ENVIRONETICS GEO-ENGINEERING
200 Brown Road, Suite 210
Fremont, California 94539-7957
(510) 770-5733 Telefax (510) 770-5752

October 7, 1992

Mr. Fred L. Houston
Winning Action Investments, Inc.
7080 Donlon Way, Ste. 208
Dublin, CA 94568

RE: Quarterly Monitoring Report for 6310 Houston Place, Dublin, California.

Dear Mr. Houston:

This letter report presents the results of quarterly monitoring performed on September 24, 1992 for the above referenced property, shown in Figure 1, Attachment A. Previous soil and groundwater analytical results have been summarized in reports dated April 9, 1991, titled "Well Installation Report and Results of Quarterly Monitoring, American City Truck Stop, 6310 Houston Court, Dublin, CA", in the "Quarterly Monitoring Report" dated August 5, 1991, in the "Quarterly Monitoring Report" dated February 14, 1992 and in previous reports referenced therein. To evaluate the potential impact on beneficial uses of groundwater due to the previous hydrocarbon release, a quarterly monitoring program has been implemented.

GROUNDWATER SAMPLE COLLECTION PROTOCOL

A proposal to collect water samples from four of the six groundwater monitoring wells was submitted for approval to Mr. Ravi Arulanantham, Hazardous Materials Specialist with Alameda County Health Care Services. Mr. Arulanantham, approved collection of water samples from five of the six groundwater monitoring wells and indicated that Well MW-4 was to be monitored for water level elevation. In a letter dated June 1, 1992, Mr. Thomas Peacock, Supervising HMS of the Hazardous Material Division also approved collection of water samples from five of the six wells and water level measurements in all six (6) monitoring wells.

The groundwater samples have been collected in accordance with protocol presented in the report dated 9 April, 1991. Initially, the wells were purged by bailing until a non turbid discharge was obtained. During sampling, well discharge was monitored for temperature, pH and conductivity until these indicator parameters had stabilized completely. Once the indicator parameters had stabilized, a teflon bailer equipped with a bottom emptying device was used for collection of groundwater samples, reducing the risk of volatilization of hydrocarbon constituents. Water samples were transferred directly from the bottom emptying device into glass vessels equipped with teflon septa. Samples were appropriately preserved and delivered to the certified analytical laboratory under appropriate chain of custody protocol.

Groundwater Analytical Results

The groundwater samples have been submitted for analysis of Total Petroleum Hydrocarbons as Diesel (TPHD), Total Oil and Grease (TOG) and Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) using EPA methods. Analytical results are summarized in Table 1, Attachment B. Certified analytical reports and chain of custody documentation are presented in Attachment C.

Groundwater Elevation Data

Groundwater elevation data are summarized in Table 2, Attachment B. The wells were observed to be under negative pressure upon removal of the sealed well caps, and were allowed to equilibrate for more than 24 hours before sampling. The length of time required for equilibrium water level conditions to be established is associated with the very fine grained, semiconfining site soils, which are prone to a delayed yield from storage. The groundwater flow direction is generally consistent with previous site data (see Plate 2, Attachment A).

CONCLUSIONS

Trace levels of TPHD have been detected in Wells MW-1, MW-2 and MW-5. In all analyzed groundwater samples, TOG and BTEX are below the laboratory detection limits. Well MW-6, installed to provide for lateral downgradient definition of petroleum hydrocarbons, contained no detectable petroleum constituents.

Obviously, the level of TPH-Diesel will continue to decrease in time (please see the graphic in Attachment C) due to natural biodegradation.

Reporting

Copies of this groundwater monitoring report should be submitted to:

RWQCB- S.F. Bay Region	Alameda County Health Care Services Agency
Attn: Mr. Lester Feldman	Attn: Mr. Thomas Peacock
2101 Webster Street, Ste. 500	80 Swan Way, Ste. 500
Oakland, CA 94612	Oakland, CA 94621

Additional copies of this report have been provided for the purpose of regulatory submittal.

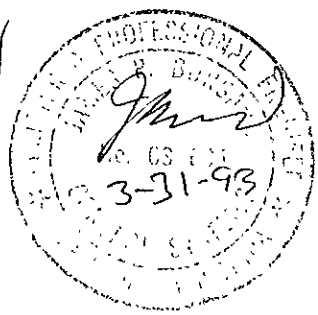
Should you have any questions or comments, please call Valentin at (510) 770-5733.

Very truly yours,

ENVIRONETICS GEO-ENGINEERING

Valentin N. Constantinescu, M.Sc.
Senior Project Hydrogeologist

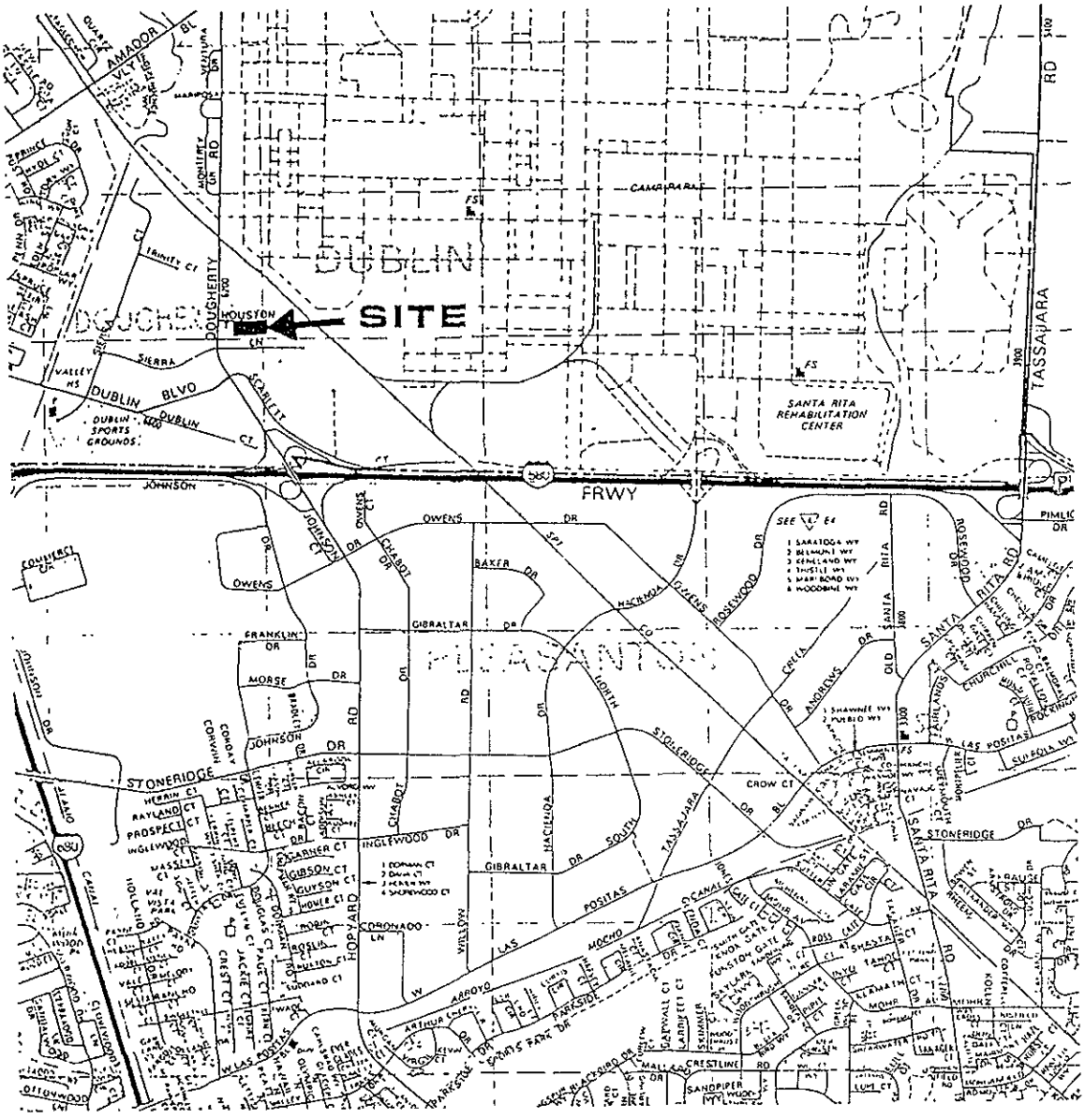
James P. Burgard, P.E.
President



VNC/JPB/nr
Attachments

ATTACHMENT A

PLATES



Source: Thomas Bros. Maps,
Alameda County, 1989

0 2,000 feet
SCALE

N

Environetics Geo-Engineering		WINNING ACTION INVESTMENTS SITE LOCATION MAP
Project No. 104	Drawn by: V. N. C.	
Date: 10/7/92	Checked by: J. P. B.	

Plate 1

9/82 $\frac{\Delta E' (H-M)}{\Delta E' (H-L)} = \frac{X}{Dist\ H-L}$ $(D\cdot S)\left[\frac{\Delta E'}{\Delta E'}\right] = X$ 3,45.

1/82 $(80)\left[\frac{0.01}{0.04}\right]$ $(80)\left[\frac{0.58}{0.63}\right] = \sim 74$

HOUSTON PLACE

DOUGHERTY ROAD

MW-3

MW-2

MW-1

MW-5

MW-4

MW-6

BORCHERS BROS. SUPPLY

EXISTING GAS PUMPS

N

EXPLANATION

MW-1* Monitoring well

← Groundwater flow direction

SCALE

0 100 feet

Environetics Geo-Engineering	
Project No.: 104	Drawn by: V. N. C.
Date: 10/7/92	Checked by: J. P. B.

WINNING ACTION INVESTMENTS

SITE MAP

Plate 2

ATTACHMENT B

TABLES

Table 1. Summary of historical groundwater monitoring results for American City Truck Stop, Winning Action Investments, Inc., Dublin, CA

MONITORING WELL MW-1

DATE	TPHD	TOG	B	T	E	X
08/15/89	10.6	N/A	0.016	ND	0.0024	0.0031
12/13/89	60.0	N/A	ND	ND	ND	ND
06/20/90	4.3	7.2	ND	ND	ND	ND
08/30/90	15.0	20.0	ND	ND	ND	ND
03/01/91	<0.05	<0.05	N/A	N/A	N/A	N/A
07/19/91	10.0	20.0	N/A	N/A	N/A	N/A
01/17/92	3.2	<5	<0.0003	0.0006	0.0004	0.0024
09/24/92	0.690	<0.5	<0.0005	<0.0005	<0.0005	<0.0005

MONITORING WELL MW-2

DATE	TPHD	TOG	B	T	E	X
08/15/89	47.0	50.0	ND	ND	ND	ND
12/13/89	34.0	95.0	ND	ND	ND	ND
06/20/90	1.2	ND	ND	ND	ND	ND
08/30/90	1.8	2.5	ND	ND	ND	ND
03/01/91	<0.05	1.9	N/A	N/A	N/A	N/A
07/19/91	2.3	8.9	N/A	N/A	N/A	N/A
01/17/92	0.65	<5.0	<0.0003	<0.0003	<0.0003	0.0006
09/24/92	0.260	<0.5	<0.0005	<0.0005	<0.0005	<0.0005

MONITORING WELL MW-3

DATE	TPHD	TOG	B	T	E	X
08/15/89	2.0	N/A	ND	ND	ND	ND
12/13/89	1.7	N/A	ND	ND	ND	ND
06/20/90	ND	ND	ND	ND	ND	ND
03/01/91	0.45	0.6	N/A	N/A	N/A	N/A
07/19/91	0.32	0.7	N/A	N/A	N/A	N/A
01/17/92	0.16	<5	<0.0003	<0.0003	<0.0003	<0.0003
09/24/92	<0.1	<0.5	<0.0005	<0.0005	<0.0005	<0.0005

MONITORING WELL MW-4

DATE	TPHD	TOG	B	T	E	X
06/20/90	22.0	8.6	ND	ND	ND	ND
08/30/90	0.56	2.4	ND	ND	ND	ND
03/01/91	0.73	1.4	N/A	N/A	N/A	N/A
07/19/91	0.72	1.2	N/A	N/A	N/A	N/A
01/17/92	N/A	N/A	N/A	N/A	N/A	N/A
09/24/92	N/A	N/A	N/A	N/A	N/A	N/A

MONITORING WELL MW-5

DATE	TPHD	TOG	B	T	E	X
03/07/91	74.0	160	<0.0005	0.0012	0.001	0.0022
07/19/91	32.0	34	<0.0005	<0.0005	<0.0005	0.0020
01/17/92	0.66	<5	<0.0003	<0.0003	<0.0003	0.0009
09/24/92	0.170	<0.5	<0.0005	<0.0005	<0.0005	<0.0005

MONITORING WELL MW-6

DATE	TPHD	TOG	B	T	E	X
03/07/91	<0.05	<0.5	N/A	N/A	N/A	N/A
07/19/91	<0.05	<0.5	N/A	N/A	N/A	N/A
01/17/92	<0.05	<5	<0.0003	<0.0003	<0.0003	<0.0003
09/24/92	<0.1	<0.5	<0.0005	<0.0005	<0.0005	<0.0005

Note: Concentrations expressed in milligrams per liter (mg/L), or ppm. 1989 and 19990 results reported in Winters Petroleum (1989), Safety Specialists (1989) and NSI (1990)

CAL-EPA Drinking Water Standards:

benzene - 0.001 mg/1
ethylbenzene - 0.680 mg/1
xylenes - 1.750 mg/1

Abbreviations

TPHD - total petroleum hydrocarbons as diesel
B - benzene
T - toluene
X - xylenes
E - ethylbenzene
TOG - total oil and grease
ND - not analyzed
N/A - not analyzed
Cal-EPA - California Environmental Protection Agency

Table 2. Summary of groundwater elevation data for American City Truck Stop, Winning Action Investments, Inc., Dublin, CA

MONITORING WELL MW-1

DATE	WHE	DTW	GWE
08/15/89	332.47	NR	323.13
12/13/89		9.34	323.13
06/20/90		8.84	323.63
08/30/90		8.83	323.64
04/08/91		7.73	324.74
07/12/91		9.25	323.22
01/17/92		9.72	322.75
09/24/92		10.28	322.19

MONITORING WELL MW-2

DATE	WHE	DTW	GWE
08/15/89	332.58	NR	323.27
12/13/89		9.21	323.37
06/20/90		8.82	323.76
08/30/90		8.82	323.76
04/08/91		7.81	324.77
07/12/91		9.42	323.16
01/17/92		9.70	322.28
09/24/92		10.25	322.33

MONITORING WELL MW-3

DATE	WHE	DTW	GWE
08/15/89	332.40	NR	323.33
12/13/89	10.12	9.10	323.30
06/20/90		8.57	323.83
08/30/90	322.28	8.58	323.82
04/08/91		7.58	324.82
07/12/91		9.11	323.29[a]
01/17/92		9.57	322.83
09/24/92		10.12	322.28

MONITORING WELL MW-4

DATE	WHE	DTW	GWE
06/20/90	331.55[A]	8.06	323.49
08/30/90		8.07	323.48
04/08/91		7.70	323.85
07/12/91		9.00	322.55[a]
01/17/92		9.76	321.79
09/24/92		10.32	321.23

MONITORING WELL MW-5

DATE	WHE	DTW	GWE
04/08/91	332.49	7.75	324.74
07/12/91	9.63	8.98	323.51[a]
01/17/92		9.67	322.82
09/24/92	322.86	9.63	322.86

Continued on next page

Table 2. (continued) Summary of groundwater elevation data for American City Truck Stop, Winning Action Investments, Inc., Dublin, CA

MONITORING WELL MW-6

DATE	WHE	DTW	GWE
04/08/91	332.64	7.95	324.69
07/12/91		9.42	323.22[a]
01/17/92		9.56	323.08
09/24/92		10.12	322.52

Note: Elevation data expressed in feet above mean sea level, City of Dublin datum. Elevation data from 1989 and 1990 reported in Safety Specialists (1989) and NSI (1990), respectively.

a Uncertain data.

Abbreviations

WHE - well-head elevation
DTW - depth to water
GWE - groundwater elevation

ATTACHMENT C

CERTIFIED ANALYTICAL REPORTS, CHAIN OF CUSTODY AND GRAPHIC

Excelchem
Environmental Labs
8112 Patton Avenue
Citrus Heights, CA 95610
(916) 729-5313

ANALYSIS REPORT

Attention: Mr. Valentin Constantineson
Environetics Geo-Engineering
200 Brown Rd., Suite 210
Fremont, Ca. 94539

Project: Winning Action

Date Sampled : 9-24-92
Date Received: 9-28-92
BTEX Analyzed: 10-3-92
TPHg Analyzed: NR
TPHd Analyzed: 9-30-92
Matrix: Water

	Benzene PPB	Toluene PPB	Ethyl-benzene PPB	Total Xylenes PPB	TPHg PPB	TPHd PPB
Reporting Limit:	0.5	0.5	0.5	0.5	50	100
SAMPLE Laboratory Identification						
MW-1 W0992338	ND	ND	ND	ND	NR	690
MW-2 W0992339	ND	ND	ND	ND	NR	260
MW-3 W0992340	ND	ND	ND	ND	NR	ND
MW-5 W0992341	ND	ND	ND	ND	NR	170
MW-6 W0992342	ND	ND	ND	ND	NR	ND

PPB = Parts per billion = ug/L = micrograms per liter
ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.
NR = Analysis not requested.

ANALYTICAL PROCEDURES

BTEX-- Benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) are analyzed by using EPA Method 602 which utilizes a gas chromatograph (GC) equipped with a photoionization detector (PID).
TPHg--Total petroleum hydrocarbons as gasoline (low-to-medium boiling points) are analyzed by using modified EPA Method 8015, which utilizes a GC equipped with an FID.
TPHd--Total petroleum hydrocarbons as diesel (high boiling points) are measured by extraction using EPA Method 3510 followed by modified EPA Method 8015 with direct sample injection into a GC equipped with an FID.

Laboratory Representative

10-5-92
Date Reported

EXCELCHEM ENVIRONMENTAL LABS IS CERTIFIED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY (Certification No. 1760)

Excelchem
Environmental Labs
8112 Patton Avenue
Citrus Heights, CA 95610
(916) 729-5313

ANALYSIS REPORT

Attention:	Mr. Valentin Constantineson	Date Sampled :	9-24-92
	Environetics Geo-Engineering	Date Received:	9-28-92
	200 Brown Rd., Suite 210	TOG Analyzed:	9-30-92
	Fremont, Ca. 94539	Matrix :	Water

Project: Winning Action

	TOG PPB
Reporting Limit:	500
SAMPLE Laboratory Identification	
MW-1 W0992338	ND
MW-2 W0992339	ND
MW-3 W0992340	ND
MW-5 W0992341	ND
MW-6 W0992342	ND

ppb = parts per billion = ug/L = micrograms per liter
ND = Not detected. Compound(s) may be present at concentrations below the reporting limit.

ANALYTICAL PROCEDURES
TOG-- Total oil and grease is measured gravimetrically by standard method 5520d&e.

Laboratory Representative

10-5-92
Date Reported

EXCELCHEM ENVIRONMENTAL LABS IS CERTIFIED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY (Certification No. 1760)

ENVIRONETICS GEO-ENGINEERING
200 Brown Road, Suite 210
Fremont, California 94539
(510)770-5733 Telefax(510)770-5752

CHAIN OF CUSTODY

DATE: 9/25/92 PAGE: 1 OF 1

PROJ. MGR. VALENTIN CONSTANTINESCU

SAMPLER'S SIGNATURE Valentin Constantinescu

PHONE NO. 510 770-5733

ANALYSIS REQUEST

SAMPLE I.D.	DATE	TIME	MATRIX	TPHG	TPHG & BTEX	TPHD	BTEX	O & G	METALS Cd,Cr Pb,Zn Ni	HALOCARBONS PURGEABLE	ORGANICS VOLATILE	ORGANIC LEAD	TOTAL LEAD	SOLUBLE LEAD					NUMBER OF CONTAINERS
MW-1	9/24/92	16:45	SOIL / WATER			X	X	X											2+2
MW-2	9/24/92	16:55	SOIL / WATER			X	X	X											2+2
MW-3	9/24/92	17:10	SOIL / WATER			X	X	X											2+2
MW-5	9/24/92	17:15	SOIL / WATER			X	X	X											2+2
MW-6	9/24/92	17:20	SOIL / WATER			X	X	X											2+2
			SOIL / WATER																

PROJECT INFORMATION:
WINNING ACTION

LABORATORY INSTRUCTIONS/COMMENTS:
Turn Around Time (Circle One)
Same Day 24 Hrs 48 Hrs
72 Hrs (Normal)

ANALYTICAL LABORATORY EXCELCHEM
CITY

RELINQUISHED BY:
Valentin Constantinescu
Signature
VALENTIN CONSTANTINESCU
Printed Name
ENVIRONETICS
Company
Time 13:15 Date 9/25/92

RECEIVED BY:
Dave Charette
Signature
DAVE CHARETTE
Printed Name
EXPRESS-IT
Company
Time 1315 Date 9-25-92

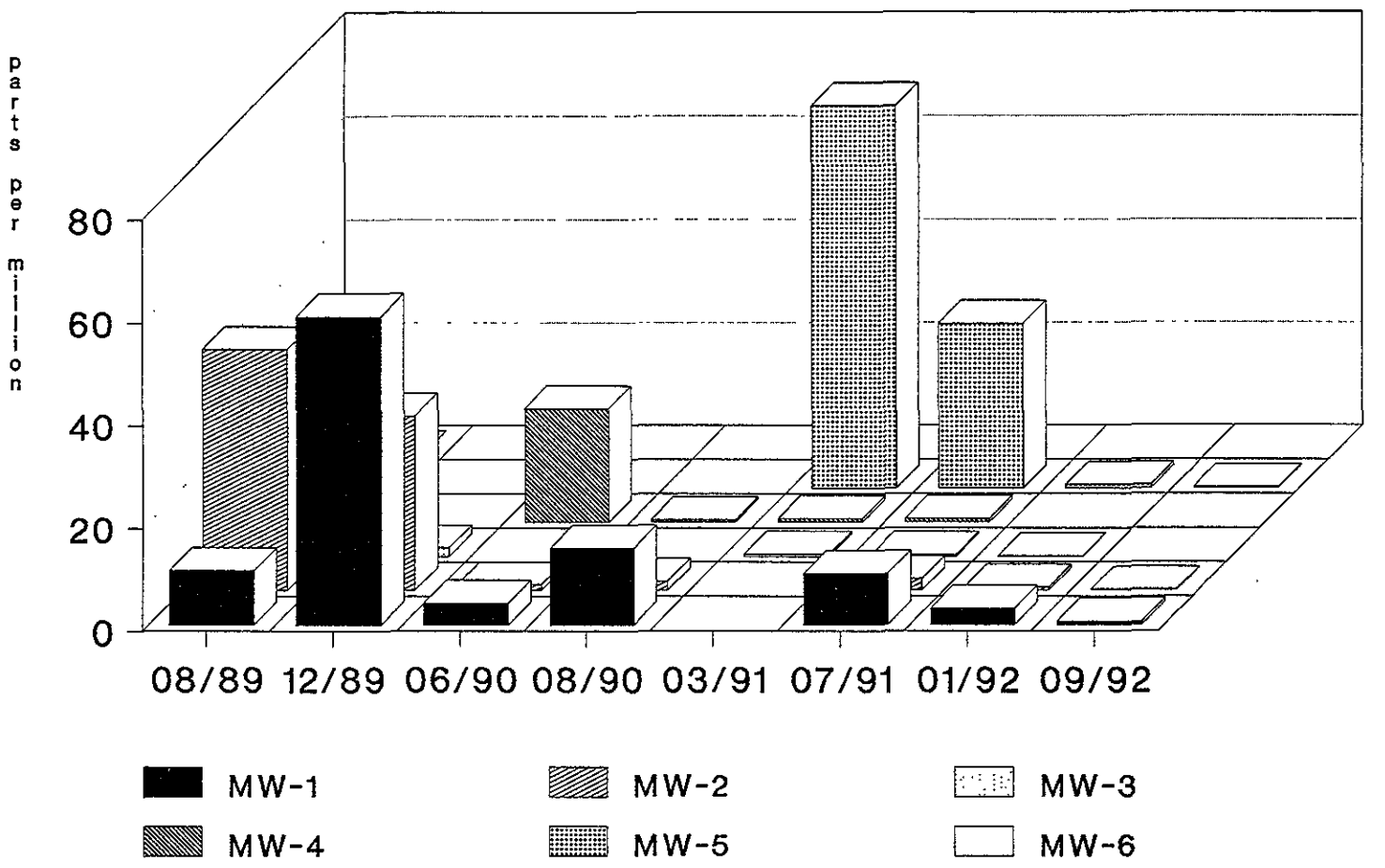
RELINQUISHED BY:
Dave Charette
Signature
DAVE CHARETTE
Printed Name
EXPRESS-IT
Company
Time 1900 Date 9-25-92

RECEIVED BY:
R Smith
Signature
R SMITH
Printed Name
Express-It
Company
Time 0059 Date 9-26-92

RELINQUISHED BY:
R Smith
Signature
R SMITH
Printed Name
Express-IT
Company
Time 0600 Date 9-26-92

RECEIVED BY:
M Ralston
Signature
Marilyn Ralston
Printed Name
Express It
Company
Time 0800 Date 9-28

TPH-Diesel vs. Time



6310 Houston Place, Dublin, California

ATTACHMENT D

WELL MONITORING FORMS

Environetics Geo-Engineering

200 Brown Road, Suite 210
Fremont, California 94539
(510)770-5733 Telefax (510)770-5752

WELL MONITORING FORM:

CLIENT: Fred L. Houston DATE: 9/24/92

ADDRESS: 6310 Houston Place

Dublin, California

Note 1: TOTAL WELL DEPTH & DEPTH TO WATER measurements are read to an accuracy of .01' from a straight edge placed in a north-south orientation on top of the christy box.

Note 2: The 0.17 figure used below to convert WATER COLUMN HEIGHT to gallons has units of gallons/linear foot, and is for a 2" diameter, Schedule 40 PVC pipe with an inside diameter of 2.067". Similarly, use a conversion factor of 0.66 for a 4" pipe, which has a 4.026" I.D.

TOTAL WELL DEPTH 20.30' MONITORING WELL # MW-1

- DEPTH TO WATER 10.28'

= WATER COLUMN HEIGHT 10.02' X 0.66 = 6.61 Gallons (1 well volume)

water to be purged from monitoring well prior to taking samples.

3 X 6.61 = 19.83 (3 well volumes)

TIME	GALLONS	TEMPERATURE °F	pH	CONDUCTIVITY µmhos/cm
10:15	1	67.0	7.15	5.89
10:22	3	65.3	7.23	5.78
10:37	5	64.8	7.26	5.45
10:46	7	65.1	7.18	4.27
10:57	9	67.2	7.26	4.26
11:12	11	65.2	7.17	3.67
11:25	13	64.5	7.24	3.78
11:36	15	64.7	7.23	3.87
11:55	17	63.5	7.26	3.56
12:07	19	64.3	7.25	3.58
12:22	21	64.6	7.27	3.55

CONTAMINANT ODOR? NO TIME OF SAMPLE COLLECTION: 16:45

TURBIDITY LEVEL: LOW

SHEEN ON WATER? NO SAMPLER'S SIGNATURE: Valentin Constantin

Environetics Geo–Engineering

200 Brown Road, Suite 210
Fremont, California 94539
(510)770–5733 Telefax (510)770–5752

WELL MONITORING FORM:

CLIENT: Fred L. Houston DATE: 9/24/92

ADDRESS: 6310 Houston Place

Dublin, California

Note 1: TOTAL WELL DEPTH & DEPTH TO WATER measurements are read to an accuracy of .01' from a straight edge placed in a north–south orientation on top of the christy box.

Note 2: The 0.17 figure used below to convert WATER COLUMN HEIGHT to gallons has units of gallons/linear foot, and is for a 2" diameter, Schedule 40 PVC pipe with an inside diameter of 2.067". Similarly, use a conversion factor of 0.66 for a 4" pipe, which has a 4.026" I.D.

TOTAL WELL DEPTH 19.07 MONITORING WELL # MW-2

– DEPTH TO WATER 10.25

= WATER COLUMN HEIGHT 8.82 X 0.66 = 5.82 Gallons (1 well volume)

Multiply 1 well volume by 3 to obtain the minimum number of gallons of water to be purged from monitoring well prior to taking samples.

3 X 5.82 = 17.46 (3 well volumes)

TIME	GALLONS	TEMPERATURE °F	pH	CONDUCTIVITY µmhos/cm
12:30	1	64.7	6.89	3.56
12:42	3	64.2	7.25	3.45
12:58	5	63.6	7.65	3.58
13:10	7	62.5	7.62	3.24
13:21	9	62.3	7.56	3.27
13:34	11	62.1	7.68	3.19
13:42	13	60.7	7.45	3.27
13:53	15	61.4	7.68	3.45
14:05	17	61.9	7.65	3.58
14:12	19	61.7	7.66	3.56

CONTAMINANT ODOR? NO TIME OF SAMPLE COLLECTION: 16:55

TURBIDITY LEVEL: LOW

SHEEN ON WATER? NO SAMPLER'S SIGNATURE: Valentin Tsonkov

Environetics Geo-Engineering

200 Brown Road, Suite 210
Fremont, California 94539
(510)770-5733 Telefax (510)770-5752

WELL MONITORING FORM:

CLIENT: Fred L. Houston DATE: 9/24/92

ADDRESS: 6310 Houston Place

Dublin, California

Note 1: TOTAL WELL DEPTH & DEPTH TO WATER measurements are read to an accuracy of .01' from a straight edge placed in a north-south orientation on top of the christy box.

Note 2: The 0.17 figure used below to convert WATER COLUMN HEIGHT to gallons has units of gallons/linear foot, and is for a 2" diameter, Schedule 40 PVC pipe with an inside diameter of 2.067". Similarly, use a conversion factor of 0.66 for a 4" pipe, which has a 4.026" I.D.

TOTAL WELL DEPTH 17.45' MONITORING WELL # MW-3

- DEPTH TO WATER 10.12'

= WATER COLUMN HEIGHT 7.33' X 0.66 = 4.84 Gallons (1 well volume)

Multiply 1 well volume by 3 to obtain the minimum number of gallons of water to be purged from monitoring well prior to taking samples.

3 X 4.84 = 14.52 (3 well volumes)

TIME	GALLONS	TEMPERATURE °F	pH	CONDUCTIVITY µmhos/cm
14:20	1	67.3	7.56	10.23
14:34	3	66.4	7.45	10.45
14:42	5	67.1	7.43	10.78
14:51	7	54.6	7.47	10.83
14:59	9	64.3	7.45	10.75
15:10	11	64.7	7.43	10.78
15:21	13	64.6	7.52	10.89
15:26	15	64.7	7.57	10.92
15:31	17	64.5	7.55	10.95

CONTAMINANT ODOR? NO TIME OF SAMPLE COLLECTION: 17:10

TURBIDITY LEVEL: LOW

SHEEN ON WATER? NO SAMPLER'S SIGNATURE: Valentin Constantin

Environetics Geo-Engineering

200 Brown Road, Suite 210
Fremont, California 94539
(510)770-5733 Telefax (510)770-5752

WELL MONITORING FORM:

CLIENT: Fred L. Houston DATE: 9/24/92

ADDRESS: 6310 Houston Place

Dublin, California

Note 1: TOTAL WELL DEPTH & DEPTH TO WATER measurements are read to an accuracy of .01' from a straight edge placed in a north-south orientation on top of the christy box.

Note 2: The 0.17 figure used below to convert WATER COLUMN HEIGHT to gallons has units of gallons/linear foot, and is for a 2" diameter, Schedule 40 PVC pipe with an inside diameter of 2.067". Similarly, use a conversion factor of 0.66 for a 4" pipe, which has a 4.026" I.D.

TOTAL WELL DEPTH 18.15' MONITORING WELL # MW-5

- DEPTH TO WATER 9.63'

= WATER COLUMN HEIGHT 8.52' X 0.17 = 1.45 Gallons (1 well volume)

Multiply 1 well volume by 3 to obtain the minimum number of gallons of water to be purged from monitoring well prior to taking samples.

3 X 1.45 = 4.35 (3 well volumes)

TIME	GALLONS	TEMPERATURE °F	pH	CONDUCTIVITY µmhos/cm
15:35	1	55.8	7.12	8.12
15:45	2	54.7	7.22	8.08
15:52	3	56.8	7.17	8.06
15:58	4	54.9	7.18	8.25
16:05	5	55.1	7.16	8.27

CONTAMINANT ODOR? NO TIME OF SAMPLE COLLECTION: 17:15

TURBIDITY LEVEL: LOW

SHEEN ON WATER? NO SAMPLER'S SIGNATURE: Volunteer Consultant

Environetics Geo-Engineering

200 Brown Road, Suite 210
Fremont, California 94539
(510)770-5733 Telefax (510)770-5752

WELL MONITORING FORM:

CLIENT: Fred L. Houston DATE: 9/24/92

ADDRESS: 6310 Houston Place

Dublin, California

Note 1: TOTAL WELL DEPTH & DEPTH TO WATER measurements are read to an accuracy of .01' from a straight edge placed in a north-south orientation on top of the christy box.

Note 2: The 0.17 figure used below to convert WATER COLUMN HEIGHT to gallons has units of gallons/linear foot, and is for a 2" diameter, Schedule 40 PVC pipe with an inside diameter of 2.067". Similarly, use a conversion factor of 0.66 for a 4" pipe, which has a 4.026" I.D.

TOTAL WELL DEPTH 18.81' MONITORING WELL # MW-6

- DEPTH TO WATER 10.12'

= WATER COLUMN HEIGHT 8.69' X 0.17 = 1.48 Gallons (1 well volume)

Multiply 1 well volume by 3 to obtain the minimum number of gallons of water to be purged from monitoring well prior to taking samples.

3 X 1.48 = 4.44 (3 well volumes)

TIME	GALLONS	TEMPERATURE °F	pH	CONDUCTIVITY µmhos/cm
16:15	1	62.7	8.16	4.21
16:22	2	61.8	8.13	3.87
16:28	3	61.6	8.21	3.98
16:31	4	62.6	7.86	4.02
16:36	5	62.7	7.88	4.03

CONTAMINANT ODOR? NO TIME OF SAMPLE COLLECTION: 17:20

TURBIDITY LEVEL: LOW

SHEEN ON WATER? NO SAMPLER'S SIGNATURE: Valentin Gonzalez