20861 Wilbeam Avenue, #4 Castro Valley, CA 94546

(510) 247-9885 Facsimile:(510) 886-5399

December 28, 2000

Mr. James Jaing 302 - 8th Street Oakland, CA 94607

Subject:

Request for Site Closure

2896 Castro Valley Boulevard Castro Valley, California 94546

Dear Mr. Jaing,

ERAS Environmental, Inc. (ERAS) is pleased to present this Request for Site Closure report for the above referenced address (hereinafter the "Property"). The work performed included a review of subsurface environmental investigation studies completed at the Property and preparation of this report which includes a compilation of historical analytical data into table format, and preparation of a Case Summary Form, as required by the Alameda County Health Care Services Agency (ACHCSA).

ERAS has forwarded a copy of this report to Mr. Amir Gholami of the ACHCSA for review.

Please call if you have any questions regarding the information presented or regarding work performed at the Property.

Respectfully,

ERAS Environmental, Inc.

David Siegel, R.E.A.

President



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Introduction

The Property is located on the northwest corner of Castro Valley Boulevard and Anita Avenue in Castro Valley, California. The Property is developed with a small commercial building occupied by Boulevard Auto Service. The Property was historically developed with a gasoline service station which operated three underground gasoline storage tanks UST), a 10,000 gallon, 7,500 gallon and 5,000 gallon, and one 300 gallon underground waste oil tank.

The USTs were removed from the Property in June 1987. Subsurface environmental investigations were subsequently conducted in January 1988 and September 1990. Three groundwater monitoring wells were installed on the Property as part of the 1990 investigation to define the extent of contamination. The wells were sampled for petroleum hydrocarbon products soon after installation, and again in 1992, 1997, 1999, and 2000. Nearly all water samples collected from the wells have been found not to contain detectable concentrations of fuel hydrocarbons and semi-volatile organic compounds. Two water samples from the September 1992 sampling event contained low concentrations of fuel hydrocarbon products and semi-volatile organic compounds, below the Maximum Contaminant Levels (MCL) listed in California Title 22 regulations for primary drinking water or other water quality standards.

Additional excavation and soil sampling of the former tank pits was completed in 1994. Confirmatory soil samples collected from the excavation sidewalls contained less than 100 parts per million (ppm) of total petroleum hydrocarbons as diesel (TPH-d). Samples that were analyzed for total petroleum hydrocarbons as gasoline (TPH-g) and benzene, toluene, ethyl benzene, and xylenes (BTEX) were found not to contain any of these constituents. Concentrations of TPH-g, BTEX, and total oil & grease were not detected in a grab water sample collected from the fuel tank excavation. Excavated soils were stockpiled on the Property and sampled for profiling and disposal. Upon completion of profiling, this material was taken to the BFI landfill in Livermore, California for disposal. The transportation and disposal was completed by Mercer Trucking in February 1995. All soil disposal was documented on Uniform Hazardous Waste Manifests. The Alameda County Health Care Services Agency (ACHCSA) has determined that further sampling of the three groundwater monitoring wells on the Property is not required at this time.

Previous Environmental Investigations

A summary of analytical results for soil samples and groundwater samples are presented in **Tables 1**, and 2, respectively. The location of the soil borings and sampling locations are shown on **Exhibits 1-4 in Appendix A**.

All USTs were removed from the Property in June 1987 by Geonomics, Incorporated. Immediately after removal, subsurface sampling was completed by collecting native soil samples from underneath both ends of the three fuel tanks and below the center of the waste oil tank. A composite soil sample from the tank backfill was also collected from the fuel tank excavation and waste oil tank excavation (**Exhibit 1**).

The discrete samples from the fuel tank excavation were analyzed for TPH-g and BTEX; discrete samples from the waste oil tank excavation were analyzed for TPH-d and waste oil, total oil & grease (TOG), BTEX, and Priority Pollutants (EPA Method 8240). Each of the composite samples was subjected to the same analyses. Analysis of native soil from

under each tank indicated the presence of low levels of TPH-g (maximum of 100 ppm) and BTEX (maximum of 2.2 ppm (xylenes)) under one of the fuel USTs and higher levels of TPH-d (maximum of 5,300 ppm) and TOG (maximum of 16,000 ppm) under the former waste oil UST.

In May 1989, the Alameda County Environmental Health Department, Division of Hazardous Materials, requested that additional subsurface investigation work be completed to define the lateral and vertical extent of hydrocarbon contamination. In response to this request, Aqua Science Engineers (ASE) drilled seven more soil borings on the Property in September 1990 (Exhibit 2). Four borings were drilled to depths of 13 to 15 feet below ground surface (bgs) in the immediate vicinity of the former tank locations. Three borings were drilled to a depth of 20 feet bgs and converted to groundwater monitoring wells under an approved permit from Zone 7 of the Alameda County Flood Control and Water Conservation District. Boring B-1, drilled at the western edge of the former UST area contained 790 ppm of TPH-g and 730 ppm of TOG. None of the other soil samples contained more than 32 ppm of TOG or 14 ppm of TPH-g.

Metals were detected in the soil samples collected by ASE. The following are the ranges (or the maximum concentration) of concentrations in ppm reported by ASE (1990). Following these reported values are mostly within the "normal" ranges of metals expected in areas of industrial development. This is based on the concentrations of metals in samples of surficial sediments collected from Oak Glen Park and Lake Merritt in Oakland (Bryden, et al, 1991). Values of arsenic, antimony, thallium and selenium were above the reported ranges. However, the metals appear to be background concentrations because of their narrow ranges of concentrations regardless of their location and depth of collection.

Silver 0.4	0.6-1.4
Arsenic 14-21 Beryllium <1	1.1 - 6.3 0.1
Cadmium 1.5	0.1 0.16-3.32
Chromium 27-50	21-53
Copper 15-22	24-215
Mercury ND	0.37-1.58
Nickel 32-40	27-58
Lead 56-190	192-806
Antimony 4-7	0.8-1.4
Thallium 4-7	<1.5
Selenium 17-25	<1
Zinc 42-80	155-1050

Groundwater was encountered in all boreholes at a depth of approximately 11-13 feet. Groundwater monitoring indicated the local flow direction to be to the west-southwest. Soil samples were collected at 5 foot intervals and at the soil-groundwater interface. Sixteen soil samples were collected and analyzed for TPH-g, TPH-d, BTEX, TOG, chlorinated halocarbons (EPA Method 8010), semi-volatile and extractable hydrocarbons (EPA Method 8270), and metals. The monitoring wells were developed and sampled for these same constituents in October 1990. The groundwater samples contained low concentrations of fuel hydrocarbons (no detectable concentrations of TPH-g), maximum concentration of BTEX in MW-3, ethylbenzene 17 parts per billion (ppb), xylenes 15 ppb).

MW-1 contained benzene at a concentration of 0.6 ppb, toluene at 0.83 ppb, ethylbenzene at 1.8 ppb and xylenes at 1.0 ppb.

The groundwater monitoring wells were sampled again in April and October 1992 by C-REM Engineers. The samples collected and analyzed contained TPH-d at concentrations of 1,600 ppb in MW-3 and 310 ppb in MW-1. Benzene was detected at a maximum concentration of 1.5 ppb (MW-1), toluene at a maximum of 0.83 ppb (MW-1), ethylbenzene at a maximum concentration of 45 ppb (MW-3) and xylenes at a maximum concentration of 51 ppb (MW-3).

In 1993, Gentech Environmental (GTE) excavated the area in and around the former USTs and collected soil samples from the sidewalls of the excavation (**Exhibit 3**). The soil samples were analyzed for fuel hydrocarbons and were found to contain low concentrations of TPH-g and BTEX (highest concentration equal to 64 ppm), but higher concentrations of TOG (3,980 ppm in sample SW#5, 955 in SW#6). Benzene was detected at a maximum concentration of 1.1 ppm, toluene at a maximum of 4.13 ppm, ethylbenzene at a maximum concentration of 4.86 ppm and xylenes at a maximum concentration of 25.1 ppm. The concentrations of selected metals analyzed were within the following ranges: chromium (3.9-9.7 ppm), nickel (19-24 ppm), lead (2.0-7.3 ppm), cadmium (0.13-0.38 ppm), zinc (32-40 ppm), selenium (ND).

Based on the previous analytical results of soil samples, additional excavation of soil from the former UST excavations (specifically the area formerly containing the waste oil UST where SW#5 and SW#6 were collected) was conducted in 1994 by GTE. Soil was stockpiled on the Property and sampled for profiling and disposal. The sidewalls of the tank pit areas were re-sampled at the soil-water interface and analyzed for fuel hydrocarbons and selected metals (**Exhibit 4**). A grab groundwater sample was collected from the excavation pit and sampled for the same constituents. Soil samples collected from the sidewalls contained a maximum of 93 ppm TPH-d. Samples that were analyzed for TPH-g and BTEX were found not to contain any of these constituents. The grab water sample contained 92 ppb TPH-d. Concentrations of TPH-g, BTEX, and TOG were not detected in the water sample.

Upon completion of profiling for the stockpiled soil, this material was taken to the BFI landfill in Livermore, California for disposal. The transportation and disposal was completed by Maciel Trucking in February 1995. All disposal was documented on Uniform Hazardous Waste Manifests.

Sampling of the three groundwater monitoring wells was conducted in April 1997, three times in 1999, and again in January 2000. Each time, groundwater samples from the three wells were analyzed for TPH-d, TPH-g, and BTEX. With two exceptions, all samples were found not to contain detectable concentrations of fuel hydrocarbon products. The two samples found to contain measurable concentrations of fuel hydrocarbons were an April 2000 sample from MW-1 (0.55 ppb xylenes) and a January 2000 sample from MW-3 (280 ppb TPH-d).

Location, Geology and Hydrogeology

Location

The Property is located on the northwest corner of Castro Valley Boulevard and Anita

Avenue, in a fully developed retail area of Castro Valley. Multi-tenant retail buildings are located on adjacent parcels to the east and west. The building adjacent to the east is occupied by a dry cleaner and shoe repair. The building adjacent to the west is occupied by a nail salon and hub cap shop. An operating Chevron service station is located across Anita Avenue to the east.

The closest surface water is San Lorenzo Creek, an intermittent stream, located approximately 1000 feet to the east, according to the United States Geological Survey (USGS) Hayward topographic map. The surrounding topography is somewhat hilly and undulating. The Hayward Fault is located about 1 mile to the west.

Geology

The Property is underlain by mostly fine grained alluvial sediments eroded from the surrounding upland surfaces. Boring logs from investigations conducted at the Property show that the shallow soils consist of clay and silt. A two-foot thick sand layer occurs approximately 11-13 feet under the Property. Below this is a clay layer, which extends to an approximate depth of 20 feet (ASE, 1990). Bedrock at deeper levels consists of Jurassic-aged sedimentary rocks of the Franciscan Formation.

Regional Hydrogeology

The Property is located in an area known as the Diablo Highland near the boundary with the San Leandro Cone Area, a subarea of the Santa Clara Valley Groundwater Basin (Department of Water Resources, 1967). The Diablo Highland contains mostly bedrock overlain by a thin veneer of sediments. The San Leandro Cone generally consists of thick permeable units separated by thick impermeable units. These sediments act as a groundwater recharge area of the Santa Clara Valley Groundwater Basin. Groundwater in the vicinity occurs in thin discontinuous water bearing strata up to 100 feet below ground surface. Deeper aquifers, occurring below 250 feet, are regional producers of groundwater.

The elevation of the Property is approximately 165 feet above Mean Sea Level, according to the USGS topographic map. Regionally, topography in the area of the Property slopes down to the west toward San Francisco Bay. The regional groundwater flow follows the topography, moving from areas of higher elevation to areas of lower elevation. The regional direction of groundwater flow is estimated to be toward the west-southwest.

Local Groundwater Information

Groundwater gauging measurements of the three groundwater monitoring wells located on the Property have consistently shown that shallow groundwater flow direction is predominantly toward the west-southwest and Castro Valley Boulevard. Well MW-1 is located about 20-30 feet west and south of the former fuel tank pit. Well MW-2 is located along the eastern boundary of the Property, near Anita Avenue. Well MW-3 is located along the southern boundary of the Property (see Exhibit 2 in Appendix A). The groundwater monitoring indicates that the flow direction has varied from west to southwest at a shallow gradient. Maps illustrating the groundwater gradient under the Property are included in Appendix B. Wells MW-1 and MW-3 are therefore down-gradient of the former USTs.

Groundwater beneath the Property has been measured at a depth of approximately 11-13 feet bgs in the monitoring wells.

Conclusions and Request for Closure

Conclusions

The soil and groundwater investigations conducted at the Property have revealed the following regarding subsurface environmental conditions in the area formerly containing fuel and waste oil USTs.

Soil

- Over-excavation of hydrocarbon contaminated soils from the tank pit areas was completed in 1994. Confirmatory soil sampling from the excavation sidewalls was conducted at the soil-water interface. Soil samples collected from the sidewalls, following the completion of excavation, contained a maximum concentration of TPH-d at 93 ppm and a maximum concentration of TPH-g at 64 ppm. Benzene was detected at a maximum concentration of 1.10 ppm.
- 2. The confirmation samples indicate that excavation work was successful in removing the elevated concentrations of petroleum hydrocarbons in soil from the area of the former USTs. The concentrations of metals in the soil samples analyzed by ASE in 1990 and Gentech appear to be "background" concentrations. This is based on the observations that indicate the concentrations detected are within generally narrow ranges, regardless of their depth and location. In addition, the concentrations of metals analyzed by Gentech were not elevated in the area containing petroleum hydrocarbons (northeastern part of the excavation where TOG was detected at a concentration of up to 3,980 ppm) compared to the other areas.

Groundwater

- 1. Groundwater monitoring wells on the Property were first sampled for fuel hydrocarbons in October 1990. Groundwater samples contained low concentrations of BTEX (maximum of 17 ppb of ethylbenzene in downgradient well MW-3).
- 2. The groundwater monitoring wells were sampled again in April and October 1992. Groundwater samples were found to contain low concentrations of TPH-d (1,600 and 310 ppb in down-gradient wells MW-3 and MW-1) and lesser concentrations of TPH-g (210 and 88 ppb in wells MW-3 and MW-1) and BTEX (maximum of 51 ppb of xylenes in MW-3, maximum of 7.1 ppb of ethylbenzene in MW-1).
- A groundwater grab sample collected from the excavation in 1994 following removal of soil contained 92 ppb of TPH-d, but no detectable TPH-g or BTEX.
- 4. Additional sampling of the wells was performed in April 1997 and for four consecutive quarters in 1999 and 2000. TPH-d has been detected at a maximum concentration of 280 ppb (in well MW-3), and only xylenes at a concentration of 0.55 ppb (in well MW-1).
- 5. The groundwater sampling and analysis indicates no significant

concentrations of petroleum hydrocarbons in the down-gradient monitoring wells MW-1 and MW-3.

Request for Closure

Based upon the results of historical soil and groundwater investigations conducted, ERAS requests that environmental closure be granted for the Property. This request is based on the following information pertaining to the Property.

The Property qualifies as a low risk groundwater case based on the following considerations.

- The leak source has been removed and the areas of the former USTs have been over-excavated to remove soils that were impacted by fuel hydrocarbons. The extent of contaminated soil was defined and confirmatory soil samples did not contain high concentrations of TPH-g or BTEX.
- Sampling of the three groundwater monitoring wells indicates that fuel hydrocarbons (no TPH-g or benzene, toluene and ethylbenzene for four consecutive quarters) have not impacted groundwater beneath the Property. The residual petroleum hydrocarbons in the soil underlying the Property appear to be generally free of the volatile hydrocarbon constituents and petroleum hydrocarbons are not affecting groundwater in detectable concentrations.
- Water production wells, deeper drinking water aquifers, surface water or other sensitive receptors are unlikely to be impacted by the release of fuel hydrocarbons at the Property.
- The current environmental condition of subsurface soil or groundwater at the Property represents no significant risk to human health. Groundwater under the Property or adjacent parcels is not used or expected to be used for a source of drinking water.
- The Property presents no significant risk to the environment. Wetlands or surface water bodies are not located within close proximity to the Property.

Based on the site conditions, potential sensitive receptors, and current use of the Property, there does not appear to be a risk to human health or safety or to the environment. Subsurface soils that were contaminated at the Property have been removed and it appears that remaining petroleum hydrocarbons do not pose a risk to current or probable future beneficial uses of groundwater.

References

Aqua Science Engineers, Incorporated, Workplan, Proposal for Soil and Groundwater Investigation Services at 2896 Castro Valley Boulevard, Castro Valley, California, April 27, 1990.

Bryden, G.W. et al, Background Levels of Selected Environmental Analytes In Soil and

Sediment From Urban and Suburban Parks East of San Francisco Bay, Hazmacon 1991 Proceedings, April 1991.

C-Rem Engineers, Well Monitoring 2896 Castro Valley Boulevard, Job No. 92020.02. October 26, 1992.

CGS Sampling Specialists, First Quarter Monitoring Well Sampling Report, April 21, 1997.

Geonomics, Incorporated, Soil Sampling Report, Underground Storage Tanks, 2896 Castro Valley Boulevard, Castro Valley, California, June 30, 1987.

Gentech Environmental, Inc., Technical Report, 2896 Castro Valley Boulevard, Castro Valley, California, December 15, 1994.

PIERS, Report of Groundwater Sampling, 2896 Castro Valley Boulevard, Castro Valley, California, January 13, 2000.

PIERS, Report of Groundwater Sampling, 2896 Castro Valley Boulevard, Castro Valley, California, October 26, 1999.

PIERS, Report of Groundwater Sampling, 2896 Castro Valley Boulevard, Castro Valley, California, August 27, 1999.

PIERS, Report of Groundwater Sampling, 2896 Castro Valley Boulevard, Castro Valley, California, April 27, 1999.

United States Geological Survey, 7.5-Minute Quadrangle Topographic Map, Hayward, California, 1993.

Limitations

This report has been prepared by ERAS according to the State and local agency suggested guidance documents for these investigations and in general accordance with the accepted standard of practice which exists in Northern California at the time the investigation was performed. The interpretations, conclusions and recommendations made herein are based upon the data and analysis for the soil and water samples collected on-site by others. ERAS is not responsible for errors in laboratory analysis and reporting, or for information withheld during the course of the study. It should be recognized that the definition and evaluation of geological conditions is a difficult and inexact art. Judgements leading to conclusions are generally made with an incomplete knowledge of the conditions present. Additional conditions and materials could exist at the site that were not encountered during this study. No warranty or guarantee is expressed or implied therein.

Tables Sample Analytical Data

TABLE 1
Soil Sample Analytical Results (concentrations in ppm)
2896 Castro Valley Boulevard, Castro Valley, California

Sample Number	Consul- tant	Depth (feet)	Sample Date	TPH-d	TOG	TPH-g	В	Т	E	X	Method 8010	Method 8270
TP147 A-1	Geo- nomics	11	6/16/87			ND	ND	ND	NA	ND		
TP147 A-2	Geo- nomics	11	6/16/87			ND	ND	ND	NA	ND	Ţ	
TP147 B-1	Geo- nomics	11	6/16/87			ND	ND	ND	NA	DI		
TP147 B-2	Geo- nomics	11	6/16/87			ND	ND	ND	NA	ND		
TP147 C-1	Geo- nomics	11	6/16/87			ND	ND	ND	NA	ND		
TP147 C-2	Geo- nomics	11	6/16/87			100	ND	0.2	NA	2.2		
TP147D	Geo- nomics	7	6/16/87	5,300	16,000	NA	0.22	0.09	0.3	1.5		
TP147E	Geo- nomics	stock- pile	6/16/87			15	ND	ND	ND	11		
TP147F	Geo- nomics	stock- pile	6/16/87			ND	ND	ND	ND	ND		
B -1	ASE	6.5	9/27/90	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-1	ASE	11	9/27/90	ND	730	790	0.3	1.9	4	8.8	ND	@
B-1	ASE	13.5	9/27/90	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-2	ASE	6	9/27/90			ND	ND	ND	ND	ND	ND	
B-2	ASE	10	9/27/90			13	ND	ND	0.024	.021	ND	
B-2	ASE	13	9/27/90			ND	ND	ND	ND	ND	ND	
B-3	ASE	6.5	9/27/90			ND	ND	ND	ND	ND	ND	
B-3	ASE	11	9/27/90			ND	ND	ND	ND	ND	ND	
B-4	ASE	6	9/27/90			ND	ND	ND	ND	ND	ND	
B-4	ASE	11	9/27/90			ND	ND	ND	ND	ND	ND	
MW-1	ASE	5.5	9/27/90	NA	NA	ND	ND	ND	ND	ND	ND	NA .
MW-1	ASE	11	9/27/90	ND	32	14	ДИ	ND	ND	ND	ND	ND

TABLE 1
Soil Sample Analytical Results (concentrations in ppm)
2896 Castro Valley Boulevard, Castro Valley, California

Sample Number	Consul- tant	Depth (feet)	Sample Date	TPH-d	TOG	TPH-g	В	7	E	×	Method 8010	Method 8270
MW-2	ASE	5	9/27/90	NA	NA	ND	ND	ND	ND	ND	ND	
MW-2	ASE	12.5	9/27/90	NA	NA	ND	ND	ND	ND	ND	3	
MW-3	ASE	6.5	9/27/90	NA	NA	ND	ND	ND	ND	ND	ND	
MW-3	ASE	10.5	9/27/90	NA	NA	7.7	ND	ND	0.057	.076	ND.	
SW#1	GTE	inter- face	10/25/93	NA	NA	64.11	1.10	4.13	4.86	25.1		
SW#2	GTE	inter- face	10/25/93	NA	NA	29.49	0.05	0.55	1.18	6.64		
SW#3	GTE	inter- face	10/25/93	NA	NA	1.28	ND	0.07	0.01	0.12		
SW#4	GTE	inter- face	10/25/93	NA	NA	435	ND	0,19	0.01	0.10		
SW#5	GTE	inter- face	10/25/93	NA	3,980	1.25	ND	0,21	0.02	0.16		
SW#6	GTE	inter- face	10/25/93	NA	955	5.09	0.31	1.00	0.01	0.61		
EXTSW #1(A)	GTE	inter- face	5/26/94	93	NA	NA	NA	NA	NA	NA	ND	
EXTSW #2(A)	GTE	inter- face	05/26/94	12	NA.	ŊĀ	NA	NA	NA	NA	ND	
EXTSW #3(A)	GTE	inter- face	05/26/94	16	NA	NA	NA	NA	NA	NA	ND	
EXTSW #4(A)	GTE	inter- face	0526//94	55	NA	NA	NA	NA	NA	NA	ND	
W/O-S/P #1	GTE	stock- pile	05/26/94	24	21	ND	ND	ND	ND	ND		

Notes:

NA Not analyzed, also blank spaces indicates not analyzed for that constituent

ND Not detected at or above the laboratory detection limit

TPH-g Total petroleum hydrocarbons as gasoline TPH-d Total petroleum hydrocarbons as diesel

BTEX Benzene, toluene, ethylbenzene, total xylenes

Sample contained 7.2 micrograms per kilogram naphthalene

TOG Total oil & grease SW Sidewall sample

W/O-SP waste oil stockpile sample

interface Sidewall soil sample collected at the soil-water interface

TABLE 2
Groundwater Sample Analytical Results (ppb)
2896 Castro Valley Boulevard

Sample Number	Consul- tant	Sample Date	TPH-d	TOG	TPH-g	В	Т	E	X	Other
MW-1	ASE	10/9/90	NA	ND	ND	ND	ND	ND	ND	1
MW -1	ASE	10/26/90	NA	ND	ND	ND	ND	ND	ND	
MW -1	C-REM	3/30/92	NA	ND	310	1.5	0.76	7.1	1.5	2
MW-1	C-REM	9/25/92	<5	NA	88	0.6	0.83	1.8	1.0	3
MW-1	cgs	4/9/97	ΝD	ND	ND	ND	ND	ND	ND	
MW-1	PIERS	4/20/99	2	NA	ND	ND	ND	ND	0.55	
MW-1	PIERS	7/14/99	ND	NA	ND	ND	ND	ND	ND	
MW-1	PIERS	10/26/99	ND	NA	ND	ND	ND	ND	ND	
MW-1	PIERS	1/4/00	ND	NA	ND	ND	ND	ND	ND	
MW-2	ASE	10/9/90	NA	NA	ND	ND	ND	ND	ND	
MW-2	ASE	10/26/90	NA	ND	ND	ND	ND	ND	ND	
MW-2	C-REM	3/30/92	ND	ND	ND	ND	ND	ND	ND	
MW-2	C-REM	9/25/92	ND	ND	ND	ND	ND	ND	ND	
MW-2	cgs	4/9/97	ND	ND	ND	ND	ND	ND	ND	
MW-2	PIERS	4/20/99	ND	ND	ND	ND	DV	Ð	ND	
MW-2	PIERS	7/14/99	ND	ND	ND	ND	ND	ND	ND	
MW-2	PIERS	10/26/99	ND	ND	ND	ND	ND	ND	ND	
MW-2	PIERS	1/4/00	ND	ND	ND	ND	ND	ND	ND	
MW-3	ASE	10/9/90	NA	NA	ND	ND	ND	ND	ND	
MW-3	ASE	10/26/90	NA	ND	ND	ND	ND	ND	ND	
MW-3	C-REM	3/30/92	NA	NA	1,600	<3	<3	45	51	4
MW-3	C-REM	9/25/92	< 5	NA	210	ND	ND	17	15	5
MW-3	cgs	4/9/97	ND	NA	ND	ND	ND	ND	ND	

TABLE 2 Groundwater Sample Analytical Results (ppb) 2896 Castro Valley Boulevard

Sample Number	Consul- tant	Sample Date	TPH-d	TOG	TPH-g	2	ī	E	x	Other
MW-3	PIERS	4/20/99	ND	NA	ND	ND	ND	ND	МD	
MW-3	PIERS	7/14/99	ND	NA	ND	ND	ND	ND	ND	
MW-3	PIERS	10/26/99	ND	NA	ND	ND	ND	ND	ND	
MW-3	PIERS	1/4/00	280	NA	ND	ND	ND	ND	ND	
EXC- GWS	Gentech	5/26/94	92	ND	ND	ND	ND	ND	ND	

Notes:	
NA	Not analyzed
ND	Not detected at or above the laboratory detection limit indicated. Detection Limits are 50 ppb for TPH-g & TPH-d and 0.5 ppb for BTEX
TPH-g	Total petroleum hydrocarbons as gasoline
TPH-d	Total petroleum hydrocarbons as diesel
BTEX	Benzene, Toluene, Ethylbenzene, Total Xylenes
1	Sample contained 3.9 ppb naphthalene, 44 ppb TOG, 70 ppb lead, 20 ppb zinc
2	Sample contained 0.99 ppb lead
3	Sample contained 3.9 ppb naphthalene, 82 ppb arsenic, 130 ppb lead, 480 ppb chromium, 28 ppb selenium
4	Sample contained 44 ppb napthalene, 8.7 ppb 2-methylnapthalene
5	Sample contained 9.1 ppb napthalene and 2.8 ppb 2-methylnapthalene
TOG	Total Oil & Grease
EXC-GWS	Grab groundwater sample from tank excavation area

Appendix A

Exhibits

Boring and Sample Location Maps

EXHIBIT 2. From Aqua Science Engineers, Inc. 2/22/91

MICHAEL J. MAJORS CIVIL ENGINEERS, INC.

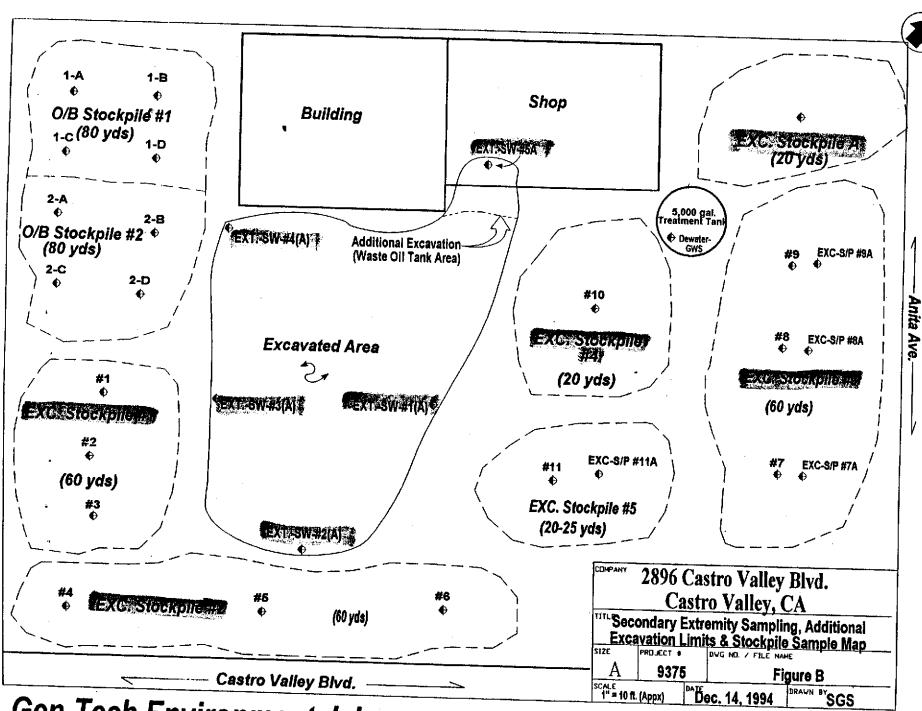
Figure 1 Site Plan, Current

1 **** 20°
BUILDING 168.55 P. MW2
CANOPY
167.89 B1 tankpit area 83 MWI
167.32 BZ BZ BLVD.

ROBERT C.
GOODMUNDSON

LS-9515
EGG 9-3000 FORTH

Drawn	Job_	3905-02	Checked	
Scale 1 inch = 26 feet	Date.	12-4-90	Parcel	



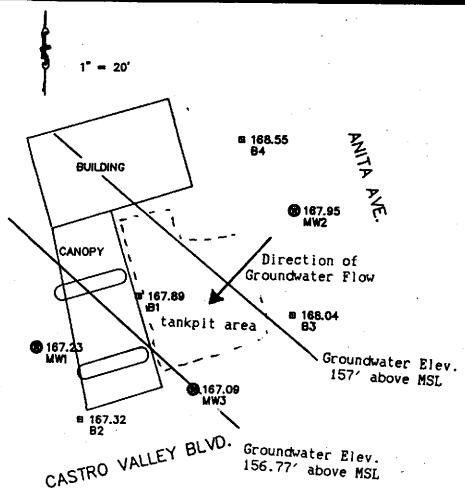
Gen-Tech Environmental, Inc.

Appendix B Selected Groundwater Gradient Maps



Figure 3
Site Plan with
Direction of Groundwater Flow
and Gradient

FROM: Aqua Science Engineers, Inc. 2/22/91
Groundwater gradient date unknown

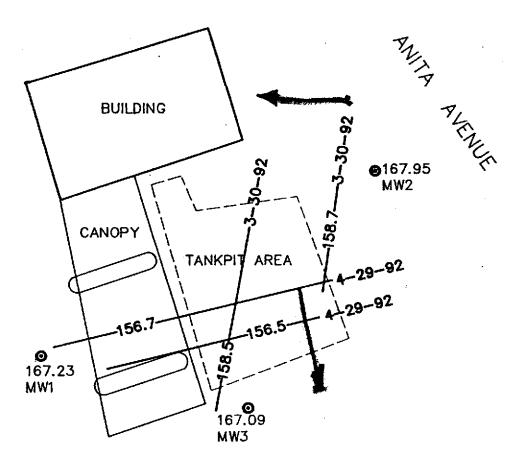




Drawn	Job - 3905-02	Checked
Scale 1 inch = 26 feet.	Date 12-4-90	Parcel

FROM: C-Rem Engineers 10/26/92





CASTRO VALLEY BOULEVARD

LEGEND

WATER LEVEL GRADIENT CONTOUR 458.5 **ELEVATION IN FEET**

DATE WATER LEVEL MEASURED 3-30-92

ENGINEERS C-REM

• SURVEYING • PLANNING ENGINEERING 1820 GATEWAY DRIVE • SUITE 100 • SAN MATEO • CA 94404

Phone: (415) 571-6400

Fax: (415) 571-1029

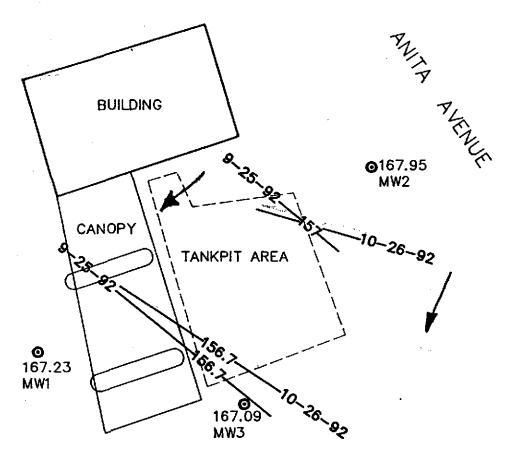
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Drawn by:	PC
Designed by:	MW
Surveyed by:	
Scole: 1 = 2	0'
Date: 10-2	7-92
Job No.: 92	020.02

ROBERT M. FROST WATER LEVEL GRADIENT CONTOUR MAP FIGURE 1 CASTRO VALLEY

SHEET 1 OF 1

FROM: C-Rem Engineers 10/26/92





CASTRO VALLEY BOULEVARD

LEGEND

WATER LEVEL GRADIENT CONTOUR 458.5-**ELEVATION IN FEET**

DATE WATER LEVEL MEASURED 9-25-92

C-REM

• SURVEYING • PLANNING 1820 GATEWAY DRIVE . SUITE 100 - SAN MATEO - CA 94404

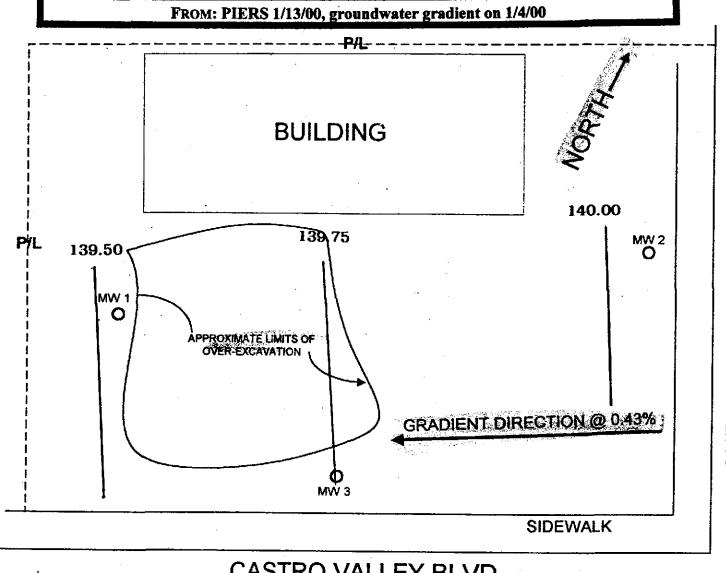
Phone: (415) 571-6400

Fax: (415) 571-1029

Checked by:	MW
Drawn by:	PC
Designed by:	MW
Surveyed by:	
Scale: 1"=2	0,
Date 0-27-	-92
Joh No. 920	120.02

ROBERT M. FROST WATER LEVEL GRADIENT CONTOUR MAP FIGURE 2 CASTRO VALLEY

SHEET 1 of 1



CASTRO VALLEY BLVD.

Well#	Casing Elev.	Depth to Grndwtr.	Grndwtr Elev.	
MW1	150.11	10.55	139.56	
MW2	150.66	10.63	140.03	
MW3	150.00*	10.25	139.85	

_	SITE PLAN ALLEY BLVD., CASTRO	VALLEY, CA
SCALE: 1"=20"	APPROVED BY:	DRAWN BY:
DATE: 1/12/00		REVISED
PIERS ENVIRO	ONMENTAL SERVI	CES, INC.
1330 S. BASCOM AVENUE, S	UITE F, SAN JOSE, CA 95128	FIGURE 2

Appendix C Case Closure Summary Form

CASE CLOSURE SUMMARY

I. AGENCY INFORMATION

Agency Name: Alameda County Health Care Services	Address: 1131 Harbor Bay Boulevard
City/State/Zip: Alameda, CA 94502	Phone: (510) 567-6876
Responsible Staff Person: Mr. Amir Gholami, REHS	Title: Hazardous Materials Specialist

II. SITE INFORMATION

Site Facility Address: 2896 C	astro Valley Boulevard, Castro Valley, C	CA 94546	
RB/SMS Case No.:	Local or LOP Case No.:	Priority:	
URF Filing Date:	SWEEPS No.:		

Responsible Parties (include addresses and phone numbers)

Mr. James Jiang, 302 8th Street, Oakland, CA 94607

Ms. Hilda Wong, 20950 Elbridge Court, Castro Valley, CA 94552

Tank No.	Size in Gallons	Contents	Closed In—Place/Removed?	Date
	10,000	gasoline	Removed	6/16/87
	7,500	gasoline	Removed	6/16/87
	5,000	gasoline	Removed	6/16/87
	300	waste oil	Removed	6/16/87

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Tank Leak or Overfill/Overspill							
Site characterization complete? Yes Date Approved By Oversight Agency:							
Monitoring wells installed? Yes	Number: 3 Proper screened interval? Yes (10-20*						
Highest GW Depth Below Ground Surface: 10 Lowest Depth: 12 Flow Direction: West-Southwest to Southwest							
Most Sensitive Current Use: Summary of Production Wells in Vicinity: There are no known production wells within the vicinity which would							
be considered threatened	·- -						
Are drinking water wells affected? No	Aquifer Name: Unkn	own (Part of SF Bay GW Basin)					
Is surface water affected? No Nearest SW Name: San Lorenzo Creek							
Off-Site Beneficial Use Impacts (Addresses/Locations):							
Report(s) on file? Yes Where is report(s) filed? Alameda County Health Care Services							

Date: December 28, 2000

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL						
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date			
Tanks	4 tanks	Disposal (unknown)	6/16/87			
Piping	unknown	Disposal (unknown)	6/16/87			
Free Product	None					
Soil	unknown	Disposal (BFI Livermore Class III landfill	1994 and 1995			
Groundwater	None					
Barrels	None					

MAXIMUM DOCUMENTED POLLUTANT CONCENTRATIONS—BEFORE AND AFTER CLEANUP									
	Soil (ppm)		Water (ppb)			Soil (ppm)		Water (ppb)	
POLLUTANT	Before	After	Before	After	POLLUTANT	Before	After	Before	After
TPH (Gas)	790	64.11	210	<50	Ethylbenzene	4	4.86	45	<0.5
TPH (Diesel)	5,300	93	NA	280	Xylenes	8.8	25.1	51	<0.5
Benzene	0.3	1.1	1.5	<0.5	Oil & Grease	NA	16,000	ND	ND
Toluene	1.9	4.13	0.83	<0.5	Heavy Metals	NA	190 (Pb)	NA	480 (Cr)
TCE	ND	ND	ND	ND	MTBE	NA	NA	NA	NA

Description of Interim Remediation Action: Soil was reportedly removed to a depth corresponding to the depth of groundwater (approximately 10-12 feet). Following sample analysis, additional excavation was performed in the area of the former waste oil UST where elevated concentrations of total oil and grease remained.

IV. CLOSURE

Does completed corrective action protect exis	ting beneficial uses per the Regional Bo	ard Basin Plan? Yes
Does completed corrective action protect pote	ntial beneficial uses per the Regional Bo	oard Basin Plan? Yes
Does corrective action protect public health for	or current land use? Yes	
Site Management Requirements:		
Monitoring Wells Decommissioned:	Number Decommissioned:	Number Retained: 3
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

Title:	Date:
PIERS, Report of Groundwater Sampling, 2896 Castro Valley Boulevard, Castro Valley, California	4/13/00
PIERS, Report of Groundwater Sampling, 2896 Castro Valley Boulevard, Castro Valley, California	10/26/99
PIERS, Report of Groundwater Sampling, 2896 Castro Valley Boulevard, Castro Valley, California	8/27/99
PIERS, Report of Groundwater Sampling, 2896 Castro Valley Boulevard, Castro Valley, California	4/27/99
CGS Sampling Specialists, First Quarter Monitoring Well Sampling Report	4/21/97
Gentech Environmental, Inc., Technical Report, 2896 Castro Valley Boulevard, Castro Valley, California	12/15/94
C-Rem Engineers, Well Monitoring 2896 Castro Valley Boulevard, Job No. 92020.02	10/26/92
Aqua Science Engineers, incorporated, Workplan, Proposal for Soll and Groundwater Investigation Services at 2896 Castro Valley Boulevard, Castro Valley, California	4/27/90
Geonomics, incorporated, Soil Sampling Report, Underground Storage Tanks, 2896 Castro Valley Boulevard, Castro Valley, California	6/30/87

V. ADDITIONAL COMMENTS, DATA, ETC.

PLEASE INCLUDE/ATTACH THE FOLLOWING AS APPROPRIATE:

1) SITE MAP INDICATING TANK PIT LOCATION, MONIFORING WELL LOCATION, GROUNDWATER GRADIENT, ETC.; AND,
2) SITE COMMENTS WORTHY OF NOTICE (E.G., AREA OF RESIDUAL POLLUTION LEFT IN PLACE, DEED NOTICES ETC.)

All four USTs have been removed from the site. Two subsequent excavations appear to have removed most of the petroleum hydrocarbons from beneath the site. Groundwater monitoring utilizing three groundwater monitoring wells have indicated two of the wells are located down-gradient of the former USTs. Monitoring of the wells since 1990, including four consecutive quarters in 1999 and 2000 indicate only low concentrations of petroleum hydrocarbons have impacted groundwater.

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.