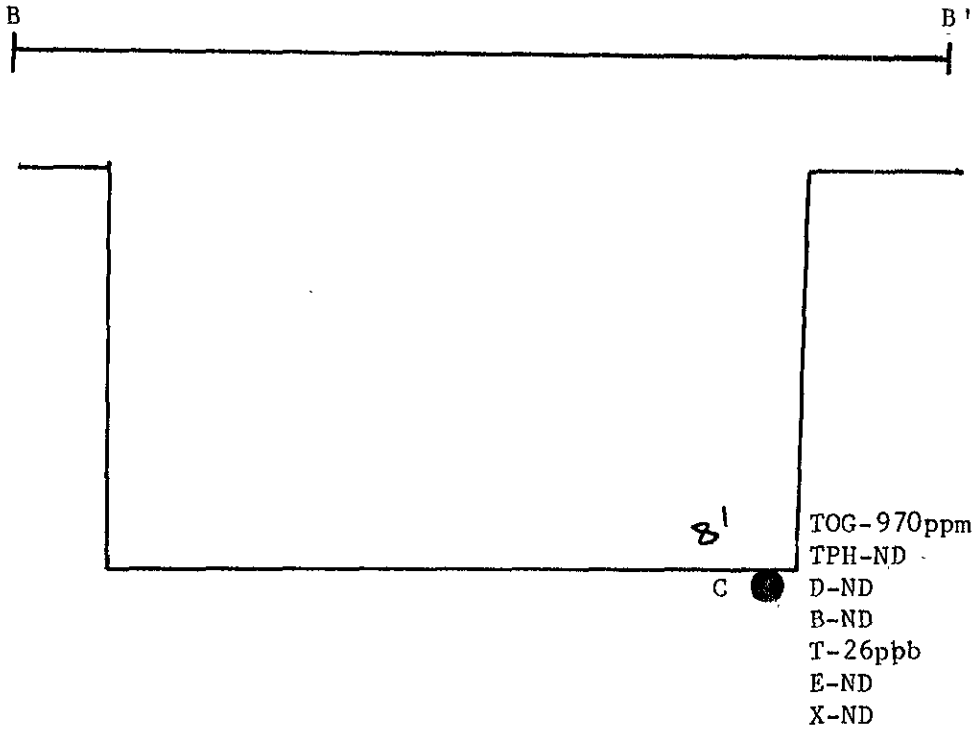
Cross-Section A-A'
342 - 105th Avenue
Oakland, California

Project No. 317089

Date: 3-30-90

Plate
**3**

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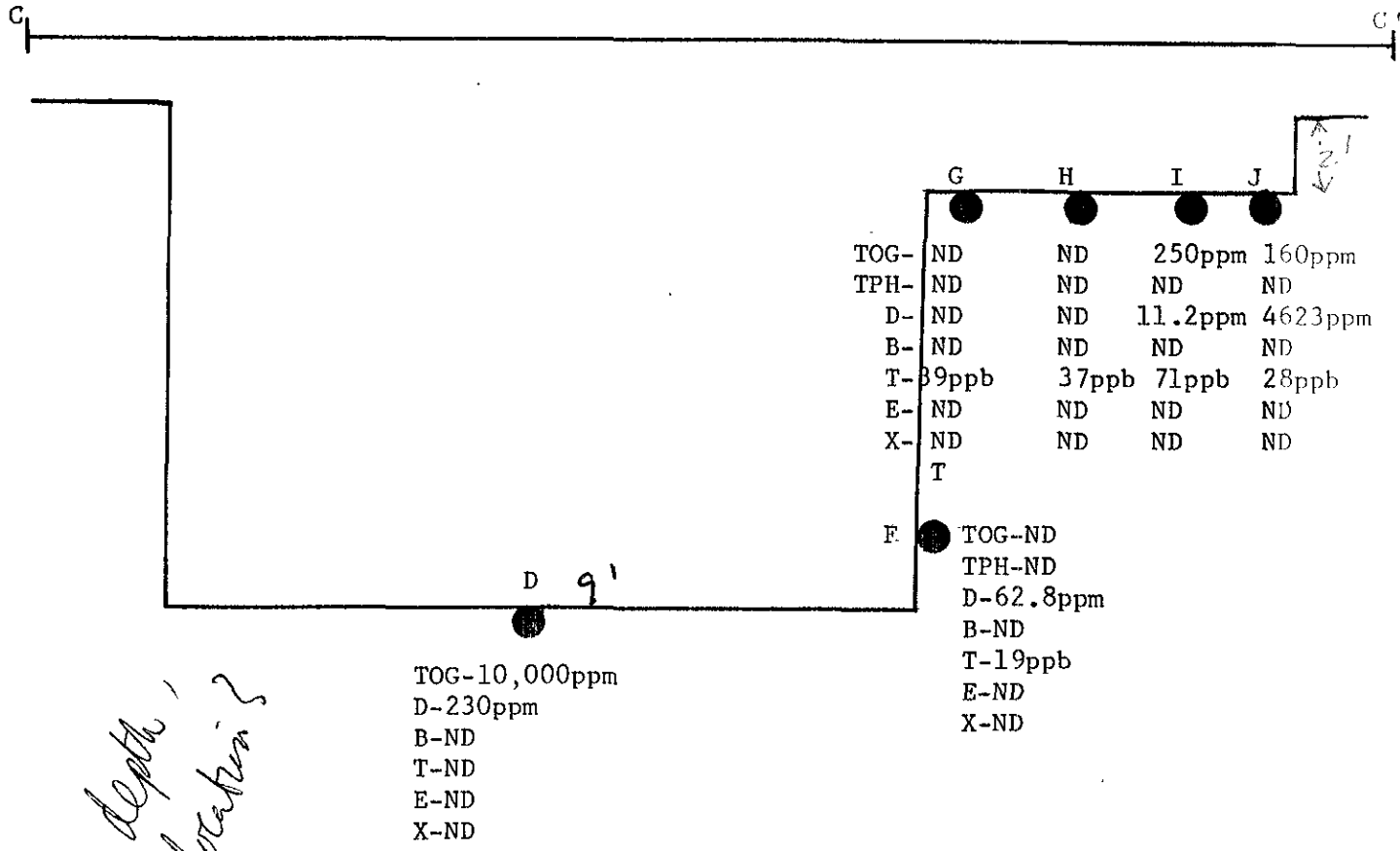
Cross-Section B-B'
342 - 105th Avenue
Oakland, California

Project No. 317089

Date: 3-30-90

Plate
4

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Cross-Section C-C'
342 - 105th Avenue
Oakland, California

Project No. 317089

Date: 3-30-90

Plate
5

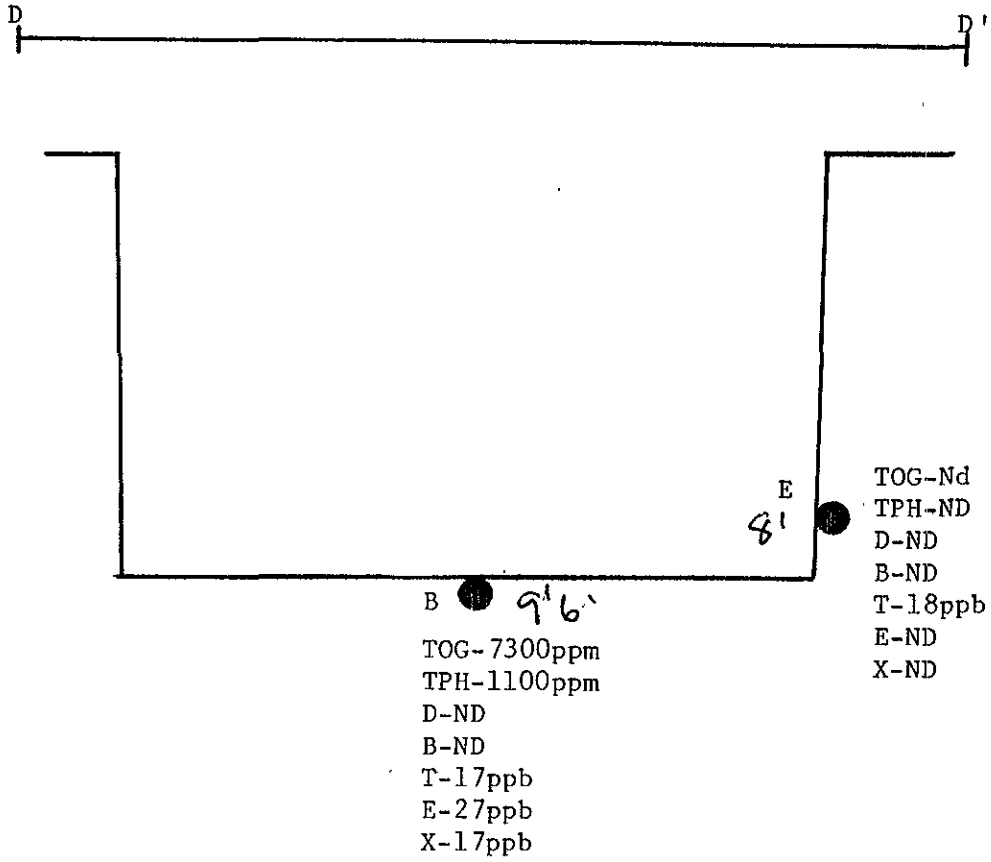


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Plate
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