



Uriah Inc.

An Environmental Services Company

PROPOSAL FOR THE
COMPLETION OF AN
INITIAL SUBSURFACE INVESTIGATION
AT
1171 OCEAN AVENUE
OAKLAND, CA
DECEMBER 8, 1989



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Mr. Gil Wistar
Hazardous Materials Specialist
Alameda County Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

RE: Proposed Work Plan for Completion of an Initial Subsurface Investigation at 1171 Ocean Avenue, Oakland, CA

Dear Mr. Wistar:

Having completed the installation of six exploratory soil borings to groundwater in the area formerly occupied by a 5,000 gallon underground fuel storage tank located at the above referenced facility, Uriah proposes the following in response to the requests for additional work set forth within correspondence directed from your office to Mr. Sam Rohn on May 16, 1989 and November 3, 1989:

1) Acquisition and presentation of information concerning past and present activities occurring at the site in question. Emphasis will be placed upon manufacturing, handling, and storage of hazardous materials, including spills involving these materials. Information will also presented concerning all underground storage tanks located on site.

2) Development of additional data regarding hydrogeologic conditions at the site and acquisition and presentation of information in textual and graphic forms concerning surface waters within one mile of the site and wells both on-site and upon all contiguous properties.

3) Completion of the assessment of the extent of soil and groundwater contamination through the placement of one 2" diameter groundwater monitoring well at the location shown on Figure #1, attached. This location is proposed as appropriate with regard to its apparently downgradient position, its

proximity to the former location of the underground storage tank, and relative position to the points sampled at the time of tank removal. While the well would not be downgradient of Uriah Boring LB-3, the only point at which contamination was found during the September 6, 1989 limited assessment, the low level of contamination detected at LB-3 (1.6 parts per million TPH-D in soil), the presence of clay and silty-clay soils, and a known hydraulic gradient present conditions which cause Uriah staff to request permission to install but the single monitoring well proposed. ✓

The well boring would be advanced to a point fifteen feet below groundwater with a truck-mounted 8" outside diameter, continuous flight hollow-stem auger. Drilling would be performed by staff of Bayland Drilling Company, Inc. of Foster City, CA under the direction of a qualified professional supervised by a registered civil engineer. During the course of the drilling, soils would be continuously logged using the Unified Soil Classification System. Soil samples would be collected at a depth of five (5) feet below grade, at a point just above the top of the saturated zone (i.e. approximately 7.5'), and at significant changes in lithology. Samples would be collected within brass sampling tubes (1.92 inches in diameter by 6 inches in length) fitted within a split spoon sampler driven through the hollow stem of the drilling auger(s). Upon being removed from the sampling unit, the ends of each brass tube would be promptly wrapped in aluminum foil, covered with plastic caps, sealed with electrical tape, labeled, placed on dry ice, and transported to a certified hazardous waste analytical laboratory under chain of custody for analyses for Total Petroleum Hydrocarbons as Diesel (TPH-D), benzene, toluene, total xylenes, and ethylbenzene (BTX&E) using EPA Methods 3550/8015-8020, and Total Oil and Grease (TOG) using SM 503 D&E. ✓

at least
5' above
saturation
zone.

The conversion of the boring to a monitoring well would follow the criteria described within Figure #2 (Well Details), attached.

4) The newly installed monitoring well will be given a minimum of 24 hours to stabilize. It will then be surveyed by a licensed surveyor and its elevation established to within 0.01 feet of a recognized benchmark. The well will be subsequently developed and sampled in accordance with the protocol described within Figure #3, attached. The water samples acquired attendant to well development and during the course of subsequent, routine quarterly sampling would be removed from the well with a hand pump and transferred to amber glass collection bottles and Volatile Organic Analysis (VOA) vials. Each sample would be promptly sealed, labeled, placed on blue ice, and transported, also under chain of custody, to a certified laboratory for analysis for TPH-D, and BTX&E, using EPA Methods 3510/8015-602, TOG using SM 503 C&E, and for selected water quality criteria (e.g. TDS, pH, and EC). The quality of samples obtained would

be assured through utilization of sample blanks. The depth to water within the well would be obtained monthly following installation with the use of an electronic tape.

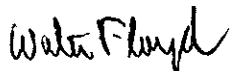
All sampling equipment will be decontaminated between sampling intervals by first scrubbing withalconox solution followed by a distilled water rinse. Drilling augers will be steam cleaned or changed between borings. Drill cuttings will be placed on visqueen and covered for on site storage pending receipt of laboratory data. Well water extracted during the course of development/sampling will be stored within a DOT drum pending the receipt of analytical data.

5) Subsequent to the acquisition and development of sampling data, the levels of contamination will be refined into isoconcentration contour maps and modeled, as appropriate.

How?

We trust that the activities proposed herein constitute an appropriate supplemental site assessment work plan. Should you require additional work, however, or if we may otherwise be of assistance, please contact either of the undersigned at (415) 455-4991.

Sincerely,



Walter Floyd
Geologist
and



Eddy A. Tabet, P.E.
California Registered Engineer #43041

WF/EAT:ms
Attachments
cc: Lester Feldman, SFRWQCB

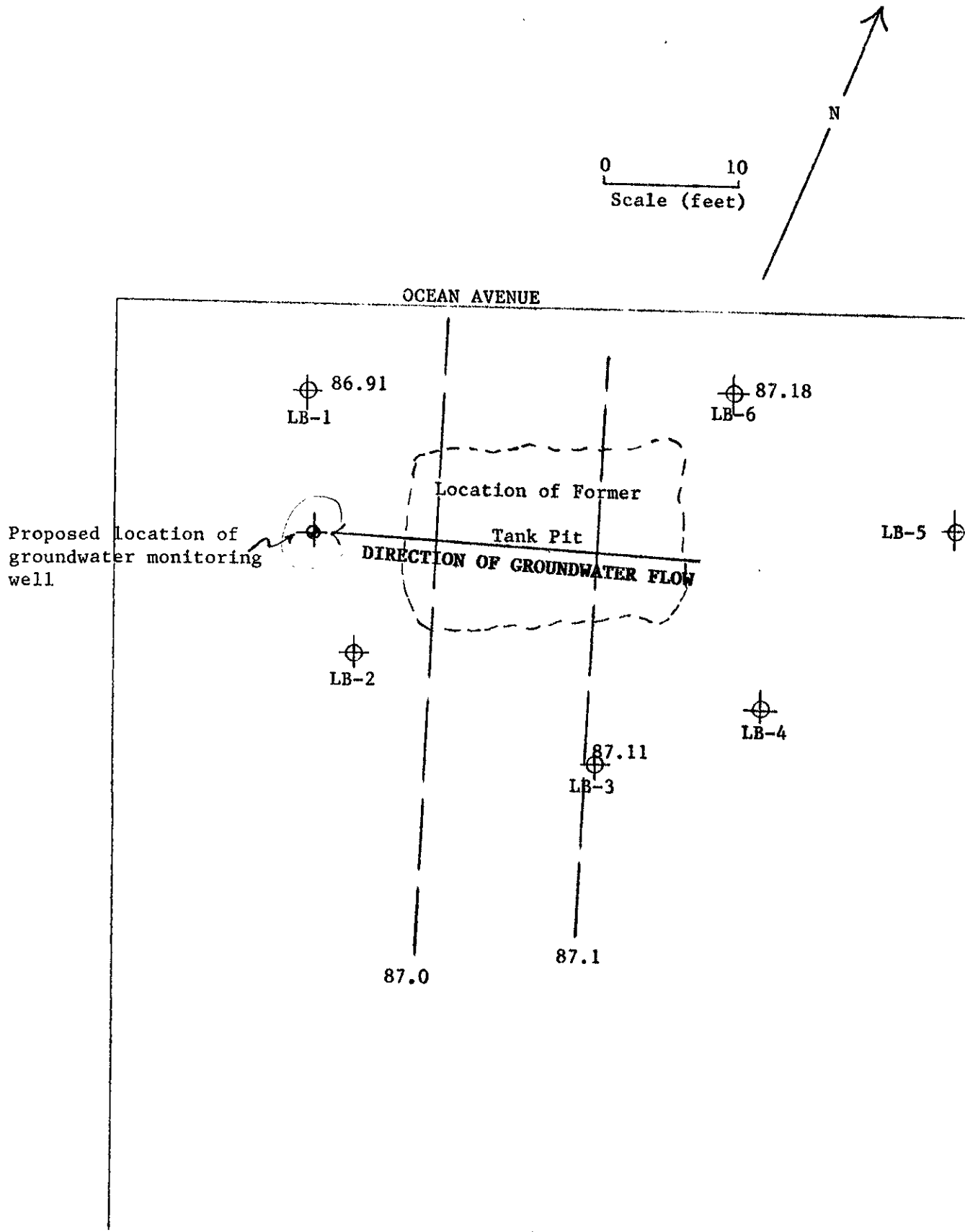


Figure 1