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

RAFAT A. SHAHID, Assistant Agency Director

May 19, 1995

Alameda County
Environmental Protection Division
1131 Harbor Bay Parkway, Room 250
Alameda CA 94502-6577

CC4580

STID 4099

REMEDIAL ACTION COMPLETION CERTIFICATE

Gary Jensen
Bay Area Rapid Transit District
P.O. Box 12688
Oakland, CA 94604

William Macedo
Castro Valley Unified School District
P.O. Box 2146
Castro Valley, CA 94546

RE: (FORMER) CVUSD CORPORATION YARD, 21000 WILBEAM AVENUE, CASTRO VALLEY

Dear Messrs. Jensen and Macedo:

This letter confirms the completion of site investigation and remedial action associated with the three fuel underground storage tanks at the referenced location.

Based on 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 underground storage tank 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 Scott Seery at (510) 567-6783 if you have any questions regarding this matter.

Sincerely,

Rafat A. Shahid
Director of Environmental Services

cc: William Raynolds, Acting Chief, Env. Protection Division
Kevin Graves, RWQCB
Mike Harper, SWRCB
Jim Ferdinand, Alameda County Fire Department

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION **Date: 2/23/95**

Agency name: **Alameda County-EPD** Address: **1131 Harbor Bay Pkwy #250**
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **Scott Seery** Title: **Sr. Haz. Materials Spec.**

II. CASE INFORMATION

Site facility name: **BART Station / (former) C.V. School District Corp Yard**
Site facility address: 21000 Wilbeam Ave., Castro Valley CA 94546
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.:**4099**
URF filing date: 6-25-92 SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
William Macedo C.V. Unified School Dist.	P.O. Box 2146 Castro Valley, CA 94546	510-537-3000
Gary Jensen Bay Area Rapid Transit Dist.	P.O. Box 12688 Oakland, CA 94604	

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	2000	gasoline	removed	6-25-92
2	"	diesel	"	"
3	1000	UNK fuel	"	6-26-92

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: corrosion

Site characterization complete? YES

Date approved by oversight agency: 7-10-92

Monitoring Wells installed? YES Number: 3

Proper screened interval? YES

Highest GW depth below ground surface: 0.46' Lowest depth: 5.32'

Flow direction: predominantly W to SW

Most sensitive current use: parking lot

Are drinking water wells affected? NO Aquifer name: C.V. GW Basin

Is surface water affected? NO Nearest affected SW name: NA

Off-site beneficial use impacts (addresses/locations): NA

Leaking Underground Fuel Storage Tank Program

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

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment of Disposal w/destination)	Date
Tank	2x2000 gal; 1x1000 gal	disposal/recycle-Erickson	6/25 - 6/26/92
Piping	UNK	" "	UNK
Free Product	NA		
Soil	~ 324yds^3	disposal-BFI, Livermore	9/11/92
Groundwater	15,000 gal	disposal (POTW)	after 8/92
Barrels	UNK		

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

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	1100	ND	1900	ND
TPH (Diesel)	140	"	53	"
Benzene	7.3	"	440	"
Toluene	2.8	"	90	"
Xylene	20	"	35	"
Ethylbenzene	44	"	38	"
Oil & Grease	NA	NA	NA	NA
Metals: (Total Pb)	60	46	94,000*	ND
(Organic Pb)	ND	NA	ND	NA

* "Before" GW sample results for **organic** lead are from "grab" GW samples collected from borings advanced adjacent to UST cluster prior to UST closures. Additional "before" Pb datum is for GW samples collected from wells completed post UST closure, and analyzed for **total** lead from unfiltered samples. Subsequent total lead GW analyses are from filtered samples.

Comments (Depth of Remediation, etc.):

Soil samples were collected from sidewalls at a depth of approximately 5½ feet BG. Sidewall samples were collected because of the presence of shallow GW in each of the three (3) UST pits. Further excavation of the "mystery" UST pit ensued, as field observations identified that an unauthorized release had occurred. Overexcavation extended to below GW and laterally, primarily to the east and west. Post excavation samples were "ND" for all fuel target compounds.

Leaking Underground Fuel Storage Tank Program

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 Decommisioned: UNK [SEE: Sec. VII, *Additional Comments, Data, etc.*]

Number Decommisioned: UNK Number Retained: UNK

List enforcement actions taken: NONE

List enforcement actions rescinded: NONE

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Scott Seery Title: Sr. Haz Mat Specialist
Signature: Date: 2-24-95

Reviewed by
Name: Madhulla Logan Title: Haz Mat Specialist
Signature: Date: 2-24-95

Name: Jennifer Eberle Title: Haz Mat Specialist
Signature: Date: 2-24-95

VI. RWQCB NOTIFICATION

Date Submitted to RB: RB Response:
RWQCB Staff Name: Kevin Graves Title: San. Engineering Asso. Date:

VII. ADDITIONAL COMMENTS, DATA, ETC.

Preliminary to completion of UST closure (and other environmental and demolition tasks associated with the razing of this former school district corp yard), several shallow (≤ 10') soil borings were emplaced about the site, including three (3) around the former UST complex. Both soil and

"grab" GW samples were collected and analyzed for TPH-G, -D, BTEX and organolead. Part per billion ranges of various TPH-G and BTEX compounds were discovered in each of the GW samples, as well as in shallow soil collected from borings 051WBO1 and 051WBO3 near the SW corner of the UST complex.

Initially only two USTs were expected to be present and closed at this site. However, a third UST was ultimately discovered and also removed. Two of the three USTs were found to have throughgoing holes, particularly in the case of the 3rd "mystery" UST which had several holes in various locations along its bottom, ends, and top.

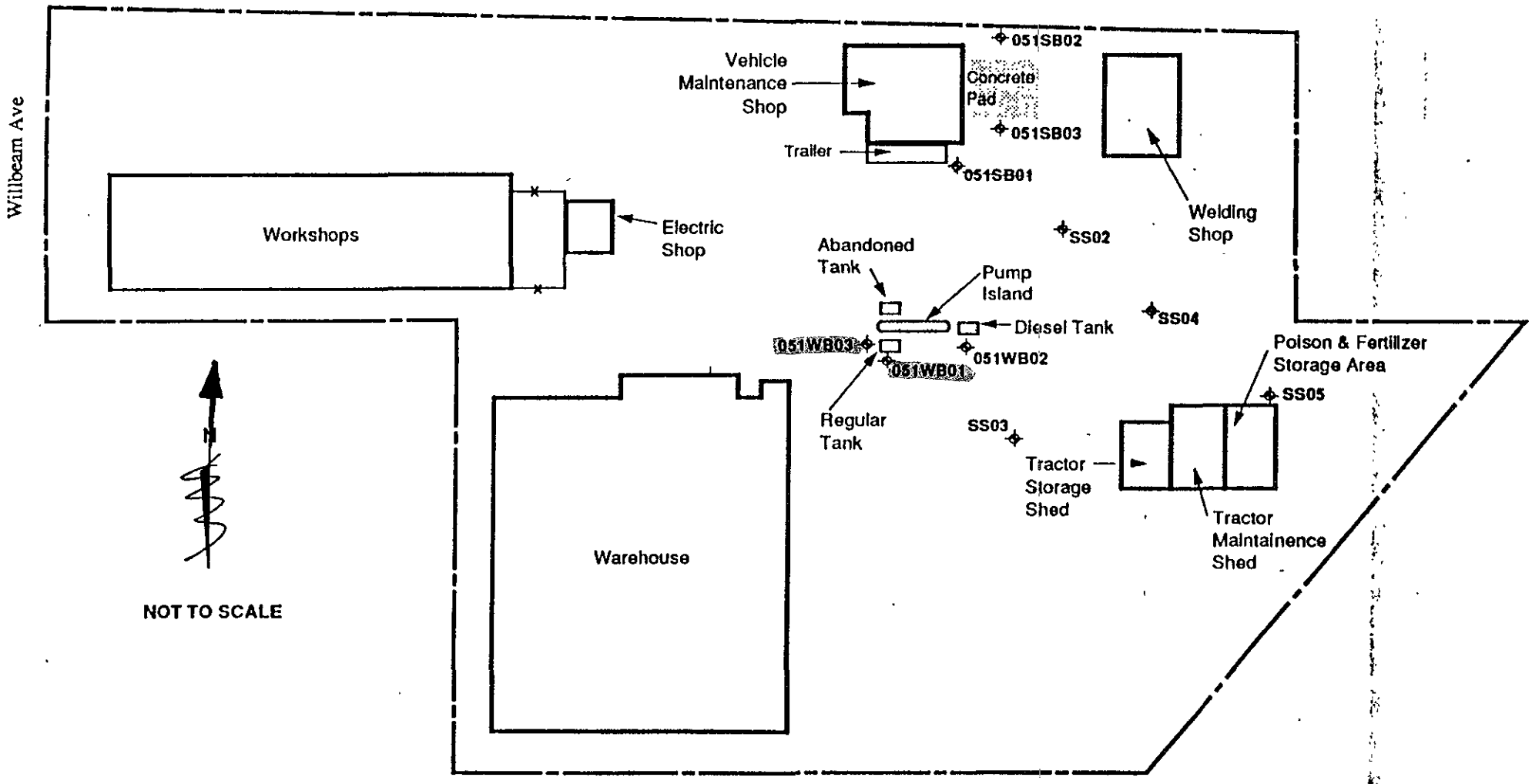
Shallow GW was present in each excavation, initially encountered at ~10' BG, but stabilizing @ ~ 5½' BG. Such necessitated the collection of sidewall samples at the ~5½ foot depth. Apparent FP/emulsion was noted on GW. The 3rd UST pit was subsequently over-excavated to remove obviously contaminated soil. Although initial soil samples from the 3rd UST pit revealed up 1100 ppm TPH-G (among other fuel compounds), final confirmatory samples were "ND" for all constituents. Soil samples collected from below dispensers and piping were also "ND" or at negligible concentrations for all target constituents.

Approximately 15,000 gallons of GW was pumped from the excavation(s) and stored temporarily at grade in a Baker® tank pending approval from Oro Loma Sanitation District to discharge to a sanitary sewer access on-site. Upon approval, this water was discharged to the sanitary sewer.

Three (3) GW monitoring wells were subsequently emplaced about the former UST complex through alternating sequences of clay, silty clays, and silty clayey sand. GW, initially encountered @ ~13' BG, appeared to be confined locally, stabilizing historically as high as ~0.5' BG. GW flow ranged from south-to-west-to-NE over the course of the investigation; however; flow was predominantly to the west to SW at a very flat gradient (stagnant).

Aside from initial high total lead analyses results in unfiltered GW samples (subsequent samples were filtered), all fuel constituents have been "ND" for all constituents through the course of the sampling program. The subsequent absence of target compounds in sampled GW is likely a function of: 1) the apparent strong vertical component to GW flow identified locally; 2) a flat gradient, minimizing advective contaminant dispersion; 3) substantial source removal, in terms of both affected soil and GW; and, 4) tight fine-grained sediments (clays and silts), enhancing contaminant adsorption through increased surface area with a consequent reduction in hydraulic conductivity, further limiting advective transport as a dispersion mechanism.

Although presently unknown, the wells may have been inadvertently destroyed during demolition and other activities associated with the BART station construction. Appropriate well destruction will be requested of the RP.



KEY

SS	Surface Sample
SS/WB	Soil Boring with Water Sample

[redacted] = "hits"

SITE MAP SHOWING BORING LOCATIONS

BART
August 1992 — Castro Valley District Coporation Yard
3715-051-043 — Castro Valley, California

DAMES & MOORE

FIGURE 2

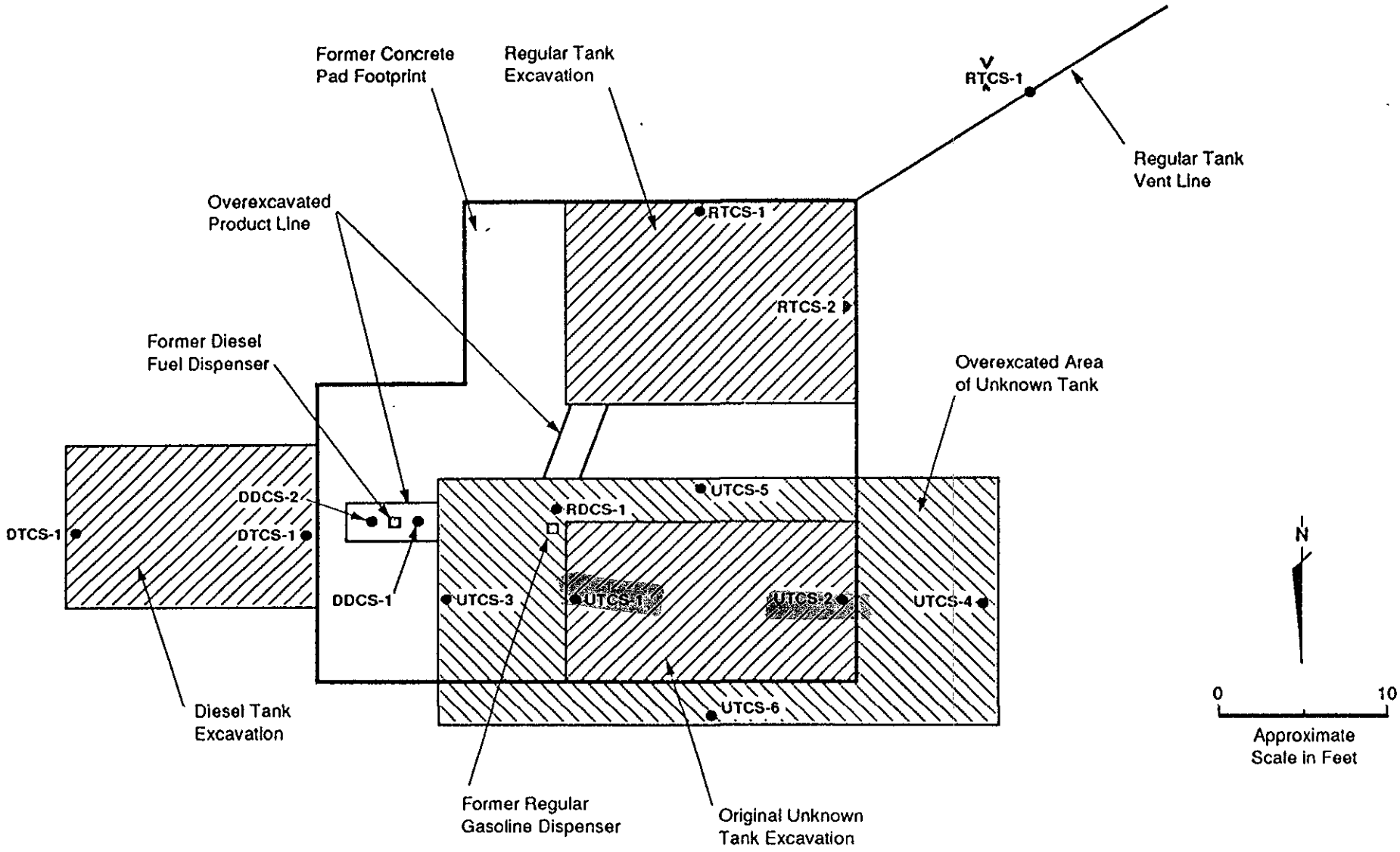
TABLE 2
SUMMARY OF SUBSURFACE SOIL ANALYTICAL DATA[1]

pre-UST closure investigation

borings adjacent to USTs

Boring No.	Sample Depth (ft.)	Analytes								
		TPH Gasoline	TPH Diesel	B[1,2]	T[2]	E[2]	X[2]	Organic Lead	Volatile Organics[3]	TRPH[4]
051WB01-01	2.5	7.9	ND[5]	0.31	0.038	0.18	0.21	ND	-[6]	-
051WB01-02	5.0	ND	ND	ND	ND	ND	ND	ND	-	-
051WB01-03	10.0	ND	ND	ND	ND	ND	ND	ND	-	-
051WB01-04	7.5	ND	ND	ND	ND	ND	ND	ND	-	-
051WB02-01	2.0	ND	ND	ND	ND	ND	ND	ND	-	-
051WB02-02	5.0	ND	ND	ND	ND	ND	ND	ND	-	-
051WB02-03	7.5	ND	ND	ND	ND	ND	ND	ND	-	-
051WB02-04	10.0	ND	ND	ND	ND	ND	ND	ND	-	-
051WB03-01	2.5	20.0	ND	0.81	0.13	0.25	0.38	ND	-	-
051WB03-02	5.0	ND	ND	ND	ND	ND	ND	ND	-	-
051WB03-03	7.5	0.820	ND	0.15	.0058	0.015	0.005	ND	-	-
051WB03-04	9.5	ND	ND	ND	ND	ND	ND	ND	-	-
051SB01-01	2.5	-	-	-	-	-	-	-	ND	ND
051SB01-02	5.0	-	-	-	-	-	-	-	ND	ND
051SB02-01	2.5	-	-	-	-	-	-	-	ND	14.0
051SB02-02	5.0	-	-	-	-	-	-	-	ND	8.0
051SB02-03	10.0	-	-	-	-	-	-	-	ND	7.0
051SB03-01	2.5	-	-	-	-	-	-	-	ND	6.0
051SB03-02	5.0	-	-	-	-	-	-	-	ND	6.0

1) All results in mg/kg (ppm). All samples analyzed by CKY Environmental Services of Pleasanton, California.
2) BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
3) Volatile organic compounds by EPA Method 8240
4) TRPH = Total Recoverable Petroleum Hydrocarbons
5) ND = Not detected
6) - = Not analyzed



TANK EXCAVATIONS AND CONFIRMATORY SAMPLE LOCATIONS

BART
May 1994 — Castro Valley District Corporation Yard
3715-051-043 — Castro Valley, California

DAMES & MOORE

FIGURE 3

UST Closure

TABLE 1
SUMMARY OF CONFIRMATORY SOIL SAMPLE ANALYTICAL RESULTS[1]

Sample Date	Sample No.[2]	Analytes						
		TPH Gas[3]	TPH Diesel	B	T	E	X	Total Lead
6/25/92	RTCS-1	ND	ND	ND	ND	ND	ND	27
	RTCS-2	ND	ND	ND	0.010	0.010	0.030	31
	DTCS-1	ND	ND	ND	ND	ND	ND	27
	DTCS-2	ND	ND	0.010	ND	ND	0.017	30
6/26/92	[redacted]	1,100	140	7.3	2.8	44.0	20.0	40
	[redacted]	810	80	4.8	1.4	37.0	16.0	45
dispenser	DDCS-1	7.5	ND	0.70	0.31	0.31	0.96	52
dispenser	RDCS-1	5.5	ND	0.44	1.0	0.20	1.2	60
	RTVCS-1	ND	ND	ND	ND	ND	ND	26
6/30/92 (After additional excavation)	UTCS-3	ND	ND	ND	ND	ND	ND	31
	UTCS-4	ND	ND	ND	ND	ND	ND	39
	UTCS-5	ND	ND	ND	ND	ND	ND	26
	UTCS-6	ND	ND	ND	ND	ND	ND	46
dispenser	DDCS-2	ND	ND	ND	ND	ND	ND	45

Notes:

1) All results reported in mg/kg. All samples were analyzed by CKY Environmental Services of Pleasanton, California.
2) Sample locations are shown on Plate 3.
3) ND = not detected above laboratory reporting limits.

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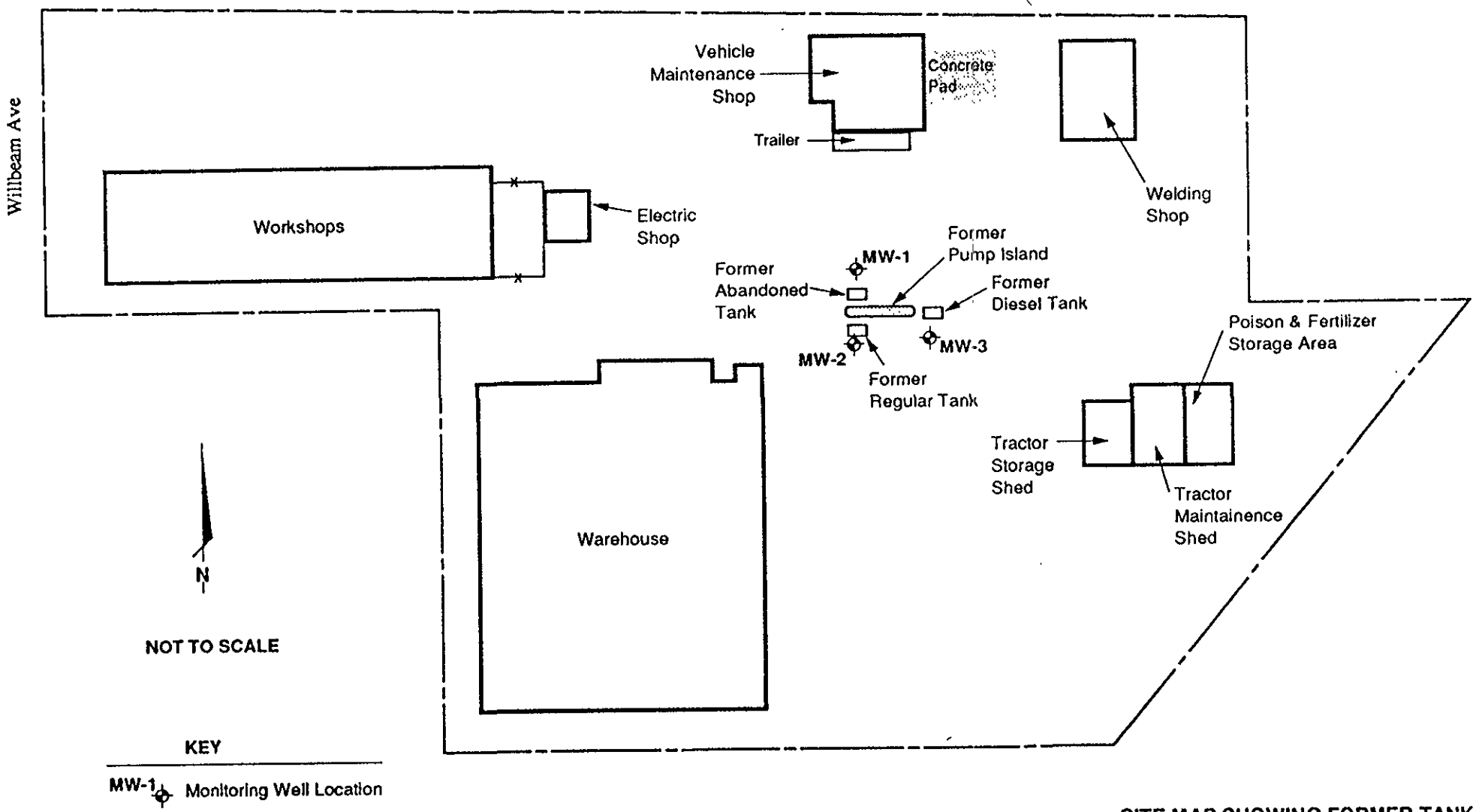

SITE MAP SHOWING FORMER TANK LOCATIONS AND MONITORING WELLS

BART
Castro Valley District Coporation Yard
Castro Valley, California

May 1994
3715-051-043

DAMES & MOORE

FIGURE 2

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA
BART, FORMER CASTRO VALLEY UNIFIED SCHOOL DISTRICT YARD

Well No.	Date Collected	Depth to Water (feet)	TOC[1] Elevation	Groundwater Surface Elevation
MW-1	2/25/93	2.44	164.68	162.24
	3/25/93	2.41	164.68	162.27
	4/22/93	2.99	164.68	161.69
	5/10/93	3.47	164.68	161.21
	8/30/93	4.57	162.48*	157.97
	11/30/93	1.41	162.48	161.07
	3/1/94	0.65	162.48	161.83
MW-2	2/25/93	2.47	164.64	162.17
	3/25/93	2.86	164.64	161.78
	4/22/93	3.52	164.64	161.12
	5/10/93	3.50	164.64	161.14
	8/30/93	3.22	163.01*	159.79
	11/30/93	2.24	163.01	160.77
	3/1/94	1.17	163.01	161.84
MW-3	2/25/93	2.54	165.58	163.04
	3/25/93	3.73	165.58	161.85
	4/22/93	3.93	165.58	161.65
	5/10/93	4.10	165.58	161.48
	8/30/93	5.32	162.65*	157.33
	11/30/93	1.52	162.65	161.13
	3/1/94	0.46	162.65	162.19

Notes: [1] TOC = Top of casing. Elevation referenced to Mean Sea Level.
* Wells cut down and resurveyed to facilitate construction activities at the site.