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**Final**

**Source Water Assessment**

**for the**

**Town of Kitzmiller Water System**

**Garrett County, Maryland**

Prepared for:

Maryland Department of the Environment  
Water Management Administration  
Water Supply Program  
1800 Washington Boulevard, Suite 625  
Baltimore, Maryland 21230-1719

Prepared by:

EA Engineering, Science, Technology, Inc.  
15 Loveton Circle  
Sparks, Maryland 21152  
(410) 771-4950

February 2004

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February 2004



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**LIST OF ACRONYMS AND ABBREVIATIONS**

CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Act Information System
CHS	Controlled Hazardous Substances
COMAR	Code of Maryland Regulations
DWEL	Drinking Water Equivalent Level
ft	Foot/Feet
gpd	Gallon(s) Per Day
gpm	Gallon(s) Per Minute
GPS	Global Positioning System
GWUDI	Ground Water Under the Direct Influence
in.	Inch(es)
IOC	Inorganic Compound
LUST	Leaking Underground Storage Tank
MCL	Maximum Contaminant Level
MDE	Maryland Department of the Environment
mg/L	Milligram(s) Per Liter
MGS	Maryland Geological Survey
NPL	National Priorities List
pCi/L	Picocurie(s) Per Liter
PWSID	Public Water System Identification
SDWA	Safe Drinking Water Act
SDWR	Secondary Drinking Water Regulations
SOC	Synthetic Organic Compound
SWAP	Source Water Assessment Plan
SWPA	Source Water Protection Area
SWPP	Source Water Protection Plan
µg/L	Microgram(s) Per Liter
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WHPA	Well Head Protection Area

## EXECUTIVE SUMMARY

EA Engineering, Science, and Technology was tasked to perform a Source Water Assessment for the Town of Kitzmiller water system in Garrett County, Maryland. The Maryland Department of the Environment (MDE) identifies this water system as Public Water System Identification (PWSID) 0110013. EA has performed this study under Purchase Order No. U00P9200205, as authorized by MDE.

The required components of this report, as described in Maryland's Source Water Assessment Plan (SWAP), are:

- Delineation of the area that contributes water to the source
- Identification of potential sources of contamination
- Determination of the susceptibility of the water supply to contamination
- Recommendations for protecting the drinking water supply

The source of the Town of Kitzmiller water supply is the Pottsville-Allegheny Formation, which is an unconfined, sandstone and shale aquifer. The Source Water Protection Area (SWPA) for the one ground-water supply well was delineated using the watershed delineation method for fractured bedrock wells. The SWPA is based on land topography, nearby streams, and a calculation of the total ground-water contributing area during a drought. The SWPA is approximately 141 acres and is irregular in shape.

Potential point and non-point sources of contamination within the assessment area were identified based on site visits, a review of MDE's databases, and a review of sewer service area and land use maps. No point sources for pollutants were observed within or adjacent to the SWPA. Pastures and forests were observed within the SWPA. Pastures account for 30 percent of the SWPA and can be considered a non-point source of contaminants. Well information and water quality data were also reviewed.

The susceptibility analysis for the Town of Kitzmiller water supply is based on a review of the water quality data, potential sources of contamination, aquifer characteristics, and well integrity. From this assessment, the system has a low susceptibility to volatile organic compounds, synthetic organic compounds, inorganic compounds, microbiological contamination, and radionuclides.

Recommendations to protect the ground-water supply include creating a SWPA team, resident awareness, and communication with County officials about future planning and land use.



## 1. INTRODUCTION

EA Engineering, Science, and Technology was tasked to perform a Source Water Assessment for the Town of Kitzmiller water system in Garrett County, Maryland. EA has performed this study under Purchase Order No. U00P3200205, as authorized by the Maryland Department of the Environment (MDE).

The water system serves the residents of the Town of Kitzmiller in southeastern Garrett County. The water treatment plant and production well for the system are located northwest of the Town of Kitzmiller, off of North Hill Road. The Town of Kitzmiller serves a population of 370 with 187 connections. One production well supplies the water for this system (Figure 1).

### 1.1 GROUND-WATER SUPPLY SYSTEM INFORMATION

A review of the well data and sanitary surveys of the system indicates that the single supply well, Well 1 (GA940821), was drilled on 19 February 1998, in accordance with the State's current well construction standards, which were implemented in 1973. The lone production well has an average yield of 42,000 gallons per day (gpd). The pumping rate of this well is 93 gallons per minute (gpm). The wellhead was observed to be in good condition with a secure, padlocked cap, adjacent to the water treatment plant.

Prior to the construction of Well 1 in 1998, the system utilized a surface water supply system from Wolfden Run. This system is still in place as a backup system; however, it is not used regularly.

Table 1 contains a summary of the well construction data.

**TABLE 1. WELL INFORMATION**

Source ID	Source Name	Permit No.	Total Depth (ft)	Casing Depth (ft)	Aquifer
02	Kitzmiller	GA940821	445	306	Pottsville-Allegheny Formation

According to MDE, the contact responsible for this system is Mark Tonkovick of the Garrett County Public Utilities. The Direct Superintendent for Kitzmiller is Allen Festerman of the Garrett County Public Utilities (OT-4, ST-4).

Presently, the system disinfects all water from the well with calcium hypochlorite.

### 1.2 HYDROGEOLOGY

Garrett County lies entirely within the Appalachian Plateau physiographic province, and is the westernmost county in Maryland. Pleistocene terraces and recent flood plains found along the larger streams and consolidated sedimentary rocks of the mid-Paleozoic (Devonian, Mississippian, and Pennsylvanian age) dominate the surface and subsurface geology.

The Mid-Paleozoic units are folded into broad anticlines and synclines that trend northeast-southwest. The anticlinal structures are underlain by Devonian rocks and contain three distinct gas fields. The synclinal structures for the coal basins of the region are underlain by Pennsylvanian rocks.

The ground water from the production well is from the Pottsville-Allegheny Formation (Pennsylvanian age) and can vary in thickness from 180 to 325 ft. The rocks of the Pennsylvanian age consist of thin units of a repeating and variable sequence of sandstone, siltstone, and shale with subordinate amounts of coal, clay, and argillaceous limestone. The Pottsville and lower Allegheny Formation contain a somewhat higher percentage of sandy beds than the other Pennsylvanian units. The Pottsville-Allegheny Formation is described as "sandstone (conglomeritic in the lower part), with siltstone, shale, claystone and a few discontinuous coal seams." Typically, this formation is an important aquifer along the flanks of coal basins. Few wells derive water from this formation; however, the formation has the potential for yielding moderately large quantities of water [Maryland Geological Survey (MGS) 1980].

The source of ground water in Garrett County is from precipitation in the form of rainfall or snowmelt that infiltrates into the subsurface. The availability of ground water in the predominantly sedimentary bedrock depends on the lithology of the rock, the permeability of the substrate, and the presence or absence of secondary openings from fracturing and weathering. The average well yield of 127 wells in the Pottsville-Allegheny Formation is 13.1 gpm with a range of yield from 0.5 to 150 gpm (MGS 1980).

## 2. DELINEATION OF THE AREA CONTRIBUTING WATER TO SOURCE

For ground-water systems, a wellhead protection area (WHPA) is considered to be the source water protection area (SWPA) for the system. Consistent with the recommended delineation in the Maryland Source Water Assessment Plan (SWAP) (MDE 1999), the watershed drainage area that contributes ground water to the supply wells methodology was used.

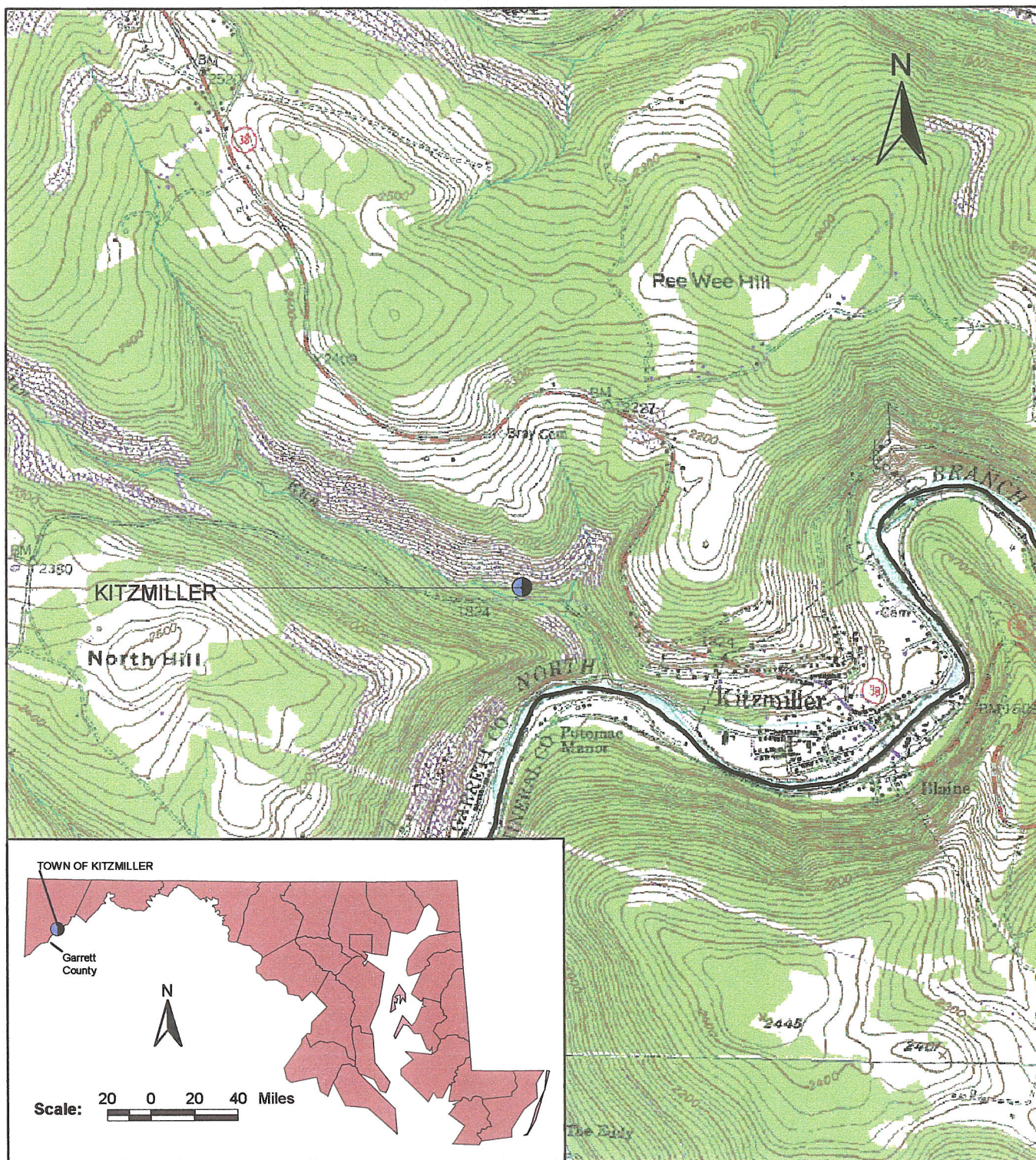
The delineation shape accounted for surface water bodies, topography, significant land features, and by using a conservative calculation of total ground-water recharge during a drought. For conservative purposes, a drought condition recharge value of 400 gpd per acre (or approximately 5.4 in. per year) was used to estimate the total ground-water contribution area required to supply the well.

The current Water Appropriation Permit for the Town of Kitzmiller issued by the MDE Water Rights Division is for an average withdrawal of 42,000 gpd. To determine the total ground-water contribution area during a drought, the following equation was used:

$$\text{Recharge Area (acre)} = \text{Average Use (gpd)} / \text{Drought Condition Recharge (gpd/acre)}$$

From the equation above, the total ground-water contributing area during a drought is approximately 105 acres. The delineated SWPA is approximately 141 acres (Figure 2), and is therefore adequate to meet the average daily ground-water usage during a drought.





**Figure 1. Town of Kitzmiller  
Location Map of the Supply Well  
Source Water Assessment Program  
2003**

**Legend:**

● Supply Well



Source: United States Geologic Survey. 1948 (photorevised 1981). 7.5-minute Series Topographic Map for Kitzmiller, Maryland-West Virginia.  
United States Geologic Survey. 1949 (photorevised 1981). 7.5-minute Series Topographic Map for Mount Storm, West Virginia-Maryland.

**Scale:**

1000 0 1000 2000 Feet



### 3. INVENTORY OF POTENTIAL CONTAMINANTS WITHIN THE DELINEATED ZONE

A field survey was performed on 17 December 2002 to confirm potential sources of contamination identified in MDE databases around the ground-water well. These databases include the Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS), which includes National Priorities List (Superfund) sites, Maryland Registered Underground Storage Tank (UST) sites, Maryland Leaking Underground Storage Tank (LUST) sites, landfills, pesticide dealers, ground-water discharge permits, and Controlled Hazardous Substances (CHS) generator sites.

During the field survey, other sources of potential contamination not in the MDE databases were noted and the locations were surveyed using a global positioning system (GPS) receiver for mapping purposes (Figure 2).

#### 3.1 POINT SOURCES

No point sources for contaminants were observed in the SWPA during the site visit or in any databases reviewed.

Several point sources, including three USTs and one LUST were observed within a mile of the SWPA. These point sources are approximately 3,000 ft downgradient of the supply well and unlikely to impact the water supply.

#### 3.2 NON-POINT SOURCES

Pastures and forests were observed in all directions around the SWPA during the site visit.

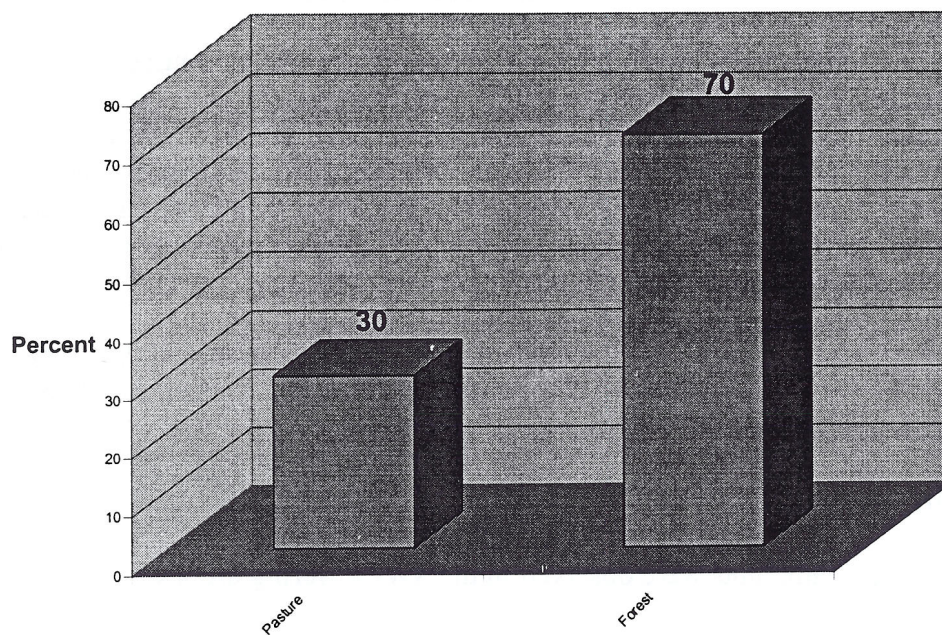
Using the Maryland Office of Planning's 2000 Land Use/Land Cover map for Garrett County, potential non-point sources within the SWPA were also evaluated by land use designation (Figure 3). A summary of the percent and acreage of each type of land use is presented in the graphs on the following page.

From an interpretation of the graphs, forests (99 acres) and pastures (42 acres) account for 100 percent of the SWPA (141 acres). The release of nitrates from manure in pastures is common. Therefore, there is potential for the migration of nitrate and microbiological contaminants into the ground water.

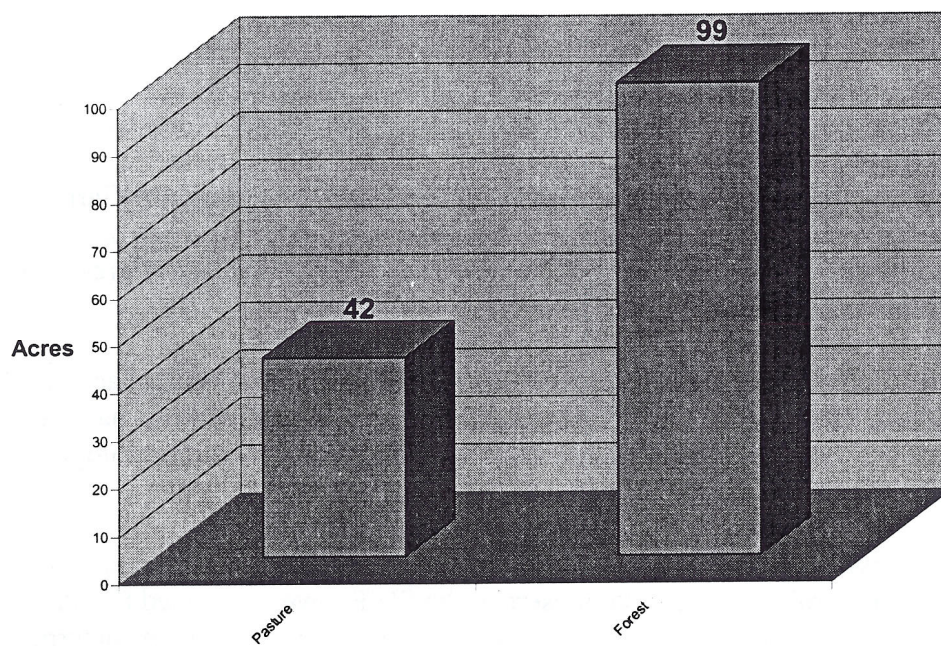
Using the 1993 Maryland Office of Planning's Garrett County sewerage coverage, potential non-point sources from other septic system users in the SWPA were assessed (Figure 4). By overlaying the SWPA on the sewerage coverage layer in ArcView GIS, it was determined that 100 percent of the SWPA does not have public sewer service and is not planned for service for at least 10 years.



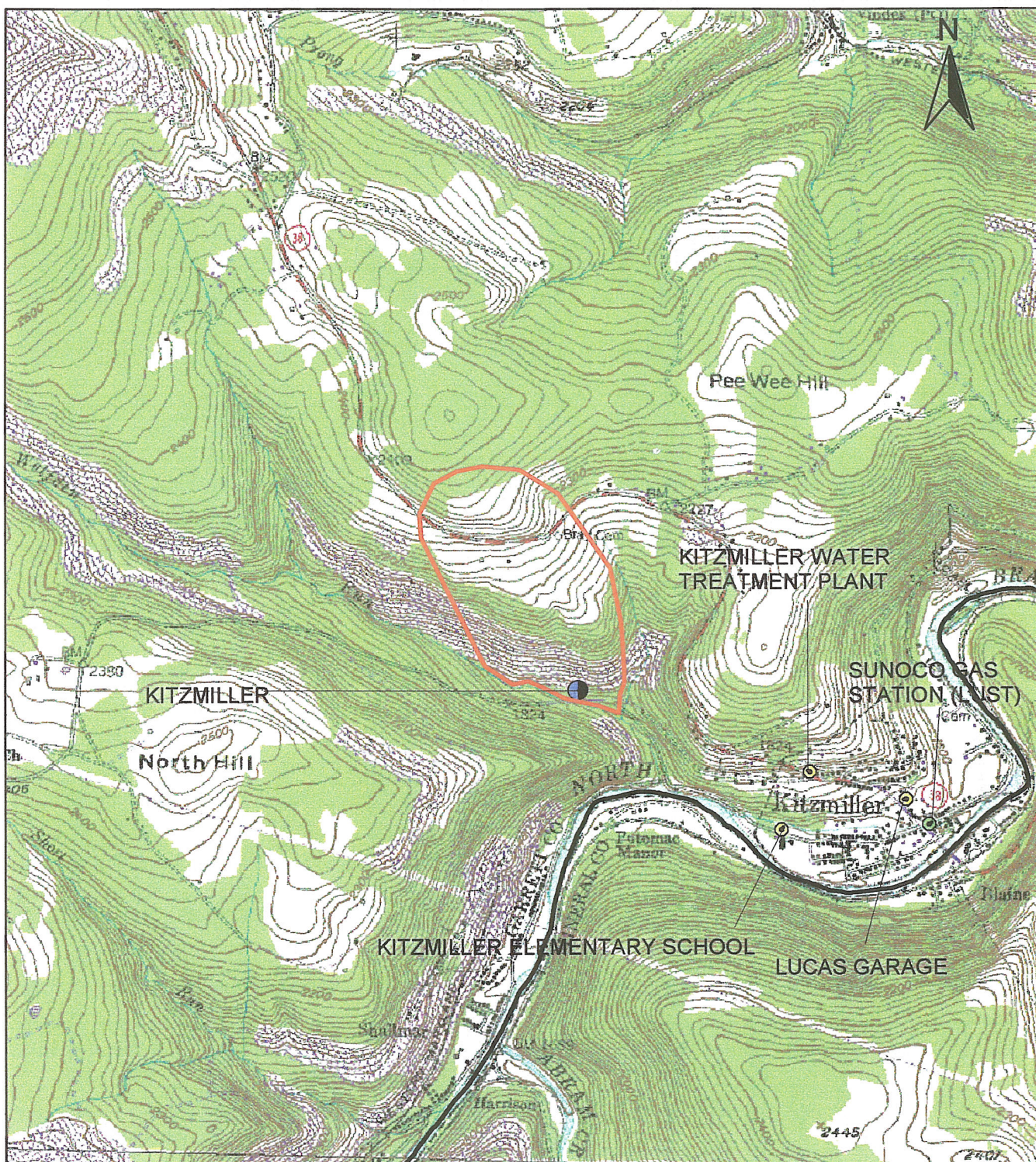
PERCENTAGE OF EACH LAND USE TYPE



ACREAGE OF EACH LAND USE TYPE







**Figure 2. Town of Kitzmiller  
Source Water Protection Area Map  
with Potential Sources of Contamination**

Source Water Assessment Program  
2003

- Legend:**
- Supply Well
  - SWPA Boundary
  - LUST
  - UST

Source: United States Geologic Survey. 1948 (photorevised 1981). 7.5-minute Series  
Topographic Map for Kitzmiller, Maryland-West Virginia.  
United States Geologic Survey. 1949 (photorevised 1981). 7.5-minute Series  
Topographic Map for Mount Storm, West Virginia-Maryland.

**Scale:**  
1000 0 1000 2000 Feet



## 4. REVIEW OF WATER QUALITY DATA

Water quality data were obtained from the MDE Water Supply Program database of Safe Drinking Water Act (SDWA) contaminants. The results reported are for finished (treated) ground water (unless noted).

A review of the water quality data from 1990-2002 has been performed for the Town of Kitzmiller's finished water samples. All detected compounds from the ground-water sample analyses are shown in Appendix A. Results prior to 1998 are from samples taken from the surface water system.

Ground-water analytical results were compared to 50 percent of the U.S. Environmental Protection Agency (USEPA) Maximum Contaminant Levels (MCLs) or the USEPA Secondary Drinking Water Regulations (SDWR). If no MCL or SDWR was available, the Drinking Water Equivalent Level (DWEL) was substituted as recommended by the USEPA Office of Water.

### 4.1 GENERAL WATER QUALITY PARAMETERS

One ground-water sample collected on 1 May 1996 was reported with a pH of 6.3. This is less than the SDWR range of 6.5 to 8.5. SDWR parameters are non-enforceable federal guidelines regarding cosmetic effects, such as tooth or skin discoloration, or aesthetic effects, such as taste, odors, or color.

However, all other subsequent ground-water samples collected through 2002 were reported with pH between 7.2 and 8.4, which is within the normal range. In addition, the alkalinity is generally high.

### 4.2 VOLATILE ORGANIC COMPOUNDS

No volatile organic compounds (VOCs) were reported in ground-samples greater than 50 percent of the comparison criteria.

Bromomethane was detected in ground-water samples collected on 22 June 2000 (0.7 µg/L) and 31 July 2002 (5.7 µg/L) below the DWEL of 50 µg/L.

The disinfection by-products bromodichloromethane, chloroform, and dibromochloromethane (along with bromoform are commonly known as trihalomethanes) were also reported in the water samples and ranged in concentration from 0.3 to 10 µg/L. The current MCL for all trihalomethanes is 100 µg/L. Beginning January 2004, the MCL will be lowered to 80 µg/L. Elevated levels of total trihalomethanes are typically detected in finished water samples (chlorinated) at surface water plants, which was the system's only water supply until 1998.

### 4.3 SYNTHETIC ORGANIC COMPOUNDS

The synthetic organic compound (SOC) di(2-ethylhexyl) phthalate (3 µg/L) was reported in ground-water samples collected 8 May 1995 at 50 percent of the USEPA MCL (6 µg/L). A

summary of all di(2-ethylhexyl) phthalate concentrations reported in the ground-water samples is shown in Table 2.

**TABLE 2. SUMMARY OF DI(2-ETHYLHEXYL)PHTHALATE ANALYSIS**

Plant ID	Sample Date	Contaminant	Result	Unit
01	4/26/94	DI(2-ETHYLHEXYL) PHTHALATE	--	µg/L
01	5/8/95	DI(2-ETHYLHEXYL) PHTHALATE	3	µg/L
01	10/10/96	DI(2-ETHYLHEXYL) PHTHALATE	--	µg/L
01	7/1/97	DI(2-ETHYLHEXYL) PHTHALATE	--	µg/L
01	4/21/98	DI(2-ETHYLHEXYL) PHTHALATE	--	µg/L
01	6/22/00	DI(2-ETHYLHEXYL) PHTHALATE	1.1	µg/L
01	6/22/00	DI(2-ETHYLHEXYL) PHTHALATE	--	µg/L

Notes:

-- Non Detect.

Shaded value is equal to 50 percent of the MCL.

A low level concentration of di(2-ethylhexyl)adipate (0.6 µg/L) was detected in a ground-water sample collected on 22 June 2000. The USEPA MCL for this compound is 400 µg/L.

Also, a low-level concentration of hexachlorocyclopentadiene (0.05 µg/L) was detected in a ground-water sample collected on 10 October 1996 at less than the MCL of 50 µg/L.

#### 4.4 INORGANIC COMPOUNDS

No inorganic compounds (IOCs) were reported in ground-samples greater than 50 percent of the comparison criteria.

Low-level concentrations of nitrate were reported in ground-water samples collected between 9 June 1993 and 21 April 1998, which ranged from 0.15 to 0.5 mg/L. Low levels of nitrite (0.008 and 0.002 mg/L) were reported in ground-water samples collected 8 May 1995 and 10 October 1996, respectively. Nitrate and nitrite are USEPA primary drinking water standard parameters with an MCL of 10 and 1 mg/L, respectively. Nitrates have not been detected in sampling results since April 1998 after the installation of the well.

Sodium was detected in ground-water samples collected between 26 August 1996 and 22 June 2000. Sample concentrations ranged from 7.1 to 109 mg/L. USEPA has an advisory range of sodium between 30 and 60 mg/L that is non-enforceable and only applies to odor and taste thresholds.

Sulfate was detected in ground-water samples collected between 8 May 1995 and 16 April 2002. Sample concentrations ranged from 1.6 to 35 mg/L and are less than the SDWR for sulfate of 250 mg/L.



Fluoride was detected in ground-water samples collected between 18 November 1998 and 22 June 2000 at concentrations ranging from 0.43 to 0.96 mg/L, which is lower than the USEPA MCL for fluoride of 4.0 mg/L.

Barium was also reported in ground-water samples collected on 26 August 1996 (0.035 mg/L) and 28 July 1999 (0.1 mg/L), less than the MCL of 2 mg/L.

Chloride (18 mg/L) was detected in a ground-water sample collected on 16 April 2002 below the SDWR for chloride of 250 mg/L.

Additionally, a low-level concentration of nickel (0.0017 mg/L) was detected in a ground-water sample collected 26 August 1996 at a concentration less than the DWEL of 0.7 mg/L.

#### **4.5 MICROBIOLOGICAL CONTAMINANTS**

No total or fecal coliform has been detected in samples of the water system's finished water from January 1997 to July 2002.

##### **4.5.1 Ground Water Under the Direct Influence (GWUDI)**

Surface water that directly recharges the aquifer through major fractures in rock does not pass through the soil overburden that both filters and contains beneficial microorganisms that break down contaminants. If significant variances in the ground-water results from dry and storm conditions are observed, it is possible that the ground water is under the direct influence of surface water.

To assess the potential of Ground Water Under the Direct Influence (GWUDI) of surface water, ground-water sampling records (during dry and storm conditions) in MDE databases were assessed and information from Public Water Supply Inspection Reports was reviewed.

However, no ground-water sample data has been collected for the system to date.

The well is located in an unconfined aquifer and has been assigned a ranking of GWUDI Group 3 (moderate risk) by MDE.

Final determination by the MDE Water Supply Program is pending the results of GWUDI sampling and analysis by the water supplier.

#### **4.6 RADIONUCLIDES**

No radionuclides were reported in ground-water samples greater than 50 percent of the comparison criteria.

Low levels of gross beta were detected in samples collected 13 November 1995, 28 July 1999, and 28 September 2001 that were less than the more conservative proposed USEPA MCL of 50 picocuries per liter (pCi/L). Reported concentrations were 1.4, 2, and 4 pCi/L, respectively.

Concentrations of gross alpha were detected in samples collected on 28 September 2001 and 29 October 2001 below the USEPA MCL of 15 pCi./L. The sample concentrations were 3 and 1 pCi/L, respectively.

Radon-222 was not detected in the one ground-water sample collected on 23 April 2001.



## 5. SUSCEPTIBILITY ANALYSIS

To evaluate the integrity of the ground-water source, the following criteria were used to conduct the susceptibility analysis:

1. Available water quality data
2. Presence of potential contaminant sources in the SWPA
3. Aquifer characteristics
4. Well integrity
5. Likelihood of change to the natural conditions

The aquifer that supplies the Town of Kitzmiller drinking water is unconfined.

For the Susceptibility Analysis in this report, rankings of “high,” “moderate,” and “low” susceptibility to contamination were utilized after a review of current information. However, other SWAP reports for the State of Maryland also utilized rankings of “is,” “may be,” and “is not” susceptible to contamination. For consistency between the ranking systems, the following details their equivalence. The ranking of “highly susceptible” is equivalent to “is susceptible,” “moderately susceptible” is equivalent to “may be susceptible,” and “low susceptibility” is equivalent to “is not susceptible.”

### 5.1 VOLATILE ORGANIC COMPOUNDS

No VOCs were reported in the ground-water samples at a concentration greater than 50 percent of the MCL.

Low concentrations of bromomethane were detected in samples collected in June 2000 and July 2002 that were less than the DWEL for the compound. A DWEL is a non-enforceable guideline that assumes lifetime exposure to less than the DWEL concentration will not cause adverse health effects. Bromomethane (or methyl bromide) is typically found as a fumigant to control fungus and weeds and may be used in the pastures within the SWPA.

The trihalomethanes reported in the water samples are likely by-products of the surface water chlorination process to eliminate waterborne bacteria. The reported concentrations were well less than the MCL of 100 µg/L and the future MCL of 80 µg/L.

Based on the water quality data reviewed, the age of the supply well, and the absence of observed or reported facilities that may cause VOC contamination in the SWPA, the water supply for The town of Kitzmiller has a low susceptibility to VOC contamination.

### 5.2 SYNTHETIC ORGANIC COMPOUNDS

Di(2-ethylexyl)phthalate was detected in a sample collected 8 May 1995 at a concentration greater than 50 percent of the USEPA MCL (6 µg/L). One additional sample from 22 June 2000 had detectable di(2-ethylhexyl)phthalate (1.1 µg/L) that was less than the MCL. The presence

of this compound is due to laboratory cross-contamination and therefore does not represent actual ground-water quality.

Low levels of di(2-ethylhexyl)adipate and hexachlorocyclopentadiene were detected in samples from June 2000 and October 1996, respectively. The concentration was less than the MCL for each compound. Both are typically released from chemical manufacturing plants. No observed sources were found within the SWPA.

No other SOC's were detected in ground-water samples collected. A majority of SOC's are not readily dissolved in water and have a high affinity to sorb to soil particles. From well construction data for the Town of Kitzmiller, there is approximately 300 ft of overburden that will buffer the aquifer from SOC contamination.

Based on the review of the water quality data, thickness of the overburden, and the absence of sources for SOC's, the water supply for the Town of Kitzmiller has a low susceptibility to SOC contamination.

### 5.3 INORGANIC COMPOUNDS

No IOC concentrations were reported greater than 50 percent of the comparison criteria in any of the water samples analyzed.

Elevated levels could occur due to an influx of agricultural animal waste, agricultural chemicals or fertilizers, and/or septic system effluent into the ground water. One hundred percent of the SWPA is not served by public sanitary sewer systems and most likely uses private septic systems, which can cause nitrate pollution in ground water if not functioning properly. However, no concentrations of nitrate have been reported in the ground-water samples greater than 0.5 mg/L, which is less than the 10 mg/L MCL. No trends were identified in the data for nitrates. It is likely that the microbes in the relatively thick overburden are degrading any nitrate compounds from the non-point sources such as pastures or septic system effluent from impacting ground-water quality.

Nickel was detected in a sample collected on August 1996 that was well less than the DWEL. No other samples were submitted for analysis of nickel. This element is likely present from natural sources within the bedrock aquifer.

Sulfate, sodium, fluoride, and chloride were also detected in low concentrations. The reported levels were within the normal Garrett County water quality parameters (MGS 1980) and less than the 50 percent criteria for each compound.

Based on the water quality data reviewed, the age and integrity of the well, and the lack of contaminant sources, the water supply for the Town of Kitzmiller has a low susceptibility to IOC contamination.

## 5.4 RADIONUCLIDES

Gross beta and gross alpha were detected in several samples; however, the detected concentrations are less than the USEPA MCLs.

The presence of radionuclides in ground water is generally attributed to the decay of naturally occurring minerals such as uranium in the aquifer; however, no radionuclides were reported in the ground-water samples greater than 50 percent of the comparison criteria.

Based on water quality data reviewed, the water supply for the Town of Kitzmiller has a low susceptibility to radionuclides.

## 5.5 MICROBIOLOGICAL CONTAMINANTS

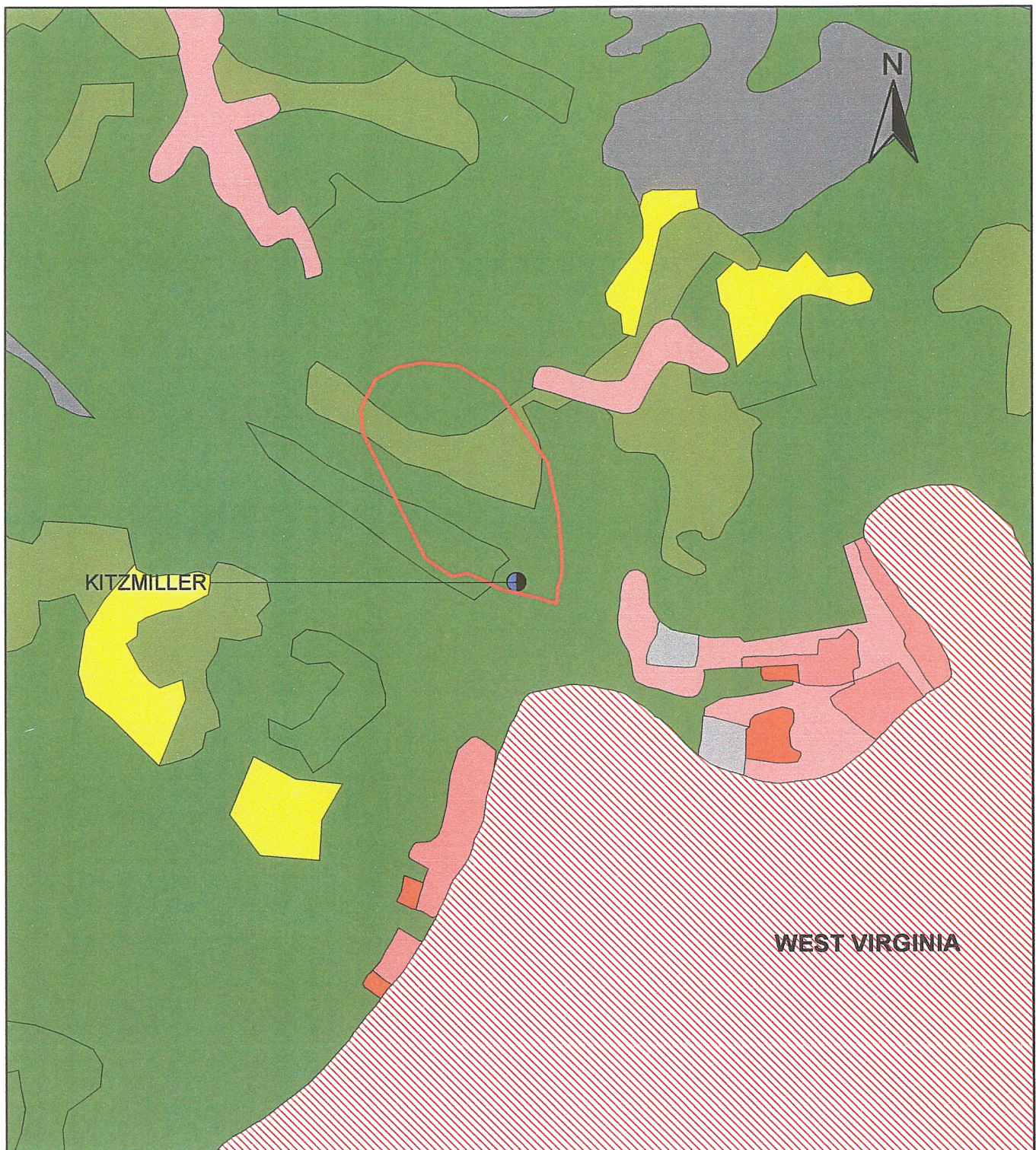
No total or fecal coliforms were detected in any water samples collected.

MDE has assigned a GWUDI rating of Group 3 (moderate risk) to this system based on the well's proximity to surface water bodies. However, no data has been submitted to date to determine the well's susceptibility to surface water influence.

From a review of the sanitary survey and the MDE well construction database, the supply well was constructed after 1973, the year that current well construction standards were required. The wellhead was observed to be in good condition.

Based on the water quality review and the well construction, the water supply for the Town of Kitzmiller has a low susceptibility to microbiological contamination.





**Figure 3. Town of Kitzmiller  
Land Use Map of the  
Source Water Protection Area  
Source Water Assessment Program  
2003**



**Scale:** 2000 0 2000 Feet

**Legend:**

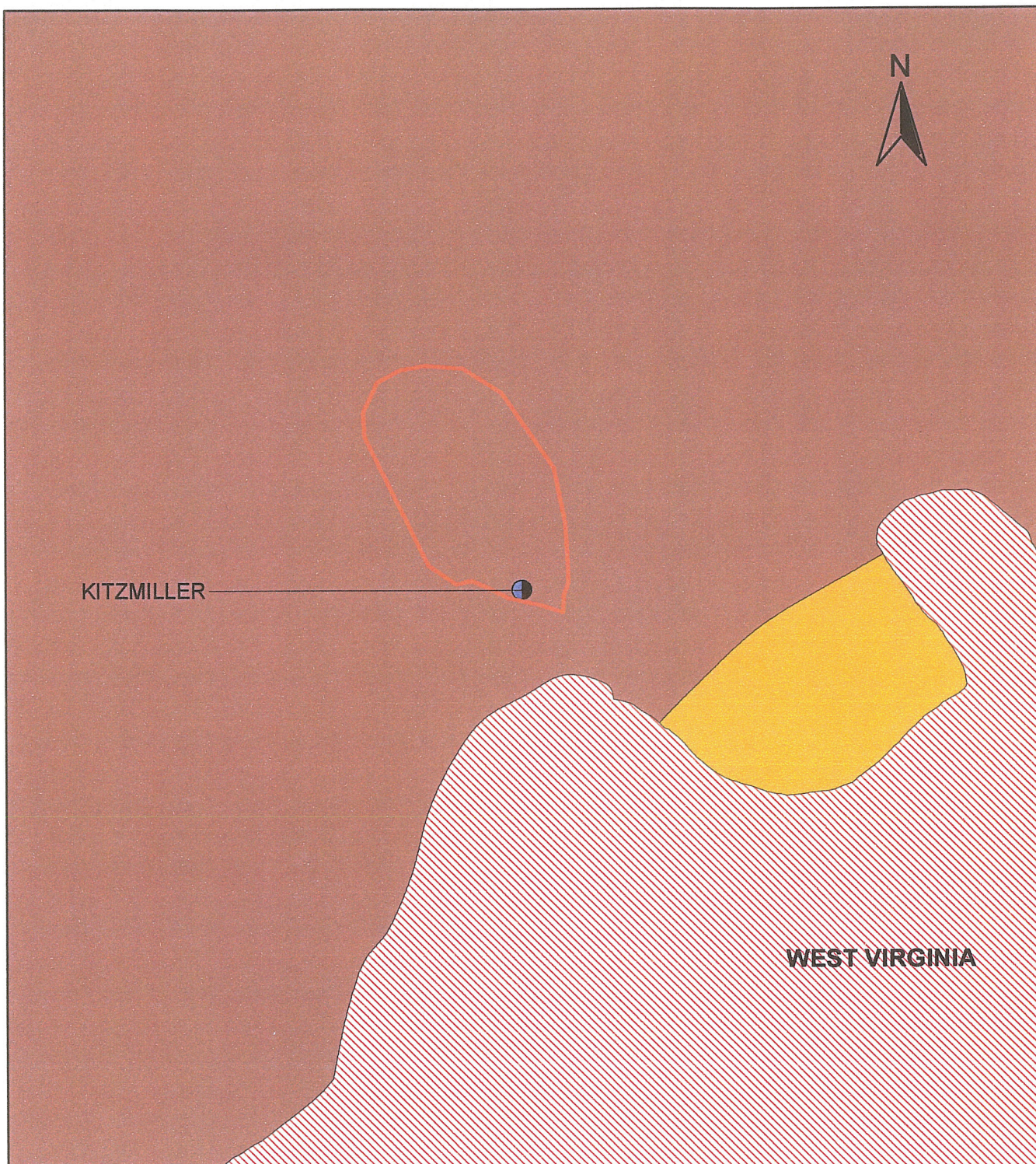
- Supply Well
- SWPA Boundary
- ▨ West Virginia

**Land Use**

- |                              |              |
|------------------------------|--------------|
| □ Low Density Residential    | □ Extractive |
| □ Medium Density Residential | □ Cropland   |
| □ High Density Residential   | □ Pasture    |
| □ Commercial                 | □ Forest     |






Source: Maryland Office of Planning, 2000.





**Figure 4. Town of Kitzmiller  
Sewer Service Map of the  
Source Water Protection Area**  
Source Water Assessment Program  
2003

**Legend:**

- |   |               |   |                         |
|---|---------------|---|-------------------------|
|  | Supply Well   |  | No planned service area |
|   | SWPA Boundary |  | Existing service area   |
|   | West Virginia |   |                         |

Source: Maryland Office of Planning, 1993.

Scale: 1000 0 1000 2000 Feet



## **6. RECOMMENDATIONS FOR PROTECTING THE WATER SUPPLY**

With the information contained in this report, the Town of Kitzmiller has a basis for better understanding of the risks to its drinking water supply. Being aware of the SWPA, knowing potential contaminant sources, evaluating current and future development, working with agricultural producers and soil conservation agencies, and implementing effective outreach and education are examples of management practices that will help protect the water supply.

Recommendations for the protection of the ground-water supply are intended for the water supplier and its residents. Specific management recommendations for consideration are listed below.

### **6.1 PROTECTION TEAM**

The team should represent all the interests in the community, such as water suppliers, community associations officers, the County Health Department, local planning agencies, local businesses, developers, property owners, and residents within and near the SWPAs. The team should work to reach a consensus on how to protect the water supply.

### **6.2 PUBLIC AWARENESS AND OUTREACH**

The water supplier should consider discussing with property owners and businesses located within the SWPA the activities that could have impacts to the ground water and its quality.

The water supplier should also consider sending pamphlets, flyers, or bill stuffers to its residents to educate them about the SWPA. An example pamphlet, "Gardening in a Wellhead Protection Area," is available from MDE. The residents should also be encouraged to notify the Town of Kitzmiller management of any significant spills from gasoline or any other potentially hazardous substances.

Placing signs at the SWPA boundaries is an effective way to make the public aware of protecting their source of water supply, and to help in the event of spill notification and response.

The Executive Summary of this report should also be listed in the Consumer Confidence Report for the water system, and should also indicate that the report is available to the general public by contacting the water supplier, the local library, or MDE.

### **6.3 PLANNING/NEW DEVELOPMENT**

The water supplier should also inform the Garrett County Health and Planning Departments of any concerns about future development or zoning changes for properties that are within the SWPA.

## **6.4 MONITORING**

The water supplier should continue to monitor the ground water for all SWDA contaminants as required by MDE.

Annual raw water sampling for microbiological contaminants is a good way to check the integrity of the well.

GWUDI testing should be conducted as soon as possible to determine if the ground-water quality is affected by surface water runoff.

## **6.5 CONTINGENCY PLAN**

As required by the Code of Maryland Regulations (COMAR) 26.04.01.22, all water system owners are required to prepare and submit a plan to provide safe drinking water under emergency conditions for approval by MDE.

The water supplier should develop a Spill Contingency Plan. Quick and effective spill response in the event of accidental spills or leaks is an important element in the water supplier's SWPP. This plan should identify the procedures and resources to be used to mitigate any discharge of oil or hazardous substances in the SWPA. It should also establish responsibilities, duties, procedures, and resource containment, mitigation, and cleanup of accidental discharges of oil and hazardous substances that may occur within the SWPA. In all cases when spills may present a significant risk of contamination to ground water within the SWPA the local fire department should be notified of the incident.

## **6.6 CHANGES IN USES**

The water supplier is required to inform the Water Supply Program at MDE of any changes to pumping rates and when a change in the number of wells used is anticipated. Any changes to the pumping rate and/or the number of supply wells will affect the size and shape of the SWPA.

## **6.7 CONTAMINANT SOURCE INVENTORY UPDATES/INSPECTIONS**

The water supplier should conduct its own survey of the SWPA to ensure that there are no additional potential sources of contamination.

A regular inspection and maintenance program of the supply well should be considered to prevent a failure in the well's integrity, which could provide a pathway for contaminants to the aquifer.

Depressions that form around the wellhead should be filled and graded to prevent surface water ponding that could occur during rain events. This will help to prevent surface water infiltration into the well.

## **6.8 PURCHASE CONSERVATION EASEMENTS OR PROPERTY**

Loans are available for the purchase of property or for the purchase of easements for protection of the water supply. Eligible property must lie within the designated SWPA. Loans are currently offered at zero percent interest and zero points. Please contact the Water Supply Program of the MDE for more information.



## 7. REFERENCES

The following sources of information were consulted as a part of this investigation:

1. Maryland Geological Survey (MGS). 1980. *Garrett County Water-Well Records, Chemical-Quality Data, Ground-Water Use, Coal Test-Hole Data and Surface-Water Data*. 102 pp.
2. Maryland Department of the Environment (MDE), Water Supply Program. 1999. *Maryland's Source Water Assessment Plan*. 36 pp.
3. United States Environmental Protection Agency (USEPA). 1999. *Proposed Radon in Drinking Water Rule*. EPA 815-F-99-006. USEPA Office of Water.

## SOURCES OF DATA

Water Appropriation and Use Database  
Public Water Supply Inspection Reports  
Monitoring Reports  
MDE Water Supply Program Oracle Database  
MDE Waste Management Sites Database  
Maryland Office of Planning 2000 Garrett County Land Use Map  
Maryland Office of Planning 1993 Garrett County Sewer Service Map  
USGS Topographic 7.5-minute Quadrangle Map – 1948 Kitzmiller, Maryland Quad  
USGS Topographic 7.5-minute Quadrangle Map – 1949 Mount Storm, West Virginia Quad



## **Appendix A**

### **Detected Compounds and Analytes In Ground-Water Samples**



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	4/26/1994	1,1,1,2-TETRACHLOROETHANE	--	
01	1/25/1996	1,1,1,2-TETRACHLOROETHANE	--	
01	7/1/1997	1,1,1,2-TETRACHLOROETHANE	--	
01	4/21/1998	1,1,1,2-TETRACHLOROETHANE	--	
01	8/6/1998	1,1,1,2-TETRACHLOROETHANE	--	
02	6/22/2000	1,1,1,2-TETRACHLOROETHANE	--	
02	2/28/2001	1,1,1,2-TETRACHLOROETHANE	--	
01	2/28/2001	1,1,1,2-TETRACHLOROETHANE	--	
02	4/23/2001	1,1,1,2-TETRACHLOROETHANE	--	
02	9/28/2001	1,1,1,2-TETRACHLOROETHANE	--	
02	10/29/2001	1,1,1,2-TETRACHLOROETHANE	--	
02	7/31/2002	1,1,1,2-TETRACHLOROETHANE	--	
01	1/12/1990	1,1,1-TRICHLOROETHANE	--	
01	4/23/1990	1,1,1-TRICHLOROETHANE	--	
01	8/2/1990	1,1,1-TRICHLOROETHANE	--	
01	10/15/1990	1,1,1-TRICHLOROETHANE	--	
01	4/26/1994	1,1,1-TRICHLOROETHANE	--	
01	1/25/1996	1,1,1-TRICHLOROETHANE	--	
01	7/1/1997	1,1,1-TRICHLOROETHANE	--	
01	4/21/1998	1,1,1-TRICHLOROETHANE	--	
01	8/6/1998	1,1,1-TRICHLOROETHANE	--	
02	6/22/2000	1,1,1-TRICHLOROETHANE	--	
02	2/28/2001	1,1,1-TRICHLOROETHANE	--	
01	2/28/2001	1,1,1-TRICHLOROETHANE	--	
02	4/23/2001	1,1,1-TRICHLOROETHANE	--	
02	9/28/2001	1,1,1-TRICHLOROETHANE	--	
02	10/29/2001	1,1,1-TRICHLOROETHANE	--	
02	7/31/2002	1,1,1-TRICHLOROETHANE	--	
01	4/26/1994	1,1,2,2-TETRACHLOROETHANE	--	
01	1/25/1996	1,1,2,2-TETRACHLOROETHANE	--	
01	7/1/1997	1,1,2,2-TETRACHLOROETHANE	--	
01	4/21/1998	1,1,2,2-TETRACHLOROETHANE	--	
01	8/6/1998	1,1,2,2-TETRACHLOROETHANE	--	
02	6/22/2000	1,1,2,2-TETRACHLOROETHANE	--	
02	2/28/2001	1,1,2,2-TETRACHLOROETHANE	--	
01	2/28/2001	1,1,2,2-TETRACHLOROETHANE	--	
02	4/23/2001	1,1,2,2-TETRACHLOROETHANE	--	
02	9/28/2001	1,1,2,2-TETRACHLOROETHANE	--	
02	10/29/2001	1,1,2,2-TETRACHLOROETHANE	--	
02	7/31/2002	1,1,2,2-TETRACHLOROETHANE	--	
01	4/26/1994	1,1,2-TRICHLOROETHANE	--	
01	1/25/1996	1,1,2-TRICHLOROETHANE	--	
01	7/1/1997	1,1,2-TRICHLOROETHANE	--	
01	4/21/1998	1,1,2-TRICHLOROETHANE	--	
01	8/6/1998	1,1,2-TRICHLOROETHANE	--	
02	6/22/2000	1,1,2-TRICHLOROETHANE	--	
02	2/28/2001	1,1,2-TRICHLOROETHANE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	2/28/2001	1,1,2-TRICHLOROETHANE	--	
02	4/23/2001	1,1,2-TRICHLOROETHANE	--	
02	9/28/2001	1,1,2-TRICHLOROETHANE	--	
02	10/29/2001	1,1,2-TRICHLOROETHANE	--	
02	7/31/2002	1,1,2-TRICHLOROETHANE	--	
01	4/26/1994	1,1-DICHLOROETHANE	--	
01	1/25/1996	1,1-DICHLOROETHANE	--	
01	7/1/1997	1,1-DICHLOROETHANE	--	
01	4/21/1998	1,1-DICHLOROETHANE	--	
01	8/6/1998	1,1-DICHLOROETHANE	--	
02	6/22/2000	1,1-DICHLOROETHANE	--	
02	2/28/2001	1,1-DICHLOROETHANE	--	
01	2/28/2001	1,1-DICHLOROETHANE	--	
02	4/23/2001	1,1-DICHLOROETHANE	--	
02	9/28/2001	1,1-DICHLOROETHANE	--	
02	10/29/2001	1,1-DICHLOROETHANE	--	
02	7/31/2002	1,1-DICHLOROETHANE	--	
01	1/12/1990	1,1-DICHLOROETHYLENE	--	
01	4/23/1990	1,1-DICHLOROETHYLENE	--	
01	8/2/1990	1,1-DICHLOROETHYLENE	--	
01	10/15/1990	1,1-DICHLOROETHYLENE	--	
01	4/26/1994	1,1-DICHLOROETHYLENE	--	
01	1/25/1996	1,1-DICHLOROETHYLENE	--	
01	7/1/1997	1,1-DICHLOROETHYLENE	--	
01	4/21/1998	1,1-DICHLOROETHYLENE	--	
01	8/6/1998	1,1-DICHLOROETHYLENE	--	
02	6/22/2000	1,1-DICHLOROETHYLENE	--	
02	2/28/2001	1,1-DICHLOROETHYLENE	--	
01	2/28/2001	1,1-DICHLOROETHYLENE	--	
02	4/23/2001	1,1-DICHLOROETHYLENE	--	
02	9/28/2001	1,1-DICHLOROETHYLENE	--	
02	10/29/2001	1,1-DICHLOROETHYLENE	--	
02	7/31/2002	1,1-DICHLOROETHYLENE	--	
01	4/26/1994	1,1-DICHLOROPROPENE	--	
01	1/25/1996	1,1-DICHLOROPROPENE	--	
01	7/1/1997	1,1-DICHLOROPROPENE	--	
01	4/21/1998	1,1-DICHLOROPROPENE	--	
01	8/6/1998	1,1-DICHLOROPROPENE	--	
02	6/22/2000	1,1-DICHLOROPROPENE	--	
02	2/28/2001	1,1-DICHLOROPROPENE	--	
01	2/28/2001	1,1-DICHLOROPROPENE	--	
02	4/23/2001	1,1-DICHLOROPROPENE	--	
02	9/28/2001	1,1-DICHLOROPROPENE	--	
02	10/29/2001	1,1-DICHLOROPROPENE	--	
02	7/31/2002	1,1-DICHLOROPROPENE	--	
01	4/26/1994	1,2,3-TRICHLOROBENZENE	--	
01	1/25/1996	1,2,3-TRICHLOROBENZENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
02	10/29/2001	BROMOFORM	--	
02	7/31/2002	BROMOFORM	--	
01	4/26/1994	BROMOMETHANE	--	
01	1/25/1996	BROMOMETHANE	--	
01	7/1/1997	BROMOMETHANE	--	
01	4/21/1998	BROMOMETHANE	--	
01	8/6/1998	BROMOMETHANE	--	
02	6/22/2000	BROMOMETHANE	0.7	50 ^
02	2/28/2001	BROMOMETHANE	--	
01	2/28/2001	BROMOMETHANE	--	
02	4/23/2001	BROMOMETHANE	--	
02	9/28/2001	BROMOMETHANE	--	
02	10/29/2001	BROMOMETHANE	--	
02	7/31/2002	BROMOMETHANE	5.7	50 ^
01	1/12/1990	CARBON TETRACHLORIDE	--	
01	4/23/1990	CARBON TETRACHLORIDE	--	
01	8/2/1990	CARBON TETRACHLORIDE	--	
01	10/15/1990	CARBON TETRACHLORIDE	--	
01	4/26/1994	CARBON TETRACHLORIDE	--	
01	1/25/1996	CARBON TETRACHLORIDE	--	
01	7/1/1997	CARBON TETRACHLORIDE	--	
01	4/21/1998	CARBON TETRACHLORIDE	--	
01	8/6/1998	CARBON TETRACHLORIDE	--	
02	6/22/2000	CARBON TETRACHLORIDE	--	
02	2/28/2001	CARBON TETRACHLORIDE	--	
01	2/28/2001	CARBON TETRACHLORIDE	--	
02	4/23/2001	CARBON TETRACHLORIDE	--	
02	9/28/2001	CARBON TETRACHLORIDE	--	
02	10/29/2001	CARBON TETRACHLORIDE	--	
02	7/31/2002	CARBON TETRACHLORIDE	--	
01	4/26/1994	CHLOROETHANE	--	
01	1/25/1996	CHLOROETHANE	--	
01	7/1/1997	CHLOROETHANE	--	
01	4/21/1998	CHLOROETHANE	--	
01	8/6/1998	CHLOROETHANE	--	
02	6/22/2000	CHLOROETHANE	--	
02	2/28/2001	CHLOROETHANE	--	
01	2/28/2001	CHLOROETHANE	--	
02	4/23/2001	CHLOROETHANE	--	
02	9/28/2001	CHLOROETHANE	--	
02	10/29/2001	CHLOROETHANE	--	
02	7/31/2002	CHLOROETHANE	--	
01	4/26/1994	CHLOROFORM	0.3	100 #
01	1/25/1996	CHLOROFORM	--	
01	7/1/1997	CHLOROFORM	7	100 #
01	4/21/1998	CHLOROFORM	1.3	100 #
01	8/6/1998	CHLOROFORM	4.6	100 #

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
02	6/22/2000	CHLOROFORM	--	
02	2/28/2001	CHLOROFORM	--	
01	2/28/2001	CHLOROFORM	--	
02	4/23/2001	CHLOROFORM	--	
02	9/28/2001	CHLOROFORM	--	
02	10/29/2001	CHLOROFORM	--	
02	7/31/2002	CHLOROFORM	--	
01	4/26/1994	CHLOROMETHANE	--	
01	1/25/1996	CHLOROMETHANE	--	
01	7/1/1997	CHLOROMETHANE	--	
01	4/21/1998	CHLOROMETHANE	--	
01	8/6/1998	CHLOROMETHANE	--	
02	6/22/2000	CHLOROMETHANE	--	
02	2/28/2001	CHLOROMETHANE	--	
01	2/28/2001	CHLOROMETHANE	--	
02	4/23/2001	CHLOROMETHANE	--	
02	9/28/2001	CHLOROMETHANE	--	
02	10/29/2001	CHLOROMETHANE	--	
02	7/31/2002	CHLOROMETHANE	--	
01	1/12/1990	cis-1,2-DICHLOROETHYLENE	--	
01	4/23/1990	cis-1,2-DICHLOROETHYLENE	--	
01	8/2/1990	cis-1,2-DICHLOROETHYLENE	--	
01	10/15/1990	cis-1,2-DICHLOROETHYLENE	--	
01	4/26/1994	cis-1,2-DICHLOROETHYLENE	--	
01	1/25/1996	cis-1,2-DICHLOROETHYLENE	--	
01	7/1/1997	cis-1,2-DICHLOROETHYLENE	--	
01	4/21/1998	cis-1,2-DICHLOROETHYLENE	--	
01	8/6/1998	cis-1,2-DICHLOROETHYLENE	--	
02	6/22/2000	cis-1,2-DICHLOROETHYLENE	--	
02	2/28/2001	cis-1,2-DICHLOROETHYLENE	--	
01	2/28/2001	cis-1,2-DICHLOROETHYLENE	--	
02	4/23/2001	cis-1,2-DICHLOROETHYLENE	--	
02	9/28/2001	cis-1,2-DICHLOROETHYLENE	--	
02	10/29/2001	cis-1,2-DICHLOROETHYLENE	--	
02	7/31/2002	cis-1,2-DICHLOROETHYLENE	--	
01	4/26/1994	DIBROMOCHLOROMETHANE	--	
01	1/25/1996	DIBROMOCHLOROMETHANE	--	
01	7/1/1997	DIBROMOCHLOROMETHANE	2	100 #
01	4/21/1998	DIBROMOCHLOROMETHANE	--	
01	8/6/1998	DIBROMOCHLOROMETHANE	0.7	100 #
02	6/22/2000	DIBROMOCHLOROMETHANE	--	
02	2/28/2001	DIBROMOCHLOROMETHANE	--	
01	2/28/2001	DIBROMOCHLOROMETHANE	--	
02	4/23/2001	DIBROMOCHLOROMETHANE	--	
02	9/28/2001	DIBROMOCHLOROMETHANE	--	
02	10/29/2001	DIBROMOCHLOROMETHANE	--	
02	7/31/2002	DIBROMOCHLOROMETHANE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	7/1/1997	1,2,3-TRICHLOROBENZENE	--	
01	4/21/1998	1,2,3-TRICHLOROBENZENE	--	
01	8/6/1998	1,2,3-TRICHLOROBENZENE	--	
02	6/22/2000	1,2,3-TRICHLOROBENZENE	--	
02	2/28/2001	1,2,3-TRICHLOROBENZENE	--	
01	2/28/2001	1,2,3-TRICHLOROBENZENE	--	
02	4/23/2001	1,2,3-TRICHLOROBENZENE	--	
02	9/28/2001	1,2,3-TRICHLOROBENZENE	--	
02	10/29/2001	1,2,3-TRICHLOROBENZENE	--	
02	7/31/2002	1,2,3-TRICHLOROBENZENE	--	
01	4/26/1994	1,2,3-TRICHLOROPROPANE	--	
01	1/25/1996	1,2,3-TRICHLOROPROPANE	--	
01	7/1/1997	1,2,3-TRICHLOROPROPANE	--	
01	4/21/1998	1,2,3-TRICHLOROPROPANE	--	
01	8/6/1998	1,2,3-TRICHLOROPROPANE	--	
02	6/22/2000	1,2,3-TRICHLOROPROPANE	--	
02	2/28/2001	1,2,3-TRICHLOROPROPANE	--	
01	2/28/2001	1,2,3-TRICHLOROPROPANE	--	
02	4/23/2001	1,2,3-TRICHLOROPROPANE	--	
02	9/28/2001	1,2,3-TRICHLOROPROPANE	--	
02	10/29/2001	1,2,3-TRICHLOROPROPANE	--	
02	7/31/2002	1,2,3-TRICHLOROPROPANE	--	
01	4/26/1994	1,2,4-TRICHLOROBENZENE	--	
01	1/25/1996	1,2,4-TRICHLOROBENZENE	--	
01	7/1/1997	1,2,4-TRICHLOROBENZENE	--	
01	4/21/1998	1,2,4-TRICHLOROBENZENE	--	
01	8/6/1998	1,2,4-TRICHLOROBENZENE	--	
02	6/22/2000	1,2,4-TRICHLOROBENZENE	--	
02	2/28/2001	1,2,4-TRICHLOROBENZENE	--	
01	2/28/2001	1,2,4-TRICHLOROBENZENE	--	
02	4/23/2001	1,2,4-TRICHLOROBENZENE	--	
02	9/28/2001	1,2,4-TRICHLOROBENZENE	--	
02	10/29/2001	1,2,4-TRICHLOROBENZENE	--	
02	7/31/2002	1,2,4-TRICHLOROBENZENE	--	
01	4/26/1994	1,2,4-TRIMETHYLBENZENE	--	
01	1/25/1996	1,2,4-TRIMETHYLBENZENE	--	
01	7/1/1997	1,2,4-TRIMETHYLBENZENE	--	
01	4/21/1998	1,2,4-TRIMETHYLBENZENE	--	
01	8/6/1998	1,2,4-TRIMETHYLBENZENE	--	
02	6/22/2000	1,2,4-TRIMETHYLBENZENE	--	
02	2/28/2001	1,2,4-TRIMETHYLBENZENE	--	
01	2/28/2001	1,2,4-TRIMETHYLBENZENE	--	
02	4/23/2001	1,2,4-TRIMETHYLBENZENE	--	
02	9/28/2001	1,2,4-TRIMETHYLBENZENE	--	
02	10/29/2001	1,2,4-TRIMETHYLBENZENE	--	
02	7/31/2002	1,2,4-TRIMETHYLBENZENE	--	
01	1/12/1990	1,2-DICHLOROETHANE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	4/23/1990	1,2-DICHLOROETHANE	--	
01	8/2/1990	1,2-DICHLOROETHANE	--	
01	10/15/1990	1,2-DICHLOROETHANE	--	
01	4/26/1994	1,2-DICHLOROETHANE	--	
01	1/25/1996	1,2-DICHLOROETHANE	--	
01	7/1/1997	1,2-DICHLOROETHANE	--	
01	4/21/1998	1,2-DICHLOROETHANE	--	
01	8/6/1998	1,2-DICHLOROETHANE	--	
02	6/22/2000	1,2-DICHLOROETHANE	--	
02	2/28/2001	1,2-DICHLOROETHANE	--	
01	2/28/2001	1,2-DICHLOROETHANE	--	
02	4/23/2001	1,2-DICHLOROETHANE	--	
02	9/28/2001	1,2-DICHLOROETHANE	--	
02	10/29/2001	1,2-DICHLOROETHANE	--	
02	7/31/2002	1,2-DICHLOROETHANE	--	
01	1/12/1990	1,2-DICHLOROPROPANE	--	
01	4/23/1990	1,2-DICHLOROPROPANE	--	
01	8/2/1990	1,2-DICHLOROPROPANE	--	
01	10/15/1990	1,2-DICHLOROPROPANE	--	
01	4/26/1994	1,2-DICHLOROPROPANE	--	
01	1/25/1996	1,2-DICHLOROPROPANE	--	
01	7/1/1997	1,2-DICHLOROPROPANE	--	
01	4/21/1998	1,2-DICHLOROPROPANE	--	
01	8/6/1998	1,2-DICHLOROPROPANE	--	
02	6/22/2000	1,2-DICHLOROPROPANE	--	
02	2/28/2001	1,2-DICHLOROPROPANE	--	
01	2/28/2001	1,2-DICHLOROPROPANE	--	
02	4/23/2001	1,2-DICHLOROPROPANE	--	
02	9/28/2001	1,2-DICHLOROPROPANE	--	
02	10/29/2001	1,2-DICHLOROPROPANE	--	
02	7/31/2002	1,2-DICHLOROPROPANE	--	
01	4/26/1994	1,3,5-TRIMETHYLBENZENE	--	
01	1/25/1996	1,3,5-TRIMETHYLBENZENE	--	
01	7/1/1997	1,3,5-TRIMETHYLBENZENE	--	
01	4/21/1998	1,3,5-TRIMETHYLBENZENE	--	
01	8/6/1998	1,3,5-TRIMETHYLBENZENE	--	
02	6/22/2000	1,3,5-TRIMETHYLBENZENE	--	
02	2/28/2001	1,3,5-TRIMETHYLBENZENE	--	
01	2/28/2001	1,3,5-TRIMETHYLBENZENE	--	
02	4/23/2001	1,3,5-TRIMETHYLBENZENE	--	
02	9/28/2001	1,3,5-TRIMETHYLBENZENE	--	
02	10/29/2001	1,3,5-TRIMETHYLBENZENE	--	
02	7/31/2002	1,3,5-TRIMETHYLBENZENE	--	
01	4/26/1994	1,3-DICHLOROPROPANE	--	
01	1/25/1996	1,3-DICHLOROPROPANE	--	
01	7/1/1997	1,3-DICHLOROPROPANE	--	
01	4/21/1998	1,3-DICHLOROPROPANE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	8/6/1998	1,3-DICHLOROPROPANE	--	
02	6/22/2000	1,3-DICHLOROPROPANE	--	
02	2/28/2001	1,3-DICHLOROPROPANE	--	
01	2/28/2001	1,3-DICHLOROPROPANE	--	
02	4/23/2001	1,3-DICHLOROPROPANE	--	
02	9/28/2001	1,3-DICHLOROPROPANE	--	
02	10/29/2001	1,3-DICHLOROPROPANE	--	
02	7/31/2002	1,3-DICHLOROPROPANE	--	
01	4/26/1994	1,3-DICHLOROPROPENE	--	
01	1/25/1996	1,3-DICHLOROPROPENE	--	
01	7/1/1997	1,3-DICHLOROPROPENE	--	
01	4/21/1998	1,3-DICHLOROPROPENE	--	
01	8/6/1998	1,3-DICHLOROPROPENE	--	
02	6/22/2000	1,3-DICHLOROPROPENE	--	
02	2/28/2001	1,3-DICHLOROPROPENE	--	
01	2/28/2001	1,3-DICHLOROPROPENE	--	
02	4/23/2001	1,3-DICHLOROPROPENE	--	
02	9/28/2001	1,3-DICHLOROPROPENE	--	
02	10/29/2001	1,3-DICHLOROPROPENE	--	
02	7/31/2002	1,3-DICHLOROPROPENE	--	
01	4/26/1994	2,2-DICHLOROPROPANE	--	
01	1/25/1996	2,2-DICHLOROPROPANE	--	
01	7/1/1997	2,2-DICHLOROPROPANE	--	
01	4/21/1998	2,2-DICHLOROPROPANE	--	
01	8/6/1998	2,2-DICHLOROPROPANE	--	
02	6/22/2000	2,2-DICHLOROPROPANE	--	
02	2/28/2001	2,2-DICHLOROPROPANE	--	
01	2/28/2001	2,2-DICHLOROPROPANE	--	
02	4/23/2001	2,2-DICHLOROPROPANE	--	
02	9/28/2001	2,2-DICHLOROPROPANE	--	
02	10/29/2001	2,2-DICHLOROPROPANE	--	
02	7/31/2002	2,2-DICHLOROPROPANE	--	
01	1/12/1990	BENZENE	--	
01	4/23/1990	BENZENE	--	
01	8/2/1990	BENZENE	--	
01	10/15/1990	BENZENE	--	
01	4/26/1994	BENZENE	--	
01	1/25/1996	BENZENE	--	
01	7/1/1997	BENZENE	--	
01	4/21/1998	BENZENE	--	
01	8/6/1998	BENZENE	--	
02	6/22/2000	BENZENE	--	
02	2/28/2001	BENZENE	--	
01	2/28/2001	BENZENE	--	
02	4/23/2001	BENZENE	--	
02	9/28/2001	BENZENE	--	
02	10/29/2001	BENZENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
02	7/31/2002	BENZENE	--	
01	4/26/1994	BROMOBENZENE	--	
01	1/25/1996	BROMOBENZENE	--	
01	7/1/1997	BROMOBENZENE	--	
01	4/21/1998	BROMOBENZENE	--	
01	8/6/1998	BROMOBENZENE	--	
02	6/22/2000	BROMOBENZENE	--	
02	2/28/2001	BROMOBENZENE	--	
01	2/28/2001	BROMOBENZENE	--	
02	4/23/2001	BROMOBENZENE	--	
02	9/28/2001	BROMOBENZENE	--	
02	10/29/2001	BROMOBENZENE	--	
02	7/31/2002	BROMOBENZENE	--	
01	4/26/1994	BROMOCHLOROMETHANE	--	
01	1/25/1996	BROMOCHLOROMETHANE	--	
01	7/1/1997	BROMOCHLOROMETHANE	--	
01	4/21/1998	BROMOCHLOROMETHANE	--	
01	8/6/1998	BROMOCHLOROMETHANE	--	
02	6/22/2000	BROMOCHLOROMETHANE	--	
02	2/28/2001	BROMOCHLOROMETHANE	--	
01	2/28/2001	BROMOCHLOROMETHANE	--	
02	4/23/2001	BROMOCHLOROMETHANE	--	
02	9/28/2001	BROMOCHLOROMETHANE	--	
02	10/29/2001	BROMOCHLOROMETHANE	--	
02	7/31/2002	BROMOCHLOROMETHANE	--	
01	4/26/1994	BROMODICHLOROMETHANE	--	
01	1/25/1996	BROMODICHLOROMETHANE	--	
01	7/1/1997	BROMODICHLOROMETHANE	10	100 #
01	4/21/1998	BROMODICHLOROMETHANE	--	
01	8/6/1998	BROMODICHLOROMETHANE	2.3	100 #
02	6/22/2000	BROMODICHLOROMETHANE	--	
02	2/28/2001	BROMODICHLOROMETHANE	--	
01	2/28/2001	BROMODICHLOROMETHANE	--	
02	4/23/2001	BROMODICHLOROMETHANE	--	
02	9/28/2001	BROMODICHLOROMETHANE	--	
02	10/29/2001	BROMODICHLOROMETHANE	--	
02	7/31/2002	BROMODICHLOROMETHANE	--	
01	4/26/1994	BROMOFORM	--	
01	1/25/1996	BROMOFORM	--	
01	7/1/1997	BROMOFORM	--	
01	4/21/1998	BROMOFORM	--	
01	8/6/1998	BROMOFORM	--	
02	6/22/2000	BROMOFORM	--	
02	2/28/2001	BROMOFORM	--	
01	2/28/2001	BROMOFORM	--	
02	4/23/2001	BROMOFORM	--	
02	9/28/2001	BROMOFORM	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	4/26/1994	DIBROMOMETHANE	--	
01	1/25/1996	DIBROMOMETHANE	--	
01	7/1/1997	DIBROMOMETHANE	--	
01	4/21/1998	DIBROMOMETHANE	--	
01	8/6/1998	DIBROMOMETHANE	--	
02	6/22/2000	DIBROMOMETHANE	--	
02	2/28/2001	DIBROMOMETHANE	--	
01	2/28/2001	DIBROMOMETHANE	--	
02	4/23/2001	DIBROMOMETHANE	--	
02	9/28/2001	DIBROMOMETHANE	--	
02	10/29/2001	DIBROMOMETHANE	--	
02	7/31/2002	DIBROMOMETHANE	--	
01	4/26/1994	DICHLORODIFLUOROMETHANE	--	
01	1/25/1996	DICHLORODIFLUOROMETHANE	--	
01	7/1/1997	DICHLORODIFLUOROMETHANE	--	
01	4/21/1998	DICHLORODIFLUOROMETHANE	--	
01	8/6/1998	DICHLORODIFLUOROMETHANE	--	
02	6/22/2000	DICHLORODIFLUOROMETHANE	--	
02	2/28/2001	DICHLORODIFLUOROMETHANE	--	
01	2/28/2001	DICHLORODIFLUOROMETHANE	--	
02	4/23/2001	DICHLORODIFLUOROMETHANE	--	
02	9/28/2001	DICHLORODIFLUOROMETHANE	--	
02	10/29/2001	DICHLORODIFLUOROMETHANE	--	
02	7/31/2002	DICHLORODIFLUOROMETHANE	--	
01	1/12/1990	ETHYLBENZENE	--	
01	4/23/1990	ETHYLBENZENE	--	
01	8/2/1990	ETHYLBENZENE	--	
01	10/15/1990	ETHYLBENZENE	--	
01	4/26/1994	ETHYLBENZENE	--	
01	1/25/1996	ETHYLBENZENE	--	
01	7/1/1997	ETHYLBENZENE	--	
01	4/21/1998	ETHYLBENZENE	--	
01	8/6/1998	ETHYLBENZENE	--	
02	6/22/2000	ETHYLBENZENE	--	
02	2/28/2001	ETHYLBENZENE	--	
01	2/28/2001	ETHYLBENZENE	--	
02	4/23/2001	ETHYLBENZENE	--	
02	9/28/2001	ETHYLBENZENE	--	
02	10/29/2001	ETHYLBENZENE	--	
02	7/31/2002	ETHYLBENZENE	--	
01	4/26/1994	HEXACHLOROBUTADIENE	--	
01	1/25/1996	HEXACHLOROBUTADIENE	--	
01	7/1/1997	HEXACHLOROBUTADIENE	--	
01	4/21/1998	HEXACHLOROBUTADIENE	--	
01	8/6/1998	HEXACHLOROBUTADIENE	--	
02	6/22/2000	HEXACHLOROBUTADIENE	--	
02	2/28/2001	HEXACHLOROBUTADIENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	2/28/2001	HEXACHLOROBUTADIENE	--	
02	4/23/2001	HEXACHLOROBUTADIENE	--	
02	9/28/2001	HEXACHLOROBUTADIENE	--	
02	10/29/2001	HEXACHLOROBUTADIENE	--	
02	7/31/2002	HEXACHLOROBUTADIENE	--	
01	4/26/1994	ISOPROPYLBENZENE	--	
01	1/25/1996	ISOPROPYLBENZENE	--	
01	7/1/1997	ISOPROPYLBENZENE	--	
01	4/21/1998	ISOPROPYLBENZENE	--	
01	8/6/1998	ISOPROPYLBENZENE	--	
02	6/22/2000	ISOPROPYLBENZENE	--	
02	2/28/2001	ISOPROPYLBENZENE	--	
01	2/28/2001	ISOPROPYLBENZENE	--	
02	4/23/2001	ISOPROPYLBENZENE	--	
02	9/28/2001	ISOPROPYLBENZENE	--	
02	10/29/2001	ISOPROPYLBENZENE	--	
02	7/31/2002	ISOPROPYLBENZENE	--	
01	4/26/1994	m-DICHLOROBENZENE	--	
01	1/25/1996	m-DICHLOROBENZENE	--	
01	7/1/1997	m-DICHLOROBENZENE	--	
01	4/21/1998	m-DICHLOROBENZENE	--	
01	8/6/1998	m-DICHLOROBENZENE	--	
02	6/22/2000	m-DICHLOROBENZENE	--	
02	2/28/2001	m-DICHLOROBENZENE	--	
01	2/28/2001	m-DICHLOROBENZENE	--	
02	4/23/2001	m-DICHLOROBENZENE	--	
02	9/28/2001	m-DICHLOROBENZENE	--	
02	10/29/2001	m-DICHLOROBENZENE	--	
02	7/31/2002	m-DICHLOROBENZENE	--	
01	4/26/1994	METHYLENE CHLORIDE	--	
01	1/25/1996	METHYLENE CHLORIDE	--	
01	7/1/1997	METHYLENE CHLORIDE	--	
01	4/21/1998	METHYLENE CHLORIDE	--	
01	8/6/1998	METHYLENE CHLORIDE	--	
02	6/22/2000	METHYLENE CHLORIDE	--	
02	2/28/2001	METHYLENE CHLORIDE	--	
01	2/28/2001	METHYLENE CHLORIDE	--	
02	4/23/2001	METHYLENE CHLORIDE	--	
02	9/28/2001	METHYLENE CHLORIDE	--	
02	10/29/2001	METHYLENE CHLORIDE	--	
02	7/31/2002	METHYLENE CHLORIDE	--	
01	1/25/1996	METHYL-TERT-BUTYL-ETHER	--	
01	1/25/1996	METHYL-TERT-BUTYL-ETHER	--	
01	7/1/1997	METHYL-TERT-BUTYL-ETHER	--	
01	7/1/1997	METHYL-TERT-BUTYL-ETHER	--	
01	4/21/1998	METHYL-TERT-BUTYL-ETHER	--	
01	4/21/1998	METHYL-TERT-BUTYL-ETHER	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	8/6/1998	METHYL-TERT-BUTYL-ETHER	--	
01	8/6/1998	METHYL-TERT-BUTYL-ETHER	--	
02	6/22/2000	METHYL-TERT-BUTYL-ETHER	--	
02	6/22/2000	METHYL-TERT-BUTYL-ETHER	--	
02	2/28/2001	METHYL-TERT-BUTYL-ETHER	--	
01	2/28/2001	METHYL-TERT-BUTYL-ETHER	--	
02	2/28/2001	METHYL-TERT-BUTYL-ETHER	--	
01	2/28/2001	METHYL-TERT-BUTYL-ETHER	--	
02	4/23/2001	METHYL-TERT-BUTYL-ETHER	--	
02	4/23/2001	METHYL-TERT-BUTYL-ETHER	--	
02	9/28/2001	METHYL-TERT-BUTYL-ETHER	--	
02	9/28/2001	METHYL-TERT-BUTYL-ETHER	--	
02	10/29/2001	METHYL-TERT-BUTYL-ETHER	--	
02	10/29/2001	METHYL-TERT-BUTYL-ETHER	--	
02	7/31/2002	METHYL-TERT-BUTYL-ETHER	--	
02	7/31/2002	METHYL-TERT-BUTYL-ETHER	--	
01	1/12/1990	MONOCHLORO BENZENE	--	
01	4/23/1990	MONOCHLORO BENZENE	--	
01	8/2/1990	MONOCHLORO BENZENE	--	
01	10/15/1990	MONOCHLORO BENZENE	--	
01	4/26/1994	MONOCHLORO BENZENE	--	
01	1/25/1996	MONOCHLORO BENZENE	--	
01	7/1/1997	MONOCHLORO BENZENE	--	
01	4/21/1998	MONOCHLORO BENZENE	--	
01	8/6/1998	MONOCHLORO BENZENE	--	
02	6/22/2000	MONOCHLORO BENZENE	--	
02	2/28/2001	MONOCHLORO BENZENE	--	
01	2/28/2001	MONOCHLORO BENZENE	--	
02	4/23/2001	MONOCHLORO BENZENE	--	
02	9/28/2001	MONOCHLORO BENZENE	--	
02	10/29/2001	MONOCHLORO BENZENE	--	
02	7/31/2002	MONOCHLORO BENZENE	--	
01	4/26/1994	m-XYLENE	--	
01	1/25/1996	m-XYLENE	--	
01	7/1/1997	m-XYLENE	--	
01	4/21/1998	m-XYLENE	--	
01	8/6/1998	m-XYLENE	--	
02	6/22/2000	m-XYLENE	--	
02	2/28/2001	m-XYLENE	--	
01	2/28/2001	m-XYLENE	--	
02	4/23/2001	m-XYLENE	--	
02	9/28/2001	m-XYLENE	--	
02	10/29/2001	m-XYLENE	--	
02	7/31/2002	m-XYLENE	--	
01	4/26/1994	NAPHTHALENE	--	
01	1/25/1996	NAPHTHALENE	--	
01	7/1/1997	NAPHTHALENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	4/21/1998	NAPHTHALENE	--	
01	8/6/1998	NAPHTHALENE	--	
02	6/22/2000	NAPHTHALENE	--	
02	2/28/2001	NAPHTHALENE	--	
01	2/28/2001	NAPHTHALENE	--	
02	4/23/2001	NAPHTHALENE	--	
02	9/28/2001	NAPHTHALENE	--	
02	10/29/2001	NAPHTHALENE	--	
02	7/31/2002	NAPHTHALENE	--	
01	4/26/1994	N-BUTYLBENZENE	--	
01	1/25/1996	N-BUTYLBENZENE	--	
01	7/1/1997	N-BUTYLBENZENE	--	
01	4/21/1998	N-BUTYLBENZENE	--	
01	8/6/1998	N-BUTYLBENZENE	--	
02	6/22/2000	N-BUTYLBENZENE	--	
02	2/28/2001	N-BUTYLBENZENE	--	
01	2/28/2001	N-BUTYLBENZENE	--	
02	4/23/2001	N-BUTYLBENZENE	--	
02	9/28/2001	N-BUTYLBENZENE	--	
02	10/29/2001	N-BUTYLBENZENE	--	
02	7/31/2002	N-BUTYLBENZENE	--	
01	4/26/1994	n-PROPYLBENZENE	--	
01	1/25/1996	n-PROPYLBENZENE	--	
01	7/1/1997	n-PROPYLBENZENE	--	
01	4/21/1998	n-PROPYLBENZENE	--	
01	8/6/1998	n-PROPYLBENZENE	--	
02	6/22/2000	n-PROPYLBENZENE	--	
02	2/28/2001	n-PROPYLBENZENE	--	
01	2/28/2001	n-PROPYLBENZENE	--	
02	4/23/2001	n-PROPYLBENZENE	--	
02	9/28/2001	n-PROPYLBENZENE	--	
02	10/29/2001	n-PROPYLBENZENE	--	
02	7/31/2002	n-PROPYLBENZENE	--	
01	4/26/1994	o-CHLOROTOLUENE	--	
01	1/25/1996	o-CHLOROTOLUENE	--	
01	7/1/1997	o-CHLOROTOLUENE	--	
01	4/21/1998	o-CHLOROTOLUENE	--	
01	8/6/1998	o-CHLOROTOLUENE	--	
02	6/22/2000	o-CHLOROTOLUENE	--	
02	2/28/2001	o-CHLOROTOLUENE	--	
01	2/28/2001	o-CHLOROTOLUENE	--	
02	4/23/2001	o-CHLOROTOLUENE	--	
02	9/28/2001	o-CHLOROTOLUENE	--	
02	10/29/2001	o-CHLOROTOLUENE	--	
02	7/31/2002	o-CHLOROTOLUENE	--	
01	1/12/1990	o-DICHLOROBENZENE	--	
01	4/23/1990	o-DICHLOROBENZENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	8/2/1990	o-DICHLOROBENZENE	--	
01	10/15/1990	o-DICHLOROBENZENE	--	
01	4/26/1994	o-DICHLOROBENZENE	--	
01	1/25/1996	o-DICHLOROBENZENE	--	
01	7/1/1997	o-DICHLOROBENZENE	--	
01	4/21/1998	o-DICHLOROBENZENE	--	
01	8/6/1998	o-DICHLOROBENZENE	--	
02	6/22/2000	o-DICHLOROBENZENE	--	
02	2/28/2001	o-DICHLOROBENZENE	--	
01	2/28/2001	o-DICHLOROBENZENE	--	
02	4/23/2001	o-DICHLOROBENZENE	--	
02	9/28/2001	o-DICHLOROBENZENE	--	
02	10/29/2001	o-DICHLOROBENZENE	--	
02	7/31/2002	o-DICHLOROBENZENE	--	
01	4/26/1994	o-XYLENE	--	
01	1/25/1996	o-XYLENE	--	
01	7/1/1997	o-XYLENE	--	
01	4/21/1998	o-XYLENE	--	
01	8/6/1998	o-XYLENE	--	
02	6/22/2000	o-XYLENE	--	
02	2/28/2001	o-XYLENE	--	
01	2/28/2001	o-XYLENE	--	
02	4/23/2001	o-XYLENE	--	
02	9/28/2001	o-XYLENE	--	
02	10/29/2001	o-XYLENE	--	
02	7/31/2002	o-XYLENE	--	
01	4/26/1994	p-CHLOROTOLUENE	--	
01	1/25/1996	p-CHLOROTOLUENE	--	
01	7/1/1997	p-CHLOROTOLUENE	--	
01	4/21/1998	p-CHLOROTOLUENE	--	
01	8/6/1998	p-CHLOROTOLUENE	--	
02	6/22/2000	p-CHLOROTOLUENE	--	
02	2/28/2001	p-CHLOROTOLUENE	--	
01	2/28/2001	p-CHLOROTOLUENE	--	
02	4/23/2001	p-CHLOROTOLUENE	--	
02	9/28/2001	p-CHLOROTOLUENE	--	
02	10/29/2001	p-CHLOROTOLUENE	--	
02	7/31/2002	p-CHLOROTOLUENE	--	
01	1/12/1990	p-DICHLOROBENZENE	--	
01	4/23/1990	p-DICHLOROBENZENE	--	
01	8/2/1990	p-DICHLOROBENZENE	--	
01	10/15/1990	p-DICHLOROBENZENE	--	
01	4/26/1994	p-DICHLOROBENZENE	--	
01	1/25/1996	p-DICHLOROBENZENE	--	
01	7/1/1997	p-DICHLOROBENZENE	--	
01	4/21/1998	p-DICHLOROBENZENE	--	
01	8/6/1998	p-DICHLOROBENZENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
02	6/22/2000	p-DICHLOROBENZENE	--	
02	2/28/2001	p-DICHLOROBENZENE	--	
01	2/28/2001	p-DICHLOROBENZENE	--	
02	4/23/2001	p-DICHLOROBENZENE	--	
02	9/28/2001	p-DICHLOROBENZENE	--	
02	10/29/2001	p-DICHLOROBENZENE	--	
02	7/31/2002	p-DICHLOROBENZENE	--	
01	4/26/1994	P-ISOPROPYLTOLUENE	--	
01	1/25/1996	P-ISOPROPYLTOLUENE	--	
01	7/1/1997	P-ISOPROPYLTOLUENE	--	
01	4/21/1998	P-ISOPROPYLTOLUENE	--	
01	8/6/1998	P-ISOPROPYLTOLUENE	--	
02	6/22/2000	P-ISOPROPYLTOLUENE	--	
02	2/28/2001	P-ISOPROPYLTOLUENE	--	
01	2/28/2001	P-ISOPROPYLTOLUENE	--	
02	4/23/2001	P-ISOPROPYLTOLUENE	--	
02	9/28/2001	P-ISOPROPYLTOLUENE	--	
02	10/29/2001	P-ISOPROPYLTOLUENE	--	
02	7/31/2002	P-ISOPROPYLTOLUENE	--	
01	4/26/1994	p-XYLENE	--	
01	1/25/1996	p-XYLENE	--	
01	7/1/1997	p-XYLENE	--	
01	4/21/1998	p-XYLENE	--	
01	8/6/1998	p-XYLENE	--	
02	6/22/2000	p-XYLENE	--	
02	2/28/2001	p-XYLENE	--	
01	2/28/2001	p-XYLENE	--	
02	4/23/2001	p-XYLENE	--	
02	9/28/2001	p-XYLENE	--	
02	10/29/2001	p-XYLENE	--	
02	7/31/2002	p-XYLENE	--	
01	4/26/1994	SEC-BUTYLBENZENE	--	
01	1/25/1996	SEC-BUTYLBENZENE	--	
01	7/1/1997	SEC-BUTYLBENZENE	--	
01	4/21/1998	SEC-BUTYLBENZENE	--	
01	8/6/1998	SEC-BUTYLBENZENE	--	
02	6/22/2000	SEC-BUTYLBENZENE	--	
02	2/28/2001	SEC-BUTYLBENZENE	--	
01	2/28/2001	SEC-BUTYLBENZENE	--	
02	4/23/2001	SEC-BUTYLBENZENE	--	
02	9/28/2001	SEC-BUTYLBENZENE	--	
02	10/29/2001	SEC-BUTYLBENZENE	--	
02	7/31/2002	SEC-BUTYLBENZENE	--	
01	1/12/1990	STYRENE	--	
01	4/23/1990	STYRENE	--	
01	8/2/1990	STYRENE	--	
01	10/15/1990	STYRENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

=Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	4/26/1994	STYRENE	--	
01	1/25/1996	STYRENE	--	
01	7/1/1997	STYRENE	--	
01	4/21/1998	STYRENE	--	
01	8/6/1998	STYRENE	--	
02	6/22/2000	STYRENE	--	
02	2/28/2001	STYRENE	--	
01	2/28/2001	STYRENE	--	
02	4/23/2001	STYRENE	--	
02	9/28/2001	STYRENE	--	
02	10/29/2001	STYRENE	--	
02	7/31/2002	STYRENE	--	
01	4/26/1994	TERT-BUTYLBENZENE	--	
01	1/25/1996	TERT-BUTYLBENZENE	--	
01	7/1/1997	TERT-BUTYLBENZENE	--	
01	4/21/1998	TERT-BUTYLBENZENE	--	
01	8/6/1998	TERT-BUTYLBENZENE	--	
02	6/22/2000	TERT-BUTYLBENZENE	--	
02	2/28/2001	TERT-BUTYLBENZENE	--	
01	2/28/2001	TERT-BUTYLBENZENE	--	
02	4/23/2001	TERT-BUTYLBENZENE	--	
02	9/28/2001	TERT-BUTYLBENZENE	--	
02	10/29/2001	TERT-BUTYLBENZENE	--	
02	7/31/2002	TERT-BUTYLBENZENE	--	
01	1/12/1990	TETRACHLOROETHYLENE	--	
01	4/23/1990	TETRACHLOROETHYLENE	--	
01	8/2/1990	TETRACHLOROETHYLENE	--	
01	10/15/1990	TETRACHLOROETHYLENE	--	
01	4/26/1994	TETRACHLOROETHYLENE	--	
01	1/25/1996	TETRACHLOROETHYLENE	--	
01	7/1/1997	TETRACHLOROETHYLENE	--	
01	4/21/1998	TETRACHLOROETHYLENE	--	
01	8/6/1998	TETRACHLOROETHYLENE	--	
02	6/22/2000	TETRACHLOROETHYLENE	--	
02	2/28/2001	TETRACHLOROETHYLENE	--	
01	2/28/2001	TETRACHLOROETHYLENE	--	
02	4/23/2001	TETRACHLOROETHYLENE	--	
02	9/28/2001	TETRACHLOROETHYLENE	--	
02	10/29/2001	TETRACHLOROETHYLENE	--	
02	7/31/2002	TETRACHLOROETHYLENE	--	
01	1/12/1990	TOLUENE	--	
01	4/23/1990	TOLUENE	--	
01	8/2/1990	TOLUENE	--	
01	10/15/1990	TOLUENE	--	
01	4/26/1994	TOLUENE	--	
01	1/25/1996	TOLUENE	--	
01	7/1/1997	TOLUENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	4/21/1998	TOLUENE	--	
01	8/6/1998	TOLUENE	--	
02	6/22/2000	TOLUENE	--	
02	2/28/2001	TOLUENE	--	
01	2/28/2001	TOLUENE	--	
02	4/23/2001	TOLUENE	--	
02	9/28/2001	TOLUENE	--	
02	10/29/2001	TOLUENE	--	
02	7/31/2002	TOLUENE	--	
01	1/12/1990	trans-1,2-DICHLOROETHYLENE	--	
01	4/23/1990	trans-1,2-DICHLOROETHYLENE	--	
01	8/2/1990	trans-1,2-DICHLOROETHYLENE	--	
01	10/15/1990	trans-1,2-DICHLOROETHYLENE	--	
01	4/26/1994	trans-1,2-DICHLOROETHYLENE	--	
01	1/25/1996	trans-1,2-DICHLOROETHYLENE	--	
01	7/1/1997	trans-1,2-DICHLOROETHYLENE	--	
01	4/21/1998	trans-1,2-DICHLOROETHYLENE	--	
01	8/6/1998	trans-1,2-DICHLOROETHYLENE	--	
02	6/22/2000	trans-1,2-DICHLOROETHYLENE	--	
02	2/28/2001	trans-1,2-DICHLOROETHYLENE	--	
01	2/28/2001	trans-1,2-DICHLOROETHYLENE	--	
02	4/23/2001	trans-1,2-DICHLOROETHYLENE	--	
02	9/28/2001	trans-1,2-DICHLOROETHYLENE	--	
02	10/29/2001	trans-1,2-DICHLOROETHYLENE	--	
02	7/31/2002	trans-1,2-DICHLOROETHYLENE	--	
01	1/12/1990	TRICHLOROETHYLENE	--	
01	4/23/1990	TRICHLOROETHYLENE	--	
01	8/2/1990	TRICHLOROETHYLENE	--	
01	10/15/1990	TRICHLOROETHYLENE	--	
01	4/26/1994	TRICHLOROETHYLENE	--	
01	1/25/1996	TRICHLOROETHYLENE	--	
01	7/1/1997	TRICHLOROETHYLENE	--	
01	4/21/1998	TRICHLOROETHYLENE	--	
01	8/6/1998	TRICHLOROETHYLENE	--	
02	6/22/2000	TRICHLOROETHYLENE	--	
02	2/28/2001	TRICHLOROETHYLENE	--	
01	2/28/2001	TRICHLOROETHYLENE	--	
02	4/23/2001	TRICHLOROETHYLENE	--	
02	9/28/2001	TRICHLOROETHYLENE	--	
02	10/29/2001	TRICHLOROETHYLENE	--	
02	7/31/2002	TRICHLOROETHYLENE	--	
01	4/26/1994	TRICHLOROFLUOROMETHANE	--	
01	1/25/1996	TRICHLOROFLUOROMETHANE	--	
01	7/1/1997	TRICHLOROFLUOROMETHANE	--	
01	4/21/1998	TRICHLOROFLUOROMETHANE	--	
01	8/6/1998	TRICHLOROFLUOROMETHANE	--	
02	6/22/2000	TRICHLOROFLUOROMETHANE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
02	2/28/2001	TRICHLOROFLUOROMETHANE	--	
01	2/28/2001	TRICHLOROFLUOROMETHANE	--	
02	4/23/2001	TRICHLOROFLUOROMETHANE	--	
02	9/28/2001	TRICHLOROFLUOROMETHANE	--	
02	10/29/2001	TRICHLOROFLUOROMETHANE	--	
02	7/31/2002	TRICHLOROFLUOROMETHANE	--	
01	1/12/1990	VINYL CHLORIDE	--	
01	4/23/1990	VINYL CHLORIDE	--	
01	8/2/1990	VINYL CHLORIDE	--	
01	10/15/1990	VINYL CHLORIDE	--	
01	4/26/1994	VINYL CHLORIDE	--	
01	1/25/1996	VINYL CHLORIDE	--	
01	7/1/1997	VINYL CHLORIDE	--	
01	4/21/1998	VINYL CHLORIDE	--	
01	8/6/1998	VINYL CHLORIDE	--	
02	6/22/2000	VINYL CHLORIDE	--	
02	2/28/2001	VINYL CHLORIDE	--	
01	2/28/2001	VINYL CHLORIDE	--	
02	4/23/2001	VINYL CHLORIDE	--	
02	9/28/2001	VINYL CHLORIDE	--	
02	10/29/2001	VINYL CHLORIDE	--	
02	7/31/2002	VINYL CHLORIDE	--	
01	1/12/1990	XYLENES, TOTAL	--	
01	4/23/1990	XYLENES, TOTAL	--	
01	8/2/1990	XYLENES, TOTAL	--	
01	10/15/1990	XYLENES, TOTAL	--	
01	4/26/1994	XYLENES, TOTAL	--	
01	1/25/1996	XYLENES, TOTAL	--	
01	7/1/1997	XYLENES, TOTAL	--	
01	4/21/1998	XYLENES, TOTAL	--	
01	8/6/1998	XYLENES, TOTAL	--	
02	6/22/2000	XYLENES, TOTAL	--	
02	2/28/2001	XYLENES, TOTAL	--	
01	2/28/2001	XYLENES, TOTAL	--	
02	4/23/2001	XYLENES, TOTAL	--	
02	9/28/2001	XYLENES, TOTAL	--	
02	10/29/2001	XYLENES, TOTAL	--	
02	7/31/2002	XYLENES, TOTAL	--	
Synthetic Organic Compounds			µg/L	µg/L
01	4/26/1994	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	5/8/1995	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	1/25/1996	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	10/10/1996	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	7/1/1997	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	7/1/1997	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	4/21/1998	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	4/21/1998	1,2-DIBROMO-3-CHLOROPROPANE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Synthetic Organic Compounds			µg/L	µg/L
01	8/6/1998	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	6/22/2000	1,2-DIBROMO-3-CHLOROPROPANE	--	
02	6/22/2000	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	5/8/1995	2,4,5-T	--	
01	10/10/1996	2,4,5-T	--	
01	7/1/1997	2,4,5-T	--	
01	4/21/1998	2,4,5-T	--	
01	6/22/2000	2,4,5-T	--	
02	6/22/2000	2,4,5-T	--	
01	4/26/1994	2,4,5-TP (SILVEX)	--	
01	5/8/1995	2,4,5-TP (SILVEX)	--	
01	10/10/1996	2,4,5-TP (SILVEX)	--	
01	7/1/1997	2,4,5-TP (SILVEX)	--	
01	4/21/1998	2,4,5-TP (SILVEX)	--	
01	6/22/2000	2,4,5-TP (SILVEX)	--	
02	6/22/2000	2,4,5-TP (SILVEX)	--	
01	4/26/1994	2,4-D	--	
01	5/8/1995	2,4-D	--	
01	10/10/1996	2,4-D	--	
01	7/1/1997	2,4-D	--	
01	4/21/1998	2,4-D	--	
01	6/22/2000	2,4-D	--	
02	6/22/2000	2,4-D	--	
01	4/26/1994	3-HYDROXYCARBOFURAN	--	
01	4/21/1998	3-HYDROXYCARBOFURAN	--	
01	6/22/2000	3-HYDROXYCARBOFURAN	--	
02	6/22/2000	3-HYDROXYCARBOFURAN	--	
01	4/26/1994	ALACHLOR (LASSO)	--	
01	5/8/1995	ALACHLOR (LASSO)	--	
01	10/10/1996	ALACHLOR (LASSO)	--	
01	7/1/1997	ALACHLOR (LASSO)	--	
01	4/21/1998	ALACHLOR (LASSO)	--	
01	6/22/2000	ALACHLOR (LASSO)	--	
02	6/22/2000	ALACHLOR (LASSO)	--	
01	4/26/1994	ALDICARB	--	
01	4/21/1998	ALDICARB	--	
01	6/22/2000	ALDICARB	--	
02	6/22/2000	ALDICARB	--	
01	4/26/1994	ALDICARB SULFONE	--	
01	4/21/1998	ALDICARB SULFONE	--	
01	6/22/2000	ALDICARB SULFONE	--	
02	6/22/2000	ALDICARB SULFONE	--	
01	4/26/1994	ALDICARB SULFOXIDE	--	
01	4/21/1998	ALDICARB SULFOXIDE	--	
01	6/22/2000	ALDICARB SULFOXIDE	--	
02	6/22/2000	ALDICARB SULFOXIDE	--	
01	4/26/1994	ALDRIN	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Synthetic Organic Compounds			µg/L	µg/L
01	5/8/1995	ALDRIN	--	
01	10/10/1996	ALDRIN	--	
01	7/1/1997	ALDRIN	--	
01	4/21/1998	ALDRIN	--	
01	6/22/2000	ALDRIN	--	
02	6/22/2000	ALDRIN	--	
01	4/26/1994	ATRAZINE	--	
01	5/8/1995	ATRAZINE	--	
01	10/10/1996	ATRAZINE	--	
01	7/1/1997	ATRAZINE	--	
01	4/21/1998	ATRAZINE	--	
01	6/22/2000	ATRAZINE	--	
02	6/22/2000	ATRAZINE	--	
01	4/26/1994	BENZO(a)PYRENE	--	
01	5/8/1995	BENZO(a)PYRENE	--	
01	10/10/1996	BENZO(a)PYRENE	--	
01	7/1/1997	BENZO(a)PYRENE	--	
01	4/21/1998	BENZO(a)PYRENE	--	
01	6/22/2000	BENZO(a)PYRENE	--	
02	6/22/2000	BENZO(a)PYRENE	--	
01	4/26/1994	BHC-GAMMA(LINDANE)	--	
01	5/8/1995	BHC-GAMMA(LINDANE)	--	
01	10/10/1996	BHC-GAMMA(LINDANE)	--	
01	7/1/1997	BHC-GAMMA(LINDANE)	--	
01	4/21/1998	BHC-GAMMA(LINDANE)	--	
01	6/22/2000	BHC-GAMMA(LINDANE)	--	
02	6/22/2000	BHC-GAMMA(LINDANE)	--	
01	4/26/1994	BUTACHLOR (MACHETE)	--	
01	5/8/1995	BUTACHLOR (MACHETE)	--	
01	10/10/1996	BUTACHLOR (MACHETE)	--	
01	7/1/1997	BUTACHLOR (MACHETE)	--	
01	4/21/1998	BUTACHLOR (MACHETE)	--	
01	6/22/2000	BUTACHLOR (MACHETE)	--	
02	6/22/2000	BUTACHLOR (MACHETE)	--	
01	4/26/1994	CARBARYL	--	
01	4/21/1998	CARBARYL	--	
01	6/22/2000	CARBARYL	--	
02	6/22/2000	CARBARYL	--	
01	4/26/1994	CARBOFURAN	--	
01	4/21/1998	CARBOFURAN	--	
01	6/22/2000	CARBOFURAN	--	
02	6/22/2000	CARBOFURAN	--	
01	4/26/1994	CHLORDANE	--	
01	5/8/1995	CHLORDANE	--	
01	10/10/1996	CHLORDANE	--	
01	7/1/1997	CHLORDANE	--	
01	4/21/1998	CHLORDANE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Synthetic Organic Compounds			µg/L	µg/L
01	6/22/2000	CHLORDANE	--	
02	6/22/2000	CHLORDANE	--	
01	4/26/1994	DALAPON	--	
01	5/8/1995	DALAPON	--	
01	10/10/1996	DALAPON	--	
01	7/1/1997	DALAPON	--	
01	4/21/1998	DALAPON	--	
01	6/22/2000	DALAPON	--	
02	6/22/2000	DALAPON	--	
01	4/26/1994	DECACHLOROBIPHENYL	--	
01	5/8/1995	DECACHLOROBIPHENYL	--	
01	10/10/1996	DECACHLOROBIPHENYL	--	
01	7/1/1997	DECACHLOROBIPHENYL	--	
01	4/26/1994	DI(2-ETHYLHEXYL) ADIPATE	--	
01	5/8/1995	DI(2-ETHYLHEXYL) ADIPATE	--	
01	10/10/1996	DI(2-ETHYLHEXYL) ADIPATE	--	
01	7/1/1997	DI(2-ETHYLHEXYL) ADIPATE	--	
01	4/21/1998	DI(2-ETHYLHEXYL) ADIPATE	--	
01	6/22/2000	DI(2-ETHYLHEXYL) ADIPATE	0.6	400
02	6/22/2000	DI(2-ETHYLHEXYL) ADIPATE	--	
01	4/26/1994	DI(2-ETHYLHEXYL) PHTHALATE	--	
01	5/8/1995	DI(2-ETHYLHEXYL) PHTHALATE	3	6
01	10/10/1996	DI(2-ETHYLHEXYL) PHTHALATE	--	
01	7/1/1997	DI(2-ETHYLHEXYL) PHTHALATE	--	
01	4/21/1998	DI(2-ETHYLHEXYL) PHTHALATE	--	
01	6/22/2000	DI(2-ETHYLHEXYL) PHTHALATE	1.1	6
02	6/22/2000	DI(2-ETHYLHEXYL) PHTHALATE	--	
01	5/8/1995	DIAZINON (SPECTRACIDE)	--	
01	10/10/1996	DIAZINON (SPECTRACIDE)	--	
01	7/1/1997	DIAZINON (SPECTRACIDE)	--	
01	4/26/1994	DICAMBA	--	
01	5/8/1995	DICAMBA	--	
01	10/10/1996	DICAMBA	--	
01	7/1/1997	DICAMBA	--	
01	4/21/1998	DICAMBA	--	
01	6/22/2000	DICAMBA	--	
02	6/22/2000	DICAMBA	--	
01	4/26/1994	DIELDRIN	--	
01	5/8/1995	DIELDRIN	--	
01	10/10/1996	DIELDRIN	--	
01	7/1/1997	DIELDRIN	--	
01	4/21/1998	DIELDRIN	--	
01	6/22/2000	DIELDRIN	--	
02	6/22/2000	DIELDRIN	--	
01	4/26/1994	DINOSEB	--	
01	5/8/1995	DINOSEB	--	
01	10/10/1996	DINOSEB	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Synthetic Organic Compounds			µg/L	µg/L
01	7/1/1997	DINOSEB	--	
01	4/21/1998	DINOSEB	--	
01	6/22/2000	DINOSEB	--	
02	6/22/2000	DINOSEB	--	
01	5/8/1995	DURSBAN	--	
01	10/10/1996	DURSBAN	--	
01	7/1/1997	DURSBAN	--	
01	4/26/1994	ENDRIN	--	
01	5/8/1995	ENDRIN	--	
01	10/10/1996	ENDRIN	--	
01	7/1/1997	ENDRIN	--	
01	4/21/1998	ENDRIN	--	
01	6/22/2000	ENDRIN	--	
02	6/22/2000	ENDRIN	--	
01	4/26/1994	ETHYLENE DIBROMIDE (EDB)	--	
01	5/8/1995	ETHYLENE DIBROMIDE (EDB)	--	
01	1/25/1996	ETHYLENE DIBROMIDE (EDB)	--	
01	10/10/1996	ETHYLENE DIBROMIDE (EDB)	--	
01	7/1/1997	ETHYLENE DIBROMIDE (EDB)	--	
01	7/1/1997	ETHYLENE DIBROMIDE (EDB)	--	
01	4/21/1998	ETHYLENE DIBROMIDE (EDB)	--	
01	4/21/1998	ETHYLENE DIBROMIDE (EDB)	--	
01	8/6/1998	ETHYLENE DIBROMIDE (EDB)	--	
01	6/22/2000	ETHYLENE DIBROMIDE (EDB)	--	
02	6/22/2000	ETHYLENE DIBROMIDE (EDB)	--	
01	4/26/1994	HEPTACHLOR	--	
01	5/8/1995	HEPTACHLOR	--	
01	10/10/1996	HEPTACHLOR	--	
01	7/1/1997	HEPTACHLOR	--	
01	4/21/1998	HEPTACHLOR	--	
01	6/22/2000	HEPTACHLOR	--	
02	6/22/2000	HEPTACHLOR	--	
01	4/26/1994	HEPTACHLOR EPOXIDE	--	
01	5/8/1995	HEPTACHLOR EPOXIDE	--	
01	10/10/1996	HEPTACHLOR EPOXIDE	--	
01	7/1/1997	HEPTACHLOR EPOXIDE	--	
01	4/21/1998	HEPTACHLOR EPOXIDE	--	
01	6/22/2000	HEPTACHLOR EPOXIDE	--	
02	6/22/2000	HEPTACHLOR EPOXIDE	--	
01	4/26/1994	HEXACHLOROBENZENE (HCB)	--	
01	5/8/1995	HEXACHLOROBENZENE (HCB)	--	
01	10/10/1996	HEXACHLOROBENZENE (HCB)	--	
01	7/1/1997	HEXACHLOROBENZENE (HCB)	--	
01	4/21/1998	HEXACHLOROBENZENE (HCB)	--	
01	6/22/2000	HEXACHLOROBENZENE (HCB)	--	
02	6/22/2000	HEXACHLOROBENZENE (HCB)	--	
01	4/26/1994	HEXACHLOROCYCLOPENTADIENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Synthetic Organic Compounds			µg/L	µg/L
01	5/8/1995	HEXACHLOROCYCLOPENTADIENE	--	
01	10/10/1996	HEXACHLOROCYCLOPENTADIENE	0.05	50
01	7/1/1997	HEXACHLOROCYCLOPENTADIENE	--	
01	4/21/1998	HEXACHLOROCYCLOPENTADIENE	--	
01	6/22/2000	HEXACHLOROCYCLOPENTADIENE	--	
02	6/22/2000	HEXACHLOROCYCLOPENTADIENE	--	
01	4/26/1994	METHOMYL	--	
01	4/21/1998	METHOMYL	--	
01	6/22/2000	METHOMYL	--	
02	6/22/2000	METHOMYL	--	
01	4/26/1994	METHOXYCHLOR	--	
01	5/8/1995	METHOXYCHLOR	--	
01	10/10/1996	METHOXYCHLOR	--	
01	7/1/1997	METHOXYCHLOR	--	
01	4/21/1998	METHOXYCHLOR	--	
01	6/22/2000	METHOXYCHLOR	--	
02	6/22/2000	METHOXYCHLOR	--	
01	4/26/1994	METOLACHLOR	--	
01	5/8/1995	METOLACHLOR	--	
01	10/10/1996	METOLACHLOR	--	
01	7/1/1997	METOLACHLOR	--	
01	4/21/1998	METOLACHLOR	--	
01	6/22/2000	METOLACHLOR	--	
02	6/22/2000	METOLACHLOR	--	
01	4/26/1994	METRIBUZIN (SENCOR)	--	
01	5/8/1995	METRIBUZIN (SENCOR)	--	
01	10/10/1996	METRIBUZIN (SENCOR)	--	
01	7/1/1997	METRIBUZIN (SENCOR)	--	
01	4/21/1998	METRIBUZIN (SENCOR)	--	
01	6/22/2000	METRIBUZIN (SENCOR)	--	
02	6/22/2000	METRIBUZIN (SENCOR)	--	
01	4/26/1994	OXAMYL (VYDATE)	--	
01	4/21/1998	OXAMYL (VYDATE)	--	
01	6/22/2000	OXAMYL (VYDATE)	--	
02	6/22/2000	OXAMYL (VYDATE)	--	
01	4/26/1994	PENTACHLOROPHENOL	--	
01	5/8/1995	PENTACHLOROPHENOL	--	
01	10/10/1996	PENTACHLOROPHENOL	--	
01	7/1/1997	PENTACHLOROPHENOL	--	
01	4/21/1998	PENTACHLOROPHENOL	--	
01	6/22/2000	PENTACHLOROPHENOL	--	
02	6/22/2000	PENTACHLOROPHENOL	--	
01	4/26/1994	PICLORAM	--	
01	5/8/1995	PICLORAM	--	
01	10/10/1996	PICLORAM	--	
01	7/1/1997	PICLORAM	--	
01	4/21/1998	PICLORAM	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

=Drinking Water Advisory Level

#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Synthetic Organic Compounds			µg/L	µg/L
01	6/22/2000	PICLORAM	--	
02	6/22/2000	PICLORAM	--	
01	4/26/1994	PROPACHLOR (RAMROD)	--	
01	5/8/1995	PROPACHLOR (RAMROD)	--	
01	10/10/1996	PROPACHLOR (RAMROD)	--	
01	7/1/1997	PROPACHLOR (RAMROD)	--	
01	4/21/1998	PROPACHLOR (RAMROD)	--	
01	6/22/2000	PROPACHLOR (RAMROD)	--	
02	6/22/2000	PROPACHLOR (RAMROD)	--	
01	4/26/1994	SIMAZINE	--	
01	5/8/1995	SIMAZINE	--	
01	10/10/1996	SIMAZINE	--	
01	7/1/1997	SIMAZINE	--	
01	4/21/1998	SIMAZINE	--	
01	6/22/2000	SIMAZINE	--	
02	6/22/2000	SIMAZINE	--	
01	4/26/1994	TOXAPHENE	--	
01	5/8/1995	TOXAPHENE	--	
01	10/10/1996	TOXAPHENE	--	
01	7/1/1997	TOXAPHENE	--	
Radionuclides			pCi/L	pCi/L
02	10/29/2001	COMBINED RADIUM (226 & 228)	--	
00	11/13/1995	GROSS ALPHA	--	
01	7/28/1999	GROSS ALPHA	--	
02	2/28/2001	GROSS ALPHA	--	
02	4/23/2001	GROSS ALPHA	--	
01	9/28/2001	GROSS ALPHA	3	15
02	10/29/2001	GROSS ALPHA	1	15
01	7/28/1999	GROSS ALPHA (SHORT TERM)	--	
02	2/28/2001	GROSS ALPHA (SHORT TERM)	--	
02	4/23/2001	GROSS ALPHA (SHORT TERM)	--	
01	9/28/2001	GROSS ALPHA (SHORT TERM)	--	
02	10/29/2001	GROSS ALPHA (SHORT TERM)	--	
00	11/13/1995	GROSS BETA	1.4	50
01	7/28/1999	GROSS BETA	2	50
02	2/28/2001	GROSS BETA	--	
02	4/23/2001	GROSS BETA	--	
01	9/28/2001	GROSS BETA	4	50
02	10/29/2001	GROSS BETA	--	
01	7/28/1999	GROSS BETA (SHORT TERM)	--	
02	2/28/2001	GROSS BETA (SHORT TERM)	--	
02	4/23/2001	GROSS BETA (SHORT TERM)	--	
01	9/28/2001	GROSS BETA (SHORT TERM)	--	
02	10/29/2001	GROSS BETA (SHORT TERM)	--	
02	10/29/2001	RADIUM-226	--	
02	10/29/2001	RADIUM-228	--	
02	4/23/2001	RADON-222	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

#=Total Trihalomethane

# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Inorganic Compounds			mg/L	mg/L
01	5/8/1995	ANTIMONY	--	
01	8/26/1996	ANTIMONY	--	
01	10/10/1996	ANTIMONY	--	
01	7/1/1997	ANTIMONY	--	
01	4/21/1998	ANTIMONY	--	
01	7/28/1999	ANTIMONY	--	
01	6/22/2000	ANTIMONY	--	
02	6/22/2000	ANTIMONY	--	
01	12/20/1993	ARSENIC	--	
01	12/6/1994	ARSENIC	--	
01	5/8/1995	ARSENIC	--	
01	8/26/1996	ARSENIC	--	
01	10/10/1996	ARSENIC	--	
01	7/1/1997	ARSENIC	--	
01	4/21/1998	ARSENIC	--	
01	7/28/1999	ARSENIC	--	
01	6/22/2000	ARSENIC	--	
02	6/22/2000	ARSENIC	--	
01	5/8/1995	BARIUM	--	
01	8/26/1996	BARIUM	0.035	2
01	10/10/1996	BARIUM	--	
01	7/1/1997	BARIUM	--	
01	4/21/1998	BARIUM	--	
01	7/28/1999	BARIUM	0.1	2
01	6/22/2000	BARIUM	--	
02	6/22/2000	BARIUM	--	
01	5/8/1995	BERYLLIUM	--	
01	8/26/1996	BERYLLIUM	--	
01	10/10/1996	BERYLLIUM	--	
01	7/1/1997	BERYLLIUM	--	
01	4/21/1998	BERYLLIUM	--	
01	7/28/1999	BERYLLIUM	--	
01	6/22/2000	BERYLLIUM	--	
02	6/22/2000	BERYLLIUM	--	
01	5/8/1995	CADMIUM	--	
01	8/26/1996	CADMIUM	--	
01	10/10/1996	CADMIUM	--	
01	7/1/1997	CADMIUM	--	
01	4/21/1998	CADMIUM	--	
01	7/28/1999	CADMIUM	--	
01	6/22/2000	CADMIUM	--	
02	6/22/2000	CADMIUM	--	
01	4/16/2002	CHLORIDE	18	250 *
01	5/8/1995	CHROMIUM	--	
01	8/26/1996	CHROMIUM	--	
01	10/10/1996	CHROMIUM	--	
01	7/1/1997	CHROMIUM	--	

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#=Total Trihalomethane



# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Inorganic Compounds			mg/L	mg/L
01	4/21/1998	CHROMIUM	--	
01	7/28/1999	CHROMIUM	--	
01	6/22/2000	CHROMIUM	--	
02	6/22/2000	CHROMIUM	--	
01	5/8/1995	FLUORIDE	--	
01	8/26/1996	FLUORIDE	--	
01	10/10/1996	FLUORIDE	--	
01	7/1/1997	FLUORIDE	--	
01	4/21/1998	FLUORIDE	--	
01	11/18/1998	FLUORIDE	0.96	4
01	7/28/1999	FLUORIDE	0.43	4
01	4/18/2000	FLUORIDE	0.72	4
01	4/24/2000	FLUORIDE	0.72	4
01	5/4/2000	FLUORIDE	0.74	4
01	6/22/2000	FLUORIDE	0.74	4
02	6/22/2000	FLUORIDE	0.74	4
01	4/16/2002	IRON	--	
01	4/16/2002	MANGANESE	--	
01	5/8/1995	MERCURY	--	
01	8/26/1996	MERCURY	--	
01	10/10/1996	MERCURY	--	
01	7/1/1997	MERCURY	--	
01	4/21/1998	MERCURY	--	
01	7/28/1999	MERCURY	--	
01	6/22/2000	MERCURY	--	
02	6/22/2000	MERCURY	--	
01	5/8/1995	NICKEL	--	
01	8/26/1996	NICKEL	0.0017	0.7 ^
01	10/10/1996	NICKEL	--	
01	7/1/1997	NICKEL	--	
01	4/21/1998	NICKEL	--	
01	7/28/1999	NICKEL	--	
01	6/22/2000	NICKEL	--	
02	6/22/2000	NICKEL	--	
01	2/8/1993	NITRATE	--	
01	6/9/1993	NITRATE	0.2	10
01	8/3/1993	NITRATE	0.4	10
01	11/17/1993	NITRATE	0.2	10
01	5/8/1995	NITRATE	0.008	10
01	11/8/1995	NITRATE	--	
01	5/1/1996	NITRATE	0.3	10
01	8/26/1996	NITRATE	0.15	10
01	10/10/1996	NITRATE	0.2	10
01	7/1/1997	NITRATE	0.2	10
01	10/22/1997	NITRATE	0.2	10
01	4/21/1998	NITRATE	0.5	10
01	5/26/1999	NITRATE	--	

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#=Total Trihalomethane

# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

Plant ID	Sample Date	Contaminant Name	Result	MCL
Inorganic Compounds			mg/L	mg/L
01	7/28/1999	NITRATE	--	
01	3/14/2000	NITRATE	--	
01	4/18/2000	NITRATE	--	
01	6/22/2000	NITRATE	--	
02	6/22/2000	NITRATE	--	
02	1/2/2001	NITRATE	--	
02	8/29/2001	NITRATE	--	
01	4/16/2002	NITRATE	--	
01	2/8/1993	NITRITE	--	
01	5/8/1995	NITRITE	0.008	1
01	10/10/1996	NITRITE	0.002	1
01	7/1/1997	NITRITE	--	
01	5/8/1995	SELENIUM	--	
01	8/26/1996	SELENIUM	--	
01	10/10/1996	SELENIUM	--	
01	7/1/1997	SELENIUM	--	
01	4/21/1998	SELENIUM	--	
01	7/28/1999	SELENIUM	--	
01	6/22/2000	SELENIUM	--	
02	6/22/2000	SELENIUM	--	
01	8/26/1996	SODIUM	9.7	60 *
01	10/10/1996	SODIUM	12.9	60 *
01	7/1/1997	SODIUM	14.5	60 *
01	4/21/1998	SODIUM	7.1	60 *
01	7/28/1999	SODIUM	109	60 *
01	6/22/2000	SODIUM	89.8	60 *
01	5/8/1995	SULFATE	20.7	250 *
01	10/10/1996	SULFATE	32.7	250 *
01	7/1/1997	SULFATE	35	250 *
01	4/21/1998	SULFATE	23.9	250 *
01	7/28/1999	SULFATE	1.6	250 *
01	4/16/2002	SULFATE	12.1	250 *
01	5/8/1995	THALLIUM	--	
01	10/10/1996	THALLIUM	--	
01	7/1/1997	THALLIUM	--	
01	4/21/1998	THALLIUM	--	
01	7/28/1999	THALLIUM	--	
01	6/22/2000	THALLIUM	--	
02	6/22/2000	THALLIUM	--	
General Water Quality Parameters				
01	4/16/2002	ALKALINITY, CARBONATE	157	
01	4/16/2002	ALKALINITY, TOTAL	152	
01	4/16/2002	HARDNESS, TOTAL (AS CaCO3)	6	
01	5/1/1996	pH	6.3	6.5-8.5 *
01	10/10/1996	pH	7.2	6.5-8.5 *
01	7/1/1997	pH	7.6	6.5-8.5 *
01	7/28/1999	pH	8.4	6.5-8.5 *

--=Not Detected

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# SUMMARY OF COMPOUNDS IN KITZMILLER WATER SAMPLES

General Water Quality Parameters				
01	4/16/2002	pH	7.8	6.5-8.5 *
01	4/16/2002	TOTAL DISSOLVED SOLIDS (TDS)	218	
01	4/16/2002	CONDUCTIVITY @ 25 C U-MHO	317	
01	4/16/2002	TURBIDITY	0.3	1

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+ =Drinking Water Advisory Level

#=Total Trihalomethane

# SUMMARY OF MICROBIOLOGICAL CONTAMINANT ANALYSIS FOR KITZMILLER WATER SAMPLES

Sample Date	Samples Taken	Total Coliform	Total Fecal	Total Indeterminate	Sample Repeats	Repeat Coliforms	Repeat Fecal	Repeat Indeterminate
1/1/1997	1	0	0	0	--	--	--	--
2/1/1997	1	0	0	0	--	--	--	--
3/1/1997	1	0	0	0	--	--	--	--
4/1/1997	1	0	0	0	--	--	--	--
5/1/1997	1	0	0	0	--	--	--	--
6/1/1997	1	0	0	0	--	--	--	--
7/1/1997	1	0	0	0	--	--	--	--
8/1/1997	1	0	0	0	--	--	--	--
9/1/1997	1	0	0	0	--	--	--	--
10/1/1997	2	0	0	0	--	--	--	--
11/1/1997	1	0	0	0	--	--	--	--
12/1/1997	1	0	0	0	--	--	--	--
1/1/1998	1	0	0	0	--	--	--	--
2/1/1998	1	0	0	0	--	--	--	--
3/1/1998	1	0	0	0	--	--	--	--
4/1/1998	1	0	0	0	--	--	--	--
5/1/1998	1	0	0	0	--	--	--	--
6/1/1998	1	0	0	0	--	--	--	--
7/1/1998	1	0	0	0	--	--	--	--
8/1/1998	1	0	0	0	--	--	--	--
9/1/1998	1	0	0	0	--	--	--	--
10/1/1998	1	0	0	0	--	--	--	--
11/1/1998	1	0	0	0	--	--	--	--
12/1/1998	1	0	0	0	--	--	--	--
1/1/1999	1	0	0	0	--	--	--	--
2/1/1999	1	0	0	0	--	--	--	--
3/1/1999	1	0	0	0	--	--	--	--
4/1/1999	1	0	0	0	--	--	--	--
5/1/1999	1	0	0	0	--	--	--	--
6/1/1999	1	0	0	0	--	--	--	--
7/1/1999	1	0	0	0	--	--	--	--
8/1/1999	1	0	0	0	--	--	--	--
9/1/1999	1	0	0	0	--	--	--	--
10/1/1999	1	0	0	0	--	--	--	--
11/1/1999	1	0	0	0	--	--	--	--
12/1/1999	1	0	0	0	--	--	--	--
1/1/2000	1	0	0	0	--	--	--	--
2/1/2000	1	0	0	0	--	--	--	--
3/1/2000	1	0	0	0	--	--	--	--
4/1/2000	1	0	0	0	--	--	--	--
5/1/2000	1	0	0	0	--	--	--	--
6/1/2000	1	0	0	0	--	--	--	--
7/1/2000	1	0	0	0	--	--	--	--
8/1/2000	1	0	0	0	--	--	--	--

-- = not applicable

0 = non detect



## SUMMARY OF MICROBIOLOGICAL CONTAMINANT ANALYSIS FOR KITZMILLER WATER SAMPLES

Sample Date	Samples Taken	Total Coliform	Total Fecal	Total Indeterminate	Sample Repeats	Repeat Coliforms	Repeat Fecal	Repeat Indeterminate
9/1/2000	1	0	0	0	--	--	--	--
10/1/2000	1	0	0	0	--	--	--	--
11/1/2000	1	0	0	0	--	--	--	--
12/1/2000	1	0	0	0	--	--	--	--
1/1/2001	1	0	0	0	--	--	--	--
2/1/2001	1	0	0	0	--	--	--	--
3/1/2001	1	0	0	0	--	--	--	--
4/1/2001	1	0	0	0	--	--	--	--
5/1/2001	1	0	0	0	--	--	--	--
6/1/2001	1	0	0	0	--	--	--	--
7/1/2001	1	0	0	0	--	--	--	--
8/1/2001	1	0	0	0	--	--	--	--
9/1/2001	1	0	0	0	--	--	--	--
10/1/2001	1	0	0	0	--	--	--	--
11/1/2001	1	0	0	0	--	--	--	--
12/1/2001	1	0	0	0	--	--	--	--
1/1/2002	1	0	0	0	--	--	--	--
2/1/2002	1	0	0	0	--	--	--	--
3/1/2002	1	0	0	0	--	--	--	--
4/1/2002	1	0	0	0	--	--	--	--
5/1/2002	1	0	0	0	--	--	--	--
6/1/2002	1	0	0	0	--	--	--	--
7/1/2002	1	0	0	0	--	--	--	--

-- = not applicable

0 = non detect