
92 711 11 21 9 22

**FOURTH QUARTER 1992
GROUNDWATER MONITORING**

AT

**FORMER ISLAND GUN CLUB
500 MAITLAND DRIVE
ALAMEDA CALIFORNIA**

**Project No. F3125.31
February 1993**

RESNA
42501 Albrae Street
Fremont, California 94538
(510) 440-3300

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Fremont, California 94538
Phone: (510) 440-3300
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1125

January 19, 1993
RESNA Job No. F3125.32

Harbor Bay Isle Associates
1141 Harbor Bay Parkway
Alameda, California 94501

Attention: Mr. Aidan Barry

Subject: Letter Report on Fourth Quarter 1992 Groundwater Monitoring at Former Island Gun Club, 500 Maitland Drive, Alameda, California.

Dear Mr. Barry:

This letter summarizes the results of the fourth quarter 1992 groundwater sampling and analysis performed by RESNA Industries, Inc. (RESNA) at the subject site (see Plate 1).

BACKGROUND

The property is located on the northwest corner of Maitland Drive and Harbor Bay Parkway on the Bay Farm Island portion of Alameda. The 5-acre site was used as a shooting club [redacted] to approximately 1986. When the range opened, the site had standing water for most of the non-summer months. In the early 1960's, fill material was imported and added to the property. The fill material was derived from excess soil from various construction sites (RESNA Proposed Work Plan, March 24, 1992).

boring logs

In September 1992, RESNA conducted a Phase II Soil and Groundwater Investigation at the site. [redacted] included drilling three exploratory borings and installing three groundwater monitoring wells in the borings. The well locations are shown on Plate 2.



In order to evaluate gradient and lead, copper, and PNA concentrations in groundwater, [redacted] monitoring and sampling of the three wells was performed by RESNA for the fourth quarter 1992. This report summarizes the groundwater monitoring results for October, November, and December, 1992.

SAMPLING PROCEDURES

A representative of RESNA conducted monthly monitoring and sampling of monitoring wells MW-1, MW-2, and MW-3 on September 16, October 16, and November 30, 1992. Due to an error in the request for analysis for the November sampling, the three wells were sampled again on December 22, 1992. Purge water and equipment rinseate were placed in Department of Transportation (DOT)-approved 55-gallon drums and stored on-site, pending laboratory analysis.

Prior to sampling, the wells were purged of approximately 3 to 4 well volumes. Groundwater samples were collected using a clean teflon bailer and poured into the proper laboratory-supplied containers, labeled with a unique sample number, placed in a chilled cooler, entered onto a chain-of-custody form, and transported to a state-certified laboratory for analysis. RESNA's Groundwater Sampling Protocol is included in Appendix A. A summary of subjective evaluations and laboratory analytical results are included in Table 1.

LABORATORY ANALYSES

Groundwater samples were analyzed at RESNA Environmental Laboratories, a state-certified laboratory in Fremont, California. All groundwater samples were analyzed for total dissolved solids (TDS), copper, and lead using both the soluble threshold limit concentration (STLC) and the total threshold limit concentration (TTLC) methods, and for polynuclear aromatics (PNA's) using EPA Method 8270. The analytical reports and chain-of-custody records are included in Appendix B.

Summary of Analytical Results

A summary of groundwater sampling data is included in Table 1.

The laboratory analytical results indicate that polynuclear aromatics were not detected above laboratory detection limits in any of the sampling events.

Lead was detected in groundwater samples from MW-1 in September at 0.005 milligrams per liter (mg/L), using the total threshold limit concentration (TTLC) method. Lead was not detected at or above laboratory detection limits in samples from MW-1 in October or November using either the soluble threshold limit concentration (STLC) method or the TTLC method. In samples from MW-2, lead was detected in September and October at 0.005 mg/L and 0.006 mg/L, respectively, using the TTLC method. Lead was not detected in samples from MW-2 using the STLC method in September or October, and was not detected in November using either method. Samples from MW-3 contained lead using the STLC method in September, October, and November, at 0.005 mg/L, 0.005 mg/L, and 0.005 mg/L, respectively. Lead was not detected in samples from MW-3 using the STLC method in any of the sampling events.

Copper was detected in samples from MW-1 in September and October at 0.027 milligrams per liter (mg/L) and 0.026 mg/L, respectively, using the total threshold limit concentration (TTLC) method, and in October at 0.022 mg/L, using the soluble threshold limit concentration (STLC) method. Copper was not detected in samples from MW-1 in November using either method. Groundwater samples from MW-2 contained copper in September at 0.016 mg/L (STLC) and 0.12 mg/L (TTLC), and in October at 0.033 mg/L (STLC) and 0.038 mg/L (TTLC). Copper was not detected in samples from MW-2 at or above laboratory detection limits in November using either method. Groundwater samples from MW-3 contained copper at 0.31 mg/L (TTLC) in September. Copper was detected in samples from MW-3 in October at 0.027 mg/L (STLC) and 0.033 mg/L (TTLC), and in November at 0.056 mg/L (STLC) and 0.01 mg/L (TTLC).

Groundwater samples collected in December were not analyzed for copper or lead using either method.

Total dissolved solids (TDS) were detected in MW-1 in September, October, and December, at 2,200 milligrams per liter (mg/L), 2,200 mg/L, and 1,200 mg/L, respectively. Groundwater samples from MW-2 contained TDS at 4,800 mg/L, 4,800 mg/L, and 4,100 mg/L in September,

October, and December, respectively. TDS were detected in samples from MW-3 in September, October, and December, at 3,000 mg/L, 1,600 mg/L, and 1,400 mg/L, respectively. Groundwater samples collected in November were not analyzed for TDS.

Groundwater Gradient and Flow Direction

A summary of groundwater monitoring data and subjective evaluations is included in Table 1. Plates 3 through 6 show the groundwater elevation contours based on the water level data in Table 1. Groundwater flow has fluctuated from north to southeast to northwest from September to December. This could be due in part to tidal influences. The site is approximately 1 1/2 miles from the San Francisco Bay. The approximate gradients for ~~September, October, November, and December~~ were 0.005, 0.004, 0.001, and 0.003, respectively.

Discussion

The laboratory reports indicate non-detectable levels of polynuclear aromatics in the groundwater beneath the site.

The levels of total dissolved solids (TDS) in the groundwater at the site range from 1,200 mg/L to 4,800 mg/L. The United States Environmental Protection Agency (U.S. EPA) has not established guidelines for water quality goal with respect to TDS.

The established guidelines for ~~lead and copper~~ as reported in the California Ocean Plan Numerical Water Quality Objectives, established by the U.S. EPA (Marshack, CRWQCB-CVR, Water Quality Goals, September 1991) are ~~2 parts per billion (2,000 parts per million, or milligrams per liter) and 3 parts per billion (3,000 parts per million, or milligrams per liter)~~, respectively. These levels are established as a six-month median for Marine Aquatic Life Protection. The reported levels of copper and lead in the groundwater at the subject site exceed the above guidelines set by the U.S. EPA.

Reporting Requirements

A copy of this report will be forwarded to the following agencies in a timely manner.

Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621
Attention: Mr. Kevin Tinsley

City of Alameda
Department of Public Works
2263 Santa Clara Avenue
Alameda, California 94501
Attention: Mr. Robert L. Warnick, P.E.

San Francisco Bay
Regional Water Quality Control Board
2101 Webster Street, Room 500
Oakland, California 94612
Attention: Mr. Lester Feldman

Limitations

The discussion presented in this report are based on the following:

1. Observations by field personnel,
2. Results of laboratory analyses performed by a state-certified laboratory, and
3. Our understanding of the regulations of the State of California and the County of Alameda.

It is possible that variations in the soil or groundwater conditions at the site could exist beyond the points explored in this investigation. Also, changes in the groundwater conditions could occur at some time in the future because of variations in rainfall, temperature, regional water use, or other factors.

The services performed by RESNA have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the Alameda County area. Please note that contamination of soil and/or groundwater must be reported to the appropriate agencies in a timely manner. No other warranty, expressed or implied, is made.

RESNA includes in this report chemical analytical data from a state-certified laboratory. The analytical results are performed according to procedures suggested by the U.S. EPA and the State of California.

If you have any questions regarding this report, please do not hesitate to call.

Sincerely,

RESNA Industries Inc.

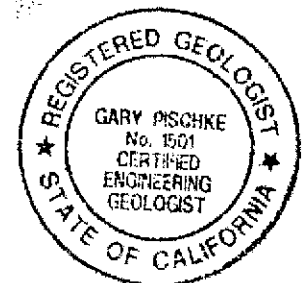


Sheryl Fontaine
Staff Geologist

SF/GP/sw



Gary Pischke, C.E.G. 1501
Project Manager



January 19, 1993

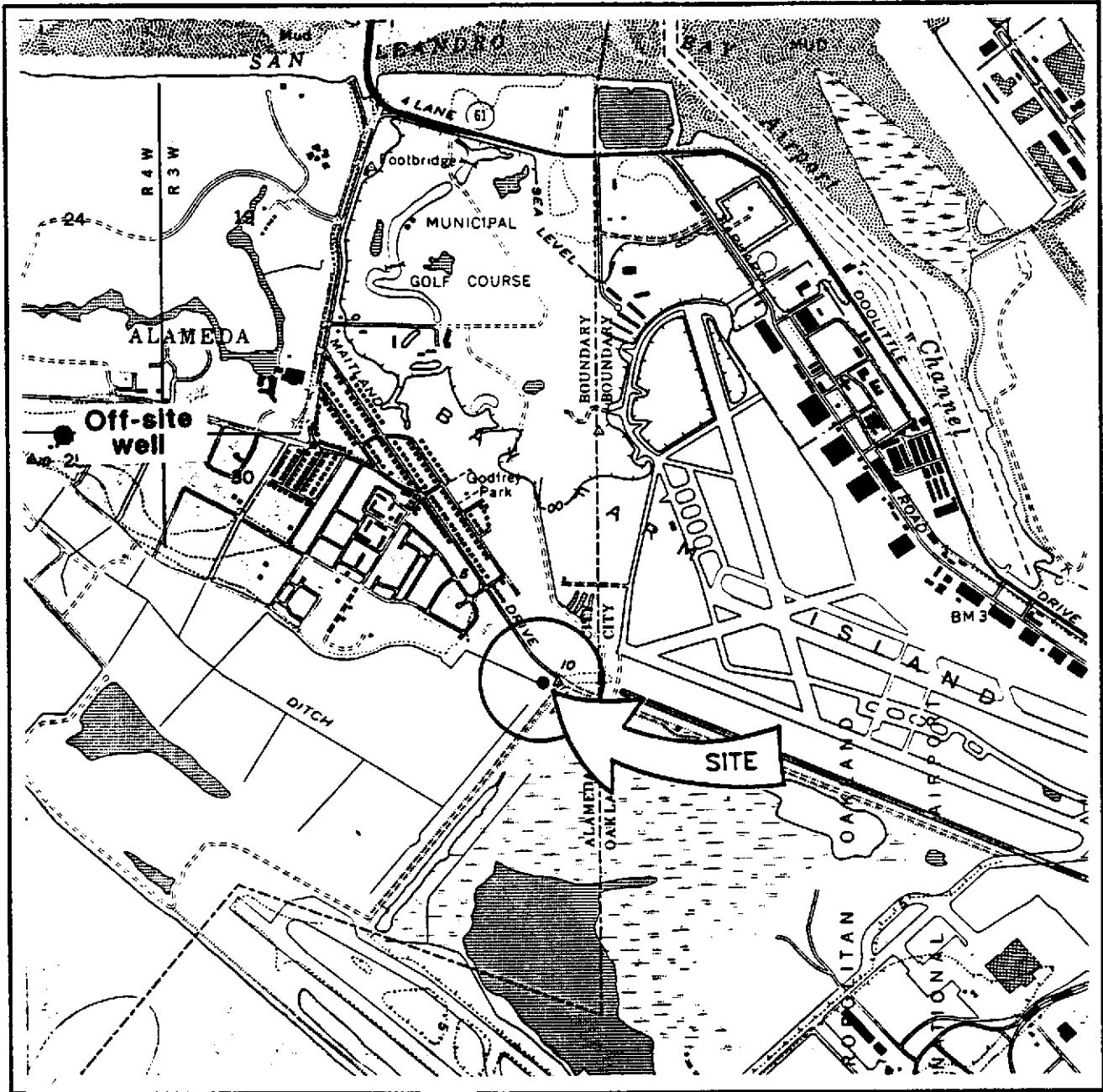
Harbor Bay Isle Associates
Project No. F3125.32

TABLE 1

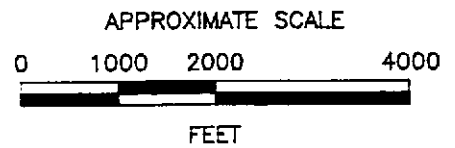
SUMMARY GROUNDWATER MONITORING AND SAMPLING DATA

Well No.	Sample Date	Well Elevation (MSL)	Depth to Water (ft.)	Groundwater Elevation (MSL)	TDS (mg/L)	STLC(Pb) (mg/L)	STLC(c) (mg/L)	TTLC(pb) (mg/L)	TTLC(c) (mg/L)	PNA's (µg/L)
MW-1	9/16/92	5.05	5.18	-0.13	2,200	<0.005	<0.01	0.013	0.027	ND
	10/16/92		5.38	-0.33	2,200	<0.005	0.022	<0.005	0.026	ND
	11/30/92		3.24	1.81	NR	<0.01	<0.01	<0.01	<0.01	NR
	12/22/92		3.50	1.55	1,200	NR	NR	NR	NR	ND
MW-2	9/16/92	5.60	5.52	0.08	4,800	<0.005	0.016	0.036	0.12	ND
	10/16/92		5.72	-0.12	4,800	<0.005	0.033	0.0061	0.0038	ND
	11/30/92		4.10	1.50	NR	<0.01	<0.01	<0.01	<0.01	NR
	12/22/92		3.45	2.15	4,100	NR	NR	NR	NR	ND
MW-3	9/16/92	4.76	4.23	0.53	3,000	<0.005	<0.1	0.087	0.31	ND
	10/16/92		4.40	0.36	1,600	<0.005	0.027	<0.005	0.033	ND
	11/30/92		3.17	1.59	NR	<0.01	0.056	0.034	0.01	NR
	12/22/92		3.00	1.76	1,400	NR	NR	NR	NR	ND

MSL = Elevation in feet above mean sea level
TDS = Total dissolved solids
PNA = Polynuclear aromatics
mg/L = Milligrams per liter
µg/L = Micrograms per liter
STLC = Soluble threshold limit concentration
TTLC = Total threshold limit concentration
Pb = Lead
Cu = Copper
NR = Analysis not requested
ND = Not detected. Refer to laboratory results for applicable detection limit
<0.01 = Not detected. Number following < indicates applicable laboratory detection limit.



SOURCE: U.S. GEOLOGICAL SURVEY
 7.5-MINUTE QUADRANGLE
 SAN LEANDRO, CALIFORNIA
 PHOTOREVISED 1980



RESNA	SITE LOCATION MAP	PLATE 1
	FORMER ISLAND GUN CLUB SITE	
	500 MAITLAND DRIVE	
PROJECT NO. F3125.32	ALAMEDA, CALIFORNIA	

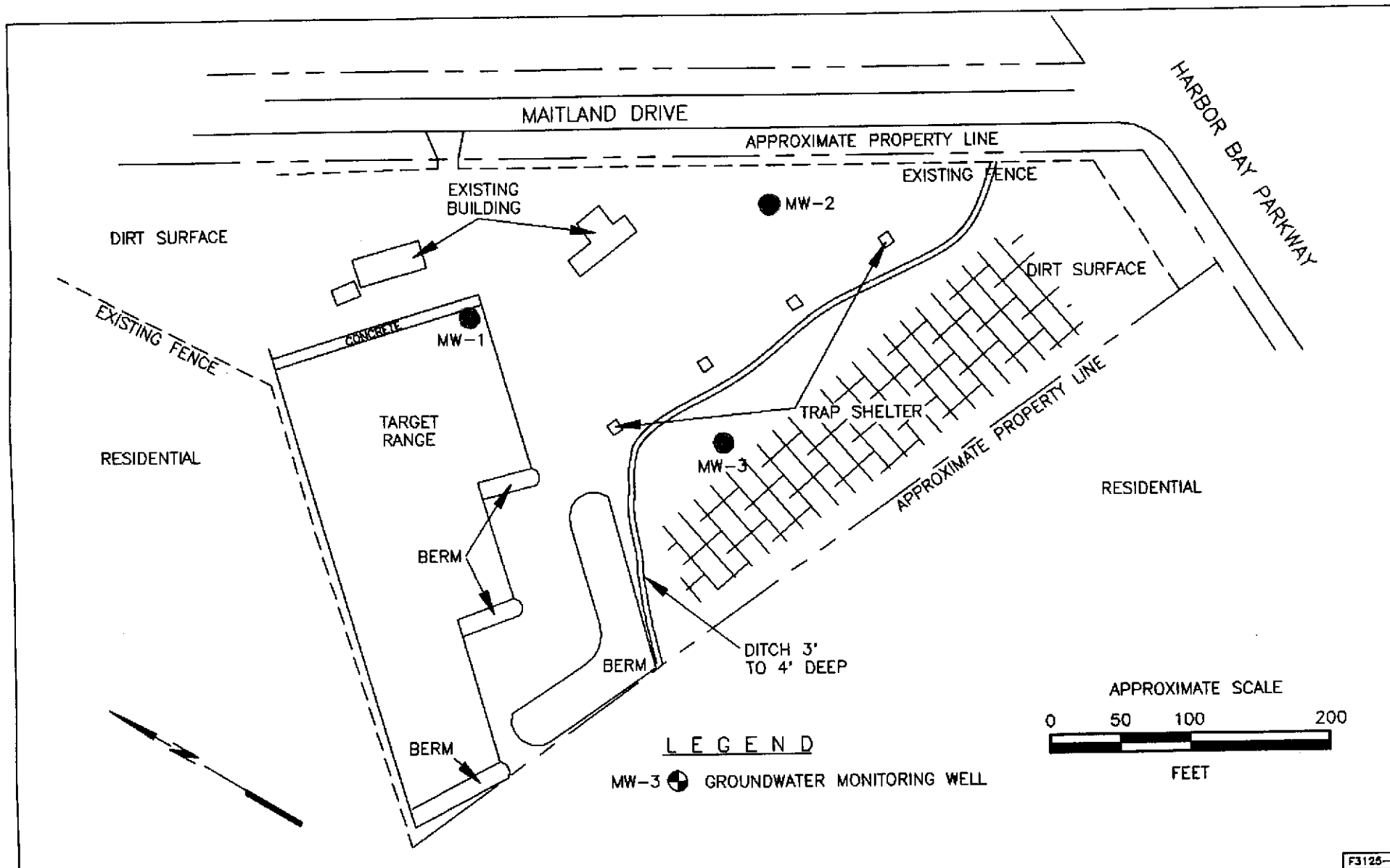

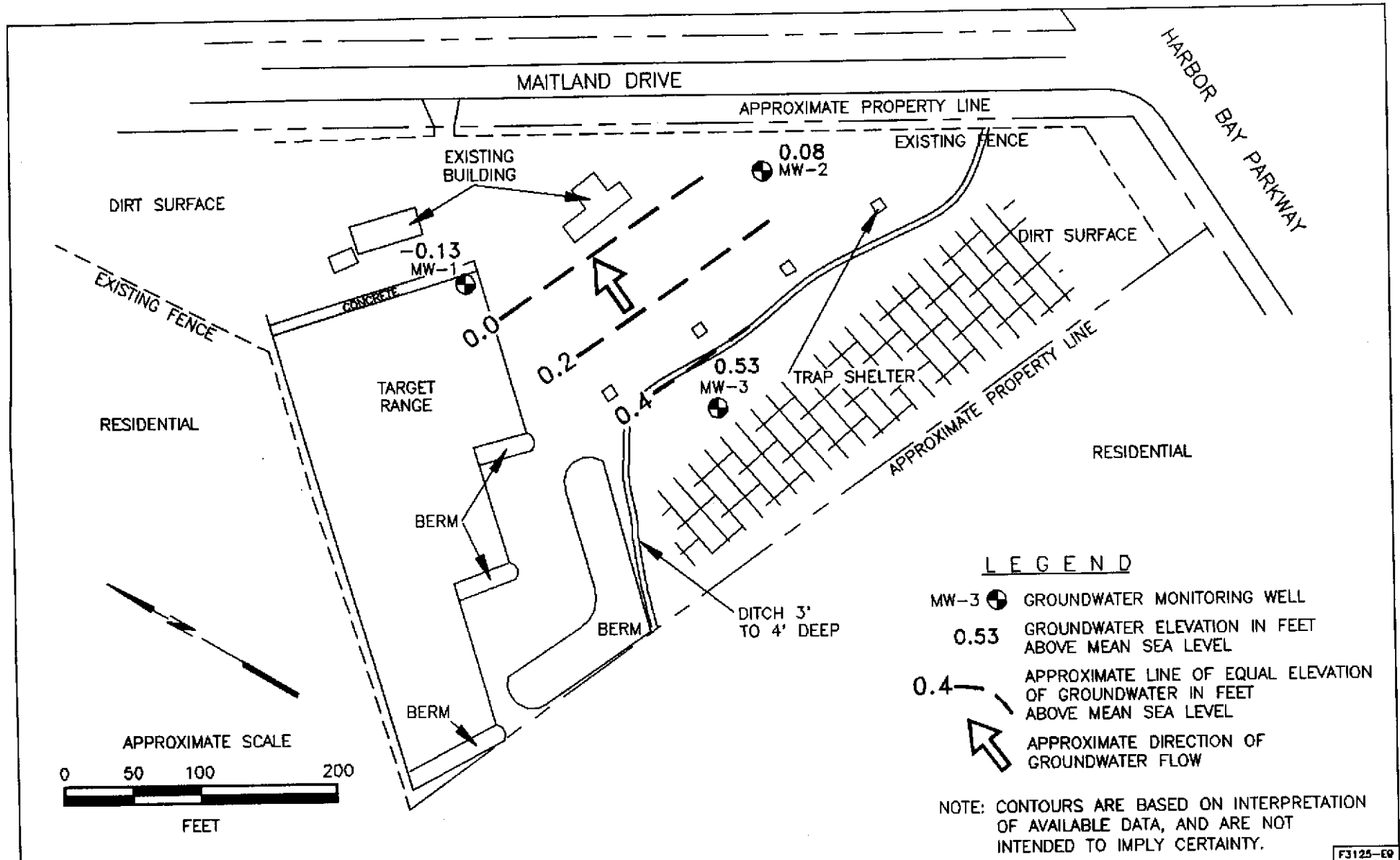


PLATE 2	SITE PLAN	 PROJECT NO. F3125.32
	FORMER ISLAND GUN CLUB SITE	
	500 MAITLAND DRIVE	
	ALAMEDA, CALIFORNIA	



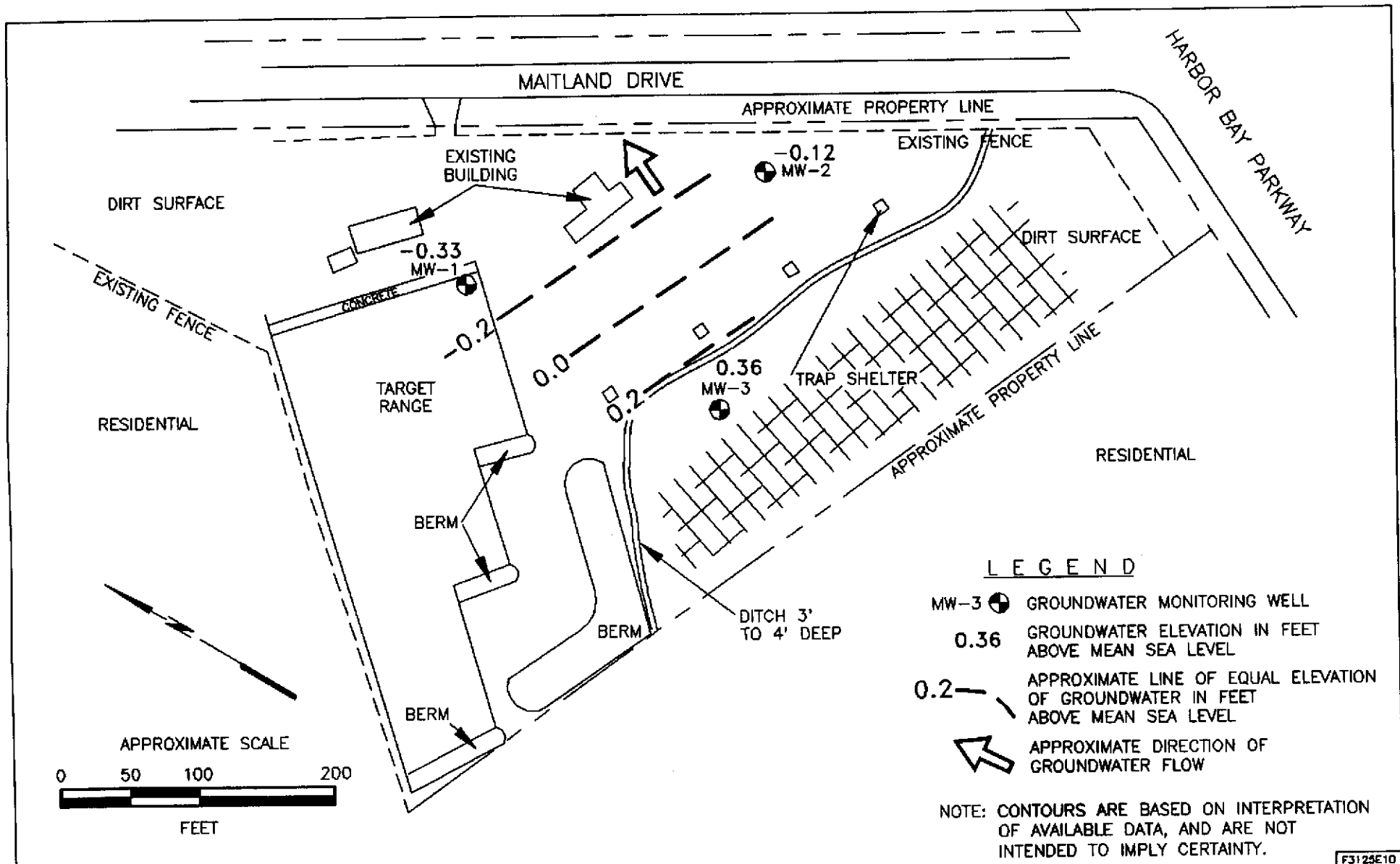
LEGEND

- MW-3 GROUNDWATER MONITORING WELL
- 0.53 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 0.4 APPROXIMATE LINE OF EQUAL ELEVATION OF GROUNDWATER IN FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

NOTE: CONTOURS ARE BASED ON INTERPRETATION OF AVAILABLE DATA, AND ARE NOT INTENDED TO IMPLY CERTAINTY.

F3125-E9

PLATE 3	GROUNDWATER POTENTIOMETRIC SURFACE MAP (9/16/92)	
	FORMER ISLAND GUN CLUB SITE	
	500 MAITLAND DRIVE	
	ALAMEDA, CALIFORNIA	
		PROJECT NO. F3125.32



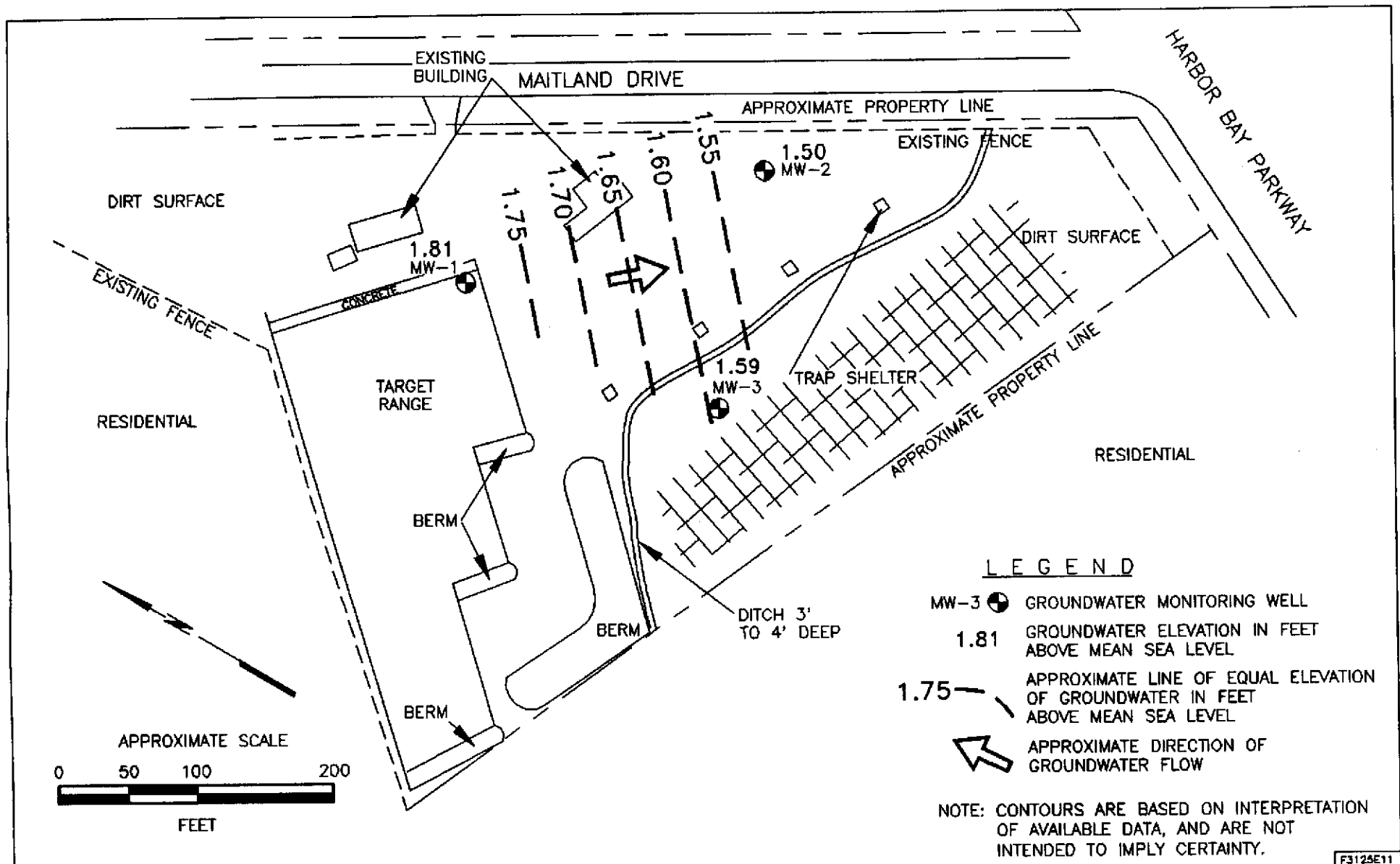
LEGEND

- MW-3 GROUNDWATER MONITORING WELL
- 0.36 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 0.2 APPROXIMATE LINE OF EQUAL ELEVATION OF GROUNDWATER IN FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW


NOTE: CONTOURS ARE BASED ON INTERPRETATION OF AVAILABLE DATA, AND ARE NOT INTENDED TO IMPLY CERTAINTY.

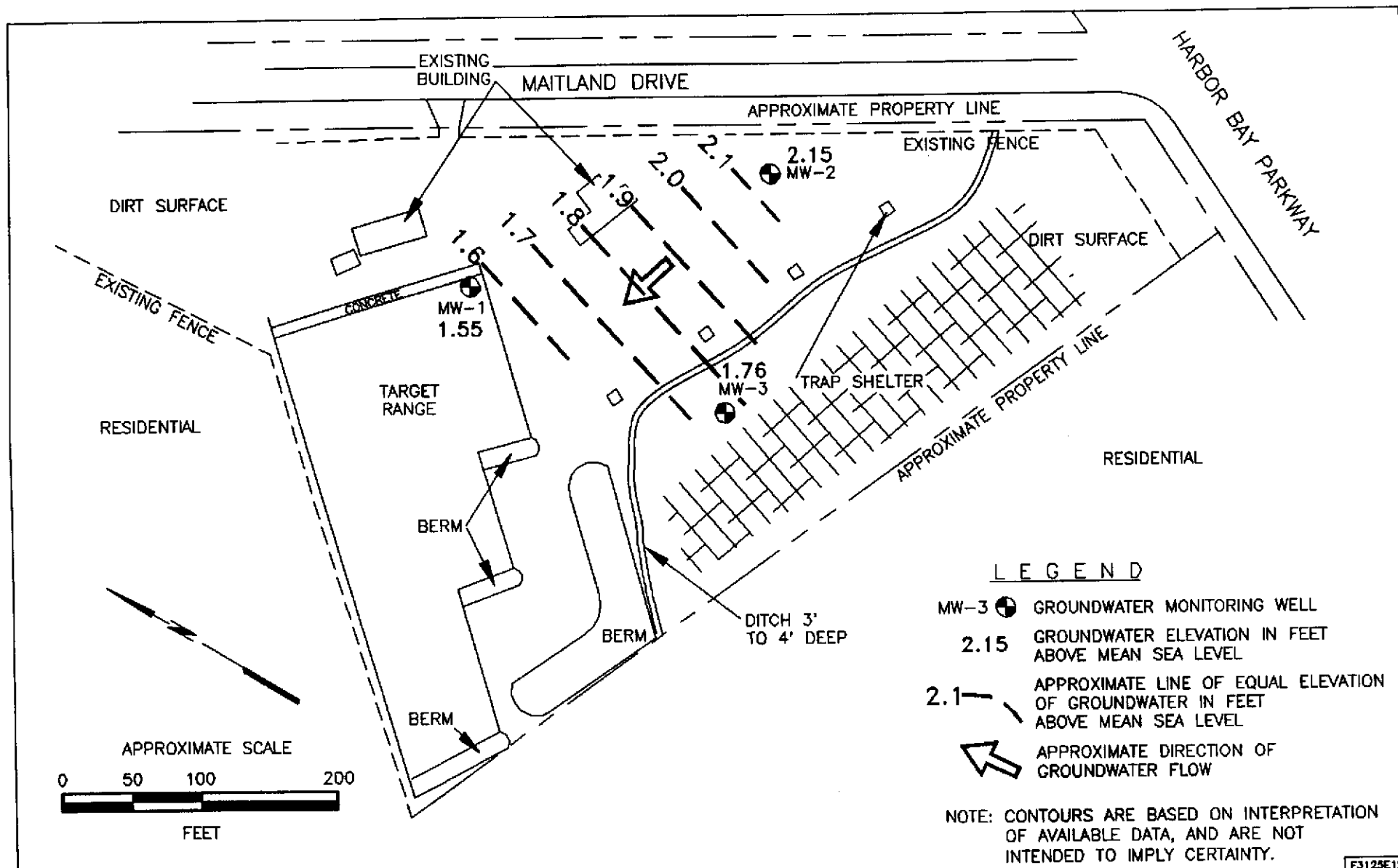
F3125E10

PLATE 4	GROUNDWATER POTENTIOMETRIC SURFACE MAP (10/16/92)	
	FORMER ISLAND GUN CLUB SITE	
	500 MAITLAND DRIVE	
	ALAMEDA, CALIFORNIA	
		PROJECT NO. F3125.32



F3125E11

PLATE 5	GROUNDWATER POTENTIOMETRIC SURFACE MAP (11/30/92)	 PROJECT NO. F3125.32
	FORMER ISLAND GUN CLUB SITE	
	500 MAITLAND DRIVE	
	ALAMEDA, CALIFORNIA	



LEGEND

- MW-3 GROUNDWATER MONITORING WELL
- 2.15 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 2.1 APPROXIMATE LINE OF EQUAL ELEVATION OF GROUNDWATER IN FEET ABOVE MEAN SEA LEVEL
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

NOTE: CONTOURS ARE BASED ON INTERPRETATION OF AVAILABLE DATA, AND ARE NOT INTENDED TO IMPLY CERTAINTY.

F3125E12

PLATE 6	GROUNDWATER POTENTIOMETRIC SURFACE MAP (12/22/92)	
	FORMER ISLAND GUN CLUB SITE	
	500 MAITLAND DRIVE	
	ALAMEDA, CALIFORNIA	
		PROJECT NO. F3125.32

APPENDIX A

GROUNDWATER SAMPLING PROTOCOL



RESNA

Groundwater Sampling Protocol

GROUNDWATER SAMPLING PROTOCOL

Sampling of groundwater is performed by RESNA Industries, Inc. sampling technicians. Monitoring well sampling procedures are summarized as follows:

1. Wells are sampled in approximate order of increasing contamination.
2. Proceed to first well with clean and decontaminated equipment.
3. Measurements depths to liquid surface(s) in the well, and total depth of monitoring well. Note presence of sediment.
4. Field check for presence of floating product; measure apparent thickness.
5. Calculate minimum purge volume (well volumes) then purge well.
6. Monitor groundwater for temperature, pH, and specific conductance during purging. Following stabilization of parameters and removal of minimum volume, allow well to recover adequately.
7. Collect samples using Environmental Protection Agency (EPA) approved sample collection devices, i.e., teflon or stainless steel bailers or pumps.
8. Transfer samples into laboratory-supplied EPA-approved containers.
9. Label samples and log onto chain-of-custody form.
10. Store samples in a chilled ice chest for shipment to a state-certified analytical laboratory.
11. Secure wellhead.
12. Decontaminate equipment prior to sampling next well.

Equipment Cleaning and Decontamination

All water samples are placed in precleaned laboratory-supplied bottles. Sample bottles and caps remain sealed until actual usage at the site. All equipment which comes in contact with the interior of the well or groundwater is thoroughly cleaned with either a steam cleaner, a trisodium phosphate (TSP) solution or an Alconox™ solution and rinsed with deionized or distilled water before use at the site. This cleaning procedure is followed between each well sampled. If a teflon cord is used, the cord is cleaned. If a nylon or cotton cord is used, a new cord is used in each well.

All equipment blanks are collected prior to sampling. The blanks are analyzed periodically to ensure proper cleaning procedures are used.

Water Level Measurements

Depth to groundwater is measured in each well using a sealed sampling tape or scaled electric sounder prior to purging or sampling. If the well is known or suspected of containing free-phase petroleum hydrocarbons, either an optical interface probe or a bailer is used to measure the hydrocarbon thickness. Measurements are collected and recorded to the nearest 0.01 foot. Each monitoring well's total depth will be measured; this will allow a relative judgement of well sedimentation and need for redevelopment to be made.

Bailer Sheen Check

If no measurable free-phase petroleum hydrocarbons are detected, a clear acrylic bailer is used to determine the presence of a sheen. The color of the water and any film or obvious odor are recorded.

Groundwater Sampling

Prior to groundwater sampling, each well is purged of "standing" groundwater. Either a bailer, hand pump, or submersible pump is used to purge the well. The amount of purging is dependent on the well hydraulics. Samples will be collected when temperature, pH, and specific conductance stabilize and a minimum of three well-casing volumes of water have been removed. Field measurements will be taken after purging each well volume. Physical parameter measurements (temperature, pH, and specific conductance) are closely monitored throughout the well purging process and are used as

indicators for assessing sufficient purging. The purging parameters are measured to observe stabilization to a range of values typical for that aquifer and well. Stable field parameters are recognized as indicative of groundwater aquifer chemistry entering the well. Specific conductance (conductivity) meters are read to the nearest ± 10 umhos/cm and are calibrated daily. pH meters are read to the nearest ± 0.1 pH units and are calibrated daily. Temperature is read to the nearest 0.1 °F. Calibration of physical parameter meters will follow manufacturer's specifications. Collected field data during purging activities will be entered on the Well Sampling Field Data Sheet.

Following purging, the well is allowed to recharge prior to sampling. When recovery to 80% of the static water level is estimated or observed to exceed two hours, a sample will be collected when sufficient volume is available to fill all sample containers. The well will be purged slowly enough to minimize the volatilization of organic contaminants during well recharge.

In wells where free-phase hydrocarbons are detected, the free-phase portion will be bailed from the well and its volume recorded. If free-phase hydrocarbons persist through bailing, a groundwater sample will not be collected.

Volatile organic groundwater samples are collected so that air passage through the sample does not occur or is minimal (to prevent volatiles from being stripped from the samples). Sample bottles are filled by slowly running the sample down the side of the bottle until there is a positive convex meniscus over the mouth of the bottle. The teflon side of the septum (in cap) is then positioned against the meniscus, the cap is screwed on tightly, the sample is inverted, and the bottle is lightly tapped. If a bubble is evident, the cap is removed, more sample is added, and the bottle is resealed.

Chain-of-Custody

Groundwater sample containers are labeled with a unique sample number, location, and date of collection. All samples are logged into a chain-of-custody form and placed in a secure, chilled ice chest for shipment to a laboratory certified by the State of California.

Sample Storage

Groundwater samples collected in the field are stored in an ice chest cooled to approximately 4 °C while in transit to the office or analytical laboratory. Samples are stored in a refrigerator overnight and during weekends and holidays. The refrigerator is set to 4 °C and is locked with access controlled by a designated sample custodian.

Quality Assurance/Quality Control Objectives

The sampling and analysis procedures employed by RESNA for groundwater sampling and monitoring follow regulatory guidance for quality assurance/quality control (QA/QC). Quality assurance objectives have been established to develop and implement procedures for obtaining and evaluating water quality and field data in an accurate, precise, and complete manner. In this way, sampling procedures and field measurements provide information that is comparable and representative of actual field conditions. Quality control (QC) is maintained by site-specific field protocols and by requiring the analytical laboratory to perform internal and external QC checks. The goal is to provide data that are accurate, precise, complete, comparable, and representative. The definitions as developed by overseeing federal, state, and local agency guidance documents for accuracy, precision, completeness, comparability, and representativeness are:

- **Accuracy** — the degree of agreement of a measurement with an accepted reference or true value.
- **Precision** — a measure of agreement among individual measurements under similar conditions. Usually expressed in terms of the standard deviation.
- **Completeness** — the amount of valid data obtained from a measurement system compared to the amount that was expected to meet the project data goals.
- **Comparability** — express the confidence with which one data set can be compared to another.
- **Representativeness** — a sample or group of samples that reflect the characteristics of the media at the sampling point.

Laboratory and field handling procedures of samples may be monitored by including QC samples for analysis. QC samples may include any combination of the following:

- **Trip Blanks:** Trip blanks are sent to the project site, and travel with project site samples. Trip blanks are not opened, and are returned from a project site with the project site samples for analysis.

-
- **Field Blank:** Prepared in the field using organic-free water. Field blanks accompany project site samples to the laboratory and are analyzed for specific chemical parameters unique to the project site where they were prepared.
 - **Duplicates:** Duplicated samples are collected "second samples" from a selected well and project site. They are collected as either split samples or second-run samples collected from the same well.
 - **Equipment Blank:** Periodic QC samples collected from field equipment rinseate to verify decontamination procedures.

The number and types of QC samples are determined and analyzed on a project-specific basis.

Shallow Groundwater Survey

A shallow groundwater survey employs reconnaissance field sampling and chemical analysis for rapid plume mapping. A state-certified mobile laboratory may be used. The subcontractor would sample for analysis at locations marked by the RESNA field geologist. The thin-diameter probes from which groundwater is collected are advanced to the water bearing stratum and a groundwater sample is withdrawn to the surface, and analyzed immediately thereafter. Probe holes are backfilled with a grout slurry or as the local permitting agency requires. The contractor will report the details and results sampling, purging, and chemical analysis to RESNA. RESNA considers this type of shallow probe mapping (together with shallow groundwater sampling) to be a reconnaissance technique only.

APPENDIX B

**SAMPLING LOGS,
LABORATORY REPORTS
AND
CHAIN-OF-CUSTODY RECORDS**

Job Name: Loric Oakland Alameda Date: 9-16-92
 Job No.: F3125.0031 Sampled by: R Sutherland
 Phase: Q Laboratory: Resna
 Wells Secure: Yes No If no, then comment: _____

Drums at Site: Full 2 Empty _____

Well No.	Depth to Water (ft)	Well Depth (ft)	Time (W/L)	Purge Volume (gal)	F ^o Temp. (°F)	Cond. (umho/cm)	pH	Observations
MW-1	5.18	13.90	8:00	1.4 3	66.7	3360	7.44	NO odor
				4.5	66.7	3370	7.43	NO Sheen
				6	67.0	3060	7.48	cloudy/silty
MW-2	5.52	13.93	8:10	1.4 3	69.3	6840	7.19	NO odor
				4.5	68.4	6860	7.12	NO Sheen
				6	68.6	6900	7.08	cloudy
MW-3	4.23	13.25	8:20	1.5 3	73.7	2730	7.81	NO odor
				4.5	69.8	2610	7.66	NO Sheen
				6	68.7	2540	7.58	cloudy



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

PROJECT NO.		PROJECT NAME/SITE		ANALYSIS REQUESTED										P.O. #.				
F3125.00		Doric Construction 500 Maitland dr, Alameda		BTEX (602/8020) TPHg (8015) TPHa (8015) TOG 418 1/5520 601/8010 624/8240 625/8270 TILC (Cu/Pb) STLc (Cu/Pb) TDS														
SAMPLERS				(PRINT) Robin Sutherland		NO. CONTAINERS	SAMPLE TYPE											
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED											REMARKS
MW-1		9-16-92	9:40		X		Y											Filter & Preserve if Neccessary
MW-2		↓	10:55		X		↓											
MW-3		↓	12:10		X		↓											
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		LABORATORY:		PLEASE SEND RESULTS TO:										
<i>Robin Sutherland</i>		9-18-92	9:30	<i>Roberto Arcilla</i>		Resna		Cheryl Fountain 42501 Albrae St Fremont, CA 94538 Cheryl Fountain PROJECT MANAGER:										
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		REQUESTED TURNAROUND TIME:												
						Normal												
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		RECEIPT CONDITION:												

487
48
48

ANALYSIS REPORT

1020lab.frm

Attention: Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538
Project: 19513-L,F3125.00
Doric Construction

Date Sampled: 09-16-92
Date Received: 09-18-92
TDS Analyzed: 09-24-92

TDS(mg/L)

SAMPLE
Laboratory Identification

MW-1 W1209458	2200
MW-2 W1209459	4800
MW-3 W1209460	3000

ANALYTICAL PROCEDURES

TDS is measured according to Standard Method 160.2

M. Tague
Laboratory Representative

September 30, 1992
Date Reported

ANALYSIS REPORT

Attention: Sheryl Fontaine
RESNA
42501 Albrae St
Fremont, CA 94538
Project: 19513-L, F3125.00
Sample ID: MW-1
Lab ID: W1209458

Date Sampled: 09-16-92
Date Received: 09-18-92
Date Analyzed: 09-22-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>	<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
Acenaphthene	ND	2.0	1,3-Dichlorobenzene	ND	2.0
Acenaphthylene	ND	2.0	1,4-Dichlorobenzene	ND	2.0
Anthracene	ND	2.0	1,2-Dichlorobenzene	ND	2.0
Benzidine	ND	5	3,3-dichlorobenzidine	ND	10
Benzoic Acid	ND	2.0	2,4-dichlorophenol	ND	2.0
Benzo(a)anthracene	ND	2.0	Diethyl phthalate	ND	2.0
Benzo(b)fluoranthene	ND	2.0	2,4-Dimethylphenol	ND	2.0
Benzo(k)fluoranthene	ND	2.0	Dimethyl phthalate	ND	2.0
Benzo(g,h,i)perylene	ND	2.0	4,6-Dinitro-2-methylphenol	ND	10
Benzo(a)pyrene	ND	2.0	2,4-Dinitrophenol	ND	10
Benzyl alcohol	ND	2.0	2,4-Dinitrotoluene	ND	2.0
Bis(2-chloroethoxy)methane	ND	2.0	2,6-Dinitrotoluene	ND	2.0
Bis(2-chloroethyl)ether	ND	2.0	Di-N-octyl phthalate	ND	2.0
Bis(2-chloroisopropyl)ether	ND	2.0	Fluoranthene	ND	2.0
Bis(2-ethylhexyl)phthalate	ND	10	Fluorene	ND	2.0
4-Bromophenyl phenyl ether	ND	2.0	Hexachlorobenzene	ND	2.0
Butyl benzyl phthalate	ND	2.0	Hexachlorobutadiene	ND	2.0
4-Chloroaniline	ND	2.0	Hexachlorocyclopentadiene	ND	2.0
2-Chloronaphthalene	ND	2.0	Hexachloroethane	ND	2.0
4-Chloro-3-methylphenol	ND	2.0	Indeno(1,2,3-cd)pyrene	ND	2.0
2-Chlorophenol	ND	2.0	Isophorone	ND	2.0
4-Chlorophenyl phenyl ether	ND	2.0	2-Methylnaphthalene	ND	2.0
Chrysene	ND	2.0	2-Methylphenol	ND	2.0
Dibenz(a,h)anthracene	ND	2.0	4-Methylphenol	ND	2.0
Dibenzofuran	ND	2.0	Naphthalene	ND	2.0
Di-N-butyl phthlate	ND	10	2-Nitroaniline	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 NR = Analysis not requested.

W. T. Tague

Laboratory Representative

September 30, 1992
Date Reported

RESNA ENVIRONMENTAL LABORATORY IS CERTIFIED BY THE STATE OF CALIFORNIA
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
 (Certification No. E1211)

42501 Albrae Street • Fremont, CA 94538 • Phone: (510) 623-0775 • (800) 247-5223 • FAX: (510) 651-8754

ANALYSIS REPORT

Attention: Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538

Project: 19513-L, F3125.00
Sample ID: MW-1
Lab ID: W1209458

Date Sampled: 09-16-92
Date Received: 09-18-92
Date Analyzed: 09-22-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
3-Nitroaniline	ND	2.0
4-Nitroaniline	ND	2.0
Nitrobenzene	ND	2.0
2-Nitrophenol	ND	2.0
4-Nitrophenol	ND	10
N-Nitrosodiphenylamine	ND	2.0
N-Nitroso-di-N-propylamine	ND	2.0
Pentachlorophenol	ND	10
Phenanthrene	ND	2.0
Phenol	ND	2.0
Pyrene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
2,4,5-Trichlorophenol	ND	2.0
2,4,6-Trichlorophenol	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 NR = Analysis not requested.

VM Taguer
 Laboratory Representative

September 30, 1992
 Date Reported

ANALYSIS REPORT

Attention: Sheryl Fontaine
RESNA
42501 Albrae St
Fremont, CA 94538
Project: 19513-L, F3125.00
Sample ID: MW-2
Lab ID: W1209459

Date Sampled: 09-16-92
Date Received: 09-18-92
Date Analyzed: 09-22-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>	<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
Acenaphthene	ND	2.0	1,3-Dichlorobenzene	ND	2.0
Acenaphthylene	ND	2.0	1,4-Dichlorobenzene	ND	2.0
Anthracene	ND	2.0	1,2-Dichlorobenzene	ND	2.0
Benzdine	ND	5	3,3-dichlorobenzidine	ND	10
Benzoic Acid	ND	2.0	2,4-dichlorophenol	ND	2.0
Benzo(a)anthracene	ND	2.0	Diethyl phthalate	ND	2.0
Benzo(b)fluoranthene	ND	2.0	2,4-Dimethylphenol	ND	2.0
Benzo(k)fluoranthene	ND	2.0	Dimethyl phthalate	ND	2.0
Benzo(g,h,i)perylene	ND	2.0	4,6-Dinitro-2-methylphenol	ND	10
Benzo(a)pyrene	ND	2.0	2,4-Dinitrophenol	ND	10
Benzyl alcohol	ND	2.0	2,4-Dinitrotoluene	ND	2.0
Bis(2-chloroethoxy)methane	ND	2.0	2,6-Dinitrotoluene	ND	2.0
Bis(2-chloroethyl)ether	ND	2.0	Di-N-octyl phthalate	ND	2.0
Bis(2-chloroisopropyl)ether	ND	2.0	Fluoranthene	ND	2.0
Bis(2-ethylhexyl)phthalate	ND	10	Fluorene	ND	2.0
4-Bromophenyl phenyl ether	ND	2.0	Hexachlorobenzene	ND	2.0
Butyl benzyl phthalate	ND	2.0	Hexachlorobutadiene	ND	2.0
4-Chloroaniline	ND	2.0	Hexachlorocyclopentadiene	ND	2.0
2-Chloronaphthalene	ND	2.0	Hexachloroethane	ND	2.0
4-Chloro-3-methylphenol	ND	2.0	Indeno(1,2,3-cd)pyrene	ND	2.0
2-Chlorophenol	ND	2.0	Isophorone	ND	2.0
4-Chlorophenyl phenyl ether	ND	2.0	2-Methylnaphthalene	ND	2.0
Chrysene	ND	2.0	2-Methylphenol	ND	2.0
Dibenz(a,h)anthracene	ND	2.0	4-Methylphenol	ND	2.0
Dibenzofuran	ND	2.0	Naphthalene	ND	2.0
Di-N-butyl phthlate	ND	10	2-Nitroaniline	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 NR = Analysis not requested.

W. T. Tague
 Laboratory Representative

September 30, 1992
 Date Reported

ANALYSIS REPORT

Attention: Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538

Date Sampled: 09-16-92
Date Received: 09-18-92
Date Analyzed: 09-22-92
Matrix: Water

Project: 19513-L, F3125.00
Sample ID: MW-2
Lab ID: W1209459

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
3-Nitroaniline	ND	2.0
4-Nitroaniline	ND	2.0
Nitrobenzene	ND	2.0
2-Nitrophenol	ND	2.0
4-Nitrophenol	ND	10
N-Nitrosodiphenylamine	ND	2.0
N-Nitroso-di-N-propylamine	ND	2.0
Pentachlorophenol	ND	10
Phenanthrene	ND	2.0
Phenol	ND	2.0
Pyrene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
2,4,5-Trichlorophenol	ND	2.0
2,4,6-Trichlorophenol	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
NR = Analysis not requested.

M. Tague

Laboratory Representative

September 30, 1992
Date Reported

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DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
(Certification No. E1211)

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ANALYSIS REPORT

Attention: Sheryl Fontaine
RESNA
42501 Albrae St
Fremont, CA 94538
Project: 19513-L, F3125.00
Sample ID: MW-3
Lab ID: W1209460

Date Sampled: 09-16-92
Date Received: 09-18-92
Date Analyzed: 09-22-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>	<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
Acenaphthene	ND	2.0	1,3-Dichlorobenzene	ND	2.0
Acenaphthylene	ND	2.0	1,4-Dichlorobenzene	ND	2.0
Anthracene	ND	2.0	1,2-Dichlorobenzene	ND	2.0
Benzidine	ND	5	3,3-dichlorobenzidine	ND	10
Benzoic Acid	ND	2.0	2,4-dichlorophenol	ND	2.0
Benzo(a)anthracene	ND	2.0	Diethyl phthalate	ND	2.0
Benzo(b)fluoranthene	ND	2.0	2,4-Dimethylphenol	ND	2.0
Benzo(k)fluoranthene	ND	2.0	Dimethyl phthalate	ND	2.0
Benzo(g,h,i)perylene	ND	2.0	4,6-Dinitro-2-methylphenol	ND	10
Benzo(a)pyrene	ND	2.0	2,4-Dinitrophenol	ND	10
Benzyl alcohol	ND	2.0	2,4-Dinitrotoluene	ND	2.0
Bis(2-chloroethoxy)methane	ND	2.0	2,6-Dinitrotoluene	ND	2.0
Bis(2-chloroethyl)ether	ND	2.0	Di-N-octyl phthalate	ND	2.0
Bis(2-chloroisopropyl)ether	ND	2.0	Fluoranthene	ND	2.0
Bis(2-ethylhexyl)phthalate	ND	10	Fluorene	ND	2.0
4-Bromophenyl phenyl ether	ND	2.0	Hexachlorobenzene	ND	2.0
Butyl benzyl phthalate	ND	2.0	Hexachlorobutadiene	ND	2.0
4-Chloroaniline	ND	2.0	Hexachlorocyclopentadiene	ND	2.0
2-Chloronaphthalene	ND	2.0	Hexachloroethane	ND	2.0
4-Chloro-3-methylphenol	ND	2.0	Indeno(1,2,3-cd)pyrene	ND	2.0
2-Chlorophenol	ND	2.0	Isophorone	ND	2.0
4-Chlorophenyl phenyl ether	ND	2.0	2-Methylnaphthalene	ND	2.0
Chrysene	ND	2.0	2-Methylphenol	ND	2.0
Dibenz(a,h)anthracene	ND	2.0	4-Methylphenol	ND	2.0
Dibenzofuran	ND	2.0	Naphthalene	ND	2.0
Di-N-butyl phthlate	ND	10	2-Nitroaniline	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 NR = Analysis not requested.

M. Tague

Laboratory Representative

September 30, 1992
Date Reported

RESNA ENVIRONMENTAL LABORATORY IS CERTIFIED BY THE STATE OF CALIFORNIA
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(Certification No. E1211)

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ANALYSIS REPORT

Attention: Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538

Date Sampled: 09-16-92
Date Received: 09-18-92
Date Analyzed: 09-22-92
Matrix: Water

Project: 19513-L, F3125.00
Sample ID: MW-3
Lab ID: W1209460

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
3-Nitroaniline	ND	2.0
4-Nitroaniline	ND	2.0
Nitrobenzene	ND	2.0
2-Nitrophenol	ND	2.0
4-Nitrophenol	ND	10
N-Nitrosodiphenylamine	ND	2.0
N-Nitroso-di-N-propylamine	ND	2.0
Pentachlorophenol	ND	10
Phenanthrene	ND	2.0
Phenol	ND	2.0
Pyrene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
2,4,5-Trichlorophenol	ND	2.0
2,4,6-Trichlorophenol	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
NR = Analysis not requested.



Laboratory Representative

September 30, 1992
Date Reported

ANALYSIS REPORT

1020lab.frm

Attention: Sheryl Fontaine
RESNA
42501 Albrae St
Fremont, CA 94538
Project: 19513-L, F3125.00
Lab ID: QF3125917.GMS

Date Sampled: 09-16-92
Date Received: 09-18-92
Date Analyzed: 09-22-92
Matrix: Water

EPA METHOD 8270 QA/QC SHEET
UNITS ug/L

<u>COMPOUND NAME</u>	<u>MS</u>	<u>MSD</u>	<u>RPD</u>	<u>Limits</u>
4CHLORO-3-METHYLPHENOL	86%	99%	14%	22%-147%
2CHLOROPHENOL	81%	90%	11%	23%-134%
PENTACHLOROPHENOL	67%	67%	0	14%-176%
PHENOL	52%	56%	7.4%	5%-112%
ACENAPHTHENE	75%	84%	11%	47%-145%
1,4-DICHLOROBENZENE	57%	52%	9.2%	20%-124%
2,4-DINITROTOLUENE	77%	81%	5.1%	39%-139%
N-NITROSO-DI-n-PROPYLAMINE	65%	76%	16%	D-230%
PYRENE	96%	110%	13%	54%-120%
1,2,4-TRICHLOROBENZENE	56%	51%	9.4%	44%-142%

ppb = parts per billion = $\mu\text{g/L}$ = micrograms per Liter
RPD = Relative Percent Difference
D = Detectable
RPD Limits < 25

IMTague
Laboratory Representative

September 30, 1992
Date Reported

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(Certification No. 1211)

42501 Albrae Street • Fremont, CA 94538 • Phone: (510) 623-0775 • (800) 247-5223 • FAX: (510) 651-8754



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RESNA
42501 Albrae Street, Suite 100
Fremont, CA 94538
Attention: Anthony Enerio

Client Project ID: F3125.00, Doric Construction
Sample Descript: ~~XXXXXXXXXX~~
Lab Number: 209-3067

Sampled: Sep 16, 1992
Received: Sep 18, 1992
Extracted: Sep 22, 1992
Reported: Oct 2, 1992

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration
Waste Extraction Test

Total Threshold Limit Concentration

Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTL Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)
Antimony	15	0.0050	--	500	0.0050	--
Arsenic	5	0.0050	--	500	0.0050	--
Barium	100	0.10	--	10,000	0.10	--
Beryllium	0.75	0.010	--	75	0.010	--
Cadmium	1	0.010	--	100	0.010	--
Chromium (VI)	5	0.0050	--	500	0.0050	--
Chromium (III)	560	0.010	--	2,500	0.010	--
Cobalt	80	0.050	--	8,000	0.050	--
Copper	25	0.010	N.D.	2,500	0.010	0.027
Lead	5	0.0050	N.D.	1,000	0.0050	0.013
Mercury	0.2	0.00020	--	20	0.00020	--
Molybdenum	350	0.050	--	3,500	0.050	--
Nickel	20	0.050	--	2,000	0.050	--
Selenium	1	0.0050	--	100	0.0050	--
Silver	5	0.010	--	500	0.010	--
Thallium	7	0.0050	--	700	0.0050	--
Vanadium	24	0.050	--	2,400	0.050	--
Zinc	250	0.010	--	5,000	0.010	--
Asbestos	-	10	--	10,000	10	--
Fluoride	180	0.10	--	18,000	0.10	--

Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RESNA
42501 Albrae Street, Suite 100
Fremont, CA 94538
Attention: Anthony Enerio

Client Project ID: F3125.00, Doric Construction
Sample Descript: ~~XXXXXXXXXX~~
Lab Number: 209-3068

Sampled: Sep 16, 1992
Received: Sep 18, 1992
Extracted: Sep 22, 1992
Reported: Oct 2, 1992

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration
Waste Extraction Test

Total Threshold Limit Concentration

Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTL Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)
Antimony	15	0.0050	--	500	0.0050	--
Arsenic	5	0.0050	--	500	0.0050	--
Barium	100	0.10	--	10,000	0.10	--
Beryllium	0.75	0.010	--	75	0.010	--
Cadmium	1	0.010	--	100	0.010	--
Chromium (VI)	5	0.0050	--	500	0.0050	--
Chromium (III)	560	0.010	--	2,500	0.010	--
Cobalt	80	0.050	--	8,000	0.050	--
Copper	25	0.010	0.010	2,500	0.010	0.12
Lead	6	0.0050	N.D.	1,000	0.0050	0.036
Mercury	0.2	0.00020	--	20	0.00020	--
Molybdenum	350	0.050	--	3,500	0.050	--
Nickel	20	0.050	--	2,000	0.050	--
Selenium	1	0.0050	--	100	0.0050	--
Silver	5	0.010	--	500	0.010	--
Thallium	7	0.0050	--	700	0.0050	--
Vanadium	24	0.050	--	2,400	0.050	--
Zinc	250	0.010	--	5,000	0.010	--
Asbestos	-	10	--	10,000	10	--
Fluoride	180	0.10	--	18,000	0.10	--

Asbestos results are reported as fibers/g.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RESNA	Client Project ID: F3125.00, Doric Construction	Sampled: Sep 16, 1992
42501 Albrae Street, Suite 100	Sample Descript: XXXXXXXXXX	Received: Sep 18, 1992
Fremont, CA 94538		Extracted: Sep 22, 1992
Attention: Anthony Enerio	Lab Number: 209-3069	Reported: Oct 2, 1992

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration Waste Extraction Test

Total Threshold Limit Concentration

Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTL Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)
Antimony	15	0.0050	--	500	0.0050	--
Arsenic	5	0.0050	--	500	0.0050	--
Barium	100	0.10	--	10,000	0.10	--
Beryllium	0.75	0.010	--	75	0.010	--
Cadmium	1	0.010	--	100	0.010	--
Chromium (VI)	5	0.0050	--	500	0.0050	--
Chromium (III)	560	0.010	--	2,500	0.010	--
Cobalt	80	0.050	--	8,000	0.050	--
Copper	25	0.010	N.D.	2,500	0.010	0.31
Lead	5	0.0050	N.D.	1,000	0.0050	0.087
Mercury	0.2	0.00020	--	20	0.00020	--
Molybdenum	350	0.050	--	3,500	0.050	--
Nickel	20	0.050	--	2,000	0.050	--
Selenium	1	0.0050	--	100	0.0050	--
Silver	5	0.010	--	500	0.010	--
Thallium	7	0.0050	--	700	0.0050	--
Vanadium	24	0.050	--	2,400	0.050	--
Zinc	250	0.010	--	5,000	0.010	--
Asbestos	-	10	--	10,000	10	--
Fluoride	180	0.10	--	18,000	0.10	--

Asbestos results are reported as fibers/g.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
 Maria Lee
 Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RESNA
42501 Albrae Street, Suite 100
Fremont, CA 94538
Attention: Anthony Enerlo

Client Project ID: F3125.00, Doric Construction

QC Sample Group: 2093067-9

Reported: Oct 2, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Lead	Lead	Copper	Copper
	TTLc	STLc	STLc	TTLc

Method:	EPA 239.2	EPA 239.2	EPA 6010	EPA 6010
Analyst:	S. Chin	S. Chin	C. Medefesser	M. Mistry
Reporting Units:	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Sep 23, 1992	Sep 25, 1992	Sep 30, 1992	Sep 29, 1992
QC Sample #:	209-3241	209-2508	209-3068	Set 9-53

Sample Conc.:	N.D.	0.061	0.016	N.D.
Spike Conc. Added:	0.050	0.50	5.0	2.0
Conc. Matrix Spike:	0.046	0.48	5.1	1.9
Matrix Spike % Recovery:	92	84	102	95
Conc. Matrix Spike Dup.:	0.045	0.47	5.1	1.9
Matrix Spike Duplicate % Recovery:	90	82	102	95
Relative % Difference:	2.2	2.1	0.0	0.0

SEQUOIA ANALYTICAL

Maria Lee
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

PROJECT NO.		PROJECT NAME/SITE					ANALYSIS REQUESTED										P.O. #:	
F3125.00		Doric Construction					BTEX (602/8020) TPHg (8015) TPHd (8015) TOG 418.1/5520 601/8010 824/8240 825/8270 TLCC STLCC Cu/Pb Cu/Pb											
SAMPLERS (SIGN)		(PRINT)															NO. CONTAINERS	SAMPLE TYPE
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED											
MW-1		9/16/92			x			2	W									2093067
MW-2		↓			↓			↓	↓									↓ 68
MW-3		↓			↓			↓	↓									↓ 69

RELINQUISHED BY: <i>Anthony G...</i>	DATE 9/18/92	TIME 2:50	RECEIVED BY: <i>Rebekah A. Hays</i>	LABORATORY: <i>Leywin</i>	PLEASE SEND RESULTS TO: RESNA ENVIRONMENTAL LABORATORY 42501 Albrac St Fremont, CA 94533 Tel # (510) 651-1906 Fax # (510) 651-8754
RELINQUISHED BY: <i>Rebekah A. Hays</i>	DATE 9/10/92	TIME 15:30	RECEIVED BY:	REQUESTED TURNAROUND TIME: <i>2w/2 by 10/2/92</i>	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:		
RELINQUISHED BY:	DATE 9-18-92	TIME 15:30	RECEIVED BY LABORATORY: <i>Tom Little</i>	RECEIPT CONDITION:	
PROJECT MANAGER: <i>A. Gencio / S. Fontaine</i>					

Job Name: Ioric Construction Date: 10-16-92
 Job No.: F3125.31 Sampled by: R Sutherland
 Phase: Q/start-up Laboratory: Resna
 Wells Secure: Yes No If no, then comment: _____

Drums at Site: Full 2 Empty _____

Well No.	Depth to Water (ft)	Well Depth (ft)	Time (W/L)	Purge Volume (gal)	F ^o Temp. F	Cond. (umho/cm)	pH	Observations
1 MW-1	5.38	13.85	08:00	1.4	3 67.7	5.000	6.94	No odor
					4.5 68.2	4.380	6.96	No Sheen
					6 66.5	5.010	6.98	cloudy
2 MW-2	5.72	13.92	08:10	1.3	3 67.6	8850	7.08	No odor
					4.5 66.8	8.880	7.10	No Sheen
					6 67.8	8.990	7.04	cloudy/silty
3 MW-3	4.40	13.18	08:20	1.4	3 65.1	3570	6.97	No odor
					4.5 64.6	3510	6.99	No Sheen
					6 65.3	3490	7.03	Cloudy

ANALYSIS REPORT

1020lab.frm

Attention: Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538
Project: 19513-L,F3125-31
Doric Const.

Date Sampled: 10-16-92
Date Received: 10-20-92
TDS Analyzed: 10-29-92

TDS(mg/L)

SAMPLE
Laboratory Identification

MW-1
W1210319

2200

MW-2
W1210320


4800

MW-3
W1210321

1600

ANALYTICAL PROCEDURES

TDS is measured according to Standard Method 160.2



Laboratory Representative

November 3, 1992
Date Reported

ANALYSIS REPORT

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538
Project: 19513-L, F3125.31
Sample ID: MW-1
Lab ID: W1210319

Date Sampled: 10-16-92
Date Received: 10-20-92
Date Extracted: 10-22-92
Date Analyzed: 10-30-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>	<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
Acenaphthene	ND	2.0	1,3-Dichlorobenzene	ND	2.0
Acenaphthylene	ND	2.0	1,4-Dichlorobenzene	ND	2.0
Anthracene	ND	2.0	1,2-Dichlorobenzene	ND	2.0
Benzdine	ND	5	3,3-dichlorobenzidine	ND	10
Benzoic Acid	ND	2.0	2,4-dichlorophenol	ND	2.0
Benzo(a)anthracene	ND	2.0	Diethyl phthalate	ND	2.0
Benzo(b)fluoranthene	ND	2.0	2,4-Dimethylphenol	ND	2.0
Benzo(k)fluoranthene	ND	2.0	Dimethyl phthalate	ND	2.0
Benzo(g,h,i)perylene	ND	2.0	4,6-Dinitro-2-methylphenol	ND	10
Benzo(a)pyrene	ND	2.0	2,4-Dinitrophenol	ND	10
Benzyl alcohol	ND	2.0	2,4-Dinitrotoluene	ND	2.0
Bis(2-chloroethoxy)methane	ND	2.0	2,6-Dinitrotoluene	ND	2.0
Bis(2-chloroethyl)ether	ND	2.0	Di-N-octyl phthalate	ND	2.0
Bis(2-chloroisopropyl)ether	ND	2.0	Fluoranthene	ND	2.0
Bis(2-ethylhexyl)phthalate	ND	10	Fluorene	ND	2.0
4-Bromophenyl phenyl ether	ND	2.0	Hexachlorobenzene	ND	2.0
Butyl benzyl phthalate	ND	2.0	Hexachlorobutadiene	ND	2.0
4-Chloroaniline	ND	2.0	Hexachlorocyclopentadiene	ND	2.0
2-Chloronaphthalene	ND	2.0	Hexachloroethane	ND	2.0
4-Chloro-3-methylphenol	ND	2.0	Indeno(1,2,3-cd)pyrene	ND	2.0
2-Chlorophenol	ND	2.0	Isophorone	ND	2.0
4-Chlorophenyl phenyl ether	ND	2.0	2-Methylnaphthalene	ND	2.0
Chrysene	ND	2.0	2-Methylphenol	ND	2.0
Dibenz(a,h)anthracene	ND	2.0	4-Methylphenol	ND	2.0
Dibenzofuran	ND	2.0	Naphthalene	ND	2.0
Di-N-butyl phthlate	ND	10	2-Nitroaniline	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 NR = Analysis not requested.


 Laboratory Representative

November 3, 1992
 Date Reported

RESNA ENVIRONMENTAL LABORATORY IS CERTIFIED BY THE STATE OF CALIFORNIA
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
 (Certification No. E1211)

42501 Albrae Street • Fremont, CA 94538 • Phone: (510) 623-0775 • (800) 247-5223 • FAX: (510) 651-8754

ANALYSIS REPORT

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538
Project: 19513-L, F3125.31
Sample ID: MW-1
Lab ID: W1210319

Date Sampled: 10-16-92
Date Received: 10-20-92
Date Extracted: 10-22-92
Date Analyzed: 10-30-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
3-Nitroaniline	ND	2.0
4-Nitroaniline	ND	2.0
Nitrobenzene	ND	2.0
2-Nitrophenol	ND	2.0
4-Nitrophenol	ND	10
N-Nitrosodiphenylamine	ND	2.0
N-Nitroso-di-N-propylamine	ND	2.0
Pentachlorophenol	ND	10
Phenanthrene	ND	2.0
Phenol	ND	2.0
Pyrene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
2,4,5-Trichlorophenol	ND	2.0
2,4,6-Trichlorophenol	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter

ND = Not detected. Compound(s) may be present at concentrations below the detection limit.

NR = Analysis not requested.

MTague
Laboratory Representative

November 3, 1992
Date Reported

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DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY

(Certification No. E1211)

42501 Albrae Street • Fremont, CA 94538 • Phone: (510) 623-0775 • (800) 247-5223 • FAX: (510) 651-8754

ANALYSIS REPORT

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538
Project: 19513-L, F3125.31
Sample ID: MW-2
Lab ID: W1210320

Date Sampled: 10-16-92
Date Received: 10-20-92
Date Extracted: 10-22-92
Date Analyzed: 10-30-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>	<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
Acenaphthene	ND	2.0	1,3-Dichlorobenzene	ND	2.0
Acenaphthylene	ND	2.0	1,4-Dichlorobenzene	ND	2.0
Anthracene	ND	2.0	1,2-Dichlorobenzene	ND	2.0
Benzidine	ND	5	3,3-dichlorobenzidine	ND	10
Benzoic Acid	ND	2.0	2,4-dichlorophenol	ND	2.0
Benzo(a)anthracene	ND	2.0	Diethyl phthalate	ND	2.0
Benzo(b)fluoranthene	ND	2.0	2,4-Dimethylphenol	ND	2.0
Benzo(k)fluoranthene	ND	2.0	Dimethyl phthalate	ND	2.0
Benzo(g,h,i)perylene	ND	2.0	4,6-Dinitro-2-methylphenol	ND	10
Benzo(a)pyrene	ND	2.0	2,4-Dinitrophenol	ND	10
Benzyl alcohol	ND	2.0	2,4-Dinitrotoluene	ND	2.0
Bis(2-chloroethoxy)methane	ND	2.0	2,6-Dinitrotoluene	ND	2.0
Bis(2-chloroethyl)ether	ND	2.0	Di-N-octyl phthalate	ND	2.0
Bis(2-chloroisopropyl)ether	ND	2.0	Fluoranthene	ND	2.0
Bis(2-ethylhexyl)phthalate	ND	10	Fluorene	ND	2.0
4-Bromophenyl phenyl ether	ND	2.0	Hexachlorobenzene	ND	2.0
Butyl benzyl phthalate	ND	2.0	Hexachlorobutadiene	ND	2.0
4-Chloroaniline	ND	2.0	Hexachlorocyclopentadiene	ND	2.0
2-Chloronaphthalene	ND	2.0	Hexachloroethane	ND	2.0
4-Chloro-3-methylphenol	ND	2.0	Indeno(1,2,3-cd)pyrene	ND	2.0
2-Chlorophenol	ND	2.0	Isophorone	ND	2.0
4-Chlorophenyl phenyl ether	ND	2.0	2-Methylnaphthalene	ND	2.0
Chrysene	ND	2.0	2-Methylphenol	ND	2.0
Dibenz(a,h)anthracene	ND	2.0	4-Methylphenol	ND	2.0
Dibenzofuran	ND	2.0	Naphthalene	ND	2.0
Di-N-butyl phthlate	ND	10	2-Nitroaniline	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 NR = Analysis not requested.


 Laboratory Representative

November 3, 1992
 Date Reported

ANALYSIS REPORT

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538

Project: 19513-L, F3125.31
Sample ID: MW-2
Lab ID: W1210320

Date Sampled: 10-16-92
Date Received: 10-20-92
Date Extracted: 10-22-92
Date Analyzed: 10-30-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
3-Nitroaniline	ND	2.0
4-Nitroaniline	ND	2.0
Nitrobenzene	ND	2.0
2-Nitrophenol	ND	2.0
4-Nitrophenol	ND	10
N-Nitrosodiphenylamine	ND	2.0
N-Nitroso-di-N-propylamine	ND	2.0
Pentachlorophenol	ND	10
Phenanthrene	ND	2.0
Phenol	ND	2.0
Pyrene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
2,4,5-Trichlorophenol	ND	2.0
2,4,6-Trichlorophenol	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 NR = Analysis not requested.



 Laboratory Representative

November 3, 1992
 Date Reported

ANALYSIS REPORT


Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538
Project: 19513-L, F3125.31
Sample ID: MW-3
Lab ID: W1210321

Date Sampled: 10-16-92
Date Received: 10-20-92
Date Extracted: 10-22-92
Date Analyzed: 10-30-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>	<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
Acenaphthene	ND	2.0	1,3-Dichlorobenzene	ND	2.0
Acenaphthylene	ND	2.0	1,4-Dichlorobenzene	ND	2.0
Anthracene	ND	2.0	1,2-Dichlorobenzene	ND	2.0
Benzidine	ND	5	3,3-dichlorobenzidine	ND	10
Benzoic Acid	ND	2.0	2,4-dichlorophenol	ND	2.0
Benzo(a)anthracene	ND	2.0	Diethyl phthalate	ND	2.0
Benzo(b)fluoranthene	ND	2.0	2,4-Dimethylphenol	ND	2.0
Benzo(k)fluoranthene	ND	2.0	Dimethyl phthalate	ND	2.0
Benzo(g,h,i)perylene	ND	2.0	4,6-Dinitro-2-methylphenol	ND	10
Benzo(a)pyrene	ND	2.0	2,4-Dinitrophenol	ND	10
Benzyl alcohol	ND	2.0	2,4-Dinitrotoluene	ND	2.0
Bis(2-chloroethoxy)methane	ND	2.0	2,6-Dinitrotoluene	ND	2.0
Bis(2-chloroethyl)ether	ND	2.0	Di-N-octyl phthalate	ND	2.0
Bis(2-chloroisopropyl)ether	ND	2.0	Fluoranthene	ND	2.0
Bis(2-ethylhexyl)phthalate	ND	10	Fluorene	ND	2.0
4-Bromophenyl phenyl ether	ND	2.0	Hexachlorobenzene	ND	2.0
Butyl benzyl phthalate	ND	2.0	Hexachlorobutadiene	ND	2.0
4-Chloroaniline	ND	2.0	Hexachlorocyclopentadiene	ND	2.0
2-Chloronaphthalene	ND	2.0	Hexachloroethane	ND	2.0
4-Chloro-3-methylphenol	ND	2.0	Indeno(1,2,3-cd)pyrene	ND	2.0
2-Chlorophenol	ND	2.0	Isophorone	ND	2.0
4-Chlorophenyl phenyl ether	ND	2.0	2-Methylnaphthalene	ND	2.0
Chrysene	ND	2.0	2-Methylphenol	ND	2.0
Dibenz(a,h)anthracene	ND	2.0	4-Methylphenol	ND	2.0
Dibenzofuran	ND	2.0	Naphthalene	ND	2.0
Di-N-butyl phthlate	ND	10	2-Nitroaniline	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 NR = Analysis not requested.


 Laboratory Representative

November 3, 1992
 Date Reported

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 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
 (Certification No. E1211)

42501 Albrae Street • Fremont, CA 94538 • Phone: (510) 623-0775 • (800) 247-5223 • FAX: (510) 651-8754

ANALYSIS REPORT


Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538
Project: 19513-L, F3125.31
Sample ID: MW-3
Lab ID: W1210321

Date Sampled: 10-16-92
Date Received: 10-20-92
Date Extracted: 10-22-92
Date Analyzed: 10-30-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
3-Nitroaniline	ND	2.0
4-Nitroaniline	ND	2.0
Nitrobenzene	ND	2.0
2-Nitrophenol	ND	2.0
4-Nitrophenol	ND	10
N-Nitrosodiphenylamine	ND	2.0
N-Nitroso-di-N-propylamine	ND	2.0
Pentachlorophenol	ND	10
Phenanthrene	ND	2.0
Phenol	ND	2.0
Pyrene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
2,4,5-Trichlorophenol	ND	2.0
2,4,6-Trichlorophenol	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
NR = Analysis not requested.



Laboratory Representative

November 3, 1992
Date Reported

ANALYSIS REPORT

1020lab.frm

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538
Project: 19513-L,F3125.31
Sample ID: Method Water Spike
Lab ID:

Date Sampled: 10-22-92
Date Received: 10-22-92
Date Extracted: 10-22-92
Date Analyzed: 10-30-92

EPA METHOD 8270 QA/QC SHEET
UNITS ug/L

<u>COMPOUND NAME</u>	<u>MS</u>	<u>MSD</u>	<u>RPD</u>	<u>Limits</u>
4CHLORO-3-METHYLPHENOL	63%	61%	3.2%	22%-147%
2CHLOROPHENOL	83%	80%	3.6%	23%-134%
PENTACHLOROPHENOL	65%	151%	8.9%	14%-176%
PHENOL	92%	97%	5.3%	5%-112%
ACENAPHTHENE	55%	53%	3.7%	47%-145%
1,4-DICHLOROBENZENE	53%	51%	3.9%	20%-124%
2,4-DINITROTOLUENE	68%	67%	1.5%	39%-139%
N-NITROSO-DI-n-PROPYLAMINE	61%	57%	1.5%	D-230%
PYRENE	80%	83%	3.7%	54%-120%
1,2,4-TRICHLOROBENZENE	52%	49%	5.9%	44%-142%

ppb = parts per billion = $\mu\text{g/L}$ = micrograms per Liter
RPD = Relative Percent Difference
D = Detectable



Laboratory Representative

November 3, 1992
Date Reported

RESNA ENVIRONMENTAL LABORATORY IS CERTIFIED BY THE STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
(Certification No. 1211)

42501 Albrae Street • Fremont, CA 94538 • Phone: (510) 623-0775 • (800) 247-5223 • FAX: (510) 651-8754

PROJECT NO.		PROJECT NAME/SITE		ANALYSIS REQUESTED										P.O. #:						
F3125.31		Ponic Construction 500 Maitland Dr, Alameda		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX (602/8020)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHg (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHg (8015)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TOG 418 (15520)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">601/8010</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">624/8240</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">625/8270</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">STLC (Cu/Pb)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TILC (Cu/Pb)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TDS (salinity)</div> </div>																
SAMPLERS		(PRINT)												NO. CONTAINERS	SAMPLE TYPE					
Robin Sutherland		Robin Sutherland																		
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED	NO. CONTAINERS	SAMPLE TYPE											REMARKS
MW-1	(w/ 210319)	10-16-92	9:00		X	None	Y			6	W									
MW-2	(↓ 320)	↓	10:00		↓	↓	↓	↓	↓											
MW-3	(↓ 321)	↓	11:00		↓	↓	↓	↓	↓											
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		LABORATORY:					PLEASE SEND RESULTS TO:									
Robin Sutherland		10/20/92	7:15			Resna					S. Fontaine 42501 Albravest Fremont, CA 94538									
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		REQUESTED TURNAROUND TIME:					PROJECT MANAGER:									
						Normal														
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		RECEIPT CONDITION:														
		10/20/92	7:15	Anthony Arena		good														



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RESNA	Client Project ID: F3125.31, Doric Construction	Sampled: Oct 16, 1992
42501 Albrae Street, Suite 100	Sample Descript: Water, MW-1	Received: Oct 20, 1992
Fremont, CA 94538		Extracted: 10/21, 22/92
Attention: Anthony Enerio	Lab Number: 210-3034	Reported: Oct 30, 1992

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration

Waste Extraction Test

Total Threshold Limit Concentration

Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTL Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)
Antimony	15	0.0050	--	500	0.0050	--
Arsenic	5	0.0050	--	500	0.0050	--
Barium	100	0.10	--	10,000	0.10	--
Beryllium	0.75	0.010	--	75	0.010	--
Cadmium	1	0.010	--	100	0.010	--
Chromium (VI)	5	0.0050	--	500	0.0050	--
Chromium (III)	560	0.010	--	2,500	0.010	--
Cobalt	80	0.050	--	8,000	0.050	--
Copper	25	0.010	0.022	2,500	0.010	0.026
Lead	5	0.0050	N.D.	1,000	0.0050	N.D.
Mercury	0.2	0.00020	--	20	0.00020	--
Molybdenum	350	0.050	--	3,500	0.050	--
Nickel	20	0.050	--	2,000	0.050	--
Selenium	1	0.0050	--	100	0.0050	--
Silver	5	0.010	--	500	0.010	--
Thallium	7	0.0050	--	700	0.0050	--
Vanadium	24	0.050	--	2,400	0.050	--
Zinc	250	0.010	--	5,000	0.010	--
Asbestos	-	10	--	10,000	10	--
Fluoride	180	0.10	--	18,000	0.10	--

Asbestos results are reported as fibers/g.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
 Maria Lee
 Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RESNA
42501 Albrae Street, Suite 100
Fremont, CA 94538
Attention: Anthony Enerio

Client Project ID: F3125.31, Doric Construction
Sample Descript: Water, MW-2
Lab Number: 210-3035

Sampled: Oct 16, 1992
Received: Oct 20, 1992
Extracted: 10/21, 22/92
Reported: Oct 30, 1992

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration

Waste Extraction Test

Total Threshold Limit Concentration

Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTL Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)
Antimony	15	0.0050	--	500	0.0050	--
Arsenic	5	0.0050	--	500	0.0050	--
Barium	100	0.10	--	10,000	0.10	--
Beryllium	0.75	0.010	--	75	0.010	--
Cadmium	1	0.010	--	100	0.010	--
Chromium (VI)	5	0.0050	--	500	0.0050	--
Chromium (III)	560	0.010	--	2,500	0.010	--
Cobalt	80	0.050	--	8,000	0.050	--
Copper	25	0.010	0.033	2,500	0.010	0.038
Lead	5	0.0050	N.D.	1,000	0.0050	0.0061
Mercury	0.2	0.00020	--	20	0.00020	--
Molybdenum	350	0.050	--	3,500	0.050	--
Nickel	20	0.050	--	2,000	0.050	--
Selenium	1	0.0050	--	100	0.0050	--
Silver	5	0.010	--	500	0.010	--
Thallium	7	0.0050	--	700	0.0050	--
Vanadium	24	0.050	--	2,400	0.050	--
Zinc	250	0.010	--	5,000	0.010	--
Asbestos	-	10	--	10,000	10	--
Fluoride	180	0.10	--	18,000	0.10	--

Asbestos results are reported as fibers/g.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
Maria Lee
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RESNA	Client Project ID: F3125.31, Doric Construction	Sampled: Oct 16, 1992
42501 Albrae Street, Suite 100	Sample Descript: Water, MW-3	Received: Oct 20, 1992
Fremont, CA 94538		Extracted: 10/21, 22/92
Attention: Anthony Enerio	Lab Number: 210-3036	Reported: Oct 30, 1992

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration
Waste Extraction Test

Total Threshold Limit Concentration

Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTL Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)
Antimony	15	0.0050	--	500	0.0050	--
Arsenic	5	0.0050	--	500	0.0050	--
Barium	100	0.10	--	10,000	0.10	--
Beryllium	0.75	0.010	--	75	0.010	--
Cadmium	1	0.010	--	100	0.010	--
Chromium (VI)	5	0.0050	--	500	0.0050	--
Chromium (III)	560	0.010	--	2,500	0.010	--
Cobalt	80	0.050	--	8,000	0.050	--
Copper	25	0.010	0.027	2,500	0.010	0.033
Lead	5	0.0050	N.D.	1,000	0.0050	N.D.
Mercury	0.2	0.00020	--	20	0.00020	--
Molybdenum	350	0.050	--	3,500	0.050	--
Nickel	20	0.050	--	2,000	0.050	--
Selenium	1	0.0050	--	100	0.0050	--
Silver	5	0.010	--	500	0.010	--
Thallium	7	0.0050	--	700	0.0050	--
Vanadium	24	0.050	--	2,400	0.050	--
Zinc	250	0.010	--	5,000	0.010	--
Asbestos	-	10	--	10,000	10	--
Fluoride	180	0.10	--	18,000	0.10	--

Asbestos results are reported as fibers/g.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
 Maria Lee
 Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

RESNA
42501 Albrae Street, Suite 100
Fremont, CA 94538
Attention: Anthony Enerio

Client Project ID: F3125.31, Doric Construction

QC Sample Group: 2103034-5

Reported: Oct 30, 1992

QUALITY CONTROL DATA REPORT - STLC

ANALYTE	Lead	Beryllium	Cadmium	Chromium	Nickel
Method:	EPA 7421	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Analyst:	S. Chin	M. Mistry	M. Mistry	M. Mistry	M. Mistry
Reporting Units:	mg/L	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Oct 26, 1992	Oct 28, 1992	Oct 28, 1992	Oct 28, 1992	Oct 28, 1992
QC Sample #:	210-3166	210-3835	210-3835	210-3835	210-3835
Sample Conc.:	0.12	N.D.	N.D.	N.D.	0.070
Spike Conc. Added:	0.50	1.0	1.0	1.0	1.0
Conc. Matrix Spike:	720	1.1	1.3	1.1	2.3
Matrix Spike % Recovery:	120	110	130	110	223
Conc. Matrix Spike Dup.:	690	1.1	1.3	1.1	2.2
Matrix Spike Duplicate % Recovery:	114	110	130	110	213
Relative % Difference:	4.3	0.0	0.0	0.0	4.6

SEQUOIA ANALYTICAL

Maria Lee
Maria Lee
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$



SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

RESNA
42501 Albrae Street, Suite 100
Fremont, CA 94538
Attention: Anthony Enerio

Client Project ID: F3125.31, Doric Construction

QC Sample Group: 2103034-5

Reported: Oct 30, 1992

QUALITY CONTROL DATA REPORT - TTLC

ANALYTE

	Lead	Beryllium	Cadmium	Chromium	Nickel
--	------	-----------	---------	----------	--------

Method:	EPA 239.2	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
Analyst:	S. Chin	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
Reporting Units:	mg/L	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Oct 23, 1992	Oct 30, 1992	Oct 30, 1992	Oct 30, 1992	Oct 30, 1992
QC Sample #:	210-3036	210-3034	210-3034	210-3034	210-3034

Sample Conc.:	N.D.	N.D.	N.D.	0.092	0.12
Spike Conc. Added:	0.050	1.0	1.0	1.0	1.0
Conc. Matrix Spike:	0.046	1.1	0.97	1.0	1.0
Matrix Spike % Recovery:	92	110	97	91	88
Conc. Matrix Spike Dup.:	0.048	1.1	0.97	1.0	1.0
Matrix Spike Duplicate % Recovery:	96	110	97	91	88
Relative % Difference:	4.3	0.0	0.0	0.0	0.0

SEQUOIA ANALYTICAL

Maria Lee
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$

PROJECT NO.		PROJECT NAME/SITE				ANALYSIS REQUESTED										P.O. #:						
F3125.31		DORIC Const.						/ (SIGN) / (PRINT)														
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED	NO. CONTAINERS	SAMPLE TYPE	BTEX (622/8020)	TPHg (8015)	TPHd (8015)	TOG 418.1/5520	601/8010	624/8240	625/8270	SYCC Gupp	TCCLimp	REMARKS			
MW-1 2103034		10/16/92			<input checked="" type="checkbox"/>			2	U							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			51210 319		
MW-2 2103035		↓			<input checked="" type="checkbox"/>			2	W							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			please filter + preserve ↓		
MW-3 2103036		↓			<input checked="" type="checkbox"/>			2	W							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			↓		
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		LABORATORY:					PLEASE SEND RESULTS TO:											
<i>[Signature]</i>		10-22-92	9:37 AM	<i>[Signature]</i>		<i>Geowia</i>					RESNA ENVIRONMENTAL LABORATORY 42501 Albrae St. Fremont, CA 94538 Tel # (510) 651-1906 Fax # (510) 651-8754											
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		REQUESTED TURNAROUND TIME:					PROJECT MANAGER:											
<i>[Signature]</i>		10/20/92	1058			2 weeks by 11/3/92										<i>A. Gueno / S. Fontaine</i>						
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		RECEIPT CONDITION:																
<i>[Signature]</i>				<i>[Signature]</i>		good																

Job Name: Doric Construction Date: 11-30-92
 Job No.: F3125.31 Sampled by: R Sutherland
 Phase: Q Laboratory: Resna
 Wells Secure: Yes No If no, then comment: _____
 Drums at Site: Full 2 Empty _____

Well No.	Depth to Water (ft)	Well Depth (ft)	Time (W/L)	Purge Volume (gal)	Temp. (°C)	Cond. (umho/cm)	pH	Observations	
1 MW-1	3.24	13.80	10:30	1.7	3	66.4	5010	6.94	No odor
				4.5	66.1	4900	6.99	No sheen	
				6	65.8	4870	7.04	cloudy	
3 MW-2	4.10	13.90	10:40	1.3	3	66.9	7600	7.10	No odor
				4.5	68.3	7580	7.15	No sheen	
				6	65.8	7550	7.12	Cloudy	
2 MW-3	3.17	13.10	10:35	1.5	3	66.7	3570	6.95	No odor
				4.5	66.1	3500	6.94	No sheen	
				6	65.7	3470	6.91	cloudy	

Job Name: ~~RESNA~~ Doric Constr. Date: 12-22-92
 Job No.: F3125.31 Sampled by: S. Fontaine
 Phase: QM Laboratory: RESNA

Wells Secure: Yes No If no, then comment: _____

Drums at Site: Full 1 Empty 1/2 full 1

Well No.	Depth to Water (ft)	Well Depth (ft)	Time (W*L)	Purge Volume (gal)	Temp. (°C)	Cond. (umho/cm)	pH	Observations
Mw-1	3.50	3.50 13.65	12:00	1.75	15°	5500		cloudy
				2	15°	6000		cloudy
				3	15.5°	5750		clearer, yellowish
				4	17°	6100		cloudy
				5.25	15°	6500		slightly cloudy
Mw-2	3.45	3.45 13.72	1:00	2	16	6500		cloudy, silty
				2	15	6650		cloudy
				3	15.5	6500		cloudy
				4	15	6450		cloudy
				6	15	6500		cloudy
Mw-3	3.00	12.80	2:00	1.65	14.5	2125		cloudy, silty
				2	15	2150		cloudy
				3	15	2125		cloudy
				4	15	2100		cloudy
				5	15	2075		slightly cloudy

ANALYSIS REPORT

1020lab.frm

Attention: Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538
Project: 19513-L,F3125-31
Doric Const.

Date Sampled: 12-22-92
Date Received: 12-22-92
TDS Analyzed: 12-29-92

TDS(mg/L)

SAMPLE
Laboratory Identification

MW-1 W1212469	1200
MW-2 W1212470	4100
MW-3 W1212471	1400

ANALYTICAL PROCEDURES

TDS is measured according to Standard Method 160.2



Laboratory Representative

January 4, 1993
Date Reported

ANALYSIS REPORT

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St., Ste 100
Fremont, CA 94538
Project: 19513-L, F3125, Doric Const.
Sample ID: MW-1
Lab ID: W1212469

Date Sampled: 12-22-92
Date Received: 12-22-92
Date Extracted: 12-23-92
Date Analyzed: 12-23-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>	<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
Acenaphthene	ND	2.0	1,3-Dichlorobenzene	ND	2.0
Acenaphthylene	ND	2.0	1,4-Dichlorobenzene	ND	2.0
Anthracene	ND	2.0	1,2-Dichlorobenzene	ND	2.0
Benzdine	ND	5	3,3-dichlorobenzidine	ND	10
Benzoic Acid	ND	2.0	2,4-dichlorophenol	ND	2.0
Benzo(a)anthracene	ND	2.0	Diethyl phthalate	ND	2.0
Benzo(b)fluoranthene	ND	2.0	2,4-Dimethylphenol	ND	2.0
Benzo(k)fluoranthene	ND	2.0	Dimethyl phthalate	ND	2.0
Benzo(g,h,i)perylene	ND	2.0	4,6-Dinitro-2-methylphenol	ND	10
Benzo(a)pyrene	ND	2.0	2,4-Dinitrophenol	ND	10
Benzyl alcohol	ND	2.0	2,4-Dinitrotoluene	ND	2.0
Bis(2-chloroethoxy)methane	ND	2.0	2,6-Dinitrotoluene	ND	2.0
Bis(2-chloroethyl)ether	ND	2.0	Di-N-octyl phthalate	ND	2.0
Bis(2-chloroisopropyl)ether	ND	2.0	Fluoranthene	ND	2.0
Bis(2-ethylhexyl)phthalate	ND	10	Fluorene	ND	2.0
4-Bromophenyl phenyl ether	ND	2.0	Hexachlorobenzene	ND	2.0
Butyl benzyl phthalate	ND	2.0	Hexachlorobutadiene	ND	2.0
4-Chloroaniline	ND	2.0	Hexachlorocyclopentadiene	ND	2.0
2-Chloronaphthalene	ND	2.0	Hexachloroethane	ND	2.0
4-Chloro-3-methylphenol	ND	2.0	Indeno(1,2,3-cd)pyrene	ND	2.0
2-Chlorophenol	ND	2.0	Isophorone	ND	2.0
4-Chlorophenyl phenyl ether	ND	2.0	2-Methylnaphthalene	ND	2.0
Chrysene	ND	2.0	2-Methylphenol	ND	2.0
Dibenz(a,h)anthracene	ND	2.0	4-Methylphenol	ND	2.0
Dibenzofuran	ND	2.0	Naphthalene	ND	2.0
Di-N-butyl phthlate	ND	10	2-Nitroaniline	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 NR = Analysis not requested.

M. Tague
Laboratory Representative

December 28, 1992
Date Reported

ANALYSIS REPORT

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St., Ste 100
Fremont, CA 94538
Project: 19513-L, F3125, Doric Const.
Sample ID: MW-1
Lab ID: W1212469

Date Sampled: 12-22-92
Date Received: 12-22-92
Date Extracted: 12-23-92
Date Analyzed: 12-23-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
3-Nitroaniline	ND	2.0
4-Nitroaniline	ND	2.0
Nitrobenzene	ND	2.0
2-Nitrophenol	ND	2.0
4-Nitrophenol	ND	10
N-Nitrosodiphenylamine	ND	2.0
N-Nitroso-di-N-propylamine	ND	2.0
Pentachlorophenol	ND	10
Phenanthrene	ND	2.0
Phenol	ND	2.0
Pyrene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
2,4,5-Trichlorophenol	ND	2.0
2,4,6-Trichlorophenol	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
ND = Analysis not requested.

M. Tasque

Laboratory Representative

December 28, 1992
Date Reported

ANALYSIS REPORT

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St., Ste 100
Fremont, CA 94538
Project: 19513-L, F3125, Doric Const.
Sample ID: MW-2
Lab ID: W1212470

Date Sampled: 12-22-92
Date Received: 12-22-92
Date Extracted: 12-23-92
Date Analyzed: 12-23-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>	<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
Acenaphthene	ND	2.0	1,3-Dichlorobenzene	ND	2.0
Acenaphthylene	ND	2.0	1,4-Dichlorobenzene	ND	2.0
Anthracene	ND	2.0	1,2-Dichlorobenzene	ND	2.0
Benzidine	ND	5	3,3-dichlorobenzidine	ND	10
Benzoic Acid	ND	2.0	2,4-dichlorophenol	ND	2.0
Benzo(a)anthracene	ND	2.0	Diethyl phthalate	ND	2.0
Benzo(b)fluoranthene	ND	2.0	2,4-Dimethylphenol	ND	2.0
Benzo(k)fluoranthene	ND	2.0	Dimethyl phthalate	ND	2.0
Benzo(g,h,i)perylene	ND	2.0	4,6-Dinitro-2-methylphenol	ND	10
Benzo(a)pyrene	ND	2.0	2,4-Dinitrophenol	ND	10
Benzyl alcohol	ND	2.0	2,4-Dinitrotoluene	ND	2.0
Bis(2-chloroethoxy)methane	ND	2.0	2,6-Dinitrotoluene	ND	2.0
Bis(2-chloroethyl)ether	ND	2.0	Di-N-octyl phthalate	ND	2.0
Bis(2-chloroisopropyl)ether	ND	2.0	Fluoranthene	ND	2.0
Bis(2-ethylhexyl)phthalate	ND	10	Fluorene	ND	2.0
4-Bromophenyl phenyl ether	ND	2.0	Hexachlorobenzene	ND	2.0
Butyl benzyl phthalate	ND	2.0	Hexachlorobutadiene	ND	2.0
4-Chloroaniline	ND	2.0	Hexachlorocyclopentadiene	ND	2.0
2-Chloronaphthalene	ND	2.0	Hexachloroethane	ND	2.0
4-Chloro-3-methylphenol	ND	2.0	Indeno(1,2,3-cd)pyrene	ND	2.0
2-Chlorophenol	ND	2.0	Isophorone	ND	2.0
4-Chlorophenyl phenyl ether	ND	2.0	2-Methylnaphthalene	ND	2.0
Chrysene	ND	2.0	2-Methylphenol	ND	2.0
Dibenz(a,h)anthracene	ND	2.0	4-Methylphenol	ND	2.0
Dibenzofuran	ND	2.0	Naphthalene	ND	2.0
Di-N-butyl phthlate	ND	10	2-Nitroaniline	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 NR = Analysis not requested.

VM Tague

Laboratory Representative

December 28, 1992
Date Reported

ANALYSIS REPORT

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St., Ste 100
Fremont, CA 94538
Project: 19513-L, F3125, Doric Const.
Sample ID: MW-2
Lab ID: W1212470

Date Sampled: 12-22-92
Date Received: 12-22-92
Date Extracted: 12-23-92
Date Analyzed: 12-23-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
3-Nitroaniline	ND	2.0
4-Nitroaniline	ND	2.0
Nitrobenzene	ND	2.0
2-Nitrophenol	ND	2.0
4-Nitrophenol	ND	10
N-Nitrosodiphenylamine	ND	2.0
N-Nitroso-di-N-propylamine	ND	2.0
Pentachlorophenol	ND	10
Phenanthrene	ND	2.0
Phenol	ND	2.0
Pyrene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
2,4,5-Trichlorophenol	ND	2.0
2,4,6-Trichlorophenol	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
ND = Analysis not requested.

MTague

Laboratory Representative

December 28, 1992
Date Reported

RESNA ENVIRONMENTAL LABORATORY IS CERTIFIED BY THE STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
(Certification No. E1211)

42501 Albrae Street • Fremont, CA 94538 • Phone: (510) 623-0775 • (800) 247-5223 • FAX: (510) 651-8754

ANALYSIS REPORT

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St., Ste 100
Fremont, CA 94538
Project: 19513-L, F3125, Doric Const.
Sample ID: MW-3
Lab ID: W1212471

Date Sampled: 12-22-92
Date Received: 12-22-92
Date Extracted: 12-23-92
Date Analyzed: 12-23-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>	<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
Acenaphthene	ND	2.0	1,3-Dichlorobenzene	ND	2.0
Acenaphthylene	ND	2.0	1,4-Dichlorobenzene	ND	2.0
Anthracene	ND	2.0	1,2-Dichlorobenzene	ND	2.0
Benidine	ND	5	3,3-dichlorobenzidine	ND	10
Benzoic Acid	ND	2.0	2,4-dichlorophenol	ND	2.0
Benzo(a)anthracene	ND	2.0	Diethyl phthalate	ND	2.0
Benzo(b)fluoranthene	ND	2.0	2,4-Dimethylphenol	ND	2.0
Benzo(k)fluoranthene	ND	2.0	Dimethyl phthalate	ND	2.0
Benzo(g,h,i)perylene	ND	2.0	4,6-Dinitro-2-methylphenol	ND	10
Benzo(a)pyrene	ND	2.0	2,4-Dinitrophenol	ND	10
Benzyl alcohol	ND	2.0	2,4-Dinitrotoluene	ND	2.0
Bis(2-chloroethoxy)methane	ND	2.0	2,6-Dinitrotoluene	ND	2.0
Bis(2-chloroethyl)ether	ND	2.0	Di-N-octyl phthalate	ND	2.0
Bis(2-chloroisopropyl)ether	ND	2.0	Fluoranthene	ND	2.0
Bis(2-ethylhexyl)phthalate	ND	10	Fluorene	ND	2.0
4-Bromophenyl phenyl ether	ND	2.0	Hexachlorobenzene	ND	2.0
Butyl benzyl phthalate	ND	2.0	Hexachlorobutadiene	ND	2.0
4-Chloroaniline	ND	2.0	Hexachlorocyclopentadiene	ND	2.0
2-Chloronaphthalene	ND	2.0	Hexachloroethane	ND	2.0
4-Chloro-3-methylphenol	ND	2.0	Indeno(1,2,3-cd)pyrene	ND	2.0
2-Chlorophenol	ND	2.0	Isophorone	ND	2.0
4-Chlorophenyl phenyl ether	ND	2.0	2-Methylnaphthalene	ND	2.0
Chrysene	ND	2.0	2-Methylphenol	ND	2.0
Dibenz(a,h)anthracene	ND	2.0	4-Methylphenol	ND	2.0
Dibenzofuran	ND	2.0	Naphthalene	ND	2.0
Di-N-butyl phthlate	ND	10	2-Nitroaniline	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
NR = Analysis not requested.

M. Tague

Laboratory Representative

December 28, 1992
Date Reported

RESNA ENVIRONMENTAL LABORATORY IS CERTIFIED BY THE STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
(Certification No. E1211)

42501 Albrae Street • Fremont, CA 94538 • Phone: (510) 623-0775 • (800) 247-5223 • FAX: (510) 651-8754

ANALYSIS REPORT

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St., Ste 100
Fremont, CA 94538

Project: 19513-L, F3125, Doric Const.
Sample ID: MW-3
Lab ID: W1212471

Date Sampled: 12-22-92
Date Received: 12-22-92
Date Extracted: 12-23-92
Date Analyzed: 12-23-92
Matrix: Water

EPA METHOD 8270

<u>COMPOUND NAME</u>	<u>ug/L</u>	<u>MDL</u>
3-Nitroaniline	ND	2.0
4-Nitroaniline	ND	2.0
Nitrobenzene	ND	2.0
2-Nitrophenol	ND	2.0
4-Nitrophenol	ND	10
N-Nitrosodiphenylamine	ND	2.0
N-Nitroso-di-N-propylamine	ND	2.0
Pentachlorophenol	ND	10
Phenanthrene	ND	2.0
Phenol	ND	2.0
Pyrene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
2,4,5-Trichlorophenol	ND	2.0
2,4,6-Trichlorophenol	ND	2.0

ppb = parts per billion = ug/L = micrograms per Liter
 ND = Not detected. Compound(s) may be present at concentrations below the detection limit.
 ND = Analysis not requested.

VM Tague
Laboratory Representative

December 28, 1992
Date Reported

RESNA ENVIRONMENTAL LABORATORY IS CERTIFIED BY THE STATE OF CALIFORNIA
 DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
 (Certification No. E1211)

42501 Albrae Street • Fremont, CA 94538 • Phone: (510) 623-0775 • (800) 247-5223 • FAX: (510) 651-8754

ANALYSIS REPORT

1020lab.frm

Attention: Ms. Sheryl Fontaine
RESNA
42501 Albrae St.
Fremont, CA 94538
Project: 19513-L,F3125, Doric Const.
Sample ID: Water Spike
Lab ID: NA

Date Sampled: 12-23-92
Date Received: 12-23-92
Date Analyzed: 12-23-92
Matrix: Water

EPA METHOD 8270 QA/QC SHEET
UNITS ug/L

<u>COMPOUND NAME</u>	<u>MS</u>	<u>MSD</u>	<u>RPD</u>	<u>Limits</u>
4CHLORO-3-METHYLPHENOL	68%	72%	5.7%	22%-147%
2CHLOROPHENOL	70%	70%	0	23%-134%
PENTACHLOROPHENOL	64%	66%	3.1%	14%-176%
PHENOL	36%	35%	2.8%	5%-112%
ACENAPHTHENE	85%	83%	2.4%	47%-145%
1,4-DICHLOROBENZENE	84%	84%	0	20%-124%
2,4-DINITROTOLUENE	75%	76%	1.3%	39%-139%
N-NITROSO-DI-n-PROPYLAMINE	93%	95%	2.1%	D-230%
PYRENE	55%	56%	1.8%	54%-120%
1,2,4-TRICHLOROBENZENE	66%	66%	0	44%-142%

ppb = parts per billion = $\mu\text{g/L}$ = micrograms per Liter
RPD = Relative Percent Difference
D = Detectable



Laboratory Representative

December 28, 1992
Date Reported

RESNA ENVIRONMENTAL LABORATORY IS CERTIFIED BY THE STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES AS A HAZARDOUS WASTE TESTING LABORATORY
(Certification No. 1211)

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CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

05849

PROJECT NO.	PROJECT NAME/SITE						ANALYSIS REQUESTED											P.O. #:		
F3125.31	Doric Construction						<i>(Diagonal lines covering analysis requested section)</i>													
SAMPLERS <i>(Signature)</i>		(SIGN) <i>(Signature)</i>					NO. CONTAINERS	SAMPLE TYPE												
		(PRINT) <i>S. Fontaine</i>																		
SAMPLE IDENTIFICATION	DATE	TIME	COMP	GRAB	PRES. USED	ICED			BTEX (602/8020)	TPH9 (8015)	TPHd (8015)	TOG 418.1/5520	601/8010	624/8240	625/8270	TDS	REMARKS			
MW-1	12/22	12:00	X			X	1	H ₂ O						X				W1212469		
MW-1		12:15													X			↓		
MW-2		1:00												X				↓ 470		
MW-2		1:15													X			↓		
MW-3		2:00												X				↓ 471		
MW-3		2:15	↓			↓		↓							X					

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	LABORATORY:	PLEASE SEND RESULTS TO: <i>S. Fontaine</i>
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	LABORATORY:	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	REQUESTED TURNAROUND TIME: <i>Normal per SF 12/23/92</i>	
RELINQUISHED BY: <i>(Signature)</i>	DATE 12/22/92	TIME 3:40p	RECEIVED BY LABORATORY: <i>Roberto Arilla</i>	RECEIPT CONDITION: <i>cold</i>	



SEQUOIA ANALYTICAL

880 Chesapeake Drive • Redwood City, CA 94063
(415) 384-9600 • FAX (415) 364-9233

RESNA 42501 Albrae Street, Suite 100 Fremont, CA 94538 Attention: Anthony Enerio	Client Project ID: F3125.31, Doric Construction Sample Descript: Water, MW-1 Lab Number: 212-2441	Sampled: Nov 30, 1992 Received: Dec 11, 1992 Extracted: Dec 16, 1992 Reported: Dec 23, 1992
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INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration
Waste Extraction Test

Total Threshold Limit Concentration

Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTL Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)
Antimony	15	0.0050	--	500	0.0050	--
Arsenic	5	0.0050	--	500	0.0050	--
Barium	100	0.10	--	10,000	0.10	--
Beryllium	0.75	0.010	--	75	0.010	--
Cadmium	1	0.010	--	100	0.010	--
Chromium (VI)	5	0.0050	--	500	0.0050	--
Chromium (III)	560	0.010	--	2,500	0.010	--
Cobalt	80	0.050	--	8,000	0.050	--
Copper	25	0.010	N.D.	2,500	0.010	N.D.
Lead	5	0.010	N.D.	1,000	0.010	N.D.
Mercury	0.2	0.00020	--	20	0.00020	--
Molybdenum	350	0.050	--	3,500	0.050	--
Nickel	20	0.050	--	2,000	0.050	--
Selenium	1	0.0050	--	100	0.0050	--
Silver	5	0.010	--	500	0.010	--
Thallium	7	0.0050	--	700	0.0050	--
Vanadium	24	0.050	--	2,400	0.050	--
Zinc	250	0.010	--	5,000	0.010	--
Asbestos	-	10	--	10,000	10	--
Fluoride	180	0.10	--	18,000	0.10	--

Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
Maria Lee
Project Manager

2122441.ENS <1>



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RESNA 42501 Albrae Street, Suite 100 Fremont, CA 94538 Attention: Anthony Enerio	Client Project ID: F3125.31, Doric Construction Sample Descript: Water, MW-2 Lab Number: 212-2442	Sampled: Nov 30, 1992 Received: Dec 11, 1992 Extracted: Dec 16, 1992 Reported: Dec 23, 1992
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INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration
Waste Extraction Test

Total Threshold Limit Concentration

Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTLIC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)
Antimony	15	0.0050	--	500	0.0050	--
Arsenic	5	0.0050	--	500	0.0050	--
Barium	100	0.10	--	10,000	0.10	--
Beryllium	0.75	0.010	--	75	0.010	--
Cadmium	1	0.010	--	100	0.010	--
Chromium (VI)	5	0.0050	--	500	0.0050	--
Chromium (III)	560	0.010	--	2,500	0.010	--
Cobalt	80	0.050	--	8,000	0.050	--
Copper	25	0.010	N.D.	2,500	0.010	N.D.
Lead	5	0.010	N.D.	1,000	0.010	N.D.
Mercury	0.2	0.00020	--	20	0.00020	--
Molybdenum	350	0.050	--	3,500	0.050	--
Nickel	20	0.050	--	2,000	0.050	--
Selenium	1	0.0050	--	100	0.0050	--
Silver	5	0.010	--	500	0.010	--
Thallium	7	0.0050	--	700	0.0050	--
Vanadium	24	0.050	--	2,400	0.050	--
Zinc	250	0.010	--	5,000	0.010	--
Asbestos	-	10	--	10,000	10	--
Fluoride	180	0.10	--	18,000	0.10	--

Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
Maria Lee
Project Manager

2122441.ENS <2>



SEQUOIA ANALYTICAL

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RESNA 42501 Albrae Street, Suite 100 Fremont, CA 94538 Attention: Anthony Enerio	Client Project ID: F3125.31, Doric Construction Sample Descript: Water, MW-3 Lab Number: 212-2443	Sampled: Nov 30, 1992 Received: Dec 11, 1992 Extracted: Dec 16, 1992 Reported: Dec 23, 1992
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INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration
Waste Extraction Test

Total Threshold Limit Concentration

Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTL Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)
Antimony	15	0.0050	--	500	0.0050	--
Arsenic	5	0.0050	--	500	0.0050	--
Barium	100	0.10	--	10,000	0.10	--
Beryllium	0.75	0.010	--	75	0.010	--
Cadmium	1	0.010	--	100	0.010	--
Chromium (VI)	5	0.0050	--	500	0.0050	--
Chromium (III)	560	0.010	--	2,500	0.010	--
Cobalt	80	0.050	--	8,000	0.050	--
Copper	25	0.010	0.056	2,500	0.010	0.010
Lead	5	0.010	N.D.	1,000	0.010	0.034
Mercury	0.2	0.00020	--	20	0.00020	--
Molybdenum	350	0.050	--	3,500	0.050	--
Nickel	20	0.050	--	2,000	0.050	--
Selenium	1	0.0050	--	100	0.0050	--
Silver	5	0.010	--	500	0.010	--
Thallium	7	0.0050	--	700	0.0050	--
Vanadium	24	0.050	--	2,400	0.050	--
Zinc	250	0.010	--	5,000	0.010	--
Asbestos	-	10	--	10,000	10	--
Fluoride	180	0.10	--	18,000	0.10	--

Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Maria Lee
Maria Lee
Project Manager

2122441.ENS <3>



SEQUOIA ANALYTICAL

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RESNA
42501 Albrae Street, Suite 100
Fremont, CA 94538
Attention: Anthony Enerio

Client Project ID: P3125.31, Doric Construction

QC Sample Group: 2122441-3

Reported: Dec 23, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Lead STLC	Lead TTLG	Beryllium	Cadmium	Chromium	Nickel
Method:	EPA 7421	EPA 239.2	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
Analyst:	S. Chin	S. Chin	M. Mistry	M. Mistry	M. Mistry	M. Mistry
Reporting Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Dec 17, 1992	Dec 21, 1992	Dec 16, 1992	Dec 16, 1992	Dec 16, 1992	Dec 16, 1992
QC Sample #:	212-1844	BLK121692	BLK121692	BLK121692	BLK121692	BLK121692
Sample Conc.:	0.18	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.50	0.050	1.0	1.0	1.0	1.0
Conc. Matrix Spike:	0.70	0.060	0.99	0.94	0.98	0.98
Matrix Spike % Recovery:	104	100	99	94	98	98
Conc. Matrix Spike Dup.:	0.77	0.045	0.98	0.93	0.98	0.98
Matrix Spike Duplicate % Recovery:	118	90	99	93	98	98
Relative % Difference:	9.5	11	0.0	1.1	0.0	0.0

SEQUOIA ANALYTICAL

Maria Lee
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$

2122441.ENS <4>

PROJECT NO. F3125.31		PROJECT NAME/SITE Doric Construction 500 Maitland Alameda					ANALYSIS REQUESTED										P.O. #:		
SAMPLES (SIGN) <i>Robin Sutherland</i>		(PRINT) Robin Sutherland																	
SAMPLE IDENTIFICATION		DATE	TIME	COMP	GRAB	PRES. USED	ICED	NO. CONTAINERS	SAMPLE TYPE	BTEX (602/8020)	TPHg (8015)	TPHg (8015)	TOG 418 1/5620	601/8010	824/8240	825/8270	STLC (Pb/Cu)	TTLC (Pb/Cu)	REMARKS
MW-1	w/212211	11-30-92	11:00		X	None	Y	2	↓								X	X	Filter & Preserve If Necessary
MW-3	↓ 212	↓	12:00		X	↓	↓	2	↓								X	X	
MW-2	↓ 213	↓	13:00		X	↓	↓	2	↓								X	X	
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		LABORATORY: Resna				PLEASE SEND RESULTS TO: S. Fontaine									
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		REQUESTED TURNAROUND TIME: Normal													
RELINQUISHED BY: <i>Robin Sutherland</i>		DATE 12/11/92	TIME 7:00	RECEIVED BY LABORATORY: <i>J. G. Smith</i>		RECEIPT CONDITION: good										PROJECT MANAGER:			