Mr Dale Klettke, CHMM

Here is a copy of our Quarterly report -

Hiro's Nursery, 1630-162nd Ave
San Leandro, Ca. ASN 80-63-26
Lot 15

Sincerely
Dianne Fukushima

QUARTERLY GROUNDWATER MONITORING REPORT

AUGUST 1995

1630 - 162nd Avenue
San Leandro, California
(STID 1361)

Prepared for

Mr. Hiro Fukushima
1301 Hilliker Place
Livermore, CA 94550

September 28, 1995

ALFA ENVIRONMENTAL REMEDIATION SERVICES

P.O. BOX 1630 PLEASANTON CA 94566 (510)462-9763 Fax:(510)462-9726

ALFA ENVIRONMENTAL REMEDIATION SERVICES

September 28, 1995

Mr. Hiro Fukushima
1301 Hilliker Place
Livermore, CA 94550

Subject: Quarterly Groundwater Monitoring Report
August 1995
1630 - 162nd Avenue, San Leandro, California (STID 1361).

Dear Mr. Fukushima:

Enclosed is the subject report required by the Alameda County Department of Environmental Health (ACDEH) for the above mentioned site.

We appreciate the opportunity to provide our consulting engineering and hydrogeologic services to Hiro's Nursery. Please contact either of the undersigned if you have questions or require additional information.

Sincerely,

ALFA ENVIRONMENTAL REMEDIATION SERVICES

Valentin Constantinescu, R.E.A., C.E.C.M.
Senior Environmental Geologist

Marvin D. Kirkeby, P.E.
Registered Civil Engineer

VNC/MDK/avc
Enclosure

INTRODUCTION

ALFA Environmental Remediation Services (ALFA) purged and sampled three (3) groundwater monitoring wells at the above referenced site on August 29, 1995. The tasks described were undertaken in response to requirements set forth by Mr. Dan Klettke, Hazardous Materials Specialist with the Alameda County Health Services Agency (ACHSA) and are intended to comply with standards for such work established by the ACHSA and the San Francisco Bay Regional Water Quality Control Board (RWQCB).

OVERVIEW OF RELEVANT ENVIRONMENTAL COMPLIANCE ACTIVITIES

In front of one of the site garages (see Plate 1) was a gasoline pump which serviced a 550 gallon underground storage tank (UST) (northern tank). This tank was installed in the 1970's. A second underground storage tank (southern tank) was located adjacent to the small nursery office, on the west side of the property. This gasoline underground storage tank was removed in 1992.

Four soil borings were drilled in the vicinity of the two USTs and tested for total volatile hydrocarbons (TVH) and benzene, toluene, ethylbenzene, and xylenes. Soil samples taken from the soil borings designated SB1 and SB2, located near the east and west ends of the northern UST, presented TVH concentrations at 230 and 79 parts per million (ppm), respectively, p-xylene level was 3 ppm in SB1 and 3 ppm in SB2. In addition, m-xylene was detected in SB2 at 7 ppm, making the total xylenes in SB2 equal to 10 ppm. No other BTEX compounds were detected in SB1 and SB2.

On August 31, 1989 a second soil and groundwater sampling event was performed in the area of northern UST. Two soil borings were drilled; SB-5 was drilled slightly upgradient of the tank and SB-6 was drilled approximately 30 feet in the presumed downgradient direction. Analytical results for soil samples collected from SB5 and SB6 indicated that TVH/BTEX compounds were not present above detection limits in the soil beneath the saturated zone in SB5, or in the unsaturated soil in SB-6. Analytical results of grab water samples collected from SB-5 and SB-6 showed 4.5 parts per billion (ppb) of benzene, 9.9 ppb of p-xylene, 0.8 ppb of m-xylene, and 290 ppb of TVH in SB-5. Benzene was the only compound detected in the grab water sample collected from SB-6, at a concentration of 1.6 ppb. However, these samples may not be representative of groundwater quality, since these are grab samples collected through the augers.

On September 3, 1992 the southern tank was removed. Two soil samples acquired from the tank pit and one composite soil sample from the excavated soil stockpile were tested for Total Petroleum Hydrocarbons as Gasoline (TPH-G), for Benzene, Toluene, Ethylbenzene and Total Xylenes (BTE&X) and for Total Lead. TPH-G and BTEX compounds were below the reporting limit (not detected). Total Lead was present in all soil samples at low levels (5.4 to 6.9 ppm). The former tank pit was

backfilled with the excavated soil from the stockpile in accordance with the September 17, 1992 letter signed by Mr. Robert Weston, Hazardous Materials Specialist with Alameda County-Health Care Services Agency.

The northern tank, a 500-gallon underground storage tank (UST) containing gasoline was removed from this site in August of 1994. At the time of the removal the UST was very rusty and pitted over much of the exterior. Holes were found on the upper/lower surfaces and the ends of the tank. One soil sample collected from the bottom of the excavation contained up to 18 parts per million (ppm) of total petroleum hydrocarbon as gasoline (TPH-G) and 0.45 ppm of benzene, 0.025 of toluene, 0.66 ppm of ethylbenzene, and 1.3 ppm of xylenes.

The site wells were constructed on May 9, 1995 at those locations shown in Plate 1, attached. The wells were developed on May 15, 1995 and sampled on May 22, 1995 in accordance with protocol set forth by the RWQCB in the document titled "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks...Tri-Regional Recommendations ".

On May 22, 1995 the elevations of the well heads were surveyed using an Alameda County benchmark located in the South-East corner of intersection of Maubert Avenue and 162nd Avenue (see Table 1).

WELL PURGING AND SAMPLING

Depth to static groundwater within each well was measured with an electrical tape prior to purging. Following calculations to determine well casing volumes, each well was then purged of more than three well volumes using a peristaltic pump and a dedicated tubing until temperature, Ph, and electrical conductivity measurements stabilized and the water was observed to be relatively non-turbid. Measurements of pH, conductivity and temperature were acquired and recorded as referenced within Attachment A.

After the wells have been purged, recharged, and stabilized, water samples were acquired within a clean, disposable polyethylene bailer lowered to a point just below the surface of the water table. Upon bringing the bailer to grade, the sample was promptly transferred to Volatile Organic Analysis (VOA) vials containing sufficient HCl preservative to reduce the sample pH to <2.0, and to 1-liter plastic bottles preserved with HNO_3, with care given to minimize off-gassing. The water sample for Lead analysis was filtered in the field. The vials were filled so no headspace bubbles formed when inverted.

Each container was labeled, placed in a cooler on ice at a temperature of 4 degrees Celsius, for transport to a State Certified hazardous waste analytical laboratory under chain of custody. The samples thus acquired were free of sheen or other evidence of free product.

Groundwater samples were analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-G), for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTE&X), and for Total Lead using EPA-approved Methods.

The purge water from each well was stored in a labeled 55-gallon drum. This drum will be stored on-site pending development of an appropriate disposal protocol.

GROUNDWATER LEVEL MEASUREMENTS

Groundwater levels were measured by ALFA's geologist in the monitoring wells designated MW-1, MW-2, and MW-3. Groundwater level data as measured on August 29, 1995 are presented in Table 1.

On August 29, 1995 the groundwater flow direction was N87W and the gradient value was 0.014 ft/ft (see Plate 1, and Table 1).

Field Quality Assurance/Quality Control

Sampling equipment was steam cleaned or thoroughly scrubbed with alconox solution followed by a distilled water rinse prior to being brought on site and between samplings. Sample blank was taken prior to water sampling and analyzed by the lab.

Site Safety

Because of the sampling methods employed during this phase of investigation, exposure to any contaminated water was kept to a minimum.

RESULTS OF LABORATORY ANALYSES

Copies of the reports of certified laboratory analyses are attached hereto as Attachment B.

CONCLUSIONS AND RECOMMENDATIONS

Groundwater analytical results indicate that TPH-G, BTEX, and Total Lead compounds are below the level of detection.

To comply with standards established by the ACHCSA and the San Francisco Bay Regional Water Quality Control Board (RWQCB) quarterly groundwater sampling will continue.

TABLE 1

GROUNDWATER ELEVATION DATA (a,b)

August 1995

Well No.	*Elevation of MP (ft, NGVD of 1929)(c)*	*Depth to Water Below MP (ft)*	*Water-level Elevation (ft NGVD of 1929)*
MW-1	*38.86*	*8.09*	*30.77*
MW-2	*39.35*	*8.22*	*31.13*
MW-3	*39.63*	*8.34*	*31.29*

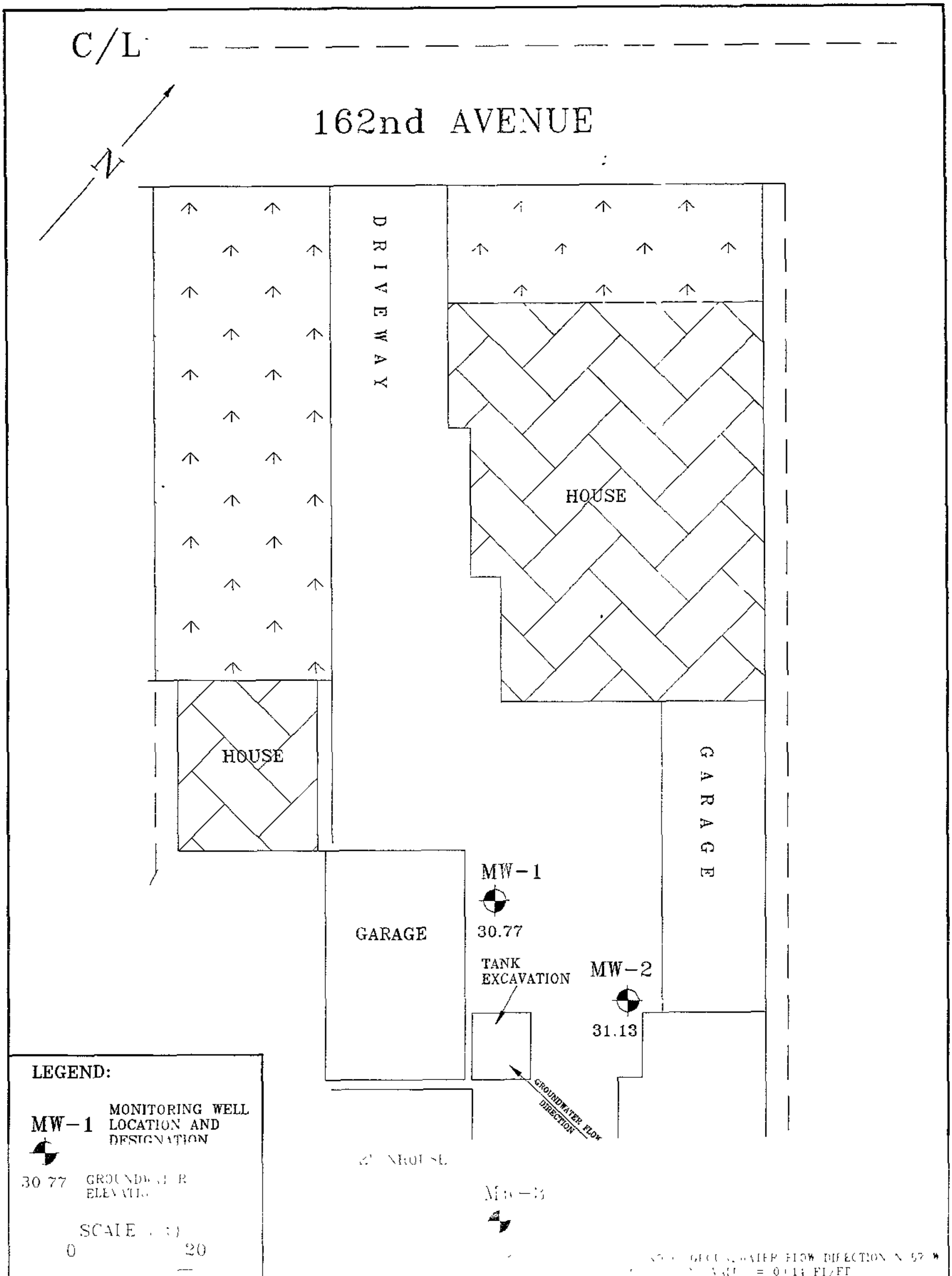
(a) Survey Benchmark: a standard Alameda County bronze disk near the southeasterly corner of intersection of Maubert Avenue and 162nd Avenue. Disc is stamped "Mau-162""1978", elevation 64.3746 feet. Elevations are relative to the National Geodetic Vertical Datum (NGVD) of 1929.

(b) Measurements taken in August 29, 1995 by ALFA's personnel.

(c) MP = Measuring point, north rim of well casing.

ATTACHMENT A

SITE MAP
AND WELL MONITORING FORMS



ALFA		Plate
Project No		1
Date: 8/29/		

ALFA ENVIRONMENTAL REMEDIATION SERVICES

P.O. BOX 1630
PLEASANTON, CA 94566
(510) 462-9763 FAX: (510) 462-9726

WELL MONITORING FORM:

CLIENT: HIRO FUKUSHIMA DATE: 8/29/95

SITE
ADDRESS: 1630-162nd AVENUE

SAN LEANDRO, CALIFORNIA

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

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

TOTAL WELL DEPTH 19.95' MONITORING WELL # MW-1

- DEPTH TO WATER 8.09'

= WATER COLUMN HEIGHT 11.86' X 0.17 = 2.02 Gallons (1 well volume)

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

3 X 2.02 = 6.06 Gallons (3 Well Volumes)

VOLUME	pH	TEMPERATURE °F	CONDUCTIVITY µmhos/cm
1	6.34	67.5	1.45
2	6.37	66.5	1.42
3	6.51	65.8	1.53
4	6.50	65.8	1.56
5	6.43	65.8	1.52
6	6.48	65.3	1.53
7	6.46	65.5	1.55

CONTAMINANT ODOR? NO TIME OF SAMPLE COLLECTION 10:42

TURBIDITY LEVEL: LOW

SHEEN ON WATER? NO SAMPLER'S SIGNATURE:

ALFA ENVIRONMENTAL REMEDIATION SERVICES

P.O. BOX 1630
PLEASANTON, CA 94566
(510) 462-9763 FAX: (510) 462-9726

WELL MONITORING FORM:

CLIENT: HIRO FUKUSHIMA DATE: 8/29/95

SITE
ADDRESS: 1630-162nd AVENUE

SAN LEANDRO, CALIFORNIA

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

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

TOTAL WELL DEPTH 19.91' MONITORING WELL # MW-2

- DEPTH TO WATER 8.22'

= WATER COLUMN HEIGHT 11.69' X 0.17 = 1.99 Gallons (1 well volume)

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

3 X 1.99 = 5.97 Gallons (3 Well Volumes)

VOLUME	pH	TEMPERATURE °F	CONDUCTIVITY μmhos/cm
1	6.40	66.7	1.55
2	6.51	66.2	1.50
3	6.55	65.9	1.46
4	6.52	66.1	1.51
5	6.51	65.7	1.60
6	6.50	65.8	1.62

CONTAMINANT ODOR? NO TIME OF SAMPLE COLLECTION: 10:51

TURBIDITY LEVEL: LOW

SHEEN ON WATER? NO SAMPLER'S SIGNATURE:

ALFA ENVIRONMENTAL REMEDIATION SERVICES

P.O. BOX 1630
PLEASANTON, CA 94566
(510) 462-9763 FAX: (510) 462-9726

WELL MONITORING FORM:

CLIENT: HIRO FUKUSHIMA DATE: 8/29/95

SITE
ADDRESS: 1630-162nd AVENUE

SAN LEANDRO, CALIFORNIA

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

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

TOTAL WELL DEPTH 19.93' MONITORING WELL # MW-3

- DEPTH TO WATER 8.34'

= WATER COLUMN HEIGHT 11.59' X 0.17 = 1.97 Gallons (1 well volume)

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

3 X 1.97 = 5.91 Gallons (3 Well Volumes)

VOLUME	pH	TEMPERATURE °F	CONDUCTIVITY µmhos/cm
1	5.88	66.7	1.63
2	6.21	66.3	1.59
3	6.43	65.7	1.62
4	6.67	65.3	1.64
5	6.71	65.5	1.62
6	6.69	65.4	1.63

CONTAMINANT ODOR? NO TIME OF SAMPLE COLLECTION: 10.57

TURBIDITY LEVEL: LOW

SHEEN ON WATER? NO SAMPLER'S SIGNATURE:

ATTACHMENT B

LABORATORY RESULTS
AND CHAIN OF CUSTODY

PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

August 30, 1995 PEL # 9508101

HIRO FUKUSHIMA

Re: Four water samples for Gasoline/BTEX analysis.

Project name: Hiro

Date sampled: Aug 29, 1995 Date submitted: Aug 29, 1995
Date extracted: Aug 29-30, 1995 Date analyzed: Aug 29-30, 1995

RESULTS:

SAMPLE I.D.	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylene (ug/L)
MW-1	N.D.	N.D.	N.D.	N.D.	N.D.
MW-2	N.D.	N.D.	N.D.	N.D.	N.D.
MW-3	N.D.	N.D.	N.D.	N.D.	N.D.
Blank	N.D.	N.D.	N.D.	N.D.	N.D.
Blank	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	109.4%	105.7%	97.0%	97.9%	91.1%
Detection limit	50	0.5	0.5	0.5	0.5
Method of Analysis	5030 / 8015	602	602	602	602

David Duong
Laboratory Director

Attachment

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax. 408-946-9663

PRIORITY ENVIRONMENTAL LABS
Precision Environmental Analytical Laboratory

August 30, 1995 PEL # 9508101

HIRO FUKUSHIMA

Re: Four water samples for total Lead analysis.

Project name: Hiro

Date sampled: Aug 29, 1995 Date submitted: Aug 29, 1995
Date extracted: Aug 29-30, 1995 Date analyzed: Aug 29-30,1995

RESULTS:

SAMPLE I.D.	Lead (mg/L)
MW-1	N.D.
MW-2	N.D.
MW-3	N.D.
Blank	N.D.
Blank	N.D.
Detection limit	0.01
Method of Analysis	7420

David Duong
Laboratory Director

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax 408-946-9663

PRIORITY ENVIRONMENTAL LABS

Chain of Custody

1764 Houret Ct. Milpitas,CA.95035 Tel:408-946-9636 Fax:408-946-9663

DATE: 8/29/95 PAGE: 1 OF 1

PROJECT MGR VACCHTIN CONSTANCE
COMPANY ACE ENVIRONMENTAL
ADDRESS P.O. BOX 1030
FLEMINGTON, CA 95440
PHONE 510-462-9763 FAX 510-462-9766
SIGNATURE Constance Vacchtin

WATER

ANALYSIS REPORT

PEL # 9508101
INV # 26301

SAMPLE ID	DATE	TIME	MATRIX	TPH-Gasoline (EPA 5030.8015)	TPH-Gasoline(5030.8015) w/BTEX(EPA 602.8020)	TPH-Diesel (EPA 3510/3550.8015)	PURGEABLE AROMATICS BTEX (EPA 602.8020)	TOTAL OIL & GREASE (EPA 5520 C.D&F)	PESTICIDES/PCB (EPA 608.8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	CHLORINATED HYDROCARBONS (EPA 601.8010)	TOTAL Lead	NUMBER OF CONTAINERS
MW-1	8/29/95	10:42	WATER		X							X	2+1
MW-2	↓	10:51	↓		X							X	2+1
MW-3	↓	10:57	↓		X							X	2+1
BLANK	8/29/95	10:30	WATER		X							X	2+1

Sample Received in good cold Condition and No. head spaces Victor Duong 8/29/95

PROJECT INFORMATION
PROJECT NAME HIRO
PROJECT NUMBER

SAMPLE RECEIPT
TOTAL # OF CONTAINERS 12
RECD. GOOD COND./COLD

INSTRUCTIONS & COMMENTS: Preserved with HCl/HNO3 WATER SAMPLE FOR LEAD ANALYSIS FILTERED Constance Vacchtin

RELINQUISHED BY: 1	RECEIVED BY: 1	RELINQUISHED BY: 2	RECEIVED BY: 2
VACCHTIN C.	VICTOR DUONG		
SIGNATURE: Constance Vacchtin	SIGNATURE: Victor Duong	SIGNATURE:	SIGNATURE:
Date: 8/29/95 Time: 13:42	Date: 8/29/95 Time: 1342	Date: Time:	Date: Time:
COMPANY: ACE ENV.	COMPANY: PEL	COMPANY:	COMPANY: