

STID 3736

November 27, 1995

Chester Clark
537 Hidden Valley Road
Grants Pass, OR 97527

ATTN: Bob Price

*Copy
5/13/96*

Site:
Clark's Home and Garden
23040 Clawiter Road
Hayward, California

Date:
October 9, 1995

GROUNDWATER SAMPLING REPORT 951009-V-2

Blaine Tech Services, Inc. performs specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. does not participate in the interpretation of analytical results, or become involved with the marketing or installation of remedial systems.

This report deals with the groundwater well sampling performed by our firm in response to your request. Data collected in the course of our work at the site are presented in the TABLE OF MONITORING DATA. This information was collected during our inspection, well evacuation and sample collection. Measurements include the total depth of the well and the depth to water. Water surfaces were further inspected for the presence of immiscibles. A series of electrical conductivity, pH, and temperature readings were obtained during well evacuation and at the time of sample collection.

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STANDARD PRACTICES

Evacuation and Sampling Equipment

As shown in the TABLE OF MONITORING DATA, the wells at this site were evacuated according to a protocol requirement for the three case volumes. The wells were evacuated using bailers.

Samples were collected using bailers.

Bailers: A bailer, in its simplest form, is a hollow tube which has been fitted with a check valve at the lower end. The device can be lowered into a well by means of a cord. When the bailer enters the water, the check valve opens and liquid flows into the interior of the bailer. The bottom check valve prevents water from escaping when the bailer is drawn up and out of the well.

Two types of bailers are used in groundwater wells at sites where fuel hydrocarbons are of concern. The first type of bailer is made of a clear material such as acrylic plastic and is used to obtain a sample of the surface and the near surface liquids, in order to detect the presence of visible or measurable fuel hydrocarbon floating on the surface. The second type of bailer is made of Teflon or stainless steel and is used as an evacuation and/or sampling device.

Bailers are inexpensive and relatively easy to clean. Because they are manually operated, variations in operator technique may have a greater influence than would be found with more automated sampling equipment. Also where fuel hydrocarbons are involved, the bailer may include near surface contaminants that are not representative of water deeper in the well.

Decontamination

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site.

Effluent Materials

The evacuation process creates a volume of effluent water which must be contained. Blaine Tech Services, Inc. will place this water in appropriate containers of the client's choice or bring new 55 gallon DOT 17 E drums to the site, which are appropriate for the containment of the effluent materials. The determination of how to properly dispose of the effluent water must usually await the results of laboratory analyses of the sample collected from the groundwater

well. If that sample does not establish whether or not the effluent water is contaminated, or if effluent from more than one source has been combined in the same container, it may be necessary to conduct additional analyses on the effluent material.

Sampling Methodology

Samples were obtained by standardized sampling procedures that follow an evacuation and sample collection protocol. The sampling methodology conforms to both State and Regional Water Quality Control Board standards and specifically adheres to EPA requirements for apparatus, sample containers and sample handling as specified in publication SW 846 and T.E.G.D. which is published separately.

Sample Containers

Sample containers are supplied by the laboratory performing the analyses.

Sample Handling Procedures

Following collection, samples are promptly placed in an ice chest containing deionized ice or an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

Sample Designations

All sample containers are identified with both a sampling event number and a discrete sample identification number. Please note that the sampling event number is the number that appears on our chain of custody. It is roughly equivalent to a job number, but applies only to work done on a particular day of the year rather than spanning several days, as jobs and projects often do.

Chain of Custody

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under our standard chain of custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date and signature of person accepting custody of the samples).

Hazardous Materials Testing Laboratory

The samples obtained at this site were delivered to Curtis & Tompkins Laboratory in Berkeley, California. Curtis & Tompkins Laboratory is certified by the California Department of Health Services as a Hazardous Materials Testing Laboratory, and is listed as DOHS HMTL #1459.

Personnel

All Blaine Tech Services, Inc. personnel receive 29 CFR 1910.120(e)(2) training as soon after being hired as is practical. In addition, many of our personnel have additional certifications that include specialized training in level B supplied air apparatus and the supervision of employees working on hazardous materials sites. Employees are not sent to a site unless we are confident they can adhere to any site safety provisions in force at the site and unless we know that they can follow the written provisions of an SSP and the verbal directions of an SSO.

In general, employees sent to a site to perform groundwater well sampling will assume an OSHA level D (wet) environment exists unless otherwise informed. The use of gloves and double glove protocols protects both our employees and the integrity of the samples being collected. Additional protective gear and procedures for higher OSHA levels of protection are available.

Reportage

Submission to the Regional Water Quality Control Board and the local implementing agency should include copies of the sampling report, the chain of custody and the certified analytical report issued by the Hazardous Materials Testing Laboratory.

The following addresses have been listed here for your convenience:

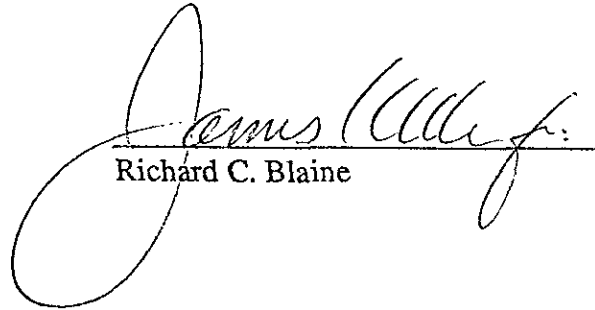
Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, 5th Floor
Oakland, CA 94612

ATTN: Dennis Mishek

Alameda Fire Dept.
300 Park Street
Alameda, CA 94501

ATTN: Albert L. Smith

Please call if we can be of any further assistance.



Richard C. Blaine

RCB/lp

attachments: table of well monitoring data
chain of custody

TABLE OF WELL MONITORING DATA

| | | | | | | | | | |
|-------------------------------|-----------------------------------|----------|----------|-----------------------------------|-------|-------|-----------------------------------|-------|-------|
| Well I.D. | #1 | #1 | #1 | | | | | | |
| Date Sampled | 04/21/95 | 07/07/95 | 10/09/95 | | | | | | |
| Well Diameter (in.) | 2 | 2 | 2 | | | | | | |
| Total Well Depth (ft.) | 23.65 | 23.53 | 23.58 | | | | | | |
| Depth To Water (ft.) | 13.39 | 14.08 | 15.03 | | | | | | |
| Free Product (in.) | NONE | NONE | NONE | | | | | | |
| Reason If Not Sampled | -- | -- | -- | | | | | | |
| 1 Case Volume (gal.) | 1.64 | 1.51 | 1.36 | | | | | | |
| Did Well Dewater? | NO | NO | NO | | | | | | |
| Gallons Actually Evacuated | 5.0 | 5.0 | 4.5 | | | | | | |
| Purging Device | BAILER | BAILER | BAILER | | | | | | |
| Sampling Device | BAILER | BAILER | BAILER | | | | | | |
| Time | 14:01 | 14:05 | 14:07 | 14:08 | 14:11 | 14:13 | 10:31 | 10:36 | 10:39 |
| Temperature (Fahrenheit) | 64.2 | 63.2 | 64.2 | 65.0 | 64.6 | 64.6 | 66.4 | 66.2 | 66.2 |
| pH | 7.8 | 7.4 | 7.4 | 7.2 | 7.0 | 7.0 | 7.6 | 7.2 | 7.2 |
| Conductivity (micromhos/cm) | 3800 | 1800 | 1800 | 800 | 800 | 800 | 1800 | 1600 | 1600 |
| Nephelometric Turbidity Units | >200 | >200 | >200 | >200 | >200 | >200 | >200 | >200 | >200 |
| BTS Chain of Custody | 950421-V-4 | | | 950707-V-3 | | | 951009-V-2 | | |
| BTS Sample I.D. | #1 | | | #1 | | | #1 | | |
| Analysis | TPH (GAS), BTEX & TPH (DIESEL) | | | TPH (GAS), BTEX & TPH (DIESEL) | | | TPH (GAS), BTEX & TPH (DIESEL) | | |

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|--|
| SUMMARY OF CAR RESULTS in parts per billion unless otherwise noted |
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| | | | |
|------------------------|-------------------|-------------------|-------------------|
| DOHS HMTL Laboratory | CURTIS & TOMPKINS | CURTIS & TOMPKINS | CURTIS & TOMPKINS |
| Laboratory Sample I.D. | 120767-001 | 121686-001 | 122969-001 |
| TPH Gasoline | 1500+ | 3100 | 870 |
| Benzene | 3.1 | 7.7 | <0.5 |
| Toluene | 5.9 | 8.1 | <0.5 |
| Ethyl Benzene | 45 | 54 | 12 |
| Xylene Isomers | 62 | 92 | 5.2 |
| TPH Diesel | 1900 | 3200 | 1300 |

In the interest of clarity, an addendum has been added to the TABLE which lists analytical results in such a way that our field observations are presented together with the analytical results. This addendum is entitled a **SUMMARY OF CAR RESULTS**. As indicated by the title, the source documents for these numbers are the laboratory's certified analytical reports. These **certified analytical reports (CARs)** are generated by the laboratory as the sole official documents in which they issue their findings. Any discrepancy between the CAR and a tabular or text presentation of analytical values must be decided in favor of the CAR on the grounds that the CAR is the authoritative legal document.

| CONDUCT ANALYSIS TO DETECT | | | | | | | | | | |
|------------------------------|-----------------|--|--|--|--|--------------|--|--|--|--|
| C = COMPOSITE ALL CONTAINERS | ✓ TPH GAS, BTEX | | | | | ✓ TPH Diesel | | | | |
| | | | | | | | | | | |

LAB CURTIS + Tompkins DHS # _____
 ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
 EPA WQCB REGION III
 LIA
 OTHER

CHAIN OF CUSTODY
951009-V-2
 CLIENT Chester Clark
 SITE 23040 Clawiter Rd.
Hayward, CA

SPECIAL INSTRUCTIONS Invoice & Report to Chester Clark - cc: BLAINE TECH SERVICES.
For samples with BTEX greater than 5PPB, the Lab will Run BTEX by 8240 + Luft Method for BTEX

| SAMPLE I.D. | MATRIX S = SOIL W = H2O | CONTAINERS | | C = COMPOSITE ALL CONTAINERS | CONDUCT ANALYSIS TO DETECT | ADD'L INFORMATION | STATUS | CONDITION | LAB SAMPLE # |
|-------------|-------------------------------|------------|---------|------------------------------|----------------------------|-------------------|----------|-----------|--------------|
| | | TOTAL | LIBRARY | | | | | | |
| #1 | W | 7 | LIBRARY | | | | Positive | | |
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SAMPLING COMPLETED 10-9-95 | TIME 1030 | SAMPLING PERFORMED BY F.A. VANDEN BROEK | RESULTS NEEDED NO LATER THAN Positive Tomorrow

RELEASED BY [Signature] | DATE 10/10/95 | TIME 1010 | RECEIVED BY [Signature] | DATE 10/10/95 | TIME 1010

RELEASED BY _____ | DATE _____ | TIME _____ | RECEIVED BY _____ | DATE _____ | TIME _____

RELEASED BY _____ | DATE _____ | TIME _____ | RECEIVED BY _____ | DATE _____ | TIME _____

SHIPPED VIA _____ | DATE SENT _____ | TIME SENT _____ | COOLER # _____