


93 JUL 30 PM 2:02

**LETTER OF TRANSMITTAL**

Date: July 29, 1993

To: Ms. Jennifer Eberle  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
80 Swan Way, Room 200  
Oakland, CA 94621

From: Kimberly S. Lagomarsino   
Project Scientist

Subject: **Addendum to the Second Quarter Report - 1993**  
**Dreyer's Grand Ice Cream**  
**5929 College Avenue, Oakland, California**  
**(ATT Project No. 919313)**

Aqua Terra Technologies  
Consulting Engineers  
& Scientists

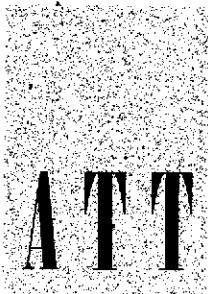
2950 Buskirk Avenue  
Suite 120  
Walnut Creek, CA  
94596-2079  
FAX 934-0418  
510 934-4884

---

Transmitted herewith are the amended pages for the second quarter Report - 1993. Please replace Pages 1 and 2, and Table 1 with the new pages.

Please contact me with any questions you may have.

cc: William C. Collett, Dreyer's Ice Cream  
Rich Hiatt, RWQCB



June 30, 1993

Ms. Jennifer Eberle  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
80 Swan Way, Room 200  
Oakland, CA 94621

**Subject: Second Quarterly Report - 1993  
Groundwater Monitoring Report & Subsurface Investigation  
Dreyer's Grand Ice Cream  
5929 College Avenue, Oakland, California  
(Project No. 919313)**

Dear Ms. Eberle:

Aqua Terra Technologies  
Consulting Engineers  
& Scientists

2950 Buskirk Avenue  
Suite 120  
Walnut Creek, CA  
94596-2079  
FAX 934-0418  
510 934-4884

Aqua Terra Technologies, Inc. (ATT) is pleased to present the results for groundwater monitoring activities conducted by ATT during the second quarter, 1993 for the subject site. A site location map is presented on Plate 1 (Attachment A). Monitoring activities during the reporting period included recording of groundwater level measurements, groundwater sample collection, and laboratory sample analysis.

## **BACKGROUND**

One 1,000-gallon and one 8,000-gallon gasoline tank, two 4,000-gallon diesel tanks and one 2,000-gallon diesel tank were removed from the southeast corner of the property during December, 1989 (before construction of the current office building at the site). Two 1,000-gallon waste oil tanks were also removed from the southwest portions of the property in December, 1989. The approximate locations of the former underground tank excavations are shown on Plate 2.

## **QUARTERLY GROUNDWATER MONITORING**

### **Groundwater Elevations and Flow Direction**

Groundwater level measurements were recorded on April 20 and June 2, 1993. Groundwater elevation contours and flow directions for April 20, 1993 are shown on Plate 2 (Attachment A). Historic groundwater elevations are summarized in Table 1 (Attachment B).

During the second quarter 1993, groundwater table elevations ranged from

Ms. Jennifer Eberle  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
June 30, 1993  
Page 2

171.40 feet above mean sea level (msl) to 176.89 feet above msl. The groundwater gradient on April 20, 1993 was approximately 0.035 feet per foot (ft/ft). The groundwater flow direction was predominantly towards the northwest.

### **Groundwater Sample Collection & Analytical Methods**

On June 2, 1993 ATT field personnel collected a set of groundwater samples from all site monitoring wells (MW1, MW2, and MW3). The samples were transported with ATT chain-of-custody documentation to a California Department of Health Services (DHS) certified laboratory for analysis of total petroleum hydrocarbons as diesel and as gasoline (TPH/d and TPH/g, respectively), and of benzene, toluene, ethylbenzene, and total xylenes (BTEX). U.S. Environmental Protection Agency (EPA) Test Methods 3510/8015, 5030/8015, and 602 were used for analysis of TPH/d, TPH/g, and BTEX, respectively.

### **Groundwater Sample Analytical Results**

The analytical results for groundwater samples collected from monitoring wells MW1, MW2, and MW3 to date, are summarized in Table 2 (Attachment B). Copies of the signed laboratory reports, chain-of-custody documentation, and sample collection records are presented in Attachment C.

Concentrations of TPH/d, TPH/g, and BTEX were below method detection limits in the sample collected from monitoring well MW1. TPH/d was not detected in the samples collected from wells MW2 and MW3.

Concentrations of TPH/g and BTEX, in the sample collected from well MW2, were 58,000 micrograms per liter (ug/L), and 50 ug/L, 68 ug/L, 70 ug/L, and 170 ug/L, respectively. Concentrations of TPH/g and BTEX, in the sample collected from well MW3, were 14,000 ug/L, and 11 ug/L, 13 ug/L, 16 ug/L, and 49 ug/L, respectively.

### **Planned Activities**

Monthly groundwater level measurements will be recorded during the third quarter 1993. Groundwater samples will be collected quarterly from the

**Table 1**  
**Groundwater Elevation Summary**  
**Dreyer's Grand Ice Cream**  
**5929 College Avenue**  
**Oakland, California**

Well No.	TOC Elevation <sup>a</sup> (feet)	Date	Groundwater Depth <sup>b</sup> (feet)	Groundwater Elevation <sup>c</sup> (feet)	
MW1	189.14	08/12/91	14.86	174.28	
		12/04/91	16.16	172.98	
		04/24/92	11.93	177.21	
		05/04/92	12.15	176.99	
		06/17/92	13.17	175.97	
		07/15/92	13.66	175.48	
		08/31/92	14.91	174.23	
		09/14/92	15.18	173.96	
		10/22/92	15.34	173.80	
		11/20/92	15.27	173.87	
		12/03/92	14.44	174.70	
		01/18/93	7.85	181.29	
		02/10/93	9.29	179.85	
		03/10/93	9.88	179.26	
			182.22 <sup>d</sup>		
	MW2	185.23	<del>04/20/93</del>	<del>10.15</del>	<del>172.09</del>
<del>06/02/93</del>			<del>10.02</del>	<del>171.40</del>	
08/12/92			12.26	172.97	
12/04/91			12.30	172.93	
04/24/92			10.00	175.23	
05/04/92			10.29	174.94	
06/17/92			10.86	174.37	
07/15/92			11.48	173.75	
08/31/92			12.02	173.21	
09/14/92			12.34	172.89	
		10/22/92	12.37	172.86	
		11/20/92	11.64	173.59	

Table 1

**Groundwater Elevation Summary  
Dreyer's Grand Ice Cream  
5929 College Avenue  
Oakland, California**

Well No.	TOC Elevation <sup>a</sup> (feet)	Date	Groundwater Depth <sup>b</sup> (feet)	Groundwater Elevation <sup>c</sup> (feet)
	185.84 <sup>d</sup>	12/03/92	11.95	173.28
		01/18/93	5.86	179.37
		02/10/93	8.20	177.03
		03/10/93	8.57	176.66
		<del>04/20/93</del>	<del>8.95</del>	<del>176.89</del>
		<del>06/02/93</del>	<del>9.10</del>	<del>176.74</del>
MW3	184.68	08/12/91	11.73	172.95
		12/04/91	11.65	173.03
		04/24/92	11.00	173.68
		05/04/92	11.09	173.59
		06/17/92	11.51	173.17
		07/15/92	11.84	172.84
		08/31/92	11.70	172.98
		09/14/92	11.74	172.94
		10/22/92	11.33	173.35
		11/20/92	10.58	174.10
		12/03/92	10.12	174.56
	185.29 <sup>d</sup>	01/18/93	8.42	176.26
		02/10/93	9.94	174.74
		03/10/93	10.19	174.49
		<del>04/20/93</del>	<del>10.22</del>	<del>175.07</del>
		<del>06/02/93</del>	<del>10.73</del>	<del>174.56</del>

- a. TOC: top of well casing elevation measured relative to an arbitrary bench mark which was measured to mean sea level (MSL) by interpolation from the Oakland West, California, 7.5' Quadrangle Topographic Map (T.1S, R.3W).
- b. Depth to groundwater measured from the TOC.
- c. Groundwater elevation is equal to the difference between the TOC elevation and groundwater depth.
- d. Top of casing resurveyed on May 1, 1993