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

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6700

June 1, 1995
STID 1330

REMEDIAL ACTION COMPLETION CERTIFICATION

Mr. David Kuhre
Oliver Rubber Company
1200 65th Street
Emeryville, California 94608

RE: Oliver Rubber Company
1200 65th Street, Emeryville, California 94608

Dear Mr. Kuhre:

This letter confirms the completion of site investigation and remedial action for the two 8,000 gallon non halogenated solvent underground storage tanks removed on November 1, 1991 and one 1,000 gallon bunker oil underground storage tank removed on July 24, 1992 at the above described location.

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

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations.

Please contact Susan L. Hugo at (510) 567-6780 if you have any questions regarding this matter.

Sincerely,

Rafat A. Shahid

Rafat A. Shahid, Director

cc: Mee Ling Tung, Acting Chief, Environmental Protection - files
Kevin Graves, RWQCB
Mike Harper, SWRCB
Robert Kitay, Aqua Science Engineers, 2411 Old Crow Canyon Road, Suite #4, San Ramon, California 94583

CASE CLOSURE SUMMARY

Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Agency name: **Alameda County-HazMat** Date: April 20, 1995
City/State/Zip: **Alameda, CA 94502** Address: **1131 Harbor Bay Parkway**
Responsible staff person: **Susan Hugo** Phone: **(510) 567-6700**
Title: **Sr. Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **Oliver Rubber Company**
Site facility address: **1200 65th Street, Emeryville, California 94608**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **1330**
URF filing date: **7/1/92** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Oliver Rubber Company	1200 65th Street	(510) 654-7711
Attn: Mr. Ron Kessler	Emeryville, CA 94608	

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	8000	Non Halogenated Solvent	Removed	11/1/91
2	8000	Non Halogenated Solvent	Removed	11/1/91
3	1000	Bunker Oil	Removed	7/24/92

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**
Site characterization complete? **YES**
Date approved by oversight agency: **9/24/92**
Monitoring Wells installed? **YES** Number: **Three**
Proper screened interval? **YES**
Highest GW depth below ground surface: **3.46 feet** Lowest depth: **8.08 feet**
Flow direction: **West - southwest**
Most sensitive current use: **Unknown**
Are drinking water wells affected? **NO** Aquifer name: **NA**
Is surface water affected? **NO** Nearest affected SW name: **NA**
Off-site beneficial use impacts (addresses/locations): **NA**

Report(s) on file? **YES** Where is report(s) filed? **Alameda County**
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment of Disposal w/destination)	Date
Tank	2 - 8000 gallon	Erickson - 255 Parr Blvd.	11/1/91
	1 - 1000 gallon	Richmond, California	6/24/92
Soil	54 cu. yds.	BFI, Livermore, CA	1/15/93
	36 cu. yds.	BFI, Livermore, CA	7/15/92
	80 cu. yds.	McKittrick Waste Disposal	12/30/91
	40 cu. yds.	BFI, Livermore, CA	12/30/91
	54 cu. yds.	BFI, Livermore, CA	2/4/92
Groundwater	2500 gallons	McKittrick Waste Disposal McKittrick, California	11/14/91
	1290 gallons	Demenno Rerdoon, Compton	11/15/91
Rinsate	260 gallons	Demenno Rerdoon, Compton	10/31/91
Barrels	550 gal. waste oil/water	Waste Oil Recovery, Compton California	6/24/92

III. RELEASE AND SITE CHARACTERIZATION INFORMATION
Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	250	27	1900	ND
TPH (Diesel)	490	30	2900	ND
Benzene	0.079	0.0084	2.1	ND
Toluene	0.048	0.014	2.0	ND
Ethylbenzene	0.027	0.0073	2.0	ND
Xylene	0.014	0.024	18.0	ND
Oil & Grease	1500	48	ND	ND
Others	Refer to comments		Refer to comments	

Comments (Depth of Remediation, etc.):

Two 8000-gallon underground tanks used to store non halogenated solvent were removed underneath the sidewalk on November 1, 1991. A concrete vault surrounded the two tanks on all sides and bottom. Soil was excavated along the outside of the vault to a depth of approximately 10 to 11 feet below grade. Groundwater was encountered during the excavation at a depth of approximately 9.5 feet below grade. Six soil samples (S-1 to S-6) were collected from the walls of the excavation at approximately 6 inches above

groundwater. In addition to BTEX, the following volatile organic compounds were detected in the soil samples: 3.5 ppm cyclohexane, 5.2 ppm trimethyl cyclopentanes, 10 ppm methyl cyclohexane, and 2.3 ppm n-heptane. Lead was also found at 7.47 ppm. Grab groundwater sample detected 43 ppb cyclohexane, 160 ppb trimethyl cyclopentanes, 380 ppb methyl cyclohexane and 30 ppb n-heptane. On November 14, 1991, overexcavation in the area of S-1 was conducted and verification samples did not detect any concentration of VOCs. Additionally, 2500 gallons of water was removed from the excavation and vaults and a grab groundwater sample was again collected showing the following contaminants: 190 ppb methyl propyl cyclopentane, 100 ppb di-methyl cyclopentane, and 50 ppb methyl cyclopentane.

One 1000 gallon underground bunker oil storage tank was removed in the parking lot on July 24, 1992. Two bottom and four sidewall soil samples were collected in the excavation. Up to 490 ppm TPH diesel and 1,500 ppm oil and grease were detected in the excavation walls. In December, 1992 overexcavation of petroleum hydrocarbon contaminated soil was conducted and verification soil samples indicated 48 ppm TOG and 30 ppm TPH diesel remained on site.

Three shallow groundwater monitoring wells were installed and two soil borings (SB-1 and SB-2) were advanced on October 1, 1992. The native soil types encountered were primarily composed of organic clay from approximately 1 feet to 10 feet. Silty clay was observed from 10 feet to the bottom of the borehole at 25 feet depth. Depth to water range from 7.44 feet to 8.08 feet. Target compounds sought were not detected from the soil samples collected from the borings with the exception of trichlorofloromethane (13 ppb); 1,1-dichloroethene (2.9 ppb) and chloroform (11 ppb). The three groundwater monitoring wells were sampled for four quarters and showed non detect for all target compounds.

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: **NA**
Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **NO (will be decommissioned upon approval of closure)**
Number Decommissioned: **NA** Number Retained: **NA**
List enforcement actions taken: **NA**
List enforcement actions rescinded: **NA**

Leaking Underground Fuel Storage Tank Program

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Susan L. Hugo** Title: **Sr. Hazardous Materials Specialist**
Signature: Susan L. Hugo Date: **April 25, 1995**

Reviewed by
Name: **Eva Chu** Title: **Hazardous Materials Specialist**
Signature: Eva Chu Date: 5/8/95

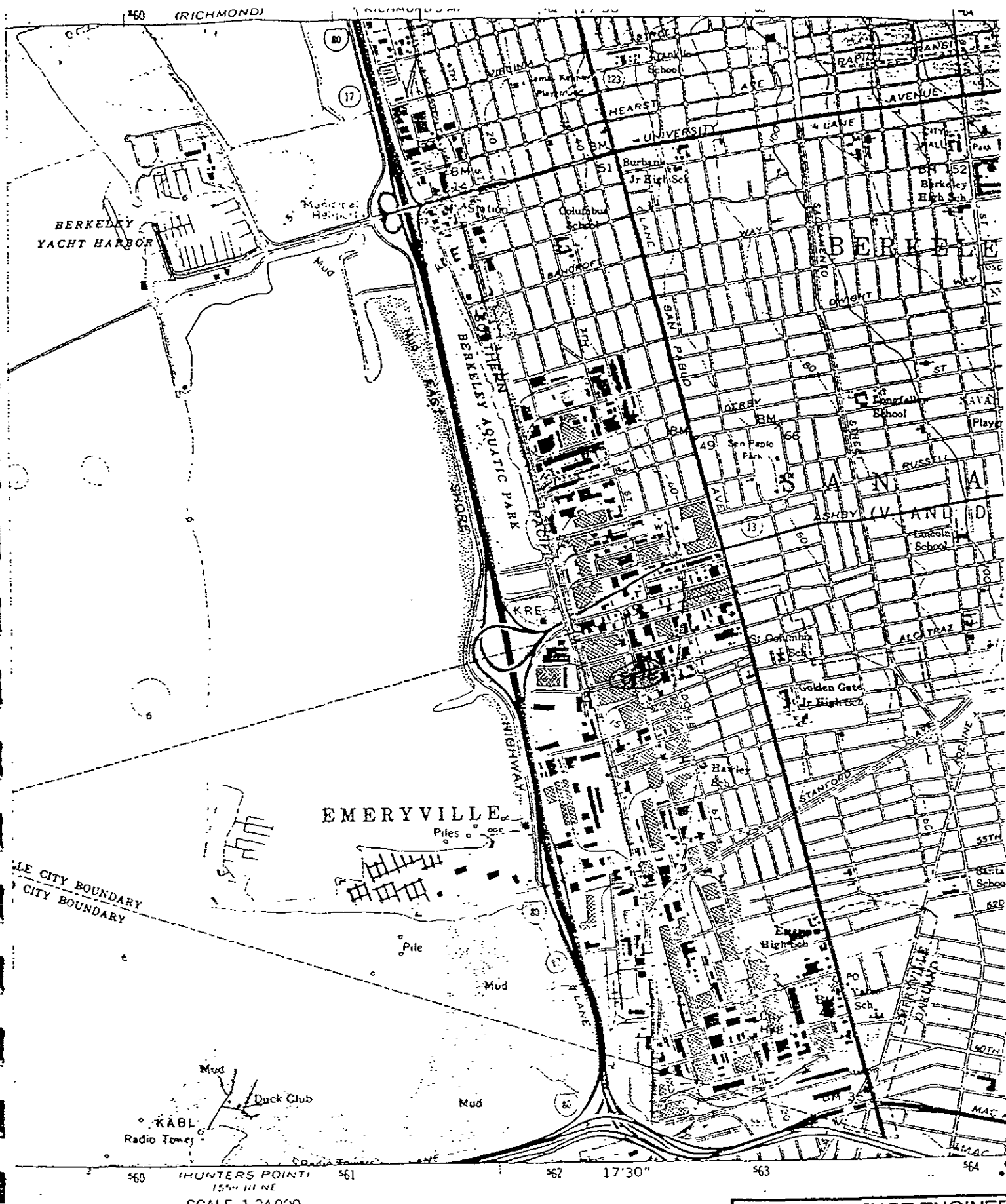
Name: **Thomas Peacock** Title: **Sup. Hazardous Materials Specialist**
Signature: Thomas Peacock Date: 4-27-95

VI. RWQCB NOTIFICATION

Date Submitted to RB: May 8, 1995 RB Response: Approved
RWQCB Staff Name: **Kevin Graves** Title: **Water Resources Control Engineer**
Signature: Kevin Graves Date: 5/22/95

VII. ADDITIONAL COMMENTS, DATA, ETC.

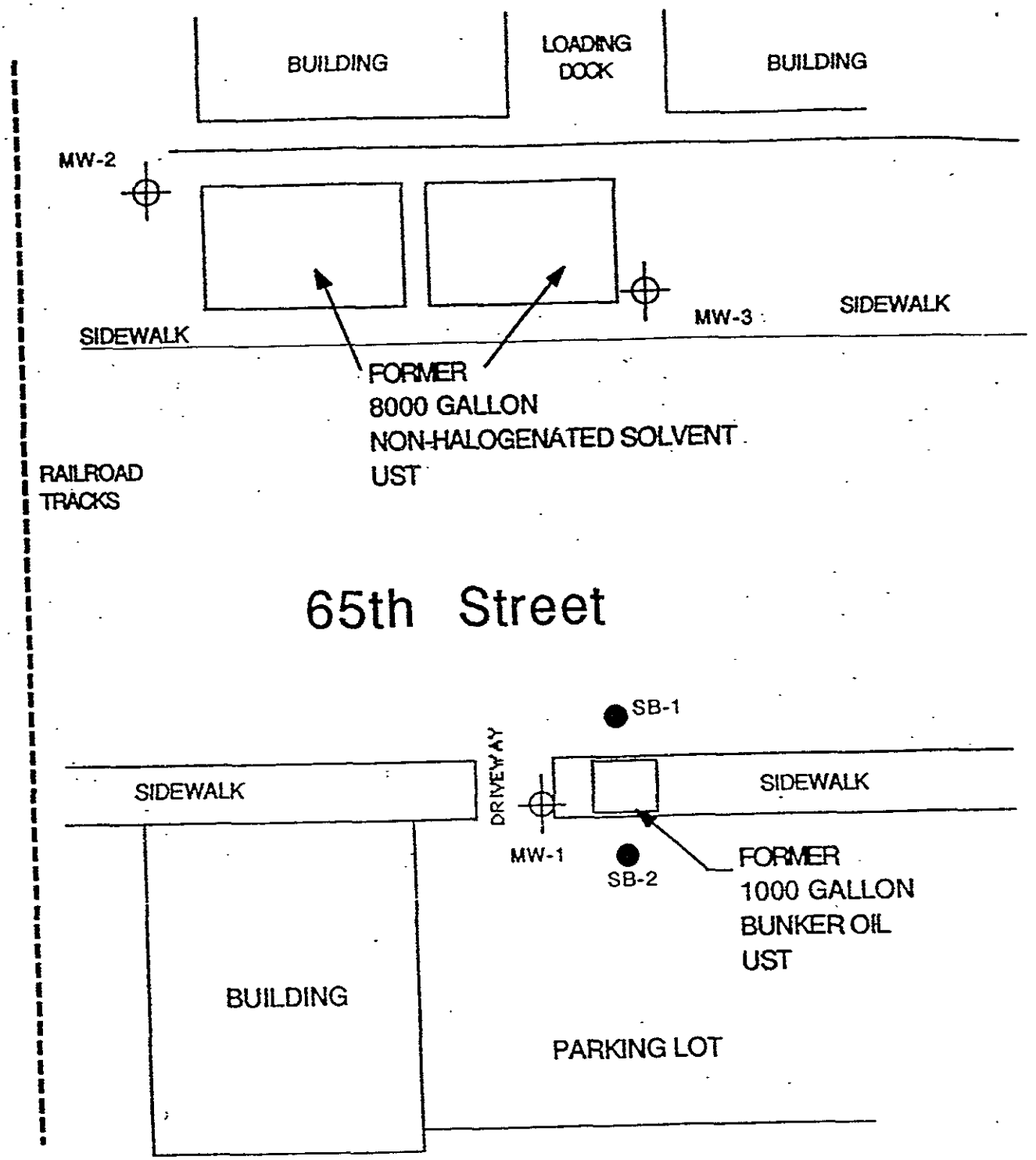
Aggressive source removal has occurred at the site. The three underground storage tanks had been removed and contaminated soil were excavated. Three groundwater monitoring wells were sampled for four quarters. Contaminants were not detected in the groundwater during these four sampling events. The potential beneficial uses of the groundwater do not appear to be threatened to a significant extent from the release that occurred at the site associated with the three former tanks.



AQUA SCIENCE ENGINEE

Figure 1: Site Plan

U.S. Geological Survey,



LEGEND

SB-1 Soil Boring

MW-1 Monitoring Well

N

0 ft. 20 ft.

SCALE

SITE PLAN

Oliver Rubber
1200 65th Street
Emeryville, California

Aqua Science Engineers | Figure 2

TABLE 1

Summary of Chemical Analysis of SOIL Samples
TPH Diesel, BTEX, and Oil & Grease
EPA Methods 3550/8015, 8020, and 5520 D&F

Sample I.D.	TPH Diesel (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Oil & Grease (ppm)
MW-1-10'	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2-10'	---	N.D.	N.D.	N.D.	N.D.	---
MW-2-15'	---	N.D.	N.D.	N.D.	N.D.	---
MW-3-5'	---	N.D.	N.D.	N.D.	N.D.	---
MW-3-15'	---	N.D.	N.D.	N.D.	N.D.	---
SB-1-10'	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
SB-2-10'	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
EPA METHOD	3550/ 8015	8020	8020	8020	8020	5520 D&F

ND Non Detectable at analytical method limits
ppm parts per million
ppb parts per billion
--- not analyzed

TABLE 2

Summary of Chemical Analysis of SOIL Samples
Purgeable Halocarbons, and Volatile Organics
EPA Methods 8010, and 8240

CONSTITUENT	MW-2-5' (ppb)	MW-2-15' (ppb)
TRICHLOROFLOROMETHANE	13	---
1,1-DICHLOROETHENE	---	2.9
CHLOROFORM	---	11
EPA METHOD	8240	8010

ppb parts per billion
--- not analyzed

*All other constituents tested for as part of these methods were found to be N.D. See Appendix B for copies of sample results.

TABLE 3
Summary of Chemical Analysis of WATER Samples
TPH as Diesel, BTEX, and Oil & Grease
EPA Methods 3510/8015, 602, and 5520 C&F

Sample I.D.	TPH Diesel (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Oil & Grease (ppm)
MW-1	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	---	---	---	---	---	---
MW-3	---	---	---	---	---	---
EPA METHOD	3510/ 8015	602	602	602	602	5520 C&F

N.D. Non Detectable at analytical method limits
ppm parts per million
ppb parts per billion
--- not analyzed

TABLE 4
Summary of Chemical Analysis of Water Samples
Volatile Organics and Acid/Base Extractables
EPA Methods 8240 and 8270

Sample I.D.	All Volatile Organics	All Acid/Base Extractables
MW-1	---	N.D.
MW-2	N.D.	---
MW-3	N.D.	---

N.D. Non Detectable at analytical method limits
--- not analyzed

TABLE 5
Summary of Chemical Analysis of Water Samples
pH and Conductivity
EPA Methods 9045 and 120.1

Sample I.D.	pH	Conductivity
MW-1	6.8	930
MW-2	7.0	1100
MW-3	6.7	670
EPA Method	9045	120.1

7.0 GEOLOGY AND GROUNDWATER GRADIENT

The native soil types encountered while drilling were primarily composed of blue-green organic clay (CL) from approximately 1 ft. to 10 feet, from 10 to the bottom of hole depth (25 feet), brown/blue-green, silty clay was observed. Water saturated soil was first encountered during drilling at approximately 15-17 feet in the monitoring well borings. A graphical description of the soil types are provided on the well construction logs (see Appendix D).

The elevations of the tops of the well casings were surveyed relative to mean sea level (MSL) on October 1, 1992. The depths to groundwater were measured in each well on the day of the survey using a water level sounder (Solinst). Two measurements were taken in each well to confirm groundwater depth. The depth to water and the top of casing survey data were used to calculate a groundwater flow direction and gradient. A summary of the elevation data is provided below.

TABLE 6
Summary of Groundwater Well Survey Data

Well Number	Depth to Water	Top of Casing Elevation	Groundwater Elevation
MW-1	8.08 ft.	20.0 ft. AMSL	11.92 ft. AMSL
MW-2	7.45 ft.	19.21 ft. AMSL	11.76 ft. AMSL
MW-3	7.44 ft.	19.80 ft. AMSL	12.36 ft. AMSL

A three-point problem was solved for well combinations MW-1, MW-2 and MW-3. A graphic representation of the three-point problem indicating groundwater flow direction and gradient is presented in the Groundwater Gradient Map, Figure 3. The current direction of groundwater flow is west across the site at a gradient of 0.02 ft/ft.

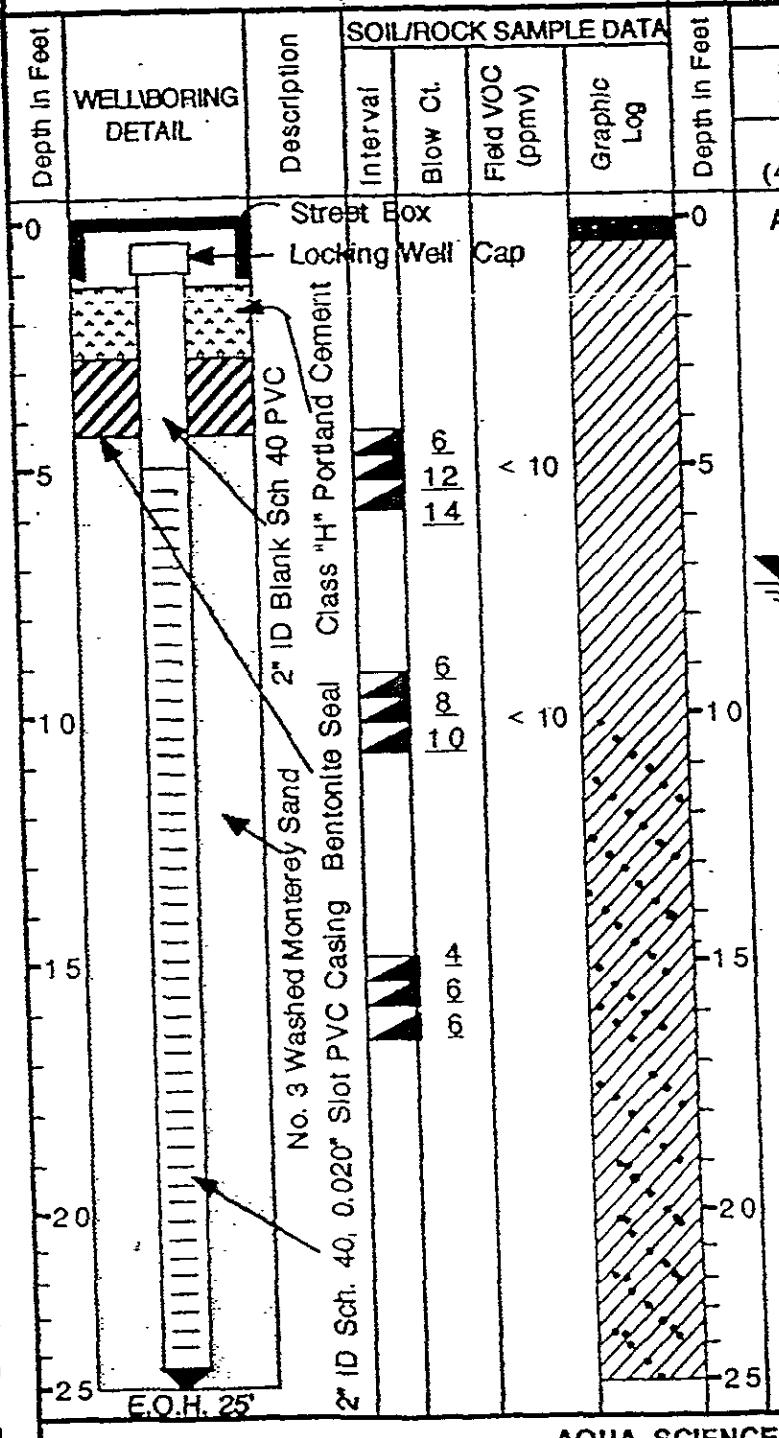
SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DETAILS

WELL NO. MW3

Project Name: Oliver Rubber	Project Location: 1200 65th Street, Oakland	Page 1 of 1
Driller: WEST HAZMAT	Type of Rig: CME 75	Type and Size of Auger: 8.0" O.D., H.S.
Logged By: WCL	Date Drilled: 10/01/92	Checked By: David M. Schultz, P.E.

WATER AND WELL DATA

Depth of Water First Encountered: ~ 17'	Total Depth of Well Completed: 25.0'
Static Depth of Water in Well: 7.44' Below T.O.C.	Well Screen Type and Diameter: 2" Diameter Schedule 40 PVC
Total Depth of Boring: 25'	Well Screen Slot Size: 0.020"
	Type and Size of Soil Sampler: 2" I.D., Calif. Split-Spoon



DESCRIPTION OF LITHOLOGY

standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.

And	With	Some	Trace
(40-50%)	(40-25%)	(25-10%)	(10-0%)

Approximately 4" of asphalt

Blue-green Clay (CL)
moderate, unrecognizable odor
slight moisture

Static Water Level = 7.45'

Bown with blue-green Clay (CL)
brown with blue-green mottling, some plant fragments, moderately moist,
no noticeable odor

Brown with slight blue-green mottling Clay (CL), with silt,with abundant pebbles, very moist,
no odor

As Above.

Brown Clay with silt (CL), mottled with plant fragments, moderately moist, no odor

As Above.

AQUA SCIENCE ENGINEERS, INC.

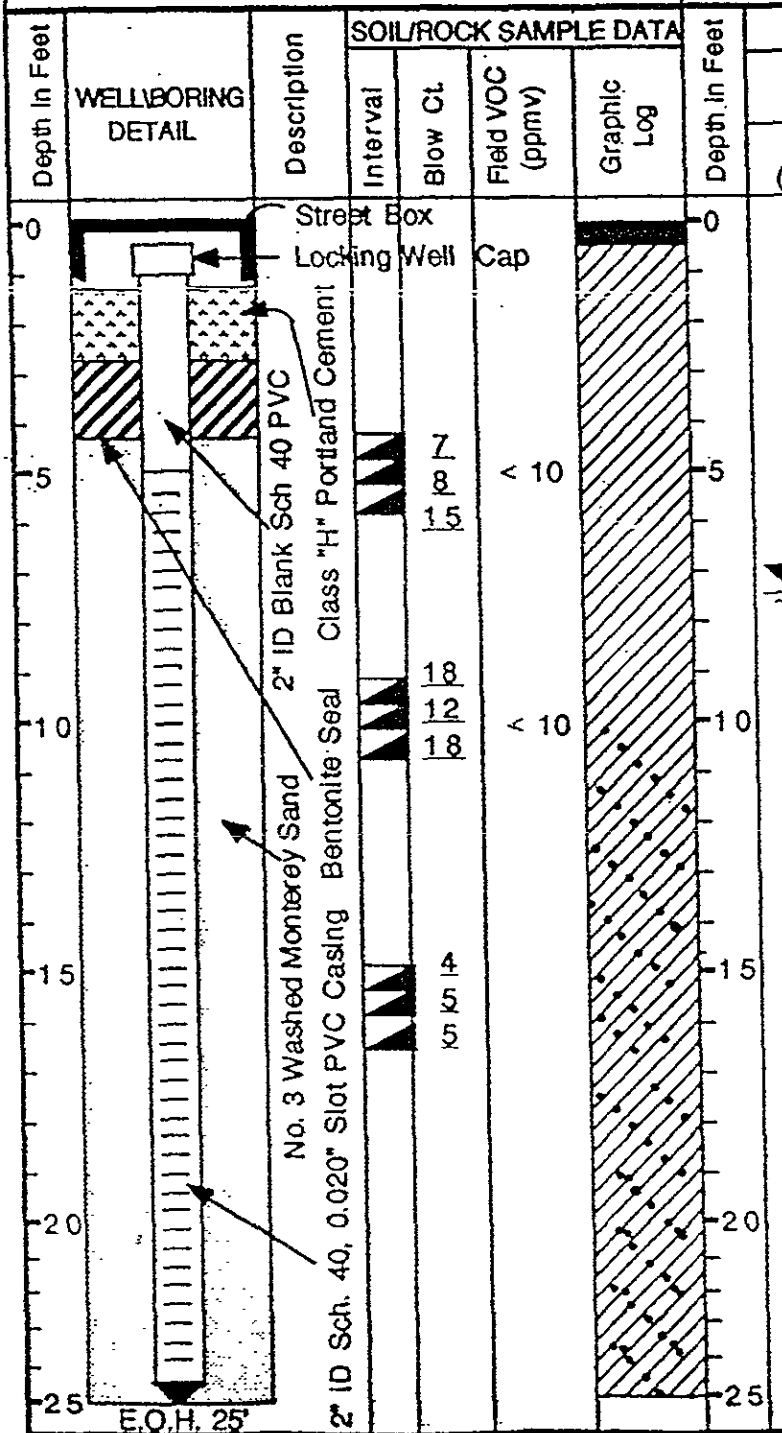
SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DETAILS

WELL NO. MW2

Project Name: Oliver Rubber	Project Location: 1200 65th Street, Oakland	Page 1 of 1
Driller: WEST HAZMAT	Type of Rig: CME 75	Type and Size of Auger: 8.0" O.D., H.S.
Logged By: WCL	Date Drilled: 10/01/92	Checked By: David M. Schultz, P.E.

WATER AND WELL DATA

Depth of Water First Encountered: ~ 15'	Total Depth of Well Completed: 25.0'
Static Depth of Water in Well: 7.45' Below T.O.C.	Well Screen Type and Diameter: 2" Diameter Schedule 40 PVC
Total Depth of Boring: 25'	Well Screen Slot Size: 0.020"
	Type and Size of Soil Sampler: 2" I.D., Calif. Split-Spoon



DESCRIPTION OF LITHOLOGY

standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.

And (40-50%)	With (40-25%)	Some (25-10%)	Trace (10-0%)

Approximately 4" of asphalt

Fine, Sandy, Silty Clay (SP-ML-CL) blue-green color, unrecognizable odor slight moisture

Static Water Level = 7.45'

Fine, Sandy, Silty, Clay (SP-ML-CL) brown with blue-green mottling, some pebbles no noticeable odor

Brown Silty Clay (CL), with some plant fragments and pebbles, very moist, no odor

As Above.

As Above.

AQUA SCIENCE ENGINEERS, INC.

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DETAILS

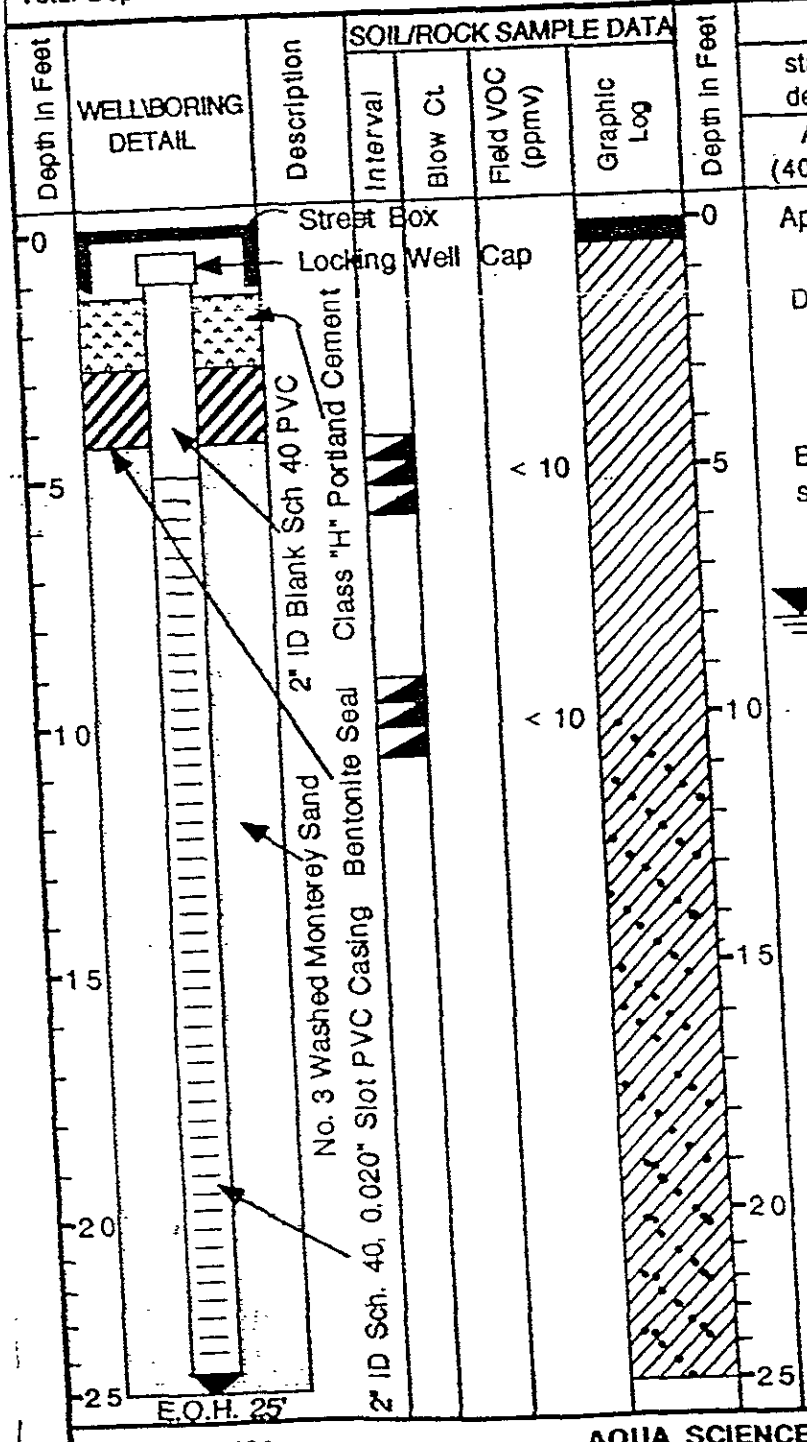
WELL NO. MW1

Page 1 of 1

Project Name: Oliver Rubber	Project Location: 1200 65th Street, Oakland	
Driller: WEST HAZMAT	Type of Rig: Simco 2400 SK-1	Type and Size of Auger: 6.00" O.D., H.S.
Logged By: WCL	Date Drilled: 10/01/92	Checked By: David M. Schultz, P.E.

WATER AND WELL DATA

- Depth of Water First Encountered: ~ 15'
- Static Depth of Water in Well: 8.08' Below T.O.C.
- Total Depth of Boring: 25'
- Total Depth of Well Completed: 25.0'
- Well Screen Type and Diameter: 2" Diameter Schedule 40 PVC
- Well Screen Slot Size: 0.020"
- Type and Size of Soil Sampler: 2" I.D., Calif. Split-Spoon



DESCRIPTION OF LITHOLOGY

standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.

And	With	Some	Trace
(40-50%)	(40-25%)	(25-10%)	(10-0%)

Approximately 4" of asphalt

Dark Gray Clay (CL) from 2 to 5 feet

Blue-Green Clay (CL), trace silt (≈ 10%), slight moisture, no odor

Static Water Level = 8.08'

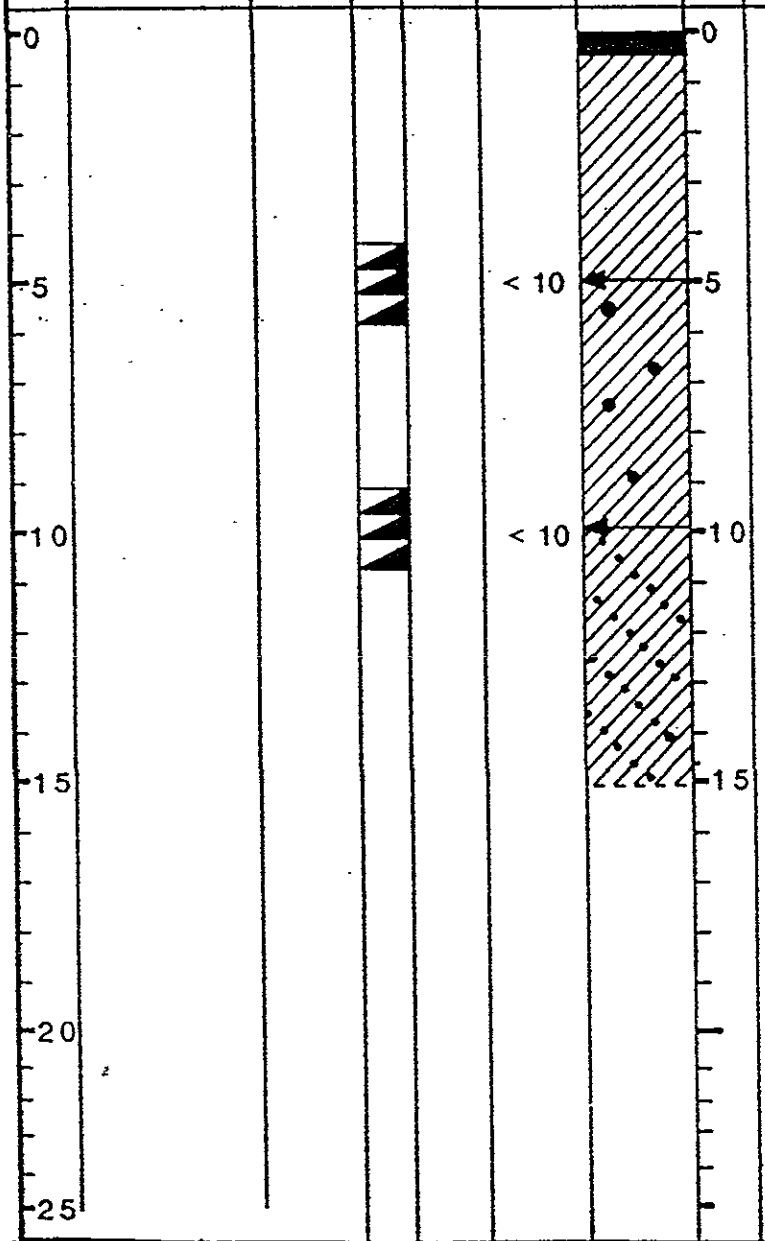
Brown clay (CL), with silt (≈ 40%), some blue-green mottling, slight moisture, no odor

Brown clay (CL), with silt (≈ 40%), some pebbles, very moist, no odor

AQUA SCIENCE ENGINEERS, INC.

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DETAILS		BORING NO. SB2
Project Name: Oliver Rubber	Project Location: 1200 65th Street, Oakland	Page 1 of 1
Driller: WEST HAZMAT	Type of Rig: Simco 2400 SK-1	Type and Size of Auger: 6.00" O.D., H.S.
Logged By: WCL	Date Drilled: 10/01/92	Checked By: David M. Schultz, P.E.

WATER AND WELL DATA	Total Depth of Well Completed: N/A
Depth of Water First Encountered: N/A	Well Screen Type and Diameter: N/A
Static Depth of Water in Well: N/A.	Well Screen Slot Size: N/A
Total Depth of Boring: 15'	Type and Size of Soil Sampler: 2" I.D., Calif. Split-Spoon



DESCRIPTION OF LITHOLOGY

standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.

And (40-50%) With (40-25%) Some (25-10%) Trace (10-0%)

0 — Approximately 4" of asphalt

Dark Gray Clay (CL), no odor

5 — Blue-Green Clay (CL), some plant mattter, slight moisture, no odor

10 — Brown, silty clay (CL), some plant matter slight moisture, abundant pebbles, no odor

15 — Brown, silty clay (CL), some plant matter very moist, abundant pebbles, no odor

EOH = 15'

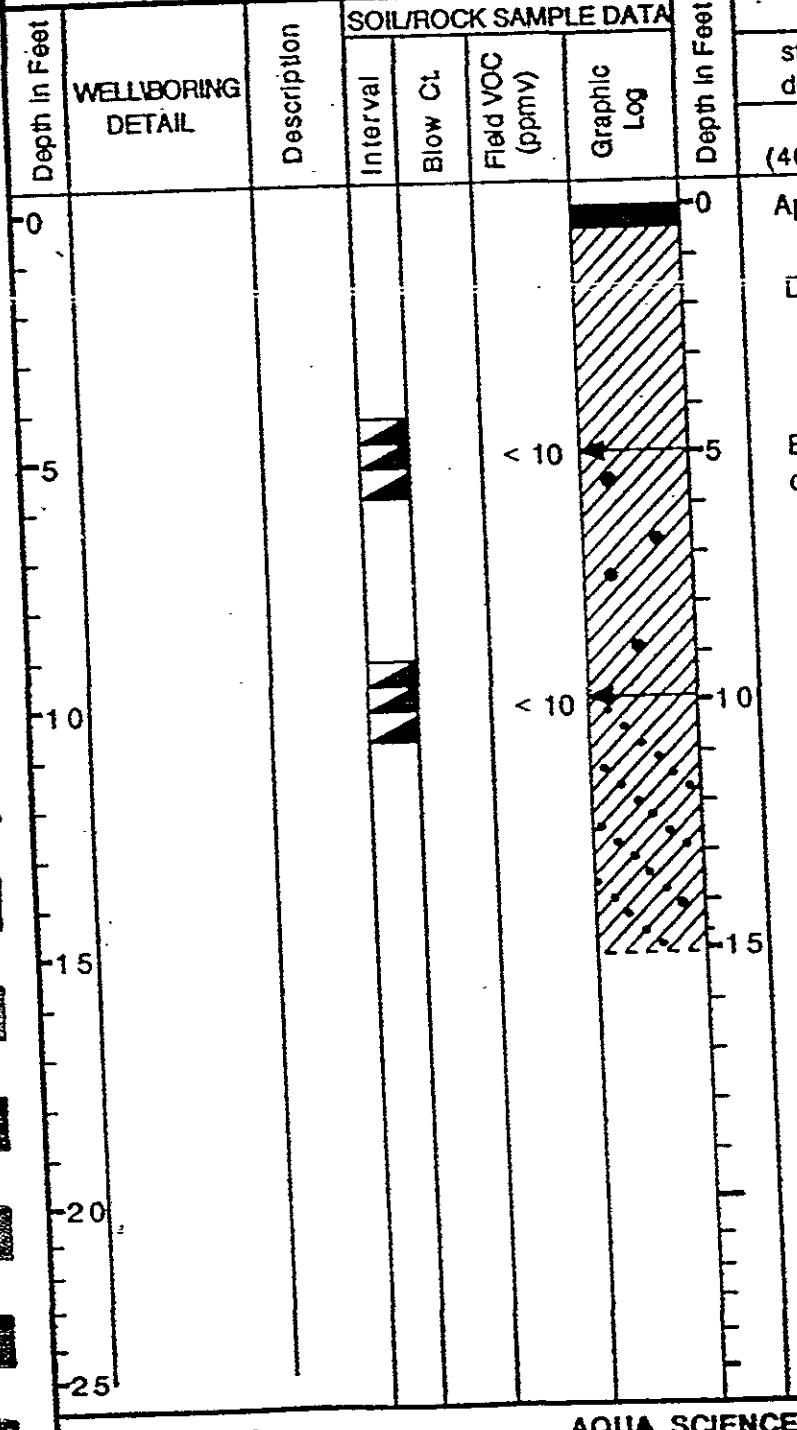
SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DETAILS

BORING NO. SB1

Project Name: Oliver Rubber	Project Location: 1200 65th Street, Oakland	Page 1 of 1
Driller: WEST HAZMAT	Type of Rig: Simco 2400 SK-1	Type and Size of Auger: 6.00" O.D., H.S.
Logged By: WCL	Date Drilled: 10/01/92	Checked By: David M. Schultz, P.E.

WATER AND WELL DATA

Depth of Water First Encountered:N/A	Total Depth of Well Completed: N/A
Static Depth of Water in Well: N/A.	Well Screen Type and Diameter: N/A
Total Depth of Boring: 15'	Well Screen Slot Size:N/A
	Type and Size of Soil Sampler: 2" I.D., Calif. Split-Spoon



DESCRIPTION OF LITHOLOGY

standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.

And (40-50%)	With (40-25%)	Some (25-10%)	Trace (10-0%)

0 Approximately 4" of asphalt

Dark Gray Clay (CL) from 2 to 5 feet

5 Blue-Green Clay (CL), some plant mattter, cobbles, slight moisture, no odor

10 Brown clay (CL), some plant matter slight moisture, no odor

15 Brown clay (CL), some plant matter, very moist some pebbles, no odor

EOH = 15'

AQUA SCIENCE ENGINEERS, INC.

TABLE 1: SOIL SAMPLE ANALYTICAL RESULTS

Sample No.	TPH Diesel (ppm)	Oil & Grease (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)
BE	ND	ND	ND	ND	ND	ND
BW	390	670	ND	ND	ND	ND
SW-W	130	450	19	6.7	ND	33
SW-E	ND	ND	ND	ND	ND	ND
SW-N	490	1500	42	48	5.9	100
SW-S	470	1300	8.6	19	27	130

* - Composited sample
ND - Non Detectable at analytical method limits
ppm - parts per million
ppb - parts per billion

On June 24 and June 25 approximately 36 cubic yards of soil were removed from the tank area. Excavation of soils was conducted to a depth of approximately 7.0 feet below grade.

The stockpiled soil was sampled and analyzed for Total Recoverable Hydrocarbons (EPA 418.1), BTEX (EPA 1311/602), Reactivity (Title 22), Corosivity (Title 22), Ignitability (Title 22), Semi Volatile Organics (EPA 8270). The results indicated 1200 ppm of Total Petroleum Hydrocarbons, a pH of 7.6 for Corrosivity, and Method 8270 revealed 380 ppb of 2-Methylnaphthalene.

5.0 BACKFILLING AND RESURFACING

The excavation was not backfilled and was covered with 1" trenchplate.

All soil removed from the tank excavation were disposed of at a Class III Landfill. The acceptance certificate from BFI Waste Systems is located in Appendix B. Aggregate Systems Transport, a licensed hazardous waste hauler, transported the soil to the landfill under a non-hazardous waste manifest.

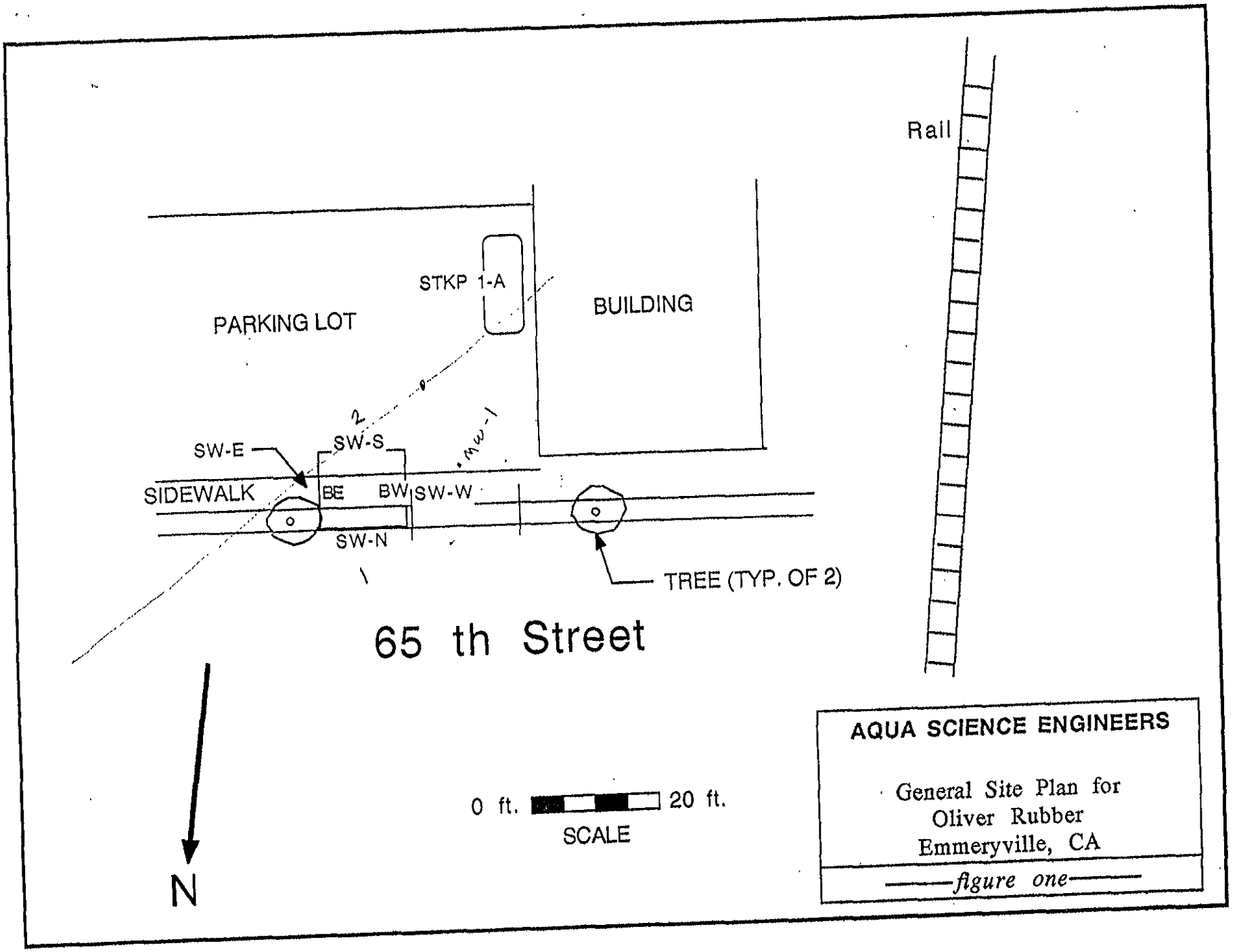

Rail
STKP 1-A
PARKING LOT
BUILDING
SW-E
SW-S
SW-W
BE
BW
SIDEWALK
SW-N
TREE (TYP. OF 2)
65 th Street
N
0 ft.
20 ft.
SCALE
AQUA SCIENCE ENGINEERS
General Site Plan for
Oliver Rubber
Emmeryville, CA
figure one

TABLE ONE
Summary of Chemical Analysis of SOIL Samples
TPH Diesel, BTEX, and Oil & Grease

Sample I.D.	TPH Diesel (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Oil & Grease (ppm)
SW-N	2.9	8.4	14	7.3	24	48
SW-S	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
SW-W	30	N.D.	N.D.	6.6	12	N.D.
STKP-IA*	36	N.D.	N.D.	N.D.	N.D.	150
EPA METHOD	3550/ 8015	8020	8020	8020	8020	5520 D&F

ND Non- Detectable at analytical method limits
ppm parts per million
ppb parts per billion
* Composite sample

STOCKPILED SOIL

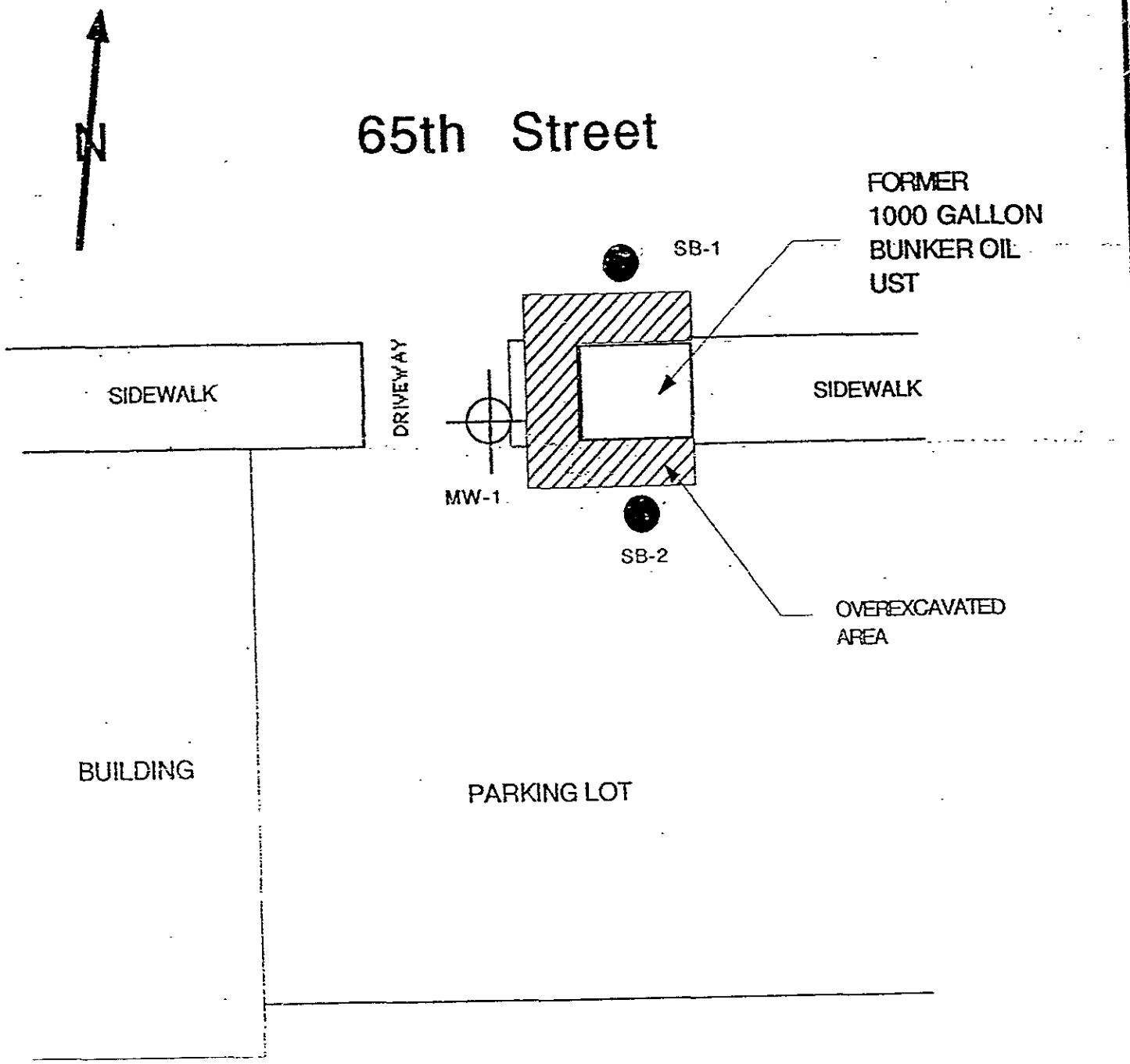
The excavated material (approximately 50 cubic yards) was stockpiled on site and will be loaded, trucked, and properly disposed of at a local landfill once further "soil profiling" has occurred. ASE anticipates disposal as Non-Hazardous material at a local Class III landfill. The stockpiled soil is covered with visqueen.

BACKFILLING AND RESURFACING

The excavation was backfilled with a combination of the original backfill material and imported base rock. The excavation was backfilled to 4 inches below grade, and will be resurfaced to match existing conditions at a later date.

CONCLUSIONS AND RECOMMENDATIONS

ASE spoke with Ms. Hugo of the ACHCSA immediately after soil sample results were faxed from the laboratory to our office. The results appeared to be low enough that further action regarding the soil in the direct proximity of the former bunker oil excavation would not be necessary. Furthermore, site closure is now possible once quarterly groundwater monitoring has proven that groundwater has not been impacted by petroleum hydrocarbon contamination. ASE recommends continuing



LEGEND

- SB-1 — Soil Boring
- MW-1 — Monitoring Well
- Overexcavated Area

SITE PLAN

Oliver Rubber
1200 65th Street
Emeryville, California

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Copies of signed laboratory data sheets are found in Appendix C.

TABLE 1: ANALYTICAL RESULTS
SOIL AND GROUNDWATER SAMPLING
Oliver Rubber Company, Emeryville, CA 11/5/91

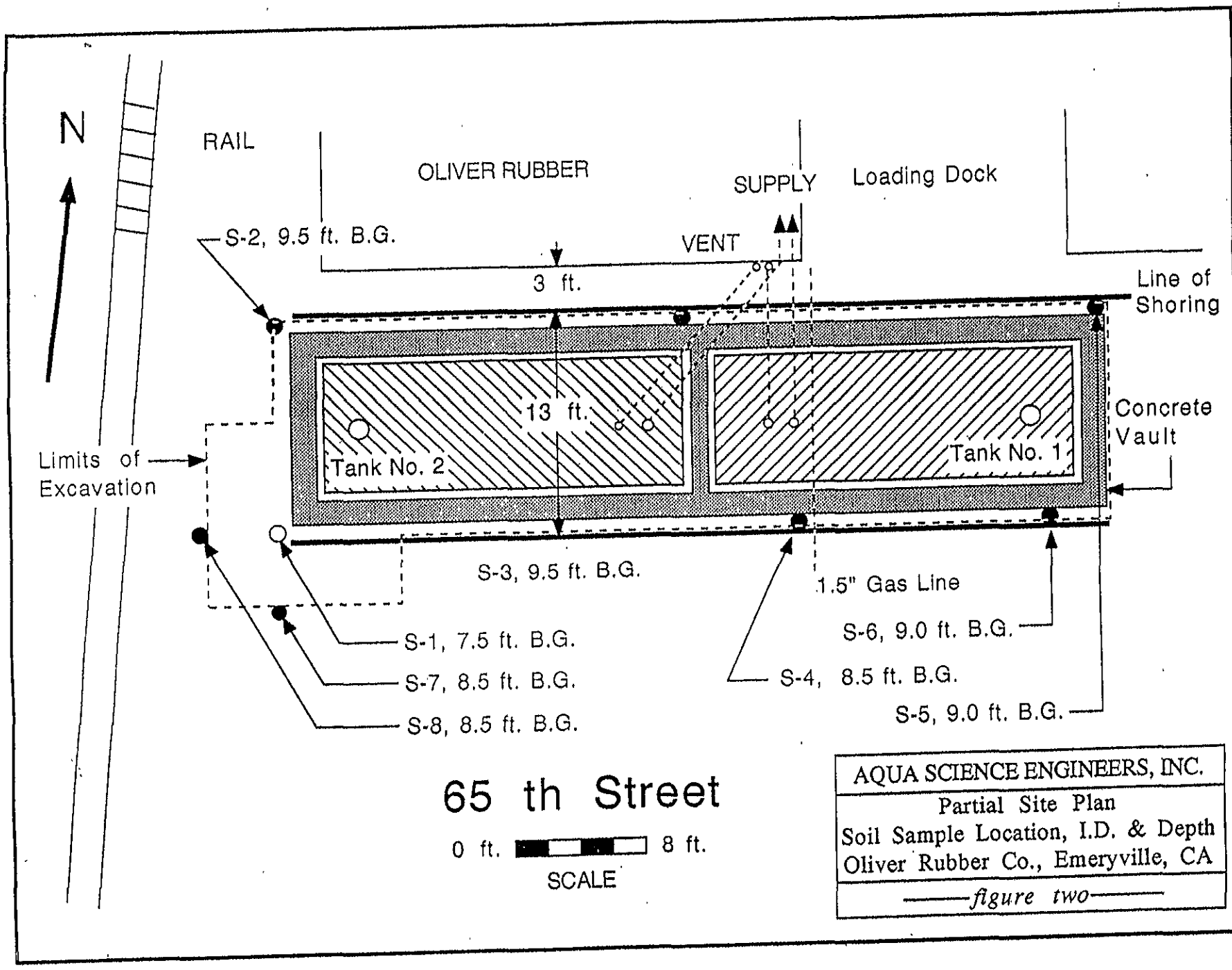
SAMPLE I.D.	TPH GASOLINE ppm	Benzene ppb	TPH DIESEL ppm	Toluene ppb	n-Heptane ppb	Xylenes ppb	Methyl Cyclohexane ppb	Trimethyl Cyclopentanes ppb	Cyclo Heptane
S-1 (Pb 6.96 ppm)	250	ND	N.D.	15	690	14	10000	2800	3500
S-2 (6.86)	1.8	ND	N.D.	ND	120	ND	340	320	ND
S-3 (4.45)	27	ND	N.D.	ND	2300	ND	4400	5200	ND
S-4 (6.59)	N.D.	ND	N.D.	ND	21	ND	56	63	ND
S-5 (7.47)	18	79	N.D.	ND	1500	ND	3400	3700	ND
S-6 (6.54)	N.D.	ND	N.D.	ND	12	ND	53	26	ND

SAMPLE I.D.	TPH GASOLINE ppb	TPH DIESEL ppb	n-Heptane ppb	Methyl Cyclohexane ppb	Trimethyl Cyclopentanes ppb	Cyclo hexane
GW-1	1900	2900	30	380	160	43

TABLE 2: ANALYTICAL RESULTS
SOIL AND GROUNDWATER SAMPLING
Oliver Rubber Company, Emeryville, CA 11/14/91

SAMPLE I.D.	TPH GASOLINE ppm	TPH DIESEL ppm	All 8240 Compounds
S-7	1.3	N.D.	N.D.
S-8	N.D.	N.D.	N.D.

SAMPLE I.D.	TPH GASOLINE ppb	TPH DIESEL ppb	Methyl, Propyl CycloPentane ppb	Di-Methyl CycloPentane ppb	Methyl Cyclopentane ppb
GW-2	1600	N.D.	190	100	50



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Partial Site Plan
Soil Sample Location, I.D. & Depth
Oliver Rubber Co., Emeryville, CA

figure two

TABLE ONE
Soil Sample Analyses Results
Hydrocarbons and VOCs
(parts per million)

Well#/ Sample Depth	TPH-D	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Oil and Grease	Other VOCs
MW-1- 10'	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<10	---
MW-1- 15'	---	---	---	---	---	---	N.D.[a]
MW-2- 5'	---	---	---	---	---	---	b
MW-2- 10'	---	<0.0050	<0.0050	<0.0050	<0.0050	---	---
MW-2- 15'	---	<0.0050	<0.0050	<0.0050	<0.0050	---	c
MW-3- 5'	---	<0.0050	<0.0050	<0.0050	<0.0050	---	---
MW-3- 10'	---	---	---	---	---	---	N.D.
MW-3- 15'	---	<0.0050	<0.0050	<0.0050	<0.0050	---	N.D.
SB-1-10'	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<10	---
SB-2-10'	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<10	---

--- = Not analyzed
N.D. = Not detected at detection limits
a = No semi-volatile organic compounds (SVOCs) detected at detection limits
b = 0.013 ppm trichlorofloromethane detected by EPA Method 8240; no other compounds detected
c = 0.0029 ppm 1,1-dichloroethene and 0.011 ppm chloroform detected by EPA Method 8010; no other compounds detected

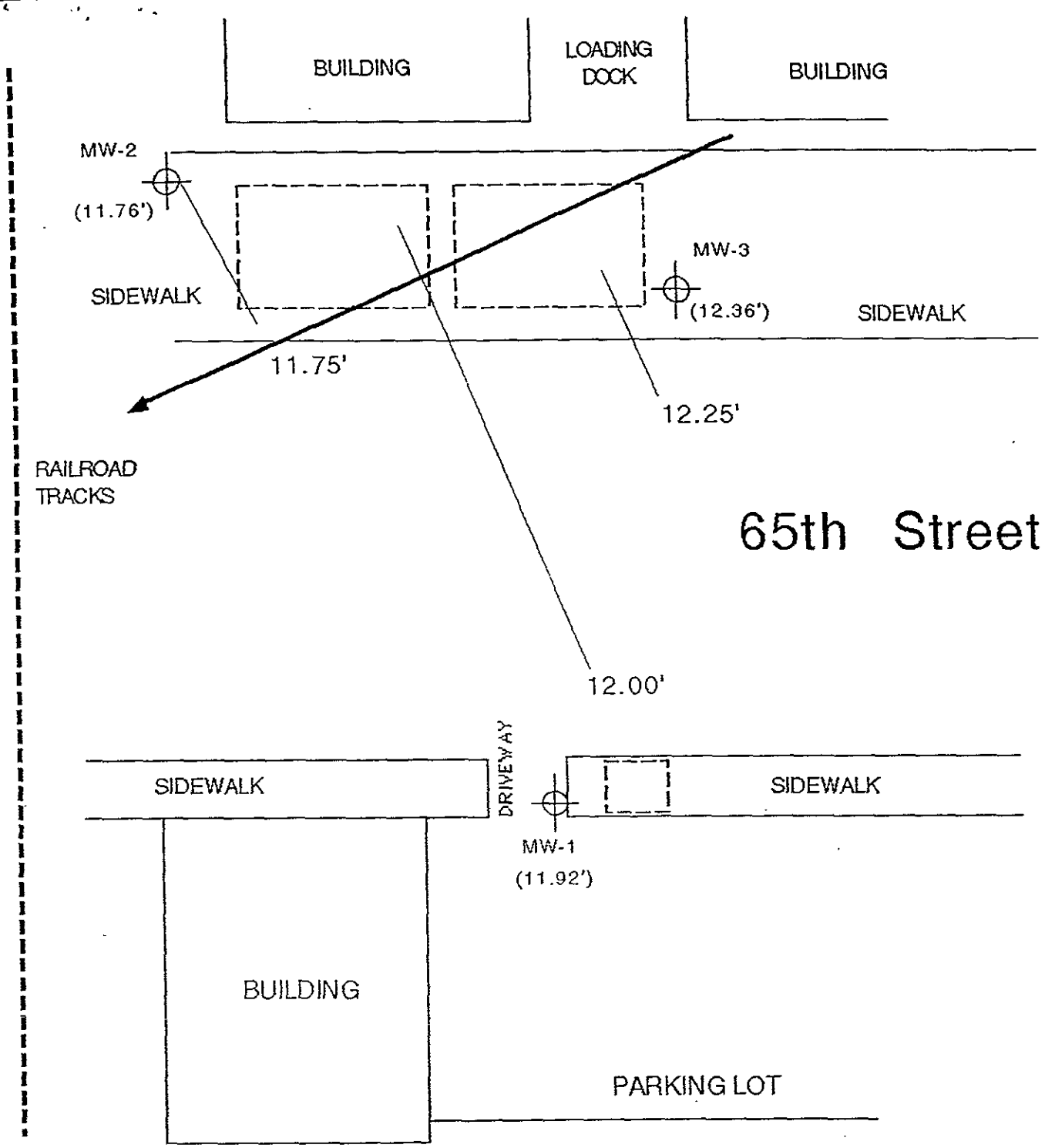
TABLE TWO
Groundwater Sample Analyses Results
(parts per billion)

Well #	TPH-G	TPH-D	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Oil & Grease	VOCs
MW-1								
10-05-92	---	<50	<0.5	<0.5	<0.5	<0.5	<500	---
01-18-93	---	<50	<0.5	<0.5	<0.5	<0.5	<500	---
04-16-93	---	<50	<0.5	<0.5	<0.5	<0.5	<500	---
07-14-93	---	<50	<0.5	<0.5	<0.5	<0.5	<500	---
MW-2								
10-05-92	---	---	---	---	---	---	---	N.D.
01-18-93	<50	---	<0.5	<0.5	<0.5	<0.5	---	N.D.
04-16-93	<50	---	---	---	---	---	---	N.D.
07-14-93	<50	---	---	---	---	---	---	N.D.
MW-3								
10-05-92	---	---	---	---	---	---	---	N.D.
01-18-93	<50	---	<0.5	<0.5	<0.5	<0.5	---	N.D.
04-16-93	<50	---	---	---	---	---	---	N.D.
07-14-93	<50	---	---	---	---	---	---	N.D.
Analytical Method	5030/ 8015	3510/ 8015	602	602	602	602	5520 B&F	624

--- = Not analyzed
N.D. = Not detected at analytical detection limit

TABLE THREE
Summary of Groundwater Elevation Data

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-1	10-01-92	20.00	8.08	11.92
	01-18-93		4.00	16.00
	04-16-93		5.10	14.90
	07-14-93		6.82	13.18
MW-2	10-01-92	19.21	7.45	11.76
	01-18-93		3.80	15.41
	04-16-93		4.62	14.59
	07-14-93		6.20	13.01
MW-3	10-01-92	19.80	7.44	12.36
	01-18-93		3.46	16.34
	04-16-93		4.60	15.20
	07-14-93		6.11	13.69



LEGEND

MW-1
(11.92')
Monitoring Well with groundwater depth in feet above mean sea level

Groundwater Gradient direction

N

0 ft. 20 ft.
SCALE

GROUNDWATER GRADIENT MAP (10/1/92)

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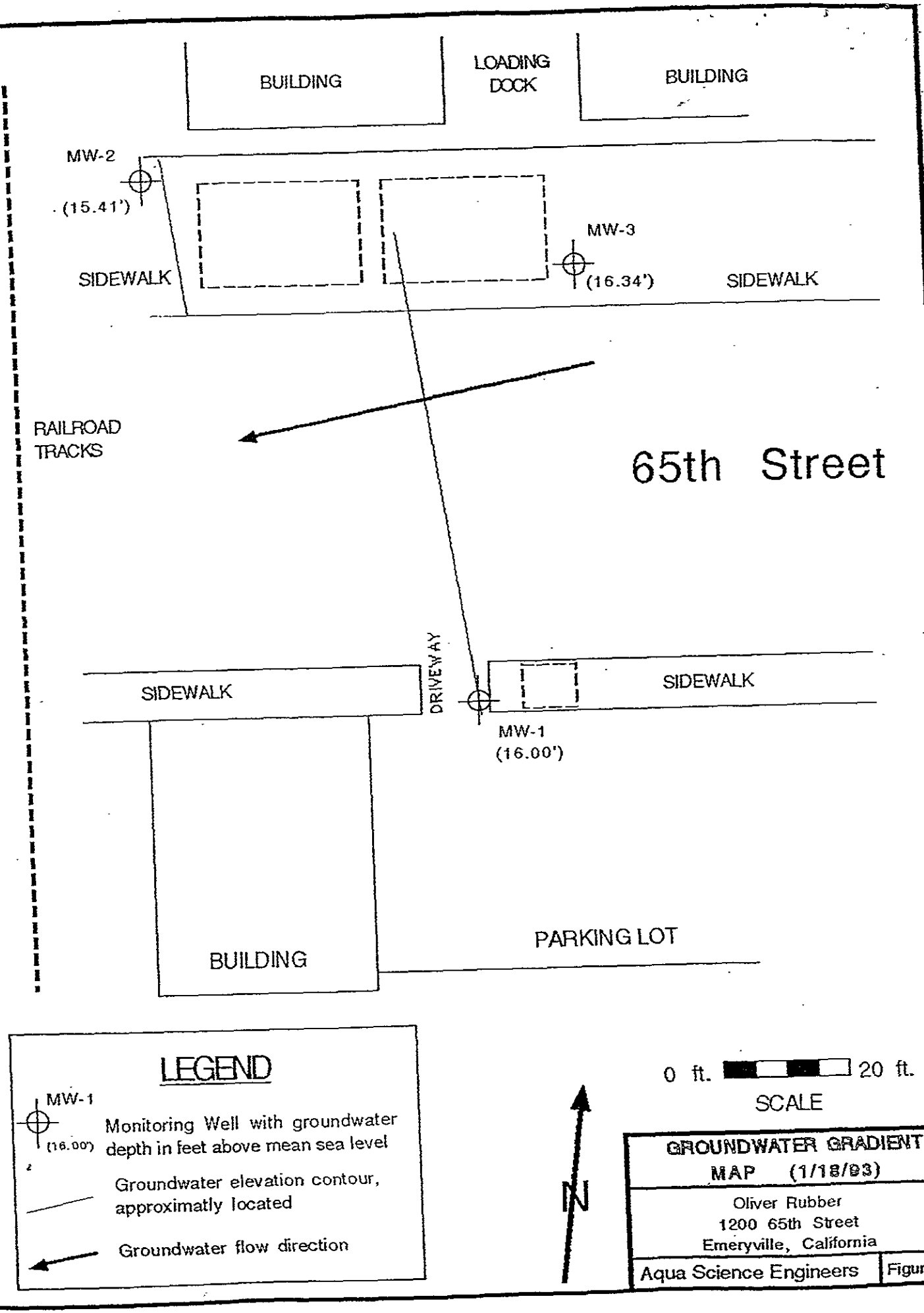

GROUNDWATER GRADIENT MAP (1/18/93)

Oliver Rubber
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Emeryville, California

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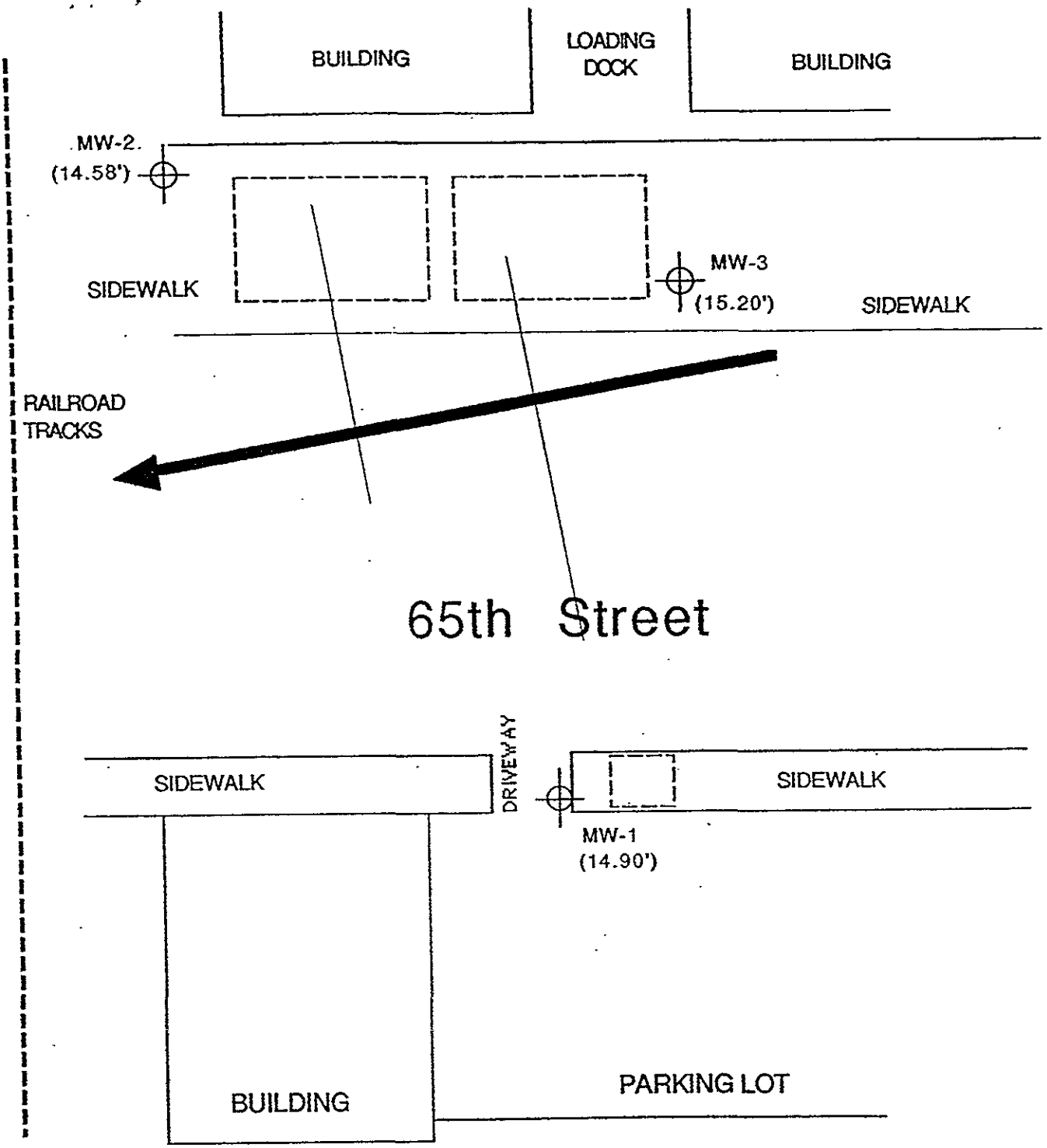

LEGEND

MW-1
(14.90') Monitoring Well with groundwater depth in feet above mean sea level

Groundwater elevation contour, approximatly located

Groundwater flow direction

N

0 ft. 20 ft.
SCALE

GROUNDWATER GRADIENT MAP (4/16/93)

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Emeryville, California

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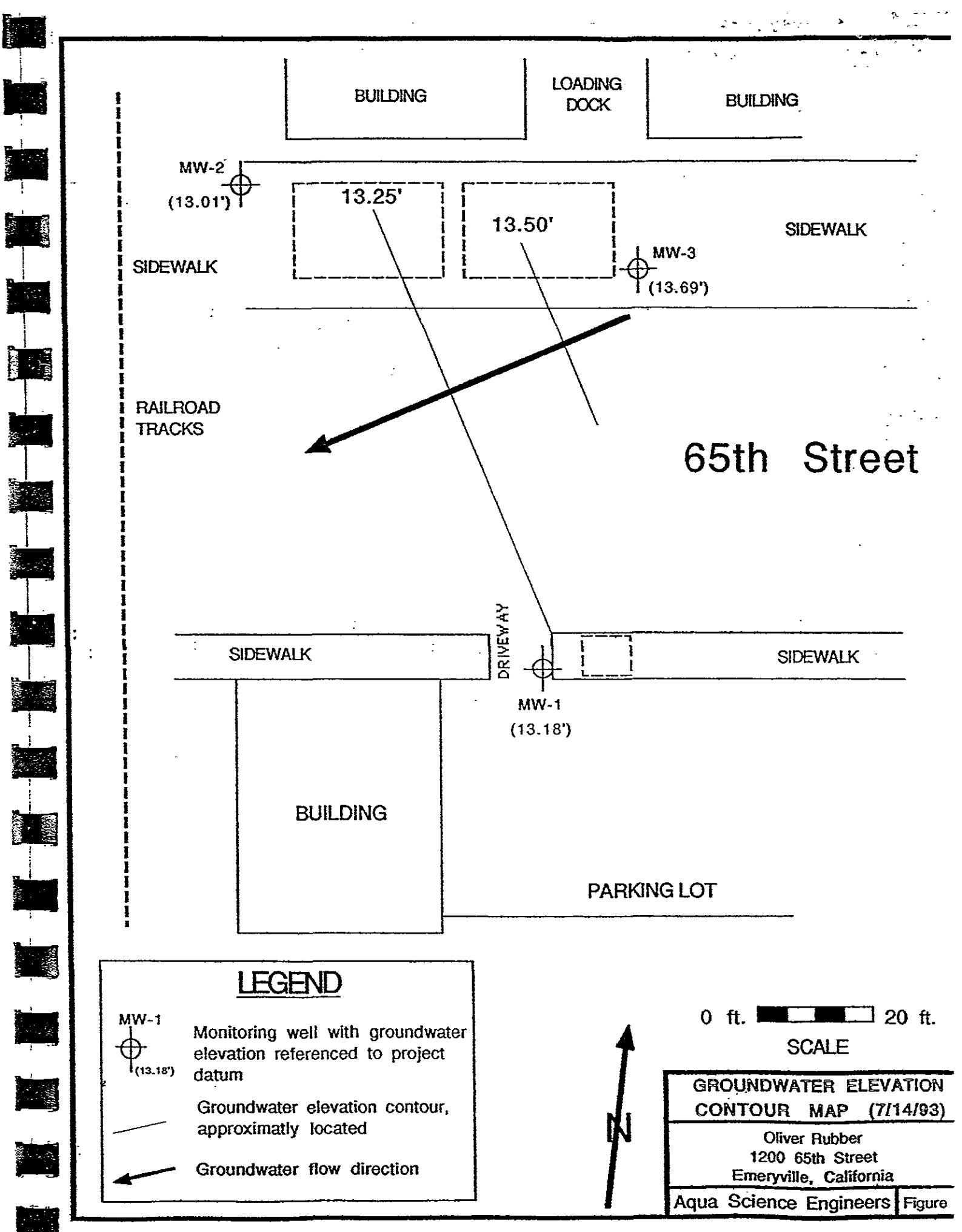
BUILDING
LOADING DOCK
BUILDING
MW-2
(13.01')
13.25'
13.50'
SIDEWALK
SIDEWALK
MW-3
(13.69')
RAILROAD TRACKS
65th Street
SIDEWALK
DRIVEWAY
SIDEWALK
MW-1
(13.18')
BUILDING
PARKING LOT
LEGEND
MW-1
(13.18')
Monitoring well with groundwater elevation referenced to project datum
Groundwater elevation contour, approximatly located
Groundwater flow direction
N
0 ft.
20 ft.
SCALE
GROUNDWATER ELEVATION CONTOUR MAP (7/14/93)
Oliver Rubber
1200 65th Street
Emeryville, California
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Figure