

ENVIRONMENTAL  
PROTECTION  
99 JUL -2 AM 8:35



ENVIRONMENTAL  
PROTECTION  
99 JUL -2 AM 8:35

June 30, 1999

Ms. Juliet Shin  
Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway #250  
Alameda, California 94502-6577

Reference: Monitoring Well Installation and Groundwater Monitoring Report  
2585 Nicholson Street in San Leandro, California  
Versar Project No. 4422-001

Dear Ms. Shin:

Versar, Inc. (Versar) is pleased to provide, on behalf of Bank of America NT&SA, the enclosed *Monitoring Well Installation and Groundwater Monitoring Report*. Should you wish to discuss the information presented herein, please feel free to call me at (916) 863-9325, or Mr. John Schovanec with Bank of America at (949) 260-5812.

Sincerely,

Scott Allin, R.E.A.  
Senior Program Manager

cc: Mr. John Schovanec - Bank of America  
Mr. Michael Bakaldin - City of San Leandro

1759-99/4422-001/JUN30'99

• SACRAMENTO OFFICE •

7844 MADISON AVENUE, SUITE 167 • FAIR OAKS, CALIFORNIA 95628 • TELEPHONE: (916) 962-1612 FAX: (916) 962-2678



**MONITORING WELL INSTALLATION AND  
GROUNDWATER MONITORING REPORT**

2585 Nicholson Street  
San Leandro, California

ESD Number 305582

*Prepared for:*

**BANK OF AMERICA, N.T. & S.A.**  
Environmental Services Department, No. 24122  
4000 MacArthur Boulevard, Suite 100  
Newport Beach, California 92660

*Prepared by:*

**Versar** INC.  
7844 Madison Avenue, Suite 167  
Fair Oaks, California 95628

Versar Project No. 4422-001

June 30, 1999

1759-99/4422-001/JUN30'99

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## FOREWORD

This Monitoring Well Installation and Groundwater Monitoring Report was prepared by Versar, Inc. for Bank of America. Mr. Philip Cox, Senior Associate Geologist prepared this report. Mr. Scott Allin reviewed this report and Mr. Tim Berger, California Registered Geologist No. 5225, supervised the field activities and the preparation of this report.

Prepared By:

Philip Cox  
Senior Associate Geologist  
Environmental Management Division

Approved for Release By:

Tim Berger, R.G. 5225  
Senior Geologist  
Environmental Management Division

Reviewed By:

Scott Allin, REA  
Senior Program Manager

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## 1.0 INTRODUCTION

Versar, Inc. (Versar) has prepared this Well Installation and Groundwater Monitoring Report on behalf of Bank of America, NT&SA (BoFA) summarizing work performed at the property located at 2585 Nicholson Street in San Leandro, California (Site). Figures 1 and 2 show the Site location and Site layout, respectively. The following sections describe the scope of work, site location, and site background.

### 1.1 Scope of Work

The objectives of this well installation and groundwater sampling was to assess the lateral distribution of petroleum hydrocarbons and related constituents in groundwater originating from the Site, and to determine the groundwater flow direction and gradient. To meet these objectives, the following primary activities were performed:

- ▶ Performance of pre-well installation activities including; obtaining appropriate permits, clearance of underground utilities, and preparation of a Site specific health and safety plan;
- ▶ Installation, development, and sampling of four new groundwater monitoring wells;
- ▶ Survey the top of the well casings to a common datum point to allow for the calculation of groundwater gradient and flow direction;
- ▶ Sampling of the one existing groundwater monitoring well;
- ▶ Laboratory analysis of groundwater samples; and
- ▶ Prepare this report documenting the well installation and groundwater sampling activities at the Site.

The scope of work for the well installation and groundwater sampling was originally proposed in Versar's workplan dated November 4, 1998 (Versar, 1998a). An addendum to the Workplan was presented in a letter dated December 23, 1998 (Versar, 1998b) and was prepared in response to Alameda County Environmental Health Services (ACEHS) letter dated November 17, 1998 (ACEHS, 1998a), which provided comments on the original workplan. Comments on the workplan addendum were presented in the ACEHS letters dated January 4, 1999 (ACEHS, 1999a), and February 1, 1999 (ACEHS, 1999b).

## 1.2 Site Location

The Site is located at 2585 Nicholson Street in San Leandro, California. The nearest cross street is Republic Avenue. The Site is currently occupied by Crane Works and consists of a single-story commercial office building at the north end of the property, and covered parking/work area over the western and southern edges of the property. The parking/work areas are covered with 6-inch concrete.

## 1.3 Background

According to information presented in the McLaren/Hart soil and groundwater characterization report (McLaren/Hart, 1998), two underground storage tanks (USTs) were removed from the Site in 1991. Reportedly, overexcavation was performed during UST removal activities. Soil and groundwater samples collected during the UST removal activities identified total petroleum hydrocarbons (TPH) as diesel and gasoline in both media. In 1992, Hageman-Aguiar (HA) performed an on-site soil and groundwater investigation. The results of the investigation identified elevated levels of TPH on-site in soil and groundwater. During the investigation, HA installed one monitoring well (MW-1) on the central portion of the Site. Between 1992 and 1995, ten groundwater samples were collected by HA from MW-1. These groundwater results are summarized in Table 2. HA identified free-floating product in MW-1 during some of the sampling events, at a maximum thickness of 1.25 inches.

In 1998, McLaren/Hart performed a limited investigation of soil and groundwater, both on and off-site. The investigation consisted of collecting soil samples from 8 borings, and groundwater samples from 15 borings. McLaren/Hart concluded that adequate definition of petroleum hydrocarbons in soil and groundwater had been completed, and that the contaminant plume was relatively stable with minimal off-site migration of petroleum hydrocarbons. McLaren/Hart recommended installation of additional monitoring wells to confirm the direction of groundwater flow beneath the Site.

## 2.0 METHODOLOGY

The primary objective of this section is to present the tasks and methodology associated with the well installation activities. The following section describes permitting, underground utilities, well installation, surveying, and groundwater sampling and analysis.



## 2.1 Permitting

Permits for the new monitoring wells were obtained from the Alameda County Public Works Department. An encroachment permit was also obtained from the City of San Leandro for monitoring well MW-2. Copies of the permits are included as Appendix A.

## 2.2 Underground Utilities

Versar contracted CU Survey to clear underground utilities prior to drilling. The following underground utilities were identified in the vicinity of the monitoring wells installed during this investigation by CU Survey:

- ▶ A natural gas line runs parallel with Nicholson Street, approximately three feet northeast of MW-2;
- ▶ An electrical line is located approximately three feet northwest of MW-4; and
- ▶ A storm sewer is located approximately 5 feet southwest of MW-5.

## 2.3 Well Installation and Development

On April 15 and 16, 1999, the four new monitoring wells were installed by Cal-Nev Geoe Explorations, C57 Licence No. 582696 (Figure 2). The boreholes were drilled using 8-inch diameter hollow-stem augers to a depth of approximately 14 to 15 feet below ground surface (bgs). The monitoring wells were constructed inside the hollow-stem augers using approximately 10 feet of pre-cleaned, two-inch diameter, Schedule 40 PVC slotted casing with 0.010-inch slots, with approximately 4 to 5 feet of flush-jointed, two-inch diameter, Schedule 40 PVC casing to the surface. A sand pack consisting of clean, 2/12 sand was placed in the annular space around the casing from the bottom of the borehole to approximately one foot above the top of the screen. A minimum two-foot bentonite seal was placed above the sand pack and hydrated. The remaining annular space was filled to just below surface with a cement/bentonite seal.

The monitoring wells were sealed with a locking well cap. The well cap and well cover are labeled with the well identification code and the words "Monitoring Well." The drilling logs, including the well construction details are included in Appendix B.

Soil cuttings, rinsate water from the drilling and sampling equipment decontamination, and development water were placed in seven (four soil and three water) 55-gallon Department of Transportation (DOT) 17E&H steel drums and temporarily stored on-site. Based on the field screening results, the drums were labeled as non-hazardous waste with the date, source, and generator.

On April 26, 1999, the four newly installed wells were developed. This was accomplished by surging, then bailing approximately 10 well volumes of water from each well. Temperature, pH, and electrical conductivity readings were collected to monitor groundwater stabilization within the wells during development. The groundwater monitoring well development tables are included in Appendix C.

## **2.4 Surveying**

On April 26, 1999, the top of each new well and the existing well casing was horizontally and vertically surveyed to a horizontal accuracy of 1 foot and a vertical accuracy of 0.01 foot by Morrow Surveying, Incorporated. The survey data was used in conjunction with the groundwater level measurements to produce groundwater elevation contour maps and to calculate the groundwater gradient across the Site. The groundwater elevation data are presented in Table 1. The surveyor's report is included in Appendix D.

## **2.5 Groundwater Sampling and Analysis**

On April 29, 1999, groundwater samples were collected from monitoring wells MW-2 through MW-5, and depth to water measurements were collected from all five monitoring wells. Groundwater samples were collected from monitoring well MW-1 on May 7, 1999. Prior to sampling, each well was purged of approximately three well casing volumes of groundwater. Following purging, the water level was allowed to recover to at least 80 percent of the pre-purge level. During purging, temperature, pH, conductivity, and dissolved oxygen were measured and a visual note of turbidity was recorded on groundwater monitoring well purge tables. The purge tables are presented in Appendix E.

Groundwater samples collected from monitoring wells MW-2 through MW-5 were submitted to Kemron Environmental Services for TPH as gasoline (TPH-G), TPH as diesel (TPH-D), TPH as motor oil (TPH-MO) by Environmental Protection Agency (EPA) Method 8015, and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B. The samples were collected, placed in containers, preserved, and analyzed within the holding times consistent with applicable U.S. EPA, California EPA, and Regional Water Quality Control Board (RWQCB) procedures and

requirements. Samples were delivered under chain-of-custody protocol. Custody of the samples began at the time of sample collection and was maintained by the sampling team until the samples were relinquished to the laboratory.

### **3.0 INVESTIGATION RESULTS**

#### **3.1 Groundwater Flow Direction and Gradient**

Using the survey data in conjunction with the groundwater level measurements collected on April 29, 1999, the groundwater gradient was calculated to be approximately 0.001 feet/foot and flowing in a southeasterly direction. The groundwater contour map for April 29, 1999 is included as Figure 3. Given the extremely flat groundwater gradient and shallow depth to groundwater beneath the Site, it is likely that the calculated groundwater flow direction will vary seasonally. Therefore, the average groundwater flow direction will be representative of the direction of groundwater flow over time.

#### **3.2 Groundwater Analytical Results**

The laboratory analytical results from the April and May 1999 monitoring event are summarized on Figure 4 and Table 2. The laboratory analytical report is included in Appendix F. The following is a summary of the analytical results detected above the laboratory reporting limits:

- ▶ TPH-G was detected in wells MW-1, MW-4, and MW-5 at 8,100 micrograms per liter ( $\mu\text{g/L}$ ), 110  $\mu\text{g/L}$ , and 270  $\mu\text{g/L}$ , respectively;
- ▶ TPH-D was only detected in well MW-3 at 540  $\mu\text{g/L}$ ; and
- ▶ BTEX compounds were only detected in well MW-1 at concentrations of 1,400  $\mu\text{g/L}$ , 31  $\mu\text{g/L}$ , 82  $\mu\text{g/L}$ , and 360  $\mu\text{g/L}$ , respectively.

These results are relatively consistent with previous investigation results, and indicate minimal off-site migration of TPH and BTEX compounds. Additional groundwater samples should be collected to evaluate the fate and transport of the contaminants for the purpose of obtaining future site closure.



### 3.3 Investigation-Derived Waste Disposal

Investigation derived wastes included soil and groundwater. A total of three drum of soil were generated during installation of the monitoring wells. A total of five drums of water were generated during well development, well purging, and equipment decontamination. The wastes are scheduled to be transported by Integrated Waste Management (IWM) to Seaport's facility in Redwood City, California (water), and to BFI Landfill in Livermore, California (soil).

### 4.0 PENDING ACTIVITIES

Versar recommends quarterly sampling of the groundwater monitoring wells to validate the results of the data presented herein. The next monitoring event is scheduled for July 1999. In addition to the analyses performed during this investigation, as requested by the ACEHS, samples from select monitoring wells will also be analyzed for fuel oxygenates by EPA Method 8260, and for semi-volatile organic compounds (SVOCs) by EPA Method 8270. Given the relatively high mobility of fuel oxygenates, Versar proposes analyzing for these constituents in both source and downgradient monitoring locations (MW-1, MW-3, MW-4 and MW-5). Given the relatively lower mobility of SVOCs, Versar proposes analyzing for SVOCs in source wells only (MW-1 and MW-3). Additional recommendations for the Site will be provided in subsequent quarterly monitoring reports.

### 5.0 REFERENCES

ACEHS, 1998, *Workplan for investigation at 2585 Nicholson Street, San Leandro, CA*, November 17, 1998.

ACEHS, 1999a, *Addendum to workplan for investigation at 2585 Nicholson Street, San Leandro, CA*, January 4, 1999.

ACEHS, 1999b, *Addendum to workplan for investigation at 2585 Nicholson Street, San Leandro, CA*, February 01, 1999.

McLaren/Hart, 1998, *Soil and Groundwater Characterization, 2585 Nicholson Street, San Leandro, California*, May 1, 1998.



Versar, 1998a, *Workplan for Well Installation, Development, and Sampling, 2585 Nicholson Street in San Leandro, California.* November 4, 1998.

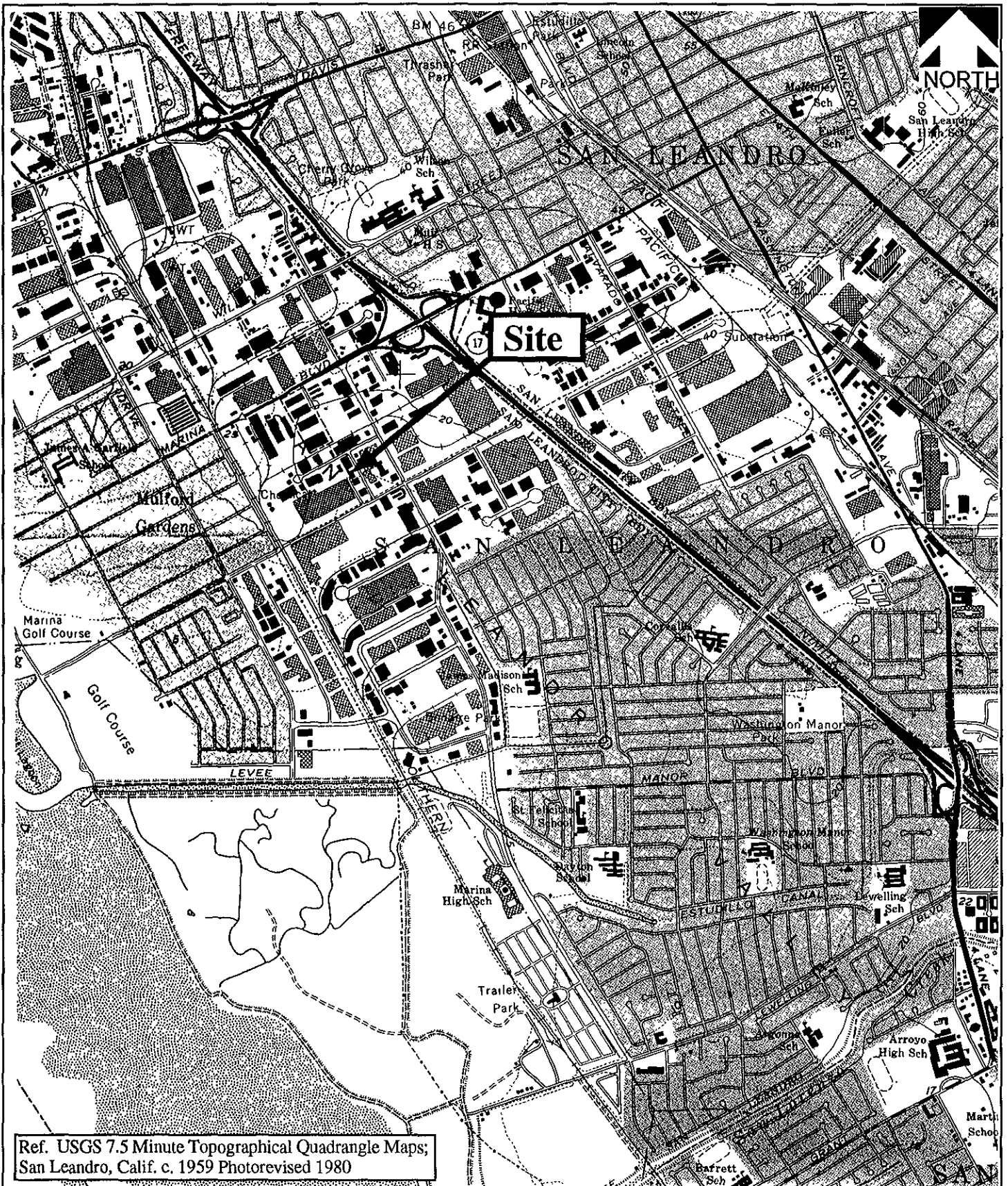
Versar, 1998b. *Addendum to the Workplan for Well Installation, Development, and Sampling 2585 Nicholson Street in San Leandro, California.* December 23, 1998.

## **6.0 STATEMENT OF LIMITATIONS**

The conclusions presented above are based on the agreed-upon scope of work outlined in Section 1.1. Versar makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others and used by Versar. It is possible that information exists beyond the scope of this investigation. Also, changes in Site use may have occurred sometime in the past due to variations in rainfall, temperature, water usage, economic, agricultural, or other factors. Additional information that was not found or available to Versar at the time of the writing of this report may result in a modification of the conclusions presented. This report is not a legal opinion.

The services performed by Versar have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty expressed or implied is made.

**FIGURES**



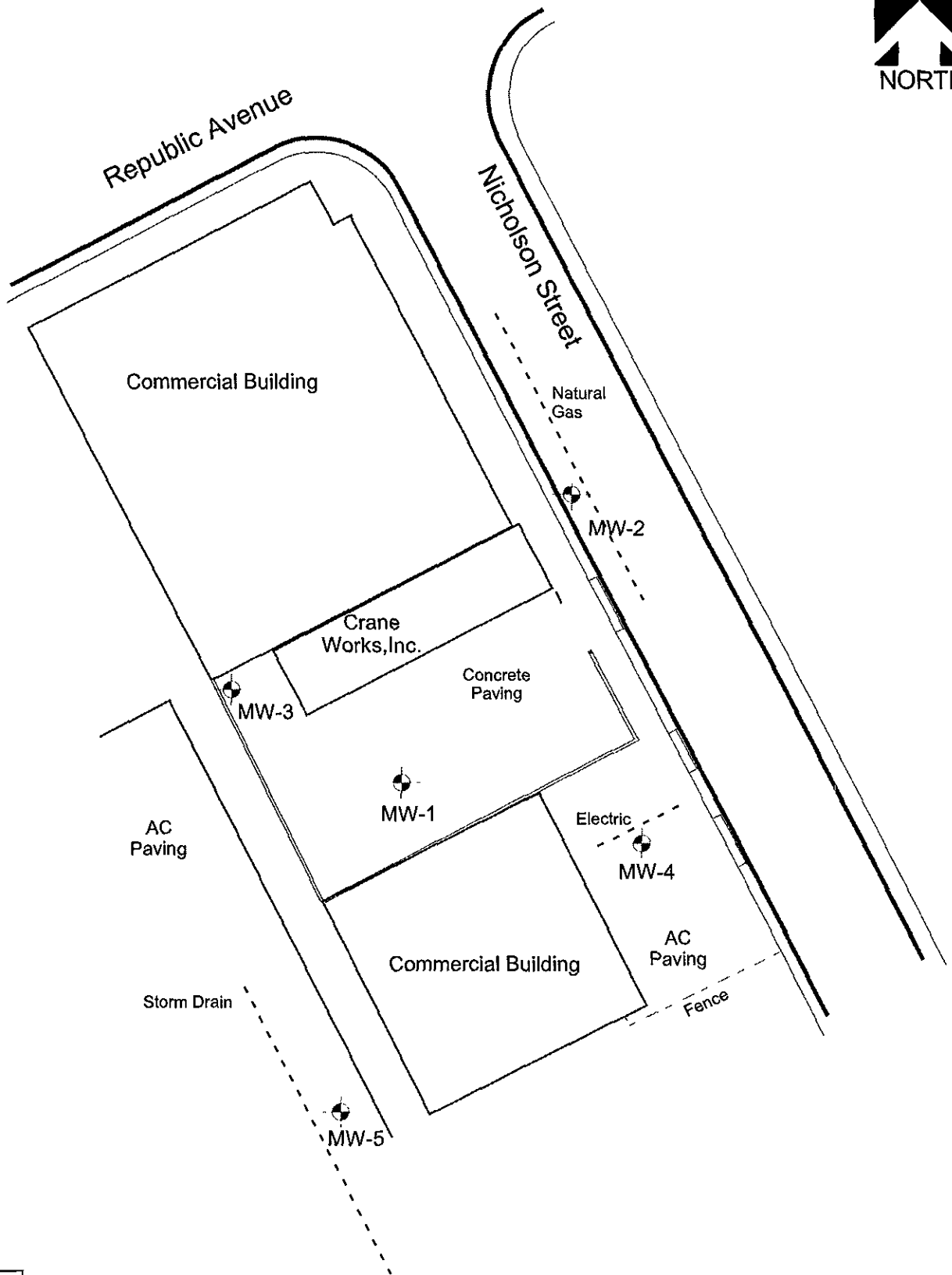
Ref. USGS 7.5 Minute Topographical Quadrangle Maps;  
 San Leandro, Calif. c. 1959 Photorevised 1980

Dr. By: Dale Anderson  
 Date: 5/10/99  
 Scale: 1 inch=2,000 feet  
 Versar Project No. 4422-001  
 PathFile: P:\BOFAISANLEAN\REPORT\Fig1

**Versar**  
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 Suite 167  
 Fair Oaks, CA 95628  
 (916) 962-1612

**SITE LOCATION**  
 2585 Nicholson Street  
 San Leandro, California

Figure  
 1



Dr. By: Dale Anderson  
Date: 5/10/99  
Scale: 1 inch= 60 feet  
Versar Project No. 4422-001  
Path/File: PIBOFA\SanLean\Report\Fig2

**Versar**  
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Fair Oaks, CA 95628  
(916) 962-1612

**SITE LAYOUT AND MONITORING  
WELL LOCATION MAP**  
2585 Nicholson Street  
San Leandro, California

Figure  
2





Republic Avenue

Nicholson Street

Commercial Building

MW-2  
Depth to Water: 3.76'  
G.W. Elevation: 9.93'

MW-1  
Depth to Water: 5.33'  
G.W. Elevation: 9.94'

MW-3  
Depth to Water: 5.88'  
G.W. Elevation: 10.00'

Crane Works, Inc.

Concrete Paving

MW-4  
Depth to Water: 5.40'  
G.W. Elevation: 9.85'

MW-3

MW-1

MW-4

AC Paving

9.95

9.90

Commercial Building

AC Paving

MW-5  
Depth to Water: 6.64'  
G.W. Elevation: 9.82'

9.85

MW-5

Groundwater  
Gradient: 0.001 ft/ft

Fence

Legend

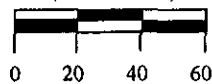


Observation Well Location

9.85

Groundwater Contour Interval  
in Feet Above Mean Sea Level

(Scale - Feet)



Dr. By: Dale Anderson  
Date: 5/10/99  
Scale: 1 inch= 60 feet  
Versar Project No. 4422-001  
Path/File: P:\BOPAI\SanLeandro\Report\Fig3

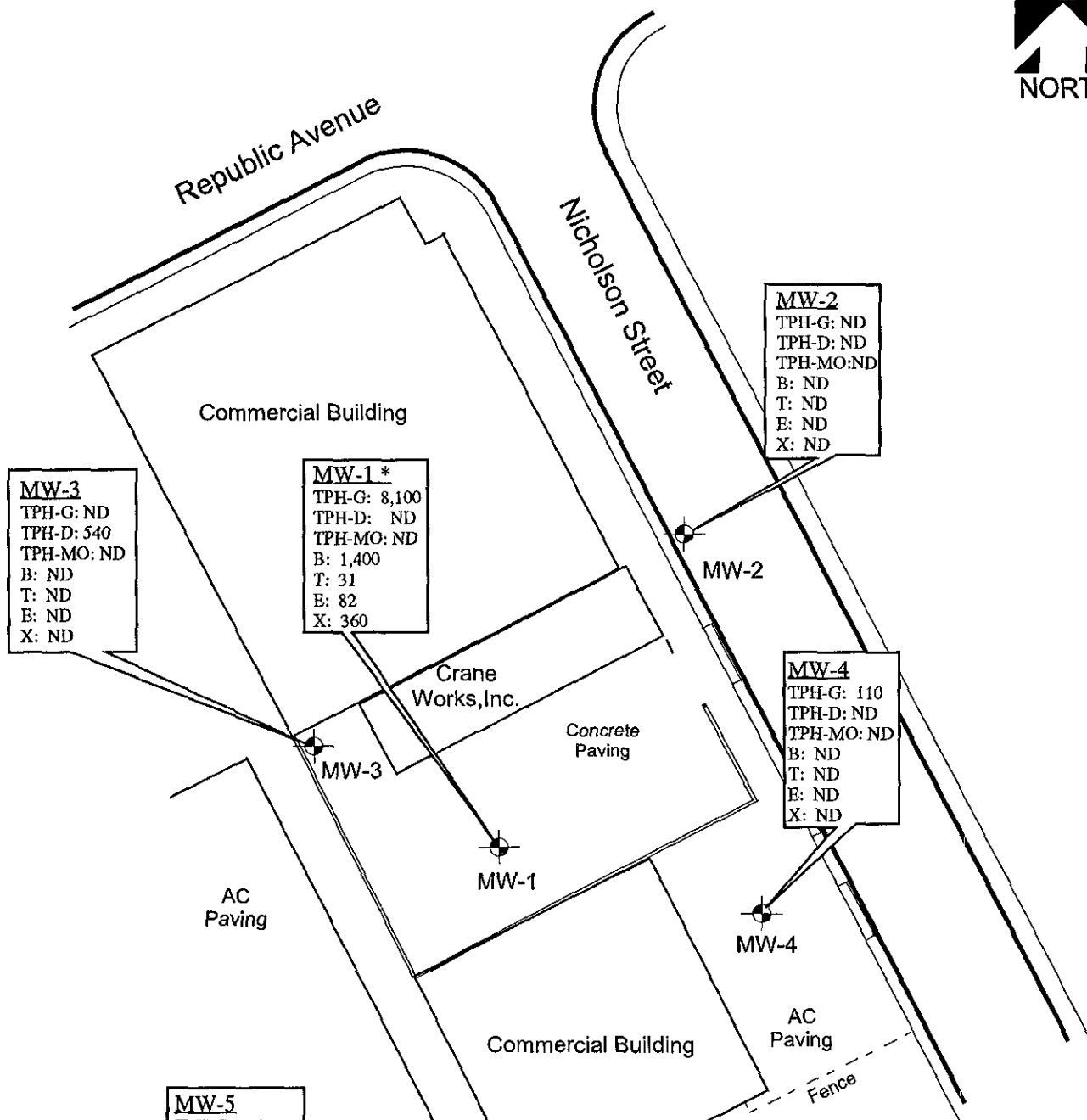


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# Groundwater Contour Map

April 29, 1999  
2585 Nicholson Street  
San Leandro, California

Figure  
3



**MW-3**  
 TPH-G: ND  
 TPH-D: 540  
 TPH-MO: ND  
 B: ND  
 T: ND  
 E: ND  
 X: ND

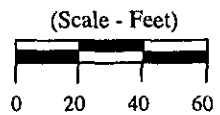
**MW-1\***  
 TPH-G: 8,100  
 TPH-D: ND  
 TPH-MO: ND  
 B: 1,400  
 T: 31  
 E: 82  
 X: 360

**MW-2**  
 TPH-G: ND  
 TPH-D: ND  
 TPH-MO: ND  
 B: ND  
 T: ND  
 E: ND  
 X: ND

**MW-4**  
 TPH-G: 110  
 TPH-D: ND  
 TPH-MO: ND  
 B: ND  
 T: ND  
 E: ND  
 X: ND

**MW-5**  
 TPH-G: 270  
 TPH-D: ND  
 TPH-MO: ND  
 B: ND  
 T: ND  
 E: ND  
 X: ND

Legend	
	Extraction and Observation Well Location
TPH-G:	Total Petroleum Hydrocarbons as Gasoline
TPH-D:	Total Petroleum Hydrocarbons as Diesel
TPH-MO:	Total Petroleum Hydrocarbons as Motor Oil
B:	Benzene
T:	Toluene
E:	Ethybenzene
X:	Total Xylenes
ND:	Not detected at or above the methods reporting limit.
*	Sample Collected 5/7/99



Dr. By: Dale Anderson  
 Date: 5/10/99  
 Scale: 1 Inch= 60 feet  
 Versar Project No. 4422-001  
 Path/File : P:\BOFA\SanLoan\Report\Fig4

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**Laboratory Analytical Results  
 For Groundwater Samples  
 April 29, 1999  
 2585 Nicholson Street  
 San Leandro, California**

**Figure  
 4**

**TABLES**

Table 1  
 Groundwater Elevation Data  
 2585 Nicholson Street  
 San Leandro, California

		Groundwater Monitoring Well					Hydraulic gradient magnitude (ft/ft)	General gradient direction
		MW-1	MW-2	MW-3	MW-4	MW-5		
Well casing elevation (feet amsl)		15.27	13.69	15.88	15.25	16.46	---	---
April 29, 1999	Depth to groundwater (feet bgs)	5.33	3.76	5.88	5.40	6.64	0.001	Southeast
	Groundwater Elevation (feet amsl)	9.94	9.93	10.00	9.85	9.82		

Notes and Abbreviations:  
 ft/ft = feet per foot  
 amsl = above mean sea level

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Table 2  
Analytical Results for Groundwater Samples  
2585 Nicholson Street  
San Leandro, California

Monitoring Well No.	Date	Chemicals of Concern								
		TPH-G (µg/L)	TPH-D (µg/L)	TPH-MO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TPH-K (mg/L)	TPH-SS (µg/L)
MW-1	June 6, 1992	10,000	ND	NA	110	81	62	280	NA	NA
	November 9, 1992	9,800	ND	NA	23	14	22	96	NA	NA
	April 23, 1993	18,000	560	ND	42	47	50	190	ND	370
	July 28, 1993	27,000	ND	ND	40	45	63	190	ND	ND
	December 10, 1993	7,800	3,800	ND	13	16	20	77	ND	ND
	March 14, 1994	280,000	620	ND	970	880	620	1,700	ND	3,300
	June 30, 1994	8,500	ND	ND	23	13	8.5	19	ND	ND
	September 14, 1994	2,400	52	ND	5.3	2.6	2.5	6	ND	ND
	December 14, 1994	4,800	1,300	ND	32	32	16	50	ND	1,000
	April 20, 1995	74,000	3,700	ND	320	350	350	940	ND	570
	September 5, 1995	33,000	46,000	ND	140	270	260	1,100	ND	4,900
May 7, 1999	8,100	ND	ND	1,400	31	82	360	NA	NA	
MW-2	April 29, 1999	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-3	April 29, 1999	ND	540	ND	ND	ND	ND	ND	NA	NA
MW-4	April 29, 1999	110	ND	ND	ND	ND	ND	ND	NA	NA
MW-5	April 29, 1999	270	ND	ND	ND	ND	ND	ND	NA	NA

Notes and Abbreviations:

TPH-G = total petroleum hydrocarbons as gasoline.

TPH-K = total petroleum hydrocarbons as kerosene.

TPH-SS = total petroleum hydrocarbons as stoddard solvent.

µg/L = micrograms per liter, equivalent to parts per billion (ppb).

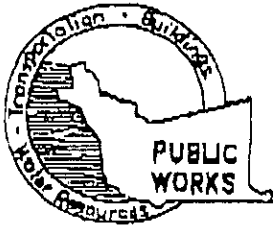
mg/L = milligrams per liter, equivalent to parts per million (ppm).

ND = not detected at or above the methods reporting limit.

NA = not analysed

**APPENDIX A**

**Well Installation and Encroachment Permits**



# ALAMEDA COUNTY PUBLIC WORKS AGENCY

## WATER RESOURCES SECTION

951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651  
PHONE (510) 670-5573 ANDREAS GODFREY FAX (510) 670-5263  
(510) 670-5248 ALVIN KAN

### DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 2585 NICHOLSON ST.,  
SAN LEANDE

PERMIT NUMBER 99 WR 154  
WELL NUMBER \_\_\_\_\_  
APN \_\_\_\_\_

California Coordinates Source \_\_\_\_\_  
CCN \_\_\_\_\_  
KPN \_\_\_\_\_  
i. CCE \_\_\_\_\_  
ii. Accuracy 2 \_\_\_\_\_  
ft \_\_\_\_\_

### PERMIT CONDITIONS

Circled Permit Requirements Apply

CLIENT  
Name BANK OF AMERICA  
Address 4000 HEATHWA BLVD Phone (949) 260-5812  
City MELIBERT BEACH Zip 92660

#### A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

APPLICANT  
Name VERSAK INC. (ALVIN KAN)  
Address 7744 MADISON AVE, STE 167 Fax (916) 962-2678  
City FAIR OAKS, Phone (916) 962-9225  
Zip 95628

#### B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

TYPE OF PROJECT  
Well Construction \_\_\_\_\_  
Cathodic Protection  Geotechnical Investigation \_\_\_\_\_  
Water Supply  General   
Monitoring  Contamination   
Well Destruction

#### C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

PROPOSED WATER SUPPLY WELL USE  
New Domestic  Replacement Domestic   
Municipal  Irrigation   
Industrial  Other \_\_\_\_\_

#### D. GEOTECHNICAL

Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material in areas of known or suspected contamination. Remediated cement grout shall be used in place of compacted cuttings.

DRILLING METHOD:  
Mud Rotary  Air Rotary  Auger   
Cable  Other

#### E. CATHODIC

Fill hole above anode zone with concrete placed by tremie.

DRILLER'S LICENSE NO C-57 582696

#### F. WELL DESTRUCTION

See attached.

WELL PROJECTS  
Drill Hole Diameter 98 in. Maximum Depth 15 ft.  
Casing Diameter 3 in. Number 2 TOTAL WELLS  
Surface Seal Depth 4 ft. (4)

#### G. SPECIAL CONDITIONS

GEOTECHNICAL PROJECTS  
Number of Borings \_\_\_\_\_ Maximum Depth \_\_\_\_\_ ft.  
Hole Diameter \_\_\_\_\_ in.

ESTIMATED STARTING DATE OCT. 14, 1998 4/15/99  
ESTIMATED COMPLETION DATE OCT. 19, 1998 4/16/99

APPROVED Andreas Godfrey DATE 4/9/99

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-89.

APPLICANT'S SIGNATURE [Signature] DATE 10/15/98 4/17/99

Service No. \_\_\_\_\_

CITY OF SAN LEANDRO  
APPLICATION TO PERFORM WORK  
IN THE PUBLIC RIGHT-OF-WAY

8.02  
99140

Permit Number

APRIL 14, 1999

Date Approved

Work Site: 2585 NICHOLSON STREET

Applicant: Name SCOTT ALLIN Address 7844 MADISON AVE, STE 167, FAIR OAKS Tel. (916) 883-9725

Owner: Name JOHN SCHOUANEC Address 4000 MACARTHUR BLVD, STE 100, BERKELEY Tel. (415) 260-5812

Purpose of Permit:

Utility  Street Excavation  Curb, Gutter Sidewalk, Driveway  Other MONITORING WELL

Detailed Description and Dimensions of Work: INSTALLATION OF ONE MONITORING WELL WITH TRAPPEL RATED 16" DIA. VAULT COVER ~~IN~~ ON NICHOLSON STREET, APPROX. 3' IN FROM CURB

Plan Submitted: Yes \_\_\_\_\_ No X

Profile Submitted Yes \_\_\_\_\_ No X

Date Work to be Started: 4/15

Date Work to be Completed by: 4/15

Building Permit No. \_\_\_\_\_

State Encroachment Permit No. \_\_\_\_\_

Oro Loma Permit No. \_\_\_\_\_

Alameda County Flood Control Permit No. \_\_\_\_\_

Compliance with State Labor Code: In accordance with Section 3800

- Applicant has on file, with the City of San Leandro, evidence that workman's compensation insurance is carried.
- Applicant will not employ anyone so as to become subject to the workman's compensation laws of California.

Statement of State Contractor's License: In accordance with Section 7031.5 of the State Business and Professions Code.

- Applicant has State License No. \_\_\_\_\_, Class \_\_\_\_\_ in full force and effect.
- Applicant is exempt from the State Contractor's License Law for the following reason(s): \_\_\_\_\_

By the application and acceptance of this permit, the undersigned intending to be legally bound does hereby agree that all work performed will be in accordance with all applicable provisions of this permit and all regulations, provisions, and specifications as adopted by the City. Further, the undersigned agrees that this permit is to serve as a guaranty for payment of all permit and/or inspection charges as billed by the City. Any misrepresentation of information requested from the applicant on this form shall make this permit null and void.

Signature: \_\_\_\_\_ Date: 4/7/99

PLEASE CALL 577-3308 FOR INSPECTIONS

SPECIAL PROVISIONS

Backfill Required PER CITY STANDARD DETAILS & SPECS

Pavement Section Required \_\_\_\_\_

Minimum Depth of Cover \_\_\_\_\_

Police & Fire Dept. to be notified 24 hours prior to start: YES \_\_\_\_\_ NO X

\* TWO WAY TRAFFIC TO BE MAINTAINED AT ALL TIMES.

PERMIT IS VALID WHEN SIGNED

Any omission on the part of the City to specify on this permit any rule, regulation, provision, or specification shall not excuse the permittee from complying with all requirements of law and appropriate ordinances and all applicable regulations, provisions, and specifications adopted by the City.

\* SAMPLES REPORT COPY TO BE SUBMITTED TO MIKE BAKALWIN

H&M MAT COORDINATOR

SEE REVERSE SIDE FOR GENERAL PROVISIONS APPLICABLE TO ALL PERMIT WORK

ISSUE FOR CITY ENGINEER

\_\_\_\_\_

INSPECTION RECORD

Date	Comments	Insp.	Hrs. Charged

FEES

PERMIT FEE: 125.00 To Acct #3306

RESTORE/INSPECT DEPOSIT: \_\_\_\_\_ To CN # \_\_\_\_\_

STREET CUT FEE: \_\_\_\_\_ TO ACCT #3304

TOTAL: \_\_\_\_\_

NOTE: 1 hr. Minimum charge per inspection stop

Hours forwarded from reverse side: \_\_\_\_\_

TOTAL HOURS CHARGED: \_\_\_\_\_

- All charges collected at permit insurance
- All charges to be billed to CN # \_\_\_\_\_





**APPENDIX B**

**Drilling Logs**









**APPENDIX C**

**Groundwater Monitoring Well Development Tables**



**MONITORING WELL DEVELOPMENT TABLE**

Project Number: 4422-001			Site Name: Bank of America - San Leandro			
Well Number: MW 2			Date(s) Developed: 4/26/99			
OVA - Ambient: 0			Development Method: Dedicated Disposable Bailer			
OVA - Vault: 22			Development Rate: 1.5 gal/min			
OVA - Casing: 89			Developed By: Dale Anderson			
Water Level - Initial: 3.75' @ 1053			Free Product: NONE			
Water Level - Final: 3.9' @ 1446			Sheen: NONE			
Well Depth: 14.2'			Odor: NONE			
Well Diameter: 2"			Well Casing Volume: 1.7 gal			
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity
1057	.25	66.2	6.86	949	ND	MOD
1102	2	65.4	6.57	825	11	MOD
1107	4	65.1	6.47	880	11	V
1111	6	64.9	6.41	830	11	V
1116	8	64.7	6.46	855	11	V
1120	10	64.8	6.43	852	11	V
1129	12	64.4	6.41	894	11	V
1134	14	64.2	6.43	807	11	V
1139	16	64.0	6.47	851	11	11
1144	18	64.6	6.35	837	11	MOD
Field Notes:						

## MONITORING WELL DEVELOPMENT TABLE

Project Number: 4422-001				Site Name: Bank of America - San Leandro		
Well Number: MW 3				Date(s) Developed: 4/26/99		
OVA - Ambient: 02 ppm				Development Method: Dedicated Disposable Bailer		
OVA - Vault: 2 ppm				Development Rate: 133 g/min		
OVA - Casing: 240				Developed By: Dale Anderson		
Water Level - Initial: 5.85' @ 932				Free Product: NO		
Water Level - Final: 6.0' @ 1018				Sheen: <input checked="" type="checkbox"/>		
Well Depth: 13.9'				Odor: <input checked="" type="checkbox"/>		
Well Diameter: 2 INCH				Well Casing Volume: 1.3 gal		
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity
0935	2.5	61.0	7.01	1268	NR	MOD
0940	1	59.8	6.99	1000	11	HIGH
0943	2	60.3	6.92	864	11	11
0948	4	60.0	6.65	661	11	r
0952	6	60.9	6.55	576	11	r
958	8	60.5	6.41	554	11	11
1004	10	61.0	6.43	512	11	r
1010	12	61.0	6.20	488	11	11
1013	13	60.7	6.11	539	11	r
1017	14	60.7	6.13	534	11	r
Field Notes: STRONG AMBIENT SOLVENT ODOR						





MONITORING WELL DEVELOPMENT TABLE

Project Number: 4422-001				Site Name: Bank of America - San Leandro		
Well Number: MW 4				Date(s) Developed: 4/26/99		
OVA - Ambient: 1 PPM				Development Method: Dedicated Disposable Bailer		
OVA - Vault: 2 PPM				Development Rate: .4 gal/mw		
OVA - Casing: 7 PPM				Developed By: Dale Anderson		
Water Level - Initial: 5.37 @ 1227				Free Product: <input checked="" type="checkbox"/>		
Water Level - Final: 5.4 @ 1307				Sheen: <input checked="" type="checkbox"/>		
Well Depth: 14.2'				Odor: <input checked="" type="checkbox"/>		
Well Diameter: 2'				Well Casing Volume: 1.4 gal		
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity
1230	.25	68.6	6.35	1809	NA	MOD
1234	1	66.3	6.29	1263	11	HIGH
1236	2	65.7	6.29	1423	11	✓
1240	4	65.6	6.25	1050	11	r
1244	6	65.5	6.26	1088	11	"
1249	8	65.6	6.44	1004	11	"
1254	10	65.8	6.34	951	11	"
1258	12	65.9	6.38	1060	11	"
1303	14	65.9	6.35	984	11	✓
1306	15	65.9	6.39	1006	11	11
Field Notes:						



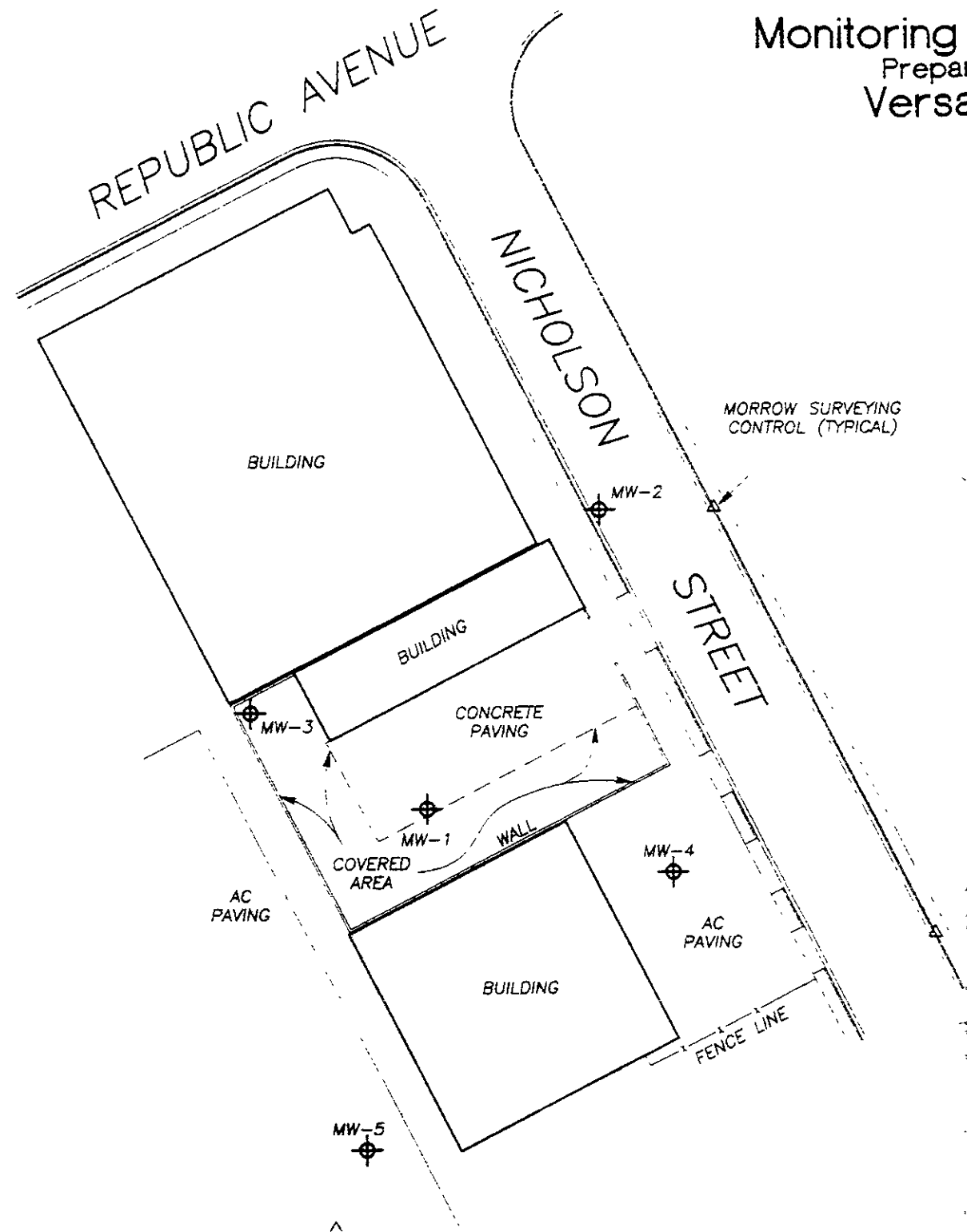
MONITORING WELL DEVELOPMENT TABLE

Project Number: 4422-001			Site Name: Bank of America - San Leandro			
Well Number: MW 5			Date(s) Developed: 4/26/99			
OVA - Ambient: 0 PPM			Development Method: Dedicated Disposable Bailer			
OVA - Vault: 0 PPM			Development Rate: .43 g/min			
OVA - Casing: 0 PPM			Developed By: Dale Anderson			
Water Level - Initial: 6.60 @ 1336			Free Product: NONE			
Water Level - Final: 8.5 @ 1421			Sheen: NONE			
Well Depth: 15.55			Odor: NONE			
Well Diameter: 2"			Well Casing Volume: 1.5 gal			
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity
1343	125	61.4	6.50	1620	NR	Low
1345	1	61.9	6.50	1885	"	High
1348	2	61.0	6.60	1695	"	"
1353	4	NR	NR	NR	"	"
1358	6	65.4	6.61	1260	"	"
1402	8	NR	NR	NR	NR	"
1406	10	65.7	7.38	1221	"	"
1412	12	61.8	7.09	1140	"	"
1416	14	60.2	6.86	1125	"	4
1418	15	60.8	6.86	1104	"	4
Field Notes:						



**APPENDIX D**  
**Surveyor's Report**

Monitoring Well Exhibit  
 Prepared for:  
 Versar, Inc.



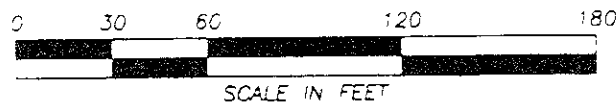
DESCRIPTION	NORTHING	EASTING	ELEV (PVC)	ELEV (BOX)
MW-1	5000.0	5000.0	15.27	15.82
MW-2	5115.7	5068.6	13.69	14.10
MW-3	5037.9	4932.4	15.88	16.38
MW-4	4974.7	5095.8	15.25	15.68
MW-5	4867.8	4975.6	16.46	16.57

GRID IS ARBITRARY.

PROJECT ASSUMED NORTH 27° WEST IS THE IMPROVEMENTS ALONG NICHOLSON STREET

ELEVATIONS BASED ON THE ENCASED MONUMENT AT THE INTERSECTION OF FAIRWAY AND NICHOLSON STREETS. ELEVATION 13.873 FEET.

SCALE: 1"=60'



2585 Nicholson Street  
 San Leandro  
 Alameda County  
 California



**Morrow  
 Surveying**

1450 Harbor Boulevard  
 Suite D  
 West Sacramento, CA 95691  
 (916) 372-8124

Date: April 30, 1999  
 Scale: 1"=60'  
 Sheet 1 of 1  
 Revised:  
 Book: 492  
 Drawing No. 8517-002

**APPENDIX E**

**Groundwater Monitoring Well Purge Tables**



MONITORING WELL PURGE TABLE

Project Number: 4422-001	Site Name: Bank of America - San Leandro
Well Number: MW2	Date(s) Purged: 4/29/99
OVA - Ambient: NR	Purge Method: Dedicated Disposable Bailer
OVA - Vault: NR	Purge Rate: 1.25 gal/min
OVA - Casing: NR	Date & Time Sampled: 4/29/99 @ 1245
Water Level - Initial: 3.76 FT @ 9:27	Purged & Sampled: Dale Anderson
Water Level - Final: 3.8 FT @ 1238	Sampling Method: Dedicated Disposable Bailer
Well Depth: 14.2 FT	Free Product: NONE
Well Diameter: 2 INCH	Sheen: NONE
Well Casing Volume: 1.7 GAL	Odor: NONE

Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity
1223	.25	78.6	7.61	1063	1.33	clear
1225	1.0	73.6	7.56	995	1.0	MOW
1228	2.0	72.1	7.33	982		MOW
1229	3.0	70.5	7.36	976	.84	11
1230	3.5	69.5	7.30	972	.89	11
1232	4.0	69.5	7.26	978	.93	11
1235	4.5	68.0	7.14	953	1.10	11
1236	5.0	69.1	6.99	967	.87	11
1237	5.5	68.8	6.98	966	.73	11
1245	Sample	69.7	7.28	968	2.45	

Field Notes: \* UICAA well 9:00



MONITORING WELL PURGE TABLE

Project Number: 4422-001	Site Name: Bank of America - San Leandro
Well Number: MW3	Date(s) Purged: 4/29/99
OVA - Ambient: NR	Purge Method: Dedicated Disposable Bailer
OVA - Vault: NR	Purge Rate: 13 g/min
OVA - Casing: NR	Date & Time Sampled: 4/29/99 @ 1400
Water Level - Initial: 5.88' @ 0925	Purged & Sampled: Dale Anderson
Water Level - Final: 5.4' @ 1348	Sampling Method: Dedicated Disposable Bailer
Well Depth: 13.9'	Free Product: NONE
Well Diameter: 2"	Sheen: NONE
Well Casing Volume: 1.3 gal	Odor: NONE

Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity
1334	.25	67.9	7.43	462	1.93	clear
1335	.5	64.2	7.26	565	1.03	MOD
1337	1.0	62.7	6.98	562	1.25	11
1339	1.5	61.9	6.98	553	1.55	11
1340	2.0	62.1	6.84	564	1.94	11
1342	2.5	61.8	6.68	563	1.23	11
1344	3.0	61.9	6.76	556	1.96	11
1345	3.5	61.5	6.89	548	NR	11
1347	4.0	61.9	6.93	542	1.87	11
1400	Sampled					

Field Notes: UDCAP WELL @ 9:00



MONITORING WELL PURGE TABLE

Project Number: 4422-001			Site Name: Bank of America - San Leandro			
Well Number: MW 4			Date(s) Purged: 4/29/99			
OVA - Ambient: NO READING			Purge Method: Dedicated Disposable Bailer			
OVA - Vault: "			Purge Rate: .3 g/min			
OVA - Casing: "			Date & Time Sampled: 4/29/99 @ 1140			
Water Level - Initial: 5.40 @ 0930			Purged & Sampled: Dale Anderson			
Water Level - Final: 5.45 @ 1132			Sampling Method: Dedicated Disposable Bailer			
Well Depth: 14.2			Free Product: NONE			
Well Diameter: 2.1 inch			Sheen: NONE			
Well Casing Volume: 1.4 gal			Odor: NONE			
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity
1115	1.25	73.0	6.18	1350	1.29	Clear
1117	1.0	70.3	6.93	1309	2.11	4/6
1119	1.5	68.2	7.21	1214	1.35	"
1121	2.0	68.2	7.22	1205	1.38	"
1123	2.5	68.2	7.29	1168	1.46	"
1125	3.0	68.1	7.25	1153	1.62	"
1127	3.5	68.0	7.26	1158	1.21	"
1129	4.0	67.8	7.22	1122	1.02	"
1129	4.5	67.8	7.26	1181	1.55	"
1140	Sample	71.9	7.41	1289	2.76	
Field Notes: UNCAP WELL @ 9:00						



MONITORING WELL PURGE TABLE

Project Number: 4422-001	Site Name: Bank of America - San Leandro
Well Number: MW 5	Date(s) Purged: 4/29/99
OVA - Ambient: NO READINGS	Purge Method: Dedicated Disposable Bailer
OVA - Vault: 1	Purge Rate: .24 g/min
OVA - Casing: 1	Date & Time Sampled: 4/29/99 @ 1020
Water Level - Initial: 6.64' @ 0948	Purged & Sampled: Dale Anderson
Water Level - Final: 6.90' @ 1012	Sampling Method: Dedicated Disposable Bailer
Well Depth: 15.55'	Free Product: NONE
Well Diameter: 2 inch	Sheen: NONE
Well Casing Volume: 1.45 gal	Odor: NONE

Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity
0950	.25	66.7	7.38	1210	2.63	Clear
0954	1.0	68.7	6.90	1270	3.08	Low
0957	1.5	69.1	6.93	1198	2.32	MOD
1000	2.0	67.3	7.08	1192	3.05	11
1001	2.5	66.1	7.10	1151	2.20	11
1003	3.0	65.3	7.12	1167	3.08	11
1005	3.5	65.3	7.11	1127	1.86	11
1007	4.0	65.0	7.13	1147	2.52	11
1009	4.5	65.5	7.14	1146	2.23	
1020	Sample		7.04	1210		

Field Notes: VUCAP WELL @ 9:00 - VUCAP SLIGHT PRESSURE



**MONITORING WELL PURGE TABLE**

<b>Project Number:</b> 4422-001	<b>Site Name:</b> Bank of America - San Leandro
<b>Well Number:</b> MW 1	<b>Date(s) Purged:</b> <del>4/29/99</del> 5/7/99
<b>OVA - Ambient:</b> NR	<b>Purge Method:</b> CENTRIFUGAL PUMP Dedicated Disposable Bailer
<b>OVA - Vault:</b> NR	<b>Purge Rate:</b> 1.6 GPM
<b>OVA - Casing:</b> NR	<b>Date &amp; Time Sampled:</b> <del>4/29/99</del> 5-7-99 @
<b>Water Level - Initial:</b> 5.45 @ 1100	<b>Purged &amp; Sampled:</b> Dale Anderson
<b>Water Level - Final:</b> 5.58 @ 1153	<b>Sampling Method:</b> Dedicated Disposable Bailer
<b>Well Depth:</b> 14	<b>Free Product:</b> NO
<b>Well Diameter:</b> 6	<b>Sheen:</b> MODERATE
<b>Well Casing Volume:</b> 15.75	<b>Odor:</b> MODERATE - 10-1200 FT. FROM

Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity
1109	1	65.3	7.07	939	5.76	LOW
1117	10	67.2	6.91	968	7.92	"
1119	17	66.0	6.82	983	5.83	"
1121	25	65.0	6.74	974	7.41	"
1124	30	64.1	6.52	969	5.56	clean
1127	35	64.3	6.93	957	5.23	"
1131	40	64.2	6.84	954	5.23	"
1135	45	64.2	6.80	958	5.33	"
1140	56.25	64.9	6.79	936	6.84	"
1200	sample	62.6	6.73	9.19	1.70	"

Field Notes:

5/11



**APPENDIX F**

**Laboratory Analytical Report and Chain-of-Custody Documentation**

KEMRON Environmental Services  
109 Starlite Park  
Marietta, Ohio 45750  
Phone: (740) 375-4071

Versar, Inc.  
7844 Madison Ave.  
Suite 167  
Fair Oaks, CA 95628  
Attention: Mr. Scott Allin

Login #: L9904571  
Report Date: 05/11/99  
Work ID: 4422-001/BANK OF AMERICA  
Date Received: 04/30/99

PO Number:  
Account Number: VERSAR-CA-503

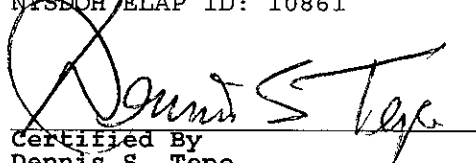
SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>	<u>Sample Number</u>	<u>Sample Description</u>
L9904571-01	MW5	L9904571-02	MW4
L9904571-03	MW2	L9904571-04	MW3
L9904571-05	D5, D3, D1, D2/COMP.		

\*\*\*\*REVISED REPORT\*\*\*\*

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

  
Certified By  
Dennis S. Tepe

Order #99-04-571  
May 11, 1999 13:44

*KEMRON ENVIRONMENTAL SERVICES*  
REPORT NARRATIVE

DIESEL RANGE ORGANICS - 8015:

Sample fraction 01 yielded % recoveries for both surrogates that were outside acceptable limits. There was insufficient sample remaining for re-extraction analysis.

Extended carbon range was analyzed on DRO to cover motor oil. The results are non-detect.

Login #L9904571  
May 11, 1999 03:10 pm

KEMRON ENVIRONMENTAL SERVICES

Product: DRO - Diesel Range Organics (GC)

Lab Sample ID: L9904571-01  
Client Sample ID: MW5  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: 05/03/99  
Analysis Date: 05/06/99 Time: 17:43

Instrument: HP8  
Analyst: HV  
Lab File ID: 005F0101

Method: 8015\3510  
Run ID: R65110  
Batch: WG57096

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics.....	ug/L		ND	110	1.05
SURROGATES- In Percent Recovery:						
	o-Terphenyl.....	33.1 *		( 49 - 174%)		
	Octacosane.....	10.2 *		( 26 - 152%)		

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9904571-01  
Client Sample ID: MW5  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/03/99 Time: 15:14

Instrument: HP12  
Analyst: MFB  
Lab File ID: 010R0101

Method: 8021B  
Run ID: R65015  
Batch: WG57004

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
71-43-2	Benzene.....	ug/L		ND	1.0	1
100-41-4	Ethylbenzene.....	ug/L		ND	1.0	1
108-88-3	Toluene.....	ug/L		ND	1.0	1
1330-20-7	Xylenes, Total.....	ug/L		ND	1.0	1
SURROGATES- In Percent Recovery:						
	a,a,a-Trifluorotoluene.....	101		( 82 - 123%)		

RL = Reporting Limit

Login #L9904571  
May 11, 1999 03:10 pm

KEMRON ENVIRONMENTAL SERVICES

Product: GRO - Gasoline Range Organics

Lab Sample ID: L9904571-01  
Client Sample ID: MW5  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/04/99 Time: 22:21

Instrument: HP3  
Analyst: VMN  
Lab File ID: 3G467

Method: 8015  
Run ID: R65049  
Batch: WG57082

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics.....	ug/L	270		100	1
	<b>SURROGATES- In Percent Recovery:</b>					
	Chlorobenzene.....	80.2		( 64 - 148%)		

Product: DRO - Diesel Range Organics (GC)

Lab Sample ID: L9904571-02  
Client Sample ID: MW4  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: 05/03/99  
Analysis Date: 05/06/99 Time: 20:09

Instrument: HP8  
Analyst: HV  
Lab File ID: 006F0101

Method: 8015\3510  
Run ID: R65110  
Batch: WG57096

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics.....	ug/L		ND	110	1.1
	<b>SURROGATES- In Percent Recovery:</b>					
	o-Terphenyl.....	48.8	*	( 49 - 174%)		
	Octacosane.....	51.7		( 26 - 152%)		

RL = Reporting Limit

Login #L9904571  
May 11, 1999 03:10 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9904571-02  
Client Sample ID: MW4  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A

Sample Weight: N/A  
Extract Volume: N/A

Date Collected: 04/29/99

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/03/99 Time: 15:52

Instrument: HP12  
Analyst: MFB  
Lab File ID: 011R0101

Method: 8021B  
Run ID: R65015  
Batch: WG57004

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
71-43-2	Benzene.....	ug/L		ND	1.0	1
100-41-4	Ethylbenzene.....	ug/L		ND	1.0	1
108-88-3	Toluene.....	ug/L		ND	1.0	1
1330-20-7	Xylenes, Total.....	ug/L		ND	1.0	1
SURROGATES- In Percent Recovery:						
	a,a,a-Trifluorotoluene.....	96.7		( 82 - 123%)		

Product: GRO - Gasoline Range Organics

Lab Sample ID: L9904571-02  
Client Sample ID: MW4  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A

Sample Weight: N/A  
Extract Volume: N/A

Date Collected: 04/29/99

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/04/99 Time: 23:00

Instrument: HP3  
Analyst: VMN  
Lab File ID: 3G468

Method: 8015  
Run ID: R65049  
Batch: WG57082

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics.....	ug/L	110		100	1
SURROGATES- In Percent Recovery:						
	Chlorobenzene.....	82.2		( 64 - 148%)		

RL = Reporting Limit



Login #L9904571  
May 11, 1999 03:10 pm

KEMRON ENVIRONMENTAL SERVICES

Product: DRO - Diesel Range Organics (GC)

Lab Sample ID: L9904571-03  
Client Sample ID: MW2  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A

Sample Weight: N/A  
Extract Volume: N/A

Date Collected: 04/29/99

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: 05/03/99  
Analysis Date: 05/06/99 Time: 22:35

Instrument: HP8  
Analyst: HV  
Lab File ID: 007F0101

Method: 8015\3510  
Run ID: R65110  
Batch: WG57096

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics.....	ug/L		ND	110	1.06
SURROGATES- In Percent Recovery:						
	o-Terphenyl.....	53.0		( 49 - 174%)		
	Octacosane.....	21.5 *		( 26 - 152%)		

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9904571-03  
Client Sample ID: MW2  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A

Sample Weight: N/A  
Extract Volume: N/A

Date Collected: 04/29/99

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/03/99 Time: 16:29

Instrument: HP12  
Analyst: MFB  
Lab File ID: 012R0101

Method: 8021B  
Run ID: R65015  
Batch: WG57004

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
71-43-2	Benzene.....	ug/L		ND	1.0	1
100-41-4	Ethylbenzene.....	ug/L		ND	1.0	1
108-88-3	Toluene.....	ug/L		ND	1.0	1
1330-20-7	Xylenes, Total.....	ug/L		ND	1.0	1
SURROGATES- In Percent Recovery:						
	a, a, a-Trifluorotoluene.....	89.0		( 82 - 123%)		

RL = Reporting Limit

Login #L9904571  
May 11, 1999 03:10 pm

KEMRON ENVIRONMENTAL SERVICES

Product: GRO - Gasoline Range Organics

Lab Sample ID: L9904571-03  
Client Sample ID: MW2  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/05/99 Time: 00:52

Instrument: HP3  
Analyst: VMN  
Lab File ID: 3G471

Method: 8015  
Run ID: R65050  
Batch: WG57082

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics.....	ug/L		ND	100	1
SURROGATES- In Percent Recovery:						
	Chlorobenzene.....	80.5		( 64 - 148%)		

Product: DRO - Diesel Range Organics (GC)

Lab Sample ID: L9904571-04  
Client Sample ID: MW3  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: 05/03/99  
Analysis Date: 05/07/99 Time: 01:01

Instrument: HP8  
Analyst: HV  
Lab File ID: 008F0101

Method: 8015\3510  
Run ID: R65111  
Batch: WG57096

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics.....	ug/L	540		100	1.03
SURROGATES- In Percent Recovery:						
	o-Terphenyl.....	67.9		( 49 - 174%)		
	Octacosane.....	29.8		( 26 - 152%)		

RL = Reporting Limit

Login #L9904571  
May 11, 1999 03:10 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9904571-04  
Client Sample ID: MW3  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99  
Instrument: HP12  
Analyst: MFB  
Lab File ID: 013R0101

Sample Weight: N/A  
Extract Volume: N/A  
% Solid: N/A  
Method: 8021B  
Run ID: R65015  
Batch: WG57004

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/03/99 Time: 17:07

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
71-43-2	Benzene.....	ug/L		ND	1.0	1
100-41-4	Ethylbenzene.....	ug/L		ND	1.0	1
108-88-3	Toluene.....	ug/L		ND	1.0	1
1330-20-7	Xylenes, Total.....	ug/L		ND	1.0	1
SURROGATES- In Percent Recovery:						
	a, a, a-Trifluorotoluene.....	113		( 82 - 123%)		

Product: GRO - Gasoline Range Organics

Lab Sample ID: L9904571-04  
Client Sample ID: MW3  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99  
Instrument: HP3  
Analyst: VMN  
Lab File ID: 3G472

Sample Weight: N/A  
Extract Volume: N/A  
% Solid: N/A  
Method: 8015  
Run ID: R65050  
Batch: WG57082

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/05/99 Time: 01:30

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics.....	ug/L		ND	100	1
SURROGATES- In Percent Recovery:						
	Chlorobenzene.....	87.9		( 64 - 148%)		

RL = Reporting Limit

Login #L9904571  
 May 11, 1999 03:10 pm

KEMRON ENVIRONMENTAL SERVICES

Lab Sample ID: L9904571-05  
 Client Sample ID: D5,D3,D1,D2/COMP.  
 Site/Work ID: 4422-001/BANK OF AMERICA

Matrix: Soil  
 Collected: 04/29/99 N/A

% Solid: 80  
 COC Info: N/A

Analyte	Units	Result	Qualifiers	RL	Dil	Type	Analyst	Analysis Date	Time	Method
Percent Solids.....	% wt.	80		1.0	1	N/A	SMW	05/04/99	14:30	D2216-90
Lead, Total.....	mg/kg		ND	6.3	1	N/A	JYH	05/05/99	10:42	6010B\3050A
Petroleum Hydrocarbons.....	mg/kg		ND	31	1	N/A	MPM	05/04/99	19:50	418.1

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9904571-05  
 Client Sample ID: D5,D3,D1,D2/COMP.  
 Site/Work ID: 4422-001/BANK OF AMERICA  
 Matrix: Soil

Dil. Type: N/A  
 COC Info: N/A  
 Date Collected: 04/29/99

Sample Weight: N/A  
 Extract Volume: N/A

% Solid: 80

TCLP Extract Date: N/A  
 Extract Date: N/A  
 Analysis Date: 05/03/99 Time: 12:43

Instrument: HP5  
 Analyst: MFB  
 Lab File ID: 5G295

Method: 8021B  
 Run ID: R64806  
 Batch: WG57000

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
71-43-2	Benzene.....	ug/kg		ND	6.3	5
100-41-4	Ethylbenzene.....	ug/kg		ND	6.3	5
108-88-3	Toluene.....	ug/kg	38		6.3	5
1330-20-7	Xylenes, Total.....	ug/kg	16		6.3	5
SURROGATES- In Percent Recovery:						
	a,a,a-Trifluorotoluene.....	115		( 34 - 175%)		

RL = Reporting Limit

Order #: 99-04-571  
May 11, 1999 03:10 pm

KEMRON ENVIRONMENTAL SERVICES  
WORK GROUPS

Work Group	Run ID	Sample	Dil Type Matrix	Product	Method	Date Collected	Department
WGS6919	R65110	L9904571-01	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Extraction
WGS6919	R65110	L9904571-02	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Extraction
WGS6919	R65110	L9904571-03	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Extraction
WGS6919	R65111	L9904571-04	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Extraction
WGS7000	R64806	L9904571-05	Soil	Volatile Organics (BETX)	8021B	29-APR-1999	Volatile - GC
WGS7004	R65015	L9904571-01	Water	Volatile Organics (BETX)	8021B	29-APR-1999	Volatile - GC
WGS7004	R65015	L9904571-02	Water	Volatile Organics (BETX)	8021B	29-APR-1999	Volatile - GC
WGS7004	R65015	L9904571-03	Water	Volatile Organics (BETX)	8021B	29-APR-1999	Volatile - GC
WGS7004	R65015	L9904571-04	Water	Volatile Organics (BETX)	8021B	29-APR-1999	Volatile - GC
WGS7037	R64967	L9904571-05	Soil	Petroleum Hydrocarbons	418.1	29-APR-1999	Extraction
WGS7054	R64934	L9904571-05	Soil	Lead, Total	6010B\3050A	29-APR-1999	Digestion
WGS7073	R64952	L9904571-05	Soil	Percent Solids	D2216-90	29-APR-1999	Conventionals
WGS7082	R65049	L9904571-01	Water	Gasoline Range Organics	8015	29-APR-1999	Volatile - GC
WGS7082	R65049	L9904571-02	Water	Gasoline Range Organics	8015	29-APR-1999	Volatile - GC
WGS7082	R65050	L9904571-03	Water	Gasoline Range Organics	8015	29-APR-1999	Volatile - GC
WGS7082	R65050	L9904571-04	Water	Gasoline Range Organics	8015	29-APR-1999	Volatile - GC
WGS7087	R64934	L9904571-05	Soil	Lead, Total	6010B\3050A	29-APR-1999	Metals - ICP
WGS7096	R65110	L9904571-01	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Semivolatile - GC
WGS7096	R65110	L9904571-02	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Semivolatile - GC
WGS7096	R65110	L9904571-03	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Semivolatile - GC
WGS7096	R65111	L9904571-04	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Semivolatile - GC

*KEMRON ANALYST LIST*

*Ohio Valley Laboratory*

*03/30/99*

---

ALC - - Ann L. Clark  
BAD - - Becky A. Diehl  
CEB - - Chad E. Barnes  
CDB - - Christy D. Burton  
CMS - - Crystal M. Stevens  
CRC - - Carla R. Cochran  
DIH - - Deanna I. Hesson  
DLN - - Deanna L. Norton  
DLP - - Dorothy L. Payne  
ECL - - Eric C. Lawson  
FEH - - Fay E. Harmon  
HV - - Hema Vilasagar  
JCR - - Jennifer C. Randall  
JLH - - Janice L. Holland  
JWR - - John W. Richards  
JYH - - Ji Y. Hu  
KHA - - Kim H. Archer  
KAS - - Kevin A. Stutler  
KRA - - Kathy R. Albertson  
MDA - - Mike D. Albertson

MDC - - Michael D. Cochran  
MES - - Mary E. Schiling  
MLS - - Michael L. Schimmel  
MMB - - Maren M. Beery  
RDC - - Rebecca D. Cutlip  
RDS - - Rebecca D. Sutton  
REF - - Ron E. Fertile  
REK - - Robert E. Kyer  
RSS - - Regina S. Simmons  
RWC - - Rodney W. Campbell  
SJK - - Sindy J. Kinney  
SJM - - Shawn J. Marshall  
SLP - - Sheri L. Pfalzgraf  
SLT - - Stephanie L. Tepe  
SMW - - Shauna M. Welch  
SPL - - Steve P. Learn  
SPS - - Steve P. Swatzel  
TRS - - Todd R. Stack  
VC - - Vicki Collier  
VMN - - Vincent M. Nedeff

KEMRON Environmental Services, Inc.  
LIST OF VALID QUALIFIERS (qual)  
December 10, 1998

Qualifier	Description	Qualifier	Description
A	See the report narrative	N	Tentatively Identified Compound (TIC)
NA	Not applicable	ND	Not detected at or above the reporting limit (RL)
+	Correlation coefficient for the MSA is less than 0.995	NF	Not found
<	Less than	NFL	No free liquid
>	Greater than	NI	Non-ignitable
B	Present in the method blank	NR	Analyte is not required to be analyzed
C	Confirmed by GC/MS	NS	Not spiked
*	Surrogate or spike compound out of range	P	Concentration > 25% difference between the two GC columns
CG	Confluent growth	QNS	Quantity not sufficient to perform analysis
D	The analyte was quantified at a secondary dilution factor	R	Analyte exceeds regulatory limit
DL	Surrogate or spike was diluted out	RA	Reanalysis confirms reported results
E	Estimated concentration due to sample matrix interference	RE	Reanalysis confirms sample matrix interference
F	Present below nominal reporting limit (AFCEE only)	S	Analyzed by method of standard addition
FL	Free liquid	SMI	Sample matrix interference on surrogate
I	Semiquantitative result, out of instrument calibration range	SP	Reported results are for spike compounds only
J	Present below nominal reporting limit	TNTC	Too numerous to count
L	Sample reporting limits elevated due to matrix interference	U	Analyzed for but not detected
M	Duplicate injection precision not met	W	Post-digestion spike for furnace AA out of control limits
		Z	Can not be resolved from isomer. See below.

**Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent.

KEMRON ENVIRONMENTAL SERVICES  
OHIO VALLEY LABORATORY  
QUALITY CONTROL SUMMARY

WORKGROUP: wg57087  
METHOD: 6010B  
MATRIX: SOIL  
UNITS: MG/KG  
INSTRUMENT: IRIS

RUN DATE: 5/5/99  
PREP DATE: 5/4/99  
ANALYST: JY11

ANALYTE			CONCENTRATION PPM								PERCENT RECOVERY						PERCENT			
	RDL	Blank	T-LCS	LCS	SAMPLE		T-MS	MS	MSD	LCS		MS		REP RPD	MS RPD	RPD UCL				
					REP1	REP2				RESULT	LCL	UCL	LCL				UCL			
Silver	2.000	ND	10.000	9.730	ND	ND	ND	10.000	9.260	9.290	97.3	80.0	120.0	92.6	92.9	80.0	120.0	NA	0.32	20
Lead	5.000	ND	50.320	48.400	61.600	116.000	ND	50.000	49.300	49.400	96.2	80.0	120.0	98.6	98.8	80.0	120.0	61.26	0.20	20
Antimony	10.000	ND	50.000	46.500	ND	ND	ND	50.000	30.400	28.800	93.0	80.0	120.0	60.8	57.6	80.0	120.0	NA	5.41	20
																		0.00	0.00	
																		0.00	0.00	
																		0.00	0.00	
																		0.00	0.00	
																		0.00	0.00	
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																		0.00	0.00	
																		0.00	0.00	
																		0.00	0.00	

NOTES & DEFINITIONS :

RDL = REPORTING DETECTION LIMIT  
NA = NOT APPLICABLE  
ND = NOT DETECTED  
DL = DILUTED OUT (Concentration of sample > 4X spike concentration)

LCS = LABORATORY CONTROL SAMPLE  
T-LCS = TRUE VALUE OF LCS  
REP1 = UNSPIKED SAMPLE REPLICATE 1  
REP2 = UNSPIKED SAMPLE REPLICATE 2  
SAMPLE RESULT = CONCENTRATION OF UNSPIKED MATRIX  
T-MS = TRUE VALUE OF MATRIX SPIKE  
MS = MATRIX SPIKE  
MSD = MATRIX SPIKE DUPLICATE  
LCL = LOWER CONTROL LIMIT  
UCL = UPPER CONTROL LIMIT

REP RPD = RELATIVE PERCENT DIFFERENCE OF SAMPLE REPLICATES  
MS RPD = RELATIVE PERCENT DIFFERENCE OF MATRIX SPIKES



PROJECT NO.		PROJECT NAME					PARAMETERS							INDUSTRIAL HYGIENE SAMPLE	Y	
4422-001		BANK OF AMERICA SAN LEANDRO					NO. OF CONTAINERS GRO 8015M DRO 8015M WAO 8015M BTEX 8020 TPH Pb 4/20 CHLORO ALL-ORC								1	
SAMPLERS: (Signature) Dale Anderson					(Printed) DALE ANDERSON					REMARKS						
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION											
MW 5	4/29	1020		X		4	↓	↓	↓	X					* SEE NOTE	
MW 4		1140				5	↓	↓	↓						" "	
MW 2		1245				5	↓	↓	↓						" "	
MW 3		1400				5	↓	↓	↓						" "	
D 5		1440			COMPOSITE FOR ONE ANALYSIS	1				X	↓				COMPOSITE TO ONE	
D 3		1445				1									"	
D 1		1450				1									"	
D 2		1455				1									"	
Relinquished by: (Signature) Dale Anderson			Date / Time 4/29/99 1600		Received by: (Signature) TO FED EX			Relinquished by: (Signature)			Date / Time		Received by: (Signature)			
(Printed) DALE ANDERSON					(Printed)			(Printed)					(Printed)			
Relinquished by: (Signature)			Date / Time		Received for Laboratory by: (Signature)			Date / Time		Remarks STA TAT * LOW DETECTION LIMITS QUESTIONS RESULTS, INVOICE TO SCOTT ALLIN 916 863-9325						
(Printed)					(Printed)											

KEMRON Environmental Services  
109 Starlite Park  
Marietta, Ohio 45750  
Phone: (740) 313-4071

Versar, Inc.  
7844 Madison Ave.  
Suite 167  
Fair Oaks, CA 95628  
Attention: Mr. Scott Allin

Login #: L9904571  
Report Date: 05/07/99  
Work ID: 4422-001/BANK OF AMERICA  
Date Received: 04/30/99

PO Number:  
Account Number: VERSAR-CA-503

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>	<u>Sample Number</u>	<u>Sample Description</u>
L9904571-01	MW5	L9904571-02	MW4
L9904571-03	MW2	L9904571-04	MW3
L9904571-05	D5, D3, D1, D2/COMP.		

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

  
Certified By  
Dennis S. Tepe

Order #99-04-571  
May 7, 1999 16:13

KEMRON ENVIRONMENTAL SERVICES  
REPORT NARRATIVE

DIESEL RANGE ORGANICS - 8015:

Sample fraction 01 yielded % recoveries for both surrogates that were outside acceptable limits. There was insufficient sample remaining for re-extraction analysis.

Login #L9904571  
May 7, 1999 04:09 pm

KEMRON ENVIRONMENTAL SERVICES

Product: DRO - Diesel Range Organics (GC)

Lab Sample ID: L9904571-01  
Client Sample ID: MW5  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A  
% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: 05/03/99  
Analysis Date: 05/06/99 Time: 17:43

Instrument: HP8  
Analyst: HV  
Lab File ID: 005F0101

Method: 8015\3510  
Run ID: R65110  
Batch: WG57096

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics.....	ug/L		ND	110	1.05
SURROGATES- In Percent Recovery:						
	o-Terphenyl.....	33.1 *		( 49 - 174%)		
	Octacosane.....	10.2 *		( 26 - 152%)		

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9904571-01  
Client Sample ID: MW5  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/03/99 Time: 15:14

Instrument: HP12  
Analyst: MFB  
Lab File ID: 010R0101

% Solid: N/A  
Method: 8021B  
Run ID: R65015  
Batch: WG57004

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
71-43-2	Benzene.....	ug/L		ND	1.0	1
100-41-4	Ethylbenzene.....	ug/L		ND	1.0	1
108-88-3	Toluene.....	ug/L		ND	1.0	1
1330-20-7	Xylenes, Total.....	ug/L		ND	1.0	1
SURROGATES- In Percent Recovery:						
	a,a,a-Trifluorotoluene.....	101		( 82 - 123%)		

RL = Reporting Limit

Login #L9904571  
May 7, 1999 04:09 pm

KEMRON ENVIRONMENTAL SERVICES

Product: GRO - Gasoline Range Organics

Lab Sample ID: L9904571-01  
Client Sample ID: MW5  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/04/99 Time: 22:21

Instrument: HP3  
Analyst: VMN  
Lab File ID: 3G467

Method: 8015  
Run ID: R65049  
Batch : WG57082

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics.....	ug/L	270		100	1
	<b>SURROGATES- In Percent Recovery:</b>					
	Chlorobenzene.....	80.2	( 64 - 148%)			

Product: DRO - Diesel Range Organics (GC)

Lab Sample ID: L9904571-02  
Client Sample ID: MW4  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: 05/03/99  
Analysis Date: 05/06/99 Time: 20:09

Instrument: HP8  
Analyst: HV  
Lab File ID: 006F0101

Method: 8015\3510  
Run ID: R65110  
Batch : WG57096

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics.....	ug/L		ND	110	1.1
	<b>SURROGATES- In Percent Recovery:</b>					
	o-Terphenyl.....	48.8 *	( 49 - 174%)			
	Octacosane.....	51.7	( 26 - 152%)			

RL = Reporting Limit

Login #L9904571  
May 7, 1999 04:09 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9904571-02  
Client Sample ID: MW4  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A  
% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/03/99 Time: 15:52

Instrument: HP12  
Analyst: MFB  
Lab File ID: 011R0101

Method: 8021B  
Run ID: R65015  
Batch: WG57004

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
71-43-2	Benzene.....	ug/L		ND	1.0	1
100-41-4	Ethylbenzene.....	ug/L		ND	1.0	1
108-88-3	Toluene.....	ug/L		ND	1.0	1
1330-20-7	Xylenes, Total.....	ug/L		ND	1.0	1
SURROGATES- In Percent Recovery:						
	a,a,a-Trifluorotoluene.....	96.7		( 82 - 123%)		

Product: GRO - Gasoline Range Organics

Lab Sample ID: L9904571-02  
Client Sample ID: MW4  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A  
% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/04/99 Time: 23:00

Instrument: HP3  
Analyst: VMN  
Lab File ID: 3G468

Method: 8015  
Run ID: R65049  
Batch: WG57082

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics.....	ug/L	110		100	1
SURROGATES- In Percent Recovery:						
	Chlorobenzene.....	82.2		( 64 - 148%)		

RL = Reporting Limit

Login #L9904571  
May 7, 1999 04:09 pm

KEMRON ENVIRONMENTAL SERVICES

Product: DRO - Diesel Range Organics (GC)

Lab Sample ID: L9904571-03  
Client Sample ID: MW2  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: 05/03/99  
Analysis Date: 05/06/99 Time: 22:35

Instrument: HP8  
Analyst: HV  
Lab File ID: 007F0101

Method: 8015\3510  
Run ID: R65110  
Batch: WG57096

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics.....	ug/L		ND	110	1.06
SURROGATES- In Percent Recovery:						
	o-Terphenyl.....	53.0		( 49 - 174%)		
	Octacosane.....	21.5 *		( 26 - 152%)		

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9904571-03  
Client Sample ID: MW2  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/03/99 Time: 16:29

Instrument: HP12  
Analyst: MFB  
Lab File ID: 012R0101

Method: 8021B  
Run ID: R65015  
Batch: WG57004

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
71-43-2	Benzene.....	ug/L		ND	1.0	1
100-41-4	Ethylbenzene.....	ug/L		ND	1.0	1
108-88-3	Toluene.....	ug/L		ND	1.0	1
1330-20-7	Xylenes, Total.....	ug/L		ND	1.0	1
SURROGATES- In Percent Recovery:						
	a,a,a-Trifluorotoluene.....	89.0		( 82 - 123%)		

RL = Reporting Limit

Login #L9904571  
May 7, 1999 04:09 pm

KEMRON ENVIRONMENTAL SERVICES

Product: GRO - Gasoline Range Organics

Lab Sample ID: L9904571-03  
Client Sample ID: MW2  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/05/99 Time: 00:52

Instrument: HP3  
Analyst: VMN  
Lab File ID: 3G471

Method: 8015  
Run ID: R65050  
Batch: WG57082

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics.....	ug/L		ND	100	1
<b>SURROGATES- In Percent Recovery:</b>						
	Chlorobenzene.....	80.5		( 64 - 148%)		

Product: DRO - Diesel Range Organics (GC)

Lab Sample ID: L9904571-04  
Client Sample ID: MW3  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: 05/03/99  
Analysis Date: 05/07/99 Time: 01:01

Instrument: HP8  
Analyst: HV  
Lab File ID: 008F0101

Method: 8015\3510  
Run ID: R65111  
Batch: WG57096

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics.....	ug/L	540		100	1.03
<b>SURROGATES- In Percent Recovery:</b>						
	o-Terphenyl.....	67.9		( 49 - 174%)		
	Octacosane.....	29.8		( 26 - 152%)		

RL - Reporting Limit



Login #L9904571  
May 7, 1999 04:09 pm

KEMRON ENVIRONMENTAL SERVICES

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9904571-04  
Client Sample ID: MW3  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/03/99 Time: 17:07

Instrument: HP12  
Analyst: MFB  
Lab File ID: 013R0101

Method: 8021B  
Run ID: R65015  
Batch: WG57004

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
71-43-2	Benzene.....	ug/L		ND	1.0	1
100-41-4	Ethylbenzene.....	ug/L		ND	1.0	1
108-88-3	Toluene.....	ug/L		ND	1.0	1
1330-20-7	Xylenes, Total.....	ug/L		ND	1.0	1
SURROGATES- In Percent Recovery:						
	a,a,a-Trifluorotoluene.....	113		( 82 - 123%)		

Product: GRO - Gasoline Range Organics

Lab Sample ID: L9904571-04  
Client Sample ID: MW3  
Site/Work ID: 4422-001/BANK OF AMERICA  
Matrix: Water

Dil. Type: N/A  
COC Info: N/A  
Date Collected: 04/29/99

Sample Weight: N/A  
Extract Volume: N/A

% Solid: N/A

TCLP Extract Date: N/A  
Extract Date: N/A  
Analysis Date: 05/05/99 Time: 01:30

Instrument: HP3  
Analyst: VMN  
Lab File ID: 3G472

Method: 8015  
Run ID: R65050  
Batch: WG57082

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics.....	ug/L		ND	100	1
SURROGATES- In Percent Recovery:						
	Chlorobenzene.....	87.9		( 64 - 148%)		

RL = Reporting Limit

Login #L9904571  
 May 7, 1999 04:09 pm

KEMRON ENVIRONMENTAL SERVICES

Lab Sample ID: L9904571-05  
 Client Sample ID: D5,D3,D1,D2/COMP.  
 Site/Work ID: 4422-001/BANK OF AMERICA

Matrix: Soil  
 Collected: 04/29/99 N/A

% Solid: 80  
 COC Info: N/A

Analyte	Units	Result	Qualifiers	RL	Dil	Type	Analyst	Analysis Date	Time	Method
Percent Solids.....	% wt.	80		1.0	1	N/A	SMW	05/04/99	14:30	D2216-90
Lead, Total.....	mg/kg		ND	6.3	1	N/A	JYH	05/05/99	10:42	6010B\3050A

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9904571-05  
 Client Sample ID: D5,D3,D1,D2/COMP.  
 Site/Work ID: 4422-001/BANK OF AMERICA  
 Matrix: Soil

Dil. Type: N/A  
 COC Info: N/A  
 Date Collected: 04/29/99

Sample Weight: N/A  
 Extract Volume: N/A

% Solid: 80

TCLP Extract Date: N/A  
 Extract Date: N/A  
 Analysis Date: 05/03/99 Time: 12:43

Instrument: HP5  
 Analyst: MFB  
 Lab File ID: 5G295

Method: 8021B  
 Run ID: R64806  
 Batch: WG57000

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
71-43-2	Benzene.....	ug/kg		ND	6.3	5
100-41-4	Ethylbenzene.....	ug/kg		ND	6.3	5
108-88-3	Toluene.....	ug/kg	38		6.3	5
1330-20-7	Xylenes, Total.....	ug/kg	16		6.3	5
SURROGATES- In Percent Recovery:						
	a,a,a-Trifluorotoluene.....	115		( 34 - 175%)		

RL = Reporting Limit

Order #: 99-04-571  
May 7, 1999 04:32 pm

**KEMRON ENVIRONMENTAL SERVICES  
WORK GROUPS**

<b>Work Group</b>	<b>Run ID</b>	<b>Sample</b>	<b>Dil Type Matrix</b>	<b>Product</b>	<b>Method</b>	<b>Date Collected</b>	<b>Department</b>
WG56919	R65110	L9904571-01	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Extraction
WG56919	R65110	L9904571-02	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Extraction
WG56919	R65110	L9904571-03	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Extraction
WG56919	R65111	L9904571-04	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Extraction
WG57000	R64806	L9904571-05	Soil	Volatile Organics (BETX)	8021B	29-APR-1999	Volatile - GC
WG57004	R65015	L9904571-01	Water	Volatile Organics (BETX)	8021B	29-APR-1999	Volatile - GC
WG57004	R65015	L9904571-02	Water	Volatile Organics (BETX)	8021B	29-APR-1999	Volatile - GC
WG57004	R65015	L9904571-03	Water	Volatile Organics (BETX)	8021B	29-APR-1999	Volatile - GC
WG57004	R65015	L9904571-04	Water	Volatile Organics (BETX)	8021B	29-APR-1999	Volatile - GC
WG57054	R64934	L9904571-05	Soil	Lead, Total	6010B\3050A	29-APR-1999	Digestion
WG57073	R64952	L9904571-05	Soil	Percent Solids	D2216-90	29-APR-1999	Conventionals
WG57082	R65049	L9904571-01	Water	Gasoline Range Organics	8015	29-APR-1999	Volatile - GC
WG57082	R65049	L9904571-02	Water	Gasoline Range Organics	8015	29-APR-1999	Volatile - GC
WG57082	R65050	L9904571-03	Water	Gasoline Range Organics	8015	29-APR-1999	Volatile - GC
WG57082	R65050	L9904571-04	Water	Gasoline Range Organics	8015	29-APR-1999	Volatile - GC
WG57087	R64934	L9904571-05	Soil	Lead, Total	6010B\3050A	29-APR-1999	Metals - ICP
WG57096	R65110	L9904571-01	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Semivolatile - GC
WG57096	R65110	L9904571-02	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Semivolatile - GC
WG57096	R65110	L9904571-03	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Semivolatile - GC
WG57096	R65111	L9904571-04	Water	Diesel Range Organics (GC)	8015\3510	29-APR-1999	Semivolatile - GC

*KEMRON ANALYST LIST*

*Ohio Valley Laboratory*

*03/30/99*

---

ALC - - Ann L. Clark  
BAD - - Becky A. Diehl  
CEB - - Chad E. Barnes  
CDB - - Christy D. Burton  
CMS - - Crystal M. Stevens  
CRC - - Carla R. Cochran  
DIH - - Deanna I. Hesson  
DLN - - Deanna L. Norton  
DLP - - Dorothy L. Payne  
ECL - - Eric C. Lawson  
FEH - - Fay E. Harmon  
HV - - Hema Vilasagar  
JCR - - Jennifer C. Randall  
JLH - - Janice L. Holland  
JWR - - John W. Richards  
JYH - - Ji Y. Hu  
KHA - - Kim H. Archer  
KAS - - Kevin A. Stutler  
KRA - - Kathy R. Albertson  
MDA - - Mike D. Albertson

MDC - - Michael D. Cochran  
MES - - Mary E. Schiling  
MLS - - Michael L. Schimmel  
MMB - - Maren M. Beery  
RDC - - Rebecca D. Cutlip  
RDS - - Rebecca D. Sutton  
REF - - Ron E. Fertile  
REK - - Robert E. Kyer  
RSS - - Regina S. Simmons  
RWC - - Rodney W. Campbell  
SJK - - Sindy J. Kinney  
SJM - - Shawn J. Marshall  
SLP - - Sheri L. Pfalzgraf  
SLT - - Stephanie L. Tepe  
SMW - - Shauna M. Welch  
SPL - - Steve P. Learn  
SPS - - Steve P. Swatzel  
TRS - - Todd R. Stack  
VC - - Vicki Collier  
VMN - - Vincent M. Nedeff

KEMRON Environmental Services, Inc.  
LIST OF VALID QUALIFIERS (qual)  
December 10, 1998

Qualifier	Description	Qualifier	Description
A	See the report narrative	N	Tentatively Identified Compound (TIC)
NA	Not applicable	ND	Not detected at or above the reporting limit (RL)
+	Correlation coefficient for the MSA is less than 0.995	NF	Not found
<	Less than	NFL	No free liquid
>	Greater than	NI	Non-ignitable
B	Present in the method blank	NR	Analyte is not required to be analyzed
C	Confirmed by GC/MS	NS	Not spiked
*	Surrogate or spike compound out of range	P	Concentration > 25% difference between the two GC columns
CG	Confluent growth	QNS	Quantity not sufficient to perform analysis
D	The analyte was quantified at a secondary dilution factor	R	Analyte exceeds regulatory limit
DL	Surrogate or spike was diluted out	RA	Reanalysis confirms reported results
E	Estimated concentration due to sample matrix interference	RE	Reanalysis confirms sample matrix interference
F	Present below nominal reporting limit (AFCEE only)	S	Analyzed by method of standard addition
FL	Free liquid	SMI	Sample matrix interference on surrogate
I	Semiquantitative result, out of instrument calibration range	SP	Reported results are for spike compounds only
J	Present below nominal reporting limit	TNTC	Too numerous to count
L	Sample reporting limits elevated due to matrix interference	U	Analyzed for but not detected
M	Duplicate injection precision not met	W	Post-digestion spike for furnace AA out of control limits
		Z	Can not be resolved from isomer. See below.

**Special Notes for Organic Analytes**

1. Acrolein and acrylonitrile by method 624 are semiquantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methyphenol and 4-Methyphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound and are matrix dependent.

***INORGANIC QA/QC***

KEMRON ENVIRONMENTAL SERVICES  
OHIO VALLEY LABORATORY  
QUALITY CONTROL SUMMARY

WORKGROUP: wg57087                      RUN DATE: 5/5/99  
METHOD: 6010B                              PREP DATE: 5/4/99  
MATRIX: SOIL                                ANALYST: JYH  
UNITS: MG/KG  
INSTRUMENT: IRIS

ANALYTE			CONCENTRATION PPM								PERCENT RECOVERY						PERCENT			
	RDL	Blank	T-LCS	LCS	REP1	SAMPLE		T-MS	MS	MSD	LCS	LCS	LCS	MS	MSD	MS	MS	REP	MS	RPD
						LCL	UCL					LCL	UCL			RPD	RPD	UCL		
Silver	2.000	ND	10.000	9.730	ND	ND	ND	10.000	9.260	9.290	97.3	80.0	120.0	92.6	92.9	80.0	120.0	NA	0.32	20
Lead	5.000	ND	50.320	48.400	61.600	116.000	ND	50.000	49.300	49.400	96.2	80.0	120.0	98.6	98.8	80.0	120.0	61.26	0.20	20
Antimony	10.000	ND	50.000	46.500	ND	ND	ND	50.000	30.400	28.800	93.0	80.0	120.0	60.8	57.6	80.0	120.0	NA	5.41	20
																		0.00	0.00	
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NOTES & DEFINITIONS :

RDL = REPORTING DETECTION LIMIT  
NA = NOT APPLICABLE  
ND = NOT DETECTED  
DL = DILUTED OUT (Concentration of sample > 4X spike concentration)

LCS = LABORATORY CONTROL SAMPLE  
T-LCS = TRUE VALUE OF LCS  
REP1 = UNSPIKED SAMPLE REPLICATE 1  
REP2 = UNSPIKED SAMPLE REPLICATE 2  
SAMPLE RESULT = CONCENTRATION OF UNSPIKED MATRIX  
T-MS = TRUE VALUE OF MATRIX SPIKE  
MS = MATRIX SPIKE  
MSD = MATRIX SPIKE DUPLICATE  
LCL = LOWER CONTROL LIMIT  
UCL = UPPER CONTROL LIMIT

REP RPD = RELATIVE PERCENT DIFFERENCE OF SAMPLE REPLICATES  
MS RPD = RELATIVE PERCENT DIFFERENCE OF MATRIX SPIKES

***ORGANIC QA/QC***



# Kemron Environmental Services

Volatile Quality Control Summary  
Method 8021B

Run Date:	3-May-99	Blk Finm	5G289
Instrument:	HP 5	LCS Finm	5G288
Analyst:	MFB	Shift	AM
Work Group:	WG57000		
Matrix	Soil		

Sample # 04-570-01	
Finm	5G290
MS Finm	5G291
MSD Finm	5G292
DF	1

Daily QA Information	Method Detection Limit	LCS				MS MSD						Percent		Outliers			
		Method Blank	LCS 20 ug/L	Percent Recovery	Control Limits	Sample Result	MS 20 ug/L	MSD 20 ug/L	Percent Recover	Percent Recover	Advisory Limits	Percent RPD	Advisory Limit	LCS	MS	MSD	%RPD
Analyte List	ug/kg	ug/kg	ug/kg	% Rec	% Rec	ug/kg	ug/kg	ug/kg	% Rec	% Rec	% Rec	% RPD	% RPD				
methyl-tert-butyl ether	0.898	NA	NA	NA	69 - 121	NA	NA	NA	NA	NA	69 - 121	NA	15				
benzene	0.419	ND	21.2	106.0	74 - 121	ND	19.2	17.3	95.9	86.5	74 - 121	10.4	20				
toluene	0.434	ND	19.3	96.6	74 - 120	ND	16.3	14.2	81.4	71.2	74 - 120	13.4	19			L	
chlorobenzene	0.398	NA	NA	NA	85 - 121	NA	NA	NA	NA	NA	85 - 121	NA	24				
ethylbenzene	0.406	ND	20.7	103.4	75 - 127	ND	16.4	14.1	81.8	70.6	75 - 127	14.7	19			L	
m+p-xylene	0.84	ND	41.8	104.5	76 - 125	ND	31.9	27.7	79.9	69.3	76 - 125	14.2	19			L	
o-xylene	0.84	ND	20.6	103.0	76 - 125	ND	16.7	15.1	83.6	75.5	76 - 125	10.3	19			L	
xylene (total)	0.84	ND	62.4	104.0	76 - 125	ND	48.7	42.8	81.1	71.3	76 - 125	12.9	19			L	
1,3-dichlorobenzene	0.389	NA	NA	NA	80 - 120	NA	NA	NA	NA	NA	80 - 120	NA	15				
1,4-dichlorobenzene	0.399	NA	NA	NA	80 - 120	NA	NA	NA	NA	NA	80 - 120	NA	15				
1,2-dichlorobenzene	0.649	NA	NA	NA	80 - 120	NA	NA	NA	NA	NA	80 - 120	NA	16				

Surrogate Recovery	Blank	% Rec	LCS	% Rec	SMPL	% Rec	MS	% Rec	MSD	% Rec	Recovery Limits	BLK	LCS	MP	MS	MSD
a,a,a-Trifluorotoluene	27.6	91.9	29.4	98.1	29.1	97.1	27.0	90.0	23.7	78.9	47 - 121					
p-Bromofluorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	47 - 121					

### Notes and Definitions

MDL = Method Detection Limit  
 BLK = Method Blank  
 LCS = Laboratory Control Sample  
 SMPL = Sample Results  
 MS/MSD = Matrix Spike / Matrix Spike Duplicate

UPL = Upper Control Limit  
 RPD = Relative Percent Difference  
 ND = Not Detected  
 NA = Not Applicable

DL = Diluted Out  
 SS = Surrogate Standard  
 L = Low  
 H = High

# Kemron Environmental Services

Volatile Quality Control Summary

Method 8021B

Run Date:	3-May-99	Blk Flnm	008R0101
Instrument:	HP12	LCS Flnm	009R0101
Analyst:	MFB	Shift	AM
Work Group:	WG57004		
Matrix	Water		

Sample #	04-571-01
Flnm	010R0101
MS Flnm	014R0101
MSD Flnm	015R0101
DF	1

Daily QA Information	Method Detection Limit	LCS				Sample Result	MS			MSD			Percent RPD	Advisory Limit	Outliers			
		Method Blank	LCS 20 ug/L	Percent Recovery	Control Limits		MS 20 ug/L	MSD 20 ug/L	Percent Recover	Percent Recover	Advisory Limits	LCS			MS	MSD	%RPD	
Analyte List	ug/L	ug/L	ug/L	% Rec	% Rec	ug/L	ug/L	ug/L	% Rec	% Rec	% Rec	% RPD	% RPD					
methyl-tert-butyl ether	0.453	NA	NA	NA	56 - 149	NA	NA	NA	NA	NA	56 - 149	NA	16					
benzene	0.339	ND	20.7	103.6	78 - 122	ND	19.9	22.3	99.4	111.7	78 - 122	11.6	15					
toluene	0.541	ND	20.5	102.3	78 - 123	ND	17.3	20.1	86.4	100.3	78 - 123	15.0	15					
chlorobenzene	0.418	NA	NA	NA	70 - 128	NA	NA	NA	NA	NA	70 - 128	NA	24					
ethylbenzene	0.43	ND	21.0	105.2	80 - 129	ND	17.9	20.7	89.7	103.3	80 - 129	14.1	16					
m+p-xylene	0.81	ND	40.7	101.9	80 - 124	ND	34.6	39.9	86.4	99.7	80 - 124	14.3	16					
o-xylene	0.81	ND	20.5	102.3	80 - 124	ND	17.6	20.2	88.2	100.8	80 - 124	13.3	16					
xylene (total)	0.81	ND	61.2	102.0	80 - 124	ND	52.2	60.1	87.0	100.1	80 - 124	14.0	16					
1,3-dichlorobenzene	0.385	NA	NA	NA	81 - 110	NA	NA	NA	NA	NA	81 - 110	NA	15					
1,4-dichlorobenzene	0.346	NA	NA	NA	78 - 107	NA	NA	NA	NA	NA	78 - 107	NA	16					
1,2-dichlorobenzene	0.352	NA	NA	NA	84 - 112	NA	NA	NA	NA	NA	84 - 112	NA	15					

Surrogate Recovery	Blank	% Rec	LCS	% Rec	SMPL	% Rec	MS	% Rec	MSD	% Rec	Recovery Limits	BLK	LCS	SMPL	MS	MSD
a,a,a-Trifluorotoluene	28.7	95.7	30.1	100.4	30.2	100.8	29.4	98.1	30.4	101.3	70 - 130					
p-Bromofluorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70 - 130					

**Notes and Definitions**

MDL = Method Detection Limit

UPL = Upper Control Limit

DL = Diluted Out

BLK = Method Blank

RPD = Relative Percent Difference

SS = Surrogate Standard

LCS = Laboratory Control Sample

ND = Not Detected

L = Low

SMPL = Sample Results

NA = Not Applicable

H = High

MS/MSD = Matrix Spike / Matrix Spike Duplicate

**Kemron Environmental Services**  
 Volatile Quality Control Summary  
 Method 8015B

Workgroup	WG57082
RunDate	4-May-99
Matrix:	WATER
Instrument	HP 3
Analyst	VMN

BLK FLNM:	3G465
LCS FLNM:	3G466
SMPL Num:	04-571-02
SMPL FLNM:	3G468
MS FLNM:	3G469
MSD FLNM:	3G470

LCS DF:	1
SMPL DF:	1
MS DF:	1
MSD DF:	1

Daily QA Information	MDL	Concentration, PPB							Percent Recovery					% RPD		Outliers				
		BLK	LCS	LCS Spike Level	SMPL	MS	MSD	MS Spike Level	LCS	LCS Limit	MS	MSD	MS Limit	MS	RPD	UCL	LCS	MS	MSD	%RPD
Target Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%	%	%	%	%					
GRO	26.46	ND	938.8	900.0	113.4	1000.8	1012.1	900.0	104.3	84 - 115	98.6	99.9	84 - 115	1.1	15.0					
		BLK	LCS		SMPL	MS	MSD	SS Spike Level	BLK	LCS		SMPL	MS	MSD	Surrogate Limit	BLK	LCS	SMPL	MS	MSD
Surrogate Standard	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	ug/L	%	%		%	%	%	%					
chlorobenzene		23.9	34.3		24.7	32.5	31.5	30.0	79.5	114.4		82.2	108.3	104.9	74 - 138					

*Notes and Definitions*

- MDL = Method Detection Limit
- BLK = Method Blank
- LCS = Laboratory Control Sample
- SMPL = Sample Results
- MS/MSD = Matrix Spike / Matrix Spike Duplicate
- UPL = Upper Control Limit
- RPD = Relative Percent Difference
- ND = Not Detected
- NA = Not Applicable
- DF = Dilution Factor
- DL = Diluted Out
- SS = Surrogate Standard
- L = Low
- H = High

KEMRON ENVIRONMENTAL SERVICES, OVL  
SEMI-VOLATILES QUALITY CONTROL SUMMARY

ANAL WORK GRP : WGS7096  
METHOD : 8015  
MATRIX : WATER  
CONCENTRATION UNITS : ug/l  
PREP WORK GRP : WGS6919

EXT DATE : 05-03-99  
EXT BENCH SHEET : V114-P51  
BLK FILENAME : 004F0101  
LCS FILENAME : 005F0101  
INSTRUMENT: HP 8

RUN DATE : 05-03-99  
SMPL ID : 04-571-01  
SMPL FLNM : 005F0101  
MS FLNM : 007F0101  
MSD FLNM : 008F0101

ANALYTE	CONCENTRATION , ug/l									PERCENT RECOVERY , %									PERCENT			
	RDL	BLANK	LCS	LCS	LCS	SAMPLE	MS	MS	MSD	BLANK	LCS	LCS	LCS	LCS	SAMPLE	MS	MSD	MS	MS	DUP	MSD	RPD
			SPIKE	ADDED	DUP		SPIKE					ADDED	DUP	LCL				UCL	LCL			
DIESEL	500	ND	1000	947	NA	ND	2000	1407	1693	NA	94.7	NA	51	154	NA	70.3	84.7	18	165	NA	18	20
URROGATE																						
o-TERPHENYL	15.4		20	16.4	NA	6.95	42.6	24.8	25.6	76.8	81.9	NA	49	174	33.1	58.2	60.1	18	165	NA	3	20
OCTACOSANE	6.25		20	9.94	NA	2.13	42.6	6.29	12.3	31.3	49.7	NA	26	152	10.2	19.5	28.8	26	152	NA	39	20

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NOTES & DEFINITIONS  
NA = NOT APPLICABLE  
ND = NOT DETECTED  
RDL=REPORTING DETECTION LIMIT

KEMRON ENVIRONMENTAL SERVICES  
OHIO VALLEY LABORATORY  
QUALITY CONTROL SUMMARY

WORKGROUP: WG57037      RUN DATE: 5/4/99  
 METHOD: 418.1              ANALYST: MPM  
 MATRIX: Soil                SPIKE: 04-571-05  
 UNITS: mg/kg                SPIKE DUP: 04-571-05

ANALYTE	RDL		SAMPLE						PERCENT RECOVERY						PERCENT RPD		
	Blank		T-LCS	LCS	RESULT	T-MS	MS	MSD	LCS	LCS LCL	LCS UCL	MS	MSD	MS LCL	MS UCL	REP RPD	RPD UCL
TPH	25.00	ND	250.00	213.27	ND	250.00	159.96	182.09	85.31	76.40	115.00	63.98	72.84	47.05	139.50	12.94	30.00

NOTES & DEFINITIONS :

RDL = REPORTING DETECTION LIMIT  
 DL = DILUTED OUT  
 NA = NOT APPLICABLE  
 ND = NOT DETECTED  
 NR = NOT REQUIRED

LCS = LABORATORY CONTROL SAMPLE  
 T-LCS = TRUE VALUE OF LCS  
 REP1 = UNSPIKED SAMPLE REPLICATE 1  
 REP2 = UNSPIKED SAMPLE REPLICATE 2  
 SAMPLE RESULT = CONCENTRATION OF UNSPIKED MATRIX  
 T-MS = TRUE VALUE OF MATRIX SPIKE  
 MS = MATRIX SPIKE  
 LCL = LOWER CONTROL LIMIT  
 UCL = UPPER CONTROL LIMIT

REP RPD = RELATIVE PERCENT DIFFERENCE OF SAMPLE REPLICATES

PROJECT NO.		PROJECT NAME					PARAMETERS							INDUSTRIAL HYGIENE SAMPLE	Y			
1482-001		BANK OF AMERICA SAN LEANDRO													(N)			
SAMPLERS: (Signature)					(Printed)					NO. OF CONTAINERS GRO 8015M DRO 8015M MO 8015M RTA 8020 TPH P/D							REMARKS	
Dale Anderson					DALE ANDERSON													
FIELD SAMPLE NUMBER	DATE 1999	TIME	COMP.	GRAB	STATION LOCATION													
MW 5	4/29	1020		X		4				X						* SEE NOTE		
MW 4		1140				5												
MW 2		1245				5												
MW 3		1400				5	∇	∇	∇									
D 5		1440			COMPOSITE FOR ONE ANALYSIS	1				X	X					COMPOSITE TO ONE		
D 3		1445				1												
D 1		1450				1												
D 2		1455		∇		1												
															add oil coolant 4/30/99			
															C of C Dealed S to contact			
Relinquished by: (Signature)			Date / Time		Received by: (Signature)			Relinquished by: (Signature)			Date / Time		Received by: (Signature)					
Dale Anderson			4/29/99/1600										Cooler Temp 5.0 (Jlg)					
(Printed)					(Printed)			(Printed)					(Printed)					
DALE ANDERSON					TO FLD ETX													
Relinquished by: (Signature)			Date / Time		Received for Laboratory by: (Signature)			Date / Time		Remarks								
					Brenda Gregory			4/30/99/1013		STA JAT * LOW DETECTION LIMITS QUESTIONS, RESULTS, INVOICE TO SCOTT ALLIN 916 863-9325								
(Printed)					(Printed)													
					Brenda Gregory													





Acculabs Inc.

Davis

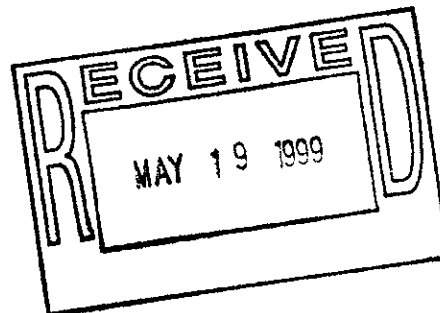
1046 Olive Drive, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

Sample Log 19989  
May 14, 1999

Scott Allin  
Versar, Inc.  
7844 Madison Avenue, Suite 167  
Fair Oaks, CA 95628

Subject : 1 Water sample  
Project Name : Bank of America, San Leandro  
Project Number : 4422-001

Location : San Leandro



Dear Mr. Allin,

Chemical analysis on the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. USEPA protocols for sample storage and preservation were followed.

Acculabs - Davis is certified by the State of Arizona (AZ0583) and the State of California (# 2330). If you have any questions regarding procedures or results, please call me at 530-757-0920.

Sincerely,

Tom Kwoka





# Acculabs Inc.

Davis

1046 Olive Drive, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

Sample Log 19989

19989-01

Sample: MW-1

From : Bank of America, San Leandro (Proj. # 4422-001)

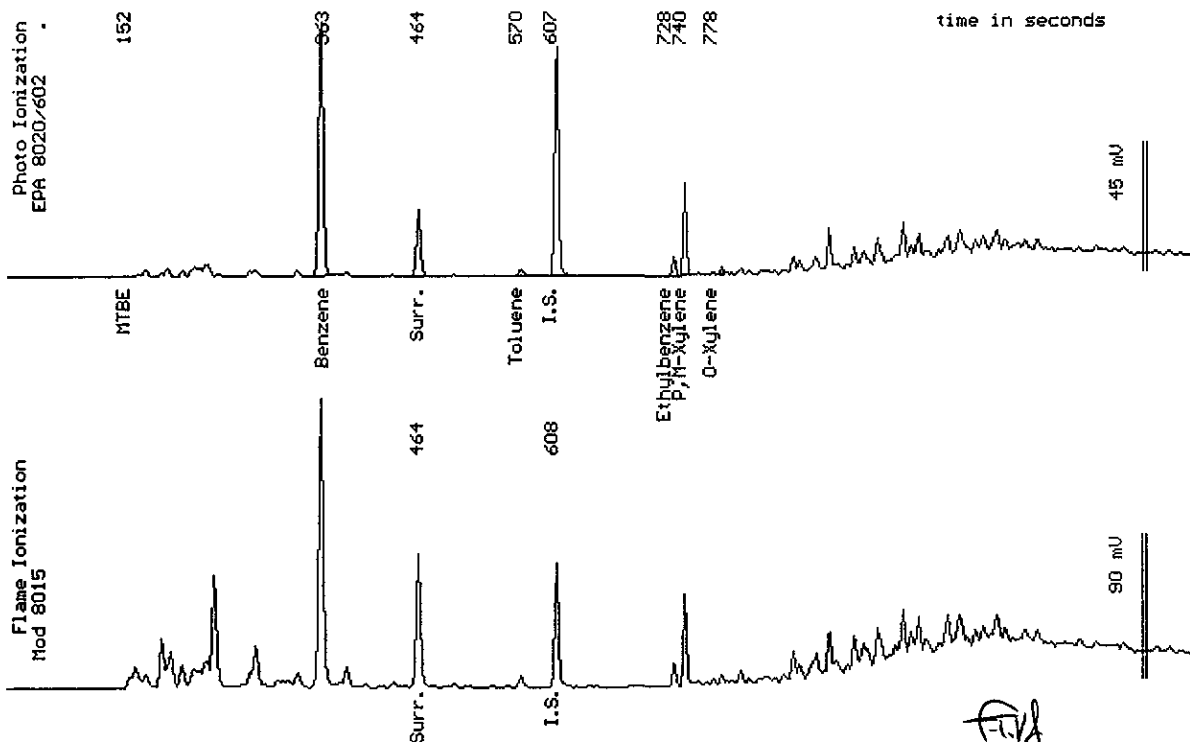
Sampled : 05/07/99

Dilution : 1:50

Run Log : 4184J

Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(25)	1400
Toluene	(25)	31
Ethylbenzene	(25)	82
Total Xylenes	(25)	360
TPH as Gasoline	(2500)	8100
Surrogate Recovery		83 %



Date Analyzed: 05-14-99  
Column : 0.53mm ID X 60m Restek Rtx-1701

  
Stewart Rodolsky  
Senior Chemist

Acculabs Inc.

May 14, 1999  
Sample Log 19989


QC Report for EPA 602 & Modified EPA 8015  
Run Log : 4184J  
From : Bank of America, San Leandro (Proj. # 4422-001)  
Sample(s) Received : 05/07/99

Parameter	Matrix Spike % Recovery	Matrix Spike Duplicate % Recovery	RPD *
Benzene	78	82	5
Ethylbenzene	86	92	6
TPH as Gasoline	94	107	13

\* RPD = Relative Percent Difference

Parameter	Laboratory Control Sample % Recovery
Benzene	81
Ethylbenzene	91
Gasoline	109

Parameter	Method Blank
Benzene	<0.50 ug/L
Toluene	<0.50 ug/L
Ethylbenzene	<0.50 ug/L
Total Xylenes	<0.50 ug/L
TPH as Gasoline	<50 ug/L

  
Tom Kwok  
Lab Director



# Acculabs Inc.

Davis

1046 Olive Drive, Davis CA 95616 ■ 530-757-0920 ■ Fax 753-6091

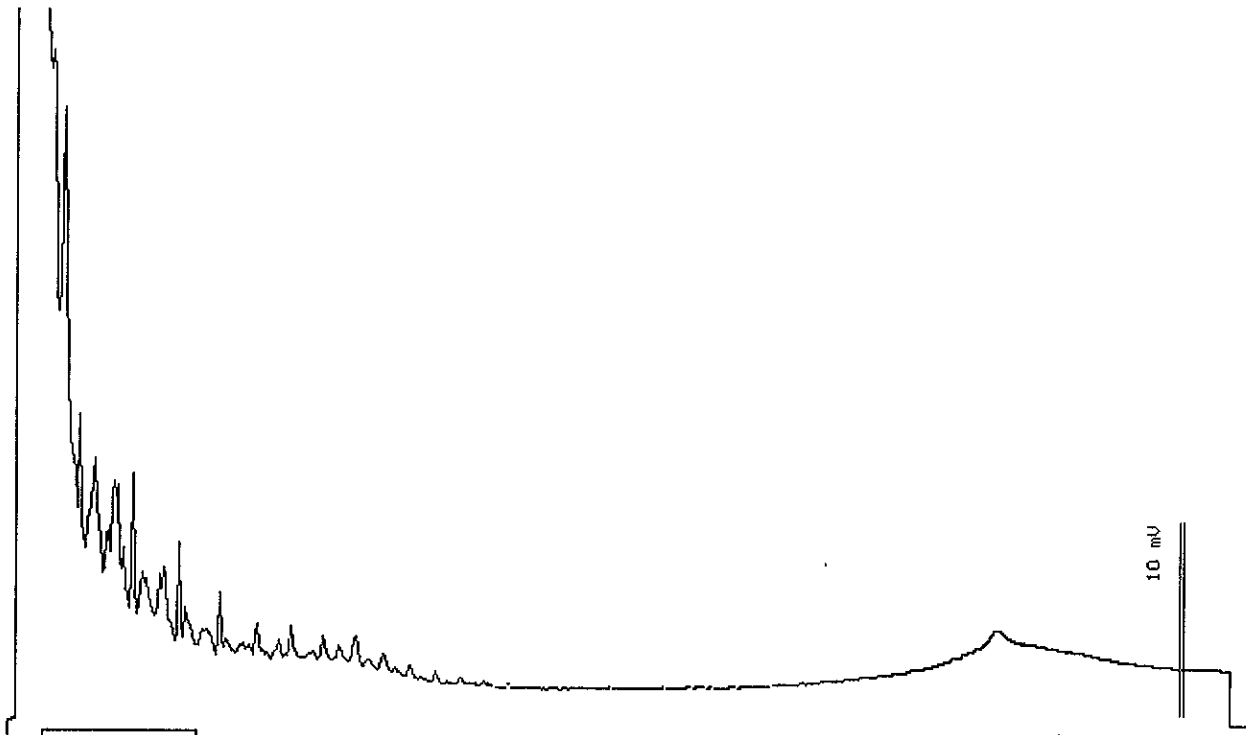
Sample Log 19989  
19989-01

Sample: MW-1


From : Bank of America, San Leandro (Proj. # 4422-001)  
Sampled : 05/07/99  
Extracted: 05/13/99  
Dilution : 1:1  
Matrix : Water

QC Batch : DW990502  
Run Log : 7437C

Parameter	(MRL) ug/L	Measured Value ug/L
TPH as Diesel	(50)	<50
TPH as Motor Oil	(100)	<100



Date: 05-14-99 Time: 03:52:46  
Column : 0.53mm ID X 15m DB1 (J&W Scientific)

  
Stewart Rodolsky  
Senior Chemist

Acculabs Inc.

May 14, 1999

QC Report  
TPH Diesel by 8015 Mod

QC Batch DW990502

Matrix: Water

**Spike and Spike Duplicate Results**

Parameter	Matrix Spike (%Rec)	Matrix Spike Dup. (%Rec)	RPD %
TPH as Diesel	Not enough sample for spiking. See duplicate LCS Data.		

**Laboratory Control Spike**

Parameter	Laboratory Control Spike (%Rec)	Laboratory Control Spike Dup. (%Rec)	RPD %
TPH as Diesel	91	81	12

**Method Blank**

Parameter	MDL(ug/L)	Measured Value(ug/L)
TPH as Diesel	(50)	<50

  
\_\_\_\_\_  
Tom Kwoka  
Lab Director

PROJECT NO.		PROJECT NAME					PARAMETERS							INDUSTRIAL HYGIENE SAMPLE		Y
1422-001		BANK of AMERICA SAN LEANDRO					<div style="display: flex; flex-direction: column;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">NO. OF CONTAINERS</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH-G 8 DIV 1</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH-P / NO 8012</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BZTA 8020</div> </div>							N		N
SAMPLERS: (Signature) Dale Anderson					(Printed) DALE ANDERSON									REMARKS		
FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION											
MW 1	5/7/99	1200		X		8	X	X	X							HYDRO ODDOR WATER SEE NOTE
Relinquished by: (Signature) Dale Anderson		Date / Time 5/7/99 1430		Received by: (Signature)			Relinquished by: (Signature)		Date / Time		Received by: (Signature)					
(Printed) DALE ANDERSON				(Printed)			(Printed)				(Printed)					
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)			Date / Time		Remarks							
(Printed)				(Printed) Steve Woodfill			5/7/99 1430		STD JAT LOW DETECTION LIMIT! QUESTIONS, RESULTS, INVOICE TO SCOTT ALLAN 916 863 9325							

**REVIEW DRAFT - NOT FOR RELEASE**

**APPENDIX G**

**Non-hazardous Waste Data Forms**