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ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: June 28, 1993
QUARTER ENDING: March 31, 1993

SERVICE STATION NO.: 721
ADDRESS: 44 Lewelling Blvd., San Lorenzo, CA
COUNTY: Alameda

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

BACKGROUND:

In April 1987, three underground gasoline storage tanks were excavated and removed. Samples collected from beneath the former tanks indicated that hydrocarbons were present in the soil. In May 1987, three monitoring wells (MW-1 through MW-3) were installed by Conoco. Hydrocarbons were detected in soil and ground-water samples collected from the wells. In December 1988, four additional wells (MW-4 through MW-7) were installed. Dissolved-phase hydrocarbons were detected in the new wells. In September 1989, two additional wells (MW-8 and MW-9) were installed. The site has been on a monitoring program since May 1987.

In July 1990, the site was purchased by Ultramar Inc. from Conoco. The monitoring program has continued. Submitted work plan for additional assessment on March 14, 1991.

In October 1991, drilled two additional offsite wells (MW-10 and MW-11) southwest of the site and one onsite recovery well (RW-1). In November 1991, performed ground-water pump test and vapor extraction test.

In April 1992, Ultramar submitted an Interim Remediation Plan. The plan was approved in June 1992.

SUMMARY OF THIS QUARTER'S ACTIVITIES:

Performed quarterly monitoring on February 3, 1993. In March 1993, installed the subsurface piping for the remediation system.

RESULT OF QUARTERLY MONITORING:

Monitoring data indicates that the thickness of free product MW-3 decreased from 0.38' to 0.02'and in RW-1 from 0.01' to not detected. The benzene concentration decreased in MW-1 from 200 ppb to 130 ppb and in MW-10 from 36 ppb to 15 ppb. Benzene concentrations increased in MW-2 from not detected to 1.2 ppb, in MW-5 from not detected to 3.0 ppb, in MW-6 from 1.3 ppb to 1.9 ppb, and in MW-7 from 29 ppb to 200 ppb. Benzene concentrations remained not detected in wells MW-4, MW-8, and MW-9. The benzene concentrations in MW-3 and RW-1, which were not sampled last quarter, were 7,200 ppb and 71 ppb, respectively.

PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

ACTIVITY	ESTIMATED COMPLETION DATE
Continue quarterly ground-water monitoring	Ongoing
Complete installation of remediation system.	May 31, 1993
Begin operation of ground-water remediation system.	June 30, 1993

AEGIS ENVIRONMENTAL, INC.

1050 Melody Lane, Suite 160, Roseville, CA 95678 ✦ 916 • 782-2110 / 916 • 969-2110 / FAX 916 • 786-7830

June 28, 1993

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

Subject: **First Quarter 1993 Groundwater Monitoring Report**
Beacon Station #721
44 Lewelling Boulevard, San Lorenzo, 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 February 3, 1993, at the subject site (Figure 1). The monitoring included measurements of depths to water, subjective analysis of free product, and collection of groundwater samples.

GROUNDWATER ELEVATIONS

Prior to purging, Aegis personnel collected depth to water measurements on February 3, 1993. Groundwater level data from February 1992 to date, are summarized in Table 1. Previous groundwater level data are included in Attachment 3. All measurements of depths to liquids were conducted according to the Aegis standard operating procedures (SOP) included in Attachment 1. On the basis of the February 3, 1993, measurements, groundwater is estimated to flow generally to the southwest (Figure 2) at an average gradient of approximately 0.002 ft/ft. In general, groundwater levels have increased approximately 4.5 feet compared to the November 1992 event.

GROUNDWATER SAMPLING AND ANALYSES

Groundwater samples were collected from eleven of the twelve wells on February 3, 1993. A groundwater sample was collected from MW-3 after free product was bailed from the well. The samples were collected according to the Aegis SOP included in Attachment 1, and submitted under chain-of-custody to WEST Labs of Davis, California, a state-certified analytical laboratory. All samples were analyzed for concentrations of:

- Total petroleum hydrocarbons, as gasoline, by modified EPA Method 8015.
- Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 602.

Current analytical results, and prior 1992 analytical results only, are summarized in Table 2. Previous analytical results are included in Attachment 4. Figure 3 is a distribution map of benzene in groundwater based on Feburary 3, 1993 data. The analytical laboratory report and chain-of-custody forms for the current event are included as Attachment 2. Benzene concentrations remained below detection limits in wells MW-4, MW-5, MW-8, MW-9, and MW-11. Wells MW-1 and MW-10 had a decrease in benzene concentrations compared to the November 1992 event. Benzene concentrations increased in wells MW-2, MW-5, MW-6, MW-7 and MW-10 compared to the November 1992 sampling. Wells MW-3, and RW-1 had a decrease in benzene concentrations compared to the August 1992 event[1].

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

Ms. Pamela Evans
Hazardous Materials Program
Department of Environmental Health
County of Alameda
80 Swan Way, Room 200
Oakland, California 94612

Mr. Steven Ritchie
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

[1] Wells MW-3 and RW-1 were not sampled in November 1992

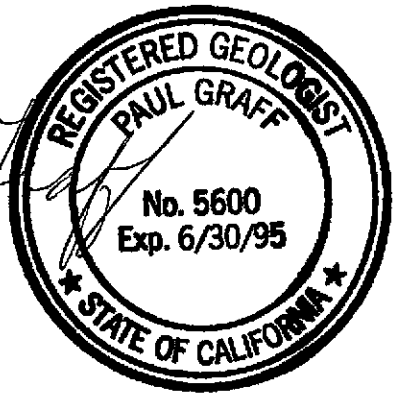
This report has been prepared for the sole use of Ultramar Inc. Any reliance on this report by third parties shall be at such parties' own risk. The work described herein was performed under the review and supervision of the professional geologist, registered with the State of California, whose signature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

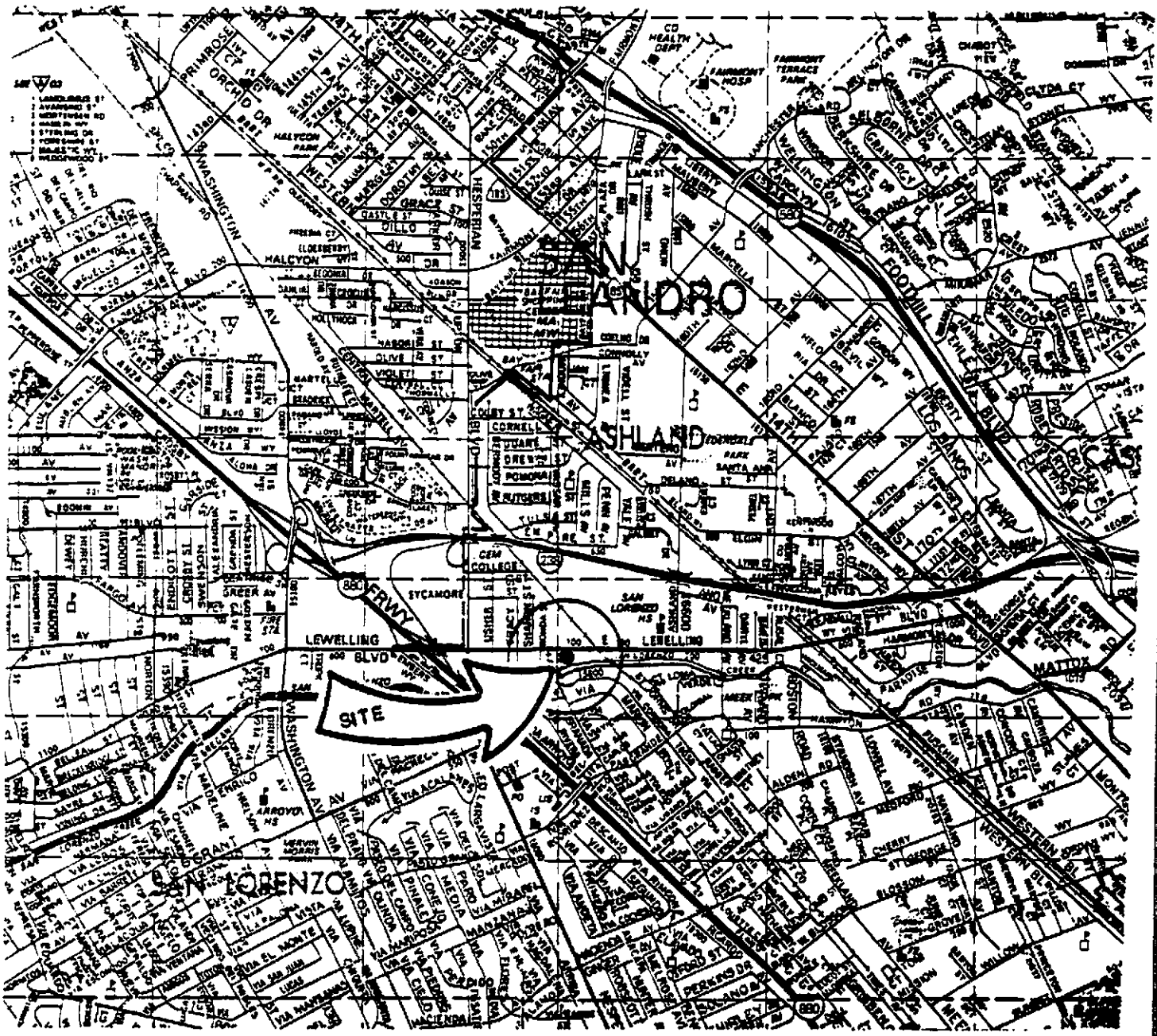


Paul Graff
Senior Geologist
CRG No. 5600

6/15/93
Date

OMK/PKG/cdr

Attachments



BASE MAP: THOMAS BROS. GUIDE ALAMEDA CO. 1991

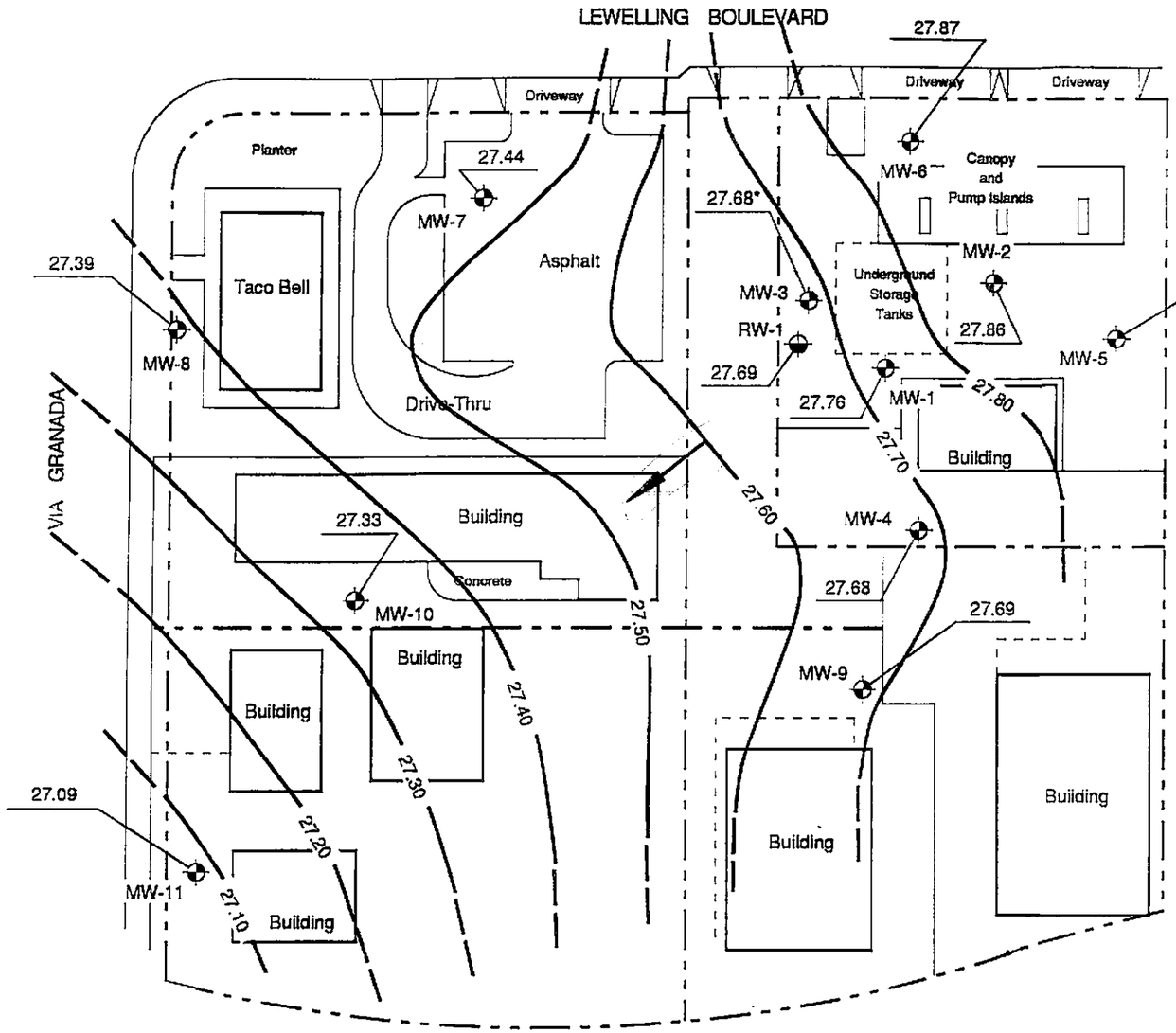
LEGEND

SITE LOCATION

0 1100 2200

SCALE IN FEET

REVIEWED BY:	SITE LOCATION MAP		
	ULTRAMAR BEACON STATION NO. 721		
APPROVED BY:	44 LEWELLING BOULEVARD	JOB #:	DRAWN BY:
	SAN LORENZO, CALIFORNIA	DATE: 1/8/92	DRAWING #: FIG. 1



LEGEND

- Monitoring Well
- Recovery Well
- Approximate Property Lines
- Corrected For Free Product Thickness (See Table 1)
- Potentiometric Surface Contour Line (Dashed Where Inferred)
- 23.10 Groundwater Elevation in Feet
- Estimated Direction of Groundwater Flow

Hydraulic Gradient = 0.002 ft/ft
Contour Interval = 0.1 ft

NOTES

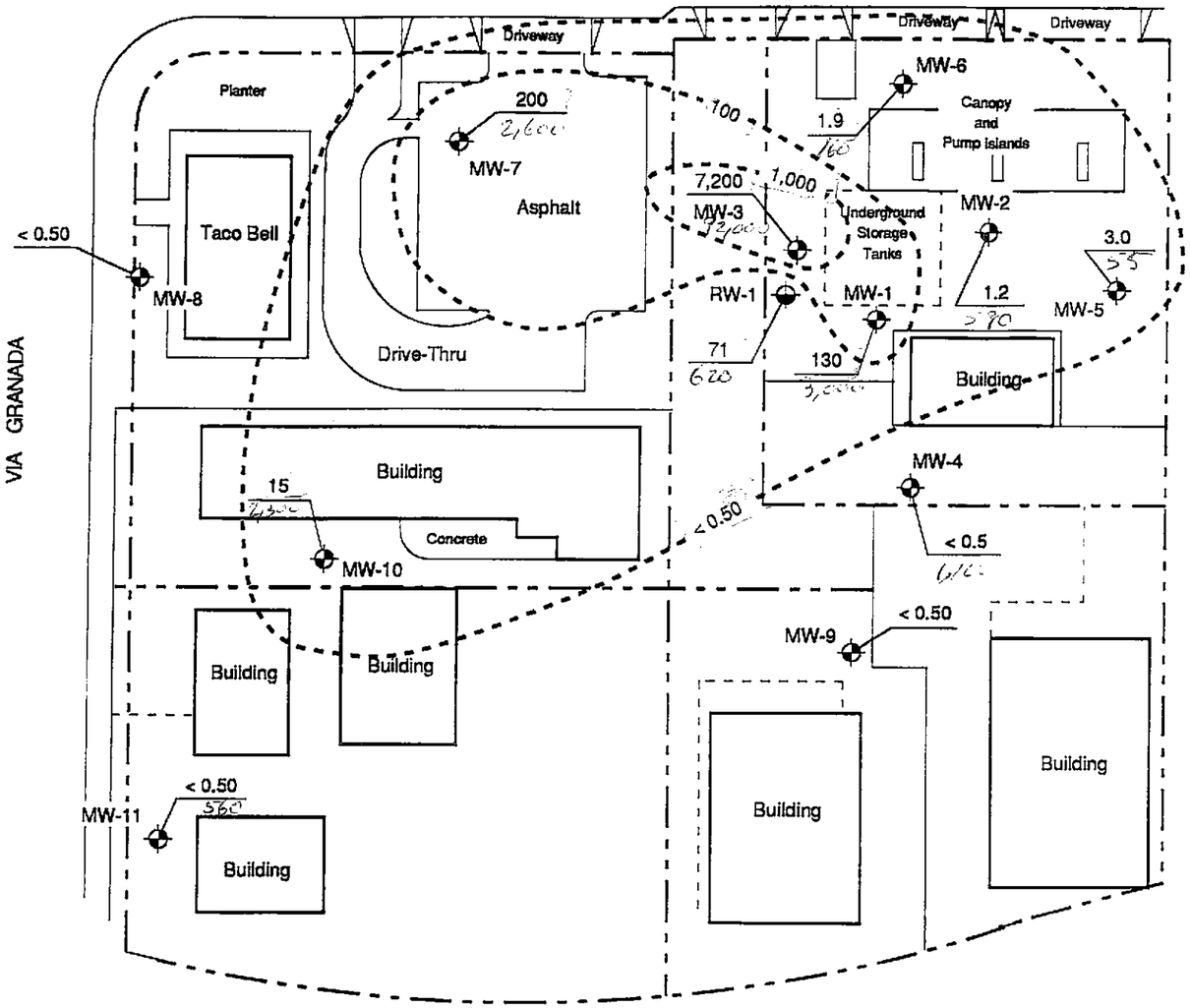
Site Sketch After Site Vicinity Map
By Resna
(January 9, 1992)

All Locations Are Approximate

0 40 80
Approximate Scale
1" = 40'

AEGIS ENVIRONMENTAL, INC.		POTENTIOMETRIC SURFACE MAP February 3, 1993	FIGURE 2
DRAWN BY: D. Hada	DATE: March 17, 1993	Beacon Station #721 44 Lewelling Boulevard San Lorenzo, CA	PROJECT NUMBER: 92-703
REVISED BY:	DATE:		
REVIEWED BY:	DATE:		

LEWELLING BOULEVARD



TPHg = (ppb) in soil and

LEGEND

- Monitoring Well
- Recovery Well
- Approximate Property Lines
- 130 — Benzene Concentration (parts-per-billion)
- Inferred iso-Concentration Limits
- < 0.50 — Below Indicated Detection Limit

Contour Interval = Exponential

NOTES

Site Sketch After Site Vicinity Map
By Resna
(January 9, 1992)

All Locations Are Approximate

0 40 80
Approximate Scale
1" = 40'

AEGIS ENVIRONMENTAL, INC.		DISTRIBUTION MAP OF BENZENE IN GROUNDWATER February 3, 1993	FIGURE 3
DRAWN BY: D. Hada	DATE: March 17, 1993	Beacon Station #721 44 Lewelling Boulevard San Lorenzo, CA	PROJECT NUMBER: 92-703
REVISED BY:	DATE:		
REVIEWED BY:	DATE:		

TABLE 1

LIQUID LEVEL DATA

BEACON STATION #721
44 LEWELLING BOULEVARD, SAN LORENZO, CALIFORNIA
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Groundwater[1]	Groundwater Elevation[2]	Depth to Free Product[1]	Free Product Thickness	Well Depth	Comments
MW-1	02/18/92	43.67	16.42	27.25	---	---	---	---
	05/14/92		17.28	26.39	---	---	---	---
	08/27/92		19.48	24.19	---	---	---	---
	11/19/92		20.57	23.10	---	---	30.93	---
	02/03/93		15.91	27.76	---	---	31.11	---
MW-2	02/18/92	43.09	16.65	26.44	---	---	---	---
	05/14/92		16.64	26.45	---	---	---	---
	08/27/92		18.81	24.28	---	---	---	---
	11/19/92		19.91	23.18	---	---	32.18	---
	02/03/93		15.23	27.86	---	---	32.73	---
MW-3	02/18/92	43.10	16.89	26.21	---	---	---	---
	05/14/92		16.80	26.30	---	---	---	---
	08/27/92		18.98	24.12	---	---	---	---
	11/19/92		20.38	23.01*	20.00	0.38	---	---
	02/03/93		15.43	27.68*	15.45	0.02	29.52	Bailed off heavy sheen
MW-4	02/18/92	44.66	18.51	26.15	---	---	---	---
	05/14/92		18.22	26.44	---	---	---	---
	08/27/92		20.47	24.19	---	---	---	---
	11/19/92		21.58	23.08	---	---	24.43	---
	02/03/93		16.98	27.68	---	---	24.53	---
MW-5	02/18/92	43.79	17.37	26.42	---	---	---	---
	05/14/92		17.29	26.50	---	---	---	---
	08/27/92		22.18	21.61	---	---	---	---
	11/19/92		20.68	23.11	---	---	28.80	---
	02/03/93		15.91	27.88	---	---	29.19	---

NOTES:
1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
* = Corrected groundwater elevation = Reference elevation - CDTW , 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.
--- = Not analyzed/not sampled.
Well Depth = Measurement from top of casing to bottom of well.

TABLE 1 (CONTINUED)

LIQUID LEVEL DATA

BEACON STATION #721
44 LEWELLING BOULEVARD, SAN LORENZO, CALIFORNIA
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Groundwater[1]	Groundwater Elevation[2]	Depth to Free Product[1]	Free Product Thickness	Well Depth	Comments
MW-6	02/18/92	42.47	15.87	26.60	---	---	---	---
	05/14/92		16.04	26.43	---	---	---	---
	08/27/92		18.17	24.30	---	---	---	---
	11/19/92		19.30	23.17	---	---	28.54	---
	02/03/93		14.60	27.87	---	---	28.64	---
MW-7	02/18/92	41.54	15.51	26.03	---	---	---	---
	05/14/92		15.41	26.13	---	---	---	---
	08/27/92		17.45	24.09	---	---	---	---
	11/19/92		18.54	23.00	---	---	24.42	---
	02/03/92		14.10	27.44	---	---	24.23	---
MW-8	02/18/92	42.26	16.57	25.69	---	---	---	---
	05/14/92		16.24	26.02	---	---	---	---
	08/27/92		18.28	23.98	---	---	---	---
	11/19/92		19.32	22.94	---	---	23.01	---
	02/03/92		14.87	27.39	---	---	23.19	---
MW-9	02/18/92	44.94	18.87	26.07	---	---	---	---
	05/14/92		18.55	26.39	---	---	---	---
	08/27/92		20.80	24.14	---	---	---	---
	11/19/92		21.90	23.04	---	---	23.61	---
	02/03/92		17.25	27.69	---	---	23.52	---
MW-10	02/18/92	42.34	16.63	25.71	---	---	---	---
	05/14/92		15.25	27.09	---	---	---	---
	08/27/92		18.35	23.90	---	---	---	---
	11/19/92		19.43	22.91	---	---	29.61	---
	02/03/92		15.01	27.33	---	---	29.55	---

NOTES:
1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
* = Corrected groundwater elevation = Rererence elevation - CDTW, 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.
— = Not analyzed/not sampled.
Well Depth = Measurement from top of casing to bottom of well.
CDTW = DTW - (SP.G x LHT).

TABLE 1 (CONTINUED)

LIQUID LEVEL DATA

BEACON STATION #721
44 LEWELLING BOULEVARD, SAN LORENZO, CALIFORNIA
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing)[1]	Depth to Groundwater[1]	Groundwater Elevation[2]	Depth to Free Product[1]	Free Product Thickness	Well Depth	Comments
MW-11	02/18/92	45.00	17.00	26.17	---	---	---	---
	05/14/92		19.02	25.98	---	---	---	---
	08/27/92		21.13	23.87	---	---	---	---
	11/19/92		17.91	22.77	---	---	29.37	---
	02/03/92			27.09	---	---	29.42	---
RW-1	05/14/92	43.17	16.88	26.29	---	---	---	---
	08/27/92		19.05	24.12	---	---	---	---
	11/19/92		21.11	22.07*	21.10	0.01	---	---
	02/03/92		15.48	27.69	---	---	36.36	---

NOTES:
1 = Measurement and reference elevation taken from notch/mark on top north side of well casing.
2 = Elevation referenced to mean sea level.
* = Corrected groundwater elevation = Reference elevation - CDTW, 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.
--- = Not analyzed/not sampled.
Well Depth = Measurement from top of casing to bottom of well.

TABLE 2

ANALYTICAL RESULTS: GROUNDWATER

BEACON STATION #721
44 LEWELLING BOULEVARD, SAN LORENZO, 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	02/18/92	—	—	—	—	—
	05/15/92	41,000	2,000	47	1,200	400
	08/28/92	110,000	3,800	54	850	970
	11/19/92	3,600	200	<5.0	90	140
	02/03/93	3,000	130	22	79	130
MW-2	02/18/92	1,600	<0.5	<0.5	1.9	<0.5
	05/14/92	740	1.2	1.0	1.3	<0.5
	08/27/92	1,400	6.5	1.1	0.6	<0.5
	11/19/92	360	<0.5	<0.5	2.7	<0.5
	02/03/93	590	1.2	1.6	4.5	6.4
MW-3	02/18/92	—	—	—	—	—
	05/15/92	160,000	6,300	5,900	1,700	6,100
	08/28/92	1,300,000	25,000	40,000	6,700	44,000
	11/19/92	—	—	—	—	—
	02/03/93	92,000	7,200	11,000	2,900	13,000
MW-4	02/18/92	5,100	<0.5	<0.5	12	21
	05/14/92	4,600	<0.5	5.6	1.8	2.2
	08/28/92	1,700	6.6	1.3	1.6	3.1
	11/19/92	400	<0.5	<0.5	<0.5	<0.5
	02/03/93	1,100	<0.5	<0.5	<0.5	<0.5
MW-5	02/18/92	<50	<0.5	<0.5	<0.5	<0.5
	05/14/92	<50	<0.5	<0.05	<0.5	<0.5
	08/27/92	<50	<0.5	<0.5	<0.5	<0.5
	11/19/92	<50	<0.5	<0.5	<0.5	<0.5
	02/03/93	55	3.0	2.7	2.0	9.9
MW-6	02/18/92	370	4.8	<0.5	<0.5	<0.5
	05/14/92	120	<0.5	<0.5	<0.5	<0.5
	08/27/92	<50	1.2	<0.5	<0.5	<0.5
	11/19/92	66	1.3	<0.5	1.0	1.1
	02/03/93	160	1.9	2.6	2.3	12
MW-7	02/18/92	670	16	<0.5	10	16
	05/14/92	1,500	44	<0.5	36	88
	08/27/92	23,000	400	5.8	290	1,400
	11/19/92	330	29	<0.5	10	63
	02/03/93	2,600	200	<0.5	110	480

NOTES: < = Below indicated detection limit.
— = Not analyzed/not sampled.

TABLE 2 (CONTINUED)

ANALYTICAL RESULTS: GROUNDWATER

BEACON STATION #721
44 LEWELLING BOULEVARD, SAN LORENZO, 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-8	02/18/92	1,200	<0.5	<0.5	9.5	<0.5
	05/14/92	130	<0.5	<0.5	<0.5	<0.5
	08/28/92	140	<0.5	<0.5	<0.5	<0.5
	11/19/92	320	<0.5	<0.5	2.0	<0.5
	02/03/93	<50	<0.5	<0.5	<0.5	<0.5
MW-9	02/18/92	<50	<0.5	<0.5	<0.5	<0.5
	05/14/92	<50	<0.5	<0.5	<0.5	<0.5
	08/27/92	<50	<0.5	<0.5	<0.5	<0.5
	11/19/92	<50	<0.5	<0.5	<0.5	1.3
	02/03/93	<50	<0.5	<0.5	<0.5	<0.5
MW-10	02/18/92	18,000	110	57	440	63
	05/15/92	8,500	24	9.8	97	<0.5
	08/28/92	9,600	20	2.8	40	3.5
	11/19/92	5,700	36	21	330	31
	02/03/93	2,300	15	4.6	35	9.6
MW-11	02/18/92	2,400	<0.5	<0.5	<0.5	<0.5
	05/15/92	1,600	<0.5	1.9	1.3	0.7
	08/27/92	2,100	15	2	0.6	1.2
	11/19/92	490	<0.5	<0.5	<0.5	<0.5
	02/03/93	560	<0.5	<0.5	0.55	<0.5
RW-1	05/15/92	790	270	62	29	140
	08/28/92	24,000	1,300	200	68	810
	11/19/92	—	—	—	—	—
	02/03/93	620	71	35	22	110

NOTES: < = Below indicated detection limit.
— = Not analyzed/not sampled.

ATTACHMENT 1

STANDARD OPERATING PROCEDURES

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURES
RE: 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.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURES
RE: 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.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURE
RE: 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.

AEGIS ENVIRONMENTAL, INC.
STANDARD OPERATING PROCEDURE
RE: 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 DTP measurement is made accordingly.

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.

ATTACHMENT 2

LABORATORY REPORTS AND CHAIN-OF-CUSTODY FORMS

CF/SRR

February 11, 1993
Sample Log 5804

RECEIVED
MAR 0 3 1993
Ans'd. CF/SRR

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

Subject: Analytical Results for 12 Water Samples
Identified as: Project # 92-703 (Beacon 721)
Received: 02/04/93

Dear Ms. Richgels:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on February 11, 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

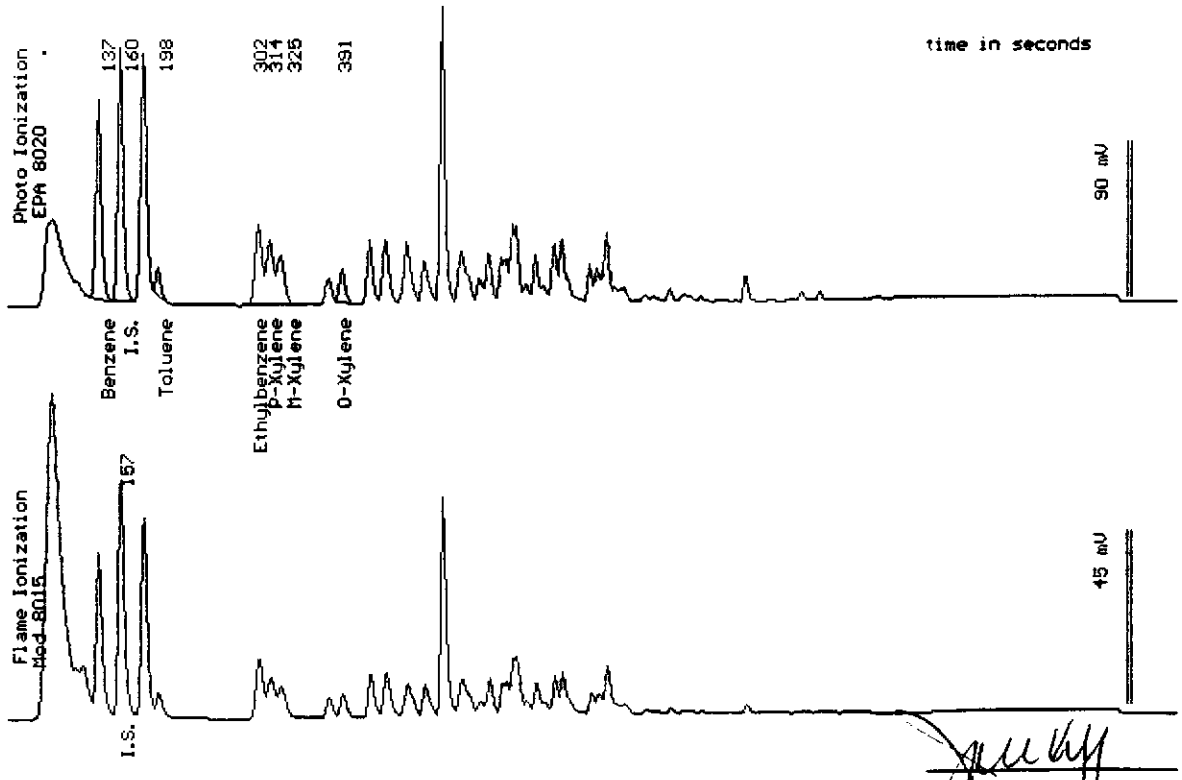
Sample Log 5804

5804-1

Sample: **MW-1**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:10 QC Batch : 4081j
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(5.0)	130
Toluene	(5.0)	22
Ethylbenzene	(5.0)	79
Total Xylenes	(5.0)	130
TPH as Gasoline	(500)	3000



Date Analyzed: 02-06-93
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

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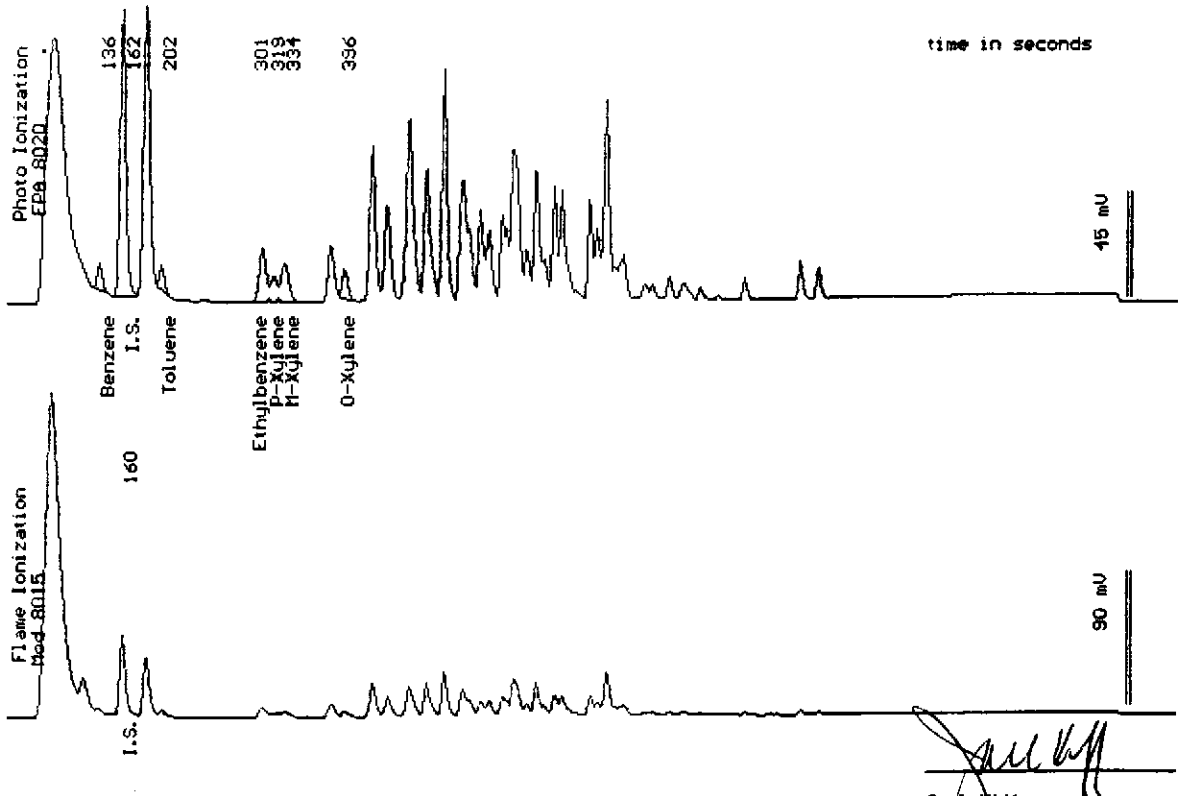
Sample Log 5804

5804-2

Sample: **MW-2**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:1 QC Batch : 4081i
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	1.2
Toluene	(.50)	1.6
Ethylbenzene	(.50)	4.5
Total Xylenes	(.50)	6.4
TPH as Gasoline	(50)	590



Date Analyzed: 02-06-93
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

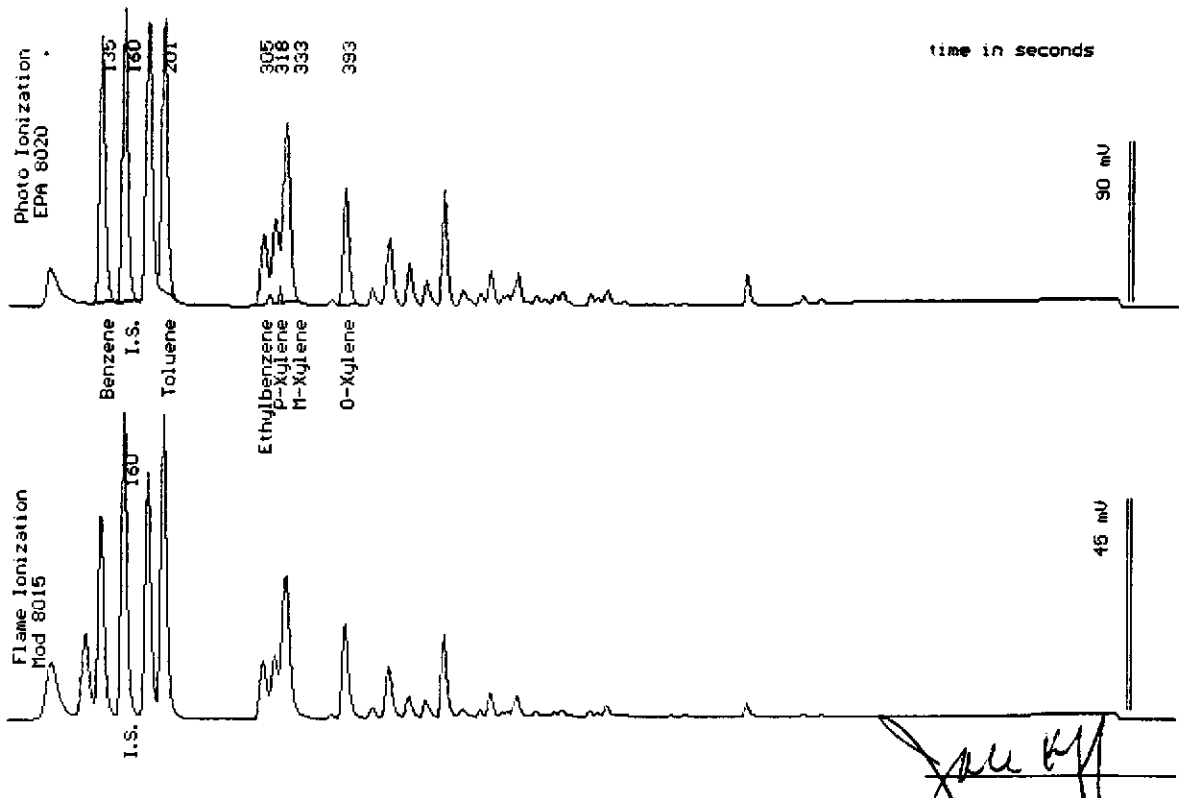
Sample Log 5804

5804-3

Sample: **MW-3**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:500 QC Batch : 4082i
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(250)	7200
Toluene	(250)	11000
Ethylbenzene	(250)	2900
Total Xylenes	(250)	13000
TPH as Gasoline	(25000)	92000



Date Analyzed: 02-11-93
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

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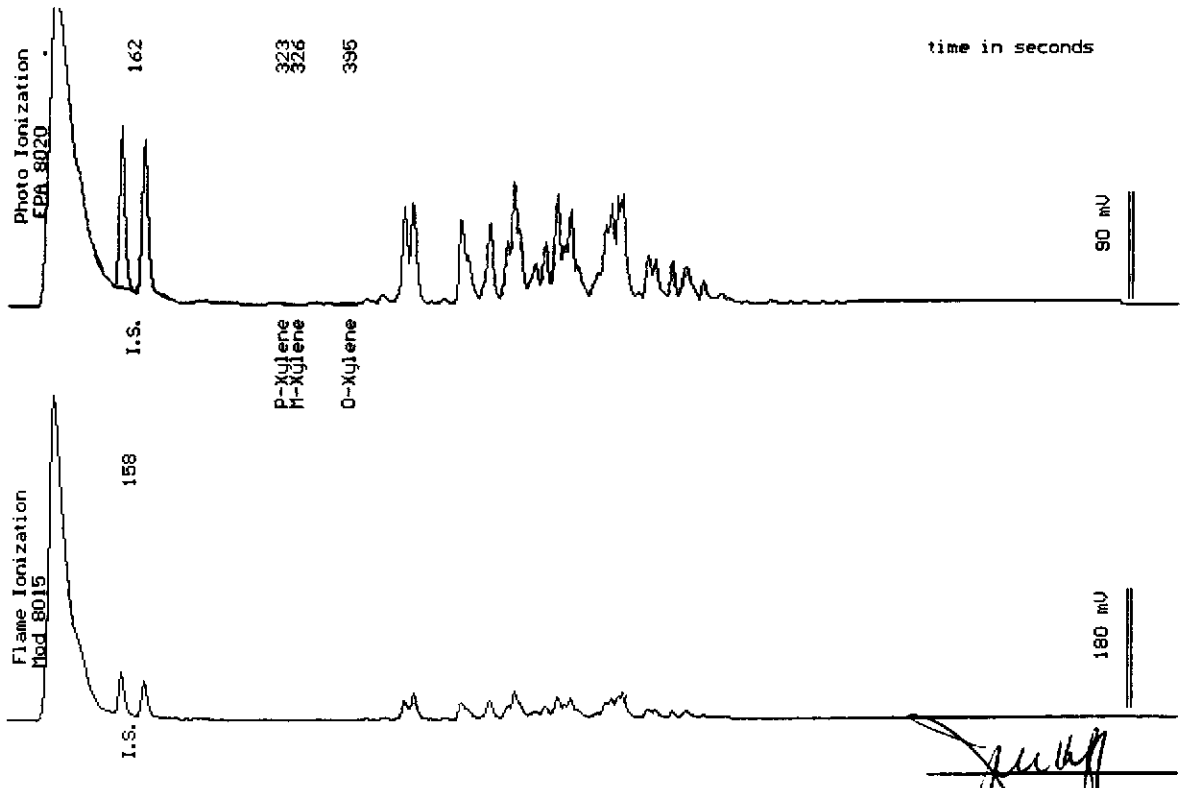
Sample Log 5804

5804-4

Sample: **MW-4**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:1 QC Batch : 4081i
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	1100



Date Analyzed: 02-06-93
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

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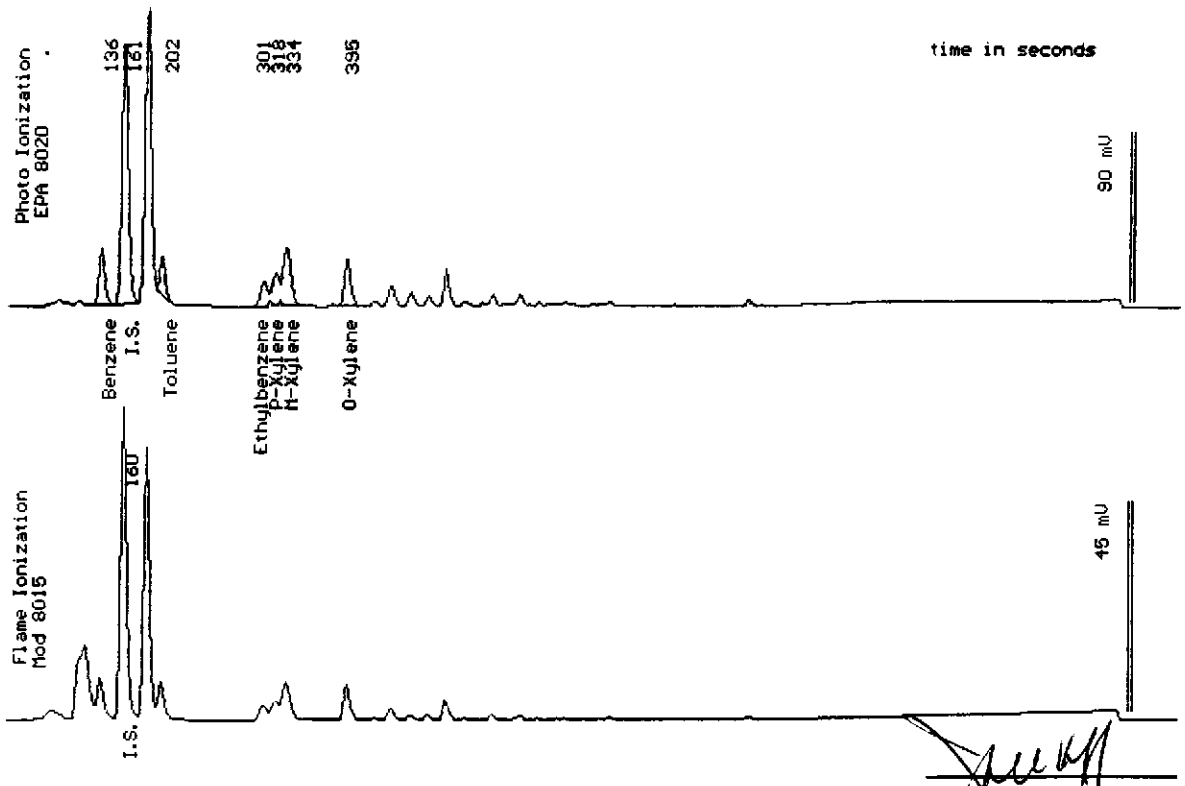
Sample Log 5804

5804-5

Sample: **MW-5**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:1 QC Batch : 4081i
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	3.0
Toluene	(.50)	2.7
Ethylbenzene	(.50)	2.0
Total Xylenes	(.50)	9.9
TPH as Gasoline	(50)	55



Date Analyzed: 02-06-93
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

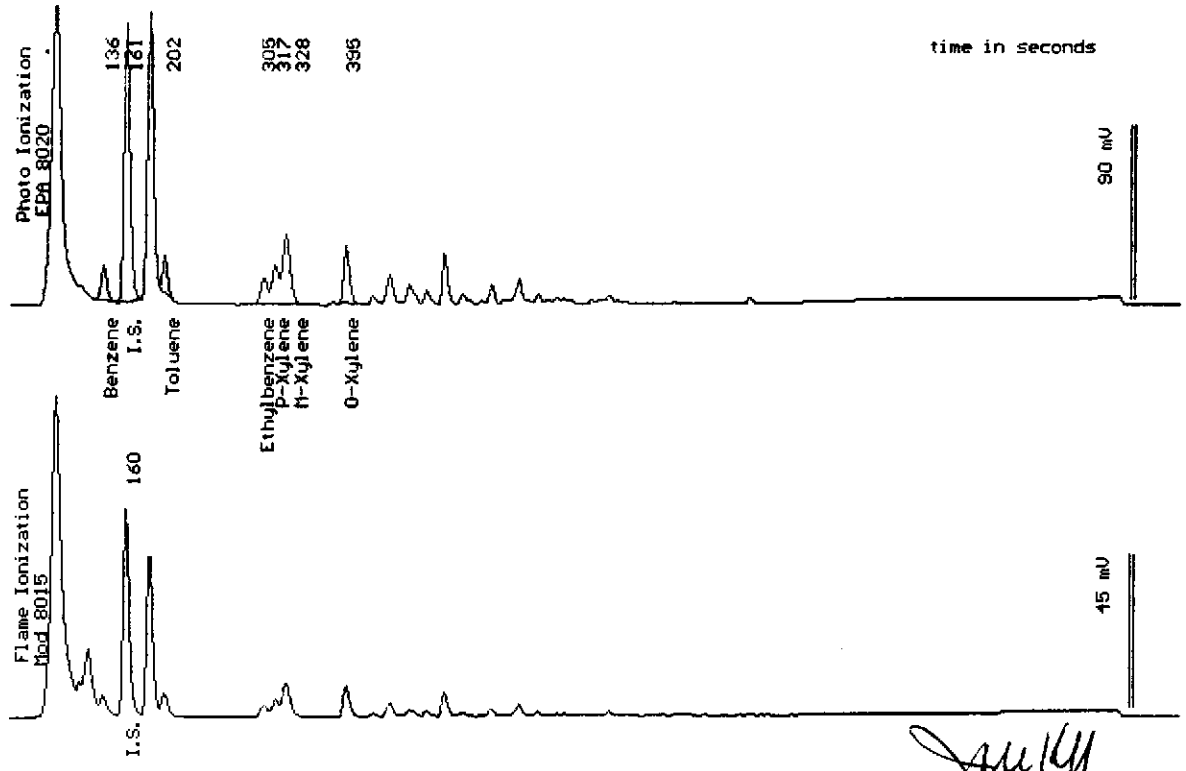
Sample Log 5804

5804-6

Sample: **MW-6**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:1 QC Batch : 4081i
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	1.9
Toluene	(.50)	2.6
Ethylbenzene	(.50)	2.3
Total Xylenes	(.50)	12
TPH as Gasoline	(50)	160



Date Analyzed: 02-06-93
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

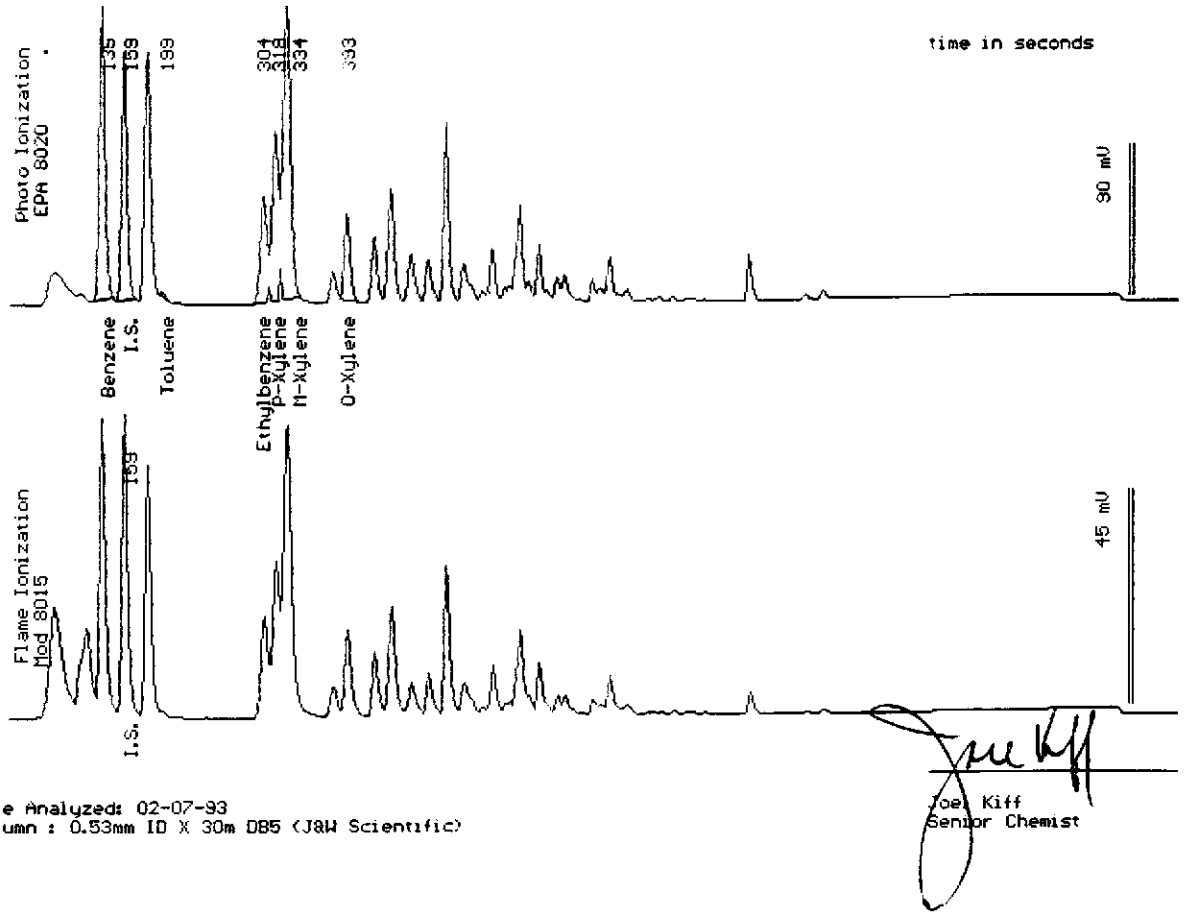
92-703
RECEIVED
FEB 25 1993
Ans'd. CF/SRR

Sample Log 5804
5804-8

Sample: **MW-7**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:10 QC Batch : 4081j
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(5.0)	200
Toluene	(5.0)	<5.0
Ethylbenzene	(5.0)	110
Total Xylenes	(5.0)	480
TPH as Gasoline	(500)	2600



Date Analyzed: 02-07-93
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist

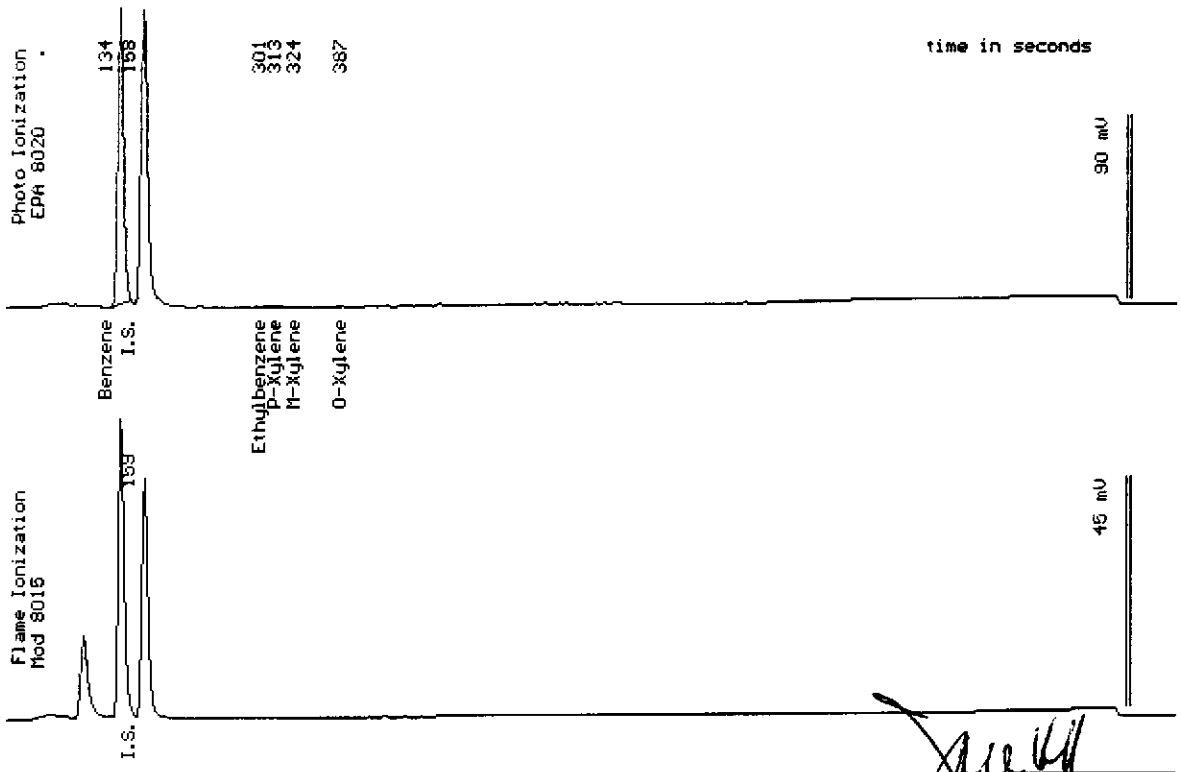
Sample Log 5804

5804-7

Sample: **MW-8**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:1 QC Batch : 4081i
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50



Date Analyzed: 02-06-93
Column : 0.53mm ID X 30m DB5 (J&W Scientific)

Joel Kiff
Senior Chemist

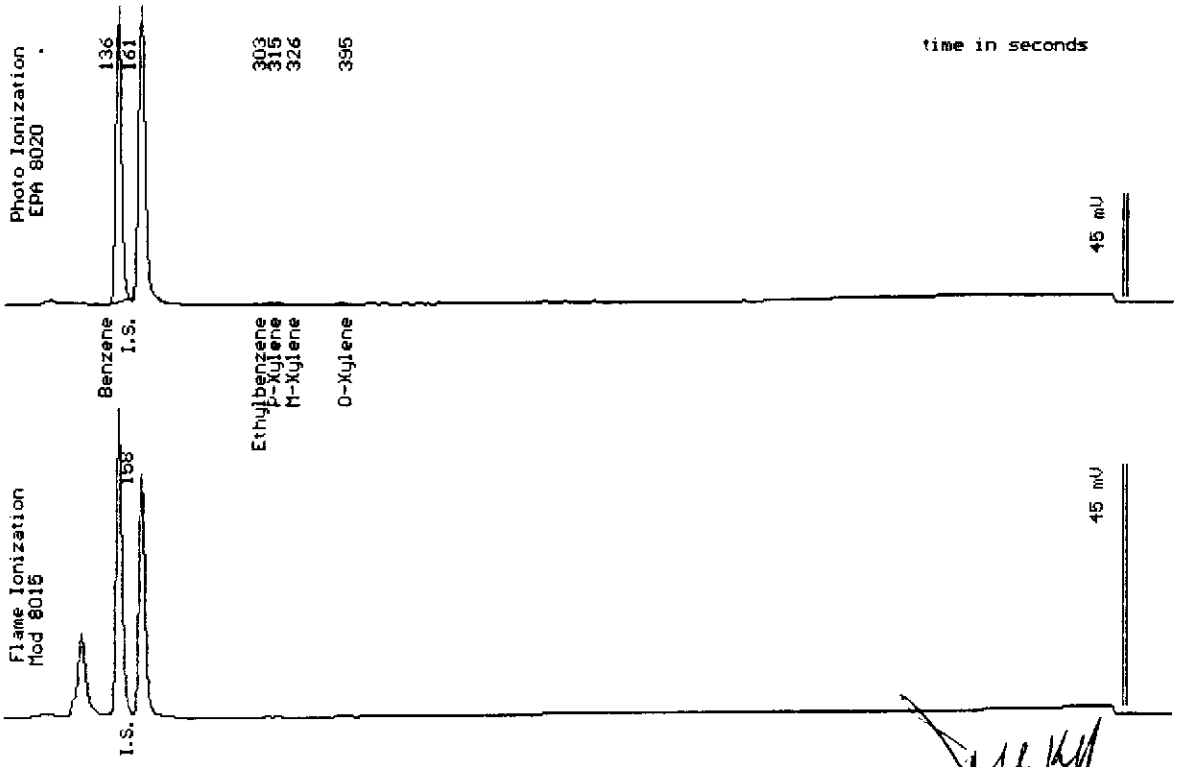
Sample Log 5804

5804-9

Sample: **MW-9**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:1 QC Batch : 4081i
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50



Date Analyzed: 02-06-93
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

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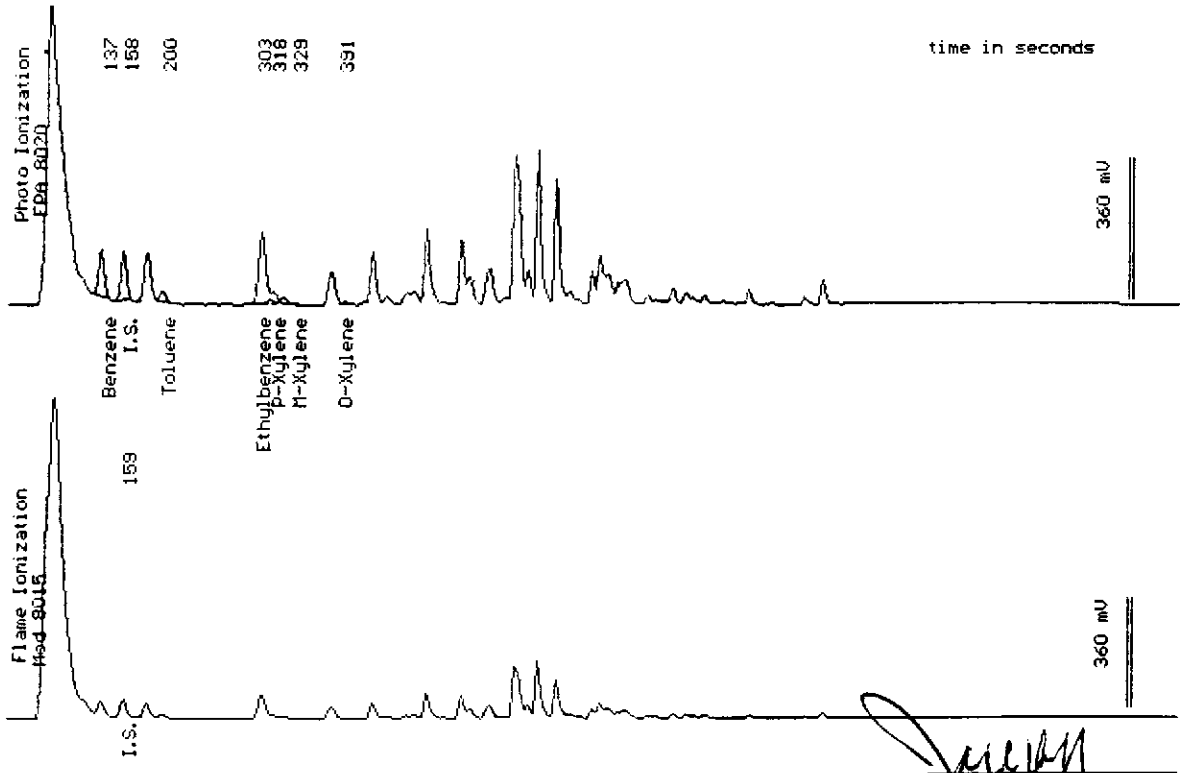
Sample Log 5804

5804-10

Sample: **MW-10**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:1 QC Batch : 4081ii
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	15
Toluene	(.50)	4.6
Ethylbenzene	(.50)	36
Total Xylenes	(.50)	9.6
TPH as Gasoline	(50)	2300



Date Analyzed: 02-06-93
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

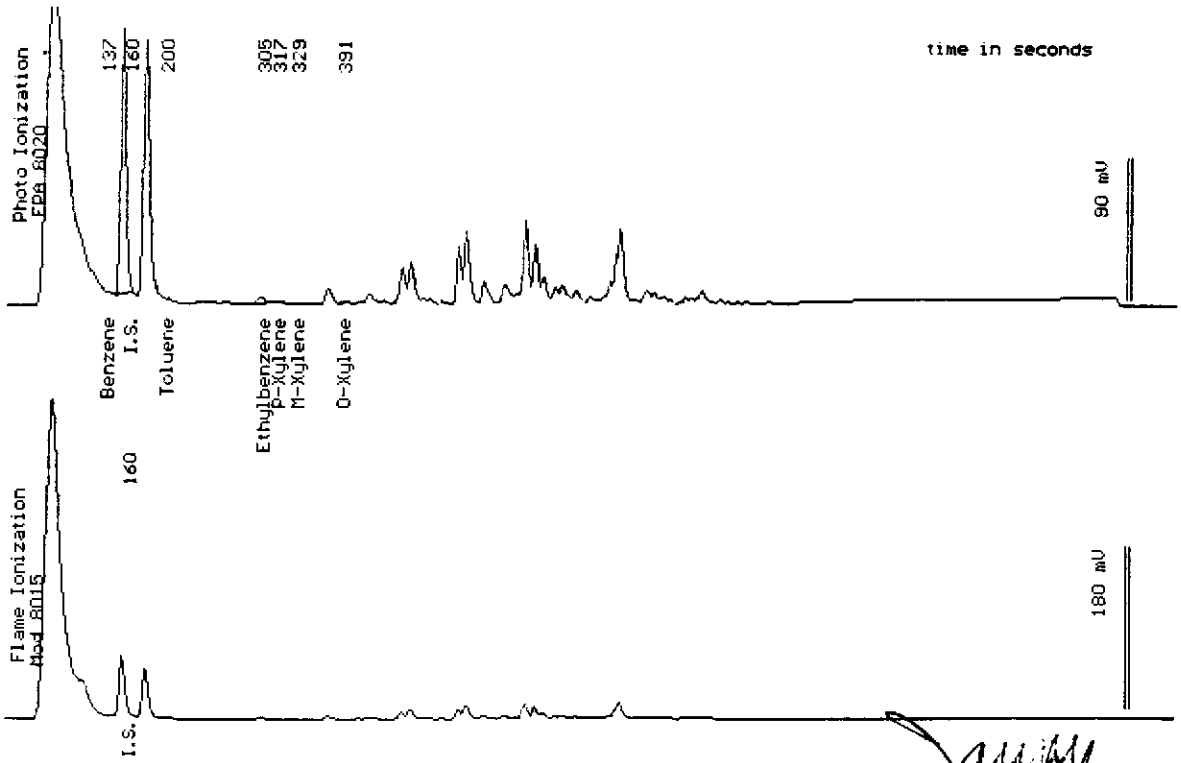
Sample Log 5804

5804-11

Sample: **MW-11**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:1 QC Batch : 4082h
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	.55
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	560



Date Analyzed: 02-10-93
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

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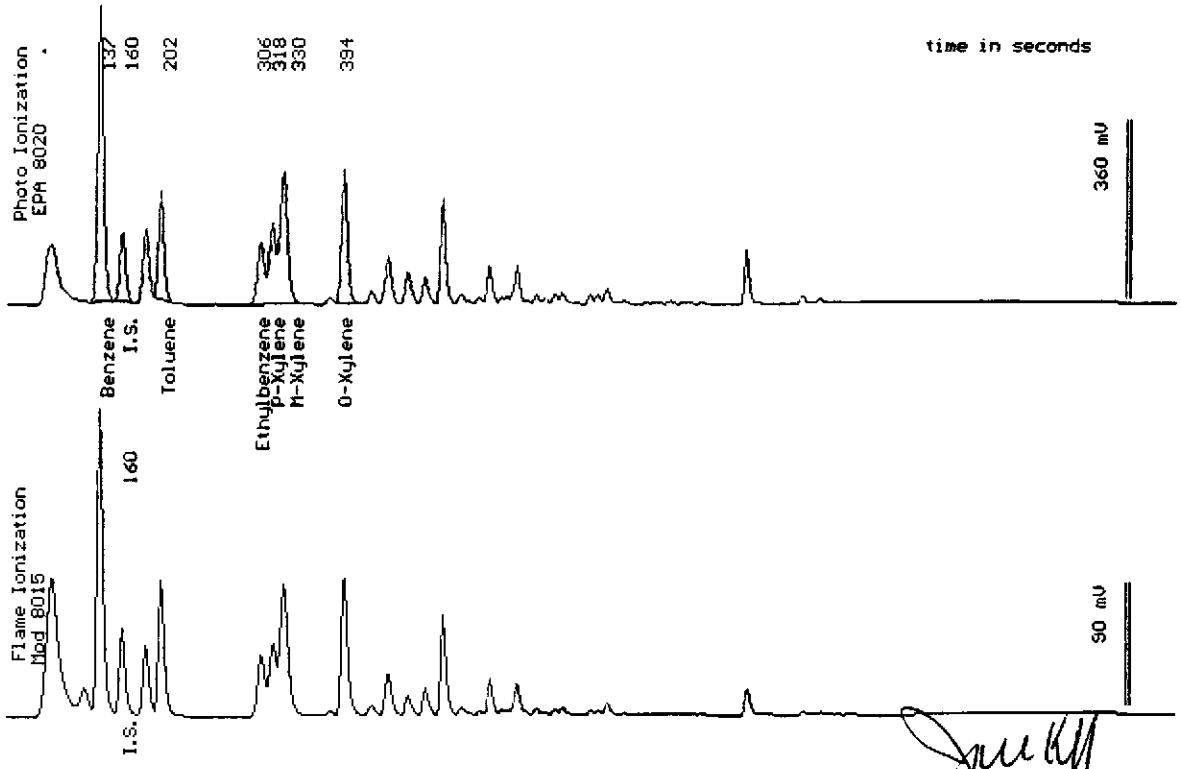
Sample Log 5804

5804-12

Sample: **RW-1**

From : Project # 92-703 (Beacon 721)
Sampled : 02/03/93
Dilution : 1:1 QC Batch : 4081j
Matrix : Water

Parameter	(MDL) ug/L	Measured Value ug/L
Benzene	(.50)	71
Toluene	(.50)	35
Ethylbenzene	(.50)	22
Total Xylenes	(.50)	110
TPH as Gasoline	(50)	620



Date Analyzed: 02-07-93
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST
(916) 753-9500

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)			ANALYSES									Date	Form No.
721	Mike Wesley												2-4-93	1 of 2
Project No.	Sampler (Signature)													
92-703	mike wesley													
Project Location	Affiliation													
44 LEWELLING BLVD. SAN LORENZO, CA.	Aegis Environmental													
Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)						No. of Containers	Please use Tri-Regional detection limits! REMARKS	
MW - 1	2-3-93	11:07		X	X							2		
MW - 2		11:17												
MW - 3		10:27												
MW - 4		10:40												
MW - 5		11:01												
MW - 6		11:33												
MW - 7		12:43												
MW - 8		12:30												

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Mike Wesley	2/4	1:55	Louis Dorna	2/4/93	1:55
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Louis Dorna	2/4/93	4:05			
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
				2/4/93	1605

Report To: Sheila Richgels (916) 786-2110
Aegis Environmental FAX 786-7830
1050 Melody Lane, Ste 160
Roseville, CA 95678

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

32-8003 1/90

(1) ESI
(916) 753-9500

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)	Date	Form No.
721	Mike Wesney	2-9-93	2 of 2

Project No.	Sampler (Signature)
92-703	Mike Wesney

Project Location	Affiliation
San Lorenzo, CA.	Aegis Environmental

PLEASE USE TRI-REGIONAL DETECTION LIMITS.

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	REMARKS
MW-9	2-5-93	11:50		X	X		2	
MW-10	"	12:07		"	"		"	
MW-11	"	12:13		"	"		"	
RW-1	"	10:46		"	"		"	

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Mike Wesney	2/4	1:55	Luis Dona	2/4/93	1.55
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Luis Dona	2/4/93	4:05			
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
				2/4/93	1605

Report To: SHEILA RICHGELS
1050 MELODY LN. STE. 160
ROSEVILLE, CA. 95678
(916) 782-2110
FAX 786-7830

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

32-8003 1/90

ATTACHMENT 3

HISTORICAL WATER LEVEL DATA

TABLE 2

SUMMARY OF GROUNDWATER ELEVATION DATA

Well Number	Top of Well Casing (famsl)	Date Sampled	Depth to Water (feet)	Groundwater Surface Elevation (famsl)	Elevation Change Since Previous Measurement (feet)
MW-1	43.67	03/10/88	17.12	26.55	---
		06/14/88	18.05	25.62	-0.93
		12/05/88	19.48	24.19	-1.43
		03/08/89	18.07	25.60	1.41
		06/22/89	18.60	25.07	-0.53
		09/27/89	19.98	23.69	-1.38
		12/29/89	20.45	23.22	-0.47
		03/29/90	19.31	24.36	1.14
		06/21/90	19.69	23.98	-0.38
		09/25/90*	21.88	22.51	-1.47
		12/18/90*	20.89	23.12	0.61
		03/28/91	17.77	25.90	2.78
		06/25/91	18.60	25.07	-0.83
		09/17/91	20.14	23.53	-1.54
		11/05/91	20.40	23.27	-0.26
		02/18/92	16.42	27.25	3.98
		05/14/92	17.28	26.39	-0.86
MW-2	43.09	03/10/88	16.43	26.66	---
		06/14/88	17.35	25.74	-0.92
		12/05/88	18.79	24.30	-1.44
		03/08/89	17.31	25.78	1.48
		06/22/89	17.92	25.17	-0.61
		09/27/89	19.27	23.82	-1.35
		12/29/89	19.75	23.34	-0.48
		03/29/90	18.62	24.47	1.13
		06/21/90	19.12	23.97	-0.50
		09/25/90	20.54	22.55	-1.42
		12/18/90	20.30	22.79	0.24
		03/28/91	16.94	26.15	3.36
		06/25/91	17.95	25.14	-1.01
		09/17/91	19.50	23.59	-1.55
		11/05/91	19.73	23.36	-0.23
		02/18/92	16.65	26.44	3.08
		05/14/92	16.64	26.45	0.01
MW-3	43.10	03/10/88	16.68	26.42	---
		06/14/88	17.59	25.51	-0.91
		12/05/88	18.96	24.14	-1.37
		03/08/89	17.60	25.50	1.36
		06/22/89	18.11	24.99	-0.51

TABLE 2

SUMMARY OF GROUNDWATER ELEVATION DATA

Well Number	Top of Well Casing (famsl)	Date Sampled	Depth to Water (feet)	Groundwater Surface Elevation (famsl)	Elevation Change Since Previous Measurement (feet)
MW-3 Cont'd		09/27/89	19.47	23.63	-1.36
		12/29/89*	19.97	23.13	-0.50
		3/29/90*	17.60	25.53	2.40
		06/21/90	19.35	23.75	-1.78
		9/25/90*	20.72	22.41	-1.34
		12/18/90*	21.42	22.00	-0.41
		03/28/91	17.45	25.85	3.85
		06/25/91	18.12	25.01	-0.84
		9/17/91*	19.55	23.55	-1.46
		11/05/91	19.98	23.12	-0.43
		02/18/92	16.89	26.21	3.09
		05/14/92	16.80	26.30	0.09
MW-4	44.66	12/05/88	20.47	24.19	---
		03/08/89	19.03	25.63	1.44
		06/22/89	19.57	25.09	-0.54
		09/27/89	20.98	23.68	-1.41
		12/29/89	21.43	23.23	-0.45
		03/29/90	20.29	24.37	1.14
		06/21/90	20.78	23.88	-0.49
		09/25/90	22.24	22.42	-1.46
		12/18/90	22.18	22.48	0.06
		03/28/91	18.79	25.87	3.39
		06/25/91	19.59	25.07	-0.80
		09/17/91	21.15	23.51	-1.56
		11/05/91	21.41	23.25	-0.26
		02/18/92	18.51	26.15	2.90
		05/14/92	18.22	26.44	0.29
MW-5	43.79	12/05/88	19.48	24.31	---
		03/08/89	18.00	25.79	1.48
		06/22/89	18.60	25.19	-0.60
		09/27/89	20.00	23.79	-1.40
		12/29/89	20.43	23.36	-0.43
		03/29/90	19.24	24.55	1.19
		06/21/90	19.82	23.97	-0.58
		09/25/90	21.23	22.56	-1.41
		12/18/90	21.04	22.75	0.19
		03/28/91	17.69	26.10	3.35
		06/25/91	18.62	25.17	-0.93

TABLE 2

SUMMARY OF GROUNDWATER ELEVATION DATA

Well Number	Top of Well Casing (famsl)	Date Sampled	Depth to Water (feet)	Groundwater Surface Elevation (famsl)	Elevation Change Since Previous Measurement (feet)
MW-5 (Con't)		09/17/91	20.23	23.56	-1.61
		11/05/91	20.43	23.36	-0.20
		02/18/92	17.37	26.42	3.06
		05/14/92	17.29	26.50	0.08
MW-6	42.47	12/05/88	17.99	24.48	---
		03/08/89	16.75	25.72	-1.24
		06/22/89	17.30	25.17	-0.55
		09/27/89	18.64	23.83	-1.34
		12/29/89	19.16	23.31	-0.52
		03/29/90	18.04	24.43	1.12
		06/21/90	18.53	23.94	-0.49
		09/25/90	19.91	22.56	-1.38
		12/18/90	20.61	21.86	-0.70
		03/28/91	16.29	26.18	4.32
		06/25/91	17.36	25.11	-1.07
		09/17/91	18.89	23.58	-1.53
		11/05/91	19.07	23.40	-0.18
		02/18/92	15.87	26.60	3.20
		05/14/92	16.04	26.43	-0.17
MW-7	41.54	12/05/88	17.61	23.93	---
		03/08/89	16.27	25.27	1.34
		06/22/89	16.72	24.82	-0.45
		09/27/89	17.99	23.55	-1.27
		12/29/89	18.54	23.00	-0.55
		03/29/90	17.43	24.11	1.11
		06/21/90	17.88	23.66	-0.45
		09/25/90	19.12	22.42	-1.24
		12/18/90	19.16	22.38	-0.04
		03/28/91	16.04	25.50	3.12
		06/25/91	16.66	24.88	-0.62
		09/17/91	17.99	23.55	-1.33
		11/05/91	18.33	23.21	-0.34
		02/18/92	15.51	26.03	2.82
		05/14/92	15.41	26.13	0.10
MW-8	42.26	09/27/89	18.89	23.37	---
		12/29/89	19.45	22.81	-0.56
		03/29/90	18.39	23.87	1.06

TABLE 2

SUMMARY OF GROUNDWATER ELEVATION DATA

Well Number	Top of Well Casing (famsl)	Date Sampled	Depth to Water (feet)	Groundwater Surface Elevation (famsl)	Elevation Change Since Previous Measurement (feet)
MW-8 (Con't)		06/21/90	18.80	23.46	-0.41
		09/25/90	20.10	22.16	-1.30
		12/18/90	20.13	22.13	-0.03
		03/28/91	17.14	25.12	2.99
		06/25/91	17.45	24.81	-0.31
		09/17/91	18.81	23.45	-1.36
		11/05/91	19.14	23.12	-0.33
		02/18/92	16.57	25.69	2.57
		05/14/92	16.24	26.02	0.33
MW-9	44.94	09/27/89	21.38	23.56	---
		12/29/89	21.76	23.18	-0.38
		03/29/90	20.58	24.36	1.18
		06/21/90	21.11	23.83	-0.53
		09/25/90	22.60	22.34	-1.49
		12/18/90	22.56	22.38	0.04
		03/28/91	19.13	25.81	3.43
		06/25/91	19.90	25.04	-0.77
		09/17/91	21.49	23.45	-1.59
		11/05/91	21.75	23.19	-0.26
		02/18/92	18.87	26.07	2.88
		05/14/92	18.55	26.39	0.32
MW-10	42.34	11/05/91	19.28	23.06	---
		02/18/92	16.63	25.71	2.65
		05/14/92	15.25	27.09	1.38
MW-11	45.00	11/05/91	22.11	22.89	---
		02/18/92	17.00	26.17	3.28
		05/14/92	19.02	25.98	-0.19

TABLE 2

SUMMARY OF GROUNDWATER ELEVATION DATA

Well Number	Top of Well Casing (famsl)	Date Sampled	Depth to Water (feet)	Groundwater Surface Elevation (famsl)	Elevation Change Since Previous Measurement (feet)
RW-1		05/14/92	16.88	26.29	---

NOTE: All available water elevation data were recalculated to present wellhead elevations as reported by Ronald R. Archer, Surveryor, on November 6, 1991

1. famsl = feet above mean sea level
2. * = groundwater elevations for these quarters were corrected for the presence of floating gasoline product using the equation:
   GWE = WE -[DTW-(PT x 0.8)]

Where:
- GWE = Groundwater elevation in feet above mean sea level
- WE = Well elevation at top of casing
- DTW = Depth to water from top of casing in feet
- PT = Product thickness in feet
- 0.8 = Assumed difference in specific gravities between water and gasoline

ATTACHMENT 4

HISTORICAL ANALYTICAL DATA

TABLE 1

SUMMARY OF GROUNDWATER ANALYSES AND MONITORING DATA
(May 14-15, 1992)

Sample Number	Date Collected	TPHG ppb	Benzene ppb	Toluene ppb	Ethyl Benzene ppb	Total Xylenes ppb	Well Elevation famsl	DTW[1] feet	Water[1] Elevation famsl
MW-1	5/15/92	41,000	2,000	47	200	400	43.67	17.28	26.39
MW-2	5/14/92	740	1.2	1.0	1.3	ND	43.09	16.64	26.45
MW-3	5/15/92	160,000	6,300	5,900	1,700	6,100	43.10	16.80	26.30
MW-4	5/14/92	4,600	ND	5.6	1.8	2.2	44.66	18.22	26.44
MW-5	5/14/92	ND	ND	ND	ND	ND	43.79	17.29	26.50
MW-6	5/14/92	120	ND	ND	ND	ND	42.47	16.04	26.43
MW-7	5/14/92	1,500	44	ND	36	88	41.54	15.41	26.13
MW-8	5/14/92	130	ND	ND	ND	ND	42.26	16.24	26.02
MW-9	5/14/92	ND	ND	ND	ND	ND	44.94	18.55	26.39
MW-10	5/15/92	8,500	24	9.8	97	ND	42.34	15.25	27.09
MW-11	5/15/92	1,600	ND	1.9	1.3	0.7	45.00	19.02	25.98[1]
RW-1	5/15/92	790	270	62	29	140	43.17	16.88	26.29
BB-1	5/15/92	ND	ND	ND	ND	ND	---	---	---

ppb Parts per billion
famsl Feet above mean sea level
ND None detected
DTW Depth to water
— No data available
* Water elevation not used for groundwater elevation contour map
NS Not sampled
1 Data from 5/14/92
BB 1 Bailer blank

TABLE 3

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Xylenes (ppb)	TPHG (ppb)	Comments
MW-1	05/29/87	490	150	930	3,790	18,050	
	07/14/87	560	120	950	3,270	14,750	
	08/17/87	630	40	320	1,130	12,860	
	09/01/87	558	84	562	1,942	14,269	
	12/10/87	200	138	273	777	14,000	
	03/10/88	70	40	340	940	7,300	
	06/14/88	290	ND	330	790	34,000	
	12/05/88	100	16	140	310	4,000	
	03/08/89	670	20	580	1,200	9,100	Sheen
	06/22/89	1,000	20	1,200	2,200	12,000	Sheen
	09/27/89	960	9	260	360	6,800	
	12/29/89	210	33	1,200	250	4,800	
	03/29/90	1,100	42	510	1,800	14,000	
	06/21/90	1,400	ND	160	130	7,900	
	09/25/90	NS	NS	NS	NS	NS	0.9 ft free-product
	12/18/90	NS	NS	NS	NS	NS	0.4 ft free-product
	03/28/91	230	75	570	2,000	26,000	Sheen
	06/25/91	970	35	300	610	22,000	
	09/17/91	490	150	250	370	16,000	
	11/05/91	420	45	410	780	35,000	Sheen
	02/18/92	NS	NS	NS	NS	NS	Sheen
	05/15/92	2,000	47	200	400	41,000	Sheen
MW-2	05/29/87	113	14	46	58	4,870	
	07/14/87	103	25	34	48	2,207	
	08/17/87	37.6	10.9	8.2	11.1	756	
	09/01/87	75.3	14.2	16.4	27.6	1,482	
	12/10/87	28	40.6	38.1	100.3	1,800	
	03/10/88	9.2	3.1	7.3	2.6	1,200	
	06/14/88	ND	ND	2.2	5.7	500	
	12/05/88	ND	1.3	5.6	3.6	500	
	03/08/89	ND	1.3	3.5	3.7	730	
	06/22/89	ND	ND	ND	ND	570	
	09/27/89	3.8	0.64	2.9	54	420	
	12/29/89	6.7	2	5.7	2.9	270	
	03/29/90	10	0.88	10	3.3	420	
	06/21/90	ND	ND	4	ND	650	
	09/25/90	ND	1.5	3.5	1.5	680	
	12/18/90	ND	1.7	2.2	0.6	500	

TABLE 3

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Xylenes (ppb)	TPHG (ppb)	Comments
MW-2 (cont)	03/28/91	ND	2.2	2.7	1.1	730	
	06/25/91	ND	ND	ND	1.2	610	
	09/17/91	ND	ND	2.5	1.2	820	
	11/05/91	ND	ND	1.1	ND	700	
	02/18/92	ND	ND	1.9	ND	1600	
	05/14/92	1.2	1.0	1.3	ND	740	
MW-3	05/29/87	5,400	3,900	1,700	5,200	40,300	
	07/14/87	6,880	7,080	1,580	4,770	30,320	
	08/17/87	5,930	4,180	1,240	3,370	25,620	
	09/01/87	8,540	6,660	1,020	3,740	38,210	
	12/10/87	4,240	2,350	890	1,860	25,000	
	03/10/88	3,210	950	940	950	13,400	
	06/14/88	5,900	7,600	450	4,600	54,000	
	12/05/88	4,200	2,400	1,000	3,100	19,000	
	03/08/89	11,000	9,400	2,300	9,900	53,000	Sheen
	06/22/89	16,000	5,900	2,100	6,600	60,000	Sheen
	09/27/89	8,100	2,800	1,200	4,300	34,000	
	12/29/89	NS	NS	NS	NS	NS	0.02 ft free-product
	03/29/90	NS	NS	NS	NS	NS	0.04 ft free-product
	06/21/90	19,000	22,000	22,000	120,000	2,100,000	
	09/25/90	NS	NS	NS	NS	NS	0.04 ft free-product
	12/18/90	NS	NS	NS	NS	NS	0.42 ft free-product
	03/28/91	NS	NS	NS	NS	NS	0.25 ft free-product
	06/25/91	NS	NS	NS	NS	NS	0.02 ft free-product
	09/17/91	NS	NS	NS	NS	NS	0.44 ft free-product
	11/05/91	NS	NS	NS	NS	NS	Sheen
	02/18/92	NS	NS	NS	NS	NS	Sheen
	05/15/92	6,300	5,900	1,700	6,100	160,000	Sheen
MW-4	12/05/88	ND	ND	2.3	6.5	4,500	
	03/08/89	ND	ND	ND	ND	3,900	
	06/22/89	ND	ND	ND	ND	1,500	
	09/27/89	11	ND	ND	ND	1,200	
	12/29/89	ND	2.1	2.3	ND	920	
	03/29/90	ND	ND	8	ND	870	
	06/21/90	ND	ND	ND	ND	1,500	
	09/25/90	ND	11	4.6	6	3,100	
	12/18/90	ND	4.4	15	6.3	3,600	

TABLE 3

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Xylenes (ppb)	TPHG (ppb)	Comments
MW-4	03/28/91	8.9	4.4	4.4	2.2	2,000	
(Con't)	06/25/91	ND	5.4	1.7	ND	2,000	
	09/17/91	ND	ND	0.8	ND	2,300	
	11/05/91	ND	ND	3.2	1.1	3,500	
	02/18/92	ND	ND	12	21	5,100	
	05/14/92	ND	5.6	1.8	2.2	4,600	
MW-5	12/05/88	ND	0.78	0.23	0.92	3.9	
	03/08/89	2.7	6.7	2.7	15	58	
	06/22/89	0.91	ND	ND	ND	5	
	09/27/89	1.3	ND	ND	ND	5.3	
	12/29/89	ND	ND	ND	ND	ND	
	03/29/90	ND	ND	ND	ND	ND	
	06/21/90	ND	ND	ND	ND	12	
	09/25/90	ND	ND	ND	ND	ND	
	12/18/90	ND	ND	ND	ND	ND	
	03/28/91	ND	ND	ND	ND	ND	
	06/25/91	ND	ND	ND	ND	ND	
	09/17/91	ND	ND	ND	ND	ND	
	11/05/91	ND	ND	ND	ND	ND	
	02/18/92	ND	ND	ND	ND	ND	
	05/14/92	ND	ND	ND	ND	ND	
MW-6	12/05/88	4	1.3	0.63	1.3	190	
	03/08/89	2.2	ND	ND	1.1	23	
	06/22/89	0.82	2.6	0.18	1.2	57	
	09/27/89	0.2	0.24	ND	ND	2.1	
	12/29/89	ND	ND	ND	ND	ND	
	03/29/90	2.1	ND	ND	ND	12	
	06/21/90	ND	ND	ND	ND	ND	
	09/25/90	1.4	ND	ND	ND	98	
	12/18/90	2.2	ND	ND	ND	200	
	03/28/91	3.5	ND	ND	ND	140	
	06/25/91	ND	ND	ND	ND	95	
	09/17/91	ND	ND	ND	ND	ND	
	11/05/91	ND	ND	ND	ND	130	
	02/18/92	4.8	ND	ND	ND	370	
	05/14/92	ND	ND	ND	ND	120	

TABLE 3

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Xylenes (ppb)	TPHG (ppb)	Comments
MW-7	12/05/88	140	150	40	370	1,500	
	03/08/89	730	72	180	370	2,400	
	06/22/89	570	43	180	220	2,000	
	09/27/89	420	5.9	140	28	1,400	
	12/29/89	87	3.5	18	15	150	
	03/29/90	110	40	53	150	530	
	06/21/90	620	34	290	400	4,100	
	09/25/90	49	2.4	30	42	750	
	12/18/90	74	4.5	25	69	510	
	03/28/91	53	0.8	24	24	500	
	06/25/91	23	ND	32	37	570	
	09/17/91	79	1	89	100	1,400	
	11/05/91	52	ND	76	58	1,100	
	02/18/92	16	ND	10	16	670	
	05/14/92	44	ND	36	88	1,500	
MW-8	09/27/89	ND	ND	16	ND	4,200	
	12/29/89	ND	3.2	18	ND	2,800	
	03/29/90	ND	ND	19	ND	2,600	
	06/21/90	ND	ND	13	ND	4,600	
	09/25/90	2.3	22	16	26	4,500	
	12/18/90	0.7	6	9.7	2.3	1,100	
	03/28/91	2.6	4.6	3.2	3.1	1,600	
	06/25/91	ND	ND	2.5	1.3	760	
	09/17/91	ND	ND	13	3.9	1,900	
	11/05/91	ND	ND	15	ND	1,400	
	02/18/92	ND	ND	9.5	ND	1,200	
	05/14/92	ND	ND	ND	ND	130	
MW-9	09/27/89	ND	ND	ND	ND	25	
	12/29/89	ND	ND	ND	2.5	11	
	03/29/90	ND	ND	ND	ND	ND	
	06/21/90	ND	ND	ND	ND	ND	
	09/25/90	ND	ND	ND	ND	ND	
	12/18/90	ND	ND	ND	ND	100	
	03/28/91	ND	ND	ND	ND	ND	
	06/25/91	ND	ND	ND	ND	ND	
	09/17/91	ND	ND	ND	ND	ND	

TABLE 3

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Well No.	Date Sampled	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Xylenes (ppb)	TPHG (ppb)	Comments
MW-9 (Con't)	11/05/91	ND	ND	ND	ND	ND	
	02/18/92	ND	ND	ND	ND	ND	
	05/14/92	ND	ND	ND	ND	ND	
MW-10	11/05/91	29	140	500	320	27,000	
	02/18/92	110	57	440	63	18,000	
	05/15/92	24	9.8	97	ND	8,500	
MW-11	11/05/91	ND	ND	ND	ND	890	
	02/18/92	ND	ND	ND	ND	2,400	
	05/15/92	ND	1.9	1.3	0.7	1,600	
RW-1	11/13/91	74	68	7	99	1,600	
	05/15/92	270	62	29	140	790	

1. TPHG Total petroleum hydrocarbons as gasoline
2. ND - Not detected
3. NS - Not sampled
4. Samples prior to December 1988 collected by Applied GeoSystems
5. Sample from December 1988 through December 1990 collected by DuPont Environmental
6. Sample from March 1991 through September 1991 collected by Groundwater Technology

ATTACHMENT 5

FIELD DATA SHEETS

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

Project Address: **Beacon - 44 Lewelling, San Lorenzo - 721** Date: 2-5-93

Recorded by: Mike Wesney Project No.: **92-703**

Well No.	Time	Measured Total Depth	Depth to Gr. Water	Depth to Product	Product Thickness	Comments (TOC/TOB) (product skimmer in well)
MW-1	9:54	31.11	15.91	n/a	n/a	
MW-2	10:01	32.73	15.23			
MW-3	9:55	29.52	15.43			Hard to tell if product in well. OZ
MW-4	9:57	24.53	16.98			
MW-5	9:59	29.17	15.91			
MW-6	10:03	28.64	14.60			
MW-7	10:12	24.23	14.10			
MW-8	10:05	23.19	14.37			
MW-9	11:37	23.52	17.25			
MW-10	11:50	29.53	15.01			
MW-11	12:00	29.42	17.71			
RW-1	9:52	36.36	15.48			

Notes:

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon #721
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW1

Purging Equipment:

- [X] 2" Disposable bailer
- [ ] 2" PVC bailer
- [ ] 4" PVC bailer
- [ ] Submersible pump
- [ ] Dedicated bailer

Sampled with disposal bailer or other:
Well recharged to 80% recovery.

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

Depth of well: 31.11
Depth to water: 15.91

Calculated purge: 10 gal
Actual purge: 10 gal

Start purge: 10:50 Sampling time: 11:07 Sampling Date: 2-3-97

Time	Temp.	E.C.	pH	Turbidity	Volume
10:53	68.7	8200	6.31		4
10:56	69.4	8200	6.28		7
10:59	69.7	8220	6.25		10

Sample appearance: Sm. cloudy

QC samples collected at this well:

Lock: 3753

Remarks: Hand Bailed w/ Disp

Signature: Mike Mooney Review: OK

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon #721
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW2

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

Sampled with disposal bailer or other: ___
Well recharged to 80% recovery.

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

Depth of well: 32.73
Depth to water: 15.23

Calculated purge: 12gal
Actual purge: 12gal

Start purge: 11:05 Sampling time: 11:17 Sampling Date: 2-3-93

Time	Temp.	E.C.	pH	Turbidity	Volume
11:09	73.3	8705	6.74		8
11:11	73.4	8650	6.75		10
11:52	75.9	8690	6.75		12

Sample appearance: Sm. Clear

QC samples collected at this well: ___ Lock: 3753

Remarks: Hand Bailed Gal w/ Disp Bailer

Signature Mike Mooney Review OK

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon #721

Site: 44 Lewelling Blvd

Project No: 92-703

Well Designation: MW3

Purging Equipment:

X 2" Disposable bailer

___ 2" PVC bailer

___ 4" PVC bailer

[scribbled out] Submersible pump

___ Dedicated bailer

Sampled with disposal bailer or other: ___

Well recharged to 80% recovery.

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

Depth of well: 29.52

Depth to water: 15.43

Calculated purge: 10gal

Actual purge: 7gal

Start purge: 10:07

Sampling time: 10:27

Sampling Date: 2-3-93

Time	Temp.	E.C.	pH	Turbidity	Volume
10:10	70.4	182 us	6.78		3
10:13	71.0	180 us	6.75		6
10:14	Dry	7 gal			

Sample appearance: clear

QC samples collected at this well: ___

Lock: 3753

Remarks: Hand Bailed Well w/ Disp Bailer Product stabilized .02 w/ Color confirmed w/ css showed Product on the casing checked with Keck .03 Reading

Signature: Mike Woomey

Review: [signature]

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon #73
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW4

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

Sampled with disposal bailer or other: ______
Well recharged to 80% recovery.

Well Diameter: 2" X 3" ___ 4" ___ 6" ___ 8" ___

Purge Vol. Multiplier: 0.163 0.367 0.653 1.47 2.61 gal/ft.

Depth of well: 24.53
Depth to water: 16.98

Calculated purge: 5gal
Actual purge: 5gal

Start purge: 10:30 Sampling time: 10:40 Sampling Date: 2-3-93

Time	Temp.	E.C.	pH	Turbidity	Volume
10:32	73.4	5.54 us	6.78		2
10:33	73.0	5.62 us	6.99		3
10:34	73.1	5.60 us	7.0		4
10:35	73.0	5.61	7.01		5

Sample appearance: Clear

QC samples collected at this well: ______

Lock: 3753

Remarks: Hand Bailed w/ Disp Bailer w/Pump in Rain

Signature: Mike Woomey Review: [signature]

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon #72
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW5

Purging Equipment:

- X 2" Disposable bailer
- ___ 2" PVC bailer
- ___ 4" PVC bailer
- X Submersible pump
- ___ Dedicated bailer

Sampled with disposal bailer or other: ___
Well recharged to 80% recovery.

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

Depth of well: 29.19
Depth to water: 15.91

Calculated purge: 9gal
Actual purge: 9gal

Start purge: 10:48 Sampling time: 11:01 Sampling Date: 2/3/93

Time	Temp.	E.C.	pH	Turbidity	Volume
10:49	69.8	6.35 us	6.64		5
10:50	70.1	6.30 us	6.60		8
10:52	70.2	6.29 us	6.60		9

Sample appearance: Sm. Clear

QC samples collected at this well: ___ Lock: 3753

Remarks: Hand Bailed last Purge w/ Disp Bailer

Signature: Mike Mooney Review: OK

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon #721
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW6

Purging Equipment:

- X — 2" Disposable bailer
- ___ — 2" PVC bailer
- ___ — 4" PVC bailer
- X — Submersible pump
- ___ — Dedicated bailer

Sampled with disposal bailer or other: ___
Well recharged to 80% recovery.

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

Depth of well: 28.64
Depth to water: 14.60

Calculated purge: 10 gal
Actual purge: 4 gal

Start purge: 11:19
Sampling time: 11:33
Sampling Date: 2-3-93

Time	Temp.	E.C.	pH	Turbidity	Volume
11:20	Dry	3 gal			
11:21	72.2	765.0	5.75		4 gal

Sample appearance: Sm. cloudy

QC samples collected at this well: ___

Lock: 3753

Remarks: Hand Bailed Apx 1 gal w/ Disp of Purging water

Signature: Mike Mooney
Review: OK

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon #72
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW7

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

Sampled with disposal bailer or other: ___
Well recharged to 80% recovery.

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

Depth of well: 24.23
Depth to water: 14.10

Calculated purge: 7gal
Actual purge: 7gal

Start purge: 12:26 Sampling time: 12:43 Sampling Date: 2-3-93

Time	Temp.	E.C.	pH	Turbidity	Volume
12:29	72.7	751 us	6.21		4
12:32	73.1	754 us	6.20		6
12:33	79.5	754 us	6.25		7

Sample appearance: clear

QC samples collected at this well: ___ Lock: 3753

Remarks: Hand Bailed well w/ Disp Bailer

Signature Mike Mooney Review OK

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon #721
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW8

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

Sampled with disposal bailer or other: ___
Well recharged to 80% recovery.

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

Depth of well: 23.19
Depth to water: 14.87

Calculated purge: 5gal
Actual purge: 5gal

Start purge: 12:19 Sampling time: 12:30 Sampling Date: 2-3-93

Time	Temp.	E.C.	pH	Turbidity	Volume
12:21	71.7	739u	5.67		3
12:22	72.4	737u	5.70		4
12:24	72.8	736u	5.73		5

Sample appearance: Sm. cloudy

QC samples collected at this well: ___ Lock: 3753

Remarks: Hand Baled well w/ Disp Bailer

Signature Mike Mooney Review OK

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW9

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

Sampled with disposal bailer or other: ___
Well recharged to 80% recovery.

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

Depth of well: 23.52
Depth to water: 17.25

Calculated purge: 4 gal
Actual purge: 4 gal

Start purge: 11:39 Sampling time: 1150 Sampling Date: 2-3-93

Time	Temp.	E.C.	pH	Turbidity	Volume
11:41	73.4	804 us	5.66		2
11:42	73.9	8.10 us	5.68		3
11:43	74.2	807 us	5.69		4

Sample appearance: Som cloudy.

QC samples collected at this well: ___

Lock: 3753

Remarks: Hand Bailed W/ Disp Bailer

Signature: Mike Mooney

Review: DK

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon #721
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW10

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

Sampled with disposal bailer or other: ____
Well recharged to 80% recovery.

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

Depth of well: 29.55
Depth to water: 15.01

Calculated purge: 10 gal
Actual purge: 10 gal

Start purge: 11:51 Sampling time: 12:09 Sampling Date: 2-3-93

Time	Temp.	E.C.	pH	Turbidity	Volume
11:55	73.1	786 us	6.10		6
11:57	73.4	790 us	6.08		8
11:58	73.8	787 us	6.08		10

Sample appearance: clear

QC samples collected at this well: ____ Lock: 3753

Remarks: Hand Bailed Well w/ Disp Bailer

Signature Mike Mooney Review DK

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW11

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

Sampled with disposal bailer or other: ____
Well recharged to 80% recovery.

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

Depth of well: 29.42
Depth to water: 17.91

Calculated purge: 7gal
Actual purge: 7gal

Start purge: 12:01 Sampling time: 12:13 Sampling Date: 2-3-93

Time	Temp.	E.C.	pH	Turbidity	Volume
12:05	72.2	747.0	5.83		4
12:06	72.8	749.0	5.80		6
12:07	73.2	743.0	5.79		7

Sample appearance: Sem. clear

QC samples collected at this well: ____ Lock: 3753

Remarks: Hand Bailed well w/ Disp Bailer

Signature: Mike Mooney Review: OK

AEGIS ENVIRONMENTAL, INC.

SAMPLING INFORMATION SHEET

Client: Beacon = 721
Site: 44 Lewelling Blvd

Project No: 92-703
Well Designation: MW1

Purging Equipment:

- X — 2" Disposable bailer
- ___ — 2" PVC bailer
- ___ — 4" PVC bailer
- X — Submersible pump
- ___ — Dedicated bailer

Sampled with disposal bailer or other: ___
Well recharged to 80% recovery.

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

Depth of well: 36.36
Depth to water: 15.48

Calculated purge: 186.01
Actual purge: 100

Start purge: 9:54 Sampling time: 10:46 Sampling Date: 2-3-93

Time	Temp.	E.C.	pH	Turbidity	Volume
10:05	75.5	206 uS	5.15		36
10:18	75.3	250. uS	6.63		66
10:37	75.3	240. uS	6.11		100

Sample appearance: clear

QC samples collected at this well: ___ Lock: 3753

Remarks: * Parameters stable at 100 Gallons Hand Bailed Total w/ Disp

Signature Mike Mooney Review JF