

July 29, 1998 Project Number 6142.2

Ms. Eva Chu Hazardous Materials Specialist Alameda County Environmental Health Department 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Re: Report on the July 1998 Groundwater Monitoring Event, Abandonment of Well MW-1R, Construction Details of the Planned Building Slab and Request for Closure, 6085 Scarlett Court, Dublin, California.

Dear Ms. Chu:

This report presents the July 1998 groundwater monitoring report, abandonment of groundwater monitoring well MW-1R, construction details of the planned building slab and request for closure for the 6085 Scarlett Court site, in Dublin, California (Plate 1). The groundwater monitoring event was requested by the Alameda County Environmental Health Department (ACEHD) prior to abandoning onsite groundwater monitoring well MW-1R.

Background

The following background section is based on information presented in <u>Results of Soil and Ground-Water Investigations and Remedial Activities</u>, 6085 Scarlett Court, Dublin, <u>California</u>, by Levine Fricke, of Pleasanton, California, dated July 18, 1995.

The site was formerly owned by Aggregate Systems, Inc. and was used for rock, sand and concrete storage and distribution. Three 500 to 1,000 gallon underground storage tanks (USTs), one dispenser island and the concrete slab for an abandoned single story building were located onsite. The three USTs were removed from the site in June 1990 by Clayton Environmental Consultants of Pleasanton, California, under the supervision of the ACDEH. Numerous small holes were reported in the USTs and soil staining was observed in the excavation during the UST removals. Soil samples collected following the UST removals

indicated concentrations of up to 290 parts per million (ppm) of total petroleum hydrocarbons as gasoline (TPH-g) and up to 23 ppm of xylenes in the soil, as reported by Levine-Fricke.

A single groundwater monitoring well (MW-1) was installed southwest of the UST excavation in November 1993 by H₂OGEOL, Inc., of Livermore, California. Groundwater samples collected from well MW-1 in April 1994 contained 91 ppm TPH-g and BTEX components (benzene, toluene, ethylbenzene, and total xylenes) of up to 23 ppm benzene.

In 1994 Levine Fricke of Roseville, California, conducted a Phase II limited investigation onsite, which consisted of hand auger soil sampling and groundwater sampling. Following these investigations, Levine Fricke supervised the excavation of approximately 1,000 cubic yards of soil. Approximately 148 cubic yards of the 1,000 cubic yards of soil were contaminated and segregated from the clean soil. Well MW-1 was removed during the excavation. Replacement well MW-1R was installed on January 30, 1995. The location of MW-1R was approved by the ACDEH.

The approximately 148 cubic yards of contaminated soil were aerated onsite. On October 31, 1996 EnviroNet sampled the aerated soil. The samples were analyzed and found to be non-detect (ND) for TPH-g, and BTEX, and to contain from 12 to 15 mg/kg of TPH-d. The UST excavation was filled to within four feet of the surface with pea gravel, then the remainder of the excavation was filled with the aerated soil.

Well MW-1R was monitored by EnviroNet Consulting in September and December 1996. Low concentrations of TPH-g and benzene were detected in September; low concentrations of TPH-g and methyl tertiary butyl ether (MTBE) were detected in December (Table 2). The quarterly groundwater monitoring was discontinued with the concurrence of the ACDEH.

Levine-Fricke's March 6, 1996, Results of a Limited Health Risk-Assessment and Ground Water Modeling, 6085 Scarlett Court, Dublin, California, indicted that the risk associated with petroleum affected soil beneath the site was not significant.

Well MW-1R and a domestic well are located within the footprint of a planned motorcycle dealership building (enclosed folded plate). The general contractor, CSI of San Francisco, California, wished to abandon well MW-1R prior to constructing the building pad. Ms. Eva Chu of the ACEHD requested that well MW-1R and the domestic well be sampled for BTEX and MTBE by EPA Method 8260 prior to abandonment of well MW-1R.

According to CSI, the domestic well will be used for onsite irrigation and toilet flushing. The building will also be provided with a public water supply.

July 1998 GROUNDWATER MONITORING EVENT

Depth to Groundwater Measurement

The depth to groundwater was measured in monitoring well MW-1R on July 6, 1998. The groundwater elevation for well MW-1R is presented in Table 1. The casing elevation and groundwater elevation are reported in feet relative to Mean Sea Level.

Sampling of Groundwater Monitoring Well MW-1R

Before sampling, well MW-1R was purged in excess of three well volummes of groundwater until the pH, temperature, and conductivity of the purged water had stabilized. A groundwater sample was collected using a disposable bailer and transferred into 40 milliliter volatile organic analysis (VOA) vials. The sample was labeled, stored under refrigerated conditions, and transported to Alpha Analytical Laboratories Inc. (Alpha), in Ukiah, California, under Chain-of-Custody documentation. Information collected in the field during the sampling was recorded on a Groundwater Field Sampling Form, a copy of which is enclosed.

Sampling of the Domestic Well

The domestic well was not purged prior to sampling, due to the well's size. According to Mr. Wyman Hong of the Zone 7 Water Agency, this well is approximately 300 feet deep. The steel casing exposed at the ground surface is 10 inches in diameter. The construction crew placing the engineered fill for site's new building pad had been using water from the well to moisture condition the imported fill. However, they had no estimate of how much water they had removed from the well in the days immediately prior to collecting the sample. A groundwater sample was collected using a disposable bailer and transferred into 40 milliliter VOA vials. The water sample was labeled, stored under refrigerated conditions, and transported to Alpha under Chain-of-Custody documentation.

Groundwater Sample Analyses

Alpha subcontracted the analyses to Kiff Analytical LLC, in Davis, California. Kiff analyzed the samples for BTEX and MTBE using EPA Method 8260. Both Alpha and Kiff are California-certified analytical laboratories.

Analytical Results

The groundwater sample from well MW-1R contained 0.035 milligrams per liter (mg/L) of benzene and 0.00074 mg/L of ethylbenzene, but was non detect (ND) for the remaining BTEX components and MTBE. The sample from the domestic well contained 0.0011 mg/L of benzene, but was ND for the other BTEX components and MTBE. Table 2 presents the groundwater sample analytical results. A copy of Kiff's analytical report is enclosed.

Discussion

The groundwater flow direction and gradient cannot be determined with the groundwater elevation data from only one monitoring well. The July 18, 1995, Levine Fricke report indicates that the historic groundwater flow at the adjacent site to the south was toward the south to southwest. Based on the groundwater flow direction at the nearby site, monitoring well MW-1R is generally down-gradient of the former UST location.

The analytical results indicate the detection of 0.035 mg/L of benzene and 0.00074 mg/l of ethylbenzene in the sample from well MW-1R and 0.0011 mg/L benzene in the sample from the domestic well. Neither well contained a detectable concentration of MTBE.

ABANDONMENT OF GROUNDWATER MONITORING WELL MW-1R

A well abandonment permit for well MW-1R was received from the Zone 7 Water Agency on July 7, 1998. Verbal permission to abandon well MW-1R was received from Ms. Eva Chu of the ACDEH on July 9, 1998. Kvilhuag Drilling of Concord, California, abandoned well MW-1R by pressure grouting on July 14, 1998. A copy of the well abandonment permit is enclosed.

CONSTRUCTION DETAILS OF THE PLANNED BUILDING SLAB

Discussion with Ms. Chu indicated that the construction details of the planned building slab would be needed by the ACDEH in order to consider site closure. A copy of the cross section of the planned building slab was provided by Carlenzoli and Associates, of Santa Rosa, California. The cross section was signed and stamped by Douglas J. Ferrarelli, a California registered professional engineer.

Former monitoring well MW-1R and the domestic well are located within the planned warehouse area of the planed building. For the warehouse space, the cross section shows

a ten-inch thick layer of class 2 aggregate baserock overlying approximately two feet of engineered fill. On top of the baserock is a six-mil thick vapor barrier, then a two-inch thick sand layer followed by a seven inch thick concrete slab.

For office space area, the cross section shows four inches of gravel overlying approximately two feet of engineered fill. On top of the gravel is a six-mil thick vapor barrier, then a two-inch thick layer of sand followed by a five-inch thick concrete slab. A copy of the cross section is enclosed.

CLOSURE

Very low concentrations of benzene and ethylbenzene were detected in well MW-1R, this well has since been abandoned.

A very low concentration of benzene was detected in the sample from the domestic well, this well remains onsite. The detection of 0.0011 mg/L of benzene exceeds the Maximum Contaminant Level of 0.001 mg/L for benzene, as established by the California Department of Health Services, Standards and Technology Unit, Division of Drinking Water. However, this well will not be used as a drinking water source. At the time of sampling the well was not sealed and has been used by the construction crew to provide water to moisture-condition the engineered fill. The potential exists that the detection of a low concentration of benzene could be the result of contamination accidentally introduced into the well.

The contaminant source (USTs) and associated contaminated soil have been removed and documented by other consultants. Very low concentrations of BTEX components remain in the site's groundwater. Levine Fricke's March 6, 1996 report indicated that the risk associated with petroleum affected soil beneath the site is not significant.

The enclosed structural sections indicate that the building will have either a five or seven inch thick concrete slab overlying approximately two feet of engineered fill, a two-inch sand layer and a six-mil thick vapor barrier to prevent the migration of soil vapors into the building.

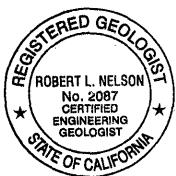
Further expenditure of funds does not appear justified and the remaining groundwater contamination should degrade by natural processes. Therefore, EnviroNet Consulting requests that the Alameda County Environmental Health Department grant site closure.

We trust this report provides the information you require. Please call (707) 546-9461 if you have any questions or comments.

Sincerely, **EnviroNet Consulting**



Certified Engineering Geologist No. 2087



Expires January 31, 2000

Enclosures:

Plate 1:

Site Location Map

Plate 2:

Site Plan

Folded Plan: Site Plan (by Herbert Samonsky, Architects, with modifications

by EnviroNet Consulting)

Structural Sections for Arlen Ness Motorcycles (by Carlenzoli

and Associates)

Table 1:

Groundwater Elevations, Well MW-1R

Table 2:

1996 Groundwater Sample Analytical Results

Table 3:

1998 Groundwater Sample Analytical Results

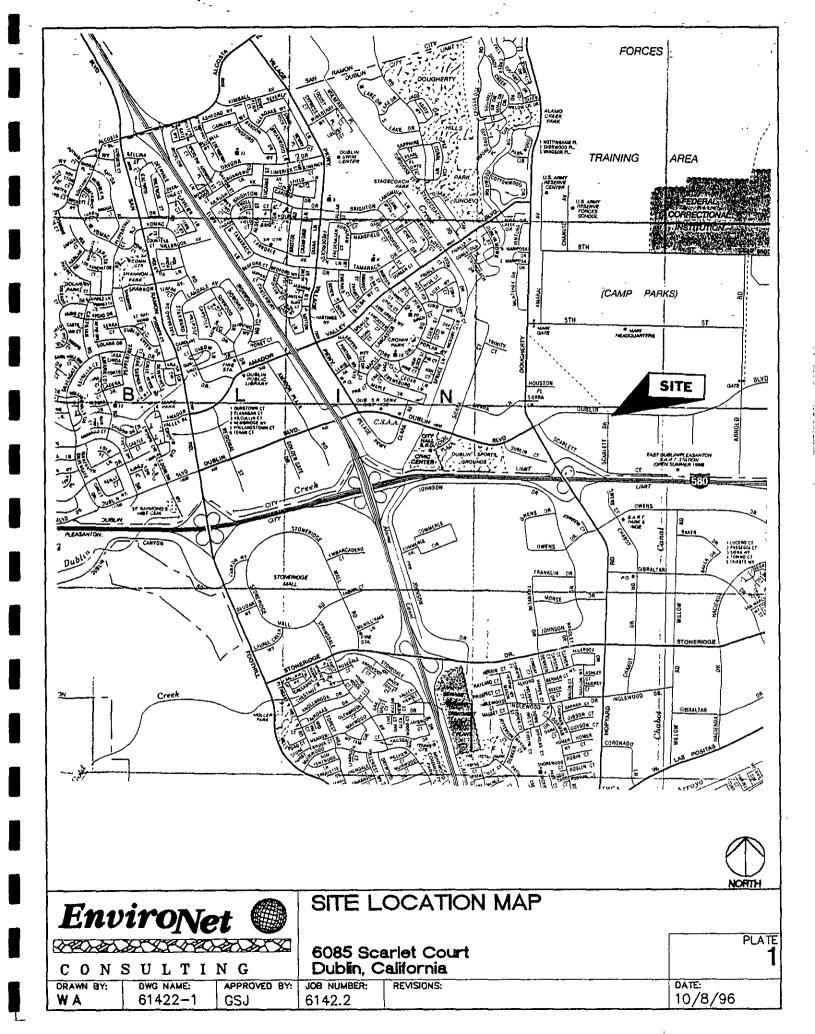
Kiff Analytical LLC Analytical Report, July 8, 1998 Groundwater Field Sampling Form for Well MW-1R

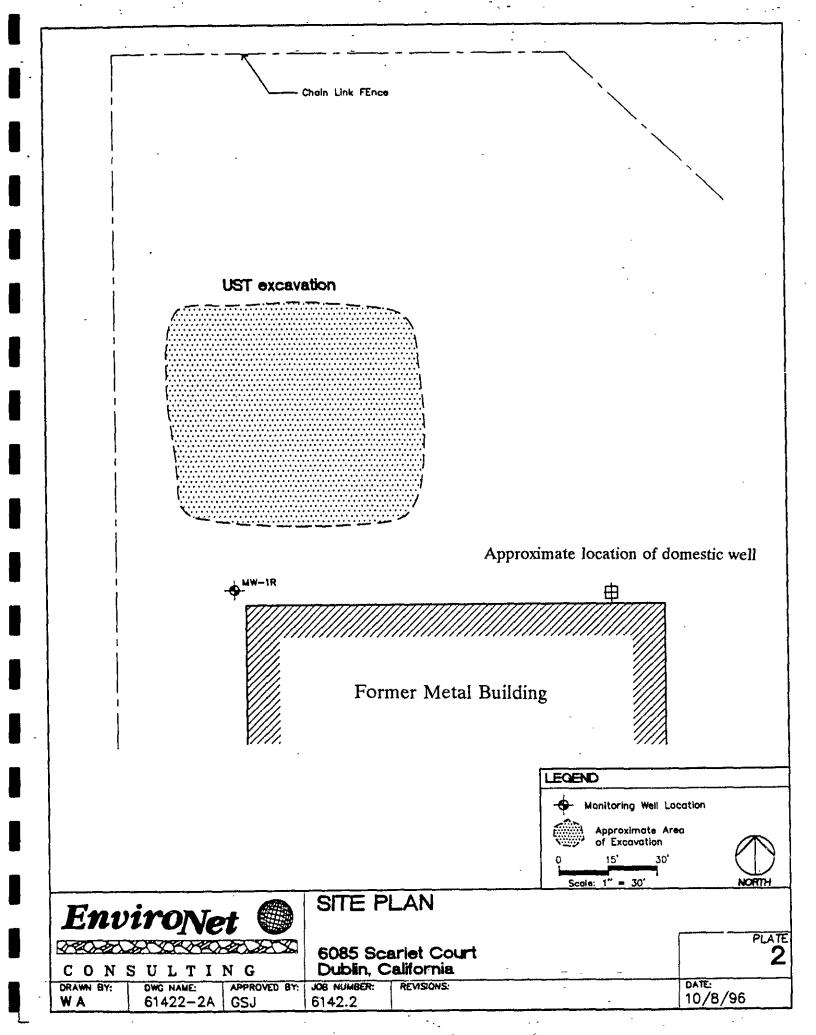
Well Abandonment Permit for Well MW-1R

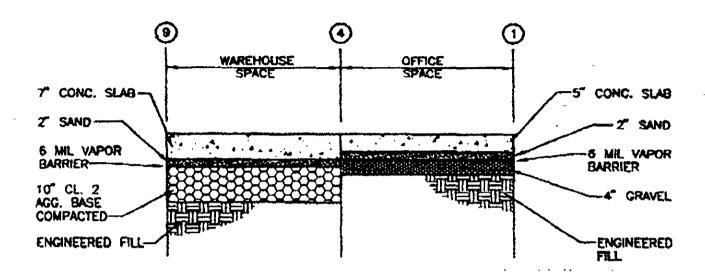
DISTRIBUTION

Project Number 6142.2

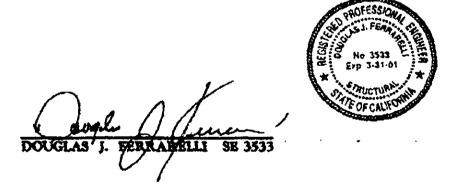
Mr. Burt Hamrol President CSI/Customer Service General Contracting, Inc. 525 York Street







STRUCTURAL SECTIONS FOR ARLEN NESS MOTORCYCLES



7-22-98



CARLENZOLI

AND

ASSOCIATES

Engineers-Surveyers-Planners

365A TESCONE CINCER, SANTA NORA, CA 95401 (707) 542-6465 FAX (707) 542-1645

Table 1: Groundwater Elevations, Well MW-1R

Well Number	Date of Water Level Measurement	Top of Casing Elevation*	Depth to Water in Feet	Ground Water Elevation*
MW-1R	9/10/96 12/19/96 7/6/98	330.01	6.61 4.30 4.80	323.40 325.71 325.21

^{*} In feet above mean sea level.

Table 2: 1996 Groundwater Sample Analytical Results (EPA Method 8020)

Well	Date			TPH- ma	В	7	E	X	MTBE
MW-1R	09/10/96	0.081	ND	ND	mg/ 0.0012	ND	ND	ND	********
IVI VV-I K	12/19/96	0.081	ND ND	ND ND	0.0012 ND	ND ND	ND ND	ND ND	0.110

ND = Not Detected.

---- = Not Analyzed.

TPH-d = TPH as diesel

TPH-mo = TPH as motor oil

Table 3: July 1998 Groundwater Sample Analytical Results (EPA Method 8260)

Well	Date	В	T	r.	X	MTBE
				ng/L		
MW-1R		0.035	ND	0.00074	ND	ND
Domestic Well	7/6/98	0.0011	ND	ND	ND	ND

ND = Not Detected



Date: 07/08/98

Robert Nelson Environet Consulting 3601 Regional Parkway, Suite A Santa Rosa, CA 95403

Subject: 2 Water Samples

Project Name: 6085 Scarlett Court, Dublin

Project Number: 6142.2

Dear Mr. Nelson,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Date: 07/08/98

6085 Scarlett Court, Dublin Project Name:

Project Number: 6142.2

Sample: Domestic Well

Matrix: Water

Sample Date: 07/06/98

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
	1.1	0,50	ug/L	EPA 8260B	07/08/98
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/08/98
Toluene Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/08/98
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/08/98
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/08/98
Toluene - d8 (Surr) 4-Bromofluorobenzene (Surr)	96.5 98.8		% Recovery % Recovery	EPA 8260B EPA 8260B	07/08/98 07/08/98

Sample: MW-1R

Matrix: Water

Sample Date :07/06/98

Sample Date :07/06/98	Measured	Method Reporting		Analysis	Date	
Parameter	Value	Limit	Units	Method	Analyzed	
	35	0.50	ug/L	EPA 8260B	07/08/98	
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/08/98	
Toluene	0.74	0.50	ug/L	EPA 8260B	07/08/98	
Ethylbenzene Total Xylenes	< 0.50	0,50	ug/L	EPA 8260B	07/08/98	
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/08/98	
Toluene - d8 (Surr)	95.7		% Recovery	EPA 8260B	07/08/98	
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	07/08/98	

Approved By: Joel Kif

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Date: 07/08/98

6085 Scarlett Court, Dublin Project Name:

Project Number: 6142.2

Water Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/07/98
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/07/98
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/07/98
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/07/98
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/07/98
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/07/98
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/07/98
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/07/98
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/07/98
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/07/98
Toluene - d8 (Surr)	98.4		% Recovery	EPA 8260B	07/07/98
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	07/07/98

Approved By: Jøel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Date: 07/08/98

QC Report : Method Spikes/ Method Spike Duplicates

6085 Scarlett Court, Dublin Project Name :

Project Number: 6142.2

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	e Units	Analysis Method	Oate Analyzed		Percent	Relative	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit	,
Water Spike Re	<u>-</u>								07/07/00	400	97.1	3.08	70-130	25	
Benzene Toluene	Blank Blank	<0.50 <0.50	50.0 50.0	50.0 50.0	50.1 49.8	48.6 48.2	ug/L ug/L	EPA 8260B EPA 8260B	07/07/98 07/07/98		96.4	3.39	70-130		

Approved By: Poel Kiff

DRIVING TIME

SITE TIME

WORK ORDER CHAIN OF CUSTODY RECORD

RESPONSIBLE FOR PROPER DISPOSAL OF HAZARDOUS WASTES. CLIENTS NOT PICKING UP HAZARDOUS WASTES MAY BE ASSESSED AN APPROPRIATE FEE.

7882

DATE 7-6-98 PAGE 1 OF Alpha Analytical Laboratories Inc. • 860 Waugh Lane, H-1, Uklah, CA 95482 • (707) 468-0401 • FAX (707) 468-5267 CLIENT'S NAME SAMPLE CONDITION ON **ANALYSES** RECEIPT: COLD/ICED?. 6085 Scarlet Court BUBBLES OR AIR SPACE? CONTRACT/PURCHASE ORDER/QUOTE NUMBER 6142.2 WERE SAMPLES PRESERVED? SIGNATURE OF PERSON AUTHORIZING WORK SAMPLED BY UNDER TERMS STATED ON REVERSE SIDE OF SCOVA THIS FORM. SAMPLE TYPE NO. OF **EXPLAIN IRREGULARITIES BELOW** SAMPLE NUMBER IDENTIFICATION LAB SAMPLE NUMBER DATE TIME AIR SOLID COMPLERS CONTS -01 7-6--02 1700 DATE TIME TURN AROUND TIME REQUESTED RELINQUISHED BY: RECEIVED BY: (SIGNATURE) (SIGNATURE) RELINQUISHED BY RECEIVED BY: DATE TIME 48 Hoar TH (SIGNATURE) (SIGNATURE) SAMPLE CONTROL OFFICER RELINQUISHED BY RECEIVED FOR LABORATORY BY: (SIGNATURE) METHOD OF SHIPMENT AUTHORIZED BY: SAMPLE DESPOSITION: 1. STORAGE TIME REQUESTED (SAMPLES WILL BE STORED FOR 30 DAYS WITHOUT ADDITIONAL CHARGES: SPECIAL INSTRUCTIONS THEREAFTER STORAGE CHARGES WILL BE BILLED AT THE PUBLISHED RATES.) 2. SAMPLE TO BE RETURNED TO CLIENT? YES NO HAZARDOUS MATERIALS ARE THE PROPERTY OF THE CLIENT. THE CLIENT IS TOTAL TIME

ENVIRONET CONSULTING GROUNDWATER FIELD SAMPLING FORM

		MEET IMEGI	REACTION .				
Project Number/Nume:	61422		Well Number:	MW-IR	-		
Project Location:	DES Emi	25 Dubla	Well Depth from TOC: 18.7				
Date: 7-6	5-1998		Casing Diameter:	2"	*		
Start Time:	30 Finish Time:		Product Thickness is	Inches:			
Recorded by:	CN		Water Level from T	oc: 4,80	Time: 1432		
Sampled by:	LN		Screened Interval:	Initis	il Well Depth:		
Purge Time Start: //	50 Purge Time St	op:	Well Elevation (TO	C):			
Pump Intake Setting:	Near Bottom 🗆 Ne	ar Top 🗆 Other:	Well Type: Moni	tor C Extraction C	Other:		
Notes:			Well Material: P	VC St. Steel O	her:		
		WEAT	HKR				
	Yes/No Clouds: Y Yes/No	ca/No	Precipitation in Las	5 Days:	,		
	YOLUME:	OF WATER TO BE RI	Moved Before:	EAMPLING			
(18.7.4.80) (TD - WL	$\frac{Z}{\text{Dia. inches}})^2 \times 0.04$	408 = <u>2.27</u>	gallons in one well	volume			
6.8 gallons in	3 well volumes		S total gailons	removed			
		FIELD MEAS	ASUREMENTS				
Time	рН	EC 1 10 100 (000)	Temp * F	Gallons	Appearance		
1635	7.09	1.76	71.2		54.		
	7.26	1.73	68-9	2	+URBID		
	7.20	1.71	67-9	3	\		
	7.17	1-71	68.0	4			
	7.20	1.70	67.5	5			
	· 7.21	1.72	67.3	6			
1650	7.21	17.1	67-3	7	<u> </u>		
Water Level After Pu	rging:		80% of Original Water Level:				
Water Level Before S	Sampling:						
APPEARANCE OF	SAMPLE: 5L.	tur 310		Tim	10: 1700		
Bailer: YES/No		Type: Despe	osobb,	GРM:			
Pump: Ves/No		Type: July	reselle	GPM:			
Dedicated: Yes/No		Туре		GPM:			
DECONTAMINATI	ON METHOD: Pari	ge Pump; TSP Wash	n, Double Rinse, Di	sposable Bailers)		
SAMPLE ANALYSI	S: SEE CHAIN OF	CUSTODY					
SIGNATURE:	1-66	nt 2. 1	Velsor	\			



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600 FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE	FOR OFFICE USE
Dublin Dublin	PERMIT NUMBER 98112 LOCATION NUMBER 3S/1E 6G26
MY SON FRANCISCO, CA ZID 94110	PERMIT CONDITIONS 1983 Circled Permit Requirements Apply
Address 360/ Regional Valce (707) 544-5769 Address 360/ Regional Valce (707) 546-946/ Ity Parkman Juda A Zip 95403 TYPE OF PROJECT Well Construction Geotechnical Investigation Cathodic Protection General Water Supply Contamination Well Destruction Well Destruction Well Destruction Well Destruction PROPOSED WATER SUPPLY WELL USE Domestic Industrial Other Municipal Irrigation DRILLING METHOD: Aud Rotary Air Rotary Auger X Table Other DRILLER'S LICENSE NO. C57 482370 WELL PROJECTS Drill Hole Diameter 2 in. Maximum Casing Diameter in. Depth 20 ft. Surface Seal Depth ft. Number	A. SENERAL 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date. 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects. 3. Permit is vaid if project not begun within 90 days of approval date. 8. WATER WELLS, INCLUDING PIEZOMETERS 1. Minimum surface seal thickness is two inches of cement grout placed by tremie. 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings. D. CATHODIC. Fill hole above anode zone with concrete placed by tremie. E. WELL DESTRUCTION. See attached.
GEOTECHNICAL PROJECTS Number of Borings Hole Diameter In. ESTIMATED STARTING DATE ESTIMATED COMPLETION DATE Thereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.	Approved Wigman Hong Date 7 Jul 98
APPLICANTS Robot L. Nolan, R. Lr. Date 7-7-19 C.E. L.	91992