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

October 29, 1996
StID # 3657

REMEDIAL ACTION COMPLETION CERTIFICATION

Mr. Frank Cole
R & A Trucking
865 77th Ave.
Oakland CA 94621

RE: R & A Trucking, 865 77th Ave., Oakland 94621

Dear Mr. Cole:

This letter confirms the completion of site investigation and remedial action for the one underground 1,000 gallon gasoline tank at the above described location.

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

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

Please contact Barney Chan at (510) 567-6765 if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung
Agency Director

c: B. Chan, Hazardous Materials Division-files
Mr. D. Robinson, AB&I, 7825 San Leandro St., Oakland 94621
Kevin Graves, RWQCB
L. Casias, SWRCB (with attachment)

RACC865

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION **Date:** ~~5/31/96~~ 6/27/96

Agency name: **Alameda County-HazMat** Address: **1131 Harbor Bay Parkway Rm 250, Alameda CA 94502**

City/State/Zip: **Alameda** Phone: **(510) 567-6700**

Responsible staff person: Barney Chan Title: **Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: R & A Trucking

Site facility address: 865 77th Ave., Oakland CA 94621

RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: 3657

ULR filing date: 2/11/91 SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
R & A Trucking Attn: Mr. Frank Cole	865 77th Ave. Oakland, CA 94621	(510) 632-7112

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	1,000	gasoline	Removed	12/04/91

III RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: suspect holes in tank bottom

Site characterization complete? Yes

Date approved by oversight agency: work plans approved on 3/9/94 & 3/30/95

Monitoring Wells installed? YES Number: 2

Proper screened interval? Yes, 7-17'bgs, based on depth of first encountered groundwater. Actual GW level equilibrated above these depths. GW likely under semi-confined conditions.

Leaking Underground Fuel Storage Program

Highest GW depth: 4.21'BGS Lowest depth: 5.46' BGS

Flow direction: presumed northwesterly based on regional and neighboring site flow direction.
Most sensitive current use: commercial/industrial

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)? Alameda County
1131 Harbor Bay Parkway,
Room 250, Alameda CA 94502-6577

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment of Disposal w/destination)	Date
Tanks & Piping	1000 gallon	Disposed, Erickson Inc 255 Parr Blvd., Richmond	1/24/91
Soil	216 cy	BFI Landfill, Livermore	4/25/94
Groundwater	700 gallon	Disposed, Evergreen Env.	3/3/95

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	1Before	After2	3Before	After4
TPH (Gas)	1800	190	12000	ND
Benzene	9.9	0.59	1900	ND
Toluene	45	4.3	19	ND
Ethylbenzene	140	3.6	48	ND
Xylenes	23	1.4	49	ND

Comments (Depth of Remediation, etc.):
1 original soil sample from tank pull
2 soil sample from second overexcavation
3 from well MW-1
4 from well MW-2

IV. CLOSURE
Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? YES

Leaking Underground Fuel Storage Tank Program

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

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 Decommisioned: one of two

Number Decommisioned: 1 Number Retained: 1

List enforcement actions taken: Final NOV- 8/13/90

List enforcement actions rescinded:Above, tank removed on 1/24/91

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Barney M. Chan Title: Hazardous Materials Specialist

Signature: Barney M Chan Date: 6/27/96

Reviewed by

Name: Thomas Peacock Title: Manager

Signature: Thomas Peacock Date: 6-5-96

Name: Eva Chu Title: Haz. Mat. Specialist

Signature: Eva Chu Date: 5/24/96

VI. RWQCB NOTIFICATION

Date Submitted to RB: RB Response:

RWQCB Staff Name: K. Graves Title: AWRCE Date:

VII. ADDITIONAL COMMENTS, DATA, ETC.

One 1000 gallon single walled steel tank was removed from this site on 1/24/91, witnessed by Ms. Cynthia Chapman of ACDEH. The tank was located beneath the unpaved area of what would have been the sidewalk on Hawley St. Holes were observed on the bottom and the seam of the tank. The soil beneath the tank appeared contaminated. Groundwater was not encountered. Two soil samples were taken from beneath the ends of the tank @ approximately 9' depth. Up to 1800 ppm TPHg and 9.9,45,23 and 140 ppm

Leaking Underground Fuel Storage Tank Program

VII. ADDITIONAL COMMENTS (cont)

BTEX, respectively was found in these samples.

On 12/11/91, the former tank pit was overexcavated to groundwater which was encountered at approximately 11.5′ bgs. Sidewall soil samples were taken from 7.5-9.5′ depth. Residual contamination was reduced to 45 ppm TPHg and 0.13, 0.58, 0.52 and 2.2 ppm BTEX, respectively. Based on the regional gradient and that of neighboring sites, on 11/9/92, MW-1 was installed northwest of the former tank. MW-1 was located within 10 feet of the edge of the overexcavated pit. TPHg @ 370 ppm and BTEX @ 2.1, 2.3. 0.9 and 2.2 ppm, respectively was detected from the 7′ bgs boring in MW-1. When elevated TPHg and benzene was detected in groundwater samplings from MW-1, a work plan was provided to determine the lateral extent of soil and groundwater contamination.

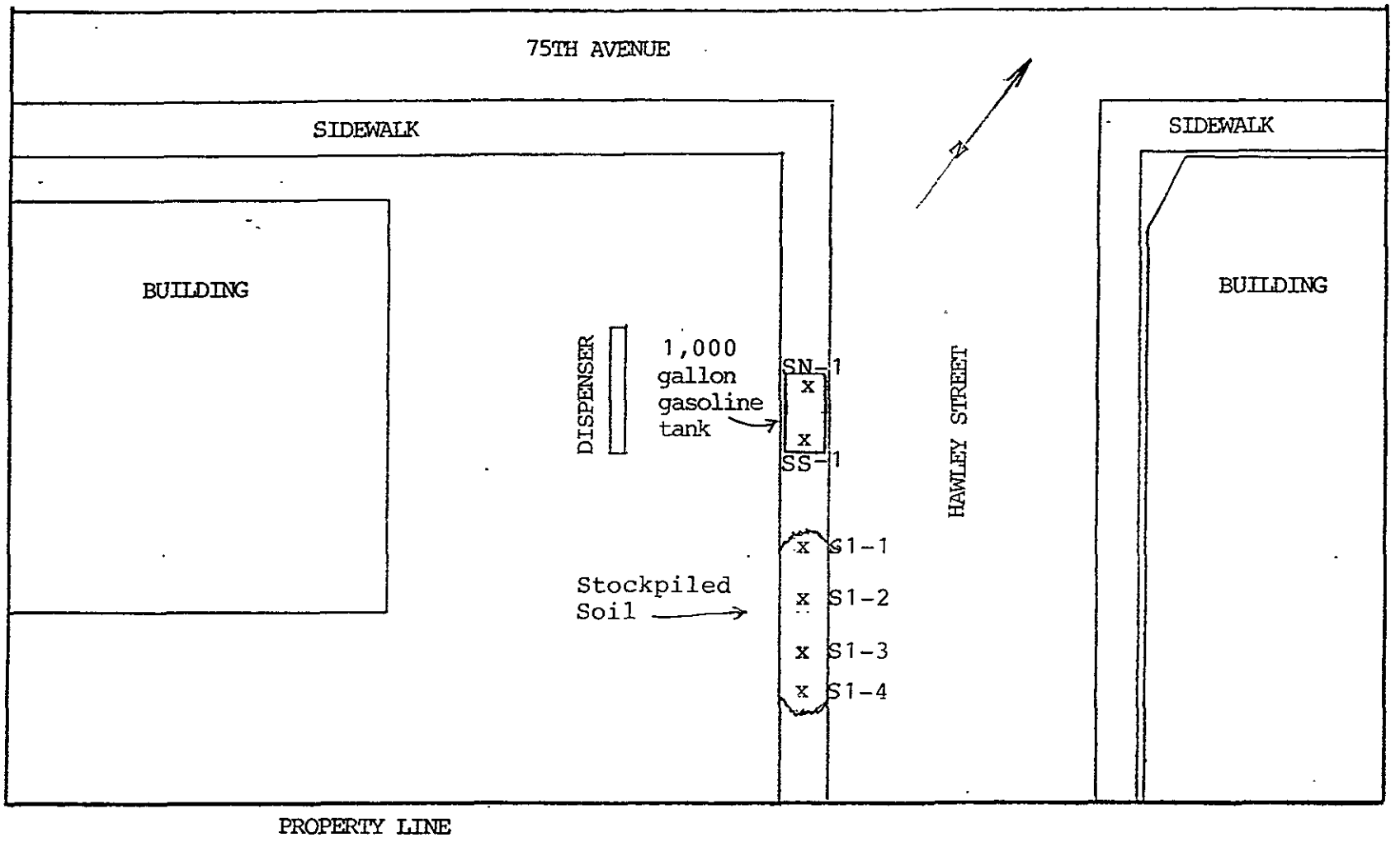
On 3/9/94, four borings were advanced up- and downgradient of MW-1 and the former tank pit. Soil samples from the soil-groundwater interface, as well as grab groundwater samples, were taken from each boring. One boring was upgradient and three downgradient of the tank. Since the soil borings from SP-2 and SP-3 were ND for TPHg and BTEX, SP-4, the boring even further downgradient, was not analyzed. Grab groundwater results indicated that only SP-3, the boring immediately downgradient of MW-1, was impacted with TPHg or BTEX. It appeared that soil contamination was limited to the shallow soils downgradient of MW-1. Therefore, further excavation was proposed.

On 11/18/94, additional soils were excavated around MW-1 and this well was destroyed. Four sidewall samples at the soil/groundwater interface were taken after this second overexcavation. Only the north sidewall detected any significant contamination where TPHg @ 190 ppm and BTEX @ 0.59, 4.3, 1.4 and 3.6 ppm respectively, were detected.

On 1/30/95, soil boring SP-5 was drilled across 75th Ave., further downgradient of the overexcavation. Both soil and grab groundwater sample from this boring were ND for TPHg and BTEX. Based on these results, replacement well, MW-2, was installed within 5′ of SP-5 on 5/24/95. This well was sampled on 6/1/95, 9/6/95 and 1/18/96. No TPHg or BTEX was detected in any of these monitoring events.

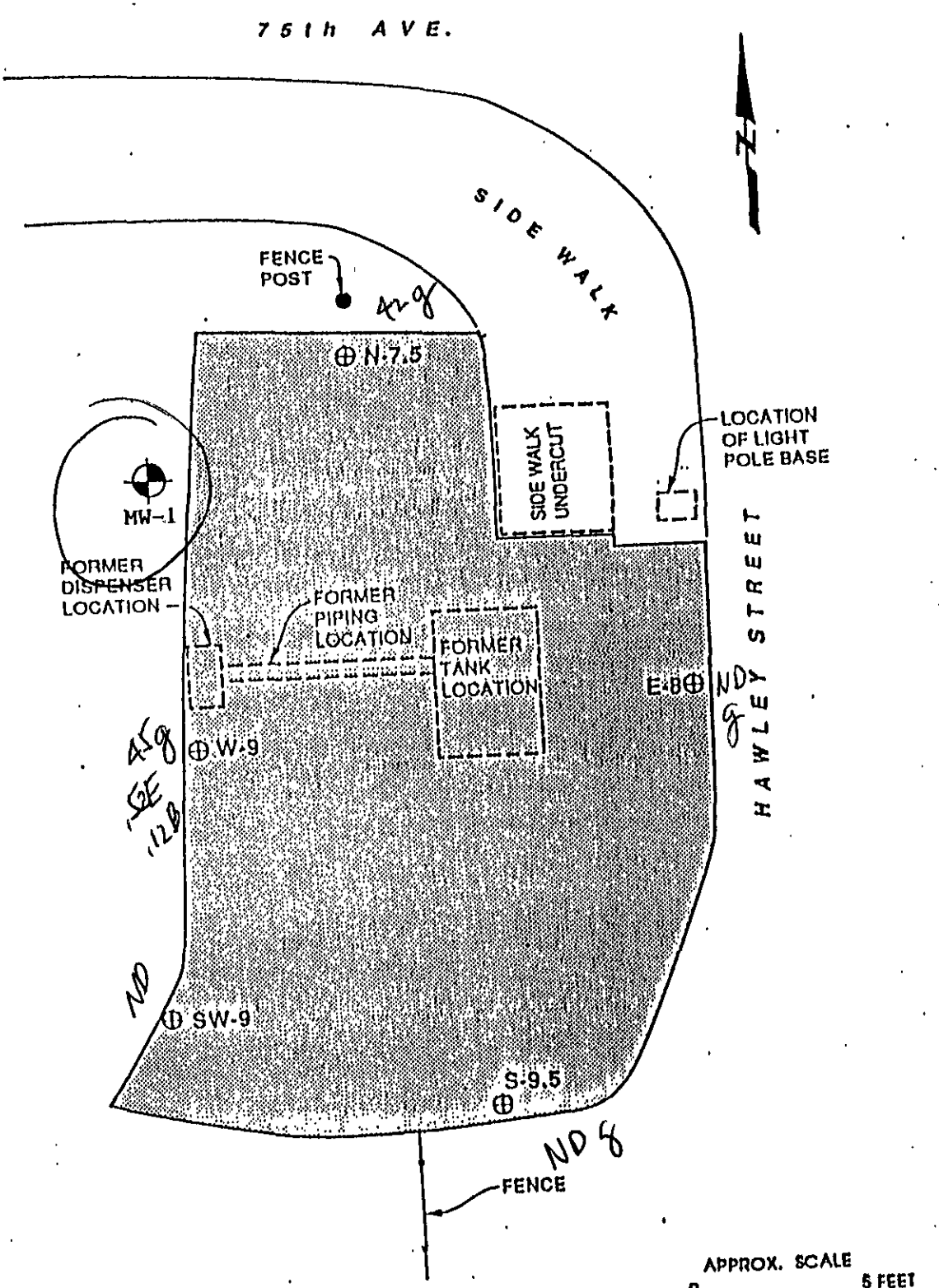
Rationale for closure:

1. Significant source removal through two soil overexcavations has occurred.
2. Groundwater contamination appears to be limited in extent with the downgradient well not detecting any contamination for three consecutive monitoring events.
3. Contaminant migration appears to support the assumed northwest gradient.



TANK PROTECT ENGINEERING
Of Northern California

PLOT PLAN
R & A TRUCKING COMPANY
865 77TH AVENUE
OAKLAND, CALIFORNIA



SITE PLAN

LEGEND:

⊕ - Indicates Proposed 4-inch Monitoring Well Location

Map: Levine-Fricke, Project No. 1506

BSK Proposal PR92048.3
March 1992
FIGURE: 1

BSI & Associ

Analytical Report

R & A EXCAVATION

LOG NO: E91-12-276

Received: 11 DEC 91

Mailed: DEC 18 1991

Mr. John Fehringer
American Brass and Iron
7825 San Leandro Street
Oakland, California 94621

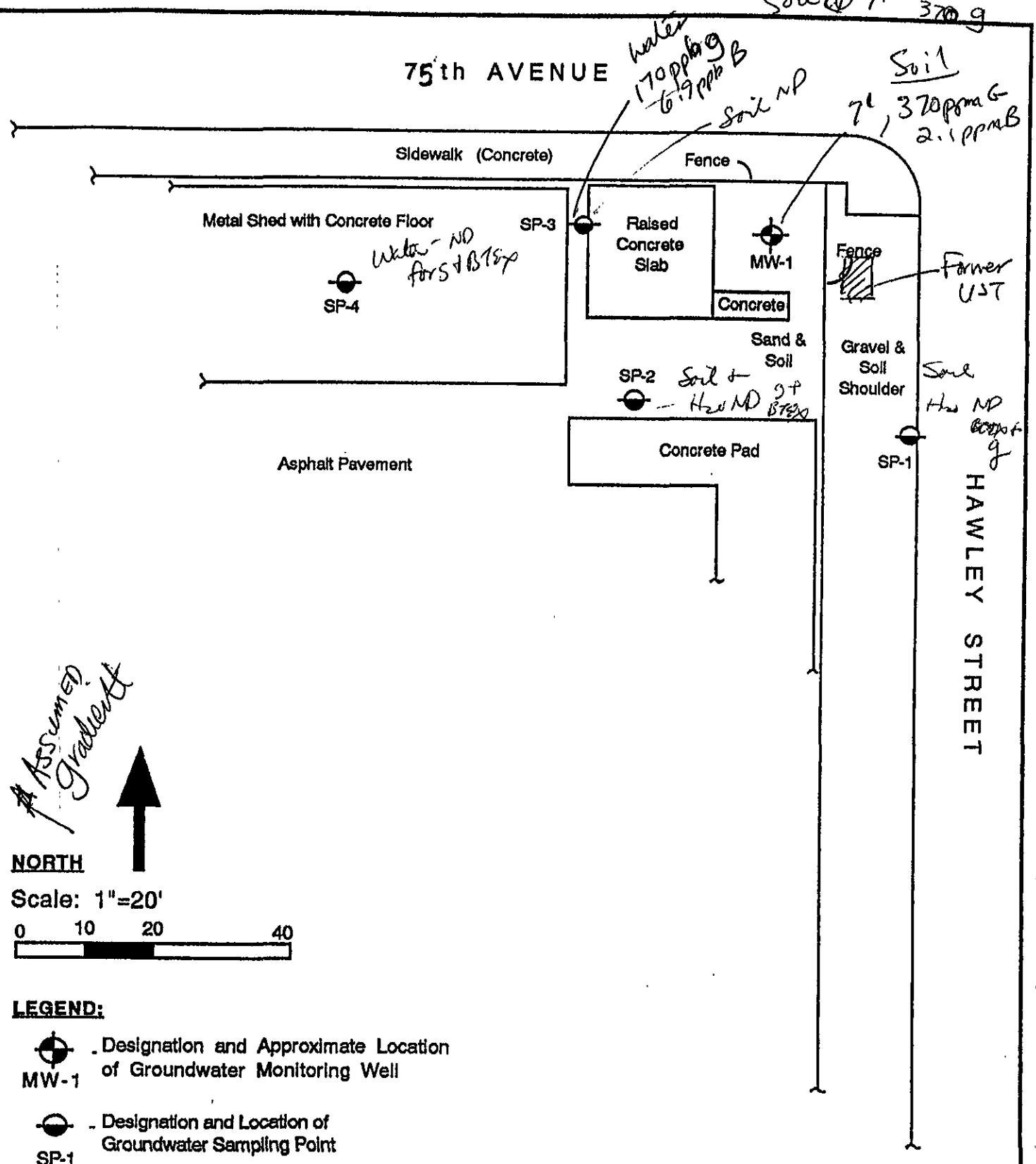
Purchase Order: 1268

CC: Mr. John Sturman, Levine.Frick

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
12-276-1	N-7.5	11 DEC 91
12-276-2	E-8	11 DEC 91
12-276-3	W-9	11 DEC 91
12-276-4	S-9.5	11 DEC 91
12-276-5	SW-9	11 DEC 91

PARAMETER	12-276-1	12-276-2	12-276-3	12-276-4	12-276-5
TPH-Volatile/BTEX					
Date Analyzed	12.13.91	12.15.91	12.15.91	12.15.91	12.15.91
Dilution Factor, Times	50	1	100	1	1
Benzene, mg/kg	0.13	<0.005	0.12	<0.005	<0.005
Ethylbenzene, mg/kg	0.52	<0.005	0.52	<0.005	<0.005
Toluene, mg/kg	0.58	<0.005	0.10	<0.005	<0.005
Total Xylene Isomers, mg/kg	2.2	<0.005	0.28	<0.005	<0.005
C6 to C12 Hydrocarbons, mg/kg	42	<0.1	45	<0.1	0.1



ON-SITE CONTAMINATION LIMITS ASSESSMENT R & A TRUCKING 865-77TH AVENUE OAKLAND, CALIFORNIA	**SITE PLAN** Job No. P94048.4 March 1994 FIGURE: 2	**BSK** & ASSOCIATES

TABLE 2

WATER CHEMICAL ANALYSES RESULTS
in Parts Per Billion (PPB)

Sample Designation (Action Level)$_1$	Benzene (1)	Toluene (100)$_2$	Ethyl-benzene (680)	Xylenes (1750)	TPH as Gasoline (NA)
SP-1, W-1	ND	ND	ND	ND	ND
SP-2, W-1	ND	ND	ND	ND	ND
SP-3, W-1	6.9	ND	ND	ND	170
SP-4, W-1	ND	ND	ND	ND	ND

NA - Not Available
1 - California Department of Health Drinking Water Standards, 1991
2 - CA DHS Recommended Drinking Water Action Levels, 1990

SUBSURFACE CONDITIONS

Surface conditions at boring locations SP-1, SP-2 and SP-3 comprised unpaved, sandy and gravelly sediment. Boring SP-4 was located within a shed having a concrete floor.

Subsurface conditions were visually explored to a maximum depth of 10 feet during this investigation. Materials encountered typically comprised an initial one-foot or less of orange sandy coarse gravel aggregate likely emplaced as a pavement base. Beneath the aggregate was encountered dark gray, damp to moist clayey-silt/silty-clay. The clay typically graded stiffer and lighter with depth, becoming yellow-brown mottled with gray; gray mottles were due to gray pore linings. Carbonate blebs and aggregates were encountered at approximately five feet in each boring, and extended to a depth of approximately eight feet. In Borings SP-1 and SP-3 clean, coarse angular sand was encountered at depths of 9.0 and 9.5 feet, respectively. In Boring SP-4, the clay/silt graded sandy at 8.0 to 9.0 feet in depth, but coarse, clean sand was not encountered. In Boring SP-2, predominantly sandy sediment was not encountered.

Groundwater was encountered in three borings at depths of 8.5 to 9.5 feet. In Boring SP-2, water was not encountered in the clayey silt until approximately 10.5 feet. The upper limit of regular sediment saturation was indicated by the greatest depth of carbonate encountered, approximately 8.0 to 8.5 feet below present grade. The presence of water in pores indicated by gray pore linings and aureoles was observed beginning at depths of 4.5 to 7.0 feet below present grade.

Contamination was olfactorilly observed in water from sample-point SP-3, and soil in SP-4. PID readings were obtained from soil in SP-4 in the dark-gray clay beneath the aggregate, readings decreased rapidly with depth.

A water sample was obtained from the hand-augered boring by lowering a disposable polyethylene bailer into water in the uncased boring.

Water samples were decanted from the bailers into appropriate containers with preservative immediately following retrieval from the sample-point. The collected water samples were then labeled, sealed, and refrigerated on-site for delivery to our State-certified analytical laboratories, with attendant Chain-Of-Custody documentation.

Chemical Testing

In accordance with our proposal and Water Quality Board Tri-regional Recommendations, BSK Analytical Laboratories performed the following analyses on soil samples obtained at the site:

Soil - EPA Method 8020 for BTEX
EPA Method 8015 for TPH as Gasoline

Water - EPA Method 602 for BTEX
EPA Method 8015/5030 for TPH as Gasoline

A summary of the chemical test results is provided in the following tables. The Chemical Test Data sheets from BSK are provided in Appendix "A", Figures A-1 through A-7. Chain-Of-Custody documentation is provided in Figure A-8.

TABLE 1

SOIL CHEMICAL ANALYSES RESULTS
in Parts Per Million (PPM)

Sample Designation (Action Level)	Benzene (NA)$_1$	Toluene (NA)$_1$	Ethyl-benzene (NA)$_1$	Xylenes (NA)$_1$	TPH as Gasoline (10)$_1$
SP-1, S-1 at 8.5'	ND	ND	ND	ND	ND
SP-2, S-1 at 8.5'	ND	ND	ND	ND	ND
SP-3, S-1 at 9.0'	ND	ND	ND	ND	ND

ND - None Detected
-- - Not Tested
NA - Not Available
1 - State Water Resources Control Board, LUFT Field Manual, Table 2-1
2 - California Code Of Regulations, Title 22, Article 11, 66699(c) List of Organic Persistent and Bioaccumulative Toxic Substances - TTLC Value

CHEMICAL TESTING

The water sample obtained from Well MW-1 was tested for the following indications of gasoline contamination:

Water - EPA Method 602 for BTEX
California LUFT Organics for TPH as Gasoline

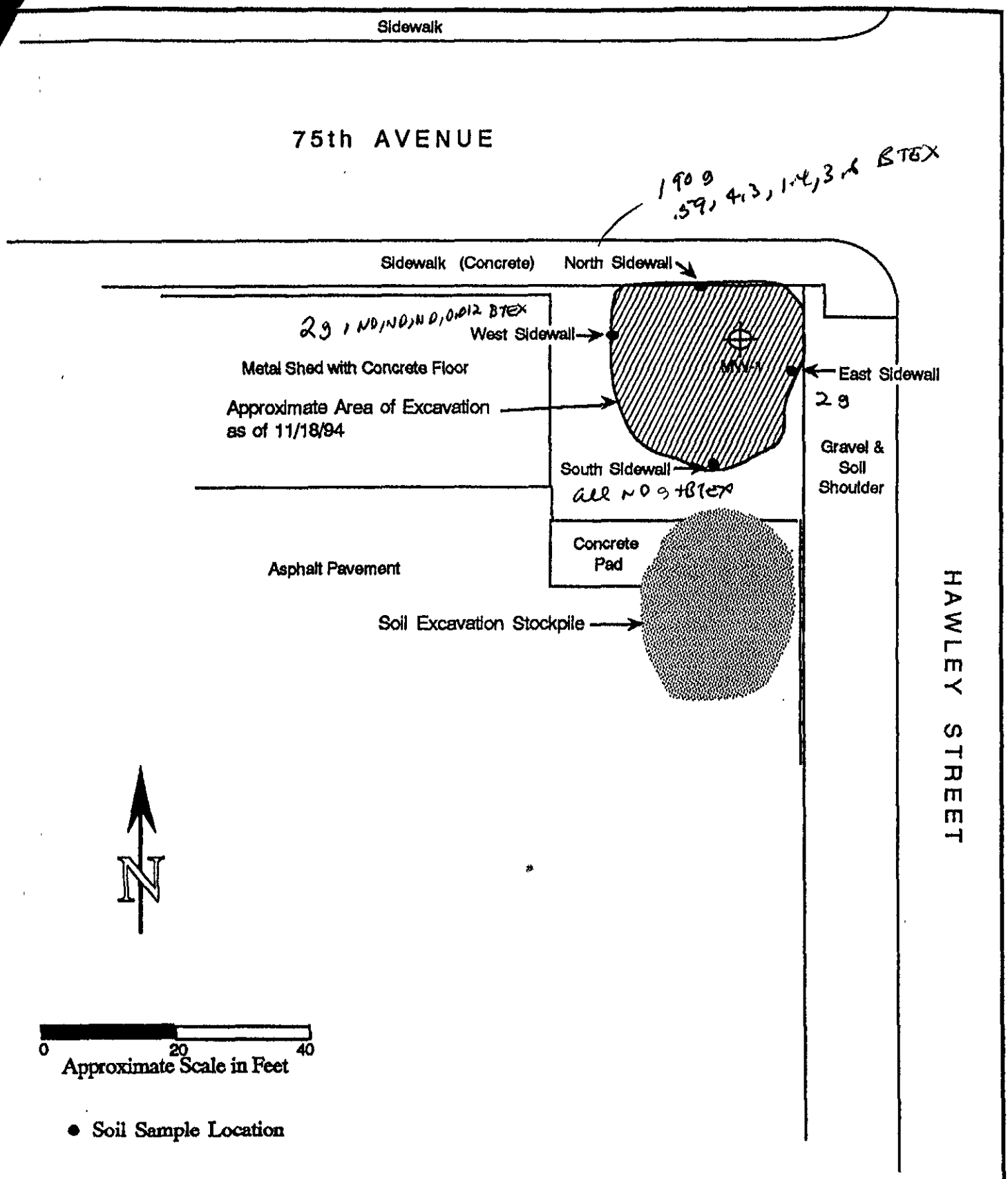
A summary of the current and previous chemical test results is provided in the following table. The Chemical Test Data sheet and BSK Chain-Of-Custody documentation are attached to this report.

TABLE 1

WATER CHEMICAL ANALYSES RESULTS
in Parts Per Billion (PPB)

Sample Designation (Action Level)$_1$	Benzene (1)	Toluene (100)$_2$	Ethylbenzene (680)	Xylene (1750)	TPH as Gasoline (NA)
September 9, 1994					
MW-1	1100	19	12	18	6000
June 10, 1994					
MW-1	1900	15	14	14	5200
March 3, 1994					
MW-1	1200	15	23	22	8400
December 3, 1993					
MW-1	450	19	48	49	12000
August 20, 1994					
MW-1	850	17	19	37	1900
November 30, 1992 (Initial Well Sample)					
MW-1	1270	<50	30.9	34.3	7600

NA - Not Available
1 - California Department of Health Drinking Water Standards, 1991
2 - CA DHS Recommended Drinking Water Action Levels, 1990



SOIL EXCAVATION OBSERVATIONS AND SAMPLING
R & A TRUCKING
865-77TH AVENUE
OAKLAND, CALIFORNIA

SITE PLAN

Job No. P92276.3
December 1994
FIGURE: 2

BSK
& ASSOCIATES

Following soil excavation, AB & I employees were in process of setting up system to pump water from the excavation into drums.

ANALYTICAL RESULTS

The results of the soil samples collected from the excavation sidewalls on November 18, 1994, are presented below in Table 1. The sampling locations are presented on Figure 2, Site Plan. The laboratory data sheets and chain-of-custody documents are attached.

TABLE 1
ANALYTICAL RESULTS
EXCAVATION SOIL SAMPLES
COLLECTED NOVEMBER 18, 1994
(Results Reported in Milligrams per Kilogram mg/kg)

Sample Location	TPH-Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
North Sidewall at 6 ft.	190	0.59	4.3	1.4	3.6
East Sidewall at 6 ft.	2	0.013	0.027	0.010	0.073
South Sidewall at 6 ft.	ND	ND	ND	ND	ND
West Sidewall at 6 ft.	2	ND	ND	ND	0.012
Detection Limit	1	0.005	0.005	0.005	0.005

ND - None Detected

ANALYTICAL RESULTS

TABLE 1

ANALYTICAL RESULTS, SOIL SAMPLE
(Results in milligrams per kilogram mg/kg)

Sample Designation (Action Level)	Benzene $(NA)_1$	Toluene $(NA)_1$	Ethyl-benzene $(NA)_1$	Xylenes $(NA)_1$	TPH as Gasoline $(10)_1$
S-2 at 10.5'	ND	ND	ND	ND	ND

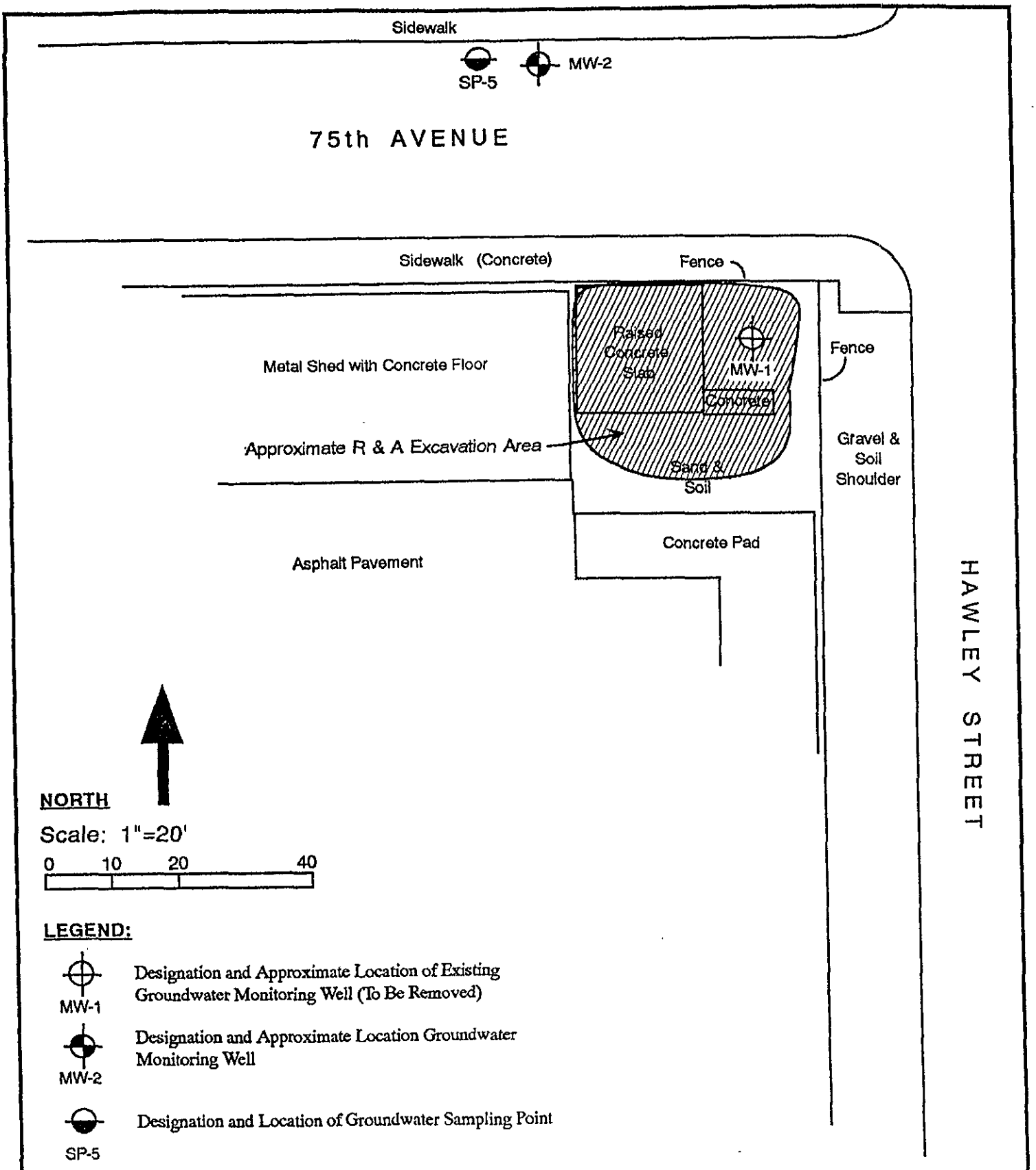
ND - None Detected
-- - Not Tested
NA - Not Available
1 - State Water Resources Control Board, LUFT Field Manual, Table 2-1

TABLE 2

ANALYTICAL RESULTS, GROUNDWATER SAMPLES
(Results in micrograms per liter ug/l)

Sample Designation (Action Level)$_1$	Benzene (1)	Toluene $(100)_2$	Ethyl-benzene (680)	Xylenes (1750)	TPH as Gasoline (NA)
S-5 SP-1,# 3 (01/30/95)	ND	ND	ND	ND	ND
MW-2 (06/01/95)	ND	ND	ND	ND	ND

NA - Not Available
1 - California Department of Health Drinking Water Standards, 1991
2 - CA DHS Recommended Drinking Water Action Levels, 1990



R & A TRUCKING
865-77TH AVENUE
OAKLAND, CALIFORNIA

SITE PLAN

FIGURE: 2

BSK
& ASSOCIATES

BSK & Associates
1181 Quarry Lane
Building 300
Pleasanton, CA 94566
(510) 462-4000
(510) 462-6283 FAX

February 2, 1996

BSK JOB NO.P94324.4

American Brass & Iron Foundry
7825 San Leandro Street
Oakland, California 94621

Attention: Mr. David Robinson
Environmental Engineering Manager

Subject: Report
Third Quarterly Sampling and Analysis
R & A Trucking
865 - 77th Avenue
Oakland, California

As requested and authorized, BSK & Associates is presenting the results of the third quarterly sampling and analysis of the groundwater sample collected from Monitoring Well MW-2.

The results of this quarterly sampling and the previous sampling are summarized in Table 1 below. The laboratory data sheet, chain-of-custody and well field log are provided as attachments to this letter report.

TABLE 1

ANALYTICAL RESULTS, GROUNDWATER SAMPLES
(Results in micrograms per liter ug/l)

Sample Designation (Action Level)	Benzene (1)	Toluene (100)2	Ethyl-benzene (680)	Xylenes (1750)	TPH as Gasoline (NA)
SP-5*, #3 (01/30/95)	ND	ND	ND	ND	ND
MW-2 (6/1/95), First Quater	ND	ND	ND	ND	ND
MW-2 (9/6/95) Second Quarter	ND	ND	ND	ND	ND
MW-2 (1/18/96) Third Quarter	ND	ND	ND	ND	ND

NA - Not Available
1 - California Department of Health Drinking Water Standards, 1991
2 - CA DHS Recommended Drinking Water Action Levels, 1990
* - Intial grab water sample from sampling point boring