Du Pont Biosystems

January 24, 1989
Job No. 211-71-11

Mr. Larry Seto
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Subject: Two Additional Monitoring Wells
Jet Gas Station
44 Lewelling Boulevard
San Lorenzo, California

Dear Mr. Seto:

Four ground-water monitoring wells and one deep exploratory boring were completed on December 2, 1988 at the subject site as proposed in the workplan by Alpha Consultants, Inc., dated August 30, 1988 (Alpha Consultants, Inc. is now associated with Du Pont Biosystems). The monitoring wells were developed and sampled on December 5, 1988. The purpose of these monitoring wells was to establish the lateral limits of gasoline contamination within the ground water beneath the site. During the drilling and sampling portions of the fieldwork, gasoline odors were noted in monitoring wells MW-4 and MW-7 (see Site Plan, Figure 1).

The laboratory analytical results from the most recent ground-water sampling are attached. Moderate levels of gasoline constituents were reported from monitoring wells MW-4 and MW-7. As a result, we do not have the lateral limits of the gasoline contaminant plume fully defined. We propose the installation of two additional ground-water monitoring wells at the approximate locations shown on Figure 1. These two additional monitoring wells are deemed necessary for full definition of the plume boundaries.

The monitoring wells will be constructed using 2-inch diameter, schedule 40 PVC and we anticipate the well screens will be placed from 10 to 30 feet below the existing grade. Additional construction details are shown on Figure 2, Typical Monitoring Well Construction. All drilling, sampling, and sample handling procedures and policies outlined in our workplan will be followed during the construction of the two wells.

7068 Koll Center Parkway, Suite 401 ▪ Pleasanton, California 94566 ▫ 415▪462▪7772 ▫ 800▪468▪2122 ▫ FAX ▪415▪462▪7944
500 W. Dutton's Mill Road, Suite 102 ▪ Aston, Pennsylvania 19014 ▫ 215▪497▪5800 ▫ 800▪548▪1964

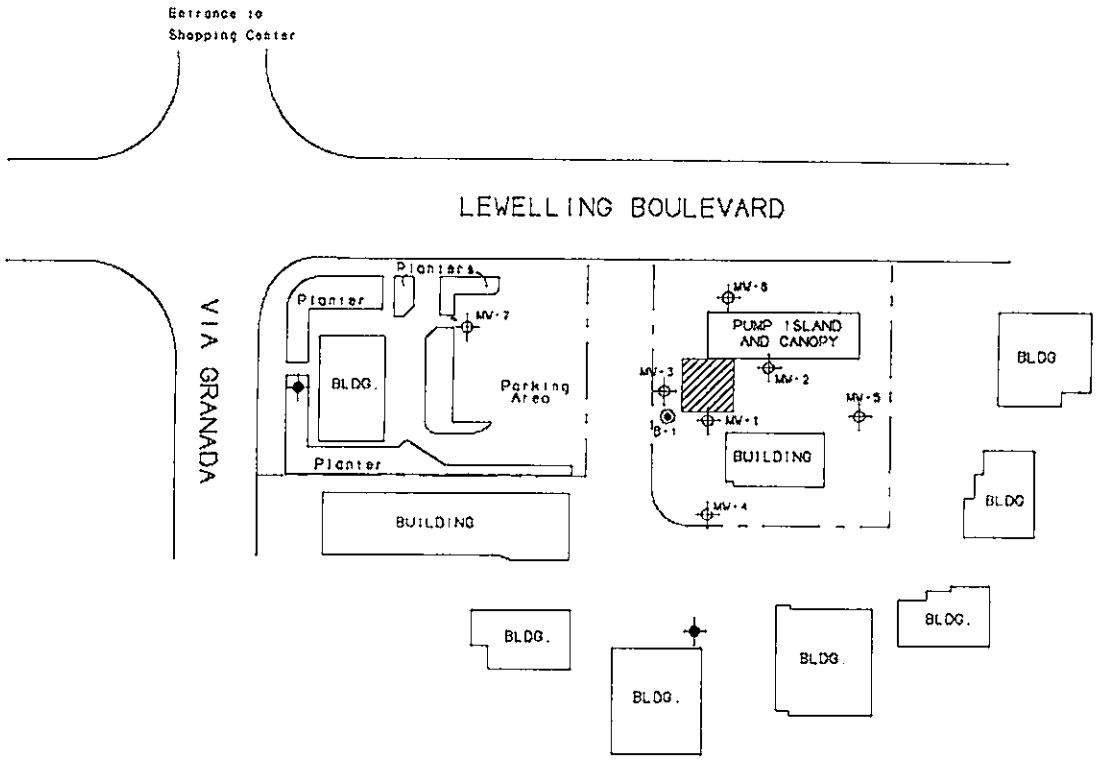
Please do not hesitate to call if you have any questions or comments.

Respectfully submitted,

DU PONT BIOSYSTEMS

Darrell S. Klingman
Coordinator - Environmental Affairs

DSK:rw



EXPLANATION

- Property Limits
- MW-7 Existing Monitoring Well
- Proposed Monitoring Well
- B-1 Exploratory Boring
- Existing Fuel Tanks

60 0 60 120
scale feet

N

SITE PLAN

SCALE: As Shown	APPROVED	DRAWN BY: DA CADD
DATE: 8/25/88		REVISED:

Jet Gas Station
44 Lewelling Boulevard
San Lorenzo, California

Du Pont Biosystems

DRAWING NUMBER
211-71-11

Base: Modified From Pacific Aerial Surveys, Inc. aerial photo #AV-2772-8-14, at a scale of approximately 1 inch = 50 feet, dated 1-25-88.

Figure 1

Typical Monitoring Well Construction

WELL LOG MW-

JOB NUMBER:_____ DATE DRILLED:_____

JOB NAME:_____ SURFACE ELEVATION:_____

DRILL RIG:_____ DATUM:_____

SAMPLER TYPE: _____ DRIVE WEIGHT: _____ HEIGHT OF FALL: _____

NOTE: Actual conditions may differ depending upon conditions encountered

Depth feet	Well Construction	Lab * Analysis	Blows Per Foot	Sample Depth	Sample Type	USCS Symbol	Description
	Concrete Apron						
	Locking steel cover PVC cap						
10							
20	14 Sack Cement/ bentonite grout						
30	Sch. 40 PVC Blank casing						
	Bentonite Seal						
40	Centralizer						
	Slotted Sch. 40 PVC Screen, 0.01" or 0.02" Slots, Typically 4 Slots per Inch						
50							
60							
	Sand Pack						
70							
	Annular Space at least 2" but no greater than 6"						
80							
	Sch. 40 PVC Blank Casing						
90							
	Centralizer						
	Bentonite Seal						
100							
120							
140							
160							

Du Pont Biosystems

Logged by:_____

Approved by:_____

Figure 2

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545 *(415) 783-6960*

TAL

DATE: 1/5/89

LOG NO.: 6765

DATE SAMPLED: 12/5/88

DATE RECEIVED: 12/7/88

CUSTOMER: DuPont Biosystems

REQUESTER: Curt Griffiths

PROJECT: No. 211-Q6-11, San Lorenzo

Sample Type: Water

Method and Constituent	Units	MW1 Concentration	MW1 Detection Limit	MW2 Concentration	MW2 Detection Limit	MW3 Concentration	MW3 Detection Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	4,000	90	500	3	19,000	2,000
Modified EPA Method 8020:							
Benzene	ug/l	100	10	< 0.3	0.3	4,200	200
Toluene	ug/l	16	10	1.3	0.3	2,400	200
Xylenes	ug/l	310	10	3.6	0.3	3,100	200
Ethyl Benzene	ug/l	140	10	5.6	0.3	1,000	200

DATE: 1/5/89
LOG NO.: 6765
DATE SAMPLED: 12/5/88
DATE RECEIVED: 12/7/88
PAGE: Two

Sample Type: Water

Method and Constituent	Units	MW4 Concentration	MW4 Detection Limit	MW5 Concentration	MW5 Detection Limit	MW6 Concentration	MW6 Detection Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	4,500	20	3.9	2	190	2
Modified EPA Method 8020:							
Benzene	ug/l	< 2	2	< 0.2	0.2	4.0	0.2
Toluene	ug/l	< 2	2	0.78	0.2	1.3	0.2
Xylenes	ug/l	6.5	2	0.92	0.2	1.3	0.2
Ethyl Benzene	ug/l	2.3	2	0.23	0.2	0.63	0.2

		MW7		Dup. 1		Dup. 2	
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	1,500	20	500	3	5.0	2
Modified EPA Method 8020:							
Benzene	ug/l	140	10	< 2	2	< 0.2	0.2
Toluene	ug/l	150	10	1.9	2	0.45	0.2
Xylenes	ug/l	370	10	< 2	2	1.6	0.2
Ethyl Benzene	ug/l	40	10	6.3	2	0.28	0.2

Hugh R. McLean

Hugh R. McLean
Supervisory Chemist

HRM:mln