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

StID 696

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

March 4, 1998

Mr. Roger Woodward
P.O. Box 2688
Dublin, CA 94568

Re: Fuel Leak Site Case Closure for Corwood Carwash at 6973 Village Parkway, Dublin, CA 94568

Dear Mr. Woodward:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Protection Division is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- up to 260 ppm TPH as gasoline and 1.1 ppm benzene remain in soil near the USTs; and,
- three groundwater monitoring wells are still located onsite.

If you have any questions, please contact me at (510) 567-6762.

eva chu
Hazardous Materials Specialist

enlosure:
1. Case Closure Letter
2. Case Closure Summary

c: Dennis Carrington
City of Dublin
100 Civic Plaza
P.O. Box 2340
Dublin, CA 94568
files (corwood.16)

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REMEDIAL ACTION COMPLETION CERTIFICATION

StID 696 - 6973 Village Parkway, Dublin, CA
(2-10,000 gallon gasoline UST lined and cathodically protected in March -April 1991)

March 4, 1998

Mr. Roger Woodward
P.O. Box 2688
Dublin, CA 94568

Dear Mr. Woodward:

This letter confirms the completion of site investigation and remedial action for the underground storage tanks located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the underground storage tanks are greatly appreciated.

Based on information in the above-referenced file 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 tank release is required.

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

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

cc: Richard Pantages, Chief of Division of Environmental Protection
Kevin Graves, RWQCB
Lori Casias, SWRCB
William McCammon, Alameda County Fire, QIC Code 41401
files-ec (corwood.15)

01-0458

Department of Environmental Health

JAN 31 1997

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: December 10, 1996

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

II. CASE INFORMATION

Site facility name: **Corwood Carwash**
Site facility address: **6973 Village Pkwy, Dublin, CA 94568**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **696**
URF filing date: **7/13/92** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Roger Woodward	P.O. Box 2688, Dublin, CA 94568	

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	10,000	Gasoline	UST lined & cathodic protected	
2	10,000	Gasoline	in March-April 1991.	

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**
Site characterization complete? **YES**
Date approved by oversight agency: **9/26/96**
Monitoring Wells installed? **Yes** Number: **3**
Proper screened interval? **Yes, 5' to 24' bgs**
Highest GW depth below ground surface: **7.14'** Lowest depth: **7.50' in MW-2**
Flow direction: **SSE**
Most sensitive current use: **Commercial**
Are drinking water wells affected? **No** Aquifer name: **Dublin Subbasin**
Is surface water affected? **No** Nearest affected SW name: **NA**
Off-site beneficial use impacts (addresses/locations): **None**

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

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment or Disposal w/destination)	Date
Tank		**2 USTs were lined and cathodic protection provided in March-April 1991**	

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before[1]	After	Before[2]	After[3]
TPH (Gas)	**530**	**530**	**3,000**	**240**
TPH (Diesel)	**800**	**800**	**ND**	**330**
Benzene	**1.8**	**1.8**	**1,200**	**0.6**
Toluene	**22**	**22**	**170**	**ND**
Ethylbenzene	**16**	**16**	**140**	**ND**
Xylenes	**88**	**88**	**380**	**ND**
Heavy metals				
Other				

NOTE: 1 from four soil borings advanced around UST complex, 4/91
2 grab groundwater samples from borings advanced in 4/91
3 groundwater from monitoring wells sampled in 10/95

Comments (Depth of Remediation, etc.):

See Section VII, Additional Comments, etc...

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: **None**

Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **No, pending site closure**
Number Decommissioned: **0** Number Retained: **3**
List enforcement actions taken: **None**

List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Eva Chu** Title: **Haz Mat Specialist**

Signature: [signature] Date: 1/21/97

Reviewed by

Name: **Susan Hugo** Title: **Sr. Haz Mat Specialist**

Signature: [signature] Date: 12/20/96

Name: **Thomas Peacock** Title: **Supervisor**

Signature: [signature] Date: 1-17-97

VI. RWQCB NOTIFICATION

Date Submitted to RB: 1/22/97 RB Response: Approved

RWQCB Staff Name: **Kevin Graves** Title: **AWRCE**

Signature: [signature] Date: 1-27-97

VII. ADDITIONAL COMMENTS, DATA, ETC.

Corwood Carwash is a full service car wash and retails unleaded gasoline. The site has two 10K gallon gasoline USTs. In March and April 1991 the old fuel dispensers and underground piping were removed and replaced with new dispensers and double-walled fiberglass piping. Gold Coast Technologies Inc supervised interior lining and cathodic protection for the two USTs.

A subsurface investigation was also conducted around the tank cluster at this time. Four investigative soil borings (BA through BD) were drilled to 15' or 20' bgs and soil samples were collected at 5' intervals. "Grab" groundwater samples were also collected from each borehole. Up to 530 ppm TPHg, 800 ppm TPHd, and 1.8, 22, 16, and 88 ppm BTEX, respectively, were identified in soil from 5' to 10' bgs. Groundwater was encountered at ~15' bgs. Up to 3,000 ppb TPHg and 1,200, 170, 140, and 380 ppb BTEX, respectively, were detected. TPHd was not identified in groundwater. (See Fig 1, Tables 1 and 2)

In June 1993 three monitoring wells (MW-1 through MW-3) were installed. Soil samples were collected from 5.5' to 10.5' bgs in each boring. Up to 1,100 ppm TPHd, 170 ppm TPHg, and 1.0, 0.17, 0.27, and 1.0 ppm BTEX, respectively, were identified in soil from boring MW-3 at 5.5' bgs. (See Fig 2, Table 3)

Groundwater has been sampled twice (6/93 and 10/95). Low to non-detectable levels of TPHd, TPHg, and BTEX were detected. (See Table 4). This is

substantially lower than the grab groundwater samples collected from the soil borings in April 1991. Natural bioattenuation should continue to degrade residual hydrocarbons in soil and groundwater. The fuel release has not significantly impacted groundwater quality. Continued sampling is not warranted.

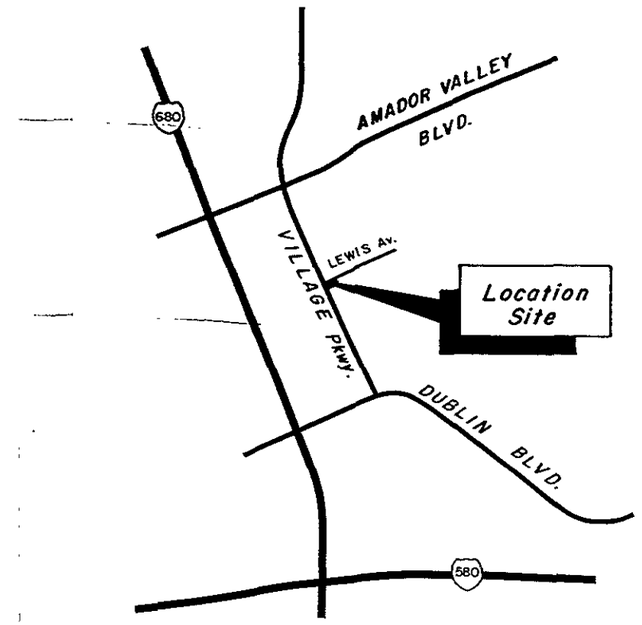
In summary, case closure is recommended because:

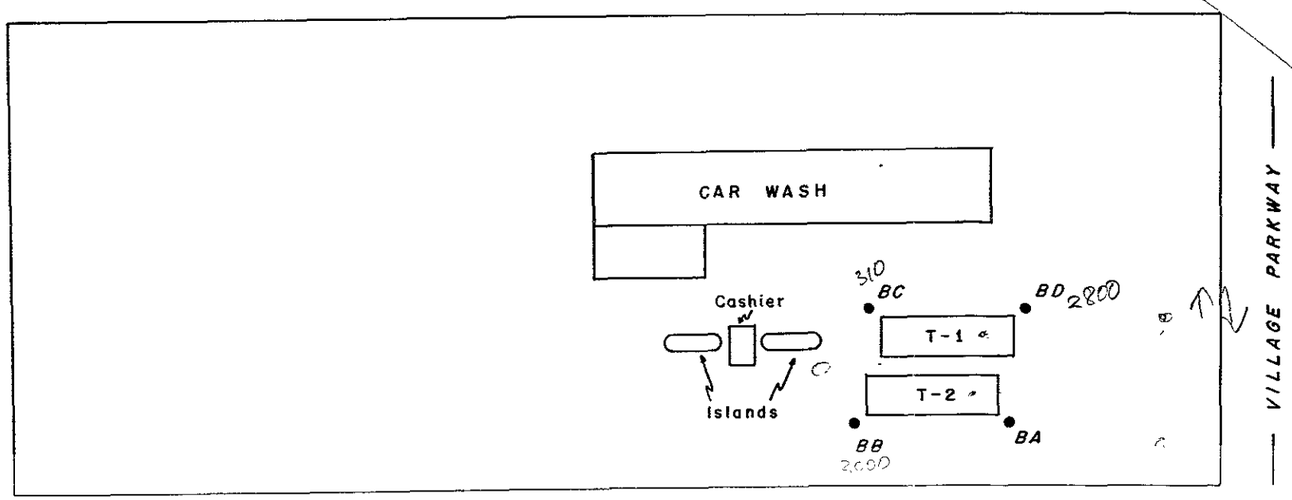
- the leak and ongoing sources have been removed;
- the site has been adequately characterized;
- the dissolved plume is not migrating;

  plume migration is limited since clay sediments were encountered from below concrete and sand fill material to 25' bgs (See Boring logs)

- *no water wells, surface water, or other sensitive receptors are likely to be impacted; and,*
- *the site presents no significant risk to human health or the environment.*

Boring	Depth
BA	20'
BB	15'
BC	20'
BD	15'





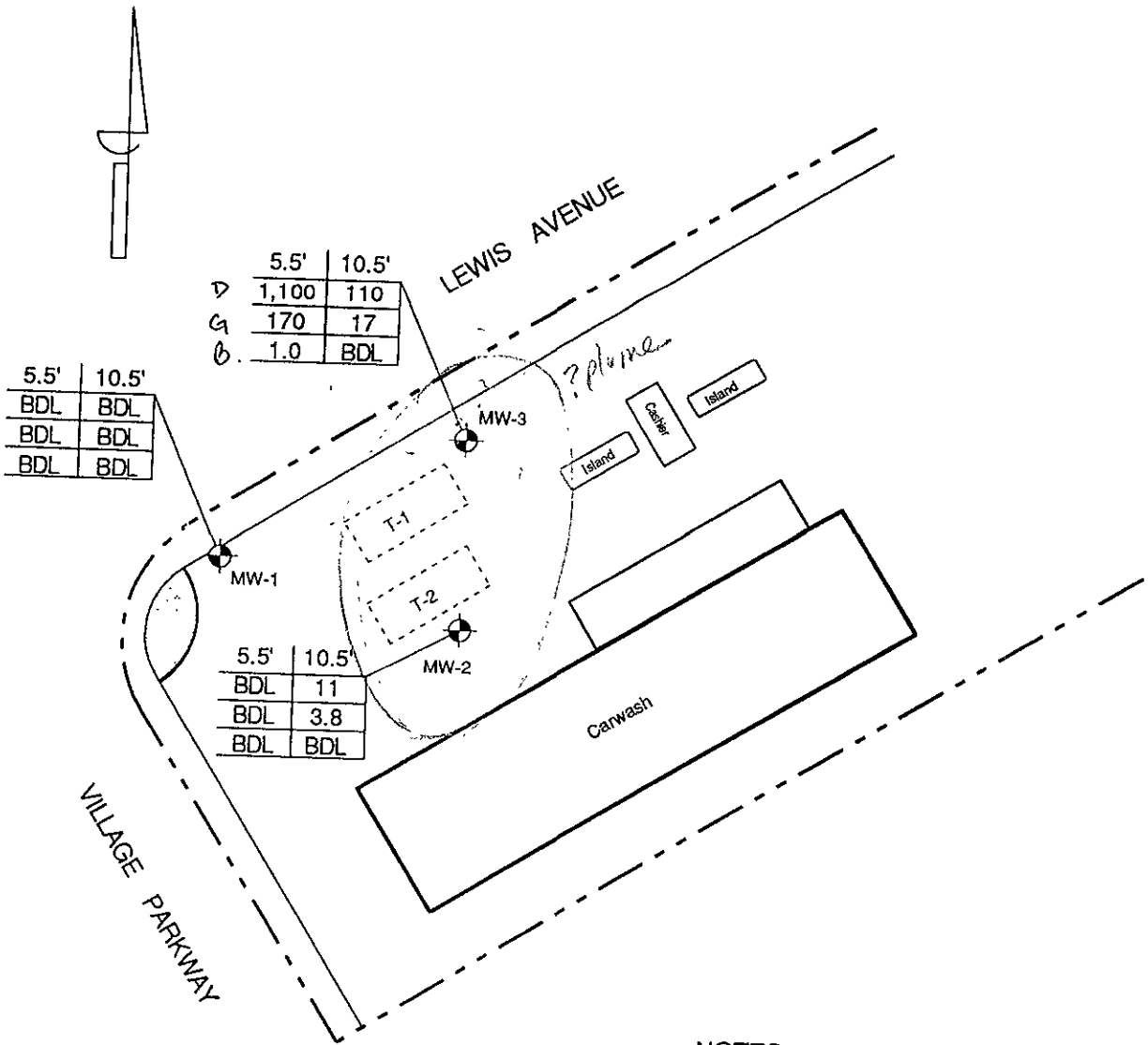
GOLD COAST TECHNOLOGIES

CORWOOD CAR WASH
6973 Village Pkwy.
Dublin, CA.

N

FIG 1

LOCATION MAP NO SCALE



LEGEND

- Monitoring Well
- Undergrond Storage Tank
- 5.5' — Depth of Sample
- 1,100 — Total Petroleum Hydrocarbons as Diesel
- 170 — Total Petroleum Hydrocarbons as Gasoline
- 1.0 — Benzene
- BDL — Below Detection Limits

NOTES

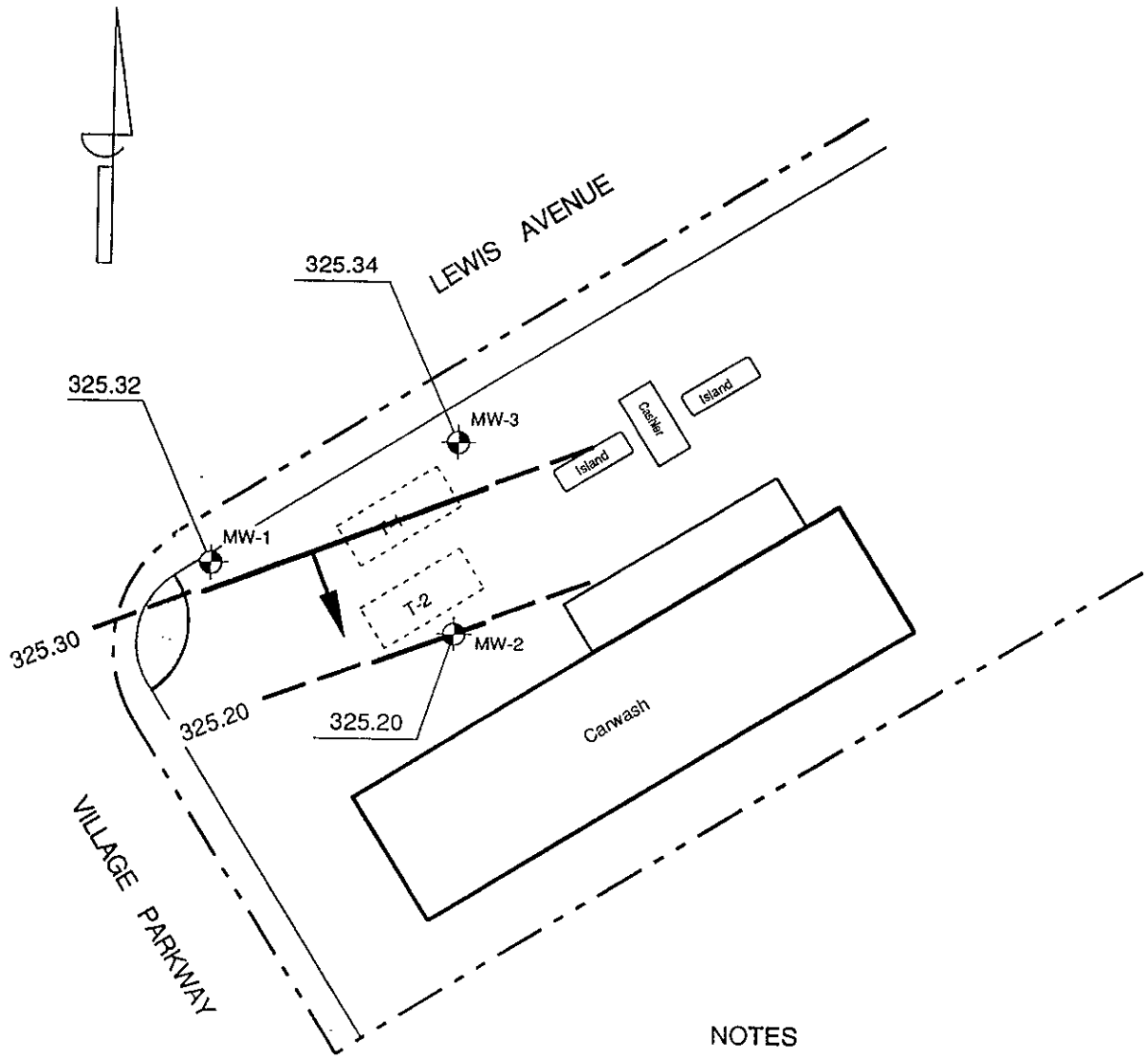
Site Sketch After Site Map
By Gold Coast Technologies, Inc.
May 1991

All Locations Are Approximate

All concentrations are in parts-per-million

0 30 60
Approximate Scale

AEGIS ENVIRONMENTAL, INC.		DISTRIBUTION MAP OF TPH, AS DIESEL, GASOLINE, AND BENZENE IN SOIL June 8, 1993	FIGURE 2
DRAWN BY: D. Hada	DATE: October 24, 1993		
REVISED BY:	DATE	Corwood Carwash 6973 Village Parkway Dublin, CA	PROJECT NUMBER 10-92078
REVIEWED BY	DATE:		



LEGEND

- Monitoring Well
- Undergrond Storage Tank
- Potentiometric Surface Contour Line (Dashed Where Inferred)
- 325.32 Groundwater Elevation in Feet
- Approximate Direction of Groundwater Flow

NOTES

Site Sketch After Site Map
By Gold Coast Technologies, Inc.
May 1991

All Locations Are Approximate

Average Hydraulic Gradient ≈ 0.005 ft./ft.
Contour Interval = 0.1 ft.

0 30 60
Approximate Scale

AEGIS ENVIRONMENTAL, INC.		POTENTIOMETRIC SURFACE MAP June 9, 1993	FIGURE 3
DRAWN BY: D. Hada	DATE: October 24, 1993	Corwood Carwash 6973 Village Parkway Dublin, CA	PROJECT NUMBER: 10-9207
REVISED BY:	DATE:		
REVIEWED BY:	DATE:		

Table 1 Soil Laboratory Analysis Summary mg/kg

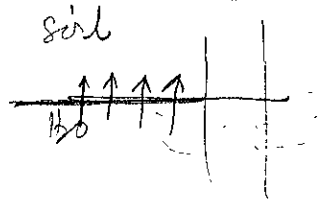
Sample #	TPH-G	B	T	X	E	Pb (ppm)	TPH-D
BA-5	ND	ND	ND	ND	ND	5.1	ND
BA-10	.6	ND	ND	ND	ND	6.4	13
BA-15	ND	ND	ND	ND	ND	4.3	ND
BA-20	ND	ND	ND	ND	ND	7.2	ND
BB-5	260	1.1	ND	.78	5.1	11	800
BB-10	1.4	ND	ND	.012	.007	11.7	26
BB-15	ND	ND	ND	ND	ND	4.7	ND
BC-5	83	.73	ND	ND	2.6	4.4	410
BC-10	ND	ND	ND	ND	.006	7.0	ND
BC-15	ND	ND	ND	ND	ND	5.0	ND
BC-20	ND	ND	ND	ND	ND	10.1	ND
BD-5	ND	.012	ND	ND	ND	3.9	ND
BD-10	530	1.8	22	88	16	5.6	65
BD-15	ND	ND	ND	ND	ND	5.6	ND

Table 2 Water Laboratory Analysis Summary ug/L > 1 PPb

Sample #	TPH-G	B	T	X	E	Pb	TPH-D
BA-15	ND	1.6	ND	ND	1.1	13 *	ND *
BB-15	3000	1200	22	45	81	10 *	ND *
BC-20	310	24	ND	36	13	ND *	ND *
BD-15	2800	490	170	380	140	11 *	ND *

* The samples were taken from Coast To Coast analytical only.

100 PP



V. Recommendations:

The recommendations for this site are limited to the four (4) borings and samples taken surrounding the tank cluster.

- There exists some gasoline and diesel levels in the soil, mostly at the five foot level with some extending to the ten foot level. However, these levels are non-detectable below ten feet. Study of these borings do not indicate that the areas assessed for this report are effecting ground water quality.

- The ground water samples appear to indicate low levels of each of the contaminants tested for in BB-15 H2O and BD-15 H2O. The reporting limits for this area, as given by the Regional Board for the Alameda County District, are 50 ppb for gasoline and diesel and .5 ppb for BTEX. Some of the levels are above the reporting limits, but the source of these constituents remains unanswered. Further investigation of the background levels normally found in the area and of other potential sources in the vicinity is warranted.

- If further sampling is required for this site, the auger should be replaced or steam cleaned at five foot intervals, and a water well must be properly developed prior to water sampling.

TABLE #3

ANALYTICAL RESULTS: SOIL

CORWOOD CARWASH
6973 VILLAGE PARKWAY, DUBLIN, CALIFORNIA
JUNE 8, 1993
(All results in parts-per-million)

Sample Name	Sample Depth (feet)	Total Petroleum Hydrocarbons		Aromatic Volatile Organics				Total Lead
		Diesel	Gasoline	Benzene	Toluene	Ethyl-benzene	Total Xylenes	
MW1-5.5	5.5	<	<	<	<	<	<	3.1
MW1-10.5	10.5	<	<	<	<	<	<	2.5
MW2-5.5	5.5	<	<	<	<	<	<	<<2.5
MW2-10.5	10.5	11	3.8	<<0.05	<<0.05	<<0.05	<<0.05	<<2.5
MW3-5.5	5.5	1,100	170	1.0	0.17	0.27	1.0	<<2.5
MW3-10.5	10.5	110	17	<<0.05	<<0.05	0.07	0.12	4.1

NOTE: < = Below Practical Quantitation Reporting Limits (PQL) per "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites" (August 10, 1990). (PQL for BTEX = 0.005 ppm, TPH, as gasoline = 1.0 ppm, and TPH, as diesel = 5.0).

<< = Below indicated detection limit.

- After purging parameters had stabilized, ground water was poured directly from the bailer into two 40-ml VOA vials and one one liter amber jar. Each container was then tightly sealed with teflon lined septum, making sure that no air bubbles were present in the container. Each container was then labeled and placed in cold storage for transport to the analytical laboratory under formal chain-of-custody.

RESULTS OF QUARTERLY MONITORING

Hydrologic Conditions

Water depths were measured to the nearest 0.01 foot by Century West Engineering prior to purging. Calculated ground water flow gradient, which is shown on Figure 2, was to the south-southeast at approximately 0.007 vertical feet/horizontal foot. Purged water from MW-2 exhibited slight hydrocarbon odors and no visible hydrocarbon sheen. Purged water from MW-1 and MW-3 exhibited no hydrocarbon odors or hydrocarbon sheens.

Laboratory Analytical Results

Ground water samples from MW-1, MW-2, and MW-3 were analyzed for total petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, ethylbenzene and xylenes (BTEX); and total petroleum hydrocarbons as diesel (TPH-D). Table 1 summarizes these analytical results. Laboratory data reports and chain-of-custody records are contained in Appendix B.

Table 4
SUMMARY OF GROUND WATER ANALYTICAL RESULTS
Corwood Car Wash UST Site

Well Number	Sample Date	Ground Water Elevation[1]	Concentration (ppm)					
			TPH-D	TPH-G	B	T	E	X
MW-1	06/09/93	325.32	ND(.100)[2]	ND(0.05)	ND(.0005)	ND(.0005)	ND(.0005)	ND(.0005)
	10/23/95	325.09	ND(0.05)	ND(0.05)	ND(.0005)	ND(.0005)	ND(.0005)	ND(.0005)
MW-2	06/09/93	325.20	0.640	0.110	0.013	ND(.0005)	ND(.0005)	ND(.0005)
	10/23/95	324.84	0.33[3]	0.24[4]	ND(.0005)	ND(.0005)	ND(.0005)	ND(.0005)
MW-3	06/09/93	325.34	ND(.100)	ND(0.05)	0.0005	ND(.0005)	0.0005	ND(.0005)
	10/23/95	325.01	0.17[3]	0.06	0.0006	ND(.0005)	ND(.0005)	ND(.0005)

BORING LOGS

CUSTOMER CORWOOD DATE 4-1-91 PAGE #1 OF 1

LOGGED BY D.R. DIAMETER OF BORING 8" WATER AT 15

WELL # BA

LAB RESULTS TPHppm	TLV READING PPM	DEPTH FEET	BLOW COUNT	SAMPLE #	USCS	LITHO	SOIL DESCRIPTION
		0'					Concrete cover. Fine tan sands.
ND	0	5'	3,5,6	A-5	OL		Dk grey clay w/ fine tan silty sands inter mixed.
.6	0	10'	2,4,4	A-10	OL		Dk grey moist clay w no fines. No odors.
ND	0	15'	3,3,6	A-15	MH		Dk grey clay. Increas moisture. No fines. No odors.
ND	0	20'	3,5,6	A-20	CH		Lighter grey, very moist. No fines.
ND				A-H2O			Water sample, no shee no odors.

COMMENTS:

CUSTOMER CORWOOD DATE 4-1-91 PAGE #1 OF 1

LOGGED BY D.R. DIAMETER OF BORING 8" WATER AT 15

WELL # BB

LAB RESULTS TPHppm	TLV READING PPM	DEPTH FEET	BLOW COUNT	SAMPLE #	USCS	LITHO	SOIL DESCRIPTION
		0'					Concrete cover. Fine tan sands.
260	0	5'	2,3,4	B-5	OL		Dk grey organic clay. Slight odor.
1.4	0	10'	2,3,4	B-10	OL		Lighter grey organic clay. Some fines inter mixed. No odor
ND	0	15'		B-15	OL		Lt grey clay. Increase moisture.Some fines. No odors.
3.0				B-H2O			Water sample, no sheer no odors.

COMMENTS:

CUSTOMER CORWOOD DATE 4-1-91 PAGE #1 OF 1

LOGGED BY D.R. DIAMETER OF BORING 8" WATER AT 15

WELL # BC

LAB RESULTS TPHppm	TLV READING PPM	DEPTH FEET	BLOW COUNT	SAMPLE #	USCS	LITHO	SOIL DESCRIPTION
		0'					Concrete cover. Fine tan sands.
83	0	5'	2,3,4	C-5	OL		Dark grey organic clay. Slight odor.
ND	0	10'	3,4,4	C-10	OL		Lighter grey to brown clay. Some fines inter mixed. No odor.
ND	0	15'	3,4,5	C-15	OH		Lt grey to brown organic clay. Moist. Some fines. No odor
ND	0	20'	3,4,6	C-20	OH		Lt grey to brown clay. Wet sample, no odor.
.3				C-H2O			Water sample, no sheen no odors.

COMMENTS:

CUSTOMER CORWOOD DATE 4-1-91 PAGE #1 OF 1

LOGGED BY D.R. DIAMETER OF BORING 8" WATER AT 15

WELL # BD

LAB RESULTS TPHppm	TLV READING PPM	DEPTH FEET	BLOW COUNT	SAMPLE #	USCS	LITHO	SOIL DESCRIPTION
		0'					Concrete cover. Fine tan sands.
ND	0	5'	3,4,6	D-5	OL		Fine tan sands to dk grey organic clay. No odors.
530	50	10'	3,5,5	D-10	OL		Dark grey organic clay. Some fines inte mixed. Slight odor.
ND	0	15'		D-15	CH		Lt grey to brown inorganic clay. Moist. No odors.
2.8				D-H2O			Water sample, no shee no odors.

COMMENTS: