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FIVE YEAR DATA REVIEW REPORT
WEYERHAEUSER EVERETT EAST SITE
PARCEL 1
EVERETT, WASHINGTON

Prepared for



Weyerhaeuser

Weyerhaeuser Company

September 4, 2003

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**Five Year Data Review Report
Weyerhaeuser Everett East Site - Parcel 1**

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1 INTRODUCTION

This Five Year Data Review Report has been prepared in compliance with the Consent Decree for the Weyerhaeuser Everett East Site (Consent Decree # 972027738) entered into between the Washington State Department of Ecology (Ecology) and Weyerhaeuser Company (Weyerhaeuser). This Five Year Data Review Report is required as specified in Part XXIII of the Consent Decree (Ecology, 1997) and outlined in the Ecology-approved Confirmational Ground-Water Monitoring Plan (CMP; Dalton, Olmsted & Fuglevand, Inc., 1997).

The purpose of this report is to provide a review of monitoring data collected over the five-year period from June 1997 through March 2002 for Survey Parcels 1 and 2 (the East Site). This report provides assessment of concentration trends and compliance with established cleanup levels on a monitoring well-by-monitoring well basis for the 10 wells comprising the confirmation monitoring well network. The results of this report will be used by Weyerhaeuser and Ecology to determine the need, if any, for additional monitoring.

1.1 Site Description

The Weyerhaeuser Everett Site property is located at 515 Marine View Drive, Everett, Washington. The property consists of approximately 72 acres zoned M-2 Heavy Manufacturing by the city of Everett and located approximately 3 miles northeast of downtown Everett on the banks of the Snohomish River (Figure 1). The site is located approximately 2 miles upstream of the mouth of the Snohomish River at Port Gardner Bay in Possession Sound. The site is generally flat and shaped like a peninsula. It is bordered on the north by the State Highway 529 bridge right-of-way, on the east by the Snohomish River, on the south by the Snohomish River and city of Everett undeveloped land, and on the west by the Burlington Northern Railroad tracks.

The Everett Site property is divided into several survey parcels. For the purpose of this Consent Decree, the East Site (Survey Parcels 1 and 2) and the South End Residual Wood Storage Site (Survey Parcel 4) are referred to as the Everett Site property (Figure 2). This report focuses on the data collected from the East Site (Survey Parcels 1 and 2), which is comprised of 63 acres.

The East Site was divided into eight sub-areas for assessment and remedial investigation. Four sub-areas (Areas 7, 8, 9, and 10) were identified for remediation and groundwater monitoring (Figure 2) and will be herein referred to as the site.

The South End Residual Wood Storage Site (Survey Parcel 4) was monitored for a period of one year and the results indicated that no groundwater contamination was present at this site. Ecology determined that no further action was necessary at Survey Parcel 4 in a letter dated August 12, 1998.

1.2 Site History

Weyerhaeuser began operation in Everett in 1902. Weyerhaeuser property is comprised of the East Site and the West Site. The West Site consisted of a Kraft pulp mill from 1953 to 1992, and sawmills (Mills C and D) from 1926 to 1976. The West Site was remediated in 1994 through a Consent Decree with Ecology and is not covered in this report.

The majority of the East Site is located in the former Saw Mill B complex. Mill B activities consisted of lumber processing operations including a saw mill, planing mill, power house, wood sapstain dip tanks, end seal treatment tanks, lumber drying and storage area, diesel and gasoline storage tanks, and storage sheds for pipe, machines and motors. The East Site was built on a former estuarine tide flat with sand dredged from the river bottom, and began operation in 1902. The tide flat was filled further in 1915 and the mill operations were expanded. The mill continued to operate until closure in 1979, and the facility was dismantled in 1982.

During Mill B demolition in 1982, a fire destroyed the re-manufacturing building, powerhouse, machine shop, and other small buildings. After the fire, portions of the Mill B area were used for chip storage. In the spring of 1996, the wood chips were removed down to native site soil (dredge sand).

A summary of historic uses of the four sub-areas identified for remediation follows.

Area 7 – Former Saw Mill Area. Area 7 is the site of the former sawmill including the Mill B fire area, re-manufacturing building, transformer sites, and oiling room. This area was used for chip storage after 1984.

Area 8 – Former Treating Shed, Dip Tank, and Oil Storage Shop Area. Area 8 is located adjacent to the Snohomish River. This area included a treating shed, an aboveground sapstain/end seal dip tank, an oil storage shop, and two aboveground fuel tanks storing gasoline and diesel.

Area 9 – Former Power House, Pipe Shop, Machine Shop, and Motor Shop Area. Area 9 included the Mill B fire area, former pipe shop, motor storage building, powerhouse, machine shop, transformer sites, general storage areas, a water tower, truck scale and house, and office building.

Area 10 – Former Cut-up Plant, Crane Sheds, and Planing Mill Area. Area 10 included sapstain Dip Tank No. 3 and an aboveground tank storing diesel used to lubricate the inside of the Presto-log extruder during manufacturing operations.

1.3 Geology and Hydrogeology

The site is located within the low-lying floodplain of the Snohomish River (a former estuarine tidal flat), which is bound on the west side by steeply sloped glaciated ridges and hills reaching to 500 feet above sea level. The site is located approximately 2 miles upstream from the Snohomish River mouth at Port Gardner Bay in Possession Sound. Most of the site is underlain by dredged sand fill. In the early 1900s, the tide flat was filled using sand dredged from the river bottom. The bank of the Snohomish River is generally stabilized with a bulkhead of timber pilings along the length of Survey Parcels 1, 2, and 3 (Figure 2).

Elevations at the site ranged between approximately 8 and 12 feet above mean lower low water. Site stratigraphy from the surface to depth was as follows.

Grade Fill and Mixed Fill Unit. This unit was encountered at the surface from approximately 1 to 4 feet below ground surface (bgs) and consisted of sandy gravel, asphalt, angular pebbles and cobbles of crushed rock, wood debris, and bark. The top few inches of soil contained abundant organic and wood debris and was vegetated in many areas. The grade fill formed a dense and permeable unit at the surface. The grade fill and mixed fill unit was generally continuous across the site.

Upper Sand Unit (Dredge Fill). This unit consisted of gray-brown to black, fine to medium sand with trace coarse sand. The upper sand unit averaged 5 to 6 feet in thickness and ranged from 1 to 10 feet thick. The sand was typically uniform in texture and composition with thin lenses (less than 2 inches) of coarser or finer sand. Historical records indicate that the sand was dredged from the Snohomish River and deposited on the former estuarine tide flats from Mill B to immediately north of the South End Residual Wood Storage Site. Slight horizontal bedding was seen in most samples, confirming a hydraulic emplacement of dredge fill. Dredge sands were encountered below fill units in all test pits and soil borings.

The groundwater table was found in the upper sand at an average depth of 4 feet bgs. The presence of groundwater within portions of this unit appears to be intermittent depending on seasonal water table fluctuations. During times of low groundwater elevation, groundwater is not present in portions of this water bearing unit or in some of the on site confirmation wells completed to the bottom of this unit. Groundwater samples and results specified in this report as not sampled (NS), could not be collected and reported due to the fact that this sand unit did not contain sufficient water for analyses during these low water periods.

Upper Silt Unit. The upper silt unit was encountered in all borings penetrating the base of the upper sand or other fill material at the site. The average thickness was 8 feet. The unit consisted of stiff, low-plasticity to non-plastic gray-brown to dark brown silt with abundant organic matter (wood fragments and rootlets) in the upper layers of the unit. This unit also contained fine-sand lenses and silty sand approximately 0.1 to 0.2 feet thick.

Lower Sand Unit. The lower sand unit consisted of fine to coarse sand with trace gravel and wood debris. This unit also contained silty and clayey lenses. The lower sand unit was encountered in the deep monitoring well borings (MW-100D, MW-103D, MW-105D, and MW-108D) and the borings on the South End Residual Wood Storage Site, which were advanced below the base of the upper-silt unit. This unit was coarser and denser than the upper sand unit.

Wood Chip, Sawdust, and/or Lime Product. This unit was found on Survey Parcels 1 and 4. On Survey Parcel 1, the wood chips and sawdust were located in Areas 7 and 10.

Three hydrostratigraphic units were identified during site investigations: a shallow unconfined water bearing zone (Grade Fill and Upper Sand Units), a semi-confining unit (Upper Silt Unit), and a semi-confined aquifer (Lower Sand Unit).

Groundwater elevation data and maps indicating groundwater flow directions and water-level fluctuations are discussed and presented in the quarterly and annual monitoring reports for this project. Groundwater was approximately 4 feet bgs in most areas of the site. Groundwater fluctuates an average of 2.5 feet between seasonal and maximum elevations. A tidal study was completed for portions of the adjacent Survey Parcel 3 in 1992, which showed that groundwater elevations in the upper sand water bearing zone fluctuated less than 0.3 feet in wells adjacent to the river, and groundwater elevations fluctuated 4 to 6 feet in the lower sand aquifer. The Snohomish River water level fluctuates an average of 7 feet over a tidal cycle.

Hydraulic conductivities for the upper sand, silt, and lower sand were estimated with slug, pump, and laboratory permeability tests on undisturbed core samples. The horizontal groundwater flow direction in the upper sand zone is toward the east to northeast and has an average linear velocity of 1.8 feet per day. The upper sand water bearing zone hydraulic conductivity was estimated at 0.05 centimeters per second. Horizontal groundwater flow in the lower sand aquifer is tidally influenced and generally moves toward the east at an average linear velocity of 0.2 feet per day. Downward flow between water bearing zones is hydraulically impeded by the upper silt (hydraulic conductivity of 2.2×10^{-7} centimeters per second); however, this unit is saturated and does transmit water to the lower sand aquifer. Vertical groundwater flow velocity was estimated at 3.1×10^{-4} feet per day.

1.4 Previous Investigations

Numerous soil and groundwater investigations have been conducted in association with the site prior to Ecology and Weyerhaeuser entering into the Consent Decree in 1997. A detailed summary of the previous investigations is presented in the Cleanup Action Plan (CAP) included as Exhibit C of the Consent Decree. Based on the results of the previous investigations, contaminants of concern (COCs) and cleanup action levels were identified for the site and are discussed in Section 2 of this report.

2 DECISION DOCUMENTS

2.1 Consent Decree

The Consent Decree entered into between Ecology and Weyerhaeuser for the Everett East Site in April 1997 outlined specific remedial actions necessary to protect public health and the environment. Additionally, COCs and cleanup levels for soil and groundwater were established for each of the COCs. The CAP is presented as Exhibit C of the Consent Decree. The CAP details the remedial activities to be performed at the site. The Consent Decree and the CAP state that confirmational groundwater monitoring will be required per the Ecology-approved CMP submitted by Dalton, Olmsted and Fuglevand, Inc., and is attached to the Consent Decree as Exhibit I.

The COCs identified in the Consent Decree for soil and groundwater at the site include total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), carcinogenic polycyclic aromatic hydrocarbons (cPAHs), and pentachlorophenol (PCP). The Ecology Model Toxics Control Act (MTCA) Method C cleanup levels are identified in the Consent Decree as the cleanup levels for the site and are listed below.

Soil Cleanup Levels

COC	Level
TPH	2,500 mg/kg
PCP	280 mg/kg
PCBs	17 mg/kg
cPAHs	20 mg/kg
mg/kg - milligrams per kilogram.	

Groundwater Cleanup Levels

COC	Level
TPH	10 mg/L
PCP	7.29 µg/L
PCBs	0.114 µg/L
cPAHs	0.120 µg/L
mg/L - milligrams per liter. µg/L - micrograms per liter.	

The Consent Decree provides the basis for confirmational monitoring (Section XXIII) and the basis for decisions from this five-year review of monitoring data. The Consent Decree states that if, at the end of the five-year period for the site monitoring wells, monitoring data indicate that the conditions of the Consent Decree have been met at the points of compliance for the soil cleanup and cleanup action levels as set forth in Section VI, and the groundwater cleanup levels are below levels set forth in Section VI during the last eight consecutive groundwater sampling events as defined in the CMP and no upward concentrations trends are evident, then groundwater monitoring can cease, monitoring wells be abandoned, and Ecology issue a written declaration that groundwater monitoring has been completed at the site. Furthermore, if the conditions are not met, then groundwater monitoring will continue until at least eight consecutive quarters of groundwater sampling data are obtained with concentrations below cleanup levels and no upward concentration trends are evident.

In addition to the groundwater constituents listed above, total arsenic was analyzed in groundwater samples from select monitoring wells. Total arsenic is not part of the Consent Decree; therefore, cleanup levels for arsenic site were not established for the site. The CMP states that total arsenic is being monitored for assessment purposes only.

2.2 Cleanup Action Plan

The CAP is an enforceable part of the Consent Decree that outlines the steps and procedures for implementing environmental cleanup of the site. The CAP summarizes the results of environmental studies and site characterization data. Remediation areas and COCs for each area are also specified.

The CAP summarizes three alternative cleanup actions and presents the preferred remedial alternative. The preferred alternative consisted of excavating soils to the soil cleanup standards, disposing of soils in an approved landfill, backfilling the excavated areas with clean fill material, and monitoring the groundwater to confirm long-term effectiveness of the cleanup.

The remedial technology selected in the CAP consisted of excavation of soils in each of the identified remediation areas to the soil cleanup levels or to the surface of the water table; disposal of soils in an approved landfill; covering the excavated areas with clean fill; and confirmational groundwater sampling as specified in the CMP. Additionally, Ecology required Weyerhaeuser to record a restrictive covenant for the affected areas on the site that remain above the soil cleanup levels, and prevent the withdrawal of groundwater from the Water Table Zone for domestic purposes.

A summary of the remedial actions conducted in accordance with the CAP is presented in Section 3 of this report.

2.3 Confirmational Groundwater Monitoring Plan

The CMP was prepared as required by the CAP. The document provides the details of groundwater monitoring to be completed at the site. This document outlines the requirements of the five-year review and procedures to evaluate the data collected for attainment of cleanup levels for the groundwater COCs. The CMP closely follows published Ecology guidance (Ecology 1992; 1993; 1995) for this purpose.

The *Attainment Evaluation Procedures for Groundwater Contaminants of Concern* outlined in the CMP for the evaluation of the groundwater data at the site is presented below.

Step 1. Perform a qualitative analysis to determine if concentrations of the COCs are changing over time. To achieve this, concentration data are plotted against time and evaluated for upward or downward trends apparent in the data. The trends will be validated and quantified using regression analyses. The purpose of Step 1 is to assess whether concentration stability has been achieved.

Step 2. Compare groundwater quality data to site cleanup levels for each monitoring well at the site.

Depending upon the results of the data evaluation described above, two scenarios are possible as stated in the CMP:

Scenario 1. If the last eight quarterly sample results are below cleanup levels and an upward trend is not evident in the data (based on Step 1), cleanup levels will have been achieved, additional monitoring will not be required, and the monitoring wells will be abandoned with Ecology approval.

Scenario 2. If one or more of the last eight sample concentrations are confirmed to be above cleanup levels, additional statistical analysis, appropriate to the data type (e.g., distribution, number of non-detects), will be performed. Guidance published by Ecology (Ecology 1992, 1993, 1995) will be used. A confirmed sample analysis is one in which an analyte, upon resampling, still exceeds the cleanup level. Sampling of monitoring wells that meet cleanup levels will not be required, and these monitoring wells will be abandoned. If the resample analysis still exceeds the cleanup level, then the exceedance will be confirmed and groundwater monitoring of that well will continue.

3 REMEDIAL ACTIONS

Soil and groundwater impact was encountered during the initial environmental investigations that occurred at the site. Numerous soil and groundwater samples were collected to characterize the extent of impact to the site by the COCs. The following remedial actions have occurred at the site in accordance with the Consent Decree:

Soil. In April 1997, Dalton, Olmstead & Fuglevand, Inc. supervised the excavation of approximately 4,500 cubic yards of soil from Areas 7 through 10 as specified in the Consent Decree Section VI. Twenty specific areas (Remediation Areas 7-1, 7-2A, 7-2B, 7-2C, 8-1, 8-2, 8-3A, 8-3B, 8-4, 9-1, 10-1, 10-2, 10-3A, 10-3B, 10-3C, 10-4A, 10-4B, 10-4C, 10-4D, and TP-16) were identified during previous investigation activities as contained impacted soils above cleanup levels. The excavated material was disposed of off site as specified in the East Site – Soil Remediation Completion Report dated June 1997.

Groundwater. No active remediation is occurring to site groundwater. The CMP details the ongoing monitoring program that is being conducted at the site and is described in Section 4 of this report.

4 GROUNDWATER QUALITY EVALUATION

Quarterly groundwater sampling has been performed at the site per the CMP for a period of five years. Quarterly and annual monitoring reports have been submitted to Ecology during the five-year period. Groundwater samples were collected using the U.S. Environmental Protection Agency (EPA)-approved low flow purging and sampling protocol as specified in the CMP. Prior to groundwater sample collection, groundwater was purged at a rate of between 100 and 500 milliliters per minute and field parameters including temperature, pH, specific conductance, dissolved oxygen, and oxidation-reduction potential were measured every five minutes. Upon stabilization of field parameters per the EPA low flow purging and sampling protocol, groundwater samples were collected in laboratory supplied containers and submitted to Weyerhaeuser Analytical and Testing Services Laboratory for analyses. Field water quality parameters are presented in the quarterly and annual monitoring reports and not presented in this report. Figure 2 present the locations of all site monitoring wells.

4.1 Laboratory Parameters and Analytical Methods

Analytical requirements and frequency were identified in the CMP. The site confirmation wells are MW-100S through MW-105S, MW-100D, MW-103D, MW-105D, and MW-RA-8-3. The background wells are MW-107S(2), MW-108S, MW-109S, and MW-108D. The background wells were abandoned in 2000. The following list summarizes the analytical methodology and frequency of groundwater sampling during the five-year period.

Site Confirmation Wells

- TPH as diesel and oil (Ecology Method NWTPH-Dx) – quarterly for five years
- PCP (EPA Method 8270C) – quarterly for five years
- cPAHs (EPA Method 8270C) – quarterly for the first year and annually for the remaining four years
- Total arsenic (EPA Method 7000 series) – quarterly for the first year and annually for the remaining four years

- PCBs (EPA Method 8082) – quarterly for the first year and annually (in monitoring wells MW-102S through MW-105S) for the remaining four years

Background Wells

- TPH as diesel and oil – quarterly for the first year and annually for the remaining four years
- PCP – quarterly for the first year and annually for the remaining four years
- cPAHs – quarterly for the first year and annually for the remaining four years
- Total arsenic – quarterly for the first year and annually for the remaining four years
- PCBs – quarterly for the first year and discontinue

4.1.1 Field and Laboratory Quality Assurance/Quality Control

Some of the groundwater samples could not be collected from some of the wells during each required event because of an absence of water in the wells and shallow water bearing zone due to the low groundwater table during the dry season. The monitoring requirements for each analytical method are presented in Tables 1 through 5. Laboratory quality assurance/quality control data and data validation discussions are presented in the quarterly and annual monitoring reports. Duplicate samples were collected during each sampling event and presented in the quarterly and annual monitoring reports. For the purpose of this report, no duplicate sample results are presented.

4.2 Well-by-Well Results and Discussion

As required by the CMP, the following sections summarize the results of the groundwater sampling and analytical program on a well-by-well basis. The cleanup levels referenced in the following subsections are listed in Section 2 of this report. A complete summary of the results for TPH as diesel and oil, PCP, cPAHs, PCBs, and arsenic are presented in Tables 1 through 5, respectively. Regression analyses have been conducted on TPH and PCP results for monitoring wells with sufficient detectable concentrations (Appendix A). There were no exceedances of TPH or PCBs above the cleanup levels in any of the samples collected during the reporting period. It should be noted that many of the results discussed in the following sections are referred to as below the laboratory reporting limit. The following list presents the range of laboratory reporting limits for each constituent compared to the cleanup levels specified in the Consent Decree.

Reporting Limits versus Cleanup Levels for Groundwater

COC	Reporting Limit Range	Cleanup Level
TPH as Diesel	0.046 mg/L to 0.085 mg/L	10 mg/L
TPH as Oil	0.18 mg/L to 0.28 mg/L	10 mg/L
PCP	0.5 µg/L to 6 µg/L ^a	7.29 µg/L
PCBs	0.035 µg/L to 0.08 µg/L ^b	0.114 µg/L
cPAHs	0.0008 µg/L to 0.04 µg/L ^c	0.120 µg/L
^a The reporting limit for the 9/25/2001 sample from MW-102S was 13 µg/L. ^b The reporting limit for samples analyzed on 6/15/99 ranged from 0.4 to 0.8 µg/L. ^c The reporting limits are based on individual cPAHs. Samples collected on 9/25/97 and 9/26/97 had reporting limits that ranged from 0.004 to 0.1 µg/L.		

4.2.1 Background Wells

The background wells MW-107S(2), MW-108D, MW-108S, and MW-109S were sampled in accordance with the requirement of the Consent Decree, although, due to redevelopment of a portion of the site, the wells were abandoned in 2000 with the approval of Ecology in a letter dated May 10, 2000. The approval letter is included as Appendix B. The analytical results for the sampling events prior to 2000 are presented in Tables 1 through 5. The well-by-well discussion of these wells will not be performed, because there were no COCs that exceeded cleanup levels with the exception of the first quarter total cPAH results in well MW-108S. A resample of this well showed that this result may have been erroneous due to suspended particulates in the sample as discussed in a letter from EMCON to Ecology dated September 18, 1998.

4.2.2 Monitoring Well MW-100D

Concentrations of TPH as diesel have been detected in groundwater samples collected from monitoring well MW-100D since June 1999 but remain well below cleanup levels. TPH as oil has been detected above the laboratory reporting limit in only one sample since June 1997 and is well below the cleanup level. Regression analyses of TPH as diesel and oil are presented in Appendix A. The results of the analyses indicate an increasing trend with respect to TPH as diesel but remain well below the cleanup level (maximum concentration detected is approximately 0.25 mg/L, approximately 40 times lower than the cleanup level).

No concentrations have been detected above the laboratory reporting limit for PCBs and PCP. Two groundwater samples had detectable concentrations of cPAHs (in both cases benzo[k]fluoranthene), but are well below the cleanup level (approximately 15 times lower than the cleanup levels).

Arsenic has been detected in groundwater samples during each sampling event except for the June 1999 event. Concentrations range from 2 to 16 µg/L.

4.2.3 Monitoring Well MW-100S

Concentrations of TPH as diesel have been detected in groundwater samples collected from monitoring well MW-100S periodically throughout the reporting period, but are well below the cleanup level (below the laboratory reporting limit to a maximum of 0.27 mg/L). TPH as oil was not detected above the laboratory reporting limit in any samples. Regression analyses of TPH as diesel and oil are presented in Appendix A. The results of the analyses indicate decreasing or stable trends well below the cleanup levels for TPH as both diesel and oil.

No concentrations have been detected above the laboratory reporting limit for PCBs and cPAHs. One groundwater sample had a detectable concentration of PCP (2 µg/L) in September 1998, but is below cleanup level.

Arsenic has been detected in groundwater samples during each sampling event except for the December 1997 event. Concentrations range from 4 to 9 µg/L.

4.2.4 Monitoring Well MW-101S

Concentrations of TPH as diesel have been detected in groundwater samples collected from monitoring well MW-101S throughout the reporting period (with the exception of the March 1999 event, which was below the laboratory reporting limit), but the concentrations have been well below the cleanup level (ranged from 0.051 to 0.69 mg/L). TPH as oil was detected above the laboratory reporting limit in samples collected in June and December 1997 and March and June 1998, but was well below the cleanup level. The remaining results were below the laboratory reporting limit. Regression analyses of TPH as diesel and oil are presented in Appendix A. The results of the analyses indicate decreasing trends well below the cleanup levels for TPH as both diesel and oil.

No concentrations have been detected above the laboratory reporting limit for PCBs or cPAHs. The groundwater sample collected in June 1997 had a PCP concentration of 120 µg/L, which exceeded the cleanup level. This sample result was confirmed in July 1997. No PCP results from samples collected from this well have exceeded the cleanup level since July 1997.

Arsenic has been detected in groundwater samples during each sampling event. Concentrations range from 6 to 24 µg/L.

4.2.5 Monitoring Well MW-102S

Concentrations of TPH as diesel have been detected in groundwater samples collected from monitoring well MW-102S periodically throughout the reporting period, but the concentrations have been well below the cleanup level (below the laboratory reporting limit to a maximum of 0.19 mg/L). TPH as oil was not detected above the laboratory reporting limit in any samples with the exception of the June 1998 event (0.082 mg/L).

Regression analyses of TPH as diesel and oil are presented in Appendix A. The results of the analyses indicate decreasing or stable trends well below the cleanup levels for TPH as both diesel and oil.

No concentrations have been detected above the laboratory reporting limit for PCP and PCBs. The results of cPAH analyses indicated two events had detectable concentrations of cPAHs in groundwater. The June 2000 event had a total cPAH concentration of 0.01 $\mu\text{g/L}$ (below cleanup level), and the September 2001 had a total cPAH concentration of 0.544 $\mu\text{g/L}$, which is above the cleanup level. Total cPAHs have been analyzed during six sampling events from this confirmation well, with one result above the cleanup level. A minimum of three additional sampling events with total cPAHs below the laboratory reporting limit will be required to utilize a statistical confidence interval approach to adequately show that the sample exceedance is not representative of the cPAH concentration at this location.

Arsenic has been detected in groundwater samples during each sampling event except for the June 2001 event. Concentrations range from 5 to 14 $\mu\text{g/L}$.

4.2.6 Monitoring Well MW-103D

Concentrations of TPH as diesel have been detected in groundwater samples collected from monitoring well MW-103D throughout the reporting period (with the exception of the December 1998 event, which was below the laboratory reporting limit), but the concentrations have been well below the cleanup level (ranged from 0.037 to 0.69 mg/L). TPH as oil has been detected above the laboratory reporting limit periodically throughout the reporting period, but is well below the cleanup level (below the laboratory reporting limit to a maximum of 0.38 mg/L). Regression analyses of TPH as diesel and oil are presented in Appendix A. The results of the analyses indicate slightly increasing trends for TPH as both diesel and oil but remain approximately 15 times lower than cleanup levels.

No concentrations have been detected above the laboratory reporting limit for PCP and PCBs. Concentrations of total cPAHs were detected above the laboratory reporting limit in June 1997 and September 2001. The September 2001 sample contained a total cPAH concentration of 0.1225 $\mu\text{g/L}$, which is slightly above the cleanup level. Total cPAHs have been analyzed during nine sampling events from this confirmation well, with one result above the cleanup level. A calculation was performed using a confidence interval approach, as specified in MTCA 173-340-720. The upper one-sided 95 percent confidence limit on the true mean groundwater concentration is 0.026 $\mu\text{g/L}$, which is less than the cleanup level.

Arsenic has been detected in groundwater samples during each sampling event with the exception of the June 1999 sampling event. Concentrations range from 1 to 8 $\mu\text{g/L}$.

4.2.7 Monitoring Well MW-103S

Concentrations of TPH as diesel and oil have been detected in groundwater samples collected from monitoring well MW-103S throughout the reporting period (with the exception of the December 1998 event, which was below the laboratory reporting limit), but the concentrations have been well below the cleanup levels. Due to the lack of groundwater in the shallow water bearing zone in the vicinity of this well and the available volume of water present in the well during most of the sampling events, samples could not be collected during 14 of the 20 monitoring quarters. Based on the available data, regression analyses of TPH as diesel and oil are presented in Appendix A. The results of the analyses indicate slightly increasing trends for TPH as diesel and oil, but well below the cleanup levels (maximum concentration of diesel [1.5 mg/L] and oil [0.44 mg/L]).

No concentrations have been detected above the laboratory reporting limit for PCP, cPAHs, and PCBs.

Arsenic was detected in a groundwater sample during one sampling event at a concentration of 1 µg/L.

4.2.8 Monitoring Well MW-104S

Concentrations of TPH as diesel have been detected above the laboratory reporting limit in groundwater samples collected from monitoring well MW-104S three times during the reporting period, but the concentrations have been well below the cleanup levels. No concentrations of TPH as oil above laboratory reporting limits have been detected in samples from the well. Due to the lack of groundwater in the shallow water bearing zone in the vicinity of this well and the available volume of water present in the well during most of the sampling events, samples could not be collected during 14 of the 20 monitoring quarters. Based on the available data, a regression analysis of TPH as diesel is presented in Appendix A. The results of the analysis indicate stable trends for TPH as diesel and oil, well below the cleanup levels (maximum concentration of diesel – 0.13 mg/L).

No concentrations have been detected above the laboratory reporting limit for PCP, cPAHs, or PCBs.

Arsenic was analyzed during one sampling event (June 1999) and had a concentration of 25,000 µg/L. The June 1999 sampling event was the only event in which sufficient water was available during sample collection; therefore, the arsenic concentration in June 1999 cannot be confirmed.

4.2.9 Monitoring Well MW-105D

Concentrations of TPH as diesel have been detected in groundwater samples collected from monitoring well MW-105D throughout the reporting period (with the exception of the June 1999, event which was below the laboratory reporting limit), but the concentrations have been well below the cleanup level (ranged from 0.030 to 0.19 mg/L). TPH as oil was detected above the laboratory reporting limit one time during the reporting period, but was well below the cleanup level. Regression analyses of TPH as diesel and oil are presented in Appendix A. The results of the analyses indicate a slightly decreasing or stable trend for TPH as both diesel and oil, and well below the cleanup levels.

No concentrations have been detected above the laboratory reporting limit for PCP and PCBs. Concentrations of total cPAHs were detected above the laboratory reporting limit in June 1997, June 1999, and September 2001. All detectable total cPAH results were below the cleanup level.

Arsenic was detected in groundwater samples during the September and December 1997 sampling events with a concentration of 2 µg/L on both occasions.

4.2.10 Monitoring Well MW-105S

Concentrations of TPH as diesel have been detected in groundwater samples collected from monitoring well MW-105S periodically throughout the reporting period, but the concentrations have been well below the cleanup level (below the laboratory reporting limit to a maximum of 0.18 mg/L). TPH as oil has been detected above the reporting limit during three sampling events, but was well below the cleanup level (maximum concentration: 0.22 mg/L). Regression analyses of TPH as diesel and oil are presented in Appendix A. The results of the analyses indicate increasing trends, but well below the cleanup levels for both TPH as diesel and oil (approximately 45 times lower than the cleanup level).

No concentrations have been detected above the laboratory reporting limit for PCP and PCBs. Concentrations of total cPAHs were detected above the laboratory reporting limit in June 1997, December 1997, June 1998, and June 2000. The June 2000 sample contained a total cPAH concentration of 0.369 µg/L, which is above the cleanup level. Total cPAHs have been analyzed during seven sampling events from this confirmation well, with one result above the cleanup level. A calculation was performed using a confidence interval approach, as specified in MTCA 173-340-720. The upper one-sided 95 percent confidence limit on the true mean groundwater concentration is 0.102 µg/L, which is less than the cleanup level.

Arsenic has been detected in groundwater samples during each sampling event. Concentrations range from 2 to 9 µg/L.

4.2.11 Monitoring Well MW-RA-8-3

Concentrations of TPH as diesel have been detected in groundwater samples collected from monitoring well MW-RA-8-3 throughout the reporting period, but the concentrations have been well below the cleanup level (ranged from 0.15 to 1.5 mg/L). TPH as oil was detected above the laboratory reporting limit periodically throughout the reporting period, but was well below the cleanup level (below the laboratory reporting limit to a maximum of 0.70 mg/L). Regression analyses of TPH as diesel and oil are presented in Appendix A. The results of the analyses indicate decreasing trends for TPH as both diesel and oil, well below the cleanup levels.

PCP has been present in concentrations above the cleanup levels in 16 of the 20 quarterly monitoring events. The range of concentrations is below the laboratory reporting limit to 1,000 µg/L. A regression analysis of PCP is presented in Appendix A. The results of the analysis indicate a slightly decreasing trend with the last two quarterly events below the cleanup level.

No concentrations have been detected above the laboratory reporting limit for PCBs. Concentrations of total cPAHs were detected above the laboratory reporting limit in September 2001. The September 2001 sample contained a total cPAH concentration of 0.1927 µg/L, which is slightly above the cleanup level. Total cPAHs have been analyzed during nine sampling events from this confirmation well, with one result above the cleanup level. A calculation was performed using a confidence interval approach, as specified in MTCA 173-340-720. The upper one-sided 95 percent confidence limit on the true mean groundwater concentration is 0.042 µg/L, which is less than the cleanup level.

Arsenic has been detected in groundwater samples during each sampling event with the exception of the June 2001 sampling event. Concentrations range from 3 to 15 µg/L.

5 SUMMARY OF GROUNDWATER DATA

Based on the analytical results and the monitoring well-by-monitoring well comparison of the data, TPH concentrations in all the site wells have not exceeded cleanup levels. The highest concentration of TPH as diesel detected during the five-year sampling period was 1.5 mg/L, which is below the established cleanup level of 10 mg/L. The highest concentration of TPH as oil detected during the five year period was 0.7 mg/L, which is well below the established cleanup level of 10 mg/L. The regression analyses indicated that TPH concentrations in a majority of the wells were either stable or decreasing. Some of the wells indicated slightly increasing trends, but because the concentrations are an order of magnitude or lower than the cleanup levels and there is no continuing source of contamination, the probability of increased impact to groundwater by petroleum hydrocarbons is minimal.

The results of PCP analyses conducted from samples collected during the five-year period indicate that 2 of the 10 confirmation wells have had PCP concentrations in groundwater exceeding the established cleanup level of 7.29 µg/L. Confirmation well MW-101S had concentrations of PCP that exceeded the cleanup level in groundwater samples collected during the June 1997 event; this was confirmed with a second sample collected July 1997. Since that time, no PCP concentrations have been detected in any samples collected from MW-101S over a total of nine sampling events. Confirmation well MW-RA-8-3 has had PCP concentrations exceeding the cleanup level in groundwater samples collected throughout the five-year period, with the exception of December 1998, June 2000, and the two most recent sampling events in December 2001 and March 2002. A regression analysis of these data indicates that there is a decreasing trend in the concentration of PCP in groundwater at well MW-RA-8-3, although a minimum of six additional sampling events are required per the CMP.

The results of the PCB analyses of groundwater samples collected from the confirmation wells indicate that there are no detectable concentrations of PCB compounds above laboratory reporting limits in any of the wells at the site at anytime during the past five years.

The results of cPAH analyses on groundwater samples collected from the confirmation wells over the five-year period appear to show some inconsistency. In 6 of 10 confirmation wells, the total cPAH concentrations were well below the cleanup level of 0.12 µg/L. In an additional three wells (MW-102S, MW-103D, and MW-RA-8-3), there was an exceedance of the cleanup level of total cPAHs during one of the sampling events. However, all results from each of the three wells were evaluated using a statistical confidence interval approach. The results showed that there is a greater than 95-percent

likelihood that the true concentration is below the cleanup standard, and that the one result from each well is anomalous; therefore, the groundwater from these wells is not considered impacted with cPAHs. In one additional well (MW-102S), the total cPAH concentration was exceeded once out of six events. A minimum of three additional sampling events with non-detectable results are necessary to statistically show that this one sample result was anomalous (Ecology, 1992, 1993, and 1995).

The four background wells, MW-107S(2), MW-108D, MW-108S, and MW-109S, were abandoned upon Ecology approval in 2000 due to redevelopment of a portion of the site. Previous results indicated that there were no COCs with concentrations exceeding cleanup levels with the exception of one cPAH result that was not confirmed by resampling.

6 RECOMMENDATIONS

The Consent Decree states that following the completion of eight consecutive quarters of sampling with analytical results below the specified cleanup levels, monitoring can cease and wells can be abandoned. Groundwater samples were collected during periods of low tide to obtain representative samples of the water bearing zone and not the river water influx at higher tide. Due to the nature of the shallow water bearing zone at the site, it has not been possible to collect groundwater samples from each of the confirmation wells during each quarter. The shallow confirmation wells are completed through the upper sand unit to the top of the upper silt unit; therefore, all available groundwater from this unit is accessible for sampling. However, in many instances the groundwater elevation was not sufficient to obtain the necessary sample volume. An attempt was made to collect samples during each required sampling event. Since samples were collected when groundwater was present in the water bearing zone, the requirement of eight consecutive sampling events was not technically practicable, and the data collected to date is sufficient to make the following recommendations. Based on the Attainment Evaluation Procedures for Groundwater Contaminants of Concern in the CMP, the following recommendations are made for the continued monitoring at the site on a well-by-well basis:

MW-100D. Abandon well. No COCs have exceeded cleanup levels during the five-year period. The well was sampled during all 20 quarterly sampling events. The slightly increasing trend in TPH as diesel is well below the cleanup level (maximum concentration is approximately 40 times lower than the cleanup level).

MW-100S. Abandon well. No COCs have exceeded cleanup levels during the five-year period. The well was sampled during 15 of the 20 quarterly sampling events.

MW-101S. Abandon well. No COCs, other than PCP, have exceeded cleanup levels during the five-year period. The initial quarter sampling event indicated that PCP exceeded the cleanup level in groundwater. All subsequent sampling events (nine total) were below cleanup level for PCP. The well was sampled during 10 of the 20 quarterly sampling events.

MW-102S. Continue monitoring for cPAHs only. No COCs, other than cPAHs, have exceeded cleanup levels during the five-year period. The groundwater sample collected during the September 2001 sampling event contained a total cPAH concentration exceeding the cleanup level. This was the only exceedance. The well will be sampled for a minimum of three additional events to statistically show that the September 2001

results was anomalous. The well was sampled during 13 of the 20 quarterly sampling events (6 out of 9 times for cPAHs).

MW-103D. Abandon well. No COCs, other than cPAHs, have exceeded cleanup levels during the five-year period. The groundwater sample collected during the September 2001 sampling event contained a total cPAH concentration exceeding the cleanup level. This was the only exceedance. As discussed in Section 4, statistics showed that sufficient data has been collected from this well to show that the exceedance was anomalous and that groundwater in this well is not impacted with cPAHs. The well was sampled during all 20 quarterly sampling events (9 times for cPAHs). The slightly increasing trends in TPH as diesel and oil are well below the cleanup level (maximum concentration is approximately 15 times lower than the cleanup level).

MW-103S. Abandon well. No COCs have exceeded cleanup levels during the five-year period. The well was sampled during 6 of 20 quarterly sampling events. During most sampling events there was not sufficient water in the well to collect a sample. The slightly increasing trend in TPH as diesel and oil is well below the cleanup level (maximum concentration is approximately seven times lower than the cleanup level). Although the well has only been sampled six times during the reporting period, the events were spread out over the five years during different times of the year. Because there have been no exceedances and the concentrations are well below cleanup levels, it is not practical to continue monitoring this well.

MW-104S. Abandon well. No COCs have exceeded cleanup levels during the five-year period. The well was sampled during 6 of 20 quarterly sampling events. During most sampling events there was not sufficient water in the well to collect a sample. Although the well has only been sampled six times during the reporting period, the events were spread out over the five years during different times of the year. Because there have been no exceedances and the concentrations are well below cleanup levels, it is not practical to continue monitoring this well.

MW-105D. Abandon well. No COCs have exceeded cleanup levels during the five-year period. The well was sampled during all 20 quarterly sampling events.

MW-105S. Abandon well. No COCs, other than cPAHs, have exceeded cleanup levels during the five-year period. The groundwater sample collected during the June 2000 sampling event contained a total cPAH concentration exceeding the cleanup level. This was the only exceedance. As discussed in Section 4, statistics showed that sufficient data has been collected from this well to show that the exceedance was anomalous and that groundwater in this well is not impacted with cPAHs. The well was sampled during 11 of the 20 quarterly sampling events (7 out of 8 times for cPAHs).

MW-RA-8-3. Continue monitoring for PCP only. PCP has exceeded the cleanup level in groundwater samples from this well. Although the two most recent events have indicated PCP concentrations below the cleanup level, further sampling is required to meet the requirements of the Consent Decree.

The groundwater sample collected during the September 2001 sampling event contained a total cPAH concentration exceeding the cleanup level. This was the only exceedance. As discussed in Section 4, statistics showed that sufficient data has been collected from this well to demonstrate that the exceedance was anomalous and that groundwater in this well is not impacted with cPAHs. The well was sampled during all 20 quarterly sampling events (9 times for cPAHs).

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LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

TABLES

Table 1
Compliance Monitoring Results
Total Petroleum Hydrocarbons in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Sample Date	Monitoring Requirement	TPH as diesel	TPH as motor oil
MW-100D	6/19/1997	Q	<0.080	<0.20
MW-100D	9/26/1997	Q	<0.079	<0.20
MW-100D	12/4/1997	Q	<0.082	<0.20
MW-100D	3/5/1998	Q	<0.080	<0.20
MW-100D	6/18/1998	Q	<0.078	<0.20
MW-100D	9/28/1998	Q	<0.08	<0.20
MW-100D	12/10/1998	Q	<0.08	<0.2
MW-100D	3/24/1999	Q	<0.08	<0.20
MW-100D	6/15/1999	Q	0.083	<0.19
MW-100D	8/24/1999	Q	0.120	<0.19
MW-100D	11/3/1999	Q	0.097	<0.19
MW-100D	3/22/2000	Q	0.089	<0.2
MW-100D	6/16/2000	Q	0.120	0.220
MW-100D	9/14/2000	Q	<0.082	<0.2
MW-100D	12/13/2000	Q	<0.080	<0.21
MW-100D	3/13/2001	Q	<0.080	<0.2
MW-100D	6/21/2001	Q	0.140	<0.2
MW-100D	9/25/2001	Q	0.160	<0.2
MW-100D	12/12/2001	Q	0.250	<0.18
MW-100D	3/29/2002	Q	0.250	<0.2
MW-100S	6/19/1997	Q	<0.077	<0.19
MW-100S	9/26/1997	Q	<0.077	<0.19
MW-100S	12/4/1997	Q	<0.082	<0.20
MW-100S	3/5/1998	Q	<0.080	<0.20
MW-100S	6/18/1998	Q	0.270	<0.20
MW-100S	9/28/1998	Q	<0.08	<0.20
MW-100S	12/10/1998	Q	<0.08	<0.20
MW-100S	3/24/1999	Q	<0.08	<0.20
MW-100S	6/15/1999	Q	<0.078	<0.2
MW-100S	8/24/1999	Q	NS	NS
MW-100S	11/3/1999	Q	NS	NS
MW-100S	3/22/2000	Q	<0.08	<0.2
MW-100S	6/16/2000	Q	<0.08	<0.20
MW-100S	9/14/2000	Q	NS	NS
MW-100S	12/13/2000	Q	<0.084	<0.2
MW-100S	3/13/2001	Q	<0.083	<0.21
MW-100S	6/21/2001	Q	NS	NS
MW-100S	9/25/2001	Q	NS	NS
MW-100S	12/12/2001	Q	<0.046	<0.18
MW-100S	3/29/2002	Q	0.067	<0.2
MW-101S	6/19/1997	Q	0.69	0.28
MW-101S	9/25/1997	Q	0.46	<0.20
MW-101S	12/4/1997	Q	0.46	0.26

All results in milligrams per liter (mg/L).
Q = quarterly compliance sample.
A = annual compliance sample.
TPH = total petroleum hydrocarbons.
NS = not sampled.
< = not detected at indicated reporting limit.

Table 1
Compliance Monitoring Results
Total Petroleum Hydrocarbons in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Sample Date	Monitoring Requirement	TPH as diesel	TPH as motor oil
MW-101S	3/5/1998	Q	0.12	0.20
MW-101S	6/18/1998	Q	0.051	0.190
MW-101S	9/28/1998	Q	NS	NS
MW-101S	12/10/1998	Q	0.120	<0.20
MW-101S	3/24/1999	Q	<0.080	<0.20
MW-101S	6/15/1999	Q	0.110	<0.2
MW-101S	8/24/1999	Q	NS	NS
MW-101S	11/3/1999	Q	NS	NS
MW-101S	3/22/2000	Q	NS	NS
MW-101S	6/16/2000	Q	NS	NS
MW-101S	9/14/2000	Q	NS	NS
MW-101S	12/13/2000	Q	NS	NS
MW-101S	3/13/2001	Q	NS	NS
MW-101S	6/21/2001	Q	NS	NS
MW-101S	9/25/2001	Q	NS	NS
MW-101S	12/12/2001	Q	0.180	<0.18
MW-101S	3/29/2002	Q	0.270	0.2
MW-102S	6/19/1997	Q	NS	NS
MW-102S	9/26/1997	Q	NS	NS
MW-102S	12/3/1997	Q	<0.082	<0.20
MW-102S	3/5/1998	Q	<0.080	<0.20
MW-102S	6/18/1998	Q	0.190	0.082
MW-102S	9/28/1998	Q	NS	NS
MW-102S	12/10/1998	Q	<0.08	<0.20
MW-102S	3/24/1999	Q	<0.08	<0.20
MW-102S	6/15/1999	Q	NS	NS
MW-102S	8/24/1999	Q	NS	NS
MW-102S	11/3/1999	Q	NS	NS
MW-102S	3/22/2000	Q	NS	NS
MW-102S	6/16/2000	Q	<0.08	<0.20
MW-102S	9/14/2000	Q	<0.077	<0.19
MW-102S	12/13/2000	Q	<0.080	<0.2
MW-102S	3/13/2001	Q	<0.078	<0.19
MW-102S	6/21/2001	Q	<0.080	<0.2
MW-102S	9/25/2001	Q	0.051	<0.2
MW-102S	12/12/2001	Q	<0.046	<0.18
MW-102S	3/29/2002	Q	0.077	<0.2
MW-103D	6/19/1997	Q	0.10	0.23
MW-103D	9/25/1997	Q	0.27	0.21
MW-103D	12/3/1997	Q	0.12	<0.20
MW-103D	3/6/1998	Q	0.15	0.24
MW-103D	6/17/1998	Q	0.037	0.240
MW-103D	9/28/1998	Q	0.079	0.160

All results in milligrams per liter (mg/L).
Q = quarterly compliance sample.
A = annual compliance sample.
TPH = total petroleum hydrocarbons.
NS = not sampled.
< = not detected at indicated reporting limit.

Table 1
Compliance Monitoring Results
Total Petroleum Hydrocarbons in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Sample Date	Monitoring Requirement	TPH as diesel	TPH as motor oil
MW-103D	12/9/1998	Q	<0.080	<0.20
MW-103D	3/24/1999	Q	0.210	<0.20
MW-103D	6/15/1999	Q	0.520	0.310
MW-103D	8/24/1999	Q	0.200	0.200
MW-103D	11/3/1999	Q	0.450	0.300
MW-103D	3/22/2000	Q	0.140	<0.20
MW-103D	6/16/2000	Q	0.240	0.220
MW-103D	9/15/2000	Q	0.200	0.230
MW-103D	12/13/2000	Q	0.560	0.300
MW-103D	3/13/2001	Q	0.200	<0.20
MW-103D	6/21/2001	Q	0.460	0.260
MW-103D	9/25/2001	Q	0.390	0.340
MW-103D	12/12/2001	Q	0.082	<0.20
MW-103D	3/29/2002	Q	0.690	0.380
MW-103S	6/19/1997	Q	NS	NS
MW-103S	9/25/1997	Q	NS	NS
MW-103S	12/3/1997	Q	0.25	0.21
MW-103S	3/6/1998	Q	0.42	0.41
MW-103S	6/18/1998	Q	NS	NS
MW-103S	9/28/1998	Q	NS	NS
MW-103S	12/9/1998	Q	<0.080	<0.20
MW-103S	3/24/1999	Q	1.500	0.370
MW-103S	6/15/1999	Q	NS	NS
MW-103S	8/24/1999	Q	NS	NS
MW-103S	11/3/1999	Q	NS	NS
MW-103S	3/22/2000	Q	NS	NS
MW-103S	6/16/2000	Q	NS	NS
MW-103S	9/15/2000	Q	NS	NS
MW-103S	12/13/2000	Q	NS	NS
MW-103S	3/13/2001	Q	NS	NS
MW-103S	6/21/2001	Q	NS	NS
MW-103S	9/25/2001	Q	NS	NS
MW-103S	12/12/2001	Q	0.380	0.280
MW-103S	3/29/2002	Q	1.500	0.440
MW-104S	6/19/1997	Q	NS	NS
MW-104S	9/25/1997	Q	NS	NS
MW-104S	12/4/1997	Q	NS	NS
MW-104S	3/5/1998	Q	NS	NS
MW-104S	6/18/1998	Q	NS	NS
MW-104S	9/28/1998	Q	NS	NS
MW-104S	12/9/1998	Q	0.1	<0.20
MW-104S	3/24/1999	Q	NS	NS
MW-104S	6/15/1999	Q	<0.14	<0.36

All results in milligrams per liter (mg/L).
Q = quarterly compliance sample.
A = annual compliance sample.
TPH = total petroleum hydrocarbons.
NS = not sampled.
< = not detected at indicated reporting limit.

Table 1
Compliance Monitoring Results
Total Petroleum Hydrocarbons in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Sample Date	Monitoring Requirement	TPH as diesel	TPH as motor oil
MW-104S	8/24/1999	Q	NS	NS
MW-104S	11/3/1999	Q	NS	NS
MW-104S	3/22/2000	Q	NS	NS
MW-104S	6/16/2000	Q	NS	NS
MW-104S	9/15/2000	Q	NS	NS
MW-104S	12/13/2000	Q	<0.080	<0.20
MW-104S	3/13/2001	Q	<0.11	<0.28
MW-104S	6/21/2001	Q	NS	NS
MW-104S	9/25/2001	Q	NS	NS
MW-104S	12/12/2001	Q	0.067	<0.2
MW-104S	3/29/2002	Q	0.13	<0.2
MW-105D	6/19/1997	Q	0.11	<0.19
MW-105D	9/25/1997	Q	0.18	<0.20
MW-105D	12/3/1997	Q	0.12	<0.20
MW-105D	3/6/1998	Q	0.110	<0.20
MW-105D	6/17/1998	Q	0.043	<0.2
MW-105D	9/28/1998	Q	0.030	<0.2
MW-105D	12/10/1998	Q	0.170	<0.20
MW-105D	3/25/1999	Q	0.130	<0.20
MW-105D	6/15/1999	Q	0.120	<0.19
MW-106D	8/24/1999	Q	0.120	<0.19
MW-105D	11/3/1999	Q	0.100	<0.19
MW-105D	3/22/2000	Q	0.190	<0.2
MW-105D	6/16/2000	Q	0.180	0.220
MW-105D	9/15/2000	Q	<0.078	<0.19
MW-105D	12/13/2000	Q	0.080	<0.2
MW-105D	3/13/2001	Q	0.082	<0.19
MW-105D	6/21/2001	Q	0.082	<0.2
MW-105D	9/25/2001	Q	0.110	<0.2
MW-105D	12/12/2001	Q	0.096	<0.2
MW-105D	3/29/2002	Q	0.140	<0.2
MW-105S	6/19/1997	Q	0.10	<0.2
MW-105S	9/25/1997	Q	0.14	<0.2
MW-105S	12/3/1997	Q	<0.082	<0.2
MW-105S	3/6/1998	Q	<0.080	0.22
MW-105S	6/17/1998	Q	<0.08	<0.2
MW-105S	9/28/1998	Q	NS	NS
MW-105S	12/10/1998	Q	0.096	0.21
MW-105S	3/25/1999	Q	0.097	<0.2
MW-105S	6/15/1999	Q	0.084	<0.19
MW-105S	8/24/1999	Q	NS	NS
MW-105S	11/3/1999	Q	NS	NS
MW-105S	3/22/2000	Q	NS	NS

All results in milligrams per liter (mg/L).
Q = quarterly compliance sample.
A = annual compliance sample.
TPH = total petroleum hydrocarbons.
NS = not sampled.
< = not detected at indicated reporting limit.

Table 1
Compliance Monitoring Results
Total Petroleum Hydrocarbons in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Sample Date	Monitoring Requirement	TPH as diesel	TPH as motor oil
MW-105S	6/16/2000	Q	0.140	0.3
MW-105S	9/14/2000	Q	NS	NS
MW-105S	12/13/2000	Q	NS	NS
MW-105S	3/13/2001	Q	NS	NS
MW-105S	6/21/2001	Q	NS	NS
MW-105S	9/25/2001	Q	NS	NS
MW-105S	12/12/2001	Q	<0.05	<0.2
MW-105S	3/29/2002	Q	0.180	0.21
MW-107S	6/19/1997	Q	0.13	<0.21
MW-107S	9/26/1997	Q	1.4	0.25
MW-107S	12/4/1997	Q	0.66	<0.2
MW-107S	3/6/1998	Q	0.66	0.27
MW-107S	6/18/1998	A	0.059	0.120
MW-107S	6/14/1999	A	0.200	<0.19
MW-108D	6/19/1997	Q	<0.080	<0.2
MW-108D	9/24/1997	Q	<0.079	<0.2
MW-108D	12/4/1997	Q	<0.082	<0.2
MW-108D	3/6/1998	Q	<0.080	<0.2
MW-108D	6/18/1998	A	<0.08	<0.2
MW-108D	6/14/1999	A	<0.074	<0.19
MW-108S	6/19/1997	Q	0.14	0.25
MW-108S	9/24/1997	Q	0.10	<0.2
MW-108S	12/4/1997	Q	<0.082	<0.2
MW-108S	3/6/1998	Q	0.093	<0.2
MW-108S	6/18/1998	A	0.290	0.140
MW-108S	6/14/1999	A	0.099	<0.19
MW-109S	6/19/1997	Q	<0.085	<0.2
MW-109S	9/25/1997	Q	<0.080	<0.2
MW-109S	12/4/1997	Q	<0.082	<0.2
MW-109S	3/6/1998	Q	<0.080	<0.2
MW-109S	6/18/1998	A	0.240	<0.2
MW-109S	6/14/1999	A	<0.074	<0.2
MW-RA-8-3	6/19/1997	Q	1.3	0.39
MW-RA-8-3	9/25/1997	Q	1.4	0.34
MW-RA-8-3	12/4/1997	Q	1.0	0.41
MW-RA-8-3	3/5/1998	Q	1.3	0.46
MW-RA-8-3	6/17/1998	Q	0.590	0.7
MW-RA-8-3	9/28/1998	Q	0.710	<0.2
MW-RA-8-3	12/10/1998	Q	0.150	<0.2
MW-RA-8-3	3/24/1999	Q	0.370	<0.2
MW-RA-8-3	6/15/1999	Q	0.340	<0.19
MW-RA-8-3	8/24/1999	Q	1.000	0.310
MW-RA-8-3	11/3/1999	Q	1.200	0.460

All results in milligrams per liter (mg/L).
Q = quarterly compliance sample.
A = annual compliance sample.
TPH = total petroleum hydrocarbons.
NS = not sampled.
< = not detected at indicated reporting limit.

Table 1
Compliance Monitoring Results
Total Petroleum Hydrocarbons in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Sample Date	Monitoring Requirement	TPH as diesel	TPH as motor oil
MW-RA-8-3	3/22/2000	Q	0.200	<0.2
MW-RA-8-3	6/16/2000	Q	0.460	0.28
MW-RA-8-3	9/15/2000	Q	1.500	0.48
MW-RA-8-3	12/13/2000	Q	0.470	<0.2
MW-RA-8-3	3/13/2001	Q	0.310	<0.19
MW-RA-8-3	6/21/2001	Q	0.280	<0.2
MW-RA-8-3	9/25/2001	Q	0.690	0.28
MW-RA-8-3	12/12/2001	Q	0.420	0.28
MW-RA-8-3	3/29/2002	Q	0.830	0.28

All results in milligrams per liter (mg/L).
Q = quarterly compliance sample.
A = annual compliance sample.
TPH = total petroleum hydrocarbons.
NS = not sampled.
< = not detected at indicated reporting limit.

**Table 2
Compliance Monitoring Results
Pentachlorophenol in Groundwater
Weyerhaeuser - Everett East Site**

Well Number	Date	Monitoring Requirement	Pentachlorophenol (µg/L)
MW-100D	06/19/97	Q	<4
MW-100D	09/26/97	Q	<5
MW-100D	10/08/97	R	<5
MW-100D	12/04/97	Q	<2
MW-100D	03/05/98	Q	<2
MW-100D	06/18/98	Q	<5
MW-100D	09/28/98	Q	<2
MW-100D	12/10/98	Q	<2
MW-100D	03/24/99	Q	<2
MW-100D	06/15/99	Q	<1
MW-100D	08/24/99	Q	<4
MW-100D	11/03/99	Q	<4
MW-100D	03/22/00	Q	<5
MW-100D	06/16/00	Q	<5
MW-100D	09/14/00	Q	<5
MW-100D	12/13/00	Q	<5
MW-100D	03/13/01	Q	<5
MW-100D	06/21/01	Q	<5
MW-100D	09/25/01	Q	<5
MW-100D	12/12/01	Q	<6
MW-100D	03/29/02	Q	<5
MW-100S	06/19/97	Q	<4
MW-100S	09/26/97	Q	<5
MW-100S	12/04/97	Q	<2
MW-100S	03/05/98	Q	<2
MW-100S	06/18/98	Q	<5
MW-100S	09/28/98	Q	2
MW-100S	12/10/98	Q	<2
MW-100S	03/24/99	Q	<2
MW-100S	06/15/99	Q	<1
MW-100S	08/24/99	Q	NS
MW-100S	11/03/99	Q	NS
MW-100S	03/22/00	Q	<5
MW-100S	06/16/00	Q	<5
MW-100S	09/14/00	Q	NS
MW-100S	12/13/00	Q	<5
MW-100S	03/13/01	Q	<5
MW-100S	06/21/01	Q	NS
MW-100S	09/25/01	Q	NS
MW-100S	12/12/01	Q	<6
MW-100S	03/29/02	Q	<5
MW-101S	06/19/97	Q	120
MW-101S	07/30/97	R	55

µg/L = micrograms per liter.
Q = quarterly compliance sample.
A = annual compliance sample.
R = resample per the Consent Decree.
NS = not sampled.
< = not detected at indicated reporting limit.

Table 2
Compliance Monitoring Results
Pentachlorophenol in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Date	Monitoring Requirement	Pentachlorophenol (µg/L)
MW-101S	09/25/97	Q	4
MW-101S	12/04/97	Q	<2
MW-101S	03/05/98	Q	2
MW-101S	06/18/98	Q	<5
MW-101S	09/28/98	Q	NS
MW-101S	12/10/98	Q	<2
MW-101S	03/24/99	Q	<2
MW-101S	06/15/99	Q	<1
MW-101S	08/24/99	Q	NS
MW-101S	11/03/99	Q	NS
MW-101S	03/22/00	Q	NS
MW-101S	06/16/00	Q	NS
MW-101S	09/14/00	Q	NS
MW-101S	12/13/00	Q	NS
MW-101S	03/13/01	Q	NS
MW-101S	06/21/01	Q	NS
MW-101S	09/25/01	Q	NS
MW-101S	12/12/01	Q	<6
MW-101S	03/29/02	Q	<5
MW-102S	06/19/97	Q	NS
MW-102S	09/26/97	Q	NS
MW-102S	12/03/97	Q	<2
MW-102S	03/05/98	Q	<2
MW-102S	06/18/98	Q	<5
MW-102S	09/28/98	Q	NS
MW-102S	12/10/98	Q	<2
MW-102S	03/24/99	Q	<2
MW-102S	06/15/99	Q	NS
MW-102S	08/24/99	Q	NS
MW-102S	11/03/99	Q	NS
MW-102S	03/22/00	Q	NS
MW-102S	06/16/00	Q	<5
MW-102S	09/15/00	Q	<5
MW-102S	12/13/00	Q	<5
MW-102S	03/13/01	Q	<5
MW-102S	06/21/01	Q	<5
MW-102S	09/25/01	Q	<13
MW-102S	12/12/01	Q	<5
MW-102S	03/29/02	Q	<5
MW-103D	06/19/97	Q	<4
MW-103D	09/25/97	Q	<5
MW-103D	12/03/97	Q	<2
MW-103D	03/06/98	Q	<2

µg/L = micrograms per liter.
Q = quarterly compliance sample.
A = annual compliance sample.
R = resample per the Consent Decree.
NS = not sampled.
< = not detected at Indicated reporting limit.

**Table 2
Compliance Monitoring Results
Pentachlorophenol in Groundwater
Weyerhaeuser - Everett East Site**

Well Number	Date	Monitoring Requirement	Pentachlorophenol (µg/L)
MW-103D	06/17/98	Q	<5
MW-103D	09/28/98	Q	<2
MW-103D	12/09/98	Q	<2
MW-103D	03/24/99	Q	<2
MW-103D	06/15/99	Q	<0.5
MW-103D	08/24/99	Q	<4
MW-103D	11/03/99	Q	<4
MW-103D	03/22/00	Q	<5
MW-103D	06/16/00	Q	<5
MW-103D	09/15/00	Q	<5
MW-103D	12/13/00	Q	<5
MW-103D	03/13/01	Q	<5
MW-103D	06/21/01	Q	<5
MW-103D	09/25/01	Q	<5
MW-103D	12/12/01	Q	<5
MW-103D	03/29/02	Q	<5
MW-103S	06/19/97	Q	NS
MW-103S	09/26/97	Q	NS
MW-103S	12/03/97	Q	<2
MW-103S	03/06/98	Q	<2
MW-103S	06/18/98	Q	NS
MW-103S	09/28/98	Q	NS
MW-103S	12/09/98	Q	<2
MW-103S	03/24/99	Q	<2
MW-103S	06/15/99	Q	NS
MW-103S	08/24/99	Q	NS
MW-103S	11/03/99	Q	NS
MW-103S	03/22/00	Q	NS
MW-103S	06/16/00	Q	NS
MW-103S	09/14/00	Q	NS
MW-103S	12/13/00	Q	NS
MW-103S	03/13/01	Q	NS
MW-103S	06/21/01	Q	NS
MW-103S	09/25/01	Q	NS
MW-103S	12/12/01	Q	<5
MW-103S	03/29/02	Q	<5
MW-104S	06/19/97	Q	NS
MW-104S	09/26/97	Q	NS
MW-104S	12/03/97	Q	NS
MW-104S	03/06/98	Q	NS
MW-104S	06/18/98	Q	NS
MW-104S	09/28/98	Q	NS
MW-104S	12/09/98	Q	NS
MW-104S	03/24/99	Q	NS
MW-104S	06/15/99	Q	NS
MW-104S	08/24/99	Q	NS
MW-104S	11/03/99	Q	NS
MW-104S	03/22/00	Q	NS
MW-104S	06/16/00	Q	NS
MW-104S	09/14/00	Q	NS
MW-104S	12/13/00	Q	NS
MW-104S	03/13/01	Q	NS
MW-104S	06/21/01	Q	NS
MW-104S	09/25/01	Q	NS
MW-104S	12/12/01	Q	<5
MW-104S	03/29/02	Q	<5

µg/L = micrograms per liter.
Q = quarterly compliance sample.
A = annual compliance sample.
R = resample per the Consent Decree.
NS = not sampled.
< = not detected at indicated reporting limit.

Table 2
Compliance Monitoring Results
Pentachlorophenol in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Date	Monitoring Requirement	Pentachlorophenol (µg/L)
MW-104S	03/24/99	Q	NS
MW-104S	06/15/99	Q	<0.6
MW-104S	08/24/99	Q	NS
MW-104S	11/03/99	Q	NS
MW-104S	03/22/00	Q	NS
MW-104S	06/16/00	Q	NS
MW-104S	09/14/00	Q	NS
MW-104S	12/13/00	Q	<5
MW-104S	03/13/01	Q	<5
MW-104S	06/21/01	Q	NS
MW-104S	09/25/01	Q	NS
MW-104S	12/12/01	Q	<5
MW-104S	03/29/02	Q	<5
MW-105D	06/19/97	Q	<4
MW-105D	09/25/97	Q	<5
MW-105D	12/03/97	Q	<2
MW-105D	03/06/98	Q	<2
MW-105D	06/17/98	Q	<5
MW-105D	09/28/98	Q	<2
MW-105D	12/09/98	Q	<2
MW-105D	03/25/99	Q	<2
MW-105D	06/15/99	Q	<0.5
MW-105D	08/24/99	Q	<4
MW-105D	11/03/99	Q	<4
MW-105D	03/22/00	Q	<5
MW-105D	06/16/00	Q	<5
MW-105D	09/15/00	Q	<5
MW-105D	12/13/00	Q	<5
MW-105D	03/13/01	Q	<5
MW-105D	06/21/01	Q	<2
MW-105D	09/25/01	Q	<5
MW-105D	12/12/01	Q	<5
MW-105D	03/29/02	Q	<5
MW-105S	06/19/97	Q	<4
MW-105S	09/25/97	Q	<5
MW-105S	12/03/97	Q	<2
MW-105S	03/06/98	Q	<2
MW-105S	06/17/98	Q	<5
MW-105S	09/28/98	Q	NS
MW-105S	12/09/98	Q	<2
MW-105S	03/25/99	Q	<2
MW-105S	06/15/99	Q	<0.5
MW-105S	08/24/99	Q	NS

µg/L = micrograms per liter.
Q = quarterly compliance sample.
A = annual compliance sample.
R = resample per the Consent Decree.
NS = not sampled.
< = not detected at indicated reporting limit.

**Table 2
Compliance Monitoring Results
Pentachlorophenol in Groundwater
Weyerhaeuser - Everett East Site**

Well Number	Date	Monitoring Requirement	Pentachlorophenol (µg/L)
MW-105S	11/03/99	Q	NS
MW-105S	03/22/00	Q	NS
MW-105S	06/16/00	Q	<5
MW-105S	09/15/00	Q	NS
MW-105S	12/13/00	Q	NS
MW-105S	03/13/01	Q	NS
MW-105S	06/21/01	Q	NS
MW-105S	09/25/01	Q	NS
MW-105S	12/12/01	Q	<5
MW-105S	03/29/02	Q	<5
MW-107S	06/19/97	Q	<5
MW-107S	09/26/97	Q	<5
MW-107S	12/04/97	Q	<2
MW-107S	03/06/98	Q	<2
MW-107S	06/18/98	A	<5
MW-107S	06/14/99	A	<1
MW-108D	06/19/97	Q	<4
MW-108D	09/24/97	Q	<5
MW-108D	12/04/97	Q	<2
MW-108D	03/06/98	Q	<2
MW-108D	06/18/98	A	<5
MW-108D	06/14/99	A	<1
MW-108S	06/19/97	Q	<4
MW-108S	09/24/97	Q	<5
MW-108S	12/04/97	Q	<2
MW-108S	03/06/98	Q	<2
MW-108S	06/18/98	A	<5
MW-108S	06/14/99	A	<1
MW-109S	06/19/97	Q	<4
MW-109S	09/25/97	Q	<5
MW-109S	12/04/97	Q	<2
MW-109S	03/06/98	Q	<2
MW-109S	06/18/98	A	<5
MW-109S	06/14/99	A	<1
MW-RA-8-3	06/19/97	Q	73
MW-RA-8-3	08/21/97	R	290
MW-RA-8-3	09/25/97	Q	68
MW-RA-8-3	11/03/97	R	38
MW-RA-8-3	12/04/97	Q	24
MW-RA-8-3	03/05/98	Q	580
MW-RA-8-3	06/17/98	Q	260
MW-RA-8-3	09/28/98	Q	1,000
MW-RA-8-3	12/10/98	Q	4

µg/L = micrograms per liter.
Q = quarterly compliance sample.
A = annual compliance sample.
R = resample per the Consent Decree.
NS = not sampled.
< = not detected at Indicated reporting limit.

**Table 2
Compliance Monitoring Results
Pentachlorophenol in Groundwater
Weyerhaeuser - Everett East Site**

Well Number	Date	Monitoring Requirement	Pentachlorophenol (µg/L)
MW-RA-8-3	03/24/99	Q	13
MW-RA-8-3	06/15/99	Q	40
MW-RA-8-3	08/24/99	Q	150
MW-RA-8-3	11/03/99	Q	360
MW-RA-8-3	03/22/00	Q	4
MW-RA-8-3	06/16/00	Q	140
MW-RA-8-3	09/15/00	Q	310
MW-RA-8-3	12/13/00	Q	27
MW-RA-8-3	03/13/01	Q	38
MW-RA-8-3	06/21/01	Q	19
MW-RA-8-3	09/25/01	Q	52
MW-RA-8-3	12/12/01	Q	<4
MW-RA-8-3	03/29/02	Q	5

µg/L = micrograms per liter.
 Q = quarterly compliance sample.
 A = annual compliance sample.
 R = resample per the Consent Decree.
 NS = not sampled.
 < = not detected at indicated reporting limit.

Table 3
Compliance Monitoring Results in Groundwater
Carcinogenic Polycyclic Aromatic Hydrocarbons in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Date	Monitoring Requirement	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Total cPAHs
MW-100D	6/19/1997	Q	<0.0130	<0.0130	<0.0020	0.0004	<0.0010	<0.0130	<0.0130	0.0004
MW-100D	9/26/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-100D	12/4/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.0030	<0.040	<0.040	ND
MW-100D	3/5/1998	Q	<0.027	<0.027	<0.0040	0.0008	<0.0020	<0.027	<0.027	0.0008
MW-100D	6/18/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-100D	6/15/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-100D	6/16/2000	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-100D	6/21/2001	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-100D	9/25/2001	R	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-100S	6/19/1997	Q	<0.0130	<0.0130	<0.0020	<0.0004	<0.0010	<0.0130	<0.0130	ND
MW-100S	9/26/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-100S	12/4/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.0030	<0.040	<0.040	ND
MW-100S	3/5/1998	Q	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-100S	6/18/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-100S	6/15/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-100S	6/16/2000	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-100S	6/21/2001	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-101S	6/19/1997	Q	<0.0130	<0.0130	<0.0020	<0.0004	<0.0010	<0.0130	<0.0130	ND
MW-101S	9/26/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-101S	12/4/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.0030	<0.040	<0.040	ND
MW-101S	3/5/1998	Q	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-101S	6/18/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-101S	6/15/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-101S	6/16/2000	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-101S	6/21/2001	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-102S	6/19/1997	Q	NS	NS	NS	NS	NS	NS	NS	NS
MW-102S	9/26/1997	Q	NS	NS	NS	NS	NS	NS	NS	NS
MW-102S	12/3/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.0030	<0.040	<0.040	ND
MW-102S	3/5/1998	Q	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-102S	6/18/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-102S	6/15/1998	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-102S	6/16/2000	A	<0.027	<0.027	0.0079	0.0023	<0.0080	<0.027	<0.027	0.0102
MW-102S	6/21/2001	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-102S	9/25/2001	R	0.14	0.14	0.027	0.007	0.022	0.088	0.12	0.544
MW-103D	6/19/1997	Q	<0.0130	<0.0130	<0.0020	0.0015	0.0011	<0.0130	<0.0130	0.0026
MW-103D	9/26/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-103D	12/3/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.0030	<0.040	<0.040	ND
MW-103D	3/5/1998	Q	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-103D	6/17/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-103D	6/15/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-103D	6/16/2000	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-103D	6/21/2001	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-103D	9/25/2001	R	0.031	0.037	0.01	0.0032	0.0063	<0.020	0.035	0.1225
MW-103S	6/19/1997	Q	NS	NS	NS	NS	NS	NS	NS	NS
MW-103S	9/26/1997	Q	NS	NS	NS	NS	NS	NS	NS	NS
MW-103S	12/3/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.0030	<0.040	<0.040	ND
MW-103S	3/5/1998	Q	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-103S	6/18/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-103S	6/15/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-103S	6/16/2000	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-103S	6/21/2001	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-103S	9/25/2001	R	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
Compliance Monitoring Results in Groundwater
Carcinogenic Polycyclic Aromatic Hydrocarbons - Everett East Site
Weyerhaeuser - Everett East Site

Well Number	Date	Monitoring Requirement	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Total cPAHs
MW-1033	6/15/1999	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-1033	6/16/2000	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-1033	6/21/2001	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-1043	6/19/1997	Q	NS	NS	NS	NS	NS	NS	NS	NS
MW-1043	9/25/1997	Q	NS	NS	NS	NS	NS	NS	NS	NS
MW-1043	12/3/1997	Q	NS	NS	NS	NS	NS	NS	NS	NS
MW-1043	3/6/1998	Q	NS	NS	NS	NS	NS	NS	NS	NS
MW-1043	6/18/1998	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-1043	6/15/1999	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-1043	6/16/2000	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-1043	6/21/2001	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-1050	6/19/1997	Q	<0.0130	<0.0130	<0.0020	0.0006	<0.0010	<0.0130	<0.0130	0.0006
MW-1050	9/25/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-1050	12/3/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.030	<0.040	<0.040	ND
MW-1050	3/6/1998	Q	<0.027	<0.027	<0.0040	<0.0008	<0.020	<0.027	<0.027	ND
MW-1050	6/17/1998	A	<0.027	<0.027	<0.0040	0.00082	<0.0020	<0.027	<0.027	0.00082
MW-1050	6/16/2000	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.020	<0.027	ND
MW-1050	6/21/2001	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.020	<0.027	ND
MW-1050	9/25/2001	R	<0.027	<0.027	0.0062	0.0018	<0.0020	<0.020	<0.027	0.007
MW-1055	6/19/1997	Q	<0.0130	<0.0130	0.0039	0.0016	0.0028	<0.0130	<0.0130	0.0083
MW-1055	9/25/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-1055	12/3/1997	Q	<0.040	<0.040	<0.0060	0.0019	<0.030	<0.040	<0.040	0.0019
MW-1055	3/6/1998	Q	<0.027	<0.027	<0.0040	<0.008	<0.020	<0.027	<0.027	ND
MW-1055	6/17/1998	A	<0.027	<0.027	0.0088	0.0089	0.0071	<0.027	<0.027	0.0178
MW-1055	6/15/1999	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-1055	6/16/2000	A	0.074	0.082	0.054	0.017	0.074	<0.020	0.068	0.369
MW-1055	6/21/2001	A	NS	NS	NS	NS	NS	NS	NS	NS
MW-1075	6/19/1997	Q	<0.0130	<0.0130	<0.0020	<0.0004	<0.0010	<0.0130	<0.0130	ND
MW-1075	9/25/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-1075	12/4/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.030	<0.040	<0.040	ND
MW-1075	3/6/1998	Q	<0.027	<0.027	<0.0040	<0.008	<0.020	<0.027	<0.027	ND
MW-1075	6/18/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-1075	6/14/1999	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-1080	6/19/1997	Q	<0.0130	<0.0130	<0.0020	0.0008	0.0014	<0.0130	<0.0130	0.0022
MW-1080	9/24/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-1080	12/4/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.030	<0.040	<0.040	ND
MW-1080	3/6/1998	Q	<0.027	<0.027	<0.0040	<0.008	<0.020	<0.027	<0.027	ND
MW-1080	6/18/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-1080	6/14/1999	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-1085	6/19/1997	Q	0.04	0.075	0.062	0.031	0.073	<0.0130	0.061	0.342
MW-1085	7/30/1997	R	<0.027	<0.027	<0.0040	<0.0008	<0.0010	<0.0267	<0.0267	ND
MW-1085	9/24/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-1085	12/4/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.030	<0.040	<0.040	ND
MW-1085	3/6/1998	Q	<0.027	<0.027	<0.0040	<0.008	<0.020	<0.027	<0.027	ND
MW-1085	6/18/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-1085	6/14/1999	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-1085	6/19/1997	Q	0.04	0.075	0.062	0.031	0.073	<0.0130	0.061	0.342
MW-1085	7/30/1997	R	<0.027	<0.027	<0.0040	<0.0008	<0.0010	<0.0267	<0.0267	ND
MW-1085	9/24/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-1085	12/4/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.030	<0.040	<0.040	ND
MW-1085	3/6/1998	Q	<0.027	<0.027	<0.0040	<0.008	<0.020	<0.027	<0.027	ND
MW-1085	6/18/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	0.0094
MW-1085	6/14/1999	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	0.0048
MW-1085	6/19/1997	Q	<0.0130	<0.0130	<0.0020	0.0006	0.0081	<0.0130	<0.0130	0.0037

Table 3
Compliance Monitoring Results
Carcinogenic Polycyclic Aromatic Hydrocarbons in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Date	Monitoring Requirement	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Total cPAHs
MW-109S	9/25/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-109S	12/4/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.0030	<0.040	<0.040	ND
MW-109S	3/6/1998	Q	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-109S	6/18/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-109S	6/14/1999	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-RA-8-3	6/19/1997	Q	<0.0130	<0.0130	<0.0020	<0.0004	<0.0010	<0.0130	<0.0130	ND
MW-RA-8-3	9/25/1997	Q	<0.10	<0.10	<0.020	<0.0040	<0.010	<0.10	<0.10	ND
MW-RA-8-3	12/4/1997	Q	<0.040	<0.040	<0.0060	<0.0012	<0.0030	<0.040	<0.040	ND
MW-RA-8-3	3/5/1998	Q	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-RA-8-3	6/17/1998	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-RA-8-3	6/15/1999	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-RA-8-3	6/15/2000	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-RA-8-3	6/21/2001	A	<0.027	<0.027	<0.0040	<0.0008	<0.0020	<0.027	<0.027	ND
MW-RA-8-3	9/25/2001	R	0.048	0.049	0.015	0.0077	0.028	0.045	0.045	0.1927

All results in micrograms per liter (ug/L)

Q = quarterly compliance sample
A = annual compliance sample
R = resample per Consent Decree or quality control failure
NS = not sampled
ND = all cPAHs below laboratory reporting limit
< = below laboratory reporting limit

Table 4
Compliance Monitoring Results
Polychlorinated Biphenyls in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Date	Monitoring Requirement	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
MW-100D	6/19/1997	Q	<0.037	<0.074	<0.037	<0.037	<0.037	<0.037	<0.037
MW-100D	9/26/1997	Q	<0.038	<0.076	<0.038	<0.038	<0.038	<0.038	<0.038
MW-100D	12/4/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-100D	3/5/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-100S	6/19/1997	Q	<0.036	<0.072	<0.036	<0.036	<0.036	<0.036	<0.036
MW-100S	9/26/1997	Q	<0.038	<0.075	<0.038	<0.038	<0.038	<0.038	<0.038
MW-100S	12/4/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-100S	3/5/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-101S	6/19/1997	Q	<0.036	<0.072	<0.036	<0.036	<0.036	<0.036	<0.036
MW-101S	9/25/1997	Q	<0.040	<0.080	<0.040	<0.040	<0.040	<0.040	<0.040
MW-101S	12/4/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-101S	3/5/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-102S	6/19/1997	Q	NS	NS	NS	NS	NS	NS	NS
MW-102S	9/26/1997	Q	NS	NS	NS	NS	NS	NS	NS
MW-102S	12/3/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-102S	3/5/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-102S	6/18/1998	A	<0.033	<0.066	<0.033	<0.033	<0.033	<0.033	<0.033
MW-102S	6/15/1999	A	NS	NS	NS	NS	NS	NS	NS
MW-102S	8/15/2000	A	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
MW-102S	6/21/2001	A	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
MW-103D	6/19/1997	Q	<0.037	<0.074	<0.037	<0.037	<0.037	<0.037	<0.037
MW-103D	9/25/1997	Q	<0.040	<0.080	<0.040	<0.040	<0.040	<0.040	<0.040
MW-103D	12/3/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-103D	3/6/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-103S	6/19/1997	Q	NS	NS	NS	NS	NS	NS	NS
MW-103S	9/26/1997	Q	NS	NS	NS	NS	NS	NS	NS
MW-103S	12/3/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-103S	3/6/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-103S	6/18/1998	A	NS	NS	NS	NS	NS	NS	NS
MW-103S	6/15/1999	A	NS	NS	NS	NS	NS	NS	NS
MW-103S	6/16/2000	A	NS	NS	NS	NS	NS	NS	NS
MW-103S	6/21/2001	A	NS	NS	NS	NS	NS	NS	NS
MW-104S	6/19/1997	Q	NS	NS	NS	NS	NS	NS	NS

Table 4
Compliance Monitoring Results
Polychlorinated Biphenyls in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Date	Monitoring Requirement	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
MW-104S	9/26/1997	Q	NS	NS	NS	NS	NS	NS	NS
MW-104S	12/4/1997	Q	NS	NS	NS	NS	NS	NS	NS
MW-104S	3/5/1998	Q	NS	NS	NS	NS	NS	NS	NS
MW-104S	6/18/1998	A	NS	NS	NS	NS	NS	NS	NS
MW-104S	6/15/1999	A	<0.4	<0.8	<0.4	<0.4	<0.4	<0.4	<0.4
MW-104S	6/16/2000	A	NS	NS	NS	NS	NS	NS	NS
MW-104S	6/21/2001	A	NS	NS	NS	NS	NS	NS	NS
MW-105D	6/19/1997	Q	<0.035	<0.070	<0.035	<0.035	<0.035	<0.035	<0.035
MW-105D	9/25/1997	Q	<0.039	<0.078	<0.039	<0.039	<0.039	<0.039	<0.039
MW-105D	12/3/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-105D	3/6/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-105S	6/19/1997	Q	<0.036	<0.073	<0.036	<0.036	<0.036	<0.036	<0.036
MW-105S	9/25/1997	Q	<0.039	<0.078	<0.039	<0.039	<0.039	<0.039	<0.039
MW-105S	12/3/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-105S	3/6/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-105S	6/17/1998	A	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-105S	6/15/1999	A	<0.4 J	<0.8 J	<0.4 J	<0.4 J	<0.4 J	<0.4 J	<0.4 J
MW-105S	6/16/2000	A	NS	NS	NS	NS	NS	NS	NS
MW-105S	6/21/2001	A	NS	NS	NS	NS	NS	NS	NS
MW-107S	6/19/1997	Q	<0.039	<0.078	<0.039	<0.039	<0.039	<0.039	<0.039
MW-107S	9/26/1997	Q	<0.039	<0.078	<0.039	<0.039	<0.039	<0.039	<0.039
MW-107S	12/4/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-107S	3/6/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-108D	6/19/1997	Q	<0.037	<0.074	<0.037	<0.037	<0.037	<0.037	<0.037
MW-108D	9/24/1997	Q	<0.038	<0.077	<0.038	<0.038	<0.038	<0.038	<0.038
MW-108D	12/4/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-108D	3/6/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-108S	6/19/1997	Q	<0.038	<0.076	<0.038	<0.038	<0.038	<0.038	<0.038
MW-108S	9/24/1997	Q	<0.039	<0.078	<0.039	<0.039	<0.039	<0.039	<0.039
MW-108S	12/4/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-108S	3/6/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-109S	6/19/1997	Q	<0.036	<0.073	<0.036	<0.036	<0.036	<0.036	<0.036
MW-109S	9/25/1997	Q	<0.039	<0.078	<0.039	<0.039	<0.039	<0.039	<0.039

Table 4
Compliance Monitoring Results
Polychlorinated Biphenyls in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Date	Monitoring Requirement	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
MW-109S	12/4/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-109S	3/6/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-RA-8-3	6/19/1997	Q	<0.034	<0.069	<0.034	<0.034	<0.034	<0.034	<0.034
MW-RA-8-3	9/25/1997	Q	<0.038	<0.076	<0.038	<0.038	<0.038	<0.038	<0.038
MW-RA-8-3	12/4/1997	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04
MW-RA-8-3	3/5/1998	Q	<0.04	<0.08	<0.04	<0.04	<0.04	<0.04	<0.04

All results in micrograms per liter (µg/L)
J = estimated value
Q = quarterly compliance sample
A = annual compliance sample
NS = not sampled
< = Not detected at indicated reporting limit

Table 5
Compliance Monitoring Results
Total Arsenic in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Date	Monitoring Requirement	Arsenic (µg/L)
MW-100D	6/19/1997	Q	14
MW-100D	9/26/1997	Q	9
MW-100D	12/4/1997	Q	10
MW-100D	3/5/1998	Q	11
MW-100D	6/18/1998	A	2
MW-100D	6/15/1999	A	<3
MW-100D	6/16/2000	A	16
MW-100D	6/21/2001	A	10
MW-100S	6/19/1997	Q	6
MW-100S	9/26/1997	Q	4
MW-100S	12/4/1997	Q	<1
MW-100S	3/5/1998	Q	4
MW-100S	6/18/1998	A	7
MW-100S	6/15/1999	A	5
MW-100S	6/16/2000	A	9
MW-100S	6/21/2001	A	NS
MW-101S	6/19/1997	Q	24
MW-101S	9/25/1997	Q	30
MW-101S	12/4/1997	Q	14
MW-101S	3/5/1998	Q	6
MW-101S	6/18/1998	A	15
MW-101S	6/15/1999	A	16
MW-101S	6/16/2000	A	NS
MW-101S	6/21/2001	A	NS
MW-102S	12/3/1997	Q	9
MW-102S	9/26/1997	Q	NS
MW-102S	12/4/1997	Q	NS
MW-102S	3/5/1998	Q	5
MW-102S	6/18/1998	A	14
MW-102S	6/15/1999	A	NS
MW-102S	6/16/2000	A	14
MW-102S	6/21/2001	A	<3
MW-103D	6/19/1997	Q	3
MW-103D	9/25/1997	Q	8
MW-103D	12/3/1997	Q	3
MW-103D	3/6/1998	Q	1
MW-103D	6/17/1998	A	2
MW-103D	6/15/1999	A	<3
MW-103D	6/16/2000	A	5
MW-103D	6/21/2001	A	7
MW-103S	6/19/1997	Q	NS
MW-103S	9/26/1997	Q	NS
MW-103S	12/3/1997	Q	<1
MW-103S	3/6/1998	Q	1
MW-103S	6/17/1998	A	NS
MW-103S	6/15/1999	A	NS
MW-103S	6/16/2000	A	NS
MW-103S	6/21/2001	A	NS

**Table 5
Compliance Monitoring Results
Total Arsenic in Groundwater
Weyerhaeuser - Everett East Site**

Well Number	Date	Monitoring Requirement	Arsenic (µg/L)
MW-104S	6/19/1997	Q	NS
MW-104S	9/26/1997	Q	NS
MW-104S	12/4/1997	Q	NS
MW-104S	3/5/1998	Q	NS
MW-104S	6/18/1998	A	NS
MW-104S	6/15/1999	A	25,000
MW-104S	6/16/2000	A	NS
MW-104S	6/21/2001	A	NS
MW-105D	6/19/1997	Q	<1
MW-105D	9/25/1997	Q	2
MW-105D	12/3/1997	Q	2
MW-105D	3/6/1998	Q	<1
MW-105D	6/17/1998	A	<1
MW-105D	6/15/1999	A	<3
MW-105D	6/16/2000	A	<3
MW-105D	6/21/2001	A	<3
MW-105S	6/19/1997	Q	7
MW-105S	9/25/1997	Q	5
MW-105S	12/3/1997	Q	9
MW-105S	3/6/1998	Q	2
MW-105S	6/17/1998	A	8
MW-105S	6/15/1999	A	6
MW-105S	6/16/2000	A	4
MW-105S	6/21/2001	A	NS
MW-107S	6/19/1997	Q	32
MW-107S	9/26/1997	Q	57
MW-107S	12/4/1997	Q	28
MW-107S	3/6/1998	Q	43
MW-107S	6/18/1998	A	53
MW-107S	6/14/1999	A	44
MW-108D	6/19/1997	Q	360
MW-108D	9/24/1997	Q	3,680
MW-108D	12/4/1997	Q	4,130
MW-108D	3/6/1998	Q	3,530
MW-108D	6/18/1998	A	4,020
MW-108D	6/14/1999	A	6,340
MW-108S	6/19/1997	Q	79
MW-108S	9/24/1997	Q	3
MW-108S	12/4/1997	Q	2
MW-108S	3/6/1998	Q	2
MW-108S	6/18/1998	A	5
MW-108S	6/14/1999	A	<3
MW-109S	6/19/1997	Q	7
MW-109S	9/25/1997	Q	5
MW-109S	12/4/1997	Q	4
MW-109S	3/6/1998	Q	4
MW-109S	6/18/1998	A	4
MW-109S	6/14/1999	A	4

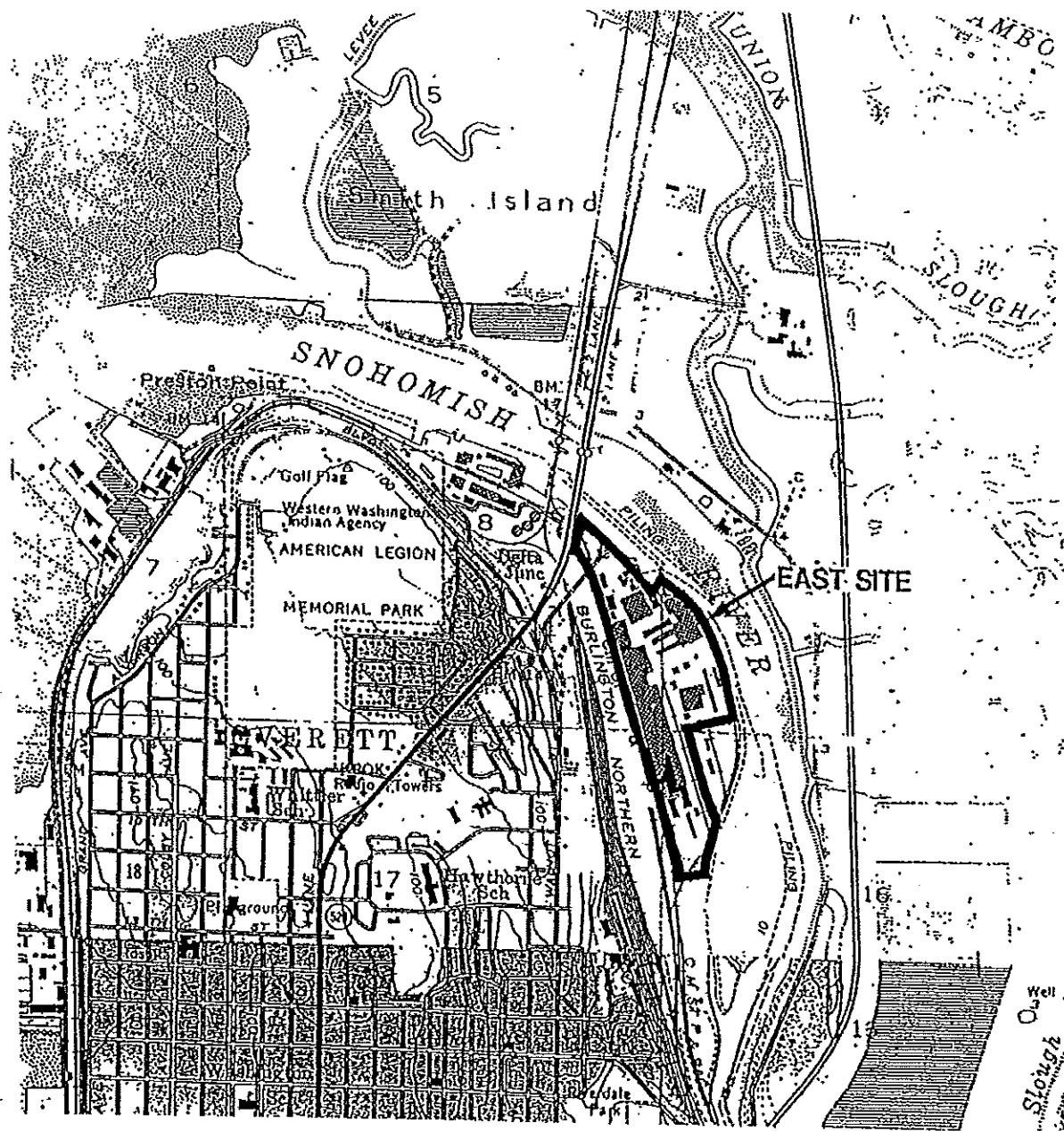
Table 5
Compliance Monitoring Results
Total Arsenic in Groundwater
Weyerhaeuser - Everett East Site

Well Number	Date	Monitoring Requirement	Arsenic (µg/L)
MW-RA-8-3	6/19/1997	Q	3
MW-RA-8-3	9/25/1997	Q	13
MW-RA-8-3	12/4/1997	Q	13
MW-RA-8-3	3/5/1998	Q	7
MW-RA-8-3	6/17/1998	A	15
MW-RA-8-3	6/15/1999	A	15
MW-RA-8-3	6/16/2000	A	9
MW-RA-8-3	6/21/2001	A	<3

µg/L = micrograms per liter
Q = quarterly compliance sample
A = annual compliance sample
NS = not sampled
< = Not detected at indicated reporting limit

FIGURES

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 DRAWING NUMBER: 837534.1



WASHINGTON



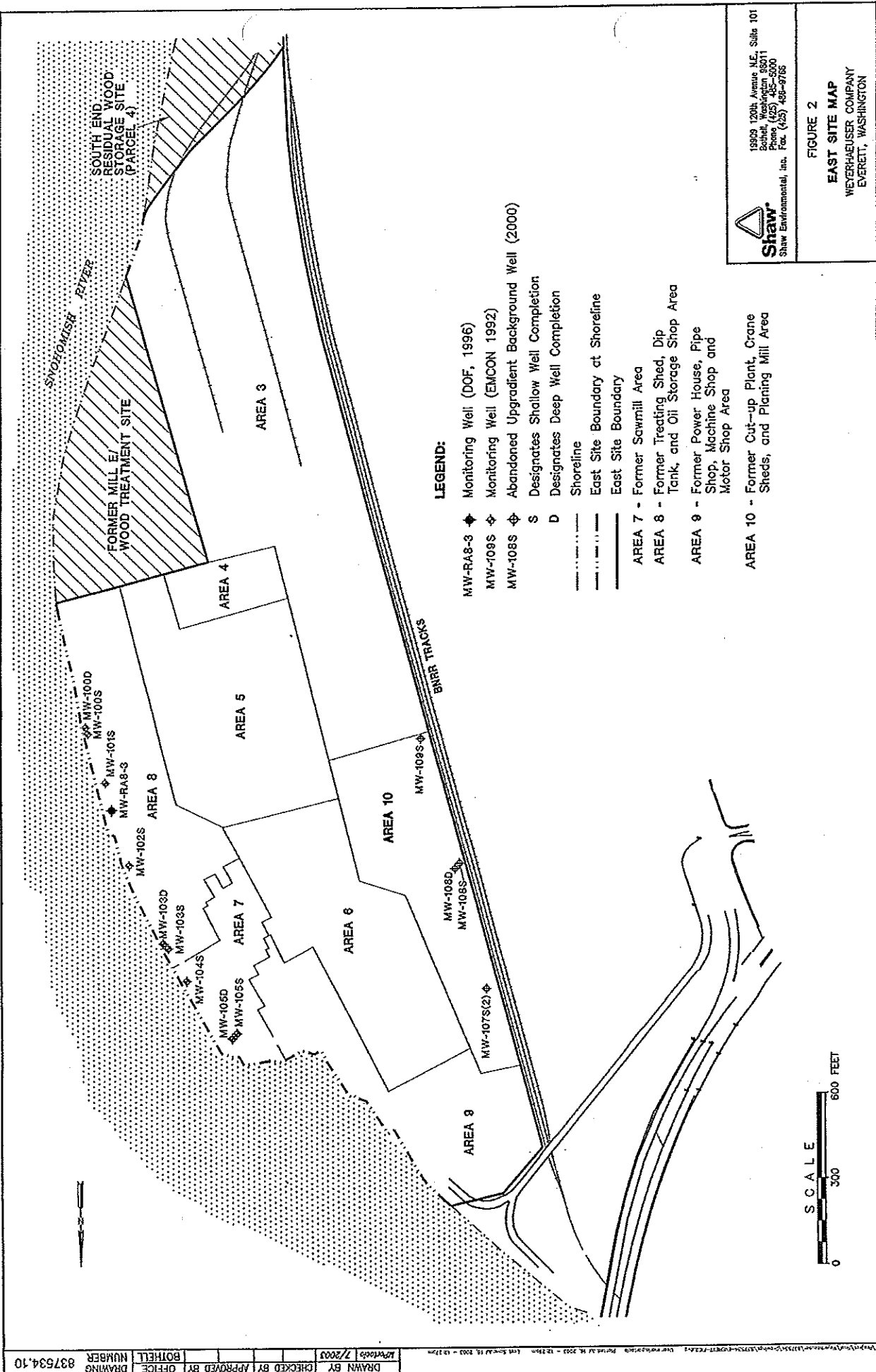
SOURCE:
 U.S.G.S. 7.5 Min. Quadrangle, EVERETT, WASHINGTON 1973.



19909 120th Avenue N.E., Suite 101
 Bothell, Washington 98011
 Phone (425) 485-5000
 Fax (425) 486-9766

FIGURE 1
 EAST SITE LOCATION MAP

WEYERHAEUSER COMPANY
 EVERETT, WASHINGTON



- LEGEND:**
- MW-109S-3 ◆ Monitoring Well (DOF, 1996)
 - MW-109S ◆ Monitoring Well (EMCON 1992)
 - MW-108S ◆ Abandoned Upgradient Background Well (2000)
 - S Designates Shallow Well Completion
 - D Designates Deep Well Completion
 - Shoreline
 - East Site Boundary at Shoreline
 - East Site Boundary
 - AREA 7 - Former Sawmill Area
 - AREA 8 - Former Treating Shed, Dip Tank, and Oil Storage Shop Area
 - AREA 9 - Former Power House, Pipe Shop, Machine Shop and Motor Shop Area
 - AREA 10 - Former Cut-up Plant, Crane Sheds, and Planing Mill Area

Shaw
Shaw Environmental, Inc. Fax: (425) 486-9785

19909 120th Avenue NE, Suite 101
Bothell, Washington 98011
Phone: (425) 485-5000

FIGURE 2
EAST SITE MAP
WEYERHAEUSER COMPANY
EVERETT, WASHINGTON

DRAWN BY: APPROVED BY: OFFICE: DRAWING NUMBER: 837534.10
 CHECKED BY: APPROVED BY: OFFICE: DRAWING NUMBER: 837534.10
 DATE: 7/2003

APPENDIX A
REGRESSION ANALYSES

MW-100D
TPH-D (as diesel)
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-100D	6/19/1997	TPH (as diesel)	0.040	0.080
MW-100D	9/28/1997	TPH (as diesel)	0.040	0.079
MW-100D	12/4/1997	TPH (as diesel)	0.041	0.082
MW-100D	3/5/1998	TPH (as diesel)	0.040	0.080
MW-100D	6/18/1998	TPH (as diesel)	0.039	0.078
MW-100D	9/28/1998	TPH (as diesel)	0.040	0.080
MW-100D	12/10/1998	TPH (as diesel)	0.040	0.080
MW-100D	3/24/1999	TPH (as diesel)	0.040	0.080
MW-100D	6/15/1999	TPH (as diesel)	0.083	0.078
MW-100D	8/24/1999	TPH (as diesel)	0.120	0.078
MW-100D	11/3/1999	TPH (as diesel)	0.097	0.078
MW-100D	3/22/2000	TPH (as diesel)	0.089	0.080
MW-100D	6/16/2000	TPH (as diesel)	0.120	0.080
MW-100D	9/14/2000	TPH (as diesel)	0.041	0.082
MW-100D	12/13/2000	TPH (as diesel)	0.042	0.084
MW-100D	3/13/2001	TPH (as diesel)	0.042	0.084
MW-100D	6/21/2001	TPH (as diesel)	0.140	0.080
MW-100D	9/25/2001	TPH (as diesel)	0.160	0.050
MW-100D	12/12/2001	TPH (as diesel)	0.250	0.046
MW-100D	3/29/2002	TPH (as diesel)	0.250	0.050
MW-100D	6/25/2002	TPH (as diesel)	0.250	0.050

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.771175408
R Square	0.59471151
Adjusted R Square	0.573380537
Standard Error	0.048985156
Observations	21

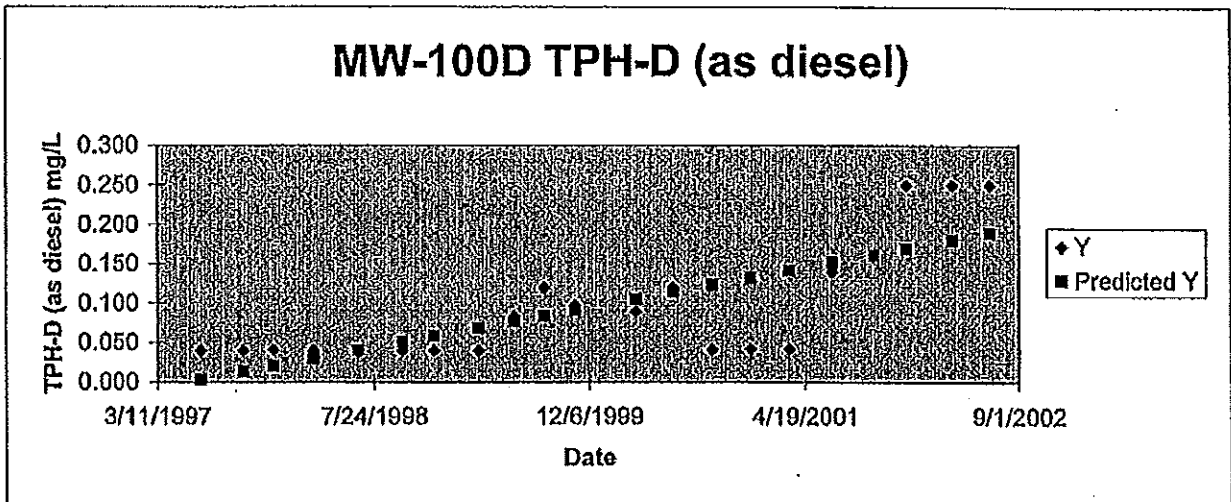
ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.066899777	0.06689978	27.8801865	4.26849E-05
Residual	19	0.045591365	0.00239955		
Total	20	0.112491143			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-3.617376591	0.703241512	-5.148861	5.7712E-05	-5.08927845	-2.145475	-5.0892784	-2.1454747
X Variable 1	0.000101697	1.92601E-05	5.28016917	4.2685E-05	6.13848E-05	0.000142	6.1385E-05	0.00014201

MW-100D
 TPH-D (as diesel)
 Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted Y	Residuals
1	0.003025036	0.036974064
2	0.013093006	0.026906994
3	0.020110077	0.020889923
4	0.029364474	0.010635526
5	0.040042625	-0.001042625
6	0.050415686	-0.010415686
7	0.057839543	-0.017839543
8	0.068415997	-0.028415997
9	0.076856822	0.006143178
10	0.083975589	0.036024411
11	0.091196053	0.005803947
12	0.105433587	-0.016433587
13	0.114179501	0.005820499
14	0.123332202	-0.082332202
15	0.132484903	-0.090484903
16	0.141637603	-0.099637603
17	0.151807271	-0.011807271
18	0.161570152	-0.001570152
19	0.169502492	0.080497508
20	0.180384037	0.069615963
21	0.189333344	0.060666656



MW-100S
TPH-D (as diesel)
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-100S	6/19/1997	TPH (as diesel)	0.038	0.077
MW-100S	9/26/1997	TPH (as diesel)	0.038	0.077
MW-100S	12/4/1997	TPH (as diesel)	0.041	0.082
MW-100S	3/6/1998	TPH (as diesel)	0.040	0.080
MW-100S	6/18/1998	TPH (as diesel)	0.270	0.078
MW-100S	9/28/1998	TPH (as diesel)	0.040	0.080
MW-100S	12/10/1998	TPH (as diesel)	0.040	0.080
MW-100S	3/24/1999	TPH (as diesel)	0.040	0.080
MW-100S	6/15/1999	TPH (as diesel)	0.039	0.078
MW-100S	3/22/2000	TPH (as diesel)	0.040	0.080
MW-100S	6/16/2000	TPH (as diesel)	0.040	0.080
MW-100S	12/13/2000	TPH (as diesel)	0.040	0.080
MW-100S	3/13/2001	TPH (as diesel)	0.040	0.080
MW-100S	12/12/2001	TPH (as diesel)	0.046	0.046
MW-100S	3/29/2002	TPH (as diesel)	0.067	0.050

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.120919145
R Square	0.01462144
Adjusted R Square	-0.061176911
Standard Error	0.061089642
Observations	15

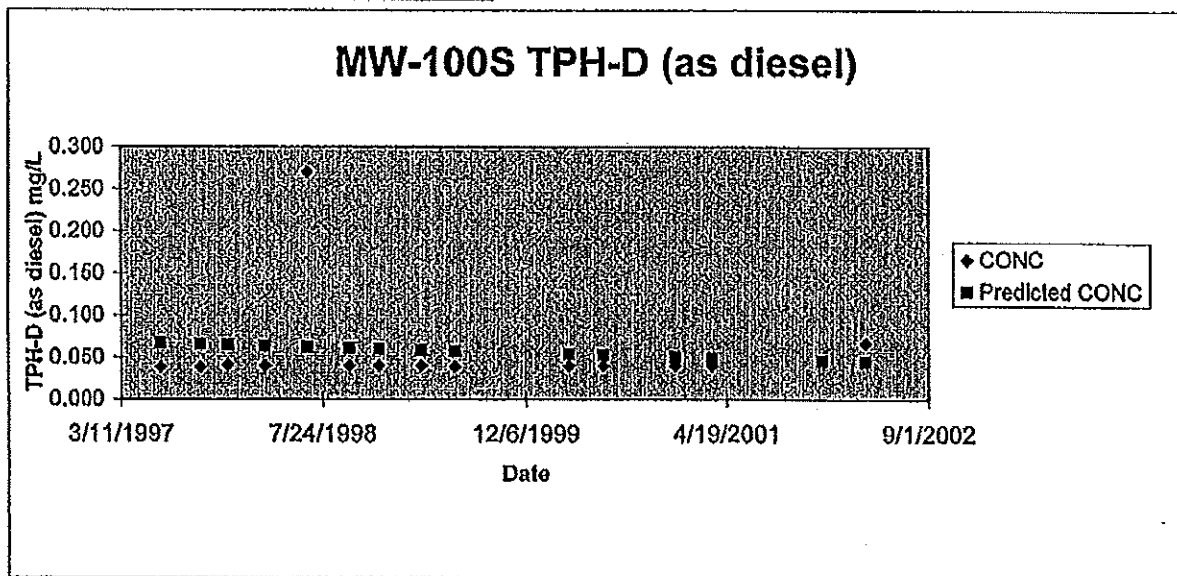
ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.000719418	0.000719	0.192899	0.667728423
Residual	13	0.048483516	0.00373		
Total	14	0.049202933			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.519097023	1.051637612	0.493608	0.629817	-1.752827475	2.791022	-1.75282748	2.79102152
SAMP_DATE	-1.2702E-05	2.89207E-05	-0.439203	0.667726	-7.51814E-05	4.98E-05	-7.5181E-05	4.97773E-05

**MW-100S
TPH-D (as diesel)
Regression Analysis**

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.066904133	-0.028904133
2	0.065646631	-0.027646631
3	0.064770189	-0.023770189
4	0.063614303	-0.023614303
5	0.062280588	0.207719412
6	0.060984979	-0.020984979
7	0.06005773	-0.02005773
8	0.058736717	-0.018736717
9	0.057682447	-0.018682447
10	0.054113172	-0.014113172
11	0.053020796	-0.013020796
12	0.050734427	-0.010734427
13	0.049591243	-0.009591243
14	0.046110882	-0.000110882
15	0.044751763	0.022248237



MW-101S
TPH-D (as diesel)
Regression Analysis

SITE_ID	DATE	CONC	DET_LIMIT
MW-101S	0	8/19/1997 0.69	0.077
MW-101S	98	9/25/1997 0.46	0.077
MW-101S	168	12/4/1997 0.46	0.082
MW-101S	269	3/5/1998 0.12	0.082
MW-101S	364	8/18/1998 0.051	0.078
MW-101S	539	12/10/1998 0.12	0.080
MW-101S	643	3/24/1999 0.04	0.080
MW-101S	726	6/15/1999 0.11	0.078
MW-101S	1637	12/12/2001 0.18	0.046
MW-101S	1744	3/29/2002 0.27	0.050

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.365694806
R Square	0.133659562
Adjusted R Square	0.025367008
Standard Error	0.21433105
Observations	10

ANOVA

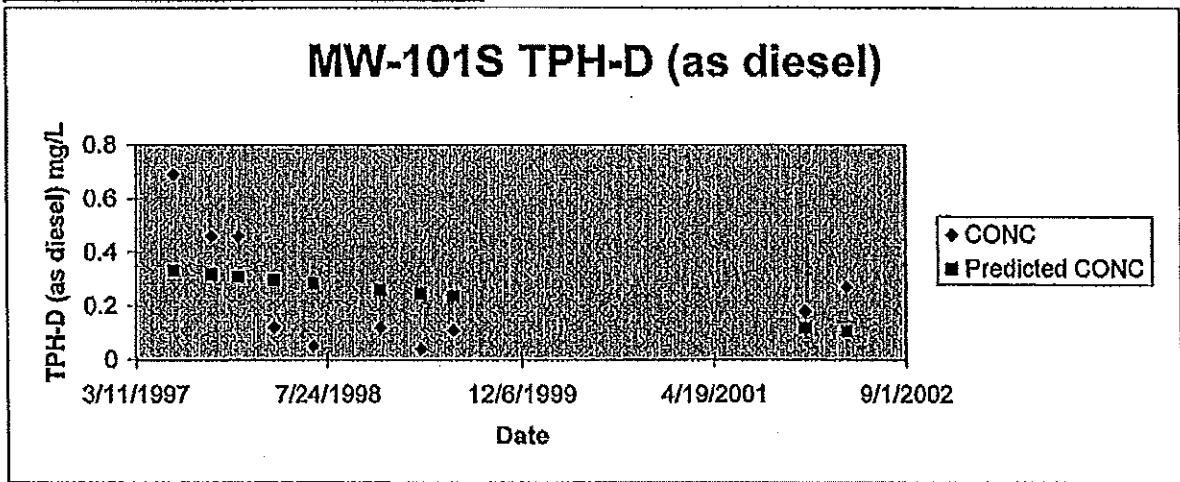
	df	SS	MS	F	Significance F
Regression	1	0.056698607	0.056699	1.234245	0.288854541
Residual	8	0.367502393	0.045938		
Total	9	0.4242009			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	4.945801741	4.227227454	1.169987	0.275679	-4.80220855	14.69381	-4.80220855	14.69381203
DATE	-0.000129852	0.000116702	-1.110966	0.298855	-0.00039877	0.000139	-0.00039877	0.000139463

MW-101S
TPH-D (as diesel)
Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.330198861	0.359801139
2	0.317492988	0.142507012
3	0.308417364	0.151582636
4	0.298619054	-0.176619054
5	0.283005618	-0.232005618
6	0.260316559	-0.140316559
7	0.246832775	-0.208832775
8	0.236071679	-0.126071679
9	0.11795892	0.06204108
10	0.104086181	0.165913819



MW-102S
TPH-D (as diesel)
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-102S	12/3/1997	TPH (as diesel)	0.041	0.082
MW-102S	3/5/1998	TPH (as diesel)	0.040	0.080
MW-102S	6/18/1998	TPH (as diesel)	0.190	0.078
MW-102S	12/10/1998	TPH (as diesel)	0.040	0.080
MW-102S	3/24/1999	TPH (as diesel)	0.040	0.080
MW-102S	6/16/2000	TPH (as diesel)	0.040	0.080
MW-102S	9/14/2000	TPH (as diesel)	0.038	0.077
MW-102S	12/13/2000	TPH (as diesel)	0.040	0.080
MW-102S	3/13/2001	TPH (as diesel)	0.040	0.080
MW-102S	6/21/2001	TPH (as diesel)	0.040	0.080
MW-102S	9/25/2001	TPH (as diesel)	0.051	0.020
MW-102S	12/12/2001	TPH (as diesel)	0.046	0.046
MW-102S	3/29/2002	TPH (as diesel)	0.077	0.050
MW-102S	6/25/2002	TPH (as diesel)	0.025	0.050

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.282603053
R Square	0.079807975
Adjusted R Square	0.003125306
Standard Error	0.040821856
Observations	14

ANOVA

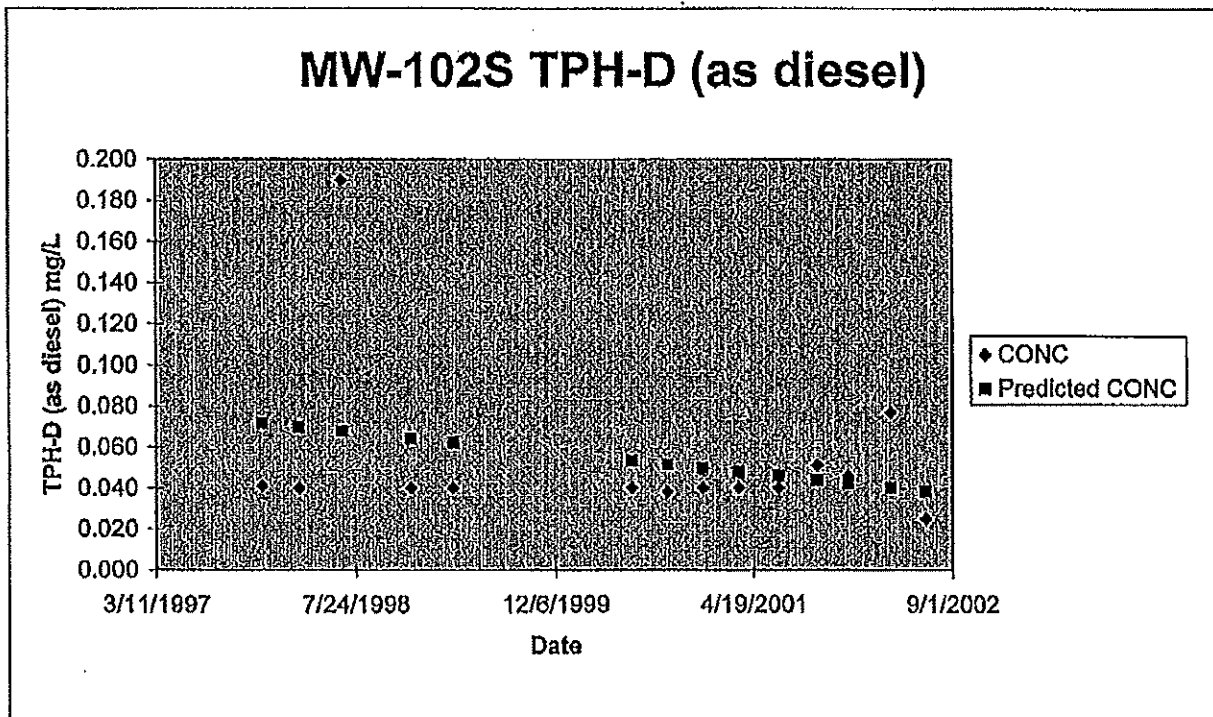
	df	SS	MS	F	Significance F
Regression	1	0.001734341	0.001734	1.040756	0.327773136
Residual	12	0.019997087	0.001666		
Total	13	0.021731429			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.787963076	0.720091225	1.094255	0.295322	-0.780980897	2.356907	-0.7809809	2.356907049
SAMP_DATE	-2.00255E-05	1.96295E-05	-1.020175	0.327773	-6.27945E-05	2.274E-05	-6.279E-05	2.27435E-05

MW-102S
 TPH-D (as diesel)
 Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.071710437	-0.030710437
2	0.06986809	-0.02986809
3	0.067765411	0.122234589
4	0.064260945	-0.024260945
5	0.062178292	-0.022178292
6	0.053166809	-0.013166809
7	0.051364513	-0.013364513
8	0.049562216	-0.009562216
9	0.04775992	-0.00775992
10	0.045757368	-0.005757368
11	0.043834919	0.007165081
12	0.042272928	0.003727072
13	0.040130198	0.036869802
14	0.038367953	-0.013367953



MW-103D
TPH-D (as diesel)
Regression Analysis

SITE_ID	DATE	NAME	CONC	DET_LIMIT
MW-103D	6/19/1997	TPH (as diesel)	0.10	0.077
MW-103D	9/26/1997	TPH (as diesel)	0.27	0.077
MW-103D	12/3/1997	TPH (as diesel)	0.12	0.082
MW-103D	3/6/1998	TPH (as diesel)	0.15	0.082
MW-103D	6/17/1998	TPH (as diesel)	0.04	0.077
MW-103D	9/28/1998	TPH (as diesel)	0.08	0.080
MW-103D	12/9/1998	TPH (as diesel)	0.04	0.080
MW-103D	3/24/1999	TPH (as diesel)	0.21	0.080
MW-103D	6/15/1999	TPH (as diesel)	0.52	0.078
MW-103D	8/24/1999	TPH (as diesel)	0.20	0.078
MW-103D	11/3/1999	TPH (as diesel)	0.45	0.078
MW-103D	3/22/2000	TPH (as diesel)	0.14	0.080
MW-103D	6/16/2000	TPH (as diesel)	0.24	0.080
MW-103D	9/15/2000	TPH (as diesel)	0.04	0.077
MW-103D	12/13/2000	TPH (as diesel)	0.56	0.080
MW-103D	3/13/2001	TPH (as diesel)	0.04	0.080
MW-103D	6/21/2001	TPH (as diesel)	0.46	0.080
MW-103D	9/25/2001	TPH (as diesel)	0.39	0.200
MW-103D	12/12/2001	TPH (as diesel)	0.08	0.046
MW-103D	3/29/2002	TPH (as diesel)	0.69	0.050
MW-103D	6/25/2002	TPH (as diesel)	0.14	0.050

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.3596276
R Square	0.129332
Adjusted R Square	0.0835073
Standard Error	0.1885589
Observations	21

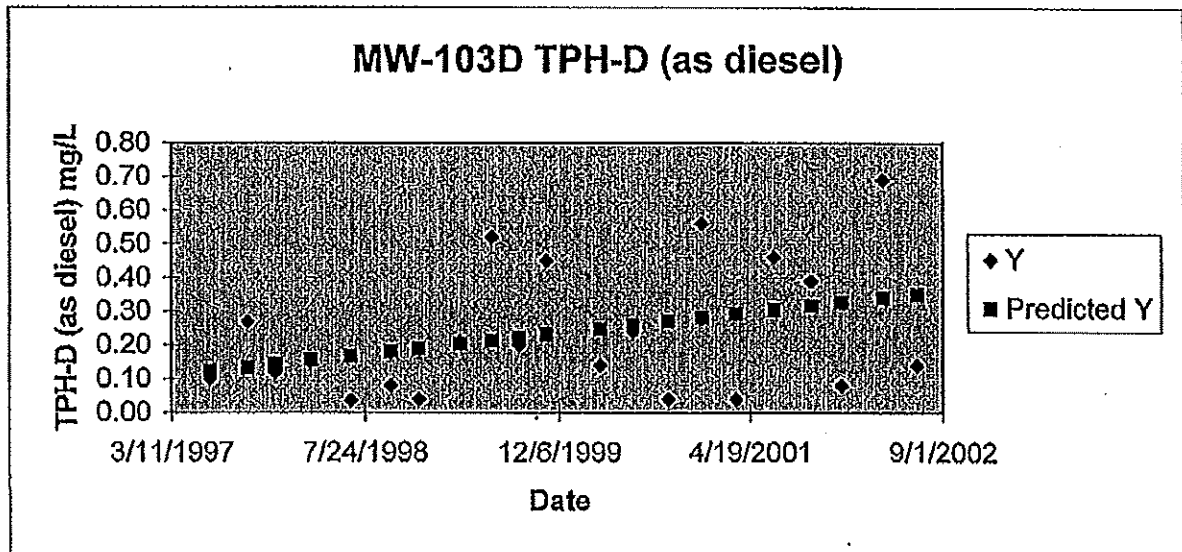
ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.100346216	0.1003	2.822324	0.109329921
Residual	19	0.675534737	0.0356		
Total	20	0.775880952			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Low 95%</i>	<i>Up 95%</i>	<i>Low 95%</i>	<i>Up 95%</i>
Intercept	-4.3098315	2.706110483	-1.593	0.12776	-9.97358755	1.3543	-9.9736	1.3543
X Variable 1	0.0001245	7.41141E-05	1.68	0.10933	-3.0613E-05	0.0003	-3E-05	0.0003

MW-103D
TPH-D (as diesel)
Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted Y	Residuals
1	0.1229273	-0.02292725
2	0.1351292	0.134870762
3	0.1437204	-0.023720433
4	0.1552999	-0.00529987
5	0.1681244	-0.131124408
6	0.1809489	-0.100948946
7	0.1899137	-0.149913671
8	0.2029872	0.007012771
9	0.2133216	0.306678434
10	0.2220373	-0.022037271
11	0.2308775	0.219122514
12	0.2483089	-0.108308897
13	0.2690168	-0.019016764
14	0.2703472	-0.23034718
15	0.2814286	0.278571423
16	0.2926345	-0.252634484
17	0.3050855	0.154914508
18	0.3170385	0.072961541
19	0.3267502	-0.246750245
20	0.3400728	0.349927177
21	0.3510297	-0.21102971



**MW-103S
TPH-D (as diesel)
Regression Analysis**

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-103S	12/3/1997	TPH (as diesel)	0.250	0.082
MW-103S	3/6/1998	TPH (as diesel)	0.420	0.082
MW-103S	12/9/1998	TPH (as diesel)	0.040	0.080
MW-103S	3/24/1999	TPH (as diesel)	1.500	0.080
MW-103S	12/12/2001	TPH (as diesel)	0.360	0.046
MW-103S	3/29/2002	TPH (as diesel)	1.500	0.050

SUMMARY OUTPUT

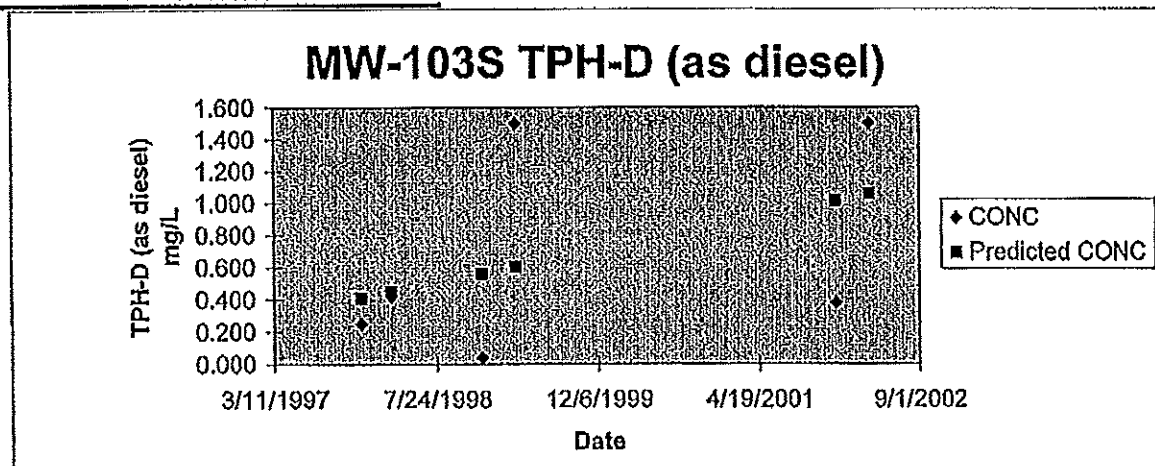
<i>Regression Statistics</i>	
Multiple R	0.436880282
R Square	0.190864381
Adjusted R Square	-0.011419524
Standard Error	0.651280085
Observations	6

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.400220339	0.40022	0.943547	0.386372019
Residual	4	1.696662994	0.424166		
Total	5	2.096883333			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	-14.28518011	15.41037418	-0.926985	0.406403	-57.07132668	28.50097	-57.071327	28.50096647
SAMP_DATE	0.000410822	0.000422933	0.971363	0.386372	-0.000763431	0.001585	-0.0007634	0.001585074

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.40867572	-0.15867572
2	0.446882128	-0.026882128
3	0.56109053	-0.52109053
4	0.604226797	0.895773203
5	1.012583458	-0.632583458
6	1.056541368	0.443458632



MW-104S
 TPH-D (as diesel)
 Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-104S	12/9/1998	TPH (as diesel)	0.100	
MW-104S	6/15/1999	TPH (as diesel)	0.070	
MW-104S	12/13/2000	TPH (as diesel)	0.040	
MW-104S	3/13/2001	TPH (as diesel)	0.060	
MW-104S	12/12/2001	TPH (as diesel)	0.067	
MW-104S	3/29/2002	TPH (as diesel)	0.130	

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.090037441
R Square	0.008106741
Adjusted R Square	-0.239866574
Standard Error	0.035704194
Observations	6

ANOVA

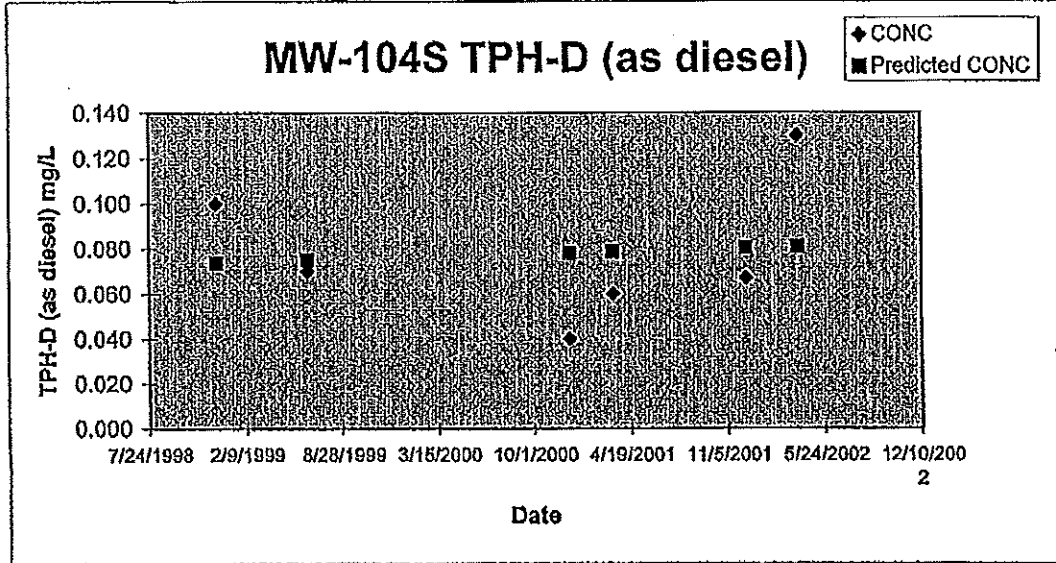
	df	SS	MS	F	Significance F
Regression	1	4.16754E-05	4.1675E-05	0.03269199	0.865308794
Residual	4	0.005099158	0.00127479		
Total	5	0.005140833			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	
Intercept	-0.140887523	1.209765113	-0.1164586	0.91290199	-3.499740906	
SAMP_DATE	5.94132E-06	3.28596E-05	0.18080926	0.86530879	-8.52918E-05	
				Upper 95%	Lower 95.0%	Upper 95.0%
				3.21796586	-3.49974091	3.217965859
				9.7174E-05	-8.5292E-05	9.71744E-05

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.07381997	0.02618003
2	0.074936939	-0.004936939
3	0.078186842	-0.038186842
4	0.078721561	-0.018721561
5	0.080349483	-0.013349483
6	0.080985205	0.049014795

MW-104S
TPH-D (as diesel)
Regression Analysis



MW-105D
TPH-D (as diesel)
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-105D	6/19/1997	TPH (as diesel)	0.11	0.077
MW-105D	9/25/1997	TPH (as diesel)	0.18	0.077
MW-105D	12/3/1997	TPH (as diesel)	0.12	0.082
MW-105D	3/8/1998	TPH (as diesel)	0.11	0.082
MW-105D	6/17/1998	TPH (as diesel)	0.04	0.087
MW-105D	9/28/1998	TPH (as diesel)	0.03	0.080
MW-105D	12/10/1998	TPH (as diesel)	0.17	0.080
MW-105D	3/25/1999	TPH (as diesel)	0.13	0.080
MW-105D	6/15/1999	TPH (as diesel)	0.12	0.078
MW-105D	8/24/1999	TPH (as diesel)	0.12	0.078
MW-105D	11/3/1999	TPH (as diesel)	0.10	0.078
MW-105D	3/22/2000	TPH (as diesel)	0.19	0.080
MW-105D	6/18/2000	TPH (as diesel)	0.18	0.080
MW-105D	9/15/2000	TPH (as diesel)	0.03	0.050
MW-105D	12/13/2000	TPH (as diesel)	0.08	0.080
MW-105D	3/13/2001	TPH (as diesel)	0.08	0.080
MW-105D	6/21/2001	TPH (as diesel)	0.08	0.080
MW-105D	9/25/2001	TPH (as diesel)	0.11	0.200
MW-105D	12/12/2001	TPH (as diesel)	0.10	0.048
MW-105D	3/29/2002	TPH (as diesel)	0.14	0.050
MW-105D	6/25/2002	TPH (as diesel)	0.09	0.050

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.12533989
R Square	0.015710088
Adjusted R Square	-0.036094644
Standard Error	0.046639111
Observations	21

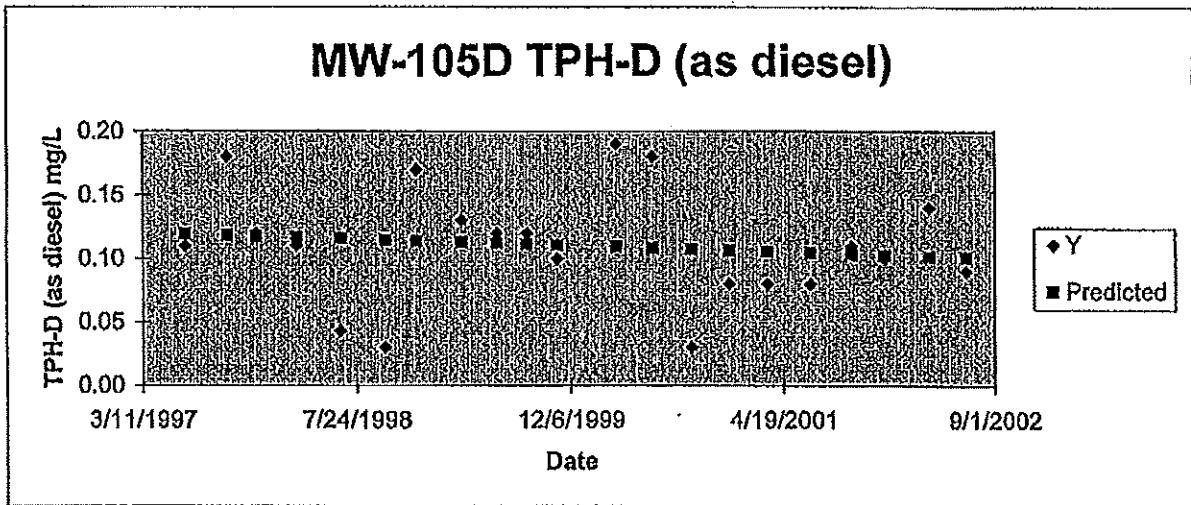
ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.000659644	0.00066	0.303256	0.58826559
Residual	19	0.041328927	0.002175		
Total	20	0.041988571			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.478735686	0.669410453	0.71516	0.483206	-0.922356929	1.879828	-0.9223569	1.8798283
X Variable 1	-1.0098E-05	1.83338E-05	-0.550887	0.588266	-4.84687E-05	2.83E-05	-4.847E-05	2.8277E-05

**MW-105D
TPH-D (as diesel)
Regression Analysis**

RESIDUAL OUTPUT

Observation	Predicted Y	Residuals
1	0.11931632	-0.00931632
2	0.118326907	0.061673093
3	0.11763029	0.00236972
4	0.116691347	-0.006691347
5	0.115651454	-0.072651454
6	0.114611561	-0.084611561
7	0.113874549	0.056125451
8	0.112814464	0.017185536
9	0.111986588	0.008013412
10	0.111279865	0.008720135
11	0.110563045	-0.010563045
12	0.109149598	0.080850402
13	0.108281338	0.071718662
14	0.107362597	-0.077362597
15	0.106464049	-0.026464049
16	0.105555405	-0.025555405
17	0.1045458	-0.0245458
18	0.103576579	0.006423421
19	0.102789087	-0.002789087
20	0.10170881	0.03829119
21	0.100820357	-0.010820357



MW-105S
 TPH-D (as diesel)
 Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-105S	6/19/1997	TPH (as diesel)	0.100	0.077
MW-105S	9/25/1997	TPH (as diesel)	0.140	0.077
MW-105S	12/3/1997	TPH (as diesel)	0.041	0.082
MW-105S	3/6/1998	TPH (as diesel)	0.040	0.080
MW-105S	6/17/1998	TPH (as diesel)	0.040	0.080
MW-105S	12/10/1998	TPH (as diesel)	0.040	0.080
MW-105S	3/25/1999	TPH (as diesel)	0.097	0.080
MW-105S	6/15/1999	TPH (as diesel)	0.084	0.078
MW-105S	6/15/2000	TPH (as diesel)	0.140	0.080
MW-105S	12/12/2001	TPH (as diesel)	0.050	0.050
MW-105S	3/29/2002	TPH (as diesel)	0.180	0.050
MW-105S	6/25/2002	TPH (as diesel)	0.110	0.050

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.38746368
R Square	0.150128103
Adjusted R Square	0.065140914
Standard Error	0.046240596
Observations	12

ANOVA

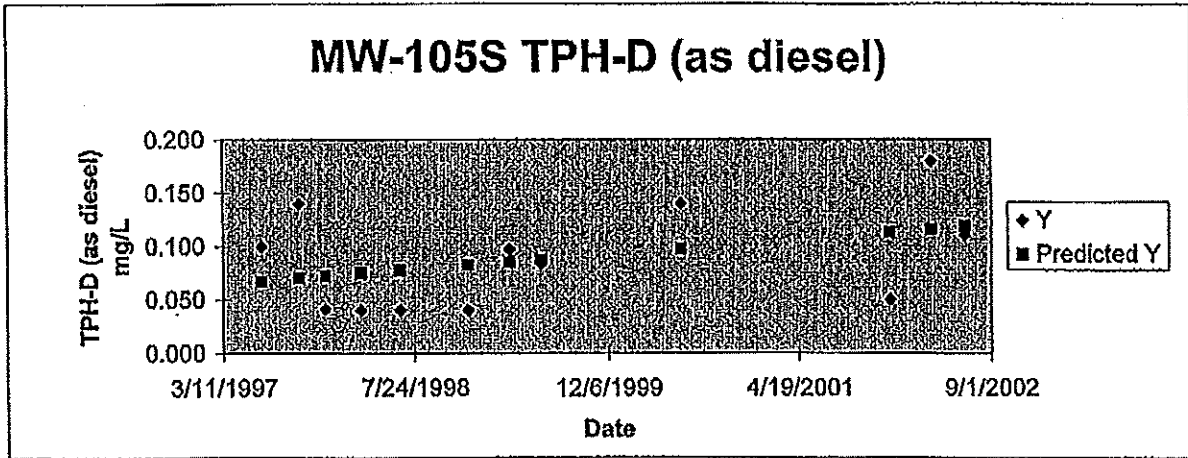
	df	SS	MS	F	Significance F
Regression	1	0.009777073	0.009777	1.766479	0.213344443
Residual	10	0.021381927	0.002138		
Total	11	0.025159			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.927680809	0.764885585	-1.213153	0.252949	-2.631508765	0.776145	-2.6315088	0.77614515
X Variable 1	2.79489E-05	2.10286E-05	1.32909	0.213344	-1.89058E-05	7.48E-05	-1.891E-05	7.4804E-05

MW-105S
 TPH-D (as diesel)
 Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted Y	Residuals
1	0.067300744	0.032699266
2	0.070039738	0.069960262
3	0.071988214	-0.030968214
4	0.074567463	-0.034867463
5	0.077446202	-0.037446202
6	0.082365212	-0.042365212
7	0.085299849	0.011700151
8	0.08759166	-0.00359166
9	0.087820965	0.042179035
10	0.113053126	-0.063053126
11	0.116043861	0.063956339
12	0.118503166	-0.008503166



MW-RA-8-3
 TPH-D (as diesel)
 Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-RA-8-3	6/19/1997	TPH (as diesel)	1.300	0.077
MW-RA-8-3	9/28/1997	TPH (as diesel)	1.400	0.077
MW-RA-8-3	12/4/1997	TPH (as diesel)	1.000	0.082
MW-RA-8-3	3/5/1998	TPH (as diesel)	1.300	0.082
MW-RA-8-3	6/17/1998	TPH (as diesel)	0.590	0.078
MW-RA-8-3	9/28/1998	TPH (as diesel)	0.710	0.080
MW-RA-8-3	12/10/1998	TPH (as diesel)	0.150	0.080
MW-RA-8-3	3/24/1999	TPH (as diesel)	0.370	0.080
MW-RA-8-3	6/16/1999	TPH (as diesel)	0.340	0.074
MW-RA-8-3	8/24/1999	TPH (as diesel)	1.000	0.078
MW-RA-8-3	11/3/1999	TPH (as diesel)	1.200	0.078
MW-RA-8-3	3/22/2000	TPH (as diesel)	0.200	0.080
MW-RA-8-3	6/16/2000	TPH (as diesel)	0.460	0.080
MW-RA-8-3	9/16/2000	TPH (as diesel)	1.600	0.080
MW-RA-8-3	12/13/2000	TPH (as diesel)	0.470	0.080
MW-RA-8-3	3/13/2001	TPH (as diesel)	0.310	0.080
MW-RA-8-3	6/21/2001	TPH (as diesel)	0.280	0.080
MW-RA-8-3	9/26/2001	TPH (as diesel)	0.690	0.200
MW-RA-8-3	12/12/2001	TPH (as diesel)	0.420	0.046
MW-RA-8-3	3/29/2002	TPH (as diesel)	0.830	0.050
MW-RA-8-3	6/26/2002	TPH (as diesel)	0.820	0.050

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.356731685
R Square	0.127257495
Adjusted R Square	0.081323679
Standard Error	0.407352049
Observations	21

ANOVA

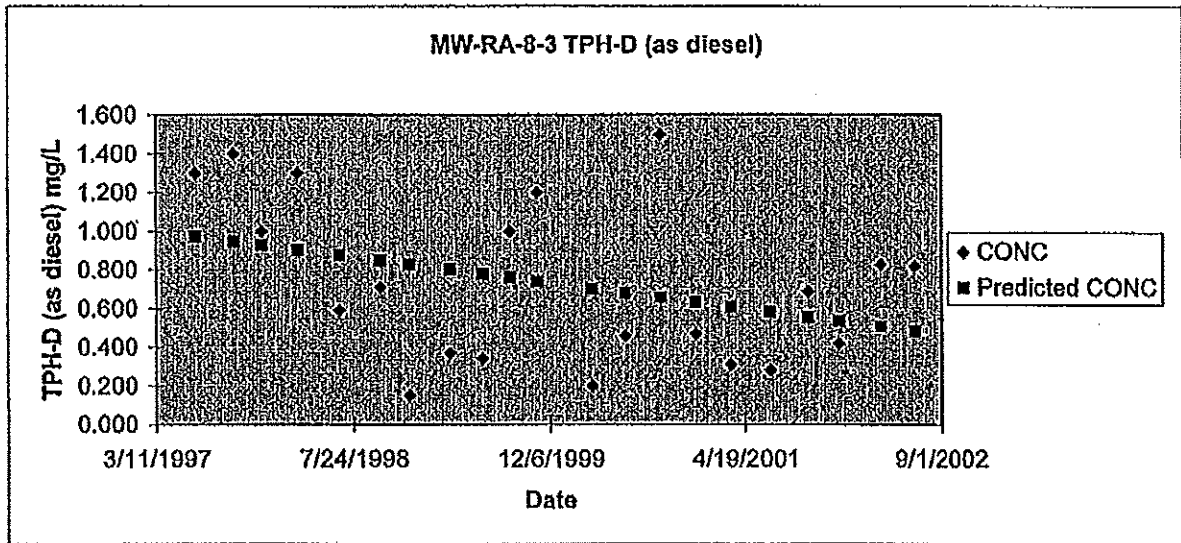
	df	SS	MS	F	Significance F
Regression	1	0.459717096	0.459717	2.770453	0.112424046
Residual	19	3.162778142	0.165936		
Total	20	3.612495238			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	10.46075241	5.84655378	1.789217	0.089534	-1.776229094	22.69773	-1.7762291	22.6977339
SAMP_DATE	-0.00026652	0.000160123	-1.664468	0.112424	-0.000601663	6.86E-05	-0.0006017	6.8622E-05

MW-RA-8-3
 TPH-D (as diesel)
 Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.97262894	0.32737106
2	0.946509949	0.453490051
3	0.927853526	0.072146474
4	0.903600177	0.396399823
5	0.875882063	-0.285802063
6	0.84843047	-0.13843047
7	0.828974487	-0.678974487
8	0.801256373	-0.431256373
9	0.779135186	-0.439135186
10	0.760478764	0.239521236
11	0.741555821	0.468444179
12	0.704242976	-0.504242976
13	0.681322228	-0.221322228
14	0.657068879	0.842931121
15	0.63334857	-0.16334857
16	0.609361741	-0.299361741
17	0.582709709	-0.302709709
18	0.557123758	0.132876242
19	0.536335173	-0.116335173
20	0.507817499	0.322182501
21	0.48436371	0.33563629



MW-100D
TPH-O
Regression Analysis

SITE_ID	Date	NAME	CONC	DET_LIMIT
MW-100D	6/19/1997	TPH (as motor oil)	0.100	0.20
MW-100D	9/26/1997	TPH (as motor oil)	0.100	0.20
MW-100D	12/4/1997	TPH (as motor oil)	0.100	0.20
MW-100D	3/5/1998	TPH (as motor oil)	0.100	0.20
MW-100D	6/18/1998	TPH (as motor oil)	0.100	0.20
MW-100D	9/28/1998	TPH (as motor oil)	0.100	0.20
MW-100D	12/10/1998	TPH (as motor oil)	0.100	0.200
MW-100D	3/24/1999	TPH (as motor oil)	0.100	0.20
MW-100D	6/15/1999	TPH (as motor oil)	0.100	0.200
MW-100D	8/24/1999	TPH (as motor oil)	0.100	0.200
MW-100D	11/3/1999	TPH (as motor oil)	0.100	0.200
MW-100D	3/22/2000	TPH (as motor oil)	0.100	0.200
MW-100D	6/16/2000	TPH (as motor oil)	0.220	0.200
MW-100D	9/14/2000	TPH (as motor oil)	0.100	0.200
MW-100D	12/13/2000	TPH (as motor oil)	0.105	0.210
MW-100D	3/13/2001	TPH (as motor oil)	0.100	0.200
MW-100D	6/21/2001	TPH (as motor oil)	0.100	0.200
MW-100D	9/25/2001	TPH (as motor oil)	0.100	0.200
MW-100D	12/12/2001	TPH (as motor oil)	0.090	0.180
MW-100D	3/29/2002	TPH (as motor oil)	0.100	0.200
MW-100D	6/25/2002	TPH (as motor oil)	0.100	0.200

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.055582198
R Square	0.003089381
Adjusted R Square	-0.049379599
Standard Error	0.027001277
Observations	21

ANOVA

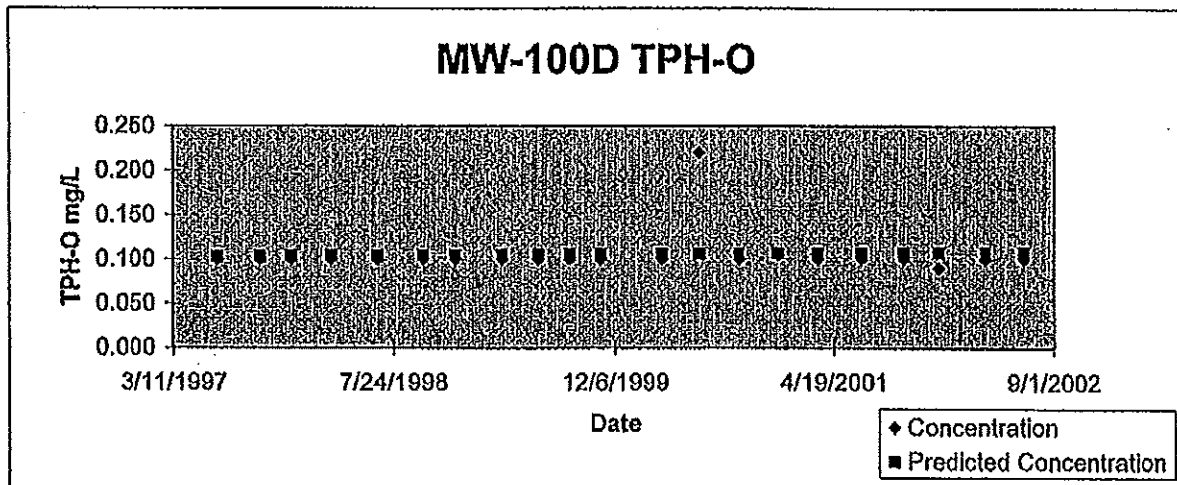
	df	SS	MS	F	Significance F
Regression	1	4.29277E-05	4.29E-05	0.05888	0.810874925
Residual	19	0.01385231	0.000729		
Total	20	0.013895238			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.011426248	0.387636182	0.029477	0.976792	-0.79990586	0.822758	-0.79990586	0.82275835
Date	2.5761E-06	1.06164E-05	0.242652	0.810875	-1.9644E-05	2.48E-05	-1.9644E-05	2.4797E-05

MW-100D
TPH-O
Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.103135495	-0.003135495
2	0.103390529	-0.003390529
3	0.10356828	-0.00356828
4	0.103802705	-0.003802705
5	0.104073196	-0.004073196
6	0.104335958	-0.004335958
7	0.104524014	-0.004524014
8	0.104791929	-0.004791929
9	0.105005745	-0.005005745
10	0.105186072	-0.005186072
11	0.105368976	-0.005368976
12	0.10572963	-0.00572963
13	0.105951175	0.114048825
14	0.106183024	-0.006183024
15	0.106414873	-0.006414873
16	0.106646722	-0.006646722
17	0.106904333	-0.006904333
18	0.107151638	-0.007151638
19	0.107352574	-0.017352574
20	0.107628217	-0.007628217
21	0.107854914	-0.007854914



MW-100S
TPH-O
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-100S	9/26/1997	TPH (as motor oil)	0.095	0.19
MW-100S	12/4/1997	TPH (as motor oil)	0.100	0.20
MW-100S	3/5/1998	TPH (as motor oil)	0.100	0.20
MW-100S	6/18/1998	TPH (as motor oil)	0.100	0.20
MW-100S	9/28/1998	TPH (as motor oil)	0.100	0.20
MW-100S	12/10/1998	TPH (as motor oil)	0.100	0.20
MW-100S	3/24/1999	TPH (as motor oil)	0.100	0.20
MW-100S	6/15/1999	TPH (as motor oil)	0.100	0.200
MW-100S	6/16/2000	TPH (as motor oil)	0.100	0.20
MW-100S	12/13/2000	TPH (as motor oil)	0.100	0.200
MW-100S	3/13/2001	TPH (as motor oil)	0.105	0.210
MW-100S	12/12/2001	TPH (as motor oil)	0.090	0.180
MW-100S	3/29/2002	TPH (as motor oil)	0.100	0.200
MW-100S	6/25/2002	TPH (as motor oil)	0.095	0.19

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.222149079
R Square	0.049350213
Adjusted R Square	-0.029870602
Standard Error	0.003548303
Observations	14

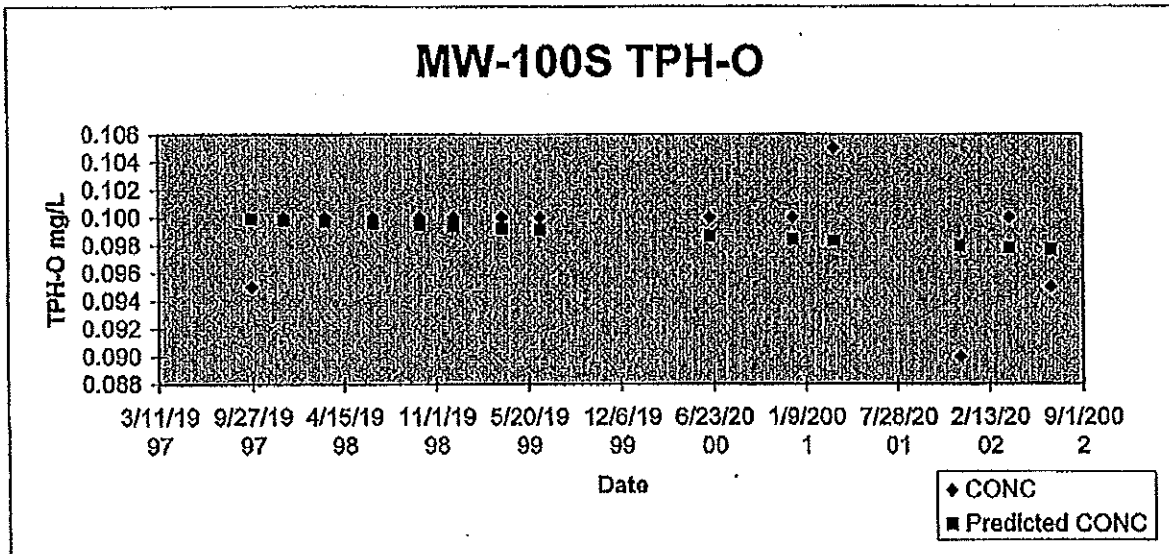
ANOVA					
	df	SS	MS	F	Significance F
Regression	1	7.84316E-08	7.84E-08	0.622945	0.445270055
Residual	12	0.000151085	1.26E-05		
Total	13	0.000158929			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.145576958	0.059110912	2.462776	0.029886	0.016785348	0.274369	0.01678535	0.27436857
SAMP_DATE	-1.27902E-06	1.62052E-06	-0.789269	0.44527	-4.8098E-06	2.25E-06	-4.81E-06	2.2518E-06

MW-100S
 TPH-O
 Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.099917074	-0.004917074
2	0.099828822	0.000171178
3	0.099712431	0.000287569
4	0.099578133	0.000421867
5	0.099447673	0.000552327
6	0.099354304	0.000645696
7	0.099221285	0.000778715
8	0.099115126	0.000884874
9	0.098645724	0.001354276
10	0.0984155	0.0015845
11	0.098300388	0.006699612
12	0.097949935	-0.007949935
13	0.09781308	0.00218682
14	0.097700526	-0.002700526



MW-101S
TPH-O
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIN	DL_FLAG
MW-101S	6/19/1997	TPH (as motor oil)	0.280	0.19	
MW-101S	9/25/1997	TPH (as motor oil)	0.100	0.20	<
MW-101S	12/4/1997	TPH (as motor oil)	0.260	0.20	
MW-101S	3/5/1998	TPH (as motor oil)	0.200	0.19	
MW-101S	6/18/1998	TPH (as motor oil)	0.190	0.020	
MW-101S	12/10/1998	TPH (as motor oil)	0.100	0.20	<
MW-101S	3/24/1999	TPH (as motor oil)	0.100	0.20	<
MW-101S	6/15/1999	TPH (as motor oil)	0.100	0.200	
MW-101S	12/12/2001	TPH (as motor oil)	0.090	0.180	
MW-101S	3/29/2002	TPH (as motor oil)	0.100	0.200	

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.619083812
R Square	0.383240003
Adjusted R Square	0.306145004
Standard Error	0.061562896
Observations	10

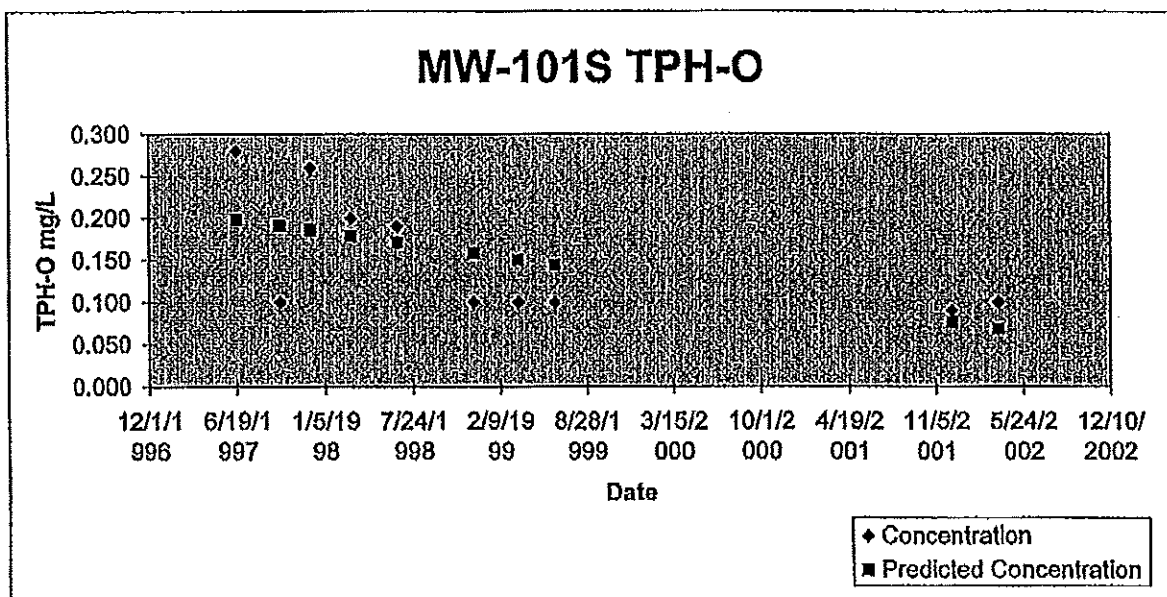
ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.018840079	0.01884	4.97101	0.05633422
Residual	8	0.030319921	0.00379		
Total	9	0.04916			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	2.858799267	1.214198149	2.354475	0.04636	0.058851495	5.658747	0.0588515	5.65874702
SAMP_DATE	-7.47367E-05	3.35206E-05	-2.229576	0.05833	-0.00015204	2.56E-06	-0.000182	2.562E-06

MW-101S
 TPH-O
 Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.19817234	0.08182766
2	0.190848142	-0.090848142
3	0.185818573	0.074383427
4	0.178815532	0.021184488
5	0.170968177	0.019031823
6	0.167889253	-0.057889253
7	0.150116635	-0.050116635
8	0.143913488	-0.043913488
9	0.075828344	0.014171656
10	0.067831516	0.032169484



MW-102S
TPH-O
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT	DL_FLAG
MW-102S	12/3/1997	TPH (as motor oil)	0.100	0.20	<
MW-102S	3/5/1998	TPH (as motor oil)	0.100	0.20	<
MW-102S	6/18/1998	TPH (as motor oil)	0.082	0.20	
MW-102S	12/10/1998	TPH (as motor oil)	0.100	0.20	<
MW-102S	3/24/1999	TPH (as motor oil)	0.100	0.20	<
MW-102S	6/16/2000	TPH (as motor oil)	0.100	0.20	<
MW-102S	9/15/2000	TPH (as motor oil)	0.095	0.190	
MW-102S	12/13/2000	TPH (as motor oil)	0.100	0.200	
MW-102S	3/13/2001	TPH (as motor oil)	0.095	0.190	
MW-102S	6/21/2001	TPH (as motor oil)	0.100	0.200	
MW-102S	9/25/2001	TPH (as motor oil)	0.100	0.200	
MW-102S	12/12/2001	TPH (as motor oil)	0.090	0.180	
MW-102S	3/29/2002	TPH (as motor oil)	0.100	0.200	
MW-102S	6/25/2002	TPH (as motor oil)	0.100	0.200	

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.134408812
R Square	0.018065675
Adjusted R Square	-0.063762185
Standard Error	0.005508761
Observations	14

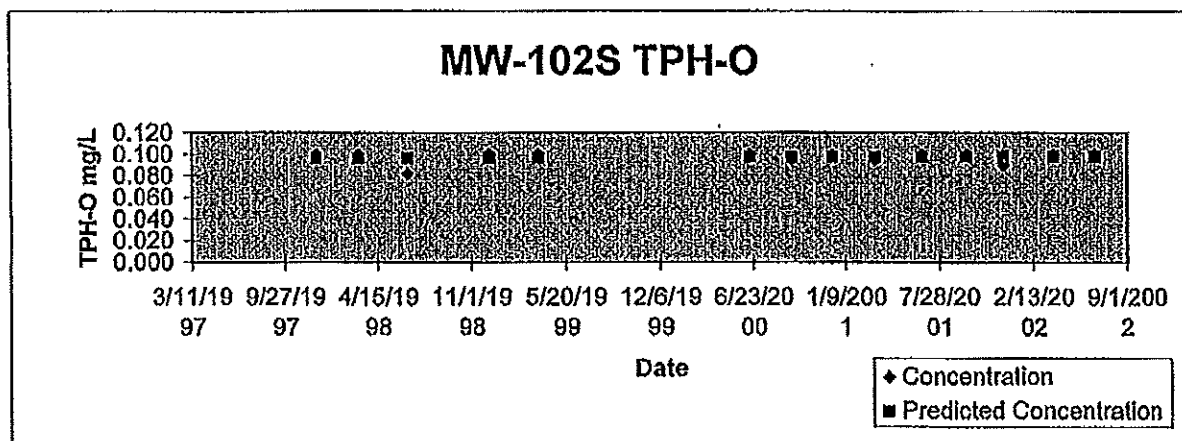
ANOVA					
	df	SS	MS	F	Significance F
Regression	1	6.69978E-06	6.7E-06	0.220777	0.646872509
Residual	12	0.000364157	3.03E-05		
Total	13	0.000370857			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.051633086	0.097171553	0.53136	0.604866	-0.16008554	0.263352	-0.1600855	0.26335171
SAMP_DATE	1.24462E-06	2.64887E-06	0.469869	0.646873	-4.5288E-06	7.02E-06	-4.527E-06	7.016E-06

MW-102S
 TPH-O
 Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.096149377	0.003850623
2	0.096263882	0.003736118
3	0.096394567	-0.014394567
4	0.096612375	0.003387625
5	0.096741616	0.003258184
6	0.097301894	0.002696106
7	0.097415155	-0.002415155
8	0.097525926	0.002474074
9	0.097637941	-0.002637941
10	0.097762403	0.002237697
11	0.097881887	0.002118113
12	0.097978967	-0.007978967
13	0.098112141	0.001887859
14	0.098221668	0.001778332



MW-103D
TPH-O
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-103D	6/19/1997	TPH (as motor oil)	0.230	0.20
MW-103D	9/25/1997	TPH (as motor oil)	0.210	0.20
MW-103D	12/3/1997	TPH (as motor oil)	0.100	0.20
MW-103D	3/6/1998	TPH (as motor oil)	0.240	0.20
MW-103D	6/17/1998	TPH (as motor oil)	0.240	0.200
MW-103D	9/28/1998	TPH (as motor oil)	0.160	0.200
MW-103D	12/9/1998	TPH (as motor oil)	0.100	0.20
MW-103D	3/24/1999	TPH (as motor oil)	0.100	0.20
MW-103D	6/15/1999	TPH (as motor oil)	0.100	0.200
MW-103D	8/24/1999	TPH (as motor oil)	0.100	0.200
MW-103D	11/3/1999	TPH (as motor oil)	0.100	0.200
MW-103D	3/22/2000	TPH (as motor oil)	0.100	0.200
MW-103D	6/16/2000	TPH (as motor oil)	0.220	0.20
MW-103D	9/15/2000	TPH (as motor oil)	0.230	0.200
MW-103D	12/13/2000	TPH (as motor oil)	0.300	0.200
MW-103D	3/13/2001	TPH (as motor oil)	0.100	0.200
MW-103D	6/21/2001	TPH (as motor oil)	0.260	0.200
MW-103D	9/25/2001	TPH (as motor oil)	0.340	0.200
MW-103D	12/12/2001	TPH (as motor oil)	0.100	0.200
MW-103D	3/29/2002	TPH (as motor oil)	0.360	0.200
MW-103D	6/25/2002	TPH (as motor oil)	0.100	0.200

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.201593303
R Square	0.04063986
Adjusted R Square	-0.009852779
Standard Error	0.091402231
Observations	21

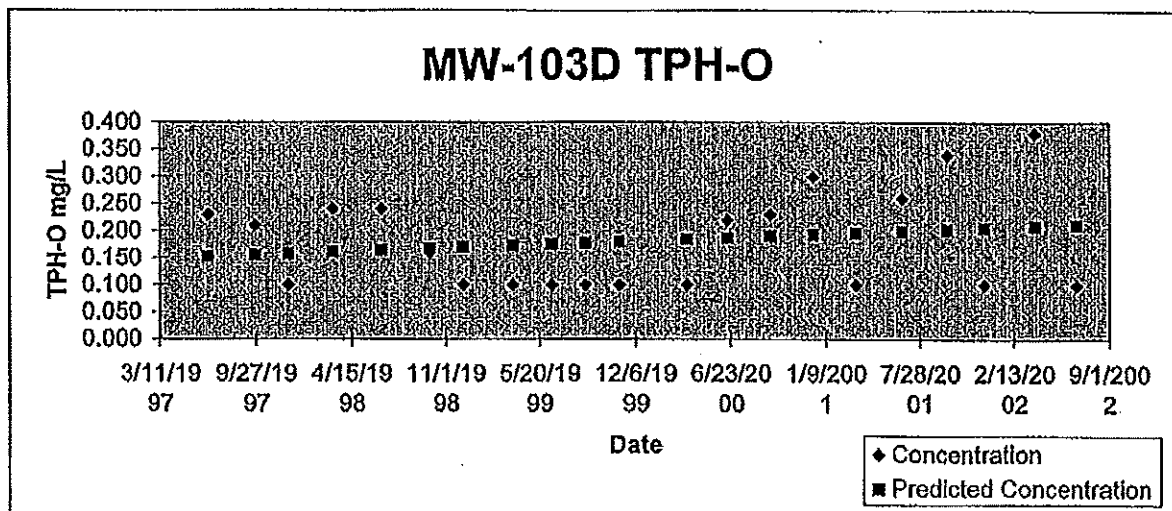
ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.006724165	0.006724	0.804867	0.380869618
Residual	19	0.158732988	0.008354		
Total	20	0.165457143			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%
Intercept	-0.995275166	1.311762698	-0.758731	0.457323	-3.740826896	1.750277	-3.7408269
SAMP_DATE	3.22309E-05	3.59262E-05	0.897144	0.38087	-4.28634E-05	0.000107	-4.2863E-05

MW-103D
 TPH-O
 Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.182146003	0.077853997
2	0.155304634	0.054695366
3	0.157528568	-0.057528568
4	0.160526045	0.079473955
5	0.183845831	0.076154169
6	0.167165617	-0.007165617
7	0.169486244	-0.089486244
8	0.172870492	-0.072870492
9	0.175545659	-0.075545659
10	0.177801824	-0.077801824
11	0.18009022	-0.08009022
12	0.184602551	-0.084602551
13	0.187374411	0.032625589
14	0.190307426	0.039692574
15	0.193175979	0.106824021
16	0.196076762	-0.096076762
17	0.199289856	0.060700144
18	0.202394025	0.137605975
19	0.204908038	-0.104908038
20	0.208358747	0.171643253
21	0.211193069	-0.111193069



MW-103D
TPH-O
Regression Analysis

Upper 95.0%
1.75027656
0.00010743

MW-103D
TPH-O
Regression Analysis



MW-103S
TPH-O
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIM	DL_FLAG
MW-103S	12/3/1997	TPH (as motor oil)	0.210	0.20	
MW-103S	3/6/1998	TPH (as motor oil)	0.410	0.20	
MW-103S	12/9/1998	TPH (as motor oil)	0.100	0.20	<
MW-103S	3/24/1999	TPH (as motor oil)	0.370	0.200	
MW-103S	12/12/2001	TPH (as motor oil)	0.280	0.180	
MW-103S	3/29/2002	TPH (as motor oil)	0.440	0.200	

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.343037658
R Square	0.117674834
Adjusted R Square	-0.102906458
Standard Error	0.13699559
Observations	6

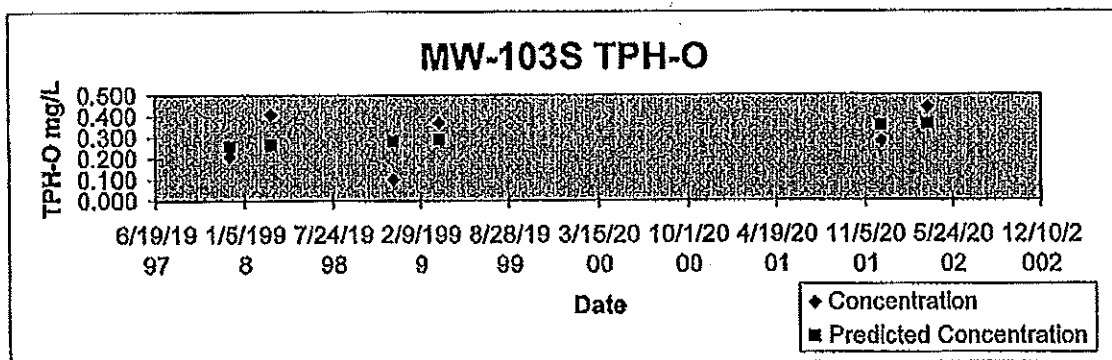
ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.010012167	0.010012	0.533476	0.505627
Residual	4	0.075071168	0.018768		
Total	5	0.085083333			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-2.065586897	3.241644377	-0.637223	0.558625	-11.06558	6.934402	-11.065576	6.93440176
SAMP_DATE	6.49782E-05	8.89632E-05	0.730394	0.505627	-0.000182	0.000312	-0.000182	0.00031198

MW-103S
 TPH-O
 Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.258488648	-0.048488648
2	0.264531621	0.145468379
3	0.282595563	-0.182595563
4	0.289418275	0.080581725
5	0.354006613	-0.074006613
6	0.360959281	0.079040719



MW-105D
TPH-O
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMIT
MW-105D	6/19/1997	TPH (as motor oil)	0.095	0.19
MW-105D	9/25/1997	TPH (as motor oil)	0.100	0.20
MW-105D	12/3/1997	TPH (as motor oil)	0.100	0.20
MW-105D	3/8/1998	TPH (as motor oil)	0.100	0.20
MW-105D	6/17/1998	TPH (as motor oil)	0.140	0.200
MW-105D	9/28/1998	TPH (as motor oil)	0.059	0.200
MW-105D	12/9/1998	TPH (as motor oil)	0.100	0.20
MW-105D	3/25/1999	TPH (as motor oil)	0.100	0.20
MW-105D	6/15/1999	TPH (as motor oil)	0.100	0.200
MW-105D	8/24/1999	TPH (as motor oil)	0.100	0.200
MW-105D	11/3/1999	TPH (as motor oil)	0.100	0.200
MW-105D	3/22/2000	TPH (as motor oil)	0.100	0.200
MW-105D	6/16/2000	TPH (as motor oil)	0.220	0.20
MW-105D	9/15/2000	TPH (as motor oil)	0.095	0.190
MW-105D	12/13/2000	TPH (as motor oil)	0.100	0.200
MW-105D	3/13/2001	TPH (as motor oil)	0.095	0.190
MW-105D	6/21/2001	TPH (as motor oil)	0.100	0.200
MW-105D	9/25/2001	TPH (as motor oil)	0.100	0.200
MW-105D	12/12/2001	TPH (as motor oil)	0.100	0.200
MW-105D	3/29/2002	TPH (as motor oil)	0.100	0.200
MW-105D	6/25/2002	TPH (as motor oil)	0.100	0.200

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.057918541
R Square	0.003354657
Adjusted R Square	-0.049100466
Standard Error	0.030072821
Observations	21

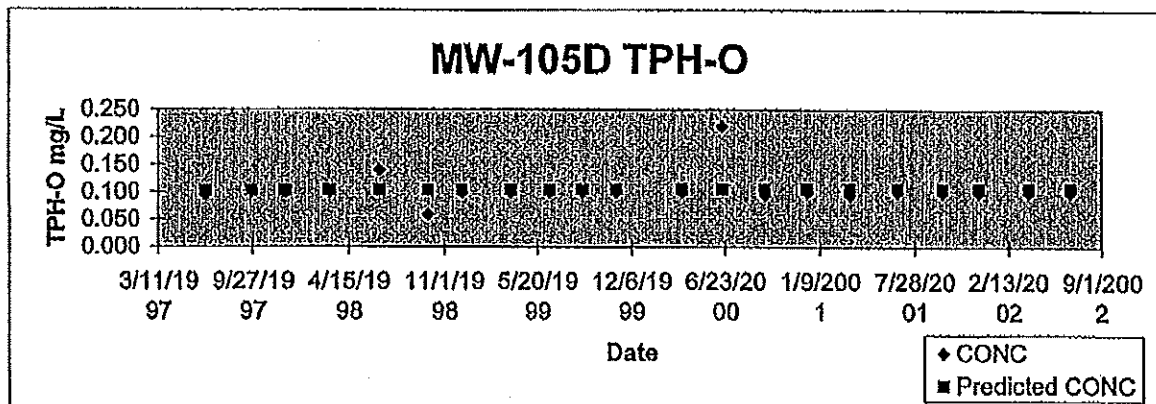
ANOVA					
	df	SS	MS	F	Significance F
Regression	1	5.78958E-05	5.78E-05	0.083951	0.803072464
Residual	19	0.017183117	0.000904		
Total	20	0.017240952			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.004182823	0.431609501	-0.009691	0.992369	-0.90755217	0.899187	-0.9075522	0.89918653
SAMP_DATE	2.9893E-06	1.18208E-05	0.252886	0.803072	-2.1752E-05	2.77E-05	-2.175E-05	2.773E-05

MW-105D
TPH-O
Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.102236385	-0.007236385
2	0.102529337	-0.002529337
3	0.102735599	-0.002735599
4	0.103013604	-0.003013604
5	0.103321502	0.036678498
6	0.103629401	-0.044629401
7	0.10384463	-0.00384463
8	0.104161497	-0.004161497
9	0.10440662	-0.00440662
10	0.104615871	-0.004615871
11	0.104828111	-0.004828111
12	0.105246614	-0.005246614
13	0.105503694	0.114496306
14	0.105778721	-0.010778721
15	0.106041769	-0.006041769
16	0.106310806	-0.011310806
17	0.106609736	-0.006609736
18	0.106898709	-0.006898709
19	0.107129875	-0.007129875
20	0.107449731	-0.007449731
21	0.107712789	-0.007712789



MW-105S

TPH-O

Regression Analysis

SITE_ID	Date	NAME	Conc	DET_LIMIT
MW-105S	6/19/1997	TPH (as motor oil)	0.100	0.20
MW-105S	9/25/1997	TPH (as motor oil)	0.100	0.20
MW-105S	12/3/1997	TPH (as motor oil)	0.100	0.20
MW-105S	3/6/1998	TPH (as motor oil)	0.220	0.20
MW-105S	6/17/1998	TPH (as motor oil)	0.100	0.200
MW-105S	12/9/1998	TPH (as motor oil)	0.210	0.200
MW-105S	3/25/1999	TPH (as motor oil)	0.100	0.20
MW-105S	6/15/1999	TPH (as motor oil)	0.100	0.200
MW-105S	6/16/2000	TPH (as motor oil)	0.300	0.20
MW-105S	12/12/2001	TPH (as motor oil)	0.100	0.200
MW-105S	3/29/2002	TPH (as motor oil)	0.210	0.200
MW-105S	6/25/2002	TPH (as motor oil)	0.100	0.200

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.178022687
R Square	0.031692077
Adjusted R Square	-0.085138715
Standard Error	0.072511461
Observations	12

ANOVA

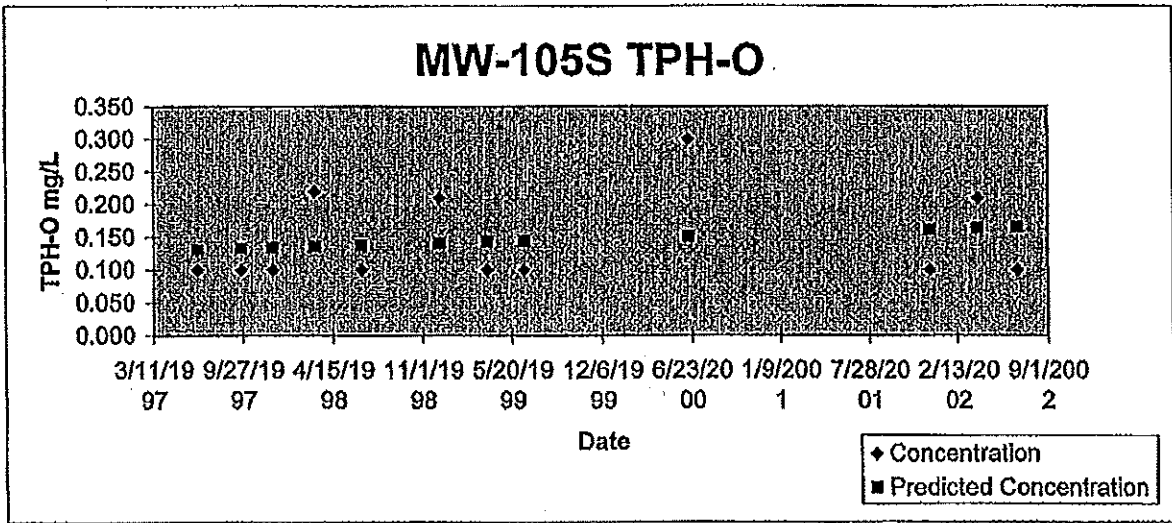
	df	SS	MS	F	Significance F
Regression	1	0.00172088	0.001721	0.327293	0.579889696
Residual	10	0.05257912	0.005258		
Total	11	0.0543			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.540833692	1.198992319	-0.451074	0.66156	-3.21235524	2.130688	-3.2123555	2.13068814
Date	1.86631E-05	3.29719E-05	0.572096	0.57989	-5.46029E-05	9.23E-05	-5.46E-05	9.2329E-05

MW-105S
 TPH-O
 Regression Analysis

RESIDUAL OUTPUT

Observation	dated Concentra.	Residuals
1	0.130692346	-0.030692346
2	0.132540928	-0.032540928
3	0.133842482	-0.033842482
4	0.135596749	0.084403251
5	0.137539648	-0.037539648
6	0.140840888	0.069159312
7	0.142840178	-0.042840178
8	0.14438695	-0.04438695
9	0.151309704	0.148690298
10	0.161571225	-0.061571225
11	0.163589576	0.046410424
12	0.165249528	-0.065249528



MW-RA-8-3
TPH-O
Regression Analysis

SITE_ID	SAMP_DATE	NAME	CONC	DET_LIMITDL_FLAG
MW-RA-8-3	6/19/1997	TPH (as motor oil)	0.390	0.20
MW-RA-8-3	9/25/1997	TPH (as motor oil)	0.340	0.20
MW-RA-8-3	12/4/1997	TPH (as motor oil)	0.410	0.20
MW-RA-8-3	3/6/1998	TPH (as motor oil)	0.460	0.20
MW-RA-8-3	6/17/1998	TPH (as motor oil)	0.700	0.200
MW-RA-8-3	9/28/1998	TPH (as motor oil)	0.100	0.20 <
MW-RA-8-3	12/10/1998	TPH (as motor oil)	0.100	0.20 <
MW-RA-8-3	3/24/1999	TPH (as motor oil)	0.100	0.20 <
MW-RA-8-3	6/15/1999	TPH (as motor oil)	0.100	0.200
MW-RA-8-3	8/24/1999	TPH (as motor oil)	0.100	0.200
MW-RA-8-3	11/3/1999	TPH (as motor oil)	0.100	0.200
MW-RA-8-3	3/22/2000	TPH (as motor oil)	0.100	0.200
MW-RA-8-3	6/16/2000	TPH (as motor oil)	0.280	0.20
MW-RA-8-3	9/16/2000	TPH (as motor oil)	0.480	0.200
MW-RA-8-3	12/13/2000	TPH (as motor oil)	0.240	0.200
MW-RA-8-3	3/13/2001	TPH (as motor oil)	0.095	0.190
MW-RA-8-3	6/21/2001	TPH (as motor oil)	0.100	0.200
MW-RA-8-3	9/25/2001	TPH (as motor oil)	0.280	0.200
MW-RA-8-3	12/12/2001	TPH (as motor oil)	0.090	0.180
MW-RA-8-3	3/29/2002	TPH (as motor oil)	0.280	0.200
MW-RA-8-3	6/25/2002	TPH (as motor oil)	0.200	0.200

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.364496782
R Square	0.132857904
Adjusted R Square	0.087218846
Standard Error	0.163498877
Observations	21

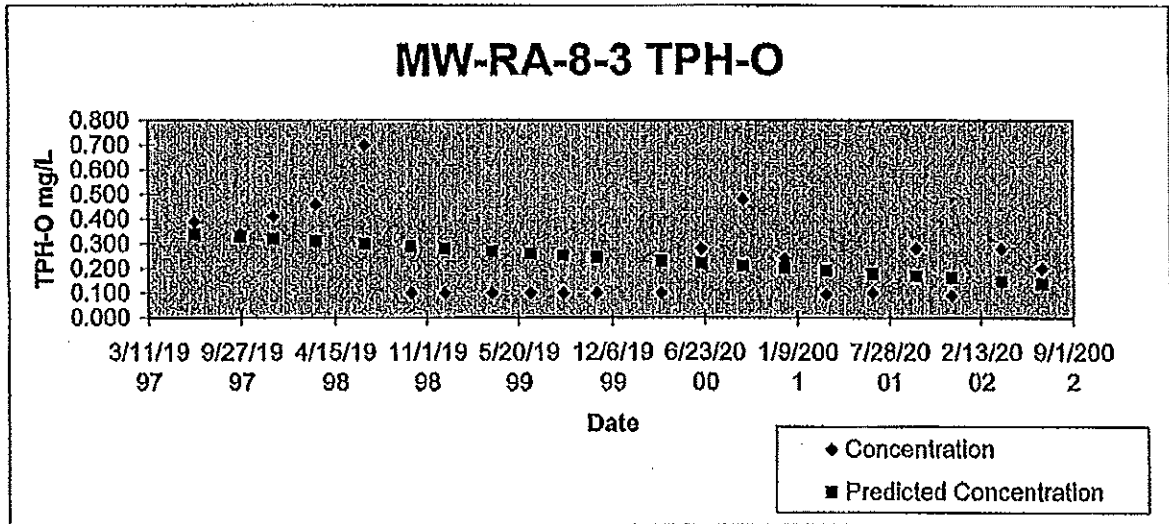
ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.077818038	0.077818	2.911057	0.10426741
Residual	19	0.507905772	0.026732		
Total	20	0.58572381			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	4.243555076	2.346831078	1.808361	0.086406	-0.668001738	9.155112	-0.6680017	9.1551189
SAMP_DATE	-0.000109654	6.42687E-05	-1.706182	0.104267	-0.00024417	2.49E-05	-0.0002442	2.4862E-05

MW-RA-8-3
 TPH-O
 Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted CONC	Residuals
1	0.339866738	0.050133262
2	0.32912063	0.01087937
3	0.321444838	0.088555162
4	0.311466309	0.148533691
5	0.300062276	0.399937724
6	0.288767896	-0.188767896
7	0.280763142	-0.180763142
8	0.269359109	-0.169359109
9	0.260257813	-0.160257813
10	0.252582021	-0.152582021
11	0.244796576	-0.144796576
12	0.229444992	-0.129444992
13	0.220014734	0.059985266
14	0.210036205	0.269963795
15	0.200276984	0.039723016
16	0.190408109	-0.095408109
17	0.179442692	-0.079442692
18	0.168915892	0.111084108
19	0.160362867	-0.070362867
20	0.148629871	0.131370129
21	0.138980305	0.061019695



MW-RA-8-3
PCP
Regression Analysis

	Date		Concentration
MW-RA-8-3	8/19/1997	Pentachlorophenol	0.073
MW-RA-8-3	7/30/1997	Pentachlorophenol	0.002
MW-RA-8-3	8/21/1997	Pentachlorophenol	0.290
MW-RA-8-3	9/25/1997	Pentachlorophenol	0.068
MW-RA-8-3	11/3/1997	Pentachlorophenol	0.038
MW-RA-8-3	12/4/1997	Pentachlorophenol	0.032
MW-RA-8-3	3/5/1998	Pentachlorophenol	0.620
MW-RA-8-3	6/17/1998	Pentachlorophenol	0.260
MW-RA-8-3	9/28/1998	Pentachlorophenol	1.000
MW-RA-8-3	12/10/1998	Pentachlorophenol	0.004
MW-RA-8-3	3/24/1999	Pentachlorophenol	0.013
MW-RA-8-3	6/15/1999	Pentachlorophenol	0.040
MW-RA-8-3	8/24/1999	Pentachlorophenol	0.150
MW-RA-8-3	11/3/1999	Pentachlorophenol	0.360
MW-RA-8-3	3/22/2000	Pentachlorophenol	0.004
MW-RA-8-3	6/16/2000	Pentachlorophenol	0.140
MW-RA-8-3	9/15/2000	Pentachlorophenol	0.310
MW-RA-8-3	12/13/2000	Pentachlorophenol	0.027
MW-RA-8-3	3/13/2001	Pentachlorophenol	0.038
MW-RA-8-3	6/21/2001	Pentachlorophenol	0.019
MW-RA-8-3	9/25/2001	Pentachlorophenol	0.052
MW-RA-8-3	12/12/2001	Pentachlorophenol	0.004
MW-RA-8-3	3/29/2002	Pentachlorophenol	0.005

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.2434302
R Square	0.0592583
Adjusted R Square	0.014461
Standard Error	0.2390635
Observations	23

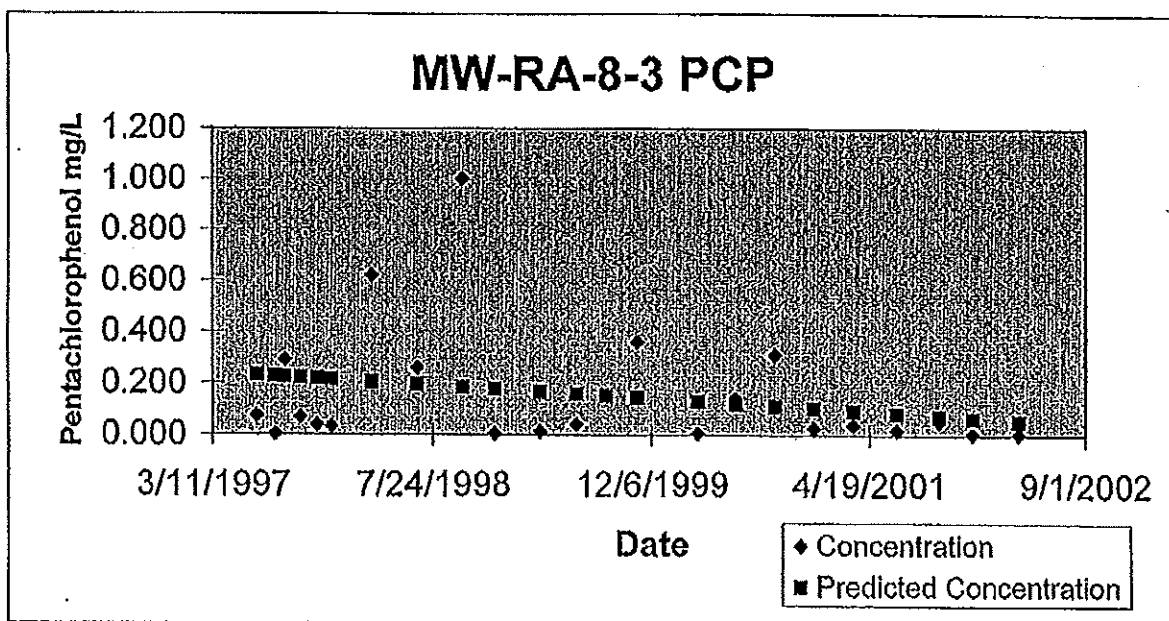
ANOVA						
	df	SS	MS	F	Significance F	
Regression	1	0.075600428	0.0756	1.3228	0.283017786	
Residual	21	1.200178442	0.0572			
Total	22	1.27577887				

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Up 95%	Lower 95%	Up 95%
Intercept	3.8860784	3.245022622	1.1976	0.2444	-2.8623167	10.634	-2.8623	10.6345
Date	-0.000103	8.92356E-05	-1.1501	0.263	-0.00028821	8E-05	-0.0003	8.3E-05

MW-RA-8-3
PCP
Regression Analysis

RESIDUAL OUTPUT

Observation	Predicted	
	Concentration	Residuals
1	0.2323455	-0.159345548
2	0.2281376	-0.226137597
3	0.2258797	0.064120328
4	0.2222875	-0.154287519
5	0.2182848	-0.180284834
6	0.2151032	-0.183103213
7	0.2057636	0.414236385
8	0.1950898	0.064910212
9	0.1845186	0.815481405
10	0.1770264	-0.17302639
11	0.1663526	-0.153352563
12	0.157834	-0.117834029
13	0.1506497	-0.000649722
14	0.1433628	0.216637217
15	0.1289942	-0.124994171
16	0.1201677	0.019832263
17	0.1108281	0.199171861
18	0.1016938	-0.074693807
19	0.0924568	-0.054456842
20	0.0821935	-0.063193547
21	0.0723408	-0.020340784
22	0.0643354	-0.060335415
23	0.0533537	-0.048335689



APPENDIX B
WELL ABANDONMENT APPROVAL LETTER



70204
RECEIVED

MAY 17 2000

ENVIRONMENTAL

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Northwest Regional Office, 3190 - 160th Ave S.E. • Bellevue, Washington 98008-5452 • (425) 649-7000

May 10, 2000

Mr. Robert E. McChesney
Director, Properties and Development
Port of Everett
P.O. Box 538
Everett, WA 98206

Dear Mr. McChesney:

This letter is in response to our discussion about "closing" the upgradient monitoring wells on the Riverside Business Park site (Weyerhaeuser East). The wells in question are MW-107S(2), MW-107D, MW-108S, MW-108D, MW-109S, MW109D, EV-21A, and EV-21B. They are not associated with the points of compliance that are needed for long-term monitoring of the site.

I see no problems in closing the wells since off-site wells that are adjacent and close enough to each of the sites that can provide the same data that these wells are providing. It is my understanding that these on-site wells are in areas that will be impacted by the roads and infrastructure that are proposed in the development plans for the site. One of the wells (MW109S) is in an existing building that is scheduled for demolition. So that you are assured that you have adequate data to make any future decisions, I would propose that you make arrangements to receive copies of the sampling data that ASCARCO receives in monitoring those off-site wells.

In order to make sure this will not disrupt the monitoring program that Weyerhaeuser has designed for the site, I contacted Shari Brown and asked if she thought there would be any problems. She may have some additional thoughts on this, particularly if there is an indication of additional contamination appearing in the ASARCO samples.

If you have any questions or would like to discuss this further, please call. My number is (425) 649-7135.

Sincerely,

Judith M. Aitken
Toxics Cleanup Program

JMA:jma:gm

cc: Larry Beard, Landau Associates
Shari Brown, Weyerhaeuser

