

99 OCT 22 PM 4: 51

October 18, 1999

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

Reference: 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 NA, the enclosed *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



October 18, 1999

Mr. John A. Schovanec
Bank of America, N.A.
Environmental Services #305478
4000 MacArthur Boulevard, Suite 100
Newport Beach, California 92660

Reference: Groundwater Monitoring Report

2585 Nicholson Street in San Leandro, California

ES# 305582

Versar Project No. 4422-001

Dear Mr. Schovanec:

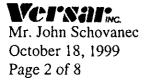
Versar, Inc. (Versar) has prepared this groundwater monitoring report on behalf of Bank of America, N.A. (Bank of America) summarizing work performed at the property located at 2585 Nicholson Street in San Leandro, California (Site). Figures 1 and 2 show the Site location and Site layout, respectively. The following sections describe the scope of work, Site location, and Site background.

This letter report presents the results of the quarterly groundwater monitoring and sampling event conducted at the Site on July 28, 1999. This report has been prepared in response to the request by the Alameda County Health Care Services (ACHCS) letter dated July 14, 1999, regarding groundwater monitoring at 2585 Nicholson Street, San Leandro, California.

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.

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. Soil and groundwater samples collected during the UST removal activities identified total petroleum hydrocarbons (TPH) as diesel and gasoline in both media. Reportedly, overexcavation was performed during UST removal activities. In 1992, Hageman-



Aguiar (HA) performed an on Site soil and groundwater investigations, and installed one monitoring well (MW-1) on the central portion of the Site. Groundwater samples were collected by HA from MW-1 between 1992 and 1995. 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. 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.

In April 1999, Versar installed four additional monitoring wells, and sampled all the Site wells, as described in our *Monitoring Well Installation and Groundwater Monitoring Report*, dated June 30, 1999. The monitoring well locations are depicted in Figure 2, Site Plan. Versar detected petroleum hydrocarbons as gasoline in the southern half of the Site; benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in well MW-1 near the center of the Site. The benzene concentration was 1,400 micrograms per liter (µg/L, equivalent to parts per billion) The groundwater gradient was calculated to be approximately 0.001 feet/foot and flowing in a southeasterly direction

QUARTERLY GROUNDWATER MONITORING ACTIVITIES

Versar performed groundwater monitoring of the Site on July 28, 1999, sampling the wells for TPH as gasoline(TPHg), TPH as diesel fuel (TPHd), TPH as motor oil (TPHmo), and BTEX. As requested by the ACHCS in their July 14, 1999 letter, samples from selected monitoring wells were also analyzed for fuel oxygenates by EPA Method 8260, and for semi-volatile organic compounds (SVOCs) by EPA Method 8270.

Versar's quarterly groundwater monitoring program for the Site included the following tasks:

- Measure groundwater levels in monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5, and calculate the hydraulic gradient and flow direction.
- Purge and collect groundwater samples from the five monitoring wells (MW-1, MW-2, MW-3, MW-4, and MW-5);
- Obtain measurements of groundwater temperature, electrical conductivity, pH, and dissolved oxygen in monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5.

1921-00/4422-001/Oct 1899



Mr. John Schovanec October 18, 1999 Page 3 of 8

- Submit the groundwater samples to a California-certified analytical laboratory for analysis of one or more of the following TPHg, TPHd, TPHmo, BTEX, fuel oxygenates, and SVOCs; and
- Prepare a letter report summarizing the results.

Groundwater Sampling Protocol

The methodology and protocol followed for the collection of groundwater samples during this groundwater sampling event are presented in Attachment III, Decontamination and Groundwater Monitoring Well Sampling Procedures.

Quarterly Groundwater Level Measurements

On July 28, 1999, the depth to groundwater in wells MW-1, MW-2, MW-3, MW-4 and MW-5 was measured at 5.85 feet, 4.19 feet, 6.37 feet, 5.84 feet, and 7.11 feet bgs, respectively. The groundwater gradient was calculated to be 0.001 feet per foot (ft/ft) flowing to the south-southeast, which is similar to the direction and gradient measured in April 1999. Groundwater surface elevations are approximately one-half foot lower than in April. Figure 3 in Attachment I is a groundwater gradient map generated from the July 28, 1999 data. Table 1 in Attachment II presents groundwater level data collected at the Site to date.

Groundwater Sampling Activities

On July 28, 1999, groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3, MW-4 and MW-5. Prior to sampling, each well was purged of approximately three casing volumes of groundwater, and the water level allowed to recover to at least 80 percent of the pre-purge level. Measurements of temperature, pH, electrical conductivity, and dissolved oxygen were recorded a minimum of three times during each purged well volume. The groundwater monitoring well purge tables are presented in Attachment IV.

Groundwater samples collected from Site wells were analyzed for TPHg, TPHd, TPHmo, BTEX, and SVOCs by Kemron Environmental Services (Kemron), California State Laboratory Certification No. 2277. Only wells MW-1 and MW-3 were sampled for SVOCs, in conformance with ACHCS' July 14, 1999 letter. All samples were anlayzed within instrument and accuracy limits defined by the method. Samples collected from MW-1, MW-2, MW-3, MW-4 and MW-5 were submitted to Excelchem, California State Laboratory Certification No. 2119, for analysis for fuel oxygenates, in conformance with ACHCS' July 14, 1999 letter.

1921-00/4422-001/Oct. 1899



Mr. John Schovanec October 18, 1999 Page 4 of 8

The samples were collected, placed in containers, preserved, transported, and analyzed within the time constraints consistent with applicable United States EPA, California EPA, and Regional Water Quality Control Board (RWQCB) procedures, and in conformance with Versar's Decontamination and Groundwater Monitoring Well Sampling Procedures, presented in Attachment III. Purge water from the July 28, 1999, sampling event has been removed from the Site for disposal. Versar will forward the disposal receipt to Bank of America.

ANALYTICAL RESULTS

The analytical results of the TPHg, TPHd, TPHmo, BTEX, fuel oxygenates, and SVOC analyses are summarized in Table 2 in Attachment II. Figure 4 in Attachment I spatially depicts the analytical results for the July 1999 groundwater monitoring event. The laboratory analytical reports are included in Attachment V.

- TPHg was detected in wells MW-1, MW-3, MW-4 and MW-5 at concentrations of 3,500 μ g/L, 300 μ g/L, 120 μ g/L, and 570 μ g/L, respectively.
- TPHd was detected in MW-1 at a concentration of 1,700 μ g/L. The analytical laboratory stated in a personal communication that the TPHd detected appeared on the chromatogram to appear to be predominantly gasoline.
- TPHmo was not detected in Site wells during this monitoring event.
- Benzene was only detected in well MW-1 at a concentration of 252 μ g/L.
- Toluene was only detected in well MW-1 at a concentration of 23 μ g/L.
- Ethylbenzene was only detected in well MW-1 at a concentration of 43 μ g/L.
- Total xylene isomers was only detected in well MW-1 at a concentration of 179
 μg/L.
- MTBE was detected in wells MW-1, MW-4, and MW-5 at concentrations of 11 μ g/L, 10 μ g/L, and 7.3 μ g/L, respectively.
- Two SVOCs, naphthalene and 2-methylnaphthalene, were detected in well MW-1 at concentrations of 10 and 6.5 μ g/L, respectively.

1921-00/4422-001/Oct 1899



Mr. John Schovanec October 18, 1999 Page 5 of 8

LOCAL SURROUNDING WELLS AND UTILITIES INFORMATION

In their July 14, 1999 letter, ACHCS requested information regarding the location and use of groundwater wells within 200 feet of the Site. ACHCS also requested information regarding the depth of gas, electric, and storm drain trenches adjacent to the Site, as depicted in Figure 2 of Versar's, June 30, 1999, Monitoring Well Installation and Groundwater Sampling Report.

Versar contacted the Alameda County Public Works Agency and obtained a map and list of monitoring wells in the vicinity of the Site. Seven wells and one boring are depicted and listed as located within 200 feet of the Site. The list of wells provided with the map shows no wells deeper than 25 feet in the area of interest, and that all the wells are used for monitoring only. and are not used for beneficial purposes. The well location map and list are presented in Attachment VI. Versar also reviewed a U.S. Geological Survey topographic map of the Site area, and a historical reference to groundwater supply in the East Bay plain. Neither reference indicated the presence of a water supply well within 200 feet of the Site. Based on these results, beneficial use of groundwater impacted by historic Site operations is not occurring within 200 feet of the Site.

Versar contacted the City of San Leandro, and the Pacific Gas & Electric Company (PG&E) for information regarding the depth of utilities at the Site. Files reviewed at the City of San has not received any response from PG&E. Versar can continue to attempt to contact PG&E for information regarding the depth of the gas and electric utility trenches at the Site. It is Versar's experience, however, that gas and electric utilities are not deeply buried, and are likely located within 3 feet of the ground surface. In addition, the direction of groundwater flow measured in April and July 1999 at the Site suggests that the gas and electric utilization of the gas and electric utilization. located up and cross gradient from MW-1, and as such are unlikely pathways for contaminant migration. Therefore, it is Versar's opinion that underground utilities in the vicinity of the Site are not influencing groundwater migration beneath the Site.

CONCLUSIONS

Based on the results of this most recent quarterly groundwater monitoring event Versar has made the following conclusions.

During the July 1999 sampling event, the groundwater gradient was calculated to be 0.001 ft/ft flowing to the south-southeast, similar to conditions measured in April 1999. Groundwater surface elevations are approximately one-half foot lower than in April.

1921-00/4422-001/Oct 18'99



Mr. John Schovanec October 18, 1999 Page 6 of 8

- TPHg, TPHd, BTEX, MTBE, and two SVOCs were detected at well MW-1, and with the exception of MTBE, were not detected in any of the other wells. This indicates that the area of residual contamination at the Site is located near the center of the property, in the vicinity of MW-1. MTBE was detected at wells south of MW-1, suggesting that if the MTBE is related to the release of gasoline at the Site, migration of contaminants is in a southerly direction from the area of well MW-1. MTBE was not detected above proposed cleanup levels for groundwater, which range from 14 to 35 μg/L. The TPHd chromatogram for the sample collected from MW-1 appeared to the laboratory to comprise gasoline-range hydrocarbons, indicating the primary constituent of concern is gasoline.
- Actionable concentrations of benzene were detected at well MW-1. No other actionable concentrations of the constituents of concern were detected at the Site.
- Naphthalene is used in the manufacture of automotive fuels. 2-methylnaphthalene is used in the synthesis of organic compounds, and may be related to the naphthalene occurrence at the Site. There are no state or federal drinking water quality goals for either compound. In addition, the compounds were detected at very low levels, no greater than 10 µg/L, and were isolated to well MW-1 only. Based on these results, napthalene and 2-methylnaphthalene are not constituents of concern for the Site.
- Versar has been unable to date to obtain information regarding the depth of utilities adjacent to the Site, as requested by ACHCS. However, the direction of groundwater flow at the Site suggests that the electrical and gas utility trenches are upgradient and cross gradient from MW-1, and as such are unlikely pathways for contaminant migration. It is Versar's opinion that underground utilities in the vicinity of the Site are not influencing groundwater migration beneath the Site.
- Based on information obtained from the Alameda County Public Works Agency well
 database and two additional references, no domestic, industrial, or irrigation wells are
 located within 200 feet of the Site. Based on these results, beneficial use of
 groundwater impacted by historic Site operations is not occurring within 200 feet of the
 Site.

1921-00/4422-001/Oct 18'99



Mr. John Schovanec October 18, 1999 Page 7 of 8

FUTURE ACTIVITIES

Versar recommends continued quarterly groundwater monitoring at the Site to characterize groundwater fluctuations, flow direction, and contaminant concentrations. This information is required in considering closure for the Site by the ACHCS.

Versar does not recommend further testing of groundwater for SVOCs, since there are no drinking water quality goals for either compound. Versar does not recommend further testing for TPHd or TPHmo at the Site, since TPH chromatograms indicate the detected petroleum hydrocarbon at the Site is gasoline.

REFERENCES

- Alameda County Health Care Services Agency. Letter to Mr. John Schovanec, Bank of America Environmental Services. Re: Groundwater monitoring at 2584 Nicholson Street, San Leandro, CA. Dated July 14, 1999.
- Figuers, S., Norfleet Consultants. Groundwater Study and Water Supply History of the East Bay Plain, Alameda and Contra Costa Counties, CA. For Friends of the San Francisco Estuary, Oakland, California. June 15, 1998.
- United States Department of the Interior Geological Survey. Map. San Leandro Quadrangle, 7.5 Minute Series (Topographic). 1959, Photorevised 1980.
- Versar, Inc.. Monitoring Well Installation and Groundwater Monitoring Report. Prepared for Bank of America, N.T. & S.A.. Project No. 4422-001. June 30, 1999.

STATEMENT OF LIMITATIONS

The conclusions presented above are based on the agreed-upon scope of work outlined in the beginning of this report. 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

1921-00/4422-001/Oct. 1899



Mr. John Schovanec October 18, 1999 Page 8 of 8

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.

This Quarterly Monitoring Report was prepared by Versar on behalf of Bank of America. Mr. Dale Anderson, Senior Environmental Technician, performed the groundwater sample collection. Mr. Tim Berger, Registered Geologist, prepared the report, and supervised the field activities. Mr. Scott Allin, Registered Environmental Assessor, reviewed the report.

Prepared by:

Tim Berger R.G. 5225

Supervising Geologist

Versar - Pacific Region

Reviewed by:

Scott Allin, R.E.A. 076223 Senior Program Manager

Versar - Pacific Region

Attachment I - Figures

Attachment II - Tables

Attachment III - Decontamination and Groundwater Monitoring Well Sampling Procedures

Attachment IV- Monitoring Well Purge Tables

Attachment V - Laboratory Analytical Reports and Chain-of-Custody Documentation

Attachment VI - Alameda County Public Works Agency Well Search Results

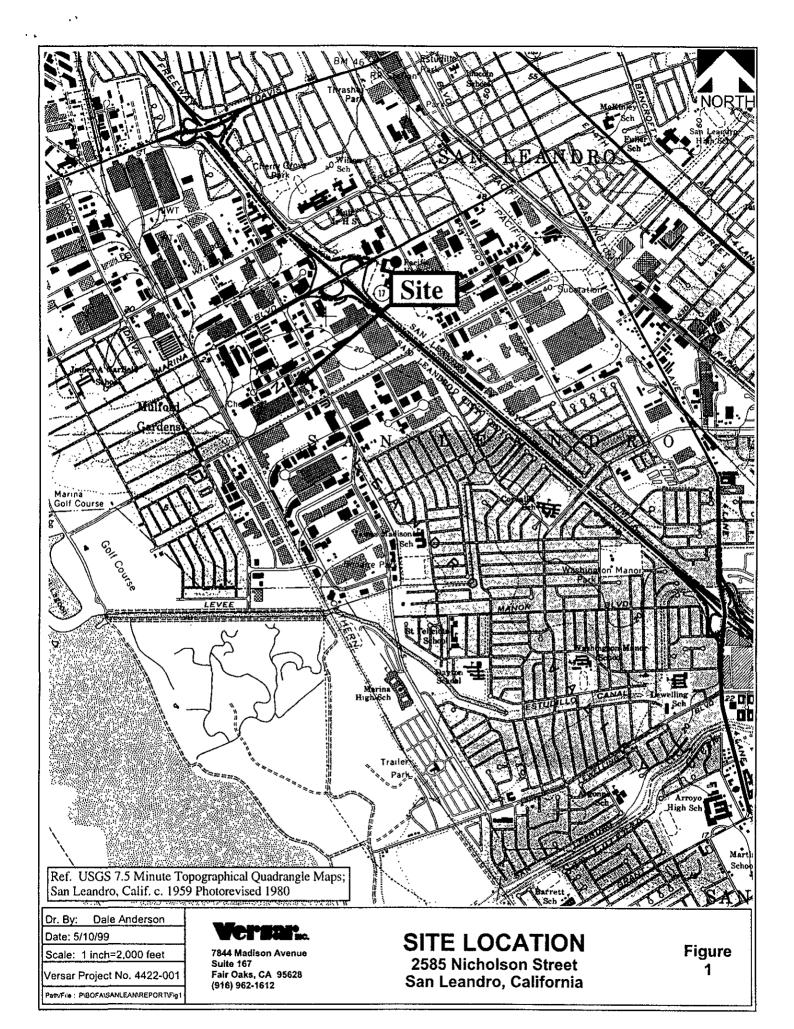
cc: Juliett Shin (Alameda County)

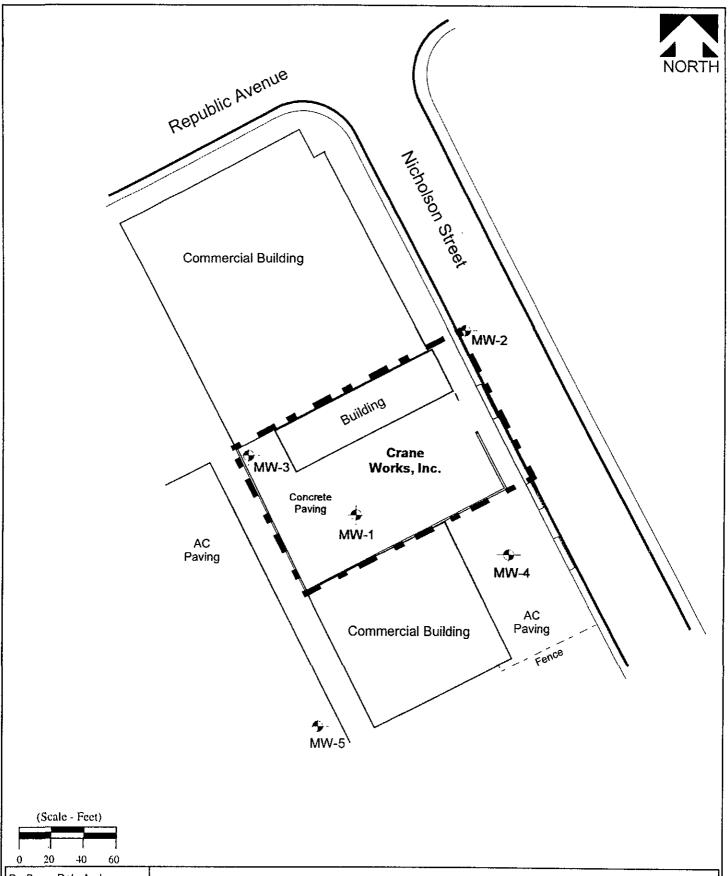
Mike Bakaldin (City of San Leandro)

1921-00/4422-001/Oct 1899

ATTACHMENT I

Figures





Dr. By: Dale Anderson
Date: 5/10/99

Scale: 1 inch= 60 feet

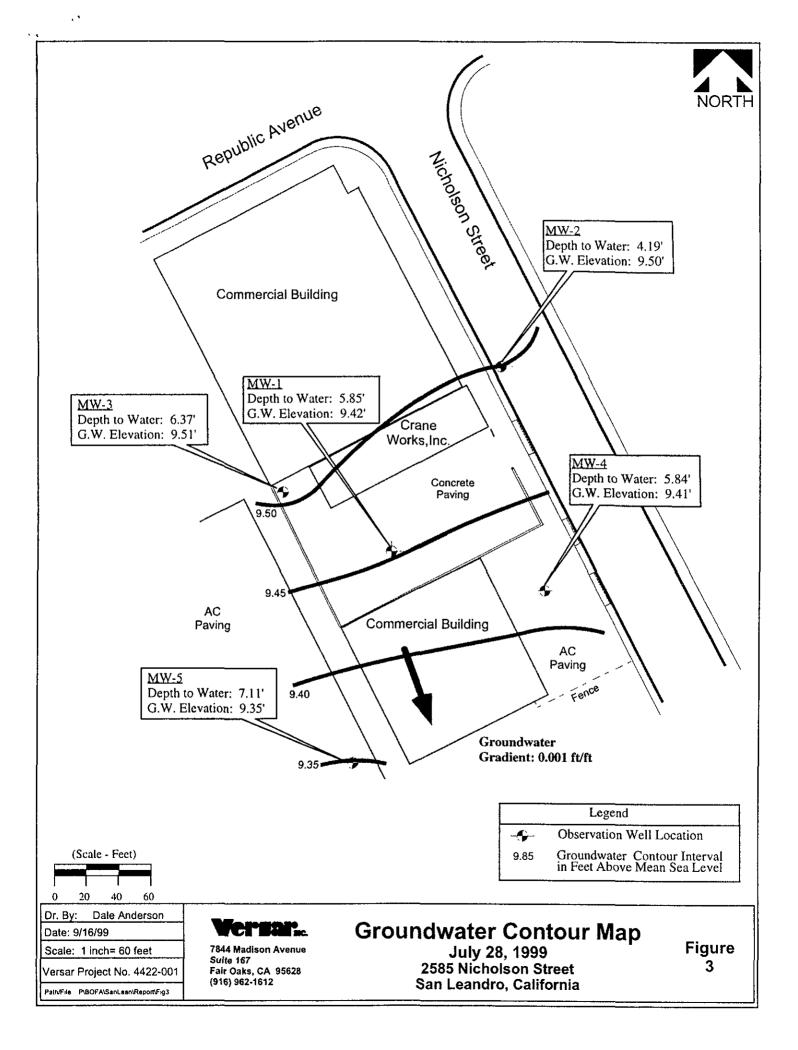
Versar Project No. 4422-001

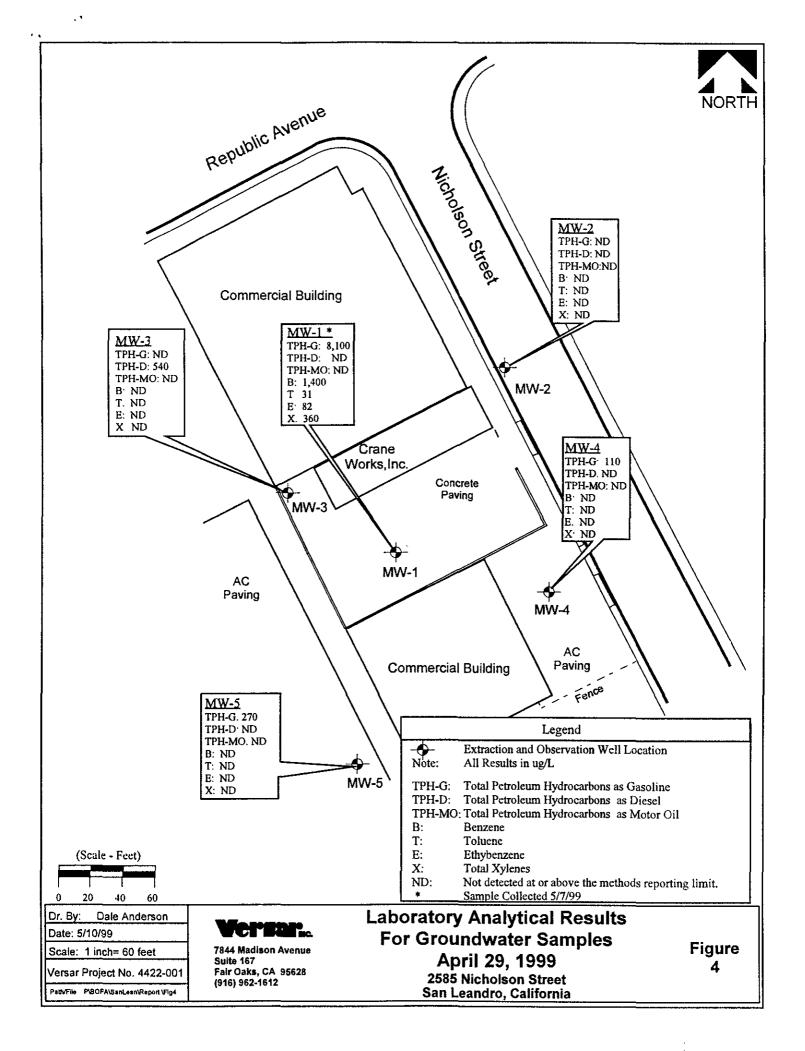
Versar...

7844 Madison Avenue Suite 167 Fair Oaks, CA 95628 (916) 962-1612 SITE LAYOUT AND MONITORING WELL LOCATION MAP 2585 Nicholson Street

San Leandro, California

Figure 2





ATTACHMENT II

Tables

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

Groundwater Moi					g Well		Hydraulic gradient	General gradient
		MW-1	MW-2	MW-3	MW-4	MW-5	magnitude (ft/ft)	direction
Well casing elevation (feet amsl)		15.27	13.69	15,88	15.25	16.46		
April 29, 1999	Depth to groundwater (feet bgs) Groundwater Elevation (feet amsl)	5.33 9.94	3.76 9.93	5.88 10.00	5.40 9.85	6.64 9.82	0.001	Southeast
July 28,1999	Depth to groundwater (feet bgs) Groundwater Elevation (feet amsl)	5.85 9.42	4,19 9.50	6.37 9.51	5.84 9.41	7,11 9.35	0.001	Southeast

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

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

						Che	micals of Concer	'n				
Monitoring		TPH-G	TPH-D	трн-мо	Benzene	Toluene	Ethylbenzene	Total Xylenes		TPH-SS		2-Methyl-
Well No.	Date	(µg/L)	(μg/ L)	(μg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	TPH-K (mg/L)	(μg/L)	Naphthalene	naphthalene
MW-I	Jun-92	10,000	ND	NA	110	81	62	280	NA	NA	NA	NA
	Nov-92	9,800	ND	NA NA	23	14	22	96	NA NA	NA	NA	NA
	Apr-93	18,000	560	ND	42	47	50	190	ND	370	NA	NA
	Jul-93	27,000	ND	ND	40	45	63	190	ND	ND	NA	NA
	Dec-93	7,800	3,800	ND	13	16	20	77	ND	ND	NA	NA
	Mar-94	280,000	620	ND	970	880	620	1,700	ND	3,300	NA	NA
	Jun-94	8,500	ND	ND	23	13	8.5	19	ND	ND	NA	NA
	Sep-94	2,400	52	ND	5.3	2.6	2.5	6	ND	ND	NA NA	NA
	Dec-94	4,800	1,300	ND	32	32	16	50	ND	1,000	NA	NA
	Apr-95	74,000	3,700	ND	320	350	350	940	ND	570	NA	NA
	Sep-95	33,000	46,000	ND	140	270	260	1,100	ND	4,900	NA	NA
	May-99	8,100	ND	ND	1,400	31	82	360	NA NA	NA	NA	NA
	Jul-99	3,500	1,700	NA	252	23	43	179	NA NA	NA	10	6.5
MW-2	Арг-99	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
	Jul-99	<100	<100	NA	<1.0	<1.0	<1.0	<1.0	NA NA	NA	NA	NA
MW-3	Apr-99	ND	540	ND	ND	ND	ND	ND	NA NA	NA	ND	ND
	Jul-99	300	<100	NA	<1.0	<1.0	<1.0	<1.0	NA	NA	<50	<5.0
MW-4	Apr-99	110	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
	Jul-99	120	<100	NA	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
MW-5	Арг-99	270	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA NA
	Jul-99	570	<100	NA	<1.0	<1.0	<1.0	<1.0	NA	NA	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.

 μ g/L = micrograms per litter, equivalent to parts per billion (ppb).

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

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

NA = not analysed

Table 2 (continued) Analytical Results for Groundwater Samples 2585 Nicholson Street

San	Leandro,	Cali	fornia

					Chemicals of Conc	ern		
Monitoring Well No.	Date	Tert-Butanol (µg/L)	Methyl- <i>tert</i> -Butyl Ether (μg/L)	Dı-isopropyl Ether (μg/L)	Ethyl-tert - Butyl Ether (µg/L)	Tert-Amyl Methyl Ether (μg/L)	l,2-Dichloroethane (µg/L)	1,2-Dibromoethane (µg/L)
MW-I	May-99	NA	NA	NA	NA	NA	NA	NA
	Jul-99	<25	11	<0.5	<0.5	<05	<0.5	<0.5
MW-2	Apr-99 Jul-99	NA <25	NA <0.5	ND <0.5	NA <0.5	NA <0.5	NA <0.5	NA <0.5
MW-3	Apr-99	NA	NA	NA	NA	NA	NA	NA
	Jul-99	<25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	Apr-99	NA	NA	NA	NA	NA	NA	NA
	Jul-99	<25	10	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	Apr-99	NA	ND	NA	NA	NA	NA	NA
	Jul-99	<25	7.3	<0.5	<0.5	<0.5	<0.5	<0.5

Notes and Abbreviations.

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

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

NA = not analyzed

ATTACHMENT III Decontamination and Groundwater Monitoring Well Sampling Procedures

1.0 DECONTAMINATION PROCEDURES

The decontamination procedures for non-dedicated field equipment and well development/purging equipment are given below. These procedures are followed during all field activities.

- 1. Non-dedicated well development, purging, and sampling equipment is carefully precleaned prior to each use, as follows:
 - a. Carefully brush off any loose foreign debris with a soft bristle brush.
 - b. Rinse the equipment thoroughly in clean water.
 - c. Wash the equipment in a non-phosphate detergent bath.
 - d. Rinse thoroughly in clean water.
 - e. Rinse thoroughly with deionized water.
 - f. Air dry in a dust-free environment.
 - g. Store in unused plastic bags or other suitable cover until use.
 - 2. Clean disposable gloves are worn by all field personnel when handling decontaminated equipment.

2.0 COLLECTION OF SAMPLES

2.1 Groundwater Sampling

Groundwater samples are collected for laboratory analysis using the procedures given below.

- 1. Open the well and measure the organic vapor concentration with a flame-ionization detector (FID) or photoionization detector (PID).
- 2. Measure the water levels (if any) in the well using a decontaminated measuring device. All measurements must be made to the nearest 0.01 foot, and measured relative to the top of the casing. Record the depth of the water in the field notebook.

- 3. Inspect the disposable bailer to ensure that the bottom valve assembly is working correctly.
- 4. Begin purging the well by inserting a bailer into the PVC monitoring well casing and carefully lower it into the well. Take care to avoid agitating and aerating the fluid column in the well.
- 5. Slowly withdraw the bailer and transfer the water samples to a sampling containers.
- 6. Measure the temperature, pH, conductivity, and turbidity. Record these and all subsequent measurements in the field notebook.
- 7. Continue purging the well (a minimum of three well volumes) until the temperature, pH, conductivity, and turbidity have stabilized, or the well is dry.
- 8. When the water has recovered to 80 percent of the original level, carefully lower a new disposable bailer into the well and recover groundwater samples.
- 9. Fill the appropriate sample containers by releasing water from the bailer via the bottom emptying device with a minimum of agitation. The most volatile parameters are collected first, proceeding to the least volatile parameters.
- 10. Place the purge water in a DOT-approved 55-gallon drums.

3.0 ANALYSIS OF SAMPLES

Samples are submitted to a California state-certified laboratory for analysis.

4.0 SAMPLE HANDLING

4.1 Sample Containers, Preservation, and Holding Times

All samples are collected, placed in containers, preserved, and analyzed within the time constraints with applicable local, provincial, and federal procedures. All sample containers are precleaned in accordance with prescribed EPA methods. A custody seal is placed around all sample container lids to prevent leaks and unauthorized tampering with individual samples following collection and prior to the time of analysis.

1921-00/4422-001/Oct. 1899

4.2 Sample Tracking and Management

All samples are tracked using a standard chain-of-custody form. The chain of custody record includes the following information:

- 1. Sample number
- 2. Signature of collector
- 3. Date and time of collection
- 4. Sample collection location
- 5. Sample type
- 6. Signature of persons involved in the chain-of-possession
- 7. Inclusive dates of possession
- 8. Analytical parameters
- 9. Pertinent field observations

The custody record is completed using waterproof ink. Corrections are made by drawing a line through, initialing the error, and then entering the correct information.

Custody of the samples begins at the time of sample collection and are maintained by the sampling team supervisor until samples are relinquished for shipment to the laboratory, or until samples are hand-delivered to the designated laboratory sample custodian. Partial sample sets being accumulated for hand-delivery to the laboratory are stored in coolers with chain-of-custody records sealed in plastic bags and placed in the cooler with the sample sets.

ATTACHMENT IV

Monitoring Well Purge Tables



Project Numbe	r: 4422-001		Site Name: B	ank of America, Sa	n Leandro, CA			
Well Number:	Mn/		Date(s) Purge	d: 7-28-99				
OVA - Ambien	3		Purge Method:					
OVA - Vault:	510		Purge Rate:					
OVA - Casing:	188		Date & Time	Sampled:	@	· · · · · · · · · · · · · · · · · · ·		
Water Level - I	~ ~	074	Purged & Sar	npled: Dale Ande	erson			
Water Level - F		446	Sampling Method: Dedicated Disposable Bailer					
Well Depth:	18		Free Product:					
Well Diameter:	2 metr 6 /NCH		Sheen: SLIGHY					
Well Casing Vo	lume: 18,2	1	SHRATE KUD	eð				
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	рН	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity		
1420	\$	69.6	6.98	9420	2.46	Low		
1425	15	69,8	6.95	9350	NR	Zav		
1428	75	69.7	2.14	9240	209	11		
1432	30	69.2	7.02	9250	2.95	1		
1434	35	>0.2	6.88	9180	2.63	1		
1436	40	68.2	6.73	8990	1.98	1		
1438	45	67.7	6.73	8930	2,75	1		
1440	50	66.8	6.51	8860	2,32	11		
1443	55	67.4	6.48	8 850	2.77	4		
1600	Semple							

Field Notes:



Project Number	r: 4422-001		Site Name: Ba	ank of America, Sa	n Leandro, CA			
Well Number:	MW Z		Date(s) Purge					
OVA - Ambient	: 17		Purge Method:					
OVA - Vault:	25		Purge Rate:		<u></u>			
OVA - Casing:	114		Date & Time	Sampled: 7/28	· @ /330			
Water Level - Ir	nitial: 4.19@ 10.	53	.	npled: Dale Ande				
	inal: 4,17@ 13			hod: Dedicated Di				
Well Depth: 14	1.2_		Free Product:					
Well Diameter:	2 inch		Sheen:			<u> </u>		
Well Casing Vol	ume: /.6		Odor:					
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pН	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity		
1304	.25	25,2	6.48	9980	1.33	LOW		
13/2	1.0	71.9	6.31	9730	1,20	Mas		
/3/3	1.75	>0,6	6.41	9570	149	1/		
1314	2.5	:6435	6.44	9410	1.32	1/		
/3/7		69.2	6,48	9460	1.38	11		
1318	13-5	69.3	6.42	9460	1.28	((
/3/9	4.0	69.4	6,45	9420	129	4		
1321	4.5	69.9	6.45	9430	1.32	1/		
/322	5.0	69.8	6.45	9400	1.2/	61		
1330	Sample							
Field Notes:	m:/ a /				<u> </u>			

Field Notes:

PPH G/BRY

TPH D/mor



Project Number	: 4422-001		Site Name: B	ank of America, Sai	n Leandro, CA			
Well Number:	MW3		Date(s) Purge					
OVA - Ambient	<u>: </u>		Purge Method:					
OVA - Vault:			Purge Rate:					
OVA - Casing:	1.7		Date & Time	Sampled:	@	,		
Water Level - In	nitial: 6.37 @]	0-40	Purged & Sar	npled: Dale Ande	rson	· · · · · · · · · · · · · · · · · · ·		
Water Level - Fi	inal: 6.45@ +	448 1512	Sampling Me	thod: Dedicated Di	sposable Bailer			
Well Depth:	3, 9		Free Product:			····		
Well Diameter:	2 inch		Sheen: O					
Well Casing Vol	ume: /, Z		Odor: 54	GIHT HYP	RO			
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	рН	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity		
742658	-25	64.0	6.79	3800	5.25	Low		
1500	.50	66.5	6-79	3580	1.49	1/		
1501	1.0	65,6	6.75	3560	1,30	*		
1502	1.5	64.9	6.68	3740	1.14	MOD		
1503	2.0	64.6	6.69	4230	193	1/		
1505	てら	64.5	6.60	4530	1.20	y		
1506	3.0	64.9	6.60	4820	1.12			
508	3,5	64.3	6.58	5180	,75			
1510	7,0	64,3	6.53	5110				
	1							
1545	Sample							
1545	1			J 110				

Field Notes:



MW4 10 8-6			d: 7-28-99		·				
10'		•		Date(s) Purged: 7-28-99					
8.6		Purge Method	Purge Method:						
		Purge Rate:			· · · · · · · · · · · · · · · · · · ·				
()		Date & Time	Sampled:	@					
itial: 5.84@ 10	59		ipled: Dale Ande	rson					
nal: 5-9/ @	1236								
14,2		Free Product:							
2 inch		Sheen:							
ume: 1,4	,	Odor:							
Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pН	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity				
.25	>5.3	6.94	1144	,	Con				
1.0	73.2	6.85	1103	1.54	11				
1.5	72.3	6.87	1090	1.71	MOD				
2.0	71.3	6.87	1053	1.85	11				
2.5	71.6	6.87	1084	157	1/				
3-0	71.7	6.92	1090	1.82	01				
3.5	71.3	6.91	1077	1.74	V				
4,0	70-6	6.97	1058	/ 3/	11				
4.5	>0.5	6.96	1054	1.29	11				
Saple									
2	nai: 5-9/ @ 1-1/, 2_ inch inch ine: 1-4 Purge Water Removed (gal) -25 -0 1-5 2-0 2-5 3-0 3-5 1-6 1-5	nal: 5-9/ @ 1236 1-1/, 2 2 inch Ime: 1.4 Purge Water Removed (gal) 1.25 1.0 1.3 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.5 1.0 1.0	Sampling Met Free Product: Sheen: Odor: Purge Water Temperature (degrees Fahrenheit) Fahrenheit Fahren	Sampling Method: Dedicated Display Sampling Method: Dedicated Display Sampling Method: Dedicated Display Sheen:					

Field Notes:

TPH-6

774-D/mo

UXYS



Project Number	: 4422-001		Site Name: Bank of America, San Leandro, CA					
Well Number:			Date(s) Purge	d: 7-28-99				
OVA - Ambient	: 5. / IPM		Purge Method:					
OVA - Vault:	6 11		Purge Rate:					
OVA - Casing:	5.6 11		Date & Time	Sampled: デセム	@ 1145			
Water Level - In	nitial: 7. // @ //	05	1	npled: Dale Ande				
Water Level - Fi	inal: 7,70 @ 11	31	Sampling Met	hod: Dedicated Di	sposable Bailer			
Well Depth: A	4.2 15.5	\$	Free Product:			<u>-</u>		
Well Diameter:	2 inch		Sheen:					
Well Casing Vol	ume: /. 4		Odor:					
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	₽Ĥ	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Turbidity		
1117	. 25	71.1	2.18	135->	193	Low		
1118	1.0	69.6	7.07	1224	2.02	11		
1119	1.5	68.8	7.10	1184	1.81	11		
1121	21.0	68,2	7.07	1199	1.71	1/		
1122	2.5	67.6	7,06	1186	2,26	1/		
1124	3.0	66-8	7.00	1137	1,24	11		
1125	403,5	67.1	6.88	1140	1,38	1/		
1127	4.0	67.1	6.88	1121	1.47	1/		
1128	4.5	67.5	>.01	1137	1.73			
•		_						
1145	Sample							
				<u> </u>				

Field Notes: 794-6 -3 V

0xy3 - 3V

ATTACHMENT V

Laboratory Analytical Reports and Chain-of-Custody Documentation

KEMRON Environmental Services 109 Starlite Park

Marietta, Ohio 45750 Phone: (740) 373-4071

Versar, Inc. 7844 Madison Avenue

Suite 167

Fair Oaks, CA 95628

Attention: Dale Anderson

Login #: L9907543 Report Date: 08/09/99

Work ID: 4422-001/BANK OF AMERICA

Date Received: 07/29/99

PO Number:

Account Number: VERSAR-CA-503

CAMOUR TORNMERTCARTON

	SAMP	LE IDENTIFICATION	- 11	U)	711 111
Sample Number	Sample Description	Sample Number	Sample Description	AUG 1 ·	1999
L9907543-01 L9907543-03 L9907543-05	MW5 MW2 MW1	L9907543-02 L9907543-04	MW4 MW3		

CA DOHS ID NO. 2277

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.

NYSDON ELAP ID: 10861

Dennis S. Tepe



Order #99-07-543 August 9, 1999 12:22

KEMRON ENVIRONMENTAL SERVICES REPORT NARRATIVE

One liter of MW-1 was received broken for DRO.

Order #: 99-07-543 August 9, 1999 12:28 pm

KEMRON ENVIRONMENTAL SERVICES WORK GROUPS

Work			Dil			Date	
Group	Run ID	Sample	Type Matrix	Product	Method	Collected	Department
WG61794	R70941	L9907543-04	Water	Semivolatile Compounds	8270C\3510C	28-JUL-1999	Extraction
₩G61794	R70941	L9907543-05	Water	Semivolatile Compounds	8270C\3510C	28-JUL-1999	Extraction
WG61795	R71308	L9907543-01	Water	Diesel Range Organics (GC)	8015\3510	28-JUL-1999	Extraction
WG61795	R71308	L9907543-02	Water	Diesel Range Organics (GC)	8015\3510	28-JUL-1999	Extraction
WG61795	R71308	L9907543-03	Water	Diesel Range Organics (GC)	8015\3510	28-JUL-1999	Extraction
WG61795	R71308	L9907543-04	Water	Diesel Range Organics (GC)	8015\3510	28-JUL-1999	Extraction
WG61795	R71308	L9907543-05	Water	Diesel Range Organics (GC)	8015\3510	28-JUL-1999	Extraction
WG61818	R71308	L9907543-01	Water	Diesel Range Organics (GC)	8015\3510	28-JUL-1999	Semivolatile - GC
WG61818	R71308	L9907543-02	Water	Diesel Range Organics (GC)	8015\3510	28-JUL-1999	Semivolatile - GC
WG61818	R71308	L9907543-03	Water	Diesel Range Organics (GC)	8015\3510	28-JUL-1999	Semivolatile - GC
WG61818	R71308	L9907543-04	Water	Diesel Range Organics (GC)	8015\3510	28-JUL-1999	Semivolatile - GC
WG61818	R71308	L9907543-05	Water	Diesel Range Organics (GC)	8015\3510	28-JUL-1999	Semivolatile - GC
WG61888	R71039	L9907543-03	Water	Volatile Organics (BETX)	8021B	28-JUL-1999	Volatile - GC
WG61889	R71045	L9907543-01	Water	Gasoline Range Organics	8015	28-JUL-1999	Volatile - GC
WG61889	R71045	L9907543-02	Water	Gasoline Range Organics	8015	28-JUL-1999	Volatile - GC
WG61889	R71045	L9907543-03	Water	Gasoline Range Organics	8015	28-JUL-1999	Volatile - GC
WG61889	R71045	L9907543-04	Water	Gasoline Range Organics	8015	28-JUL-1999	Volatile - GC
WG61889	R71045	L9907543-05	Water	Gasoline Range Organics	8015	28-JUL-1999	Volatile - GC
WG61906	R70941	L9907543-04	Water	Semivolatile Compounds	8270C\3510C	28-JUL-1999	Semivolatile - GC/MS
WG61906	R70941	L9907543-05	Water	Semivolatile Compounds	8270C\3510C	28-JUL-1999	Semivolatile - GC/MS

Login #L9907543 August 9, 1999 12:28 pm

KEMRON ENVIRONMENTAL SERVICES

Product: DRO - Diesel Range Organics (GC)

Lab Sample ID: L9907543-01 Dil. Type: N/A Sample Weight: N/A Client Sample ID: MW5 COC Info: N/A Extract Volume: N/A

Site/Work ID: 4422-001/BANK OF AMERICA

Matrix: Water Date Collected: 07/28/99 % Solid: N/A

Analysis Date: 08/03/99 Time: 13:05 Lab File ID: 8G012 Rdf 1B: K71300

Rdf 1B: K71300

CAS #	Compound	Units	Result Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics	ug/L	ND	100	1
SURR	OGATES- In Percent Recovery: o-Terphenyl Octacosane	98.5 97.5	(49 - 174%) (26 - 152%)	<i>i</i>	

Product: GRO - Gasoline Range Organics

Lab Sample ID: L9907543-01 Dil. Type: N/A Sample Weight: N/A Client Sample ID: MW5 COC Info: N/A Extract Volume: N/A

Site/Work ID: 4422-001/BANK OF AMERICA

Matrix: Water Date Collected: 07/28/99 % Solid: N/A

TCLP Extract Date: N/A

KEMRON ENVIRONMENTAL SERVICES

Product: DRO - Diesel Range Organics (GC)

Lab Sample ID: L9907543-02 Client Sample ID: MW4

Site/Work ID: 4422-001/BANK OF AMERICA

Matrix: Water

COC Info: N/A Date Collected: 07/28/99

Dil. Type: N/A

% Solid: N/A

Sample Weight: N/A

Extract Volume: N/A

Instrument: HP2 Analyst: HV

Method: 8015\3510 Run ID: R71308 Batch : WG61818

Extract Date: 07/29/99 Analysis Date: 08/03/99 Time: 13:33

Lab File ID: 8G015

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics	ug/L		ND	100	1
SURR	OGATES- In Percent Recovery: o-Terphenyl Octacosane	96.0 32.9	{	49 - 174%) 26 - 152%)	1	

Product: GRO - Gasoline Range Organics

Lab Sample ID: L9907543-02 Client Sample ID: MW4

Site/Work ID: 4422-001/BANK OF AMERICA Matrix: Water

TCLP Extract Date: N/A Extract Date: N/A

Analysis Date: 07/30/99 Time: 15:11

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

Date Collected: 07/28/99

Instrument: HP3 Analyst: VMN Lab File ID: 3G531

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

% Solid: N/A

Method: 8015 Run ID: R71045 Batch : WG61889

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics	ug/L	120		100	1
SURR	OGATES- In Percent Recovery: Chlorobenzene	89.4	(64 - 148%)		

KEMRON ENVIRONMENTAL SERVICES

Login #L9907543 August 9, 1999 12:28 pm

Product: DRO - Diesel Range Organics (GC)

Sample Weight: N/A Extract Volume: N/A Dil. Type: N/A COC Info: N/A Lab Sample ID: L9907543-03 Client Sample ID: MW2

Site/Work ID: 4422-001/BANK OF AMERICA % Solid: N/A

Date Collected: 07/28/99 Matrix: Water

Method: 8015\3510 Instrument: HP2 TCLP Extract Date: N/A Run ID: R71308 Analyst: HV Extract Date: 07/29/99

Batch: WG61818 Analysis Date: 08/03/99 Time: 13:42 Lab File ID: 8G016

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics	ug/L		ND	100	1
SURR	OGATES- In Percent Recovery: o-Terphenyl Octacosane	117 67.3	(49 - 174%) 26 - 152%)	\	

Product: 802-BETX1 - Volatile Organics (BETX)

Lab Sample ID: L9907543-03 Sample Weight: N/A Dil. Type: N/A COC Info: N/A Extract Volume: N/A Client Sample ID: MW2

Site/Work ID: 4422-001/BANK OF AMERICA

Date Collected: 07/28/99 % Solid: N/A Matrix: Water

TCLP Extract Date: N/A Instrument: HP12 Method: 8021B Extract Date: N/A Analyst: MFB Run ID: R71039 Analysis Date: 07/30/99 Time: 14:24 Lab File ID: 12G862 Batch: WG61888

CAS #	Compound	Units	Result Qualifiers	RL	Dilution	
100-41-4 108-88-3	Benzene	ug/L ug/L	ND ND ND ND	1.0 1.0 1.0	1 1 1	
SURR	OGATES- In Percent Recovery: a,a,a-Trifluorotoluene	85.3	(82 - 123%)			

KEMRON ENVIRONMENTAL SERVICES

Login #L9907543 August 9, 1999 12:28 pm

Product: GRO - Gasoline Range Organics

Dil. Type: N/A COC Info: N/A Sample Weight: N/A Lab Sample ID: L9907543-03 Extract Volume: N/A Client Sample ID: MW2

Site/Work ID: 4422-001/BANK OF AMERICA

Date Collected: 07/28/99 % Solid: N/A Matrix: Water

Method: 8015 Instrument: HP3 TCLP Extract Date: N/A Run ID: R71045 Extract Date: N/A

Analyst: VMN Lab File ID: 3G532 Batch : WG61889 Analysis Date: 07/30/99 Time: 15:53

CAS #	Compound	Units	Result Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics	ug/L	ND	100	1
SURR	COGATES- In Percent Recovery: Chlorobenzene	95.7	(64 - 148%)		

Product: DRO - Diesel Range Organics (GC)

Dil. Type: N/A COC Info: N/A Lab Sample ID: L9907543-04 Sample Weight: N/A Extract Volume: N/A Client Sample ID: MW3

Site/Work ID: 4422-001/BANK OF AMERICA Matrix: Water Date Collected: 07/28/99 % Solid: N/A

Method: 8015\3510 TCLP Extract Date: N/A Instrument: HP2 Run ID: R71308

Extract Date: 07/29/99 Analyst: HV Analysis Date: 08/03/99 Time: 13:51 Lab File ID: 8G017 Batch : WG61818

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
68334-30-5	Diesel Range Organics	ug/L		ND	100	1
SURR	OGATES- In Percent Recovery: o-Terphenyl	73.9 56.5	(49 - 174%) 26 - 152%)		

Login #L9907543 August 9, 1999 12:28 pm

Product: 8270 - Semivolatile Compounds

Dil. Type: N/A COC Info: N/A Sample Weight: N/A Extract Volume: N/A Lab Sample ID: L9907543-04 Client Sample ID: MW3
Site/Work ID: 4422-001/BANK OF AMERICA
Matrix: Water

Date Collected: 07/28/99 % Solid: N/A

Method 8270C\3510C Run ID: R70941 Instrument: HPMS5 Analyst: MDC TCLP Extract Date: N/A

Extract Date: 07/29/99 Batch : WG61906 Analysis Date: 08/02/99 Time: 22:05 Lab File ID: 5M12084

CAS #	Compound	Units	Result Qualifiers	RL	Dilution
108-95-2	Phenol	ug/L	ND	5.0	1
111-44-4	Bis(2-Chloroethyl)ether	ug/L	ND	5.0	1
95-57-8	2-Chlorophenol	ug/L	ND	5.0	1
541-73-1	1,3-Dichlorobenzene	ug/L	ND	5.0	1
106-46-7	1,4-Dichlorobenzene	ug/L	ND	5.0	1
100-51-6	Benzvl alcohol	ug/L	ND	5.0	1
95-50-1	1,2-Dichlorobenzene	ug/L	ND	5.0	1
95-48-7	2-Methylphenol	ug/L	ND	5.0	1
108-39-4	3-Methylphenol	ug/L	ND	5.0	1
108-60-1	bis(2-Chloroisopropyl)ether	ug/L	ND	5.0	1
106-44-5	4-Methylphenol	ug/L	ND	5.0	1
621-64-7	N-Nitrôsô-di-n-propylamine Hexachloroethane	ug/L	ND	5.0	1
67-72-1	Hexachloroethane	uq/L	ND	5.0	1
98-95-3	Nitrobenzene	ug/L	ND	5.0	1
78-59-1	Isophorone	ug/L	ND	5.0	1
88-75-5	2-Nîtrophenol	ug/L	ND	5.0	1
105-67-9	2,4-Dimethylphenol	ug/L	ND	5.0	1
65-85-0	Benzoic acid	ug/L	ND	25	1
111-91-1	Bis (2-Chloroethoxy) Methane	ug/L	ND	5.0	1
120-83-2	2,4-Dichlorophenol	ug/L	ND	5.0	1
120-82-1	1,2,4-Trichlorobenzene	ug/L	ND	5.0	1
91-20-3	Naphthalene	ug/L	ND	5.0	1
106-47-8	4-Chloroaniline	ug/L	ND	5.0	1
87-68-3	Hexachlorobutadiene	ug/L	ND	5.0	1
59-50-7	4-Chloro-3-methylphenol	ug/L	ND	5.0	1
91-57-6	2-Methylnaphthalene	ug/L	ND	5.0	1
77-47-4	Hexachlorocyclopentadiene	ug/L	ND	5.0	1
88-06-2	2.4.6-Trichlorophenol	ug/L	ND	5.0	1
95-95-4	2,4,5-Trichlorophenol	ug/L	ND	25	1
91-58-7	2-Chloronaphthalene	ug/L	ND	5.0	1
88-74-4	2-Nitroaniline	ug/L	ND	25	1
131-11-3	Dimethylphthalate	ug/L	ND	5.0	1
208-96-8	Acenaphthylene2,6-Dinitrotoluene	ug/L	ND	5.0	1
606-20-2	2,6-Dinitrotoluene	ug/L	ND	5.0	1
99-09-2	3-Nitroaniline	ug/L	ND	25	1
83-32-9	Acenaphthene	uq/L	ЙD	5.0	1
51-28-5	2,4-Dinitrophenol	ug/L	ND	25	1
100-02-7	4-Nitrophenol	ug/L	ND	25	1
132-64-9	Dibenzofuran	ug/L	ND	5.0	1

RL = Reporting Limit

Login #L9907543 August 9, 1999 12:28 pm

Product: 8270 - Semivolatile Compounds

Sample Weight: N/A Extract Volume: N/A Dil. Type: N/A COC Info: N/A Lab Sample ID: L9907543-04 Client Sample ID: MW3

Site/Work ID: 4422-001/BANK OF AMERICA Matrix: Water

Date Collected: 07/28/99 % Solid: N/A

Method: 8270C\3510C TCLP Extract Date: N/A Instrument: HPMS5

Run ID: R70941 Extract Date: 07/29/99 Analyst: MDC Analysis Date: 08/02/99 Time: 22:05 Lab File ID: 5M12084 Batch : WG61906

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution	
121-14-2	2,4-Dinitrotoluene	ug/L		ND	5.0	1	
84-66-2	Diethylphthalate	ug/L		ND	5.0	1	
7005-72-3	4-Chlorophenyl-phenyl ether	ug/L		ND	5.0	1	
86-73-7	Fluorene	ug/L		ND	5.0	1	
100-01-6	4-Nitroaniline	ug/L		ND	25	1	
534-52-1	4,6-Dinitro-2-methylphenol	ug/L		ND	25	1	
86-30-6	N-Nitrosodiphenvlamine	ug/L		ND	5.0	1	
101-55-3	4-Bromophenyl-phenylether	ug/L		ND	5.0	1	
118-74 - 1	Hexachiorobenzene	ug/L		ND	5.0	1	
87-86-5	Pentachlorophenol	ug/L		ND	25	1	
85-01-8	Phenanthrene	ug/L	•	ND	5.0	1	
120-12-7	Anthracene	ug/L		ND	5.0	ļ	
84-74-2	Di-N-Butylphthalate	ug/L		ND	5.0	1	
206-44-0	Fluoranthene	ug/L		ND	5.0	1	
129-00-0	Pyrene	ug/L		ND	5.0	1	
85-68-7	Butylbenzylphthalate	ug/L		ND	5.0	1	
91-94-1	3,3'-Dichlorobenzidine	ug/L		ND	10	1	
56-55-3	Benzo(a)anthracene	ug/L		ND	5.0	1	
218-01-9	Chrysene	ug/L		ND	5.0	1	
117-81-7	bis(2-Ethylhexyl)phthalate Di-n-octylphthalate	ug/L		ND	5.0	1	
117-84-0	Di-n-octylphthalate	ug/L		йD	5.0	1	
205-99-2	Benzo(b) fluoranthene	ug/L		ND	5.0	1	
207-08-9	Benzo(k) fluoranthene	ug/L		ND	5.0	1	
50-32-8	Benzo (a) pyrene	ug/L		ND	5.0	1	
193-39-5	Indeno (1, 2, 3-cd) pyrene	ug/L		ND	5.0	1	
53-70-3	Dibenzo (a, h) Anthracene	ug/L		ND	5.0	1	
191-24-2	Benzo(g,h,i)Perylene	ug/L		ND	5.0	Τ	
orm n	OGATES- In Percent Recovery:						
SORR	2-Fluorophenol	20	3.6	21 - 100%)			
	Phenol-d5		5.9	10 - 94%)			
	Nitrobenzene-d5		3	35 - 114%)			
	2-Fluorobiphenyl		0.6	43 - 116%)			
	2,4,6-Tribromophenol		6.6	10 - 123%)			
			0.6	33 - 141%)			
	p-Terphenyl-d14	59	(22 - T4T2)			

RL = Reporting Limit

Product:	GRO	-	Gasoline	Range	Organics
----------	-----	---	----------	-------	----------

Lab Sample ID: L9907543-04 Client Sample ID: MW3 Site/Work ID: 4422-001/BANK OF AMERICA Dil. Type: N/A Sample Weight: N/A COC Info: N/A Extract Volume: N/A

Matrix: Water Date Collected: 07/28/99 % Solid: N/A

Instrument: HP3 Method: 8015 TCLP Extract Date: N/A Analyst: VMN Extract Date: N/A Run ID: R71045

Lab File ID: 3G533 Analysis Date: 07/30/99 Time: 16:53 Batch : WG61889

CAS #	Compound	Units	Result Qualifiers	RL	Dilution
8006-61-9	Gasoline Range Organics	ug/L	300	100	1
SURR	OGATES- In Percent Recovery: Chlorobenzene	97.8	(64 - 148%) 🔽	,	

Product: DRO - Diesel Range Organics (GC)

Dil. Type: N/A COC Info: N/A Lab Sample ID: L9907543-05 Sample Weight: N/A Client Sample ID: MW1 Extract Volume: N/A

Site/Work ID: 4422-001/BANK OF AMERICA Matrix: Water

Date Collected: 07/28/99 % Solid: N/A

TCLP Extract Date: N/A Instrument: HP2 Method: 8015\3510 Extract Date: 07/29/99 Analyst: HV Run ID: R71308

Analysis Date: 08/03/99 Time: 14:00 Lab File ID: 8G018 Batch : WG61818

CAS # Units Oualifiers Compound Result RL Dilution 68334-30-5 Diesel Range Organics..... ug/L 1700 100 1 SURROGATES- In Percent Recovery:

o-Terphenyl..... 49 - 174%) (26 - 152%) Octacosane.....

Login #L9907543 August 9, 1999 12:28 pm

Product: 8270 - Semivolatile Compounds

Lab Sample ID: L9907543-05 Dil. Type: N/A Sample Weight: N/A Client Sample ID: MW1 COC Info: N/A Extract Volume: N/A

Site/Work ID: 4422-001/BANK OF AMERICA
Matrix: Water Date Collected: 07/28/99 % Solid: N/A

TCLP Extract Date: N/A Instrument: HPMS5 Method: 8270C\3510C

CAS #	Compound	Units	Result Qualifiers	RL	Dilution
108-95-2	Phenol	ug/L	ND	5.0	1
111-44-4	Bis (2-Chloroethyl) ether	ug/L	ND	5.0	1
95-57-8	2-Chlorophenol	ug/L	ND	5.0	1
541-73-1	1,3-Dichlorobenzene	ug/L	ND	5.0	1
106-46-7	1,4-Dichlorobenzene	ug/L	ND	5.0	1
100-51-6	Benzyl alcohol	ug/L	ND	5.0	1
95-50-1	1,2-Dichlorobenzene	ug/L	ND	5.0	1
95-48-7	2-Methylphenol	ug/L	ND	5.0	1
108-39-4	3-Methylphenol	ug/L	ND	5.0	1
108-60-1	bis(2-Chloroisopropyl)ether	ug/L	ND	5.0	1
106-44-5	4-Methylphenol	ug/L	ND	5.0	1
621-64-7	N-Nitroso-di-n-propylamine	ug/L	ND	5.0	1
67-72-1	Hexachloroethane	ug/L	ND	5.0	1
98-95-3	Nitrobenzene	ug/L	ND	5.0	1
78-59-1	Isophorone	ug/L	ND	5.0	1
88-75-5	2-Nitrophenol	ug/L	ND	5.0	1
105-67-9	2,4-Dimethylphenol	ug/L	ND	5.0	1
65-85-0	Benzoic acid	ug/L	NID	25	1
111-91-1	Bis (2-Chloroethoxy) Methane	ug/L	ND	5.0	1
120-83-2	2,4-Dichlorophenol	ug/L	ŊD	5.0	1
120-82-1	1,2,4-Trichlorobenzene	uq/L	ND	5.0	1
91-20-3	Naphthalene	ug/L	10	5.0	1
106-47-8	4-Chloroaniline	ug/L	ND	5.0	1
87-68-3	Hexachlorobutadiene	ug/L	ND	5.0	1 ,
59-50-7	4-Chloro-3-methylphenol	ug/L	ND	5.0	1
91-57-6	2-Methylnaphthalene	uq/L	6.5 /	5.0	1
77-47-4	Hexachlorocyclopentadiene	ug/L	ND	5.0	1
88-06-2	2,4,6-Trichlorophenol	ug/L	ND	5.0	1
95-95-4	2,4,5-Trichlorophenol	ug/L	ND	25	1
91-58-7	2-Chloronaphthalene	ug/L	ND	5.0	1
88-74-4	2-Nitroaniline	ug/L	ND	25	1
131-11-3	Dimethylphthalate	ug/L	ND	5.0	1
208-96-8	Acenaphthylene	ug/L	ND	5.0	1
606-20-2	2,6-Dinitrotoluene	ug/L	ND	5.0	1
99-09-2	3-Nitroaniline	ug/L	ND	25	1
83-32-9	Acenaphthene	ug/L	ND	5.0	1
51-28-5	2,4-Dinitrophenol	ug/L	ND	25	ī
100-02-7	4-Nitrophenol	ug/L	ND	25	1
132-64-9	Dibenzofuran	ug/L	ND	5.0	$\bar{1}$
		J. —			_

RL = Reporting Limit

Login #L9907543 August 9, 1999 12:28 pm

Product: 8270 - Semivolatile Compounds

Dil. Type: N/A COC Info: N/A Sample Weight: N/A Extract Volume: N/A Lab Sample ID: L9907543-05 Client Sample ID: MW1
Site/Work ID: 4422-001/BANK OF AMERICA
Matrix: Water

Date Collected: 07/28/99 % Solid: N/A

Instrument: HPMS5 Analyst: MDC Method: 8270C\3510C TCLP Extract Date: N/A Run ID: R70941 Batch : WG61906 Extract Date: 07/29/99 Lab File ID: 5M12085 Analysis Date: 08/02/99 Time: 22:43

CAS #	Compound	Units	Result	Qualifiers	RL	Dilution
121-14-2 84-66-2 7005-73-6 534-52-1 100-01-6 534-55-3 118-86-8 120-12-7 84-74-0 129-68-94-1 56-01-55-3 118-80-8 120-12-7 84-74-0 129-08-08-7 91-95-3 218-81-9 117-84-2 206-08-3 218-81-9 117-99-08-3 219-08-3 219-08-3 219-08-3 219-08-3 219-29-08-3 219-	2,4-Dinitrotoluene Diethylphthalate. 4-Chlorophenyl-phenyl ether Fluorene 4-Nitroaniline. 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine. 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Di-N-Butylphthalate Fluoranthene Pyrene Butylbenzylphthalate. 3,3'-Dichlorobenzidine Benzo(a) anthracene Chrysene bis(2-Ethylhexyl) phthalate Di-n-octylphthalate. Benzo(b) fluoranthene Benzo(b) fluoranthene Benzo(a) pyrene Indeno(1,2,3-cd) pyrene Dibenzo(a,h) Anthracene Benzo(g,h,i) Perylene	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L		888888888888888888888888888888888888888	0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.00	111111111111111111111111111111111111111
SURR	OGATES- In Percent Recovery: 2-Fluorophenol. Phenol-d5. Nitrobenzene-d5. 2-Fluorobiphenyl. 2,4,6-Tribromophenol. p-Terphenyl-d14.	33.3 22.3 53.2 54.1 87.1 67.7	((((21 - 100%) 10 - 94%) 35 - 114%) 43 - 116%) 10 - 123%) 33 - 141%)		

Login #L9907543 August 9, 1999 12:28 pm

Product: GRO - Gasoline Range Organics

Dil. Type: N/A COC Info: N/A Sample Weight: N/A Lab Sample ID: L9907543-05 Client Sample ID: MW1
Site/Work ID: 4422-001/BANK OF AMERICA Extract Volume: N/A

Date Collected: 07/28/99 % Solid: N/A

Matrix: Water

Method: 8015 TCLP Extract Date: N/A Instrument: HP3 Analyst: VMN Run ID: R71045 Extract Date: N/A Analysis Date: 07/30/99 Time: 17:34 Lab File ID: 3G534 Batch : WG61889

CAS # Compound Units Result Qualifiers RLDilution ug/L 3500 100 1 8006-61-9 Gasoline Range Organics.... SURROGATES- In Percent Recovery: 104 (64 - 148%) Chlorobenzene.....

KEMRON ANALYST LIST

Ohio Valley Laboratory

07/29/99

ALC - - Ann L. Clark BAD - - Becky A. Diehl CAR - - Caleb A. Robinson CBN - - C. Brian Noll CEB - - Chad E. Barnes CDB - - Christy D. Burton CG -- Cheryl Graham CK -- Carl King CMS - - Crystal M. Stevens CRC - - Carla R. Cochran DIH - - Deanna I. Hesson DLN - - Deanna L. Norton DLP - - Dorothy L. Payne DMD - - David M. Dye ECL - · Eric C. Lawson FEH - - Fay E. Harmon GWH - - George W. Hutchinson HLC - - Holly L. Currey HV - Hema Vilasagar JCR - - Jennifer C. Randall JDN - - Jamie D. Newell JG -- Jonathan Graziani JLH - - Janice L. Holland JWR - - John W. Richards JYH - - Ji Y. Hu

KAS - - Kevin A Stutler KHA - - Kim H. Archer KJS - - Kara J. Stump KRA - - Kathy R. Albertson LKM - - Laura K. Morris MDA - - Mike D. Albertson MDC - - Michael D. Cochran MES - - Mary E. Schiling MLS - - Michael L. Schimmel MMB - - Maren M. Beery RDC - - Rebecca D. Cutlin 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

Quali	lifier 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
В	Present in the method blank	NR	Analyte is not required to be analyzed
С	Confirmed by GC/MS	NS	Not spiked
*	Surrogate or spike compound out of range	P	Concentration > 25% difference between the two GC
00		ONIO	columns
CG	Confluent growth	QNS	
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.

ORGANIC QA/QC



Kemron Environmental Services

Volatile Quality Control Summary

Method 8015B

Workgroup	WG61889
RunDate	30-Jul-99
Matrix:	WATER
Instrument	HP3
Analyst	VMN

0.0500
3G528
3G529
07-543-03
3G532
3G535
3G536

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

Daily QA			Concentration, PPB						Percent Recovery			% F	RPD	Outliers							
Information				LCS Spike				MS Spike		LCS			М	s	MS	RPD					
	MDL	BLK	LCS	Level	SMPL	MS	MSD	Levet	LCS	Limit	мѕ	MSD	Lir	nit	RPD	UCL	LCS	MS	MSD	%F	RPD
Target Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%	%	9	6	%	%					
GRO	13.35	ND	994.1	900.0	ND	1115.3	1089.1	900 0	110.5	84 - 115	123.9	121.0	84 -	115	2.4	15 0		Н	Н		
								SS Spike							Surr	ogate					
		BLK	LÇS		SMPL	MS	MSD	Level	BLK	LCS	_	SMPL	MS	MSD	Li	mit	BLK	LCS	SMPL	MŞ	MSD
Surrogate Standard		ug/L	ug/l.		ug/L	ug/L	ug/L	ug/L	%	%		%	%	%	,	%					
chiorobenzane		26.9	31,0		28.7	32.3	31.4	30.0	89.5	103.2		95 7	107.8	104.6	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

ND = Not Detected

NA = Not Applicable

DF = Dilution Factor

DL = Diluted Out

SS = Surrogate Standard

UPL = Upper Control Limit L = Low

RPD = Relative Percent Difference H = High

KEMRON ENVIRONMENTAL SERVICES, OVL SEMI-VOLATILES QUALITY CONTROL SUMMARY

ANAL WORK GRP: WG61906

EXT DATE: 7/29/99

RUN DATE: 7/30/99

METHOD: 8270

BENCH SHEET: V120P147

SMPL ID: L9907536-17

INSTRUMENT: HPMS5

ANALYST: mdc

MATRIX: WATER CONCENTRATION UNITS: UG/L

BLK FLNM: 5M12045 LCS FLNM: 5M12046 **SMPL FLNM: 5M12048** MS FLNM: 5M12049

MSD FLNM: 5M12050

PREP	WORK	GRP:	WG61794	
------	------	------	---------	--

				CONCE	NTRATION	. ug/L						PERCEN	IT RECOVE	RY , %					PERCE	រា		BEY(OND ITS	
			LCS SPIKE			MS SPIKE						LCS						MSD	RPD	RPD >	AMPLE	્રે સુષ્	\$ \$	MSD
ANALYTE	RDL	BLANK	ADDED	LCS		ADDED	MS	MSD	BLANK	LCS	LCS LCL	UÇL	SAMPLE	MS	MSD		MS UCL	RPD	UCL	LIMIT	Ø.,	<u>ಹ</u> ಬ	تخب	ž
PYRIDINE	5.0	ND	50	11.4	ND	100	9.0	31.2	NA	22.7	5	150	NA	9.0	31.2	5	150	110	40	•		-		
N-NITROSODIMETHYLAMINE	5.0	ND	50	28.9	ND	100	47.9	43.1	NA	57.9	5	150	NA.	47.9	43.1	5	150	11	40		1			
ANILINE	10.0	ND	50	39.5	ND	100	45.0	53.1	NA	78 9	5	150	NA	45.0	53.1	5	150	17	40					1
PHENOL	5.0	ND	50	19.3	NO	100	29.8	26.3	NA	38.6	5	112	NA	29.6	26.3	5	112	12	40	İ				
BIS(2-CHLOROETHYL)ETHER	5.0	МD	50	40.7	ND	100	64.9	62.6	NA	81.3	12	158	NA	64 9	62.6	12	158	4	40				Į	
2-CHLOROPHENOL	5.0	ND	50	39.7	ND	100	62.4	58.4	NA	79.4	23	134	NA	62.4	58.4	23	134	7	40	1	1	j	}	1
1,3-DICHLOROBENZENE	5.0	ND	50	33 5	ND	100	57.1	52.6	NA	67.0	5	172	NA	57.1	52.6	5	172	8	40					
1,4-DICHLOROBENZENE	10.0	ND	50	32.6	ND	100	55.7	51.9	NA	65.3	20	124	NA	55.7	51.9	20	124	7	40	1	1			
BENZYL ALCOHOL	5.0	ND	50	42 3	ИD	100	65 1	60.8	NA	84.6	5	150	NA NA	65.1	60.8	5	150	7	40		1		1	
1,2-DICHLOROBENZENE	5.0	ND	50	34.4	ND	100	66.1	52.8	NA.	68 8	32	129	NA.	66.1	62.8	32	129	5	40		1		1	
2-METHYLPHENOL	5.0	ND	50	38.6	ND	100	60.2	56.6	NA.	77.2	5	150	NA	60 2	56 6	5	150	6	40					
BIS(2-CHLOROISOPROPYL)ETH	5.0	ВD	50	40.0	ND	100	63.7	63.2	NA	80.1	36	168	NA	63.7	63.2	36	166	1	40					-
3- & 4-METHYLPHENOL	5.0	ND	50	37.2	ND	100	56.2	53 6	NA	74.4	5	150	NA	56.2	53 6	5	150	5	40	}				1
N-NITROSO-DI-N-PROPYLAMIN	5.0	ND	50	43.0	ND	100	72,2	71.0	NA	86.0	5	230	NA	72.2	71,0	5	230	2	40	1			}	
HEXACHLOROETHANE	5.0	ND	50	33 9	ND	100	162.7	167 0	NA	67.9	40	113	NA	162.7	167 0	40	113	3	40	1		i	Н	н
NITROBENZENE	5.0	ND	50	40.6	ND	100	75,4	72.8	NA	81.3	35	180	NA	75 <i>A</i>	72.8	35	180	4	40	1				
ISOPHORONE	5.0	סא	50	51.3	ND	100	78.1	75.4	NA	102.5	21	196	NA	78.1	75.4	21	196	4	40]	
2-NITROPHENOL	2.0	ND	50	42.1	ND	100	66 3	53,8	NA.	84.2	29	162	NA.	66.3	63.8	29	182	4	40	1			1	
2,4-DIMETHYLPHENOL	5.0	ND	50	47.0	13.8	100	87.3	87.6	NA	94,0	32	119	NA	73.4	73.8	32	119	0	40				l	
BIS(2-CHLOROETHOXY)METHA	25.0	В	50	45,8	ND	100	71.8	69.2	NA	91.8	33	184	NA NA	71.6	69.2	33	184	3	40			ĺ		
BENZOIC ACID	5.0	ND	50	15.0	ND	100	46.0	46.5	NA	29.9	5	150	NA	46.0	46 5	5	150	1	40				-	
2,4-DICHLOROPHENOL	5.0	ND	50	44.5	ND	100	69.9	68.0	NA.	89.1	39	135	NA	69.9	0.83	39	135	3	40	1				
1,2,4-TRICHLOROBENZENE	5.0	ND	50	36.2	ND	100	61.0	54.9	NA	72.4	44	142	NA	61.0	54.9	44	142	10	40	1				1 1
NAPHTHALENE	5.0	ND	50	38.3	58.2	100	119.7	122.1	NA	78.5	21	133	NA	61.5	64.0	21	133	2	40	1			1	1
4-CHLOROANILINE	5.0	ND	50	47.1	ND	100	70.8	70.3	NA	94.1	5	150	NA .	70.8	70.3	5	150	1	40					1
HEXACHLOROBUTADIENE	10,0	ND	50	38,5	ND	100	64 4	58.4	NA.	76.9	24	116	NA.	64.4	58.4	24	116	10	40				1	1
4-CHLORO-3-METHYLPHENOL	5.0	ND	50	45.9	ND	100	86.6	91.0	NA	91.8	22	147	NA	86.6	91.0	22	147	5	40				1	
2-METHYLNAPHTHALENE	5.0	ND	50	40.8	5.3	100	71.8	69.0	NA	81.8	5	150	NA	66.5	63.7	5	150	4	40	1			-	į .
HEXACHLOROCYCLOPENTADI		ND	50	39.7	ND	100	54.9	45.1	NA	79.4	5	150	NA .	54.9	45.1	5	150	20	40	1	ļ		ļ	
2,4,6-TRICHLOROPHENOL	25.0	ND	50	47.3	ND	100	80.7	63.0	NA	94.6	37	144	NA	80,7	83.0	37	144	3	40				-	
2,4,5-TRICHLOROPHENOL	5.0	ND	50	47.1	ND	100	89 4	91.6	NA	94.2	5	150	NA .	89 4	91.6	5	150	2	40			i	Į	
2-CHLORONAPHTHALENE	25.0	ND	50	41.5	ND	100	67.5	62.8	NA	82.9	60	118	NA .	67.5	62.8	60	118	7	40	1			}	1 1
2-NITROANILINE	5.0	ND	50	47 1	ND	100	93.4	95.7	NA	94.2	5	150	NA	93.4	95.7	5	150	2	40	1	1 [ļ	
DIMETHYLPHTHALATE	5.0	ND	50	47.5	ND	100	87.5	90.0	NA	95.0	5	112	NA .	87.5	90.0	5	112	3	40			İ		
ACENAPHTHYLENE	5.0	ND	50	47.5	ND	100	77.7	75.1	NA	94.9	33	145	NA.	77.7	75.1	33	145	3	40				1	i i
2,6-DINITROTOLUENE	5.0	NĎ	50	48.7	ND	100	93.8	97.0	NA	97.3	50	158	NA	93.8	97.0	50	158	3	40			- 1		
3-NITROANILINE	25.0	ND	50	49.4	ND	100	93 6	95.7	NA	98,8	5	150	NA	93.6	95.7	5	150	2	40		l l	1		
ACENAPHTHENE	5.0	ND	50	44.1	ND	100	75.7	73.9	NA	88.1	47	145	NA	75.7	73.9	47	145	2	40		1	1		1
2,4-DINITROPHENOL	25 0	ND	50	31.8	ND	100	70.3	70.2	NA	63.6	5	191	NA	70.3	70.2	5	191	0	40			1	}	
4-NITROPHENOL	25.0	ND	50	22.4	ND	100	49 5	47.6	NΑ	44.9	5	132	NA	49.5	47.6	5	132	4	40			- 1		
DIBENZOFURAN	5.0	ND	50	45.3	ND	100	79 0	79.5	NA	90 6	5	150	NA	79.0	79 5	5	150	1	40					
2,4-DINITROTOLUENE	5.0	ND	50	52.7	ND	100	105.8	107.2	NA	105.3	39	139	NA .	105.8	107.2	39	139	. 1	40	<u> </u>				l

NOTES & DEFINITIONS:

NA = NOT APPLICABLE ND = NOT DETECTED

RDL=REPORTING DETECTION LIMIT

NS = NOT SPIKED L= below QC limit H≃above QC limit

KEMRON ENVIRONMENTAL SERVICES, OVL SEMI-VOLATILES QUALITY CONTROL SUMMARY

ANAL WORK GRP: WG61906 METHOD: 8270

EXT DATE: 7/29/99 BENCH SHEET: V120P147 RUN DATE: 7/30/99 SMPL ID: L9907536-17 SMPL FLNM: 5M12048 INSTRUMENT: HPMS5 ANALYST: mdc

MATRIX: WATER CONCENTRATION UNITS: UG/L

BLK FLNM: 5M12045 LCS FLNM: 5M12046

MS FLNM: 5M12049 MSD FLNM: 5M12050

CONCENTRA	LION ONLE	э.	OGIL
PREP	WORK GR	P :	WG61794

																					Г		YOND	,
1				CONCE	NTRATION	, ug/L						PERCE	IT RECOVE	ERY , %					PERCE	VΤ	<u> </u>	LIN	MITS	
ANALYTE	RDL	BLANK	LCS SPIKE ADDED	LCS	SAMPLE	MS SPIKE ADDED	MS	MSD	BLANK	LCS	LCS LCL	LCS	SAMPLE	мs	MSD	MS LCL	MS UCE	MSD RPD	RPD UCL	BEYON D RPO LIMIT	SAMPLE	3LANK	୍ଷ ହ	NSD (SD
DIETHYLPHTHALATE	5.0	ND	50	50.1	ND	100	100.4	102 6	NA	100 3	5	114	NA	100.4	102.6	5	114	2	40		~	$\overline{}$		
FLUORENE	5.0	ND	50	46.1	ND	100	85.4	86.5	NA.	92.2	25	158	NA.	85.4	86.5	25	158	1	40			i I		i
4-CHLOROPHENYL-PHENYL ET	5.0	ND	50	45.6	ND	100	80.7	82 6	NA.	91.1	59	121	NA.	80.7	82.6	59	121	2	40		1			
4-NITROANILINE	25.0	ND	50	50.5	ND	100	97.9	101.4	NA	101.0	5	150	NA.	97.9	101.4	5	150	4	40			.	1	
1,2-DIPHENYLHYDRAZINE	50	ND	50	47.0	ND	100	86.4	88.6	NA.	93.9	5	150	NA.	86 4	88.6	5	150	3	40				1	
4.6-DINITRO-2-METHYLPHENO	25.0	ND	50	48.1	ND	100	95.4	93.1	NA.	96.1	5	181	NA	95.4	93.1	5	181	2	40				-	
N-NITROSODIPHENYLAMINE **	5.0	ND	50	49.2	ND	100	99.5	101.2	NA.	98 4	5	150	NA.	99.5	101.2	1 5	150	2	40	1				
4-BROMOPHENYL-PHENYL ET	5.0	ND	50	42.4	ND	100	82.5	83.8	NA	84.8	53	127	NA	82.5	83.8	53	127	2	40	1	•	1	1	
HEXACHLOROBENZENE	5.0	ND	50	48.7	ND	100	95 8	95.8	NA	97.3	5	152	NA.	95 6	95.8	5	152	ō	40				Ì	
PENTACHLOROPHENOL	25.0	ND	50	47,7	ND	100	112.6	115.9	NA	95.4	14	176	NA.	112.6	1159	14	176	3	40	1	1		1	
PHENANTHRENE	50	ND	50	46.6	5.3	100	100.5	102.0	NA	93 1	54	120	NA	95.2	96.7	54	120	1	40		1 '	1	- 1	
ANTHRACENE	50	ND	50	49.5	ND	100	102.8	103.3	NA	98.9	27	133	NA	102.8	103.3	27	133	1	40	i		il	-	
CARBAZOLE	50	ND	50	53.2	ND	100	129.1	133 2	NA	106.4	5	150	NA	129.1	133.2] 5	150	3	40	1	1 1	1	1	ļ
DI-N-BUTYLPHTHALATE	5.0	ND	50	61.9	ND	100	107.4	110.5	NA	103,8	1	118	NA	107.4	110,5	1 1	118	3	40			1 1		-
FLUORANTHENE	5.0	ND	50	50.3	ND	100	103.8	106.9	NA	100.6	26	137	NA	103.8	106.9	26	137	3	40				Ì	ļ
PYRENE	5.0	ND	50	50.6	ND	100	103.0	103.4	NA	101.2	52	115	NA	103.0	103,4	52	115	0	40		1			ł
BUTYLBENZYLPHTHALATE	50	ND	50	56 6	ND	100	115.2	117.3	NA	113.3	5	152	NA.	1152	117.3	5	152	2	40		1 '			1
BENZO(A)ANTHRACENE	10.0	ND	50	52.1	ND	100	105 7	106.7	NA	104.2	5	262	NA.	105.7	106.7	5	262	1	40		1	1		
3.3'-DICHLOROBENZIDINE	50	ND	50	57.6	ND	100	31.0	297	NA	115.2	33	143	NA	31.0	29.7	33	143	4	40		ı	1] [LL
CHRYSENE	5.0	ND	50	51.7	NO	100	104.0	105.3	NA	103.3	17	168	NA.	104.0	105.3	17	168	1	40			1	-	1
BIS(2-ETHYLHEXYL)PHTHALAT	50	ND	50	55 5	ND	100	113 5	116.1	NA	111.0	8	158	NA	113.5	116.1	8	158	2	40		l '	1	i	
DI-N-OCTYLPHTHALATE	5.0	ND	50	58.0	ND	100	119,3	129.2	NA .	115.9	4	146	NA	119,3	129.2	4	145	8	40		1	}		
BENZO[B]FLUORANTHENE	5.0	ND	50	51,1	ND	100	108 6	105.0	NA	102.2	24	159	NA.	108 6	105.0	24	159	3	40	İ	1		-	
BENZOIKIFLUORANTHENE	5.0	ND	50	52.4	ND	100	98.2	109.0	NA	104.7	11	162	NA	98.2	109.0	11	162	10	40		1			
BENZO[A]PYRENE	5.0	ND	50	54.0	NO	100	108.7	111.3	NA	108.1	17	163	NA	108.7	111 3	17	163	2	40					ŀ
INDENO[1,2,3-CD]PYRENE	5.0	ND	50	52.8	ND	100	103 B	99,5	NA.	105.6	5	171	NA NA	103.8	2,89	5	171	4	40		Ì			ļ
DIBENZ[A,H]ANTHRACENE	50	ND	50	54.3	ND	100	107.7	103.6	NA	108.6	5	227	NA	107.7	103 6	5	227	4	40		1 '		ĺ	
BENZO(G,H,I)PERYLENE	50	ND	50	51.9	ND	100	102.0	95.2	NA	103.8	5	219	NA	102.0	95.2	5	219	7	40					
SURROGATES																<u> </u>					Ц	Ш	\bot	
2-FLUOROPHENOL		51.6	100	59.8	44.4	100	46.5	40.7	51.6	59.8	21	100	44 4	46 5	40.7	21	100							
PHENOL - D5		33.7	100	41.1	28.6	100	30,4	26 4	33,7	41,1	10	94	28.8	30.4	26.4	10	94				1		1	-
NITROBENZENE - D5		38.7	50	45.2	34.0	50	34.7	33.4	77,4	90.4	35	114	68.0	69 4	66 B	35	114				1	į L	- (1
2-FLUOROBIPHENYL		39.6	50	49.9	36.1	50	38.3	36.0	79.1	99.8	43	116	72.2	76.8	71.9	43	116				1		1	
2.4,6-TRIBROMOPHENOL		92.3	100	105.1	107.8	100	106.1	109 5	92.3	105.1	10	123	107 B	106.1	109,5	10	123	1			•	, 1	- 1	
p-TERPHENYL - D14	L	55.9	50	59,1	41.5	50	55.4	55,0	1118	118.2	33	141	B3 0	110.7	1100	33	141	<u> </u>			J	للحث		

NOTES & DEFINITIONS :

NS = NOT SPIKED

KEMRON ENVIRONMENTAL SERVICES, OVI.
SEMI-VOLATILES QUALITY CONTROL SUMMARY

ANAL WORK GRP: WG81818

PREP WORK GRP: WG81795

METHOD: 8015

MATRIX: WATER
CONCENTRATION UNITS: ug/I

EXT DATE: 07-29-99 EXT BENCH SHEET: V120-P145

BLK FILENAME: 8G010 LCS FILENAME: 8G011 INSTRUMENT: HP 2 RUN DATE: 08-03-99

SMPL ID: 07-543-01 SMPL FLNM: 8G012 MS FLNM: 8G013 MSD FLNM: 8G014

				CONCENTRA	TION: ug/									PERCENT I	RECOVERY .	%					PERCENT	
ANALYTE			LCS SPIKE	LCS	LCS DUP	SAMPLE	MS SPIKE	MS	мѕо	BLANK	LCS	LCS DUP	LCS LCL	LCS UCL	SAMPLE	MS	MSD	MS LCL	MS UCL	DUP RPD	MSD RPO	RPD UCL
	RDL	BLANK	ADDED				ADDED															
																 			- -			
DIESEL	500	ND	1000	1006	NA	ND	2000	2260	1940	NA	101	NA	51	154	NA.	113	97 0	18	165	NA.	15	20
UNROCKIE	l ≱ci3sorke iri	e:Giree Cri	name tea	AN 18688 94 (XXXXXXXXXXX		(840/28473)	765 W. W. W. W. W. W. W. W. W. W. W. W. W.	35855566EE	4225X10813	1877×87415	3#(906W6)	40880824	ereiekkei	veiria: 1944		200 0	7000000	\@9x38idi:	kavelerija)	185076 <u>7</u> 88655	aww.
o-TERPHEN		16.2	20	22 0	NA	19.7	40	52.2	499	808	110	NA	49	174	98 4	131	125	18	165	NA.	5	20
OCTACOSA	NE.	20 5	20	23.1	NA.	195	40	54 3	36.6	102	115	NA	26	152	97 4	136	91,4	26	152	NA.	3₽	20
Cardena and	fixani.	%V3200%		440000		ia Kalabit	68666268	1960:30:81d	21869886							W					(Sóstistins	å an æist

NOTES & DEFINITIONS :

NA = NOT APPLICABLE

ND = NOT DETECTED

RDL=REPORTING DETECTION LIMIT

EXCELCHEM

ENVIRONMENTAL LABS

500 Giuseppe Court, Suite 9 Roseville, CA 95678

Phone#: (916) 773-3664 Fax#: (916) 773-4784



ANALYSIS REPORT

Attention: Dale Anderson

Versar

7844 Madison Avenue, Suite 167

Fair Oaks, CA 95628

Project:

Bank of America San Leandro/4422-001

Method: EPA 8260

Date Sampled: 07/28/99
Date Received: 07/29/99
Date Analyzed: 08/03/99
Matrix: Water
Units: ug/L

Client Sample I.D.	M	W 5	M	W 4	M	W 3	M	W 1
LAB. NO.	W07	799350	W01	799351	W07	799352	W07	799353
ANALYTE	R/L	Results	R/L	Results	R/L	Results	R/L	Results
Tert-Butanol	25	ND	25	ND	25	ND	250	ND
MTBE	0.5	7.3	0.5	10.0	0.5	ND	5	11
Di-1sopropyl Ether	0.5	ND	0.5	ND	0.5	ND	5	ND
Ethyl tert-Butyl Ether	0.5	ND	0.5	ND	0.5	ND	5	ND
Tert-Amyl methyl Ether	0.5	ND	0.5	ND	0.5	ND	5	ND
Benzene	0.5	ND	0.5	ND	0.5	ND	5	252
1,2-dichloroethane	0.5	ND	0.5	ND	0.5	ND	5	ND
Toluene	0.5	ND	0.5	ND	0.5	ND	5	23
1,2-dibromoethane	0.5	ND	0.5	ND	0.5	ND	5	ND
Ethyl Benzene	0.5	ND	0.5	ND	0.5	ND	5	43
Xylenes	0.5	ND	0.5	ND	0.5	ND	5	179

	SURROC	ATE % RECOVE	RY	
Dibromotluoromethane	111	108	108	105
Tolucne-d8	99	95	97	100
4-bromotluorobenzene	95	95	96	97

	QA/QC % REC	COVERY	
	LCS	LCSD	Date Analyzed
1,1-dichloroethene	102	103	08/03/99
Benzene	101	109	08/03/99
Trichloroethene	95	94	08/03/99
Toluene	95	100	08/03/99
Chlorobenzene	98	98	08/03/99

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

R/L = Reporting Limit

Laboratory Representative

08/09/99 Date Reported



CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJE	CT NA	ME				-		7	7	P	1			7	<u>991</u>	$\frac{058}{2}$
4427-	RA	15 0	F A	n∄2∆		4 SAULL DANINDA			/5	<u> </u>	3	,	\mathcal{M}		C 1	<u>⇒ il</u>	WE RESAMPLE N
SAMPLERS: (Signatu	eliro.	on	,	viec.	(Prii	ALE ANDMASON		Sing 8	AN AND A				ή (i.	/ ^ ~	- / 1 /		1989 AREMARKS
FIELD SAMPLE NUMBER	DATE 1999	TIME	نه ا	GRAB		STATION LOCATION	/ \$	5/4)) !			A		/		\angle	
MW5	7/28	1145	1	X			3	X	3	Ø	7	વ	9	3	5	0	
mu#		1245	1					X						3	5	1	
WW Z		133	-		000	K											
M W 3		1545	1_					丛		,				3	5	2	•
mu/	4	1608	2	\$			♦	X				*		3	5	3	
					<u> </u>												
A																	
Reinquished by: (Sig	11 1 1				те Э <i>0</i>	Received by: (Signature) Charles Hunders	Rel	inquis	hed b	y: (Sig	gnature	:)		Da	te / Ti	ime	Received by: (Signature)
(Printed) DALE A	UD4e	Sa				(Printed) Charles Henderson	(Pri	nted)							<u> </u>		(Printed)
Relinquished by: (Sig	nature)		Date	e / Ti	me	Received for Laboratory by: (Signature)		Date	/ Tim	ne	Rema	rks /	いた	SÉ.	7	TAN	A EDB EDC
(Printed)				4		(Printed)							ET	ßĘ	· /	TB	AJEDBJEDC
												5	70	7	77	•	

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).



CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJE	CT NAM	E		_			7	7		PA	RAME	TEI	RS		INDUSTRIAL HYGIENE SAMPLE	A A
4422-001	BAN	K of	_ //	MA	RICA SAN LETANDRO		/		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(21/		7	7	7	7 /		16.7
SAMPLERS: (Signatu	re			·	RICA SAN LEANDRO (Printed) DALE ANDERSON		/ż	ۇر / ئ ۆ	S/H	0,1	1/1)/ /		//			
Dale (lu	arly.	on	/		DALE HNDERSON	/	\8\	/ 40 14/	14	γ <i>Ψ</i>	4/		/	/ /		REMARKS	İ
FIELD Sample Number	DATE 1999	TIME	COMP.	GRAB	STATION LOCATION	Ş	Se Cours	15/N			Y/_/	/ /	/	//	/		
MW 5	728	1145		X		5	X	X							WAT	PR	
MW4		1245				5	X	X							···		
MWZ		1330				6	X	X	X				$ \bot $				
MW3		1545				7	X	X		X]
MWI	♥	600		立		7	X	X		X)Dei) recid broke	e1)
																(by)	90
																- 1-27	- 17
					AM												
														\rightarrow			
Relinquished by: (Sig	mature)	a 7	Date	/ Tin		Reli	inquis	hed b	y: (Si	gnature	J		Date	e / Time	e Rece	eived by: (Signature)	
(Printed)		· -	1 -		(Printed)	(Prar	ited)								(Prin	ted)	
DAZE AN	DERSO	$u \mid '$	<u> </u>	20													
Relinquished by: (Sig	nature)		Date	: / Tin	ne Received for Laboratory by:	1/20	- 1	/ Tin		Remar	ks L	,0W 572	<i>\</i>)ETE MAT	TC7701	D LIMITS	,
(Printed)					(Printed)		·				`	-140	J	111		Colaled	1.0
					Trenda Gregory											Mer Cemps.	5.0

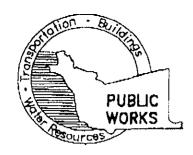
Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

KEMRON Internal Laboratory Chain of Custody

Work O	100	300-4/2	\/n	1 7 / 				-	~	
WOLKO	raer:	10/5/-	Client: V&	1 - (- 1)	# of Samp	les: ()	Due Da	te: 0//	الح Pag	ge:
Sample #	Analysis	Reason	Removed By ADT	Removed From	Moved To	Reliq. by	Ret'd By ADT	Ret'd To	Rec'd By	Reason
1-5	G60	AN	MM 42419 1530	Jain	VOA	Bla	MUSIFACT			Archive
4,5	8110	Ex1	११ र/अस्ति १८५८		SIB	TO	DE BREGIONET	Nun ndu	TUB	disposit
1-85	DRO	627	DEN 7/200 SUS	WOLKIN	5.110	TOB	07 864 01870	MINIMUY	元的	dsosal
										Copaci
										
						<u> </u>	· · · · · · · · · · · · · · · · · · ·	·		
				<u></u>		<u> </u>				ļ
		,								
							-			

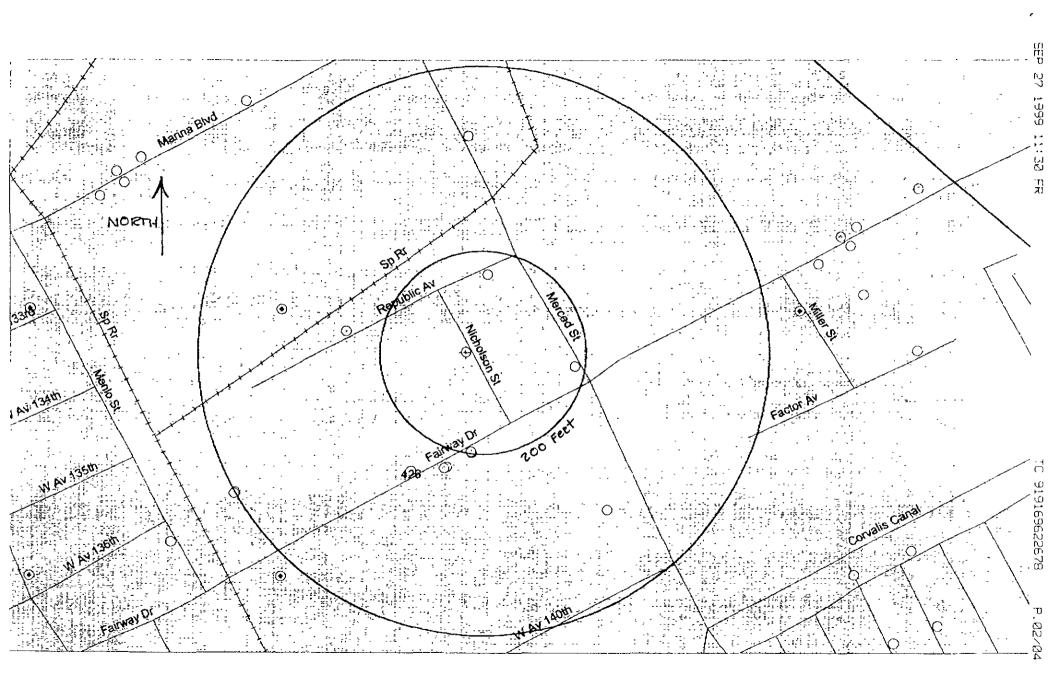
ATTACHMENT VI

Alameda County Public Works Agency Well Search Results



COUNTY OF ALAMEDA PUBLIC WORKS AGENCY 951 Turner Court, Room 300 Hayward, CA 94545-2651

FAX TRANSMITTAL	
TO: TIM BERCER-	DATE:9 127/99
	·
FAX NO.: 916-962-2678	
TRANSMITTING THE FOLLOWING:	
TITLE/DESCRIPTION	
WELL SLRVEY INFO-	
TOTAL PAGES INCLUDING THIS SHEET.	
FROM WATER RESOURCES	
NAME: Marlon Magallanes/Cindy Hutchinson TEL: (510) 670-5248 FA	X: (<u>510)</u> 670-5262
E-MAIL: Wrebcc@acwpa.mail.co.alameda.ca.us-Cindyh@acwpa.mail	l.co.alameda.ca.us
IF YOU EXPERIENCE PROBLEMS WITH THIS TRANSMISSION, PLEASE (REMARKS:	CALL US.
MON-MONTORING WELL	
BOR-BORING WELL	
·	



ŀ	emit	Yr _	Section	Address	Longcity	Owner	Update	Xcoord	Yooord	Matchlevel	Tsrqq	Rec code
{		35/3W	2D 5	2699 Merced St	San Leandro	Valley Automated Fuels	03/13/1991	122,166,376	37,703,512	o	35/3W 2D	1,218
		3S/3W	2D 6	2699 Merced St.	San Leandro	Valley Automated Fuels	03/13/1991	122,166,376	37,703,512	0	3S/3W 2D	1,219
1		3S/3W	2D 7	2699 Merced St.	San Leandro	Valley Automated Fuels	03/13/1991	122,166,376	37,703,512	0	3S/3W 2D	1,220
		3S/3W	2D	2699 Merced St	San Leandro	Valley Automated Fuels	03/13/1991	122,166,376	37,703,512	0	35/3W 2D	1,221
l		3S/3W	2D 1	1906 REPUBLIC AVE	San Leandro	PACIFIC ELECTRIC SUPI	11/04/1986	122,167,899	37,704,816	0	35/3W 2D	5,936
Į		35/3W	2E 1	1930 FAIRWAY DRIVE	San Leandro	TRIANGLE COATINGS	11/12/1988	122,168,210	37,702,279	0	35/3W 2E	5,940
		3S/3W	2D 8	2585 Nicholson St.	San Leandro	Rodding - Cleaning Serv	06/22/1993	122,168,309	37,703,714	1	3S/3W 2D	0
Į		3S/3W	2D 9	1930 Fairway Dr.	San Leandro	Triangle Coatings, SLE N	06/23/1993	122,168,220	37,702,294	1	35/3W 2D	0

Phone	City	Drilldate	Elevation	Totaldepth	Weterdepth	Diameter	Use	Log	W	Wi	Yield	Dtwcalc	Old obase
0	SLE	10/90	0	31	0	7	BOR	D	0	0	0	C	D
0	SLE	10/90	16	20	10	2	MON	G	a	0	0	6	D
0	SLE	10/90	17	20	9	2	MON	G	0	0	0	8	D
0	SLE	10/90	16	20	9	2	MON	G	0	0	0	,	Ð
0	SLE	09/86	0	15	6	2	MON	G	0	0	0	0	L
0	SLE	10/86	0	25	8	2	MON	D	0	0	0	ō	L
0	SLE	6/92	0	19	7	6	MON	G	0	0	0	0	D
0	SLE	4/92	0	15	7	2	MON	G	0	0	0	0	D

SEP 27 1999 11:32 FR

70 919169622678

P. 24/84