Ultramar

Ultramar Inc.
P.O. Box 466
525 W. Third Street
Hanford, CA 93232-0466
(209) 582-0241

Telecopy: 209-584-6113 Credit & Wholesale
209-583-3330 Administrative
209-583-3302 Information Services
209-583-3358 Accounting

March 1, 1994

Mr. Scott Seery
Department of Environmental Health
Alameda County Health Care Agency
80 Swan Way, Room 200
Oakland, CA 94621

SUBJECT: BEACON STATION NO. 720, 1088 MARINA BLVD., SAN LEANDRO, CALIFORNIA

Dear Mr. Seery:

Enclosed is a copy of the quarterly monitoring report for the fourth quarter 1993 for the above-referenced Ultramar facility. Also included is a copy of the Quarterly Status Report which describes the work completed this quarter and the work anticipated to be completed next quarter.

Please call if you have any questions.

Sincerely,

ULTRAMAR INC.

Terrence A. Fox
Senior Project Manager
Marketing Environmental Department

Enclosures

cc w/encl: Mr. Dale van Dam, AMV
Local Program Coordinator, Alameda County, San Francisco Bay Region, RWQCB

Ultramar

Ultramar Inc.
P.O. Box 466
525 W. Third Street
Hanford, CA 93232-0466
(209) 582-0241

Telecopy: 209-584-6113 Credit & Wholesale
209-583-3330 Administrative
209-583-3302 Information Services
209-583-3358 Accounting

ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: March 1, 1994
QUARTER ENDING: December 31, 1993

SERVICE STATION NO.: 720
ADDRESS: 1088 Marina Blvd., San Leandro, CA
COUNTY: Alameda

ULTRAMAR CONTACT: Terrence A. Fox **TEL. NO:** 209-583-5545

BACKGROUND:

In January 1987, three underground gasoline storage tanks and one waste oil tank were excavated and removed from two tank cavities. Samples collected from beneath the former tanks indicated that hydrocarbons were present in the soil. In March 1987, five monitoring wells (MW-1 through MW-5) were installed by Conoco. Hydrocarbons were detected in soil and ground-water samples collected from the wells with the highest concentrations being detected in the area of MW-4. In July 1987, four soil were drilled in the vicinity of MW-4 to further characterize the soil contamination in that area. TPH concentrations above 100 ppm were detected in each boring. The site has been on a monitoring program since June 1987.

In July 1990, the site was purchased by Ultramar Inc. from Conoco. The monitoring program has continued.

In August 1991, perform shallow ground water study as screening tool to locate wells.

In October 1991, installed three additional wells to further define the extent of the dissolved hydrocarbon plume.

SUMMARY OF THIS QUARTER'S ACTIVITIES:

Performed quarterly monitoring on December 21, 1993. In October 1993, performed a ground-water pump test, avapor extraction test, and a air sparging test.

RESULT OF QUARTERLY MONITORING:

Monitoring data indicates that the benzene concentration remained not detected in MW-6, remained 6,900 ppb in MW-4, and remained 1,000 ppb in MW-1. The benzene concentration decreased in MW-3 from 370 ppb to 130 ppb, in MW-5 from 7,600 ppb to 3,600 ppb, in MW-7 from 0.51 ppb to not detected, and in MW-8 from 490 ppb to 240 ppb. The benzene concentration increased in MW-2 from 640 ppb to 1,500 ppb.

PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

ACTIVITY	ESTIMATED COMPLETION DATE
Continue quarterly monitoring program.	
Submit RAP.	March 31, 1994

AEGIS ENVIRONMENTAL, INC.
1050 Melody Lane, Suite 160, Roseville, California 95678
(916) 782 2110 Fax (916) 786 7830

February 7, 1994

Mr. Terrence Fox
Environmental Specialist
Ultramar Inc.
525 West Third Street
Hanford, California 93232-0466

Subject: **Fourth Quarter 1993 Groundwater Monitoring Report**
Beacon Station #720
1088 Marina Boulevard, San Leandro, California

Dear Mr. Fox:

Aegis Environmental, Inc. (Aegis), is pleased to provide Ultramar Inc., this report documenting the results of quarterly groundwater monitoring, conducted on December 21, 1993, at the subject site (Figure 1). The monitoring included depth-to-water measurements, subjective analysis for free product, and collection of groundwater samples. All field activities pertaining to events in this report were conducted according to Aegis' Standard Operating Procedures included in the Attachments.

GROUNDWATER ELEVATIONS

Prior to purging, Aegis personnel collected depth to groundwater measurements. Groundwater level data from March 1992 to date are summarized in Table 1. Previous groundwater level data are attached. On the basis of the current measurements, groundwater flows to the southwest (Figure 2) at a gradient of <0.01 ft/ft. Groundwater levels have decreased an average of 0.22 feet compared to the last monitoring event.

GROUNDWATER SAMPLING AND ANALYSES

Aegis personnel collected groundwater samples from all eight wells. All samples were analyzed for concentrations of:

- Total petroleum hydrocarbons (TPH),as gasoline, by EPA Method 8015;
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 602.

Analytical results from March 1992 to date are summarized in Table 2. Previous analytical results are attached. Figure 3 is a distribution map of benzene in groundwater based on the current data. The laboratory report and chain-of-custody form for the current event are included in the Attachments. Benzene concentrations remained nondetectable in well MW-6. Concentrations decreased in wells MW-3, MW-5, MW-7 and MW-8; and increased in well MW-2 compared to the last sampling event. Wells MW-1 and MW-4 had the same benzene concentrations as reported for the last sampling event (1,000 and 6,900 ppb, respectively).

Aegis recommends a copy of this quarterly monitoring report be forwarded to the following agency:

Mr. Rafat Shahid
Division of Hazardous Materials
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, California 94621

This report has been prepared for the sole use of Ultramar Inc. Any reliance on this report by third parties shall be at such parties' own risk. The work described herein was performed under the review and supervision of the professional geologist/engineer, registered with the State of California, whose signature appears below.

If you have any questions or comments, please call us at (916) 782-2110.

Sincerely,

AEGIS ENVIRONMENTAL, INC.

Owen M. Kittredge
Project Geologist

REGISTERED PROFESSIONAL ENGINEER
EDGAR PAUL HAYES
Cert No. C49163
EXP. 9/26/96
CIVIL
STATE OF CALIFORNIA

E. Paul Hayes
Principal Engineer
PE No. C49163

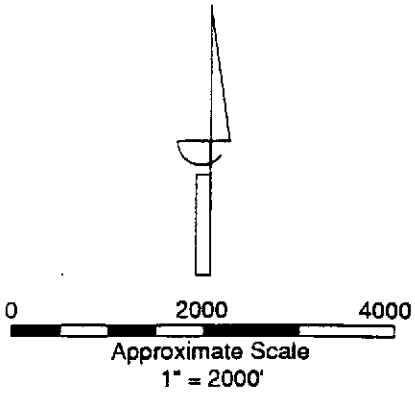
2/11/94
Date

OMK/EPH/srr

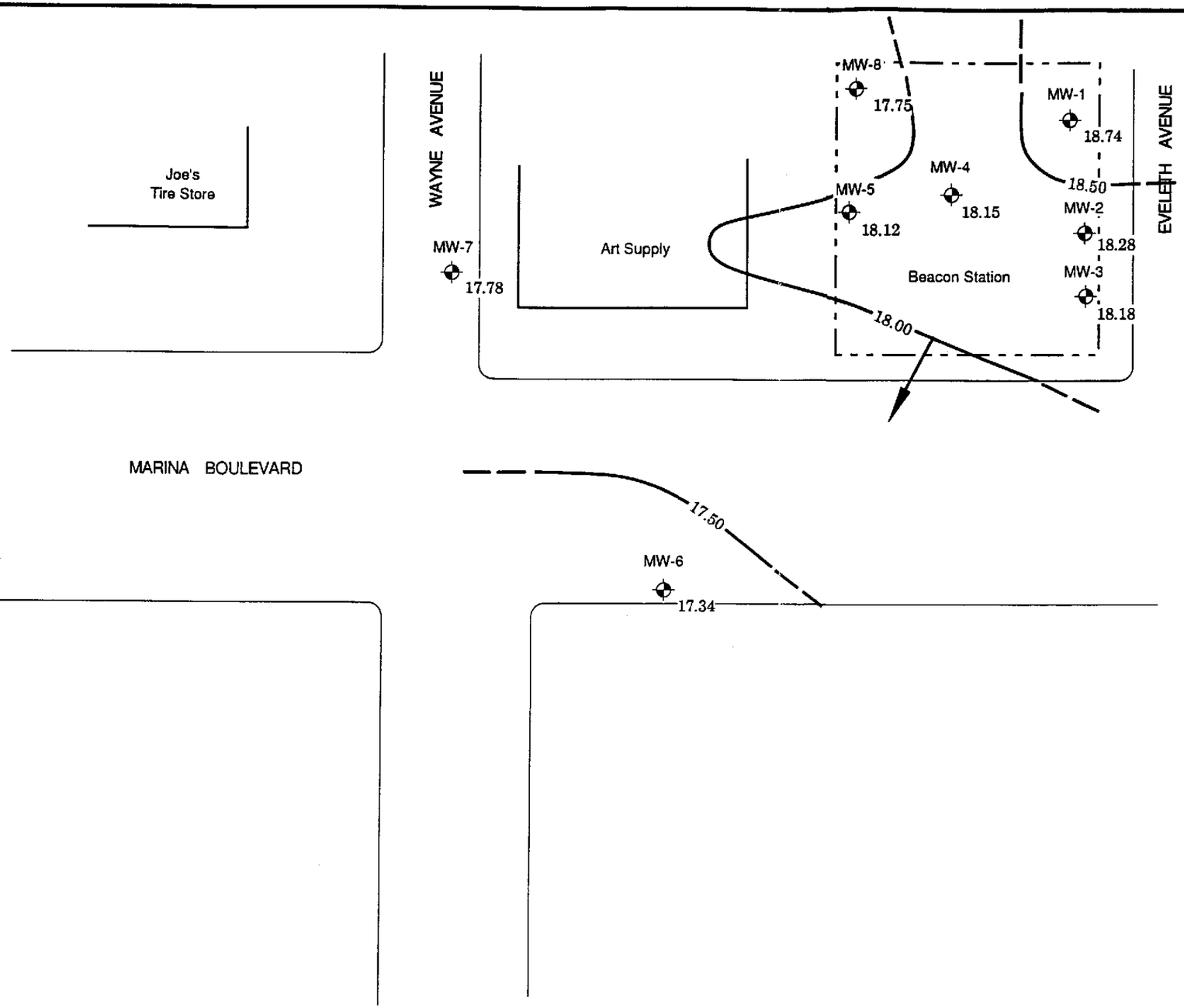
Attachments

GENERAL NOTES:

BASE MAP FROM USGS
7.5 MINUTE TOPOGRAPHIC
SAN LEANDRO, CA



AEGIS ENVIRONMENTAL, INC.		SITE LOCATION MAP	FIGURE 1
DRAWN BY:	DATE:	Beacon #720 1088 Marina Boulevard San Leandro, CA	PROJECT NUMBER: 92-702
REVISED BY:	DATE:		
REVIEWED BY:	DATE:		



LEGEND

- 18.74 — Monitoring Well, Groundwater Elevation in Feet
- Property Line
- Potentiometric Surface Contour Line (Dashed Where Inferred)
- Estimated Direction of Groundwater Flow

Hydraulic Gradient = < 0.01 ft/ft
Contour Interval = 0.50 ft

NOTES

Site Sketch After Site Map
By Groundwater Geotechnical Consultants, Inc.
(January 1992)

All Locations Are Approximate

0 50 100
Approximate Scale In Feet

AEGIS ENVIRONMENTAL, INC.

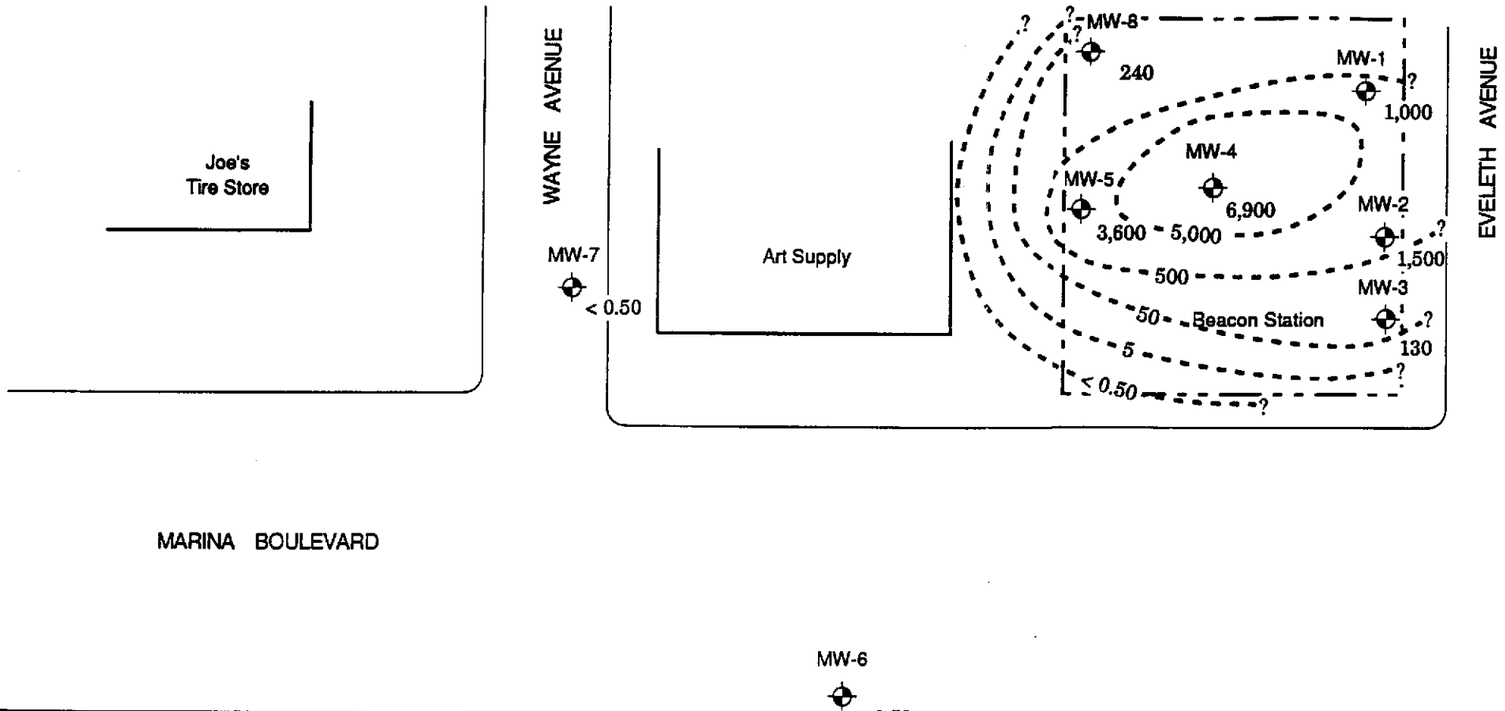
DRAWN BY: D. Hada	DATE: January 4, 1994
REVISED BY:	DATE:
REVIEWED BY:	DATE:

POTENTIOMETRIC SURFACE MAP
December 21, 1993

Beacon Station #720
1088 Marina Boulevard
San Leandro, CA

FIGURE 2

PROJECT NUMBER: 92-702



LEGEND

240	Monitoring Well Benzene Concentration (parts-per-billion)
— - - —	Property Line
- - - - -	Inferred Iso-Concentration Limits
< 0.50	Below Indicated Detection Limit

Contour Interval = Exponential

NOTES

Site Sketch After Site Map
By Groundwater Geotechnical Consultants, Inc.
(January 1992)

All Locations Are Approximate

0 50 100
Approximate Scale in Feet

AEGIS ENVIRONMENTAL, INC.

DRAWN BY: D. Hada	DATE: January 4, 1994
REVISED BY:	DATE:
REVIEWED BY:	DATE:

DISTRIBUTION MAP OF BENZENE
IN GROUNDWATER December 21, 1993

Beacon Station #720
1088 Marina Boulevard
San Leandro, CA

FIGURE
3

PROJECT NUMBER:
92-702

TABLE 1
WATER LEVEL DATA
BEACON STATION #720
1098 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Groundwater[1]	Groundwater Elevation[2]	Well Depth	Comments
MW-1	03/30/92	33.10	13.58	19.52	—	
	07/01/92		14.80	18.30	—	
	09/30/92		16.12	16.98	—	
	11/19/92		16.34	16.76	27.76	
	02/03/93		12.61	20.49	27.72	
	05/25/93		13.12	19.98	27.70	
	09/22/93		14.18	18.92	27.73	
	12/21/93		14.36	18.74	27.70	
MW-2	03/30/92	32.80	13.32	19.48	—	
	07/01/92		14.42	18.38	—	
	09/30/92		15.78	17.02	—	
	11/19/92		15.99	16.81	24.56	
	02/03/93		12.31	20.49	25.37	
	05/25/93		12.97	19.83	25.31	
	09/22/93		14.32	18.48	25.34	
	12/21/93		14.52	18.28	25.31	
MW-3	03/30/92	32.30	12.96	19.34	—	
	07/01/92		14.00	18.30	—	
	09/30/92		15.36	16.94	—	
	11/19/92		15.57	16.73	24.45	
	02/03/93		11.96	20.34	24.54	
	05/25/93		14.12	18.18	24.50	
	09/22/93		13.88	18.42	24.50	
	12/21/93		14.12	18.18	24.50	
MW-4	03/30/92	32.90	13.60	19.30	—	
	07/01/92		15.72	17.18	—	
	09/30/92		16.04	16.86	—	
	11/19/92		16.21	16.69	26.92	
	02/03/93		12.70	20.20	27.00	
	05/25/93		12.97	19.93	26.88	
	09/22/93		14.51	18.39	26.90	
	12/21/93		14.75	18.15	26.90	

NOTES:
1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
Well Depth = Measurement from top of casing to bottom of well.
— = Not measured.
* = Well paved over.
< = Below indicated detection limit.
ND = Reported as "nondetect" by previous consultant.
NS = Not sampled.

TABLE 1
WATER LEVEL DATA
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Groundwater[1]	Groundwater Elevation[2]	Well Depth	Comments
MW-5	03/30/92	32.70	13.48	19.22	—	
	07/01/92		14.58	18.12	—	
	09/30/92		15.82	16.88	—	
	11/19/92		16.00	16.70	27.56	
	02/03/93		12.40	20.30	27.61	
	05/25/93		13.01	19.69	27.61	
	09/22/93		14.37	18.33	27.64	
	12/21/93		14.58	18.12	27.01	
MW-6	03/30/92	30.40	12.62	17.78	—	
	07/01/92		12.70	17.70	—	
	09/30/92		13.40	17.00	—	
	11/19/92		13.59	16.81	15.10	
	02/03/93		12.43	17.97	15.01	
	05/25/93		—	—	—	•
	10/11/93		12.82	17.58	15.10	
	12/21/93		13.06	17.34	15.10	
MW-7	03/30/92	31.20	12.34	18.86	—	
	07/01/92		15.54	15.66	—	
	09/30/92		14.64	16.56	—	
	11/19/92		14.80	16.40	25.10	
	02/03/93		11.36	19.84	25.02	
	05/25/93		—	—	—	•
	09/22/93		13.18	18.02	25.01	
	12/21/93		13.42	17.78	25.02	
MW-8	03/30/92	33.80	14.66	19.14	—	
	07/01/92		15.74	18.06	—	
	09/30/92		17.00	16.80	—	
	11/19/92		17.01	16.79	29.75	
	02/03/93		13.83	19.97	29.88	
	05/25/93		13.01	20.79	29.86	
	09/22/93		15.81	17.99	24.52	
	12/21/93		16.05	17.75	29.86	

NOTES:
- 1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
- 2 = Elevation referenced to mean sea level.
- Well Depth = Measurement from top of casing to bottom of well.
- — = Not measured.
- • = Well paved over.
- < = Below indicated detection limit.
- ND = Reported as "nondetect" by previous consultant.
- NS = Not sampled.

TABLE 2
ANALYTICAL RESULTS: GROUNDWATER
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(All results in parts-per-billion)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics			
		Gasoline	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-1	03/30/92	27,000	630	550	540	1,900
	07/01/92	55,000	840	1,000	830	3,600
	09/30/92	6,400	150	95	120	470
	11/19/92	1,300	90	11	50	87
	02/03/93	53,000	750	560	950	5,700
	05/25/93	9,400	200	86	470	1,500
	09/22/93	41,000	1,000	510	850	1,100
	12/21/93	41,000	1,000	490	2,700	13,000
MW-2	03/30/92	52,000	2,300	1,700	940	3,300
	07/01/92	130,000	3,500	2,900	1,900	7,900
	09/30/92	24,000	890	350	500	1,700
	11/19/92	32,000	1,900	1,700	870	3,400
	02/03/93	64,000	1,900	2,200	860	4,100
	05/25/93	34,000	3,300	1,500	1,300	5,900
	09/22/93	8,000	640	150	270	2,000
	12/21/93	18,000	1,500	410	1,300	5,000
MW-3	03/30/92	21,000	560	50	630	980
	07/01/92	13,000	150	20	22	300
	09/30/92	4,500	53	2.6	84	96
	11/19/92	4,700	73	6.2	140	120
	02/03/93	23,000	220	40	430	740
	05/25/93	9,900	120	26	370	520
	09/22/93	10,000	370	71	320	640
	12/21/93	7,800	130	8.5	430	380
MW-4	03/30/92	76,000	8,000	4,400	730	2,500
	07/01/92	95,000	6,900	2,200	70	880
	09/30/92	58,000	7,100	1,500	650	2,700
	11/19/92	33,000	5,500	840	400	1,400
	02/03/93	130,000	8,200	6,700	940	4,400
	05/25/93	63,000	16,000	6,600	1,700	8,100
	09/22/93	23,000	6,900	940	150	3,000
	12/21/93	28,000	6,900	1,900	1,100	5,500

NOTES: < = Below indicated detection limit.
ND = Reported as "nondetect" by previous consultant.
NS = Not sampled.

TABLE 2
ANALYTICAL RESULTS: GROUNDWATER
BEACON STATION #720
1088 MARINA BOULEVARD, SAN LEANDRO, CALIFORNIA
(All results in parts-per-billion)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics			
		Gasoline	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-5	03/30/92	29,000	2,600	980	390	1,100
	07/01/92	52,000	2,400	1,000	5,200	2,000
	09/30/92	32,000	1,800	780	370	1,700
	11/19/92	7,800	1,000	280	120	370
	02/03/93	74,000	3,500	3,000	780	3,200
	05/25/93	57,000	7,900	4,700	1,900	7,800
	09/22/93	52,000	7,600	2,400	1,200	8,800
	12/21/93	23,000	3,600	1,200	970	3,600
MW-6	03/30/92	73	2.1	1.1	ND	0.6
	07/01/92	ND	ND	ND	ND	ND
	09/30/92	ND	0.73	ND	ND	0.58
	11/19/92	96	1.5	<0.5	<0.5	0.9
	02/03/93	73	0.6	<0.5	<0.5	<0.5
	05/25/93	NS	NS	NS	NS	NS
	10/11/93	<50	<0.5	<0.5	<0.5	<0.5
	12/21/93	<50	<0.5	<0.5	<0.5	<0.5
MW-7	03/30/92	ND	ND	ND	ND	ND
	07/01/92	ND	ND	ND	ND	ND
	09/30/92	ND	ND	ND	ND	ND
	11/19/92	<50	<0.5	<0.5	<0.5	<0.5
	02/03/93	<50	<0.5	<0.5	<0.5	<0.5
	05/25/93	NS	NS	NS	NS	NS
	09/22/93	<50	0.51	0.82	<0.5	0.81
	12/21/93	<50	<0.5	<0.5	<0.5	<0.5
MW-8	03/30/92	3,000	1,700	880	970	1,900
	07/01/92	72,000	1,800	550	520	2,200
	09/30/92	12,000	680	140	140	560
	11/19/92	9,600	530	310	130	560
	02/03/93	44,000	1,500	1,300	490	2,300
	05/25/93	7,400	580	160	170	480
	09/22/93	2,400	490	45	37	140
	12/21/93	1,400	240	7.5	<2.5	82

NOTES: < = Below indicated detection limit.
ND = Reported as "nondetect" by previous consultant.
NS = Not sampled.

SAMPLE IDENTIFICATION AND CHAIN-OF-CUSTODY PROCEDURES

SOP-4

Sample identification and chain-of-custody procedures ensure sample integrity, and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis is labeled to identify the job number, date, time of sample collection, a sample number unique to the sample, any in-field measurements made, sampling methodology, name(s) of on-site personnel and any other pertinent field observations also recorded on the field excavation or boring log.

Chain-of-custody forms are used to record possession of the sample from time of collection to its arrival at the laboratory. During shipment, the person with custody of the samples will relinquish them to the next person by signing the chain-of-custody form(s) and noting the date and time. The sample-control officer at the laboratory will verify sample integrity, correct preservation, confirm collection in the proper container(s), and ensure adequate volume for analysis.

If these conditions are met, the samples will be assigned unique laboratory log numbers for identification throughout analysis and reporting. The log numbers will be recorded on the chain-of-custody forms and in the legally-required log book maintained in the laboratory. The sample description, date received, client's name, and any other relevant information will also be recorded.

LABORATORY ANALYTICAL QUALITY ASSURANCE AND CONTROL

SOP-5

In addition to routine instrument calibration, replicates, spikes, blanks, spiked blanks, and certified reference materials are routinely analyzed at method-specific frequencies to monitor precision and bias. Additional components of the laboratory Quality Assurance/Quality Control program include:

1. Participation in state and federal laboratory accreditation/certification programs;
2. Participation in both U.S. EPA Performance Evaluation studies (WS and WP studies) and inter-laboratory performance evaluation programs;
3. Standard operating procedures describing routine and periodic instrument maintenance;
4. "Out-of-Control"/Corrective Action documentation procedures; and,
5. Multi-level review of raw data and client reports.

GROUNDWATER PURGING AND SAMPLING

SOP-7

Prior to water sampling, each well is purged by evacuating a minimum of three wetted well-casing volumes of groundwater. When required, purging will continue until either the discharge water temperature, conductivity, or pH stabilize, a maximum of ten well-bore volumes of groundwater have been recovered, or the well is bailed dry. When practical, the groundwater sample should be collected when the water level in the well recovers to at least 80 percent of its static level.

The sampling equipment consists of either a "Teflon" bailer, PVC bailer, or stainless steel bladder pump with a "Teflon" bladder. If the sampling system is dedicated to the well, then the bailer is usually "Teflon," but the bladder pump is PVC with a polypropylene bladder. In general and depending on the intended laboratory analysis, 40-milliliter glass, volatile organic analysis (VOA) vials, with "Teflon" septa, are used as sample containers.

The groundwater sample is decanted into each VOA vial in such a manner that there is no meniscus at the top of the vial. A cap is quickly secured to the top of the vial. The vial is then inverted and gently tapped to see if air bubbles are present. If none are present, the vial is labeled and refrigerated for delivery, under strict chain-of-custody, to the analytical laboratory. Label information should include a unique sample identification number, job identification number, date, time, type of analysis requested, and the sampler's name.

For quality control purposes, a duplicate water sample is collected from each well. This sample is put on hold at the laboratory. When required, a trip blank is prepared at the laboratory and placed in the transport cooler. It is labeled similar to the well samples, remains in the cooler during transport, and is analyzed by the laboratory along with the groundwater samples. In addition, a field blank may be prepared in the field when sampling equipment is not dedicated. The field blank is prepared after a pump or bailer has been either steam cleaned or properly washed, prior to use in the next well, and is analyzed along with the other samples. The field blank analysis demonstrates the effectiveness of the in-field cleaning procedures to prevent cross-contamination.

To minimize the potential for cross-contamination between wells, all well development and water sampling equipment not dedicated to a well is either steam cleaned or properly washed between use. As a second precautionary measure, wells are sampled in order of least to highest concentrations as established by available previous analytical data.

In the event the water samples cannot be submitted to the analytical laboratory on the same day they are collected (e.g., due to weekends or holidays), the samples are temporarily stored until the first opportunity for submittal either on ice in a cooler, such as when in the field, or in a refrigerator at Aegis' office.

MEASURING LIQUID LEVELS USING WATER LEVEL OR INTERFACE PROBE

SOP-12

Field equipment used for liquid-level gauging typically includes the measuring probe (water-level or interface) and product bailer(s). The field kit also includes cleaning supplies (buckets, TSP, spray bottles, and deionized water) to be used in cleaning the equipment between wells.

Prior to measurement, the probe tip is lowered into the well until it touches bottom. Using the previously established top-of-casing or top-of-box (i.e., wellhead vault) point, the probe cord (or halyard) is marked and a measuring tape (graduated in hundredths of a foot) is used to determine the distance between the probe end and the marking on the cord. This measurement is then recorded on the liquid-level data sheet as the "Measured Total Depth" of the well.

When necessary in using the interface probe to measure liquid levels, the probe is first electrically grounded to either the metal stove pipe or another metal object nearby. When no ground is available, reproducible measurements can be obtained by clipping the ground lead to the handle of the interface probe case.

The probe tip is then lowered into the well and submerged in the groundwater. An oscillating (beeping) tone indicates the probe is in water. The probe is slowly raised until either the oscillating tone ceases or becomes a steady tone. In either case, this is the depth-to-water (DTW) indicator and the DTW measurement is made accordingly. The steady tone indicates floating hydrocarbons. In this case, the probe is slowly raised until the steady tone ceases. This is the depth-to-product (DTP) indicator and the measurement of DTP is recorded. A corrected groundwater elevation for floating hydrocarbons can be calculated by using the following formula:

Corrected groundwater elevation - CDTW = DTW - (SP.G x LHT).
CDTW = Corrected depth to water.
DTW = Measured depth to water.
SP.G = Specific gravity: unweathered gasoline = 0.75; diesel = 0.80
LHT = Measured liquid hydrocarbon thickness.

The process of lowering and raising the probe must be repeated several times to ensure accurate measurements. The DTW and DTP measurements are recorded on the liquid-level data sheet. When floating product is indicated by the probe's response, a product bailer is lowered partially through the product-water interface to confirm the product on the water surface, and as further indication of product thickness, particularly in cases where the product layer is quite thin. This measurement is recorded on the data sheet as "product thickness."

In order to avoid cross-contamination of wells during the liquid-level measurement process, wells are measured in the order of "clean" to "dirty" (where such information is available). In addition, all measurement equipment is cleaned with TSP or similar solution and thoroughly rinsed with deionized water before use, between measurements in respective wells, and at the completion of the day's use.

December 29, 1993
Sample Log 8194

Sheila Richgels
Aegis Environmental Consultants, Inc.
1050 Melody Lane, Suite 160
Roseville, CA 95678

Subject: Analytical Results for 8 Water Samples
Identified as: Project # 92-702 (Beacon 720)
Received: 12/21/93

Dear Ms. Richgels:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on December 29, 1993 and describes procedures used to analyze the samples.

Sample(s) were received in 40-milliliter glass vials sealed with TFE lined septae and plastic screw-caps. Each sample was transported and received under documented chain of custody and stored at 4 degrees C until analysis was performed.

Sample(s) were analyzed using the following method(s):

"BTEX" (EPA Method 602/Purge-and-Trap)
"TPH as Gasoline" (Modified EPA Method 8015/Purge-and-Trap)

Please refer to the following table(s) for summarized analytical results and contact us at 916-757-4650 if you have questions regarding procedures or results. The chain-of-custody document is enclosed.

Approved by:

Joel Kiff
Senior Chemist

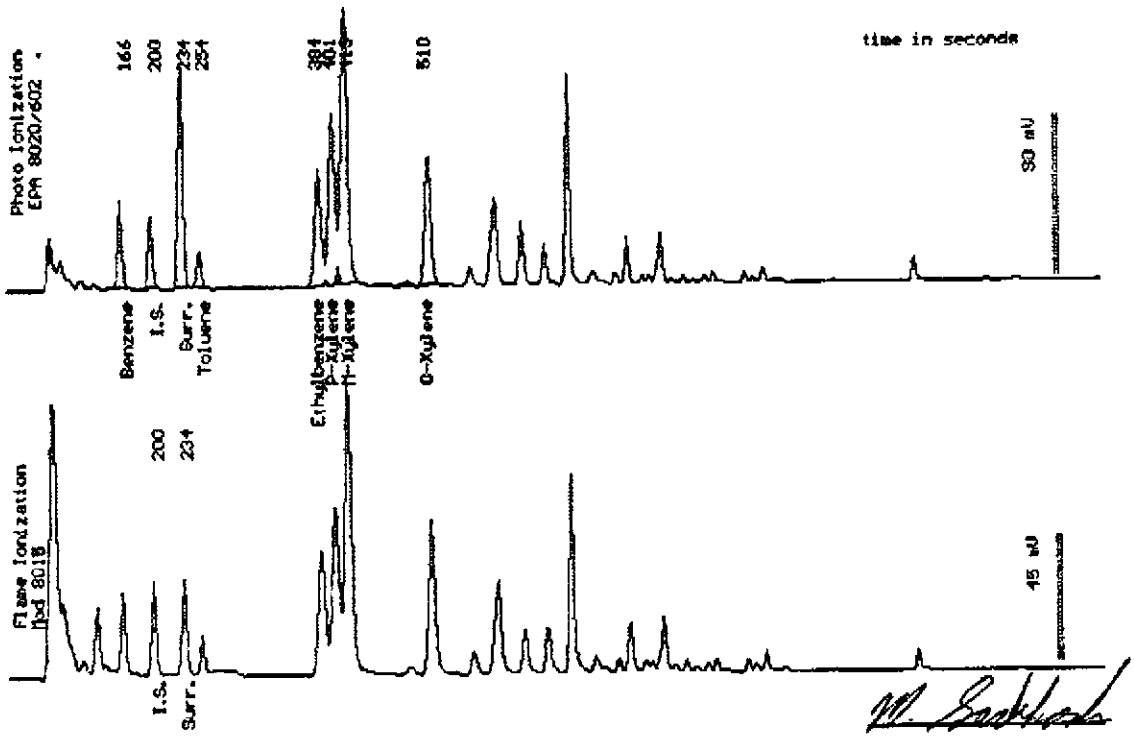
Sample Log 8194

8194-1

Sample: MW-1

From : Project # 92-702 (Beacon 720)
Sampled : 12/21/93
Dilution : 1:50 QC Batch : 4057B
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(25)	1000
Toluene	(25)	490
Ethylbenzene	(25)	2700
Total Xylenes	(25)	13000
TPH as Gasoline	(2500)	41000
Surrogate Recovery		114 %



Date Analyzed: 12-21-93
Column : 0.53mm ID X 30m DB5MX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

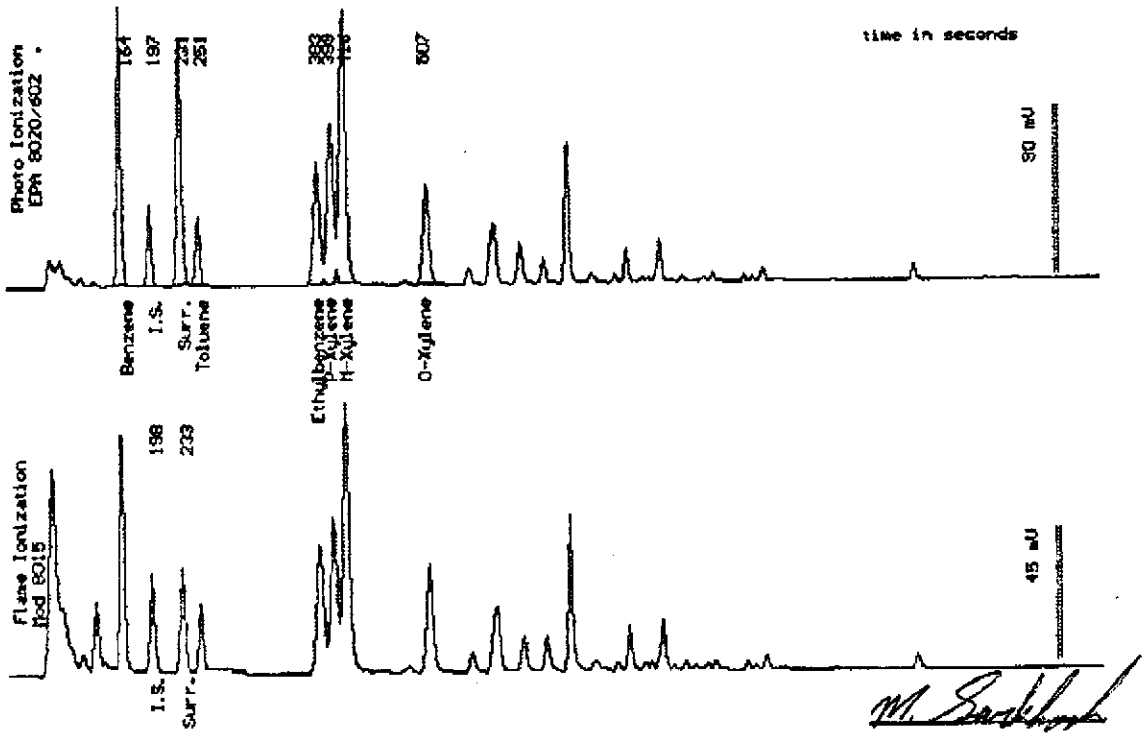
Sample Log 8194

8194-2

Sample: MW-2

From : Project # 92-702 (Beacon 720)
Sampled : 12/21/93
Dilution : 1:25 QC Batch : 4057B
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(13)	1500
Toluene	(13)	410
Ethylbenzene	(13)	1300
Total Xylenes	(13)	5000
TPH as Gasoline	(1300)	18000
Surrogate Recovery		114 %



Date Analyzed 12/27/93
Column : 0.53mm ID X 30m DBwax (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

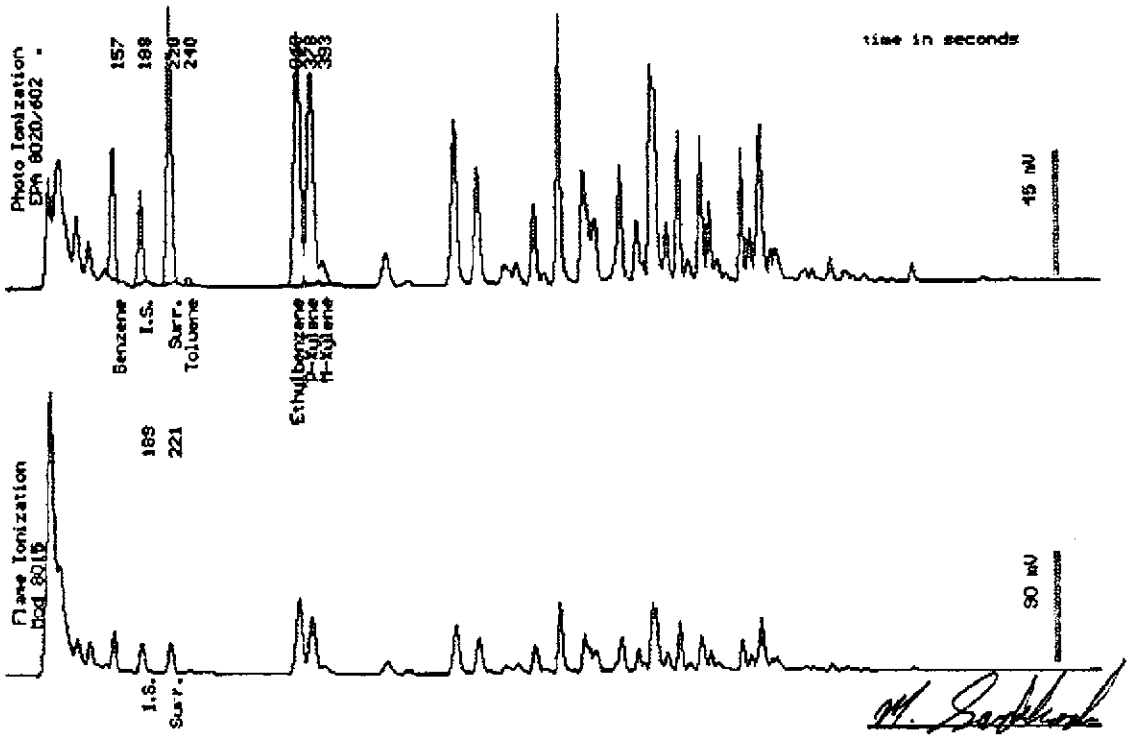
Sample Log 8194

8194-3

Sample: MW-3

From : Project # 92-702 (Beacon 720)
Sampled : 12/21/93
Dilution : 1:5 QC Batch : 4057B
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(2.5)	130
Toluene	(2.5)	8.5
Ethylbenzene	(2.5)	430
Total Xylenes	(2.5)	380
TPH as Gasoline	(250)	7800
Surrogate Recovery		114 %



Date Analyzed: 12-[illegible]
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

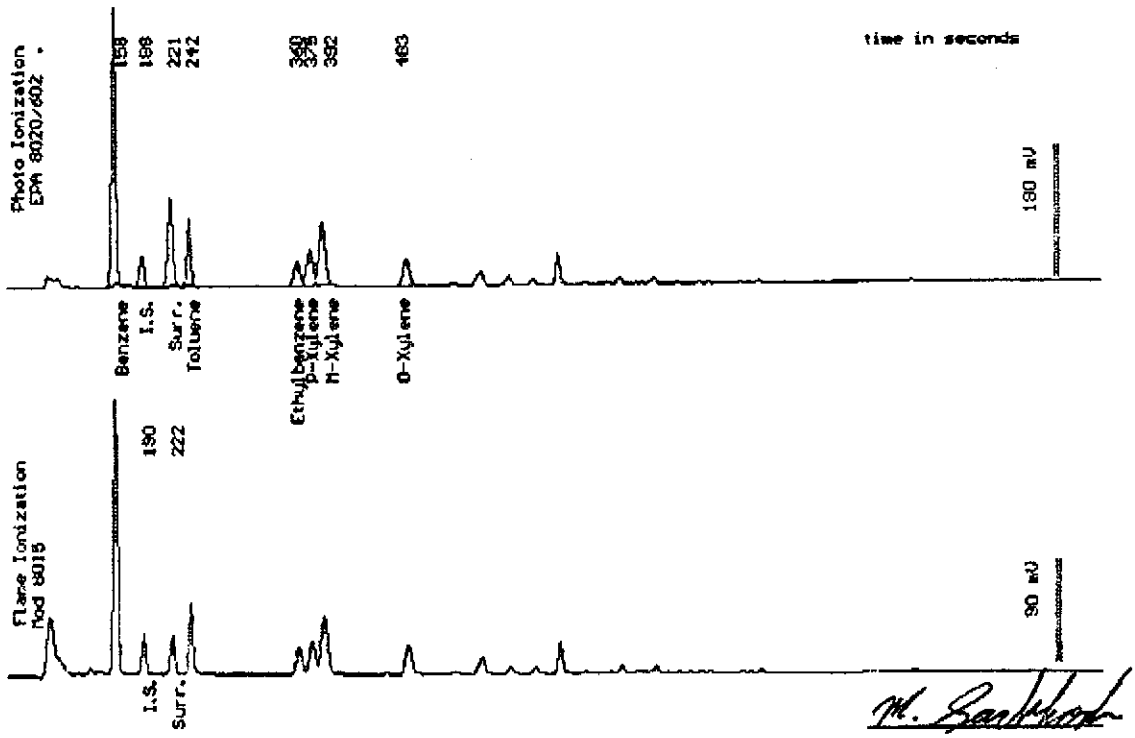
Sample Log 8194

8194-4

Sample: **MW-4**

From : Project # 92-702 (Beacon 720)
Sampled : 12/21/93
Dilution : 1:50 QC Batch : 4056e
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(25)	6900
Toluene	(25)	1900
Ethylbenzene	(25)	1100
Total Xylenes	(25)	5500
TPH as Gasoline	(2500)	28000
Surrogate Recovery		104 %



Column : 0.53mm ID x 30m DoubleX (J&W Scientific)

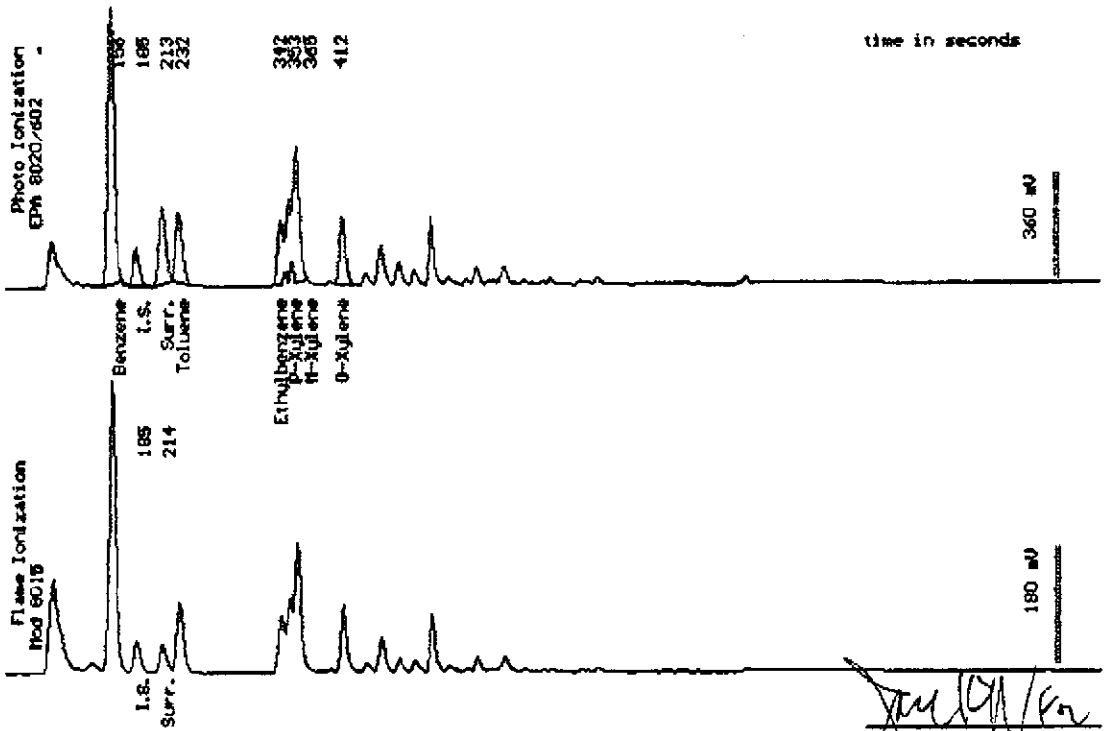
Mitra Sarkhosh
Senior Chemist

Sample Log 8194
8194-5

Sample: **MW-5**

From : Project # 92-702 (Beacon 720)
Sampled : 12/21/93
Dilution : 1:25 QC Batch : 2042d
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(13)	3600
Toluene	(13)	1200
Ethylbenzene	(13)	970
Total Xylenes	(13)	3600
TPH as Gasoline	(1300)	23000
Surrogate Recovery		102 %



Date analyzed: 12-28-93
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

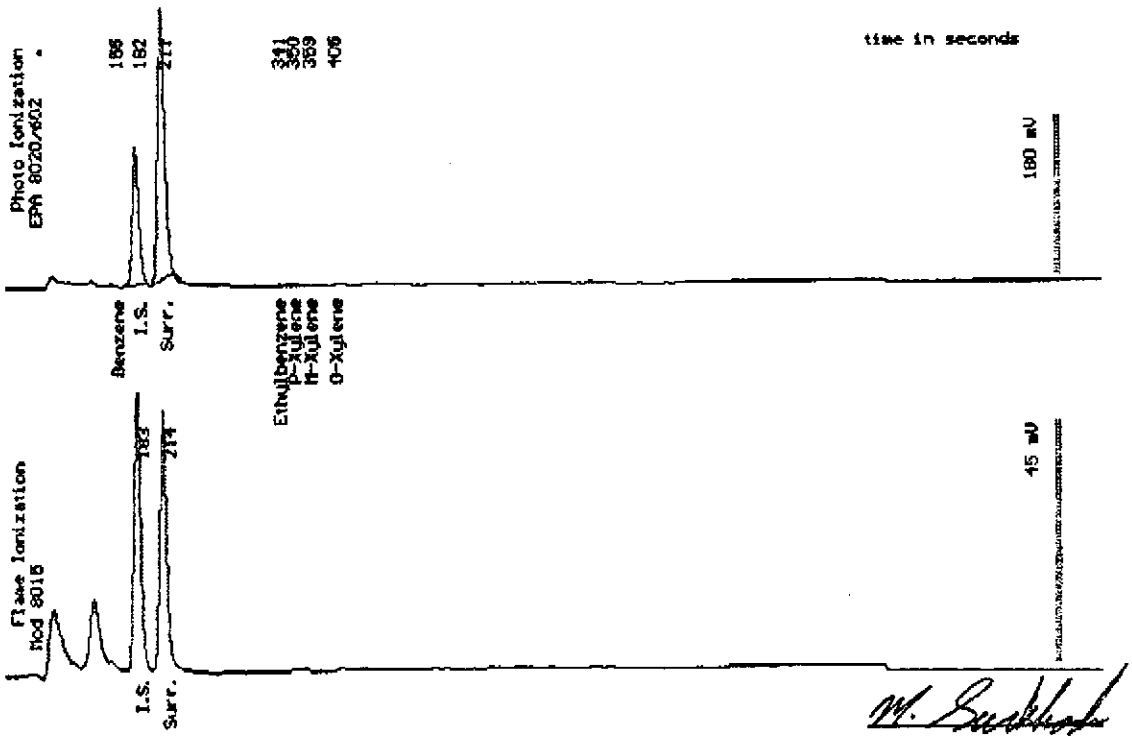
Mitra Sarkhosh
Senior Chemist

Sample Log 8194
8194-6

Sample: **MW-6**

From : Project # 92-702 (Beacon 720)
Sampled : 12/21/93
Dilution : 1:1 QC Batch : 2041D
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		95 %



Column : 0.53mm ID x 30m DBtmA (J&W Scientific)

Nitra Sarkhosh
Senior Chemist

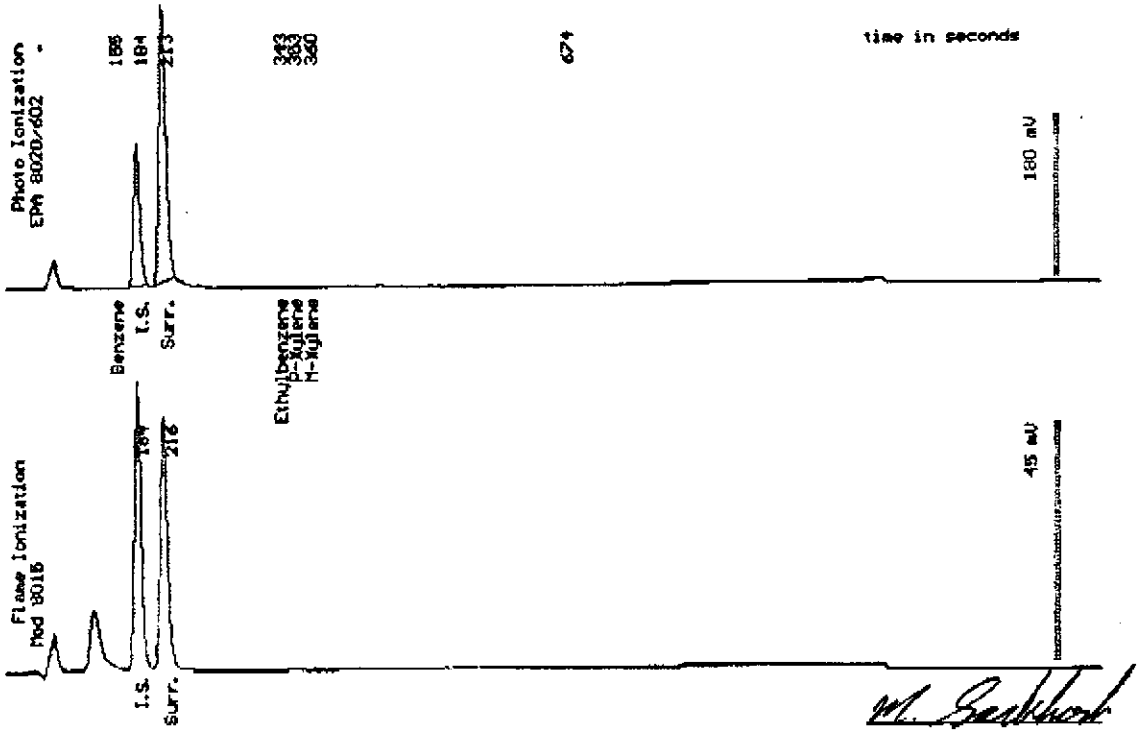
Sample Log 8194

8194-7

Sample: **MW-7**

From : Project # 92-702 (Beacon 720)
Sampled : 12/21/93
Dilution : 1:1 QC Batch : 2041D
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		97 %



Mitra Sarkhosh
Senior Chemist

Date Analyzed: 12-23-93
Column : 0.53mm ID x 30m DB-WAX (J&W Scientific)

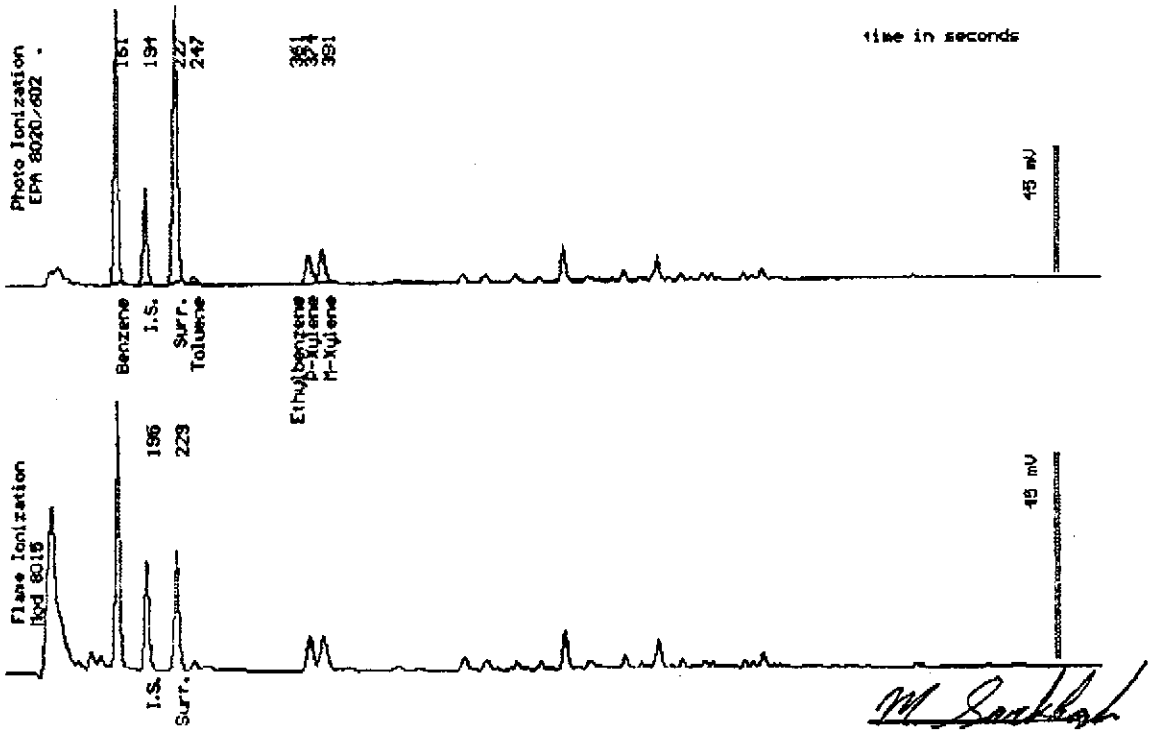
Sample Log 8194

8194-8

Sample: **MW-8**

From : Project # 92-702 (Beacon 720)
Sampled : 12/21/93
Dilution : 1:5 QC Batch : 4057B
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(2.5)	240
Toluene	(2.5)	7.5
Ethylbenzene	(2.5)	<2.5
Total Xylenes	(2.5)	82
TPH as Gasoline	(250)	1400
Surrogate Recovery		114 %



Mitra Sarkhosh
Senior Chemist

Date Analyzed: 12-[illegible]-93
Column : 0.53mm ID x 30m DBtmX (J&W Scientific)

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No. 720	Sampler (Print Name) C. Jones	ANALYSES			No. of Containers	Date 12-21-93	Form No. 1 of 1
Project No. 92-702	Sampler (Signature) Craig Jones					STANDARD T.A.T	
Project Location SAN LEANDRO	Affiliation AEGIS ENVIRO.						

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	REMARKS
MW - 1	12-21-93	0716		X	X		3	
MW - 2		0725					3	
MW - 3		0658					3	
MW - 4		0755					3	
MW - 5		0758					3	
MW - 6		0804					3	
MW - 7		0633					3	
MW - 8	12-21-93	0651					3	

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
C. Jones / AEGIS	12/21/93	1023			
			[signature]	12/21/93	102

Report To:
FAX RESULTS TO SHEILA RICHGELS
(916) 782-1277

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: TERRY FOX

WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy

TABLE 1

GROUNDWATER ELEVATIONS

Date Sampled	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)
Groundwater Monitoring Well MW-1:		**Elevation of Top of Casing = 29.89 feet**
June 23, 1987	14.79	15.10
July 06, 1987	14.93	14.96
August 06, 1987	14.22	15.67
November 04, 1987	15.74	14.15
February 02, 1988	13.99	15.90
May 02, 1988	14.99	14.90
November 21, 1988	13.03	16.86
February 14, 1989	15.86	14.03
May 02, 1989	14.77	15.12
August 10, 1989	16.35	13.54
November 08, 1989	16.46	13.43
February 20, 1990	15.58	14.31
May 18, 1990	16.40	13.49
September 15, 1990	16.83	13.06
November 26, 1990	17.16	12.73
February 07, 1991	16.43	13.46
May 14, 1991	14.93	14.96
August 16, 1991	16.35	13.54
Groundwater Monitoring Well MW-1:		**New Elevation of Top of Casing = 33.10 feet**
December 24, 1991	17.20	15.90
March 30, 1992	13.58	19.52
Groundwater Monitoring Well MW-2:		**Elevation of Top of Casing = 29.57 feet**
June 23, 1987	14.51	15.06

TABLE 1

GROUNDWATER ELEVATIONS

Date Sampled	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)
July 06, 1987	14.63	14.94
August 06, 1987	14.95	14.62
November 04, 1987	15.45	14.12
February 02, 1988	13.74	15.83
May 02, 1988	14.63	14.94
November 21, 1988	12.99	16.58
February 14, 1989	15.66	13.91
May 02, 1989	14.56	15.01
August 10, 1989	16.22	13.35
November 08, 1989	16.19	13.38
February 20, 1990	15.34	14.23
May 18, 1990	16.20	13.37
September 15, 1990	16.42	13.05
November 26, 1990	16.83	12.74
February 07, 1991	16.13	13.44
May 14, 1991	14.62	14.95
August 16, 1991	16.00	13.57
Groundwater Monitoring Well MW-2:	**New Elevation of Top of Casing = 32.80 feet**	
December 24, 1991	16.90	15.90
March 30, 1992	13.32	19.48
Groundwater Monitoring Well MW-3:	**Elevation of Top of Casing = 29.13 feet**	
June 23, 1987	14.13	15.00
July 06, 1987	14.24	14.89
August 06, 1987	14.52	14.61
November 04, 19887	15.09	14.04
February 02, 1988	13.37	15.76

TABLE 1

GROUNDWATER ELEVATIONS

Date Sampled	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)
May 02, 1988	14.22	14.91
November 21, 1988	13.01	16.12
February 14, 1989	15.22	13.91
May 02, 1989	14.16	14.97
August 10, 1989	15.61	13.52
November 08, 1989	15.75	13.38
February 20, 1990	14.95	14.18
May 18, 1990	15.79	13.34
September 15, 1990	16.07	13.06
November 26, 1990	16.36	12.77
February 07, 1991	15.74	13.39
May 14, 1991	14.19	14.94
August 16, 1991	15.55	13.58
Groundwater Monitoring Well MW-3:	**New Elevation of Top of Casing = 32.30 feet**	
December 24, 1991	16.40	15.90
March 30, 1992	12.96	19.34
Groundwater Monitoring Well MW-4:	**Elevation of Top of Casing = 29.72 feet**	
June 23, 1987	14.77	14.95
July 06, 1987	14.91	14.81
August 06, 1987	15.19	14.53
November 04, 1987	15.72	14.00
February 02, 1088	14.03	15.69
May 02, 1988	14.89	14.83
November 21, 1988	12.88	16.84
February 14, 1989	15.83	13.89
May 02, 1989	14.75	14.97

TABLE 1

GROUNDWATER ELEVATIONS

Date Sampled	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)
August 10, 1989	16.30	13.42
November 08, 1989	16.29	13.43
February 20, 1990	15.62	14.10
May 18, 1990	16.34	13.38
September 15, 1990	16.79	12.93
November 26, 1990	17.08	12.64
February 07, 1991	16.37	13.35
May 14, 1991	14.87	14.85
August 16, 1991	16.25	13.47
Groundwater Monitoring Well MW-4:	**New Elevation of Top of Casing = 32.90 feet**	
December 24, 1991	17.10	15.80
March 30, 1992	13.60	19.30
Groundwater Monitoring Well MW-5:	**Elevation of Top of Casing = 29.55 feet**	
June 23, 1987	14.63	14.92
July 06, 1987	14.79	14.76
August 06, 1987	15.07	14.48
November 04, 1987	15.61	13.94
February 02, 1988	13.84	15.71
May 02, 1988	14.77	14.78
November 21, 1988	12.84	16.71
February 14, 1989	15.72	13.83
May 02, 1989	14.68	14.87
August 10, 1989	16.03	13.52
November 08, 1989	16.33	13.22
February 20, 1990	15.44	14.11

TABLE 1

GROUNDWATER ELEVATIONS

Date Sampled	Depth to Groundwater (Feet)	Groundwater Elevation (Feet)
May 18, 1990	16.22	13.33
September 15, 1990	16.65	12.90
November 26, 1990	16.95	12.60
February 07, 1991	16.20	13.35
May 14, 1991	14.72	14.38
August 16, 1991	16.10	13.45
Groundwater Monitoring Well MW-5:	**New Elevation of Top of Casing = 32.70 feet**	
December 24, 1991	16.92	15.78
March 30, 1992	13.48	19.22
Groundwater Monitoring Well MW-6:	**Elevation of Top of Casing = 30.40 feet**	
December 24, 1991	14.12	16.28
March 30, 1992	12.62	17.78
Groundwater Monitoring Well MW-7:	**Elevation of Top of Casing = 31.20 feet**	
December 24, 1991	15.70	15.50
March 30, 1992	12.34	18.86
Groundwater Monitoring Well MW-8:	**Elevation of Top of Casing = 33.80 feet**	
December 24, 1991	18.00	15.80
March 30, 1992	14.66	19.14

Notes:
1) All elevations surveyed to an arbitrary datum
2) Elevations and depths are given in feet
3) Groundwater Technology, Inc., made measurements until February 1989
4) Du Pont Environmental Services collected samples from February 1989 through February 1991
5) Environmental Geotechnical Consultants, Inc., made measurements beginning in May 1991

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-G (µg/L)	Comments
MW-1	Apr. 16, 1987	2,313	3,770	664.1	3,331	17,276	
	June 23, 1987	1,887	2,141	466.7	1,652	26,027	
	July 06, 1987	778.2	943.7	133.2	422.1	3,938	
	Aug. 06, 1987	1,270	1,576	288.7	873.7	6,079	
	Nov. 04, 1987	1,700	4,000	720	2,200	15,000	
	Feb. 02, 1988	1,500	1,700	230	740	14,000	
	May 02, 1988	3,500	700	4,900	2,700	33,000	
	Nov. 21, 1988	2,200	560	2,800	2,200	15,000	
	Feb. 14, 1989	1,700	1,700	340	1,500	12,000	Odor
	May 02, 1989	1,500	2,400	510	2,400	18,000	Odor, Slight Sheen
	Aug. 10, 1989	1,400	1,500	360	1,600	10,000	Odor
	Nov. 08, 1989	920	470	190	360	7,200	Odor
	Feb. 20, 1990	810	540	270	800	3,300	
	May 18, 1990	1,900	500	560	1,600	5,600	
	Sep. 15, 1990	320	110	150	520	5,200	Odor
	Nov. 26, 1990	370	89	150	370	3,000	Odor
	Feb. 07, 1991	750	570	480	1,800	14,000	
	May 14, 1991	1,000	1,400	600	2,500	41,000	
	Aug. 16, 1991	310	210	150	480	4,000	Odor
	Dec. 24, 1991	530	95	310	680	11,000	Moderate Odor
	Mar. 30, 1992	630	550	540	1,900	27,000	Odor
MW-2	Apr. 16, 1987	3,131	4,239	1,067	4,608	17,920	
	June 23, 1987	2,188	2,622	1,047	4,699	49,354	
	July 06, 1987	1,575	1,729	457	1,702	8,676	
	Aug. 06, 1987	2,623	3,722	702	2,882	14,376	
	Nov. 04, 1987	2,200	4,100	900	3,500	19,000	

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Page 2 of 5

Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-G (µg/L)	Comments
MW-2	Feb. 02, 1988	6,200	6,500	1,000	4,000	54,000	
	May 02, 1988	6,800	1,300	7,100	5,400	53,000	
	Nov. 21, 1988	--	--	--	--	--	Free product
	Feb. 14, 1989	6,900	4,300	1,100	5,200	48,000	Film of free product
	May 02, 1989	6,100	8,800	2,100	16,000	111,000	Odor, sheen
	Aug. 10, 1989	4,200	2,900	1,000	5,800	39,000	Odor, sheen
	Nov. 08, 1989	3,700	1,500	740	2,200	45,000	Odor, heavy sheen
	Feb. 20, 1990	5,000	8,200	1,600	11,000	60,000	
	May 18, 1990	6,200	1,900	1,300	610	19,000	
	Sep. 15, 1990	1,400	820	660	3,000	27,000	Odor, sheen
	Nov. 26, 1990	1,100	880	700	3,800	28,000	Odor, sheen
	Feb. 07, 1991	2,100	1,900	1,300	6,200	63,000	Odor, sheen
	May 14, 1991	2,200	2,700	1,100	5,900	100,000	Moderate odor Slight sheen
	Aug. 16, 1991	1800	950	990	3900	32,000	Slight odor, sheen
	Dec. 24, 1991	1,100	550	750	2,700	30,000	Odor, sheen
	Mar. 30, 1992	2,300	1,700	940	3,300	52,000	Odor, sheen
MW-3	Apr. 16, 1987	1,371	2,438	472.3	2,617	9,967	
	June 23, 1987	646.2	922.9	320.9	1,280	16,824	
	July 06, 1987	340.3	384.2	116.5	420.2	3,395	
	Aug. 06, 1987	441.9	436.3	118.2	417.3	3,107	
	Nov. 04, 1987	320	280	74	250	2,600	
	Feb. 02, 1988	2,200	2,300	500	2,300	44,000	
	May 02, 1988	1,600	450	840	1,700	14,000	
	Nov. 21, 1988	1,200	220	560	810	8,100	
	Feb. 14, 1989	1,500	220	220	500	5,500	Odor

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-G (µg/L)	Comments
	Aug. 10, 1989	750	10	190	210	2,700	Odor
	Nov. 08, 1989	370	30	ND	58	2,400	Odor
	Feb. 20, 1990	1,200	810	77	460	3,700	
	May 18, 1990	980	ND	330	250	2,300	
	Sep. 15, 1990	240	36	150	230	4,700	Odor
	Nov. 26, 1990	170	8.4	86	120	1,400	Odor
	Feb. 07, 1991	220	20	120	230	2,900	
	May 14, 1991	370	39	220	820	15,000	
	Aug. 16, 1991	480	50	360	680	7,200	Slight Odor
	Dec. 24, 1991	150	20	100	140	4,900	Slight Odor
	Mar. 30, 1992	560	50	630	980	21,000	Odor
MW-4	Apr. 16, 1987	5,896	3,797	893.9	4,106	19,309	
	June 23, 1987	4,030	1,842	850.0	3,254	31,429	
	July 06, 1987	2,710	1,247	308.2	1,312	8,117	
	Aug. 06, 1987	3,992	1,599	447.9	1,611	10,464	
	Nov. 04, 1987	9,500	17,000	2,800	11,000	55,000	
	Feb. 02, 1988	11,000	7,400	1,400	6,200	47,000	
	May 02, 1988	9,200	1,300	6,100	6,400	58,000	
	Nov. 21, 1988	5,700	1,600	3,100	7,600	48,000	
	Feb. 14, 1989	8,700	2,500	900	3,800	29,000	Odor & sheen
	May 02, 1989	4,800	5,600	1,800	8,800	69,000	Odor, slight sheen
	Aug. 10, 1989	15,000	6,600	1,800	12,000	67,000	Odor, slight sheen
	Nov. 08, 1989	11,000	3,200	1,100	4,400	71,000	Odor, slight sheen
	Feb. 20, 1990	8,100	4,500	930	3,500	19,000	
	May 18, 1990	45,000	12,000	5,000	27,000	100,000	
	Sep. 15, 1990	4,200	1,200	740	3,000	38,000	

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-G (µg/L)	Comments
MW-4	Nov. 26, 1990	2,800	650	810	2,600	19,000	Odor
	Feb. 07, 1991	4,600	1,100	1,600	4,600	41,000	Odor, sheen
	May 14, 1991	7,300	830	3,900	3,600	100,000	Slight odor, sheen
	Aug. 16, 1991	8,000	2,500	1,100	4,000	45,000	Strong odor, sheen
	Dec. 24, 1991	6,000	1,200	1,100	3,700	79,000	Odor, sheen
	Mar. 30, 1992	8,000	4,400	730	2,500	76,000	Odor, sheen
MW-5	Apr. 16 1987	2,267	921.2	3,277	4,536	17,733	
	June 23, 1987	2,239	516.8	953.9	1,587	19,555	
	July 06, 1987	1,335	313.7	799.2	923.9	5,631	
	Aug. 06, 1987	1,890	881.2	576.8	93.4	6,450	
	Nov. 04, 1987	1,300	500	270	640	4,600	
	Feb. 02, 1988	3,100	1,500	550	1,400	24,000	
	May 02, 1988	4,400	490	1,200	1,500	17,000	
	Nov. 21, 1988	5,600	590	870	2,200	19,000	
	Feb. 14, 1989	4,300	810	410	1,300	13,000	Odor
	May 02, 1989	2,900	1,500	690	3,200	24,000	Odor, slight sheen
	Aug. 10, 1989	6,700	2,300	860	4,700	36,000	Odor, slight sheen
	Nov. 08, 1989	5,300	960	460	600	30,000	Odor
	Feb. 20, 1990	1,700	220	120	370	3,400	
	May 18, 1990	18,000	2,000	1,500	5,600	24,000	
	Sep. 15, 1990	2,600	2,200	1,000	4,900	42,000	Odor, sheen
	Nov. 26, 1990	1,900	290	260	800	8,500	Odor, sheen

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	TPH-G (µg/L)	Comments
	Feb. 07, 1991	1,500	1,200	610	2,700	24,000	Odor
	May 14, 1991	3,800	4,400	1,400	6,400	120,000	Odor, sheen
	Aug. 16, 1991	4,200	1,900	760	2,900	29,000	Moderate odor, sheen
	Dec. 24, 1991	3,900	1,500	880	3,200	63,000	Odor, sheen
	Mar. 30, 1992	2,600	980	390	1,100	29,000	Odor, sheen
MW-6	Dec. 24, 1991	ND	ND	ND	ND	79	
	Mar. 30, 1992	2.1	1.1	ND	0.6	73	
MW-7	Dec. 24, 1991	ND	ND	ND	ND	ND	
	Mar. 30, 1992	ND	ND	ND	ND	ND	
MW-8	Dec. 24, 1991	1,700	2,400	1,200	6,100	81,000	Odor, sheen
	Mar. 30, 1992	1,700	880	970	1,900	3,000	Odor, sheen

Notes:

1) TPH-G = Total Petroleum Hydrocarbons as gasoline
2) Odor refers to petroleum hydrocarbon odor
3) All results are presented in parts per billion
4) Groundwater Technology, Inc., collected samples prior to February 1989
5) Du Pont Environmental Services collected samples from February 1989 through February 1991
6) Environmental Geotechnical Consultants, Inc. collected samples beginning in May 1991
7) ND = Non Detect
8) See analytical results for detection limits (Appendix B)

AEGIS ENVIRONMENTAL, INC.
GROUNDWATER/LIQUID LEVEL DATA
(measurements in feet)

Project Address: **Beacon - 1088 Marina Bl, San Leandro - 720** Date: 12-21-95

Recorded by: A. Jones Project No.: **92-702**

Well No.	Time	Well Elev. TOC	Measured Total Depth	Depth to Gr. Water	Depth to Product	Product Thickness	Comments (TOC/TOB) (product skimmer in well)
MW-1	0557	33.10	27.70	14.36			
MW-2	0552	32.80	25.01	14.52			
MW-3	0542	32.30	24.50	14.12			
MW-4	0608	32.90	26.90	14.75			
MW-5	0603	32.70	27.61	14.58			
MW-6	0537	30.40	15.10	13.06			
MW-7	0530	31.20	25.02	13.42			
MW-8	0547	33.80	29.86	16.05			

Notes:

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: BEACON #720 Project No: 92-702

Site: 1088 MARINA BLVD. Well Designation: MW-1

SAN LEANDRO, CA.

Is setup of traffic control devices required?	:	(NO)	YES	Setup & Takedown time: _____ hours
Is there standing water in well box?	:	(NO)	YES	(Above TOC Below TOC)
Is Top of Casing cut level?	:	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked?	:	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches)	:	_____		
General condition of Wellhead assembly	:	Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment: X 2" Disposable bailer x2 _____ Submersible pump

_____ 2" PVC bailer _____ Dedicated bailer

_____ 4" PVC bailer

Sampled with: Disposal bailer: [X] Teflon Bailer: [ ]

Well Diameter:	2" X	3" __	4" __	6" __	8" __
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61 gal/ft.

Initial Measurment

Time: 0557

Depth of well: 27.70

Depth to water: 14.26

Recharge Measurement

Time: 0716

Depth to water: 15.21

Calculated purge: 8

Actual purge: 8

Meter Calibration

Date _____ Initial reading

Time _____ Adjusted reading

Temp.	E.C.	pH	Turbidity

Start purge: 0700 Sampling time: 0716 Sampling Date: 12-21-95

Time	Temp.	E.C.	pH	Turbidity	Volume
0705	50.4	.71	6.31		3
0709	50.1	.70	6.24		3
0713	50.2	.73	6.50		2

Sample appearance: Semi-cloudy

QC samples collected at this well: _____ Lock: 3753

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap: [ ] Lock #2357: [ ] Lock #0909: [ ]

4" Locking Cap: [ ] Lock #3753: [ ] Lock-Dolphin: [ ]

Remarks: _____

D.I. WATER = GALS.

Signature _____ Review _____

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: BEACON #720 Project No: 92-702

Site: 1088 MARINA BLVD. Well Designation: MW-2
SAN LEANDRO, CA.

Is setup of traffic control devices required?	:	(NO)	YES	Setup & Takedown time: _____ hours
Is there standing water in well box?	:	(NO)	YES	(Above TOC Below TOC)
Is Top of Casing cut level?	:	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked?	:	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches)	:	_____		
General condition of Wellhead assembly	:	Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment:
- X 2" Disposable bailer X2
- _____ 2" PVC bailer
- _____ 4" PVC bailer
- _____ Submersible pump
- _____ Dedicated bailer

Sampled with: Disposal bailer: ☒ Teflon Bailer: ☐

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61 gal/ft.

Initial Measurment
Time: 0552
Depth of well: 25.21
Depth to water: 14.52

Recharge Measurement
Time: 0720
Depth to water: 15.21

Calculated purge: 7
Actual purge: 7

Meter Calibration
Date _____
Time _____

	Temp.	E.C.	pH	Turbidity
Initial reading				
Adjusted reading				

Start purge: 0705 Sampling time: 0725 Sampling Date: 12-21-95

Time	Temp.	E.C.	pH	Turbidity	Volume
0709	50.4	.77	6.85		3
0713	50.1	.71	6.81		2
0717	49.8	.72	6.80		2

Sample appearance: semi-cloudy

QC samples collected at this well: _____ Lock: 3753

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap:	☐	Lock #2357:	☐	Lock #0909:	☐
4" Locking Cap:	☐	Lock #3753:	☐	Lock-Dolphin:	☐

Remarks: _____

D.I. WATER = 6 GALS.

Signature _____ Review _____

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: BEACON #720 Project No: 92-702

Site: 1088 MARINA BLVD. Well Designation: MW-3

SAN LEANDRO, CA.

Is setup of traffic control devices required?	: (NO)	YES	Setup & Takedown time: _____ hours
Is there standing water in well box?	: (NO)	YES	(Above TOC Below TOC)
Is Top of Casing cut level?	: NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked?	: NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches)	: _____		
General condition of Wellhead assembly	: Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment:
- X 2" Disposable bailer x2
- _____ 2" PVC bailer
- _____ 4" PVC bailer
- _____ Submersible pump
- _____ Dedicated bailer

Sampled with: Disposal bailer: [X] Teflon Bailer: [ ]

Well Diameter:	2" X	3" __	4" __	6" __	8" __	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time: 0542
Depth of well: 24.50
Depth to water: 14.12

Recharge Measurement
Time: 0653
Depth to water: 15.71

Calculated purge: 6
Actual purge: 6

Meter Calibration
Date _____
Time _____

	Temp.	E.C.	pH	Turbidity
Initial reading				
Adjusted reading				

Start purge: 0640 Sampling time: 0658 Sampling Date: 12-21-9

Time	Temp.	E.C.	pH	Turbidity	Volume
0645	50.1	.81	6.77	/	2
0648	49.8	.80	6.71	/	2
0651	49.7	.85	6.70	/	2

Sample appearance: semi-cloudy

QC samples collected at this well: _____ Lock: 375

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap:	[ ]	Lock #2357:	[ ]	Lock #0909:	[ ]
4" Locking Cap:	[ ]	Lock #3753:	[ ]	Lock-Dolphin:	[ ]

Remarks: _____

D.I. WATER = GALS.

Signature _____ Review _____

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: BEACON #720 Project No: 92-702

Site: 1088 MARINA BLVD. Well Designation: MW-4

SAN LEANDRO, CA.

Is setup of traffic control devices required?	:	(NO)	YES	Setup & Takedown time: _____ hours
Is there standing water in well box?	:	(NO)	YES	(Above TOC Below TOC)
Is Top of Casing cut level?	:	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked?	:	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches)	:	_____		
General condition of Wellhead assembly	:	Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment:
- X 2" Disposable bailer X2
- _____ 2" PVC bailer
- _____ 4" PVC bailer
- _____ Submersible pump
- _____ Dedicated bailer

Sampled with: Disposal bailer: X Teflon Bailer: ☐

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time: 0608
Depth of well: 26.90
Depth to water: 14.75

Recharge Measurement
Time: 0750
Depth to water: 15.22

Calculated purge: 7
Actual purge: 7

Meter Calibration
Date _____
Time _____

	Temp.	E.C.	pH	Turbidity
Initial reading				
Adjusted reading				

Start purge: 0725 Sampling time: 0755 Sampling Date: 12-21-93

Time	Temp.	E.C.	pH	Turbidity	Volume
0735	50.4	.77	6.81		3
0740	50.1	.74	6.91		2
0745	50.3	.77	7.01		2

Sample appearance: semi-cloudy

QC samples collected at this well: _____ Lock: 375

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap:	☐	Lock #2357:	☐	Lock #0909:	☐
4" Locking Cap:	☐	Lock #3753:	☐	Lock-Dolphin:	☐

Remarks: _____

D.I. WATER = 6 GALS.

Signature _____ Review _____

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: BEACON #720 Project No: 92-702

Site: 1088 MARINA BLVD. Well Designation: MW-5

SAN LEANDRO, CA.

Is setup of traffic control devices required?	:	(NO)	YES	Setup & Takedown time: _____ hours
Is there standing water in well box?	:	(NO)	YES	(Above TOC Below TOC)
Is Top of Casing cut level?	:	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked?	:	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches)	:	_____		
General condition of Wellhead assembly	:	Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment: X 2" Disposable bailer x2 _____ Submersible pump

_____ 2" PVC bailer _____ Dedicated bailer

_____ 4" PVC bailer

Sampled with: Disposal bailer: X Teflon Bailer: _____

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment

Time: 0603

Depth of well: 27.01

Depth to water: 14.58

Recharge Measurement

Time: 0755

Depth to water: 15.21

Calculated purge: 8

Actual purge: 6

Meter Calibration

Date _____ Initial reading

Time _____ Adjusted reading

Temp.	E.C.	pH	Turbidity

Start purge: 0735 Sampling time: 0758 Sampling Date: 12-21-93

Time	Temp.	E.C.	pH	Turbidity	Volume
0740	49.0	.73	6.91		3
0745	48.9	.71	6.89		3
0750	48.3	.70	6.85		2

Sample appearance: semi-cloudy

QC samples collected at this well: _____ Lock: 3753

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap:		Lock #2357:		Lock #0909:	
4" Locking Cap:		Lock #3753:		Lock-Dolphin:	

Remarks: _____

D.I. WATER = 6 GALS.

Signature _____ Review _____

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: BEACON #720 Project No: 92-702

Site: 1088 MARINA BLVD. Well Designation: MW-6

SAN LEANDRO, CA.

Is setup of traffic control devices required?	:	NO	(YES)	Setup & Takedown time: _____ hours
Is there standing water in well box?	:	(NO)	YES	(Above TOC Below TOC)
Is Top of Casing cut level?	:	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked?	:	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches)	:	_____		
General condition of Wellhead assembly	:	Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment:

X	2" Disposable bailer X 2	_____	Submersible pump
_____	2" PVC bailer	_____	Dedicated bailer
_____	4" PVC bailer		

Sampled with: Disposal bailer: [X] Teflon Bailer: [ ]

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment

Time: 0537

Depth of well: 15.10

Depth to water: 13.06

Recharge Measurement

Time: ~~0537~~ 0800

Depth to water: 15.60

Calculated purge: 1.0

Actual purge: 1.0

Meter Calibration

Date _____

Time _____

	Temp.	E.C.	pH	Turbidity
Initial reading				
Adjusted reading				

Start purge: 0620 Sampling time: 0804 Sampling Date: 12-21-93

Time	Temp.	E.C.	pH	Turbidity	Volume
0625	50.1	.77	6.20	/	1

Sample appearance: semi-cloudy

QC samples collected at this well: _____ Lock: 3750

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap:	[ ]	Lock #2357:	[ ]	Lock #0909:	[ ]
4" Locking Cap:	[ ]	Lock #3753:	[ ]	Lock-Dolphin:	[ ]

Remarks: _____

D.I. WATER = 6 GALS.

Signature _____ Review _____

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: BEACON #720 Project No: 92-702

Site: 1088 MARINA BLVD. Well Designation: MW-7

SAN LEANDRO, CA.

Is setup of traffic control devices required?	: NO	YES	Setup & Takedown time: _____ hours
Is there standing water in well box?	: NO	YES	(Above TOC Below TOC)
Is Top of Casing cut level?	: NO	YES	(If NO please explain in remarks)
Is well cap sealed and locked?	: NO	YES	(If NO please explain in remarks)
Height of Well Casing Riser (in inches)	: _____		
General condition of Wellhead assembly	: Excellent	Good	Fair Poor (Explain in remarks)

Purging Equipment:
- X 2" Disposable bailer x2
- _____ 2" PVC bailer
- _____ 4" PVC bailer
- _____ Submersible pump
- _____ Dedicated bailer

Sampled with: Disposal bailer: X Teflon Bailer: ☐

Well Diameter:	2" X	3" ___	4" ___	6" ___	8" ___	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time: 0550
Depth of well: 20.02
Depth to water: 13.42

Recharge Measurement
Time: 0630
Depth to water: 14.51

Calculated purge: 7
Actual purge: 7

Meter Calibration
Date _____
Time _____

	Temp.	E.C.	pH	Turbidity
Initial reading				
Adjusted reading				

Start purge: 0615 Sampling time: 0630 Sampling Date: 12-21-93

Time	Temp.	E.C.	pH	Turbidity	Volume
0615	50.1	.77	6.31		3
0622	50.2	.71	6.32		2
0627	50.4	.73	6.35		2

Sample appearance: semi-cloudy

QC samples collected at this well: _____ Lock: 375

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap:	☐	Lock #2357:	☐	Lock #0909:	☐
4" Locking Cap:	☐	Lock #3753:	☐	Lock-Dolphin:	☐

Remarks: _____

D.I. WATER = 5 GALS.

Signature _____ Review _____

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: BEACON #720 Project No: 92-702
Site: 1088 MARINA BLVD. Well Designation: MW-8
SAN LEANDRO, CA.

Is setup of traffic control devices required?	:	(NO)	YES	Setup & Takedown time: _____ hours
Is there standing water in well box?	:	(NO)	YES	(Above TOC Below TOC)
Is Top of Casing cut level?	:	NO	(YES)	(If NO please explain in remarks)
Is well cap sealed and locked?	:	NO	(YES)	(If NO please explain in remarks)
Height of Well Casing Riser (in inches)	:	_____		
General condition of Wellhead assembly	:	Excellent	(Good)	Fair Poor (Explain in remarks)

Purging Equipment:
- X — 2" Disposable bailer X2
- _____ — 2" PVC bailer
- _____ — 4" PVC bailer
- _____ — Submersible pump
- _____ — Dedicated bailer

Sampled with: Disposal bailer: [X] Teflon Bailer: [ ]

Well Diameter:	2" X	3"	4"	6"	8"	
Purge Vol. Multiplier:	0.163	0.367	0.653	1.47	2.61	gal/ft.

Initial Measurment
Time: 0547
Depth of well: 29.86
Depth to water: 16.05

Recharge Measurement
Time: 0647
Depth to water: 17.21

Calculated purge: 9
Actual purge: 9

Meter Calibration
Date _____
Time _____

	Temp.	E.C.	pH	Turbidity
Initial reading				
Adjusted reading				

Start purge: 0633 Sampling time: 0651 Sampling Date: 12-21-93

Time	Temp.	E.C.	pH	Turbidity	Volume
0637	50.4	.77	6.81		3
0641	50.3	.73	6.80		3
0645	51.1	.70	6.80		3

Sample appearance: semi-cloudy
QC samples collected at this well: _____ Lock: 3752

Equipment replaced: (Check all that apply) Note condition of replaced item.

2" Locking Cap:	[ ]	Lock #2357:	[ ]	Lock #0909:	[ ]
4" Locking Cap:	[ ]	Lock #3753:	[ ]	Lock-Dolphin:	[ ]

Remarks: _____

D.I. WATER = 6 GALS.

Signature _____ Review _____