



March 13, 1990

Mr. Dennis J. Byrne  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
Dept. of Environmental Health  
Hazardous Materials Division  
80 Swan Way, Room 200  
Oakland, CA 94621

Subject: Workplan for Soil Remediation and  
Monitoring Well Installations for  
the Property at  
5929 College Avenue  
Oakland, CA 94618-1391  
(Project No. 9126)

Dear Mr. Byrne:

Aqua Terra Technologies  
Consulting Engineers  
& Scientists

2950 Buskirk Avenue  
Suite 120  
Walnut Creek, CA  
94596  
415 934-4884

The following workplan for soil remediation and monitoring well installations for the property at 5929 College Avenue in Oakland, California is hereby submitted in accordance with the San Francisco Bay Region of the Regional Water Quality Control Board (RWQCB) Staff Recommendations for Initial Evaluation and Investigation of Underground Fuel Storage Tanks, California Leaking Underground Fuel Tank (LUFT) Task Force LUFT Field Manual (October, 1989) guidelines, California Department of Health Services (DHS) regulations as outlined in Title 22 and Title 23 of the California Code of Regulations (CCR), the requirements of the Alameda Health Care Services Agency (ACHCSA) (see letter dated January 22, 1990, Attachment A), and the guidelines of the Alameda County Water District (February, 1990 revision).

## I. INTRODUCTION

### A. Scope of Work

Aqua Terra Technologies, Inc. (ATT) intends to conduct an investigation to determine the areal extent of the potential impacts to soil and groundwater from underground fuel and waste oil storage tanks removed from the subject property in December, 1989. This investigation will involve the installation of three groundwater monitoring wells on the subject property. If groundwater quality indicates a contaminant plume, ATT will propose a soil boring investigation to determine the lateral and vertical extent of the contamination.

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#### **B. Site Location**

The subject property is located in the western part of the City of Oakland at the northeast corner of the intersection of College Avenue and Chabot Road (a commercial retail area). The regional location for the site is shown on Plate 1 (Attachment B) and specific site features are shown on Plate 2 (Attachment B).

#### **C. Background**

Seven underground fuel and waste oil storage tanks were removed from the former Dreyer's Grand Ice Cream Oakland facility. The tanks were located in two areas: 1) the gasoline and diesel tanks were on the southeast corner of the facility and the waste oil tanks were located on the western part of the facility. The tanks, with subsequent sampling, were removed by Petroleum Engineering, Inc. in December, 1989. Laboratory analytical results showed that total petroleum hydrocarbon concentrations (TPH) as gasoline in soils were below 1,000 mg/Kg and that TPH as waste oil and grease were above 1,000 mg/Kg.

#### **D. Site History**

1. The subject property is currently unoccupied; it was the site for the Dreyer's Grand Ice Cream, Inc. Oakland facility. Buildings and concrete pavement have recently (as of February, 1990) been demolished and removed from the site. There are no operating above ground or underground fuel storage tanks currently on the subject property.
2. On December 13, 1989, Petroleum Engineering, Inc. removed one, 1,000 gallon and one, 8,000 gallon gasoline storage tank and two, 4,000 gallon underground diesel tanks from the southwest corner of the facility. Two, 1,000 gallon waste oil tanks were removed from the western part of the facility. Soil samples from the gasoline and diesel tank excavation were collected on December 14, 1989 by Pace Laboratories, Incorporated. Soil samples, from the waste oil tanks excavation, were collected on December 14, 1989.

Subsequent soil sample analyses by Pace Laboratories, Inc., from the bottom of the removed gasoline tank excavation, indicated that total petroleum hydrocarbon

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Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
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(TPH) (as gasoline and diesel) concentrations were below the 1,000 parts per million (ppm) DHS and LUFT manual guidelines. Soil samples collected in the area of the removed waste oil tank showed TPH (as waste oil and grease) concentrations ranging to 5,915 mg/Kg.

Analytical chemical data for soil samples collected at the site during the tank excavation phase, are presented in Table 1 (Attachment C) and a copy of the certified laboratory report is presented in Attachment D.

An Underground Storage Tank Unauthorized Release (Leak/Contamination) Site Report will be filed by ATT.

3. On February 6, 1990, ATT in accordance with ACHCSA requirements (Attachment A), excavated between 80 to 100 cu yds of oil and grease contaminated soil from the former waste oil tanks excavation. Soil samples were collected by ATT personnel subsequent to soil excavation; samples were submitted to Anametrix Laboratories, Inc. of San Jose, California (Table 2, Attachment C and Attachment D). Chemical analyses indicated that the soil could be transported to a Class II-I landfill. Soil offhaul, in accordance with the appropriate regulations, was completed on February 20, 1990 (Attachment E).
4. On February 12, 1990, the onsite contractor cleaned the gasoline tank excavation by removing 400 to 450 cu yds of soil from the bottom of the excavation; this removal was required because the loose soil could not be properly compacted. The contractor noted a slight gasoline odor and notified ATT. Subsequent sampling by ATT showed that the average TPH gasoline concentration in the excavated soils was 170 mg/Kg (Table 3, Attachment C and Attachment D). On February 27, 1990, ATT initiated a soil aeration program with the approval of the BAAQMD; the ACHCSA and City of Oakland Fire Department (OFD) were notified on February 26, 1990 concerning the intended soil aeration.

The contaminated soils were spread out on 6 mil visqueen to be tilled once per day. Upon completion of the soil aeration, soils will be resampled, analyzed and removed to the appropriate landfill in accordance with the appropriate federal, state, and local regulations. As of this date, soil aeration is continuing until chemical

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Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
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analyses indicate that the soils are below 100 mg/Kg TPH as gasoline.

## II. SITE DESCRIPTION

### A. Vicinity Description and Hydrogeological Setting

The subject property is in the Oakland Upland and Alluvial Plain which consists of alluvial fan deposits of clay, silt, and sand interbedded with coarser gravels. According to the Alameda County Flood Control and Water Conservation District (ACFCWCD), 1988, 205 (J) report: "Geohydrology and Groundwater - Quality Overview, East Bay Plain Area, Alameda County, California" the shallow, unconfined groundwater table may range from 35 to 45 feet below grade. The groundwater flow direction is toward the west, southwest.

### B. Vicinity Map

The map showing the regional property location is shown on Plate 1 (Attachment B).

### C. Site Specific Map

A map showing the specific site features is shown on Plate 2 (Attachment B).

### D. Existing Soil Contamination and Excavation Results

ATT was not involved in the tank removal activities or in activities on the subject property prior to February, 1990; therefore, the following information is provided.

1. Sampling Procedures. No information is available to ATT on the protocol used concerning previously collected soil samples by Pace Laboratories, Inc. Samples collected and analyzed by Pace Laboratories, Inc. were accompanied by a chain of custody form (Attachment D). The protocol for soil samples collected by ATT personnel is given in Attachment E.
2. Depth to Groundwater. The maximum depth of the tank excavation was 10 to 15 feet below grade. A review of data from the ACFCWCD (1988) 205 (J) report indicates the shallow, unconfined groundwater table may range from 35 to 45 feet below grade.

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3. Soil Profile Encountered. Site specific information is not available. The subject property soils in the former tank excavations are silty to sandy clay.
4. Sampling and Laboratory Data. Samples collected, from the former gasoline and diesel tank excavation, by Pace Laboratories, Inc. (a DHS certified analytical laboratory) were analyzed for TPH (gasoline) using EPA Method 8015, TPH (diesel) using EPA Method 3550/8015, and benzene, toluene, ethylbenzene, and xylene (BTEX) using EPA Method 8020. Samples collected, from the former waste oil and grease tank excavation, by Pace Laboratories, Inc., were analyzed for TPH (diesel) using EPA Method 3550/8015, Oil and Grease (EPA Method 503D&E) BTEX (EPA Method 8020), halogenated volatile organic compounds (VOCs) using EPA Method 8010, extractable organic compounds (EPA Method 8270 (GC/MS), and metals (cadmium, chromium, lead, and zinc). Pace Laboratories, Inc. analytical data is summarized in Table 1 (Attachment C); certified sample analytical sheets are in Attachment D.

Reexcavated soils from the waste oil tank excavation were sampled by ATT (Table 3, Attachment C) and analyzed in accordance with LUFT protocols which are listed in Table 4 (Attachment C). Certified sample analytical sheets are in Attachment D.

5. Underground Utilities. Underground utilities have been located by the onsite building contractor and therefore, should not pose a problem. Additional information for offsite utilities, surrounding the subject property, will be obtained from Underground Service Alert (USA).
6. Unusual Problems. No unusual problems have been noted on the subject property, and none are anticipated.
7. Contaminated Soil Storage and Disposal. Excavated soil from the waste oil tanks was stored at the site; the soil was placed on, and subsequently covered by, visqueen. Management plans for the soil included chemical analyses for TPH as waste oil and grease, transportation to and subsequent disposal at a Class II-I landfill facility (Attachment E).

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8. Required Permits Obtained. A permit to remove the underground fuel storage and waste oil tanks was obtained by Petroleum Engineering, Inc. Approval was obtained by ATT, from the Bay Area Air Quality Management District (BAAQMD) to aerate the gasoline contaminated soils onsite. No other permits have been required. Groundwater monitoring well permits, from the Alameda County Water District (Zone 7), will be obtained prior to installation of the groundwater monitoring wells.

### III. Plan for Determining Extent of On Site Soil Contamination.

#### A. Extent of Contamination Within the Excavations.

Approximately 208 tons of contaminated soil were excavated from the area of the former waste oil tanks. The soil was excavated on February 6, 1990; soil excavation, with the appropriate sample collection, was supervised by an ATT engineer. Soils were analyzed for waste oil protocol in accordance with the LUFT manual. Soil sample analytical results are given in Table 3 (Attachment C). Further excavation was conducted in the former tank pit because one soil sample indicated TPH as oil and grease concentration above 1,000 mg/Kg. Additional soils were excavated with a final pit sample indicating that TPH oil and grease concentrations were at 120 mg/Kg. The excavated soils were stockpiled with the other soils for disposal.

Soils removed from the former gasoline and diesel tank prior to backfill compaction are currently being aerated onsite in accordance with BAAQMD regulations; the ACHCSA and OFD were notified prior to commencement of the soil aeration.

#### B. Sampling Methods and Procedures for the Site.

1. Soil samples will be collected during the installation of groundwater monitoring wells; soil sample collection will be according to the protocol given in Attachment F. At least one groundwater monitoring well boring will be continuously logged and soil samples will be cooled with dry ice in accordance with Alameda County Water District Groundwater Monitoring guidelines (February, 1990 revision).

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2. Soil sample analytical methods will follow the LUFT Manual (1989) and ACWD (1990) guidelines. Sample analytical methods and detection limits are given in Table 4 (Attachment C).

#### **C. Onsite Soil Treatment.**

Soils from the waste oil tank excavation were not treated onsite; these soils were offhauled to an appropriate designated landfill, in accordance with regulatory agency guidelines and the appropriate federal and state regulations. Approximately 208 tons of soil were transported to a Class II-I landfill.

Additional soils from the former gasoline tanks excavation were removed; these soils are currently being treated onsite by aeration. Approximately 400 to 450 tons of soil, with an average TPH gasoline concentration of 170 mg/Kg, were excavated, placed on 6 mil visqueen and are currently undergoing aeration in accordance with the Bay Area Air Quality Management District's (BAAQMD) Regulation 8, Rule 40 guidelines. Upon completion of aeration, the treated soils will be transported to the appropriate landfill in accordance with federal, state and local regulations.

#### **D. Site Security Measures**

The site is currently surrounded by a chain link fence with a gated entrance. Security is maintained by the onsite building contractor.

#### **IV. PLAN FOR DETERMINING GROUNDWATER CONTAMINATION.**

According to ACHCSA requirements (Attachment A), Dreyer's Grand Ice Cream, Inc. is to install three groundwater monitoring wells on the subject property to determine groundwater flow direction and soil and groundwater quality. Preliminary data from the ACFCWCD 205 (J) report, indicates that shallow groundwater flow is toward the west to slightly southwest.

ATT proposes to install two, four-inch diameter groundwater monitoring wells; both wells will be placed in the downgradient groundwater flow direction, within ten feet of the former tank excavations and within parameters imposed by architectural constraints. One, two-inch groundwater monitoring well will be placed in an

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Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
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upgradient direction from the former tank pit excavations. Precise groundwater flow direction will be calculated from static water table measurements taken from the three groundwater monitoring wells.

Soil and groundwater sampling and well development protocols are given in Attachment F. Drilling procedures and monitoring well construction are provided in Attachment G.

**C. Site Safety Plan.**


A site safety plan for this investigation is presented in Attachment H.

ATT is submitting this work plan at the request of Mr. William C. Collett, Treasurer of Dreyer's Grand Ice Cream, Inc. of Lafayette, California. Please contact us if you have any questions or comments.

Sincerely,

AQUA TERRA TECHNOLOGIES, INC.

  
Terrance E. Carter  
Senior Environmental Engineer

  
William E. Motzer, Ph.D.  
Senior Hydrogeologist  
California Registered Geologist # 4202  
(Expires 6/30/90)

TEC/WEM:kmr  
Attachments

cc: Mr. Lester Feldman, RWQCB  
Mr. William C. Collett



**ATTACHMENT A**

**Alameda County Health Care  
Services Agency Letter**

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Director



22 January 1990

Telephone Number: (415)

William Collett  
Dryer's Ice Cream Incorporated  
3675 Mount Diablo Boulevard  
Suite 300  
Lafayette, CA 94549

Subject: Underground Storage Tank Removal Conducted at 5929  
College Avenue, Oakland.

Dear Mr. Collett:

This office has reviewed the data report submitted by Petroleum Engineering Incorporated regarding the site listed above. On the basis of the soil contamination levels detected in association with this project follow-up actions are now required on your part.

Guidelines established by the San Francisco Bay Regional Water Quality Control Board require that a ground water monitoring program be established whenever soil hydrocarbon contamination reaching or exceeding 100 parts per million is detected. A monitoring well is to be located within ten feet of the former tank pit in a downgradient direction relative to ground water flow. Ground water flow direction is to be determined by data derived from three wells. During well installation, soil samples must be collected at five foot depth intervals until ground water is reached. This work must be performed under the direction of a registered engineer/geologist and all boring logs and data reports must be submitted to this office for review.

Ground water monitoring should be conducted on a quarterly basis for a minimum of one full year. The frequency and duration of any follow-up monitoring will be based upon the data derived during the first year.

The following actions are now required at this site.

- 1) Further excavation must be conducted within the former waste oil tank pit to ensure that not soil contaminated with Total Oil and Grease exceeding 1,000 parts per million remains. As per criterion established by the California Department of Health Services, a soil contaminated with hydrocarbons up to 1,000 parts per million constitutes a hazardous waste and must be physically removed for proper disposal. Upon the completion of this soil removal, samples of the pit wall must be taken to verify that the excavation has been sufficiently thorough. Please keep this office informed of developments in this regard so that approval can be granted to refill the excavation with clean backfill material.

William Collett  
Dryer's Ice Cream  
3675 Mount Diablo Blvd  
Suite 300  
Lafayette, CA 94549  
Re. 5929 College Ave Oakland  
22 January 1990  
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2) The spoil pile of soil removed from the waste oil pit will require disposal as a hazardous waste.

3) The spoil pile of soil removed from the former gasoline and diesel storage tank pit will have to be disposed of. As the level of hydrocarbon contamination in this soil was not high enough to constitute a hazardous waste, it may be disposed of in a Class III landfill. However, please ensure that documentation accounting for the final quantity and destination of this material is communicated to this office for inclusion into our files.

4) At this time the gasoline and diesel tank pit can be refilled with clean backfill material.

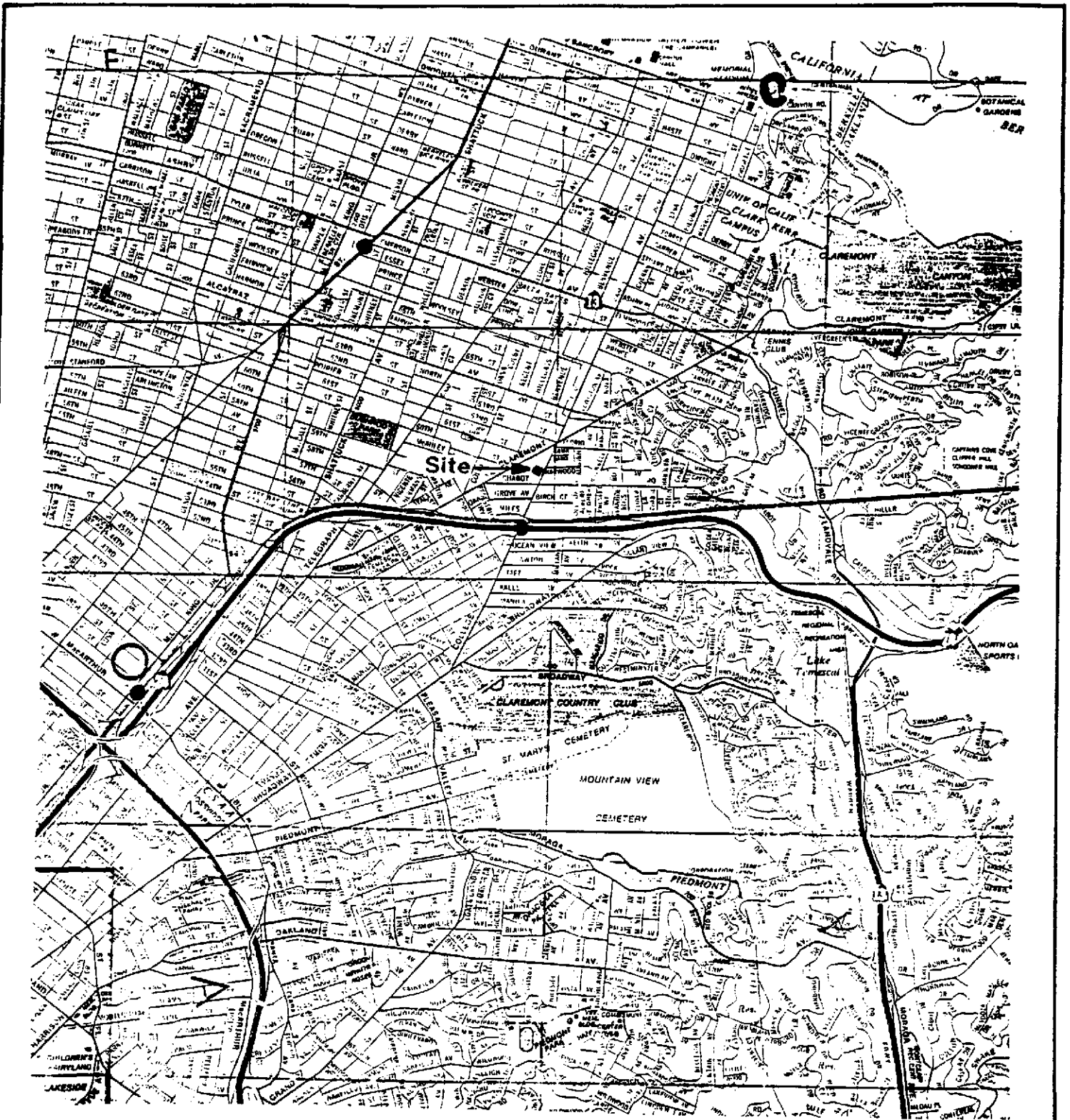
5) Three ground water monitoring wells will have to be installed to gauge whether or not ground water has been impacted by the soil contamination associated with these former tank locations and to define the ground water flow gradient. Should a contaminant plume be found in the soil or water, further borings will be required to determine the vertical and lateral extent of this plume.

If you have any questions concerning this matter please contact me at (415) 271-4320.

Sincerely,

  
Dennis J. Byrne  
Hazardous Materials Specialist

cc: Lester Feldman, SFBRWQCB  
Doug Krause, DOHS  
Rafat Shahid, Assistant Director, Alameda County Dept. of  
Environmental Health.  
Don Marchant, Petroleum Engineering, Inc.



0 1/2 1 mile  
SCALE



**Property Location Map**

**ATT**

**Aqua Terra Technologies  
Consulting Engineers  
& Scientists**

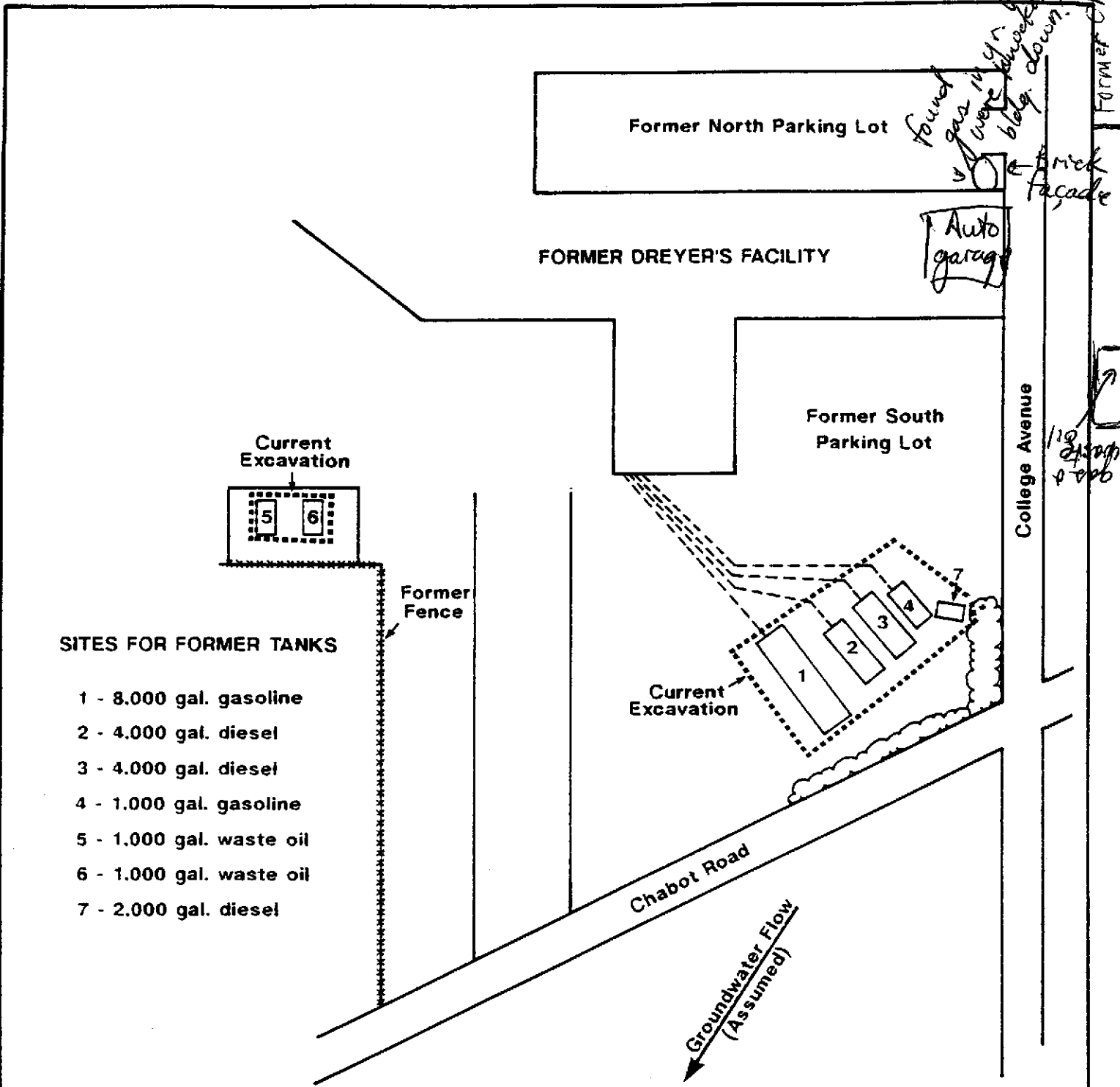
**Dreyer's Grand Ice Cream, Inc.**

**PLATE**

**JOB NUMBER  
9126**

**DATE  
3/90**

**1**



Note: Not to Scale



Facility and Former Tank Locations

Dreyer's Grand Ice Cream, Inc.

PLATE

JOB NUMBER

DATE

2

9126

2/90

**ATT**

Aqua Terra Technologies  
Consulting Engineers  
& Scientists

**LEGEND**

⊕ Proposed Groundwater Monitoring Well Location

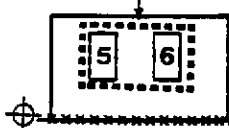
Former North Parking Lot

FORMER DREYER'S FACILITY

Former South Parking Lot

College Avenue

Current Excavation

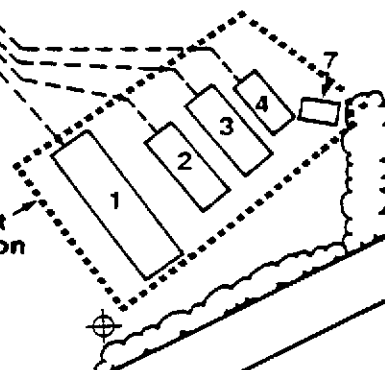


Former Fence

**SITES FOR FORMER TANKS**

- 1 - 8,000 gal. gasoline
- 2 - 4,000 gal. diesel
- 3 - 4,000 gal. diesel
- 4 - 1,000 gal. gasoline
- 5 - 1,000 gal. waste oil
- 6 - 1,000 gal. waste oil
- 7 - 2,000 gal. diesel

Current Excavation



Chabot Road

Groundwater Flow  
(Assumed)



Note: Not to Scale

**Proposed Groundwater Monitoring Well Locations**

Dreyer's Grand Ice Cream, Inc.

PLATE

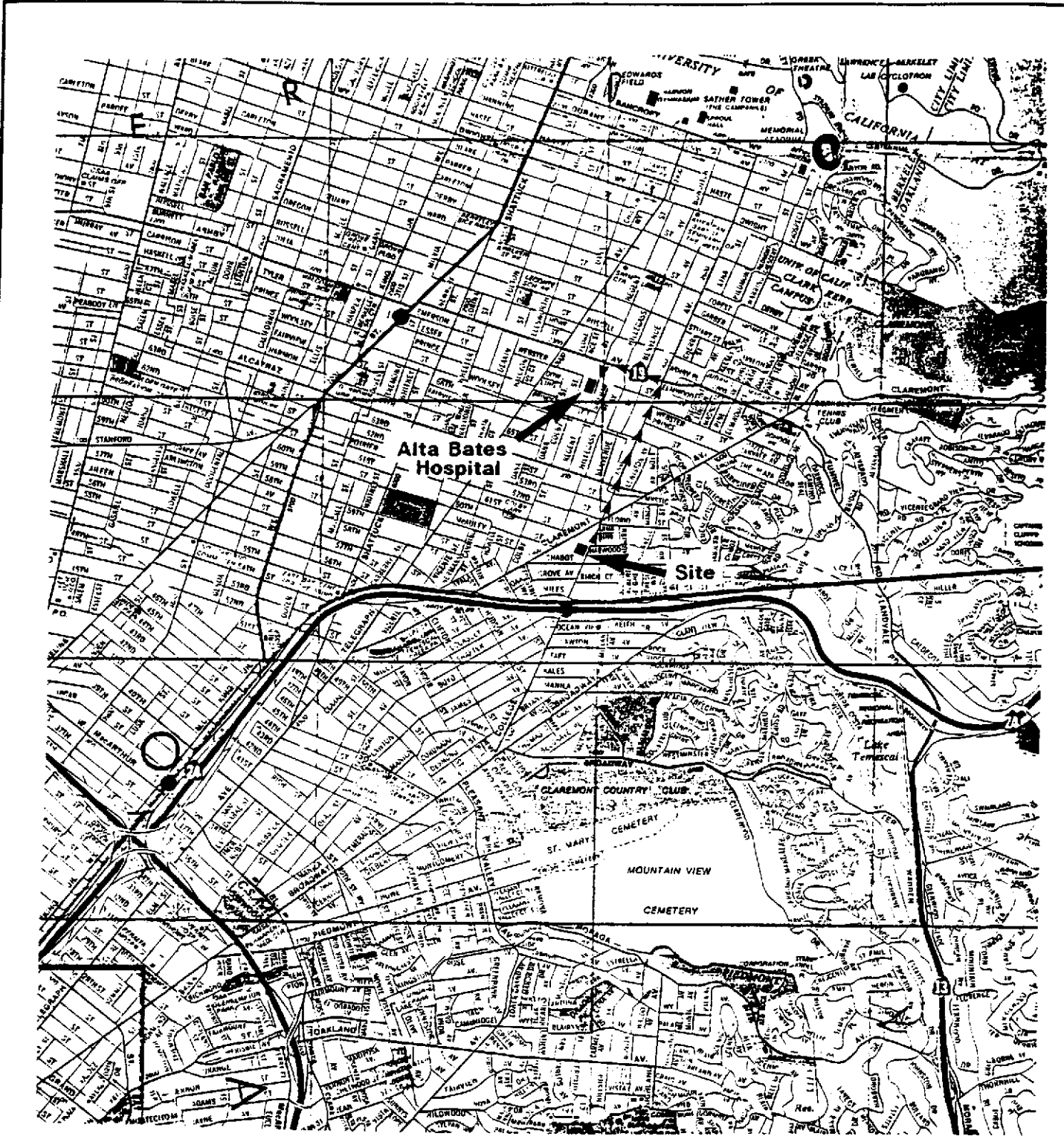
JOB NUMBER  
9126

DATE  
3/90

3

**ATT**

Aqua Terra Technologies  
Consulting Engineers  
& Scientists



0 1/2 1 mile  
SCALE



**Route to Local Hospital**

**Dreyer's Grand Ice Cream, Inc.**

<b>JOB NUMBER</b>	<b>DATE</b>
9126	3/90

**ATTACHMENT**

G-1

**ATT** Aqua Terra Technologies  
Consulting Engineers  
& Scientists

Table 1. Chemical Analyses<sup>a</sup> for Waste Oil Tank Excavation Soils  
Former Dreyer's Grand Ice Cream Facility  
Oakland, California

Sample Number	Sample Location	-----TPH-----		B	E	T	X
		Oil & Grease (mg/Kg)	Diesel (mg/Kg)				
1214-1	Waste Oil Excavation	5,915	370	<20	<20	<20	<20
1214-2	Waste Oil Excavation	150	ND	<10	<10	<10	<22
1214-3	Waste Oil Excavation	1,770	170	<2.0	<2.0	<2.0	5.5
1214-4	Waste Oil Excavation	5,625	1,800	<2.0	<2.0	<2.0	2.4
1214-5	Soil Stockpile	100	70	<1.0	<1.0	<1.0	<1.0
1214-6	Soil Stockpile	125	130	ND	0.005	0.022	0.038

a. Laboratory analyses by PACE Laboratories for samples collect on December 14, 1989 by Petroleum Engineering, Inc.

TPH = total petroleum hydrocarbons  
 B = benzene  
 E = ethylbenzene  
 T = toluene  
 X = total xylenes



Table 2. Chemical Analyses<sup>a</sup> for Waste Oil Tank Excavation Soils  
Former Dreyer's Grand Ice Cream Facility  
Oakland, California

Sample Number	Sample Location	-----TPH-----		B	E	T	X
		Oil & Grease (mg/Kg)	Diesel (mg/Kg)				
1213-1	Gasoline Tank	30	NR	<0.038	<0.038	0.043	0.16
1213-2	Gasoline Tank	40	NR	<0.038	0.15	0.045	0.16
1213-3	Diesel Tank	NR	17	<10	<10	<10	<10
1214-4	Diesel Tank	NR	350	<20	<20	<20	38
1214-5	Diesel Tank	NR	23	<20	<20	<20	<20
1214-6	Diesel Tank	NR	46	<2.5	<2.5	<2.5	<2.5
1214-7	Gasoline Tank	320	NR	1.3	5.1	4.1	21
1214-8	Gasoline Tank	190	NR	0.046	2.5	0.32	9.5

a. Laboratory analyses by PACE Laboratories from samples collected on December 13, 1989 by Petroleum Engineering, Inc.

- NR = Not reported
- TPH = total petroleum hydrocarbons
- B = benzene
- E = ethylbenzene
- T = toluene
- X = xylene

Table 3. Chemical Analyses for Waste Oil Excavated Soils  
Former Dreyer's Grand Ice Cream Facility  
Oakland, California

Sample Number	Sample Location	TPH (mg/Kg) <sup>a</sup>		TPH (mg/Kg) <sup>b</sup>	
		Total Oil & Grease	Diesel	Total Oil & Grease	Diesel
Pit 1	Waste Oil Tank Excavation	ND	ND	----	NA
Pit 2		ND	ND	----	NA
Pit 3 (Pit A)		2,400	ND	120	NA
A 25%		ND	ND	----	NA
B 25%		ND	ND	----	NA
C 25%		ND	ND	----	NA
D 25%		ND	ND	----	NA

a. Samples collected on February 6, 1990 after excavation of soils

b. Samples collected on February 21, 1990 after continued excavation of soils because of 2,400 mg/Kg in Pit 3 sample results

Table 4. Laboratory<sup>a</sup> Analytical Methods and Detection Limits  
 Breyer's Grand Ice Cream, Inc.  
 Oakland, California

Matrix	-----TPH <sup>b</sup> -----			Hydrocarbons <sup>b</sup>			
	Diesel	Gasoline	Oil & Grease	B	T	E	X
<u>Soil</u>	GCFID (3550)	GCFID (5030)	5030&E	8020	8020	8020	8020
Detection Limit (mg/Kg)	1.0	-----	50.0	0.005	0.005	0.005	0.005
<u>Water</u>	GCFID (3510)	GCFID (5030)	5030&E	602	602	602	602
Detection Limit (mg/Kg)	50.0	-----	30.0	0.5	0.5	0.5	0.5

a. Sample analyses to be conducted by a California Department of Health Services Certified Laboratory

b. TPH = total petroleum hydrocarbons

B = benzene

T = toluene

E = ethylbenzene

X = xylene

**ATTACHMENT D**

**DHS Cortical Laboratory Data**

JAN 13 RECD

January 11, 1990

Mr. Robert Henry  
Petroleum Engineering, Inc.  
11 West 9th Street  
Santa Rosa, CA 95401

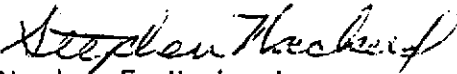
RE: PACE Project No. 491214.601  
Dryer Ice Cream

Dear Mr. Henry:

Enclosed is the report of laboratory analyses for samples received  
December 14, 1989.

If you have any questions concerning this report, please feel free  
to contact us.

Sincerely,

  
Stephen F. Nackord  
Director, Sampling and Analytical Services

Enclosures



REPORT OF LABORATORY ANALYSIS

Offices:  
 Minneapolis, Minnesota  
 Tampa, Florida  
 Coralville, Iowa  
 Novato, California  
 Leawood, Kansas  
 Irvine, California  
 Asheboro, North Carolina

Petroleum Engineering, Inc.  
 11 West 9th Street  
 Santa Rosa, CA 95401

January 11, 1990  
 PACE Project  
 Number: 491214601

Attn: Mr. Robert Henry

Dryer Ice Cream

PACE Sample Number:	805650	805660	805670
Date Collected:	12/14/89	12/14/89	12/14/89
Date Received:	12/14/89	12/14/89	12/14/89

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>6'</u>	<u>6'</u>	<u>6'</u>
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INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Cadmium	mg/kg wet	1	ND	ND	ND
Chromium	mg/kg wet	1	30	24	25
Lead	mg/kg wet	10	ND	ND	ND
Zinc	mg/kg wet	1	30	35	38

ORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Oil and Grease, Gravimetric (503D&E)	mg/kg wet	50	5915	150	1770
--------------------------------------	-----------	----	------	-----	------

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel	mg/kg	10	370	ND	170
Sonication Extraction, Date Started			12/21/89	12/21/89	12/21/89

PURGEABLE AROMATIC COMPOUNDS, EPA 8020

Benzene	mg/kg wet	0.005	LT 20	LT 10	LT 2.0
Ethylbenzene	mg/kg wet	0.005	LT 20	LT 10	LT 2.0
Toluene	mg/kg wet	0.005	LT 20	LT 10	LT 2.0
Xylenes, Total	mg/kg wet	0.005	LT 20	22	5.5

HALOGENATED VOLATILE COMPOUNDS EPA 8010

Dichlorodifluoromethane	ug/kg	2000	LT500	LT2000	LT2000
Chloromethane	ug/kg	2000	LT500	LT2000	LT2000
Vinyl Chloride	ug/kg	2000	LT500	LT2000	LT2000
Bromomethane	ug/kg	2000	LT500	LT2000	LT2000
Chloroethane	ug/kg	2000	LT500	LT2000	LT2000
Trichlorofluoromethane	ug/kg	2000	LT500	LT2000	LT2000
1,1-Dichloroethene	ug/kg	500	LT500	LT500	LT500

MDL Method Detection Limit  
 ND Not detected at or above the MDL.  
 LT Less than.

Mr. Robert Henry  
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January 11, 1990  
PACE Project  
Number: 491214601

Dryer Ice Cream

PACE Sample Number:	805650	805660	805670
Date Collected:	12/14/89	12/14/89	12/14/89
Date Received:	12/14/89	12/14/89	12/14/89
	1214-1	1214-2	1214-3
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>6'</u>

ORGANIC ANALYSIS

HALOGENATED VOLATILE COMPOUNDS EPA 8010

Methylene Chloride	ug/kg	500	LT500	LT500	LT500
trans-1,2-Dichloroethene	ug/kg	500	LT500	LT500	LT500
1,1-Dichloroethane	ug/kg	500	LT500	LT500	LT500
Chloroform	ug/kg	500	LT500	LT500	LT500
1,1,1-Trichloroethane (TCA)	ug/kg	500	LT500	LT500	LT500
Carbon Tetrachloride	ug/kg	500	LT500	LT500	LT500

1,2-Dichloroethane (EDC)	ug/kg	500	LT500	680	LT500
Trichloroethene (TCE)	ug/kg	500	LT500	LT500	LT500
1,2-Dichloropropane	ug/kg	500	LT500	LT500	LT500
Bromodichloromethane	ug/kg	500	LT500	LT500	LT500
2-Chloroethylvinyl ether	ug/kg	500	LT500	LT500	LT500
trans-1,3-Dichloropropene	ug/kg	500	LT500	LT500	LT500

cis-1,3-Dichloropropene	ug/kg	500	LT500	LT500	LT500
1,1,2-Trichloroethane	ug/kg	500	LT500	LT500	LT500
Tetrachloroethene	ug/kg	500	LT500	LT500	LT500
Dibromochloromethane	ug/kg	500	LT500	LT500	LT500
Chlorobenzene	ug/kg	500	LT500	LT500	LT500
Bromoform	ug/kg	500	LT500	LT500	LT500

1,1,2,2-Tetrachloroethane	ug/kg	500	LT500	LT500	LT500
1,3-Dichlorobenzene	ug/kg	500	LT500	LT500	LT500
1,4-Dichlorobenzene	ug/kg	500	LT500	LT500	LT500
1,2-Dichlorobenzene	ug/kg	500	LT500	LT500	LT500
Bromochloromethane (Surrogate Recovery)			93%	112%	84%
1,4-Dichlorobutane (Surrogate Recovery)			95%	107%	91%

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

N-Nitrosodimethylamine	ug/kg	300	ND	ND	ND
Aniline	ug/kg	300	ND	ND	ND

MDL Method Detection Limit  
LT Less than.  
ND Not detected at or above the MDL.

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January 11, 1990  
PACE Project  
Number: 491214601

Dryer Ice Cream

PACE Sample Number:	805650	805660	805670
Date Collected:	12/14/89	12/14/89	12/14/89
Date Received:	12/14/89	12/14/89	12/14/89

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>6'</u>	<u>6'</u>	<u>6'</u>
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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Bis(2-chloroethyl) ether	ug/kg	300	ND	ND	ND
1,3-Dichlorobenzene	ug/kg	300	ND	ND	ND
Benzyl Alcohol	ug/kg	300	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	300	ND	ND	ND
1,2-Dichlorobenzene	ug/kg	300	ND	ND	ND
Bis(2-chloroisopropyl) ether	ug/kg	300	ND	ND	ND
N-Nitrosodipropylamine	ug/kg	300	ND	ND	ND
Hexachloroethane	ug/kg	300	ND	ND	ND
Nitrobenzene	ug/kg	300	ND	ND	ND
Isophorone	ug/kg	300	ND	ND	ND
Bis(2-chloroethoxy)methane	ug/kg	300	ND	ND	ND
1,2,4-Trichlorobenzene	ug/kg	300	ND	ND	ND
Naphthalene	ug/kg	300	3020	25600	12800
4-Chloroaniline	ug/kg	300	ND	ND	ND
Hexachlorobutadiene	ug/kg	300	ND	ND	ND
2-Methylnaphthalene	ug/kg	300	5700	22300	13300
Hexachlorocyclopentadiene	ug/kg	300	ND	ND	ND
2-Chloronaphthalene	ug/kg	300	ND	ND	ND
2-Nitroaniline	ug/kg	1500	ND	ND	ND
Dimethylphthalate	ug/kg	300	ND	ND	ND
Acenaphthylene	ug/kg	300	ND	ND	ND
2,6-Dinitrotoluene	ug/kg	300	ND	ND	ND
3-Nitroaniline	ug/kg	1500	ND	ND	ND
Acenaphthene	ug/kg	300	ND	ND	ND
Dibenzofuran	ug/kg	300	ND	326	ND
2,4-Dinitrotoluene	ug/kg	300	ND	ND	ND
Diethylphthalate	ug/kg	300	ND	ND	ND
Fluorene	ug/kg	300	1260	962	ND

MDL Method Detection Limit  
ND Not detected at or above the MDL.



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PACE Project  
Number: 491214601

Dryer Ice Cream

PACE Sample Number:	805650	805660	805670
Date Collected:	12/14/89	12/14/89	12/14/89
Date Received:	12/14/89	12/14/89	12/14/89

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	6'	6'	6'
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ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

4-Nitroaniline	ug/kg	1500	ND	ND	ND
4-Chlorophenylphenylether	ug/kg	300	ND	ND	ND
N-Nitrosodiphenylamine	ug/kg	300	ND	ND	ND
1,2-Diphenylhydrazine	ug/kg	300	ND	ND	ND
4-Bromophenylphenylether	ug/kg	300	ND	ND	ND
Hexachlorobenzene	ug/kg	300	ND	ND	ND
Phenanthrene	ug/kg	300	1940	1530	513
Anthracene	ug/kg	300	ND	ND	ND
Di-n-butylphthalate	ug/kg	300	ND	ND	ND
Fluoranthene	ug/kg	300	ND	ND	ND
Benzidine	ug/kg	1500	ND	ND	ND
Pyrene	ug/kg	300	410	ND	ND
Butylbenzylphthalate	ug/kg	300	ND	ND	ND
Benzo(a)anthracene	ug/kg	300	ND	ND	ND
3,3'-Dichlorobenzidine	ug/kg	600	ND	ND	ND
Chrysene	ug/kg	300	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ug/kg	300	ND	ND	1970
Di-n-octylphthalate	ug/kg	300	ND	ND	ND
Benzo(b)fluoranthene	ug/kg	300	ND	ND	ND
Benzo(k)fluoranthene	ug/kg	300	ND	ND	ND
Benzo(a)pyrene	ug/kg	300	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ug/kg	300	ND	ND	ND
Dibenzo(a,h)anthracene	ug/kg	300	ND	ND	ND
Benzo(g,h,i)perylene	ug/kg	300	ND	ND	ND
Phenol	ug/kg	300	ND	ND	ND
2-Chlorophenol	ug/kg	300	ND	ND	ND
2-Methylphenol	ug/kg	300	ND	ND	ND
4-Methylphenol	ug/kg	300	ND	ND	ND

MDL Method Detection Limit  
ND Not detected at or above the MDL.

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Number: 491214601

Dryer Ice Cream

PACE Sample Number:	805650	805660	805670
Date Collected:	12/14/89	12/14/89	12/14/89
Date Received:	12/14/89	12/14/89	12/14/89

		1214-1	1214-2	1214-3
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>6'</u>	<u>6'</u>

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

2-Nitrophenol	ug/kg	300	ND	ND	ND
2,4-Dimethylphenol	ug/kg	300	ND	ND	ND
Benzoic Acid	ug/kg	1500	ND	ND	ND
2,4-Dichlorophenol	ug/kg	300	ND	ND	ND
4-Chloro-3-methylphenol	ug/kg	300	ND	ND	ND
2,4,6-Trichlorophenol	ug/kg	300	ND	ND	ND
2,4,5-Trichlorophenol	ug/kg	300	ND	ND	ND
2,4-Dinitrophenol	ug/kg	1500	ND	ND	ND
4-Nitrophenol	ug/kg	1500	ND	ND	ND
2-Methyl-4,6-dinitrophenol	ug/kg	1500	ND	ND	ND
Pentachlorophenol	ug/kg	300	ND	ND	ND
alpha-BHC	ug/kg	300	ND	ND	ND
beta-BHC	ug/kg	300	ND	ND	ND
gamma-BHC	ug/kg	300	ND	ND	ND
delta-BHC	ug/kg	300	ND	ND	ND
Heptachlor	ug/kg	300	ND	ND	ND
Aldrin	ug/kg	300	ND	ND	ND
Heptachlor Epoxide	ug/kg	300	ND	ND	ND
Endosulfan I	ug/kg	300	ND	ND	ND
4,4'-DDE	ug/kg	1500	ND	ND	ND
Dieldrin	ug/kg	300	ND	ND	ND
Endrin	ug/kg	300	ND	ND	ND
Endosulfan II	ug/kg	300	ND	ND	ND
4,4'-DDD	ug/kg	300	ND	ND	ND
Endrin Aldehyde	ug/kg	1500	ND	ND	ND
4,4'-DDT	ug/kg	300	ND	ND	ND
Endosulfan Sulfate	ug/kg	1500	ND	ND	ND
Aroclor-1016	ug/kg	3000	ND	ND	ND

MDL Method Detection Limit  
ND Not detected at or above the MDL.

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Dryer Ice Cream

Parameter	Units	MDL	805650	805660	805670
PACE Sample Number:			805650	805660	805670
Date Collected:			12/14/89	12/14/89	12/14/89
Date Received:			12/14/89	12/14/89	12/14/89
			1214-1	1214-2	1214-3
			6'	6'	6'

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Compound	Units	MDL	805650	805660	805670
Aroclor-1221	ug/kg	3000	ND	ND	ND
Aroclor-1232	ug/kg	3000	ND	ND	ND
Aroclor-1242	ug/kg	3000	ND	ND	ND
Aroclor-1248	ug/kg	3000	ND	ND	ND
Aroclor-1254	ug/kg	3000	ND	ND	ND
Aroclor-1260	ug/kg	3000	ND	ND	ND

Nitrobenzene-d5 (Surrogate Recovery)		140%	89%	63%
2-Fluorobiphenyl (Surrogate Recovery)		123%	113%	89%
Terphenyl-d14 (Surrogate Recovery)		155%	97%	77%
2-Fluorophenol (Surrogate Recovery)		103%	118%	79%
Phenol-d5 (Surrogate Recovery)		105%	69%	64%
2,4,6-Tribromophenol (Surrogate Recovery)		97%	85%	55%

Date Extracted for GCMS Semi-volatiles	12/21/89	12/21/89	12/21/89
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MDL Method Detection Limit  
ND Not detected at or above the MDL.

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Number: 491214601

Dryer Ice Cream

Parameter	Units	MDL	805680	805690	805700
PACE Sample Number:			805680	805690	805700
Date Collected:			12/14/89	12/14/89	12/14/89
Date Received:			12/14/89	12/14/89	12/14/89
			1214-4	1214-5	1214-6
			6'	Stockpile	Stockpile

INORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Cadmium	mg/kg wet	1	ND	ND	ND
Chromium	mg/kg wet	1	33	36	39
Lead	mg/kg wet	10	ND	18	54
Zinc	mg/kg wet	1	61	83	130

ORGANIC ANALYSIS

INDIVIDUAL PARAMETERS

Oil and Grease, Gravimetric (503D&E)	mg/kg wet	50	5625	100	125
EXTRACTABLE FUELS EPA 3550/8015					
Extractable Fuels, as Diesel	mg/kg	10	1800	70	130
Sonication Extraction, Date Started			12/21/89	12/21/89	12/21/89

PURGEABLE AROMATIC COMPOUNDS, EPA 8020

Benzene	mg/kg wet	0.005	LT 2.0	LT 1.0	ND
Ethylbenzene	mg/kg wet	0.005	LT 2.0	LT 1.0	0.006
Toluene	mg/kg wet	0.005	LT 2.0	LT 1.0	0.022
Xylenes, Total	mg/kg wet	0.005	2.4	LT 1.0	0.038

HALOGENATED VOLATILE COMPOUNDS EPA 8010

Dichlorodifluoromethane	ug/kg	20	-	-	LT2000
Dichlorodifluoromethane	ug/kg	2000	LT2000	-	-
Dichlorodifluoromethane	ug/kg	400	-	LT400	-
Chloromethane	ug/kg	20	-	-	LT2000
Chloromethane	ug/kg	2000	LT2000	-	-
Chloromethane	ug/kg	400	-	LT400	-
Vinyl Chloride	ug/kg	20	-	-	LT2000
Vinyl Chloride	ug/kg	2000	LT2000	-	-
Vinyl Chloride	ug/kg	400	-	LT400	-

MDL Method Detection Limit  
ND Not detected at or above the MDL.  
LT Less than.

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PACE Project  
Number: 491214601

Dryer Ice Cream

PACE Sample Number:	805680	805690	805700
Date Collected:	12/14/89	12/14/89	12/14/89
Date Received:	12/14/89	12/14/89	12/14/89
	1214-4	1214-5	1214-6
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>6'</u> <u>Stockpile</u> <u>Stockpile</u>

ORGANIC ANALYSIS

HALOGENATED VOLATILE COMPOUNDS EPA 8010

Bromomethane	ug/kg	20	-	-	LT2000
Bromomethane	ug/kg	2000	LT2000	-	-
Bromomethane	ug/kg	400	-	LT400	-
Chloroethane	ug/kg	20	-	-	LT2000
Chloroethane	ug/kg	2000	LT2000	-	-
Chloroethane	ug/kg	400	-	LT400	-
Trichlorofluoromethane	ug/kg	20	-	-	LT2000
Trichlorofluoromethane	ug/kg	2000	LT2000	-	-
Trichlorofluoromethane	ug/kg	400	-	LT400	-
1,1-Dichloroethene	ug/kg	100	-	LT100	-
1,1-Dichloroethene	ug/kg	5.0	-	-	LT500
1,1-Dichloroethene	ug/kg	500	LT500	-	-
Methylene Chloride	ug/kg	100	-	LT100	-
Methylene Chloride	ug/kg	5.0	-	-	LT500
Methylene Chloride	ug/kg	500	LT500	-	-
trans-1,2-Dichloroethene	ug/kg	100	-	LT100	-
trans-1,2-Dichloroethene	ug/kg	5.0	-	-	LT500
trans-1,2-Dichloroethene	ug/kg	500	LT500	-	-
1,1-Dichloroethane	ug/kg	100	-	LT100	-
1,1-Dichloroethane	ug/kg	5.0	-	-	LT500
1,1-Dichloroethane	ug/kg	500	LT500	-	-
Chloroform	ug/kg	100	-	LT100	-
Chloroform	ug/kg	5.0	-	-	LT500
Chloroform	ug/kg	500	LT500	-	-
1,1,1-Trichloroethane (TCA)	ug/kg	100	-	LT100	-
1,1,1-Trichloroethane (TCA)	ug/kg	5.0	-	-	LT500
1,1,1-Trichloroethane (TCA)	ug/kg	500	LT500	-	-
Carbon Tetrachloride	ug/kg	100	-	LT100	-

MDL Method Detection Limit  
LT Less than.

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PACE Project  
Number: 491214601

Dryer Ice Cream

Parameter	Units	MDL	805680 12/14/89 12/14/89 1214-4	805690 12/14/89 12/14/89 1214-5	805700 12/14/89 12/14/89 1214-6
PACE Sample Number:			6'	Stockpile	Stockpile
Date Collected:					
Date Received:					

ORGANIC ANALYSIS

HALOGENATED VOLATILE COMPOUNDS EPA 8010

Carbon Tetrachloride	ug/kg	5.0	-	-	LT500
Carbon Tetrachloride	ug/kg	500	LT500	-	-
1,2-Dichloroethane (EDC)	ug/kg	100	-	LT100	-
1,2-Dichloroethane (EDC)	ug/kg	5.0	-	-	LT500
1,2-Dichloroethane (EDC)	ug/kg	500	LT500	-	-
Trichloroethene (TCE)	ug/kg	100	-	LT100	-
Trichloroethene (TCE)	ug/kg	5.0	-	-	LT500
Trichloroethene (TCE)	ug/kg	500	LT500	-	-
1,2-Dichloropropane	ug/kg	100	-	LT100	-
1,2-Dichloropropane	ug/kg	5.0	-	-	LT500
1,2-Dichloropropane	ug/kg	500	LT500	-	-
Bromodichloromethane	ug/kg	100	-	LT100	-
Bromodichloromethane	ug/kg	5.0	-	-	LT500
Bromodichloromethane	ug/kg	500	LT500	-	-
2-Chloroethylvinyl ether	ug/kg	100	-	LT100	-
2-Chloroethylvinyl ether	ug/kg	5.0	-	-	LT500
2-Chloroethylvinyl ether	ug/kg	500	LT500	-	-
trans-1,3-Dichloropropene	ug/kg	100	-	LT100	-
trans-1,3-Dichloropropene	ug/kg	5.0	-	-	LT500
trans-1,3-Dichloropropene	ug/kg	500	LT500	-	-
cis-1,3-Dichloropropene	ug/kg	100	-	LT100	-
cis-1,3-Dichloropropene	ug/kg	5.0	-	-	LT500
cis-1,3-Dichloropropene	ug/kg	500	LT500	-	-
1,1,2-Trichloroethane	ug/kg	100	-	LT100	-
1,1,2-Trichloroethane	ug/kg	5.0	-	-	LT500
1,1,2-Trichloroethane	ug/kg	500	LT500	-	-
Tetrachloroethene	ug/kg	100	-	LT100	-
Tetrachloroethene	ug/kg	5.0	-	-	LT500

MDL Method Detection Limit  
LT Less than.

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January 11, 1990  
PACE Project  
Number: 491214601

Dryer Ice Cream

PACE Sample Number:	805680	805690	805700
Date Collected:	12/14/89	12/14/89	12/14/89
Date Received:	12/14/89	12/14/89	12/14/89
	1214-4	1214-5	1214-6
<u>Parameter</u>	<u>MDL</u>	<u>Stockpile</u>	<u>Stockpile</u>
	6'		

ORGANIC ANALYSIS

HALOGENATED VOLATILE COMPOUNDS EPA 8010

Tetrachloroethene	ug/kg	500	LT500	-	-
Dibromochloromethane	ug/kg	100	-	LT100	-
Dibromochloromethane	ug/kg	5.0	-	-	LT500
Dibromochloromethane	ug/kg	500	LT500	-	-
Chlorobenzene	ug/kg	100	-	LT100	-
Chlorobenzene	ug/kg	5.0	-	-	LT500
Chlorobenzene	ug/kg	500	LT500	-	-
Bromoform	ug/kg	100	-	LT100	-
Bromoform	ug/kg	5.0	-	-	LT500
Bromoform	ug/kg	500	LT500	-	-
1,1,2,2-Tetrachloroethane	ug/kg	100	-	LT100	-
1,1,2,2-Tetrachloroethane	ug/kg	5.0	-	-	LT500
1,1,2,2-Tetrachloroethane	ug/kg	500	LT500	-	-
1,3-Dichlorobenzene	ug/kg	100	-	LT100	-
1,3-Dichlorobenzene	ug/kg	5.0	-	-	LT500
1,3-Dichlorobenzene	ug/kg	500	LT500	-	-
1,4-Dichlorobenzene	ug/kg	100	-	LT100	-
1,4-Dichlorobenzene	ug/kg	5.0	-	-	LT500
1,4-Dichlorobenzene	ug/kg	500	LT500	-	-
1,2-Dichlorobenzene	ug/kg	100	-	LT100	-
1,2-Dichlorobenzene	ug/kg	5.0	-	-	LT500
1,2-Dichlorobenzene	ug/kg	500	LT500	-	-
Bromochloromethane (Surrogate Recovery)		-	-	98%	95%
Bromochloromethane (Surrogate Recovery)	ug/kg		94%	-	-
1,4-Dichlorobutane (Surrogate Recovery)		-	-	93%	92%
1,4-Dichlorobutane (Surrogate Recovery)	ug/kg		97%	-	-

MDL Method Detection Limit  
LT Less than.

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PACE Project  
Number: 491214601

Dryer Ice Cream

PACE Sample Number:	805680	805690	805700
Date Collected:	12/14/89	12/14/89	12/14/89
Date Received:	12/14/89	12/14/89	12/14/89
	1214-4	1214-5	1214-6
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>6'</u> <u>Stockpile</u> <u>Stockpile</u>

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

N-Nitrosodimethylamine	ug/kg	300	ND	ND	ND
Aniline	ug/kg	300	ND	ND	ND
Bis(2-chloroethyl) ether	ug/kg	300	ND	ND	ND
1,3-Dichlorobenzene	ug/kg	300	ND	ND	ND
Benzyl Alcohol	ug/kg	300	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	300	ND	ND	ND
1,2-Dichlorobenzene	ug/kg	300	ND	ND	ND
Bis(2-chloroisopropyl) ether	ug/kg	300	ND	ND	ND
N-Nitrosodipropylamine	ug/kg	300	ND	ND	ND
Hexachloroethane	ug/kg	300	ND	ND	ND
Nitrobenzene	ug/kg	300	ND	ND	ND
Isophorone	ug/kg	300	ND	ND	ND
Bis(2-chloroethoxy)methane	ug/kg	300	ND	ND	ND
1,2,4-Trichlorobenzene	ug/kg	300	ND	ND	ND
Naphthalene	ug/kg	300	671	ND	ND
4-Chloroaniline	ug/kg	300	ND	ND	ND
Hexachlorobutadiene	ug/kg	300	ND	ND	ND
2-Methylnaphthalene	ug/kg	300	699	ND	ND
Hexachlorocyclopentadiene	ug/kg	300	ND	ND	ND
2-Chloronaphthalene	ug/kg	300	ND	ND	ND
2-Nitroaniline	ug/kg	1500	ND	ND	ND
Dimethylphthalate	ug/kg	300	ND	ND	ND
Acenaphthylene	ug/kg	300	ND	ND	ND
2,6-Dinitrotoluene	ug/kg	300	ND	ND	ND
3-Nitroaniline	ug/kg	1500	ND	ND	ND
Acenaphthene	ug/kg	300	ND	ND	ND
Dibenzofuran	ug/kg	300	ND	ND	ND
2,4-Dinitrotoluene	ug/kg	300	ND	ND	ND

MDL      Method Detection Limit  
ND      Not detected at or above the MDL.



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January 11, 1990  
PACE Project  
Number: 491214601

Dryer Ice Cream

Parameter	Units	MDL	805680	805690	805700
PACE Sample Number:			805680	805690	805700
Date Collected:			12/14/89	12/14/89	12/14/89
Date Received:			12/14/89	12/14/89	12/14/89
			1214-4	1214-5	1214-6
			6'	Stockpile	Stockpile

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Diethylphthalate	ug/kg	300	ND	ND	ND
Fluorene	ug/kg	300	ND	ND	ND
4-Nitroaniline	ug/kg	1500	ND	ND	ND
4-Chlorophenylphenylether	ug/kg	300	ND	ND	ND
N-Nitrosodiphenylamine	ug/kg	300	ND	ND	ND
1,2-Diphenylhydrazine	ug/kg	300	ND	ND	ND
4-Bromophenylphenylether	ug/kg	300	ND	ND	ND
Hexachlorobenzene	ug/kg	300	ND	ND	ND
Phenanthrene	ug/kg	300	ND	ND	ND
Anthracene	ug/kg	300	ND	ND	ND
Di-n-butylphthalate	ug/kg	300	ND	ND	ND
Fluoranthene	ug/kg	300	ND	ND	ND
Benzidine	ug/kg	1500	ND	ND	ND
Pyrene	ug/kg	300	ND	ND	ND
Butylbenzylphthalate	ug/kg	300	ND	ND	ND
Benzo(a)anthracene	ug/kg	300	ND	ND	ND
3,3'-Dichlorobenzidine	ug/kg	600	ND	ND	ND
Chrysene	ug/kg	300	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ug/kg	300	1270	ND	ND
Di-n-octylphthalate	ug/kg	300	ND	ND	ND
Benzo(b)fluoranthene	ug/kg	300	ND	ND	ND
Benzo(k)fluoranthene	ug/kg	300	ND	ND	ND
Benzo(a)pyrene	ug/kg	300	ND	ND	ND
Ideno(1,2,3-cd)pyrene	ug/kg	300	ND	ND	ND
Dibenzo(a,h)anthracene	ug/kg	300	ND	ND	ND
Benzo(g,h,i)perylene	ug/kg	300	ND	ND	ND
Phenol	ug/kg	300	ND	ND	ND
2-Chlorophenol	ug/kg	300	ND	ND	ND

MDL Method Detection Limit  
ND Not detected at or above the MDL.

Mr. Robert Henry  
Page 13

January 11, 1990  
PACE Project  
Number: 491214601

Dryer Ice Cream

PACE Sample Number:	805680	805690	805700
Date Collected:	12/14/89	12/14/89	12/14/89
Date Received:	12/14/89	12/14/89	12/14/89
	1214-4	1214-5	1214-6
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>6'</u>
			<u>Stockpile</u>
			<u>Stockpile</u>

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

2-Methylphenol	ug/kg	300	ND	ND	ND
4-Methylphenol	ug/kg	300	ND	ND	ND
2-Nitrophenol	ug/kg	300	ND	ND	ND
2,4-Dimethylphenol	ug/kg	300	ND	ND	ND
Benzoic Acid	ug/kg	1500	ND	ND	ND
2,4-Dichlorophenol	ug/kg	300	ND	ND	ND
4-Chloro-3-methylphenol	ug/kg	300	ND	ND	ND
2,4,6-Trichlorophenol	ug/kg	300	ND	ND	ND
2,4,5-Trichlorophenol	ug/kg	300	ND	ND	ND
2,4-Dinitrophenol	ug/kg	1500	ND	ND	ND
4-Nitrophenol	ug/kg	1500	ND	ND	ND
2-Methyl-4,6-dinitrophenol	ug/kg	1500	ND	ND	ND
Pentachlorophenol	ug/kg	300	ND	ND	ND
alpha-BHC	ug/kg	300	ND	ND	ND
beta-BHC	ug/kg	300	ND	ND	ND
gamma-BHC	ug/kg	300	ND	ND	ND
delta-BHC	ug/kg	300	ND	ND	ND
Heptachlor	ug/kg	300	ND	ND	ND
Aldrin	ug/kg	300	ND	ND	ND
Heptachlor Epoxide	ug/kg	300	ND	ND	ND
Endosulfan I	ug/kg	300	ND	ND	ND
4,4'-DDE	ug/kg	1500	ND	ND	ND
Dieldrin	ug/kg	300	ND	ND	ND
Endrin	ug/kg	300	ND	ND	ND
Endosulfan II	ug/kg	300	ND	ND	ND
4,4'-DDD	ug/kg	300	ND	ND	ND
Endrin Aldehyde	ug/kg	1500	ND	ND	ND
4,4'-DDT	ug/kg	300	ND	ND	ND

MDL Method Detection Limit  
ND Not detected at or above the MDL.

Mr. Robert Henry  
Page 14

January 11, 1990  
PACE Project  
Number: 491214601

Dryer Ice Cream

Parameter	Units	MDL	805680	805690	805700
PACE Sample Number:			805680	805690	805700
Date Collected:			12/14/89	12/14/89	12/14/89
Date Received:			12/14/89	12/14/89	12/14/89
			1214-4	1214-5	1214-6
			6'	Stockpile	Stockpile

ORGANIC ANALYSIS

EXTRACTABLE ORGANICS BY EPA 8270 (GC/MS)

Endosulfan Sulfate	ug/kg	1500	ND	ND	ND
Aroclor-1016	ug/kg	3000	ND	ND	ND
Aroclor-1221	ug/kg	3000	ND	ND	ND
Aroclor-1232	ug/kg	3000	ND	ND	ND
Aroclor-1242	ug/kg	3000	ND	ND	ND
Aroclor-1248	ug/kg	3000	ND	ND	ND
Aroclor-1254	ug/kg	3000	ND	ND	ND
Aroclor-1260	ug/kg	3000	ND	ND	ND
Nitrobenzene-d5 (Surrogate Recovery)			92%	91%	84%
2-Fluorobiphenyl (Surrogate Recovery)			94%	90%	94%
Terphenyl-d14 (Surrogate Recovery)			102%	95%	96%
2-Fluorophenol (Surrogate Recovery)			90%	87%	79%
Phenol-d5 (Surrogate Recovery)			87%	89%	82%
2,4,6-Tribromophenol (Surrogate Recovery)			87%	70%	76%
Date Extracted for GCMS Semi-volatiles			12/21/89	12/21/89	12/21/89

MDL Method Detection Limit  
ND Not detected at or above the MDL.

Mr. Robert Henry  
Page 15

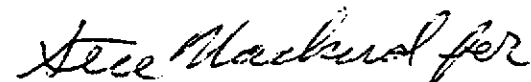
January 11, 1990  
PACE Project  
Number: 491214601

Dryer Ice Cream

The data contained in this report were obtained using EPA or other approved methodologies. All analyses were performed by me or under my direct supervision.



Stephen F. Nackord  
Director, Sampling and Analytical Services



Douglas E. Oram, Ph.D.  
Organic Chemistry Manager



REPORT OF LABORATORY ANALYSIS

Offices:
Minneapolis, Minnesota
Tampa, Florida
Coralville, Iowa
Novato, California
Leawood, Kansas
Irvine, California
Asheboro, North Carolina

PACE Laboratories, Inc.

Laboratory Report Invoice

ROUTING

Client Name: Petroleum Engineering, Inc.
11 West 9th Street

Project #: 491214601
Client #: 780631

DEO
SFN

ATTN.: Santa Rosa, CA 95401
Mr. Robert Henry

Bill to #: \_\_\_\_\_

Samples Received: December 14, 1989.

Client Project #:

Purchase Order #: # 1783

Project Name: Dryer Ice Cream

Analysis Cost \_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

Field Cost \_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

502017010 Inorganic Cost \_\_\_\_\_

502017011 Organic Cost \_\_\_\_\_

502017015 Field Cost \_\_\_\_\_

TOTAL COST \_\_\_\_\_

Invoice #: \_\_\_\_\_ Date : \_\_\_\_\_

CHAIN-OF-CUSTODY RECORD  
Analytical Request

Client Petroleum Engineering  
Address 11 W. Ninth St  
Santa Rosa CA. 95401  
Phone (707) 545-0360

Report To: Robert Henry  
Bill To: Petroleum Eng.  
P.O. # / Billing Reference # 1783  
Project Name / No. Dryer Ice Cream

Pace Client No. 780631  
Pace Project Manager TSG  
Pace Project No. 491214.601  
Requested Due Date: Std

Sampled By (PRINT):  
Donald Tokarski  
Sampler Signature Donald Tokarski Date Sampled 12-14-89

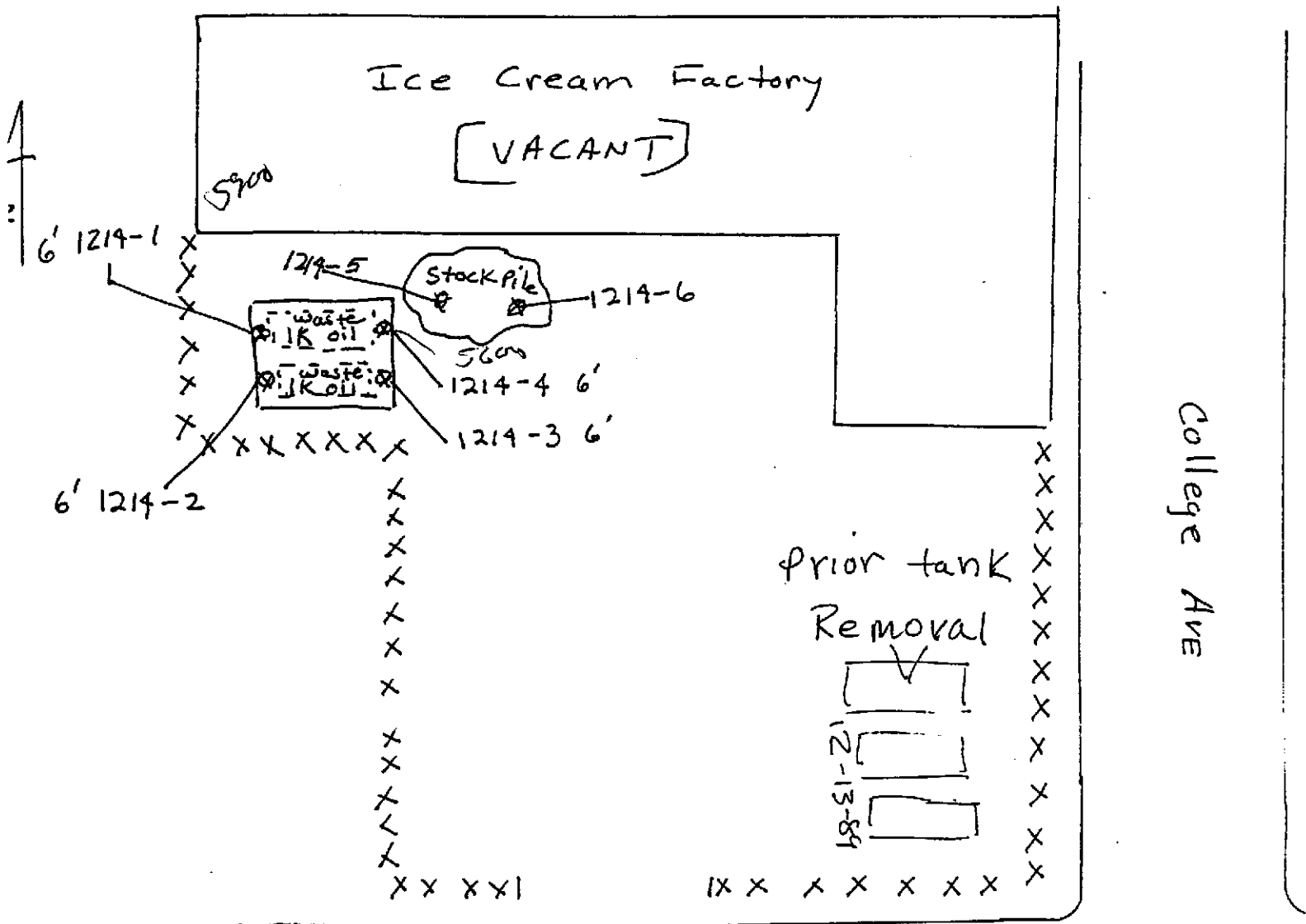
NO. OF CONTAINERS	PRESERVATIVES				ANALYSES REQUEST	REMARKS
	UNPRESERVED	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	VOA		
					<u>TPH Heavy</u> <u>TOS</u> <u>BTX+E</u> <u>8010</u> <u>8270</u> <u>Cd, Cr, Pb, Zn, Total</u>	<u>J/3</u>

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	UNPRESERVED	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	VOA	ANALYSES REQUEST	REMARKS
1	1214-1		soil	80565	1					X X X X X X	6'
2	1214-2			566	1					X X X X X X	6'
3	1214-3			567	1					X X X X X X	6'
4	1214-4			568	1					X X X X X X	6'
5	1214-5			569	1					X X X X X X	
6	1214-6		↓	80570	1					X X X X X X	stockpile
7											
8											

COOLER NOS.	BAILERS	SHIPMENT OUT/DATE	METHOD RETURNED/DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
				1-6	Donald Tokarski Pace	J. Sanderson	12/14/89	1630

Additional Comments  
 Time at site  
 1330 to 1530  
 2 hrs  
 61 miles time (35)  
 1.5 hr  
 Request Copy  
 Frank Gray  
 Fire Insp. Oakland  
 Robert Byrne  
 Dennis mut. spec  
 Haz Alameda

1-6 Donald Tokarski Pace J. Sanderson 12/14/89 1630



at site  
1330 to 1530  
2 hrs  
61 miles  
1.5 hrs  
Total 3.5 hrs

at site  
Dennis Byrne  
Haz. Mat Spec  
Alameda  
Frank Gray  
Fire Insp.  
City of Oakland  
Robert Henry  
Proj Manager  
Petroleum Eng.

6' { 1214-1 } waste oil  
 { 1214-2 } sandy soil  
 { 1214-3 } hot-gray soil  
 { 1214-4 }  
 Stockpile { 1214-5 } waste oil  
 { 1214-6 }

JAN 13 REC'D

January 11, 1990

Mr. Robert Henry  
Petroleum Engineering, Inc.  
11 West 9th Street  
Santa Rosa, CA 95401

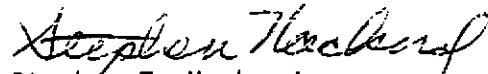
RE: PACE Project No. 491213.601  
Dreyer's Ice Cream

Dear Mr. Henry:

Enclosed is the report of laboratory analyses for samples received  
December 13, 1989.

If you have any questions concerning this report, please feel free  
to contact us.

Sincerely,



Stephen F. Nackord  
Director, Sampling and Analytical Services

Enclosures





REPORT OF LABORATORY ANALYSIS

Offices:  
 Minneapolis, Minnesota  
 Tampa, Florida  
 Coralville, Iowa  
 Novato, California  
 Leawood, Kansas  
 Irvine, California  
 Asheboro, North Carolina

Petroleum Engineering, Inc.  
 11 West 9th Street  
 Santa Rosa, CA 95401

January 11, 1990  
 PACE Project  
 Number: 491213601

Attn: Mr. Robert Henry

Dreyer's Ice Cream

Parameter	Units	MDL	805240	805250	805260
PACE Sample Number:			805240	805250	805260
Date Collected:			12/13/89	12/13/89	12/13/89
Date Received:			12/13/89	12/13/89	12/13/89
Parameter	Units	MDL	1213-1	1213-2	1213-3

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	-	-
Purgeable Fuels, as Gasoline (EPA 8015)	mg/kg wet	1.0	30	40	-
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	-	-
Benzene	mg/kg wet	0.005	LT 0.038	LT 0.038	-
Ethylbenzene	mg/kg wet	0.005	LT 0.038	0.15	-
Toluene	mg/kg wet	0.005	0.043	0.045	-
Xylenes, Total	mg/kg wet	0.005	0.16	0.16	-

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel	mg/kg	10	-	-	17
Sonication Extraction, Date Started			-	-	12/21/89

PURGEABLE AROMATIC COMPOUNDS, EPA 8020

Benzene	mg/kg wet	0.005	-	-	LT 10
Ethylbenzene	mg/kg wet	0.005	-	-	LT 10
Toluene	mg/kg wet	0.005	-	-	LT 10
Xylenes, Total	mg/kg wet	0.005	-	-	LT 10

MDL Method Detection Limit  
 LT Less than.

Mr. Robert Henry  
Page 2

January 11, 1990  
PACE Project  
Number: 491213601

Dreyer's Ice Cream

Parameter	Units	MDL	805270	805280	805290
PACE Sample Number:			805270	805280	805290
Date Collected:			12/13/89	12/13/89	12/13/89
Date Received:			12/13/89	12/13/89	12/13/89
Parameter	Units	MDL	1213-4	1213-5	1213-6

ORGANIC ANALYSIS

EXTRACTABLE FUELS EPA 3550/8015

Extractable Fuels, as Diesel	mg/kg	10	350	23	46
Sonication Extraction, Date Started			12/21/89	12/21/89	12/21/89

PURGEABLE AROMATIC COMPOUNDS, EPA 8020

Benzene	mg/kg wet	0.005	LT 20	LT 20	LT 2.5
Ethylbenzene	mg/kg wet	0.005	LT 20	LT 20	LT 2.5
Toluene	mg/kg wet	0.005	LT 20	LT 20	LT 2.5
Xylenes, Total	mg/kg wet	0.005	38	LT 20	LT 2.5

MDL Method Detection Limit  
LT Less than.

Mr. Robert Henry  
Page 3

January 11, 1990  
PACE Project  
Number: 491213601

Dreyer's Ice Cream

PACE Sample Number:		805300	805310	
Date Collected:		12/13/89	12/13/89	
Date Received:		12/13/89	12/13/89	
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>1213-7</u>	<u>1213-8</u>

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):

Purgeable Fuels, as Gasoline (EPA 8015)	mg/kg wet	1.0	320	190
PURGEABLE AROMATICS (BTXE BY EPA 8020):				
Benzene	mg/kg wet	0.005	1.3	0.046
Ethylbenzene	mg/kg wet	0.005	5.1	2.5
Toluene	mg/kg wet	0.005	4.1	0.32
Xylenes, Total	mg/kg wet	0.005	21	9.5

MDL Method Detection Limit

The data contained in this report were obtained using EPA or other approved methodologies. All analyses were performed by me or under my direct supervision.

*Steve Blackwell for:*

Douglas E. Oram, Ph.D.  
Organic Chemistry Manager

CHAIN-OF-CUSTODY RECORD  
Analytical Request

Client Petroleum Engineering  
Address 11 W. Ninth St  
Santa Rosa CA. 95401  
Phone (707) 545-0360

Report To: Rob Henry  
Bill To: Petroleum Engineering  
P.O. # / Billing Reference \_\_\_\_\_  
Project Name / No. DRYERS Ice Cream

Pace Client No. 780631  
Pace Project Manager TSG  
Pace Project No. 991213.601  
\*Requested Due Date: 5td

Sampled By (PRINT): DONALD Tokarski  
Sampler Signature Donald Tokarski Date Sampled 12-13/89

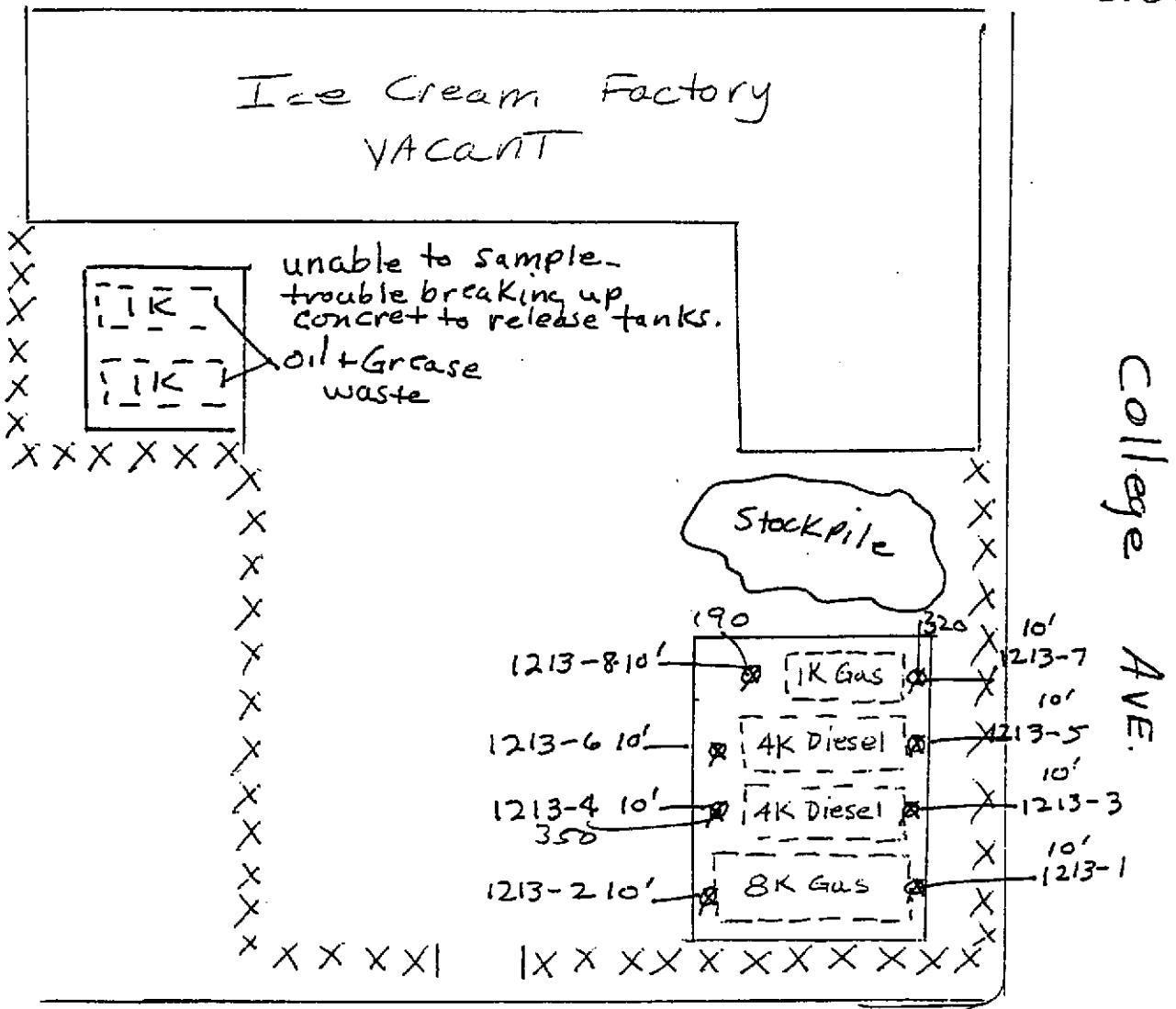
ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PAGE NO.	NO. OF CONTAINERS	PRESERVATIVES				ANALYSES REQUEST		REMARKS
						UNPRESERVED	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	VOA	TPH	BTX	
1	1213-1		Soil	80524	1					X		
2	1213-2		↓	525	1					X		
3	1213-3		↓	526	1					X		
4	1213-4		↓	527	1					X		
5	1213-5		↓	528	1					X		
6	1213-6		↓	529	1					X		
7	1213-7		↓	530	1					X		
8	1213-8		↓	80531	1					X		

COOLER NOS.	BAILERS	SHIPMENT METHOD	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
		OUT/DATE RETURNED/DATE	1-8	Donald Tokarski Pace	J. Anderson	12/13/89	5:00pm

Additional Comments  
Requested Lab Results:  
City of Oakland  
Fire Inspector  
FRANK Gray  
Alameda County  
Dennis Byrne  
HAZ. Mat. Spec.

Petroleum Eng.  
 Dryers Ice Cream  
 Factory

491213.601



Chabot Rd.

at site  
 10AM to 3:30PM  
 5.5 hrs  
 Travel time  
 1.5 hrs  
 60 miles

at site  
 Dennis Byrne  
 HAZ. Mat. Spec.  
 Alameda  
 Frank Gray  
 Fire Insp.  
 City of Oakland  
 Rob Henry  
 Proj. Manager  
 Petroleum Eng.

Gas { 1213-1 10'  
 1213-2  
 Diesel { 1213-3  
 1213-4 350  
 1213-5  
 1213-6  
 Gas { 1213-7  
 1213-8  
 Light gray clay  
 like soil mixed  
 gravel

**ANAMETRIX INC**

Environmental & Analytical Chemistry  
1961 Concourse Drive, Suite E, San Jose, CA 95131  
(408) 432-8192 • Fax (408) 432-8198

**REPORT**

Terry Carter  
Aqua Terra Technologies  
2950 Buskirk Avenue  
Suite 120  
Walnut Creek, CA 94596

February 27, 1990  
Anamatrix W.O.#: 9002221  
Date Received : 02/22/90  
Project Number#: 9126

Dear Mr. Carter:

Your samples have been received for analysis. The REPORT SUMMARY shows which of the following reports have been included: RESULTS.

NOTE: Amounts reported are net values, i.e. corrected for method blank contamination.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

A handwritten signature in cursive script that reads "Burt Sutherland".

Burt Sutherland  
Laboratory Director

BWS/dm

REPORT SUMMARY  
ANAMETRIX, INC. (408) 432-8192

Client : Aqua Terra Technologies  
 Address : 2950 Buskirk Avenue  
           Suite 120  
 City : Walnut Creek, CA 94596  
 Attn. : Terry Carter

Anamatrix W.O.#: 9002221  
 Date Received : 02/22/90  
 Purchase Order#: N/A  
 Project No. : 9126  
 Date Released : 02/27/90

Anamatrix I.D.	Sample I.D.	Matrix	Date Sampled	Method	Date Extract	Date Analyzed	Inst I.D.
----------------	-------------	--------	--------------	--------	--------------	---------------	-----------

RESULTS

9002221-01	PIT A	SOIL	02/14/90	503E	02/22/90	02/22/90	N/A
9002221-01	PIT A	SOIL	02/14/90	503D	02/22/90	02/22/90	N/A

ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 PIT A  
 Matrix : SOIL  
 Date sampled : 02/14/90  
 Date anl.TPHg : N/A  
 Date ext.TOGD : 02/22/90  
 Date anl.TOGD : 02/22/90

Anamatrix I.D. : 9002221-01  
 Analyst : G9  
 Supervisor : AP  
 Date released : 02/27/90  
 Date ext. TOGE : 02/22/90  
 Date anl. TOGE : 02/22/90

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
	Total Oil & Grease (503E)	30000	120000
	Total Oil & Grease (503D)	30000	220000

TOG(E) - Total Oil & Grease is determined by Standard Method 503E.  
 TOG(D) - Total Oil & Grease is determined by Standard Method 503D.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.



**ANAMETRIX INC**

Environmental & Analytical Chem  
1961 Concourse Drive, Suite 120  
9081 482-3192 • Fax: 908-482-1147

**REPORT**

Terry Carter  
Aqua Terra Technologies  
2950 Buskirk Avenue  
Suite 120  
Walnut Creek, CA 94596

February 15, 1990  
Anamatrix W.O.#: 9002070  
Date Received : 02/07/90  
Project Number : 9126

Dear Mr. Carter:

Your samples have been received for analysis. The REPORT SUMMARY lists your sample identifications and the analytical methods you requested. The following sections are included in this report: RESULTS and QUALITY ASSURANCE.

- NOTE: 1) Amounts reported are net values, i.e. corrected for method blank contamination.  
2) The following footnotes are applicable to Methods 624/8240:
- \* A Method 624 priority pollutant compound ( Federal Register, 10/26/84 )
  - \*\* A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
  - # An additional compound analyzed for by Anamatrix, Inc.
  - ND: Not detected at or above the practical quantitation limit for the method.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

ANAMETRIX, INC.

Sarah Schoen, Ph.D.  
Laboratory Manager

SRS/dmt

**ANAMETRIX INC**

Environmental & Analytical Chemists  
1964 Concourse Drive, Suite E, San Jose, CA 95128  
(408) 432-8192 • Fax (408) 432-8498

**REPORT**

Terry Carter  
Aqua Terra Technologies  
2950 Buskirk Avenue  
Suite 120  
Walnut Creek, CA 94596

February 15, 1990  
Anamatrix W.O.#: 9002070  
Date Received : 02/07/90  
Project Number : 9126

Dear Mr. Carter:

Your samples have been received for analysis. The REPORT SUMMARY lists your sample identifications and the analytical methods you requested. The following sections are included in this report: RESULTS and QUALITY ASSURANCE.

- NOTE: 1) Amounts reported are net values, i.e. corrected for method blank contamination.  
2) The following footnotes are applicable to Methods 624/8240:
- \* A Method 624 priority pollutant compound ( Federal Register, 10/26/84 )
  - \*\* A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
  - # An additional compound analyzed for by Anamatrix, Inc.
- ND: Not detected at or above the practical quantitation limit for the method.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

ANAMETRIX, INC.

Sarah Schoen, Ph.D.  
Laboratory Manager

SRS/dmt

REPORT SUMMARY  
ANAMETRIX, INC. (408) 432-8192

Client : Aqua Terra Technologies  
 Address : 2950 Buskirk Avenue  
           Suite 120  
 City : Walnut Creek, CA 94596  
 Attn. : Terry Carter

Anamatrix W.O.#: 9002070  
 Date Received : 02/07/90  
 Purchase Order#: N/A  
 Project No. : 9126  
 Date Released : 02/15/90

Anamatrix I.D.	Sample I.D.	Matrix	Date Sampled	Method	Date Extract	Date Analyzed	Inst I.D.
----------------	-------------	--------	--------------	--------	--------------	---------------	-----------

RESULTS

9002070-01	PIT 1	SOIL	02/06/90	8240		02/14/90	F1
9002070-02	PIT 2	SOIL	02/06/90	8240		02/14/90	F1
9002070-03	PIT 3	SOIL	02/06/90	8240		02/14/90	F1
9002070-04	A 25%	SOIL	02/06/90	8240		02/14/90	F1
9002070-05	B 25%	SOIL	02/06/90	8240		02/14/90	F1
9002070-06	C 25%	SOIL	02/06/90	8240		02/14/90	F1
9002070-07	D 25%	SOIL	02/06/90	8240		02/14/90	F1

QUALITY ASSURANCE (QA)

1CB0214V00	METHOD BLANK	SOIL	N/A	8240		02/14/90	F1
9002070-03	PIT 3	SOIL	02/06/90	SPIKE		02/14/90	F1

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240

ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 PIT 1  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date analyzed: 02/14/90  
 Dilut. factor: NONE

Anamatrix I.D. : 9002070-01  
 Analyst :  
 Supervisor : <sup>WJ</sup> PG  
 Date released : 02/15/90  
 Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	ND
75-01-4	* Vinyl Chloride	10	ND
74-83-9	* Bromomethane	10	ND
75-00-3	* Chloroethane	10	ND
75-69-4	* Trichlorofluoromethane	5	ND
75-35-4	* 1,1-Dichloroethene	5	ND
76-13-1	# Trichlorotrifluoroethane	5	ND
67-64-1	**Acetone	20	ND
75-15-0	**Carbondisulfide	5	ND
75-09-2	* Methylene Chloride	5	ND
156-60-5	* Trans-1,2-Dichloroethene	5	ND
75-34-3	* 1,1-Dichloroethane	5	ND
78-93-3	**2-Butanone	20	ND
156-59-2	* Cis-1,2-Dichloroethene	5	ND
67-66-3	* Chloroform	5	ND
71-55-6	* 1,1,1-Trichloroethane	5	ND
56-23-5	* Carbon Tetrachloride	5	ND
71-43-2	* Benzene	5	ND
107-06-2	* 1,2-Dichloroethane	5	ND
79-01-6	* Trichloroethene	5	ND
78-87-5	* 1,2-Dichloropropane	5	ND
75-27-4	* Bromodichloromethane	5	ND
110-75-8	* 2-Chloroethylvinylether	5	ND
108-05-4	**Vinyl Acetate	10	ND
10061-02-6	* Trans-1,3-Dichloropropene	5	ND
108-10-1	**4-Methyl-2-Pentanone	10	ND
108-88-3	* Toluene	5	ND
10061-01-5	* cis-1,3-Dichloropropene	5	ND
79-00-5	* 1,1,2-Trichloroethane	5	ND
127-18-4	* Tetrachloroethene	5	ND
591-78-6	**2-Hexanone	10	ND
124-48-1	* Dibromochloromethane	5	ND
108-90-7	* Chlorobenzene	5	ND
100-41-4	* Ethylbenzene	5	ND
1330-20-7	**Total Xylenes	5	ND
100-42-5	**Styrene	5	ND
75-25-2	* Bromoform	5	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	5	ND
541-73-1	* 1,3-Dichlorobenzene	5	ND
106-46-7	* 1,4-Dichlorobenzene	5	ND
95-50-1	* 1,2-Dichlorobenzene	5	ND
CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	75-130%	93%
2037-26-5	Toluene-d8	74-121%	103%
460-00-4	p-Bromofluorobenzene	70-124%	102%

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240

ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 PIT 2  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date analyzed: 02/14/90  
 Dilut. factor: NONE

Anamatrix I.D. : 9002070-02  
 Analyst : LW  
 Supervisor : PG  
 Date released : 02/15/90  
 Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	ND
75-01-4	* Vinyl Chloride	10	ND
74-83-9	* Bromomethane	10	ND
75-00-3	* Chloroethane	10	ND
75-69-4	* Trichlorofluoromethane	5	ND
75-35-4	* 1,1-Dichloroethene	5	ND
76-13-1	# Trichlorotrifluoroethane	5	ND
67-64-1	**Acetone	20	ND
75-15-0	**Carbondisulfide	5	ND
75-09-2	* Methylene Chloride	5	ND
156-60-5	* Trans-1,2-Dichloroethene	5	ND
75-34-3	* 1,1-Dichloroethane	5	ND
78-93-3	**2-Butanone	20	ND
156-59-2	* Cis-1,2-Dichloroethene	5	ND
67-66-3	* Chloroform	5	ND
71-55-6	* 1,1,1-Trichloroethane	5	ND
56-23-5	* Carbon Tetrachloride	5	ND
71-43-2	* Benzene	5	ND
107-06-2	* 1,2-Dichloroethane	5	ND
79-01-6	* Trichloroethene	5	ND
78-87-5	* 1,2-Dichloropropane	5	ND
75-27-4	* Bromodichloromethane	5	ND
110-75-8	* 2-Chloroethylvinylether	5	ND
108-05-4	**Vinyl Acetate	10	ND
10061-02-6	* Trans-1,3-Dichloropropene	5	ND
108-10-1	**4-Methyl-2-Pentanone	10	ND
108-88-3	* Toluene	5	ND
10061-01-5	* cis-1,3-Dichloropropene	5	ND
79-00-5	* 1,1,2-Trichloroethane	5	ND
127-18-4	* Tetrachloroethene	5	ND
591-78-6	**2-Hexanone	10	ND
124-48-1	* Dibromochloromethane	5	ND
108-90-7	* Chlorobenzene	5	ND
100-41-4	* Ethylbenzene	5	ND
1330-20-7	**Total Xylenes	5	ND
100-42-5	**Styrene	5	ND
75-25-2	* Bromoform	5	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	5	ND
541-73-1	* 1,3-Dichlorobenzene	5	ND
106-46-7	* 1,4-Dichlorobenzene	5	ND
95-50-1	* 1,2-Dichlorobenzene	5	ND
CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	75-130%	98%
2037-26-5	Toluene-d8	74-121%	98%
460-00-4	p-Bromofluorobenzene	70-124%	98%

## ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240

ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 PIT 3  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date analyzed: 02/14/90  
 Dilut. factor: NONE

Anamatrix I.D. : 9002070-03  
 Analyst : *lw*  
 Supervisor : *PG*  
 Date released : 02/15/90  
 Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	ND
75-01-4	* Vinyl Chloride	10	ND
74-83-9	* Bromomethane	10	ND
75-00-3	* Chloroethane	10	ND
75-69-4	* Trichlorofluoromethane	5	ND
75-35-4	* 1,1-Dichloroethene	5	ND
76-13-1	# Trichlorotrifluoroethane	5	ND
67-64-1	**Acetone	20	ND
75-15-0	**Carbondisulfide	5	ND
75-09-2	* Methylene Chloride	5	ND
156-60-5	* Trans-1,2-Dichloroethene	5	ND
75-34-3	* 1,1-Dichloroethane	5	ND
78-93-3	**2-Butanone	20	ND
156-59-2	* Cis-1,2-Dichloroethene	5	ND
67-66-3	* Chloroform	5	ND
71-55-6	* 1,1,1-Trichloroethane	5	ND
56-23-5	* Carbon Tetrachloride	5	ND
71-43-2	* Benzene	5	ND
107-06-2	* 1,2-Dichloroethane	5	ND
79-01-6	* Trichloroethene	5	ND
78-87-5	* 1,2-Dichloropropane	5	ND
75-27-4	* Bromodichloromethane	5	ND
110-75-8	* 2-Chloroethylvinylether	5	ND
108-05-4	**Vinyl Acetate	10	ND
10061-02-6	* Trans-1,3-Dichloropropene	5	ND
108-10-1	**4-Methyl-2-Pentanone	10	ND
108-88-3	* Toluene	5	ND
10061-01-5	* cis-1,3-Dichloropropene	5	ND
79-00-5	* 1,1,2-Trichloroethane	5	ND
127-18-4	* Tetrachloroethene	5	ND
591-78-6	**2-Hexanone	10	ND
124-48-1	* Dibromochloromethane	5	ND
108-90-7	* Chlorobenzene	5	ND
100-41-4	* Ethylbenzene	5	ND
1330-20-7	**Total Xylenes	5	ND
100-42-5	**Styrene	5	ND
75-25-2	* Bromoform	5	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	5	ND
541-73-1	* 1,3-Dichlorobenzene	5	ND
106-46-7	* 1,4-Dichlorobenzene	5	ND
95-50-1	* 1,2-Dichlorobenzene	5	ND
CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	75-130%	95%
2037-26-5	Toluene-d8	74-121%	97%
460-00-4	p-Bromofluorobenzene	70-124%	99%

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240

ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 A 25%  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date analyzed: 02/14/90  
 Dilut. factor: NONE

Anamatrix I.D. : 9002070-04  
 Analyst : LW  
 Supervisor : PG  
 Date released : 02/15/90  
 Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	ND
75-01-4	* Vinyl Chloride	10	ND
74-83-9	* Bromomethane	10	ND
75-00-3	* Chloroethane	10	ND
75-69-4	* Trichlorofluoromethane	5	ND
75-35-4	* 1,1-Dichloroethene	5	ND
76-13-1	# Trichlorotrifluoroethane	5	ND
67-64-1	**Acetone	20	170
75-15-0	**Carbondisulfide	5	ND
75-09-2	* Methylene Chloride	5	ND
156-60-5	* Trans-1,2-Dichloroethene	5	ND
75-34-3	* 1,1-Dichloroethane	5	ND
78-93-3	**2-Butanone	20	43
156-59-2	* Cis-1,2-Dichloroethene	5	ND
67-66-3	* Chloroform	5	ND
71-55-6	* 1,1,1-Trichloroethane	5	ND
56-23-5	* Carbon Tetrachloride	5	ND
71-43-2	* Benzene	5	ND
107-06-2	* 1,2-Dichloroethane	5	ND
79-01-6	* Trichloroethene	5	ND
78-87-5	* 1,2-Dichloropropane	5	ND
75-27-4	* Bromodichloromethane	5	ND
110-75-8	* 2-Chloroethylvinylether	5	ND
108-05-4	**Vinyl Acetate	10	ND
10061-02-6	* Trans-1,3-Dichloropropene	5	ND
108-10-1	**4-Methyl-2-Pentanone	10	ND
108-88-3	* Toluene	5	ND
10061-01-5	* cis-1,3-Dichloropropene	5	ND
79-00-5	* 1,1,2-Trichloroethane	5	ND
127-18-4	* Tetrachloroethene	5	ND
591-78-6	**2-Hexanone	10	ND
124-48-1	* Dibromochloromethane	5	ND
108-90-7	* Chlorobenzene	5	ND
100-41-4	* Ethylbenzene	5	ND
1330-20-7	**Total Xylenes	5	ND
100-42-5	**Styrene	5	ND
75-25-2	* Bromoform	5	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	5	ND
541-73-1	* 1,3-Dichlorobenzene	5	ND
106-46-7	* 1,4-Dichlorobenzene	5	ND
95-50-1	* 1,2-Dichlorobenzene	5	ND
CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	75-130%	98%
2037-26-5	Toluene-d8	74-121%	100%
460-00-4	p-Bromofluorobenzene	70-124%	93%

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240  
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 B 25%  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date analyzed: 02/14/90  
 Dilut. factor: NONE

Anametrix I.D. : 9002070-05  
 Analyst : *W*  
 Supervisor : *PG*  
 Date released : 02/15/90  
 Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	ND
75-01-4	* Vinyl Chloride	10	ND
74-83-9	* Bromomethane	10	ND
75-00-3	* Chloroethane	10	ND
75-69-4	* Trichlorofluoromethane	5	ND
75-35-4	* 1,1-Dichloroethene	5	ND
76-13-1	# Trichlorotrifluoroethane	5	ND
67-64-1	**Acetone	20	ND
75-15-0	**Carbondisulfide	5	ND
75-09-2	* Methylene Chloride	5	ND
156-60-5	* Trans-1,2-Dichloroethene	5	ND
75-34-3	* 1,1-Dichloroethane	5	ND
78-93-3	**2-Butanone	20	ND
156-59-2	* Cis-1,2-Dichloroethene	5	ND
67-66-3	* Chloroform	5	ND
71-55-6	* 1,1,1-Trichloroethane	5	ND
56-23-5	* Carbon Tetrachloride	5	ND
71-43-2	* Benzene	5	ND
107-06-2	* 1,2-Dichloroethane	5	ND
79-01-6	* Trichloroethene	5	ND
78-87-5	* 1,2-Dichloropropane	5	ND
75-27-4	* Bromodichloromethane	5	ND
110-75-8	* 2-Chloroethylvinylether	5	ND
108-05-4	**Vinyl Acetate	10	ND
10061-02-6	* Trans-1,3-Dichloropropene	5	ND
108-10-1	**4-Methyl-2-Pentanone	10	ND
108-88-3	* Toluene	5	ND
10061-01-5	* cis-1,3-Dichloropropene	5	ND
79-00-5	* 1,1,2-Trichloroethane	5	ND
127-18-4	* Tetrachloroethene	5	ND
591-78-6	**2-Hexanone	10	ND
124-48-1	* Dibromochloromethane	5	ND
108-90-7	* Chlorobenzene	5	ND
100-41-4	* Ethylbenzene	5	ND
1330-20-7	**Total Xylenes	5	ND
100-42-5	**Styrene	5	ND
75-25-2	* Bromoform	5	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	5	ND
541-73-1	* 1,3-Dichlorobenzene	5	ND
106-46-7	* 1,4-Dichlorobenzene	5	ND
95-50-1	* 1,2-Dichlorobenzene	5	ND
CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	75-130%	98%
2037-26-5	Toluene-d8	74-121%	100%
460-00-4	p-Bromofluorobenzene	70-124%	102%



ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240  
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 C 25%  
Matrix : SOIL  
Date sampled : 02/06/90  
Date analyzed: 02/14/90  
Dilut. factor: NONE

Anamatrix I.D. : 9002070-06  
Analyst : LW  
Supervisor : PG  
Date released : 02/15/90  
Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	ND
75-01-4	* Vinyl Chloride	10	ND
74-83-9	* Bromomethane	10	ND
75-00-3	* Chloroethane	10	ND
75-69-4	* Trichlorofluoromethane	5	ND
75-35-4	* 1,1-Dichloroethene	5	ND
76-13-1	# Trichlorotrifluoroethane	5	ND
67-64-1	**Acetone	20	ND
75-15-0	**Carbondisulfide	5	ND
75-09-2	* Methylene Chloride	5	ND
156-60-5	* Trans-1,2-Dichloroethene	5	ND
75-34-3	* 1,1-Dichloroethane	5	ND
78-93-3	**2-Butanone	20	ND
156-59-2	* Cis-1,2-Dichloroethene	5	ND
67-66-3	* Chloroform	5	ND
71-55-6	* 1,1,1-Trichloroethane	5	ND
56-23-5	* Carbon Tetrachloride	5	ND
71-43-2	* Benzene	5	ND
107-06-2	* 1,2-Dichloroethane	5	ND
79-01-6	* Trichloroethene	5	ND
78-87-5	* 1,2-Dichloropropane	5	ND
75-27-4	* Bromodichloromethane	5	ND
110-75-8	* 2-Chloroethylvinylether	5	ND
108-05-4	**Vinyl Acetate	10	ND
10061-02-6	* Trans-1,3-Dichloropropene	5	ND
108-10-1	**4-Methyl-2-Pentanone	10	ND
108-88-3	* Toluene	5	ND
10061-01-5	* cis-1,3-Dichloropropene	5	ND
79-00-5	* 1,1,2-Trichloroethane	5	ND
127-18-4	* Tetrachloroethene	5	ND
591-78-6	**2-Hexanone	10	ND
124-48-1	* Dibromochloromethane	5	ND
108-90-7	* Chlorobenzene	5	ND
100-41-4	* Ethylbenzene	5	ND
1330-20-7	**Total Xylenes	5	ND
100-42-5	**Styrene	5	ND
75-25-2	* Bromoform	5	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	5	ND
541-73-1	* 1,3-Dichlorobenzene	5	ND
106-46-7	* 1,4-Dichlorobenzene	5	ND
95-50-1	* 1,2-Dichlorobenzene	5	ND
CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	75-130%	102%
2037-26-5	Toluene-d8	74-121%	104%
460-00-4	p-Bromofluorobenzene	70-124%	100%

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240

ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 D 25%  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date analyzed: 02/14/90  
 Dilut. factor: 10

Anametrix I.D. : 9002070-07  
 Analyst : LW  
 Supervisor : PG  
 Date released : 02/15/90  
 Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	100	ND
75-01-4	* Vinyl Chloride	100	ND
74-83-9	* Bromomethane	100	ND
75-00-3	* Chloroethane	100	ND
75-69-4	* Trichlorofluoromethane	50	ND
75-35-4	* 1,1-Dichloroethene	50	ND
76-13-1	# Trichlorotrifluoroethane	50	ND
67-64-1	**Acetone	200	ND
75-15-0	**Carbondisulfide	50	ND
75-09-2	* Methylene Chloride	50	ND
156-60-5	* Trans-1,2-Dichloroethene	50	ND
75-34-3	* 1,1-Dichloroethane	50	ND
78-93-3	**2-Butanone	200	ND
156-59-2	* Cis-1,2-Dichloroethene	50	ND
67-66-3	* Chloroform	50	ND
71-55-6	* 1,1,1-Trichloroethane	50	ND
56-23-5	* Carbon Tetrachloride	50	ND
71-43-2	* Benzene	50	ND
107-06-2	* 1,2-Dichloroethane	50	ND
79-01-6	* Trichloroethene	50	ND
78-87-5	* 1,2-Dichloropropane	50	ND
75-27-4	* Bromodichloromethane	50	ND
110-75-8	* 2-Chloroethylvinylether	50	ND
108-05-4	**Vinyl Acetate	100	ND
10061-02-6	* Trans-1,3-Dichloropropene	50	ND
108-10-1	**4-Methyl-2-Pentanone	100	ND
108-88-3	* Toluene	50	ND
10061-01-5	* cis-1,3-Dichloropropene	50	ND
79-00-5	* 1,1,2-Trichloroethane	50	ND
127-18-4	* Tetrachloroethene	50	ND
591-78-6	**2-Hexanone	100	ND
124-48-1	* Dibromochloromethane	50	ND
108-90-7	* Chlorobenzene	50	ND
100-41-4	* Ethylbenzene	50	ND
1330-20-7	**Total Xylenes	50	ND
100-42-5	**Styrene	50	ND
75-25-2	* Bromoform	50	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	50	ND
541-73-1	* 1,3-Dichlorobenzene	50	ND
106-46-7	* 1,4-Dichlorobenzene	50	ND
95-50-1	* 1,2-Dichlorobenzene	50	ND
CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	75-130%	96%
2037-26-5	Toluene-d8	74-121%	100%
460-00-4	p-Bromofluorobenzene	70-124%	101%

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240

ANAMETRIX, INC. (408) 432-8192

Sample I.D. : METHOD BLANK Anamatrix I.D. : 1CB0214V00  
 Matrix : SOIL Analyst : *iw*  
 Date sampled : N/A Supervisor : PG  
 Date analyzed: 02/14/90 Date released : 02/15/90  
 Dilut. factor: NONE Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	ND
75-01-4	* Vinyl Chloride	10	ND
74-83-9	* Bromomethane	10	ND
75-00-3	* Chloroethane	10	ND
75-69-4	* Trichlorofluoromethane	5	ND
75-35-4	* 1,1-Dichloroethene	5	ND
76-13-1	# Trichlorotrifluoroethane	5	ND
67-64-1	**Acetone	20	ND
75-15-0	**Carbondisulfide	5	ND
75-09-2	* Methylene Chloride	5	ND
156-60-5	* Trans-1,2-Dichloroethene	5	ND
75-34-3	* 1,1-Dichloroethane	5	ND
78-93-3	**2-Butanone	20	ND
156-59-2	* Cis-1,2-Dichloroethene	5	ND
67-66-3	* Chloroform	5	ND
71-55-6	* 1,1,1-Trichloroethane	5	ND
56-23-5	* Carbon Tetrachloride	5	ND
71-43-2	* Benzene	5	ND
107-06-2	* 1,2-Dichloroethane	5	ND
79-01-6	* Trichloroethene	5	ND
78-87-5	* 1,2-Dichloropropane	5	ND
75-27-4	* Bromodichloromethane	5	ND
110-75-8	* 2-Chloroethylvinylether	5	ND
108-05-4	**Vinyl Acetate	10	ND
10061-02-6	* Trans-1,3-Dichloropropene	5	ND
108-10-1	**4-Methyl-2-Pentanone	10	ND
108-88-3	* Toluene	5	ND
10061-01-5	* cis-1,3-Dichloropropene	5	ND
79-00-5	* 1,1,2-Trichloroethane	5	ND
127-18-4	* Tetrachloroethene	5	ND
591-78-6	**2-Hexanone	10	ND
124-48-1	* Dibromochloromethane	5	ND
108-90-7	* Chlorobenzene	5	ND
100-41-4	* Ethylbenzene	5	ND
1330-20-7	**Total Xylenes	5	ND
100-42-5	**Styrene	5	ND
75-25-2	* Bromoform	5	ND
79-34-5	* 1,1,2,2-Tetrachloroethane	5	ND
541-73-1	* 1,3-Dichlorobenzene	5	ND
106-46-7	* 1,4-Dichlorobenzene	5	ND
95-50-1	* 1,2-Dichlorobenzene	5	ND
CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	75-130%	99%
2037-26-5	Toluene-d8	74-121%	101%
460-00-4	p-Bromofluorobenzene	70-124%	100%

CLP VOLATILE MATRIX SPIKE REPORT -- EPA METHOD 8240  
 ANAMETRIX, INC. (408) 629-1132

Sample I.D. : 9126 PIT 3  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date analyzed : 02/14/90

Anamatrix I.D. : 9002070-03  
 Analyst : SW  
 Supervisor : PG  
 Date released : 02/15/90  
 Instrument I.D. : F1

COMPOUND	SPIKE AMT. (UG/KG)	9002070 MS (UG/KG)	%REC MS	9002070 MSD (UG/KG)	%REC MSD	RPD	%REC LIMITS*
1,1-DICHLOROETHENE	50	58	116%	56	112%	-4%	43-161%
FREON 113	50	59	118%	51	102%	-15%	41-180%
METHYLENE CHLORIDE	50	45	90%	45	90%	0%	41-162%
CHLOROFORM	50	48	96%	52	104%	8%	60-158%
1,1,1-TRICHLOROETHANE	50	54	108%	58	116%	7%	48-152%
BENZENE	50	60	120%	64	128%	6%	66-141%
1,2-DICHLOROETHANE	50	54	108%	62	124%	14%	57-144%
TRICHLOROETHENE	50	50	100%	55	110%	10%	58-151%
4-METHYL-2-PENTANONE	50	47	94%	60	120%	24%	34-198%
TOLUENE	50	57	114%	59	118%	3%	40-158%
TETRACHLOROETHENE	50	58	116%	61	122%	5%	57-156%
CHLOROBENZENE	50	54	108%	58	116%	7%	68-143%
1,2-DICHLOROBENZENE	50	50	100%	50	100%	0%	49-161%

\* Limits established by Anamatrix, Inc.

REPORT SUMMARY  
ANAMETRIX, INC. (408) 432-8192

Client : Aqua Terra Technologies  
 Address : 2950 Buskirk Avenue  
           Suite 120  
 City : Walnut Creek, CA 94596  
 Attn. : Terry Carter

Anamatrix W.O.#: 0102070  
 Date Received : 02/07/90  
 Purchase Order#: N/A  
 Project No. : 9126  
 Date Released : 02/15/90

Anamatrix I.D.	Sample I.D.	Matrix	Date Sampled	Method	Date Extract	Date Analyzed	Inst I.D.
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RESULTS

9002070-01	PIT 1	SOIL	02/06/90	TPH	02/09/90	02/12/90	N/A
9002070-02	PIT 2	SOIL	02/06/90	TPH	02/09/90	02/12/90	N/A
9002070-03	PIT 3	SOIL	02/06/90	TPH	02/09/90	02/12/90	N/A
9002070-04	A 25%	SOIL	02/06/90	TPH	02/09/90	02/12/90	N/A
9002070-05	B 25%	SOIL	02/06/90	TPH	02/09/90	02/12/90	N/A
9002070-06	C 25%	SOIL	02/06/90	TPH	02/09/90	02/12/90	N/A
9002070-07	D 25%	SOIL	02/06/90	TPH	02/09/90	02/12/90	N/A
9002070-01	PIT 1	SOIL	02/06/90	T-22		02/09/90	AA1/
9002070-02	PIT 2	SOIL	02/06/90	T-22		02/09/90	AA1/
9002070-03	PIT 3	SOIL	02/06/90	T-22		02/09/90	AA1/
9002070-04	A 25%	SOIL	02/06/90	T-22		02/09/90	AA1/
9002070-05	B 25%	SOIL	02/06/90	T-22		02/09/90	AA1/
9002070-06	C 25%	SOIL	02/06/90	T-22		02/09/90	AA1/
9002070-07	D 25%	SOIL	02/06/90	T-22		02/09/90	AA1/

QUALITY ASSURANCE (QA)

9002070-05	B 25%	SOIL	02/06/90	SPIKE	02/09/90	02/12/90	N/A
9002070-05	B 25%	SOIL	02/06/90	SPIKE	02/09/90	02/09/90	N/A
MB020890S	METHOD BLANK	SOIL	N/A	T-22		02/09/90	AA1/

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS  
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 PIT 1  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date ext.TPHd: 02/09/90  
 Date anl.TPHd: 02/12/90

Anamatrix I.D. : 9002070-01  
 Analyst : *mh*  
 Supervisor : *TC*  
 Date released : 02/15/90  
 Date ext. TOG : 02/09/90  
 Date anl. TOG : 02/09/90

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Diesel	10000	ND
	Total Oil & Grease	30000	ND

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.

TOG - Total Oil & Grease is determined by Standard Method 503E.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS  
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 PIT 2  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date ext.TPHd: 02/09/90  
 Date anl.TPHd: 02/12/90

Anamatrix I.D. : 9002070-02  
 Analyst : *mh*  
 Supervisor : *TC*  
 Date released : 02/15/90  
 Date ext. TOG : 02/09/90  
 Date anl. TOG : 02/09/90

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Diesel	10000	ND
	Total Oil & Grease	30000	ND

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GC/FID following either EPA Method 3510 or 3550.

TOG - Total Oil & Grease is determined by Standard Method 503E.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS  
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 PIT 3  
Matrix : SOIL  
Date sampled : 02/06/90  
Date ext.TPHd: 02/09/90  
Date anl.TPHd: 02/12/90

Anametrix I.D. : 9002070-03  
Analyst : *ml*  
Supervisor : *TC*  
Date released : 02/15/90  
Date ext. TOG : 02/09/90  
Date anl. TOG : 02/09/90

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Diesel	10000	ND
	Total Oil & Grease	30000	2400000

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.

TOG - Total Oil & Grease is determined by Standard Method 503E.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.



ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS  
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 A 25%  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date ext.TPHd: 02/09/90  
 Date anl.TPHd: 02/12/90

Anamatrix I.D. : 9002070-04  
 Analyst : *mk*  
 Supervisor : *TC*  
 Date released : 02/15/90  
 Date ext. TOG : 02/09/90  
 Date anl. TOG : 02/09/90

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Diesel	10000	ND
	Total Oil & Grease	30000	ND

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.

TOG - Total Oil & Grease is determined by Standard Method 503E.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS  
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 B 25%  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date ext.TPHd: 02/09/90  
 Date anl.TPHd: 02/12/90

Anametrix I.D. : 9002070-05  
 Analyst : *mmh*  
 Supervisor : *TC*  
 Date released : 02/15/90  
 Date ext. TOG : 02/09/90  
 Date anl. TOG : 02/09/90

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Diesel	10000	ND
	Total Oil & Grease	30000	ND

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.

TOG - Total Oil & Grease is determined by Standard Method 503E.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS  
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 C 25%  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date ext.TPHd: 02/09/90  
 Date anl.TPHd: 02/12/90

Anametrix I.D. : 9002070-06  
 Analyst : mh  
 Supervisor : TC  
 Date released : 02/15/90  
 Date ext. TOG : 02/09/90  
 Date anl. TOG : 02/09/90

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Diesel	10000	ND
	Total Oil & Grease	30000	ND

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS  
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 D 25%  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date ext.TPHd: 02/09/90  
 Date anl.TPHd: 02/12/90

Anametrix I.D. : 9002070-07  
 Analyst : *ml*  
 Supervisor : *TC*  
 Date released : 02/15/90  
 Date ext. TOG : 02/09/90  
 Date anl. TOG : 02/09/90

CAS #	Compound Name	Detection Limit (ug/kg)	Amount Found (ug/kg)
	TPH as Diesel	10000	20000
	Total Oil & Grease	30000	ND

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.

TOG - Total Oil & Grease is determined by Standard Method 503E.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

ANALYSIS DATA SHEET - TITLE 22 METALS  
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.: 9002070  
Matrix : SOIL  
Date Sampled : 02/06/90  
Project Number: 9126

Date Prepared : 02/08/90  
Date Analyzed : 02/09/90  
Date Released : 02/15/90  
Instrument I.D.: AA1/ICP1

METALS	EPA Method#	Reporting Limit	Sample I.D.# PIT 1	Sample I.D.# PIT 2	Sample I.D.# PIT 3	Sample I.D.# A 25%	Sample I.D.# B 25%
COMPOUNDS		(mg/Kg)	-01	-02	-03	-04	-05
Silver (Ag)	6010	0.5	ND	ND	ND	ND	ND
Arsenic (As)	7060	0.05	13.5	15.4	13.5	10.0	11.3
Barium (Ba)	6010	0.5	125	149	116	130	111
Beryllium (Be)	6010	0.5	ND	0.53	0.50	ND	ND
Cadmium (Cd)	6010	0.5	ND	ND	ND	ND	ND
Cobalt (Co)	6010	0.5	13.4	12.9	12.4	9.96	11.7
Total Cr	6010	0.5	37.2	35.5	35.9	30.2	32.1
Copper (Cu)	6010	0.5	19.7	24.2	21.1	21.8	18.9
Mercury (Hg)	7471	0.025	ND	0.033	0.037	0.063	ND
Molybdenum (Mo)	6010	0.5	ND	ND	ND	ND	ND
Nickel (Ni)	6010	1.0	36.0	39.7	39.7	32.6	36.5
Lead (Pb)	6010	1.0	5.62	67.9	4.77	21.1	4.05
Antimony (Sb)	6010	2.0	ND	ND	ND	ND	ND
Selenium (Se)	6010	4.0	ND	ND	ND	ND	ND
Thallium (Tl)	6010	2.0	ND	ND	2.02	ND	3.50
Vanadium (V)	6010	0.5	36.6	36.8	35.9	30.1	30.5
Zinc (Zn)	6010	0.5	37.9	64.7	41.3	57.5	35.4

ND : Not detected at or above the practical quantitation limit for the method.

All Metals by EPA Method 6010/7000, Test Method for Evaluating Solid Waste, SW-846 3rd Edition November 1986, and California Administrative Code Title 22, Section 66699.

MK  
Analyst

2/16/90  
Date

R  
Supervisor

2/15/90  
Date

ANALYSIS DATA SHEET - TITLE 22 METALS  
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9002070  
Matrix : SOIL  
Date Sampled : 02/06/90  
Project Number: 9126

Date Prepared : 02/08/90  
Date Analyzed : 02/09/90  
Date Released : 02/15/90  
Instrument I.D.: AA1/ICP1

METALS	EPA Method#	Reporting Limit	Sample I.D.# C 25%	Sample I.D.# D 25%	Sample I.D.# BLANK	Sample I.D.#	Sample I.D.#
COMPOUNDS		(mg/Kg)	-06	-07	MB0208S		
Silver (Ag)	6010	0.5	ND	ND	ND		
Arsenic (As)	7060	0.05	12.7	11.8	ND		
Barium (Ba)	6010	0.5	118	135	ND		
Beryllium (Be)	6010	0.5	ND	ND	ND		
Cadmium (Cd)	6010	0.5	ND	ND	ND		
Cobalt (Co)	6010	0.5	12.0	11.8	ND		
Total Cr	6010	0.5	37.6	34.3	ND		
Copper (Cu)	6010	0.5	25.0	27.9	ND		
Mercury (Hg)	7471	0.025	ND	0.080	ND		
Molybdenum (Mo)	6010	0.5	ND	ND	ND		
Nickel (Ni)	6010	1.0	27.2	37.4	ND		
Lead (Pb)	6010	1.0	4.07	23.5	ND		
Antimony (Sb)	6010	2.0	ND	ND	ND		
Selenium (Se)	6010	4.0	ND	ND	ND		
Thallium (Tl)	6010	2.0	ND	3.49	ND		
Vanadium (V)	6010	0.5	40.6	34.2	ND		
Zinc (Zn)	6010	0.5	41.1	68.8	ND		
					ND		

ND : Not detected at or above the practical quantitation limit for the method.

All Metals by EPA Method 6010/7000, Test Method for Evaluating Solid Waste, SW-846 3rd Edition November 1986, and California Administrative Code Title 22, Section 66699.

MK  
Analyst

2/16/90  
Date

R<sup>n</sup>  
Supervisor

2/15/90  
Date

TOTAL EXTRACTABLE HYDROCARBON MATRIX SPIKE REPORT  
 EPA METHOD 3510 WITH GC/FID  
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 B 25%  
 Matrix : SOIL  
 Date sampled : 02/06/90  
 Date extracted: 02/09/90  
 Date analyzed : 02/12/90

Anamatrix I.D. :9002070-05  
 Analyst : *mh*  
 Supervisor : *TC*  
 Date Released : 02/15/90

COMPOUND	SPIKE AMT. (UG/G)	MS (UG/G)	%REC MS	MSD (UG/G)	%REC MSD	RPD	%REC LIMITS
Diesel	83	69	83%	70	84%	-1%	32-93

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 \* Limits established by Anamatrix, Inc.

TOTAL OIL AND GREASE MATRIX SPIKE  
 STANDARD METHOD 503E  
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9126 PIT 3  
 Matrix : SOIL  
 Date Sampled : 02/06/90  
 Date extracted: 02/09/90  
 Date analyzed : 02/09/90

Anamatrix I.D. : 9002070-03  
 Analyst : mh  
 Supervisor : TC  
 Date Released : 02/15/90

COMPOUND	SPIKE AMT. (UG/Kg)	9002070 MS (UG/Kg)	%REC MS	9002070 MSD (UG/Kg)	%REC MSD	RPD	%REC LIMITS
Motor Oil	300000	260000	87%	290000	97%	11%	45-115%



CHAIN OF SAMPLE CUSTODY RECORD  
 (original document, please return)

Sampled By: Tom Carter

Date Sampled: 02/14/90

Signature: Tom Carter

Job Number: 5126

Results To Be Sent To: T. Carter

Laboratory Name: Amatrix

Results Needed By: 24 hr

Contact: \_\_\_\_\_

Sampling Location: \_\_\_\_\_

Phone #: \_\_\_\_\_

Sample Identification						Analysis/EPA Method No.			
Sample Collection			Number of Containers	Preserved	Containers				Remarks
Sample ID	Time (24 hr)	Matrix			6	6	6	6	
P: T A	:	Soil	1	X					
	:								
	:								
	:								
	:								
	:								
	:								
	:								
	:								
	:								
Notes:									

Relinquished By	Date	Time
<u>Tom Carter</u>	<u>02/22/90</u>	<u>9:21</u>
		:
		:

Received By	Date	Time
<u>Joh. Menchillo</u>	<u>02/22/90</u>	<u>9:21</u>
		:
		:

**ATTACHMENT E**

**Nonhazardous Waste Data Forms**

# NON-HAZARDOUS WASTE DATA FORM

**TO BE COMPLETED BY GENERATOR**

NAME Dreyers Grand Ice Cream EPA I.D. NO. EPA EXEMPT

ADDRESS 3675 Mt. Diablo Blvd., Suite 300

CITY, STATE, ZIP Lafayette, California 94549 PHONE NO. 415, 283-9400

CONTAINERS: No. 100970 VOLUME 184 WEIGHT \_\_\_\_\_

TYPE:  TANK TRUCK  DUMP TRUCK  DRUMS  CARTONS  OTHER \_\_\_\_\_

WASTE DESCRIPTION Soil with waste oil GENERATING PROCESS Tank Removal

COMPONENTS OF WASTE			COMPONENTS OF WASTE		
	PPM	%		PPM	%
1. <u>Soil</u>		<u>99.9</u>	5. _____		
2. <u>Waste Oil</u>	<u>290</u>	<u>0.1</u>	6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH \_\_\_\_\_  SOLID  LIQUID  SLUDGE  SLURRY  OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Approval #021490-092

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Jerry Carter Jerry Carter 2/20/90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

**TRANSPORTER**

NAME Dillard Trucking, Inc. EPA I.D. NO. CAD981692809

ADDRESS Route 1 Box 73 SERVICE ORDER NO. \_\_\_\_\_

CITY, STATE, ZIP Byron, California 94544 PICK UP DATE 8-20-90

PHONE NO. (415) 634-0567

TRUCK, UNIT, I.D. NO. 13 Jr Rogers Jr Rogers 2-20-90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

**TSD FACILITY**

NAME Liquid Waste Management, Inc. EPA I.D. NO. CAD980636831

ADDRESS Star Route Box 4 DISPOSAL METHOD  LANDFILL  OTHER \_\_\_\_\_

CITY, STATE, ZIP McKittrick, Ca. 93251

PHONE NO. 805 762-7007 7366 MARTHA DOLE Martha Dole 2-20-90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	<u>22.39</u>
C/Q		RT/CD		HWDF NONE

Ph. 6.0

DISCREPANCY

# NON-HAZARDOUS WASTE DATA FORM

**TO BE COMPLETED BY GENERATOR**

NAME Dreyers Grand Ice Cream EPA I.D. NO. EPA EXEMPT

ADDRESS 3675 Mt. Diablo Blvd., Suite 300

CITY, STATE, ZIP Lafayette, California 94549 PHONE NO. 415, 283-9400

CONTAINERS: No. 100969 VOLUME 184 WEIGHT \_\_\_\_\_

TYPE:  TANK TRUCK  DUMP TRUCK  DRUMS  CARTONS  OTHER \_\_\_\_\_

WASTE DESCRIPTION Soil with waste oil GENERATING PROCESS Tank Removal

COMPONENTS OF WASTE			COMPONENTS OF WASTE		
	PPM	%		PPM	%
1. <u>Soil</u>		<u>99.9</u>	5. _____		
2. <u>Waste Oil</u>	<u>290</u>	<u>0.1</u>	6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH \_\_\_\_\_  SOLID  LIQUID  SLUDGE  SLURRY  OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Approval #021490-092

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Tom Carter Tom Carter 2/20/90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

**TRANSPORTER**

NAME Dillard Trucking, Inc. EPA I.D. NO. CAD981692809

ADDRESS Route 1 Box 73 SERVICE ORDER NO. \_\_\_\_\_

CITY, STATE, ZIP Byron, California 94544 PICK UP DATE \_\_\_\_\_

PHONE NO. (415) 634-0567

TRUCK, UNIT, I.D. NO. 8 Jim Payne Jim Payne 2-20-90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

**TSD FACILITY**

NAME Liquid Waste Management, Inc. EPA I.D. NO. CAD980636831

ADDRESS Star Route Box 4 DISPOSAL METHOD  LANDFILL  OTHER \_\_\_\_\_

CITY, STATE, ZIP McKittrick, Ca. 93251

PHONE NO. 805 762-7007 7366

MARTHA Dole Martha Dole 2-20-90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

GEN	OLD/NEW	L	A	TONS
TRANS	<u>i</u>	S	B	<u>23.93</u>
C/O		RT/CD		HWDF NONE

DISCREPANCY Ph. 6.0

# NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

NAME Dreyers Grand Ice Cream EPA I.D. NO. EPA EXEMPT

ADDRESS 3675 Mt. Diablo Blvd., Suite 300

CITY, STATE, ZIP Lafayette, California 94549 PHONE NO. 415, 283-9400

CONTAINERS: No. 100 966 VOLUME 18 y WEIGHT \_\_\_\_\_

TYPE:  TANK TRUCK  DUMP TRUCK  DRUMS  CARTONS  OTHER \_\_\_\_\_

WASTE DESCRIPTION Soil with waste oil GENERATING PROCESS Tank Removal

COMPONENTS OF WASTE			COMPONENTS OF WASTE		
	PPM	%		PPM	%
1. <u>Soil</u>		<u>99.9</u>	5. _____		
2. <u>Waste Oil</u>	<u>290</u>	<u>0.1</u>	6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH \_\_\_\_\_  SOLID  LIQUID  SLUDGE  SLURRY  OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Approval #021490-092

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Terry Carter Terry Carter 2/20/90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TRANSPORTER

NAME Dillard Trucking, Inc. EPA I.D. NO. CAD981692809

ADDRESS Route 1 Box 73 SERVICE ORDER NO. \_\_\_\_\_

CITY, STATE, ZIP Byron, California 94544 PICK UP DATE \_\_\_\_\_

PHONE NO. 415 634-0567

TRUCK, UNIT, I.D. NO. 1918-80 PAT MERKLIUG Pat Merkle 2-20-90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TSD FACILITY

NAME Liquid Waste Management, Inc. EPA I.D. NO. CAD980636831

ADDRESS Star Route Box 4  LANDFILL  OTHER \_\_\_\_\_

CITY, STATE, ZIP McKittrick, Ca. 93251

PHONE NO. 805 762-7607 7366

MARTHA DOLE Martha Dole 2-20-90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

GEN	OLD/NEW	L	A	TONS <u>21.99</u>
TRANS		S	B	
C/O		RT/CD	HWDF NONE	

DISCREPANCY Ph. 6.0

# NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

NAME Dreyers Grand Ice Cream

ADDRESS 3875 Mt. Diablo Blvd., Suite 300

EPA I.D. NO. EPA EXEMPT

CITY, STATE, ZIP Lafayette, California 94549

PHONE NO. 415, 283-9400

CONTAINERS: No. 100973 VOLUME 184 WEIGHT \_\_\_\_\_

TYPE:  TANK TRUCK  DUMP TRUCK  DRUMS  CARTONS  OTHER \_\_\_\_\_

WASTE DESCRIPTION Soil with waste oil GENERATING PROCESS Tank Removal

COMPONENTS OF WASTE			COMPONENTS OF WASTE		
	PPM	%		PPM	%
1. <u>Soil</u>		<u>99.9</u>	5. _____		
2. <u>Waste Oil</u>	<u>290</u>	<u>0.1</u>	6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH \_\_\_\_\_  SOLID  LIQUID  SLUDGE  SLURRY  OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Approval #021490-092

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Terry Carter Terry Carter 2/20/90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TRANSPORTER

NAME Dillard Trucking, Inc.

EPA I.D. NO. CAD981692809

ADDRESS Route 1 Box 73

SERVICE ORDER NO. \_\_\_\_\_

CITY, STATE, ZIP Byron, California 94544

PICK UP DATE \_\_\_\_\_

PHONE NO. (415) 634-0567

TRUCK, UNIT, I.D. NO. 1648

Douglas Stephens Douglas Stephens  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TSD FACILITY

NAME Liquid Waste Management, Inc.

EPA I.D. NO. GAD980636831

ADDRESS Star Route Box 4

DISPOSAL METHOD  LANDFILL  OTHER \_\_\_\_\_

CITY, STATE, ZIP McKittrick, Ca. 93251

PHONE NO. 805 782-7607 7366

MARTHA DOLE Martha Dole 2-20-90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	<u>22.41</u>
C/O		RT/CD	HWDF NONE	

DISCREPANCY

Ph. 6.0

# NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

NAME Dreyers Grand Ice Cream EPA I.D. NO. EPA EXEMPT  
 ADDRESS 3875 Mt. Diablo Blvd., Suite 300  
 CITY, STATE, ZIP Lafayette, California 94549 PHONE NO. (415) 283-9400

CONTAINERS: No. 100967 VOLUME 204 WEIGHT \_\_\_\_\_

TYPE:  TANK TRUCK  DUMP TRUCK  DRUMS  CARTONS  OTHER \_\_\_\_\_

WASTE DESCRIPTION			GENERATING PROCESS		
COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. <u>Soil</u>		<u>99.9</u>	5. _____		
2. <u>Waste Oil</u>	<u>290</u>	<u>0.1</u>	6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH \_\_\_\_\_  SOLID  LIQUID  SLUDGE  SLURRY  OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Approval #021490-092

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Terry Carter Terry Carter 2/20/90  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TRANSPORTER

NAME Dillard Trucking, Inc. EPA I.D. NO. CAD981692809  
 ADDRESS Route 1 Box 73 SERVICE ORDER NO. \_\_\_\_\_  
Byron, California 94544  
 CITY, STATE, ZIP \_\_\_\_\_ PICK UP DATE \_\_\_\_\_

PHONE NO. (415) 634-0567  
 TRUCK UNIT, I.D. NO. 307 David Ramsey David Ramsey 2-20-90  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TSD FACILITY

NAME Liquid Waste Management, Inc. EPA I.D. NO. CAD980636831  
 ADDRESS Star Route Box 4  LANDFILL  OTHER \_\_\_\_\_  
McKittrick, Ca. 93251  
 CITY, STATE, ZIP \_\_\_\_\_

PHONE NO. 805 762-7889 7366 MARTHA DOLE Martha Dole 2-20-90  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	<u>23.43</u>
C/O		RT/CD		HWDF NONE

DISCREPANCY Ph. 6.0

# NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

NAME Dreyers Grand Ice Cream

ADDRESS 3675 Mt. Diablo Blvd., Suite 300

EPA I.D. NO. EPA EXEMPT

CITY, STATE, ZIP Lafayette, California 94549

PHONE NO. 415, 283-9400

CONTAINERS: No. 002441 VOLUME 18yd WEIGHT \_\_\_\_\_

TYPE:  TANK TRUCK  DUMP TRUCK  DRUMS  CARTONS  OTHER 5

WASTE DESCRIPTION Soil with waste oil GENERATING PROCESS Tank Removal

COMPONENTS OF WASTE			COMPONENTS OF WASTE		
	PPM	%		PPM	
1. <u>Soil</u>		<u>99.9</u>	5. _____		
2. <u>Waste Oil</u>	<u>290</u>	<u>0.1</u>	6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH \_\_\_\_\_  SOLID  LIQUID  SLUDGE  SLURRY  OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Approval #021490-092

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Tommy Carter TYPED OR PRINTED FULL NAME & SIGNATURE DATE 2/20/90

TRANSPORTER

NAME Dillard Trucking, Inc.

EPA I.D. NO. CAD981692809

ADDRESS Route 1 Box 73

SERVICE ORDER NO. \_\_\_\_\_

CITY, STATE, ZIP Byron, California 94544

PICK UP DATE 2-20-90

PHONE NO. (415) 634-0567

TRUCK, UNIT, I.D. NO. 1 1A Todd Adams TYPED OR PRINTED FULL NAME & SIGNATURE DATE 2-20-90

TSD FACILITY

NAME Liquid Waste Management, Inc.

EPA I.D. NO. CAD980636831

ADDRESS Star Route Box 4

DISPOSAL METHOD  LANDFILL  OTHER \_\_\_\_\_

CITY, STATE, ZIP McKittrick, Ca. 93251

PHONE NO. 805 762-7607

MARTHA DOLE TYPED OR PRINTED FULL NAME & SIGNATURE DATE 2-20-90

GEN	OLD/NEW	L	A	TONS <u>22.95</u>
TRANS		S	B	
C/Q		RT/CD		HWDF NONE

DISCREPANCY Ph. 6.0



# NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

NAME Dreyers Grand Ice Cream EPA I.D. NO. EPA EXEMPT

ADDRESS 3675 Mt. Diablo Blvd., Suite 300

CITY, STATE, ZIP Lafayette, California 94549 PHONE NO. 415, 283-9400

CONTAINERS: No. 002/31-132 VOLUME 18 yds WEIGHT \_\_\_\_\_

TYPE:  TANK TRUCK  DUMP TRUCK  DRUMS  CARTONS  OTHER \_\_\_\_\_

WASTE DESCRIPTION Soil with waste oil GENERATING PROCESS Tank Removal

COMPONENTS OF WASTE			COMPONENTS OF WASTE		
	PPM	%		PPM	%
1. <u>Soil</u>		<u>99.9</u>	5. _____		
2. <u>Waste Oil</u>	<u>290</u>	<u>0.1</u>	6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH \_\_\_\_\_  SOLID  LIQUID  SLUDGE  SLURRY  OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Approval #021490-092

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

TERRY CARTER Tonyant 2/20/90  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TRANSPORTER

NAME Dillard Trucking, Inc. EPA I.D. NO. CAD981692809

ADDRESS Route 1 Box 73 SERVICE ORDER NO. \_\_\_\_\_

CITY, STATE, ZIP Byron, California 94544 PICK UP DATE 2-20-90

PHONE NO. (415) 634-0567

TRUCK UNIT I.D. NO. 8 LEON W FLANDERS Leon W Flanders 2-20-90  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TSD FACILITY

NAME Liquid Waste Management, Inc. EPA I.D. NO. CAD980636831

ADDRESS Star Route Box 4 DISPOSAL METHOD  LANDFILL  OTHER \_\_\_\_\_

CITY, STATE, ZIP McKittrick, Ca. 93251

PHONE NO. 805 762-7667 7366

MARTHA DOLE Martha Dole 2-20-90  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	<u>23.89</u>
C/O		RT/CD	HWDF NONE	

Ph. 6.0

DISCREPANCY

# NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

NAME Dreyers Grand Ice Cream EPA I.D. NO. EPA EXEMPT  
 ADDRESS 3675 Mt. Diablo Blvd, Suite 300  
 CITY, STATE, ZIP LAFAYETTE, CA 94549 PHONE NO. 415 283-9400

CONTAINERS: No. 100969 VOLUME 184 WEIGHT \_\_\_\_\_

TYPE:  TANK TRUCK  DUMP TRUCK  DRUMS  CARTONS  OTHER \_\_\_\_\_

WASTE DESCRIPTION Solid with Waste Oil GENERATING PROCESS \_\_\_\_\_

COMPONENTS OF WASTE			COMPONENTS OF WASTE		
	PPM	%		PPM	%
1. <u>Solid Soil</u>		<u>99.9</u>	5. _____		
2. <u>Waste Oil</u>	<u>290</u>	<u>0.1</u>	6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH \_\_\_\_\_  SOLID  LIQUID  SLUDGE  SLURRY  OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Approval # 021490-092

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

TERRY CARTER Terry Carter 2/20/90  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TRANSPORTER

NAME Dillard Trucking EPA I.D. NO. CA 0981692809  
 ADDRESS Route 1 Box 73 SERVICE ORDER NO. \_\_\_\_\_  
 CITY, STATE, ZIP Byron, CA 94544 PICK UP DATE \_\_\_\_\_

PHONE NO. 415 634-0567  
 TRUCK UNIT I.D. NO. 8 JIM PAYNE Jim Payne 2-21-90  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TSD FACILITY

NAME Liquid Waste Management Inc EPA I.D. NO. CA 0980636831  
 ADDRESS STAR ROUTE BOX 4 DISPOSAL METHOD  LANDFILL  OTHER \_\_\_\_\_  
 CITY, STATE, ZIP McKittick, CA 93251

PHONE NO. 805-762-7366  
MARTHA DOLFE Martha Dolfe 2-21-90  
 TYPED OR PRINTED FULL NAME & SIGNATURE DATE

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	<u>23.36</u>
C/O		RT/CD	HWDF NONE	

DISCREPANCY

Ph. 610

# NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

NAME Dreyers Grand Ice Cream EPA I.D. NO. EPA EXEMPT  
 ADDRESS 3675 Mt. Diablo Blvd. Suite 300  
 CITY, STATE, ZIP Lafayette, CA 94549 PHONE NO. 715-283-9400

CONTAINERS: No. 100973 VOLUME 184 WEIGHT \_\_\_\_\_

TYPE:  TANK TRUCK  DUMP TRUCK  DRUMS  CARTONS  OTHER \_\_\_\_\_

WASTE DESCRIPTION			GENERATING PROCESS		
COMPONENTS OF WASTE	PPM	%	COMPONENTS OF WASTE	PPM	%
1. <u>Soic</u>		<u>99.9</u>	5. _____		
2. <u>Waste Oil</u>	<u>290</u>	<u>0.1</u>	6. _____		
3. _____			7. _____		
4. _____			8. _____		

PROPERTIES: pH \_\_\_\_\_  SOLID  LIQUID  SLUDGE  SLURRY  OTHER \_\_\_\_\_

HANDLING INSTRUCTIONS: Approval # 021490-092

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

TERRY CARTER Terry Carter 2/20/90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TRANSPORTER

NAME Dillard Trucking EPA I.D. NO. CA0981692809  
 ADDRESS Route 1 Box 73 SERVICE ORDER NO. \_\_\_\_\_  
 CITY, STATE, ZIP BURAN, CA 94544 PICK UP DATE \_\_\_\_\_

PHONE NO. 415 634-0567  
 TRUCK, UNIT, I.D. NO. 1648 DOUGLAS STEPHENS Douglas Stephens 2/21/90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

TSD FACILITY

NAME Liquid Waste Management, Inc. EPA I.D. NO. CA0980636831  
 ADDRESS STAR ROUTE BOX 4 DISPOSAL METHOD  LANDFILL  OTHER \_\_\_\_\_  
 CITY, STATE, ZIP McKITTERICK, CA 93251

PHONE NO. 805 762 7366 MARTHA DOLE Martha Dole 2-21-90  
TYPED OR PRINTED FULL NAME & SIGNATURE DATE

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	<u>23.75</u>
C/O		RT/CD	HWDF NONE	

DISCREPANCY Ph. 6.0

**ATTACHMENT F**

**Soil & Groundwater Sample  
Collection & Handling Protocol**

**ATTACHMENT F****SOIL & GROUNDWATER SAMPLE  
COLLECTION & HANDLING PROTOCOL****INTRODUCTION & PURPOSE**

Because reliable and representative test results must be generated from soil and groundwater samples, it is essential to establish a sampling procedure which assures that all samples are:

- o Collected by approved and repeatable methods
- o Representative of the materials(s) at the desired location and depth
- o Uncontaminated by container and sampling equipment

The following sampling protocol is designed to be a guide to the sampling and handling procedures for soil and groundwater samples to be collected. Based on conditions which may be encountered in the field, some modifications to this protocol may be required to fit the needs of an individual site.

**SAMPLING PROCEDURES****Groundwater Sampling**

Prior to collecting groundwater samples, monitoring wells will be purged by bailing until pH, conductivity, and temperature levels stabilize. Wells will be purged and groundwater samples will be obtained using a Teflon bailer and nylon rope. New nylon rope is used for each well.

The appropriate number of sample containers and type will be used for each sample collected, in accordance with the analytical laboratory requirements and EPA protocol. The bottles will be filled using the bailer. All sample bottles will be pre-cleaned by the supplier according to EPA protocols.

To prevent cross contamination of groundwater samples by the sampling equipment, all equipment used in sampling will be washed with a trisodium phosphate solution, triple rinsed with distilled water, and allowed to air dry prior to each use. A sample of the distilled water

used in the final rinse will be retained for analysis as part of sample quality assurance.

### **Soil Sampling**

After the soil sampler is driven to the desired depth and the samples are retrieved, each end of the ring containing the soil sample to be retained for laboratory analysis will be sealed with Teflon sheeting, covered with plastic end caps, and sealed with PVC tape. All sample containers (tubes and end caps) will be steamed cleaned and air dried prior to use. The soil sample recovered in the ring just above the sample retained for chemical analysis will be examined in the field for visual and olfactory indications of chemical contamination and used for lithologic description.

The Unified Soil Classification System (USCS) will be used to log and describe the soil by the on-site geologist. These logs will also include details of the sampling process such as depth, apparent odors, discoloration, and any other factors which may be required to evaluate the presence of contamination at the site.

### **POST SAMPLING PROCEDURES**

One field/travel blank consisting of one sample bottle filled with distilled water will accompany soil and groundwater sample containers at all times, including during transport to and from the site. Distilled water field/travel blanks will be analyzed according to the appropriate EPA Methods corresponding to the soil/groundwater sample analyses.

Sample containers will be labeled with sample number, project number, date, and the initials of the person collecting the sample. A separate sample collection record will be maintained for each groundwater sample collected.

Soil and groundwater samples collected will be analyzed by an analytical laboratory certified by the California Department of Health Services (DHS) for complete chemical analysis of hazardous waste as well as drinking water samples. Quality assurance documentation will accompany all analytical reports generated by the laboratory.

The samples will be placed in an ice cooler immediately following collection, and will remain in the ice cooler until refrigerated at the analytical laboratory. The samples will be delivered to the laboratory direct by

ATT

courier or overnight freight within 48 hours of time of collection. Appropriate chain of custody forms will be used for all samples.

**ATTACHMENT G**

**Drilling Procedures & Groundwater  
Monitoring Well Construction/Design**



## ATTACHMENT G

DRILLING PROCEDURES & GROUNDWATER  
MONITORING WELL CONSTRUCTION/DESIGN

## DRILLING AND SAMPLING PROCEDURES

All borings for well construction will be drilled using eight-inch diameter or larger hollow stem auger equipment. A California Registered Geologist will direct the collection of undisturbed samples of the soils encountered and the preparation of detailed logs of each boring.

Soil sampling will be conducted using a modified California drive sampler, a standard penetration sampler, or a five-foot continuous sampler. Representative samples of each soil type will be retained in either Ziploc bags or two-inch to three-inch diameter, six-inch long, clean, brass tubes. The samples will be retained for verification of soil classification and for chemical laboratory analytical testing, as appropriate. Teflon sheeting will be placed between the soil sample and the cap, and the cap will be sealed with PVC tape.

When access limitations do not allow drilling with truck mounted equipment, either a trailer mounted drilling rig, portable power driven, or manually operated soil sampling equipment will be utilized. If soil samples are to be retained for analysis, they will be collected in clean brass tubes fitted within a thin walled drive sampler. The soil samples will be capped and sealed as described above.

All down hole sampling, drilling, and well construction equipment and materials, including augers, casing, and screens will be steam cleaned prior to their initial use. The sampling equipment will be cleaned prior to each assembly by washing with a trisodium phosphate solution, rinsing with distilled water, and allowing to air dry. The auger flights, drill bit, and sampler will be steam cleaned at each boring location.

## MONITORING WELL CONSTRUCTION

Monitoring wells will be constructed in accordance with applicable local water district or California Department of Water Resources guidelines. The specific completion details for each well will be determined in the field at the time of drilling by a California Registered Geologist experienced in groundwater monitoring system design and installation.

Monitoring wells consist of two or four-inch diameter, Schedule 40 PVC casing and screens with flush, threaded joints. No PVC glue was used. The screened sections will be machine slotted with either 0.010-inch (0.255 mm) or 0.020-inch (0.51 mm) openings. The smaller slot size will be used where the wells are screened within fine-grained sandy soils, and the larger slots will be used where coarse sand or gravels are encountered. The slotted sections will be fitted with a slip-on cap and placed opposite the water-bearing strata in the boring. The blank pipe will be connected to the perforated pipe and will extend to just below the ground surface.

The annulus between the side of the borehole and the slotted section will be filled with a clean sand pack to variable depths, but not less than one or two feet above the perforated pipe. The annulus will be packed with either Lonestar No. 1/20 (where 0.010-inch slotted pipe is used) or No. 3 (where 0.020-inch slotted pipe is used) washed sand filter material. The gradation of the filter material is summarized below:

U.S. Sieve No.	Opening (mm)	Percent Passing (No. 3)	Percent Passing (No. 1/20)
6	3.35	100	
8	2.36	99 - 100	
12	1.70	62 - 78	
16	1.18	15 - 33	100
20	0.85	0 - 8	90 - 100
30	0.60	0 - 4	14 - 40
40	0.425		0 - 5

A seal of bentonite pellets approximately 24-inches thick will be placed above the sand pack to reduce the risk of grout penetration into the sand. The bentonite pellets will be hydrated with distilled water to form a tight plug. A cement/bentonite grout will be placed above the bentonite plug to a depth of approximately two feet below the ground surface. The grout will be pumped into the boreholes using a tremie pipe. Concrete will be placed from the top of the cement/bentonite mixture to the ground surface.

At most sites in sedimentary formations, it is not practical to "rationally design" a filter pack based on sieve analyses. From experience, Lonestar No. 1/20 or No. 3 washed sand as a filter material has been selected for use in the proposed wells. The 0.010-inch and 0.020-

inch slot sizes were selected to retain 100 percent of the filter material.

The completed wells will be enclosed in a traffic rated enclosure placed flush with grade or in an above-ground metal enclosure, and will be fitted with a locking cap. If a groundwater level contour map is to be prepared, well head elevations will be determined by a level survey, and well coordinates will be determined by a traverse survey. The level/traverse survey will be referenced to a bench mark of known elevation and coordinates. Once water levels have stabilized, water levels in all wells will be measured.

After the wells have been completed, they will be developed by pumping and surging to clean and stabilize the soils around the screens. A manually operated, positive displacement surge pump and Teflon bailer, surge block, and/or centrifugal pump will be used for development. A minimum of 10 well casing volumes of water will be removed during development; however, development will continue until water flows clear and pH, temperature, and conductivity have stabilized. All development equipment will be steam cleaned prior to its initial use in each well. A well development log will be maintained which will include 1) a record of development water parameters at frequent intervals, 2) the quantity of water removed during development, and 3) flow rates during development.

Soil cuttings generated during drilling will be wrapped in plastic sheeting, and water generated during well development will be retained in secured 55-gallon drums until chemical analytical data from samples are received.

**ATTACHMENT H**  
**Site Safety Plan**

AQUA TERRA TECHNOLOGIES SITE SAFETY PLAN

A. GENERAL INFORMATION

Site: Former Dreyer's Grand Ice Cream facility

Location: 5929 College Avenue  
Oakland, CA 94618

Plan Prepared By: William E. Motzer Date: March 7, 1990  
Senior Hydrogeologist

Plan Approved By: Terrance E. Carter Date: March 7, 1990  
Senior Environmental Engineer

Objectives:

- 1) Excavation and offhaul of waste oil and grease contaminated soil.
- 2) Onsite aeration of gasoline contaminated soil.
- 3) Installation of three groundwater monitoring wells.

Proposed Date of Investigation: March, 1990 and upon approval of work plan by the Alameda County Health Care Services Agency and San Francisco Bay Region, Regional Water Quality Control Board

Background Review: Complete: X Preliminary:

Documentation/Summary: Aqua Terra Technologies, Inc. (ATT) workplan of March, 1990 (attached)

Overall Hazard: Serious: Moderate:  
Low: X Unknown:

B. SITE/WASTE CHARACTERISTICS

Waste Type(s): Liquid: Solid: X Sludge: Gas:

Characteristic(s): Corrosive: Ignitable: Radioactive:  
Volatile: X Toxic: Reactive: Unknown: Other(name):

Facility Description: Vacant and graded lot, currently undergoing preparation for active building construction.

Principal Disposal Method (type and location): Disposal of excavated soil by truck offhaul to a Class II or Class III landfill as per regulatory agency requirements. Storage of groundwater monitoring well cuttings in 17-H, 55-gallon drums. Final destination of drill cuttings to be determined from soil sample analyses. Storage of monitoring well development and sampling water in 55-gallon drums; disposal to be determined upon

AQUA TERRA TECHNOLOGIES SITE SAFETY PLAN (continued)  
Page 2

receipt of California Department of Health Services (DHS) certified laboratory.

Unusual Features (power lines, terrain, utilities, etc.): none

Status: Active: X Inactive: Unknown:  
Property currently undergoing active construction of a new Dreyer's facility.

History (agency action, complaints, injuries, etc.): None noted

C. HAZARD EVALUATION

<u>Parameter:</u>	TLV (ppm)	IDLH (ppm)	LEL (%)	HEALTH skin/eyes/inge./inha.
	_____	_____	_____X_____	X

Special Precautions and Comments: Use NIOSH approved gloves when handling soil samples. Sampling to be conducted in open air. Excavated soils, to be treated via aeration, to be covered during periods of precipitation.

D. SITE SAFETY WORK PLAN

Perimeter Establishment: Map/Sketch Attached: see work plan  
Site Secured: via gated, chain link fence

Perimeter Identified: Yes; via building plans and perimeter fence.

Zone(s) of Contamination Identified: Zones of contamination identified during underground fuel and waste oil storage tank removal (see work plan)

Personal Protection:

Level of Protection: A\_\_\_\_\_B\_\_\_\_\_C\_\_\_\_\_D\_X\_\_\_\_\_

Modifications: If necessary, tyvek suits will be used with NIOSH approved face masks. All personnel collecting soil samples will wear gloves. Hard hats and steel toed shoes will be worn at all times.

Surveillance Equipment & Materials:

Instrument: LEL Meter Action Level: 20%

AQUA TERRA TECHNOLOGIES SITE SAFETY PLAN (continued)

Page 3

Site Entry Procedures: Permission of property owner and onsite building contractor. Hard hats and steel toed shoes will be worn at all times.

Decontamination Procedures:

Personal: Wash hands, face, clothes. Smoking or eating not permitted onsite during active excavation or drilling.

Equipment: Steel toed boots, gloves, hard hat, NIOSH approved respirator.

First Aid (type of equipment available): Fully stocked first aid kit and emergency eyewash with company vehicles.

Work Limitations (time of day, weather, heat/cold stress):

Work limitations: winds less than 10 mph; no work during periods of precipitation; work hours: 8:00 A.M to 5:00 P.M. Monday through Friday.

Investigation-Derived Material Disposal: Excavated soil from the former waste oil tank area to be offhauled to a Class II landfill. Soil removed from the former gasoline tank excavation to be aerated onsite and removed to an appropriate landfill upon receipt of final soil analyses. Three monitoring wells to be installed onsite.

Team Composition:

<u>Team Member</u>	<u>Responsibility</u>
Terrance E. Carter	Project Manager/Engineer
William E. Motzer	Project Hydrogeologist
Michael Deschenes	Project Geologist
Bruce L. Berman	Project Safety Manager

**E. EMERGENCY INFORMATION**

Local Resources:

Ambulance: 911  
 Hospital Emergency Room: 911  
 Poison Control Center: 1-800-523-2222  
 Police: 911  
 Fire Department: 911  
 Explosives Unit: 911  
 Agency Contact: National Response Center (NAC)  
 Toxic Chemical and Oil Spills: 1-800-424-8802

## AQUA TERRA TECHNOLOGIES SITE SAFETY PLAN (continued)

Page 4

Site Resources:

Water Supply: on site  
Telephone: 415 601-0179  
Radio: unknown  
Other: none

Emergency Contacts:

Name: Mr. William C. Collett, Treasurer      Phone: 415 283-9400  
Dreyer's Grand Ice Cream, Inc.

Mr. Terry Carter, Senior Env. Eng.      Phone: 415 934-4884  
Aqua Terra Technologies, Inc.

Emergency Routes:

Hospital: Alta Bates-Herrick Hospital  
3001 Colby and Ashby  
Berkeley, California

From site north on College Avenue (approximately 0.65 miles) to Ashby Avenue. Left turn (west) onto Ashby approximately 0.20 miles to hospital entrance (on left) south side of Ashby Avenue.



**ATTACHMENT H**  
**Site Safety Plan**