Versar INC.

3570

AUG 01 2001

July 27, 2001

Mr. Amir K. Gholami, REHS
Hazardous Materials Specialist
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, California 94502-6577

RE: CLOSURE APPLICATION
2585 Nicholson Street in San Leandro, California (STID 3570)

Dear Mr. Gholami:

Per your request, enclosed is a completed closure application for the above-referenced property. The application was also sent to you via email. If you have any questions, please feel free to call me at (916) 863-9325.

Sincerely,
Versar, Inc.

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

cc: *Ms. Donna Proffitt (Bank of America)*
Ms. Janet Giannini (Bank of America)
Mr. Stuart Block (Cox, Castle & Nicholson, LLP)
Mr. Mike Bakaldin (City of San Leandro Fire Department)

6401resp1.wpd/4422-003

SITE CLOSURE SUMMARY

AUG 01 2001

I. AGENCY INFORMATION

Date: July 24, 2001

Agency Name: **Alameda County-Hazmat**	Address: **1131 Harbor Bay Pkwy**
City/State/Zip: **Alameda, CA 94502**	Phone: **(510) 567-6700**
Responsible Staff Person: **Amir K. Gholami**	Title: **Hazardous Materials Specialist**

II. SITE INFORMATION

Site Facility Name: Nicholson Street

Site Facility Address: 2585 Nicholson Street, San Leandro, California

RB/SMS Case No.: NA	RO-0000020 **Local or LOP Case No: STID 3570**	Priority:
URF Filing Date:	SWEEPS No.: NA	

Responsible Parties (include addresses and phone numbers):

Sketchley Family Trust, c/o Bank of America as Trustee of the Sketchley Family Trust, Environmental Services Department, 4820 Irvine Blvd., Irvine, California 92620-1910

Tank No.	Size in Gallons	Contents	Closed In–Place/Removed?	Date
1	Approx. 10,000	Suspected gasoline	Removed	1991
2	Approx. 500	Waste oil	Removed	1991

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Gasoline

Site characterization complete? Yes	Date Approved By Oversight Agency:	
Monitoring wells installed? Yes	Number: 5	Proper-screened interval? Yes
Highest GW Depth below top of well casing: 3.61'	Lowest Depth: 7.11'	Flow Direction: SE to SW

Most Sensitive Current Use: None identified Mixed commercial / residential?

Most Sensitive Potential Use: Domestic or municipal supply, and Probability of Use: Very low.

confirm if there are residential units -

Are drinking water wells affected? No	Aquifer Name: None
Is surface water affected? No	Nearest/Affected SW Name: Estudillo Canal (1.0-mile S), San Leandro Creek (1.5-mile N)

Off-Site Beneficial Use Impacts (Addresses/Locations): None

Report(s) on file? Yes	Where is report(s) filed? ACHCSA and San Leandro Fire Department

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	Unknown	Unknown; assumed destroyed. ask for manifests.	1991
Piping	Unknown	Unknown; assumed destroyed	1991
Free Product	Amount unknown	Absorbent socks used between 1992 and 1999	1992-1999
Soil	Approx. 250 cubic yards	Unknown off-site landfill	1991
Groundwater	Approx. 1,600 gallons	1,000 gallons recycled by Seaport Environmental. Remaining 600 gallons unknown	1999-2001

call Mike Bakaldin

MAXIMUM DOCUMENTED POLLUTANT CONCENTRATIONS--BEFORE AND AFTER CLEANUP

	1 Soil (ppm)		2 Water (ppb)			3 Soil (ppm)		4 Water (ppb)	
POLLUTANT	**Before**	**After**	**Before**	**After**	POLLUTANT	**Before**	**After**	**Before**	**After**
TPH (Gas)	440	NA	280,000*	17,800**	**Xylene**	6.3	NA	1,700*	1,300*
TPH (Diesel)	280	NA	46,000*	<50**	**Oil & Grease**	NA	NA	NA	NA
Benzene	1.5	NA	970*	1,200**	**PCE**	NA	NA	NA	NA
Toluene	1.9	NA	880*	170**	**MTBE**	NA	NA	NA	11
Ethylbenzene	1.8	NA	620*	450**	**Heavy Metal**	NA	NA	NA	NA

see below

* Represents maximum concentration identified during initial monitoring period (1992-1995)
** Represents maximum concentration identified during 2001.

Comments (Depth of Remediation, etc.):
Significant excavation of the site was performed to groundwater (approximately 6.5 feet below ground surface) during UST removal actions. Subsequent testing performed in 1992, prior to backfilling, indicated petroleum hydrocarbons had migrated on the groundwater table outside the excavation area. Between 1995 and 1999, the groundwater elevation at the site rose approximately one to two feet. This rise in groundwater elevation resulted in a smear zone within fine-grained overburden soils. Dissolution of residual petroleum constituents continues from the smear zone. Data strongly supports anaerobic intrinsic biodegradation processes at the site. Data from down gradient monitoring locations (40 to 100 feet from the site boundary) show only trace levels of petroleum constituents.

A risk assessment prepared for the site indicates residual petroleum constituents do not pose a risk to site users under a commercial/industrial setting. A well survey performed for the site surrounding area did not identify groundwater use in proximity to the site Based on the information gathered during assessment activities, residual petroleum impact is naturally degrading over time, minimal off-site migration is occurring, and no adverse risk to human health and the environment exists.

do RBCA for residential scenario

Explain footnotes
1 =
2 =
3 =
4 =

Was No Comfirm?

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes, data strongly supports the occurrence of natural attenuation of petroleum constituents, and eventual breakdown of residual petroleum hydrocarbons. No beneficial uses or sensitive receptors were identified in proximity to the groundwater impact.

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes, per above

Does corrective action protect public health for current land use? Yes, per above

Site Management Requirements: Site management is required if excavation is proposed in the vicinity of the former UST.

Should Corrective action be reviewed if land use changes? Yes

Monitoring Wells Decommissioned: NA	Number Decommissioned: NA	Number Retained: NA

List Enforcement Actions Taken: NA

List Enforcement Actions Rescinded: NA

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Amir K. Gholami** Title: **Haz Mat Specialist**

Signature: Date:

Reviewed by
Name: Title: **Haz Mat Specialist**

Signature: Date:

Name: **Susan Hugo** Title: **Supervisor**

Signature: Date:

VI. RWQCB NOTIFICATION

Date Submitted to RB: RB Response:

RWQCB Staff Name: **Chuck Headlee** Title: **AEG**

Signature: Date:

Provide history and current use of site.

Give brief description of lithology

Include soil + groundwater data from tank removal + over excavation.

VI. ADDITIONAL COMMENTS, DATA, ETC. (Attached please find the following relevant information: 1) plot plans; 2) historical tables, 3) April 2001 quarterly monitoring report, and 4) boring logs and well logs

Please see summary discussion on Page 2 of 4. The following are summary answers to the criteria for case closure:

- *Has the site been adequately investigated (are soil and groundwater plumes defined)?* Groundwater elevations are very high (average of approximately five feet below grade). Soil was over excavated during UST removal, and subsequent detections in soil are believed to be related to migration of free-floating product on the water table. Groundwater is adequately characterized by the source area-monitoring well (MW-1), up gradient monitoring well (MW-2), cross gradient monitoring well (MW-3), and two down gradient monitoring wells (MW-4 and MW-5).
- *Has source (primary) been removed (tank removed)?* Yes, in 1991.
- *Is free product removed to the extent practicable (floating product removed)?* Yes, floating product was detected between 1992 and 1995, and was removed using absorbent socks. No floating product was not observed during the 1999 through 2001 monitoring period.
- *Do you have a stable plume (stable or decreasing plume)?* As described previously, residual impact entrained in overburden soils continues to release petroleum constituents. Concentrations over the last two years are relatively consistent, with mild fluctuations which correlate to increased groundwater elevations. The overall plume, from a migration potential, is stable. Occasional increased source area concentrations have not resulted in increase concentrations in the down gradient monitoring locations.
- *Any current / future public health threat?* A risk assessment performed did not identify current or future risks to public health under a commercial/industrial setting.
- *Any current / future ecological threat?* A risk assessment performed did not identify ecological receptors.
- *Any current / future water sources threat?* A well survey did not identify any current or anticipated future threats to water sources.
- *Is risk management plan in place?* A risk management plan for residual petroleum impact will be prepared upon concurrence with no further action.

Include Geoprobe boring info to explain GW plume is adequately characterized

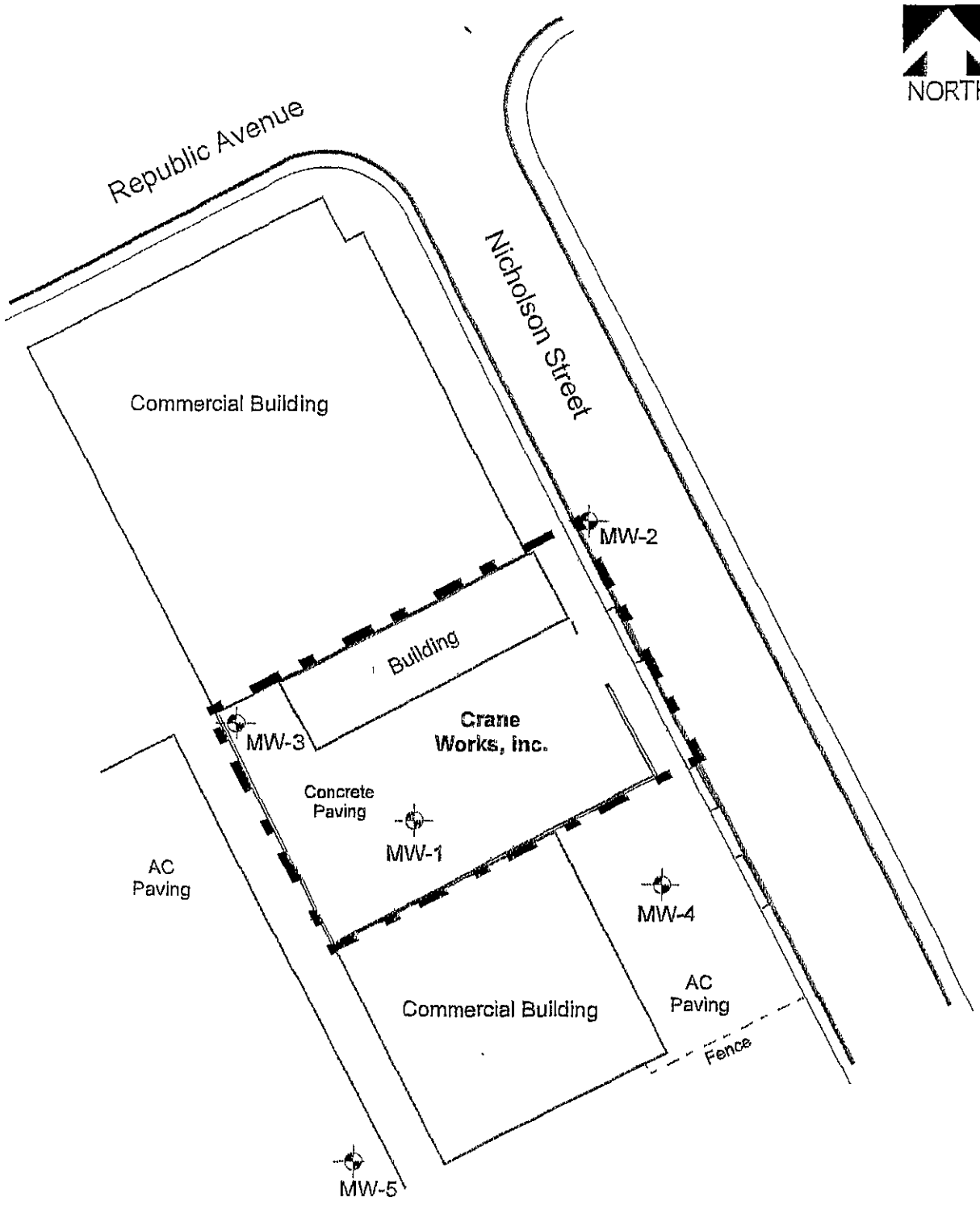
Case closure is recommended for the following reasons:

- The leak and ongoing sources have been removed, and significant source removal actions have been performed;
- The site has been adequately characterized as evidenced by the existing source area monitoring well (MW-1), up gradient monitoring well (MW-2), cross gradient monitoring well (MW-3), and two down gradient monitoring wells (MW-4 and MW-5);
- The dissolved plume is not migrating, and is being degraded through natural attenuation processes;
- No water wells, surface water, or other sensitive receptors with the potential to be impacted were identified during assessment activities; and
- The site presents no significant risk to human health or the environment under a commercial/industrial setting.

ATTACHMENT 1

Plot Plans

(Hageman-Aguiar, Inc., McLaren/Hart, and Versar, Inc.)



(Scale - Feet)

0 20 40 60

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

Versar Inc.
7044 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

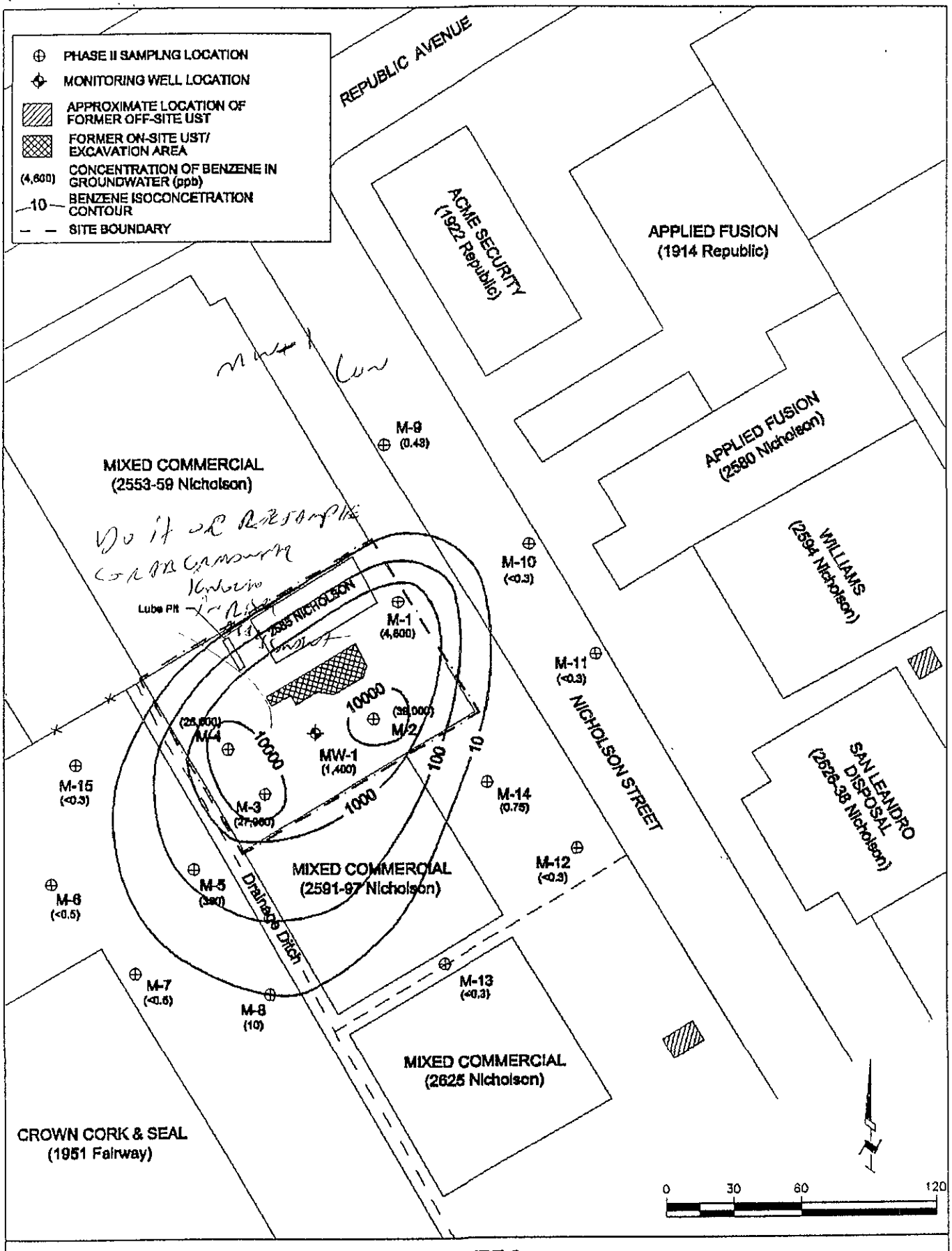


FIGURE 2

BENZENE ISOCONCENTRATION CONTOURS
2585 NICHOLSON STEET
SAN LEANDRO, CALIFONRIA

0602457\001\001\basemap.dwg 04/09/98

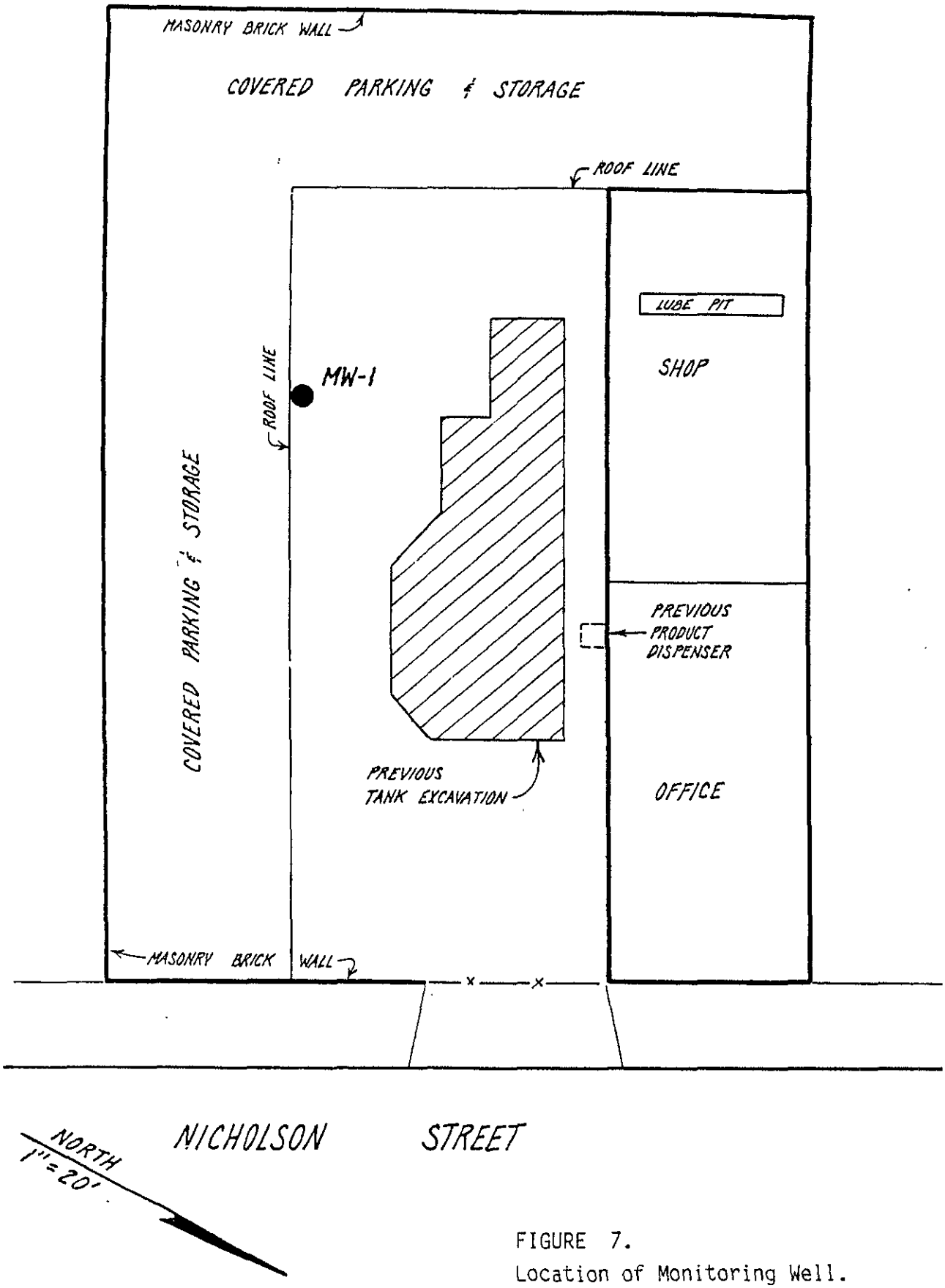
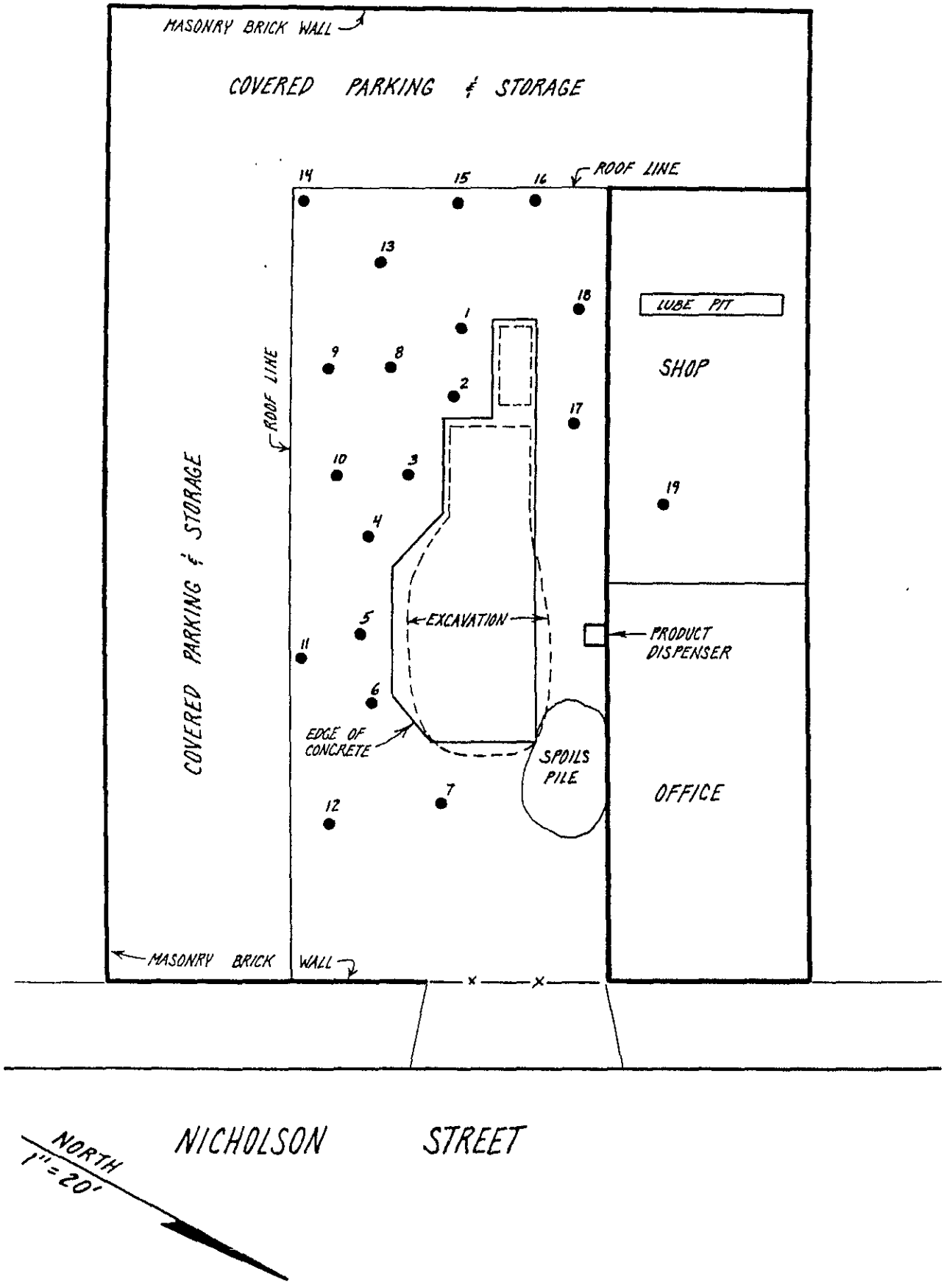


FIGURE 7.
Location of Monitoring Well.


MASONRY BRICK WALL
COVERED PARKING & STORAGE
ROOF LINE
14
15
16
13
18
LUBE PIT
1
9
8
SHOP
ROOF LINE
2
17
10
3
19
COVERED PARKING & STORAGE
4
5
EXCAVATION
PRODUCT DISPENSER
11
6
EDGE OF CONCRETE
SPOILS PILE
OFFICE
7
12
MASONRY BRICK WALL
NICHOLSON STREET
NORTH
1" = 20'

ATTACHMENT 2

Historical Tables

(Hageman-Aguiar, Inc., McLaren/Hart, and Versar, Inc.)

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 toc)	5.33	3 76	5.88	5 40	6 64		
	Groundwater elevation (feet amsl)	**9.94**	**9.93**	**10.00**	**9.85**	**9.82**	**0.001**	Southeast
July 28,1999	Depth to groundwater (feet toc)	5 85	4.19	6.37	5.84	7.11		
	Groundwater elevation (feet amsl)	**9.42**	**9.50**	**9.51**	**9.41**	**9.35**	**0.001**	Southeast
	Change from previous elevation	-0.52	-0.43	-0.49	-0.44	-0.47		
October 28, 1999	Depth to groundwater (feet toc)	5.45	4.06	5 79	5.60	6.68		
	Groundwater elevation (feet amsl)	**9.82**	**9.63**	**10.09**	**9.65**	**9.78**	**0.002**	Easterly
	Change from previous elevation	0.40	0 13	0.58	0.24	0.43		
January 20, 2000	Depth to groundwater (feet toc)	5.13	3.70	5 63	5.25	6.43		
	Groundwater elevation (feet amsl)	**10.14**	**9.99**	**10.25**	**10.00**	**10.03**	**0.001**	Easterly
	Change from previous elevation	0.32	0.36	0 16	0.35	0.25		
April 13, 2000	Depth to groundwater (feet toc)	4.95	3.61	5.41	5 06	6.15		
	Groundwater elevation (feet amsl)	**10.32**	**10.08**	**10.47**	**10.19**	**10.31**	**0.002**	Easterly
	Change from previous elevation	0.18	0.09	0.22	0.19	0.28		
July 20, 2000	Depth to groundwater (feet toc)	5 74	4.06	6.27	5.77	7 11		
	Groundwater elevation (feet amsl)	**9.53**	**9.63**	**9.61**	**9.48**	**9.35**	**0.001**	South/Southeast
	Change from previous elevation	-0.79	-0.45	-0.86	-0.71	-0 96		
October 26, 2000	Depth to groundwater (feet toc)	5 35	3 85	5.75	5.28	6 56		
	Groundwater elevation (feet amsl)	**9.92**	**9.84**	**10.13**	**9.97**	**9.90**	N/A	N/A
	Change from previous elevation	-0.40	-0.24	-0.34	-0.22	-0.41		
January 23, 2001	Depth to groundwater (feet toc)	5.70	4 00	6.21	5.73	6.70		
	Groundwater elevation (feet amsl)	**9.57**	**9.69**	**9.67**	**9.52**	**9.76**	**0.001**	South/Southeast
	Change from previous elevation	-0.35	-0.15	-0.46	-0.45	-0.14		
April 26, 2001	Depth to groundwater (feet toc)	5.38	3.80	5.90	5.40	6.65		
	Groundwater elevation (feet amsl)	**9.89**	**9.89**	**9.98**	**9.85**	**9.81**	**0.001**	Southeast
	Change from previous elevation	0.32	0.20	0 31	0.33	0.05		

Notes and Abbreviations:
ft/ft = feet per foot
amsl = above mean sea level
toc = top of casing
N/A = not available

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)	TPH-K (µg/L)	TPH-SS (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MW-1	Jun-92	10,000	ND	--	--	--	110	81	62	280
	Nov-92	9,800	ND	--	--	--	23	14	22	96
	Apr-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
	Jul-00	28,400	<50	<500	--	--	1,470	190	299	967
	Oct-00	12,900	--	--	--	<1,000	1,000	197	353	1,400
	Jan-01	17,800	--	--	--	--	957	146	353	1,060
	Apr-01	13,000	<50	--	--	--	1,200	170	450	1,300
MW-2	Apr-99	ND	ND	ND	--	--	ND	ND	ND	ND
	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
	Apr-01	160	--	--	--	--	<0.5	<0.5	<0.5	<0.5
MW-3	Apr-99	ND	540	ND	--	--	ND	ND	ND	ND
	Jul-99	300	<100	--	--	--	<1.0	<1.0	<1.0	<1.0
	Oct-99	230	--	--	--	--	<1.0	<1.0	<1 0	<1.0
	Jan-00	163	<50	--	--	--	0.8	<0.5	<0.5	<0.5
	Apr-00	98	--	--	--	--	0.7	<0.5	<0.5	<0.5
	Jul-00	<400	--	--	--	--	2.0	<0.5	<0.5	<0.5
	Oct-00	<50	--	--	--	--	<0 5	<0.5	<0.5	<1.0
	Jan-01	62	--	--	--	--	<0.5	<0.5	<0.5	<0.5
	Apr-01	62	--	--	--	--	<0.5	<0.5	<0.5	<0 5
MW-4	Apr-99	110	ND	ND	--	--	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
	Jan-00	106	--	--	--	--	0.9	<0.5	<0.5	<0.5
	Apr-00	99	--	--	--	--	1.0	<0.5	<0.5	<0.5
	Jul-00	--	--	--	--	--	--	--	--	--
	Oct-00	139	--	--	--	--	0.6	<0.5	<0.5	<1.0
	Jan-01	85	--	--	--	--	<0.5	<0.5	<0.5	<0.5
	Apr-01	130	--	--	--	--	<0.5	<0.5	<0.5	<0.5
MW-5	Apr-99	270	ND	ND	--	--	ND	ND	ND	ND
	Jul-99	570	<100	--	--	--	<1.0	<1.0	<1.0	<1.0
	Oct-99	540	--	--	--	--	<1.0	<1 0	<1.0	<1.0
	Jan-00	231	--	--	--	--	1.9	<0.5	<0.5	<0.5
	Apr-00	353	--	--	--	--	3.5	<0.5	<0.5	<0.5
	Jul-00	<400	--	--	--	--	<0.5	<0.5	<0.5	<0.5
	Oct-00	156	--	--	--	--	1.0	<0.5	<0.5	<1.0
	Jan-01	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5
	Apr-01	200	--	--	--	--	<0 5	<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 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
-- = not analysed

Table 3
Intrinsic Bioremediation Indicater Analytical Results for Groundwater Samples
2585 Nicholson Street
San Leandro, California

		Bioremediation Indicators					
Monitoring Well No	Date	Methane (µg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Redox (mV)	D/O (mg/L)
MW-1	Jan-00	2590	0.27	46	576	-106	2.51
	Apr-00	3.1	<0 20	14	614	137	0.94
	Jul-00	2170	<0.5	13	524	-167	1.01
	Oct-00	2660	<0.5	32	578	-107	0.69
	Jan-01	156	<0 1	10	558	-156	1.17
	Apr-01	2300	<0.5	<4.0	560	-132	0.12
MW-2	Jan-00	1.5	3.04	82	530	-048	1.63
	Apr-00	<0.01	24	75	498	195	0.93
	Jul-00	3.1	6.3	59	706	-015	1.05
	Oct-00	2.5	24	24	546	164	2.63
	Jan-01	1.9	5.5	90	468	185	7.97
	Apr-01	2.2	22	230	520	159	1.63
MW-3	Jan-00	13.0	1.37	45	346	-055	2.61
	Apr-00	0.02	3.2	20	304	061	0.98
	Jul-00	31	1.9	44	312	069	0.95
	Oct-00	42	8.9	47	366	-009	2.28
	Jan-01	16	2.2	28	368	157	7.34
	Apr-01	12	6.1	42	370	001	2.49
MW-4	Jan-00	--	--	--	--	-060	1.49
	Apr-00	--	--	--	--	181	0.94
	Jul-00	--	--	--	--	033	0.76
	Oct-00	--	--	--	--	132	3.05
	Jan-01	--	--	--	--	189	11.2
	Apr-01	--	--	--	--	107	1.6
MW-5	Jan-00	--	--	--	--	-072	1.91
	Apr-00	--	--	--	--	116	1.48
	Jul-00	--	--	--	--	-045	1.02
	Oct-00	--	--	--	--	125	0.96
	Jan-01	--	--	--	--	201	11.97
	Apr-01	--	--	--	--	73	2.21

Notes and Abbreviations:
Methane by Gas Chromatography / Mass Spectroscopy
Nitrate by EPA method 353 2
Sulfate by EPA method 375.4
Alkalinity by EPA method 2320B
Redox - Reduction/Oxidation potential in millivolts, field measured with direct reading instrument, average of last three readings
D/O - Dissolved Oxygen, field measured with direct reading instrument, average of last three readings.
µg/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
-- = not analysed

TABLE 1
SOIL ANALYTICAL RESULTS
2585 NICHOLSON STREET
SAN LEANDRO, CA

Boring Location:	M-1	M-2	M-3	M-4	M-5	M-8
Sample Depth (ft.):	6	5	5	5	5	5
TPH (mg/kg)						
Gasoline	1100	330	790	210	<1.0	<1.0
Motor oil	<500	<1000	<200	<100	1.5	<1.0
Purgeable Aromatics (ug/kg)						
Benzene	4500	2100	1300	2500	<5.0	<5.0
Toluene	45000	16000	23000	18000	<5.0	<5.0
Ethylbenzene	4100	7100	17000	6900	<5.0	<5.0
Xylenes, Total	110000	37000	97000	36000	<10.0	<10.0
MTBE	<40000	<8000	<8000	<8000	<80	<80

TPH - Total petroleum hydrocarbons by Modified EPA Method 8015.
Purgeble Aromatics - By EPA Method 8020.
mg/kg - Milligrams per kilogram.
ug/kg - Micrograms per kilogram.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
2585 NICHOLSON STREET
SAN LEANDRO, CA

Sampling Location:	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12	M-13	M-14	M-15	MW-1
Sample Date:	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Jun-97
TPH (mg/l)																
Gasoline	47	1300	67	79	1.5	<0.05	<0.05	0.36	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	20
Motor oil	<12	<22	<70	<2.8	<1.0	<2.8	3.4	0.51	0.29	0.97	0.68	4.0	0.11	1.8	2.2	<0.25
Diesel	<12	<22	<70	<2.8	<1.0	<2.8	<1.6	<0.25	<0.05	0.26	0.27	<0.5	<0.05	<0.25	<0.5	<0.25
Purgeable Aromatics (ug/l)																
Benzene	4800	39000	27000	26000	350	<0.5	<0.5	10	0.43	<0.3	<0.3	<0.3	<0.3	0.75	<0.3	1400
Toluene	17000	100000	22000	22000	17	<0.5	<0.5	1.8	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	2800
Ethylbenzene	2200	40000	2200	2000	150	<0.5	<0.5	1.1	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	530
Xylenes, Total	12000	200000	12000	11000	37	<1.5	<1.5	2.5	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	6900
MTBE	<500	14000	<1000	<1000	19	<1.0	<1.0	12	12	<1.0	<1.0	<1.0	<1.0	18	<1.0	270

TPH - Total petroleum hydrocarbons by Modified EPA Method 8015.
Purgeble Aromatics - By EPA Method 8020.
MTBE - Methyl Tert-Butyl Ether.
mg/l - Milligrams per liter.
ug/l - Micrograms per liter.

TABLE 1 (continued)

Soil Sampling Results

Boring	Depth (feet)	Total Recoverable Hydrocarbons (mg/kg)
B-15	4 6	ND 4,200
B-16	4 6	ND 3,400
B-17	4 6	ND 2,900
B-18	4 6	ND 2,800
B-19	4 6	300 2,000
DETECTION LIMIT		50

TABLE 1 (continued)

Soil Sampling Results

Boring	Depth (feet)	Total Recoverable Hydrocarbons (mg/kg)
B-8	4 6	170 7,100
B-9	4 6	230 6,600
B-10	4 6	ND 9,900
B-11	4 6	490 3,800
B-12	4 6	ND 1,800
B-13	4 6	ND 16,000
B-14	4 6	ND 7,500
DETECTION LIMIT		50

TABLE 1.

Soil Sampling Results

EPA Method 418.1 (Infrared Spectroscopy)

Boring	Depth (feet)	Total Recoverable Hydrocarbons (mg/kg)
B-1	4 6	100 5,800
B-2	4 6	250 11,000
B-3	4 6	ND 5,600
B-4	4 6	260 9,500
B-5	4 6	ND 4,200
B-6	4 6	59 1,800
B-7	4 6	280 1,300
DETECTION LIMIT		50

TABLE 2.

Analysis by Gas Chromatography (EPA method 8015 and 8020)

Boring	Depth (feet)	Total Recoverable Petroleum Hydrocarbons (mg/Kg)	TPH as Gasoline (mg/Kg)	TPH as Kerosene (mg/Kg)	TPH as Diesel (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl-benzene (ug/Kg)	Total Xylenes (ug/Kg)	Motor Oil (mg/Kg)
B-2	4	250	270	ND	8.6	1,300	1,700	1,800	4,900	ND
B-6	4	59	280	ND	ND	780	1,000	1,000	3,900	ND
B-7	4	280	340	ND	280	1,500	1,900	1,600	6,200	ND
B-8	4	170	240	ND	ND	950	1,200	1,300	4,700	ND
B-9	4	230	230	ND	17	1,200	1,600	1,700	6,200	ND
B-11	4	490	360	ND	86	600	1,200	1,500	5,100	ND
B-19	4	300	440	ND	40	680	1,200	1,600	6,300	ND
Detection Limit		50	1.0	1.0	1.0	5.0	5.0	5.0	5.0	10

ND = Not Detected

TABLE 3.

Soil Sampling Results

(Monitoring Well Installation)

Boring	Depth (feet)	TPH as Gasoline (mg/Kg)	TPH as Kerosene (mg/Kg)	TPH as Diesel (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl-benzene (ug/Kg)	Total Xylenes (ug/Kg)	Motor Oil (mg/Kg)	Oil & Grease (mg/Kg)
MW-1	4 6	18 11,000	ND ND	ND 190	200 32,000	180 59,000	22 44,000	760 17,000	ND ND	ND ND
Detection Limit		1.0	1.0	1.0	5.0	5.0	5.0	5.0	10	10

ND = Not Detected

ATTACHMENT 3

April 2001 Quarterly Monitoring Report

(Versar, Inc.)

Versar INC.

June 20, 2001

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

Reference: Groundwater Monitoring Report (April 2001)
2585 Nicholson Street in San Leandro, California
ES# 305582
Versar Project No. 4422-003

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. 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 April 26, 2001. The results of this monitoring event are presented graphically on Figure 3 in Attachment I, and are summarized in tables in Attachment II. This report has been prepared in response to the request by the Alameda County Health Care Services (ACHCS) letters dated July 14, 1999, and October 29, 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 areas over the western and southern edges of the property.

• SACRAMENTO AREA OFFICE •
7844 MADISON AVENUE, SUITE 167 • FAIR OAKS, CA 95628 • TELEPHONE (916) 962-1612 FAX (916) 962-2678

BACKGROUND

According to prior assessment documents, 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 as diesel (TPHd) and gasoline (TPHg) in both media, and soils were over excavated. One groundwater monitoring well (MW-1) was installed in 1992, and an oil absorbent sock was used to collect free-floating product (maximum of 1.25-inches).

In April 1999, Versar installed four additional monitoring wells on or around the Site perimeter. Quarterly monitoring of groundwater from the monitoring wells has been performed since well installation. Groundwater monitoring has identified TPHg and benzene, toluene, ethylbenzene, and xylenes (BTEX) on-site in well MW-1. Low to non-detect levels of the constituents have been identified in the surrounding monitoring wells. This report presents the April 2001 monitoring episode.

QUARTERLY GROUNDWATER MONITORING ACTIVITIES

Versar performed groundwater monitoring of the Site on April 26, 2001, sampling the five wells for TPHg and BTEX. Three of the wells were sampled for parameters indicative of intrinsic bio-remediation. 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, oxidation/reduction potential (redox), and dissolved oxygen (DO) in monitoring wells MW-1, MW-2, MW-3, MW-4, and MW-5;
- Submit the groundwater samples to a California-certified analytical laboratory for analysis of one or more of the following; TPHg, total petroleum hydrocarbons as diesel (TPHd), BTEX, methane, nitrate, sulfate, and alkalinity; 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 April 26, 2001, the depth to groundwater in wells MW-1, MW-2, MW-3, MW-4 and MW-5 was measured to characterize groundwater flow direction and gradient. The depths to groundwater at each well, along with historical measurements, are presented in Table 1. Groundwater surface elevations are 0.05 to 0.33 foot higher than in January 2001. Groundwater was measured to be flowing in a southerly direction, at a gradient of approximately 0.001 feet per foot. Figure 3 in Attachment I is a groundwater gradient map generated from the April 26, 2001 data. The gradient depicted on Figure 3 depicts some localized recharge effects likely related to precipitation. The overall gradient and direction of groundwater flow is relatively consistent with those observed previously at the Site.

Groundwater Sampling Activities

On April 26, 2001, 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, redox, and DO 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 MW-1, MW-2, MW-3, MW-4, and MW-5 were analyzed for TPHg and BTEX. Groundwater samples collected from Site wells MW-1, MW-2, and MW-3 were analyzed for methane, sulfate, nitrate and alkalinity. The groundwater sample from Site well MW-1 was also analyzed for TPHd. All analyses were performed by Excelchem Environmental Labs (Excelchem), California State Laboratory Certification No. 2119. 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 April 26, 2001 sampling event was stored on-site in

two DOT-approved, 55-gallon steel drums, which are pending off-site recycling by Seaport Environmental.

ANALYTICAL RESULTS

The analytical results of the TPH and BTEX analyses are summarized in Table 2 in Attachment II. Figure 3 in Attachment I spatially depicts the analytical results for the April 26, 2001 groundwater monitoring event. The analytical results for methane, nitrate, sulfate, and alkalinity analyses; and DO and redox measurements; are summarized in Table 3 in Attachment II. The laboratory analytical reports are included in Attachment V. The following is a summary of the analytical results:

- TPHg was detected in each monitoring well at concentrations ranging from 62 micrograms per liter well (μg/L) in well MW-3, to 13,000 μg/L in well MW-1.
- Benzene was detected in well MW-1 only at a concentration of 1,200 μg/L;
- Toluene was detected in well MW-1 only at a concentration of 170 μg/L;
- Ethylbenzene was detected in well MW-1 only at a concentration of 450 μg/L; and
- Total xylene isomers was detected in well MW-1 only at a concentration of 1,300 μg/L.

Samples collected from wells MW-1, MW-2, and MW-3 to assess the potential for intrinsic bio-remediation indicate that anaerobic intrinsic biodegradation continues to occur at the Site. Methane concentrations are elevated in MW-1 relative to other samples, suggesting anaerobic respiration. The nitrate and sulfate concentrations are lower in MW-1, suggesting use of these electron receptors in biological degradation. In addition, redox is strongly negative and DO is lower in MW-1, suggesting biological activity.

CONCLUSIONS

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

- During the April 2001 monitoring event, groundwater surface elevations were 0.05 to 0.33 foot higher than in January 2001

- TPHg and BTEX were detected in the sample collected from well MW-1. Low levels of TPHg were detected in samples collected from other Site monitoring wells. BTEX compounds were not detected in the samples collected from wells other than MW-1. Concentrations of TPHg and BTEX in well MW-1 remained relatively consistent during the April 2001 monitoring event. The data indicates that the area of residual impact at the Site remains located near the center of the property, in the vicinity of MW-1.

- Samples collected from wells MW-1, MW-2, and MW-3 to assess the potential for intrinsic bio-remediation indicate that anaerobic intrinsic biodegradation continues to occur at the Site.

FUTURE ACTIVITIES

In a letter from the ACHCS dated June 4, 2001, the ACHCS authorized reduction of the monitoring program for the Site. While specific analyses were not identified in the letter, Versar's interpretation of the revised program is as follows: 1) groundwater samples will be collected from well MW-1 on a semi-annual basis for TPHg and BTEX analyses; 2) groundwater sampling will not be required for the remaining monitoring wells; 3) groundwater surface elevations for each monitoring well will be measured on a semi-annual basis; and 4) reporting will occur on a semi-annual basis. The initial event of this revised program will occur in October 2001.

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.

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.

Versar, Inc.. *Groundwater Monitoring and Utility Survey Report.* Prepared for Bank of America, N.T. & S.A.. Project No. 4422-001. January 6, 2000.

Versar, Inc.. *Groundwater Monitoring Report, January 2000.* Prepared for Bank of America, N.T. & S.A.. Project No. 4422-001. March 21, 2000.

Versar, Inc.. *Groundwater Monitoring Report, April 2000.* Prepared for Bank of America, N.T. & S.A.. Project No. 4422-002. May 31, 2000.

Versar, Inc.. *Groundwater Monitoring Report, July 2000.* Prepared for Bank of America, N.T. & S.A.. Project No. 4422-002. September 26, 2000.

Versar, Inc.. *Groundwater Monitoring Report, October 2000.* Prepared for Bank of America, N.T. & S.A.. Project No. 4422-002. December 20, 2000.

Versar, Inc.. *Risk-Based Corrective Action (RBCA) Analysis Update.* Prepared for Cox, Castle & Nicholson LLP, Project No. 4422-003. March 21, 2000.

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 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. Ms. Annette Cornelius, Environmental Assessor, performed the groundwater sample collection. Mr. Scott Allin, Registered Environmental Assessor, prepared the report, and supervised the field activities. Mr. Tim Berger, Registered Geologist, reviewed the report.

Prepared by:

Scott Allin, R.E.A.
Senior Program Manager
Versar - Pacific Region

Reviewed by:

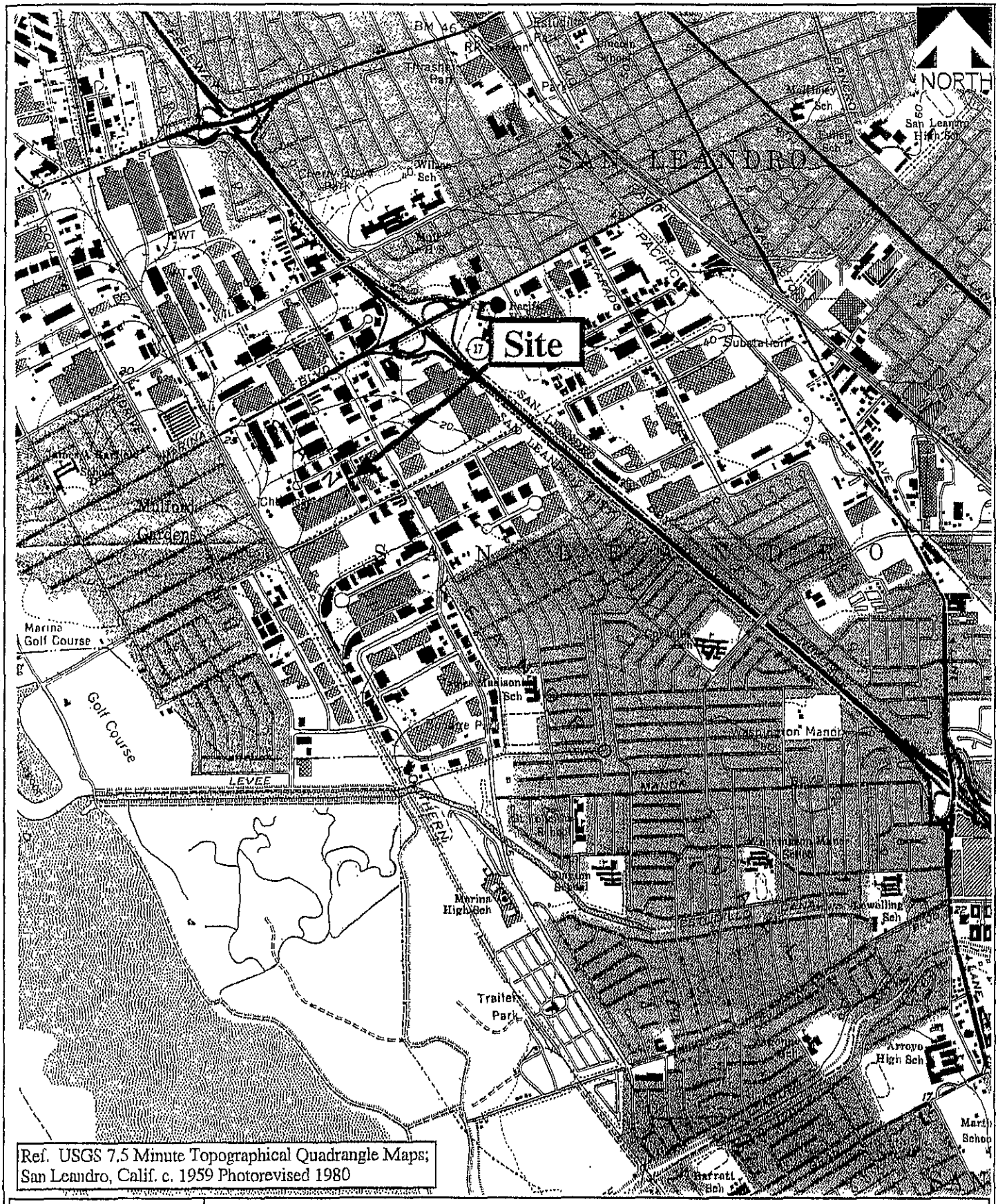
Tim Berger, R.G.
Supervising Geologist
Versar - Pacific Region

Attachment I - Figures
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

cc: Amir Gholami (Alameda County)
Mike Bakaldin (City of San Leandro)

ATTACHMENT I

Figures



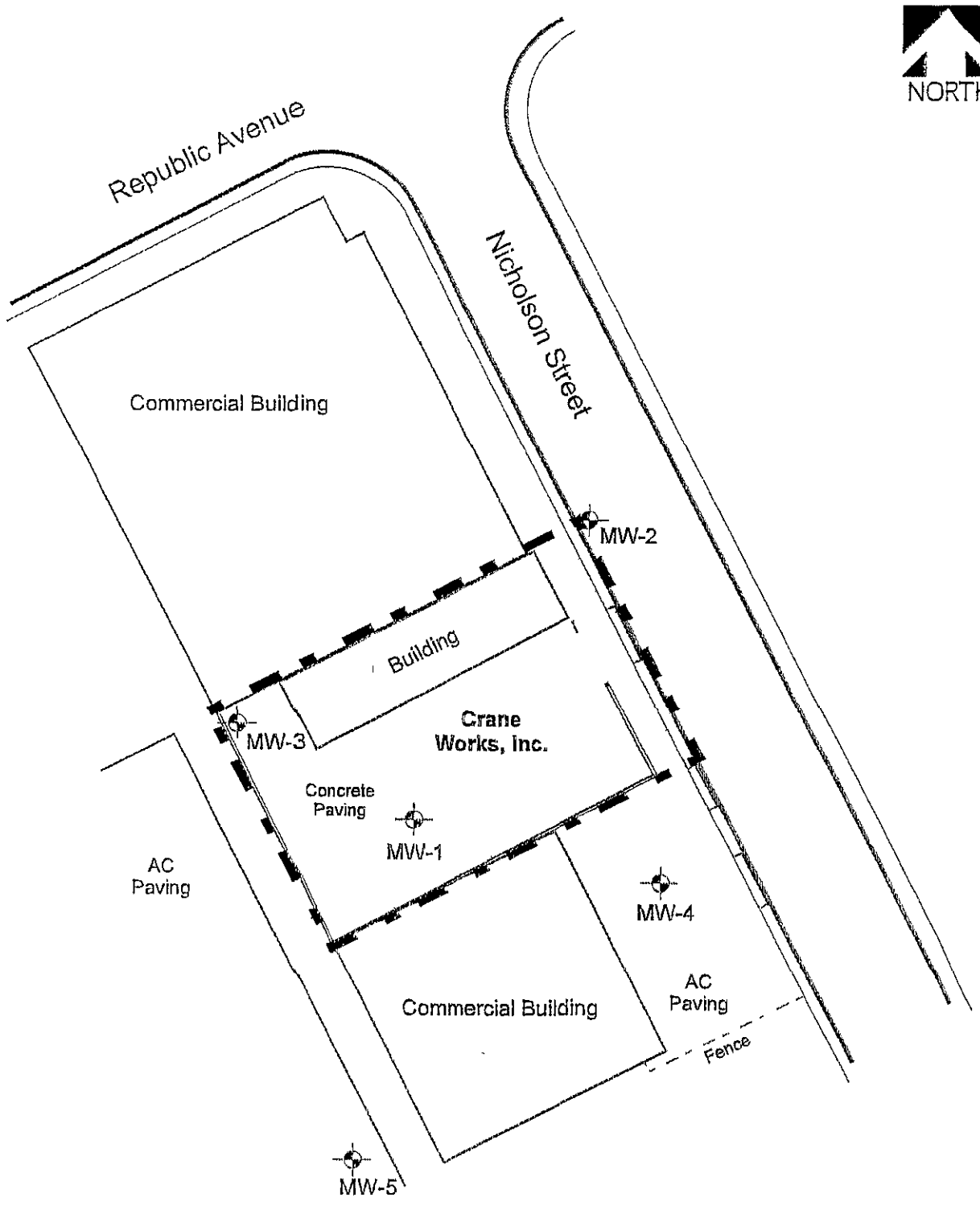
Dr. By:	Dale Anderson
Date:	5/10/99
Scale:	1 inch=2,000 feet
Versar Project No.	4422-001
Path/File :	P:\BOFA\SANLEAN\REPORT\Fig1

Versar Inc.
7044 Madison Avenue
Suite 167
Fair Oaks, CA 95628
(916) 962-1612

SITE LOCATION

2585 Nicholson Street
San Leandro, California

Figure 1



(Scale - Feet)

0 20 40 60

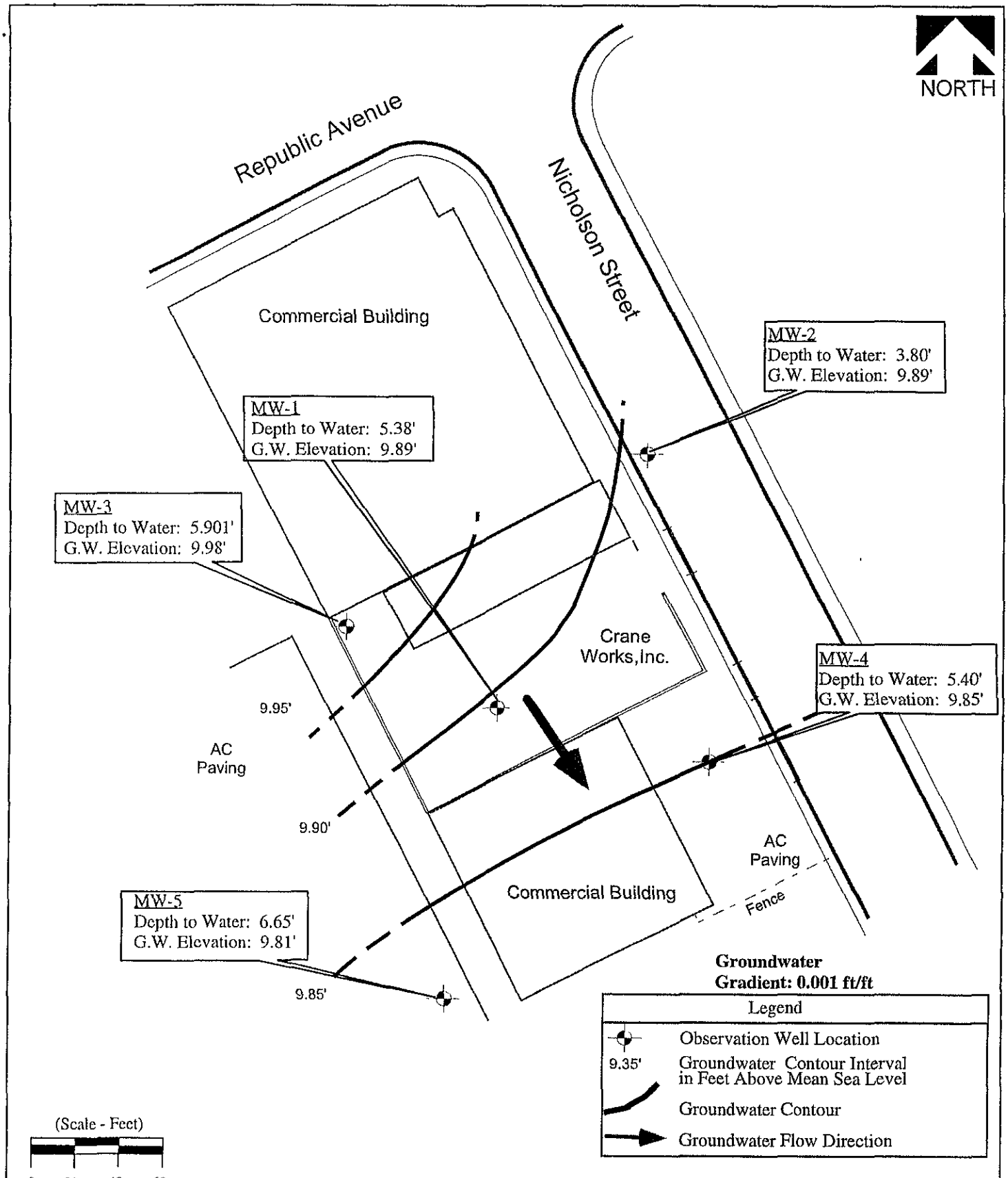
Dr. By: Dale Anderson	
Date: 5/10/99	
Scale: 1 Inch= 60 feet	
Versar Project No. 4422-001	
Path/File: P:\BOFA\SanLean\Report\Fig2	

Versar Inc.
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



Dr. By:	AC
Date:	5/8/01
Scale:	1 inch= 60 feet
Versar Project No.	4422-003

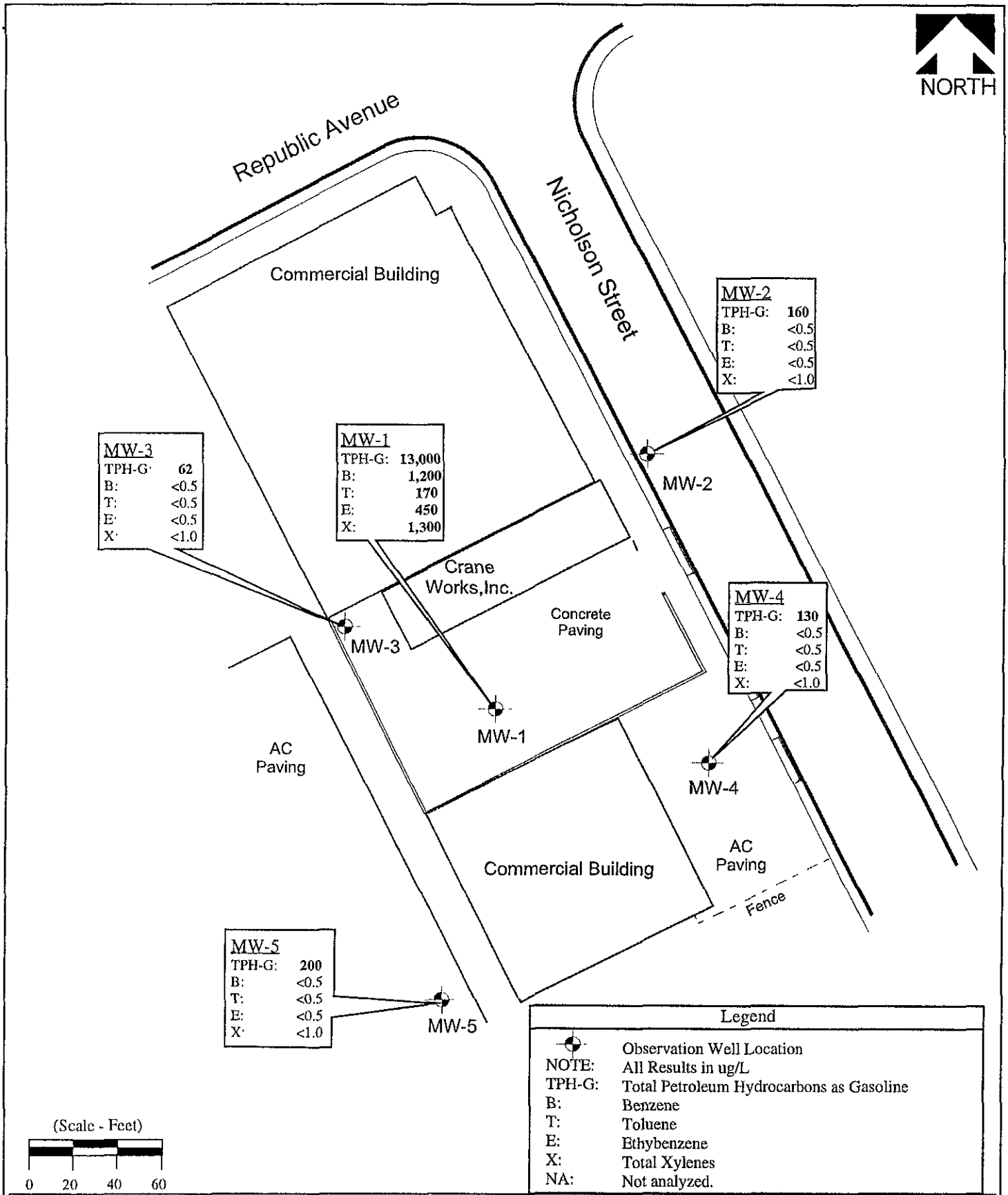
Versar Inc.
7844 Madison Avenue
Suite 167
Fair Oaks, CA 95628
(916) 962-1612

Groundwater Contour Map

April 26, 2001
2585 Nicholson Street
San Leandro, California

Figure 3

Path/File : P\BOFA\SanLean\QM&S\Apr01\Fig3



Dr. By:	AC
Date:	05/9/01
Scale:	1 inch= 60 feet
Versar Project No.	4422-003

Versar Inc.
7844 Madison Avenue
Suite 167
Fair Oaks, CA 95628
(916) 962-1612

Laboratory Analytical Results For Groundwater Samples April 26, 2001

2585 Nicholson Street
San Leandro, California

Figure 4

Path/File: P\BOFA\SanLean\QMS\Apr01\Fig4

ATTACHMENT II

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 toc)	5 33	3 76	5.88	5.40	6 64		
	Groundwater elevation (feet amsl)	**9.94**	**9.93**	**10.00**	**9.85**	**9.82**	**0.001**	Southeast
July 28,1999	Depth to groundwater (feet toc)	5.85	4.19	6.37	5 84	7.11		
	Groundwater elevation (feet amsl)	**9.42**	**9.50**	**9.51**	**9.41**	**9.35**	**0.001**	Southeast
	Change from previous elevation	-0.52	-0.43	-0.49	-0.44	-0.47		
October 28, 1999	Depth to groundwater (feet toc)	5 45	4.06	5.79	5.60	6 68		
	Groundwater elevation (feet amsl)	**9.82**	**9.63**	**10.09**	**9.65**	**9.78**	**0.002**	Easterly
	Change from previous elevation	0.40	0.13	0.58	0.24	0.43		
January 20, 2000	Depth to groundwater (feet toc)	5.13	3.70	5 63	5.25	6.43		
	Groundwater elevation (feet amsl)	**10.14**	**9.99**	**10.25**	**10.00**	**10.03**	**0.001**	Easterly
	Change from previous elevation	0.32	0.36	0.16	0 35	0.25		
April 13, 2000	Depth to groundwater (feet toc)	4 95	3.61	5.41	5.06	6 15		
	Groundwater elevation (feet amsl)	**10.32**	**10.08**	**10.47**	**10.19**	**10.31**	**0.002**	Easterly
	Change from previous elevation	0.18	0 09	0.22	0.19	0.28		
July 20, 2000	Depth to groundwater (feet toc)	5.74	4 06	6.27	5 77	7.11		
	Groundwater elevation (feet amsl)	**9.53**	**9.63**	**9.61**	**9.48**	**9.35**	**0.001**	South/Southeast
	Change from previous elevation	-0.79	-0.45	-0.86	-0.71	-0.96		
October 26, 2000	Depth to groundwater (feet toc)	5 35	3.85	5.75	5 28	6 56		
	Groundwater elevation (feet amsl)	**9.92**	**9.84**	**10.13**	**9.97**	**9.90**	N/A	N/A
	Change from previous elevation	-0.40	-0.24	-0.34	-0 22	-0.41		
January 23, 2001	Depth to groundwater (feet toc)	5.70	4 00	6 21	5.73	6.70		
	Groundwater elevation (feet amsl)	**9.57**	**9.69**	**9.67**	**9.52**	**9.76**	**0.001**	South/Southeast
	Change from previous elevation	-0.35	-0.15	-0.46	-0.45	-0 14		
April 26, 2001	Depth to groundwater (feet toc)	5 38	3.80	5.90	5.40	6 65		
	Groundwater elevation (feet amsl)	**9.89**	**9.89**	**9.98**	**9.85**	**9.81**	**0.001**	Southeast
	Change from previous elevation	0.32	0.20	0.31	0.33	0.05		

Notes and Abbreviations:
ft/ft = feet per foot
amsl = above mean sea level
toc = top of casing
N/A = not available

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)	TPH-K (µg/L)	TPH-SS (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MW-1	Jun-92	10,000	ND	--	--	--	110	81	62	280
	Nov-92	9,800	ND	--	--	--	23	14	22	96
	Apr-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
	Jul-00	28,400	<50	<500	--	--	1,470	190	299	967
	Oct-00	12,900	--	--	--	<1,000	1,000	197	353	1,400
	Jan-01	17,800	--	--	--	--	957	146	353	1,060
	Apr-01	13,000	<50	--	--	--	1,200	170	450	1,300
MW-2	Apr-99	ND	ND	ND	--	--	ND	ND	ND	ND
	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
	Apr-01	160	--	--	--	--	<0.5	<0.5	<0.5	<0.5
MW-3	Apr-99	ND	540	ND	--	--	ND	ND	ND	ND
	Jul-99	300	<100	--	--	--	<1.0	<1.0	<1.0	<1.0
	Oct-99	230	--	--	--	--	<1.0	<1.0	<1.0	<1.0
	Jan-00	163	<50	--	--	--	0.8	<0.5	<0.5	<0.5
	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	--	--	--	--	<0.5	<0.5	<0.5	<1 0
	Jan-01	62	--	--	--	--	<0.5	<0.5	<0.5	<0.5
	Apr-01	62	--	--	--	--	<0.5	<0.5	<0.5	<0.5
MW-4	Apr-99	110	ND	ND	--	--	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
	Jan-00	106	--	--	--	--	0.9	<0.5	<0.5	<0.5
	Apr-00	99	--	--	--	--	1.0	<0.5	<0.5	<0.5
	Jul-00	--	--	--	--	--	--	--	--	--
	Oct-00	139	--	--	--	--	0.6	<0.5	<0.5	<1.0
	Jan-01	85	--	--	--	--	<0.5	<0.5	<0 5	<0.5
	Apr-01	130	--	--	--	--	<0.5	<0.5	<0.5	<0.5
MW-5	Apr-99	270	ND	ND	--	--	ND	ND	ND	ND
	Jul-99	570	<100	--	--	--	<1.0	<1.0	<1.0	<1.0
	Oct-99	540	--	--	--	--	<1.0	<1.0	<1.0	<1.0
	Jan-00	231	--	--	--	--	1.9	<0.5	<0.5	<0.5
	Apr-00	353	--	--	--	--	3.5	<0.5	<0.5	<0.5
	Jul-00	<400	--	--	--	--	<0.5	<0.5	<0.5	<0 5
	Oct-00	156	--	--	--	--	1.0	<0.5	<0.5	<1.0
	Jan-01	<50	--	--	--	--	<0.5	<0.5	<0.5	<0.5
	Apr-01	200	--	--	--	--	<0.5	<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 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
-- = not analysed

Table 3
Intrinsic Bioremediation Indicator Analytical Results for Groundwater Samples
2585 Nicholson Street
San Leandro, California

		Bioremediation Indicators					
Monitoring Well No	Date	Methane (µg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Alkalinity (mg/L)	Redox (mV)	D/O (mg/L)
MW-1	Jan-00	2590	0.27	46	576	-106	2.51
	Apr-00	3.1	<0.20	14	614	137	0.94
	Jul-00	2170	<0 5	13	524	-167	1.01
	Oct-00	2660	<0 5	32	578	-107	0.69
	Jan-01	156	<0.1	10	558	-156	1.17
	Apr-01	2300	<0.5	<4.0	560	-132	0.12
MW-2	Jan-00	1.5	3.04	82	530	-048	1.63
	Apr-00	<0 01	24	75	498	195	0.93
	Jul-00	3.1	6.3	59	706	-015	1.05
	Oct-00	2.5	24	24	546	164	2.63
	Jan-01	1.9	5.5	90	468	185	7.97
	Apr-01	2.2	22	230	520	159	1.63
MW-3	Jan-00	13.0	1.37	45	346	-055	2.61
	Apr-00	0.02	3.2	20	304	061	0.98
	Jul-00	31	1.9	44	312	069	0.95
	Oct-00	42	8.9	47	366	-009	2.28
	Jan-01	16	2.2	28	368	157	7.34
	Apr-01	12	6.1	42	370	001	2.49
MW-4	Jan-00	--	--	--	--	-060	1.49
	Apr-00	--	--	--	--	181	0.94
	Jul-00	--	--	--	--	033	0.76
	Oct-00	--	--	--	--	132	3.05
	Jan-01	--	--	--	--	189	11.2
	Apr-01	--	--	--	--	107	1.6
MW-5	Jan-00	--	--	--	--	-072	1.91
	Apr-00	--	--	--	--	116	1.48
	Jul-00	--	--	--	--	-045	1.02
	Oct-00	--	--	--	--	125	0.96
	Jan-01	--	--	--	--	201	11.97
	Apr-01	--	--	--	--	73	2.21

Notes and Abbreviations:
Methane by Gas Chromatography / Mass Spectroscopy
Nitrate by EPA method 353.2
Sulfate by EPA method 375.4
Alkalinity by EPA method 2320B
Redox - Reduction/Oxidation potential in millivolts, field measured with direct reading instrument, average of last three readings.
D/O - Dissolved Oxygen, field measured with direct reading instrument, average of last three readings.
µg/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.
-- = not analysed

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 pre-cleaned 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.

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

MONITORING WELL PURGE TABLE

Project Number: 10.4422.4422.003	**Site Name:** Former Bank of America-San Leandro
Well Number: MW5	**Date(s) Purged:** 4/26/01
OVA - Ambient: No Reading Taken	**Purge Method:** Disposable Bailer
OVA - Vault: No Reading Taken	**Purge Rate:**
OVA - Casing: No Reading Taken	**Date & Time Sampled:** 4/26/01 - 1310
Water Level - Initial: 6.65 Feet@ 12.29	**Purged & Sampled:** Annette Cornelius
Water Level - Final: 6.68 Feet@ 13.00	**Sampling Method:** Disposable Bailer
Well Depth: 15.5 feet	**Free Product:**
Well Diameter: 2 inch	**Sheen:**
Well Casing Volume:	**Odor:**

Time 12:31	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l) 2.05	Redox	Turbidity
1234	0.5	17.7	6.9	1049		092	
12:36	2	17.8	6.9	710		082	
12:41	3	17.8	6.9	412	1.50	067	
12:50	5	18.0	6.9	1311	1.42	070	
	Sample @ 1310						

Field Notes:

5:38 C 10:04

MONITORING WELL PURGE TABLE

Project Number: 10.4422.4422.003	**Site Name:** Former Bank of America-San Leandro
Well Number: MW1	**Date(s) Purged:** 4/26/01
OVA - Ambient: No Reading Taken	**Purge Method:** Centrifugal Pump
OVA - Vault: No Reading Taken	**Purge Rate:**
OVA - Casing: No Reading Taken	**Date & Time Sampled:** 4/26/01 - 12:10
Water Level - Initial: 5.38 Feet@ 11:24	**Purged & Sampled:** Annette Cornelius
Water Level - Final: 5.45 Feet@ 12:01	**Sampling Method:** Disposable Bailer
Well Depth: 18.0 feet	**Free Product:**
Well Diameter: 6 inch	**Sheen:**
Well Casing Volume:	**Odor:**

Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Redox	Turbidity
11:31	0.5	16.8	6.9	527	0.24	-130	
11:35	10	17.3	6.7	769	0.19	-140	
	20					-138	
11:39	30	17.4	6.8	643	.12	-138	
11:46	40	17.7	6.9	822	.12	-132	
11:51	50	17.8	6.4	889	.14	-120	
	Sampled 1210						

Field Notes:

MONITORING WELL PURGE TABLE

Project Number: 10.4422.4422.003	**Site Name:** Former Bank of America-San Leandro
Well Number: MW2	**Date(s) Purged:** 4/26/01
OVA - Ambient: No Reading Taken	**Purge Method:** Disposable Bailer
OVA - Vault: No Reading Taken	**Purge Rate:**
OVA - Casing: No Reading Taken	**Date & Time Sampled:** 4/26/01 - 10:00
Water Level - Initial: 3.50 Feet@ 9:37	**Purged & Sampled:** Annette Cornelius
Water Level - Final: 3.83 Feet@ 9:55	**Sampling Method:** Disposable Bailer
Well Depth: feet	**Free Product:**
Well Diameter: 2 inch	**Sheen:**
Well Casing Volume:	**Odor:**

Time 9:37	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l) 1.36	Redox	Turbidity
9.42	0.5	17 7	7 4	871		172	clear
9.44	2	17 9	7 3	1133		165	1
9.47	3	18.0	7.3	1124	1.91	160	1
9:51	5	17.6	7.3	896	1.36	~~167~~	2
	Sample @ 10:00						

Field Notes:

MONITORING WELL PURGE TABLE

Project Number: 10.4422.4422.003	**Site Name:** Former Bank of America-San Leandro
Well Number: MW4	**Date(s) Purged:** 4/26/01
OVA - Ambient: No Reading Taken	**Purge Method:** Disposable Bailer
OVA - Vault: No Reading Taken	**Purge Rate:**
OVA - Casing: No Reading Taken	**Date & Time Sampled:** 4/26/01 - 9:00
Water Level - Initial: 5.10 Feet@ 8:24	**Purged & Sampled:** Annette Cornelius
Water Level - Final: 5.43 Feet@ 8:57	**Sampling Method:** Disposable Bailer
Well Depth: feet	**Free Product:**
Well Diameter: 2 inch	**Sheen:**
Well Casing Volume:	**Odor:**

Time	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Redox	Turbidity
					1.45		
8:33	0.5	19.0	7.4	1084		084	clear
8:39	2	18.8	7.3	1229		100	clear
8:42	3	18.4	7.2	0802	1.800	108	slight
8:50	5	19.9	7.2	918	1.40	115	"
	Sampled 9:00						

Field Notes:

MONITORING WELL PURGE TABLE

Project Number: 10.4422.4422.003	**Site Name:** Former Bank of America-San Leandro
Well Number: MW3	**Date(s) Purged:** 4/26/01
OVA - Ambient: No Reading Taken	**Purge Method:** Disposable Bailer
OVA - Vault: No Reading Taken	**Purge Rate:**
OVA - Casing: No Reading Taken	**Date & Time Sampled:** 4/26/01 - 11:00
Water Level - Initial: 5.90 Feet@ 10:30	**Purged & Sampled:** Annette Cornelius
Water Level - Final: 5.93 Feet@ 10:52	**Sampling Method:** Disposable Bailer
Well Depth: feet	**Free Product:**
Well Diameter: 2 inch	**Sheen:**
Well Casing Volume:	**Odor:**

Time 10:34	Purge Water Removed (gal)	Temperature (degrees Fahrenheit)	pH	Electrical Conductivity (umhos/cm)	Dissolved Oxygen (mg/l) 1.90	Redox	Turbidity
10:15	0.5	15.7	7.1	272		049	slight
10:39	2	15.0	7.2	303		005	mod
"	3	16.1	7.2	539	2.45	-006	
10:49	5	16.5	7.1	591	2.53	001	
		Sample @ 11:00					

Field Notes:

ATTACHMENT V

Laboratory Analytical Reports and Chain-of-Custody Documentation

4010 18

Versar INC

CHAIN OF CUSTODY RECORD

Due 05/04 bin # A-49

PROJECT NO.	PROJECT NAME	INDUSTRIAL HYGIENE SAMPLE
442003	B of A San Leandro	Y / N

SAMPLERS: (Signature) Annette Cornelius (Printed) Annette Cornelius

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	PARAMETERS: TPHg BTEX	TPHd	Methanol	Alkalinity	Sulfate	Nitrate			REMARKS
mw 1	4/26/01	1210		X	W0401403	8	X	X	X	X	X	X			brought in sample
mw 2	"	1000		X	W0401404	7	X		X	X	X	X			W/24 hrs left for
mw 3	"	1100			W0401405	7	X		X	X	X	X			Nitrate.
mw 4	"	700		X	W0401406	6	X								
mw 5	"	13:10		X	W0401407	3	X								

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Annette Cornelius	4/27/01 9:00				
(Printed) Annette Cornelius		(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
		Shannon Beale	04/27/01 9:00	Standard TAT
(Printed)		(Printed) Shannon Beale		fax results to Scott Allin 916 962 2678

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

EXCELCHEM
ENVIRONMENTAL LABS

500 Giuseppe Court, Suite 3
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784

ANALYSIS REPORT

Attention: Annette Cornelius
Versar Inc.
7844 Madison Ave., Ste. 167
Fair Oaks, CA 95628
Project: B of A San Leandro / 4422003
Method: EPA 8020/8015m

Date Sampled: 4/26/01
Date Received: 4/27/01
BTEX/TPHg Analyzed: 5/7/01
TPHd Analyzed: 5/1/01

Client Sample I.D.	MW1		MW2		MW3		MW4		MW5	
LAB. NO.	W0401403		W0401404		W0401405		W0401406		W0401407	
ANALYTE	R/L	Results	R/L	Results	R/L	Results	R/L	Results	R/L	Results
Benzene	20	1200	0.50	ND	0.50	ND	0.50	ND	0.50	ND
Toluene	20	170	0.50	ND	0.50	ND	0.50	ND	0.50	ND
Ethylbenzene	20	450	0.50	ND	0.50	ND	0.50	ND	0.50	ND
Total Xylenes	40	1300	1.0	ND	1.0	ND	1.0	ND	1.0	ND
TPH as Gasoline	2000	13000	50	160	50	62	50	130	50	200
TPH as Diesel	50	ND	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R

QA/QC %RECOVERY		
	LCS	LCSD
Benzene	96	106
Toluene	98	110
Ethylbenzene	100	112
Total Xylenes	101	113
TPH as Diesel	73	71

QA/QC Analyzed: 5/7/01
TPHd QA/QC Analyzed: 5/1/01

N/R = Not Requested
ND = Not detected. Compound(s) may be at concentrations below the reporting limit.
R/L = Reporting Limit
Water samples reported in µg/L

Laboratory Representative

5/8/01
Date Sampled

EXCELCHEM
ENVIRONMENTAL LABS

500 Giuseppe Court, Suite 3
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784

ANALYSIS REPORT

Attention: Annette Cornelius
Versar Inc.
7844 Madison Ave., Ste. 167
Fair Oaks, CA 95628
Project: B of A San Leandro / 4422003
Method: SM 2320B

Date Sampled: 4/26/01
Date Received: 4/27/01
Date Analyzed: 5/7/01

Client Sample I.D.	MW1		MW2		MW3	
LAB. NO.	W0401403		W0401404		W0401405	
ANALYTE	R/L	Results	R/L	Results	R/L	Results
Hydroxide (as $CaCO_3$)	5.0	ND	5.0	ND	5.0	ND
Carbonate (as $CaCO_3$)	5.0	ND	5.0	ND	5.0	ND
Bicarbonate (as $CaCO_3$)	5.0	560	5.0	520	5.0	370

QA/QC %RECOVERY			
	LCS	LCSD	MS
Alkalinity, Total	106	107	94

QA/QC Analyzed: 5/7/01

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.
R/L = Reporting Limit
Water samples reported in mg/L

Laboratory Representative

5/8/01
Date Reported

EXCELCHEM
ENVIRONMENTAL LABS

500 Giuseppe Court, Suite 3
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784

ANALYSIS REPORT

Attention: Annette Cornelius
Versar Inc.
7844 Madison Ave., Ste. 167
Fair Oaks, CA 95628
Project: B of A San Leandro / 4422003
Method: EPA 300.0

Date Sampled: 4/26/01
Date Received: 4/27/01
Date Analyzed: 4/27/01

Client Sample I.D.	MW1		MW2		MW3	
LAB. NO.	W0401403		W0401404		W0401405	
ANALYTE	R/L	Results	R/L	Results	R/L	Results
Nitrate (as NO_3)	0.50	ND	2.5	22	0.50	6.1

QA/QC %RECOVERY		
	LCS	LCSD
Nitrate (as NO_3)	105	100

QA/QC Analyzed: 4/27/01

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.
R/L = Reporting Limit
Water samples reported in mg/L

Laboratory Representative

5/8/01
Date Reported

EXCELCHEM
ENVIRONMENTAL LABS

500 Giuseppe Court, Suite 3
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784

ANALYSIS REPORT

Attention: Annette Cornelius
Versar Inc.
7844 Madison Ave., Ste. 167
Fair Oaks, CA 95628
Project: B of A San Leandro / 4422003
Method: EPA RSKSOP-175

Date Sampled: 4/26/01
Date Received: 4/27/01
Date Analyzed: 4/30/01

Client Sample I.D.		MW1		MW2		MW3	
LAB. NO.		W0401403		W0401404		W0401405	
ANALYTE	MDL	R/L	Results	R/L	Results	R/L	Results
Methane	1.0	5.0	2300	1.0	2.2	1.0	12

QA/QC %RECOVERY		
	LCS	LCSD
Methane	80	73

QA/QC Analyzed: 4/30/01

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.
R/L = Reporting Limit
Water samples reported in µg/L

Laboratory Representative

5/8/01
Date Reported

EXCELCHEM
ENVIRONMENTAL LABS

500 Giuseppe Court, Suite 3
Roseville, CA 95678
Phone#: (916) 773-3664 Fax#: (916) 773-4784

ANALYSIS REPORT

Attention: Annette Cornelius
Versar Inc.
7844 Madison Ave., Ste. 167
Fair Oaks, CA 95628
Project: B of A San Leandro / 4422003

Date Sampled: 4/26/01
Date Received: 4/27/01
Date Analyzed: 5/4/01

Client Sample I.D.	MW1		MW2		MW3	
LAB. NO.	W0401403		W0401404		W0401405	
ANALYTE	R/L	Results	R/L	Results	R/L	Results
Sulfate	4.0	ND	4.0	230	4.0	42

QA/QC %RECOVERY				
	LCS	LCSD	MS	MSD
Sulfate	90	115	105	110

QA/QC Analyzed: 5/4/01

ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.
R/L = Reporting Limit
Water samples reported in mg/L

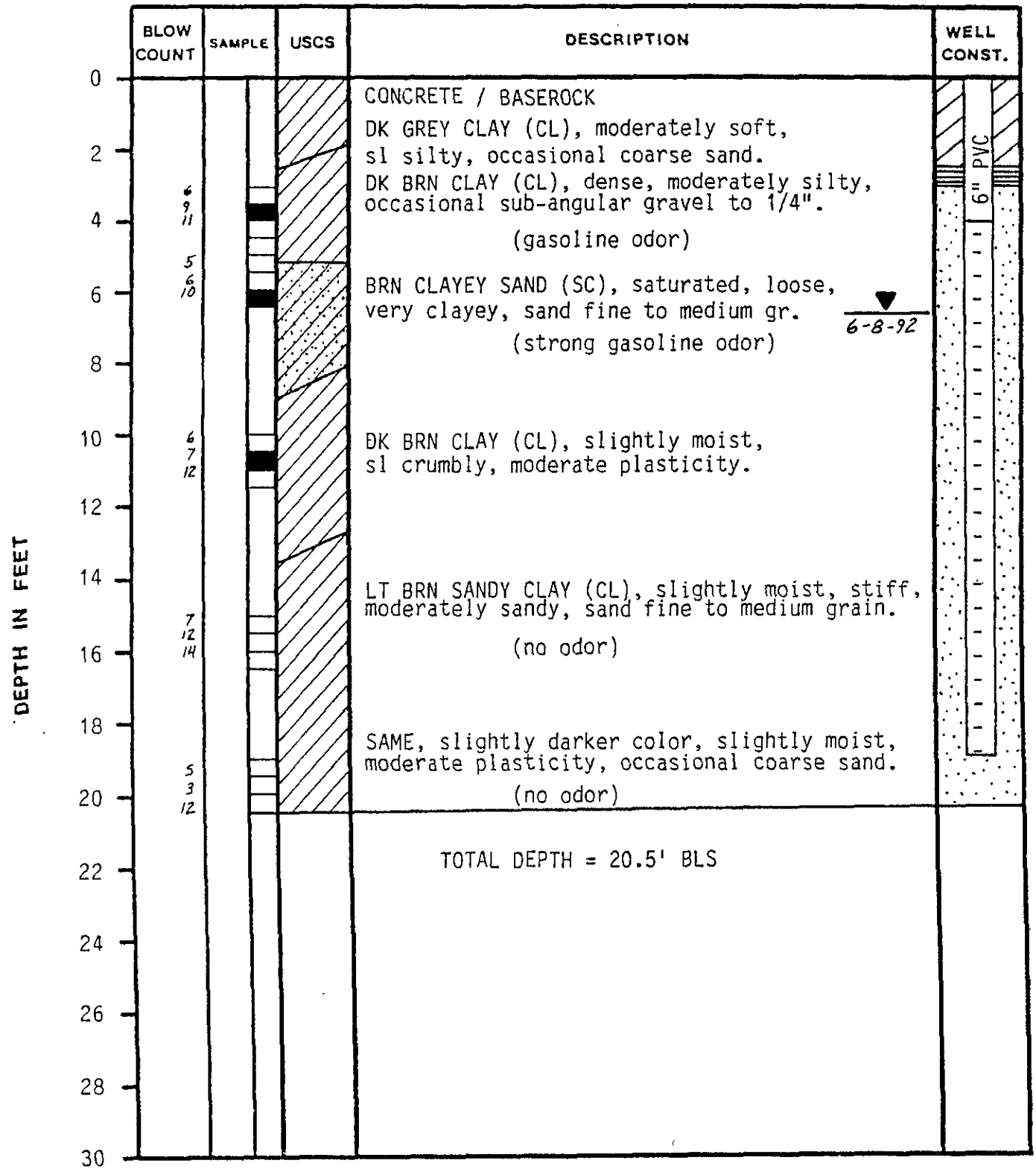
Laboratory Representative

5/8/01
Date Reported

ATTACHMENT 4

Boring Logs and Well Logs

(Hageman-Aguiar, Inc., and Versar, Inc.)



HAGEMAN - AGUIAR, INC.	LOG OF MONITORING WELL MW-1 Rodding-Cleaning Service 2585 Nicholson Street, San Leandro, CA	FIGURE 8
DATE June 2, 1992	PROJECT NO.	
TOC ELEVATION	EQUIPMENT 12" Hollow Stem Auger	

Versar, Inc.	DRILLING LOG	PROJECT NO. 4422-001

Supervising Geologist:	Tim Berger, R.G. 5225	Site Name:	BANK OF AMERICA - SAN LEANDRO
Log By:	ANNETTE CORNELIUS	Boring No:	MW-2
Date:	APRIL 15, 1999	Boring Diameter:	8 INCH
Drilling Contractor:	CAL-NEV GEOEXPLORATIONS	Boring Depth:	14 feet
Contractor Lic. No.:	C57-582696	Boring Location:	NICHOLSON STREET-WEST SIDE
Rig Type:	CME-55		PARKING LANE
Driller:	JAMES FRIETAS		

Depth (ft)	Advanced/Recovered	Retained	Blow Counts	First Water / Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, COLOR, MOISTURE, STAINING, DENSITY, ODOR, SORTING, PERCENT FINES, ROUNDING, SECONDARY POROSITY GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
2					VAULT			Asphalt Roadbase/fill	
						CL		CLAY: very dark gray.	
4						SM		SANDY SILT: dark yellowish brown, very moist, 30% silt, fine sand sub-angular.	
6				▽				Grades to yellowish brown, wet, sub-angular with fine gravel	
8									
10						CL		CLAY: dark gray, wet.	
						SM		SANDY SILT: grayish brown, wet, 40-50% fine sand, sub-angular, 5% fine gravel sub-angular	
12						CL		CLAY: very dark gray, moist. Grades to brown, with dark brown and black staining, 10% fine gravel medium stiff to stiff.	
14								Grades to light yellowish brown, soft, silty sand with 15% fine sand , 5%, medium sand	
								Well set at 14 feet below ground surface with 10 feet of 0.01" Slotted screen in 2/12 mesh sand.	

Versar, Inc.	DRILLING LOG	PROJECT NO. 4422-001

Supervising Geologist:	Tim Berger, R.G. 5225	Site Name:	BANK OF AMERICA - SAN LEANDRO
Log By:	ANNETTE CORNELIUS	Boring No:	MW-3
	APRIL 16, 1999	Boring Diameter:	8 INCH
Drilling Contractor:	CAL-NEV GEOEXPLORATIONS	Boring Depth:	14 feet
Contractor Lic. No.:	C57-582696	Boring Location:	NORTHWEST CORNER OF SUBJECT
Rig Type:	CME-55		PROPERTY - UNDER CANOPY
Driller:	JAMES FRIETAS		

Depth (ft)	Advanced/Recovered	Retained	Blow Counts	First Water / Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, COLOR, MOISTURE, STAINING, DENSITY, ODOR, SORTING, PERCENT FINES, ROUNDING, SECONDARY POROSITY GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
2					VAULT			Concrete	
						CL		SILTY CLAY: very dark gray, moist, medium stiff 15%, sub-angular to angular calcarious clastes-2mm	
4									
6									
8						SM		SILTY SAND: dark grayish brown, wet, poorly sorted, coarse sand to fine graded with 25% medium gravel.	
								Grades to silty sand with clay.	
10								Grades to silty sand no gravel, dark grayish brown, odor. OVM readings sporadic	254
						CL		SILTY CLAY LENS	
12									3.7
						SM		SANDY SILT: dark gray, wet, fine to medium sand.	
14									

Versar, Inc.	DRILLING LOG	PROJECT NO. 4422-001

Supervising Geologist:	Tim Berger, R.G. 5225	Site Name:	BANK OF AMERICA - SAN LEANDRO
Log By:	ANNETTE CORNELIUS	Boring No:	MW-4
Date:	APRIL 15, 1999	Boring Diameter:	8 INCH
Drilling Contractor:	CAL-NEV GEOEXPLORATIONS	Boring Depth:	15 feet
Contractor Lic. No.:	C57-582696	Boring Location:	2591 NICHOLSON STREET
Rig Type:	CME-55		CENTER OF PARKING AREA ADJACENT
Driller:	JAMES FRIETAS		TO AND SOUTH OF SUBJECT PROPERTY

Depth (ft)	Advanced/Recovered	Retained	Blow Counts	First Water / Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, COLOR, MOISTURE, STAINING, DENSITY, ODOR, SORTING, PERCENT FINES, ROUNDING, SECONDARY POROSITY GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
2					VAULT			Asphalt Fill	
4						CL		SILTY CLAY/CLAY: very dark gray, moist to dry, 5% to 10% silt Grades to very dark grayish brown, medium stiff, 5% sub-angular 3mm sand	
6								Grades to dark grayish brown with black staining, stiff, silt sand, 5% sub-angular 3mm sand.	
8						SM		SILTY SAND: dark yellowish brown, 10% silt, 5% sub-angular 3mm sand.	
10						CL		SILTY CLAY: very dark gray, soft.	
12									
14								CLAY:	
16								Well set at 15 feet below ground surface with 10 feet of 0.010' Slotted screen in 2/12 mesh sand.	
18									

Versar, Inc.	DRILLING LOG	PROJECT NO. 4422-001

Supervising Geologist:	Tim Berger, R.G. 5225	Site Name:	BANK OF AMERICA - SAN LEANDRO
Log By:	ANNETTE CORNELIUS	Boring No:	MW-5
Date:	APRIL 15, 1999	Boring Diameter:	8 INCH
Drilling Contractor:	CAL-NEV GEOEXPLORATIONS	Boring Depth:	17 feet
Contractor Lic. No.:	C57-582696	Boring Location:	WINTERLAND PROPERTY PARKING AREA
Rig Type:	CME-55		
Driller:	JAMES FRIETAS		

Depth (ft)	Advanced/Recovered	Retained	Blow Counts	First Water / Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, COLOR, MOISTURE, STAINING, DENSITY, ODOR, SORTING, PERCENT FINES, ROUNDING, SECONDARY POROSITY GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
2					VAULT			Asphalt Fill	
4						CL		SILTY CLAY: very dark, moist	
6								Grades to very dark grayish brown, moist, 5% 4mm sub-angular, 20% silt	
8						SW		SAND: olive, 90% sand	
10									
12						CL		SILTY CLAY: olive gray.	1.6
14									
16								Borehole initially advanced to 15' below ground surface (bgs). Partial collapse of borehole prevented properly setting well. Borehole advanced to 17' bgs and well set at 15 feet bgs with 10 feet of 0.010' Slotted screen in 2/12 mesh sand.	
18									

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION

RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:	BORING
6" SOLID STEM AUGER	B - 1
CME - 45 DRILL RIG	SHT
SAMPLING METHOD:	1 of 1
2" SPLIT BARREL SAMPLER	DRILLING
WITH BRASS LINERS	START / FINISH
WATER LEVEL	TIME / TIME
TIME	0745 / 0800
DATE	DATE / DATE
CASING DEPTH / SCREEN	5/15/92 / 5/15/92

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH In feet	USCS
2" SPLIT	18	16	2/4/8	0750	4	
2" SPLIT	18	18	4/8/12	0800	6	

SURFACE CONDITIONS:

CONCRETE

DK GREY SAND (FILL/BASE)

DK BRN CLAY (CL), NEARLY DRY, STIFF, OCCASIONAL COARSE SAND

SAME (PETROLEUM ODOR)

BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN, MODERATELY CLAYEY

GREY BRN SAND & GRAVEL (GW), SATURATED, LOOSE, SAND FINE TO MEDIUM, GRAVEL MEDIUM GRAIN

(PETROLEUM ODOR)

TOTAL DEPTH = 6½' BLS

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C 34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING	PROJECT NAME & LOCATION	
SEE SITE MAP	RODDING CLEANING, 2585 NICHOLSON ST. SAN LEANDRO	
	DRILLING METHOD: 6" SOLID STEM AUGER; CME - 45 DRILL RIG	BORING B - 2
	SAMPLING METHOD: 2" SPLIT BARREL SAMPLER WITH BRASS LINERS	SHT 1 of 1
	WATER LEVEL / TIME / DATE	DRILLING START: TIME 0800, DATE 5/15/92; FINISH: TIME 0815, DATE 5/15/92
	CASING DEPTH / SCREEN	

SCALE: 1" =

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		DK BRN CLAY (CL), SLIGHTLY MOIST, STIFF, OCCASIONAL SUB-ANGULAR GRAVEL TO 1/2"
					2		
					3		
2" SPLIT	18	18	5/10/8	0807	4		SAME (SLIGHT PETROLEUM ODOR)
					5		GREY BRN CLAYEY SILT (ML), MOIST
2" SPLIT	18	18	5/8/6	0812	6		GREY SAND & GRAVEL (GW), SATURATED, (STRONG GASOLINE ODOR)
					7		
					8		
					9		TOTAL DEPTH = 6 1/2' BLS
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING
SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION
RODDING-CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD: 6" SOLID STEM AUGER; CME - 45 DRILL RIG	BORING B-3
SAMPLING METHOD: 2" SPLIT BARREL SAMPLER WITH BRASS LINERS	SHT 1 of 1
WATER LEVEL	DRILLING START TIME 0815 / FINISH TIME 0825
TIME	
DATE	DATE 5/15/92 / DATE 5/15/92
CASING DEPTH / SCREEN	

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		BRN SAND & GRAVEL (BASEROCK)
					2		
					3		DK BRN CLAY (CL), SLIGHTLY MOIST, SLIGHTLY CRUMBLY
2" SPLIT	18	18	5/8/10	0820	4		
					5		GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN, OCCASIONAL GRAVEL TO 1/2"
2" SPLIT	18	18	4/8/12	0825	6	▼	
					7		DK GREY SAND & GRAVEL, SATURATED (STRONG GASOLINE ODOR)
					8		
					9		
					0		TOTAL DEPTH = 6½' BLS
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING
SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION
RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:	BORING
6" SOLID STEM AUGER	B-4
CME - 45 DRILL RIG	SHT
SAMPLING METHOD:	1 of 1
2" SPLIT BARREL SAMPLER	DRILLING
WITH BRASS LINERS	START / FINISH
WATER LEVEL	TIME 0830 / 0845
TIME	
DATE	DATE 5/15/92 / 5/15/92
CASING DEPTH / SCREEN	

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH In feet	USCS
					0	
					1	
					2	
					3	
2" SPT	18	18	4/6/11	0840	4	
					5	
2" SPT	18	18	3/4/7	0845	6	
					7	
					8	
					9	
					0	
					1	
					2	
					3	
					4	
					5	
					6	
					7	
					8	
					9	
					0	

SURFACE CONDITIONS:

CONCRETE

BRN SAND & GRAVEL (BASEROCK)

DK BRN CLAY (CL), NEARLY DRY, STIFF, OCCASIONAL COARSE SAND

GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN

GREY SAND (SP), SATURATED, FINE GRAIN, SLIGHTLY CLAYEY, OCCASIONAL ROUNDED GRAVEL TO 1"

(STRONG GASOLINE ODOR)

TOTAL DEPTH = 6½' BLS

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
STATE OF CALIFORNIA
CIVIL

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION

RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:
6" SOLID STEM AUGER
CME - 45 DRILL RIG

SAMPLING METHOD:
2" SPLIT BARREL SAMPLER
WITH BRASS LINERS

WATER LEVEL			
TIME			
DATE			
CASING DEPTH		SCREEN	

BORING: B - 5

SHT: 1 of 1

DRILLING

START	FINISH
TIME 0850	TIME 0900
DATE 5/15/92	DATE 5/15/92

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH In feet	USCS
					0	
					1	
					2	
					3	
2" SPLIT	18	18	4/5/12	0855	4	
					5	
2" SPLIT	18	18	4/4/3	0900	6	
					7	
					8	
					9	
					0	
					1	
					2	
					3	
					4	
					5	
					6	
					7	
					8	
					9	
					0	

SURFACE CONDITIONS:

CONCRETE

DK BRN CLAY (CL), NEARLY DRY, STIFF

SAME (SLIGHT PETROLEUM ODOR)

GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN

GREY SAND (SP), SATURATED, FINE GRAIN SLIGHTLY CLAYEY

(GASOLINE ODOR)

TOTAL DEPTH = 6 1/2' BLS

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION

RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:	BORING
6" SOLID STEM AUGER	B - 6
CME - 45 DRILL RIG	SHT
SAMPLING METHOD:	1 of 1
2" SPLIT BARREL SAMPLER	DRILLING
WITH BRASS LINERS	START / FINISH
WATER LEVEL	TIME 0900 / 0915
TIME	
DATE	DATE 5/15/92 / 5/15/92
CASING DEPTH / SCREEN	

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH In feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		DK BRN CLAY (CL), VERY STIFF
					2		
					3		
2" SPLIT	18	18	4/6/10	0907	4		SAME, SLIGHTLY MOIST, VERY STIFF (SLIGHT PETROLEUM ODOR)
					5		GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN
2" SPLIT	18	0	LOST SAMPLE		6		
	COLLECT GRAB SAMPLE			0915	7		GREY SAND (SP), SATURATED, FINE GRAIN, SLIGHTLY CLAYEY
					8		
					9		TOTAL DEPTH = 6½' BLS
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C 34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION
RODDING- CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:	BORING
6" SOLID STEM AUGER	B- 7
CME - 45 DRILL RIG	SHT 1 of 1
SAMPLING METHOD:	DRILLING
2" SPLIT BARREL SAMPLER	START / FINISH
WITH BRASS LINERS	
WATER LEVEL	TIME 0925 / TIME 0935
TIME	
DATE	DATE 5/15/92 / DATE 5/15/92
CASING DEPTH / SCREEN	

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		
					2		DK BRN CLAY (CL), SLIGHTLY MOIST, STIFF
					3		
2" SPLIT	18	18	4/6/8	0930	4		(NO ODOR)
					5		GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN
2" SPLIT	18	18	4/5/6	0935	6		DK GREY SAND (SP), SATURATED, COARSE GRAIN
					7		(STRONG GASOLINE ODOR)
					8		
					9		TOTAL DEPTH = 6½' BLS
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION
RODDING - CLEANING. 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:
6" SOLID STEM AUGER
CME- 45 DRILL RIG

SAMPLING METHOD:
2" SPLIT BARREL SAMPLER
WITH BRASS LINERS

WATER LEVEL			
TIME			
DATE			
CASING DEPTH		SCREEN	

BORING: B - 8

SHT: 1 of 1

DRILLING

START	FINISH
TIME 0945	TIME 0955
DATE 5/15/92	DATE 5/15/92

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS
					0	
					1	
					2	
					3	
2" SPLIT	18	18	4/6/8	0950	4	
					5	
2" SPLIT	18	18	3/3/5	0955	6	
					7	
					8	
					9	
					0	
					1	
					2	
					3	
					4	
					5	
					6	
					7	
					8	
					9	
					0	

SURFACE CONDITIONS:

CONCRETE
GREY SAND (BASE)

DK BRN CLAY (CL), STIFF

SAME, SLIGHTLY MOIST
(SLIGHT PETROLEUM ODOR)

GREY BRN CLAYEY SAND (SM), MOIST
VERY FINE GRAIN

DK GREY CLAYEY SAND & GRAVEL (GW),
SATURATED, SLIGHTLY CLAYEY

(PETROLEUM ODOR)

TOTAL DEPTH = 6½' BLS

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION
RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:
6" SOLID STEM AUGER
CME - 45 DRILL RIG

SAMPLING METHOD:
2" SPLIT BARREL SAMPLER
WITH BRASS LINERS

BORING
B - 9

SHT
1 of 1

WATER LEVEL				DRILLING START TIME	DRILLING FINISH TIME
TIME				1000	1015
DATE				DATE	DATE
CASING DEPTH		SCREEN		5/15/92	5/15/92

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		DK BRN CLAY (CL), NEARLY DRY, STIFF
					2		
					3		SAME, SLIGHTLY MOIST
2" SPLIT	18	18	5/6/10	1005	4		THIN SANDY LAYER
					5		GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN
2" SPLIT	18	18	3/3/3	1012	6		GREY CLAYEY SAND & GRAVEL (GC), SATURATED, (GASOLINE ODOR)
					7		
					8		TOTAL DEPTH = 6½' BLS
					9		
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION

RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:	BORING
6" SOLID STEM AUGER	B - 10
CME - 45 DRILL RIG	SHT
SAMPLING METHOD:	1 of 1
2" SPLIT BARREL SAMPLER	DRILLING
WITH BRASS LINERS	START / FINISH
WATER LEVEL	TIME / TIME
TIME	1015 / 1035
DATE	DATE / DATE
CASING DEPTH / SCREEN	5/15/92 / 5/15/92

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		DK GREY BRN CLAY (CL), NEARLY DRY, STIFF
					2		
					3		SAME, SLIGHTLY MOIST
2" SPLIT	18	18	4/6/8	1030	4		
					5		GREY BRN CLAYEY SAND (SM), SLIGHTLY MOIST, VERY FINE GRAIN
2" SPLIT	18	18	4/7/7	1035	6		
					7		DK GREY SAND (SP), SATURATED, FINE GRAIN, OCCASIONAL MEDIUM GRAIN
					8		(STRONG GASOLINE ODOR)
					9		
					0		TOTAL DEPTH = 6½' BLS
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING
SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION
RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:
6" SOLID STEM AUGER
CME - 45 DRILL RIG

SAMPLING METHOD:
2" SPLIT BARREL SAMPLER
WITH BRASS LINERS

WATER LEVEL			
TIME			
DATE			
CASING DEPTH		SCREEN	

BORING
B - 11

SHT
1 of 1

DRILLING

START	FINISH
TIME 1040	TIME 1055
DATE 5/15/92	DATE 5/15/92

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		BRN SAND & GRAVEL (BASE)
					2		DK BRN CLAY (CL), NEARLY DRY, STIFF
					3		
2" SPLIT	18	18	3/4/8	1045	4		SAME, SLIGHTLY MOIST
					5		GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN
2" SPLIT	18	18	4/5/6	1055	6		GREY SAND & GRAVEL (GW), SATURATED, GRAVEL FINE GRAIN
					7		
					8		
					9		TOTAL DEPTH = 6½' BLS
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34282
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING	PROJECT NAME & LOCATION	
SEE SITE MAP	RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO	
	DRILLING METHOD: 6" SOLID STEM AUGER; CME - 45 DRILL RIG	BORING B - 12
	SAMPLING METHOD: 2" SPLIT BARREL SAMPLER WITH BRASS LINERS	SHT 1 of 1
	WATER LEVEL / TIME / DATE	DRILLING START TIME 1100 DATE 5/15/92; FINISH TIME 1115 DATE 5/15/92
	CASING DEPTH / SCREEN	

SCALE: 1" =

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		DK BRN CLAY (CL), NEARLY DRY, STIFF
					2		
					3		
2" SPLIT	18	18	4/6/7	1105	4		SAME, SLIGHTLY MOIST
					5		GREY BRN CLAYEY SAND (SM), MOIST VERY FINE GRAIN
2" SPLIT	18	18	—	1110	6		GREY CLAYEY SAND & GRAVEL (GC), SATURATED GRAVEL FINE GRAIN
					7		
					8		
					9		TOTAL DEPTH = 6½' BLS
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER GARY H. AGUIAR No. C-34262 STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION

RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:	BORING
6" SOLID STEM AUGER	B - 13
CME - 45 DRILL RIG	SHT
SAMPLING METHOD:	1 of 1
2" SPLIT BARREL SAMPLER	DRILLING
WITH BRASS LINERS	START / FINISH

WATER LEVEL				TIME	TIME
TIME				1130	1155
DATE				DATE	DATE
CASING DEPTH		SCREEN		5/15/92	5/15/92

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		DK BRN CLAY (CL), NEARLY DRY, STIFF
					2		
					3		
2" SPLIT	18	18	3/6/8	1150	4		SAME, SLIGHTLY MOIST, OCCASIONAL ANGULAR & SUBANGULAR GRAVEL TO ½"
					5		GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN
2" SPLIT	18	18	4/5/6	1155	6		GREY CLAYEY SAND & GRAVEL (GC), SATURATED, GRAVEL FINE GRAIN
					7		
					8		TOTAL DEPTH = 6½' BLS
					9		
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION

RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD: 6" SOLID STEM AUGER; CME - 45 DRILL RIG	BORING B - 14
SAMPLING METHOD: 2 " SPLIT BARREL SAMPLER WITH BRASS LINERS	SHT 1 of 1
	DRILLING START / FINISH
WATER LEVEL	
TIME	TIME 1200 / 1215
DATE	DATE 5/15/92 / 5/15/92
CASING DEPTH / SCREEN	

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS
					0	
					1	
					2	
					3	
2" SPLIT	18	18	4/6/8	1210	4	
					5	
2" SPLIT	18	18	3/4/5	1215	6	
					7	
					8	
					9	
					0	
					1	
					2	
					3	
					4	
					5	
					6	
					7	
					8	
					9	
					0	

SURFACE CONDITIONS:

CONCRETE

DK BRN CLAY (CL), NEARLY DRY, STIFF

SAME, SLIGHTLY MOIST

(NO ODOR)

GREY BRN CLAYEY SAND (SM), MOIST
VERY FINE GRAIN

GREY CLAYEY SAND & GRAVEL (GC), SATURATED,
GRAVEL FINE GRAIN

TOTAL DEPTH = 6½' BLS

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34252
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING	PROJECT NAME & LOCATION	
SEE SITE MAP	RODDING-CLEANING, 2585 NICHOLSON ST. SAN LEANDRO	
	DRILLING METHOD: 6" SOLID STEM AUGER; CME - 45 DRILL RIG	BORING B - 15
	SAMPLING METHOD: 2" SPLIT BARREL SAMPLER WITH BRASS LINERS	SHT 1 of 1
	WATER LEVEL / TIME / DATE	DRILLING START TIME 1215 DATE 5/15/92; FINISH TIME 1230 DATE 5/15/92
	CASING DEPTH / SCREEN	

SCALE: 1" =

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH In feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		DK BRN CLAY (CL), NEARLY DRY, STIFF
					2		
					3		
2" SPLIT	18	18	4/18/12	1222	4		SAME, SLIGHTLY MOIST
					5		GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN
2" SPLIT	18	18	PUSH	1228	6		GREY CLAYEY SAND & GRAVEL (GC), SATURATED, GRAVEL FINE GRAIN
					7		
					8		
					9		TOTAL DEPTH = 6½' BLS
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION

RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:	BORING
6" SOLID STEM AUGER	B - 16
CME - 45 DRILL RIG	SHT
SAMPLING METHOD:	1 of 1
2" SPLIT BARREL SAMPLER	DRILLING
WITH BRASS LINERS	START / FINISH
WATER LEVEL	TIME / TIME
TIME	1230 / 1245
DATE	DATE / DATE
CASING DEPTH / SCREEN	5/15/92 / 5/15/92

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		DK BRN CLAY (CL), NEARLY DRY, STIFF
					2		
					3		SAME, SLIGHTLY MOIST, STIFF
2" SPLIT	18	18	5/7/9	1237	4		
					5		GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN
2" SPLIT	18	18	PUSH	1245	6		GREY CLAYEY SAND & GRAVEL (GC), SATURATED GRAVEL FINE GRAIN
					7		
					8		
					9		TOTAL DEPTH = 6½' BLS
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION
RODDING - CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:	BORING
6" SOLID STEM AUGER	B - 17
CME - 45 DRILL RIG	SHT
SAMPLING METHOD:	1 of 1
2" SPLIT BARREL SAMPLER	DRILLING
WITH BRASS LINERS	START / FINISH
WATER LEVEL	TIME / TIME
TIME	1255 / 1310
DATE	DATE / DATE
CASING DEPTH / SCREEN	5/15/92 / 5/15/92

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		BRN SAND & GRAVEL (BASE)
					2		DK BRN CLAY (CL), NEARLY DRY, STIFF
					3		
2" SPLIT	18	18	4/6/12	1300	4		SAME, SLIGHTLY MOIST, STIFF (NO ODOR)
					5		GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN
2" SPLIT	18	18	PUSH	1310	6		GREY CLAYEY SAND & GRAVEL (GC), SATURATED, GRAVEL FINE GRAIN
					7		
					8		
					9		TOTAL DEPTH = 6½' BLS
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING

SEE SITE MAP

SCALE: 1" =

PROJECT NAME & LOCATION

RODDING-CLEANING, 2585 NICHOLSON ST. SAN LEANDRO

DRILLING METHOD:
6" SOLID STEM AUGER
CME - 45 DRILL RIG

SAMPLING METHOD:
2" SPLIT BARREL SAMPLER
WITH BRASS LINERS

BORING B - 18

SHT of

WATER LEVEL			
TIME			
DATE			
CASING DEPTH		SCREEN	

DRILLING

START	FINISH
TIME 1320	TIME 1340
DATE 5/15/92	DATE 5/15/92

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH in feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		DK BRN CLAY (CL), NEARLY DRY, STIFF
					2		
					3		SAME, SLIGHTLY MOIST
2" SPLIT	18	18	3/3/5	1330	4		
					5		GREY BRN CLAYEY SAND (SM), MOIST VERY FINE GRAIN
2" SPLIT	18	18	3/3/5	1340	6		GREY CLAYEY SAND & GRAVEL (GC), SATURATED, GRAVEL FINE GRAIN
					7		
					8		TOTAL DEPTH = 6 1/2' BLS
					9		
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.

LOCATION OF BORING	PROJECT NAME & LOCATION	
SEE SITE MAP	RODDING- CLEANING, 2585 NICHOLSON ST. SAN LEANDRO	
	DRILLING METHOD: 4" HAND AUGER; CME - 45 DRILL RIG	BORING B - 19
	SAMPLING METHOD: 2" SPLIT BARREL SAMPLER WITH BRASS LINERS	SHT 1 of 1
	WATER LEVEL / TIME / DATE	DRILLING START: TIME 1345, DATE 5/15/92; FINISH: TIME 1415, DATE 5/15/92
SCALE: 1" =	CASING DEPTH / SCREEN	

SAMPLER	inches DRIVEN	inches RECOVER	BLOW COUNT per 6 inches	TIME	DEPTH In feet	USCS	SURFACE CONDITIONS:
					0		CONCRETE
					1		DK BRN CLAY (CL), NEARLY DRY, STIFF
					2		OCCASIONL SUB-ANGULAR GRAVEL TO 1"
					3		
2"	6	6		1400	4		SAME, SLIGHTLY MOIST
					5		GREY BRN CLAYEY SAND (SM), MOIST, VERY FINE GRAIN
2"	6	6		1415	6		(GASOLINE ODOR)
					7		
					8		TOTAL DEPTH = 6' BLS
					9		
					0		
					1		
					2		
					3		
					4		
					5		
					6		
					7		
					8		
					9		
					0		

REGISTERED PROFESSIONAL ENGINEER
GARY H. AGUIAR
No. C-34262
CIVIL
STATE OF CALIFORNIA

HAGEMAN - AGUIAR, INC.