

13500

November 28, 2001

Ms. Donna Proffitt Bank of America, N.A. Environmental Services Department 4820 Irvine Boulevard Irvine, California 92620-1910

Reference: Groundwater Monitoring Report (October 2001)

2585 Nicholson Street in San Leandro, California

ES# 305582

Versar Project No. 4422-004

Dear Ms. Proffitt:

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, Attachment I, present the Site location and Site layout, respectively.

### **Background**

A release of petroleum constituents was discovered at the Site during removal of underground storage tanks (USTs) in 1991. Subsequently, Versar and others have performed an investigation of soils and groundwater beneath the Site, and extensive groundwater monitoring. The results of the groundwater monitoring and data evaluation has determined the constituents identified in groundwater are naturally degrading over time, and pose no risk to Site occupants under an industrial setting.

The Alameda County Health Care Services (ACHCS) is currently considering granting closure for the Site. In the interim, the groundwater monitoring program has been reduced to one well (MW-1) on a semi-annual basis.

1001qms/4422-004



Ms. Donna Proffitt November 28, 2001 Page 2 of 2

## October 2001 Results

Monitoring well MW-1 was sampled on October 30, 2001. The methodology and protocol followed for the collection of the groundwater sample during this groundwater sampling event are presented in Attachment III, Decontamination and Groundwater Monitoring Well Sampling Procedures. A monitoring well purge table documenting field measurements during sampling is presented in Attachment II. The groundwater sample from MW-1 was analyzed for total petroleum hydrocarbons (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Methods 8015 Modified and 8020, respectively. Laboratory analytical data sheets are included in Attachment II. Current and historic analytical results from all Site monitoring wells are presented in Table 1 of Attachment I.

As shown in Table 1, analytical results from MW-1 in October 2001 are significantly lower than the April 2001 results. The depth to groundwater in the monitoring well during the October 2001 monitoring event was approximately 0.5-foot lower than in April 2001, which supports Versar' previous assertion that fluctuating concentrations in MW-1 are the result of dissolution of residual petroleum constituents during higher groundwater elevations.

The October 2001 data supports conclusions provided previously to the ACHCS, and in Versar's opinion, the Site should be granted low-risk closure. If you have any questions, please feel free to call Scott Allin at (916) 863-9325.

Prepared by:

Scott Allin, R.E.A.

Senior Program Manager

Versar - Pacific Region

Reviewed by:

Tim Berger, R.G.

Supervising Geologist

Versar - Pacific Region

Attachment I - Figures and Tables

Attachment II - Laboratory Analytical Data Reports and Monitoring Well Purge Table

Attachment III - Decontamination and Groundwater Monitoring Well Sampling Procedures

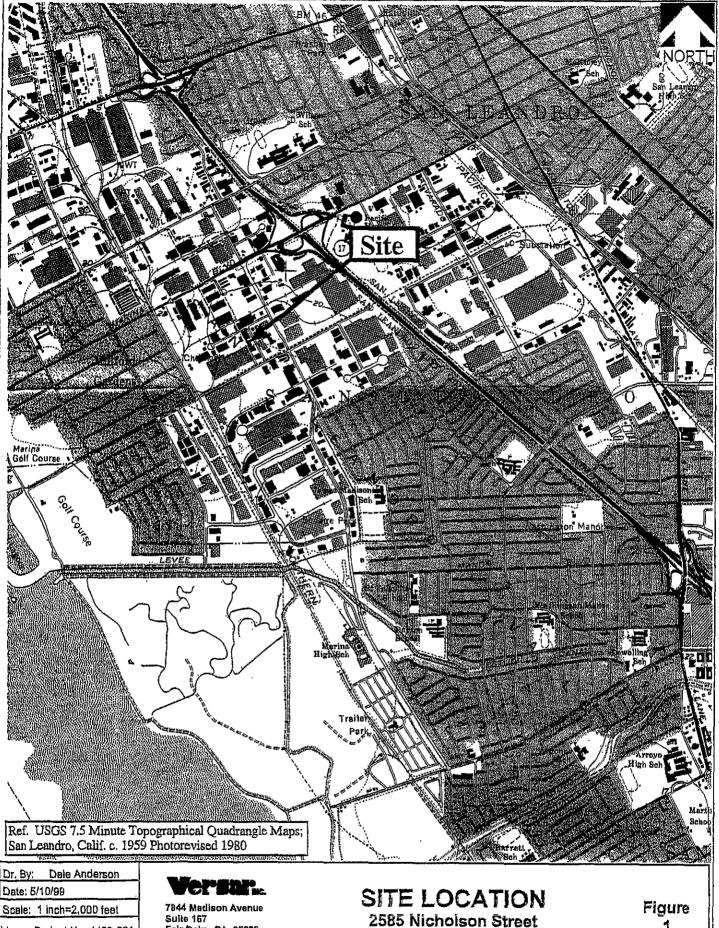
cc: Amir Gholami (Alameda County)

Susan Hugo (Alameda County)

Mike Bakaldin (City of San Leandro)

# ATTACHMENT I

Figures and Tables

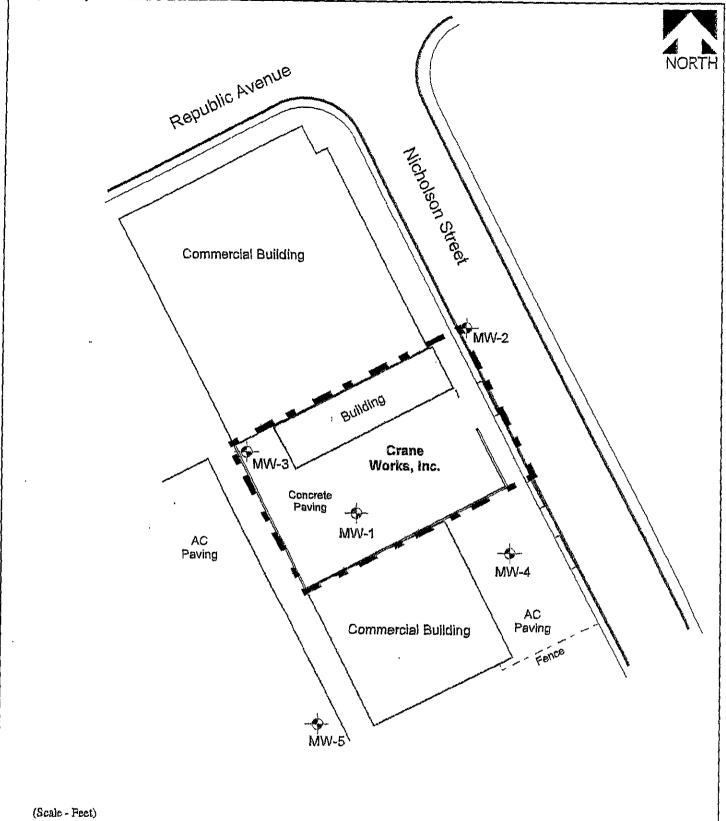


Versar Project No. 4422-001

PRINTIN: PUBDEAUSANLEAN/REPORT/FIET

Sulie 167 Fair Oaks, CA 95628 (916) 962-1612

San Leandro, California



(Scale - Feet)
0 20 40 60

Dr. By: Dale Anderson

Date: 5/10/99

Scale: 1 Inch= 60 feet

Versar Project No. 4422-001

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Metanti.

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

2585 Nicholson Street San Leandro, California Figure 2

Table 1 Analytical Results for Groundwater Samples 2585 Nicholson Street San Leandro, California

I					(	Chemicals of Con	cern			
Monitoring		TPH-G	TPH-D	трн-мо	трн-к	TPH-SS	Benzene	Toluene	Ethylbenzene	Total Xylenes
Well No	Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(ng/L)	(harr)	(μg/L)	(µg/L)
MW-1	Jun-92	10,000	ND	747			110	81	62	280
	Nov-92	9,800	ND	-		-	23	14	22	96
	Арг-93	18,000	560	ND	ND	370	42	47	50	190
	Jul-93	27,000	ND	ND	ND	ND	40	45	63	190
	Dec-93	7,800	3,800	ND	ND	ND	13	16	20	77
	Mar-94	280,000	620	ND	ND	3,300	970	880	620	1,700
	Jun-94	8,500	ND	ND	ND	ND	23	13	8.5	19
	Sep-94	2,400	52	ND	ND	ND	5.3	2.6	2.5	6
	Dec-94	4,800	1300	ND	ND	1,000	32	32	16	50
	Apr-95	74,000	3,700	ND	ND	570	320	350	350	940
	Sep-95	33,000	46,000	ND	ND	4,900	140	270	260	1,100
	May-99	8,100	ND	ND	-	-	1,400	31	82	360
	Jul-99	3,500	1,700	-			252	23	43	179
	Oct-99	4,900				-	270	34	<5	370
	Jan-00	22,400	<500				1,300	402	483	2,490
	Apr-00	13,000	 				1,130	226	335	1,410
	(m)-00	28,400	<50	<500		-	1,470	190	299	967
	Oct-00	12,900		<del></del>		<1,000	1,000	197	353	1,400
	Jan-01	17,800	, ·	-	-	- '	957	146	353	1,060
	Apr-01	13,000 21,800	<50 +				1,200	170	450	1,300
	encised \$5.55	XXXXXX00000000000000000000000000000000				Lagrania de la compansión	210	20	47	82
MW-2	Apr-99	ND	ND	ND			ND	ND	ND	ND
ļ	Jul-99	<100	<100		-		<1.0	<1.0	<1.0	<1.0
	Oct-99	<100					<1.0	<1.0	<1.0	<1.0
	Jan-00	118					0.7	<0.5	<0.5	<0.5
	Apr-00	<50					0.5	<0.5	<0.5	<0.5
	Jul-00	<400	-	-	-		0.8	<0.5	<0.5	<0.5
	Oct-00	<50		-			<0.5	<0.5	<0.5	<1.0
	Jan-01	104					<0.5	<0.5	<0.5	<0.5
ľ	Apr-01	160	-	••	-	-	<0.5	<0.5	<0.5	<0.5
MW-3	Apr-99	ND	540	ND			ND	ND	ND	ND
<b>.</b>	Jul-99	300	<100		=		<1.0	<1.0	<1.0	<1.0
į.	Oct-99	230					<1.0	<1.0	<1.0	<1.0
J.	Jan-00	163	<50				0.8	<0.5	<0.5	<0.5
ļ,	Apr-00	90					0.7	<0.5	<0.5	<0.5
	Jul-00	<400				_ [	2.0	<0.5	<0.5	<0.5
	Oct-00	<50				٠	<0.5	<0.5	<0.5	<1.0
	Jan-01	62					<0.5	<0.5	<0.5	<0.5
ŀ	Apr-01	62					<0.5	<0.5	<0.5	<0.5
MW-4	Apr-99	110	ND	ND	<del></del>	-	ND	ND	ND	ND
	Jul-99	120	<100		-		<1.0	<1.0	<1.0	<1.0
	Oct-99	<100	*-				<1.0	<1.0	<1.0	<1.0
	ا مما	106	86			-	0.9	<0.5	<0.5	<0.5
	Jan-00	200						<0.5	<0.5	<0.5
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] 	Арт-00 lul-00 Осt-00	99  139	+- 				 0.6	₹ <0.5	<0.5	 <1.0
, , ,	Apr-00 Iul-00 Oct-00 Ian-01	99  139 85	+- 				0.6 <0.5	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<1.0 <0.5 <0.5
MW-S	Apr-00 Iul-00 Oct-00 Ian-01 Apr-01	99  139 85 130	  	  	  	  	0.6 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5	<1.0 <0.5 <0.5
MW-5 /	Apr-00 lul-00 Oct-00 lan-01 Apr-01	99  139 85 130	   ND	   ND	  	  	0.6 <0.5 <0.5 ND	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<1.0 <0.5 <0.5 ND <1.0
MW-5 /	Apr-00 lul-00 Oct-00 Jan-01 Apr-01 Apr-99	99  139 85 130 270 570	   ND <100	  ND	  		0.6 <0.5 <0.5 ND <1.0	<0.5 <0.5 <0.5 <0.5 ND <1.0	<0.5 <0.5 <0.5 <0.5 ND <1.0	<1.0 <0.5 <0.5
MW-5 ,	Apr-00 Jul-00 Oct-00 Jan-01 Apr-01 Apr-99 Jul-99 Oct-99 Jan-00 Apr-00	99  139 85 130 270 570 540	ND <100	  ND 	   	   	0.6 <0.5 <0.5 ND <1.0 <1.0	<0.5 <0.5 <0.5 <0.5 ND <1.0 <1.0	<0.5 <0.5 <0.5 <0.5 ND <1.0 <1.0	<1.0 <0.5 <0.5 <0.5 ND <1.0 <1.0
MW-5 /	Apr-00 lul-00 Oct-00 Jan-01 Apr-01 Apr-99 Oct-99 ban-00 Apr-00 lul-00	99  139 85 130 270 570 540 231	ND <1000	  ND 	    	   	0.6 <0.5 <0.5 <0.5 ND <1.0 <1.0	<0.5 <0.5 <0.5 <0.5 ND <1.0 <1.0 <0.5	<0.5 <0.5 <0.5 <0.5 ND <1.0 <1.0 <0.5	<1.0 <0.5 <0.5 <0.5 ND <1.0 <1.0 <0.5
MW-5	Apr-00 lul-00 Oct-00 Jan-01 Apr-01 Apr-99 Jul-99 Jul-99 Jan-00 Apr-00 Jul-00 Oct-00	99  139 85 130 270 570 540 231 353 <400 156	    <100  	ND	     	   	0.6 <0.5 <0.5 <0.5 ND <1.0 <1.0 1.9 3.5	<0.5 <0.5 <0.5 <0.5 ND <1.0 <1.0 <0.5 <0.5	<0.5 <0.5 <0.5 <0.5 ND <1.0 <1.0 <0.5 <0.5	<1.0 <0.5 <0.5 <0.5 ND <1.0 <1.0 <0.5 <0.5
MW-5	Apr-00 Jul-00 Oct-00 Jan-01 Apr-01 Apr-99 Jul-99 Oct-99 Jun-90 Jun-00 Jun-00 Jun-00 Jun-00 Jun-00 Jun-01	99  139 85 130 270 570 540 231 353 <400 156 <50	   ND <100   	ND			ND <1.0 <1.0 <1.0 1.9 3.5 <0.5	ND <1.0 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0	ND <1.0 <1.0 <1.0 <0.5 <0.5 <0.5 <0.5	<1.0 <0.5 <0.5 <0.5 ND <1.0 <1.0 <0.5 <0.5
MW-5	Apr-00 lul-00 Oct-00 Jan-01 Apr-01 Apr-99 Jul-99 Jul-99 Jan-00 Apr-00 Jul-00 Oct-00	99  139 85 130 270 570 540 231 353 <400 156	ND <100	ND	       		0.6 <0.5 <0.5 <0.5 ND <1.0 <1.0 1.9 3.5 <0.5	~0.5 <0.5 <0.5 ND <1.0 <1.0 <0.5 <0.5 <0.5	ND <1.0 <1.0 <1.0 <1.0 <0.5 <0.5 <0.5 <0.5 <0.5	<1.0 <0.5 <0.5 ND <1.0 <1.0 <0.5 <0.5 <0.5

#### Notes and Abbreviations:

TPH-G = total petroleum hydrocarbons as gasoline.
TPH-D = total petroleum hydrocarbons as diesel.

TPH-K = total petroleum hydrocarbons as kerosene.

TPH-SS = total petroleum hydrocarbons as stoddard solvent

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

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

NO = not detected at or above the methods reporting limit

-- = not analysed

2076-01/4422-002/FBB25'00

# ATTACHMENT II

Laboratory Analytical Data Reports and Monitoring Well Purge Table

## MONITORING WELL PURGE TABLE

Project N	umber: 4422	003		Site Name: B of A Sam learned to												
Well Num				Date(s) Purged: $ 0/3 \sqrt{v} $												
OVM - AI	nbient:			Purge Method:												
OVM - Va	ıult:			Purge Rate:												
OVM - Ca	ising:			Date & Time Sampled: 10(35/0)												
Water Le	vel - Initial:	,79 en 12	3:10,03	Purged & Sampled: 15/30/60 14/56												
Water Lev	vel - Final:	5.78 e 1	4.42	Sampling Method:												
Well Dept				Free Product:												
Well Dian	ieter:			Sheen:												
Well Casin	ng Volume:			Odor:												
Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pН	Electrical Conductivity (ms/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Oxidation - Reduction Potential (mV)									
13.40	15. god	19.2	6.72	11.69		8.11										
13:54	25	19,3	4.45	8.77		0.12										
13:59	36	19.3	6-69	8,31		0.13										
14.83	45	1923	6.64	3,48		0.4										
	14:54	Samy														
		,														
						i										
Field Note	s:															

# Excelchem Environmental Labs, Inc.

500 Giuseppe Court, Suite 3 Roseville, CA 95678 (916) 773-3664 voice (916) 773-4784 fax

# FAX COVER SHEET

Date:

11/7/01

To:

Scott Allin

Versar

Fax Number:

916-962-2678

From:

Terri Mars

Project Manager

Total Pages (including cover sheet): 3

### Comments:

Thank you for using Excelchem for your laboratory needs. I have attached the Analysis Reports for your review. If there is additional information you need, please do not hesitate to call. I look forward to working with you on your next project!

# **EXCELCHEM** ENVIRONMENTAL LABS

500 Giuseppe Court, Suite 3 Roseville, CA 95678

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



## **ANALYSIS REPORT**

Attention: Scott Allin

Versar Incorporated

7844 Madison Ave., Ste. 167

Fair Oaks, CA 95628

Project:

B of A San Leandro / 4422-003

Method:

EPA 8020/8015m

1	0/30/01
	0/30/01
1	1/02/01
	. 1

Client Sample I.D.	· MW-1									
LAB. NO.	W1001559									
ANALYTE	TVL	Results								
Benzene	10	210								
Toluene	0.5	20								
Ethylbenzene	0.5	47								
Total Xylenes	1,0	82								
TPH as Gasoline	50	1800								

QA/QC %I	RECOVERY	
	LCS	LCSD
Benzene	92	93
Toluene	93	94
Ethylbenzene	93	93
Total Xylenes	91	92

QA/QC Analyzed: 11/02/01

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

R/L = Reporting Limit

Water samples reported in µg/L

boratory Representative

Date Reported

Excelo Environme	•	50	500 Giuseppe Court, Suite 9 Roseville, CA 95678 (916) 773-3664												CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST														r,												
Project Manager: Pho Scatt Allin 916										one #:													SR	_														1	[A]	-	
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# 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.

- a. Non-dedicated well development, purging, and sampling equipment is carefully precleaned prior to each use, as follows:
  - 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 flameionization 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.

# 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.