GETTLER-RYAN INC.

TRANSMITTAL

TO: Ms. Madhulla Logan
Alameda County Health Care
Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

DATE: October 8, 1997
PROJ. #: 8148.02
SUBJECT: Work Plan for Soil Sampling at
8 Acre Parcel
East Castro Valley Boulevard
Castro Valley, California

FROM:

Clyde J. Galantine
Project Geologist
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
1	October 8, 1997	Work Plan for Soil Sampling

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit __ copies for approval

[X] As requested [ ] Approved as noted [ ] Submit __ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[X] For Your Files

COMMENTS:

I have enclosed one copy of the work plan for the above site. Work at the above site will be performed immediately as per our conservation on October 7, 1997. I will call you as soon as I know when the samples will be collected so that you may inspect the site and witness the sample collection. If you have any questions or comments, please call me at (510) 551-7555.

cc: Mr. Roger Gaither, Redwood Christian Schools

GETTLER-RYAN INC.

October 8, 1997

Ms. Madhulla Logan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda California 94502-6577

Subject: Work Plan for Soil Sampling at 8 Acre Parcel, East Castro Valley Boulevard, Castro Valley, California

Ms. Logan:

At the request of Mr. Roger Gaither of Redwood Christian Schools (Redwood), Gettler-Ryan Inc. (GR) has prepared this Work Plan for the collection of additional soil samples at the subject site. The proposed work includes: collecting and submitting selected soil samples for chemical analysis and preparing a report presenting the observations associated with the soil samples. This work is proposed to further evaluate whether soil beneath the site has been impacted by petroleum hydrocarbons.

The scope of work proposed in this Work Plan is intended to comply with the State of California Water Resources Control Board's *Leaking Underground Fuel Tanks (LUFT) Manual* and *California Underground Storage Tank Regulations, 1994*, the Regional Water Quality Control Board's (RWQCB) *Tri-Regional Board Staff Recommendations for Preliminary Investigation and Evaluation of Underground Tank Sites*, and the Alameda County Health Care Services (ACHCSA) guidelines.

SITE DESCRIPTION

The subject site (the eight acre parcel) is a vacant parcel located southwest of the intersection of East Castro Valley Boulevard and Eden Canyon Road (Figure 1). There are currently no existing structures present at the site. A concrete slab is present on the upper terrace, along with debris from a former wooden structure. A single-wall above-ground steel tank is located at the northwest end of the subject site. This tank appears to have been used to store water. The adjacent four acre parcel contains numerous abandoned wooden structures along the east property boundary. Pertinent site features are shown on Figure 2.

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PREVIOUS ENVIRONMENTAL WORK

On July 25, 1997, GR collected eight soil samples (R-1 through R-8) at the subject site. Four samples were collected from both the upper and lower terraces of the eight acre parcel (Figure 2). Samples were collected by removing the upper 2 inches of soil from each sample location, then driving a clean brass sample tube into the soil. Each sample was analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg) according to EPA Method 5030/GC-FID and a fuel fingerprint for Extractable Total Petroleum Hydrocarbons calculated as diesel (TPHd) and oil (TPHo) according to EPA Method 3550/GC-FID by American Environmental Network (AEN) laboratories.

TPHo was detected in samples R-1 through R-8 at concentrations ranging from 6 to 930 parts per million (ppm). TPHg and TPHd were not detected in any sample.

Upon receipt of the analytical data, additional soil samples were collected. Soil sample R-8A was collected immediately adjacent to the location of R-8 at a depth of 0.5 feet below ground surface (bgs). A shovel and pick were then used to excavate the area around R-8 and R-8A to a depth of approximately 1.75 feet bgs. Soil sample R-8-2 was then driven into the bottom of the excavation to a depth of 2 feet bgs. The soil near R-8 ranged from loose soil and roots (surface to 0.20 feet bgs), to a well-compacted silt and clay with varying amounts of gravel (0.20 to 0.75 feet bgs), to silt (0.75 to 2 feet bgs). A third sample, R-9, was collected at a depth of 0.5 feet bgs from a four acre parcel located immediately south of the eight acre parcel (Figure 2).

These three samples were transported to Sequoia Analytical for a Fuel Fingerprint analysis according to EPA Method 8015. Sample R-8A and R-8-2 contained 15 and 4.1 ppm of an unidentified hydrocarbon between C9 and C40, respectively. R-9 contained 19 ppm of an unidentified hydrocarbon between C9 and C40.

An extract of sample R-8 was transported from AEN to Sequoia Analytical for Fuel Fingerprint analysis. Analysis of the extract by Sequoia detected 880 ppm of an unidentified hydrocarbon between C9 and C40. This concentration can be compared to the 930 ppm TPHo reported by AEN.

PROPOSED SCOPE OF WORK

Per the ACHCSA letter dated September 15, 1997 and our discussions with Ms. Madhulla Logan the following scope of work was requested.

Task 1. Field Activities

Four soil samples will be collected. The samples will be collected at approximately 0.5 and 2 feet bgs at the locations of soil samples R-6 and R-1 (Figure 2). These samples contained the second and third highest concentrations of TPH previously identified.

A hand auger will be used to dig down to the appropriate depth. A clean brass sample tube will be driven into the soil using a hand driven soil sampler fitted with a 2-inch diameter by 4-inch long clean brass tube. After removal from the sampling device, the sample tubes will be covered with teflon sheeting, capped, labeled, and placed in a cooler with ice for preservation. A chain-of-custody form will be initiated in the field and accompany the soil samples to an appropriate laboratory.

Task 2. Laboratory Analyses

The samples collected at 2 feet bgs will be submitted to a California-certified Hazardous Materials Testing Laboratory and analyzed for TPHo by EPA Methods 5030/8015. If either of these samples are reported to contain more than 500 ppm TPHo, then the corresponding sample collected at 0.5 feet bgs will be analyzed for Polynuclear Aromatics (PNAs) by EPA method 8100.

Task 3. Reporting

Following receipt and analysis of all data, a report will be prepared which summarizes the procedures and the results associated with this investigation. This report will be submitted to Redwood for their use and distribution.

PROJECT STAFF

Mr. Stephen Carter, a Registered Geologist in the State of California (R.G. No. 5577), will provide technical oversight and review of the work. Mr. Greg Gurss, Project Manager, will supervise and direct field and office operations. GR employs a staff of geologist, engineers, and technicians who will assist with the project.

SCHEDULE

Implementation of the proposed scope of work will commence upon completion and distribution of this work plan as per our telephone conservation on October 7, 1997. We are currently scheduled to collect the soil samples on October 10, 1997.

If you have any questions, please call us in our Dublin office at (510) 551-7555.

Sincerely
Gettler-Ryan Inc.

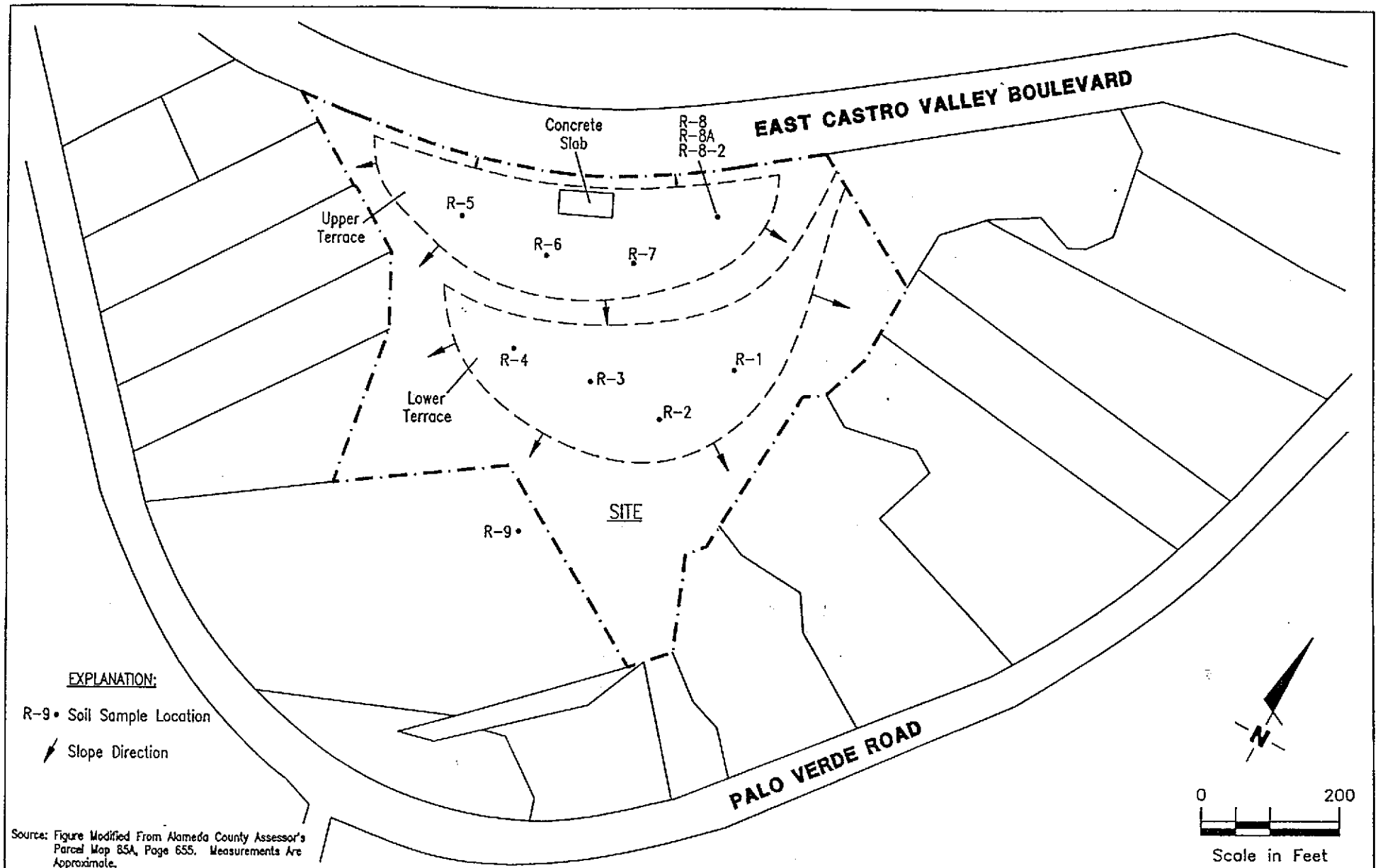
for

Clyde J. Galantine
Project Geologist

Stephen J. Carter
Senior Geologist
R.G. 5577

Attachments: Figure 1. Vicinity Map
Figure 2. Site Map

c: Mr. Roger S. Gaither, Redwood Christian Schools



Source: Figure Modified From Alameda County Assessor's Parcel Map 85A, Page 655. Measurements Are Approximate.

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SITE PLAN/SAMPLE LOCATION MAP
Redwood Christian Schools
East Castro Valley Boulevard – 8 Acre Parcel
Castro Valley, California

FIGURE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
8148		07/97	