STREAMBORN

510/528-4234
Fax 528-2613

William and Kathy Florence
6316 Castle Drive
Oakland CA 94611

8 January 1997

Project No. P178A

Letter Report
Abandonment of Monitoring Wells MW-1, MW-2 and MW-3
21031 Western Boulevard
Hayward CA

Dear Mr. and Mrs. Florence:

This letter report describes abandonment of monitoring wells MW-1, MW-2, and MW-3 at the subject property (Figures 1 and 2).

BACKGROUND

A chronology of environmental activities at the subject property is summarized in Table 1. Monitoring wells MW-1, MW-2, and MW-3 were installed by Streamborn in December 1995 as part of soil and groundwater investigation activities at the property. The three wells were constructed of 2-inch diameter PVC casing and installed to a depth of approximately 35-feet below ground surface. Copies of the boring logs and well completion schematics are contained in Attachment 1.

The wells were abandoned pursuant to the 19 November 1996 Remedial Action Completion Certification letter from the Alameda County Health Care Services Agency (Attachment 2).

WELL ABANDONMENT

Prior to well abandonment, a permit was obtained from Alameda County Zone 7 Water Agency. Because wells MW-1 and MW-2 were located in the Alameda County right-of-way for Western Boulevard, an encroachment permit was also obtained from the Alameda County Public Works Agency. Copies of these permits are included in Attachment 3.

Wells MW-1 and MW-2 were abandoned on 19 December 1996. Well MW-3 was abandoned on 6 January 1997 using a limited access drilling rig.

On 19 December 1996, immediately prior to the well abandonment, groundwater levels and the total depths of the three wells were measured (Table 2).

The wells were abandoned by overdrilling using 8-inch outside diameter hollow-stem augers. The augers penetrated approximately 38-feet below ground surface (approximately 2-feet below the maximum total depth shown on the boring logs).

Mail: P.O. Box 8330, Berkeley CA 94707-8330

Office: 900 Santa Fe Avenue, Albany CA 94706

After extracting the PVC casing, filter pack, and surface seal from each well, the augers were placed back into the open hole and cement-bentonite grout (proportions: 5 gallons of water, 94-pounds of cement, 5 pounds bentonite) was placed through the hollow-stem of the augers. While placing grout, the augers were extracted until the hole was completely grouted. The theoretical volume of each hole and the grout take compared favorably. After grouting, the ground surface at each well location was patched with concrete.

Because no contamination was detected during installation and monitoring of the wells, soil spoils generated during the well abandonments (primarily comprised of filter pack material) were spread on the ground at the property. Grout spoils, traffic boxes, and PVC casing were disposed of as municipal waste.

Drilling work was performed by BayLand Drilling of Menlo Park CA. The Well Drillers Report (DWR 188) is included in Attachment 4.

If you have any questions, please call.

Sincerely,

STREAMBORN

Keith Beury

Keith Beury
Environmental Engineer

Attachments

cc: Amy Leech/Alameda County Health Care Services Agency, Oakland CA
Kevin Graves/San Francisco Bay Regional Water Quality Control Board, Oakland CA

Table 1

Environmental Chronology

21031 Western Boulevard
Hayward CA

Date	Performed By	Description
April 1989	William and Kathy Florence	• Property at 21031 Western Boulevard was purchased by William and Kathy Florence. • At the time the property was purchased by the Florences, a 1,000-gallon underground gasoline tank existed near the east side of the onsite building. The tank was installed by a previous owner of the property.
21 August 1989	West Coast Tank Testing	• The tank was removed. • Approximately 20 cubic yards of gasoline-contaminated soil were overexcavated and stockpiled onsite. • Two soil samples were collected from the excavation. The sample depths and exact locations were not documented. Analytical results indicated elevated concentrations of TPH-gasoline and BTEX.
22 September 1989	West Coast Tank Testing	• Approximately 80 cubic yards of gasoline-contaminated soil were excavated and stockpiled onsite with the previously-excavated 20 cubic yards. The 100 cubic yards of overexcavated soil were apparently aerated onsite. Final disposition of the soil was not documented.
September and October 1989	B&B Associated Services	• Several soil samples were collected. The sample depths and exact locations were not documented, but some of the samples were presumably collected from the limits of the excavation. Analytical results indicated elevated concentrations of TPH-gasoline and BTEX.
14 November 1994	Streamborn	• Workplan describing soil and groundwater investigation was submitted to Alameda County.
2 December 1994	Alameda County	• Comments regarding the workplan were provided by Alameda County.
22 December 1994	Streamborn	• Workplan addendum was submitted to Alameda County.
23 January 1995	Alameda County	• Alameda County approved the workplan and addendum.
19 and 20 December 1995	Streamborn	• Soil borings B-1 and B-2 were drilled adjacent to the former tank excavation. Soil samples collected from the borings revealed nondetectable concentrations of TPH-gasoline and BTEX, and nondetectable or nonelevated concentrations of lead. • Monitoring well MW-1 was installed east of the former tank excavation. Soil samples from the boring revealed nondetectable concentrations of TPH-gasoline and BTEX, and nondetectable or nonelevated concentrations of lead. • Monitoring well MW-2 was installed northwest of the former tank excavation. Soil samples from the boring revealed nondetectable concentrations of TPH-gasoline and BTEX, and nondetectable or nonelevated concentrations of lead. • Monitoring well MW-3 was installed west of the former tank excavation. Soil samples from the boring revealed nondetectable concentrations of TPH-gasoline and BTEX, and nondetectable or nonelevated concentrations of lead. • Level survey of wells performed.
26 December 1995	Streamborn	• Monitoring wells MW-1, MW-2, and MW-3 were developed.
27 December 1995	Streamborn	• Groundwater samples were collected from wells MW-1, MW-2, and MW-3. Groundwater levels measured. Results revealed nondetectable concentrations of TPH-gasoline, BTEX, and dissolved lead.
22 March 1996	Streamborn	• Groundwater samples were collected from wells MW-1, MW-2, and MW-3. Groundwater levels measured. Results revealed nondetectable concentrations of TPH-gasoline and BTEX.
12 June 1996	Streamborn	• Groundwater samples were collected from wells MW-1, MW-2, and MW-3. Groundwater levels measured. Results revealed nondetectable concentrations of TPH-gasoline and BTEX.
19 November 1996	Alameda County	• Remedial Action Completion Certification letter issued by Alameda County indicating no further investigation or remediation is needed.
19 December 1996	Streamborn	• Monitoring wells MW-1 and MW-2 were abandoned.
6 January 1997	Streamborn	• Monitoring well MW-3 was abandoned.

General Notes
(a) Alameda County = Alameda County Health Care Services Agency.
(b) TPH-gasoline = total petroleum hydrocarbons as gasoline.
(c) BTEX = benzene, toluene, ethylbenzene, and xylenes.

Table 2

Groundwater Level Measurements

21031 Western Boulevard
Hayward CA

Location		MW-1		MW-2		MW-3	
Measuring Point		Top of PVC Casing-North Side, Elevation 999.63 (Ground Surface-North Side, Elevation 1,000.09)		Top of PVC Casing-North Side, Elevation 999.40 (Ground Surface-North Side, Elevation 999.81)		Top of PVC Casing-North Side, Elevation 999.72 (Ground Surface-North Side, Elevation 1,000.16)	
Measured By	Parameter or Date	Depth	Elevation	Depth	Elevation	Depth	Elevation
Streamborn	27 December 1995	25.13	974.50	24.73	974.67	25.27	974.45
Streamborn	22 March 1996	19.02	980.61	18.66	980.74	19.13	980.59
Streamborn	12 June 1996	21.56	978.07	21.17	978.23	21.73	977.99
Streamborn	19 December 1996	23.23	976.40	22.80	976.60	23.43	976.29
Streamborn	Total Depth (last measurement)	34.9	-	34.8	-	35.0	-

General Notes

(a) Measurements in units of feet.

(b) Groundwater elevations referenced to site-specific datum = bench mark at surface of concrete slab, south side of roll up door. Assumed elevation = 1,000.00 feet.

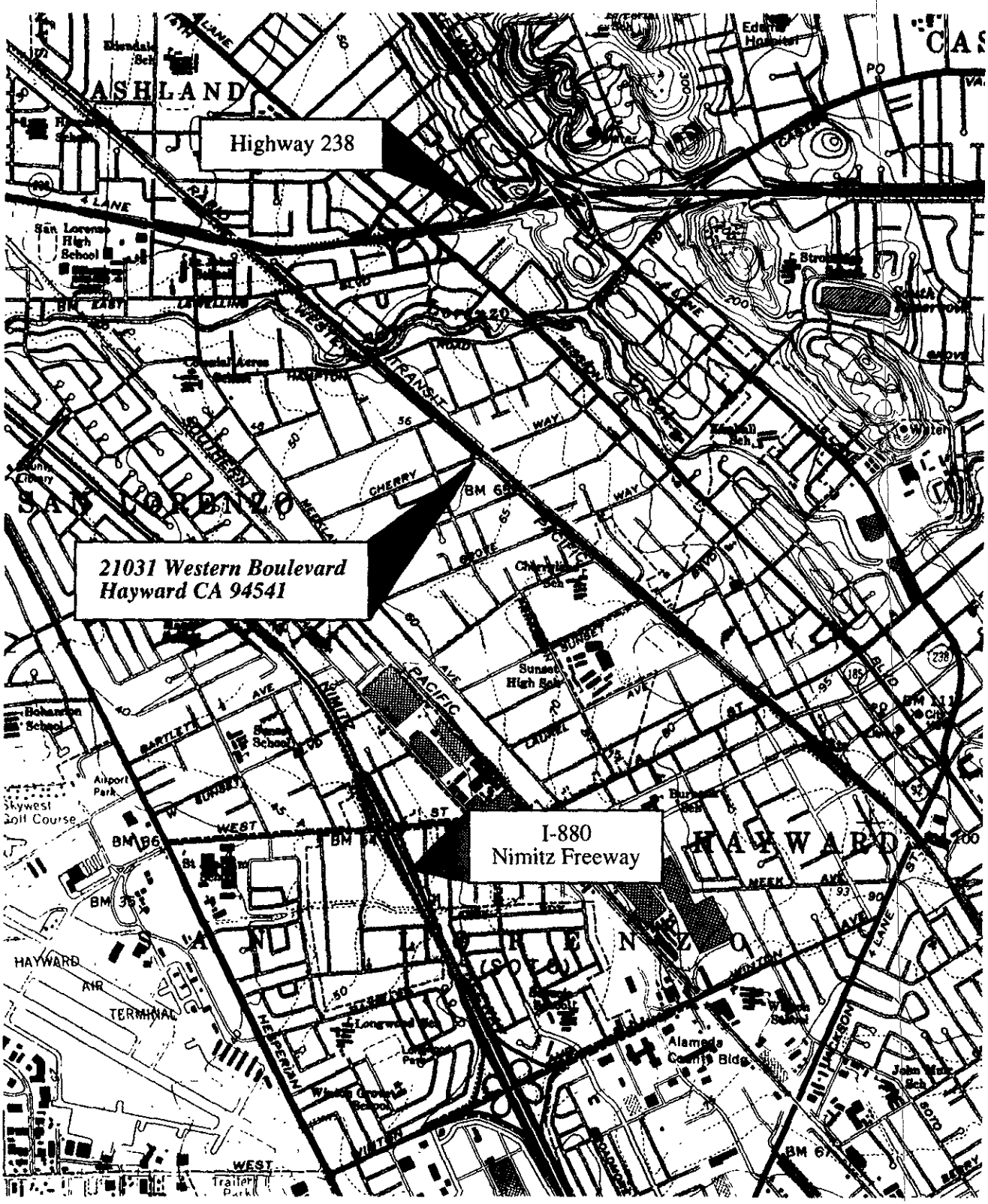

Figure 1

Location Map

21031 Western Boulevard
Hayward CA

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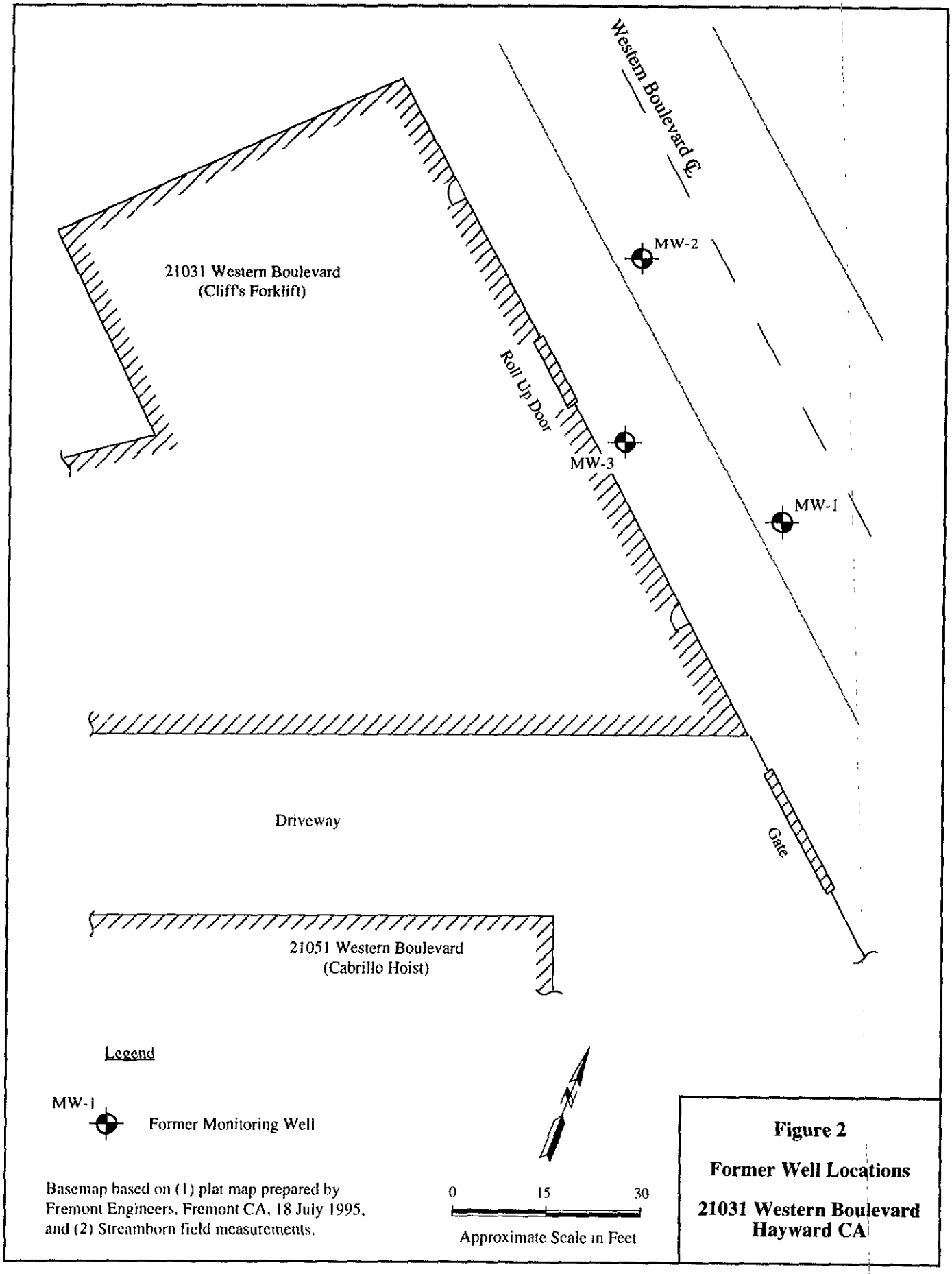

Basemap based on (1) plat map prepared by Fremont Engineers, Fremont CA, 18 July 1995, and (2) Streamborn field measurements.

Figure 2

Former Well Locations

21031 Western Boulevard Hayward CA

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ATTACHMENT 1

Boring Logs and Well Completion Schematics

BORING LOG LEGEND AND NOTES

Soil Classification

Soils were classified in the field in approximate accordance with ASTM D 2488-90 (Standard Practice for Description and Identification of Soils, Visual-Manual Procedure). Textural classifications represent the opinion of the field geologist or field engineer regarding the nature and character of encountered materials. Proportions of textural classes (sand, gravel, etc.) cited on the logs should be considered approximate. Laboratory classification tests may not have been performed to verify the field classifications. In general, mixtures of soil types and gradual transitions between soil types may more accurately represent the subsurface materials, instead of the distinct divisions depicted on the logs. Soils were necessarily classified only at depths where samples were examined; extrapolation to other depths, as depicted on the logs, adds uncertainty.

Textural Classification

 Silty Gravel (GM)

 Clay (CH or CL)

 Sand (SP)

 Silty Sand (SM)

Textural Transitions

— — — Approximate location of gradational transition or inferred contact between soil types

Sampling

 Sampling Interval (collected or attempted)

When blow counts are reported, sampling performed with a 140-pound weight, falling approximately 30-inches, driving a 2-inch inside diameter by 18-inch long split-spoon sampler fitted with three 2-inch diameter by 6-inch long brass or stainless steel liners. When blow counts are not reported, sampling performed by pushing the aforementioned sampler with the hydraulic ram of the drill rig.

General Notes

(a) OVM (ppmv) = Measurement by field organic vapor monitor in ppm volume/volume. Measurements performed using Thermo Environmental Instruments Model 580B OVM, 10.0 eV photoionization detector, calibrated to 100 ppm v/v isobutylene. Measurements performed by screening the ends of the freshly retrieved liners. Value cited on log was maximum reading obtained at either end of liner.

(b) Depths measured from ground surface.

Boring No. MW-1 (page 1 of 3)

Project	Soil and Groundwater Investigation 21031 Western Boulevard Hayward CA	Address	21031 Western Boulevard Hayward CA
Location	±39-feet southeast of roll-up door	Logged By	Doug Lovell, STREAMBORN, Berkeley CA
Elevation	Ground surface, north side = 1,000.09-feet (assumed datum)	Project No.	P178
Start Drilling	12:30 PM, 19 December 1995	Finish Drilling	2:30 PM, 19 December 1995
Drill Method	±4-inch ID by ±7-inch OD hollow-stem auger	Driller	HEW, Palo Alto CA
Drill Rig	CME 45	Drilled Depth	±36.5-feet
Completion	2-inch PVC well with traffic box	Groundwater (During Drilling)	±26-feet
Sampling	±2-inch ID by ±2-1/2-inch OD driven split-spoon fitted with 2-inch diameter by 6-inch long brass or stainless steel liners. Samples collected by driving spoon ahead of auger bit.	Groundwater (Stabilized)	25.1-feet below top of casing, measured 27 December 1995

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
0.0						Asphalt concrete pavement.	
1.0		GM				Silty Gravel (GM). Fill (aggregate base).	
2.0							
3.0							
4.0							
5.0							
		CH				Clay (CH), medium to high plasticity, stiff, moist, dark brown. No odor or staining.	
6.0							
7.0							
8.0							
9.0							
10.0							

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Boring No. MW-1 (page 2 of 3)

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
10.0				5	6	Clay (CH), medium to high plasticity, *stiff*, moist, dark brown. No odor or staining.	
				10	6		< 5
11.0				12	6		
12.0							
13.0							
14.0							
15.0					6	Clay (CL or CH), medium plasticity, moist, *stiff*, brown, light brown, and *mottled* gray-brown. No odor or staining.	
				Push	6		< 5
16.0					6		
17.0		CH and/or CL					
18.0							
19.0							
20.0					6	Clay (CL or CH), as above. No odor or staining.	
				Push	6		< 5
21.0					6		
22.0							
23.0							
24.0							
25.0							

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Boring No. MW-1 (page 3 of 3)

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
25.0					6	Clay (CL or CH), as above. No odor or staining.	
		CH/CL		Push	6		< 5
26.0					6	Silty Sand (SM), fine sand texture, 20-40% silt and clay (varies with depth), wet, light brown with gray mottling. No odor or staining.	
27.0							
28.0							
29.0							
30.0					0	Silty Sand (SM), as above. No odor or staining.	
				Push	0		< 5
31.0		SM			6		
32.0							
33.0							
34.0							
35.0				5	6	Silty Sand (SM), as above. No odor or staining.	
				5	6		< 5
36.0				6	6		
						Total depth = 36.5-feet.	
37.0						Boring completed as 2-inch PVC well. Refer to completion schematic.	
						On 27 December 1995, stabilized water level measured at 25.1-feet below top of casing.	
38.0							
39.0							
40.0							

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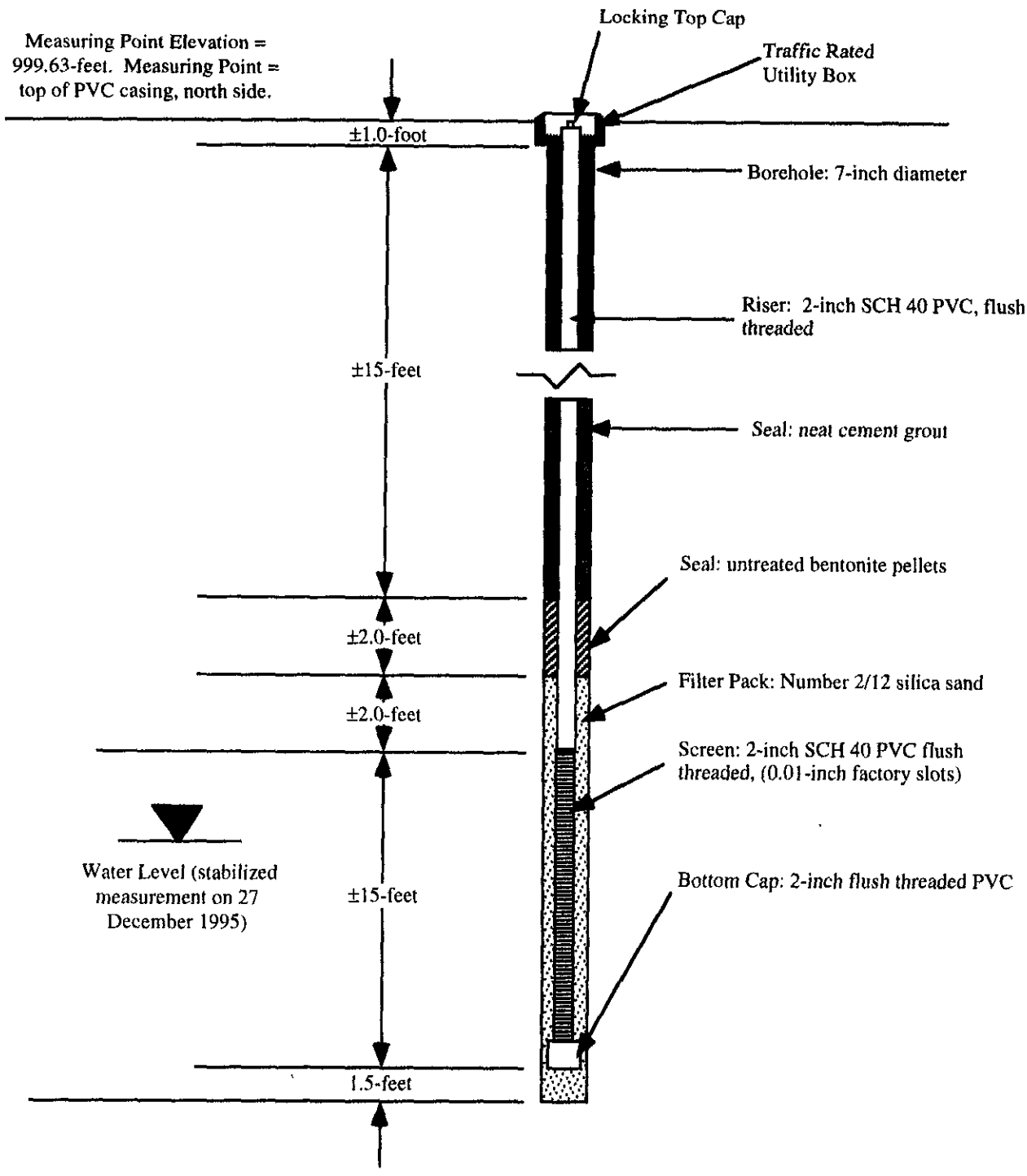

No Scale

MW-1
Monitoring Well Completion Schematic

21031 Western Boulevard
Hayward CA

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Boring No. MW-2 (page 1 of 3)

Project	Soil and Groundwater Investigation 21031 Western Boulevard Hayward CA	Address	21031 Western Boulevard Hayward CA
Location	±26-feet northeast of south side of roll-up door	Logged By	Doug Lovell, STREAMBORN, Berkeley CA
Elevation	Ground surface, north side = 999.81-feet (assumed datum)	Project No.	P178
Start Drilling	10:15 AM, 20 December 1995	Finish Drilling	11:30 AM, 20 December 1995
Drill Method	±4-inch ID by ±7-inch OD hollow-stem auger	Driller	HEW, Palo Alto CA
Drill Rig	CME 45	Drilled Depth	±36.5-feet
Completion	2-inch PVC well with traffic box	Groundwater (During Drilling)	±26-feet
Sampling	±2-inch ID by ±2-1/2-inch OD driven split-spoon fitted with 2-inch diameter by 6-inch long brass or stainless steel liners. Samples collected by driving spoon ahead of auger bit.	Groundwater (Stabilized)	24.7-feet below top of casing, measured 27 December 1995

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
0.0						Asphalt concrete pavement.	
1.0		GM				Silty Gravel (GM). Fill (aggregate base).	
2.0							
3.0							
4.0							
5.0							
		CH				Clay (CH), medium to high plasticity, stiff, moist, dark brown. No odor or staining.	
6.0							
7.0							
8.0							
9.0							
10.0							

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Boring No. MW-2 (page 2 of 3)

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
10.0					6	Clay (CL or CH), medium plasticity, moist, stiff, brown, light brown, and mottled gray-brown. No odor or staining.	
				Push	6		< 5
11.0					6		
12.0							
13.0							
14.0							
15.0							
16.0							
17.0		CH and/or CL					
18.0							
19.0							
20.0					6	Clay (CL or CH), as above. No odor or staining.	
				Push	6		< 5
21.0					6		
22.0							
23.0							
24.0							
25.0							

Boring No. MW-2 (page 3 of 3)

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
25.0					6	Clay (CL or CH), as above. No odor or staining.	
		CH/CL					
				Push	6		< 5
26.0							
					6	Silty Sand (SM), fine sand texture, 20-40% silt and clay (varies with depth), wet, light brown with gray mottling No odor or staining.	
27.0							
28.0							
29.0							
30.0					0	Silty Sand (SM), as above. No odor or staining.	
				Push	0		< 5
31.0		SM			6		
32.0							
33.0							
34.0							
35.0					6	Silty Sand (SM), as above. No odor or staining.	
				Push	6		< 5
36.0					6		
						Total depth = 36.5-feet.	
37.0						Boring completed as 2-inch PVC well. Refer to completion schematic.	
						On 27 December 1995, stabilized water level measured at 24.7-feet below top of casing.	
38.0							
39.0							
40.0							

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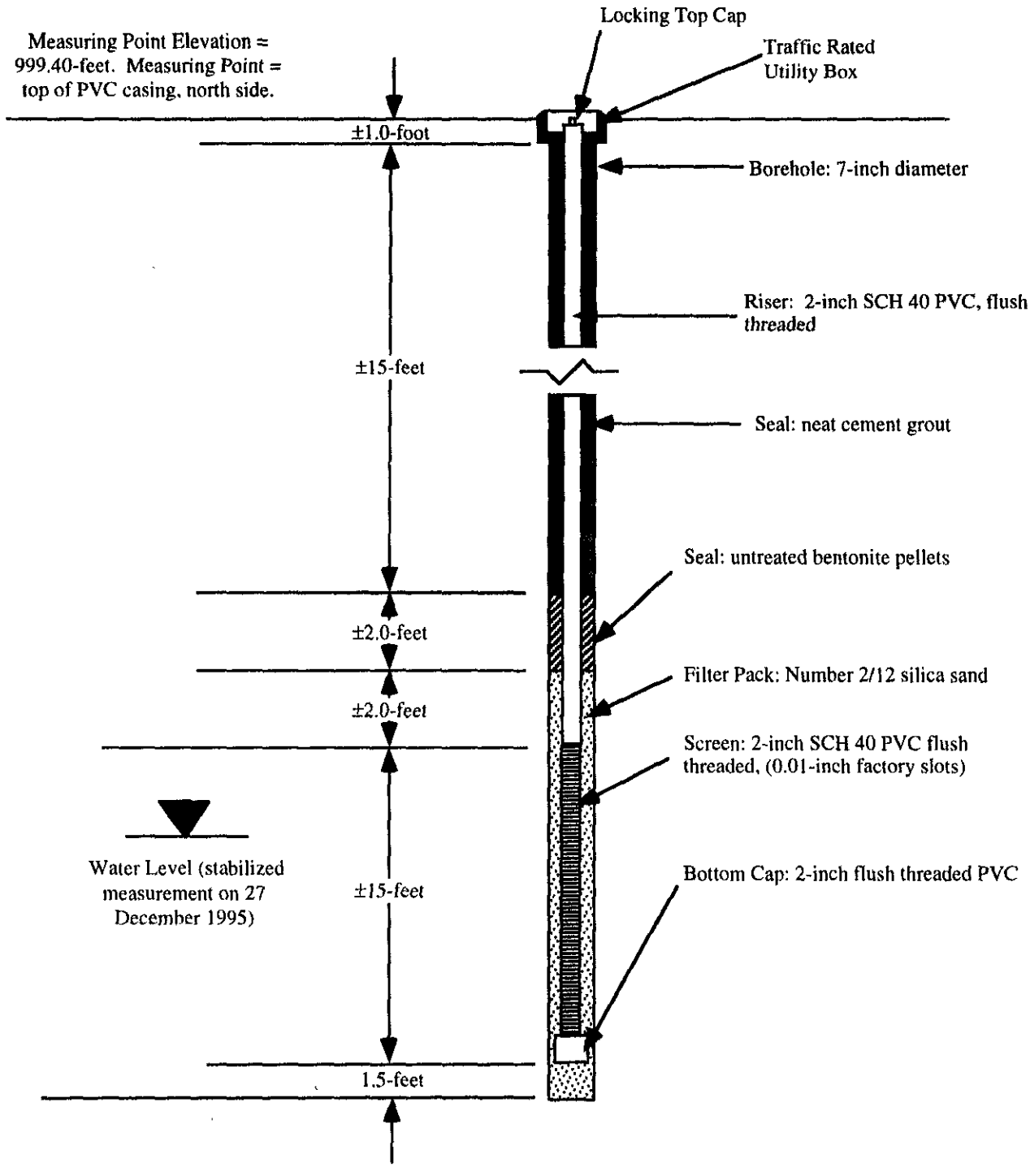

No Scale

MW-2
Monitoring Well Completion Schematic

21031 Western Boulevard
Hayward CA

Boring No. MW-3 (page 1 of 3)

Project	Soil and Groundwater Investigation 21031 Western Boulevard Hayward CA	Address	21031 Western Boulevard Hayward CA
Location	±10-feet southeast of roll-up door	Logged By	Doug Lovell, STREAMBORN, Berkeley CA
Elevation	Ground surface, north side = 1,000.16-feet (assumed datum)	Project No.	P178
Start Drilling	12:40 PM, 20 December 1995	Finish Drilling	3:30 PM, 20 December 1995
Drill Method	±4-inch ID by ±7-inch OD hollow-stem auger	Driller	HEW, Palo Alto CA
Drill Rig	CME 45	Drilled Depth	±35-feet
Completion	2-inch PVC well with traffic box	Groundwater (During Drilling)	±27-feet
Sampling	±2-inch ID by ±2-1/2-inch OD driven split-spoon fitted with 2-inch diameter by 6-inch long brass or stainless steel liners. Samples collected by driving spoon ahead of auger bit.	Groundwater (Stabilized)	25.3-feet below top of casing, measured 27 December 1995

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
0.0							
		GM				Silty Gravel (GM). Fill (aggregate base).	
1.0							
2.0							
3.0							
4.0							
5.0					6	Clay (CH), medium to high plasticity, stiff, moist, dark brown. No odor or staining.	
		CH		Push	6		< 5
6.0					6		
7.0						Very hard drilling from 7-feet to 8-feet. Cuttings contain particles of concrete. Driller suspects that a portion of the boring encountered the edge of the adjacent building foundation.	
8.0							
9.0							
10.0							

Boring No. MW-3 (page 2 of 3)

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
10.0					6	Clay (CH), medium to high plasticity, stiff, moist, dark brown. No odor or staining.	
				Push	6		< 5
11.0					6		
12.0							
13.0							
14.0							
15.0					6	Clay (CL or CH), medium plasticity, moist, stiff, brown, light brown, and mottled gray-brown. No odor or staining.	
				Push	6		< 5
16.0					6		
17.0		CH and/or CL					
18.0							
19.0							
20.0					6	Clay (CL or CH), as above. No odor or staining.	
				Push	6		< 5
21.0					6		
22.0							
23.0							
24.0							
25.0							

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Boring No. MW-3 (page 3 of 3)

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
25.0					6	Clay (CL or CH), as above. No odor or staining.	
		CH/CL					
				Push	6		< 5
26.0							
					6		
27.0							
28.0							
29.0							
30.0					6	Silty Sand (SM), fine sand texture, 20-40% silt and clay (varies with depth), wet, light brown with gray mottling. No odor or staining.	
				Push	6		< 5
31.0		SM					
					6		
32.0							
33.0							
34.0							
35.0						Total depth = 35-feet.	
						Boring completed as 2-inch PVC well. Refer to completion schematic.	
						On 27 December 1995, stabilized water level measured at 25.3-feet below top of casing.	
36.0							
37.0							
38.0							
39.0							
40.0							

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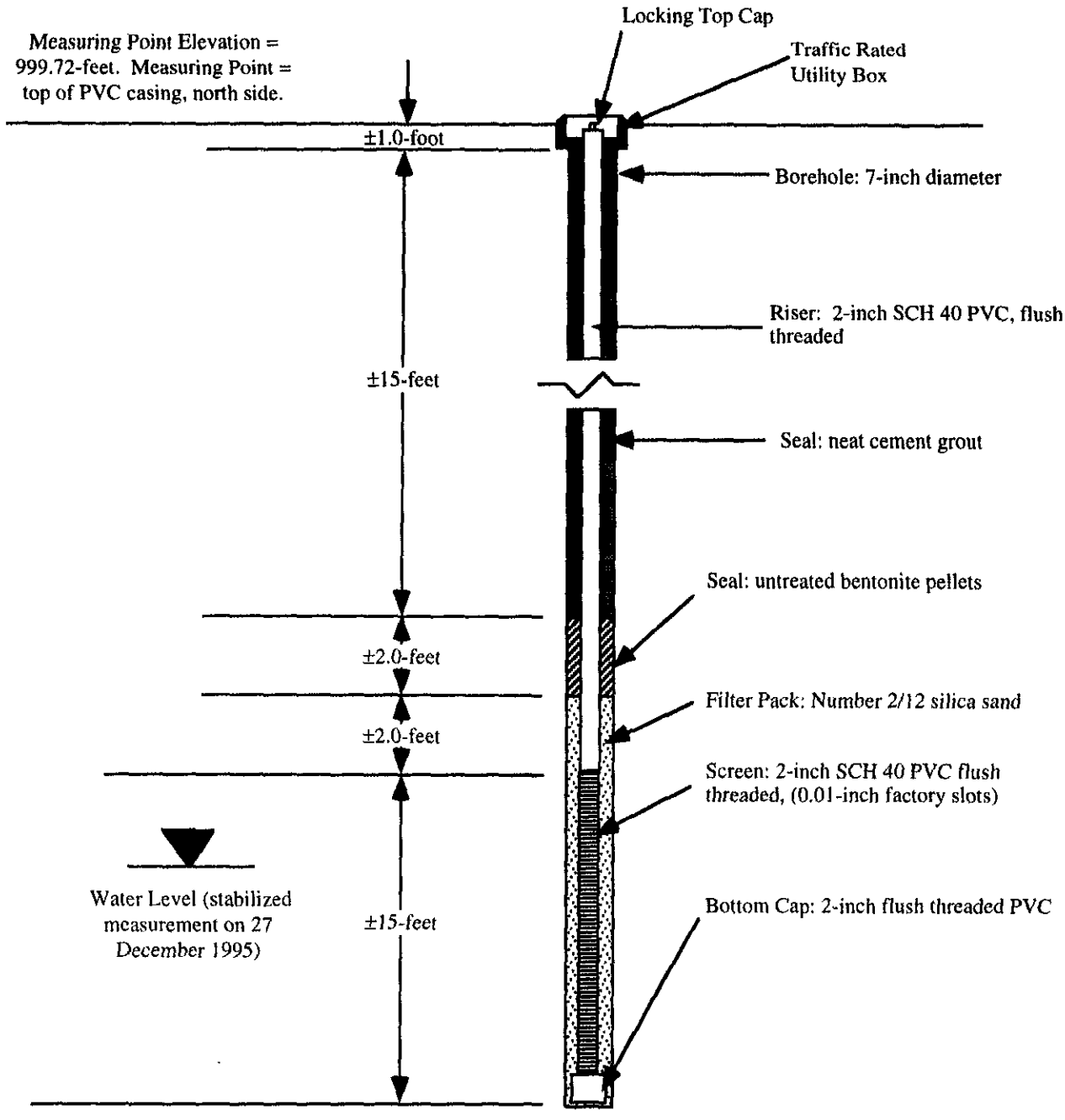


No Scale

MW-3
Monitoring Well Completion Schematic

21031 Western Boulevard
Hayward CA

ATTACHMENT 2

Remedial Action Completion Certification Letter From Alameda County Health Care Services Agency

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

REMEDIAL ACTION COMPLETION CERTIFICATION

November 19, 1996

William & Kathy Florence
Property owners
6316 Castle Dr.
Oakland CA 94611

Attn: Clifford Thompson
Cliff's Forklift
21051 Western Blvd.
Hayward CA 94541

Dear Mr. and Mrs. Florence and Mr. Thompson:

UNDERGROUND STORAGE TANK (UST) CASE
Cliff's Forklift
21031 Western Blvd.
Hayward CA 94541
SITE NO. 3574

This letter confirms the completion of site investigation and remedial action for the underground storage tank formerly located at the above-described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721 (e). If a change in land use, structural configuration, or site activities are proposed such that more conservative exposure scenarios should be evaluated, the owner must promptly notify this agency.

Please telephone Amy Leech at (510)567-6700 if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director of Environmental Health Services

ATTACHMENT

c: Attn: Keith D. Beury, Streamborn, PO Box 8330, Albany, CA 94706 w/attachment
Kevin Graves, RWQCB
Lori Casias, SWRCB w/attachment
Acting Chief of Environmental Protection Division
ALL/Files

Rec'd 11/26/96 01-0431

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

ENVIRONMENTAL PROTECTION
96 NOV 15 PM 3:51

I. AGENCY INFORMATION

Agency name: **Alameda County-HazMat**
Date:City/State/Zip: **Alameda, CA 94502**
Responsible staff person: **Amy Leech**
Date: **September 27, 1996**
Address: **1131 Harbor Bay Pkwy**
Phone: **(510) 567-6700**
Title: **Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **Cliff's Forklift**
Site facility address: **21031 Western Blvd., Hayward CA 94541**
RB LUSTIS Case No: **N/A**
Local Case No./LOP Case No.: **3574**
URF filing date: **05/06/91**
SWEEPS No: **N/A**

Responsible Parties:	Address:	Phone Numbers:
William & Kathy Florence	6316 Castle Dr, Oakland CA 94611	(510)482-1874
Attn: Clifford Thompson Cliff's Forklift	21051 Western Blvd, Hayward CA 94541	

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	1,000	gasoline	removed	08/21/89

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**

Site characterization complete? **Yes**
Date approved by oversight agency: **08/16/96**

Monitoring Wells installed? **Yes** Number: **3**

Proper screened interval? **Yes**

Highest GW depth below ground surface: **18.66** Lowest depth: **25.27**

Flow direction: **Southwest**

Most sensitive current use: **Commercial**

Are drinking water wells affected? **No** Aquifer name: **N/A**

Is surface water affected? **No** Nearest affected SW name:**N/A**

Off-site beneficial use impacts (addresses/locations): **n/a**

Report(s) on file? **YES** Where is report(s) filed?
Alameda County, 1131 Harbor Bay Pkwy, Alameda, CA 94502

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (cont'd)

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment or Disposal w/destination)	Date
USTs	1- 1,000 gallon	Erickson 255 Parr Blvd., Richmond, CA	08/21/89

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before[1]	After[2]	Before	After
TPH (Gasoline)	5,700	ND	ND	ND
Benzene	30	ND	ND	ND
Toluene	16	ND	ND	ND
Ethylbenzene	110	ND	ND	ND
Xylene	630	ND	ND	ND

ND=non-detect
NT=not tested

1 Soil sample collected from the north end of the gasoline UST pit during removal activities in 8/89.
2 Soil sample collected at 20, 25, and 30 ft. bgs from borings B-1 and B-2 located at each end of the former UST pit on 12/19/95.

Comments (Depth of Remediation, etc.): See comments under "Additional Comments" section.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan?
Undetermined

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan?
Undetermined

Does corrective action protect public health for current land use? **YES**
Site management requirements: **N/A**

Should corrective action be reviewed if land use changes? **YES**

Monitoring wells Decommissioned: **No, pending case closure.**
Number Decommissioned: **0** Number Retained: **3**

List enforcement actions taken: **n/a**
List enforcement actions rescinded: **n/a**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Amy Leech
Signature: A. Leech
Title: Hazardous Materials Specialist
Date: 10/15/96

Reviewed by
Name: Juliet Shin
Signature: Juliet Shin
Title: Sr. Hazardous Materials Specialist
Date: 10/18/96

Name: Thomas Peacock
Signature: Thomas Peacock
Title: Supervising, Hazardous Materials Spec.
Date: 10-10-96

VI. RWQCB NOTIFICATION

Date Submitted to RB:
RWQCB Staff Name: Kevin Graves, P.E.
Title: Assoc. Water Resources Control Engineer

RB Response: Approved
Signature: K. Graves
Date: 11/14/96

VII. ADDITIONAL COMMENTS

On August 21, 1989, one 1,000-gallon gasoline underground storage tank (UST) was removed from Cliff's Forklift, commercial property located at 21031 Western Blvd. in Hayward, CA. (See attachment 1 for site location and layout.) Up to 5,700 ppm TPH-G and 30/16/110/630 ppm BTEX, respectively, was identified in soil samples collected beneath each end of the UST.

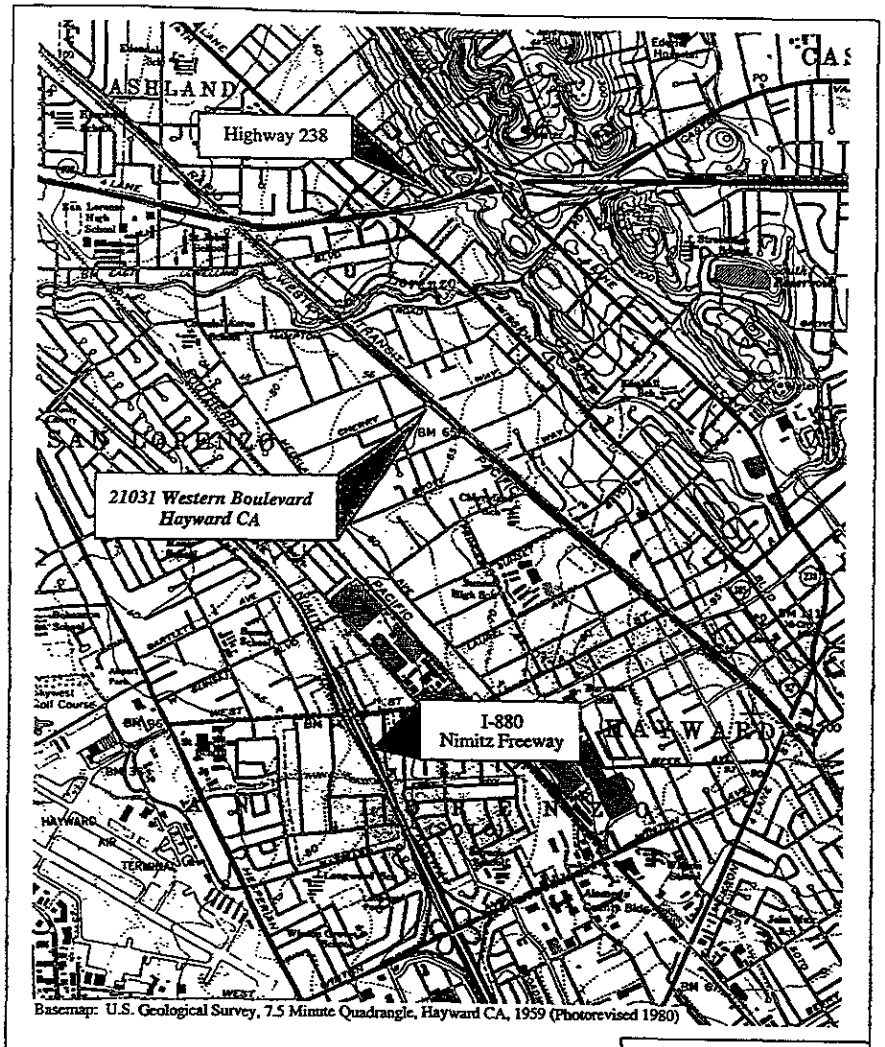
Approximately 100 cubic yards of contaminated soil was reportedly excavated and removed from the former UST pit. Analytical results of confirmatory samples reportedly collected from the UST pit on October 2, 1989 subsequent to tank removal, identified up to 9,500 ppm TPH-G and 3.7/370/230/1,500 ppm BTEX, respectively, from the southeast side of the excavation at an unspecified depth. It is not known if further excavation of contaminated soil occurred at this point. However, analytical results of a three point composite sample collected from the site on October 13, 1989 was non-detect for TPH-G and BTEX. It is not known if these samples were collected from the stockpile soil or from the UST pit.

No documentation exists regarding the fate of the stockpiled soil other than verbal accounts that it was removed or disappeared from the site. Because original overexcavation activities were not well documented, two soil borings (B-1 and B-2) were emplaced at each end of the former UST pit in December 1995 to confirm contaminant concentrations in soil within the vicinity of the UST pit.. Visual observations and OVM readings made during the installation of these borings did not identify any contamination. Likewise, soil samples collected and analyzed at 20, 25, and 30 ft. bgs from boring B-1 and B-2 were non-detect for TPH-G and BTEX. (See attachment 2 for summary of soil results.)

Three groundwater monitoring wells (MW-1, MW-2, MW-3) were installed in the vicinity of the former UST in 12/95. Groundwater was encountered at 25 ft. bgs during drilling operations. Native soil was reported to consist of stiff clays from 2 ft. to 25 ft. and then silty sand to the depth explored down 35 ft. bgs. All soil samples collected from the monitoring wells were non-detect for TPH-G and BTEX, including samples collected at the capillary fringe. (See attachment 2 for soil results and attachment 3 for boring logs.)

Groundwater has been monitored and sampled for three quarters from 12/95 to 6/95. Groundwater flow has been toward the southwest, and analytical results have been non-detect for TPH-G and BTEX during all sampling events. (See attachment 4 for historical groundwater results.)

Based on this information, no further investigations are recommended for this site.



Basemap: U.S. Geological Survey, 7.5 Minute Quadrangle, Hayward CA, 1959 (Photorevised 1980)

Figure 1

Location Map

21031 Western Boulevard
Hayward CA

STREAMBORN

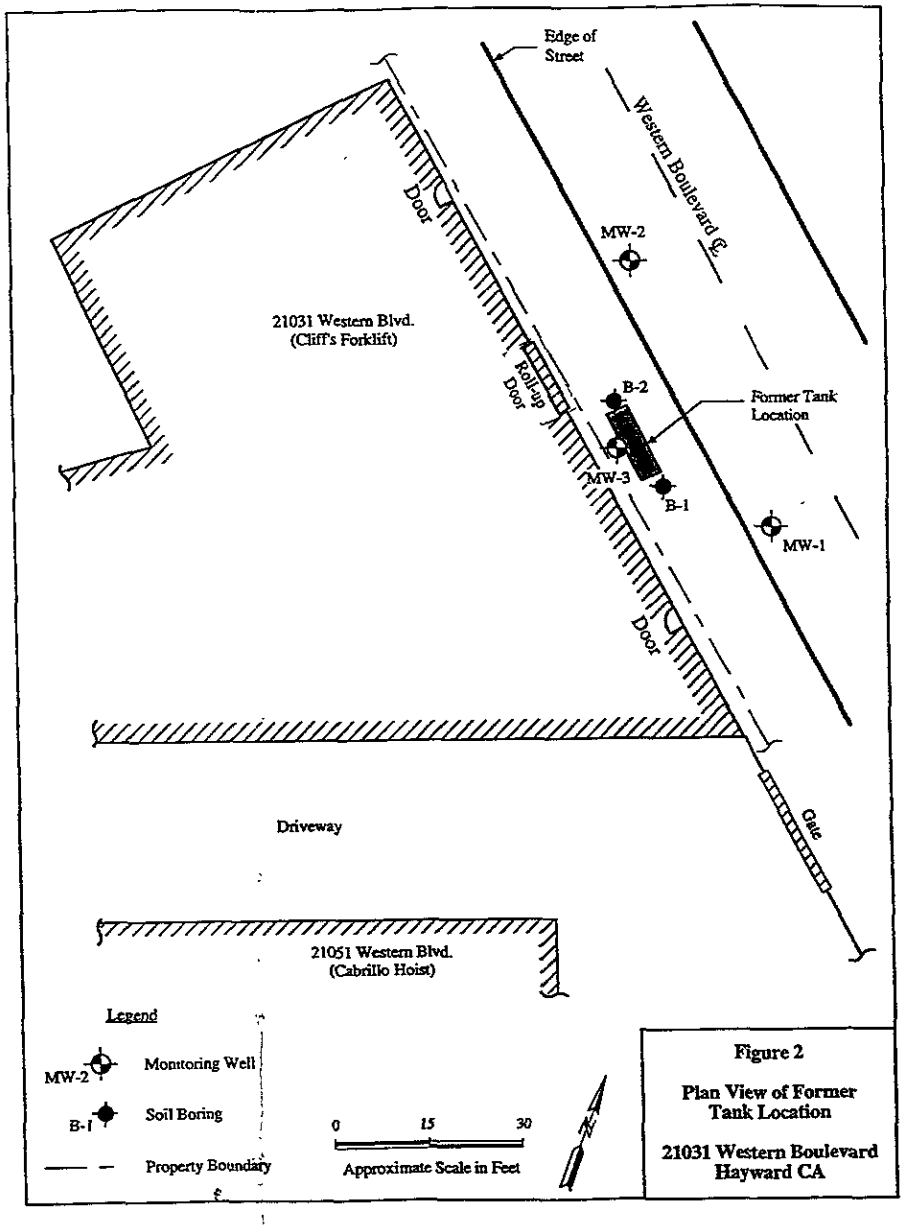


Figure 2

Plan View of Former Tank Location

21031 Western Boulevard
Hayward CA

STREAMBOR

(1)

Table 2

Analytical Results of Historic Soil Sampling

Presumed Sample Location	Depth (feet)	Sample Date	Sample Identification	Collected by	Sample Type	TPH-Gasoline (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)
North side of excavation	Not documented	21 August 1989	No. 1 North End	B&B Associated Services	Grab	5,700	30	16	110	630
South side of excavation	Not documented	21 August 1989	No. 2 South End	B&B Associated Services	Grab	3.2	<0.05	0.059	0.077	0.60
Unknown	Not documented	22 September 1989	Composite of No. 1-N No. 2-NE No. 3-S No. 4-NW	B&B Associated Services	Composite	1,500	61	210	52	280
Northwest side of excavation	Not documented	2 October 1989	No. 1 NW	B&B Associated Services	Grab	1.2	<0.01	<0.01	0.038	0.13
Northeast side of excavation	Not documented	2 October 1989	No. 2 NE	B&B Associated Services	Grab	<0.5	<0.01	<0.01	<0.02	<0.06
Southwest side of excavation	Not documented	2 October 1989	No. 3 SW	B&B Associated Services	Grab	7.3	<0.01	0.10	0.07	0.96
Southeast side of excavation	Not documented	2 October 1989	No. 4 SE	B&B Associated Services	Grab	9,500	3.7	370	230	1,500
Center of excavation	Not documented	2 October 1989	No. 5 Center	B&B Associated Services	Grab	2,200	4.3	55	40	220
Unknown	Not documented	13 October 1989	Composite of No. 1 No. 2 No. 3	B&B Associated Services	Composite	<0.5	<0.01	<0.02	<0.02	<0.06

General Notes

(a) TPH-Gasoline = Total petroleum hydrocarbons as gasoline.

(b) < indicates concentration below detection limit (shaded values).

(c) Laboratory analysis performed by Trace Analysis Laboratory, Hayward CA.

(d) Sample locations and depths were not documented.

Table 3

Soil Analytical Results for Borings

Location	Depth Interval (feet)	Sample Date	Sample Identification	Collected by	Sample Type	Visual Classification	Odor or Staining	TPH-Gasoline (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	Total Lead (mg/kg)
B-1	±20.5-21.0	19 Dec 1995	B-1,S-4,20.5-21	Streamborn	Grab (liner)	CL or CH - Clay	None	<1.0	<0.005	<0.005	<0.005	<0.005	6.5
	±25.5-26.0	19 Dec 1995	B-1,S-5,25.5-26	Streamborn	Grab (liner)	CL or CH - Clay	None	<1.0	<0.005	<0.005	<0.005	<0.005	<5.0
	±30.5-31.0	19 Dec 1995	B-1,S-6,30.5-31	Streamborn	Grab (liner)	SM - Silty Sand	None	<1.0	<0.005	<0.005	<0.005	<0.005	<5.0
B-2	±20.5-21.0	20 Dec 1995	B-2,S-4,20.5-21	Streamborn	Grab (liner)	CL or CH - Clay	None	<1.0	<0.005	<0.005	<0.005	<0.005	<5.0
	±26.0-26.5	20 Dec 1995	B-2,S-5,26-26.5	Streamborn	Grab (liner)	CL or CH - Clay	None	<1.0	<0.005	<0.005	<0.005	<0.005	<5.0
	±30.5-31.0	20 Dec 1995	B-2,S-6,30.5-31	Streamborn	Grab (liner)	SM - Silty Sand	None	<1.0	<0.005	<0.005	<0.005	<0.005	<5.0
MW-1	±25.5-26.0	19 Dec 1995	MW-1,S-4,25.5-26	Streamborn	Grab (liner)	CL or CH - Clay	None	<1.0	<0.005	<0.005	<0.005	<0.005	<5.0
MW-2	±26.0-26.5	20 Dec 1995	MW-2,S-3,26-26.5	Streamborn	Grab (liner)	SM - Silty Sand	None	<1.0	<0.005	<0.005	<0.005	<0.005	<5.0
MW-3	±20.5-21.0	20 Dec 1995	MW-3,S-4,20.5-21	Streamborn	Grab (liner)	CL or CH - Clay	None	<1.0	<0.005	<0.005	<0.005	<0.005	6.2
	±25.5-26.0	20 Dec 1995	MW-3,S-5,25.5-26	Streamborn	Grab (liner)	CL or CH - Clay	None	<1.0	<0.005	<0.005	<0.005	<0.005	5.4
	±30.5-31.0	20 Dec 1995	MW-3,S-6,30.5-31	Streamborn	Grab (liner)	SM - Silty Sand	None	<1.0	<0.005	<0.005	<0.005	<0.005	<5.0

General Notes

(a) TPH-Gasoline = Total petroleum hydrocarbons as gasoline.

(b) < indicates concentration below detection limit (shaded values).

(c) Laboratory analysis performed by Chromalab, Pleasanton CA.

Boring No. MW-3 (page 1 of 3)

Project	Soil and Groundwater Investigation 21031 Western Boulevard Hayward CA	Address	21031 Western Boulevard Hayward CA
Location	±10-feet southeast of roll-up door	Logged By	Doug Lovell, STREAMBORN, Berkeley CA
Elevation	Ground surface, north side = 1,000.16-feet (assumed datum)	Project No.	P178
Start Drilling	12:40 PM, 20 December 1995	Finish Drilling	3:30 PM, 20 December 1995
Drill Method	±4-inch ID by ±7-inch OD hollow-stem auger	Driller	HEW, Palo Alto CA
Drill Rig	CME 45	Drilled Depth	±35-feet
Completion	2-inch PVC well with traffic box	Groundwater (During Drilling)	±27-feet
Sampling	±2-inch ID by ±2-1/2-inch OD driven split-spoon fitted with 2-inch diameter by 6-inch long brass or stainless steel liners. Samples collected by driving spoon ahead of auger bit.	Groundwater (Stabilized)	25.3-feet below top of casing, measured 27 December 1995

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
0.0							
		GM				Silty Gravel (GM). Fill (aggregate base).	
1.0							
2.0							
3.0							
4.0							
5.0					6	Clay (CH), medium to high plasticity, stiff, moist, dark brown. No odor or staining.	
		CH		Push	6		<5
6.0					6		
7.0						Very hard drilling from 7-feet to 8-feet. Cuttings contain particles of concrete. Driller suspects that a portion of the boring encountered the edge of the adjacent building foundation.	
8.0							
9.0							
10.0							

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Boring No. MW-3 (page 2 of 3)

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
10.0					6	Clay (CH), medium to high plasticity, stiff, moist, dark brown. No odor or staining.	
				Push	6		<5
11.0					6		
12.0							
13.0							
14.0							
15.0					6	Clay (CL or CH), medium plasticity, moist, stiff, brown, light brown, and mottled gray-brown. No odor or staining.	
				Push	6		<5
16.0					6		
17.0		CH and/or CL					
18.0							
19.0							
20.0					6	Clay (CL or CH), as above. No odor or staining.	
				Push	6		<5
21.0					6		
22.0							
23.0							
24.0							
25.0							

STREAMBORN

3

Boring No. MW-3 (page 3 of 3)

Depth (feet)	Graphic Log	USCS	Sample Interval	Blows per 6 inches	Recovery (inches)	Soil Description, Observations, Comments	OVM (ppmv)
25.0					6	Clay (CL or CH), as above. No odor or staining.	
		CH/CL					
				Push	6		< 5
26.0					6		
27.0							
28.0							
29.0							
30.0					6	Silty Sand (SM), fine sand texture; 20-40% silt and clay (varies with depth), wet, light brown with gray mottling. No odor or staining.	
				Push	6		< 5
31.0		SM			6		
32.0							
33.0							
34.0							
35.0						Total depth = 35-feet. Boring completed as 2-inch PVC well. Refer to completion schematic. On 27 December 1995, stabilized water level measured at 25.3-feet below top of casing.	
36.0							
37.0							
38.0							
39.0							
40.0							

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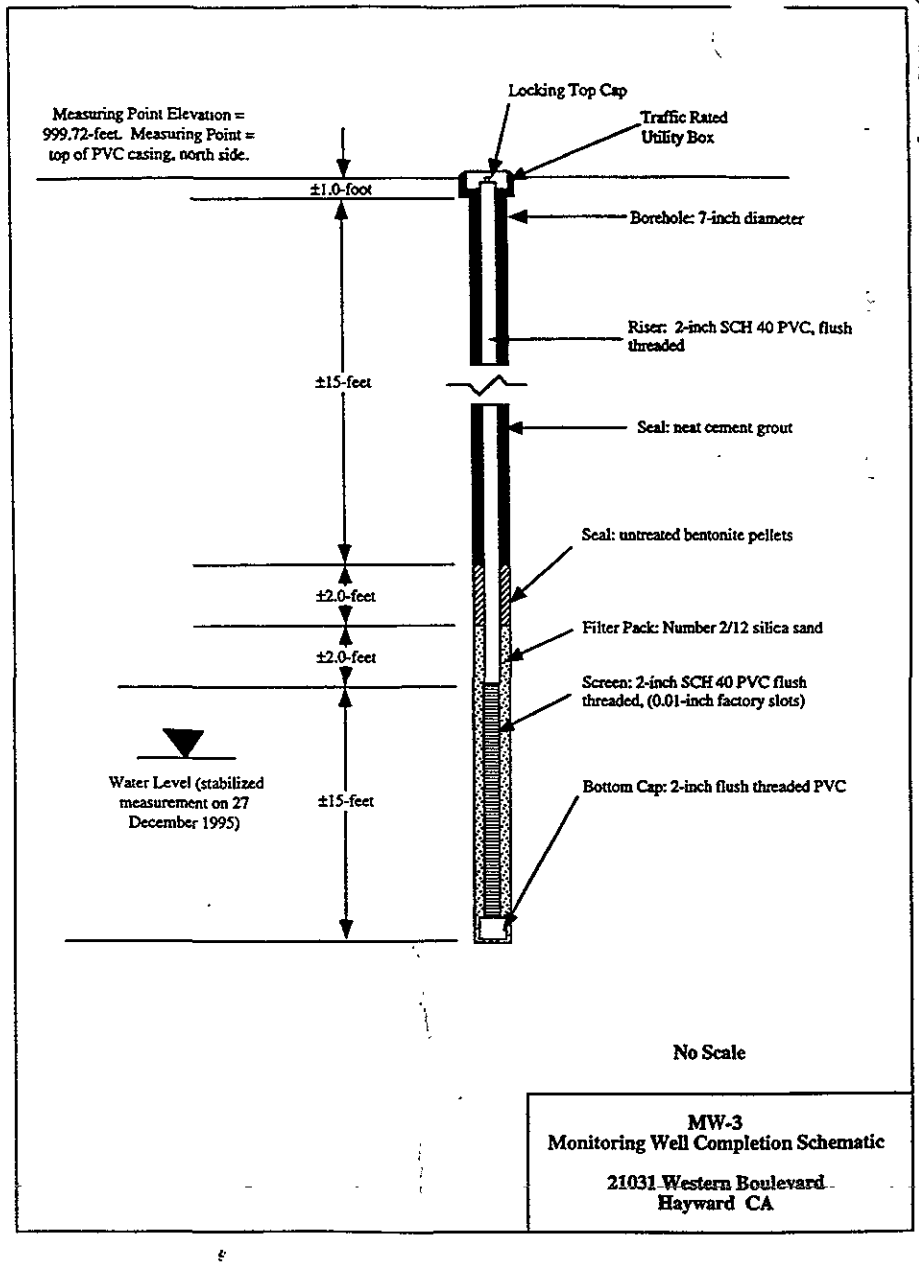

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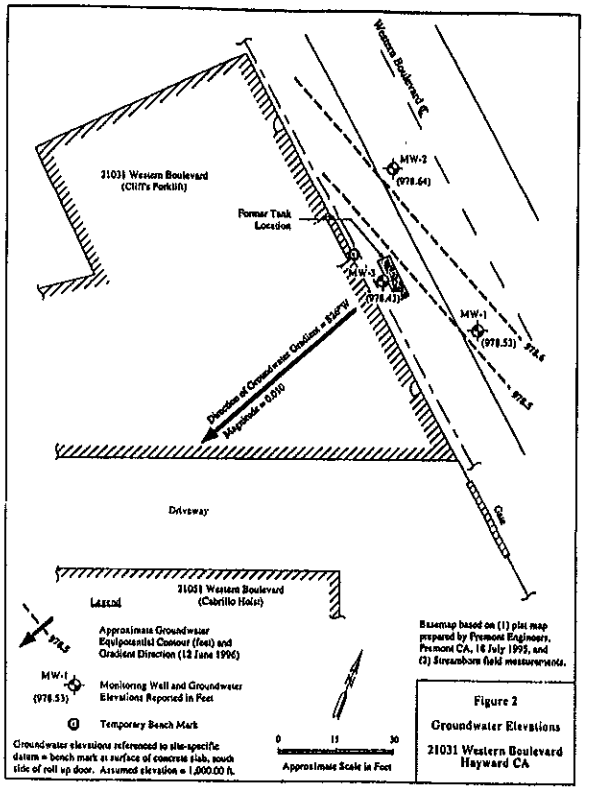


Figure 2

Groundwater Elevations

21031 Western Boulevard
Hayward CA

STREAMBORN

4

Table 3
Groundwater Level Measurements
21031 Western Boulevard
Hayward CA

Location		MW-1		MW-2		MW-3	
Measuring Point		Top of PVC Casing-North Side, Elevation 999.53 (Ground Surface-North Side, Elevation 1,000.09)		Top of PVC Casing-North Side, Elevation 999.40 (Ground Surface-North Side, Elevation 999.81)		Top of PVC Casing-No Side, Elevation 999.7 (Ground Surface-North Sio. Elevation 1,000.16)	
Measured By	Parameter or Date	Depth	Elevation	Depth	Elevation	Depth	Elevation
Streamborn	27 December 1995	25.13	974.50	24.73	974.67	25.27	974.43
Streamborn	22 March 1996	19.02	980.61	18.66	980.74	19.11	980.59
Streamborn	12 June 1996	21.56	978.53	21.17	978.64	21.73	978.43
Streamborn	Total Depth (last measurement)	34.9	-	34.8	-	35.0	-

General Notes
(a) Measurements in units of feet.
(b) Groundwater elevations referenced to site-specific datum = bench mark at surface of concrete slab, south side of roll up door. Assumed elevation = 1,000.00 feet.

STREAMBOR

Table 4
Groundwater Analytical Results

21031 Western Boulevard
Hayward CA

Monitoring Well	Sample Date	Sample Identification	Sample Type	Sampled By	TPH-Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	Dissolved Lead (µg/L)
MW-1	27 December 1995	MW-1 (27Dec95)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	<5
	22 March 1996	MW-1 (22Mar96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured
	12 June 1996	MW-1 (12Jun96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured
MW-2	27 December 1995	MW-2 (27Dec95)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	<5
	22 March 1996	MW-2 (22Mar96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured
	12 June 1996	MW-2 (12Jun96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured
MW-3	27 December 1995	MW-3 (27Dec95)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	<5
	22 March 1996	MW-3 (22Mar96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured
	12 June 1996	MW-3 (12Jun96)	Grab	Streamborn	<50	<0.5	<0.5	<0.5	<0.5	Not measured

General Notes

(a) TPH-Gasoline = total petroleum hydrocarbons as gasoline.

(b) < denotes less than detection limit (shaded values).

(c) Laboratory analysis performed by Chromalab, Pleasanton CA.

ATTACHMENT 3

Permits

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588 VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 21031 Western Boulevard
Hayward, California

CLIENT
Name William and Kathy Florence
Address 6316 Castle Drive Voice 510-482-1784
City Oakland CA Zip 94611

APPLICANT
Name Streamborn Fax 510-528-2613
Address P.O. Box 8330 Voice 510-528-4234
City Berkeley CA Zip 94707-8330

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	___	General	___
Water Supply	___	Contamination	___
Monitoring	___	Well Destruction	X

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger X
Cable ___ Other ___

DRILLER'S LICENSE NO. 374152 (BAYLAND Drilling)

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 35' (each of 3 wells)
Surface Seal Depth 18 ft. Number 3

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

ESTIMATED STARTING DATE 19 December 1996
ESTIMATED COMPLETION DATE 19 December 1996

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No 73-68.

APPLICANT'S SIGNATURE Kathy Berry/Streamborn Date 12/9/96

FOR OFFICE USE

PERMIT NUMBER 96885
LOCATION NUMBER 3S/2W 8R80 to 8R82

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

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

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

(E) WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 16 Dec 96
Wyman Hong

91992

16 December 1996

ZONE 7
WATER RESOURCES ENGINEERING
DRILLING ORDINANCE

WILLIAM AND KATHY FLORENCE
21031 WESTERN BOULEVARD
HAYWARD
WELLS 3S/2W 8R80 TO 8R82
PERMIT 96885

Destruction Requirements:

1. Drill out the well so that the casing, seal, and gravel pacd are removed to the bottom of the well.

2. Sound the well as deeply as practicable and record for your report.

3. Using a tremie pipe, fill the hole to 2 feet below the lower of finished grade or original ground with neat cement.

4. After the seal has set, backfill the remaining hole with compacted material.

These destruction requirements as proposed by Keith Beury of Streamborn meet or exceed the Zone 7 minimum requirements.

Permit #R00-941132
Issue Date: 12/17/96

COUNTY OF ALAMEDA
PUBLIC WORKS AGENCY
399 ELMHURST STREET, HAYWARD, CA 94544
(510) 670-5429

ROAD ENCROACHMENT PERMIT

This Permit is issued in accordance with the provisions of Chapter 1 of Title 5 of the Ordinance Code of the County of Alameda.

NAME & ADDRESS OF PERMITTEE:

Streamborn
900 Santa Fe Avenue
Albany CA 94706

PHONE: (510) 528-4234

Work Order Number: 80001
Expiration Date: 12/17/97
Receipt Number: 40322

JOB SITE(S): 21031 Western Boulevard
Hayward CA

This Permit authorizes an encroachment onto the roadway right-of-way, at the said Job Site(s), in order to perform the work described below; unless specifically exempted, this encroachment shall be subject to the terms and conditions of the said Chapter 1 of Title 5 and to all other provisions attached to and written into this Permit.

THE PERMITTEE INTENDS TO PERFORM THE FOLLOWING:

Abandon 3 groundwater monitoring wells at the property. The wells will be abandoned by overdrilling using hollow stem augers. The boreholes will be backfilled with cement/bentonite grout and the surface patched with asphalt.

Attention is directed to the inspection requirements and to the other general terms and conditions, as outlined on the back of this form -- and to those special requirements written below:

none.

Other Required Permits: Zone 7

Bond Information: Waived; Bonds filed under 940742

Inspection Fee/Deposit: $125 ;Chg. Insp. to WO# ____

BY: Keith Beery (Streamborn), PERMITTEE

BY: J K Rogers, FOR ALAMEDA COUNTY

Reviewed By: ____
Work Completed: ____
Inspector: ____

INSPECTION REQUIREMENTS

1. All work or access authorized by this Permit is subject to review and/or inspection by the County.

2. It is the Permittee's responsibility to notify the appropriate County office(s), as indicated below:

a. The work described in this permit must be accepted by the County. Contact the County Inspection Office at (510) 670-5762, prior to the start of work, to arrange for the required tests and inspections.

Confirm each scheduled test/inspection operation by notifying the assigned inspector 24 hours in advance.

b. The work or access described in this permit is subject to review by the County; however, notification of the County Inspection Office is not required.

c. Some or all of the work described in this permit requires additional coordination with the County -- as indicated below:

_____

_____

Note that, unless a. above is lined out, you will still be required to notify the County Inspection Office.

TERMS AND CONDITIONS

1. Unless exempted below, all work or access shall be subject to the terms and conditions delineated in the attached "General Provisions":

   Particular attention shall be paid to the requirement to call USA and the County Traffic Section, if applicable, prior to any excavation; see Provisions 27 and 28.

2. In addition, the authorized work or access shall be subject to those special requirements shown on the front of this form and to all restrictions imposed by other agencies having jurisdiction.

ATTACHMENT 4

Well Drillers Report (DWR 188)

Wyman Hong
Zone 7 Water Agency
5997 Parkside Drive
Pleasanton CA 94588

7 January 1997

Project No. P178A

Abandonment of Wells MW-1, MW-2, and MW-3
21031 Western Boulevard
Hayward CA

Dear Mr. Hong:

Attached is the Well Drillers Report (DWR 188) for abandonment of the subject monitoring wells. The attached report includes a property location map and a well location plan. We understand you will forward this report to the California Department of Water Resources.

If you have any questions, please call.

Sincerely,
STREAMBORN

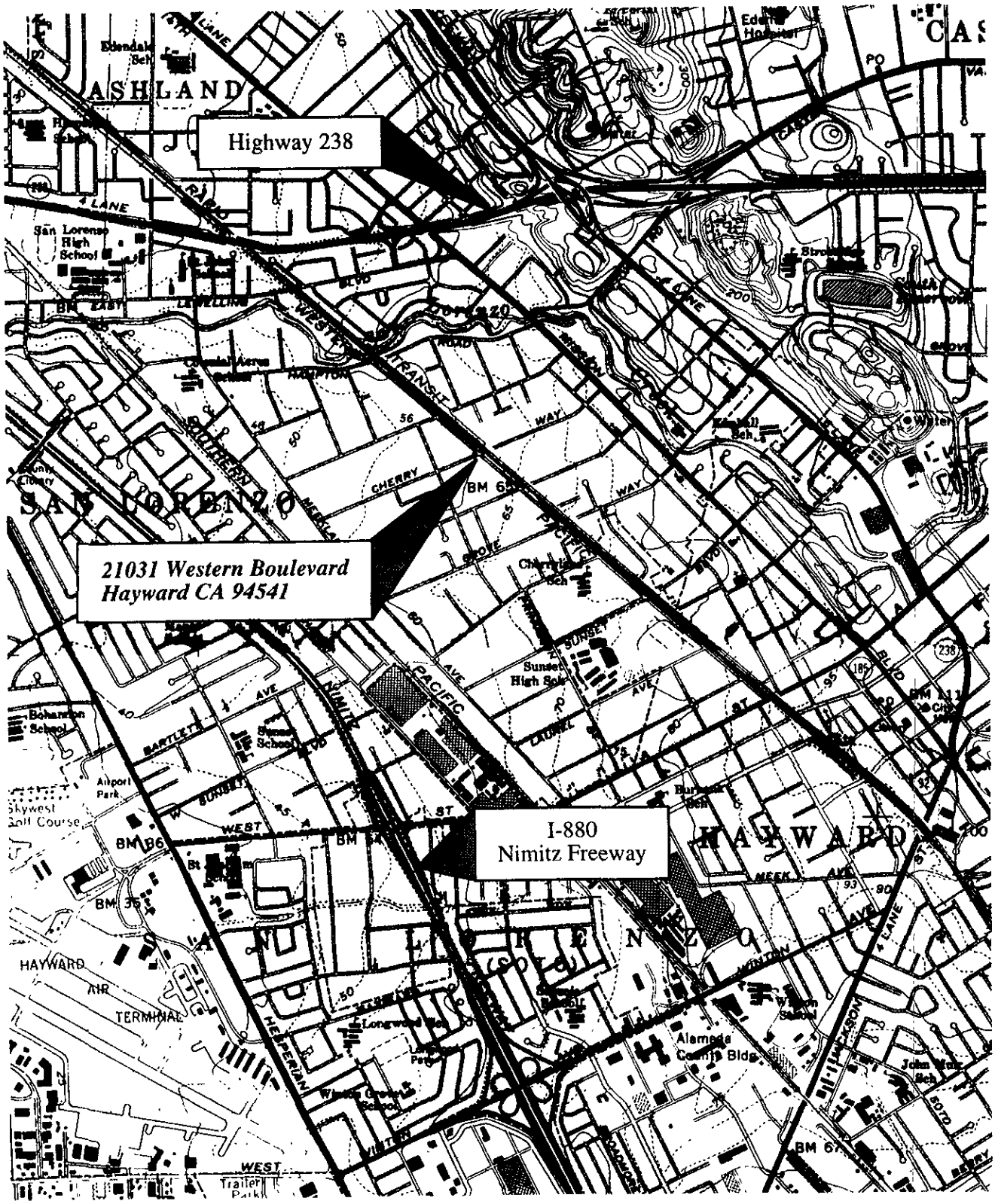
Keith Beury
Environmental Engineer

Attachments

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED



0 0.5 1.0
Approximate Scale in Miles

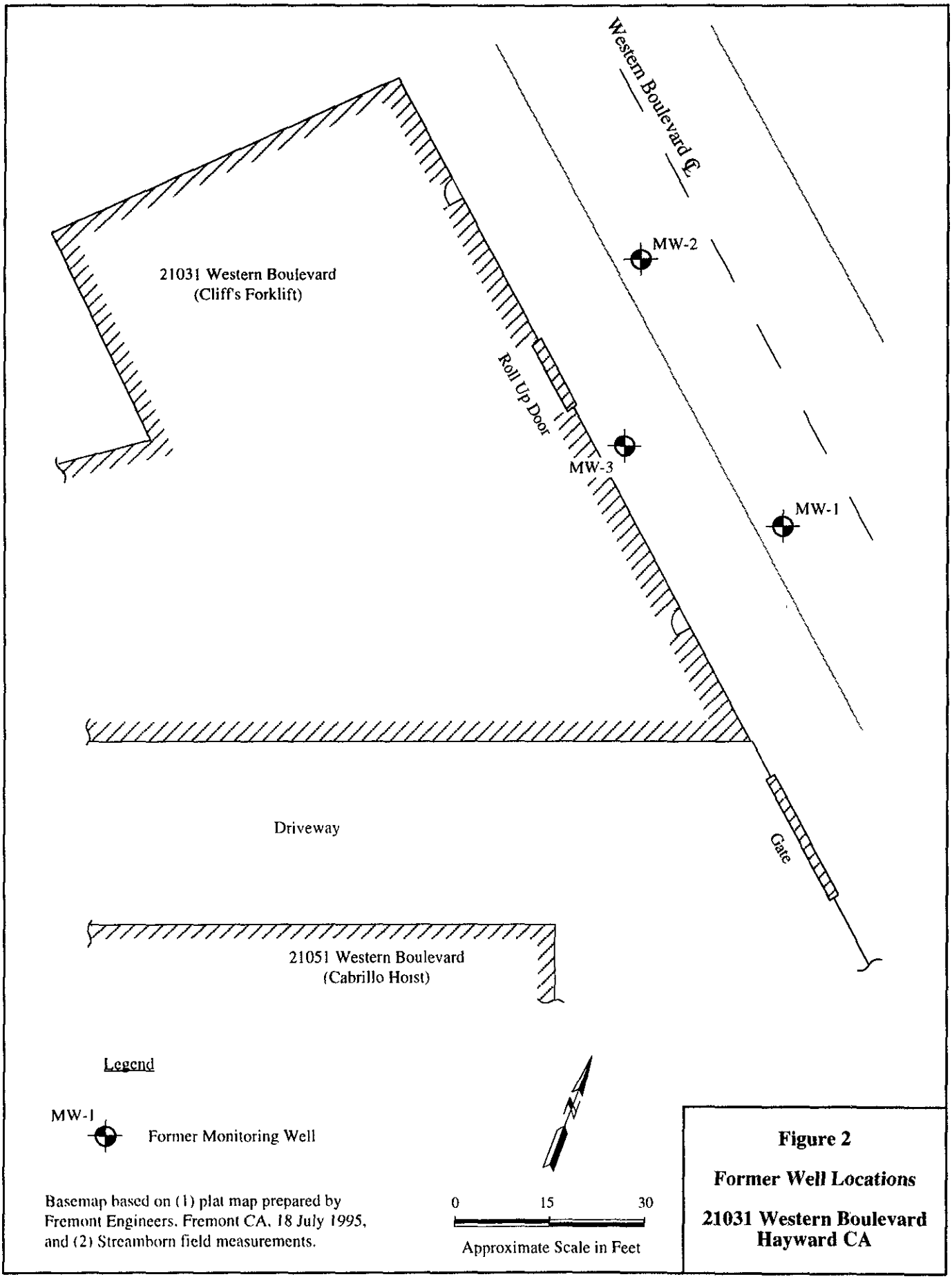
0 5,000
Approximate Scale in Feet

Basemap:
U.S. Geological Survey,
7.5 Minute Quadrangle,
Hayward CA, 1959
(Photorevised 1980)

Figure 1

Location Map

21031 Western Boulevard
Hayward CA



Basemap based on (1) plat map prepared by Fremont Engineers, Fremont CA, 18 July 1995, and (2) Streamborn field measurements.

Figure 2

Former Well Locations

21031 Western Boulevard
Hayward CA