

BLAINE TECH SERVICES INC.

985 TIMOTHY DRIVE SAN JOSE, CA 95133 (408) 995-5535 FAX (408) 293-8773

April 12, 1995

Mark Borsuk 1626 Vallejo Street San Francisco, CA 94123-5116

> site: 1432 Harrison Street Oakland, California

DATE: March 13, 1995

GROUNDWATER SAMPLING REPORT 950313-J-1

Blaine Tech Services, Inc. perform 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 WELL MONITORING DATA. This information was collected during our inspection, well evacuation, and sample collection. Measurements include the total depth of the well and 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.

Blaine Tech Services, Inc. Report No. 950313-J-1

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page 1

TABLE OF WELL MONITORING DATA

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| Well I.D. | MW-1 | MW-2 | MW-3 | | | |
|-----------------------------|----------------------|-------------------|-------------------|--|--|--|
| Date Sampled | 03/13/95 | 03/13/95 | 03/13/95 | | | |
| Well Diameter (in.) | 4 | 2 | 2 | | | |
| Total Well Depth (ft.) | 25.15 | 25.86 | 23.90 | | | |
| Depth To Water (ft.) | 18.66 | 19.15 | 17.86 | | | |
| Free Product (in.) | NONE | NONE | NONE | | | |
| Reason If Not Sampled | | | | | | |
| 1 Case Volume (gal.) | 4.2 | 1.0 | 0.9 | | | |
| Did Well Dewater? | NO | NO | NO | | | |
| Gallons Actually Evacuated | 15.0 | 3.0 | 3.0 | | | |
| Purging Device | ELECTRIC SUBMERSIBLE | BAILER | BAILER | | | |
| Sampling Device | BAILER | BAILER | BAILER | | | |
| Time | 10:26 10:28 10:30 | 11:00 11:03 11:06 | 09:48 09:51 09:54 | | | |
| Temperature (Fahrenheit) | 64.6 64.8 65.2 | 66.2 66.0 65.8 | 65.4 65.2 65.2 | | | |
| рH | 7.4 7.4 7.5 | 7.3 7.2 7.3 | 8.0 7.8 7.8 | | | |
| Conductivity (micromhos/cm) | BBO 440 400 | 300 290 300 | 560 420 360 | | | |
| BTS Chain of Custody | 950313-J-1 | 950313-J-1 | 950313-J-1 | | | |
| BTS Sample I.D. | MW-1 | MW-2 | MW-3 | | | |
| DHS HMTL Laboratory | NET | NET | NET | | | |
| Laboratory Sample I.D. | 238158 | 238159 | 238157 | | | |
| Analysis | TPH (GAS), BTXE | TPH(GAS), BTXE | TPH (GAS), BTXE, | | | |
| | | | TPH (MOTOR OIL) | | | |
| | | | EPA 8010 | | | |

| SUMMARY OF | CAR | RESULTS | in Parts Per Billion u | inless otherwise noted | |
|------------|-----|---------|------------------------|------------------------|--|
| | | | | | |

| DHS HTML Laboratory Laboratory Sample I.D. | NET 238158 | NET 238159 | NET 238157 |
|---|---------------|---------------|---------------|
| TPH Gasoline | 150,000 | 500,000 | ND |
| Benzene | 31,000 * | 9, 200 | ND |
| Toluene | 45,000 * | 23,000 | ND |
| Ethyl Benzene | 2,500 * | 7,000 | ND |
| Xylene Isomers | 17,000 + | 36,000 | ND |
| TPH Motor oil | | | ND |

* Compound quantitated at a 1000x dilution factor.

In the interest of clarity, an addendum has been appended 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.

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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 three case volumes. The wells were evacuated using electric submersible pumps and bailers.

Samples were collected using a bailer.

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 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.

Electric Submersible Pumps: Electric submersible pumps are appropriate for the high volume evacuation of wells of any depth provided the well diameter is large enough to admit the pump. Four inch and three inch diameter wells will readily accept electric submersible pumps, while two inch wells do not. In operation, the pump is lowered into the well with a pipe train above it. A checkvalve immediately above the pump and below the first section of pipe prevents water that has entered the pipe from flowing back into the well. Electricity is provided to the pump via an electrical cable and the action of the pump is to push water up out of the well.

Electric submersible pumps are often used as well evacuation devices, which are then supplanted with a more specialized sample collection device (such as a bailer) at the time of sampling. An alternative is to use the pump for both evacuation and sampling. When a bailer is used to collect the sample, interpretation of results by the consultant should allow for variations attributable to near surface contamination entering the bailer. When the electric submersible is, itself, used for sample collection it should be operated with the output restricted to a point where the loss of volatiles becomes indistinguishable from the level obtained with true sampling pumps.

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It should be noted that when the pump is used for both evacuation and sample collection that it is possible to perform these operation as an uninterrupted continuum. This contrasts with the variations in elapsed time between evacuation and sample collection that occur when field personnel cease one mode of operation and must bring other apparatus into use.

Decontamination

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All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site. Decontamination procedures include complete disassembly of the device to a point where a jet of steam cleaner water can be directed onto all the internal surfaces (this applies to the *inside* of the Teflon bladders of USGS/Middleburg pumps). Teflon conductor tubing is connected to the steam cleaner water outlet and water is run through the interior of the tubing for several minutes. The devices are then reassembled and actuated for a period of time as an additional measure. Blaine Tech Services, Inc. frequently modifies apparatus to allow complete disassembly and proper cleaning.

Effluent Materials

The evacuation process creates a volume of effluent water which must be contained. Blaine Tech Service, Inc. will place this water in appropriate containers of the client's choice or bring new 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 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 prefrozen blocks of 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 releasing the samples followed by the time, date and signature of the person accepting custody of the samples).

Hazardous Materials Testing Laboratory

The samples obtained at this site were delivered to National Environmental Testing, Inc. in Santa Rosa, California. NET is certified by the California Department of Health Services as a Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #178.

Laboratory Identification Numbers

Following receipt of the samples and completion of the Chain of Custody form, the laboratory then assigns their own identification numbers to the samples. Different laboratories use different numbering systems and, according to their own internal conventions, may or may not assign sequential numbers to samples which are placed on temporary "hold", pending the results of other analyses. Laboratory identification numbers (if assigned and available) are included in our report. These are the number that appear on the certified analytical report by the analytical laboratory.

Certified Analytical Report

The certified analytical report (CAR) generated by the laboratory is the official document in which they issue their findings. Any discrepancy between verbally communicated results and the analytical values issued in a certified analytical report should be decided in favor of the CAR, for while it may, itself, be in error with regard to a particular number, the CAR remains the recognized authoritative legal document until such time as it is amended with a corrected report.

Personnel

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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: Richard Hiett

Oakland Fire Prevention Bureau One City Hall Plaza Oakland, CA 94612

ATTN: Stanley Y. Chi

Please call if we can be of any further assistance.

Richard C. Blaine

RCB/lp

attachments: gradient map chain of custody certifie analytical report

April 11, 1995

Jim Keller Blaine Tech Services 985 Timothy Drive San Jose, CA 95133

Re: Quarterly Monitoring Report 1432 Harrison Street Oakland, California

Environmental Technology, Inc.

Dear Mr. Keller:

As you requested, Cambria Environmental Technology, Inc. has prepared this letter summarizing the results of the first quarter 1995 ground water monitoring sampling at the site referenced above. Presented below are sampling activities performed in the first quarter of 1995 and a discussion of hydrocarbon distribution in ground water.

First Quarter 1995 Activities: On March 13, 1995, Blaine Tech Services collected ground water samples from wells MW-1, MW-2 and MW-3 and analyzed the samples for total petroleum hydrocarbons as gasoline (TPHg) and benzene, ethylbenzene, toluene and xylenes (BETX). Samples from well MW-3 were also analyzed for TPH as motor oil (TPHmo). BTS also gauged all site wells.

Hydrocarbon Distribution in Ground Water: Although no petroleum hydrocarbons were detected in the samples from well MW-3, samples from wells MW-1 and MW-2 contained up to 500,000 parts per billion (ppb) TPHg and 31,000 ppb benzene. Though the samples were originally analyzed within the method specified holding time, further dilutions were required which resulted in the samples being analyzed after the holding time had expired. Considering this fact, these concentrations should be considered as minimum, instead of actual, values.

We appreciate this opportunity to provide Blaine Tech Services with environmental consulting services. Please call if you have any questions or comments.

Sincerely, Cambria Environmental Technology, Inc.

N. Scott MacLeod. R.G.

N. Scott MacLeod, R.G Principal Geologist

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| Cakland, CA. Image: Containers BAMPLE LD. DATE TIME Status CONTAINERS Status Status Status Status< | ISHE 14: | 32 H | ams | in s | 5 | | | | ž | Ś | | | | | | Invoice | & Repor | + 10 | Bloine Tech |
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| SAMPLE D. DATE TIME SAMPLING. SAMPLING DATE SAMPLING | | | | L. L. TOU | a 2 2 | | | | | M | | | | | | | | | |
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| AIW-3 3/13 9/55 W 5 10/17 X AIW-1 10/33 W 3 40/41, X X X AIW-7 11/10 W 3 40/41, X X X X AIW-7 11/10 W 3 40/41, X X X X X X AIW-7 11/10 W 3 40/41, X </td <td>SAMPLE I.D.</td> <td>DATE</td> <td>TIME</td> <td>"" ທ≯</td> <td>TOTAL</td> <td></td> <td></td> <td>5</td> <td></td> <td>N</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ADD'L INFORMATION</td> <td>STATUS</td> <td>CONDITION</td> <td>LAB SAMPLE #</td> | SAMPLE I.D. | DATE | TIME | "" ທ≯ | TOTAL | | | 5 | | N | | | | | | ADD'L INFORMATION | STATUS | CONDITION | LAB SAMPLE # |
| MW-1 10:33 W 3 HØ MLI IIII MW-2 IIIIO W 3 HØ MLI IIIIO TIB, W W MAL IIIIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | MW-3 | 3/13 | 9:55 | W | 5 | 40,ML 1 L17 | 5 | | \ge | \times | _ | | | | | | | | |
| MW-2 IIII0 W 3 Hame. TIB. W 2 Hame. W W 2 Hame. W W SAMPLING Date Image: Sampling in the image: Sampling in th | MW-1 | | <u> 0:37</u> | W | 3 | 40 M | ~; | | \mathbf{X} | | _ | | | | | | | | |
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Santa Rosa Division 3636 North Laughlin Road Suite 110 Santa Rosa, CA 95403-8226 Tel: (707) 526-7200 Fax: (707) 541-2333

Fran Thie Blaine Tech Services 985 Timothy Dr. San Jose, CA 95133 Date: 04/07/1995 NET Client Acct. No: 43200 NET Pacific Job No: 95.01182 Received: 03/15/1995

Client Reference Information

Mark Borsuk 1432 Harrison Street, Oakland, CA/950313-J1

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by: Χen_{//} Phomas F Jr. Cul Division Magaager

Linda DeMartino Project Coordinator

Enclosure(s)





Client Name:Blaine Tech ServicesDaClient Acct:43200ELAP CeNET Job No:95.01182Pa

Date: 04/07/1995 ELAP Cert: 1386 Page: 3

Ref: Mark Borsuk 1432 Harrison Street, Oakland, CA/950313-J1

SAMPLE DESCRIPTION: MW-1

Date Taken: 03/13/1995 Time Taken: 10:32 NET Sample No: 238158

| NET Sample No: 238158 | | | | | | | | Run |
|---------------------------|---------|-----------------|--------------|-------------------|--------|-----------|---------------------|-------|
| | | | Reporting | | | Date | Date | Batch |
| Parameter | Results | Flags | <u>Limit</u> | Units | Method | Extracted | Analyzed | No. |
| TPH (Gas/BTXE,Liquid) | * | | | | | | | |
| METHOD 5030/M8015 | | | | | | | 04/01/1995 | 2716 |
| DILUTION FACTOR* | ʻ100 | | | | | | 04/05/1995 | 2725 |
| as Gasoline | | | 5 | mg/L | 5030 | | 04/05/1995 | 2725 |
| METHOD 8020 (GC, Liquid) | | | | | | | 04/0 1/ 1995 | 2716 |
| Benzene | 34,000 | FI | 50 | ug/L | 8020 | | 04/01/1995 | 2716 |
| Toluene | | FI | 50 | ug/L | 8020 | | 04/01/1995 | 2716 |
| Ethylbenzene | 2,500 | FI | 50 | ug/L | 8020 | | 04/01/1995 | 2716 |
| Xylenes (Total) | 1 | [∔] FI | 50 | ug/L | 8020 | | 04/01/1995 | 2716 |
| SURROGATE RESULTS | | | | | | | 04/01/1995 | 2716 |
| Bromofluorobenzene (SURR) | 88 | | | <pre>% Rec.</pre> | 5030 | | 04/01/1995 | 2716 |

* : Sample was originally analyzed within the method specified holding time.
 Further dilutions were required and analyzed after the holding time had expired.
 This data should be considered a minimum concentration.

FI : Compound quantitated at a 1000X dilution factor.



Client Name:Blaine Tech ServicesDate:04/07/1995Client Acct:43200ELAP Cert:1386NET Job No:95.01182Page:4

Run

Ref: Mark Borsuk 1432 Harrison Street, Oakland, CA/950313-J1

SAMPLE DESCRIPTION: MW-2

Date Taken: 03/13/1995 Time Taken: 11:10 NET Sample No: 238159

| | | Reportir | ıg | | Date | Date | Batch |
|---------------------------|--------------|----------|--------|--------|-----------|------------|-------|
| Parameter | Results Flag | s Limit | Units | Method | Extracted | Analyzed | No. |
| TPH (Gas/BTXE,Liquid) | * | | | | | | |
| METHOD 5030/M8015 | | | | | | 04/01/1995 | 2716 |
| DILUTION FACTOR* | 1,000 | | | | | 04/01/1995 | 2716 |
| as Gasoline | 1000 | 50 | mg/L | 5030 | | 04/01/1995 | 2716 |
| METHOD 8020 (GC,Liquid) | | | | | | 04/01/1995 | 2716 |
| Benzene | 8,200 | 500 | ug/L | 8020 | | 04/01/1995 | 2716 |
| Toluene | 23,000 | 500 | ug/L | 8020 | | 04/01/1995 | 2716 |
| Ethylbenzene | 7,000 | 500 | ug/L | 8020 | | 04/01/1995 | 2716 |
| Xylenes (Total) | 36,000 | 500 | ug/L | 8020 | | 04/01/1995 | 2716 |
| SURROGATE RESULTS | | | | | | 04/01/1995 | 2716 |
| Bromofluorobenzene (SURR) | 102 | | % Rec. | 5030 | | 04/01/1995 | 2716 |
| | | | | | | | |

* : Sample was originally analyzed within the method specified holding time.
 Further dilutions were required and analyzed after the holding time had expired.
 This data should be considered a minimum concentration.



 Client Name:
 Blaine Tech Services
 Date:
 04/07/1995

 Client Acct:
 43200
 ELAP Cert:
 1386

 NET Job No:
 95.01182
 Page:
 5

Ref: Mark Borsuk 1432 Harrison Street, Oakland, CA/950313-J1

SAMPLE DESCRIPTION: T.B. Date Taken: 03/13/1995 Time Taken:

| NET Sample No: 238160 | | | | | | | | Run |
|---------------------------|---------|-------|-----------|--------|--------|-----------|------------|-------|
| | | | Reporting | | | Date | Date | Batch |
| Parameter | Results | Flags | Limit | Units | Method | Extracted | Analyzed | No. |
| TPH (Gas/BTXE,Liquid) | * | | | | | | | |
| METHOD 5030/M8015 | | | | | | | 04/01/1995 | 2716 |
| DILUTION FACTOR* | 1 | | | | | | 04/01/1995 | 2716 |
| as Gasoline | ND | | 0.05 | mg/L | 5030 | | 04/01/1995 | 2716 |
| METHOD 8020 (GC, Liquid) | | | | | | | 04/01/1995 | 2716 |
| Benzene | ND | | 0.5 | ug/L | 8020 | | 04/01/1995 | 2716 |
| Toluene | ND | | 0.5 | ug/L | 8020 | | 04/01/1995 | 2716 |
| Ethylbenzene | ND | | 0.5 | ug/L | 8020 | | 04/01/1995 | 2716 |
| Xylenes (Total) | ND | | 0.5 | ug/L | 8020 | | 04/01/1995 | 2716 |
| SURROGATE RESULTS | | | | | | | 04/01/1995 | 2716 |
| Bromofluorobenzene (SURR) | 75 | | | % Rec. | 5030 | | 04/01/1995 | 2716 |

* : Sample was analyzed after the method specified holding time. This data should be considered a minimum concentration.



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CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

| | | CCV | CCA | | | | |
|-----------------------------|------------|----------|----------|-------------------|------------|----------|--------|
| | CCV | Standard | Standard | | | | Run |
| | Standard | Amount | Amount | | Date | Analyst | Batch |
| Parameter | % Recovery | Found | Expected | Units | Analyzed | Initials | Number |
| TPH (Gas/BTXE, Liquid) | | | | | | | |
| as Gasoline | 102.0 | 1.02 | 1,00 | mg/L | 03/27/1995 | aal | 2694 |
| Benzene | 108.0 | 5.40 | 5.00 | ug/L | 03/27/1995 | aal | 2694 |
| Toluene | 112.0 | 5.60 | 5.00 | ug/L | 03/27/1995 | aal | 2694 |
| Ethylbenzene | 109.4 | 5.47 | 5.00 | ug/L | 03/27/1995 | aal | 2694 |
| Xylenes (Total) | 112.7 | 16.9 | 15.0 | ug/L | 03/27/1995 | aal | 2694 |
| Bromofluorobenzene (SURR) | 101.0 | 101 | 100 | % Rec. | 03/27/1995 | aal | 2694 |
| TPH (Gas/BTXE,Liquid) | | | | | | | |
| as Gasoline | 99.0 | 0.99 | 1.00 | mg/L | 04/01/1995 | lss | 2716 |
| Benzene | 96.6 | 4.83 | 5.00 | ug/L | 04/01/1995 | lss | 2716 |
| Toluene | 94.8 | 4.74 | 5.00 | ug/L | 04/01/1995 | lss | 2716 |
| Ethylbenzene | 94.2 | 4.71 | 5.00 | ug/L | 04/01/1995 | lss | 2716 |
| Xylenes (Total) | 99.3 | 14.9 | 15.0 | ug/L | 04/01/1995 | lss | 2716 |
| Bromofluorobenzene (SURR) | 101.0 | 101 | 100 | <pre>% Rec.</pre> | 04/01/1995 | lss | 2716 |
| TPH (Gas/BTXE,Liquid) | | | | | | | |
| as Gasoline | 111.0 | 1.11 | 1.00 | mg/L | 04/05/1995 | pbg | 2725 |
| Benzene | 106.2 | 5.31 | 5.00 | ug/L | 04/05/1995 | pbg | 2725 |
| Toluene | 110.2 | 5.51 | 5.00 | ug/L | 04/05/1995 | pbg | 2725 |
| Ethylbenzene | 109.8 | 5.49 | 5.00 | ug/L | 04/05/1995 | pbg | 2725 |
| Xylenes (Total) | 107.0 | 16.05 | 15.0 | ug/L | 04/05/1995 | pbg | 2725 |
| Bromofluorobenzene (SURR) | 94.0 | 94 | 100 | % Rec. | 04/05/1995 | bpâ | 2725 |
| METHOD M8015 (EXT., Liquid) | | | | | | | |
| as Motor Oil | 104.0 | 1040 | 1000 | mg/L | 03/22/1995 | tts | 950 |



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METHOD BLANK REPORT

| | Method | | | | | |
|-----------------------------|--------|-----------|--------|------------|-----------------|--------|
| | Blank | | | | | Run |
| | Amount | Reporting | | Date | Analyst | Batch |
| Parameter | Found | Limit | Units | Analyzed | <u>Initials</u> | Number |
| TPH (Gas/BTXE, Liquid) | | | | | | |
| as Gasoline | ND | 0.05 | mg/L | 03/27/1995 | aal | 2694 |
| Benzene | ND | 0.5 | ug/L | 03/27/1995 | aal | 2694 |
| Toluene | ND | 0.5 | ug/L | 03/27/1995 | aal | 2694 |
| Ethylbenzene | ND | 0.5 | ug/L | 03/27/1995 | aal | 2694 |
| Xylenes (Total) | ND | 0.5 | ug/L | 03/27/1995 | aal | 2694 |
| Bromofluorobenzene (SURR) | 89 | | % Rec. | 03/27/1995 | aal | 2694 |
| TPH (Gas/BTXE,Liquid) | | | | | | |
| as Gasoline | ND . | 0.05 | mg/L | 04/01/1995 | 1ss | 2716 |
| Benzene | ND | 0.5 | ug/L | 04/01/1995 | lss | 2716 |
| Toluene | ND | 0.5 | ug/L | 04/01/1995 | 155 | 2716 |
| Ethylbenzene | ND | 0.5 | ug/L | 04/01/1995 | lss | 2716 |
| Xylenes (Total) | ND | 0.5 | ug/L | 04/01/1995 | lss | 2716 |
| Bromofluorobenzene (SURR) | 100 | | % Rec. | 04/01/1995 | 195 | 2716 |
| TPH (Gas/BTXE, Liquid) | | | | | | |
| as Gasoline | ND | 0.05 | mg/L | 04/05/1995 | bpa | 2725 |
| Benzene | ND | 0.5 | ug/L | 04/05/1995 | pbg | 2725 |
| Toluene | ND | 0.5 | ug/L | 04/05/1995 | pbg | 2725 |
| Ethylbenzene | ND | 0.5 | ug/L | 04/05/1995 | pbg | 2725 |
| Xylenes (Total) | ND | 0.5 | ug/L | 04/05/1995 | E qđ | 2725 |
| Bromofluorobenzene (SURR) | 84 | | % Rec. | 04/05/1995 | ppa | 2725 |
| METHOD M8015 (EXT., Liquid) | | | | | | |
| as Motor Oil | ND | 0.5 | mg/L | 03/22/1995 | tts | 950 |
| | | | | | | |



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MATRIX SPIKE / MATRIX SPIKE DUPLICATE

| Mat | trix | Matrix Spike | | | | Matrix | Matrix Spike | | | | |
|------------------------|------|-----------------|------|--------|--------|--------|-----------------|-------|------------|-------|--------|
| Sp | ike | Dup | | Spike | Sample | Spike | Dup. | | Date | Run | Sample |
| Parameter % | Rec. | % Rec. | RPD | Amount | Conc. | Conc. | Conc. | Units | Analyzed | Batch | Spiked |
| TPH (Gas/BTXE, Liquid) | | | | | | | | | | | 238254 |
| as Gasoline 95 | .0 | 99.0 | 4.1 | 1.00 | ND | 0.95 | 0.99 | mg/L | 03/27/1995 | 2694 | 238254 |
| Benzene 86 | .1 | 88.4 | 2.6 | 17.3 | ND | 14.9 | 15.3 | ug/L | 03/27/1995 | 2694 | 238254 |
| Toluene 89 | . 9 | 91.6 | 1.9 | 87.8 | ND | 78.9 | 80.4 | ug/L | 03/27/1995 | 2694 | 238254 |
| TPH (Gas/BTXE, Liquid) | | | | | | | | | | | 238485 |
| as Gasoline 99 | . 0 | 89.0 | 10.6 | 1.00 | ND | 0.99 | 0.89 | mg/L | 04/01/1995 | 2716 | 238485 |
| Benzene 99 | . 4 | 95.6 | 3.9 | 15.9 | ND | 15.8 | 15.2 | ug/L | 04/01/1995 | 2716 | 238485 |
| Toluene 10 | 2.6 | 98.1 | 4.4 | 53.9 | ND | 55,3 | 52.9 | ug/L | 04/01/1995 | 2716 | 238485 |
| TPH (Gas/BTXE, Liquid) | | | | | | | | | | | 238794 |
| as Gasoline 11 | 1.0 | 111.0 | 0.0 | 1.00 | D.12 | 1.23 | 1.23 | mg/L | 04/05/1995 | 2725 | 238794 |
| Benzene 11 | 5.2 | 109.0 | 5.5 | 17.8 | 6.D | 26.5 | 25.4 | ug/L | 04/05/1995 | 2725 | 238794 |
| Toluene 11 | 2.7 | 110.0 | 2.4 | 60.0 | 0.7 | 68.3 | 66.7 | ug/L | 04/05/1995 | 2725 | 238794 |



KEY TO ABBREVIATIONS and METHOD REFERENCES

- Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- * : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).

ICVS : Initial Calibration Verification Standard (External Standard).

mean : Average; sum of measurements divided by number of measurements.

mg/L : Concentration in units of milligrams of analyte per liter of sample.

mL/L/hr : Milliliters per liter per hour.

MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.

N/A : Not applicable.

NA : Not analyzed.

ND : Not detected; the analyte concentration is less than applicable listed reporting limit.

NTU : Nephelometric turbidity units.

RPD : Relative percent difference, 100 [Value 1 - Value 2]/mean value.

SNA : Standard not available.

- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.

umhos/cm : Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

<u>Methods 601 through 625:</u> see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

<u>Methods 1000 through 9999</u>: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

 \underline{SM} : see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.