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#572

PHASE II  
ENVIRONMENTAL ASSESSMENT

8001 OAKPORT ROAD  
OAKLAND, CALIFORNIA

*Ryder Truck Co*

31 May 1991

ENVIRONMENTAL  
PHOTOGRAPHY  
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Prepared for:

FULBRIGHT AND JAWORSKI  
1301 McKinney, Suite 5100  
Houston, Texas





ROY F. WESTON, INC.  
1350 TREAT BLVD., SUITE 200  
WALNUT CREEK, CA 94596  
(415) 258-0733

31 May 1991

Ms. Eva M. Fromm  
Fulbright & Jaworski  
1301 McKinney, Suite 5100  
Houston, Texas 77010-3095

Re: Phase II Environmental Assessment  
8001 Oakport Road, Oakland, California

Dear Ms. Fromm:

Per our 9 January 1991 proposal, Roy F. Weston, Inc. (WESTON) is pleased to submit the subject report presenting the findings, conclusions, and recommendations from the Phase II Environmental Assessment performed at 8001 Oakport Road in Oakland, California.

#### INTRODUCTION AND BACKGROUND

A preliminary site assessment was conducted by WESTON in December 1990 to qualitatively assess and identify major potential environmental liabilities associated with the property. The findings and recommendations were documented in the "Phase I Environmental Assessment, 8001 Oakport Road, Oakland, California" report, 20 December 1990. The facility was evaluated for parties potentially interested in pursuing a real estate transaction.

The Phase I work included a site visit, personal interview with the current property manager, a review of historical aerial photographs, and record searches of the appropriate offices of state and local environmental agencies. Based on the findings, soil and groundwater sampling in the vicinity of the five underground storage tanks (USTs) was recommended to assess and preliminarily quantify any impact to the shallow soil and groundwater beneath the site.

The site consists of two 10,000-gallon diesel tanks (Tank #1 and Tank #2), one 10,000-gallon unleaded gasoline tank (Tank #3), one 2,000-gallon motor oil tank (Tank #4), and one 550-gallon waste oil tank (Tank #5). The five USTs are located around a fuel pumping station and are used for refueling and maintenance of rental vehicles.



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#### OBJECTIVES and SCOPE OF WORK

The objective of the Phase II Environmental Assessment was to screen the subsurface for possible petroleum-based contaminants from the USTs to further assess the significance of potential environmental liabilities in the vicinity of the USTs. Since this investigation was performed independent of any federal regulatory agency, it was not designed in strict accordance with the California Department of Health Services Leaking Underground Storage Tank (LUFT) manual. Nonetheless, the significance of the results have been evaluated relative to this manual and other pertinent local, state, and federal regulations.

Five slant soil borings were proposed for collection of soil and groundwater samples to assess the subsurface conditions in the immediate vicinity of the tanks. The borings were subsequently changed to vertical soil borings due to the presence of underground utilities and piping beneath the site.

#### SOIL BORING LOCATIONS

Figure 1 depicts the soil boring locations in the vicinity of the five underground storage tanks. Soil boring SB-1 was located to collect a grab groundwater sample in the direction assumed to be downgradient of the five USTs (groundwater was assumed to flow west to the San Francisco Bay). The remaining soil borings were located to assess the subsurface conditions adjacent to the nearby UST. Accordingly, SB-2 was located between the two 10,000-gallon diesel USTs, Tank #1 and Tank #2. SB-3 was located north of the 10,000-gallon unleaded gasoline UST, Tank #3. Also at this location was a storm drain with a grated opening and ponded water with a sheen flowing into the drain. The water appears to originate from the refueling area where a high pressure hose is used for rinsing the vehicles. SB-4 was located south of the 2,000-gallon motor oil UST, Tank #4. SB-5 was located south of the 550-gallon waste oil UST, Tank #5.

#### FIELD METHODS

All soil borings were initially hand excavated to 3.5 feet bgs as a precaution against damaging underground utilities or pipelines by drilling activities. A concrete pad overlay the three soil borings SB-2, SB-4, and SB-5 and asphalt overlay the two soil borings SB-1

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and SB-3. Concrete and asphalt coring was performed as needed. The soil borings were advanced by a 6-inch hollow-stem auger. Soil boring SB-1 was advanced to 13 feet below ground surface (bgs), the remaining four soil borings were drilled to a total depth of 11.5 feet bgs.

Soil samples were collected approximately every five feet using a California modified split-spoon lined with 6-inch long 2-inch diameter brass tubes. Soil in the brass tubes were interpreted for lithology using the Unified Soil Classification System (USCS) and Munsell Soil Color Chart, and screened with an organic vapor meter (Hnu photo-ionization unit). Soil samples selected for laboratory analysis were based on visual observations, organic vapor measurements, and distribution in the borehole. Both ends of all brass tubes were covered with teflon sheeting, closed with plastic endcaps, labelled, and placed on ice in an ice chest.

One grab groundwater sample was collected from SB-1, which was assumed to be the furthest downgradient soil boring. SB-1 was drilled to a total depth of 11.5 feet and allowed to recharge overnight to collect a grab groundwater sample.

#### **LITHOLOGY**

In general, the lithology encountered consisted of fill material (gravel, sand, and silt) to a depth of 3.5 feet bgs. Below 3.5 feet black gray plastic clay was encountered to total depth. The clay was visibly wet at 5.0 feet bgs. These sediments are consistent with the Bay Muds in the region. Appendix A presents the lithologic logs for all five soil borings.

The construction details of the USTs are unknown, but the diameter of the 10,000-gallon USTs are estimated at roughly 8 feet and placed at least three feet below grade. Since groundwater was encountered at 5 feet bgs in all soil borings, it is likely that the five USTs are almost completely submerged in the shallow groundwater.

#### **CRITERIA FOR INTERPRETING THE SAMPLE RESULTS**

To evaluate the significance of the analytical results from both soil and groundwater samples, the Maximum Contaminant Levels (MCLs) and/or Action Levels (ALs) for drinking water in California (Office of Drinking Water, California Department of Health Services memorandum, October 1990) were utilized. MCLs are enforceable,

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whereas, ALs serve as non-enforceable health-based guidance number. Accordingly, the MCL for benzene is 1  $\mu\text{g/l}$ , ethylbenzene is 680  $\mu\text{g/l}$ , and xylene is 1750  $\mu\text{g/l}$ . Toluene does not have an MCL but does have an AL of 100  $\mu\text{g/l}$ .

No specific guidelines exist for contaminant concentrations in soils, rather, residual soil concentrations are evaluated on a site by site basis, subject to site specific characteristics, such as: soil type and hydraulic properties, precipitation, and distance to groundwater. Generally, concentrations of total petroleum hydrocarbons in excess of 100 mg/kg are required to be remediated. However, since one of the primary goals is to protect groundwater and the depth to groundwater at the site is about 5 feet, it should be expected that the regulatory view of contaminant conditions at this site will be more conservative.

The LUFT field manual (October, 1989) categorizes UST sites into three categories: no evidence of significant soil contamination or any groundwater pollution (Category 1), known soil contamination (Category 2), known or suspected groundwater pollution or areas with shallow groundwater (Category 3). This site falls within Category 3. The criterion for continued investigation for areas with shallow groundwater is the detection of contamination.

It is important to note the units for contaminant concentrations in groundwater are reported on a weight per volume basis ( $\mu\text{g/L}$ , parts per billion), including the MCLs and ALs for drinking water. Whereas, the units for contaminants in soil, including saturated soils, are reported on a weight per weight basis (mg/kg, parts per million). Consequently, the concentrations of contaminants in groundwater and soil are not directly comparable, and should only be used as a guide.

#### **ANALYTICAL RESULTS**

Two soil samples per soil boring were submitted for chemical analyses. One soil sample was analyzed for benzene, toluene, ethylbenzene and xylene (BTEX) via EPA Method 8020. The other soil sample was analyzed for total petroleum hydrocarbons (TPH) for fractions of gasoline, diesel, motor oil, and kerosene via EPA method 8015 modified per the LUFT manual. Since surface contamination was visible at location SB-3, two BTEX and three TPH samples were submitted and analyzed. One grab groundwater sample from SB-1 was similarly analyzed for BTEX and TPH.



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All analyses were performed at WESTON's DHS certified laboratory in Stockton, California. The sample results are presented in Appendix B. Analytical results for the soil and water samples are presented in Table 1. Concentrations exceeding the criteria discussed above are highlighted below. SB-1 soils in the interval 5.5 feet to 6.0 feet bgs had toluene at levels of 1.94 mg/kg. In the interval 11.0 feet to 11.5 feet bgs, diesel was detected at a concentration 200 mg/kg. The grab groundwater sample from SB-1 contained benzene at 300 µg/L and TPH as gasoline, kerosene and diesel at levels of 0.56, 0.33 and 0.78 mg/L, respectively.

SB-2 soils from the 10.5 feet to 11.0 feet bgs interval had benzene and toluene at levels of 0.204 mg/kg and 0.607 mg/kg, respectively.

SB-3 soils from the interval 3.5 feet to 4.0 feet bgs had benzene, toluene, and ethylbenzene at levels of 0.632 mg/kg, 3.33 mg/kg, and 0.843 mg/kg, respectively. In the soil sample from 6.5 feet to 7.0 feet bgs, TPH as light motor oil was detected at 1500 mg/kg. At 11.0 feet to 11.5 feet bgs, toluene was detected at levels of 0.735 mg/kg.

SB-4 soils from the interval 10.5 feet to 11.0 feet bgs had toluene at 0.329 mg/kg. Soil from the interval 11.0 feet to 11.5 feet bgs revealed TPH as light motor oil at 38 mg/kg.

SB-5 soils from the interval 5.0 feet to 5.5 feet bgs revealed BTEX concentrations of 0.767 mg/kg, 3.07 mg/kg, 0.815 mg/kg, and 4.6 mg/kg, respectively. TPH as gasoline was detected at 380 mg/kg in this sample. From the 10.0 feet to 10.5 feet bgs soil sample, TPH as light motor oil was detected at levels of 3,600 mg/kg.

The grab groundwater sample collected from SB-1 contained elevated levels of benzene at 300 µg/L, and gasoline, diesel and kerosene at 0.56 µg/L, 0.78 µg/L and 0.33 µg/L respectively.

#### CONCLUSIONS

The analytical results reveal that some BTEX or TPH compounds were present in all soil samples collected at the site. SB-3, near the 10,000-gallon gasoline UST, Tank #3, contained the highest levels of toluene, ethylbenzene, and xylene detected at the site, in the 3.5 feet to 4.0 feet sample interval. SB-3 also had the highest levels of toluene, ethylbenzene, and xylene in the unsaturated zone at depths of 3.5 to 4.0 feet. The highest levels of benzene and TPH as gasoline were found in SB-5, in the 5.0 feet to 5.5 feet

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sample interval. Kerosene and diesel were detected only in SB-1 in the 11.0 feet to 11.5 feet sample interval. The highest level of TPH as light motor oil was detected in SB-5 in the 10.0 feet to 10.5 feet sample interval. The groundwater sample from SB-1, the furthest downgradient soil boring, contained elevated levels of benzene and TPH.

From the field observations and analytical results, the following conclusions are offered:

- Significant groundwater contamination exists at the site.
- The full lateral and vertical extent of contamination in both groundwater and soil is unknown.
- The elevated levels of contaminants indicates the USTs may have leaked in the past (which is somewhat contrary to the reported precision leak testing results),
- Visible fuel stains and sheens on ponded water indicates possibly chronic and substandard refueling and UST filling practices, which may also be responsible for the subsurface contamination.
- The ground surface in the vicinity of the refueling island is comprised of both concrete pads and asphalt. Both these materials are permeable and would allow surface spills to migrate to depth.
- The USTs are partially, if not completely, submerged below groundwater, which was encountered at 5 feet bgs.
- The analytical results from the soil samples reflect the respective makeup of the fuel contained in the adjacent tanks.

#### RECOMMENDATIONS

Based on analytical results and conclusions, and since the full extent of site contamination has not been completely defined, WESTON provides the following recommendations:

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- Notify the County of Alameda, the Regional Water Quality Control Board, and the Department of Health Services that an unauthorized release to soil and groundwater has occurred and been confirmed. Under the law, the responsible party has five days to notify these agencies. WESTON has requested the proper forms from the County of Alameda. The county does not seem to be concerned about the five day time period as long as notification proceeds in a timely fashion (personal communication with Cynthia Chapman, 29 May 1991).
- Enhance the refueling and UST filling procedures to minimize additional spills and impacts. Install overfill protection, if not already present.
- Install a continuous fuel detection monitoring system in groundwater. Current code requires this system.
- Be aware of final UST regulations being promulgated in 1998 which will require overfill protection and corrosion protection on all UST systems.
- An investigation to assess the lateral and vertical extent of soil and groundwater contamination would consist of, at a minimum, 10 soil borings and four monitor wells and associated soil and groundwater sampling and analysis. Determine the groundwater flow direction and gradient. However, since the site is located close to the bay, it is probably subject to tidal influences which would alter the groundwater flow gradient and direction twice daily.
- Remove the contaminated soils since these act as a source of contaminants to groundwater.
- Establish the potential beneficial uses of the groundwater. The groundwater at the site is probably brackish and not potable. Its beneficial uses could include preservation of wildlife and saltwater species in the estuaries, marshes, and bay.

From the data, the cost to remove and remediate the soils, replace the USTs area with current spill controls and an impermeable pad would be in the range of \$100,000 to \$250,000. If UST replacement is not necessary, removal and disposal of surface soils and construction of an impermeable pad would be in the range of \$40,000 to \$80,000. The cost to assess, control, and remediate groundwater

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could be in the range of \$100,000 to \$250,000, plus annual operating expenses.

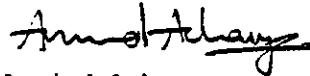
Should you have any questions or comments with regard to this report, do not hesitate to call. It has been a pleasure working with you on this project and I look forward to assisting you in the future.

Very truly yours,

ROY F. WESTON, INC.



Steven I. Michelson, R.G.  
Project Manager



Arvind Acharya  
Project Geologist

SIM/tab

cc: Susan Litherland


Enclosures

APPENDIX A

# UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

|   |  |   |  |   |                                  |
|---|--|---|--|---|----------------------------------|
| EMERGENCY<br><input type="checkbox"/> YES <input type="checkbox"/> NO |  | HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED?<br><input type="checkbox"/> YES <input type="checkbox"/> NO |  | FOR LOCAL AGENCY USE ONLY<br>HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SCHEDULE ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM. |                                  |
| REPORT DATE<br>_____  |  | CASE #<br>_____   |  | SIGNED _____ DATE _____   |                                  |
| REPORTED BY   | NAME OF INDIVIDUAL FILING REPORT<br>_____  |   | PHONE<br>( ) _____   |   | SIGNATURE<br>_____               |
|   | REPRESENTING<br><input type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD<br><input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER _____  |   | COMPANY OR AGENCY NAME<br>_____  |   |                                  |
|   | ADDRESS<br>_____   |   |  |   |                                  |
| RESPONSIBLE PARTY   | NAME<br>_____  |   | CONTACT PERSON<br>_____  |   | PHONE<br>( ) _____               |
|   | ADDRESS<br>_____   |   |  |   |                                  |
| SITE LOCATION   | STREET<br>_____  |   | CITY<br>_____  |   | STATE<br>_____                   |
|   | FACILITY NAME (IF APPLICABLE)<br>_____   |   | OPERATOR<br>_____  |   | PHONE<br>( ) _____               |
|   | ADDRESS<br>_____   |   |  |   |                                  |
| IMPLEMENTING AGENCIES   | LOCAL AGENCY<br>_____  |   | AGENCY NAME<br>_____   |   | CONTACT PERSON<br>_____          |
|   | REGIONAL BOARD<br>_____  |   | PHONE<br>( ) _____   |   |                                  |
|   | ADDRESS<br>_____   |   |  |   |                                  |
| SUBSTANCES INVOLVED   | (1) NAME<br>_____  |   |  |   | QUANTITY LOST (GALLONS)<br>_____ |
|   | (2) NAME<br>_____  |   |  |   | QUANTITY LOST (GALLONS)<br>_____ |
| DISCLOSURE/ASSESSMENT   | DATE DISCOVERED<br>_____   |   | HOW DISCOVERED<br><input type="checkbox"/> TANK TEST <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NEARBY CONDITIONS<br><input type="checkbox"/> TANK REMOVAL <input type="checkbox"/> OTHER _____  |   |                                  |
|   | DATE DISCHARGE BEGAN<br>_____  |   | METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)<br><input type="checkbox"/> REMOVE CONTENTS <input type="checkbox"/> CLOSE TANK & REMOVE <input type="checkbox"/> REPAIR PIPING<br><input type="checkbox"/> REPAIR TANK <input type="checkbox"/> CLOSE TANK & FILL IN PLACE <input type="checkbox"/> CHANGE PROCEDURE<br><input type="checkbox"/> REPLACE TANK <input type="checkbox"/> OTHER _____ |   |                                  |
|   | HAS DISCHARGE BEEN STOPPED?<br><input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE _____   |   |  |   |                                  |
| SOURCES/CAUSE   | SOURCE OF DISCHARGE<br><input type="checkbox"/> TANK LEAK <input type="checkbox"/> UNKNOWN<br><input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER _____  |   | CAUSE(S)<br><input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL<br><input type="checkbox"/> CORROSION <input type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER _____  |   |                                  |
|   | CHECK ONE ONLY<br><input type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)  |   |  |   |                                  |
| CURRENT STATUS  | CHECK ONE ONLY<br><input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORK PLAN SUBMITTED <input type="checkbox"/> POLLUTION CHARACTERIZATION<br><input type="checkbox"/> LEAK BEING CONFIRMED <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS<br><input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> CLEANUP UNDERWAY   |   |  |   |                                  |
|   | CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)<br><input type="checkbox"/> CAP SITE (CC) <input type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (BT)<br><input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS)<br><input type="checkbox"/> VACUUM EXTRACT (VE) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> TREATMENT AT HOOKUP (HL) <input type="checkbox"/> VENT SOL. (VS)<br><input type="checkbox"/> OTHER (OT) _____ |   |  |   |                                  |
| COMMENTS  | _____  |   |  |   |                                  |
|   | _____  |   |  |   |                                  |

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|--------------------|--|--|--|--|--|--|--|--|--|
| Refrigerators      | 11° 14°  |  |  |  |  |  |  |  |  |
| #Type Container    | EA - 5 LITER   |  |  |  |  |  |  |  |  |
| Volume             |  |  |  |  |  |  |  |  |  |
| Preservative       |  |  |  |  |  |  |  |  |  |
| ANALYSES REQUESTED | <br>2-1-1<br>2-1-2<br>2-1-3<br>2-1-4<br>2-1-5<br>2-1-6<br>2-1-7<br>2-1-8<br>2-1-9<br>2-1-10<br>2-1-11<br>2-1-12<br>2-1-13<br>2-1-14<br>2-1-15<br>2-1-16<br>2-1-17<br>2-1-18<br>2-1-19<br>2-1-20<br>2-1-21<br>2-1-22<br>2-1-23<br>2-1-24<br>2-1-25<br>2-1-26<br>2-1-27<br>2-1-28<br>2-1-29<br>2-1-30<br>2-1-31<br>2-1-32<br>2-1-33<br>2-1-34<br>2-1-35<br>2-1-36<br>2-1-37<br>2-1-38<br>2-1-39<br>2-1-40<br>2-1-41<br>2-1-42<br>2-1-43<br>2-1-44<br>2-1-45<br>2-1-46<br>2-1-47<br>2-1-48<br>2-1-49<br>2-1-50<br>2-1-51<br>2-1-52<br>2-1-53<br>2-1-54<br>2-1-55<br>2-1-56<br>2-1-57<br>2-1-58<br>2-1-59<br>2-1-60<br>2-1-61<br>2-1-62<br>2-1-63<br>2-1-64<br>2-1-65<br>2-1-66<br>2-1-67<br>2-1-68<br>2-1-69<br>2-1-70<br>2-1-71<br>2-1-72<br>2-1-73<br>2-1-74<br>2-1-75<br>2-1-76<br>2-1-77<br>2-1-78<br>2-1-79<br>2-1-80<br>2-1-81<br>2-1-82<br>2-1-83<br>2-1-84<br>2-1-85<br>2-1-86<br>2-1-87<br>2-1-88<br>2-1-89<br>2-1-90<br>2-1-91<br>2-1-92<br>2-1-93<br>2-1-94<br>2-1-95<br>2-1-96<br>2-1-97<br>2-1-98<br>2-1-99<br>2-1-100<br>2-1-101<br>2-1-102<br>2-1-103<br>2-1-104<br>2-1-105<br>2-1-106<br>2-1-107<br>2-1-108<br>2-1-109<br>2-1-110<br>2-1-111<br>2-1-112<br>2-1-113<br>2-1-114<br>2-1-115<br>2-1-116<br>2-1-117<br>2-1-118<br>2-1-119<br>2-1-120<br>2-1-121<br>2-1-122<br>2-1-123<br>2-1-124<br>2-1-125<br>2-1-126<br>2-1-127<br>2-1-128<br>2-1-129<br>2-1-130<br>2-1-131<br>2-1-132<br>2-1-133<br>2-1-134<br>2-1-135<br>2-1-136<br>2-1-137<br>2-1-138<br>2-1-139<br>2-1-140<br>2-1-141<br>2-1-142<br>2-1-143<br>2-1-144<br>2-1-145<br>2-1-146<br>2-1-147<br>2-1-148<br>2-1-149<br>2-1-150<br>2-1-151<br>2-1-152<br>2-1-153<br>2-1-154<br>2-1-155<br>2-1-156<br>2-1-157<br>2-1-158<br>2-1-159<br>2-1-160<br>2-1-161<br>2-1-162<br>2-1-163<br>2-1-164<br>2-1-165<br>2-1-166<br>2-1-167<br>2-1-168<br>2-1-169<br>2-1-170<br>2-1-171<br>2-1-172<br>2-1-173<br>2-1-174<br>2-1-175<br>2-1-176<br>2-1-177<br>2-1-178<br>2-1-179<br>2-1-180<br>2-1-181<br>2-1-182<br>2-1-183<br>2-1-184<br>2-1-185<br>2-1-186<br>2-1-187<br>2-1-188<br>2-1-189<br>2-1-190<br>2-1-191<br>2-1-192<br>2-1-193<br>2-1-194<br>2-1-195<br>2-1-196<br>2-1-197<br>2-1-198<br>2-1-199<br>2-1-200<br>2-1-201<br>2-1-202<br>2-1-203<br>2-1-204<br>2-1-205<br>2-1-206<br>2-1-207<br>2-1-208<br>2-1-209<br>2-1-210<br>2-1-211<br>2-1-212<br>2-1-213<br>2-1-214<br>2-1-215<br>2-1-216<br>2-1-217<br>2-1-218<br>2-1-219<br>2-1-220<br>2-1-221<br>2-1-222<br>2-1-223<br>2-1-224<br>2-1-225<br>2-1-226<br>2-1-227<br>2-1-228<br>2-1-229<br>2-1-230<br>2-1-231<br>2-1-232<br>2-1-233<br>2-1-234<br>2-1-235<br>2-1-236<br>2-1-237<br>2-1-238<br>2-1-239<br>2-1-240<br>2-1-241<br>2-1-242<br>2-1-243<br>2-1-244<br>2-1-245<br>2-1-246<br>2-1-247<br>2-1-248<br>2-1-249<br>2-1-250<br>2-1-251<br>2-1-252<br>2-1-253<br>2-1-254<br>2-1-255<br>2-1-256<br>2-1-257<br>2-1-258<br>2-1-259<br>2-1-260<br>2-1-261<br>2-1-262<br>2-1-263<br>2-1-264<br>2-1-265<br>2-1-266<br>2-1-267<br>2-1-268<br>2-1-269<br>2-1-270<br>2-1-271<br>2-1-272<br>2-1-273<br>2-1-274<br>2-1-275<br>2-1-276<br>2-1-277<br>2-1-278<br>2-1-279<br>2-1-280<br>2-1-281<br>2-1-282<br>2-1-283<br>2-1-284<br>2-1-285<br>2-1-286<br>2-1-287<br>2-1-288<br>2-1-289<br>2-1-290<br>2-1-291<br>2-1-292<br>2-1-293<br>2-1-294<br>2-1-295<br>2-1-296<br>2-1-297<br>2-1-298<br>2-1-299<br>2-1-300<br>2-1-301<br>2-1-302<br>2-1-303<br>2-1-304<br>2-1-305<br>2-1-306<br>2-1-307<br>2-1-308<br>2-1-309<br>2-1-310<br>2-1-311<br>2-1-312<br>2-1-313<br>2-1-314<br>2-1-315<br>2-1-316<br>2-1-317<br>2-1-318<br>2-1-319<br>2-1-320<br>2-1-321<br>2-1-322<br>2-1-323<br>2-1-324<br>2-1 |  |  |  |  |  |  |  |  |

Samples Were:  
(Shipped or Hand-Delivered)

NOTES: 130184778

**2 Ambient or Chilled**

NOTES: 7-1065

3 Received Broken/  
Leaking (Improperly  
Sealed)

Y N  
NOTES:

4 Properly Preserved  
Y N

**NOTES:**

|                                 | Y | N |
|---------------------------------|---|---|
| 5 Received Within Holding Times |   |   |

**NOTES:**

**COC Tape Was:**

|   |                          |   |   |
|---|--------------------------|---|---|
| 1 | Present on Outer Package | Y | N |
|---|--------------------------|---|---|

|                             |   |   |
|-----------------------------|---|---|
| 2 Unbroken on Outer Package | Y | N |
|-----------------------------|---|---|

3 Present on Sample Y

4 Unbroken on Sample  
NOTES: Y A

\_\_\_\_\_

CDC Record Was:  
1 Present Upon Receipt  
of Samples Y N

| Discrepancies Between<br>Sample Labels and CPC<br>Record? |   |   |
|---|---|---|
|   | Y | N |

NOTES:

|               |           |                      |           |
|---------------|-----------|----------------------|-----------|
| Matrix:       | W - Water | DS - Drum Solids     | X - Other |
| S - Soil      | O - Oil   | DL - Drum Liquids    |           |
| SE - Sediment | A - Air   | F - Fish             |           |
| SO - Solid    | WI - Wipe | L - EP/TCLP Leachate |           |

**Special Instructions:**

Special Instructions:  
SB-3 SAMPLES - HIGH HNU KLUGS.  
\* HYD. PROF - HYDROCARBON PROFILE

[illegible]

BLANK SHEET

CALIB. STD. ID 2-6CU-3001  
 COLUMN Bentone 15% PCD 60/80 chromasorb  
 MATRIX Water = 100%

DATE ANALYZED 5/14/91  
 INSTRUMENT ID 14  
 ANALYST Mike Moriarty

| Analytes 601/8010         | MDL<br>mg/kg ug/l | Method<br>Blank | Analytes 602/8020   | MDL<br>mg/kg ug/l | Method<br>Blank |
|---------------------------|-------------------|-----------------|---------------------|-------------------|-----------------|
| Bromodichloromethane      |                   |                 | Benzene             | 0.5               | MD              |
| Bromoform                 |                   |                 | Chlorobenzene       |                   |                 |
| Bromomethane              |                   |                 | 1,2-Dichlorobenzene |                   |                 |
| Carbon tetrachloride      |                   |                 | 1,3-Dichlorobenzene |                   |                 |
| Chloroethane              |                   |                 | 1,4-Dichlorobenzene |                   |                 |
| 2-Chloroethylvinylether   |                   |                 | Ethylbenzene        |                   |                 |
| Chloroform                |                   |                 | Toluene             |                   |                 |
| Chloromethane             |                   |                 | Xylene              |                   |                 |
| Dibromochloromethane      |                   |                 | Acetone             |                   |                 |
| 1,2-Dichlorobenzene       |                   |                 | Isopropyl alcohol   |                   |                 |
| 1,3-Dichlorobenzene       |                   |                 |                     |                   |                 |
| 1,4-Dichlorobenzene       |                   |                 |                     |                   |                 |
| Dichlorodifluoromethane   |                   |                 |                     |                   |                 |
| 1,1-Dichloroethane        |                   |                 |                     |                   |                 |
| 1,2-Dichloroethane        |                   |                 |                     |                   |                 |
| 1,1-Dichloroethene        |                   |                 |                     |                   |                 |
| c-1,2-Dichloroethene      |                   |                 |                     |                   |                 |
| 1,2-Dichloropropane       |                   |                 |                     |                   |                 |
| c-1,3-Dichloropropene     |                   |                 |                     |                   |                 |
| t-1,3-Dichloropropene     |                   |                 |                     |                   |                 |
| 1,1,2,2-Tetrachloroethane |                   |                 |                     |                   |                 |
| Tetrachloroethane         |                   |                 |                     |                   |                 |
| 1,1,1-Trichloroethane     |                   |                 |                     |                   |                 |
| 1,1,2-Trichloroethane     |                   |                 |                     |                   |                 |
| Trichloroethene           |                   |                 |                     |                   |                 |
| Trichlorofluoromethane    |                   |                 |                     |                   |                 |
| Vinyl chloride            |                   |                 |                     |                   |                 |
| Dichloromethane           |                   |                 |                     |                   |                 |
| Freon 113                 |                   |                 |                     |                   |                 |
| c-1,2-Dichloroethane      |                   |                 |                     |                   |                 |

**WESTON**  
 MANUFACTURING

BLANK SHEET

CALIB. STD. ID 2-640-3001  
 COLUMN \_\_\_\_\_  
 MATRIX Sail -

DATE ANALYZED 5/15/91  
 INSTRUMENT ID 14  
 ANALYST Mike Maravinty

| Analytes 601/8010         | MDL<br>mg/kg ug/l | Method<br>Blank | Analytes 602/8020   | MDL<br>mg/kg ug/l | Method<br>Blank |
|---------------------------|-------------------|-----------------|---------------------|-------------------|-----------------|
| Bromodichloromethane      |                   |                 | Benzene             | .025              | ND              |
| Bromoform                 |                   |                 | Chlorobenzene       |                   |                 |
| Bromomethane              |                   |                 | 1,2-Dichlorobenzene |                   |                 |
| Carbon tetrachloride      |                   |                 | 1,3-Dichlorobenzene |                   |                 |
| Chloroethane              |                   |                 | 1,4-Dichlorobenzene |                   |                 |
| 2-Chloroethylvinylether   |                   |                 | Ethylbenzene        |                   |                 |
| Chloroform                |                   |                 | Toluene             |                   |                 |
| Chloromethane             |                   |                 | Xylene              |                   |                 |
| Dibromochloromethane      |                   |                 | Acetone             |                   |                 |
| 1,2-Dichlorobenzene       |                   |                 | Isopropyl alcohol   |                   |                 |
| 1,3-Dichlorobenzene       |                   |                 |                     |                   |                 |
| 1,4-Dichlorobenzene       |                   |                 |                     |                   |                 |
| Dichlorodifluoromethane   |                   |                 |                     |                   |                 |
| 1,1-Dichloroethane        |                   |                 |                     |                   |                 |
| 1,2-Dichloroethane        |                   |                 |                     |                   |                 |
| 1,1-Dichloroethene        |                   |                 |                     |                   |                 |
| c-1,2-Dichloroethene      |                   |                 |                     |                   |                 |
| 1,2-Dichloropropane       |                   |                 |                     |                   |                 |
| c-1,3-Dichloropropane     |                   |                 |                     |                   |                 |
| t-1,3-Dichloropropane     |                   |                 |                     |                   |                 |
| 1,1,2,2-Tetrachloroethane |                   |                 |                     |                   |                 |
| Tetrachloroethene         |                   |                 |                     |                   |                 |
| 1,1,1-Trichloroethane     |                   |                 |                     |                   |                 |
| 1,1,2-Trichloroethane     |                   |                 |                     |                   |                 |
| Trichloroethene           |                   |                 |                     |                   |                 |
| Trichlorofluoromethane    |                   |                 |                     |                   |                 |
| Vinyl chloride            |                   |                 |                     |                   |                 |
| Dichloromethane           |                   |                 |                     |                   |                 |
| Freon 113                 |                   |                 |                     |                   |                 |
| c-1,2-Dichloroethane      |                   |                 |                     |                   |                 |

**WESTON**  
 ANALYTICAL CHEMISTS

Roy F. Weston, Inc. - Stockton Laboratory

Client: FULBRIGHT & JAWORSKI  
LP #: 10982

Project #: L90202

Volatiles Case Narrative

Calibration was verified for all samples analyzed.  
Surrogate recoveries were within acceptable limits for all samples.  
Spike recoveries were within acceptable limits.  
BTEX: Calibration was verified for all samples analyzed.  
The method blank associated with this group of samples were free of target analyte interferences at, or above, the reporting limits.  
Surrogate recoveries were within acceptable limits.  
Spike per cent recoveries were within acceptable limits, however, RPD's were a little high.  
Samples 860843 & 860851 were re-analyzed exceeding holding time due to bad purges.

Extractions Pest. Case Narrative

ETEH-S/3550  
All samples in batch E050691RB1 were extracted within the required holding time.

Pesticides Case Narrative

EHF: This narrative covers the analysis of 7 samples in accordance with SW-846, 3rd Edition. The specified holding time for this analysis was met. Surrogates were not used in this analysis. Spike recoveries were within acceptable limits. The method blank did not contain any target compounds or interfering peaks at or above the reporting limits. Initial and continuing calibration criteria were met for this analysis. Sample SB-2(11-11.5) showed the presence of unidentified peaks not characteristic of our Petroleum Hydrocarbon standards. Based upon our Diesel standard, a calculated value of 7.1 ppm was obtained.

Roy F. Weston, Inc. - Stockton Laboratory

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|                              |                           |
|------------------------------|---------------------------|
| Client: FULBRIGHT & JAWORSKI | Date Sampled: 4/30/1990   |
| Sample ID: SB-1(5.5-6)       | Date Received: 5/02/1991  |
| Matrix: SOIL                 | Q.C. Batch # : V051491MM1 |
| Lab ID: 860839-SA-A          | Date Analyzed: 5/14/1991  |
| Project #: L90202            | Date Reported: 5/22/1991  |
| Starting Depth: 0.00         | Ending Depth: 0.00        |
| Percent Solids: 77.3 %       |                           |

All results reported on a dry weight basis.

Test Description: BTEX

| Analyte      | Result* | Reporting Limit | Units | Method   |
|--------------|---------|-----------------|-------|----------|
| Benzene      | ND      | .032            | mg/kg | EPA 8020 |
| Toluene      | 1.94    | .032            | mg/kg |          |
| Ethylbenzene | .034    | .032            | mg/kg |          |
| Xylene       | ND      | .032            | mg/kg |          |

Tested By : PAJ  
Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-1(5.5-6)  
Matrix: SOIL  
Lab ID: 860839-SA-A  
Project #: L90202  
Starting Depth: 0.00  
Percent Solids: 77.3 %

Date Sampled: 4/30/1990  
Date Received: 5/02/1991  
Q.C. Batch #: V051391AB1  
Date Analyzed: 5/13/1991  
Date Reported: 5/22/1991  
Ending Depth: 0.00

LP #: 10982

All results reported on a dry weight basis.

Test Description: Total Volatile Hydrocarbons (TPH-G)

| Analyte                     | Result* | Reporting Limit | Units | Method |
|-----------------------------|---------|-----------------|-------|--------|
| Total Volatile Hydrocarbons | 3.4     | 1.3             | mg/kg | LUFT   |

Tested By : AMB/PJ  
Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Roy F. Weston, Inc. - Stockton Laboratory

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|                              |                          |
|------------------------------|--------------------------|
| Client: FULBRIGHT & JAWORSKI | Date Sampled: 4/30/1990  |
| Sample ID: SB-1(11-11.5)     | Date Received: 5/02/1991 |
| Matrix: SOIL                 | Date Extracted: 5/06/91  |
| Lab ID: 860840-SA-A          | Date Analyzed: 5/09/1991 |
| Project #: L90202            | Date Reported: 5/22/1991 |
| Starting Depth: 0.00         | Ending Depth: 0.00       |
| Percent Solids: 75.1 %       |                          |
| LF #: 10982                  |                          |

All results reported on a dry weight basis.

Test Description: Extractable Hydrocarbon Fingerprint

| Analyte         | Result* | Reporting Limit | Units | Method |
|-----------------|---------|-----------------|-------|--------|
| Gasoline        | ND      | 13.             | mg/kg | LUFT   |
| Kerosene        | 24.     | 13.             | mg/kg |        |
| Diesel          | 200.    | 13.             | mg/kg |        |
| Light Motor Oil | ND      | 67.             | mg/kg |        |

Tested By : KNS  
Validated By: DDJ

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-2(10.5-11.0)  
Matrix: SOIL  
Lab ID: 860841-SA-A  
Project #: L90202  
Starting Depth: 0.00  
Percent Solids: 44.5 %

Date Sampled: 4/30/1990  
Date Received: 5/02/1991  
Q.C. Batch #: V051491MM1  
Date Analyzed: 5/14/1991  
Date Reported: 5/22/1991  
Ending Depth: 0.00

LF #: 10982

All results reported on a dry weight basis.

Test Description: BTEX

| Analyte      | Result* | Reporting Limit | Units | Method   |
|--------------|---------|-----------------|-------|----------|
| Benzene      | .204    | .056            | mg/kg | EPA 8020 |
| Toluene      | .607    | .056            | mg/kg |          |
| Ethylbenzene | ND      | .056            | mg/kg |          |
| Xylene       | ND      | .056            | mg/kg |          |

Tested By : PAJ  
Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT &amp; JAWORSKI

Date Sampled: 4/30/1990

Sample ID: SB-2(10.5-11.0)

Date Received: 5/02/1991

Matrix: SOIL

Q.C. Batch # : V051391AB1

Lab ID: 860841-SA-A

Date Analyzed: 5/13/1991

Project #: L90202

LP #: 10982

Date Reported: 5/22/1991

Starting Depth: 0.00

Ending Depth: 0.00

Percent Solids: 44.5 %

All results reported on a dry weight basis.

Test Description: Total Volatile Hydrocarbons (TPH-G)

| Analyte                     | Result* | Reporting<br>Limit | Units | Method |
|-----------------------------|---------|--------------------|-------|--------|
| Total Volatile Hydrocarbons | 3.2     | 2.2                | mg/kg | LUFT   |

Tested By : AMB/PJ  
Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT &amp; JAWORSKI

Date Sampled: 4/30/1990

Sample ID: SB-2(11-11.5)

Date Received: 5/02/1991

Matrix: SOIL

Date Extracted: 5/06/91

Lab ID: 860842-SA-A

Date Analyzed: 5/19/1991

Project #: L90202

LP #: 10982

Date Reported: 5/22/1991

Starting Depth: 0.00

Ending Depth: 0.00

Percent Solids: 46.1 %

All results reported on a dry weight basis.

## Test Description: Extractable Hydrocarbon Fingerprint

| Analyte         | Result* | Reporting |  | Units | Method |
|-----------------|---------|-----------|--|-------|--------|
|                 |         | Limit     |  |       |        |
| Gasoline        | ND      | 2.2       |  | mg/kg | LUFT   |
| Kerosene        | ND      | 2.2       |  | mg/kg |        |
| Diesel          | ND      | 2.2       |  | mg/kg |        |
| Light Motor Oil | ND      | 11.       |  | mg/kg |        |

Tested By : KNS

Validated By: DDJ

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-3(3.5-4)  
Matrix: SOIL  
Lab ID: 860843-SA-A  
Project #: L90202  
Starting Depth: 0.00  
Percent Solids: 90.2 %

Date Sampled: 5/01/1990  
Date Received: 5/02/1991  
Q.C. Batch # : V051691MM1  
Date Analyzed: 5/16/1991  
Date Reported: 5/22/1991  
Ending Depth: 0.00

LP #: 10982

All results reported on a dry weight basis.

Test Description: BTEX

| Analyte      | Result* | Reporting Limit | Units | Method   |
|--------------|---------|-----------------|-------|----------|
| Benzene      | .632    | .277            | mg/kg | EPA 8020 |
| Toluene      | 3.33    | .277            | mg/kg |          |
| Ethylbenzene | .843    | .277            | mg/kg |          |
| Xylene       | 4.77    | .277            | mg/kg |          |

Tested By : PAJ  
Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-3(3.5-4)  
Matrix: SOIL  
Lab ID: 860843-SA-A  
Project #: L90202  
Starting Depth: 0.00  
Percent Solids: 90.2 %

Date Sampled: 5/01/1990  
Date Received: 5/02/1991  
Q.C. Batch #: V051491AB1  
Date Analyzed: 5/14/1991  
Date Reported: 5/22/1991  
Ending Depth: 0.00

LP #: 10982

All results reported on a dry weight basis.

Test Description: Total Volatile Hydrocarbons (TPH-G)

| Analyte                     | Result* | Reporting<br>Limit | Units | Method |
|-----------------------------|---------|--------------------|-------|--------|
| Total Volatile Hydrocarbons | 2.7     | 1.1                | mg/kg | LUFT   |

Tested By : AMB/FJ  
Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Roy F. Weston, Inc. - Stockton Laboratory

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Client: FULBRIGHT & JAWORSKI

Sample ID: SB-3(4-4.5)

Matrix: SOIL

Lab ID: 860844-SA-A

Project #: L90202

Starting Depth: 0.00

Percent Solids: 77.1 %

LP #: 10982

Date Sampled: 5/01/1990

Date Received: 5/02/1991

Date Extracted: 5/06/91

Date Analyzed: 5/09/1991

Date Reported: 5/22/1991

Ending Depth: 0.00

All results reported on a dry weight basis.

Test Description: Extractable Hydrocarbon Fingerprint

| Analyte         | Result* | Reporting Limit | Units | Method |
|-----------------|---------|-----------------|-------|--------|
| Gasoline        | ND      | 1.3             | mg/kg | LUFT   |
| Kerosene        | ND      | 1.3             | mg/kg |        |
| Diesel          | ND      | 1.3             | mg/kg |        |
| Light Motor Oil | 84.     | 6.5             | mg/kg |        |

Tested By : KNS

Validated By: DDJ

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT &amp; JAWORSKI

Date Sampled: 5/01/1990

Sample ID: SB-3(6.5-7)

Date Received: 5/02/1991

Matrix: SOIL

Date Extracted: 5/06/91

Lab ID: 860845-SA-A

Date Analyzed: 5/08/1991

Project #: L90202

LP #: 10982

Date Reported: 5/22/1991

Starting Depth: 0.00

Ending Depth: 0.00

Percent Solids: 86.4 %

All results reported on a dry weight basis.

## Test Description: Extractable Hydrocarbon Fingerprint

| Analyte         | Result* | Reporting |  | Units | Method |
|-----------------|---------|-----------|--|-------|--------|
|                 |         | Limit     |  |       |        |
| Gasoline        | ND      | 23.       |  | mg/kg | LUFT   |
| Kerosene        | ND      | 23.       |  | mg/kg |        |
| Diesel          | ND      | 23.       |  | mg/kg |        |
| Light Motor Oil | 1500.   | 120.      |  | mg/kg |        |

Tested By : KNS

Validated By: DDJ

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-3(10.5-11)  
Matrix: SOIL  
Lab ID: 860846-SA-A  
Project #: L90202 LP #: 10982  
Starting Depth: 0.00  
Percent Solids: 76.3 %

Date Sampled: 5/01/1990  
Date Received: 5/02/1991  
Date Extracted: 5/06/91  
Date Analyzed: 5/09/1991  
Date Reported: 5/22/1991  
Ending Depth: 0.00

All results reported on a dry weight basis.

Test Description: Extractable Hydrocarbon Fingerprint

| Analyte         | Result* | Reporting Limit | Units | Method |
|-----------------|---------|-----------------|-------|--------|
| Gasoline        | ND      | 1.3             | mg/kg | LUFT   |
| Kerosene        | ND      | 1.3             | mg/kg |        |
| Diesel          | ND      | 1.3             | mg/kg |        |
| Light Motor Oil | 35.     | 6.6             | mg/kg |        |

Tested By : KNS  
Validated By: DDJ

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-3(11-11.5)  
Matrix: SOIL  
Lab ID: 860847-SA-A  
Project #: L90202  
Starting Depth: 0.00  
Percent Solids: 49.0 %

Date Sampled: 5/01/1990  
Date Received: 5/02/1991  
Q.C. Batch #: V051491MM1  
Date Analyzed: 5/14/1991  
Date Reported: 5/22/1991  
Ending Depth: 0.00

LP #: 10982

All results reported on a dry weight basis.

Test Description: BTEX

| Analyte      | Result* | Reporting Limit | Units | Method   |
|--------------|---------|-----------------|-------|----------|
| Benzene      | ND      | .051            | mg/kg | EPA 8020 |
| Toluene      | .735    | .051            | mg/kg |          |
| Ethylbenzene | ND      | .051            | mg/kg |          |
| Xylene       | ND      | .051            | mg/kg |          |

Tested By : PAJ  
Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-3(11-11.5)  
Matrix: SOIL  
Lab ID: 860847-SA-A  
Project #: L90202  
Starting Depth: 0.00  
Percent Solids: 49.0 %

Date Sampled: 5/01/1990  
Date Received: 5/02/1991  
Q.C. Batch #: V051491AB1  
Date Analyzed: 5/14/1991  
Date Reported: 5/22/1991  
Ending Depth: 0.00

LP #: 10982

All results reported on a dry weight basis.

Test Description: Total Volatile Hydrocarbons (TPH-G)

| Analyte                     | Result* | Reporting Limit | Units | Method |
|-----------------------------|---------|-----------------|-------|--------|
| Total Volatile Hydrocarbons | ND      | 2.0             | mg/kg | LUFT   |

Tested By : AMB/PJ  
Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT &amp; JAWORSKI

Sample ID: SB-4(10.5-11)

Matrix: SOIL

Lab ID: 860848-SA-A

Project #: L90202

Starting Depth: 0.00

Percent Solids: 54.7 %

Date Sampled: 5/01/1990

Date Received: 5/02/1991

Q.C. Batch # : V051491MM1

Date Analyzed: 5/14/1991

Date Reported: 5/22/1991

Ending Depth: 0.00

LP #: 10982

All results reported on a dry weight basis.

Test Description: BTEX

| Analyte      | Result* | Reporting Limit | Units | Method   |
|--------------|---------|-----------------|-------|----------|
| Benzene      | ND      | .046            | mg/kg | EPA 8020 |
| Toluene      | .329    | .046            | mg/kg |          |
| Ethylbenzene | ND      | .046            | mg/kg |          |
| Xylene       | ND      | .046            | mg/kg |          |

Tested By : PAJ

Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT &amp; JAWORSKI

Date Sampled: 5/01/1990

Sample ID: SB-4(10.5-11)

Date Received: 5/02/1991

Matrix: SOIL

Q.C. Batch #: V051491AB1

Lab ID: 860848-SA-A

Date Analyzed: 5/14/1991

Project #: L90202

LP #: 10982

Date Reported: 5/22/1991

Starting Depth: 0.00

Ending Depth: 0.00

Percent Solids: 54.7 %

All results reported on a dry weight basis.

Test Description: Total Volatile Hydrocarbons (TPH-G)

| Analyte                     | Result* | Reporting Limit | Units | Method |
|-----------------------------|---------|-----------------|-------|--------|
| Total Volatile Hydrocarbons | ND      | 1.8             | mg/kg | LUFT   |

Tested By : AMB/PJ

Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-4(11-11.5)  
Matrix: SOIL  
Lab ID: 860849-SA-A  
Project #: L90202 LP #: 10982  
Starting Depth: 0.00  
Percent Solids: 55.4 %

Date Sampled: 5/01/1990  
Date Received: 5/02/1991  
Date Extracted: 5/06/91  
Date Analyzed: 5/09/1991  
Date Reported: 5/22/1991  
Ending Depth: 0.00

All results reported on a dry weight basis.

Test Description: Extractable Hydrocarbon Fingerprint

| Analyte         | Result* | Reporting Limit | Units | Method |
|-----------------|---------|-----------------|-------|--------|
| Gasoline        | ND      | 1.8             | mg/kg | LUFT   |
| Kerosene        | ND      | 1.8             | mg/kg |        |
| Diesel          | ND      | 1.8             | mg/kg |        |
| Light Motor Oil | 38.     | 9.              | mg/kg |        |

Tested By : KNS  
Validated By: DDJ

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Roy F. Weston, Inc. - Stockton Laboratory

Page: 17

Client: FULBRIGHT & JAWORSKI

Sample ID: SB-5(10-10.5)

Matrix: SOIL

Lab ID: 860850-SA-A

Project #: L90202

LP #: 10982

Starting Depth: 0.00

Percent Solids: 52.3 %

Date Sampled: 4/30/1990

Date Received: 5/02/1991

Date Extracted: 5/06/91

Date Analyzed: 5/09/1991

Date Reported: 5/22/1991

Ending Depth: 0.00

All results reported on a dry weight basis.

Test Description: Extractable Hydrocarbon Fingerprint

| Analyte         | Result* | Reporting Limit | Units | Method |
|-----------------|---------|-----------------|-------|--------|
| Gasoline        | ND      | 19.             | mg/kg | LUFT   |
| Kerosene        | ND      | 19.             | mg/kg |        |
| Diesel          | ND      | 19.             | mg/kg |        |
| Light Motor Oil | 3600.   | 96.             | mg/kg |        |

Tested By : KNS

Validated By: DDJ

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

5/16/1991

Roy F. Weston, Inc. - Stockton Laboratory  
MS/MSD Report

20:49:

Test: 602W MS 602 Water MS/MSD  
Analyst: Mike Morairty  
Analysis Date:  
Inst. #: 14Matrix : WATER  
Lab ID : SVH134-MS  
QC Batch #: V051491MM1

Instrument Filenames:

Sample: H1167C

MS: H1168C

MSD: H1169C

| Compound | Spike<br>Added<br>ug/L | Sample<br>Conc.<br>ug/L | Spike<br>Conc.<br>ug/L | Spike<br>%<br>Recovery | LCL  | UCL   |
|----------|------------------------|-------------------------|------------------------|------------------------|------|-------|
| Benzene  | 10.0                   | ND                      | 9.3103                 | 93.10%                 | 41.4 | 126.2 |
| Toluene  | 10.0                   | ND                      | 9.5600                 | 95.60%                 | 47.3 | 143.0 |

| Compound | Dup.<br>Conc.<br>ug/L | Dup.<br>%<br>Recovery | RPD     | UWL   | UCL   |
|----------|-----------------------|-----------------------|---------|-------|-------|
| Benzene  | 11.95                 | 119.53%               | 24.86w* | 11.90 | 15.70 |
| Toluene  | 12.05                 | 120.48%               | 23.03w* | 14.70 | 19.40 |

\* : exceeds control limit  
ND indicates compound was not detected.

w :exceeds warning limit

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-5(5-5.5)  
Matrix: SOIL  
Lab ID: 860851-SA-A  
Project #: L90202  
Starting Depth: 0.00  
Percent Solids: 84.7 %

Date Sampled: 4/30/1991  
Date Received: 5/02/1991  
Q.C. Batch #: V051691MM1  
Date Analyzed: 5/16/1991  
Date Reported: 5/22/1991  
Ending Depth: 0.00

LP #: 10982

All results reported on a dry weight basis.

Test Description: BTEX

| Analyte      | Result* | Reporting Limit | Units | Method   |
|--------------|---------|-----------------|-------|----------|
| Benzene      | .767    | .295            | mg/kg | EPA 8020 |
| Toluene      | 3.07    | .295            | mg/kg |          |
| Ethylbenzene | .815    | .295            | mg/kg |          |
| Xylene       | 4.60    | .295            | mg/kg |          |

Tested By : PAJ  
Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-5(5-5.5)  
Matrix: SOIL  
Lab ID: 860851-SA-A  
Project #: L90202  
Starting Depth: 0.00  
Percent Solids: 84.7 %

Date Sampled: 4/30/1991  
Date Received: 5/02/1991  
Q.C. Batch #: V051491AB1  
Date Analyzed: 5/14/1991  
Date Reported: 5/22/1991  
Ending Depth: 0.00

LP #: 10982

All results reported on a dry weight basis.

Test Description: Total Volatile Hydrocarbons (TPH-G)

| Analyte                     | Result* | Reporting Limit | Units | Method |
|-----------------------------|---------|-----------------|-------|--------|
| Total Volatile Hydrocarbons | 380.    | 12.             | mg/kg | LUFT   |

Tested By : AMB/PJ  
Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

BLANK SHEET

CALIB. STO. ID \_\_\_\_\_  
 COLUMN SP1000  
 MATRIX WATER

DATE ANALYZED 5/13/91  
 INSTRUMENT ID 11  
 ANALYST AMB

| Analytes 601/8010         | MOL<br>mg/kg ug/l | Method<br>Blank | Analytes 602/8020   | MOL<br>mg/kg ug/l | Method<br>Blank |
|---------------------------|-------------------|-----------------|---------------------|-------------------|-----------------|
| Bromodichloromethane      |                   |                 | Benzene             |                   |                 |
| Bromoform                 |                   |                 | Chlorobenzene       |                   |                 |
| Bromomethane              |                   |                 | 1,2-Dichlorobenzene |                   |                 |
| Carbon tetrachloride      |                   |                 | 1,3-Dichlorobenzene |                   |                 |
| Chloroethane              |                   |                 | 1,4-Dichlorobenzene |                   |                 |
| 2-Chloroethylvinylether   |                   |                 | Ethylbenzene        |                   |                 |
| Chloroform                |                   |                 | Toluene             |                   |                 |
| Chloromethane             |                   |                 | Xylene              |                   |                 |
| Dibromochloromethane      |                   |                 | Acetone             |                   |                 |
| 1,2-Dichlorobenzene       |                   |                 | Isopropyl alcohol   |                   |                 |
| 1,3-Dichlorobenzene       |                   |                 | GASOLINE (TUM)      | 20                | AD              |
| 1,4-Dichlorobenzene       |                   |                 |                     |                   |                 |
| Dichlorodifluoromethane   |                   |                 |                     |                   |                 |
| 1,1-Dichloroethane        |                   |                 |                     |                   |                 |
| 1,2-Dichloroethane        |                   |                 |                     |                   |                 |
| 1,1-Dichloroethene        |                   |                 |                     |                   |                 |
| t-1,2-Dichloroethene      |                   |                 |                     |                   |                 |
| 1,2-Dichloropropane       |                   |                 |                     |                   |                 |
| c-1,3-Dichloropropene     |                   |                 |                     |                   |                 |
| t-1,3-Dichloropropene     |                   |                 |                     |                   |                 |
| 1,1,2,2-Tetrachloroethane |                   |                 |                     |                   |                 |
| Tetrachloroethene         |                   |                 |                     |                   |                 |
| 1,1,1-Trichloroethane     |                   |                 |                     |                   |                 |
| 1,1,2-Trichloroethane     |                   |                 |                     |                   |                 |
| Trichloroethene           |                   |                 |                     |                   |                 |
| Trichlorofluoromethane    |                   |                 |                     |                   |                 |
| Vinyl chloride            |                   |                 |                     |                   |                 |
| Dichloromethane           |                   |                 |                     |                   |                 |
| Freon 113                 |                   |                 |                     |                   |                 |
| c-1,2-Dichloroethene      |                   |                 |                     |                   |                 |

**WESTON**  
 MANUFACTURING & DISTRIBUTION

ROY F. WESTON, INC

SOIL BORING LOG

Soil Boring No.: SB-1  
 Location: West of Tank #1 and #2  
 Client: Fulbright & Jaworski  
 Project No.: 5336-13-01  
 Equipment: drill rig: CME 75  
 method: Hollow Stem Auger  
 Dates of drilling: 4/30/91  
 Drilled depth: 13 feet  
 Contractor: Bayland Drilling  
 Driller: Kurt Voss  
 Helper: Mark Casey  
 deacon: Steam Clean

sampling: Split Spoon

deacon:

Backfill

Material: Cement Grout

Geologist: Arvind Acharya

| DEPTH<br>(feet) | SLOW<br>COUNTS   | DESCRIPTION<br>OF LITHOLOGY  | COMMENTS  |
|-----------------|------------------|--|---|
| 0               |                  | Gray black rubble with asphalt, strong odor                          | Borehole Nnu = 12 units<br>Background = 0.4 units |
| 1               |                  | Red brown, gray black rubble with large cobbles, fill under asphalt  |   |
| 2               |                  | Cobbles intermixed with silt, fill material                          |   |
| 3               |                  |  |   |
| 4               |                  | Finer cobble intermixed with silt                                    | Borehole Nnu = 12 units<br>Background = 0.4 units |
| 5               | 2-2-2<br>6" Rec. | Black gray CLAY<br>Sampled for TPH, BTEX from (5.5-6.0)'             | Background = 0.4 units<br>Borehole Nnu = 5 units  |
| 6               |                  |  |   |
| 7               |                  | Moist Black gray CLAY  | Borehole Nnu = 7.5 units<br>Background=0.4 units  |
| 8               |                  |  |   |
| 9               |                  |  |   |
| 10              | 1-1-2            | Black Gray, wet CLAY<br>Sampled for Hydrocarbon Content (11.0-11.5)' | Borehole Nnu = 7.5 units<br>Background=0.4 units  |
| 11              |                  |  |   |
| 12              |                  | Black Gray, wet CLAY<br>Sampled for BTEX from (11.5-12.0)'           |   |
| 13              |                  | T.B. - 13.0 feet   |   |

# ROY F. WESTON, INC

## SOIL BORING LOG

Soil Boring No.: SB-2 Dates of drilling: 4/30/91  
 Location: Between Tank #1 and #2 Drilled depth: 11.5 feet  
 Client: Fulbright & Jaworski Contractor: Bayland Drilling  
 Project No.: 5336-13-01 Driller: Kurt Voss  
 Equipment: Helper: Mark Casey  
 drill rig: CME 75  
 method: Hollow Stem Auger deacon: Steam Clean

sampling: Split Spoon

deacon:

Backfill

Material: Cement Grout

Geologist: Arvind Acharya

| DEPTH<br>(feet) | BLOW<br>COUNTS   | DESCRIPTION<br>OF LITHOLOGY  | COMMENTS   |
|-----------------|------------------|--|--|
| 0               |                  | (0 - 8") Concrete  |  |
| 1               |                  | Fine clean SAND, used as fill around tank  | Borehole Hnum=4.5 units<br>Background = 0.2 units  |
| 2               |                  |  |  |
| 3               |                  | Brown rubble with fine SAND - fill material  | Borehole Hnum=12.0 units<br>Background = 0.2 units |
| 4               |                  | Same as above  |  |
| 5               | 2-2-2<br>6" Rec. | Brown rubble, moist with black gray CLAY, with rootholes   | Borehole Hnum=40.0 units<br>Background = 0.4 units |
| 6               |                  |  | Borehole Hnum=5.0 units                            |
| 7               |                  | Black, gray CLAY   |  |
| 8               |                  |  |  |
| 9               |                  |  |  |
| 10              | Sinks<br>on its  | Black Gray, wet CLAY, with root holes  |  |
| 11              | own              | Sampled BTEX and TPH from (10.5-11.0)'<br>Sampled Hydrocarbon Profile from (11.0-11.5)'<br>T.D. - 11.5 |  |

ROY F. WESTON, INC

SOIL BORING LOG

Soil  
 Boring No.: SB-3  
 Location: North of Tank #3  
 Client: Fulbright & Jaworski  
 Project No.: 5336-13-01  
 Equipment:  
 drill rig: CME 75  
 method: Hollow Stem Auger  
 Dates of  
 drilling: 5/1/91  
 Drilled depth: 11.5 feet  
 Contractor: Bayland Drilling  
 Driller: Kurt Voss  
 Helper: Mark Casey  
 decon: Steam Clean  
 sampling: Split Spoon  
 decon:  
 Backfill  
 Material: Cement Grout  
 Geologist: Arvind Acharya

| DEPTH<br>(feet) | BLOW<br>COUNTS | DESCRIPTION<br>OF LITHOLOGY   | COMMENTS   |
|-----------------|----------------|---|--|
| 0               |                | Visible sheen under asphalt surface on rubble from (1.0-1.25)'                              | Borehole Hnum150 units<br>Background=0.8 units                       |
| 1               |                |   |  |
| 2               |                |   | Borehole Hnum50 units<br>Background=0.6 units                        |
| 3               | 3-5-6          | Rubble mixed with wet black gray CLAY<br>- water at 4.5'                                    | Sample Hnum10 units<br>Borehole Hnum70 units<br>Background=0.6 units |
| 4               |                | Sampled for BTEX and TPH from (3.5-4.0)'<br>Sampled for Hydrocarbon Profile from (4.0-4.5)' |  |
| 5               | 2-3-5          | Loose gravel with wet black gray CLAY, possibly french drain<br>Visible sheen               | Sample Hnum20 units  |
| 6               |                |   | Sample Hnum20 units<br>Sample Hnum150 units                          |
| 7               |                | Wet Black gray CLAY   |  |
| 8               |                |   | Hnu = 0.4 units, Skgd.   |
| 9               |                |   |  |
| 10              | 2-2-2          | Wet Black gray CLAY<br>Sampled for Hydrocarbon Content from (10.5-11.0)'                    |  |
| 11              |                | Sampled for TPH, BTEX from (11.0-11.5)'   | Sample Hnum10 units  |
| 12              |                | T.D. - 11.5 feet  |  |
| 13              |                |   |  |

ROY F. WESTON, INC

SOIL BORING LOG

Soil  
Boring No.: SB-4  
Location: South of Tank #4  
Client: Fulbright & Jaworski  
Project No.: 5336-13-01

Dates of  
drilling: 5/1/91  
Drilled depth: 11.5 feet  
Contractor: Bayland Drilling  
Driller: Kurt Voss  
Helper: Mark Casey

Equipment:  
drill rig: CME 75  
method: Hollow Stem Auger

decon: Steam Clean

sampling: Split Spoon

decon:

Backfill

Material: Cement Grout

Geologist: Arvind Acharya

| DEPTH<br>(feet) | SLOM<br>COUNTS | DESCRIPTION<br>OF LITHOLOGY                  | COMMENTS               |
|-----------------|----------------|--|------------------------|
| 0               |                | Concrete (0 - 8")                            |                        |
| 1               |                | Brown silt with rubble - fill material       |                        |
| 2               |                |  |                        |
| 3               |                | Rubble mixed with black gray CLAY            | Nnu = 0.4 units, Skpd. |
| 4               |                |  |                        |
| 5               | 2-2-2          | Moist black gray CLAY                        |                        |
| 6               |                |  |                        |
| 7               |                |  |                        |
| 8               |                | Wet Black gray CLAY                          | Nnu = 0.4 units, Skpd. |
| 9               |                |  |                        |
| 10              | 2-2-2          | Wet Black gray CLAY                          | Nnu = 0.4 units, Skpd. |
| 11              | 2" Rec.        | Sampled for TPH, BTEX from (10.5-11.0)'      | Background=0.4         |
|                 |                | Sampled for Hydrocarbon Content (11.0-11.5)' |                        |
| 12              |                | T.O. - 11.5 feet                             |                        |
| 13              |                |  |                        |

APPENDIX

# ROY F. WESTON, INC

## SOIL BORING LOG

Soil  
 Boring No.: SB-5  
 Location: South of Tank #5  
 Client: Fulbright & Jaworski  
 Project No.: 5336-13-1  
 Equipment:  
 drill rig: CME 75  
 method: Hollow Stem Auger  
 Dates of:  
 drilling: 4/30/91  
 Drilled depth: 11.5 feet  
 Contractor: Bayland Drilling  
 Driller: Kurt Voss  
 Helper: Mark Casey  
 decon: Steam Clean

sampling: Split Spoon

decon:

Backfill

Material: Cement Grout

Geologist: Arvind Acharya

| DEPTH<br>(feet) | SLOW<br>COUNTS    | DESCRIPTION<br>OF LITHOLOGY   | COMMENTS               |
|-----------------|-------------------|---|------------------------|
| 0               |                   | (0 - 8") Concrete   |                        |
| 1               |                   | Brown silty CLAY, with rubble, mostly fill                                | Minu 0.2 - Background  |
| 2               |                   |   |                        |
| 3               |                   |   |                        |
| 4               |                   |   |                        |
| 5               | 3-4-4<br>10" Rec. | Black Gray, Moist CLAY<br>Sampled for STEK and TPH from (5.0-5.5)'        | Borehole Minu 10 units |
| 6               |                   |   |                        |
| 7               |                   |   |                        |
| 8               |                   |   |                        |
| 9               |                   |   |                        |
| 10              | 1-2-2             | Black Gray, wet CLAY<br>Sampled for Hydrocarbon Profile from (10.0-10.5)' | Borehole Minu 5 units  |
| 11              |                   | T.D. - 11.5 feet  |                        |
| 12              |                   |   |                        |



212 FRANK WEST CIRCLE  
SUITE A  
STOCKTON, CA 95206  
PHONE: (209) 983-1340  
FAX: 209-983-0304

May 21, 1991

Work Order #: 5336-13-01  
LP #: 10980  
Fulbright & Jaworski

Mr. Arvind Acharya  
Roy F. Weston, Inc.  
1350 Treat Blvd., Suite 200  
Walnut Creek, CA 94596

Dear Mr. Acharya:

Enclosed are the laboratory results for samples submitted to Weston Analytical Division (formerly Canonic Environmental Analytical Laboratory).

Unless otherwise instructed, samples will be returned to you two weeks from the date of this letter.

If you have any questions, please call me at (209) 983-1340.

Very truly yours,

Joseph M. Gemmiller  
Project Manager

JMG/pry

Enclosure

**WESTON**

Laboratory Report for

Mr. Arvind Acharya  
Roy F. Weston, Inc.  
1350 Treat Blvd., Suite 200  
Walnut Creek, CA 94596

May 21, 1991

By

Roy F. Weston, Inc.  
212 Frank West Circle, Suite 2  
Stockton, CA 95206  
(209) 983-1340

Work order #: 5336-13-01  
LP #: 10980

Roy F. Weston, Inc. - Stockton Laboratory  
Final Report

Page: 1

Client: FULBRIGHT & JAWORSKI

Sample ID: SB-1(W)

Matrix: LIQUID

Lab ID: 860836-SA-A

Project #: L90202.

Starting Depth: 0.00

LP #: 10980

Date Sampled: 4/30/1991

Date Received: 5/02/1991

QC Batch #: V051691MM1

Date Analyzed: 5/16/1991

Date Reported: 5/21/1991

Ending Depth: 0.00

Test Description: BTEX Analysis

| Analyte      | Result* | Reporting | Units | Method  |
|--------------|---------|-----------|-------|---------|
|              |         | Limit     |       |         |
| Benzene      | 300.    | 5.0       | ug/L  | EPA 602 |
| Toluene      | 78.     | 5.0       | ug/L  |         |
| Ethylbenzene | 45.     | 5.0       | ug/L  |         |
| Xylene       | 77.     | 5.0       | ug/L  |         |

Tested By : PAJ

Validated By: JDM

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

Roy F. Weston, Inc. - Stockton Laboratory  
Case Narrative

Client: FULBRIGHT & JAWORSKI  
LP #: 10980

Project #: L90202

Volatiles Case Narrative

Calibration was verified for all samples analyzed.

Surrogate recoveries were within acceptable limits for all samples.

The method blank associated with this group of samples were free of target analyte interferences at, or above, the reporting limits.

Spike per cent recoveries were slightly high, however RPD's were within acceptable limits.

Sample 860836 was re-analyzed after exceeding holding times, in order to obtain target analytes within the linear range of the detector.

Pesticides Case Narrative

EHF: This narrative covers the analysis of one sample in accordance with SW-846, 3rd Edition. The specified holding time for this analysis was met. Surrogates were not used in this analysis. The presence of Gasoline, Kerosene and Diesel in sample SB-1(W) exceeded the spike concentration and required a diluted analysis, which qualifies any recovery data. The method blank did not contain any target compounds or interfering peaks at or above the reporting limits. Initial and continuing calibration criteria were met for this analysis.

Extractions Past. Case Narrative

ETEH-W/3520

All samples in batch E050291TR2 were extracted within the required holding time.

5/17/1991

Roy F. Weston, Inc. - Stockton Laboratory  
MS/MSD Report

15:41:5

Test: 602W MS 602 Water MS/MSD  
Analyst: Mike Moriarty  
Analysis Date:  
Inst. #: 14

Matrix : WATER  
Lab ID : SVH135-MS  
GC Batch #: V051591MM1

Instrument Filenames:

Sample: H1189C

IS: H1190C

MSD: H1207C

| Compound | Spike<br>Added<br>ug/L | Sample<br>Conc.<br>ug/L | Spike<br>Conc.<br>ug/L | Spike<br>%<br>Recovery | LCL  | UCL   |
|----------|------------------------|-------------------------|------------------------|------------------------|------|-------|
| Benzene  | 10.0                   | ND                      | 12.0850                | 120.85%                | 41.4 | 126.2 |
| Toluene  | 10.0                   | ND                      | 12.3378                | 123.38%                | 47.3 | 143.0 |

| Compound | Dup.<br>Conc.<br>ug/L | Dup.<br>%<br>Recovery | RPD  | UWL   | UCL   |
|----------|-----------------------|-----------------------|------|-------|-------|
| Benzene  | 12.74                 | 127.42%*              | 3.29 | 11.90 | 15.70 |
| Toluene  | 12.35                 | 123.48%               | 3.90 | 14.70 | 19.40 |

\* : exceeds control limit

w : exceeds warning limit

ND indicates compound was not detected.

Water MATRIX BLANK

DATE: 5-8-91

LP# 10980

GC 42

ANALYST K. Schultz

CLIENT Fulbright & Jaworski

COLUMN *RTx5*

## ANALYSIS EHF

[illegible]

Roy F. Weston, Inc. - Stockton Laboratory  
Final Report

Page: 2

Client: FULBRIGHT & JAWORSKI  
Sample ID: SB-1(W)  
Matrix: LIQUID  
Lab ID: 860837-SA-A  
Project #: L90202.  
Starting Depth: 0.00  
LP #: 10980  
Date Sampled: 5/01/1991  
Date Received: 5/02/1991  
QC Batch #: 05/02/91  
Date Analyzed: 5/08/1991  
Date Reported: 5/21/1991  
Ending Depth: 0.00

Test Description: Extractable Hydrocarbon Fingerprint

| Analyte         | Result* | Reporting Limit | Units | Method |
|-----------------|---------|-----------------|-------|--------|
| Gasoline        | 0.56    | 0.050           | mg/L  | LUFT   |
| Kerosene        | 0.33    | 0.050           | mg/L  |        |
| Diesel          | 0.78    | 0.050           | mg/L  |        |
| Light Motor Oil | ND      | 0.25            | mg/L  |        |

Tested By : KNS  
Validated By: DDJ

\* ND indicates a compound was not detected at a concentration level greater than the reporting limit.

# WESTERN

Client Contact/Phone (415) 256-0733

NOTES:

**Special Instructions:**

**NOTES:**



212 FRANK WEST CIRCLE  
SUITE A  
STOCKTON, CA 95206  
PHONE: (209) 983-1340  
FAX: 209-983-0304

MAY 23, 1991

Work Order # 5336-13-01  
LP #: 10982  
Fulbright & Jaworski

Mr. Steve Michelson  
Roy F. Weston, Inc.  
1350 Treat Boulevard, Suite 200  
Walnut Creek, CA 94596

Dear Mr. Michelson:

Enclosed are the laboratory results for samples submitted to Weston Analytics Division (formerly Canonie Environmental Analytical Laboratory).

Unless otherwise instructed, samples will be returned to you two weeks from the date of this letter.

If you have any questions, please call me at (209) 983-1340.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Joseph M. Demmler".

Joseph M. Demmler  
Project Manager

JMD/arr

Enclosure