Harding Lawson Associates

Transmittal/Memorandum

To: Alameda County Department of Environmental Health
470 27th Street
Oakland, California 94612

Attention: Mr. Storm Goranson

From: David Leland
Date: February 7, 1989
Subject: A - Aquifer Monitoring Report
Job No.: 09382.023.02

Remarks: Please find attached a copy of the "A - Aquifer Monitoring Report, Chinatown Redevelopment Project Area, Oakland, California", describing monitoring of ground water in the Chinatown Redevelopment Project Area of Oakland from March to July 1988.

DL:cb/c4/010

cc:

A Report Prepared for

City of Oakland Redevelopment Agency
One City Hall Plaza
Oakland, California 94612

A-AQUIFER MONITORING REPORT
CHINATOWN REDEVELOPMENT PROJECT AREA
OAKLAND, CALIFORNIA

HLA Job No. 09382,023.02

by

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

I EXECUTIVE SUMMARY

Harding Lawson Associates (HLA) designed a treatment system to clean up hydrocarbon-contaminated ground water on property bounded by 10th, 11th, Webster, and Franklin streets in the Chinatown Redevelopment Project Area of Oakland, California. Water from 15 dewatering wells installed in the A-aquifer on the perimeter of the site is pumped to the treatment system. The dewatering wells facilitate dewatering of the site during construction of the East Bay Municipal Utility District (EBMUD) office building on site.

Seven ground-water monitoring wells just outside the site perimeter are used to monitor ground-water quality and water levels during treatment system operation.

This interim report covers ground-water monitoring performed by HLA between February 29 and July 27, 1988, as part of Phase VI of our ground-water investigation of the site. The report describes the installation of four of the seven monitoring wells. It presents baseline water-quality and water-level data obtained before the treatment system began operating on March 12 and the results of periodic monitoring during system operation through July.

Sampling of ground water from monitoring wells on and near the site and analysis of samples collected from March through July 1988 indicate the presence of petroleum hydrocarbons and volatile organic compounds that are included on the US Environmental Protection Agency's (EPA) Hazardous Substance List. Concentrations of the volatile organic compounds benzene, 1,1-dichloroethene, 1,2-dichloroethane, trichloroethene and tetrachloroethene exceed California Department of Health Services (DHS) drinking water action levels (USEPA, 1987). Areas hydraulically upgradient (east)

of the site are the primary contributors of petroleum hydrocarbons and volatile organic compounds detected in water produced by the dewatering wells and subsequently processed by the treatment system, as evidenced by water chemistry data from Wells MW-2 and MW-6. The exact locations and characteristics of upgradient sources of organic compounds are not known at this time.

II INTRODUCTION

This report presents interim results of the ongoing Phase VI of HLA's ground-water investigation for the City of Oakland Redevelopment Agency (Agency) in Oakland's Chinatown Redevelopment Project Area (Plate 1). An office building is presently under construction at the site, which is bounded by 10th, 11th, Webster, and Franklin streets (Plate 2). Earlier phases of HLA investigation activities at this site are summarized in Table 1. This report covers ground-water monitoring activities performed by HLA at the site between February 29 and July 27, 1988. Phase VI activities included installation of four additional monitoring wells (designated MW-6 through MW-9), collection of ground-water samples and measurement of water levels at the four new and three previously installed monitoring wells (MW-2, MW-3 and MW-5), and reporting of the results (including a summary of subsurface conditions and the results of monitoring well sampling). Ground-water samples and water-level measurements obtained after July 27 will be reported separately. The dewatering effluent treatment system is described in HLA, 1988a. Treatment system monitoring data are presented in HLA 1988b, 1988c, 1988e, 1988f, 1988g, 1988h, and 1988i.

III FIELD INVESTIGATION

A. Monitoring Well Installation

Between February 29 and March 8, 1988, four borings were drilled to depths ranging from 41.5 to 45.0 feet below ground surface and completed as Monitoring Wells MW-6 through MW-9. Drilling was performed by HEW Drilling Company, Inc., of Palo Alto, California, using a CME 55 hollow-stem auger rig. An HLA engineer supervised the drilling and well installation and collected soil samples for chemical analysis. Borings were logged using the Unified Soil Classification System (USCS) and the Munsell Color Index Chart (Plate A1). Locations of the borings are shown on Plate 2. Boring logs and well completion details are presented in Appendix A.

Soil samples were collected at 1) approximately 5-foot intervals until the water table was reached, 2) at lithology changes, and 3) at the bottom of each boring. Samples were collected with a Modified California split-barrel sampler lined with three 2.5-inch-diameter stainless steel tubes. At each sample depth, the bottom-most tube was sealed with a taped, foil-lined cap and stored on ice; the soil sample from a second tube was screened for the presence of volatile organic compounds using an organic vapor analyzer (OVA). Soil samples from MW-9 were submitted under chain of custody to WESCO Laboratories, a state-certified laboratory in Novato, California, and were analyzed for total petroleum hydrocarbons (TPH) by EPA Test Methods 3550/8015 and for volatile organic compounds by EPA Test Methods 8010 and 8020. Samples from Wells MW-6, MW-7, and MW-8 were not submitted for laboratory analysis.

Equipment used for drilling and soil sampling was decontaminated prior to and after use according to standard HLA protocol. HLA employees performing field work were safety trained and used Level D protective equipment.

Wells MW-9 and MW-6 were completed on February 29 and March 1, 1988, respectively. Wells MW-7 and MW-8 were completed on March 7 and March 8, respectively.

The wells were constructed of 4-inch-diameter PVC with sufficient well screen to allow monitoring above the water table. Each well was developed by the driller by bailing and surging until the discharged water was clear. Wells MW-6, MW-8, and MW-9 were developed at least 18 hours after completion of the wells. MW-7 was developed immediately after completion of the well. All development water was discharged into a Baker tank. The water was subsequently processed by the dewatering effluent treatment system before it was discharged to the sanitary sewer under authority of a temporary wastewater discharge permit from EBMUD.

All wells were completed below grade with locking covers and waterproof housings. KCA Engineers, Inc. (KCA), of San Francisco, California, surveyed the top-of-casing and ground elevations for Monitoring Wells MW-6, MW-7, MW-8 and MW-9.

B. Ground-Water Sampling

From March through July 1988, the A-aquifer ground-water monitoring well network at the site comprised seven wells designated MW-2, MW-3, MW-5, MW-6, MW-7, MW-8, and MW-9. Wells MW-1 and MW-4 were within the confines of the building excavation and were destroyed during excavation. Wells MW-2, MW-3, MW-5, MW-6, MW-7, and MW-8 were sampled weekly between March 9 and May 11, 1988. Well MW-9 was sampled on March 10 and March 21, and not again until June 30, because the well was covered by soil stockpiled in preparation for aeration. From May 18 to the end of July, Wells MW-2, MW-5 and MW-6 were sampled approximately every other week and Wells MW-3, MW-7, MW-8 every fourth week. Samples were

analyzed for TPH using EPA Test Methods 3550/8015 and volatile organic compounds using EPA Test Methods 601 and 602 because previous investigations (*HLA, 1988d*) indicated the presence of petroleum hydrocarbons and volatile organics, including benzene, toluene, ethylbenzene, and xylenes (BTEX) in A-aquifer ground-water samples. Sampling followed standard HLA protocol. A trip blank was included with each round of samples.

Depth to water prior to the purging of each well was measured using a graduated steel tape and chalk until two measurements with a difference of no more than 0.02 feet are obtained. Water elevations were calculated using depth-to-water data and well measuring point elevations surveyed by KCA.

After water levels were measured, each well was purged using a submersible pump placed near the bottom of the well or by bailing with a stainless steel bailer. During purging, a volume of water equal to a least three times the static-water volume in the casing was removed. Indicator parameters (pH, conductivity, and temperature) were monitored during purging. The stability of these readings following the removal of three casing volumes provided additional evidence that static water in the well had been removed.

Discharge water produced during well purging was collected and stored on site in a Baker tank. Until May 2, all water collected in the Baker tanks was treated prior to being discharged to a sanitary sewer under authority of a temporary wastewater discharge permit issued by EBMUD. Since May 2, treated water has been discharged to the storm sewer system with Regional Water Quality Control Board (RWQCB) authorization.

Ground-water samples were collected using a clean stainless steel bailer. The samples were then transferred to clean 1-liter amber glass bottles for TPH analyses and

40-milliliter glass volatile organic analysis (VOA) vials for purgeable aromatics (BTXE) and purgeable halocarbon analyses. All ground-water samples were stored on blue ice and submitted under chain of custody to WESCO Laboratories, Inc., Novato, California (known as Pace Laboratories since July 1, 1988).

IV RESULTS

A. Aquifer Conditions

The borings drilled by HLA during this and previous investigations indicate that the uppermost unconfined aquifer at this site consists of approximately 40 feet of medium- to poorly-sorted sand with a small percentage of silt and clay. The borings for Wells MW-6 through MW-9 confirm the presence of a locally continuous clay unit identified in previous investigations at approximately 40 feet below ground surface (*HLA, 1988d*).

Ground-water elevations for mid-March through the end of July are summarized in Table 2. Plate 3 presents ground-water elevations on March 9-10, just before dewatering began on March 12. Plate 4 shows water levels for June 1-3. Based on the March 9-10 data, the hydraulic gradient in the A-aquifer prior to activation of the dewatering wells was approximately 2.1×10^{-3} toward the west (Plate 3). Since activation of dewatering wells, water levels in monitoring wells have decreased (Table 2) and indicate that ground water in the vicinity of the site is moving toward the excavation, as demonstrated graphically on Plate 4 for June 1-3.

Estimates of hydraulic conductivity calculated from previously performed aquifer tests at the site (*HLA, 1988d*) range from 2.2 to 6.3 ft/day.

B. Results of Chemical Analyses

1. Soil

Because the highest OVA readings obtained during Phase VI well installation activities were measured in samples from Boring MW-9, soil samples from this boring were submitted to the laboratory for analysis. Results of the laboratory

analysis are included as Appendix B. Results of laboratory analysis for TPH as gasoline and as diesel are summarized in Table 3. TPH (as gasoline) was measured at 2,950 parts per million (ppm) at a depth of 16.0 feet. Slightly elevated levels of TPH (as gasoline) were measured at depths of 26.0 and 41.0 feet. BTXE compounds were detected at depths of 11.0, 16.0, 20.5, 26.0 and 41.0 feet. The highest concentration of benzene was measured at 66 micrograms per kilogram (μg/kg, equivalent to parts per billion) in the sample from 16.0 feet. Highest concentrations of toluene, ethylbenzene and xylene were measured in the sample from 26.0 feet, at 12.0, 5.6 and 16.3 μg/kg, respectively. Methylene chloride was detected at concentrations of less than 1 μg/kg in samples from 6.0, 11.0 and 16.0 feet. No other Method 601 compounds were detected in any samples from MW-9. Heavy petroleum hydrocarbons, as measured by TPH (diesel) analysis, were not detected in any soil samples from MW-9.

2. Ground Water

The results of analyses of ground-water samples collected from Monitoring Wells MW-2, MW-3, and MW-5 through MW-9 between March 9 and July 27, and the associated trip blanks are presented in Tables 4 and 5. Applicable DHS drinking water action levels are also included in Tables 4 and 5, for those compounds for which action levels have been designated. Monitoring Well MW-9 was not sampled between March 21 and June 30 because soil had been stockpiled on top of it.

The highest concentrations of TPH and volatile organic compounds were found in samples from upgradient Wells MW-2 and MW-6. As shown in Table 4, seven Method 601 compounds, chloroform, 1,1-dichloroethene (1,1-DCE), 1,1-dichloroethane (1,1-DCA), 1,1,1-trichloroethane (1,1,1-TCA), 1,2-dichloroethane (1,2-DCA), trichloroethene (TCE), and tetrachloroethene (PCE), were initially reported in samples from MW-3, MW-5, MW-6, MW-8, and MW-9. Some of these chemicals were also

detected in MW-2 and MW-7 after pumping began. Analytical results for samples collected in July indicated that at least one Method 601 compound continued to be reported at each of the seven wells. Highest concentrations were reported at MW-2 and MW-6, where TCE has consistently been reported at concentrations from 1000 to 12,000 micrograms per liter (μg/l).

As shown on Table 5, elevated concentrations of Method 602 compounds and TPH were initially reported at Wells MW-2, MW-6, MW-7, MW-8, and MW-9. Method 602 compounds and TPH have not been detected at MW-8 since March 10 or at MW-7 since April 1. Substantially elevated levels of Method 602 compounds and TPH continue to be detected at MW-6. Elevated levels continue to be reported at MW-2 and MW-9.

On the basis of analytical results for samples collected in July, DHS drinking water action levels were exceeded for a total of five volatile organic compounds at one or more of the seven monitoring wells (Tables 4 and 5). These five compounds are benzene, 1,1-DCE, 1,2-DCA, TCE, and PCE. The compound most frequently occurring in excess of its designated action level is 1,2-DCA at four wells: MW-2, MW-3, MW-6, and MW-9. TCE concentrations most exceed the action level of 5.0 μg/l at Wells MW-2 and MW-6 and exceed the action level at MW-8. PCE concentrations exceed the action level at MW-2 and MW-6, as do benzene and 1,1-DCE concentrations at MW-2 and MW-5, respectively.

A detailed discussion of the occurrence of volatile organic compounds at each well is presented in the following paragraphs.

At MW-2, ground-water samples collected March 9 contained benzene, toluene, ethylbenzene and xylenes at concentrations in excess of 100 μg/l and TPH at 6300 μg/l. Samples collected on July 27 indicate reduced levels of each of the four

Method 602 compounds, with benzene, toluene and xylenes measured at concentrations of 9.9, 1.1 and 3.4 μg/l, respectively, and ethylbenzene not detected. On July 27, TPH was measured at 1200 μg/l. Method 601 compounds detected during March at MW-2 and their maximum concentrations included 1,1-DCE at 18.6 μg/l, methylene chloride at 11.7 μg/l, 1,1-DCA at 3.9 μg/l, chloroform at 2.7 μg/l, 1,2-DCA at 166 μg/l, carbon tetrachloride at 62 μg/l, TCE at 5409 μg/l, 1,2-dichloropropane at 5.0 μg/l, and PCE at 2.3 μg/l. Trans-1,2-dichloroethene (t-1,2-DCE) and 1,1,1-TCA have been detected on at least one date at MW-2. Of the ten halogenated volatile organics detected at MW-2, chloroform, 1,2-DCA, TCE, and PCE have been identified consistently. Concentrations of volatile organics exceeded DHS action levels in the July 27 sample for four compounds: benzene, 1,2-DCA, TCE, and PCE.

At MW-3, Method 602 compounds were detected on only one occasion. On April 1, a sample showed benzene, toluene, and xylenes at 0.7, 0.4, and 1.2 μg/l, respectively. Petroleum hydrocarbons have not been detected by Method 8015 analysis on any occasion at MW-3. Seven Method 601 compounds have been detected at MW-3: 1,1-DCE, 1,1-DCA, chloroform, 1,1,1-TCA, 1,2-DCA, TCE, and 1,2-dichloropropane. Of these, 1,1-DCE, 1,1-DCA, and 1,2-DCA have been reported consistently at this location. Results of analysis of a sample collected on July 27 indicated that 1,1-DCE, at 22.0 μg/l, is in excess of the DHS action level of 6.0 μg/l.

At MW-5, toluene and xylenes were reported in a sample collected on March 10 at 0.3 and 0.8 μg/l, respectively. No Method 602 compounds have been detected at this location since March 25. No petroleum hydrocarbons have been reported by Method 8015 analysis of samples from this location. Ten Method 601 compounds have been detected at MW-5: 1,1-DCE, methylene chloride, t-1,2-DCE, 1,1-DCA, chloroform, 1,1,1-TCA, 1,2-DCA, TCE, 1,2-dichloropropane, and PCE. Of these, six

have been present consistently from March through July: 1,1-DCE, 1,1-DCA, chloroform, 1,1,1-TCA, 1,2-DCA, and TCE. Concentrations of each of the six compounds have been relatively constant. Maximum measured concentrations of each of the compounds are as follows: 41 μg/l for 1,1-DCE, 13 μg/l for 1,1-DCA, 6 μg/l for chloroform, 2.7 μg/l for 1,1,1-TCA, 2.0 μg/l for 1,2-DCA, and 1.2 μg/l for TCE. In the sample collected July 27, the only compound occurring at a concentration exceeding the applicable DHS action level was 1,1-DCE at 24 μg/l.

At MW-6, Method 602 compounds benzene, toluene, ethylbenzene and xylenes have been present throughout the period of observation. Chlorobenzene was detected twice, on March 9 (0.8 μg/l) and on March 21 (125 μg/l). On March 25 (0.3 μg/l) and April 22 (3300.0 μg/l) 1,3-dichlorobenzene was detected, and 1,4-dichlorobenzene was detected (2.6 μg/l) on July 15. TPH values were initially 48,000 μg/l and have shown an erratic but generally declining trend with time. Twelve Method 601 compounds have been detected at this location: 1,1-DCE, methylene chloride, t-1,2-DCE, chloroform, 1,1,1-TCA, 1,2-DCA, TCE, 1,2-dichloropropane, cis-1,3-dichloropropene, 1,1,2-trichloroethane (1,1,2-TCA), PCE, and chlorobenzene. Of these, the five which have been consistently present, with their maximum observed concentrations in parentheses, are: t-1,2-DCE (160 μg/l), chloroform (49 μg/l), 1,2-DCA (90 μg/l), TCE (14,100 μg/l), and PCE (42 μg/l). In the samples collected at MW-6 on July 27, three compounds were reported above the applicable DHS action levels: 1,2-DCA, TCE, and PCE.

At MW-7, samples collected in March indicated the presence of benzene at 2.1 μg/l, toluene at 5.4 μg/l, ethylbenzene at 2.6 μg/l, xylenes at 6.1 μg/l, and chlorobenzene at 1.9 μg/l. No Method 602 compounds or petroleum hydrocarbons have been detected at this location since April 1. Two Method 601 compounds have been

detected at MW-7: TCE and 1,2-DCA. TCE was detected on one occasion: March 25 at 0.7 μg/l. 1,2-DCA has been detected consistently from April through July at a maximum concentration of 3.5 μg/l. In the sampled collected July 27, the 1,2-DCA concentration of 2.6 μg/l exceeded the DHS action level of 1.0 μg/l.

At MW-8, toluene, ethylbenzene, xylenes, and TPH were detected in a sample from the initial sampling round on March 10, at 3.2, 0.3, 1.5, and 50 μg/l, respectively. Benzene was reported at 0.6 μg/l in a sample collected March 31. These are the only occurrences of Method 602 compounds or TPH at this location. Five Method 601 compounds have been detected at MW-8: 1,1-DCE, chloroform, 1,2-DCA, TCE, and PCE. TCE has been reported throughout the period of observation, at concentrations ranging from an initial high of 130 μg/l to a low of 5.8 μg/l. Chloroform has been reported at concentrations up to 2.4 μg/l, with the first occurrence on April 15. Two of the other three compounds, 1,1-DCE and 1,2-DCA, were reported on only one occasion, in the sample collected March 25. PCE was detected on March 25 and April 1 and 15. In the sample collected July 27 at MW-8, only TCE was present at a concentration (18.0 μg/l) in excess of the DHS action level of 5.0 μg/l.

At MW-9, the sample collected on March 10 indicated TPH at 4700 μg/l, benzene at 110 μg/l, toluene at 95 μg/l, ethylbenzene at 16 μg/l, and xylenes at 230 μg/l. Samples collected on July 15 indicate the continued presence of benzene, toluene, xylenes, and petroleum hydrocarbons; of these, only benzene was present (110.0 μg/l) above its DHS action level. Eight Method 601 compounds have been detected on at least one occasion at MW-9: chloromethane, 1,1-DCE, 1,1-DCA, chloroform, 1,1,1-TCA, 1,2-DCA, TCE, and PCE. Of these, all except PCE were detected in a sample collected July 15. The only compound occurring at a concentration equal to or greater than the DHS action level was 1,2-DCA, measured at 1.0 μg/l.

V CONCLUSIONS

The following conclusions with respect to hydrogeologic conditions and ground-water chemistry have been developed from the results presented in Section IV.

- The uppermost unconfined aquifer consists of approximately 40 feet of sand underlain by a locally continuous clay aquitard unit. The saturated thickness of the sand unit is approximately 15 feet.
- Ground-water gradients prior to activation of dewatering wells were approximately 0.002 towards the west.
- Since activation of dewatering wells, water-level measurements indicate that ground-water gradients are toward the excavation.
- Elevated levels of petroleum hydrocarbons and volatile organic compounds have been detected in monitoring wells before and since activation of the dewatering system.
- Aromatic volatile organic compounds as measured by EPA Method 602 and petroleum hydrocarbons as measured by EPA Method 8015 were detected in Wells MW-2, MW-6, and MW-9 in samples collected in July.
- At least one EPA Method 601 compound was detected at each of the seven wells in place at the site during July.
- Five compounds occur in excess of DHS drinking water action levels: benzene, 1,1-DCE, 1,2-DCA, TCE and PCE.
- Compounds occur in concentrations at or exceeding DHS drinking water action levels at Wells MW-2, MW-5, MW-6, MW-7, MW-8, and MW-9.
- Highest concentrations of petroleum hydrocarbons and volatile organics occur in Wells MW-2 and MW-6. At both these locations, DHS action levels are exceeded for 1,2-DCA, TCE and PCE. Both of these wells are situated in areas upgradient of the site, based on water levels measured prior to the activation of dewatering wells. As a result, the source of the high levels of these compounds is probably upgradient of and not related to the EBMUD site.

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Table 1. Summary of Phased Activity
Chinatown Redevelopment Project Area
April 1987 to July 1988

Phase	Activity	Results	Recommendations
I	Removal of 4 underground tanks (4/87)	Petroleum hydrocarbons found in soil and water.	Install well to evaluate impact on ground water quality; drill test boring to evaluate vertical distribution.
II	Drill 2 borings; convert one to Well MW-1 (5/87)	Petroleum hydrocarbons in water and soil samples indicate tank has leaked.	Further ground-water investigation. File leak report with RWQCB.
III	Resample MW-1; soil gas survey for plume identification; drill 6 borings (8/87)	Confirm petroleum hydrocarbons; soil gas survey-inconclusive.	Interim soil remediation; install and hydraulically test additional wells.
IV	Install 4 wells and perform aquifer tests (12/87)	Aquifer hydraulic conductivities in range of 2.2-6.3 ft/day	Interim ground water remediation program in conjunction with proposed construction dewatering.
V	Install dewatering treatment system (3/88)	Removal of petroleum hydrocarbons from effluent prior to discharge.	Install additional wells to evaluate lateral extent and source(s).
VI	Install 4 monitoring wells (3/88). Collect and analyze ground water samples (3/88 - 7/88)	Sampling confirms high TPH, BTEX and other organics in upgradient wells.	

Table 2. Water-Level Elevations*, March - July 1988
Chinatown Redevelopment Project Area
Oakland, California

WELL NO:	MW-2		MW-3		MW-5		MW-6		MW-7		MW-8		MW-9		DW-1	
	GROUND SURFACE	TOP OF CASING	GROUND SURFACE	TOP OF CASING	GROUND SURFACE	TOP OF CASING	GROUND SURFACE	TOP OF CASING	GROUND SURFACE	TOP OF CASING	GROUND SURFACE	TOP OF CASING	GROUND SURFACE	TOP OF CASING	GROUND SURFACE	TOP OF CASING
	40.05	39.55	39.02	38.35	38.45	37.86	39.95	39.59	39.35	39.10	40.63	40.47	38.69	38.50	39.03	38.42
DATE (1988)	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevation	Depth to Water	Elevati
03/09	23.85	15.70	22.67	15.68	-	-	23.62	15.97	24.23	14.87	25.44	15.03	23.25	15.25	-	-
03/10	-	-	22.58	15.77	22.42	15.44	-	-	-	-	25.43	15.04	23.13	15.37	-	-
03/18	27.18	12.37	27.17	11.18	26.43	11.43	25.11	14.48	25.44	13.66	26.41	14.06	24.86	13.64	-	-
03/21	27.64	11.91	-	-	-	-	25.51	14.08	-	-	-	-	25.33	13.17	-	-
03/25	28.36	11.19	28.19	10.16	27.28	10.58	25.91	13.68	26.25	12.85	27.29	13.18	-	-	-	-
03/31	-	-	28.33	10.02	27.44	10.42	26.58	13.01	26.61	12.49	27.73	12.74	-	-	-	-
04/01	29.76	9.79	-	-	27.51	10.35	26.69	12.90	-	-	-	-	-	-	38.46	-0.04
04/08	30.23	9.32	27.50	10.85	27.66	10.20	27.13	12.46	27.05	12.05	28.43	12.04	-	-	38.53	-0.11
04/15	30.61	8.94	27.64	10.71	27.80	10.06	27.53	12.06	27.32	11.78	28.75	11.72	-	-	-	-
04/22	30.66	8.89	27.55	10.80	27.45	10.41	27.72	11.87	27.48	11.62	29.00	11.47	-	-	38.73	-0.31
04/28	30.75	8.80	27.65	10.70	27.50	10.36	27.85	11.74	27.61	11.49	29.17	11.30	-	-	-	-
05/05	30.43	9.12	-	-	27.68	10.18	27.90	11.69	-	-	-	-	-	-	-	-
05/11	30.43	9.12	27.97	10.38	27.94	9.92	27.97	11.62	27.80	11.30	29.36	11.11	-	-	-	-
05/18	30.15	9.40	29.12	9.23	28.14	9.72	27.99	11.60	27.79	11.31	29.45	11.02	-	-	-	-
05/27	31.53	8.02	29.85	8.50	28.61	9.25	28.35	11.24	28.04	11.06	29.68	10.79	-	-	-	-
06/03	32.13	7.42	30.14	8.21	29.26	8.60	28.78	10.81	28.44	10.66	30.32	10.15	-	-	-	-
06/16	32.52	7.03	30.80	7.55	30.46	7.40	29.14	10.45	29.00	10.10	30.81	9.66	-	-	-	-
06/30	33.84	5.71	31.70	6.65	31.06	6.80	29.56	10.03	28.49	10.61	31.16	9.31	28.83	9.67	-	-
07/15	33.60	5.95	31.92	6.43	31.39	6.47	29.96	9.63	29.88	9.22	31.69	8.78	29.28	9.22	-	-
07/27	33.73	5.82	32.02	6.33	31.60	6.26	30.16	9.43	30.15	8.95	31.94	8.53	29.54	8.96	-	-

* Elevations are in feet above Mean Sea Level (MSL)

Table 3. Results of Analyses of Soil Samples from Boring MW-9

Depth (feet bgs)	TPH (gasoline) (ppm)	TPH (diesel) (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
6.0	<0.05	<10	<0.2	<0.2	<0.2	<0.2
11.0	<0.05	<10	6.7	0.3	<0.2	<0.2
16.0	2,950	<10	66.0	1.0	<0.2	4.3
20.5	<0.05	<10	1.0	<0.2	<0.2	<0.2
26.0	6.37	<10	14.8	12.0	5.6	16.3
41.0	0.122	<10	<0.2	2.5	0.6	6.2

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Table 4. Results of Chemical Analyses of Ground-Water Samples
Purgeable Halocarbons (EPA Method 601)

WELL	DATE	DICHLORO-DIFLUORO-METHANE		CHLORO-METHANE		1,1 DI-CHLORO-ETHENE		METHYLENE CHLORIDE		TRANS 1,2 DICHLORO-ETHENE		1,1 DI-CHLORO-ETHANE		CHLORO-FORM		1,1,1 TRI-CHLORO-ETHANE		CARBON TETRA-CHLORIDE		1,2 DI-CHLORO-ETHANE		TRICHLORO-ETHENE		1,2 DI-CHLORO-PROPANE		BROMO-DICHLORO-METHANE		CIS-1,3-DI CHLORO-PROPENE		1,1,2 TRI-CHLORO-ETHANE		TETRA-CHLORO-ETHENE		CHLORO-BENZENE		BROMO-FORM		ALL OTHER 601 COMPOUNDS	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l
DHS ACTION LEVEL		--		--		6.0		40.0		16.0		20.0		--		200.0		5.0		1.0		5.0		10.0		---		16.0		100.0		4.0		30.0		--		--	
MW-2																																							
	03/09	ND	2.0	ND	2.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	0.5	ND	0.5	ND	50.0	ND	50.0	ND	50.0	ND	0.5	ND	
	03/21	ND	2.0	ND	2.0		1.5		1.3	ND	0.5	ND	0.5		1.4	ND	0.5	ND	0.5		166.0		276	ND	0.5	ND	0.5	ND	0.5	ND	0.5		2.3	ND	0.5	ND	0.5	ND	
	03/25	ND	2.0	ND	2.0		18.6		11.7	ND	0.5		3.9		2.7	ND	0.5		62.0		19.0		5409		5.0	ND	0.5	ND	0.5	ND	0.5		0.9	ND	0.5	ND	0.5	ND	
	04/01	ND	2.0	ND	2.0	ND	2.5	ND	2.5	ND	2.5	ND	2.5		10.0	ND	2.5	ND	2.5		7.5		2000	ND	2.5	ND	0.5	ND	0.5	ND	2.5		13.0	ND	2.5	ND	0.5	ND	
	04/08	ND	2.0	ND	2.0	ND	0.5	ND	0.5		0.8	ND	0.5		8.8	ND	0.5	ND	0.5		5.3		10900	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/15	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		4.5	ND	0.5	ND	0.5		3.0		4100	ND	0.5	ND	0.5	ND	0.5	ND	0.5		12.0	ND	0.5	ND	0.5	ND	
	04/22	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		3.5	ND	0.5	ND	0.5		2.7		2400	ND	0.5	ND	0.5	ND	0.5	ND	0.5		7.5	ND	0.5	ND	0.5	ND	
	04/28	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		3.8	ND	0.5	ND	0.5		2.4		2300	ND	0.5	ND	0.5	ND	0.5	ND	0.5		6.5	ND	0.5	ND	0.5	ND	
	05/05	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		1.6	ND	0.5	ND	0.5		1.4		1100	ND	0.5	ND	0.5	ND	0.5	ND	0.5		3.2	ND	0.5	ND	0.5	ND	
	05/11	ND	2.0	ND	2.0	ND	0.5	ND	0.5		0.8	ND	0.5		7.5	ND	0.5	ND	0.5		3.8		5200	ND	0.5	ND	0.5	ND	0.5	ND	0.5		10.6	ND	0.5	ND	0.5	ND	
	05/18	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		2.3	ND	0.5	ND	0.5		1.2		1900	ND	0.5	ND	0.5	ND	0.5	ND	0.5		4.5	ND	0.5	ND	0.5	ND	
	05/27	ND	2.0	ND	2.0	ND	0.5	ND	0.5		1.1	ND	0.5		7.0	ND	0.5	ND	0.5		2.3		3100	ND	0.5	ND	0.5	ND	0.5	ND	0.5		5.6	ND	0.5	ND	0.5	ND	
	06/03	ND	2.0	ND	2.0	ND	0.5	ND	0.5		2.2	ND	0.5		13.0		22.0	ND	0.5		1.5		1500	ND	0.5	ND	0.5	ND	0.5	ND	0.5		4.7	ND	0.5	ND	0.5	ND	
	06/16	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		9.4	ND	0.5	ND	0.5		1.3		1150	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
*	06/30	ND	2.0	ND	2.0	ND	2.8	ND	2.8		70.0	ND	4.7		6.2	ND	3.8	ND	2.8	ND	2.8		7600	ND	6.0	ND	0.5	ND	0.5	ND	0.5		12.0	ND	6,0	ND	4.7	ND	
	07/15	ND	2.0	ND	2.0	ND	0.5	ND	0.5		1.0	ND	0.5		5.0	ND	0.5	ND	0.5	ND	0.5		4600	ND	0.5	ND	0.5	ND	0.5	ND	0.5		8.5	ND	0.5	ND	0.5	ND	
	07/27	ND	2.0	ND	2.0	ND	0.5		0.9		1.4	ND	0.5		6.4	ND	0.5	ND	0.5		2.1		4800	ND	0.5	ND	0.5	ND	0.5	ND	0.5		8.6	ND	0.5	ND	0.5	ND	
MW-3																																							
	03/10	ND	2.0	ND	2.0		21.0	ND	0.5	ND	0.5		28.0	ND	0.5	ND	0.5	ND	0.5		2.7	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	03/19	ND	2.0	ND	2.0		40.0	ND	0.5	ND	0.5		20.0	ND	0.5	ND	0.5	ND	0.5		2.3	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	03/25	ND	2.0	ND	2.0		40.0	ND	0.5	ND	0.5		24.0	ND	0.5	ND	0.5	ND	0.5		2.4	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/01	ND	2.0	ND	2.0		57.0	ND	0.5	ND	0.5		28.0	ND	0.5	ND	0.5	ND	0.5		2.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	

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Table 4. Results of Chemical Analyses of Ground-Water Samples
Purgeable Halocarbons (EPA Method 601)

WELL	DATE	DICHLORO-DIFLUORO-METHANE		CHLORO-METHANE		1,1 DI-CHLORO-ETHENE		METHYLENE CHLORIDE		TRANS 1,2 DICHLORO-ETHENE		1,1 DI-CHLORO-ETHANE		CHLORO-FORM		1,1,1 TRI-CHLORO-ETHANE		CARBON TETRA-CHLORIDE		1,2 DI-CHLORO-ETHANE		TRICHLORO-ETHENE		1,2 DI-CHLORO-PROPANE		BROMO-DICHLORO-METHANE		CIS-1,3-DI CHLORO-PROPENE		1,1,2 TRI-CHLORO-ETHANE		TETRA-CHLORO-ETHENE		CHLORO-BENZENE		BROMO-FORM		ALL OTHER 601 COMPOUNDS	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l
DHS ACTION LEVEL		--		--		6.0		40.0		16.0		20.0		--		200.0		5.0		1.0		5.0		10.0		---		16.0		100.0		4.0		30.0		--		--	
	04/15	ND	2.0	ND	2.0	30.6		ND	0.5	ND	0.5	14.3		ND	0.5	ND	0.5	ND	0.5		1.3	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/15	ND	2.0	ND	2.0	37.0		ND	0.5	ND	0.5	14.0		ND	0.5	ND	0.5	ND	0.5		1.1	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/28	ND	2.0	ND	2.0	50.0		ND	0.5	ND	0.5	18.0		ND	0.5		0.9	ND	0.5		1.8	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/28	ND	2.0	ND	2.0	37.0		ND	0.5	ND	0.5	16.0		ND	0.5	ND	0.5	ND	0.5		1.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/11	ND	2.0	ND	2.0	48.0		ND	0.5	ND	0.5	17.0		ND	0.5		1.0	ND	0.5		2.1	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/27	ND	2.0	ND	2.0	24.0		ND	0.5	ND	0.5	10.0			0.6		0.6	ND	0.5		0.9	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	06/16	ND	2.0	ND	2.0	22.5		ND	0.5	ND	0.5	7.2		ND	0.5		0.9	ND	0.5		1.0		0.7	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	07/27	ND	2.0	ND	2.0	22.0		ND	0.5	ND	0.5	8.7		ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		1.2	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
MW-5																																							
	03/10	ND	2.0	ND	2.0	8.0		ND	0.5	ND	0.5	6.6		ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		2.6	ND	0.5	ND	0.5	ND	0.5	ND	
	03/18	ND	2.0	ND	2.0	18.0		ND	0.5	ND	0.5	10.0			2.0		1.5	ND	0.5		1.3		1.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	03/25	ND	2.0	ND	2.0	17.0		ND	0.5	ND	0.5	11.0			2.0		2.6	ND	0.5		1.2	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/01	ND	2.0	ND	2.0	20.5		ND	0.5	ND	0.5	10.0			2.0		2.0	ND	0.5		0.9		0.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/08	ND	2.0	ND	2.0	24.0		ND	0.5	ND	0.5	12.0			3.0		2.5	ND	0.5		1.0		0.7	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/15	ND	2.0	ND	2.0	18.5		ND	0.5	ND	0.5	9.3			3.6		1.6	ND	0.5		1.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/22	ND	2.0	ND	2.0	20.0		ND	0.5	ND	0.5	11.6			4.8		2.3	ND	0.5		1.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		2.5	ND	0.5	ND	0.5	ND	
	04/28	ND	2.0	ND	2.0	18.0		ND	0.5	ND	0.5	9.0			3.7		2.2	ND	0.5		1.1		0.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5		0.9	ND	0.5	ND	0.5	ND	
	05/05	ND	2.0	ND	2.0	22.8		ND	0.5	ND	0.5	9.9			4.3		1.5	ND	0.5		0.9		0.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/11	ND	2.0	ND	2.0	19.0		ND	0.5	ND	0.5	9.8			4.2		2.4	ND	0.5		1.3		0.7	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/11	ND	2.0	ND	2.0	18.0		ND	0.5	ND	0.5	7.5		ND	0.5		2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/18	ND	2.0	ND	2.0	41.0		ND	0.5	ND	0.5	11.0			4.5		2.4	ND	0.5		2.0		1.2	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/27	ND	2.0	ND	2.0	20.0		ND	0.5	ND	0.5	9.5			4.0		1.7	ND	0.5		0.8	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	06/03	ND	2.0	ND	2.0	20.0		ND	0.5		1.3	11.0		ND	0.5	ND	0.5	ND	0.5	ND	0.5		1.0		0.6	ND	0.5	ND	0.5	ND	0.5		0.8	ND	0.5	ND	0.5	ND	

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Table 4. Results of Chemical Analyses of Ground-Water Samples
Purgeable Halocarbons (EPA Method 601)

WELL	DATE	DICHLORO-DIFLUORO-METHANE		CHLORO-METHANE		1,1 DI-CHLORO-ETHENE		METHYLENE CHLORIDE		TRANS 1,2 DICHLORO-ETHENE		1,1 DI-CHLORO-ETHANE		CHLORO-FORM		1,1,1 TRI-CHLORO-ETHANE		CARBON TETRA-CHLORIDE		1,2 DI-CHLORO-ETHANE		TRICHLORO-ETHENE		1,2 DI-CHLORO-PROPANE		BROMO-DICHLORO-METHANE		CIS-1,3-DI CHLORO-PROPENE		1,1,2 TRI-CHLORO-ETHANE		TETRA-CHLORO-ETHENE		CHLORO-BENZENE		BROMO-FORM		ALL OTHER 601 COMPOUNDS	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l
DHS ACTION LEVEL		--		--		6.0		40.0		16.0		20.0		--		200.0		5.0		1.0		5.0		10.0		---		16.0		100.0		4.0		30.0		--		--	
	06/16	ND	2.0	ND	2.0	ND	0.5		110.0	ND	0.5		13.0		3.6		2.7	ND	0.5		1.6		0.8	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
*	06/30	ND	2.0	ND	2.0	ND	2.8	ND	2.8	ND	1.6	ND	4.7	ND	1.6	ND	2.8	ND	2.8	ND	3.8	ND	1.9	ND	6.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	4.1	ND	6.0	ND	4.7	ND
	07/15	ND	2.0	ND	2.0		14.0	ND	0.5	ND	0.5		9.0		4.0		1.2	ND	0.5		1.2		1.2	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	07/27	ND	2.0	ND	2.0		24.0	ND	0.5	ND	0.5		12.0		6.0		2.0	ND	0.5	ND	0.5	ND	0.5		1.8	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
MW-6																																								
	03/09	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		12.0	ND	0.5	ND	0.5		46.0		5600	ND	0.5	ND	0.5	ND	0.5	ND	0.5		9.0	ND	0.5	ND	0.5	ND	
	03/09	ND	2.0	ND	2.0	ND	0.5		0.8		0.9	ND	0.5		13.0	ND	0.5	ND	0.5		48.0		5300	ND	0.5	ND	0.5	ND	0.5	ND	0.5		7.0	ND	0.5	ND	0.5	ND	
	03/21	ND	2.0	ND	2.0	ND	0.5		1.4	ND	0.5	ND	0.5		8.7	ND	0.5	ND	0.5		90.0		276	ND	0.5	ND	0.5	ND	0.5	ND	0.5		10.0	ND	0.5	ND	0.5	ND	
	03/21	ND	2.0	ND	2.0	ND	0.5		2.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		1.3	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		12.3	ND	0.5	ND	0.5	ND	
	03/25	ND	2.0	ND	2.0	ND	0.5		24.0	ND	0.5	ND	0.5		5.2	ND	0.5	ND	0.5		22.0		5811	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	03/25	ND	2.0	ND	2.0	ND	0.5		22.0	ND	0.5	ND	0.5		4.0	ND	0.5	ND	0.5		22.0		5961	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/01	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		14.0	ND	0.5	ND	0.5		27.0		11100	ND	0.5	ND	0.5	ND	0.5	ND	0.5		11.0	ND	0.5	ND	0.5	ND	
	04/01	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		18.0	ND	0.5	ND	0.5		39.0		11300	ND	0.5	ND	0.5	ND	0.5	ND	0.5		15.0	ND	0.5	ND	0.5	ND	
	04/08	ND	2.0	ND	2.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0		10200	ND	50.0	ND	0.5	ND	0.5	ND	50.0	ND	50.0	ND	50.0	ND	0.5	ND	
	04/08	ND	2.0	ND	2.0	ND	0.5	ND	0.5		0.6	ND	0.5		17.0	ND	0.5	ND	0.5		26.3		11500	ND	0.5	ND	0.5	ND	0.5	ND	0.5		23.0		21.0	ND	0.5	ND	
	04/15	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		16.0	ND	0.5	ND	0.5		20.8		9760	ND	0.5	ND	0.5	ND	0.5	ND	0.5		21.5		1.3	ND	0.5	ND	
	04/22	ND	2.0	ND	2.0	ND	0.5	ND	0.5		0.7	ND	0.5		23.0		0.6	ND	0.5		11.8		9300	ND	0.5	ND	0.5	ND	0.5		0.6		22.0	ND	0.5	ND	0.5	ND	
	04/22	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		25.0	ND	0.5	ND	0.5		14.0		11100	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/28	ND	2.0	ND	2.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0	ND	50.0		11600	ND	50.0	ND	0.5	ND	0.5	ND	50.0	ND	50.0	ND	50.0	ND	0.5	ND	50.0
	05/05	ND	2.0	ND	2.0	ND	25.0	ND	25.0	ND	25.0	ND	25.0	ND	25.0	ND	25.0	ND	25.0	ND	25.0		14100	ND	25.0	ND	0.5	ND	0.5	ND	25.0	ND	25.0	ND	25.0	ND	0.5	ND	25.0
	05/05	ND	2.0	ND	2.0	ND	25.0	ND	25.0	ND	25.0	ND	25.0	ND	25.0	ND	25.0	ND	25.0	ND	25.0		11900	ND	25.0	ND	0.5	ND	0.5	ND	25.0	ND	25.0	ND	25.0	ND	0.5	ND	25.0
	05/11	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		11000	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5
	05/18	ND	2.0	ND	2.0	ND	50.0	ND	50.0		1.7	ND	50.0		22.8	ND	50.0	ND	50.0		14.0		8900	ND	50.0	ND	0.5	ND	0.5		1.7		82.0	ND	50.0	ND	0.5	ND	50.0

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Table 4. Results of Chemical Analyses of Ground-Water Samples
Purgeable Halocarbons (EPA Method 601)

WELL	DATE	DICHLORO-DIFLUORO-METHANE		CHLORO-METHANE		1,1 DI-CHLORO-ETHENE		METHYLENE CHLORIDE		TRANS 1,2 DICHLORO-ETHENE		1,1 DI-CHLORO-ETHANE		CHLORO-FORM		1,1,1 TRI-CHLORO-ETHANE		CARBON TETRA-CHLORIDE		1,2 DI-CHLORO-ETHANE		TRICHLORO-ETHENE		1,2 DI-CHLORO-PROPANE		BROMO-DICHLORO-METHANE		CIS-1,3-DI CHLORO-PROPENE		1,1,2 TRI-CHLORO-ETHANE		TETRA-CHLORO-ETHENE		CHLORO-BENZENE		BROMO-FORM		ALL OTHER 601 COMPOUNDS	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l
DHS ACTION LEVEL		--		--			6.0		40.0		16.0		20.0		--		200.0		5.0		1.0		5.0		10.0		---		16.0		100.0		4.0		30.0		--		--	
	05/18	ND	2.0	ND	2.0		0.8	ND	50.0		2.0	ND	50.0		21.8	ND	50.0	ND	50.0		17.0		6900	ND	50.0	ND	0.5	ND	0.5	ND	50.0		78.0	ND	50.0	ND	0.5	ND	50.0
	05/27	ND	2.0	ND	2.0		0.5	ND	0.5		1.0	ND	0.5		18.0	ND	0.5	ND	0.5		5.4		6700	ND	0.5	ND	0.5	ND	0.5		0.6		18.0	ND	0.5	ND	0.5	ND	
	06/03	ND	2.0	ND	2.0	ND	0.5	ND	0.5		1.0	ND	0.5		20.0	ND	0.5	ND	0.5		3.3		4500	ND	0.5	ND	0.5	ND	0.5		0.5		12.0	ND	0.5	ND	0.5	ND	
	06/03	ND	2.0	ND	2.0	ND	0.5	ND	0.5		1.0	ND	0.5		20.0	ND	0.5	ND	0.5		3.3		6600	ND	0.5	ND	0.5	ND	0.5	ND	0.5		11.0	ND	0.5	ND	0.5	ND	
	06/16	ND	2.0	ND	2.0	ND	0.5	ND	0.5		0.7	ND	0.5		49.0	ND	0.5	ND	0.5		2.8		3900	ND	0.5	ND	0.5		2.5		1.6		27.0		2.2	ND	0.5	ND	
	06/16	ND	2.0	ND	2.0		2.1	ND	0.5		1.1	ND	0.5		28.0	ND	0.5	ND	0.5		3.2		5300	ND	0.5	ND	0.5		2.4		2.0		31.0		5.0	ND	0.5	ND	
*	06/30	ND	2.0	ND	2.0	ND	2.8	ND	2.8		160.0	ND	4.7	ND	1.6	ND	3.8	ND	2.8	ND	2.8		4500	ND	6.0	ND	0.5	ND	0.5	ND	0.5		16.0	ND	6.0	ND	4.7	ND	
*	06/30	ND	2.0	ND	2.0	ND	2.8	ND	2.8		160.0	ND	4.7	ND	1.6	ND	3.8	ND	2.8	ND	2.8		4300	ND	6.0	ND	0.5	ND	0.5	ND	0.5		15.0	ND	6.0	ND	4.7	ND	
	07/15	ND	2.0	ND	2.0	ND	0.5	ND	0.5		8.4	ND	0.5		30.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		4.0	ND	0.5		2.6		3.2		42.0	ND	0.5		1.6	ND	
	07/27	ND	2.0	ND	2.0		1.0		0.7		11.0	ND	0.5		26.0	ND	0.5	ND	0.5		3.7		9700	ND	0.5	ND	0.5	ND	0.5	ND	0.5		22.0	ND	0.5	ND	0.5	ND	
	07/27	ND	2.0	ND	2.0		0.8	ND	0.5		9.9	ND	0.5		26.0	ND	0.5	ND	0.5		3.7		11000	ND	0.5	ND	0.5	ND	0.5	ND	0.5		24.0	ND	0.5	ND	0.5	ND	
MW-7																																								
	03/09	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	03/18	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	03/25	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		0.7	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/01	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/15	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		1.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/28	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		2.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/11	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		3.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/27	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		1.4	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	06/16	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		2.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	07/27	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		2.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	

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Table 4. Results of Chemical Analyses of Ground-Water Samples
Purgeable Halocarbons (EPA Method 601)

WELL	DATE	DICHLORO-DIFLUORO-METHANE		CHLORO-METHANE		1,1 DI-CHLORO-ETHENE		METHYLENE CHLORIDE		TRANS 1,2 DICHLORO-ETHENE		1,1 DI-CHLORO-ETHANE		CHLORO-FORM		1,1,1 TRI-CHLORO-ETHANE		CARBON TETRA-CHLORIDE		1,2 DI-CHLORO-ETHANE		TRICHLORO-ETHENE		1,2 DI-CHLORO-PROPANE		BROMO-DICHLORO-METHANE		CIS-1,3-DI CHLORO-PROPENE		1,1,2 TRI-CHLORO-ETHANE		TETRA-CHLORO-ETHENE		CHLORO-BENZENE		BROMO-FORM		ALL OTHER 601 COMPOUNDS	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l
DHS ACTION LEVEL		--		--		6.0		40.0		16.0		20.0		--		200.0		5.0		1.0		5.0		10.0		---		16.0		100.0		4.0		30.0		--		--	
MW-8																																							
	03/10	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		130.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	03/18	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		12.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	03/25	ND	2.0	ND	2.0		1.3	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		0.7		5.8	ND	0.5	ND	0.5	ND	0.5	ND	0.5		0.8	ND	0.5	ND	0.5	ND	
	04/01	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		6.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5		0.9	ND	0.5	ND	0.5	ND	
	04/15	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		0.6	ND	0.5	ND	0.5	ND	0.5		9.8	ND	0.5	ND	0.5	ND	0.5	ND	0.5		0.7	ND	0.5	ND	0.5	ND	
	04/28	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		0.9	ND	0.5	ND	0.5	ND	0.5		20.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/11	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		10.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/27	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		1.7	ND	0.5	ND	0.5	ND	0.5		13.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	05/27	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		1.8	ND	0.5	ND	0.5	ND	0.5		11.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	06/16	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		1.8	ND	0.5	ND	0.5	ND	0.5		22.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	07/27	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		2.4	ND	0.5	ND	0.5	ND	0.5		18.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
MW-9																																							
	03/10	ND	2.0	ND	2.0		9.0	ND	0.5	ND	0.5		2.6	ND	0.5		2.3	ND	0.5		3.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5		0.6	ND	0.5	ND	0.5	ND	0.5
	03/21	ND	2.0	ND	2.0		12.6	ND	0.5	ND	0.5		3.0	ND	0.5		2.6	ND	0.5		5.0		1.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5
*	06/30	ND	2.0	ND	2.0	ND	2.8	ND	2.8	ND	1.6	ND	4.7	ND	1.6	ND	3.8	ND	2.8	ND	2.8	ND	1.9	ND	6.0	ND	0.5	ND	0.5	ND	0.5	ND	4.1	ND	6.0	ND	4.7	ND	
	07/15	ND	2.0		17.0		5.8	ND	0.5	ND	0.5		1.1		6.0		0.7	ND	0.5		1.3		1.2	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	07/15	ND	2.0		31.0		4.7	ND	0.5	ND	0.5		1.0		5.4		0.6	ND	0.5		1.0		0.7	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
BLANK																																							
	03/09	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	83.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	03/21	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	03/25	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	
	04/01	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	

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Table 4. Results of Chemical Analyses of Ground-Water Samples
Purgeable Halocarbons (EPA Method 601)

WELL	DATE	DICHLORO-DIFLUORO-METHANE		CHLORO-METHANE		1,1 DI-CHLORO-ETHENE		METHYLENE CHLORIDE		TRANS 1,2 DICHLORO-ETHENE		1,1 DI-CHLORO-ETHANE		CHLORO-FORM		1,1,1 TRI-CHLORO-ETHANE		CARBON TETRA-CHLORIDE		1,2 DI-CHLORO-ETHANE		TRICHLORO-ETHENE		1,2 DI-CHLORO-PROPANE		BROMO-DICHLORO-METHANE		CIS-1,3-DI CHLORO-PROPENE		1,1,2 TRI-CHLORO-ETHANE		TETRA-CHLORO-ETHENE		CHLORO-BENZENE		BROMO-FORM		ALL OTHER 601 COMPOUNDS
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l
DHS ACTION LEVEL		--		--			6.0		40.0		16.0		20.0		--		200.0		5.0		1.0		5.0		10.0		---		16.0		100.0		4.0		30.0		--		--
	04/15	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
	04/22	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
	04/28	ND	2.0	ND	2.0	ND	0.5		1.2	ND	0.5	ND	0.5		7.4	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
	05/05	ND	2.0	ND	2.0	ND	0.5		1.7	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
	05/11	ND	2.0	ND	2.0	ND	0.5		35.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
	05/18	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
	05/27	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
	06/03	ND	2.0	ND	2.0	ND	0.5		3.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
	06/16	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5		0.6	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
*	06/30	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
	07/15	ND	2.0	ND	2.0	ND	0.5		0.7	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND
	07/27	ND	2.0	ND	2.0	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND

NOTES:

ST: Status.

ND: Not detected at level shown.

NT: Not tested.

* : Analysis performed by NET Pacific using EPA Test Method 624

Table 5. Results of Chemical Analyses of Ground-Water Samples
Purgeable Aromatics (EPA Method 602)
Petroleum Hydrocarbons (EPA Method 8015)

WELL	DATE	BENZENE		TOLUENE		CHLORO-BENZENE		ETHYL-BENZENE		XYLENES		1,3 DI-CHLORO-BENZENE		1,4 DI-CHLORO-BENZENE		1,2 DI-CHLORO-BENZENE		TPH AS GASOLINE		TPH AS DIESEL	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	mg/l
DHS Action Level			0.7		100		30		680		620		130	LOQ	0.2		130		--		--
MW-2																					
	03/09		471.0		514.0	ND	20.0		162.0		157.0	ND	20.0	ND	20.0	ND	20.0		6300	ND	10.0
	03/21		182.0		9.2		6.0		33.0		33.0	ND	0.2	ND	0.2	ND	0.2		4500	ND	1.0
	03/25		83.0		10.0	ND	0.2		11.2		15.0	ND	0.2	ND	0.2	ND	0.2		3200	ND	1.0
	04/01		17.0		7.0	ND	1.0		4.0		9.0	ND	1.0	ND	1.0	ND	1.0		3400	NT	
	04/08		51.0		3.0	ND	0.2	ND	0.2		1.4	ND	0.2	ND	0.2	ND	0.2		1660	NT	
	04/15		25.3		2.1	ND	0.2		5.1		3.0	ND	0.2	ND	0.2	ND	0.2		1600	NT	
	04/22		22.0		3.2	ND	0.2		1.5		4.5	ND	0.2	ND	0.2	ND	0.2		12000	NT	
	04/28		26.5		3.6	ND	0.4		2.0		5.5	ND	0.4	ND	0.4	ND	0.4		2000	NT	
	05/05		32.0		4.3	ND	0.2		1.7		10.0	ND	0.2	ND	0.2	ND	0.2		1400	NT	
	05/11		8.7		0.6	ND	0.2	ND	0.2		1.0	ND	0.2	ND	0.2	ND	0.2		1400	NT	
	05/18		20.0		2.1	ND	0.4	ND	0.4		4.5	ND	0.4	ND	0.4	ND	0.4		660	NT	
	05/27		8.3		1.2	ND	0.2	ND	0.2		2.6	ND	0.2	ND	0.2	ND	0.2		1700	NT	
	06/03		39.0		4.7	ND	0.2		0.7		7.0	ND	0.2	ND	0.2	ND	0.2		1700	NT	
	06/16		4.5		0.9	ND	0.2	ND	0.2		1.7	ND	0.2	ND	0.2	ND	0.2		830	NT	
*	06/30		8.5	ND	6.0	ND	6.0	ND	7.2	NT		ND	6.0	ND	6.0	ND	6.0		630	NT	
	07/15		10.0		1.2	ND	0.2	ND	0.2		2.4	ND	0.2	ND	0.2	ND	0.2		12000	NT	
	07/27		9.9		1.1	ND	0.2	ND	0.2		3.4	ND	0.2	ND	0.2	ND	0.2		1200	NT	
MW-3																					
	03/10	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	10.0
	03/18	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	1.0
	03/25	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	1.0
	04/01		0.7		0.4	ND	0.2	ND	0.2		1.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	

Table 5. Results of Chemical Analyses of Ground-Water Samples
Purgeable Aromatics (EPA Method 602)
Petroleum Hydrocarbons (EPA Method 8015)

WELL	DATE	BENZENE		TOLUENE		CHLORO-BENZENE		ETHYL-BENZENE		XYLENES		1,3 DI-CHLORO-BENZENE		1,4 DI-CHLORO-BENZENE		1,2 DI-CHLORO-BENZENE		TPH AS GASOLINE		TPH AS DIESEL	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	mg/l
DHS Action Level			0.7		100		30		680		620		130	LOQ	0.2		130		--		--
	04/15	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/15	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/28	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/28	ND	0.4	ND	0.4	ND	0.4	ND	0.4	ND	0.4	ND	0.4	ND	0.4	ND	0.4	ND	50	NT	
	05/11	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/27	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	06/16	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	07/27	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
MW-5																					
	03/10	ND	0.2		0.3	ND	0.2	ND	0.2		0.8	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	10.0
	03/18	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	1.0
	03/25	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2		0.6	ND	0.2	ND	0.2	ND	50	ND	1.0
	04/01	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/08	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/15	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/22	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/28	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/05	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/11	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/11	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/18	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/27	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	06/16	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	

Table 5. Results of Chemical Analyses of Ground-Water Samples
Purgeable Aromatics (EPA Method 602)
Petroleum Hydrocarbons (EPA Method 8015)

WELL	DATE	BENZENE		TOLUENE		CHLORO-BENZENE		ETHYL-BENZENE		XYLENES		1,3 DI-CHLORO-BENZENE		1,4 DI-CHLORO-BENZENE		1,2 DI-CHLORO-BENZENE		TPH AS GASOLINE		TPH AS DIESEL	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	mg/l
DHS Action Level			0.7		100		30		680		620		130	LOQ	0.2		130		--		--
*	06/30	ND	4.4	ND	6.0	ND	6.0	ND	7.2	NT		ND	6.0	ND	6.0	ND	6.0	ND	50	NT	
	07/15	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	07/27	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
MW-6																					
	03/09		2100.0		4900.0		0.8				8100.0	ND	33.0	ND	33.0	ND	33.0		48000	ND	10.0
	03/09		2000.0		4200.0	ND	0.2		1100.0		5600.0	ND	0.2	ND	33.0	ND	33.0		47000	ND	10.0
	03/21		3028.0		2089.0		14.0		1308.0		2980.0	ND	0.2	ND	0.2	ND	0.2		53000	ND	1.0
	03/21		3680.0		3180.0		125.0		1580.0		6300.0	ND	0.2	ND	0.2	ND	0.2		51000	ND	1.0
	03/25		18.0		27.0	ND	0.2	ND	0.2		48.0		0.3	ND	0.2	ND	0.2		31000		9.0
	03/25		13.0		27.0	ND	0.2		8.0		49.0	ND	0.2	ND	0.2	ND	0.2		50000		9.0
	04/01		440.0		490.0	ND	2.0		300.0		970.0	ND	2.0	ND	2.0	ND	2.0		32000	NT	
	04/01		430.0		500.0	ND	1.0		300.0		990.0	ND	1.0	ND	1.0	ND	1.0		39000	NT	
	04/08		2340.0		2890.0	ND	2.0		34.0		2520.0	ND	2.0	ND	2.0	ND	2.0		34050	NT	
	04/08		2760.0		3.0	ND	2.0		9.5		390.0	ND	2.0	ND	2.0	ND	2.0		4010	NT	
	04/15		456.0		1470.0	ND	0.2		3480.0		547.0	ND	0.2	ND	0.2	ND	0.2		23000	NT	
	04/22		890.0		4400.0	ND	10.0		240.0		6100.0		3300.0	ND	10.0	ND	10.0		37000	NT	
	04/22		520.0		2700.0	ND	10.0		26.0		2200.0	ND	10.0	ND	10.0	ND	10.0		26000	NT	
	04/28		340.0		3350.0	ND	100.0	ND	100.0		5000.0	ND	100.0	ND	100.0	ND	100.0		32000	NT	
	05/05		585.0		3740.0	ND	10.0		200.0		6930.0	ND	10.0	ND	10.0	ND	10.0		38000	NT	
	05/05		365.0		2370.0	ND	10.0		90.0		4330.0	ND	10.0	ND	10.0	ND	10.0		19000	NT	
	05/11		310.0		3100.0	ND	10.0		45.0		4700.0	ND	10.0	ND	10.0	ND	10.0		34000	NT	
	05/18		150.0		1600.0	ND	20.0		40.0		3000.0	ND	20.0	ND	20.0	ND	20.0		25000	NT	
	05/18		200.0		1800.0	ND	20.0		28.0		3300.0	ND	10.0	ND	10.0	ND	10.0		26000	NT	

Table 5. Results of Chemical Analyses of Ground-Water Samples
Purgeable Aromatics (EPA Method 602)
Petroleum Hydrocarbons (EPA Method 8015)

WELL	DATE	BENZENE		TOLUENE		CHLORO-BENZENE		ETHYL-BENZENE		XYLENES		1,3 DI-CHLORO-BENZENE		1,4 DI-CHLORO-BENZENE		1,2 DI-CHLORO-BENZENE		TPH AS GASOLINE		TPH AS DIESEL	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	mg/l
DHS Action Level			0.7		100		30		680		620		130	LOQ	0.2		130		--		--
	05/27		740.0		7300.0	ND	20.0		740.0		13000.0	ND	20.0	ND	20.0	ND	20.0		36000	NT	
	06/03		260.0		2500.0	ND	20.0		320.0		5100.0	ND	20.0	ND	20.0	ND	20.0		39000	NT	
	06/03		260.0		2300.0	ND	20.0		290.0		4800.0	ND	20.0	ND	20.0	ND	20.0		32000	NT	
	06/16		280.0		3100.0	ND	20.0		370.0		5500.0	ND	20.0	ND	20.0	ND	20.0		30000	NT	
	06/16		190.0		2200.0	ND	20.0		330.0		4000.0	ND	20.0	ND	20.0	ND	20.0		25000	NT	
*	06/30		170.0		2000.0	ND	6.0		260.0	NT		ND	6.0	ND	6.0	ND	6.0		21000	NT	
*	06/30		170.0		1700.0	ND	6.0	ND	7.2	NT		ND	6.0	ND	6.0	ND	6.0		13000	NT	
	07/15		8.4		300.0	ND	0.2		89.0		570.0	ND	0.2		2.6	ND	0.2		8600	NT	
	07/27		70.0		260.0	ND	0.2		0.7		1000.0	ND	0.2	ND	0.2	ND	0.2		4400	NT	
	07/27		64.0		280.0	ND	0.2		0.7		1000.0	ND	0.2	ND	0.2	ND	0.2		4900	NT	
MW-7																					
	03/09		2.1		5.4	ND	0.2		2.6		6.1	ND	0.2	ND	0.2	ND	0.2		430	ND	10.0
	03/18		0.8	ND	0.2		1.9	ND	0.2		1.1	ND	0.2	ND	0.2	ND	0.2		180	ND	1.0
	03/25	ND	0.2		1.7	ND	0.2		0.4	ND	0.2	ND	0.2	ND	0.2	ND	0.2		53	ND	1.0
	04/01	ND	0.2		0.5	ND	0.2		1.4		2.4	ND	0.2	ND	0.2	ND	0.2		128	NT	
	04/15	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/28	ND	0.4	ND	0.4	ND	0.4	ND	0.4	ND	0.4	ND	0.4	ND	0.4	ND	0.4	ND	50	NT	
	05/11	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/27	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	06/16	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	07/27	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
MW-8																					
	03/10	ND	0.2		3.2	ND	0.2		0.3		1.5	ND	0.2	ND	0.2	ND	0.2		50	ND	10.0

Table 5. Results of Chemical Analyses of Ground-Water Samples
Purgeable Aromatics (EPA Method 602)
Petroleum Hydrocarbons (EPA Method 8015)

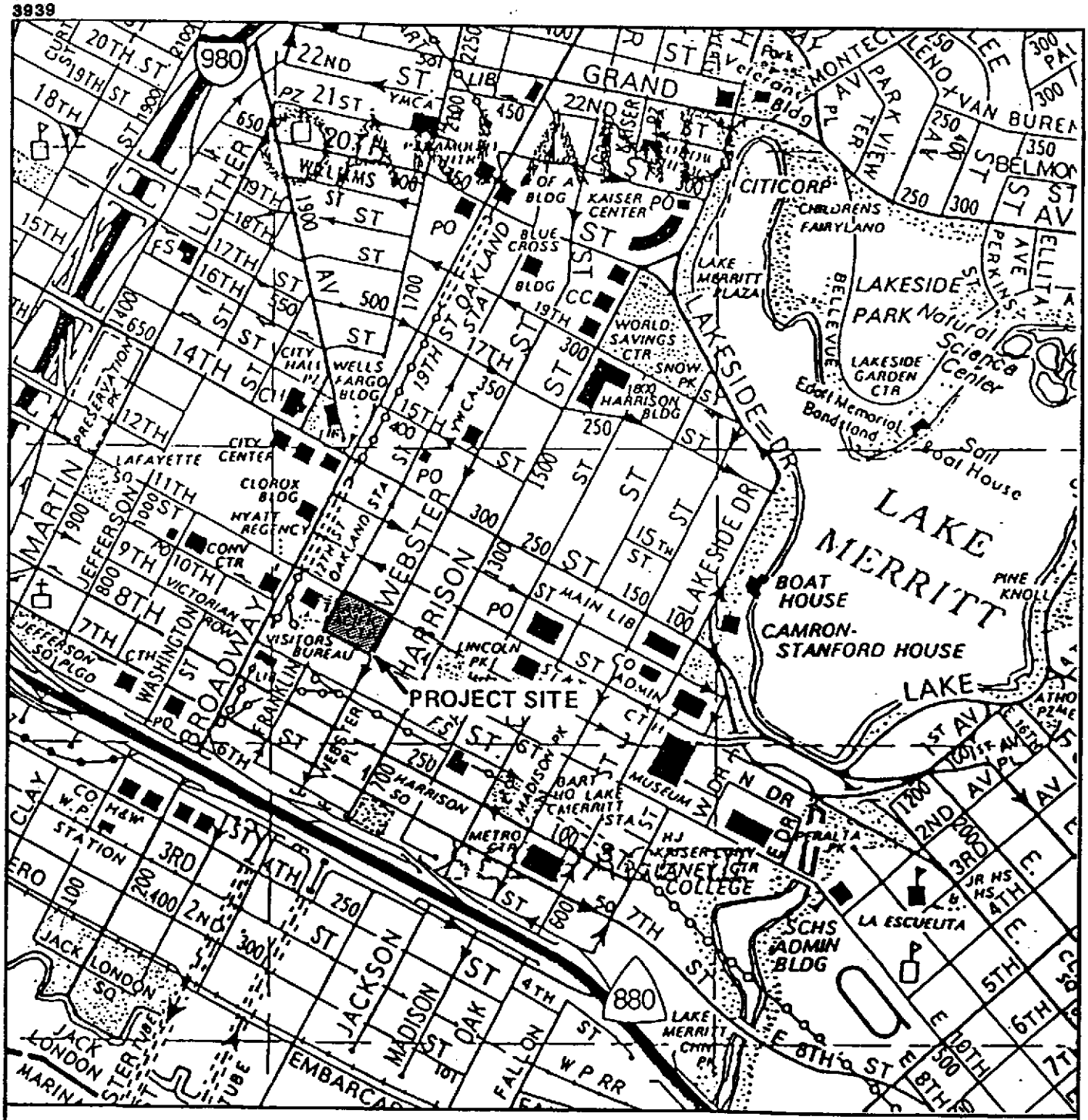
WELL	DATE	BENZENE		TOLUENE		CHLORO-BENZENE		ETHYL-BENZENE		XYLENES		1,3 DI-CHLORO-BENZENE		1,4 DI-CHLORO-BENZENE		1,2 DI-CHLORO-BENZENE		TPH AS GASOLINE		TPH AS DIESEL	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	mg/l
DHS Action Level			0.7		100		30		680		620		130	LOQ	0.2		130		--		--
	03/18	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	1.0
	03/25	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	1.0
	03/31		0.6	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	0.5
	04/15	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/28	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/11	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/27	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	06/16	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	07/27	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
MW-9																					
	03/10		110.0		95.0	ND	0.4		16.0		230.0	ND	0.4	ND	0.4	ND	0.4		4700	ND	10.0
	03/21		400.0		184.0		0.4	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2		3400	ND	1.0
*	06/30		160.0		83.0	ND	6.0	ND	7.2	NT		ND	6.0	ND	6.0	ND	6.0		91	NT	
	07/15		200.0		170.0	ND	0.2	ND	0.2		81.0	ND	0.2	ND	0.2	ND	0.2		880	NT	
	07/15		110.0		77.0	ND	0.2	ND	0.2		46.0	ND	0.2	ND	0.2	ND	0.2		180	NT	
BLANK																					
	03/09	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	10.0
	03/21	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	1.0
	03/25	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	ND	1.0
	04/01	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/08	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/15	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	04/22	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	

Table 5. Results of Chemical Analyses of Ground-Water Samples
Purgeable Aromatics (EPA Method 602)
Petroleum Hydrocarbons (EPA Method 8015)

WELL	DATE	BENZENE		TOLUENE		CHLORO-BENZENE		ETHYL-BENZENE		XYLENES		1,3 DI-CHLORO-BENZENE		1,4 DI-CHLORO-BENZENE		1,2 DI-CHLORO-BENZENE		TPH AS GASOLINE		TPH AS DIESEL	
		ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	ug/l	ST	mg/l
DHS Action Level			0.7		100		30		680		620		130	LOQ	0.2		130		--		--
	04/28	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/05	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/11	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/18	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	05/27	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	06/03	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	06/16	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
*	06/30	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	07/15	ND	0.2		0.7	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	
	07/27	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	0.2	ND	50	NT	

NOTES:

ST: Status.
ND: Not detected at level shown.
NT: Not tested.
LOQ: Limit of Quantification.
* : Analysis performed by NET Pacific using EPA Test Method 624.



Harding Lawson Associates
Engineers and Geoscientists

Location Map
A-Aquifer Monitoring Report
Chinatown Redevelopment Project Area
Oakland, California

PLATE **1**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
DM	9382,023.02	DF Wand	6/88		

3940

MW-8

MW-2

MW-6

11th Street

Franklin Street

Webster Street

MW-3

DW-1

MW-5

10th Street

MW-7

MW-9

EXPLANATION

MW-2 A-Aquifer Monitoring Well Location

DW-1 B-Aquifer Monitoring Well Location

N

0 50 100

SCALE IN FEET

109463

Harding Lawson Associates
Engineers and Geoscientists

Site Plan and Well Location Map
A-Aquifer Monitoring Report
Chinatown Redevelopment Project Area
Oakland, California

PLATE 2

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
DM	9382,023.02	DF Wieland	6/88		

MW-8
15.03

MW-2
15.70

MW-6
15.97

11th Street

15.25

15.50

15.75

15.00

Franklin Street

Webster Street

MW-3
15.68

DW-1

MW-5
15.44

10th Street

MW-7
14.87

MW-9
15.25

EXPLANATION

MW-2 15.70 — A-Aquifer Monitoring Well Ground-Water Elevation (Feet Above Sea Level)

DW-1 — B-Aquifer Monitoring Well Location

15.00 — Water-Level Elevation Contour in Feet above Mean Sea Level (MSL) Contour Interval .25 feet

N

0 50 100

SCALE IN FEET

109463

HLA

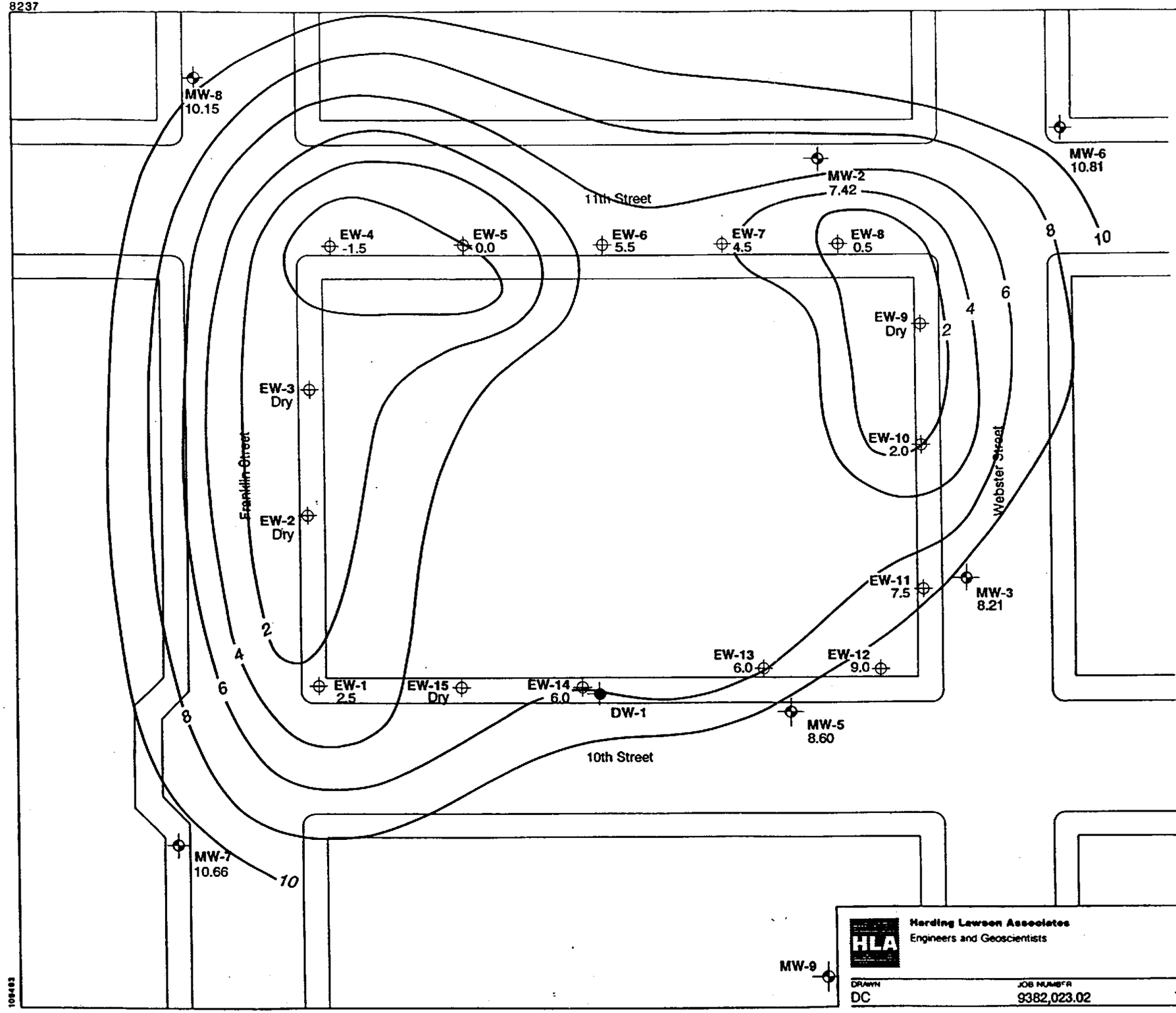
Harding Lawson Associates
Engineers and Geoscientists

Ground Water Elevations - March 9-10, 1988
A-Aquifer Monitoring Report
Chinatown Redevelopment Project Area
Oakland, California

PLATE 3

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	9382,023.02	DHL	8/88		

8237



EXPLANATION

MW-2 7.42 — A-Aquifer Monitoring Well, Ground-Water Elevation (Feet Above Mean Sea Level)

DW-1 — B-Aquifer Monitoring Well

EW-1 2.5 — Dewatering Well, Ground-Water Elevation (Feet Above Mean Sea Level)

2 — Line of Equal Water-Level Elevation (Feet Above Mean Sea Level), Contour Interval = 2 feet

Water-Level Data from Monitoring Wells Collected by HLA, 6/3/88

Water-Level Data from Dewatering Wells Collected by AGE, 6/1/88

N

0 50 100

SCALE IN FEET

108463

Harding Lawson Associates
Engineers and Geoscientists

Ground-Water Elevations, June 1-3, 1988
A-Aquifer Monitoring Report
Chinatown Redevelopment Project Area
Oakland, California

PLATE 4

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
DC	9382,023.02		8/88		

APPENDIX A

BORING LOGS AND WELL COMPLETION DETAILS

8238

MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN No 4 SIEVE SIZE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW		WELL GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
			GP		POORLY GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
		GRAVELS WITH OVER 12% FINES	GM		SILTY GRAVELS, SILTY GRAVELS WITH SAND
			GC		CLAYEY GRAVELS, CLAYEY GRAVELS WITH SAND
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO 4 SIEVE SIZE	CLEAN SANDS WITH LITTLE OR NO FINES	SW		WELL GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
			SP		POORLY GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SANDS AND GRAVELS
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SANDS AND GRAVELS, LEAN CLAYS
			OL		ORGANIC SILTS OR CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS, MICACEOUS OR DIATOMACIOUS, FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH		ORGANIC SILTS OR CLAYS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS			Pt		PEAT AND OTHER HIGHLY ORGANIC SOILS

UNIFIED SOIL CLASSIFICATION - ASTM D2487-85

Perm	—	Permeability
Consol	—	Consolidation
LL	—	Liquid Limit (%)
PI	—	Plastic Index (%)
G_s	—	Specific Gravity
MA	—	Particle Size Analysis
■	—	"Undisturbed" Sample
☒	—	Bulk or Classification Sample
YR	—	Munsell Color Index

Shear Strength (psf)		Confining Pressure		
TxUU (FM) or (S)	3200	(2600)	—	Unconsolidated Undrained Triaxial Shear (field moisture or saturated)
TxCU (P)	3200	(2600)	—	Consolidated Undrained Triaxial Shear (with or without pore pressure measurement)
TxCD	3200	(2600)	—	Consolidated Drained Triaxial Shear
SSCU (P)	3200	(2600)	—	Simple Shear Consolidated Undrained (with or without pore pressure measurement)
SSCD	3200	(2600)	—	Simple Shear Consolidated Drained
DSCD	2700	(2000)	—	Consolidated Drained Direct Shear
UC	470		—	Unconfined Compression
LVS	700		—	Laboratory Vane Shear

KEY TO TEST DATA

Harding Lawson Associates
Engineers and Geoscientists

Unified Soil Classification Chart
A-Aquifer Monitoring Report
Chinatown Redevelopment Project Area
Oakland, California

PLATE **A1**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
DM	9382,023.02	DFW	6/88		

4452

Top of PVC Casing Elevation 39.59 ft

GROUND SURFACE

See below for Well Top Detail

10-3/4 IN. DIAMETER BORING
0 to 45.0 ft

4 IN. DIAMETER SCHEDULE 40 PVC WELL CASING
0.5 to 20.0 ft

BENTONITE-CEMENT SEAL
0 to 16.0 ft

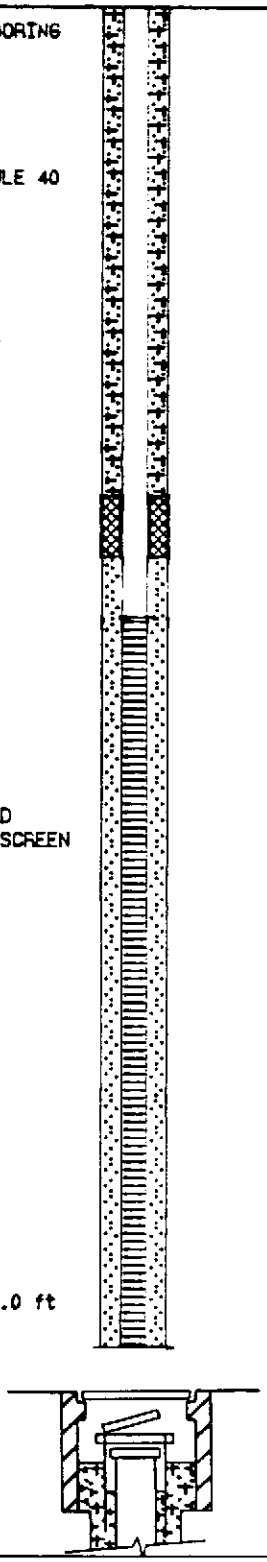
BENTONITE PELLET SEAL
16.0 TO 18.0 ft

MONTEREY #3 SAND PACK
18.0 TO 44.0 ft

4 IN. DIAMETER SLOTTED SCHEDULE 40 PVC WELL SCREEN
(0.020 in. slot size)
20.0 to 44.0 ft

BOTTOM WELL CAP at 44.0 ft
BOREHOLE CLEANED OUT to 44.0 ft

WATERPROOF WELL CAP
STEEL WELL HOUSING WITH LOCKING COVER



OVA (ppm)

0
0
0
3.2
400
98
4.2

Depth (ft) | Sample

Equipment CME 75 HSA 10.75"dia

Elevation 40.0 ft Date 3/1/88

0 CONCRETE SIDEWALK
DARK BROWN SILTY SAND (SM) (10YR 3/3) medium dense, moist, very fine- to fine-grained

5 YELLOWISH BROWN SAND WITH CLAY (SP-SC) (10YR 5/6) dense, moist, very fine- to fine-grained

10

15 color change to BROWNISH YELLOW (10YR 6/6)

20

25 OLIVE GRAY SAND (SP) (5YR 5/2) dense, saturated, very fine- to fine-grained
▼ (3/1/88)

30 BROWN SAND (SP) (10YR 5/2) dense, saturated, very fine- to fine-grained

35

40 BROWN SANDY CLAY WITH GRAVEL (CL) (10YR 5/3) very stiff to hard, saturated, few coarse angular gravel

45 OLIVE CLAY WITH SILT (CL) (5YR 4/3) hard, saturated

BOTTOM OF BOREHOLE at 45.0 ft

50

Harding Lawson Associates
Engineering and Environmental Services

Log of Boring and Well Completion Detail MW-6
A-Aquifer Monitoring Well Installation
City of Oakland
Oakland, California

PLATE **A2**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	9382.023.02		11/88		

4453

Top of PVC Casing Elevation 39.10 ft

GROUND SURFACE

See Below for Well Top Detail

10-3/4 IN. DIAMETER BORING
0 to 44.5 ft

4 IN. DIAMETER SCHEDULE 40 PVC WELL CASING
0.5 to 20.0 ft

BENTONITE CEMENT SEAL
0 TO 16.0 ft

BENTONITE PELLET SEAL
16.0 to 18.0 ft

MONTEREY #3 SANDPACK
18.0 to 43.0 ft

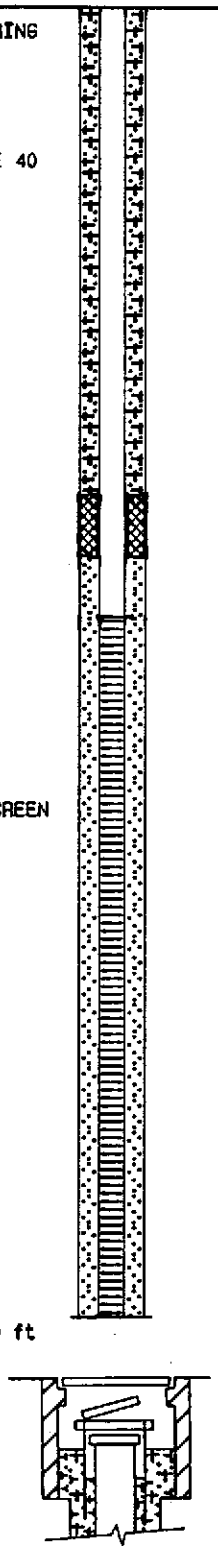
4 IN. DIAMETER SLOTTED SCHEDULE 40 PVC WELL SCREEN
(0.020 in. slot size)
20.0 to 43.0 ft

BOTTOM WELL CAP at 43.0 ft

BOREHOLE CLEANED OUT to 43.0 ft

WATERPROOF WELL CAP

STEEL WELL HOUSING WITH LOCKING COVER



OVA (ppm)

70

5

1

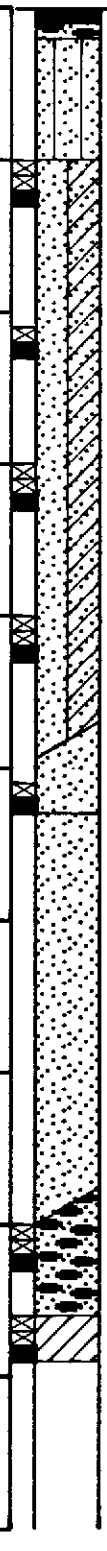
2

7

0

0

Depth (ft) / Sample



0
5
10
15
20
25
30
35
40
45
50

Equipment CME 75 HSA 10.75"dia

Elevation 39.4 ft Date 3/7/88

CONCRETE
BASEROCK
DARK BROWN SILTY SAND (SM) (10YR 3/3) medium dense, moist, very fine to fine-grained

YELLOWISH BROWN SAND WITH CLAY (SP-SC) (10YR 5/6) medium dense, moist, poorly graded, very fine- to fine-grained

color change to yellowish brown (10YR 5/4)

becomes loose

OLIVE-GRAY SAND (SP) (5YR 5/2) medium dense, saturated, fine-grained

▼ (3/7/88)
BROWN SAND (SP) (10YR 5/3) medium dense, saturated, fine-grained

becomes loose

BROWN SANDY GRAVEL WITH CLAY (GP)

PALE OLIVE CLAY (CL) (5Y 6/5) very stiff, moist

BOTTOM OF BOREHOLE at 44.5 ft

Harding Lawson Associates
Engineering and Environmental Services

Log of Boring and Well Completion Detail MW-7
A-Aquifer Monitoring Well Installation
City of Oakland
Oakland, California

PLATE **A3**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	9382, 023.02	DFW	11/88		

4454

Top of PVC Casing Elevation 40.47 ft

Equipment CME 75 HSA 10.75"dia

Elevation 40.6 ft Date 3/8/88

GROUND SURFACE

See below for Well Top Detail

OVA (ppm)

Depth (ft)

Sample

10-3/4 IN. DIAMETER BORING
0 to 41.5 ft

4 IN. DIAMETER SCHEDULE 40 PVC WELL CASING
0.5 to 20.0 ft

BENTONITE CEMENT SEAL
0 TO 16.0 ft

BENTONITE PELLET SEAL
16.0 to 18.0 ft

MONTEREY #3 SANDPACK
18.0 to 40.0 ft

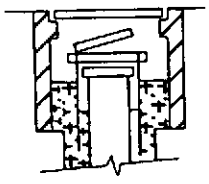
4 IN. DIAMETER SLOTTED SCHEDULE 40 PVC WELL SCREEN (0.020 in. slot size)
20.0 to 40.0 ft

BOTTOM WELL CAP at 40.0 ft

BOREHOLE CLEANED OUT to 40.0 ft

WATERPROOF WELL CAP

STEEL WELL HOUSING WITH LOCKING COVER



OVA (ppm)	Depth (ft)
0	0
0	5
0	10
0	15
0	20
7	25
0	40

0 5 10 15 20 25 30 35 40 45 50

ASPHALT
COBBLESTONES
DARK BROWN SILTY SAND (SM) (10YR 3/3) with gravel, medium dense, moist

YELLOWISH BROWN SAND WITH CLAY (SP) (10YR 5/6) medium dense, moist, very fine- to fine-grained

OLIVE-GRAY SAND (SP) (5YR 5/2) dense, wet, very fine to fine-grained
▽ (3/8/88)

BROWN SAND (SP) (10YR 5/3) dense, saturated, very fine to fine-grained

BROWN CLAYEY GRAVEL (GC) dense, saturated, gravels to 2-in. diameter

PALE OLIVE LEAN CLAY (CL) (5YR 6/3) saturated, few sand

BOTTOM OF BOREHOLE at 41.5 ft

Harding Lawson Associates
Engineering and Environmental Services

Log of Boring and Well Completion Detail MW-8
A-Aquifer Monitoring Well Installation
City of Oakland
Oakland, California

PLATE **A4**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	9382.023.02	DF Wlard	11/88		

4455

Top of PVC Casing
Elevation 38.50 ft

Equipment CME 75 HSA 10.75"dia
Elevation 38.7 ft Date 2/29/88

GROUND SURFACE

See below for Well Top Detail

OVA (ppm)

Depth (ft)

Sample

10-3/4 IN. DIAMETER BORING
0 to 41.5 ft

4 IN. DIAMETER SCHEDULE 40 PVC WELL CASING
0.5 to 20 ft

BENTONITE-CEMENT SEAL
0 to 16 ft

BENTONITE PELLET SEAL
16 to 18 ft

MONTEREY #3 SAND PACK
18 TO 40 ft

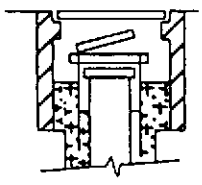
4 IN. DIAMETER SLOTTED SCHEDULE 40 PVC WELL SCREEN
(0.020 in. slot size)
20 to 40 ft

BOTTOM WELL CAP at 40 ft

BOREHOLE CLEANED OUT to 40 ft

WATERPROOF WELL CAP

STEEL WELL HOUSING WITH LOCKING COVER



OVA (ppm)
0
48
58
880
>1000
0

0
5
10
15
20
25
30
35
40
45
50

ASPHALT
YELLOWISH BROWN SAND (SP) (10YR 5/6) medium dense, moist

DARK BROWN SILTY SAND (SM) (10YR 3/3) medium dense, moist, very fine- to fine-grained

DARK YELLOWISH BROWN SAND (SP) (10YR 4/4) dense, moist, poorly graded, very fine- to fine-grained, minor clay

color change to brownish yellow (10YR 5/4)

OLIVE GRAY SAND (SP) (5YR 5/2) dense, moist, poorly graded

▼ (2/29/88)

BROWN SAND (SP) (10YR 5/3) dense, saturated

LIGHT OLIVE CLAY (CL) (5YR 6/3) hard, saturated, trace silt
BOTTOM OF BOREHOLE at 41.5 ft

Harding Lawson Associates
Engineering and Environmental Services

Log of Boring and Well Completion Detail MW-9
A-Aquifer Monitoring Well Installation
City of Oakland
Oakland, California

PLATE
A5

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	9382.023.02		11/88		

APPENDIX B

RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES

WESCO Laboratories

Report Date:	17-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	29-Feb-88
Preservatives:	none		
Analyst:	Attalla/Oram	Analysis Completion Date:	01-Mar-88
WESCO JOB #:	HLA 0827-L		
Analytical Method:	EPA 3550/8015	Hold Time:	0 days

MATRIX: SOIL

LAB #	CLIENT ID	Diesel (mg/kg)	Detection Limit(mg/kg)
8-2026	HW-9 6.0	N.D.	10
8-2027	HW-9 11.0	N.D.	10
8-2028	HW-9 16.0	N.D.	10
8-2029	HW-9 20.5	N.D.	10
8-2030	HW-9 26.0	N.D.	10
8-2031	HW-9 41.0	N.D.	10

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc

Report Date:	17-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	07-Mar-88
Preservatives:	none		
Analyst:	Lewis/Arntzen	Analysis Completion Date:	07-Mar-88
WESCO JOB #:	HLA 0827-L	Hold Time:	7 days
Analytical Method:	EPA 5030/8015		

LAB #: 8-2026 MATRIX: SOIL
CLIENT'S ID: HW-9 6.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 93 %

LAB #: 8-2027 MATRIX: SOIL
CLIENT'S ID: HW-9 11.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 105 %

LAB #: 8-2028 MATRIX: SOIL
CLIENT'S ID: HW-9 16.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Gasoline	2950000	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 113 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	17-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	09-Mar-88
Preservatives:	none	Analysis Completion Date:	09-Mar-88
Analyst:	Arntzen	Hold Time:	9 days
WESCO JOB #:	HLA 0827-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-2029 MATRIX: SOIL
CLIENT'S ID: HW-9 20.5

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 101 %

LAB #: 8-2030 MATRIX: SOIL
CLIENT'S ID: HW-9 26.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Gasoline	6370	2500

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 101 %

LAB #: 8-2031 MATRIX: SOIL
CLIENT'S ID: HW-9 41.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Gasoline	122	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 94 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	17-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	03-Mar-88
Preservatives:	none		
Analyst:	Arntzen/Lewis	Analysis Completion Date:	03-Mar-88
WESCO JOB #:	HLA 0827-L		
Analytical Method:	EPA 8010	Hold time:	3 days

LAB #: 8-2026 MATRIX: SOIL

CLIENT'S ID: HW-9 6.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	0.8	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	60 %
1,4-Dichlorobutane	77 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	17-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	03-Mar-88
Preservatives:	none	Analysis Completion Date:	03-Mar-88
Analyst:	Arntzen/Lewis	Hold time:	3 days
WESCO JOB #:	HLA 0827-L		
Analytical Method:	EPA 8010		

LAB #: 8-2027 MATRIX: SOIL

CLIENT'S ID: HW-9 11.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	0.8	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	69 %
1,4-Dichlorobutane	84 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	17-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	03-Mar-88
Preservatives:	none	Analysis Completion Date:	03-Mar-88
Analyst:	Arntzen/Lewis	Hold time:	3 days
WESCO JOB #:	HLA 0827-L		
Analytical Method:	EPA 8010		

LAB #: 8-2028 MATRIX: SOIL

CLIENT'S ID: HW-9 16.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	0.6	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	70 %
1,4-Dichlorobutane	85 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	18-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	03-Mar-88
Preservatives:	none		
Analyst:	Arntzen/Lewis	Analysis Completion Date:	03-Mar-88
WESCO JOB #:	HLA 0827-L		
Analytical Method:	EPA 8010	Hold time:	3 days

LAB #: 8-2029 MATRIX: SOIL

CLIENT'S ID: HW-9 20.5

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	60 %
1,4-Dichlorobutane	94 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 17-Mar-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: P. Llewellyn
Submitted by: W. Godwin
Preservatives: none
Analyst: Arntzen/Lewis
WESCO JOB #: HLA 0827-L
Analytical Method: EPA 8010

Client Contract/PO: 09382,021.02
Date Sampled: 29-Feb-88
Site: City of Oakland
Date Received: 29-Feb-88
Extract/Digest/Purge Date: 03-Mar-88
Analysis Completion Date: 03-Mar-88
Hold time: 3 days

LAB #: 8-2030
CLIENT'S ID: HW-9 26.0

MATRIX: SOIL

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	84 %
1,4-Dichlorobutane	76 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	18-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	03-Mar-88
Preservatives:	none		
Analyst:	Arntzen/Lewis	Analysis Completion Date:	03-Mar-88
WESCO JOB #:	HLA 0827-L		
Analytical Method:	EPA 8010	Hold time:	3 days

LAB #: 8-2031 MATRIX: SOIL

CLIENT'S ID: HW-9 41.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	76 %
1,4-Dichlorobutane	76 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	17-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	03-Mar-88
Preservatives:	none		
Analyst:	Arntzen/Lewis	Analysis Completion Date:	03-Mar-88
WESCO JOB #:	HLA 0827-L		
Analytical Method:	EPA 8020	Hold Time:	3 days

LAB #: 8-2026 MATRIX: SOIL
CLIENT'S ID: HW-9 6.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	85 %

LAB #: 8-2027 MATRIX: SOIL
CLIENT'S ID: HW-9 11.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Benzene	6.7	0.2
Toluene	0.3	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	89 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	17-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	03-Mar-88
Preservatives:	none		
Analyst:	Arntzen/Lewis	Analysis Completion Date:	03-Mar-88
WESCO JOB #:	HLA 0827-L	Hold Time:	3 days
Analytical Method:	EPA 8020		

LAB #: 8-2028 MATRIX: SOIL
CLIENT'S ID: HW-9 16.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Benzene	66	0.2
Toluene	1.0	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	4.3	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	86 %

LAB #: 8-2029 MATRIX: SOIL
CLIENT'S ID: HW-9 20.5

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Benzene	1.0	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	85 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	17-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	03-Mar-88
Preservatives:	none		
Analyst:	Arntzen/Lewis	Analysis Completion Date:	03-Mar-88
WESCO JOB #:	HLA 0827-L		
Analytical Method:	EPA 8020	Hold Time:	3 days

LAB #: 8-2030 MATRIX: SOIL
CLIENT'S ID: HW-9 26.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Benzene	14.8	0.2
Toluene	12.0	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	5.6	0.2
Xylene	16.3	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	80 %

LAB #: 8-2031 MATRIX: SOIL
CLIENT'S ID: HW-9 41.0

COMPOUND	RESULT (ug/kg)	Detection Limit (ug/kg)
Benzene	N.D.	0.2
Toluene	2.5	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	0.6	0.2
Xylene	6.2	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	75 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	17-Mar-88	Client Contract/PO:	09382,021.02
Client:	Harding Lawson Associates	Date Sampled:	29-Feb-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	P. Llewellyn	Date Received:	29-Feb-88
Submitted by:	W. Godwin	Extract/Digest/Purge Date:	14-Mar-88
Preservatives:	none		
Analyst:	Libby/Staggs	Analysis Completion Date:	14-Mar-88
WESCO JOB #:	HLA 0827-L		
Analytical Method:	CAM Metals	Hold Time:	14 days

LAB #: 8-2030 MATRIX: SOIL

CLIENT ID: HW-9 26.0

COMPOUND	RESULT (mg/kg)	Detection limit(mg/kg)	Method number
Antimony (Sb)	N.D.	0.07	EPA 7041
Arsenic (As)	1.03	0.04	EPA 7061
Barium (Ba)	62.7	3.0	APHA 304
Beryllium (Be)	0.356	0.008	EPA 7091
Cadmium (Cd)	N.D.	1.0	EPA 7130
Chromium (Cr)	47.6	2.0	EPA 7190
Cobalt (Co)	6	2	EPA 7200
Copper (Cu)	5	2	EPA 7210
Lead (Pb)	N.D.	2.0	EPA 7420
Mercury (Hg)	0.128	0.080	EPA 7470
Molybdenum (Mo)	N.D.	20	EPA 7480
Nickel (Ni)	37	2	EPA 7520
Selenium (Se)	N.D.	0.013	EPA 7741
Silver (Ag)	N.D.	2	EPA 7760
Thallium (Tl)	N.D.	0.01	EPA 7841
Vanadium (V)	29.32	0.80	EPA 7911
Zinc (Zn)	30	2	EPA 7950

N.D.: Not Detected

Susan Tinney

Analytical Supervisor

APPENDIX C

RESULTS OF LABORATORY ANALYSES OF GROUND-WATER SAMPLES

WESCO Laboratories

MONITORING WELLS 3-9-88

Report Date:	18-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	09-Mar-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Rick Hutton	Date Received:	10-Mar-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	10-Mar-88
Preservatives:	none	Analysis Completion Date:	10-Mar-88
Analyst:	Arntzen	Hold Time:	1 day
WESCO JOB #:	HLA 0831.1-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-2174 MATRIX: WATER
CLIENT'S ID: 88100901 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	430	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 75 %

LAB #: 8-2179 MATRIX: WATER
CLIENT'S ID: 88100902 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	6300	250

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 91 %

N.D.: Not Detected

Analytical Supervisor

14 Gall Drive Suite A
Novato, California 94949 415 883-6428
A Division of Western Ecological Services Company, Inc.

Report Date:	18-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	09-Mar-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Rick Hutton	Date Received:	10-Mar-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	10-Mar-88
Preservatives:	none	Analysis Completion Date:	10-Mar-88
Analyst:	Arntzen	Hold Time:	1 day
WESCO JOB #:	HLA 0831.1-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-2184 MATRIX: WATER
CLIENT'S ID: 88100903 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	48000	12500

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 89 %

LAB #: 8-2189 MATRIX: WATER
CLIENT'S ID: 88100904 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	47000	500

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 103 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	18-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	09-Mar-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Rick Hutton	Date Received:	10-Mar-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	10-Mar-88
Preservatives:	none	Analysis Completion Date:	10-Mar-88
Analyst:	Arntzen	Hold Time:	1 day
WESCO JOB #:	HLA 0831.1-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-2194 MATRIX: WATER

CLIENT'S ID: 88100905

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA

Surrogate Spike % Recovery

Fluorobenzene 71 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	18-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	09-Mar-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Rick Hutton	Date Received:	10-Mar-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	10-Mar-88
Preservatives:	none	Analysis Completion Date:	10-Mar-88
Analyst:	Attalla	Hold Time:	1 day
WESCO JOB #:	HLA 0831.1-L		
Analytical Method:	EPA 3550/8015		

MATRIX: SOIL

LAB #	CLIENT ID	Diesel (mg/kg)	Detection Limit(mg/kg)
8-2175	8810901	N.D.	10
8-2180	8810902	N.D. *	10
8-2185	8810903	N.D. *	10
8-2190	8810904	N.D. *	10
8-2195	8810905	N.D.	10

* : Gasoline present in sample.

N.D.: Not Detected

Analytical Supervisor

Report Date:	18-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	09-Mar-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Rick Hutton	Date Received:	10-Mar-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	10-Mar-88
Preservatives:	none	Analysis Completion Date:	10-Mar-88
Analyst:	Arntzen/Lewis	Hold time:	1 day
WESCO JOB #:	HLA 0831.1-L		
Analytical Method:	EPA 601		

LAB #: 8-2172
CLIENT'S ID: 88100901 MW-7
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	90 %
1,4-Dichlorobutane	103 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	18-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	09-Mar-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Rick Hutton	Date Received:	10-Mar-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	10-Mar-88
Preservatives:	none	Analysis Completion Date:	10-Mar-88
Analyst:	Arntzen/Lewis	Hold time:	1 day
WESCO JOB #:	HLA 0831.1-L		
Analytical Method:	EPA 601		

LAB #: 8-2177 MATRIX: WATER
CLIENT'S ID: 88100902 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	200
Chloromethane	N.D.	200
Vinyl Chloride	N.D.	200
Bromomethane	N.D.	200
Chloroethane	N.D.	200
Trichlorofluoromethane	N.D.	200
1,1-Dichloroethene	N.D.	50
Methylene Chloride	N.D.	50
trans-1,2-Dichloroethene	N.D.	50
1,1-Dichloroethane	N.D.	50
Chloroform	N.D.	50
1,1,1-Trichloroethane (TCA)	N.D.	50
Carbon Tetrachloride	N.D.	50
1,2-Dichloroethane (EDC)	N.D.	50
Trichloroethene (TCE)	N.D.	50
1,2-Dichloropropane	N.D.	50
Bromodichloromethane	N.D.	50
2-Chloroethylvinyl ether	N.D.	50
trans-1,3-Dichloropropene	N.D.	50
cis-1,3-Dichloropropene	N.D.	50
1,1,2-Trichloroethane	N.D.	50
Tetrachloroethene	N.D.	50
Dibromochloromethane	N.D.	50
Chlorobenzene	N.D.	50
Bromoform	N.D.	50
1,1,2,2-Tetrachloroethane	N.D.	50
1,3-Dichlorobenzene	N.D.	50
1,4-Dichlorobenzene	N.D.	50
1,2-Dichlorobenzene	N.D.	50

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	90 %
1,4-Dichlorobutane	92 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 18-Mar-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Rick Hutton
Submitted by: K. Hunter
Preservatives: none
Analyst: Arntzen/Lewis
WESCO JOB #: HLA 0831.1-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 09-Mar-88
Site: City of Oakland
Date Received: 10-Mar-88
Extract/Digest/Purge Date: 12-Mar-88
Analysis Completion Date: 12-Mar-88
Hold time: 3 days

LAB #: 8-2187
CLIENT'S ID: 88100904 MW-6
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	0.8	0.5
trans-1,2-Dichloroethene	0.9	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	13	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	48	0.5
Trichloroethene (TCE)	5300	83.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	7	0.5
Dibromochloromethane	1.1	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	91 %
1,4-Dichlorobutane	90 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 18-Mar-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Rick Hutton
Submitted by: K. Hunter
Preservatives: none
Analyst: Arntzen/Lewis
WESCO JOB #: HLA 0831.1-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 09-Mar-88
Site: City of Oakland
Date Received: 10-Mar-88
Extract/Digest/Purge Date: 12-Mar-88
Analysis Completion Date: 12-Mar-88
Hold time: 3 days

LAB #: 8-2192
CLIENT'S ID: 88100905
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	83.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	94 %
1,4-Dichlorobutane	96 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 18-Mar-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Rick Hutton
Submitted by: K. Hunter
Preservatives: none
Analyst: Arntzen/Lewis
WESCO JOB #: HLA 0831.1-L
Analytical Method: EPA 602

Client Contract/PO: 09382,022.02
Date Sampled: 09-Mar-88
Site: City of Oakland
Date Received: 10-Mar-88
Extract/Digest/Purge Date: 12-Mar-88
Analysis Completion Date: 12-Mar-88
Hold Time: 3 days

LAB #: 8-2172
CLIENT'S ID: 88100901
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	2.1	0.2
Toluene	5.4	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	2.6	0.2
Xylene	6.1	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	137 %*

LAB #: 8-2177
CLIENT'S ID: 88100902
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	471	20
Toluene	514	20
Chlorobenzene	N.D.	20
Ethylbenzene	162	20
Xylene	157	20
1,3-Dichlorobenzene	N.D.	20
1,4-Dichlorobenzene	N.D.	20
1,2-Dichlorobenzene	N.D.	20

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	115 %

* : Matrix interference
N.D.: Not Detected

Analytical Supervisor

Report Date:	18-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	09-Mar-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Rick Hutton	Date Received:	10-Mar-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	12-Mar-88
Preservatives:	none	Analysis Completion Date:	12-Mar-88
Analyst:	Arntzen/Lewis	Hold Time:	3 days
WESCO JOB #:	HLA 0831.1-L		
Analytical Method:	EPA 602		

LAB #: 8-2192 MATRIX: WATER
CLIENT'S ID: 88100905

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	127 %

N.D.: Not Detected

Analytical Supervisor

WESCO Laboratories

MONITORING WELLS 3-10-88

Report Date:	11-Apr-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	10-Mar-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Rick Hutton	Date Received:	10-Mar-88
Submitted by:	Rick Hutton	Extract/Digest/Purge Date:	10-Mar-88
Preservatives:	none	Analysis Completion Date:	11-Mar-88
Analyst:	Attalla	Hold Time:	0 day
WESCO JOB #:	HLA 0831.3		
Analytical Method:	3510/8015		

MATRIX: WATER

LAB #	CLIENT ID		Diesel (mg/l)	Detection limit(mg/l)
8-2211	101001	MW-8	N.D.	10
8-2216	101002	MW-5	N.D.	10
8-2221	101003	MW-3	N.D.	10
8-2226	101004	MW-9	N.D.*	10

N.D.: Not Detected
* : Gasoline is present in sample.

Analytical Supervisor

[illegible] Bay Drive Suite A
[illegible] California 94549 (415) 685-[illegible]

Report Date:	11-Apr-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	10-Mar-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Rick Hutton	Date Received:	10-Mar-88
Submitted by:	Rick Hutton	Extract/Digest/Purge Date:	11-Mar-88
Preservatives:	none	Analysis Completion Date:	11-Mar-88
Analyst:	Arntzen	Hold Time:	1 day
WESCO JOB #:	HLA 0831.3		
Analytical Method:	EPA 5030/8015		

LAB #: 8-2220 MATRIX: WATER
CLIENT'S ID: 101003 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 95 %

LAB #: 8-2225 MATRIX: WATER
CLIENT'S ID: 101004 MW-9

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	4700	100

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 110 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 11-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Rick Hutton
Submitted by: Rick Hutton
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.3
Analytical Method: EPA 601

Client Contract/PO: 9382,022.02
Date Sampled: 10-Mar-88
Site: City of Oakland
Date Received: 10-Mar-88
Extract/Digest/Purge Date: 11-Mar-88
Analysis Completion Date: 11-Mar-88
Hold time: 1 day

LAB #: 8-2208
CLIENT'S ID: 101001 MW-8
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	130	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans 1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	101 %
1,4-Dichlorobutane	93 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 11-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Rick Hutton
Submitted by: Rick Hutton
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.3
Analytical Method: EPA 601

Client Contract/PO: 9382,022.02
Date Sampled: 10-Mar-88
Site: City of Oakland
Date Received: 10-Mar-88
Extract/Digest/Purge Date: 11-Mar-88
Analysis Completion Date: 11-Mar-88
Hold time: 1 day

LAB #: 8-2213
CLIENT'S ID: 101002 MW-5
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	8	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	6.6	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	2.6	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	87 %
1,4-Dichlorobutane	91 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	11-Apr-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	10-Mar-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Rick Hutton	Date Received:	10-Mar-88
Submitted by:	Rick Hutton	Extract/Digest/Purge Date:	11-Mar-88
Preservatives:	none	Analysis Completion Date:	11-Mar-88
Analyst:	Arntzen	Hold time:	1 day
WESCO JOB #:	HLA 0831.3		
Analytical Method:	EPA 601		

LAB #: 8-2218 MATRIX: WATER

CLIENT'S ID: 101003 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	21	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	28	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	2.7	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	65 %
1,4-Dichlorobutane	94 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 11-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Rick Hutton
Submitted by: Rick Hutton
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.3
Analytical Method: EPA 601

Client Contract/PO: 9382,022.02
Date Sampled: 10-Mar-88
Site: City of Oakland
Date Received: 10-Mar-88
Extract/Digest/Purge Date: 11-Mar-88
Analysis Completion Date: 11-Mar-88
Hold time: 1 day

LAB #: 8-2223
CLIENT'S ID: 101004 MW-9
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	9	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	2.6	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	2.3	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	3.5	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	0.6	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	76 %
1,4-Dichlorobutane	91 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 11-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Rick Hutton
Submitted by: Rick Hutton
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.3
Analytical Method: EPA 602

Client Contract/PO: 9382,022.07
Date Sampled: 10-Mar-88
Site: City of Oakland
Date Received: 10-Mar-88
Extract/Digest/Purge Date: 11-Mar-88
Analysis Completion Date: 11-Mar-88
Hold Time: 1 day

LAB #: 8-2210
CLIENT'S ID: 101001 MW-8
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	3.2	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	0.3	0.2
Xylene	1.5	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	101 %

LAB #: 8-2215
CLIENT'S ID: 101002 MW-5
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	0.3	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	0.8	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	102 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 11-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Rick Hutton
Submitted by: Rick Hutton
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.3
Analytical Method: EPA 602

Client Contract/PO: 9382,022.02
Date Sampled: 10-Mar-88
Site: City of Oakland
Date Received: 10-Mar-88
Extract/Digest/Purge Date: 11-Mar-88
Analysis Completion Date: 11-Mar-88
Hold Time: 1 day

LAB #: 8-2220
CLIENT'S ID: 101003 MW-3
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	95 %

LAB #: 8-2225
CLIENT'S ID: 101004 MW-9
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	110	0.4
Toluene	95	0.4
Chlorobenzene	N.D.	0.4
Ethylbenzene	16	0.4
Xylene	230	0.4
1,3-Dichlorobenzene	N.D.	0.4
1,4-Dichlorobenzene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.4

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	110 %

N.D.: Not Detected

Analytical Supervisor

MONITORING WELLS

WESCO Laboratories

3-18-88

Report Date: 29-Mar-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: B. Loskutoff
Submitted by: B. Loskutoff
Preservatives: none
Analyst: Attalla
WESCO JOB #: HLA 0831.11-L
Analytical Method: 3510/8015

Client Contract/PO: 09382,022.02
Date Sampled: 18-Mar-88
Site: City of Oakland, Wells #2
Date Received: 18-Mar-88
Extract/Digest/Purge Date: 21-Mar-88
Analysis Completion Date: 24-Mar-88
Hold Time: 3 days

MATRIX: WATER

LAB #	CLIENT ID		Diesel (mg/l)	Detection limit(mg/l)
8-2668	111821	MW-3	N.D.	1.0
8-2672	111822	MW-8	N.D.	1.0
8-2676	111823	MW-7	N.D.	1.0
8-2680	111824	MW-5	N.D.	1.0

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc.

Report Date:	28-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	18-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells #2
Sampled by:	B. Loskutoff	Date Received:	18-Mar-88
Submitted by:	B. Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Arntzen	Hold time:	3 days
WESCO JOB #:	HLA 0831.11-L		
Analytical Method:	EPA 601		

LAB #: 8-2665 MATRIX: WATER

CLIENT'S ID: 111821 MW 3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	40	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	20	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	2.3	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	83 %
1,4-Dichlorobutane	82 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 28-Mar-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: B. Loskutoff
Submitted by: B. Loskutoff
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.11-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 18-Mar-88
Site: City of Oakland, Wells #2
Date Received: 18-Mar-88
Extract/Digest/Purge Date: 21-Mar-88
Analysis Completion Date: 21-Mar-88
Hold time: 3 days

LAB #: 8-2669
CLIENT'S ID: 111822 MW-8
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	12	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	0.9	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	90 %
1,4-Dichlorobutane	91 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	28-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	18-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells #2
Sampled by:	B. Loskutoff	Date Received:	18-Mar-88
Submitted by:	B. Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Arntzen	Hold time:	3 days
WESCO JOB #:	HLA 0831.11-L		
Analytical Method:	EPA 601		

LAB #: 8-2673 MATRIX: WATER

CLIENT'S ID: 111823 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	90 %
1,4-Dichlorobutane	90 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 28-Mar-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: B. Loskutoff
Submitted by: B. Loskutoff
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.11-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 18-Mar-88
Site: City of Oakland, Wells #2
Date Received: 18-Mar-88
Extract/Digest/Purge Date: 21-Mar-88
Analysis Completion Date: 21-Mar-88
Hold time: 3 days

LAB #: 8-2677
CLIENT'S ID: 111824 MW-5
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	18	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	10	0.5
Chloroform	2	0.5
1,1,1-Trichloroethane (TCA)	1.5	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	1.3	0.5
Trichloroethene (TCE)	1.0	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	86 %
1,4-Dichlorobutane	88 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	28-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	18-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells #2
Sampled by:	B. Loskutoff	Date Received:	18-Mar-88
Submitted by:	B. Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Arntzen	Hold Time:	3 days
WESCO JOB #:	HLA 0831.11-L		
Analytical Method:	EPA 602		

LAB #: 8-2665 MATRIX: WATER
CLIENT'S ID: 111821 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	105 %

LAB #: 8-2669 MATRIX: WATER
CLIENT'S ID: 111822 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	106 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	28-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	18-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells #2
Sampled by:	B. Loskutoff	Date Received:	18-Mar-88
Submitted by:	B. Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Arntzen	Hold Time:	3 days
WESCO JOB #:	HLA 0831.11-L		
Analytical Method:	EPA 602		

LAB #: 8-2674 MATRIX: WATER
CLIENT'S ID: 111823 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	0.8	0.2
Toluene	N.D.	0.2
Chlorobenzene	1.9	0.2
Ethylbenzene	N.D.	0.2
Xylene	1.1	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	103 %

LAB #: 8-2678 MATRIX: WATER
CLIENT'S ID: 111824 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	102 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	28-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	18-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells #2
Sampled by:	B. Loskutoff	Date Received:	18-Mar-88
Submitted by:	B. Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Arntzen	Hold Time:	3 days
WESCO JOB #:	HLA 0831.11-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-2666 MATRIX: WATER
CLIENT'S ID: 111821 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 92 %

LAB #: 8-2670 MATRIX: WATER
CLIENT'S ID: 111822 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 103 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	28-Mar-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	18-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells #2
Sampled by:	B. Loskutoff	Date Received:	18-Mar-88
Submitted by:	B. Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Arntzen	Hold Time:	3 days
WESCO JOB #:	HLA 0831.11-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-2674 MATRIX: WATER
CLIENT'S ID: 111823 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	180	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 89 %

LAB #: 8-2678 MATRIX: WATER
CLIENT'S ID: 111824 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 104 %

N.D.: Not Detected

Analytical Supervisor

WESCO Laboratories

Report Date:	29-Mar-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	24-Mar-88
Analyst:	Attalla	Hold Time:	0 days
WESCO JOB #:	HLA 0831.14-L		
Analytical Method:	3510/8015		

MATRIX: WATER

LAB #	CLIENT ID		Diesel (mg/l)	Detection limit(mg/l)
8-2835	122121	MW-2	N.D.	1.0
8-2836	122122	MW-9	N.D.	1.0
8-2837	122123	MW-6	N.D.*	1.0
8-2838	122124	MW-6	N.D.*	1.0
8-2839	122125	Field Blank	N.D.	1.0

N.D.: Not Detected
* : Gasoline present in sample.

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc.

Report Date:	29-Mar-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Attalla/Arntzen	Hold Time:	0 days
WESCO JOB #:	HLA 0831.14-L		
Analytical Method:	EPA 602		

LAB #: 8-2841 MATRIX: WATER
CLIENT'S ID: 122121 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	182	0.2
Toluene	9.2	0.2
Chlorobenzene	6	0.2
Ethylbenzene	33	0.2
Xylene	33	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	98 %

LAB #: 8-2843 MATRIX: WATER
CLIENT'S ID: 122122 MW-9

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	400	0.2
Toluene	184	0.2
Chlorobenzene	0.4	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	174 %*

N.D.: Not Detected
* : Matrix interference

Analytical Supervisor

Report Date:	29-Mar-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Attalla/Arntzen	Hold Time:	0 days
WESCO JOB #:	HLA 0831.14-L		
Analytical Method:	EPA 602		

LAB #: 8-2845 MATRIX: WATER
CLIENT'S ID: 122123 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	3028	0.2
Toluene	2089	0.2
Chlorobenzene	14	0.2
Ethylbenzene	1308	0.2
Xylene	2980	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	133 %*

LAB #: 8-2847 MATRIX: WATER
CLIENT'S ID: 122124 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	3680	0.2
Toluene	3180	0.2
Chlorobenzene	125	0.2
Ethylbenzene	1580	0.2
Xylene	6300	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	129 %*

N.D.: Not Detected
* : Matrix interference

Analytical Supervisor

Report Date:	29-Mar-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Attalla/Arntzen	Hold Time:	0 days
WESCO JOB #:	HLA 0831.14-L		
Analytical Method:	EPA 602		

LAB #: 8-2849 MATRIX: WATER

CLIENT'S ID: 122125 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	103 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	10-May-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Attalla/Arntzen	Hold time:	0 days
WESCO JOB #:	HLA 0831.14-L - Revised		
Analytical Method:	EPA 601		

LAB #: 8-2841 MATRIX: WATER
CLIENT'S ID: 122121

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	1.5	0.5
Methylene Chloride	1.3	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	1.4	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	166	0.5
Trichloroethene (TCE)	276	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	2.3	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	105 %
1,4-Dichlorobutane	116 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	29-Mar-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none		
Analyst:	Attalla/Arntzen	Analysis Completion Date:	21-Mar-88
WESCO JOB #:	HLA 0831.14-L		
Analytical Method:	EPA 601	Hold time:	0 days

LAB #: 8-2843 MATRIX: WATER

CLIENT'S ID: 122122 MW-9

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	12.6	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	3	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	2.6	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	5	0.5
Trichloroethene (TCE)	1.0	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	109 %
1,4-Dichlorobutane	120 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	29-Mar-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Attalla/Arntzen	Hold time:	0 days
WESCO JOB #:	HLA 0831.14-L		
Analytical Method:	EPA 601		

LAB #: 8-2845 MATRIX: WATER

CLIENT'S ID: 122123 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	1.4	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	8.7	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	90	0.5
Trichloroethene (TCE)	276	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	10	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	111 %
1,4-Dichlorobutane	119 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	29-Mar-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Attalla/Arntzen	Hold time:	0 days
WESCO JOB #:	HLA 0831.14-L		
Analytical Method:	EPA 601		

LAB #: 8-2847 MATRIX: WATER

CLIENT'S ID: 122124 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	2.5	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	1.3	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	12.3	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	111 %
1,4-Dichlorobutane	120 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	29-Mar-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none		
Analyst:	Attalla/Arntzen	Analysis Completion Date:	21-Mar-88
WESCO JOB #:	HLA 0831.14-L		
Analytical Method:	EPA 601	Hold time:	0 days

LAB #: 8-2849 MATRIX: WATER

CLIENT'S ID: 122125 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	108 %
1,4-Dichlorobutane	110 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	29-Mar-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Arntzen	Hold Time:	0 days
WESCO JOB #:	HLA 0831.14-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-2840 MATRIX: WATER
CLIENT'S ID: 122121 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	4500	250

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 108 %

LAB #: 8-2842 MATRIX: WATER
CLIENT'S ID: 122122 MW-9

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	3400	250

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 82 %

LAB #: 8-2844 MATRIX: WATER
CLIENT'S ID: 122123 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	53000	2500

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 83 %

Analytical Supervisor

Report Date:	29-Mar-88	Client Contract/PO:	09382,026.02
Client:	Harding Lawson Associates	Date Sampled:	21-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Bill Loskutoff	Date Received:	21-Mar-88
Submitted by:	Bill Loskutoff	Extract/Digest/Purge Date:	21-Mar-88
Preservatives:	none	Analysis Completion Date:	21-Mar-88
Analyst:	Arntzen	Hold Time:	0 days
WESCO JOB #:	HLA 0831.14-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-2846 MATRIX: WATER
CLIENT'S ID: 122124 MW-L

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	51000	500

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 89 %

LAB #: 8-2848 MATRIX: WATER
CLIENT'S ID: 122125 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 105 %

N.D.: Not Detected

Analytical Supervisor

MONITORING WELLS 3-25-88

WESCO Laboratories

Report Date:	06-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	25-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	25-Mar-88
Submitted by:	JMK	Extract/Digest/Purge Date:	30-Mar-88
Preservatives:	none	Analysis Completion Date:	30-Mar-88
Analyst:	Attalla	Hold Time:	5 days
WESCO JOB #:	HLA 0831.20-L		
Analytical Method:	3510/8015		

MATRIX: WATER

LAB #	CLIENT ID	Diesel (mg/l)	Detection limit(mg/l)
8-3298	122331 BLANK	N.D.	1.0
8-3299	122332 MW-3	N.D.	1.0
8-3300	122333 MW-8	N.D.	1.0
8-3301	122334 MW-7	N.D.	1.0
8-3302	122335 MW-5	N.D.	1.0
8-3303	122336 MW-2	N.D.	1.0
8-3304	122337 MW-6	9*	1.0
8-3305	122338 MW-6	9*	1.0

N.D.: Not Detected
* : Compound detected could be a light petroleum hydrocarbon.

Analytical Supervisor

Report Date:	06-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	25-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	25-Mar-88
Submitted by:	JMK	Extract/Digest/Purge Date:	01-Apr-88
Preservatives:	none	Analysis Completion Date:	01-Apr-88
Analyst:	Arntzen	Hold Time:	7 days
WESCO JOB #:	HLA 0831.20-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-3282 MATRIX: WATER
CLIENT'S ID: 122331 BLANK

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 99 %

LAB #: 8-3284 MATRIX: WATER
CLIENT'S ID: 122332 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 78 %

LAB #: 8-3286 MATRIX: WATER
CLIENT'S ID: 122333 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 95 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	06-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	25-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	25-Mar-88
Submitted by:	JMK	Extract/Digest/Purge Date:	01-Apr-88
Preservatives:	none	Analysis Completion Date:	01-Apr-88
Analyst:	Arntzen	Hold Time:	7 days
WESCO JOB #:	HLA 0831.20-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-3288 MATRIX: WATER
CLIENT'S ID: 122334 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	53	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 111 %

LAB #: 8-3290 MATRIX: WATER
CLIENT'S ID: 122335 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 97 %

LAB #: 8-3292 MATRIX: WATER
CLIENT'S ID: 122336 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	3200	250.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 115 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	06-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	25-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	25-Mar-88
Submitted by:	JMK	Extract/Digest/Purge Date:	01-Apr-88
Preservatives:	none	Analysis Completion Date:	01-Apr-88
Analyst:	Arntzen	Hold Time:	7 days
WESCO JOB #:	HLA 0831.20-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-3294 MATRIX: WATER
CLIENT'S ID: 122337 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	31000	250.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 103 %

LAB #: 8-3296 MATRIX: WATER
CLIENT'S ID: 122338 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	50000	500.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 130 %*

N.D.: Not Detected
* : Matrix interference

Analytical Supervisor

Report Date: 06-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: JMK
Preservatives: none
Analyst: Farah
WESCO JOB #: HLA 0831.20-L
Analytical Method: EPA 602

Client Contract/PO: 09382,022.02
Date Sampled: 25-Mar-88
Site: City of Oakland, Wells
Date Received: 25-Mar-88
Extract/Digest/Purge Date: 29-Mar-88
Analysis Completion Date: 29-Mar-88
Hold Time: 4 days

LAB #: 8-3282
CLIENT'S ID: 122331 BLANK
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	92 %

LAB #: 8-3284
CLIENT'S ID: 122332 MW-3
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	89 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 06-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: JMK
Preservatives: none
Analyst: Farah
WESCO JOB #: HLA 0831.20-L
Analytical Method: EPA 602

Client Contract/PO: 09382,022.02
Date Sampled: 25-Mar-88
Site: City of Oakland, Wells
Date Received: 25-Mar-88
Extract/Digest/Purge Date: 29-Mar-88
Analysis Completion Date: 29-Mar-88
Hold Time: 4 days

LAB #: 8-3286
CLIENT'S ID: 122333 MW-8
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	93 %

LAB #: 8-3288
CLIENT'S ID: 122334 MW-7
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	1.7	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	0.4	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	97 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	06-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	25-Mar-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	25-Mar-88
Submitted by:	JMK	Extract/Digest/Purge Date:	29-Mar-88
Preservatives:	none	Analysis Completion Date:	29-Mar-88
Analyst:	Farah	Hold Time:	4 days
WESCO JOB #:	HLA 0831.20-L		
Analytical Method:	EPA 602		

LAB #: 8-3290 MATRIX: WATER
CLIENT'S ID: 122335 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	0.6	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	94 %

LAB #: 8-3292 MATRIX: WATER
CLIENT'S ID: 122336 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	83	0.2
Toluene	10	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	11.2	0.2
Xylene	15	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	129 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	06-Apr-88		
Client:	Harding Lawson Associates	Client Contract/PO:	09382,022.02
Attn:	David Leland	Date Sampled:	25-Mar-88
Sampled by:	Tim Walker	Site: City of Oakland, Wells	
Submitted by:	JMK	Date Received:	25-Mar-88
Preservatives:	none	Extract/Digest/Purge Date:	29-Mar-88
Analyst:	Farah	Analysis Completion Date:	29-Mar-88
WESCO JOB #:	HLA 0831.20-L	Hold Time:	4 days
Analytical Method:	EPA 602		

LAB #: 8-3294
CLIENT'S ID: 122337 MW-6
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	18	0.2
Toluene	27	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	48	0.2
1,3-Dichlorobenzene	0.3	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	92 %

LAB #: 8-3296
CLIENT'S ID: 122338 MW-6
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	13	0.2
Toluene	27	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	8.0	0.2
Xylene	49	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	93 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 06-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: JMK
Preservatives: none
Analyst: Farah
WESCO JOB #: HLA 0831.20-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 25-Mar-88
Site: City of Oakland, Wells
Date Received: 25-Mar-88
Extract/Digest/Purge Date: 28-Mar-88
Analysis Completion Date: 28-Mar-88
Hold time: 3 days

LAB #: 8-3285
CLIENT'S ID: 122332 MW-3
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	40	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	24	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	2.4	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	95 %
1,4-Dichlorobutane	82 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 06-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: JMK
Preservatives: none
Analyst: Farah
WESCO JOB #: HLA 0831.20-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 25-Mar-88
Site: City of Oakland, Wells
Date Received: 25-Mar-88
Extract/Digest/Purge Date: 28-Mar-88
Analysis Completion Date: 28-Mar-88
Hold time: 3 days

LAB #: 8-3287
CLIENT'S ID: 122333 mw-8
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	1.3	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	0.7	0.5
Trichloroethene (TCE)	5.8	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	0.8	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	91 %
1,4-Dichlorobutane	84 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 06-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: JMK
Preservatives: none
Analyst: Farah
WESCO JOB #: HLA 0831.20-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 25-Mar-88
Site: City of Oakland, Wells
Date Received: 25-Mar-88
Extract/Digest/Purge Date: 28-Mar-88
Analysis Completion Date: 28-Mar-88
Hold time: 3 days

LAB #: 8-3289
CLIENT'S ID: 122334 MW-7
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	0.7	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	79 %
1,4-Dichlorobutane	102 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 06-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: JMK
Preservatives: none
Analyst: Farah
WESCO JOB #: HLA 0831.20-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 25-Mar-88
Site: City of Oakland, Wells
Date Received: 25-Mar-88
Extract/Digest/Purge Date: 28-Mar-88
Analysis Completion Date: 28-Mar-88
Hold time: 3 days

LAB #: 8-3291
CLIENT'S ID: 122335 MW-5
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	17	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	11	0.5
Chloroform	2	0.5
1,1,1-Trichloroethane (TCA)	2.6	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	1.2	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	93 %
1,4-Dichlorobutane	86 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 06-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: JMK
Preservatives: none
Analyst: Farah
WESCO JOB #: HLA 0831.20-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 25-Mar-88
Site: City of Oakland, Wells
Date Received: 25-Mar-88
Extract/Digest/Purge Date: 28-Mar-88
Analysis Completion Date: 28-Mar-88
Hold time: 3 days

LAB #: 8-3293
CLIENT'S ID: 122336 MW-2
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	18.6	0.5
Methylene Chloride	11.7	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	3.9	0.5
Chloroform	2.7	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	62	0.5
1,2-Dichloroethane (EDC)	19	0.5
Trichloroethene (TCE)	5409	0.5
1,2-Dichloropropane	5.0	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	0.9	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	73 %
1,4-Dichlorobutane	97 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 06-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: JMK
Preservatives: none
Analyst: Farah
WESCO JOB #: HLA 0831.20-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 25-Mar-88
Site: City of Oakland, Wells
Date Received: 25-Mar-88
Extract/Digest/Purge Date: 28-Mar-88
Analysis Completion Date: 28-Mar-88
Hold time: 3 days

LAB #: 8-3295
CLIENT'S ID: 122337 MW-6
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	2.0
Methylene Chloride	24	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	5.2	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	22	0.5
Trichloroethene (TCE)	5811	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	90 %
1,4-Dichlorobutane	82 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 06-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: JMK
Preservatives: none
Analyst: Farah
WESCO JOB #: HLA 0831.20-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 25-Mar-88
Site: City of Oakland, Wells
Date Received: 25-Mar-88
Extract/Digest/Purge Date: 28-Mar-88
Analysis Completion Date: 28-Mar-88
Hold time: 3 days

LAB #: 8-3297
CLIENT'S ID: 122338 MW-6
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	22	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	4	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	22	0.5
Trichloroethene (TCE)	5961	0.5
1,2-Dichloropropane	2	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	73 %
1,4-Dichlorobutane	74 %

N.D.: Not Detected

Analytical Supervisor

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APR 18 1988
ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION

MONITORING WELLS 4-1-88

WESCO Laboratories

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	04-Apr-88
Preservatives:	none	Analysis Completion Date:	04-Apr-88
Analyst:	Arntzen/Lewis	Hold Time:	3 days
WESCO JOB #:	HLA 0831.27-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-3646 MATRIX: WATER
CLIENT'S ID: 130115 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 122 %

LAB #: 8-3648 MATRIX: WATER
CLIENT'S ID: 130116 DW-1

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 122 %

LAB #: 8-3650 MATRIX: WATER
CLIENT'S ID: 130117 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	3400	250.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 107 %

N.D.: Not Detected

Analytical Supervisor

1400 Davis Street
Hayward, California 94545 (415) 887-8383

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	04-Apr-88
Preservatives:	none	Analysis Completion Date:	04-Apr-88
Analyst:	Arntzen/Lewis		
WESCO JOB #:	HLA 0831.27-L		
Analytical Method:	EPA 5030/8015	Hold Time:	3 days

LAB #: 8-3652 MATRIX: WATER
CLIENT'S ID: 130118 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	32000	500.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 120 %

LAB #: 8-3654 MATRIX: WATER
CLIENT'S ID: 130119 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	39000	500.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 126 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	04-Apr-88
Preservatives:	none	Analysis Completion Date:	04-Apr-88
Analyst:	Arntzen/Lewis	Hold Time:	3 days
WESCO JOB #:	HLA 0831.27-L		
Analytical Method:	EPA 602		

LAB #: 8-3646 MATRIX: WATER
CLIENT'S ID: 130115 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	122 %

LAB #: 8-3648 MATRIX: WATER
CLIENT'S ID: 130116 DW-1

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	122 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	04-Apr-88
Preservatives:	none	Analysis Completion Date:	04-Apr-88
Analyst:	Arntzen/Lewis	Hold Time:	3 days
WESCO JOB #:	HLA 0831.27-L		
Analytical Method:	EPA 602		

LAB #: 8-3650 MATRIX: WATER
CLIENT'S ID: 130117 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	17	1.0
Toluene	7	1.0
Chlorobenzene	N.D.	1.0
Ethylbenzene	4	1.0
Xylene	9	1.0
1,3-Dichlorobenzene	N.D.	1.0
1,4-Dichlorobenzene	N.D.	1.0
1,2-Dichlorobenzene	N.D.	1.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	107 %

LAB #: 8-3652 MATRIX: WATER
CLIENT'S ID: 130118 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	440	2.0
Toluene	490	2.0
Chlorobenzene	N.D.	2.0
Ethylbenzene	300	2.0
Xylene	970	2.0
1,3-Dichlorobenzene	N.D.	2.0
1,4-Dichlorobenzene	N.D.	2.0
1,2-Dichlorobenzene	N.D.	2.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	120 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	04-Apr-88
Preservatives:	none		
Analyst:	Arntzen/Lewis	Analysis Completion Date:	04-Apr-88
WESCO JOB #:	HLA 0831.27-L	Hold Time:	3 days
Analytical Method:	EPA 602		

LAB #: 8-3654 MATRIX: WATER

CLIENT'S ID: 130119 MW-b

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	430	1.0
Toluene	500	1.0
Chlorobenzene	N.D.	1.0
Ethylbenzene	300	1.0
Xylene	990	1.0
1,3-Dichlorobenzene	N.D.	1.0
1,4-Dichlorobenzene	N.D.	1.0
1,2-Dichlorobenzene	N.D.	1.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	126 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 13-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.27-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 01-Apr-88
Site: City of Oakland, Wells
Date Received: 01-Apr-88
Extract/Digest/Purge Date: 08-Apr-88
Analysis Completion Date: 08-Apr-88
Hold time: 7 days

LAB #: 8-3647
CLIENT'S ID: 130115 MW-5
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	20.5	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	10	0.5
Chloroform	2	0.5
1,1,1-Trichloroethane (TCA)	2	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	0.9	0.5
Trichloroethene (TCE)	0.6	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	92 %
1,4-Dichlorobutane	79 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 13-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.27-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 01-Apr-88
Site: City of Oakland, Wells
Date Received: 01-Apr-88
Extract/Digest/Purge Date: 08-Apr-88
Analysis Completion Date: 08-Apr-88
Hold time: 7 days

LAB #: 8-3649
CLIENT'S ID: 130116 DW-1
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	73 %
1,4-Dichlorobutane	75 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 13-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.27-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 01-Apr-88
Site: City of Oakland, Wells
Date Received: 01-Apr-88
Extract/Digest/Purge Date: 08-Apr-88
Analysis Completion Date: 08-Apr-88
Hold time: 7 days

LAB #: 8-3651
CLIENT'S ID: 130117 MW-2
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	10.0
Chloromethane	N.D.	10.0
Vinyl Chloride	N.D.	10.0
Bromomethane	N.D.	10.0
Chloroethane	N.D.	10.0
Trichlorofluoromethane	N.D.	10.0
1,1-Dichloroethene	N.D.	2.5
Methylene Chloride	N.D.	2.5
trans-1,2-Dichloroethene	N.D.	2.5
1,1-Dichloroethane	N.D.	2.5
Chloroform	10	2.5
1,1,1-Trichloroethane (TCA)	N.D.	2.5
Carbon Tetrachloride	N.D.	2.5
1,2-Dichloroethane (EDC)	7.5	2.5
Trichloroethene (TCE)	2000	2.5
1,2-Dichloropropane	N.D.	2.5
Bromodichloromethane	N.D.	2.5
2-Chloroethylvinyl ether	N.D.	2.5
trans-1,3-Dichloropropene	N.D.	2.5
cis-1,3-Dichloropropene	N.D.	2.5
1,1,2-Trichloroethane	N.D.	2.5
Tetrachloroethene	13	2.5
Dibromochloromethane	N.D.	2.5
Chlorobenzene	N.D.	2.5
Bromoform	N.D.	2.5
1,1,2,2-Tetrachloroethane	N.D.	2.5
1,3-Dichlorobenzene	N.D.	2.5
1,4-Dichlorobenzene	N.D.	2.5
1,2-Dichlorobenzene	N.D.	2.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	73 %
1,4-Dichlorobutane	81 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 13-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.27-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 01-Apr-88
Site: City of Oakland, Wells
Date Received: 01-Apr-88
Extract/Digest/Purge Date: 08-Apr-88
Analysis Completion Date: 08-Apr-88
Hold time: 7 days

LAB #: 8-3653
CLIENT'S ID: 130118 MW-6
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	14	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	27	0.5
Trichloroethene (TCE)	11100	50.0
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	11	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	91 %
1,4-Dichlorobutane	82 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 13-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.27-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 01-Apr-88
Site: City of Oakland, Wells
Date Received: 01-Apr-88
Extract/Digest/Purge Date: 08-Apr-88
Analysis Completion Date: 08-Apr-88
Hold time: 7 days

LAB #: 8-3655
CLIENT'S ID: 130119 MW-6
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	18	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	39	0.5
Trichloroethene (TCE)	11300	50.0
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	15	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	91 %
1,4-Dichlorobutane	92 %

N.D.: Not Detected

Analytical Supervisor

WESCO Laboratories

2

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	05-Apr-88
Preservatives:	none	Analysis Completion Date:	05-Apr-88
Analyst:	Attia	Hold Time:	4 days
WESCO JOB #:	HLA 0831.28-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-3656
CLIENT'S ID: 133111 MW-3
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 84 %

LAB #: 8-3658
CLIENT'S ID: 133112 MW-8
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 100 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	05-Apr-88
Preservatives:	none	Analysis Completion Date:	05-Apr-88
Analyst:	Attia	Hold Time:	4 days
WESCO JOB #:	HLA 0831.28-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-3660 MATRIX: WATER
CLIENT'S ID: 133113 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	128	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 97 %

LAB #: 8-3662 MATRIX: WATER
CLIENT'S ID: 133114 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 101 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	06-Apr-88
Preservatives:	none	Analysis Completion Date:	06-Apr-88
Analyst:	Attalla/Arntzen	Hold Time:	5 days
WESCO JOB #:	HLA 0831.28-L		
Analytical Method:	EPA 602		

LAB #: 8-3656 MATRIX: WATER
CLIENT'S ID: 133111 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	0.7	0.2
Toluene	0.4	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	1.2	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	84 %

LAB #: 8-3658 MATRIX: WATER
CLIENT'S ID: 133112 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	0.6	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	100 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	06-Apr-88
Preservatives:	none	Analysis Completion Date:	06-Apr-88
Analyst:	Attalla/Arntzen	Hold Time:	5 days
WESCO JOB #:	HLA 0831.28-L		
Analytical Method:	EPA 602		

LAB #: 8-3660 MATRIX: WATER
CLIENT'S ID: 133113 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	0.5	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	1.4	0.2
Xylene	2.4	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	95 %

LAB #: 8-3662 MATRIX: WATER
CLIENT'S ID: 133114 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	101 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	08-Apr-88
Preservatives:	none	Analysis Completion Date:	08-Apr-88
Analyst:	Attia	Hold time:	7 days
WESCO JOB #:	HLA 0831.28-L		
Analytical Method:	EPA 601		

LAB #: 8-3657 MATRIX: WATER

CLIENT'S ID: 133111 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	57	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	28	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	2.6	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	90 %
1,4-Dichlorobutane	87 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	08-Apr-88
Preservatives:	none	Analysis Completion Date:	08-Apr-88
Analyst:	Attia	Hold time:	7 days
WESCO JOB #:	HLA 0831.28-L		
Analytical Method:	EPA 601		

LAB #: 8-3659 MATRIX: WATER

CLIENT'S ID: 133112 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	6.6	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	0.9	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	78 %
1,4-Dichlorobutane	93 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Apr-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	01-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	01-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	08-Apr-88
Preservatives:	none	Analysis Completion Date:	08-Apr-88
Analyst:	Attia	Hold time:	7 days
WESCO JOB #:	HLA 0831.28-L		
Analytical Method:	EPA 601		

LAB #: 8-3661 MATRIX: WATER

CLIENT'S ID: 133113 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	85 %
1,4-Dichlorobutane	86 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 13-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.28-L
Analytical Method: EPA 601

Client Contract/PO: 09382,022.02
Date Sampled: 01-Apr-88
Site: City of Oakland, Wells
Date Received: 01-Apr-88
Extract/Digest/Purge Date: 08-Apr-88
Analysis Completion Date: 08-Apr-88
Hold time: 7 days

LAB #: 8-3663
CLIENT'S ID: 133114 Blank
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	85 %
1,4-Dichlorobutane	86 %

N.D.: Not Detected

Analytical Supervisor

MONITORING WELLS 4-8-88

WESCO Laboratories

Report Date:	19-Apr-88	Client Contract/PO:	9382,022/02
Client:	Harding Lawson Associates	Date Sampled:	08-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Walker/Larkin	Date Received:	08-Apr-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	14-Apr-88
Preservatives:	none		
Analyst:	Attalla/Arntzen	Analysis Completion Date:	14-Apr-88
WESCO JOB #:	HLA 0831.38-L	Hold Time:	6 days
Analytical Method:	EPA 5030/8015		

LAB #: 8-3929 MATRIX: WATER
CLIENT'S ID: 140851 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 110 %

LAB #: 8-3930 MATRIX: WATER
CLIENT'S ID: 140852 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	1660	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 106 %

LAB #: 8-3931 MATRIX: WATER
CLIENT'S ID: 140853 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	34050	500.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 106 %

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc.

Report Date:	19-Apr-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	08-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Walker/Larkin	Date Received:	08-Apr-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	14-Apr-88
Preservatives:	none	Analysis Completion Date:	14-Apr-88
Analyst:	Attalla/Arntzen	Hold Time:	6 days
WESCO JOB #:	HLA 0831.38-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-3932 MATRIX: WATER

CLIENT'S ID: 140854 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	4010	500.0

QUALITY CONTROL DATA

Surrogate Spike % Recovery

Fluorobenzene 122 %*

LAB #: 8-3933 MATRIX: WATER

CLIENT'S ID: 140855 BLANK

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA

Surrogate Spike % Recovery

Fluorobenzene 105 %

N.D.: Not Detected

* : Matrix Interference

Analytical Supervisor

Report Date:	19-Apr-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	08-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Walker/Larkin	Date Received:	08-Apr-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	14-Apr-88
Preservatives:	none		
Analyst:	Attalla/Arntzen	Analysis Completion Date:	14-Apr-88
WESCO JOB #:	HLA 0831.38-L	Hold Time:	6 days
Analytical Method:	EPA 602		

LAB #: 8-3929 MATRIX: WATER
CLIENT'S ID: 140851 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	110 %

LAB #: 8-3930 MATRIX: WATER
CLIENT'S ID: 140852 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	51	0.2
Toluene	3.0	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	1.4	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	106 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	19-Apr-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	08-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Walker/Larkin	Date Received:	08-Apr-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	14-Apr-88
Preservatives:	none	Analysis Completion Date:	14-Apr-88
Analyst:	Attalla/Arntzen	Hold Time:	6 days
WESCO JOB #:	HLA 0831.38-L		
Analytical Method:	EPA 602		

LAB #: 8-3931 MATRIX: WATER
CLIENT'S ID: 140853 MW-6

COMPOUND	RESULT (ug/l)		Detection Limit (ug/l)
Benzene	2340	*	2.0
Toluene	2890	*	2.0
Chlorobenzene	N.D.		2.0
Ethylbenzene	34		2.0
Xylene	2520		2.0
1,3-Dichlorobenzene	N.D.		2.0
1,4-Dichlorobenzene	N.D.		2.0
1,2-Dichlorobenzene	N.D.		2.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	106 %

LAB #: 8-3932 MATRIX: WATER
CLIENT'S ID: 140854 MW-6

COMPOUND	RESULT (ug/l)		Detection Limit (ug/l)
Benzene	2760		2.0
Toluene	3		2.0
Chlorobenzene	N.D.		2.0
Ethylbenzene	9.5		2.0
Xylene	390		2.0
1,3-Dichlorobenzene	N.D.		2.0
1,4-Dichlorobenzene	N.D.		2.0
1,2-Dichlorobenzene	N.D.		2.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	122 %*

N.D.: Not Detected
* : Matrix Interference

Analytical Supervisor

Report Date:	19-Apr-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	08-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Walker/Larkin	Date Received:	08-Apr-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	14-Apr-88
Preservatives:	none	Analysis Completion Date:	14-Apr-88
Analyst:	Attalla/Arntzen	Hold Time:	6 days
WESCO JOB #:	HLA 0831.38-L		
Analytical Method:	EPA 602		

LAB #: 8-3933 MATRIX: WATER

CLIENT'S ID: 140855 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	105 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 19-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Walker/Larkin
Submitted by: C. Larkin
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.38-L
Analytical Method: EPA 601

Client Contract/PO: 9382,022.02
Date Sampled: 08-Apr-88
Site: City of Oakland, Wells
Date Received: 08-Apr-88
Extract/Digest/Purge Date: 16-Apr-88
Analysis Completion Date: 16-Apr-88
Hold time 8 days

LAB #: 8-3934
CLIENT'S ID: 140851 MW-5
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	24	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	12	0.5
Chloroform	3.0	0.5
1,1,1-Trichloroethane (TCA)	2.5	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	1.0	0.5
Trichloroethene (TCE)	0.7	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	88 %
1,4-Dichlorobutane	84 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	19-Apr-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	08-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Walker/Larkin	Date Received:	08-Apr-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	16-Apr-88
Preservatives:	none	Analysis Completion Date:	16-Apr-88
Analyst:	Attia	Hold time	8 days
WESCO JOB #:	HLA 0831.38-L		
Analytical Method:	EPA 601		

LAB #: 8-3935 MATRIX: WATER

CLIENT'S ID: 140852 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	0.8	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	8.8	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	5.3	0.5
Trichloroethene (TCE)	10900	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	128 %
1,4-Dichlorobutane	127 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	19-Apr-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	08-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Walker/Larkin	Date Received:	08-Apr-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	16-Apr-88
Preservatives:	none	Analysis Completion Date:	16-Apr-88
Analyst:	Attia	Hold time	8 days
WESCO JOB #:	HLA 0831.38-L		
Analytical Method:	EPA 601		

LAB #: 8-3936 MATRIX: WATER

CLIENT'S ID: 140853 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	200.0
Chloromethane	N.D.	200.0
Vinyl Chloride	N.D.	200.0
Bromomethane	N.D.	200.0
Chloroethane	N.D.	200.0
Trichlorofluoromethane	N.D.	200.0
1,1-Dichloroethene	N.D.	50.0
Methylene Chloride	N.D.	50.0
trans-1,2-Dichloroethene	N.D.	50.0
1,1-Dichloroethane	N.D.	50.0
Chloroform	N.D.	50.0
1,1,1-Trichloroethane (TCA)	N.D.	50.0
Carbon Tetrachloride	N.D.	50.0
1,2-Dichloroethane (EDC)	N.D.	50.0
Trichloroethene (TCE)	10200	50.0
1,2-Dichloropropane	N.D.	50.0
Bromodichloromethane	N.D.	50.0
2-Chloroethylvinyl ether	N.D.	50.0
trans-1,3-Dichloropropene	N.D.	50.0
cis-1,3-Dichloropropene	N.D.	50.0
1,1,2-Trichloroethane	N.D.	50.0
Tetrachloroethene	N.D.	50.0
Dibromochloromethane	N.D.	50.0
Chlorobenzene	N.D.	50.0
Bromoform	N.D.	50.0
1,1,2,2-Tetrachloroethane	N.D.	50.0
1,3-Dichlorobenzene	N.D.	50.0
1,4-Dichlorobenzene	N.D.	50.0
1,2-Dichlorobenzene	N.D.	50.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	83 %
1,4-Dichlorobutane	81 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 19-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Walker/Larkin
Submitted by: C. Larkin
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.38-L
Analytical Method: EPA 601

Client Contract/PO: 9382,022.02
Date Sampled: 08-Apr-88
Site: City of Oakland, Wells
Date Received: 08-Apr-88
Extract/Digest/Purge Date: 16-Apr-88
Analysis Completion Date: 16-Apr-88
Hold time 8 days

LAB #: 8-3937
CLIENT'S ID: 140854 MW-6
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	0.6	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	17	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	26.3	0.5
Trichloroethene (TCE)	11500	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	23	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	21	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	93 %
1,4-Dichlorobutane	102 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 19-Apr-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Walker/Larkin
Submitted by: C. Larkin
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.38-L
Analytical Method: EPA 601

Client Contract/PO: 9382,022.02
Date Sampled: 08-Apr-88
Site: City of Oakland, Wells
Date Received: 08-Apr-88
Extract/Digest/Purge Date: 16-Apr-88
Analysis Completion Date: 16-Apr-88
Hold time 8 days

LAB #: 8-3938
CLIENT'S ID: 140855
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	88 %
1,4-Dichlorobutane	83 %

N.D.: Not Detected

Analytical Supervisor

MONITORING WELLS 4-15-88

WESCO Laboratories

Report Date:	01-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	15-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	C. Larkin	Date Received:	15-Apr-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	21-Apr-88
Preservatives:	none	Analysis Completion Date:	21-Apr-88
Analyst:	Attia	Hold Time:	6 days
WESCO JOB #:	HLA 0831.45-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-4133 MATRIX: WATER
CLIENT'S ID: 151501 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 99 %

LAB #: 8-4134 MATRIX: WATER
CLIENT'S ID: 151502 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 90 %

LAB #: 8-4135 MATRIX: WATER
CLIENT'S ID: 151503 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 96 %

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc.

Report Date:	01-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	15-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	C. Larkin	Date Received:	15-Apr-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	21-Apr-88
Preservatives:	none		
Analyst:	Attia	Analysis Completion Date:	21-Apr-88
WESCO JOB #:	HLA 0831.45-L		
Analytical Method:	EPA 5030/8015	Hold Time:	6 days

LAB #: 8-4136 MATRIX: WATER
CLIENT'S ID: 151504 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 105 %

LAB #: 8-4137 MATRIX: WATER
CLIENT'S ID: 151505 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 96 %

LAB #: 8-4138 MATRIX: WATER
CLIENT'S ID: 151506 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 106 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	01-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	15-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	C. Larkin	Date Received:	15-Apr-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	21-Apr-88
Preservatives:	none	Analysis Completion Date:	21-Apr-88
Analyst:	Attia	Hold Time:	6 days
WESCO JOB #:	HLA 0831.45-L		
Analytical Method:	EPA 5030/8015		

LAB #: 8-4139 MATRIX: WATER
CLIENT'S ID: 151507 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	1600	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 85 %

LAB #: 8-4140 MATRIX: WATER
CLIENT'S ID: 151508 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	23000	5000

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 95 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	01-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	15-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	C. Larkin	Date Received:	15-Apr-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	21-Apr-88
Preservatives:	none		
Analyst:	Attia	Analysis Completion Date:	21-Apr-88
WESCO JOB #:	HLA 0831.45-L		
Analytical Method:	EPA 602	Hold Time:	6 days

LAB #: 8-4133 MATRIX: WATER
CLIENT'S ID: 151501 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	101 %

LAB #: 8-4134 MATRIX: WATER
CLIENT'S ID: 151502 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	103 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	01-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	15-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	C. Larkin	Date Received:	15-Apr-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	21-Apr-88
Preservatives:	none		
Analyst:	Attia	Analysis Completion Date:	21-Apr-88
WESCO JOB #:	HLA 0831.45-L		
Analytical Method:	EPA 602	Hold Time:	6 days

LAB #: 8-4135 MATRIX: WATER
CLIENT'S ID: 151503 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	106 %

LAB #: 8-4136 MATRIX: WATER
CLIENT'S ID: 151504 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	105 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	01-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	15-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	C. Larkin	Date Received:	15-Apr-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	21-Apr-88
Preservatives:	none		
Analyst:	Attia	Analysis Completion Date:	21-Apr-88
WESCO JOB #:	HLA 0831.45-L	Hold Time:	6 days
Analytical Method:	EPA 602		

LAB #: 8-4137 MATRIX: WATER
CLIENT'S ID: 151505 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	109 %

LAB #: 8-4138 MATRIX: WATER
CLIENT'S ID: 151506 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	104 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	01-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	15-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	C. Larkin	Date Received:	15-Apr-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	21-Apr-88
Preservatives:	none		
Analyst:	Attia	Analysis Completion Date:	21-Apr-88
WESCO JOB #:	HLA 0831.45-L	Hold Time:	6 days
Analytical Method:	EPA 602		

LAB #: 8-4139 MATRIX: WATER
CLIENT'S ID: 151507 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	25.3	0.2
Toluene	2.1	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	5.1	0.2
Xylene	3.0	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	130 %

LAB #: 8-4140 MATRIX: WATER
CLIENT'S ID: 151508 MW-4

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	456	0.2
Toluene	1470	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	3480	0.2
Xylene	547	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	104 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 01-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: C. Larkin
Submitted by: K. Hunter
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.45-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/9382,022.02
Date Sampled: 15-Apr-88
Site: City of Oakland, Wells
Date Received: 15-Apr-88
Extract/Digest/Purge Date: 20-Apr-88
Analysis Completion Date: 20-Apr-88
Hold time, days: 5

LAB #:	8-4133	8-4134	
CLIENT'S ID:	151501 MW-8	151502 MW-7	
COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	N.D.	N.D.	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	N.D.	0.5
1,1-Dichloroethane	N.D.	N.D.	0.5
Chloroform	0.6	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	1.0	0.5
Trichloroethene (TCE)	9.8	N.D.	0.5
1,2-Dichloropropane	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
Tetrachloroethene	0.7	N.D.	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	88 %	86 %
1,4-Dichlorobutane	86 %	88 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 01-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: C. Larkin
Submitted by: K. Hunter
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.45-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/9382,022.02
Date Sampled: 15-Apr-88
Site: City of Oakland, Wells
Date Received: 15-Apr-88
Extract/Digest/Purge Date: 20-Apr-88
Analysis Completion Date: 20-Apr-88
Hold time, days: 5

LAB #:	8-4135	8-4136	
CLIENT'S ID:	151503 MW-5	151504 Blank	
COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	18.5	N.D.	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	N.D.	0.5
1,1-Dichloroethane	9.3	N.D.	0.5
Chloroform	3.6	N.D.	0.5
1,1,1-Trichloroethane (TCA)	1.6	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	1.0	N.D.	0.5
Trichloroethene (TCE)	N.D.	N.D.	0.5
1,2-Dichloropropane	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
Tetrachloroethene	N.D.	N.D.	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	98 %	84 %
1,4-Dichlorobutane	87 %	85 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	01-May-88	Client Contract/9382,022.02	
Client:	Harding Lawson Associates	Date Sampled:	15-Apr-88
Attn:	David Leland	Site: City of Oakland, Wells	
Sampled by:	C. Larkin	Date Received:	15-Apr-88
Submitted by:	K. Hunter	Extract/Digest/Purge Date:	20-Apr-88
Preservatives:	none	Analysis Completion Date:	20-Apr-88
Analyst:	Attia	Hold time, days:	5
WESCO JOB #:	HLA 0831.45-L		
Analytical Method:	EPA 601		
MATRIX:	WATER		

LAB #:	8-4137	8-4138	
CLIENT'S ID:	151505 MW-3	151506 MW-3	

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	30.6	37.0	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	N.D.	0.5
1,1-Dichloroethane	14.3	14.0	0.5
Chloroform	N.D.	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	1.3	1.1	0.5
Trichloroethene (TCE)	N.D.	N.D.	0.5
1,2-Dichloropropane	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
Tetrachloroethene	N.D.	N.D.	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	97 %	79 %
1,4-Dichlorobutane	91 %	78 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	01-May-88	Client Contract/9382,022.02	
Client:	Harding Lawson Associates	Date Sampled:	15-Apr-88
Attn:	David Leland	Site: City of Oakland, Wells	
Sampled by:	C. Larkin	Date Received:	15-Apr-88
Submitted by:	K. Hunter	Extract/Digest/Purge	
Preservatives:	none	Date:	20-Apr-88
Analyst:	Attia	Analysis Completion	
WESCO JOB #:	HLA 0831.45-L	Date:	20-Apr-88
Analytical Method:	EPA 601	Hold time, days:	5
MATRIX:	WATER		

LAB #:	8-4139	8-4140
CLIENT'S ID:	151507 MW-2	151508 MW-6

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	N.D.	N.D.	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	N.D.	0.5
1,1-Dichloroethane	N.D.	N.D.	0.5
Chloroform	4.5	16.0	0.5
1,1,1-Trichloroethane (TCA)	N.D.	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	3.0	20.8	0.5
Trichloroethene (TCE)	4100	9760	0.5
1,2-Dichloropropane	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
Tetrachloroethene	12.0	21.5	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	N.D.	1.3	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery

Bromochloromethane	84 %	100 %
1,4-Dichlorobutane	96 %	119 %

N.D.: Not Detected

Analytical Supervisor

MONITORING WELLS 4-22-88

WESCO Laboratories

Report Date:	05-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	22-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	22-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	26-Apr-88
Preservatives:	none	Analysis Completion Date:	26-Apr-88
Analyst:	Attia/ Lewis	Hold Time:	4 days
WESCO JOB #:	HLA 0831.53-L		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #:	8-4361	CLIENT ID:	162271 MW-5
COMPOUND		RESULT (ug/l)	Detection Limit (ug/l)
Gasoline		N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 107 %

LAB #:	8-4362	CLIENT ID:	162272 MW-2
COMPOUND		RESULT (ug/l)	Detection Limit (ug/l)
Gasoline		12000	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 99 %

LAB #:	8-4363	CLIENT ID:	162273 MW-6
COMPOUND		RESULT (ug/l)	Detection Limit (ug/l)
Gasoline		37000	2,500.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 94 %

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc.

Report Date:	05-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	22-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	22-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	26-Apr-88
Preservatives:	none	Analysis Completion Date:	26-Apr-88
Analyst:	Attia/ Lewis	Hold Time:	4 days
WESCO JOB #:	HLA 0831.53-L		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #: 8-4364	CLIENT ID: 162274 MW-6	
COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	26000	2,500.0

QUALITY CONTROL DATA

Surrogate Spike % Recovery	
Fluorobenzene	97 %

LAB #: 8-4365	CLIENT ID: 162275 DW-1	
COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA

Surrogate Spike % Recovery	
Fluorobenzene	105 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	05-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	22-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	22-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	26-Apr-88
Preservatives:	none	Analysis Completion Date:	26-Apr-88
Analyst:	Arntzen	Hold Time:	4 days
WESCO JOB #:	HLA 0831.53-L		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #: 8-4366 CLIENT ID: 162276 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Gasoline	N.D.	50.0

QUALITY CONTROL DATA

Surrogate Spike % Recovery

Fluorobenzene 105 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	05-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	22-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	22-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	25-Apr-88
Preservatives:	none	Analysis Completion Date:	25-Apr-88
Analyst:	Attia	Hold Time:	3 days
WESCO JOB #:	HLA 0831.53-L		
Analytical Method:	EPA 602		

LAB #: 8-4361 MATRIX: WATER
CLIENT'S ID: 162271 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	107 %

LAB #: 8-4362 MATRIX: WATER
CLIENT'S ID: 162272 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	22	0.2
Toluene	3.2	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	1.5	0.2
Xylene	4.5	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	99 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	05-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	22-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	22-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	25-Apr-88
Preservatives:	none	Analysis Completion Date:	25-Apr-88
Analyst:	Attia	Hold Time:	3 days
WESCO JOB #:	HLA 0831.53-L		
Analytical Method:	EPA 602		

LAB #: 8-4363 MATRIX: WATER
CLIENT'S ID: 162273 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	890	10.0
Toluene	4400	10.0
Chlorobenzene	N.D.	10.0
Ethylbenzene	240	10.0
Xylene	6100	10.0
1,3-Dichlorobenzene	3300	10.0
1,4-Dichlorobenzene	N.D.	10.0
1,2-Dichlorobenzene	N.D.	10.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	94 %

LAB #: 8-4364 MATRIX: WATER
CLIENT'S ID: 162274 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	520	10.0
Toluene	2700	10.0
Chlorobenzene	N.D.	10.0
Ethylbenzene	26	10.0
Xylene	2200	10.0
1,3-Dichlorobenzene	N.D.	10.0
1,4-Dichlorobenzene	N.D.	10.0
1,2-Dichlorobenzene	N.D.	10.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	97 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	05-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	22-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	22-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	25-Apr-88
Preservatives:	none	Analysis Completion Date:	25-Apr-88
Analyst:	Attia	Hold Time:	3 days
WESCO JOB #:	HLA 0831.53-L		
Analytical Method:	EPA 602		

LAB #: 8-4365 MATRIX: WATER

CLIENT'S ID: 162275 DW-1

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	105 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	05-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	22-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	22-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	26-Apr-88
Preservatives:	none	Analysis Completion Date:	26-Apr-88
Analyst:	Attia	Hold Time:	4 days
WESCO JOB #:	HLA 0831.53-L		
Analytical Method:	EPA 602		

LAB #: 8-4366 MATRIX: WATER

CLIENT'S ID: 162276 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	105 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 05-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Attia/ Lewis
WESCO JOB #: HLA 0831.53-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 22-Apr-88
Site: City of Oakland, Wells
Date Received: 22-Apr-88
Extract/Digest/Purge Date: 29-Apr-88
Analysis Completion Date: 29-Apr-88
Hold time, days: 7

LAB #	8-4367	8-4368	
CLIENT'S ID	MW-5 162271	MW-2 162272	
COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	20	N.D.	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	N.D.	0.5
1,1-Dichloroethane	11.6	N.D.	0.5
Chloroform	4.8	3.5	0.5
1,1,1-Trichloroethane (TCA)	2.3	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	1.6	2.7	0.5
Trichloroethene (TCE)	N.D.	2400	0.5
1,2-Dichloropropane	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
Tetrachloroethene	0.9	7.5	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	97 %	88 %
1,4-Dichlorobutane	100 %	85 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 05-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Attia/ Lewis
WESCO JOB #: HLA 0831.53-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 22-Apr-88
Site: City of Oakland, Wells
Date Received: 22-Apr-88
Extract/Digest/Purge Date: 29-Apr-88
Analysis Completion Date: 29-Apr-88
Hold time, days: 7

LAB #		8-4369		8-4370	
CLIENT'S ID	MW-6	162273	MW-6	162274	
COMPOUND		RESULT (ug/l)		RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane		N.D.		N.D.	2.0
Chloromethane		N.D.		N.D.	2.0
Vinyl Chloride		N.D.		N.D.	2.0
Bromomethane		N.D.		N.D.	2.0
Chloroethane		N.D.		N.D.	2.0
Trichlorofluoromethane		N.D.		N.D.	2.0
1,1-Dichloroethene		N.D.		N.D.	0.5
Methylene Chloride		N.D.		N.D.	0.5
trans-1,2-Dichloroethene		0.7		N.D.	0.5
1,1-Dichloroethane		N.D.		N.D.	0.5
Chloroform		23		25	0.5
1,1,1-Trichloroethane (TCA)		N.D.		N.D.	0.5
Carbon Tetrachloride		N.D.		N.D.	0.5
1,2-Dichloroethane (EDC)		11.8		14	0.5
Trichloroethene (TCE)		9300		11100	0.5
1,2-Dichloropropane		N.D.		N.D.	0.5
Bromodichloromethane		N.D.		N.D.	0.5
2-Chloroethylvinyl ether		N.D.		N.D.	0.5
trans-1,3-Dichloropropene		N.D.		N.D.	0.5
cis-1,3-Dichloropropene		N.D.		N.D.	0.5
1,1,2-Trichloroethane		0.6		N.D.	0.5
Tetrachloroethene		22		N.D.	0.5
Dibromochloromethane		N.D.		N.D.	0.5
Chlorobenzene		N.D.		N.D.	0.5
Bromoform		N.D.		N.D.	0.5
1,1,2,2-Tetrachloroethane		N.D.		N.D.	0.5
1,3-Dichlorobenzene		N.D.		N.D.	0.5
1,4-Dichlorobenzene		N.D.		N.D.	0.5
1,2-Dichlorobenzene		N.D.		N.D.	0.5
QUALITY CONTROL DATA					
Surrogate Spike Percent Recovery					
Bromochloromethane		104 %		105 %	
1,4-Dichlorobutane		102 %		91 %	

N.D.: Not Detected

Analytical Supervisor

Report Date: 05-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Attia/ Lewis
WESCO JOB #: HLA 0831.53-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 22-Apr-88
Site: City of Oakland, Wells
Date Received: 22-Apr-88
Extract/Digest/Purge Date: 29-Apr-88
Analysis Completion Date: 29-Apr-88
Hold time, days: 7

LAB #		8-4371		8-4372	
CLIENT'S ID	DW-1	162275	Blank	162276	
COMPOUND		RESULT (ug/l)		RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane		N.D.		N.D.	2.0
Chloromethane		N.D.		N.D.	2.0
Vinyl Chloride		N.D.		N.D.	2.0
Bromomethane		N.D.		N.D.	2.0
Chloroethane		N.D.		N.D.	2.0
Trichlorofluoromethane		N.D.		N.D.	2.0
1,1-Dichloroethene		N.D.		N.D.	0.5
Methylene Chloride		N.D.		N.D.	0.5
trans-1,2-Dichloroethene		N.D.		N.D.	0.5
1,1-Dichloroethane		N.D.		N.D.	0.5
Chloroform		N.D.		N.D.	0.5
1,1,1-Trichloroethane (TCA)		N.D.		N.D.	0.5
Carbon Tetrachloride		N.D.		N.D.	0.5
1,2-Dichloroethane (EDC)		N.D.		N.D.	0.5
Trichloroethene (TCE)		N.D.		N.D.	0.5
1,2-Dichloropropane		N.D.		N.D.	0.5
Bromodichloromethane		N.D.		N.D.	0.5
2-Chloroethylvinyl ether		N.D.		N.D.	0.5
trans-1,3-Dichloropropene		N.D.		N.D.	0.5
cis-1,3-Dichloropropene		N.D.		N.D.	0.5
1,1,2-Trichloroethane		N.D.		N.D.	0.5
Tetrachloroethene		N.D.		N.D.	0.5
Dibromochloromethane		N.D.		N.D.	0.5
Chlorobenzene		N.D.		N.D.	0.5
Bromoform		N.D.		N.D.	0.5
1,1,2,2-Tetrachloroethane		N.D.		N.D.	0.5
1,3-Dichlorobenzene		N.D.		N.D.	0.5
1,4-Dichlorobenzene		N.D.		N.D.	0.5
1,2-Dichlorobenzene		N.D.		N.D.	0.5
QUALITY CONTROL DATA					
Surrogate Spike Percent Recovery					
Bromochloromethane		98 %		96 %	
1,4-Dichlorobutane		102 %		99 %	

N.D.: Not Detected

Attia

Analytical Supervisor

MONITORING WELLS 4-28-88

WESCO Laboratories

Report Date: 25-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Lewis
WESCO JOB #: HLA 0831.60-L
Analytical Method: EPA 5030/8015
Matrix: WATER

Client Contract/PO: 09382,022.02
Date Sampled: 28-Apr-88
Site: City of Oakland, Wells
Date Received: 28-Apr-88
Extract/Digest/Purge Date: 29-Apr-88
Analysis Completion Date: 29-Apr-88
Hold Time: 1 day

LAB #: 8-4486 CLIENT ID: 172881 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	2000	100.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 97 %

LAB #: 8-4488 CLIENT ID: 172882 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 104 %

LAB #: 8-4490 CLIENT ID: 172883 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 102 %

LAB #: 8-4492 CLIENT ID: 172884 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 103 %

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc.

Report Date:	25-May-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	28-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	28-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	29-Apr-88
Preservatives:	none	Analysis Completion Date:	29-Apr-88
Analyst:	Lewis	Hold Time:	1 day
WESCO JOB #:	HLA 0831.60-L		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #: 8-4494 CLIENT ID: 172885 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	32000	25000

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 94 %

LAB #: 8-4496 CLIENT ID: 172886 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 100 %

LAB #: 8-4498 CLIENT ID: 172887 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 96 %

LAB #: 8-4500 CLIENT ID: 172888 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 86 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	25-May-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	28-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	28-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	29-Apr-88
Preservatives:	none	Analysis Completion Date:	29-Apr-88
Analyst:	Lewis	Hold Time:	1 day
WESCO JOB #:	HLA 0831.60-L		
Analytical Method:	EPA 602		

LAB #: 8-4486 MATRIX: WATER
CLIENT'S ID: 172881 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	26.5	0.4
Toluene	3.6	0.4
Chlorobenzene	N.D.	0.4
Ethylbenzene	2.0	0.4
Xylene	5.5	0.4
1,3-Dichlorobenzene	N.D.	0.4
1,4-Dichlorobenzene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.4

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	97 %

LAB #: 8-4488 MATRIX: WATER
CLIENT'S ID: 172882 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	104 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	25-May-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	28-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	28-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	29-Apr-88
Preservatives:	none	Analysis Completion Date:	29-Apr-88
Analyst:	Lewis	Hold Time:	1 day
WESCO JOB #:	HLA 0831.60-L		
Analytical Method:	EPA 602		

LAB #: 8-4490 MATRIX: WATER
CLIENT'S ID: 172883 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.4
Toluene	N.D.	0.4
Chlorobenzene	N.D.	0.4
Ethylbenzene	N.D.	0.4
Xylene	N.D.	0.4
1,3-Dichlorobenzene	N.D.	0.4
1,4-Dichlorobenzene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.4

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	102 %

LAB #: 8-4492 MATRIX: WATER
CLIENT'S ID: 172884 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	103 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 25-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Lewis
WESCO JOB #: HLA 0831.60-L
Analytical Method: EPA 602

Client Contract/PO: 09382,022.02
Date Sampled: 28-Apr-88
Site: City of Oakland, Wells
Date Received: 28-Apr-88
Extract/Digest/Purge Date: 29-Apr-88
Analysis Completion Date: 29-Apr-88
Hold Time: 1 day

LAB #: 8-4494 MATRIX: WATER
CLIENT'S ID: 172885 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	340	100
Toluene	3350	100
Chlorobenzene	N.D.	100
Ethylbenzene	N.D.	100
Xylene	5000	100
1,3-Dichlorobenzene	N.D.	100
1,4-Dichlorobenzene	N.D.	100
1,2-Dichlorobenzene	N.D.	100

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	94 %

LAB #: 8-4496 MATRIX: WATER
CLIENT'S ID: 172886 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	100 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	25-May-88	Client Contract/PO:	09382,022.02
Client:	Harding Lawson Associates	Date Sampled:	28-Apr-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	28-Apr-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	29-Apr-88
Preservatives:	none	Analysis Completion Date:	29-Apr-88
Analyst:	Lewis	Hold Time:	1 day
WESCO JOB #:	HLA 0831.60-L		
Analytical Method:	EPA 602		

LAB #: 8-4498 MATRIX: WATER
CLIENT'S ID: 17287 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.4
Toluene	N.D.	0.4
Chlorobenzene	N.D.	0.4
Ethylbenzene	N.D.	0.4
Xylene	N.D.	0.4
1,3-Dichlorobenzene	N.D.	0.4
1,4-Dichlorobenzene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.4

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	96 %

LAB #: 8-4500 MATRIX: WATER
CLIENT'S ID: 172888 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	87 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 25-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.60-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 28-Apr-88
Site: City of Oakland, Wells
Date Received: 28-Apr-88
Extract/Digest/Purge Date: 29-Apr-88
Analysis Completion Date: 29-Apr-88
Hold time, days: 1

LAB #:		8-4487		8-4489	
CLIENT'S ID:	MW-2	172881	MW-3	172882	
COMPOUND		RESULT (ug/l)		RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane		N.D.		N.D.	2.0
Chloromethane		N.D.		N.D.	2.0
Vinyl Chloride		N.D.		N.D.	2.0
Bromomethane		N.D.		N.D.	2.0
Chloroethane		N.D.		N.D.	2.0
Trichlorofluoromethane		N.D.		N.D.	2.0
1,1-Dichloroethene		N.D.		50.0	0.5
Methylene Chloride		N.D.		N.D.	0.5
trans-1,2-Dichloroethene		N.D.		N.D.	0.5
1,1-Dichloroethane		N.D.		18.0	0.5
Chloroform		3.8		N.D.	0.5
1,1,1-Trichloroethane (TCA)		N.D.		0.9	0.5
Carbon Tetrachloride		N.D.		N.D.	0.5
1,2-Dichloroethane (EDC)		2.4		1.8	0.5
Trichloroethene (TCE)		2300		N.D.	0.5
1,2-Dichloropropane		N.D.		N.D.	0.5
Bromodichloromethane		N.D.		N.D.	0.5
2-Chloroethylvinyl ether		N.D.		N.D.	0.5
trans-1,3-Dichloropropene		N.D.		N.D.	0.5
cis-1,3-Dichloropropene		N.D.		N.D.	0.5
1,1,2-Trichloroethane		N.D.		N.D.	0.5
Tetrachloroethene		6.5		N.D.	0.5
Dibromochloromethane		N.D.		N.D.	0.5
Chlorobenzene		N.D.		N.D.	0.5
Bromoform		N.D.		N.D.	0.5
1,1,2,2-Tetrachloroethane		N.D.		N.D.	0.5
1,3-Dichlorobenzene		N.D.		N.D.	0.5
1,4-Dichlorobenzene		N.D.		N.D.	0.5
1,2-Dichlorobenzene		N.D.		N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	82 %	100 %
1,4-Dichlorobutane	81 %	89 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 25-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.60-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 28-Apr-88
Site: City of Oakland, Wells
Date Received: 28-Apr-88
Extract/Digest/Purge Date: 29-Apr-88
Analysis Completion Date: 29-Apr-88
Hold time, days: 1

LAB #:		8-4491		8-4493	
CLIENT'S ID:	MW-3	172883	MW-5	172884	
COMPOUND		RESULT (ug/l)		RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane		N.D.		N.D.	2.0
Chloromethane		N.D.		N.D.	2.0
Vinyl Chloride		N.D.		N.D.	2.0
Bromomethane		N.D.		N.D.	2.0
Chloroethane		N.D.		N.D.	2.0
Trichlorofluoromethane		N.D.		N.D.	2.0
1,1-Dichloroethene		37.0		18.0	0.5
Methylene Chloride		N.D.		N.D.	0.5
trans-1,2-Dichloroethene		N.D.		N.D.	0.5
1,1-Dichloroethane		16.0		9.0	0.5
Chloroform		N.D.		3.7	0.5
1,1,1-Trichloroethane (TCA)		N.D.		2.2	0.5
Carbon Tetrachloride		N.D.		N.D.	0.5
1,2-Dichloroethane (EDC)		1.5		1.1	0.5
Trichloroethene (TCE)		N.D.		0.6	0.5
1,2-Dichloropropane		N.D.		N.D.	0.5
Bromodichloromethane		N.D.		N.D.	0.5
2-Chloroethylvinyl ether		N.D.		N.D.	0.5
trans-1,3-Dichloropropene		N.D.		N.D.	0.5
cis-1,3-Dichloropropene		N.D.		N.D.	0.5
1,1,2-Trichloroethane		N.D.		N.D.	0.5
Tetrachloroethene		N.D.		N.D.	0.5
Dibromochloromethane		N.D.		N.D.	0.5
Chlorobenzene		N.D.		N.D.	0.5
Bromoform		N.D.		N.D.	0.5
1,1,2,2-Tetrachloroethane		N.D.		N.D.	0.5
1,3-Dichlorobenzene		N.D.		N.D.	0.5
1,4-Dichlorobenzene		N.D.		N.D.	0.5
1,2-Dichlorobenzene		N.D.		N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	75 %	81 %
1,4-Dichlorobutane	68 %	90 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 25-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.60-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 28-Apr-88
Site: City of Oakland, Wells
Date Received: 28-Apr-88
Extract/Digest/Purge Date: 29-Apr-88
Analysis Completion Date: 29-Apr-88
Hold time, days: 1

LAB #: 8-4495
CLIENT'S ID: MW-6 172885

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	200.0
Chloromethane	N.D.	200.0
Vinyl Chloride	N.D.	200.0
Bromomethane	N.D.	200.0
Chloroethane	N.D.	200.0
Trichlorofluoromethane	N.D.	200.0
1,1-Dichloroethene	N.D.	50.0
Methylene Chloride	N.D.	50.0
trans-1,2-Dichloroethene	N.D.	50.0
1,1-Dichloroethane	N.D.	50.0
Chloroform	N.D.	50.0
1,1,1-Trichloroethane (TCA)	N.D.	50.0
Carbon Tetrachloride	N.D.	50.0
1,2-Dichloroethane (EDC)	N.D.	50.0
Trichloroethene (TCE)	11600	50.0
1,2-Dichloropropane	N.D.	50.0
Bromodichloromethane	N.D.	50.0
2-Chloroethylvinyl ether	N.D.	50.0
trans-1,3-Dichloropropene	N.D.	50.0
cis-1,3-Dichloropropene	N.D.	50.0
1,1,2-Trichloroethane	N.D.	50.0
Tetrachloroethene	N.D.	50.0
Dibromochloromethane	N.D.	50.0
Chlorobenzene	N.D.	50.0
Bromoform	N.D.	50.0
1,1,2,2-Tetrachloroethane	N.D.	50.0
1,3-Dichlorobenzene	N.D.	50.0
1,4-Dichlorobenzene	N.D.	50.0
1,2-Dichlorobenzene	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike Percent Recovery

Bromochloromethane	79 %
1,4-Dichlorobutane	82 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 25-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.60-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 28-Apr-88
Site: City of Oakland, Wells
Date Received: 28-Apr-88
Extract/Digest/Purge Date: 29-Apr-88
Analysis Completion Date: 29-Apr-88
Hold time, days: 1

LAB #:	8-4497	8-4499
CLIENT'S ID:	MW-8 172886	MW-7 172887

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	N.D.	N.D.	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	N.D.	0.5
1,1-Dichloroethane	N.D.	N.D.	0.5
Chloroform	0.9	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	2.6	0.5
Trichloroethene (TCE)	20.0	N.D.	0.5
1,2-Dichloropropane	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
Tetrachloroethene	N.D.	N.D.	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	83 %	107 %
1,4-Dichlorobutane	77 %	92 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 25-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Attia
WESCO JOB #: HLA 0831.60-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 28-Apr-88
Site: City of Oakland, Wells
Date Received: 28-Apr-88
Extract/Digest/Purge Date: 29-Apr-88
Analysis Completion Date: 29-Apr-88
Hold time, days: 1

LAB #: 8-4501
CLIENT'S ID: Blank 172888

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	1.2	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	7.4	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery	
Bromochloromethane	89 %
1,4-Dichlorobutane	90 %

N.D.: Not Detected

Analytical Supervisor

MONITORING WELLS 5-5-88

WESCO Laboratories

Report Date:	25-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	05-May-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Tim Walker	Date Received:	05-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	06-May-88
Preservatives:	none	Analysis Completion Date:	06-May-88
Analyst:	Arntzen/Lewis	Hold Time:	1 day
WESCO JOB #:	HLA 0831.65-L		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #: 8-4683 CLIENT ID: 180512 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 102 %

LAB #: 8-4684 CLIENT ID: 180513 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	1400	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 89 %

LAB #: 8-4685 CLIENT ID: 180514 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	38000	5,000.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 94 %

LAB #: 8-4686 CLIENT ID: 180515 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 102 %

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc.

Report Date:	25-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	05-May-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Tim Walker	Date Received:	05-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	06-May-88
Preservatives:	none	Analysis Completion Date:	06-May-88
Analyst:	Arntzen/Lewis	Hold Time:	1 day
WESCO JOB #:	HLA 0831.65-L		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #: 8-4687 CLIENT ID: 180516 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	19000	2,500.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery

Fluorobenzene	93 %

BLANK, SPIKE DUPLICATE AND SPIKE REPORT FOR JOB # HLA 0831.65-L
METHOD: EPA 5030/8015

COMPOUND	Blank ug/l	Spike Duplicate % deviation	Spike % recovery
Gasoline----------	N.D.	2	96

QUALITY CONTROL DATA
Surrogate Spike % Recovery

Fluorobenzene	89 %	97 %	98 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	25-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	05-May-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Tim Walker	Date Received:	05-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	06-May-88
Preservatives:	none	Analysis Completion Date:	06-May-88
Analyst:	Farah/Lewis	Hold Time:	1 day
WESCO JOB #:	HLA 0831.65-L		
Analytical Method:	EPA 602		

LAB #: 8-4685 MATRIX: WATER
CLIENT'S ID: 180514 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	585	10.0
Toluene	3740	10.0
Chlorobenzene	N.D.	10.0
Ethylbenzene	200	10.0
Xylene	6930	10.0
1,3-Dichlorobenzene	N.D.	10.0
1,4-Dichlorobenzene	N.D.	10.0
1,2-Dichlorobenzene	N.D.	10.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	108 %

LAB #: 8-4686 MATRIX: WATER
CLIENT'S ID: 180515 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	97 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	25-May-88	Client Contract/PO:	9282,022.02
Client:	Harding Lawson Associates	Date Sampled:	05-May-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Tim Walker	Date Received:	05-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	06-May-88
Preservatives:	none	Analysis Completion Date:	06-May-88
Analyst:	Farah/Lewis	Hold Time:	1 day
WESCO JOB #:	HLA 0831.65-L		
Analytical Method:	EPA 602		

LAB #: 8-4687 MATRIX: WATER

CLIENT'S ID: 180516 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	365	10.0
Toluene	2370	10.0
Chlorobenzene	N.D.	10.0
Ethylbenzene	90	10.0
Xylene	4330	10.0
1,3-Dichlorobenzene	N.D.	10.0
1,4-Dichlorobenzene	N.D.	10.0
1,2-Dichlorobenzene	N.D.	10.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	104 %

Analytical Supervisor

Report Date:	25-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	05-May-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Tim Walker	Date Received:	05-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	06-May-88
Preservatives:	none	Analysis Completion Date:	06-May-88
Analyst:	Attia	Hold time, days:	1
WESCO JOB #:	HLA 0831.65-L		
Analytical Method:	EDB by EPA 601		
MATRIX:	WATER		

LAB #: 8-4682
CLIENT'S ID: 180511 NE Sump

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Ethylene Dibromide	N.D.	0.5

QUALITY CONTROL DATA
Surrogate Spike Percent Recovery

Bromochloromethane	105 %
1,4-Dichlorobutane	103 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 25-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Farah/Lewis
WESCO JOB #: HLA 0831.65-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 05-May-88
Site: City of Oakland
Date Received: 05-May-88
Extract/Digest/Purge Date: 06-May-88
Analysis Completion Date: 06-May-88
Hold time, days: 1

LAB #:		8-4683		8-4684	
CLIENT'S ID:	MW-5	180512	MW-2	180513	
COMPOUND		RESULT (ug/l)		RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane		N.D.		N.D.	2.0
Chloromethane		N.D.		N.D.	2.0
Vinyl Chloride		N.D.		N.D.	2.0
Bromomethane		N.D.		N.D.	2.0
Chloroethane		N.D.		N.D.	2.0
Trichlorofluoromethane		N.D.		N.D.	2.0
1,1-Dichloroethene		22.8		N.D.	0.5
Methylene Chloride		N.D.		N.D.	0.5
trans-1,2-Dichloroethene		N.D.		N.D.	0.5
1,1-Dichloroethane		9.9		N.D.	0.5
Chloroform		4.3		1.6	0.5
1,1,1-Trichloroethane (TCA)		1.5		N.D.	0.5
Carbon Tetrachloride		N.D.		N.D.	0.5
1,2-Dichloroethane (EDC)		0.9		1.4	0.5
Trichloroethene (TCE)		0.6		1100	0.5
1,2-Dichloropropane		N.D.		N.D.	0.5
Bromodichloromethane		N.D.		N.D.	0.5
2-Chloroethylvinyl ether		N.D.		N.D.	0.5
trans-1,3-Dichloropropene		N.D.		N.D.	0.5
cis-1,3-Dichloropropene		N.D.		N.D.	0.5
1,1,2-Trichloroethane		N.D.		N.D.	0.5
Tetrachloroethene		N.D.		3.2	0.5
Dibromochloromethane		N.D.		N.D.	0.5
Chlorobenzene		N.D.		N.D.	0.5
Bromoform		N.D.		N.D.	0.5
1,1,2,2-Tetrachloroethane		N.D.		N.D.	0.5
1,3-Dichlorobenzene		N.D.		N.D.	0.5
1,4-Dichlorobenzene		N.D.		N.D.	0.5
1,2-Dichlorobenzene		N.D.		N.D.	0.5
QUALITY CONTROL DATA					
Surrogate Spike Percent Recovery					
Bromochloromethane		87 %		94 %	
1,4-Dichlorobutane		89 %		82 %	

N.D.: Not Detected

Analytical Supervisor

Report Date:	25-May-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	05-May-88
Attn:	David Leland	Site:	City of Oakland
Sampled by:	Tim Walker	Date Received:	05-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	06-May-88
Preservatives:	none	Analysis Completion Date:	06-May-88
Analyst:	Farah/Lewis	Hold time, days:	1
WESCO JOB #:	HLA 0831.65-L		
Analytical Method:	EPA 601		
MATRIX:	WATER		

LAB #:		8-4685	8-4687	
CLIENT'S ID:	MW-6	180514	MW-6	180516

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	100.0
Chloromethane	N.D.	N.D.	100.0
Vinyl Chloride	N.D.	N.D.	100.0
Bromomethane	N.D.	N.D.	100.0
Chloroethane	N.D.	N.D.	100.0
Trichlorofluoromethane	N.D.	N.D.	100.0
1,1-Dichloroethene	N.D.	N.D.	25.0
Methylene Chloride	N.D.	N.D.	25.0
trans-1,2-Dichloroethene	N.D.	N.D.	25.0
1,1-Dichloroethane	N.D.	N.D.	25.0
Chloroform	N.D.	N.D.	25.0
1,1,1-Trichloroethane (TCA)	N.D.	N.D.	25.0
Carbon Tetrachloride	N.D.	N.D.	25.0
1,2-Dichloroethane (EDC)	N.D.	N.D.	25.0
Trichloroethene (TCE)	14100	11900	25.0
1,2-Dichloropropane	N.D.	N.D.	25.0
Bromodichloromethane	N.D.	N.D.	25.0
2-Chloroethylvinyl ether	N.D.	N.D.	25.0
trans-1,3-Dichloropropene	N.D.	N.D.	25.0
cis-1,3-Dichloropropene	N.D.	N.D.	25.0
1,1,2-Trichloroethane	N.D.	N.D.	25.0
Tetrachloroethene	N.D.	N.D.	25.0
Dibromochloromethane	N.D.	N.D.	25.0
Chlorobenzene	N.D.	N.D.	25.0
Bromoform	N.D.	N.D.	25.0
1,1,2,2-Tetrachloroethane	N.D.	N.D.	25.0
1,3-Dichlorobenzene	N.D.	N.D.	25.0
1,4-Dichlorobenzene	N.D.	N.D.	25.0
1,2-Dichlorobenzene	N.D.	N.D.	25.0

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	84 %	93 %
1,4-Dichlorobutane	81 %	94 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 25-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Farah/Lewis
WESCO JOB #: HLA 0831.65-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 05-May-88
Site: City of Oakland
Date Received: 05-May-88
Extract/Digest/Purge Date: 06-May-88
Analysis Completion Date: 06-May-88
Hold time, days: 1

LAB #: 8-4686
CLIENT'S ID: Blank 180515

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	1.7	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA
Surrogate Spike Percent Recovery

Bromochloromethane	86 %
1,4-Dichlorobutane	88 %

N.D.: Not Detected

Analytical Supervisor

MONITORING WELLS 5-11-88

WESCO Laboratories

Report Date: 30-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Evans/Walker
Submitted by: David Evans
Preservatives: none
Analyst: Lewis/Attia
WESCO JOB #: HLA 0831.67
Analytical Method: EPA 601

Client Contract/PO: 9382.022.02
Date Sampled: 11-May-88
Site: City of Oakland, Wells
Date Received: 11-May-88
Extract/Digest/Purge Date: 13-May-88
Analysis Completion Date: 13-May-88
Hold time: 2 days

LAB #: 8-4806
CLIENT'S ID: 191111 MW-2
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	0.8	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	7.5	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	3.8	0.5
Trichloroethene (TCE)	5200	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	10.6	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	82 %
1,4-Dichlorobutane	83 %

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc.

Report Date: 27-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Evans/Walker
Submitted by: David Evans
Preservatives: none
Analyst: Lewis/Attia
WESCO JOB #: HLA 0831.67
Analytical Method: EPA 601

Client Contract/PO: 9382.022.02
Date Sampled: 11-May-88
Site: City of Oakland, Wells
Date Received: 11-May-88
Extract/Digest/Purge Date: 13-May-88
Analysis Completion Date: 13-May-88
Hold time: 2 days

LAB #: 8-4808
CLIENT'S ID: 191112 MW-3
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	48	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	17	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	1.0	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	2.1	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	83 %
1,4-Dichlorobutane	85 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	27-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	13-May-88
Preservatives:	none	Analysis Completion Date:	13-May-88
Analyst:	Lewis/Attia	Hold time:	2 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 601		

LAB #: 8-4810 MATRIX: WATER

CLIENT'S ID: 191113 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	19	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	9.8	0.5
Chloroform	4.2	0.5
1,1,1-Trichloroethane (TCA)	2.4	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	1.3	0.5
Trichloroethene (TCE)	0.7	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	100 %
1,4-Dichlorobutane	87 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	27-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	13-May-88
Preservatives:	none	Analysis Completion Date:	13-May-88
Analyst:	Lewis/Attia	Hold time:	2 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 601		

LAB #: 8-4812 MATRIX: WATER

CLIENT'S ID: 191114 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	3.5	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	87 %
1,4-Dichlorobutane	76 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	30-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	23-May-88
Preservatives:	none	Analysis Completion Date:	23-May-88
Analyst:	Attia	Hold time:	12 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 601		

LAB #: 8-4814 MATRIX: WATER

CLIENT'S ID: 191115 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	18	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	7.5	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	2.0	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	74 %
1,4-Dichlorobutane	98 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	27-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	23-May-88
Preservatives:	none	Analysis Completion Date:	23-May-88
Analyst:	Attia	Hold time:	12 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 601		

LAB #: 8-4816 MATRIX: WATER

CLIENT'S ID: 191116 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	10.0	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	95 %
1,4-Dichlorobutane	91 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	27-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	23-May-88
Preservatives:	none	Analysis Completion Date:	23-May-88
Analyst:	Attia		
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 601	Hold time:	12 days

LAB #: 8-4818 MATRIX: WATER

CLIENT'S ID: 191117 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	11000	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	91 %
1,4-Dichlorobutane	76 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 27-May-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Evans/Walker
Submitted by: David Evans
Preservatives: none
Analyst: Lewis/Attia
WESCO JOB #: HLA 0831.67
Analytical Method: EPA 601

Client Contract/PO: 9382.022.02
Date Sampled: 11-May-88
Site: City of Oakland, Wells
Date Received: 11-May-88
Extract/Digest/Purge Date: 13-May-88
Analysis Completion Date: 13-May-88
Hold time: 2 days

LAB #: 8-4820
CLIENT'S ID: 191118 Blank
MATRIX: WATER

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	2.0
Chloromethane	N.D.	2.0
Vinyl Chloride	N.D.	2.0
Bromomethane	N.D.	2.0
Chloroethane	N.D.	2.0
Trichlorofluoromethane	N.D.	2.0
1,1-Dichloroethene	N.D.	0.5
Methylene Chloride	35	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
Chloroform	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	0.5
Trichloroethene (TCE)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
Bromodichloromethane	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Dibromochloromethane	N.D.	0.5
Chlorobenzene	N.D.	0.5
Bromoform	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	87 %
1,4-Dichlorobutane	84 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	30-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	13-May-88
Preservatives:	none	Analysis Completion Date:	13-May-88
Analyst:	Attia/Lewis	Hold Time:	2 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 602		

LAB #: 8-4807 MATRIX: WATER
CLIENT'S ID: 191111 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	8.7	0.2
Toluene	0.6	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	1.0	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	102 %

LAB #: 8-4809 MATRIX: WATER
CLIENT'S ID: 191112 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	97 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	30-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	13-May-88
Preservatives:	none	Analysis Completion Date:	13-May-88
Analyst:	Attia/Lewis	Hold Time:	2 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 602		

LAB #: 8-4815 MATRIX: WATER
CLIENT'S ID: 191115 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	100 %

LAB #: 8-4817 MATRIX: WATER
CLIENT'S ID: 191116 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	99 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	30-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	13-May-88
Preservatives:	none	Analysis Completion Date:	13-May-88
Analyst:	Attia/Lewis	Hold Time:	2 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 602		

LAB #: 8-4811 MATRIX: WATER
CLIENT'S ID: 191113 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	99 %

LAB #: 8-4813 MATRIX: WATER
CLIENT'S ID: 191114 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	95 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	30-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	13-May-88
Preservatives:	none	Analysis Completion Date:	13-May-88
Analyst:	Attia/Lewis	Hold Time:	2 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 602		

LAB #: 8-4819 MATRIX: WATER
CLIENT'S ID: 191117 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	310	10.0
Toluene	3100	10.0
Chlorobenzene	N.D.	10.0
Ethylbenzene	45	10.0
Xylene	4700	10.0
1,3-Dichlorobenzene	N.D.	10.0
1,4-Dichlorobenzene	N.D.	10.0
1,2-Dichlorobenzene	N.D.	10.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	80 %

LAB #: 8-4821 MATRIX: WATER
CLIENT'S ID: 191118 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	94 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	30-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	13-May-88
Preservatives:	none	Analysis Completion Date:	13-May-88
Analyst:	Lewis/Attia	Hold time:	2 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EDB by EPA 601		

LAB #: 8-4806 MATRIX: WATER
CLIENT'S ID: 191111 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Ethylene Dibromide	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	82 %
1,4-Dichlorobutane	83 %

LAB #: 8-4818 MATRIX: WATER
CLIENT'S ID: 191117 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Ethylene Dibromide	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Bromochloromethane	91 %
1,4-Dichlorobutane	76 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	30-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	13-May-88
Preservatives:	none	Analysis Completion Date:	13-May-88
Analyst:	Attia	Hold Time:	2 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #: 8-4807 CLIENT ID: 191111 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	1400	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 102 %

LAB #: 8-4809 CLIENT ID: 191112 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 97 %

LAB #: 8-4811 CLIENT ID: 191113 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 99 %

LAB #: 8-4813 CLIENT ID: 191114 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 95 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	30-May-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	11-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Evans/Walker	Date Received:	11-May-88
Submitted by:	David Evans	Extract/Digest/Purge Date:	13-May-88
Preservatives:	none	Analysis Completion Date:	13-May-88
Analyst:	Attia	Hold Time:	2 days
WESCO JOB #:	HLA 0831.67		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #: 8-4815 CLIENT ID: 191115 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 100 %

LAB #: 8-4817 CLIENT ID: 191116 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 99 %

LAB #: 8-4819 CLIENT ID: 191117 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	34000	2,500.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 80 %

LAB #: 8-4821 CLIENT ID: 191118 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 94 %

N.D.: Not Detected

Analytical Supervisor

MONITORING WELLS 5-18-88

WESCO Laboratories

Report Date: 02-Jun-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Larkin/Evans
Submitted by: C. Larkin
Preservatives: none
Analyst: Arntzer
WESCO JOB #: HLA 0831.68-L
Analytical Method: EPA 5030/8015
Matrix: WATER

Client Contract/PO: 9382.022.02
Date Sampled: 18-May-88
Site: City of Oakland, Wells
Date Received: 18-May-88
Extract/Digest/Purge Date: 19-May-88
Analysis Completion Date: 19-May-88
Hold Time: 1 day

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LAB #: 8-5149	CLIENT ID: 201711 MW-2	
COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	660	100.0
QUALITY CONTROL DATA Surrogate Spike % Recovery Fluorobenzene	101 %	

LAB #: 8-5150	CLIENT ID: 201712 MW-5	
COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0
QUALITY CONTROL DATA Surrogate Spike % Recovery Fluorobenzene	106 %	

LAB #: 8-5151	CLIENT ID: 201713 MW-6	
COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	25000	5,000.0
QUALITY CONTROL DATA Surrogate Spike % Recovery Fluorobenzene	92 %	

LAB #: 8-5152	CLIENT ID: 201714 MW-6	
COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	26000	2,500.0
QUALITY CONTROL DATA Surrogate Spike % Recovery Fluorobenzene	89 %	

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc.

Report Date:	02-Jun-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	18-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Larkin/Evans	Date Received:	18-May-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	19-May-88
Preservatives:	none		
Analyst:	Arntzen	Analysis Completion Date:	19-May-88
WESCO JOB #:	HLA 0831.68-L		
Analytical Method:	EPA 602	Hold Time:	1 day

LAB #: 8-5149 MATRIX: WATER
CLIENT'S ID: 201711 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	20	0.4
Toluene	2.1	0.4
Chlorobenzene	N.D.	0.4
Ethylbenzene	N.D.	0.4
Xylene	4.5	0.4
1,3-Dichlorobenzene	N.D.	0.4
1,4-Dichlorobenzene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.4

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	101 %

LAB #: 8-5150 MATRIX: WATER
CLIENT'S ID: 201712 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	106 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	02-Jun-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	18-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Larkin/Evans	Date Received:	18-May-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	19-May-88
Preservatives:	none		
Analyst:	Arntzen	Analysis Completion Date:	19-May-88
WESCO JOB #:	HLA 0831.68-L		
Analytical Method:	EPA 602	Hold Time:	1 day

LAB #: 8-5151 MATRIX: WATER
CLIENT'S ID: 201713 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	150	20.0
Toluene	1600	20.0
Chlorobenzene	N.D.	20.0
Ethylbenzene	40	20.0
Xylene	3000	20.0
1,3-Dichlorobenzene	N.D.	20.0
1,4-Dichlorobenzene	N.D.	20.0
1,2-Dichlorobenzene	N.D.	20.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	92 %

LAB #: 8-5152 MATRIX: WATER
CLIENT'S ID: 201714 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	200	10.0
Toluene	1800	10.0
Chlorobenzene	N.D.	10.0
Ethylbenzene	28	10.0
Xylene	3300	10.0
1,3-Dichlorobenzene	N.D.	10.0
1,4-Dichlorobenzene	N.D.	10.0
1,2-Dichlorobenzene	N.D.	10.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	89 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 02-Jun-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Larkin/Evans
Submitted by: C. Larkin
Preservatives: none
Analyst: Arntzen
WESCO JOB #: HLA 0831.68-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382.022.02
Date Sampled: 18-May-88
Site: City of Oakland, Wells
Date Received: 18-May-88
Extract/Digest/Purge Date: 19-May-88
Analysis Completion Date: 19-May-88
Hold time, days: 1

LAB #:		8-5154	8-5155	
CLIENT'S ID:	MW-2	201711	201712	MW-5

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	N.D.	41	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	N.D.	0.5
1,1-Dichloroethane	N.D.	11	0.5
Chloroform	2.3	4.5	0.5
1,1,1-Trichloroethane (TCA)	N.D.	2.4	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	1.2	2.0	0.5
Trichloroethene (TCE)	1900	1.2	0.5
1,2-Dichloropropane	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
Tetrachloroethene	4.5	N.D.	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA
Surrogate Spike Percent Recovery

Bromochloromethane	96 %	100 %
1,4-Dichlorobutane	81 %	85 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	02-Jun-88	Client Contract/PO:	9382.022.02
Client:	Harding Lawson Associates	Date Sampled:	18-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Larkin/Evans	Date Received:	18-May-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	19-May-88
Preservatives:	none	Analysis Completion Date:	19-May-88
Analyst:	Arntzen	Hold time, days:	1
WESCO JOB #:	HLA 0831.68-L		
Analytical Method:	EPA 601		
MATRIX: WATER			

LAB #:		8-5156	8-5157	
CLIENT'S ID:	MW-6	201713	201714	MW-6

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	200.0
Chloromethane	N.D.	N.D.	200.0
Vinyl Chloride	N.D.	N.D.	200.0
Bromomethane	N.D.	N.D.	200.0
Chloroethane	N.D.	N.D.	200.0
Trichlorofluoromethane	N.D.	N.D.	200.0
1,1-Dichloroethene	N.D.	0.8	50.0
Methylene Chloride	N.D.	N.D.	50.0
trans-1,2-Dichloroethene	1.7	2.0	50.0
1,1-Dichloroethane	N.D.	N.D.	50.0
Chloroform	22.8	21.8	50.0
1,1,1-Trichloroethane (TCA)	N.D.	N.D.	50.0
Carbon Tetrachloride	N.D.	N.D.	50.0
1,2-Dichloroethane (EDC)	14	17	50.0
Trichloroethene (TCE)	8900	6900	50.0
1,2-Dichloropropane	N.D.	N.D.	50.0
Bromodichloromethane	N.D.	N.D.	50.0
2-Chloroethylvinyl ether	N.D.	N.D.	50.0
trans-1,3-Dichloropropene	N.D.	N.D.	50.0
cis-1,3-Dichloropropene	N.D.	N.D.	50.0
1,1,2-Trichloroethane	1.7	N.D.	50.0
Tetrachloroethene	82	78	50.0
Dibromochloromethane	N.D.	N.D.	50.0
Chlorobenzene	N.D.	N.D.	50.0
Bromoform	N.D.	N.D.	50.0
1,1,2,2-Tetrachloroethane	N.D.	N.D.	50.0
1,3-Dichlorobenzene	N.D.	N.D.	50.0
1,4-Dichlorobenzene	N.D.	N.D.	50.0
1,2-Dichlorobenzene	N.D.	N.D.	50.0

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery

Bromochloromethane	124 %	128 %
1,4-Dichlorobutane	95 %	103 %

N.D.: Not Detected

Analytical Supervisor

MONITORING WELLS 5-27-88

WESCO Laboratories

Report Date:	07-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	27-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	27-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	31-May-88
Preservatives:	none	Analysis Completion Date:	31-May-88
Analyst:	Lewis/Attia	Hold Time:	4 days
WESCO JOB #:	HLA 0831.71-L		
Analytical Method:	EPA 602		

LAB #: 8-5373 MATRIX: WATER
CLIENT'S ID: 212701 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	88 %

LAB #: 8-5374 MATRIX: WATER
CLIENT'S ID: 212702 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	94 %

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425

Report Date:	07-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	27-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	27-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	31-May-88
Preservatives:	none	Analysis Completion Date:	31-May-88
Analyst:	Lewis/Attia	Hold Time:	4 days
WESCO JOB #:	HLA 0831.71-L		
Analytical Method:	EPA 602		

LAB #: 8-5375 MATRIX: WATER
CLIENT'S ID: 212703 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	95 %

LAB #: 8-5376 MATRIX: WATER
CLIENT'S ID: 212704 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	96 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	07-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	27-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	27-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	31-May-88
Preservatives:	none	Analysis Completion Date:	31-May-88
Analyst:	Lewis/Attia	Hold Time:	4 days
WESCO JOB #:	HLA 0831.71-L		
Analytical Method:	EPA 602		

LAB #: 8-5377 MATRIX: WATER
CLIENT'S ID: 212705 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	95 %

LAB #: 8-5378 MATRIX: WATER
CLIENT'S ID: 212706 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	8.3	0.2
Toluene	1.2	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	2.6	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	113 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	07-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	27-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	27-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	31-May-88
Preservatives:	none	Analysis Completion Date:	31-May-88
Analyst:	Lewis/Attia	Hold Time:	4 days
WESCO JOB #:	HLA 0831.71-L		
Analytical Method:	EPA 602		

LAB #: 8-5379 MATRIX: WATER
CLIENT'S ID: 212707 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	740	20.0
Toluene	7300	20.0
Chlorobenzene	N.D.	20.0
Ethylbenzene	740	20.0
Xylene	13000	20.0
1,3-Dichlorobenzene	N.D.	20.0
1,4-Dichlorobenzene	N.D.	20.0
1,2-Dichlorobenzene	N.D.	20.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	98 %

LAB #: 8-5380 MATRIX: WATER
CLIENT'S ID: 212708 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	0.2
Toluene	N.D.	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	N.D.	0.2
Xylene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	97 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	07-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	27-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	27-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	31-May-88
Preservatives:	none	Analysis Completion Date:	31-May-88
Analyst:	Lewis/Attia	Hold Time:	4 days
WESCO JOB #:	HLA 0831.71-L		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #: 8-5373 CLIENT ID: 212701 MW-3

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 89 %

LAB #: 8-5374 CLIENT ID: 212702 MW-5

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 95 %

LAB #: 8-5375 CLIENT ID: 212703 MW-7

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 92 %

LAB #: 8-5376 CLIENT ID: 212704 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 109 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	07-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	27-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	27-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	31-May-88
Preservatives:	none	Analysis Completion Date:	31-May-88
Analyst:	Lewis/Attia	Hold Time:	4 days
WESCO JOB #:	HLA 0831.71-L		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #: 8-5377 CLIENT ID: 212705 MW-8

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 109 %

LAB #: 8-5378 CLIENT ID: 212706 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	1700	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 100 %

LAB #: 8-5379 CLIENT ID: 212707 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	36000	5,000.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 100 %

LAB #: 8-5380 CLIENT ID: 212708 Blank

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 101 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	07-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	27-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	27-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	31-May-88
Preservatives:	none	Analysis Completion Date:	31-May-88
Analyst:	Lewis/Attia	Hold time, days:	4
WESCO JOB #:	HLA 0831.71-L		
Analytical Method:	EPA 601		
MATRIX: WATER			

LAB #:	8-5373	8-5374	
CLIENT'S ID:	MW-3 212701	212702	MW-5

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	24	20	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	N.D.	0.5
1,1-Dichloroethane	10	9.5	0.5
Chloroform	0.6	4.0	0.5
1,1,1-Trichloroethane (TCA)	0.6	1.7	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	0.9	0.8	0.5
Trichloroethene (TCE)	N.D.	N.D.	0.5
1,2-Dichloropropane	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
Tetrachloroethene	N.D.	N.D.	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	83 %	90 %
1,4-Dichlorobutane	71 %	73 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	07-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	27-May-88
Attn:	David Leland	Site:	City of Oakland, Wells
Sampled by:	Tim Walker	Date Received:	27-May-88
Submitted by:	Tim Walker	Extract/Digest/Purge Date:	31-May-88
Preservatives:	none	Analysis Completion Date:	31-May-88
Analyst:	Lewis/Attia	Hold time, days:	4
WESCO JOB #:	HLA 0831.71-L		
Analytical Method:	EPA 601		
MATRIX:	WATER		

LAB #:	8-5377	8-5378	
CLIENT'S ID:	MW-8 212705	212706	MW-2

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	N.D.	N.D.	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	1.1	0.5
1,1-Dichloroethane	N.D.	N.D.	0.5
Chloroform	1.8	7.0	0.5
1,1,1-Trichloroethane (TCA)	N.D.	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	2.3	0.5
Trichloroethene (TCE)	11	3100	0.5
1,2-Dichloropropane	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
Tetrachloroethene	N.D.	5.6	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	87 %	88 %
1,4-Dichlorobutane	65 %	105 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 07-Jun-88
Client: Harding Lawson Associates
Attn: David Leland
Sampled by: Tim Walker
Submitted by: Tim Walker
Preservatives: none
Analyst: Lewis/Attia
WESCO JOB #: HLA 0831.71-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 27-May-88
Site: City of Oakland, Wells
Date Received: 27-May-88
Extract/Digest/Purge Date: 31-May-88
Analysis Completion Date: 31-May-88
Hold time, days: 4

LAB #:		8-5379	8-5380	
CLIENT'S ID:	MW-6	212707	212708	Blank

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	0.5	N.D.	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	1.0	N.D.	0.5
1,1-Dichloroethane	N.D.	N.D.	0.5
Chloroform	18	N.D.	0.5
1,1,1-Trichloroethane (TCA)	N.D.	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	5.4	N.D.	0.5
Trichloroethene (TCE)	6700	N.D.	0.5
1,2-Dichloropropane	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	0.6	N.D.	0.5
Tetrachloroethene	18	N.D.	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA
Surrogate Spike Percent Recovery

Bromochloromethane	79 %	85 %
1,4-Dichlorobutane	77 %	72 %

N.D.: Not Detected

Analytical Supervisor

MONITORING WELLS 6-3-88

HARDING LAWSON ASSOC.
JUN 21 1988

WESCO Laboratories

Report Date:	14-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	03-Jun-88
Attn:	D Leland	Site:	City of Oakland, Well
Sampled by:	Larkin/Lieberman	Date Received:	03-Jun-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	07-Jun-88
Preservatives:	none	Analysis Completion Date:	07-Jun-88
Analyst:	Lewis	Hold Time:	4 days
WESCO JOB #:	HLA 0831.73-L		
Analytical Method:	EPA 5030/8015		
Matrix:	WATER		

LAB #: 8-5573 CLIENT ID: 88220302 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	1700	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 113 %

LAB #: 8-5574 CLIENT ID: 88220303 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	39000	1,000.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 120 %

LAB #: 8-5575 CLIENT ID: 88220304 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)-----	32000	1,000.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 105 %

N.D.: Not Detected

Analytical Supervisor

14 Galli Drive, Suite A
Novato, California 94949 415 883-6425
A Division of Western Ecological Services Company, Inc.

Report Date:	13-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	03-Jun-88
Attn:	D. Leland	Site:	City of Oakland, Well
Sampled by:	Larkin/Lieberman	Date Received:	03-Jun-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	07-Jun-88
Preservatives:	none	Analysis Completion Date:	07-Jun-88
Analyst:	Lewis	Hold Time:	4 days
WESCO JOB #:	HLA 0831.73-L		
Analytical Method:	EPA 602		

LAB #: 8-5573 MATRIX: WATER
CLIENT'S ID: 220302 MW-2

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	39	0.2
Toluene	4.7	0.2
Chlorobenzene	N.D.	0.2
Ethylbenzene	0.7	0.2
Xylene	7.0	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	101 %

LAB #: 8-5574 MATRIX: WATER
CLIENT'S ID: 220303 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	260	20.0
Toluene	2500	20.0
Chlorobenzene	N.D.	20.0
Ethylbenzene	320	20.0
Xylene	5100	20.0
1,3-Dichlorobenzene	N.D.	20.0
1,4-Dichlorobenzene	N.D.	20.0
1,2-Dichlorobenzene	N.D.	20.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	94 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	03-Jun-88
Attn:	D. Leland	Site:	City of Oakland, Well
Sampled by:	Larkin/Lieberman	Date Received:	03-Jun-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	07-Jun-88
Preservatives:	none	Analysis Completion Date:	07-Jun-88
Analyst:	Lewis	Hold Time:	4 days
WESCO JOB #:	HLA 0831.73-L		
Analytical Method:	EPA 602		

LAB #: 8-5575 MATRIX: WATER

CLIENT'S ID: 220304 MW-6

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	260	20.0
Toluene	2300	20.0
Chlorobenzene	N.D.	20.0
Ethylbenzene	290	20.0
Xylene	4800	20.0
1,3-Dichlorobenzene	N.D.	20.0
1,4-Dichlorobenzene	N.D.	20.0
1,2-Dichlorobenzene	N.D.	20.0

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery
Fluorobenzene	91 %

N.D.: Not Detected

Analytical Supervisor

Report Date:	13-Jun-88	Client Contract/PO:	9382,022.02
Client:	Harding Lawson Associates	Date Sampled:	03-Jun-88
Attn:	D. Leland	Site:	City of Oakland, Well
Sampled by:	Larkin/Lieberman	Date Received:	03-Jun-88
Submitted by:	C. Larkin	Extract/Digest/Purge Date:	07-Jun-88
Preservatives:	none	Analysis Completion Date:	07-Jun-88
Analyst:	Lewis	Hold time, days:	4
WESCO JOB #:	HLA 0831.73-L		
Analytical Method:	EPA 601		
MATRIX:	WATER		

LAB #:		8-5572	8-5573	
CLIENT'S ID:	MW-5	220301	220302	MW-2

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	2.0
1,1-Dichloroethene	20	N.D.	0.5
Methylene Chloride	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	1.3	2.2	0.5
1,1-Dichloroethane	11	N.D.	0.5
Chloroform	N.D.	13	0.5
1,1,1-Trichloroethane (TCA)	N.D.	22	0.5
Carbon Tetrachloride	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	1.5	0.5
Trichloroethene (TCE)	1.0	1500	0.5
1,2-Dichloropropane	0.6	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
Tetrachloroethene	N.D.	4.7	0.5
Dibromochloromethane	N.D.	N.D.	0.5
Chlorobenzene	0.8	N.D.	0.5
Bromoform	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery		
Bromochloromethane	95 %	87 %
1,4-Dichlorobutane	85 %	77 %

N.D.: Not Detected

Analytical Supervisor

Report Date: 13-Jun-88
Client: Harding Lawson Associates
Attn: D. Leland
Sampled by: Larkin/Lieberman
Submitted by: C. Larkin
Preservatives: none
Analyst: Lewis
WESCO JOB #: HLA 0831.73-L
Analytical Method: EPA 601
MATRIX: WATER

Client Contract/PO: 9382,022.02
Date Sampled: 03-Jun-88
Site: City of Oakland, Well
Date Received: 03-Jun-88
Extract/Digest/Purge Date: 07-Jun-88
Analysis Completion Date: 07-Jun-88
Hold time, days: 4

LAB #:		8-5574	8-5575	
CLIENT'S ID:	MW-6	220303	220304	MW-6
COMPOUND		RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane		N.D.	N.D.	2.0
Chloromethane		N.D.	N.D.	2.0
Vinyl Chloride		N.D.	N.D.	2.0
Bromomethane		N.D.	N.D.	2.0
Chloroethane		N.D.	N.D.	2.0
Trichlorofluoromethane		N.D.	N.D.	2.0
1,1-Dichloroethene		N.D.	N.D.	0.5
Methylene Chloride		N.D.	N.D.	0.5
trans-1,2-Dichloroethene		1.0	1.0	0.5
1,1-Dichloroethane		N.D.	N.D.	0.5
Chloroform		20	20	0.5
1,1,1-Trichloroethane (TCA)		N.D.	N.D.	0.5
Carbon Tetrachloride		N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)		3.3	3.4	0.5
Trichloroethene (TCE)		4500	6600	0.5
1,2-Dichloropropane		N.D.	N.D.	0.5
Bromodichloromethane		N.D.	N.D.	0.5
2-Chloroethylvinyl ether		N.D.	N.D.	0.5
trans-1,3-Dichloropropene		N.D.	N.D.	0.5
cis-1,3-Dichloropropene		N.D.	N.D.	0.5
1,1,2-Trichloroethane		0.5	N.D.	0.5
Tetrachloroethene		12	11	0.5
Dibromochloromethane		N.D.	N.D.	0.5
Chlorobenzene		N.D.	N.D.	0.5
Bromoform		N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane		N.D.	N.D.	0.5
1,3-Dichlorobenzene		N.D.	N.D.	0.5
1,4-Dichlorobenzene		N.D.	N.D.	0.5
1,2-Dichlorobenzene		N.D.	N.D.	0.5
QUALITY CONTROL DATA				
Surrogate Spike Percent Recovery				
Bromochloromethane		99 %	96 %	
1,4-Dichlorobutane		75 %	78 %	

N.D.: Not Detected

Analytical Supervisor

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

REPORT OF LABORATORY ANALYSIS

MONITORING WELLS
6-16-88

Report date: July 6, 1988
Client: Harding Lawson Associates
P.O Box 578
Novato, CA 94947

Pace job #: HLA 0831.75-L

Date sampled: June 16, 1988
Sampled by: B. Loskutoff

Site: City of Oakland
Attn.: D. Leland

Date received: June 17, 1988
Submitted by: B. Loskutoff

P.O.: 09382,022.02

Lab #	Client ID	Matrix	Analysis

Dear Client,

No problems were encountered with the analysis of your samples. We will store samples for 30 days after the report date. The samples will be returned to the client after the 30-day period, unless other arrangements are made.
If you have any questions, please feel free to call, (415)883-6100.

M Blanchard

Sample Controller

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report date: July 6, 1988 Pace job #: HLA 0831.75-L
Client: Harding Lawson Associates
P.O Box 578
Novato, CA 94947

Date sampled: June 16, 1988 Site: City of Oakland
Sampled by: B. Loskutoff Attn.: D. Leland

Date received: June 17, 1988 P.O.: 09382,022.02
Submitted by: B. Loskutoff

Lab #	Client ID	Matrix	Analysis
8- 5930	88241601	water	TPH only 5030/8015
8- 5930	88241601	water	Vol Org. Cpds.601+ 602
8- 5931	88241602	water	TPH only 5030/8015
8- 5931	88241602	water	Vol Org. Cpds.601+ 602
8- 5932	88241603	water	TPH only 5030/8015
8- 5932	88241603	water	Vol Org. Cpds.601+ 602
8- 5933	88241604	water	TPH only 5030/8015
8- 5933	88241604	water	Vol Org. Cpds.601+ 602
8- 5934	88241605	water	TPH only 5030/8015
8- 5934	88241605	water	Vol Org. Cpds.601+ 602
8- 5935	88241606	water	TPH only 5030/8015
8- 5935	88241606	water	Vol Org. Cpds.601+ 602
8- 5936	88241607	water	TPH only 5030/8015
8- 5936	88241607	water	Vol Org. Cpds.601+ 602
8- 5937	88241608	water	TPH only 5030/8015
8- 5937	88241608	water	Vol Org. Cpds.601+ 602
8- 5938	88241621	water	TPH only 5030/8015
8- 5938	88241621	water	Vol Org. Cpds.601+ 602
8- 5939	88241622	water	TPH only 5030/8015
8- 5939	88241622	water	Vol Org. Cpds.601+ 602
8- 5940	88241623	water	TPH only 5030/8015
8- 5940	88241623	water	Vol Org. Cpds.601+ 602
8- 5941	88241624	water	TPH only 5030/8015
8- 5941	88241624	water	Vol Org. Cpds.601+ 602

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

Offices:
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Coralville, Iowa
Novato, California

REPORT OF LABORATORY ANALYSIS

Report Date: 05-Jul-88 Extract/Purge Date: 23-Jun-88
WESCO JOB #: HLA 0831.75-L Completion Date: 23-Jun-88
Analytical Method: EPA 5030/8015/602 Analyst: Attia
MATRIX: WATER

LAB #: 8-5930 CLIENT'S ID: MW-8 241601

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 96 %

LAB #: 8-5931 CLIENT'S ID: MW-7 241602

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 105 %

LAB #: 8-5932 CLIENT'S ID: MW-5 241603

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 90 %

LAB #: 8-5933 CLIENT'S ID: BLANK 241604

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 94 %

N.D.: Not Detected

Analytical Supervisor

pace laboratories, inc
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report Date: 05-Jul-88 Extract/Purge Date: 23-Jun-88
WESCO JOB #: HLA 0831.75-L Completion Date: 23-Jun-88
Analytical Method: EPA 5030/8015/602 Analyst: Attia
MATRIX: WATER

LAB #: 8-5934 CLIENT'S ID: MW-2 241605

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	830	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 118 %

LAB #: 8-5935 CLIENT'S ID: MW-3 241606

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 87 %

LAB #: 8-5936 CLIENT'S ID: MW-6 241607

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	30,000	5000

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 89 %

LAB #: 8-5937 CLIENT'S ID: MW-6 241608

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	25,000	12500

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 81 %

N.D.: Not Detected

Analytical Supervisor

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FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report Date: 05-Jul-88 Extract/Purge Date: 24-Jun-88
WESCO JOB #: HLA 0831.75-L Completion Date: 24-Jun-88
Analytical Method: EPA 602 Analyst: Attia
MATRIX: WATER

LAB #:		8-5930	8-5931	
CLIENT'S ID:	MW-8	241601	241602	MW-7

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	N.D.	0.2
Toluene	N.D.	N.D.	0.2
Chlorobenzene	N.D.	N.D.	0.2
Ethylbenzene	N.D.	N.D.	0.2
Xylene	N.D.	N.D.	0.2
1,3-Dichlorobenzene	N.D.	N.D.	0.2
1,4-Dichlorobenzene	N.D.	N.D.	0.2
1,2-Dichlorobenzene	N.D.	N.D.	0.2
QUALITY CONTROL DATA			
Surrogate Spike % Recovery			
Fluorobenzene	97%	94 %	

LAB #:		8-5932	8-5933	
CLIENT'S ID:	MW-5	241603	241604	Blank

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	N.D.	0.2
Toluene	N.D.	N.D.	0.2
Chlorobenzene	N.D.	N.D.	0.2
Ethylbenzene	N.D.	N.D.	0.2
Xylene	N.D.	N.D.	0.2
1,3-Dichlorobenzene	N.D.	N.D.	0.2
1,4-Dichlorobenzene	N.D.	N.D.	0.2
1,2-Dichlorobenzene	N.D.	N.D.	0.2
QUALITY CONTROL DATA			
Surrogate Spike % Recovery			
Fluorobenzene	93%	92%	

N.D.: Not Detected

Analytical Supervisor

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report Date: 07-Jul-88 Extract/Purge Date: 24-Jun-88
PACE JOB #: HLA 0831.75-L Completion Date: 24-Jun-88
Analytical Method: EPA 602 Analyst: Attia
MATRIX: WATER

LAB #:		8-5934	8-5935	
CLIENT'S ID:	MW-2	241605	241606	MW-3

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	4.5	N.D.	0.2
Toluene	0.9	N.D.	0.2
Chlorobenzene	N.D.	N.D.	0.2
Ethylbenzene	N.D.	N.D.	0.2
Xylene	1.7	N.D.	0.2
1,3-Dichlorobenzene	N.D.	N.D.	0.2
1,4-Dichlorobenzene	N.D.	N.D.	0.2
1,2-Dichlorobenzene	N.D.	N.D.	0.2

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery	
Fluorobenzene	95%	97%

LAB #:		8-5936	8-5937	
CLIENT'S ID:	MW-6	241607	241608	MW-6

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	280	190	20
Toluene	3,100	2,200	20
Chlorobenzene	N.D.	N.D.	20
Ethylbenzene	370	330	20
Xylene	5,500	4,000	20
1,3-Dichlorobenzene	N.D.	N.D.	20
1,4-Dichlorobenzene	N.D.	N.D.	20
1,2-Dichlorobenzene	N.D.	N.D.	20

Surrogate Spike	Percent Recovery	
Fluorobenzene	101%	90%

N.D.: Not Detected

Analytical Supervisor

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FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
~~Novato, California~~

Report Date: 19-Jul-88 | Extract/Purge Date: 22-Jun-88
PACE JOB #: MLA 0831.75-L | Completion Date: 22-Jun-88
Analytical Method: EPA 601 | Analyst: ATTIA
MATRIX: WATER

	MW-8	MW-7	MW-5	Blank	
LAB #:	8-5930	8-5931	8-5932	8-5933	8-5712
CLIENT'S ID:	241601	241602	241603	241604	YMH060688-S9

COMPOUND	RESULT (ug/l)	RESULT (ug/l)	RESULT (ug/l)	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Dichlorodifluoromethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
1,1-Dichloroethene	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Methylene Chloride	N.D.	N.D.	110	N.D.	N.D.	2.0
trans-1,2-Dichloroethene	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
1,1-Dichloroethane	N.D.	N.D.	13	N.D.	N.D.	2.0
Chloroform	1.8	N.D.	3.6	0.6	N.D.	2.0
1,1,1-Trichloroethane (TCA)	N.D.	N.D.	2.7	N.D.	N.D.	2.0
Carbon Tetrachloride	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
1,2-Dichloroethane (EDC)	N.D.	2.6	1.6	N.D.	N.D.	2.0
Trichloroethene (TCE)	22	N.D.	0.8	N.D.	N.D.	2.0
1,2-Dichloropropane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Bromodichloromethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
2-Chloroethylvinyl ether	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
trans-1,3-Dichloropropene	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
cis-1,3-Dichloropropene	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
1,1,2-Trichloroethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Tetrachloroethene	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Dibromochloromethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Chlorobenzene	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Bromoform	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
1,1,2,2-Tetrachloroethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
1,3-Dichlorobenzene	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
1,4-Dichlorobenzene	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
1,2-Dichlorobenzene	N.D.	N.D.	N.D.	N.D.	N.D.	2.0

QUALITY CONTROL DATA

Surrogate Spike Percent Recovery					
Bromochloromethane	82%	75%	77%	73%	101 %
1,4-Dichlorobutane	76%	71%	75%	72%	100 %

N.D.: Not Detected

Analytical Supervisor

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

REPORT OF LABORATORY ANALYSIS

Report Date: 30-Jun-88
WESCO JOB #: HLA 0831.75-L
Analytical Method: EPA 601
Matrix: WATER

Extract/Purge Date: 24-Jun-88
Completion Date: 24-Jun-88
Analyst: Attia/Levis

LAB #	8-5934	8-5935	8-5936	8-5937	8-5938	
CLIENT ID	241605	241606	241607	241608	241621	
COMPOUND	RESULT (ug/l)	RESULT (ug/l)	RESULT (ug/l)	RESULT (ug/l)	RESULT (ug/l)	Detection Limit(ug/l)
Dichlorodifluoromethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	N.D.	N.D.	N.D.	2.0
1,1-Dichloroethene	N.D.	22.5	N.D.	2.1	N.D.	0.5
Methylene Chloride	N.D.	N.D.	N.D.	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	N.D.	0.7	1.1	N.D.	0.5
1,1-Dichloroethane	N.D.	7.2	N.D.	N.D.	N.D.	0.5
Chloroform	9.4	N.D.	49	28	N.D.	0.5
1,1,1-Trichloroethane	N.D.	0.9	N.D.	N.D.	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	N.D.	N.D.	N.D.	0.5
1,2-Dichloroethane	1.3	1.0	2.8	3.2	N.D.	0.5
Trichloroethene	1,150	0.7	3,900	5,300	N.D.	0.5
1,2-Dichloropropane	N.D.	N.D.	N.D.	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	N.D.	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	N.D.	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	N.D.	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	2.5	2.4	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	1.6	2.0	N.D.	0.5
Tetrachloroethene	N.D.	N.D.	27	31	N.D.	0.5
Dibromochloromethane	N.D.	N.D.	N.D.	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	2.2	5.0	N.D.	0.5
Bromoform	N.D.	N.D.	N.D.	N.D.	N.D.	0.5
1,1,2,2,-Tetrachloroethane	N.D.	N.D.	N.D.	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	6.5	2.0	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	7.0	2.8	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	6.4	4.5	N.D.	0.5
QUALITY CONTROL DATA	Surrogate Spike % Recovery					
Bromochloromethane	86 %	87 %	87 %	74 %	102 %	
1,4-Dichlorobutane	91 %	81 %	80 %	82 %	79 %	

N. D.: Not Detected

Analytical Supervisor

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report date: August 10, 1988
Client: Harding Lawson Associates
P.O Box 578
Novato, CA 94947
Attn.: David Leland

Pace job #: HLA 0831.77-L

MONITORING WELLS
6-30-88

Date sampled: June 30, 1988
Sampled by: Evans/Levis

Site: City of Oakland

Date received: July 1, 1988
Submitted by: D. Evans

P.O.: 09382,022.02

Lab #	Client ID		Matrix	Analysis
8- 6494	88263001	MW-2	water	TPH only 5030/8015
8- 6494	88263001		water	Vol Org. Cpds. 8010+8020
8- 6495	88263002	MW-9	water	TPH only 5030/8015
8- 6495	88263002		water	Vol Org. Cpds. 8010+8020
8- 6496	88263003	MW-5	water	TPH only 5030/8015
8- 6496	88263003		water	Vol Org. Cpds. 8010+8020
8- 6497	88263004	MW-6	water	TPH only 5030/8015
8- 6497	88263004		water	Vol Org. Cpds. 8010+8020
8- 6498	88263005	MW-6	water	TPH only 5030/8015
8- 6498	88263005		water	Vol Org. Cpds. 8010+8020

Dear Client,

No problems were encountered with the analysis of your samples. We will store samples for 30 days after the report date. The samples will be returned to the client after the 30-day period, unless other arrangements are made.
If you have any questions, please feel free to call, (415)883-6100.

Please note: due to instrument failure the 8010+8020 analysis was run together as an 8240.

C. Sortag
Sample Controller

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report Date: 09-Aug-88
PACE JOB #: HLA 0831.77-L
Analytical Method: EPA 5030/8015
MATRIX: WATER

Extract/Purge Date: 13-Jul-88
Completion Date: 13-Jul-88
Analyst: LEWIS

MW-2

LAB #: 8-6494 CLIENT'S ID: 263001

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	630.0	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 84 %

MW-9

LAB #: 8-6495 CLIENT'S ID: 263002

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	91.0	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 108 %

MW-5

LAB #: 8-6496 CLIENT'S ID: 263003

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	N.D.	50.0

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 94 %

N.D.: Not Detected

Analytical Supervisor

pace laboratories, inc
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report Date: 10-Aug-88 Extract/Purge Date: 13-Jul-88
PACE JOB #: HLA 0831.77-L Completion Date: 13-Jul-88
Analytical Method: EPA 5030/8015 Analyst: LEWIS
MATRIX: WATER

MW-6

LAB #: 8-6497 CLIENT'S ID: 263004

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	21,000	5,000

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 97 %

MW-6

LAB #: 8-6498 CLIENT'S ID: 263005

COMPOUND	RESULT (ug/l)	Detection Limit (ug/l)
Total Petroleum Hydrocarbons (light)---	13,000	1,000

QUALITY CONTROL DATA
Surrogate Spike % Recovery
Fluorobenzene 107 %

QUALITY CONTROL DATA
METHOD: EPA 5030/8015 PACE JOB #: HLA 0831.77-L

COMPOUND	Blank ug/l	Spike Duplicate % deviation	Spike % recovery
Gasoline----------	N.D.	8	87

QUALITY CONTROL DATA
Surrogate Spike % Recovery

Fluorobenzene	159 %	89 %	88 %

N.D.: Not Detected

Analytical Supervisor

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report Date:	09-Aug-88	Extract/Purge Date:	05-Jul-88
PACE JOB #:	HLA 0831.77-L	Analysis Completion :	05-Jul-88
Analytical Method:	EPA 8240	Analyst: NET	
MATRIX: WATER			

	MW-2	MW-9	MW-5	
LAB #:	8-6494	8-6495	8-6496	
CLIENT ID:	263001	263002	263003	
COMPOUND	Result (ug/l)	Result (ug/l)	Result (ug/l)	Detection Limit (ug/l)
Chloromethane	N.D.	N.D.	N.D.	0.5
Vinyl Chloride	N.D.	N.D.	N.D.	0.5
Bromomethane	N.D.	N.D.	N.D.	0.5
Chloroethane	N.D.	N.D.	N.D.	0.5
Trichlorofluoromethane	N.D.	N.D.	N.D.	0.5
1,1-Dichloroethene	N.D.	N.D.	N.D.	2.8
Methylene Chloride	N.D.	N.D.	N.D.	2.8
trans-1,2-Dichloroethene	70	N.D.	N.D.	1.6
1,1-Dichloroethane	N.D.	N.D.	N.D.	4.7
Chloroform	6.2	N.D.	N.D.	1.6
1,1,1-Trichloroethane	N.D.	N.D.	N.D.	3.8
1,2-Dichloroethane	N.D.	N.D.	N.D.	2.8
Carbon Tetrachloride	N.D.	N.D.	N.D.	2.8
Benzene	8.5	160	N.D.	4.4
1,2-Dichloropropane	N.D.	N.D.	N.D.	6.0
Trichloroethene	7,600	N.D.	N.D.	1.9
Bromodichloromethane	N.D.	N.D.	N.D.	2.2
trans-1,3-Dichloropropene	N.D.	N.D.	N.D.	0.5
Toluene	N.D.	83	N.D.	6.0
cis-1,3-Dichloropropene	N.D.	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	N.D.	7.0
Dibromochloromethane	N.D.	N.D.	N.D.	3.1
Chlorobenzene	N.D.	N.D.	N.D.	6.0
Ethylbenzene	N.D.	N.D.	N.D.	7.2
Bromoform	N.D.	N.D.	N.D.	4.7
Tetrachloroethane	12	N.D.	N.D.	4.1
1,1,2,2,-Tetrachloroethane	N.D.	N.D.	N.D.	6.9
1,3-Dichlorobenzene	N.D.	N.D.	N.D.	6.0
1,4-Dichlorobenzene	N.D.	N.D.	N.D.	6.0
1,2-Dichlorobenzene	N.D.	N.D.	N.D.	6.0
QUALITY CONTROL DATA			Surrogate Spike % Recover	
1,2-Dichloroethane-d4	74 %	76%	77%	
Toluene-d8	76 %	81%	73%	
4-Bromofluorobenzene	77 %	82%	75%	

N.D.: Not Detected

Analytical Supervisor

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report Date: 09-Aug-88 Extract/Purge Date: 05-Jul-88
PACE JOB #: HLA 0831.77-L Analysis Completion : 05-Jul-88
Analytical Method: EPA 8240 Analyst: NET
MATRIX: WATER

	MW-6	MW-6	
LAB #:	8-6497	8-6498	
CLIENT ID:	263004	263005	
COMPOUND	Result (ug/l)	Result (ug/l)	Detection Limit (ug/l)
Chloromethane	N.D.	N.D.	0.5
Vinyl Chloride	N.D.	N.D.	0.5
Bromomethane	N.D.	N.D.	0.5
Chloroethane	N.D.	N.D.	0.5
Trichlorofluoromethane	N.D.	N.D.	0.5
1,1-Dichloroethene	N.D.	N.D.	2.8
Methylene Chloride	N.D.	N.D.	2.8
trans-1,2-Dichloroethene	160	160	1.6
1,1-Dichloroethane	N.D.	N.D.	4.7
Chloroform	N.D.	N.D.	1.6
1,1,1-Trichloroethane	N.D.	N.D.	3.8
1,2-Dichloroethane	N.D.	N.D.	2.8
Carbon Tetrachloride	N.D.	N.D.	2.8
Benzene	170	160	4.4
1,2-Dichloropropane	N.D.	N.D.	6.0
Trichloroethene	4,500	4,300	1.9
Bromodichloromethane	N.D.	N.D.	2.2
trans-1,3-Dichloropropene	N.D.	N.D.	0.5
Toluene	2,000	1,700	6.0
cis-1,3-Dichloropropene	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	7.0
Dibromochloromethane	N.D.	N.D.	3.1
Chlorobenzene	N.D.	N.D.	6.0
Ethylbenzene	260	N.D.	7.2
Bromoform	N.D.	N.D.	4.7
Tetrachloroethene	16	15	4.1
1,1,2,2,-Tetrachloroethane	N.D.	N.D.	6.9
1,3-Dichlorobenzene	N.D.	N.D.	6.0
1,4-Dichlorobenzene	N.D.	N.D.	6.0
1,2-Dichlorobenzene	N.D.	N.D.	6.0

QUALITY CONTROL DATA		Surrogate Spike % Recovery
1,2-Dichloroethane-d4	80 %	82%
Toluene-d8	80 %	83%
4-Bromofluorobenzene	78 %	81%

N.D.: Not Detected

Analytical Supervisor

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report date: September 16, 1988
Client: Harding Lawson Associates
P.O Box 578
Novato, CA 94947
Attn.: DAVID LELAND

Pace job #: ~~HLA-0831~~.81-L

MONITORING WELLS
7/15/88

Date sampled: July 15, 1988
Sampled by: BILL LOSKUTOFF

Site: CITY OF OAKLAND

Date received: July 15, 1988
Submitted by: BILL LOSKUTOFF

P.O.: 09382.022.02

Lab #	Client ID		Matrix	Analysis
8- 6907	88281501	MW-2	soil	TPH (light) only 5030/8015
8- 6907	88281501		soil	Vol Org. Cpds. 601+602
8- 6908	88281502	MW-5	soil	TPH (light) only 5030/8015
8- 6908	88281502		soil	Vol Org. Cpds. 601+602
8- 6909	88281503	MW-6	soil	TPH (light) only 5030/8015
8- 6909	88281503		soil	Vol Org. Cpds. 601+602
8- 6910	88281504	MW-9	soil	TPH (light) only 5030/8015
8- 6910	88281504		soil	Vol Org. Cpds. 601+602
8- 6911	88281505	MW-9	soil	TPH (light) only 5030/8015
8- 6911	88281505		soil	Vol Org. Cpds. 601+602
8- 6912	88281506	Blank	soil	TPH (light) only 5030/8015
8- 6912	88281506		soil	Vol Org. Cpds. 601+602

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report date: September 16, 1988
Pace job #: HLA 0831.81-L

Client: Harding Lawson Associates
P.O Box 578
Novato, CA 94947
Attn.: DAVID LELAND

Date sampled: July 15, 1988
Site: CITY OF OAKLAND
Sampled by: BILL LOSKUTOFF

Date received: July 15, 1988
P.O.: 09382.022.02
Submitted by: BILL LOSKUTOFF

Lab #	Client ID	Matrix	Analysis

Dear Client,

No problems were encountered with the analysis of your samples. We will store samples for 30 days after the report date. The samples will be returned to the client after the 30-day period, unless other arrangements are made.
If you have any questions, please feel free to call, (415)883-6100.

C. Santos

Sample Controller

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report Date: 14-Sep-88
PACE JOB #: HLA 0831.81-1
Analytical Method: EPA 8010
MATRIX: SOIL

Extract/Purge Date: 18-Jul-88
Completion Date: 18-Jul-88
Analyst: ATTIA/LEWIS

	MW-2	MW-5	MW-6
LAB #:	8-6907	8-6908	8-6909
CLIENT'S ID:	281501	281502	281503

COMPOUND	RESULT (ug/kg)	RESULT (ug/kg)	RESULT (ug/kg)	Detection Limit (ug/kg)
Dichlorodifluoromethane	N.D.	N.D.	N.D.	2.0
Chloromethane	N.D.	N.D.	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	N.D.	2.0
1,1-Dichloroethene	N.D.	14	N.D.	0.5
Methylene Chloride	N.D.	N.D.	N.D.	0.5
trans-1,2-Dichloroethene	1	N.D.	8.4	0.5
1,1-Dichloroethane	N.D.	9	N.D.	0.5
Chloroform	5	4	30	0.5
1,1,1-Trichloroethane (TCA)	N.D.	1.2	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	N.D.	1.2	N.D.	0.5
Trichloroethene (TCE)	4,600*	1.2	N.D.	0.5
1,2-Dichloropropane	N.D.	N.D.	4.0	0.5
Bromodichloromethane	N.D.	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	2.6	0.5
1,1,2-Trichloroethane	N.D.	N.D.	3.2	0.5
Tetrachloroethene	8.5	N.D.	42	0.5
Dibromochloromethane	N.D.	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	1.6	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	2.6	0.5
1,2-Dichlorobenzene	N.D.	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery			
Bromochloromethane	83%	81%	110%	
1,4-Dichlorobutane	97%	85%	139%	M.I.

N.D.: Not Detected
M.I.: Matrix Interference
*: Quantified at 100 times dilution.

Analytical Supervisor

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

REPORT OF LABORATORY ANALYSIS

Report Date: 13-Sep-88
PACE JOB #: HLA 0831.81-1
Analytical Method: EPA 8010
MATRIX: SOIL

Extract/Purge Date: 20-Jul-88
Completion Date: 20-Jul-88
Analyst: ATTIA/LEWIS

	MW-9	MW-9	Blank	
LAB #:	8-6910	8-6911	8-6912	
CLIENT'S ID:	281504	281505	281506	
COMPOUND	RESULT (ug/kg)	RESULT (ug/kg)	RESULT (ug/kg)	Detection Limit (ug/kg)
Dichlorodifluoromethane	N.D.	N.D.	N.D.	2.0
Chloromethane	17	31	N.D.	2.0
Vinyl Chloride	N.D.	N.D.	N.D.	2.0
Bromomethane	N.D.	N.D.	N.D.	2.0
Chloroethane	N.D.	N.D.	N.D.	2.0
Trichlorofluoromethane	N.D.	N.D.	N.D.	2.0
1,1-Dichloroethene	5.8	4.7	N.D.	0.5
Methylene Chloride	N.D.	N.D.	0.7	0.5
trans-1,2-Dichloroethene	N.D.	N.D.	N.D.	0.5
1,1-Dichloroethane	1.1	1.0	N.D.	0.5
Chloroform	6.0	5.4	N.D.	0.5
1,1,1-Trichloroethane (TCA)	0.7	0.6	N.D.	0.5
Carbon Tetrachloride	N.D.	N.D.	N.D.	0.5
1,2-Dichloroethane (EDC)	1.3	1.0	N.D.	0.5
Trichloroethene (TCE)	1.2	0.7	N.D.	0.5
1,2-Dichloropropane	N.D.	N.D.	N.D.	0.5
Bromodichloromethane	N.D.	N.D.	N.D.	0.5
2-Chloroethylvinyl ether	N.D.	N.D.	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	N.D.	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	N.D.	N.D.	0.5
1,1,2-Trichloroethane	N.D.	N.D.	N.D.	0.5
Tetrachloroethene	N.D.	N.D.	N.D.	0.5
Dibromochloromethane	N.D.	N.D.	N.D.	0.5
Chlorobenzene	N.D.	N.D.	N.D.	0.5
Bromoform	N.D.	N.D.	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	N.D.	N.D.	0.5
1,3-Dichlorobenzene	N.D.	N.D.	N.D.	0.5
1,4-Dichlorobenzene	N.D.	N.D.	N.D.	0.5
1,2-Dichlorobenzene	N.D.	N.D.	N.D.	0.5

QUALITY CONTROL DATA

Surrogate Spike	Percent Recovery		
Bromochloromethane	94%	86%	79%
1,4-Dichlorobutane	112%	98%	98%

N.D.: Not Detected
M.I.: Matrix Interference

Analytical Supervisor

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report date: 14-Sep-88
PACE JOB #: HLA 0831.81-L
Analytical Method: EPA 5030/8015
MATRIX: SOIL

Extract/Purge Date: 22-Jul-88
Completion Date: 22-Jul-88
Analyst: ARNTZEN

	MW-2	MW-5	
LAB #:	8-6907	8-6908	
CLIENT'S ID:	281501	281502	
COMPOUND	RESULT (ug/kg)	RESULT (ug/kg)	Detection Limit (ug/kg)
Total Petroleum Hydrocarbons (light)---	12,000	N.D.	50.0
QUALITY CONTROL DATA	Surrogate Spike % Recovery		
Fluorobenzene	129% M.I.	106%	

	MW-6	MW-9	
LAB #:	8-6909	8-6910	
CLIENT'S ID:	281503	281504	
COMPOUND	RESULT (ug/kg)	RESULT (ug/kg)	Detection Limit (ug/kg)
Total Petroleum Hydrocarbons (light)---	8,600	880	50.0
QUALITY CONTROL DATA	Surrogate Spike % Recovery		
Fluorobenzene	111% BFB	104% BFB	

	MW-9		
LAB #:	8-6911	8-6912	
CLIENT'S ID:	281505	281506	
COMPOUND	RESULT (ug/kg)	RESULT (ug/kg)	Detection Limit (ug/kg)
Total Petroleum Hydrocarbons (light)---	180	N.D.	50.0
QUALITY CONTROL DATA	Surrogate Spike % Recovery		
Fluorobenzene	110% BFB	105%	

N.D.: Not Detected

Project Chemist-Supervisor

11 Digital Drive □ Novato, CA 94949 □ Phone (415) 883-6100

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FORMERLY WESCO LABORATORIES

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REPORT OF LABORATORY ANALYSIS

Report Date: 13-Sep-88
PACE JOB #: HLA 0831.81-L
Analytical Method: EPA 8020
MATRIX: SOIL

Extract/Purge Date: 18-Jul-88
Completion Date: 18-Jul-88
Analyst: ATTIA/LEWIS

	MW-2	MW-5	MW-6	
LAB #:	8-6907	8-6908	8-6909	
CLIENT'S ID:	281501	281502	281503	
COMPOUND	RESULT (ug/kg	RESULT (ug/kg)	RESULT (ug/kg)	Detection Limit (ug/kg)
Benzene	10	N.D.	8.4	0.2
Toluene	1.2	N.D.	300	0.2
Chlorobenzene	N.D.	N.D.	N.D.	0.2
Ethylbenzene	N.D.	N.D.	89	0.2
Xylene	2.4	N.D.	570	0.2
1,3-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
1,4-Dichlorobenzene	N.D.	N.D.	2.6	0.2
1,2-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
QUALITY CONTROL DATA				
Surrogate Spike	Percent Recovery			
Fluorobenzene	111%	101%	149% M.I.	

QUALITY CONTROL DATA
METHOD: EPA 8020 PACE JOB#: HLA 0831.81-L

COMPOUND	Blank (ug/l)	Spike Duplicate % deviation	Spike % recovery
Benzene	N.D.	7	99%
Toluene	N.D.	5	102%
p-Xylene	N.D.	10	102%
QUALITY CONTROL DATA			
Surrogate Spike % Recovery			
Fluorobenzene	119 %	97 %	100 %

N.D.: Not Detected
M.I.: Matrix Interference

Analytical Supervisor

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REPORT OF LABORATORY ANALYSIS

Report Date: 14-Sep-88
PACE JOB #: HLA 0831.81-L
Analytical Method: EPA 8020
MATRIX: SOIL

Extract/Purge Date: 20-Jul-88
Completion Date: 20-Jul-88
Analyst: ATTIA/LEWIS

	MW-9	MW-9	Blank	
LAB #:	8-6910	8-6911	8-6912	
CLIENT'S ID:	281504	281505	281506	
COMPOUND	RESULT (ug/kg	RESULT (ug/kg)	RESULT (ug/kg)	Detection Limit (ug/kg)
Benzene	200	110	N.D.	0.2
Toluene	170	77	0.7	0.2
Chlorobenzene	N.D.	N.D.	N.D.	0.2
Ethylbenzene	N.D.	N.D.	N.D.	0.2
Xylene	81	46	N.D.	0.2
1,3-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
1,4-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
1,2-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
QUALITY CONTROL DATA				
Surrogate Spike	Percent Recovery			
Fluorobenzene	103%	96%	95%	

QUALITY CONTROL DATA
METHOD: EPA 8020 PACE JOB#: HLA 0831.81-L

COMPOUND	Blank (ug/l)	Spike Duplicate % deviation	Spike % recovery
Benzene	N.D.	1	94
Toluene	N.D.	2	100
p-Xylene	N.D.	3	101
QUALITY CONTROL DATA			
Surrogate Spike % Recovery			
Fluorobenzene	100 %	95 %	96 %

N.D.: Not Detected

Analytical Supervisor

Pace Laboratories, Inc.
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REPORT OF LABORATORY ANALYSIS

Offices:
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HARDING LAWSON ASSOC.
AUG 3 1 1988

Report date: August 30, 1988 Pace Job #: HLA 0831.83-L
Client: Harding Lawson Associates
200 Rush Landing Road
Novato, CA 94947
Attn.: D. Leland

MONITORING WELLS
7-27-88

Date sampled: July 27, 1988 Site: City of Oakland
Sampled by: B. Loskutoff

Date received: July 28, 1988 P.O.: 09382,022.02
Submitted by: B. Loskutoff

Lab #	Client ID		Matrix	Analysis
8- 7140	88302701	MW-3	water	TPH (light) only 5030/8015
8- 7140	88302701		water	Vol Org. Cpds. 8010+8020
8- 7141	88302702	MW-5	water	TPH (light) only 5030/8015
8- 7141	88302702		water	Vol Org. Cpds. 8010+8020
8- 7142	88302703	MW-2	water	TPH (light) only 5030/8015
8- 7142	88302703		water	Vol Org. Cpds. 8010+8020
8- 7143	88302704	MW-7	water	TPH (light) only 5030/8015
8- 7143	88302704		water	Vol Org. Cpds. 8010+8020
8- 7144	88302705	Blank	water	TPH (light) only 5030/8015
8- 7144	88302705		water	Vol Org. Cpds. 8010+8020
8- 7145	88302706	MW-8	water	TPH (light) only 5030/8015
8- 7145	88302706		water	Vol Org. Cpds. 8010+8020
8- 7146	88302707	MW-6	water	TPH (light) only 5030/8015
8- 7146	88302707		water	Vol Org. Cpds. 8010+8020
8- 7147	88302708	MW-6	water	TPH (light) only 5030/8015
8- 7147	88302708		water	Vol Org. Cpds. 8010+8020

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REPORT OF LABORATORY ANALYSIS

Offices:
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Coralville, Iowa
Novato, California

Report date: August 30, 1988 Pace job #: HLA 0831.83-L

Client: Harding Lawson Associates
200 Rush Landing Road
Novato, CA 94947

Attn.: D. Leland

Date sampled: July 27, 1988 Site: City of Oakland
Sampled by: B. Loskutoff

Date received: July 28, 1988 P.O.: 09382,022.02
Submitted by: B. Loskutoff

Lab #	Client ID	Matrix	Analysis

Dear Client,

No problems were encountered with the analysis of your samples. We will store samples for 30 days after the report date. The samples will be returned to the client after the 30-day period, unless other arrangements are made.
If you have any questions, please feel free to call, (415)883-6100.

C. Sontag

Sample Controller

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FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
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Coralville, Iowa
Novato, California

Report date: 22-Aug-88 Extract/Purge Date: 28-Jul-88
HCE JOB #: HLA 0831.83-L Completion Date: 28-Jul-88
Analytical Method: EPA 5030/8015 Analyst: ATTIA
MATRIX: WATER

LAB #: 8-7140 MW-3 CLIENT'S ID: 302701

COMPOUND	RESULT (ug/l)	Detection Limit(ug/l)
Total Petroleum Hydrocarbons (light)---	N.D.	50.0

QUALITY CONTROL DATA	Surrogate Spike % Recovery
Fluorobenzene	101 %

LAB #: 8-7141 MW-5 CLIENT'S ID: 302702

COMPOUND	RESULT (ug/l)	Detection Limit(ug/l)
Total Petroleum Hydrocarbons (light)---	N.D.	50.0

QUALITY CONTROL DATA	Surrogate Spike % Recovery
Fluorobenzene	105 %

LAB #: 8-7142 MW-2 CLIENT'S ID: 302703

COMPOUND	RESULT (ug/l)	Detection Limit(ug/l)
Total Petroleum Hydrocarbons (light)---	1,200	250

QUALITY CONTROL DATA	Surrogate Spike % Recovery
Fluorobenzene	101 %

N.D.: Not Detected

Analytical Supervisor

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REPORT OF LABORATORY ANALYSIS

eport Date: 22-Aug-88 Extract/Purge Date: 28-Jul-88
CE JOB #: HLA 0831.83-L Completion Date: 28-Jul-88
lytical Method: EPA 5030/8015 Analyst: ATTIA
ATRIX: WATER

AB #: 8-7143 MW-7 CLIENT'S ID: 302704

OMPOUND	RESULT (ug/l)	Detection Limit(ug/l)
tal Petroleum Hydrocarbons (light)---	N.D.	50.0

UALITY CONTROL DATA — Surrogate Spike % Recovery
luorobenzene — 101 %

B #: 8-7144 Blank CLIENT'S ID: 302705

OMPOUND	RESULT (ug/l)	Detection Limit(ug/l)
otal Petroleum Hydrocarbons (light)---	N.D.	50.0

ALITY CONTROL DATA — Surrogate Spike % Recovery
luorobenzene — 102 %

AB #: 8-7145 MW-8 CLIENT'S ID: 302706

MPOUND	RESULT (ug/l)	Detection Limit(ug/l)
tal Petroleum Hydrocarbons (light)---	N.D.	50.0

UALITY CONTROL DATA — Surrogate Spike % Recovery
uorobenzene — 103 %

.D.: Not Detected

Analytical Supervisor

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Offices:
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eport Date: 22-Aug-88 Extract/Purge Date: 28-Jul-88
E JOB #: HLA 0831.83-L Completion Date: 28-Jul-88
lytical Method: EPA 5030/8015 Analyst: ATTIA
ATRIX: WATER

AB #: 8-7146 MW-6 CLIENT'S ID: 302707

POUND	RESULT (ug/l)	Detection Limit(ug/l)
tal Petroleum Hydrocarbons (light)---	4,400	50.0

ALITY CONTROL DATA	Surrogate Spike % Recovery
orobenzene	93 % M.I.

#: 8-7147 MW-6 CLIENT'S ID: 302708

OMPOUND	RESULT (ug/l)	Detection Limit(ug/l)
otal Petroleum Hydrocarbons (light)---	4,900	50.0

LITY CONTROL DATA	Surrogate Spike % Recovery
luorobenzene	95 % M.I.

.D.: Not Detected
.I.: Matrix Interference

Analytical Supervisor

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REPORT OF LABORATORY ANALYSIS

Offices:
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eport Date: 22-Aug-88
E JOB #: HLA 0831.83-L
lytical Method: EPA 8010
ATRIX: WATER

Extract/Purge Date: SEE BELOW
Completion Date: SEE BELOW
Analyst: ATTIA

AB #:	MW-3 8-7140	MW-5 8-7141	MW-2 8-7142	
LIENT'S ID:	302701	302702	302703	
E COMPLETED:	28-JUL-88	28-JUL-88	01-AUG-88	
OMPOUND	RESULT (ug/l)	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l
ichlorodifluoromethane	N.D.	N.D.	N.D.	2.0
oromethane	N.D.	N.D.	N.D.	2.0
yl Chloride	N.D.	N.D.	N.D.	2.0
romomethane	N.D.	N.D.	N.D.	2.0
oroethane	N.D.	N.D.	N.D.	2.0
chlorofluoromethane	N.D.	N.D.	N.D.	2.0
,1-Dichloroethene	22	24	N.D.	0.5
hylene Chloride	N.D.	N.D.	0.9	0.5
ns-1,2-Dichloroethene	N.D.	N.D.	1.4	0.5
,1-Dichloroethane	8.7	12	N.D.	0.5
loroform	N.D.	6	6.4	0.5
,1-Trichloroethane (TCA)	N.D.	2.0	N.D.	0.5
arbon Tetrachloride	N.D.	N.D.	N.D.	0.5
,2-Dichloroethane (EDC)	N.D.	N.D.	2.1	0.5
chloroethene (TCE)	N.D.	N.D.	4,800*	0.5
,2-Dichloropropane	1.2	1.8	N.D.	0.5
romodichloromethane	N.D.	N.D.	N.D.	0.5
hloroethylvinyl ether	N.D.	N.D.	N.D.	0.5
ns-1,3-Dichloropropene	N.D.	N.D.	N.D.	0.5
is-1,3-Dichloropropene	N.D.	N.D.	N.D.	0.5
,2-Trichloroethane	N.D.	N.D.	N.D.	0.5
rachloroethene	N.D.	N.D.	8.6	0.5
ibromochloromethane	N.D.	N.D.	N.D.	0.5
orobenzene	N.D.	N.D.	N.D.	0.5
moform	N.D.	N.D.	N.D.	0.5
,1,2,2-Tetrachloroethane	N.D.	N.D.	N.D.	0.5
,2-Dichlorobenzene	N.D.	N.D.	N.D.	0.5
,3-Dichlorobenzene	N.D.	N.D.	N.D.	0.5
,4-Dichlorobenzene	N.D.	N.D.	N.D.	0.5

LITY CONTROL DATA

rrogate Spike	Percent Recovery		
romochloromethane	114%	110%	98%
,4-Dichlorobutane	98%	98%	103%

.D.: Not Detected
: Quantified at 100 times dilution.

Analytical Supervisor

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FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
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eport Date: 22-Aug-88
E JOB #: HLA 0831.83-L
alytical Method: EPA 8010
ATRIX: WATER

Extract/Purge Date: 28-Jul-88
Completion Date: 28-Jul-88
Analyst: LEWIS

	MW-7	Blank	MW-8	
AB #:	8-7143	8-7144	8-7145	
IENT'S ID:	302704	302705	302706	
OMPOUND	RESULT (ug/l)	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l
ichlorodifluoromethane----------	N.D.	N.D.	N.D.	2.0
hloromethane----------	N.D.	N.D.	N.D.	2.0
nyl Chloride----------	N.D.	N.D.	N.D.	2.0
romomethane----------	N.D.	N.D.	N.D.	2.0
hloroethane----------	N.D.	N.D.	N.D.	2.0
ichlorofluoromethane----------	N.D.	N.D.	N.D.	2.0
-Dichloroethene----------	N.D.	N.D.	N.D.	0.5
ethylene Chloride----------	N.D.	N.D.	N.D.	0.5
ns-1,2-Dichloroethene----------	N.D.	N.D.	N.D.	0.5
-Dichloroethane----------	N.D.	N.D.	N.D.	0.5
hloroform----------	2.4	N.D.	N.D.	0.5
,1-Trichloroethane (TCA)-----	N.D.	N.D.	N.D.	0.5
rbon Tetrachloride----------	N.D.	N.D.	N.D.	0.5
,2-Dichloroethane (EDC)--------	N.D.	N.D.	2.6	0.5
ichloroethene (TCE)----------	18	N.D.	N.D.	0.5
-Dichloropropane----------	N.D.	N.D.	N.D.	0.5
romodichloromethane----------	N.D.	N.D.	N.D.	0.5
-Chloroethylvinyl ether--------	N.D.	N.D.	N.D.	0.5
ns-1,3-Dichloropropene-------	N.D.	N.D.	N.D.	0.5
s-1,3-Dichloropropene---------	N.D.	N.D.	N.D.	0.5
,1,2-Trichloroethane----------	N.D.	N.D.	N.D.	0.5
trachloroethene----------	N.D.	N.D.	N.D.	0.5
romochloromethane----------	N.D.	N.D.	N.D.	0.5
hlorobenzene----------	N.D.	N.D.	N.D.	0.5
omoform----------	N.D.	N.D.	N.D.	0.5
,2,2-Tetrachloroethane-------	N.D.	N.D.	N.D.	0.5
,3-Dichlorobenzene----------	N.D.	N.D.	N.D.	0.5
-Dichlorobenzene----------	N.D.	N.D.	N.D.	0.5
-Dichlorobenzene----------	N.D.	N.D.	N.D.	0.5

ALITY CONTROL DATA

rrogate Spike	Percent Recovery		
romochloromethane	97%	95%	98%
-Dichlorobutane	93%	89%	97%

.D.: Not Detected

Analytical Supervisor

REPORT OF LABORATORY ANALYSIS

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FORMERLY WESCO LABORATORIES

Offices:
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Novato, California

eport Date: 04-Jan-80
E JOB #: HLA 0831.83-L
lytical Method: EPA 8010
ATRIX: WATER

Extract/Purge Date: 01-Aug-88
Completion Date: 01-Aug-88
Analyst: LEWIS

	MW-6	MW-6
AB #:	8-7146	8-7147
IENT'S ID:	302707	302708
E COMPLETED:		

OMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detectio Limit (ug/l)
ichlorodifluoromethane----------	N.D.	N.D.	2.0
oromethane----------	N.D.	N.D.	2.0
yl Chloride----------	N.D.	N.D.	2.0
omomethane----------	N.D.	N.D.	2.0
oroethane----------	N.D.	N.D.	2.0
chlorofluoromethane----------	N.D.	N.D.	2.0
,1-Dichloroethene----------	1.0	0.8	0.5
thylene Chloride----------	0.7	N.D.	0.5
ns-1,2-Dichloroethene----------	11	9.9	0.5
,1-Dichloroethane----------	N.D.	N.D.	0.5
loroform----------	26	26	0.5
,1-Trichloroethane (TCA)-----	N.D.	N.D.	0.5
rbon Tetrachloride----------	N.D.	N.D.	0.5
,2-Dichloroethane (EDC)--------	3.7	3.7	0.5
chloroethene (TCE)----------	9,700+	11,000+	0.5
-Dichloropropane----------	N.D.	N.D.	0.5
omodichloromethane----------	N.D.	N.D.	0.5
hloroethylvinyl ether--------	N.D.	N.D.	0.5
ns-1,3-Dichloropropene-------	N.D.	N.D.	0.5
is-1,3-Dichloropropene---------	N.D.	N.D.	0.5
,2-Trichloroethane----------	N.D.	N.D.	0.5
rachloroethene----------	22	24	0.5
ibromochloromethane----------	N.D.	N.D.	0.5
orobenzene----------	N.D.	N.D.	0.5
moform----------	N.D.	N.D.	0.5
,1,2,2-Tetrachloroethane-------	N.D.	N.D.	0.5
,3-Dichlorobenzene----------	N.D.	N.D.	0.5
-Dichlorobenzene----------	N.D.	N.D.	0.5
,2-Dichlorobenzene----------	N.D.	N.D.	0.5

LITY CONTROL DATA

rrogate Spike	Percent Recovery	
romochloromethane	94%	97%
-Dichlorobutane	106%	112%

.D.: Not Detected
Quantified at 125 times dilution.

Analytical Supervisor

pace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
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Report Date: 04-Jan-80
PACE JOB #: HLA 0831.83-L
Analytical Method: EPA 8020
MATRIX: WATER

Extract/Purge Date: SEE BELOW
Completion Date: SEE BELOW
Analyst: ATTIA

	MW-3	MW-5	MW-2	
LAB #:	8-7140	8-7141	8-7142	
CLIENT'S ID:	302701	302702	302703	
DATE COMPLETED:	28-Jul-88	28-Jul-88	01-Aug-88	
COMPOUND	RESULT (ug/l)	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	N.D.	9.9	0.2
Toluene	N.D.	N.D.	1.1	0.2
Chlorobenzene	N.D.	N.D.	N.D.	0.2
Ethylbenzene	N.D.	N.D.	N.D.	0.2
Xylene	N.D.	N.D.	3.4	0.2
1,3-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
1,4-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
1,2-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
QUALITY CONTROL DATA				
Surrogate Spike	Percent Recovery			
Fluorobenzene	98 %	98 %	110 %	

	MW-7	Blank	MW-8	
LAB #:	8-7143	8-7144	8-7145	
CLIENT'S ID:	302704	302705	302706	
DATE COMPLETED:	28-Jul-88	28-Jul-88	28-Jul-88	
COMPOUND	RESULT (ug/l)	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	N.D.	N.D.	N.D.	0.2
Toluene	N.D.	N.D.	N.D.	0.2
Chlorobenzene	N.D.	N.D.	N.D.	0.2
Ethylbenzene	N.D.	N.D.	N.D.	0.2
Xylene	N.D.	N.D.	N.D.	0.2
1,3-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
1,4-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
1,2-Dichlorobenzene	N.D.	N.D.	N.D.	0.2
QUALITY CONTROL DATA				
Surrogate Spike	Percent Recovery			
Fluorobenzene	97 %	99 %	97 %	

N.D.: Not Detected

Analytical Supervisor

ace laboratories, inc.
FORMERLY WESCO LABORATORIES

REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California

Report Date: 04-Jan-80 | Extract/Purge Date: SEE BELOW
PACE JOB #: HLA 0831.83-L | Completion Date: SEE BELOW
Analytical Method: EPA 8020 | Analyst: ATTIA
MATRIX: WATER

	MW-6	MW-6	
LAB #:	8-7146	8-7147	
CLIENT'S ID:	302707	302708	
DATE COMPLETED:	01-AUG-88	01-AUG-88	
COMPOUND	RESULT (ug/l)	RESULT (ug/l)	Detection Limit (ug/l)
Benzene	70	64	0.2
Toluene	260	280	0.2
Chlorobenzene	N.D.	N.D.	0.2
Ethylbenzene	0.7	0.7	0.2
Xylene	1,000	1,000	0.2
1,3-Dichlorobenzene	N.D.	N.D.	0.2
1,4-Dichlorobenzene	N.D.	N.D.	0.2
1,2-Dichlorobenzene	N.D.	N.D.	0.2
QUALITY CONTROL DATA			
Surrogate Spike	Percent Recovery		
Fluorobenzene	131 %*	129 %*	

N.D.: Not Detected
*: Matrix Interference

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CHINATOWN REDEVELOPMENT PROJECT AREA
OAKLAND, CALIFORNIA
January 31, 1989

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QUALITY CONTROL REVIEWER

Christopher R. Smith
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