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**Final**

**Source Water Assessment**

**for the**

**Wisp Resort Hotel 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.  
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February 2004

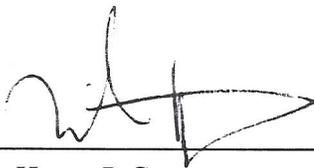
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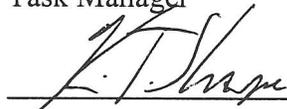
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February 2004

## TABLE OF CONTENTS

	<u>Page</u>
LIST OF FIGURES .....	iii
LIST OF TABLES .....	iii
LIST OF ACRONYMS AND ABBREVIATIONS .....	iv
EXECUTIVE SUMMARY .....	ES-1
1. INTRODUCTION.....	1-1
1.1 Ground-Water Supply System Information .....	1-1
1.2 Hydrogeology .....	1-1
2. DELINEATION OF THE AREA CONTRIBUTING WATER TO SOURCE .....	2-1
3. INVENTORY OF POTENTIAL CONTAMINANTS WITHIN THE DELINEATED ZONE .....	3-1
3.1 Point Sources .....	3-1
3.2 Non-Point Sources .....	3-1
4. REVIEW OF WATER QUALITY DATA .....	4-1
4.1 General Water Quality Parameters .....	4-1
4.2 Volatile Organic Compounds .....	4-1
4.3 Synthetic Organic Compounds .....	4-1
4.4 Inorganic Compounds .....	4-2
4.5 Microbiological Contaminants.....	4-4
4.5.1 Ground Water Under the Direct Influence (GWUDI).....	4-4
4.6 Radionuclides.....	4-4
5. SUSCEPTIBILITY ANALYSIS.....	5-1
5.1 Volatile Organic Compounds .....	5-1
5.2 Synthetic Organic Compounds .....	5-1
5.3 Inorganic Compounds .....	5-2
5.4 Radionuclides.....	5-3
5.5 Microbiological Contaminants.....	5-3

**CONTENTS (continued)**

	<u>Page</u>
6. RECOMMENDATIONS FOR PROTECTING THE WATER SUPPLY .....	6-1
6.1 Protection Team .....	6-1
6.2 Public Awareness and Outreach .....	6-1
6.3 Planning/New Development .....	6-1
6.4 Monitoring .....	6-2
6.5 Contingency Plan .....	6-2
6.6 Changes in Uses .....	6-2
6.7 Contaminant Source Inventory Updates/Inspections .....	6-2
6.8 Purchase Conservation Easements or Property .....	6-3
7. REFERENCES .....	7-1
APPENDIX A: RESULTS OF GROUND-WATER SAMPLE ANALYSIS	

**LIST OF FIGURES**

<u>Number</u>	<u>Title</u>
1	Wisp Resort Hotel location map of supply wells.
2	Wisp Resort Hotel source water protection area map with potential source of contamination.
3	Wisp Resort Hotel land use map of the source water protection area.
4	Wisp Resort Hotel sewer service map of the source water protection area.

**LIST OF TABLES**

<u>Number</u>	<u>Title</u>
1	Well information.
2	Summary of di(2-ethylhexyl)phthalate analysis.
3	Summary of nitrate analysis.
4	Summary of cadmium analysis.

## 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
NTU	Nephelometric Turbidity Unit(s)
PCBs	Polychlorinated Biphenyls
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
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 Wisp Resort Hotel water system in Garrett County, Maryland. The Maryland Department of the Environment (MDE) identifies this water system as Public Water System Identification (PWSID) 1110016. EA has performed this study under Purchase Order No. U00P9200205, as authorized by the MDE.

The required components of this report, as described in the Maryland 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 Wisp Resort Hotel water supply is the Pocono Group, which is an unconfined sandstone and shale aquifer. The Source Water Protection Area (SWPA) for the three ground-water supply wells 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 250 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. An underground storage tank (UST) and an electrical transformer were observed within the SWPA and can be considered potential point sources of pollutants. Commercial and open urban lands (golf course) were observed within the SWPA. Commercial area and open urban lands account for 89 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 Wisp Resort Hotel water supply is based on a review of the water quality data, potential sources of contamination, aquifer characteristics, and well integrity. It was determined that the water supply is moderately susceptible to nitrate and radon-222. The system has a low susceptibility to volatile organic compounds, synthetic organic compounds, other inorganic compounds, other radionuclides, and microbiological contamination.

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 were tasked to perform a Source Water Assessment for the Wisp Resort Hotel 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 Wisp Resort Hotel system serves the tenants and employees of the Wisp Resort in central Garrett County. The water treatment plant and supply wells are located adjacent to the golf course on the Wisp Resort property. The Wisp Resort Hotel system serves a population of 80 with 2 connections. Three wells supply 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 Well 1 (Source 03) was drilled on 4 February 1977 and Well 2 (Source 02) was drilled on 29 November 1990. Well 3 (Source 01) was drilled on 18 December 1999. Each well was drilled in accordance with the state's current well construction standards, which were implemented in 1973. The production wells have an average yield of 100,000 gallons per day (gpd). Well 1 has a pumping rate of 20 gallons per minute (gpm). All wellheads were observed to be in good repair with secure caps. Wells 1 and 2 were completed with stick-up casing, while Well 3 was completed in an insulated pit. 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
01	Well 3	GA920175	545	41	Pocono Group
02	Well 2	GA880514	410	220	Pocono Group
03	Well 1 (Old Well)	GA731362	250	21	Pocono Group

According to MDE, the contact responsible for this system is Butch Whealton, the Chief Engineer for the Wisp Resort Hotel.

Presently, the system disinfects Well 3 water from the Hotel water treatment plant with chlorine. Also, Poly-4, a phosphate corrosion inhibitor, is injected into the water. The ski lodge water treatment plant currently has no treatment.

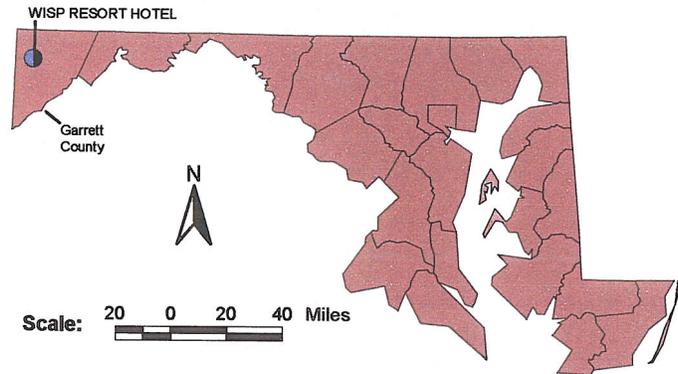
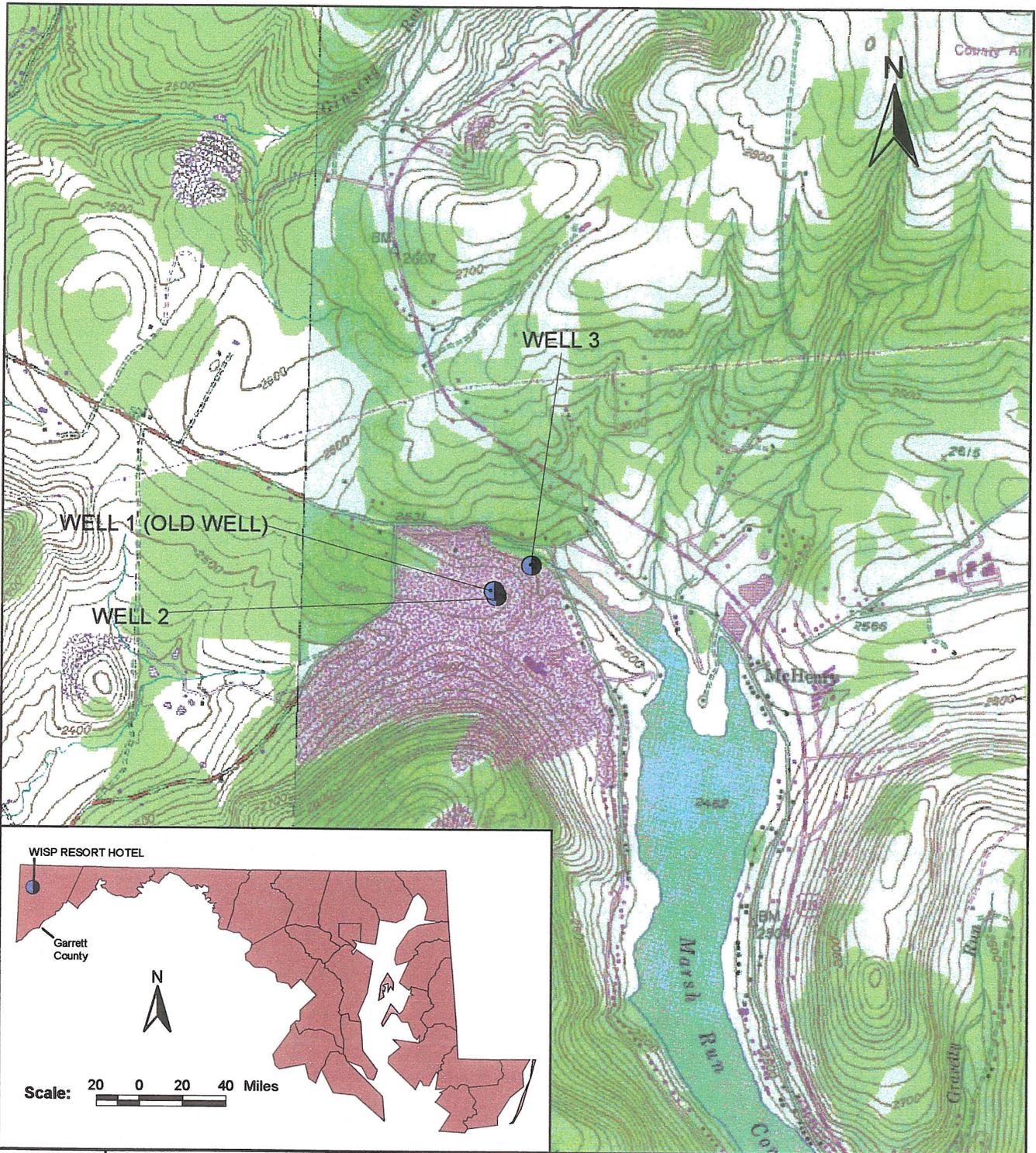
### 1.2 HYDROGEOLOGY

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 and are underlain by Pennsylvanian rocks.

The ground water used by the Wisp Resort Hotel is derived from the Paleozoic (Lower Mississippian age) Pocono Formation. This formation is composed of “coarse-grained sandstone (locally conglomeritic), shale and sandy shale.” This is an important aquifer in the Deer Park and Accident anticlines. Many wells and springs in the Pocono Formation are fairly high-yielding water sources [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. Well yield from the Pocono Formation, from 132 wells, is 13.1 gpm with a range of 0.8 to 130 gpm (MGS 1980).



**Figure 1. Wisp Resort Hotel  
Location Map of Supply Wells**  
Source Water Assessment Program  
2003

**Legend:**

● Supply Well

Source: United States Geologic Survey. 1947 (photorevised 1981). *7.5-minute Series Topographic Map for McHenry, Maryland.*  
United States Geologic Survey. 1947 (photorevised 1974). *7.5-minute Series Topographic Map for Sang Run, Maryland-West Virginia.*

**Scale:**

1000 0 1000 2000 Feet

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

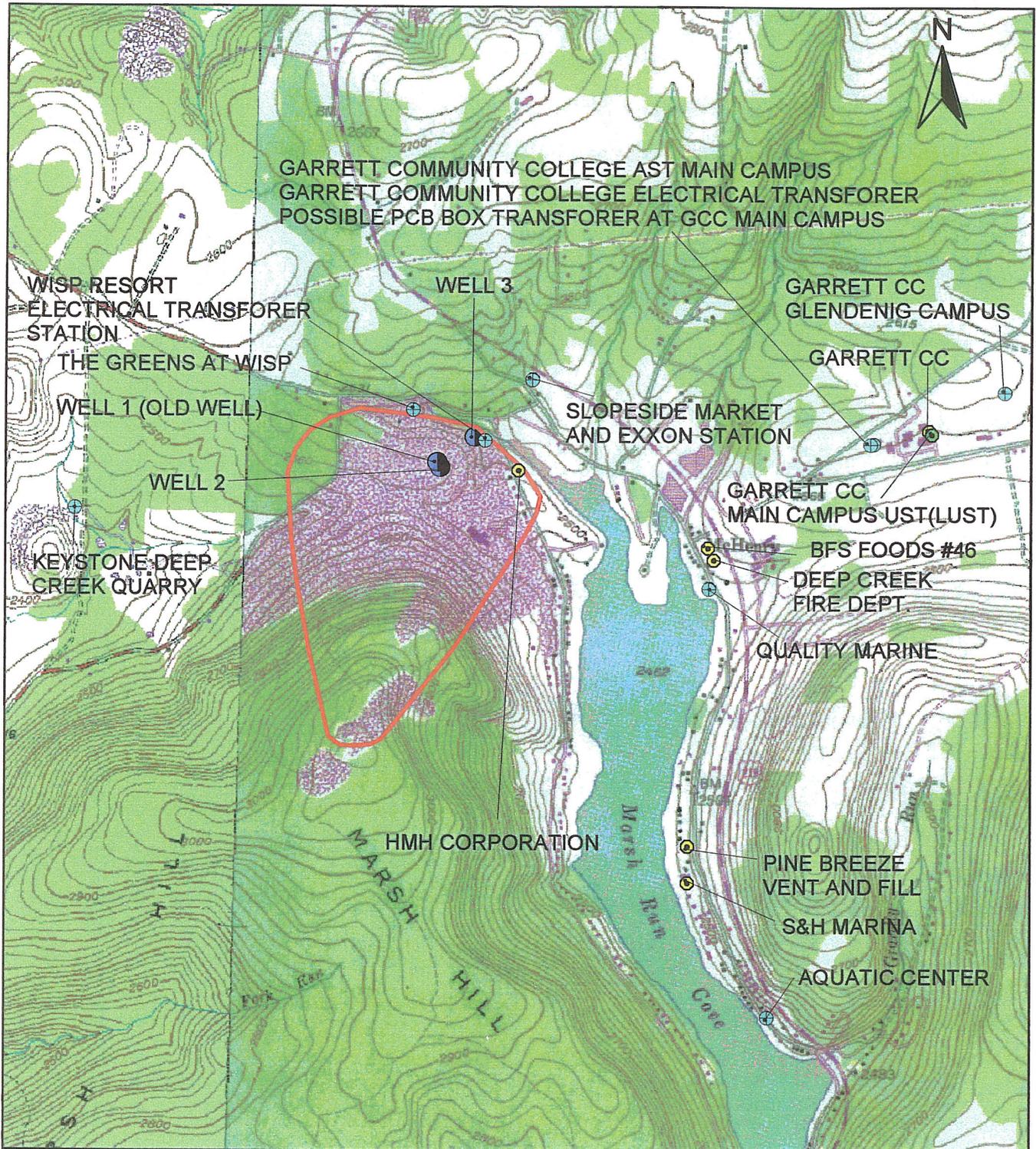
For ground-water systems, a wellhead protection area (WHPA) is considered to be the source water protection area (SWPA) for the system. Consistent with the recommended delineation in the Maryland Source Water Assessment Plan (SWAP) (MDE 1999), the watershed drainage area that contributes ground water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

This 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 Wisp Resort Hotel issued by the MDE Water Rights Division is for an average withdrawal of 100,000 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 250 acres. The delineated SWPA is approximately 250 acres (Figure 2), and is therefore adequate to meet the average daily ground-water usage during a drought.

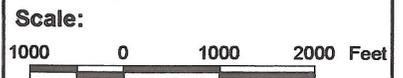


**Figure 2. Wisp Resort Hotel  
Source Water Protection Area Map  
with Potential Sources of Contamination**  
Source Water Assessment Program  
2003

- Legend:**
- Supply Well
  - ▭ SWPA Boundary
  - ⊙ LUST
  - ⊕ Miscellaneous
  - ⊙ UST



Source: United States Geologic Survey. 1947 (photorevised 1981). 7.5-minute Series Topographic Map for McHenry, Maryland.  
United States Geologic Survey. 1947 (photorevised 1974). 7.5-minute Series Topographic Map for Sang Run, Maryland-West Virginia.



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

A field survey was performed on 2 December 2002 to confirm potential sources of contamination identified in MDE databases around the ground-water wells. 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 location was surveyed using a global positioning system (GPS) receiver for mapping purposes (Figure 2).

#### 3.1 POINT SOURCES

HMH Corporations has a UST that is within the SWPA. This UST contains gasoline and could potentially leak and release petroleum hydrocarbons into the ground water.

The Wisp Resort Hotel has a large electrical transformer on the northeastern edge of the SWPA. Prior to 1977, many transformers and electrical equipment contained polychlorinated biphenyls (PCBs) as an insulator. It is possible that the equipment could contain PCBs. If the equipment leaks, the PCB oil could eventually leach through the soil overburden and into the ground-water aquifer.

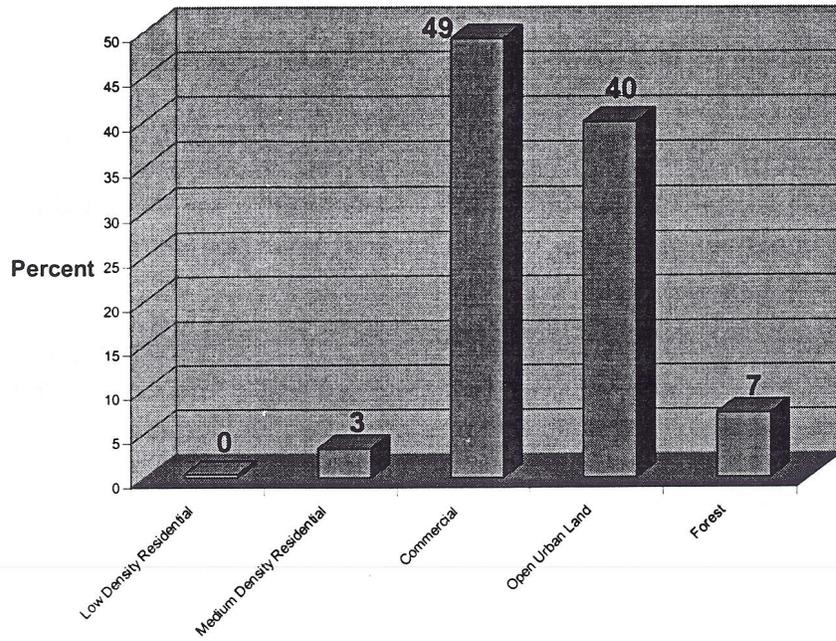
#### 3.2 NON-POINT SOURCES

Using the Maryland Office of Planning 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 next page.

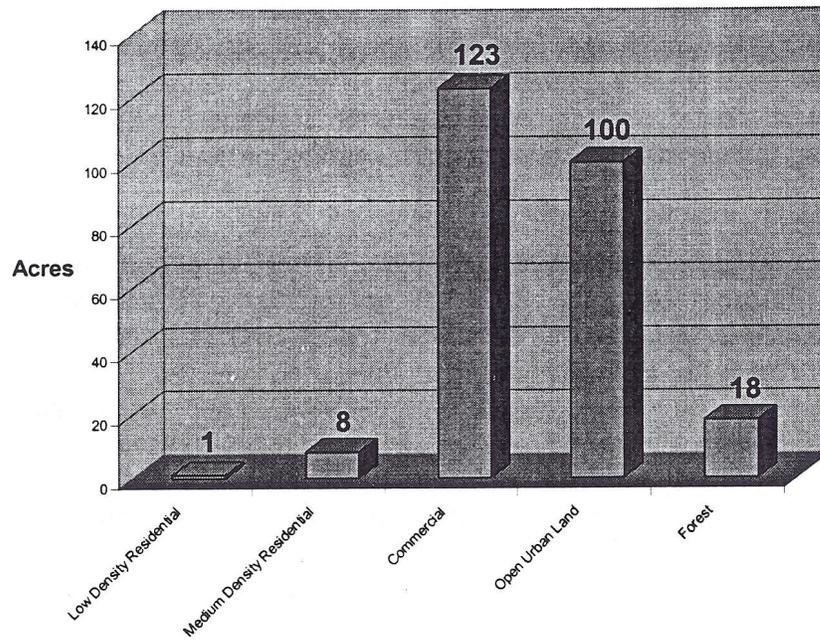
From an interpretation of the graphs, commercial areas (123 acres) and open urban land (100 acres) account for the majority of the SWPA (223 acres). For this system, the open urban land is predominantly open ski slopes and a golf course for the Wisp Resort, and is a potential source of herbicides and pesticides. Pesticides/herbicides and other inorganic compounds on golf courses are common; therefore, there is potential for the migration of contaminants into the ground water.

Using the 1993 Maryland Office of Planning Garrett County sewerage coverage map, 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 55 percent of the SWPA does not have public sewer service and is not planned for service for at least 10 years. The remaining 45 percent of the SWPA has existing sewer service.

### PERCENT OF EACH LAND USE TYPE



### ACREAGE OF EACH LAND USE TYPE





**Figure 3. Wisp Resort Hotel  
Land Use Map of the  
Source Water Protection Area  
Source Water Assessment Program  
2003**

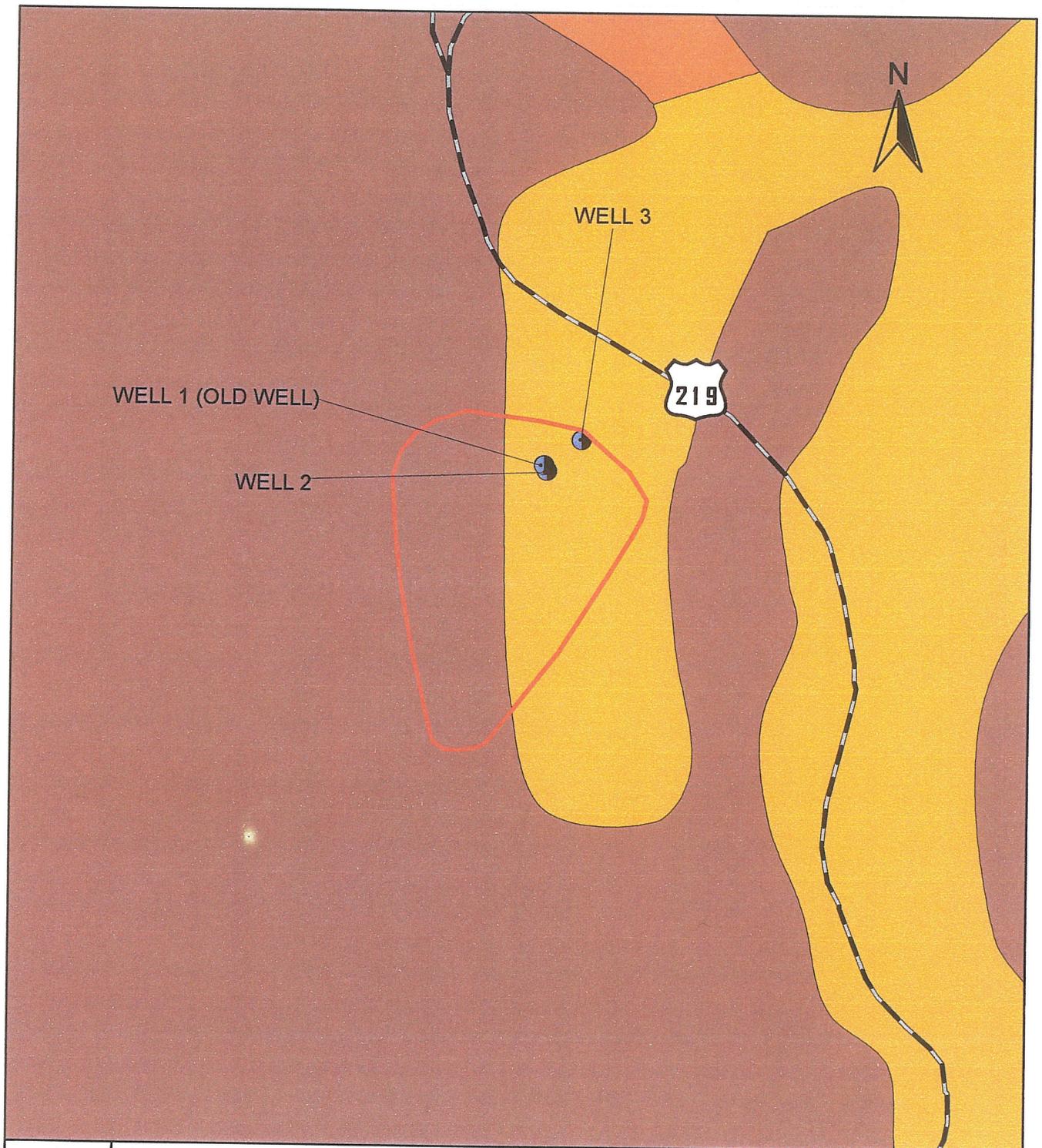


Scale: 2000 0 2000 Feet

**Legend:**

- Supply Well
- SWPA Boundary
- Major Roads
- Land Use**
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Commercial
- Open Urban Land
- Cropland
- Pasture
- Forest
- Water
- Feeding Operations

Source: Maryland Office of Planning, 2000.



**Figure 4. Wisp Resort Hotel  
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                      |
| — | Major Roads   | ■ | Area programmed for service 3 to 6-7 years |

Source: Maryland Office of Planning, 1993.

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 (not raw water unless noted).

A review of the water quality data from 1994-2002 has been performed for the Wisp Resort Hotel finished water samples. All detected compounds from the ground-water sample analysis are shown in Appendix A.

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

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

Several water samples collected had a pH between 7 and 7.3, which is within the acceptable range of pH values (SDWR pH range of 6.5 to 8.5).

Also, samples collected 20 February 2002 were reported with a turbidity value of 0.2 nephelometric turbidity units (NTU). The USEPA MCL for turbidity is 5 NTU. Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness.

### 4.2 VOLATILE ORGANIC COMPOUNDS

No volatile organic compounds (VOCs) were reported in the ground-water samples submitted for analysis.

### 4.3 SYNTHETIC ORGANIC COMPOUNDS

Di(2-ethylhexyl)phthalate (10.58 µg/L) was reported in a 12 October 1995 ground-water sample at a concentration greater than the USEPA MCL (6 µg/L). Also, the concentration of a sample (4.7 µg/L) collected on 17 February 2000 exceeded 50 percent of the MCL. A summary of all di(2-ethylhexyl)phthalate values 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	5/18/94	di(2-ethylhexyl)phthalate	--	µg/L
01	10/12/95	di(2-ethylhexyl)phthalate	10.58	µg/L
01	2/17/00	di(2-ethylhexyl)phthalate	4.7	µg/L

Note:

-- = not detected

Shaded values are greater than 50 percent of the MCL.

A low-level concentration of di(2-ethylhexyl)adipate (0.53 µg/L) was detected in a ground-water sample collected on 12 October 1995 below the USEPA MCL of 400 µg/L. This compound was not detected in samples collected in May 1994 and February 2000.

#### 4.4 INORGANIC COMPOUNDS

A sample submitted for analysis on 22 October 1998 for the inorganic compound (IOC) nitrate had a concentration (7 mg/L) greater than 50 percent of the MCL of 10 mg/L. A summary of all nitrate values reported in ground-water samples is shown in Table 3.

**TABLE 3. SUMMARY OF NITRATE ANALYSIS**

Plant ID	Sample Date	Contaminant	Result	Unit
01	2/8/93	Nitrate	--	mg/L
01	12/7/94	Nitrate	0.55	mg/L
01	10/12/95	Nitrate	--	mg/L
01	11/28/95	Nitrate	0.5	mg/L
01	4/10/96	Nitrate	0.3	mg/L
01	8/26/96	Nitrate	0.47	mg/L
01	8/27/96	Nitrate	0.39	mg/L
01	2/26/97	Nitrate	0.3	mg/L
01	4/2/97	Nitrate	0.4	mg/L
01	10/22/98	Nitrate	4.8	mg/L
01	10/22/98	Nitrate	7	mg/L
01	3/17/99	Nitrate	0.9	mg/L
01	2/16/00	Nitrate	0.6	mg/L
01	2/16/00	Nitrate	--	mg/L
01	2/17/00	Nitrate	--	mg/L
01	12/17/01	Nitrate	1.8	mg/L
01	2/20/02	Nitrate	0.5	mg/L

Notes:

Shaded values are greater than 50 percent of the MCL.

-- = not detected

Low-level concentrations of nitrite were detected in ground-water samples collected on 12 October 1995 (0.005 mg/L) and 26 February 1997 (0.3 mg/L). Nitrite has a USEPA MCL of 1 mg/L.

Also, a sample collected on 22 October 1998 had a reportable cadmium concentration (0.008 mg/L) greater than the MCL (0.005 mg/L). A subsequent ground-water sample collected on 7 January 1999 was not reported to contain cadmium. No other samples had reported concentrations of cadmium. A summary of all values reported in the ground-water samples is shown in Table 4.

**TABLE 4. SUMMARY OF CADMIUM ANALYSIS**

Plant ID	Sample Date	Contaminant	Result	Unit
01	5/18/94	Cadmium	--	mg/L
01	10/12/95	Cadmium	--	mg/L
01	10/22/98	Cadmium	--	mg/L
01	10/22/98	Cadmium	0.008	mg/L
01	1/7/99	Cadmium	--	mg/L
01	2/17/00	Cadmium	--	mg/L

Notes:

Shaded values are greater than the MCL.

-- = not detected

Low-level concentrations of sodium were detected in ground-water samples collected on 22 October 1998 (5.6 mg/L), 22 October 1998 (7 mg/L), and 17 February 2000 (9.31 mg/L), at less than the USEPA advisory range of 30-60 mg/L.

Sulfate was detected in ground-water samples collected on 18 May 1994, 12 October 1995, and 20 February 2002. Sample concentrations were 19, 8.6, and 19 mg/L, respectively, and are less than the SDWR for sulfate of 250 mg/L.

Additionally, low-level concentrations of barium were detected in ground-water samples, ranging from 0.088 to 0.12 mg/L in samples collected between 12 October 1995 and 17 February 2000, and are below the MCL for barium of 2 mg/L.

Nickel (0.014 mg/L) was detected in a ground-water sample collected on 22 October 1998 below the DWEL for nickel of 0.7 mg/L.

Arsenic was detected at a low-level concentration (0.001 mg/L) in a sample collected on 18 May 1994. The USEPA MCL for arsenic is 0.05 mg/L; however, the MCL will be lowered to 0.01 mg/L in January 2006.

Additionally, chloride was detected in a single ground-water sample (7 mg/L) collected on 20 February 2002 and is less than the SDWR of 250 mg/L.

## 4.5 MICROBIOLOGICAL CONTAMINANTS

No total or fecal coliform has been detected in finished water samples from December 1996 to April 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 likely 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 were reviewed.

However, no GWUDI sample data have been collected to date. 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 samples have been submitted for laboratory analysis of radionuclides.

## 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 Wisp Resort Hotel drinking water is an unconfined aquifer.

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 any ground-water samples analyzed.

The only observed point source of VOCs is HMH Corporation’s UST, which is located downgradient of the supply wells and is unlikely to affect ground-water quality for the system.

Based on the water quality reviewed, the age and integrity of the wells, the water quality of other nearby wells in the Pocono Group, the Wisp Resort Hotel has a low susceptibility to VOC contamination.

### 5.2 SYNTHETIC ORGANIC COMPOUNDS

Di(2-ethylhexyl) phthalate was detected greater than the MCL in a sample collected in October 1995 and greater than the 50 percent criteria in a sample collected in February 2000. Di(2-ethylhexyl) phthalate is a common laboratory cross-contaminant and therefore does not represent actual ground-water quality.

Another detected compound was di(2-ethylhexyl)adipate. This compound was less than the MCL, was only detected in one sample collected in October 1995, and was also detected in a laboratory blank sample, and therefore does not represent actual ground-water quality.

No other SOCs were detected in ground-water samples. Most SOCs are not readily dissolved in water and have a high affinity to sorb to soil particles. From the well construction data for the

Wisp Resort Hotel, there is approximately 20 to 40 ft of soil overburden that buffers the aquifer from SOC contamination.

No pesticides or herbicides have been reported in any of the ground-water samples analyzed. Therefore, it does not appear that the application of herbicides and pesticides on the golf course is affecting ground-water quality.

Based on the water quality reviewed, the absence of point sources, and the thickness of the overburden, the water supply for the Wisp Resort has a low susceptibility to SOCs.

### 5.3 INORGANIC COMPOUNDS

Nitrate was reported in a October 1998 water sample at a concentration (7 mg/L) greater than 50 percent of the MCL of 10 mg/L. Nitrate concentrations have been reported generally between 0.3 and 1.8 mg/L. Six samples have been collected since 1998 have nitrate concentrations less than 2 mg/L in all cases.

The concentrations of nitrate reported in the water sample may be from non-point sources such as septic fields and runoff from the golf course. Often, nitrate-containing fertilizers are added to the golf courses and the over-application is a potential source of nitrate to the ground water. Most of the SWPA with residential areas is already serviced by public sewer systems; therefore, excess nitrates from septic discharge is unlikely.

Cadmium was also reported in a concentration (0.008 mg/L) that exceeded 50 percent of the MCL (0.005 mg/L). This element was only reported in one sample collected in October 1998 and was not detected in the subsequent water sample collected in January 1999. Cadmium is typically eroded from natural deposits or released from paints or the corrosion of galvanized pipes.

Arsenic was detected (0.001 mg/L) in a single water sample collected in May 1994. Currently, the MCL is 0.05 mg/L, but beginning in 2006, the MCL will decrease to 0.01 mg/L. This sample is less than both the pre-and post-change MCL. Arsenic can be discharged as a compound in older pesticides and herbicides that may be present on the ski slopes or golf course and is also a naturally occurring element.

Nickel was detected in a sample collected in October 1998 at less than the DWEL. A DWEL is a concentration of a compound that lifetime exposure to will not cause adverse health effects.

Sodium, sulfate, and chloride were detected in ground-water samples at less than 50 percent of the comparison criteria for each compound. The reported concentrations were within the range of background ground-water concentrations in Garrett County (MGS 1980).

Barium was detected in several samples at less than 50 percent of the MCL.

Based on the water quality reviewed and an evaluation of the land use areas in the SWPA, the water supply at the Wisp Resort is moderately susceptible to nitrate pollution and has a low susceptibility to other IOCs.

#### 5.4 RADIONUCLIDES

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 samples for radionuclides were submitted for analysis.

Other systems in Garrett County with supply wells in the Pocono Group have radon-222 concentrations that are generally greater than 50 percent of the conservative proposed MCL of 300 picocuries per liter (pCi/L). Other radionuclides such as gross alpha and gross beta were typically reported less than 50 percent of the MCLs of 15 and 50 pCi/L.

Based on the reported concentrations of radionuclides in ground-water samples from other systems utilizing the same aquifer as the Wisp Resort Hotel, the water supply at the Wisp Resort has a moderate susceptibility to radon-222 and a low susceptibility to other radionuclides.

#### 5.5 MICROBIOLOGICAL CONTAMINANTS

No coliform bacteria, total or fecal, have been detected in the finished water samples since December 1996.

At this time, no GWUDI testing has been conducted.

From the documentation reviewed, the supply wells were constructed after 1973, the year that proper well construction techniques were required to prevent surface water infiltration. All the wellheads were observed to be in good repair.

In addition, the water system disinfects its raw water prior to distribution.

Based on the water quality reviewed and the well construction, the water supply at the Wisp Resort has a low susceptibility to microbiological contamination.

## 6. RECOMMENDATIONS FOR PROTECTING THE WATER SUPPLY

With the information contained in this report, the Wisp Resort 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 soil conservation agencies, and 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 employees. 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 employees to educate them about the SWPA. An example pamphlet, "Gardening in a Wellhead Protection Area," is available from MDE. The employees should also be encouraged to notify the Wisp Resort Hotel 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 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.

Golf courses require a significant amount of fertilizers, pesticides, and herbicides. The water supplier should contact the golf course management to discuss that overuse of fertilizers and herbicides may impact the water quality at the resort.

## 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 at each well for microbiological contaminants is a good way to check the integrity of each 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 wells should be considered to prevent a failure in the integrity of the wells, which could provide a pathway for contaminants to the aquifer.

Depressions that form around the wellheads 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 – 1947 McHenry, Maryland Quad  
USGS Topographic 7.5-minute Quadrangle Map – 1947 Sang Run, Maryland Quad

**Appendix A**

**Results of Ground-Water Sample Analysis**

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	1/17/1995	1,1,1,2-TETRACHLOROETHANE	--	
01	4/18/1995	1,1,1,2-TETRACHLOROETHANE	--	
01	7/3/1995	1,1,1,2-TETRACHLOROETHANE	--	
01	10/12/1995	1,1,1,2-TETRACHLOROETHANE	--	
01	4/17/1996	1,1,1,2-TETRACHLOROETHANE	--	
01	2/11/1997	1,1,1,2-TETRACHLOROETHANE	--	
01	2/17/2000	1,1,1,2-TETRACHLOROETHANE	--	
01	1/17/1995	1,1,1-TRICHLOROETHANE	--	
01	4/18/1995	1,1,1-TRICHLOROETHANE	--	
01	7/3/1995	1,1,1-TRICHLOROETHANE	--	
01	10/12/1995	1,1,1-TRICHLOROETHANE	--	
01	4/17/1996	1,1,1-TRICHLOROETHANE	--	
01	2/11/1997	1,1,1-TRICHLOROETHANE	--	
01	2/17/2000	1,1,1-TRICHLOROETHANE	--	
01	1/17/1995	1,1,2,2-TETRACHLOROETHANE	--	
01	4/18/1995	1,1,2,2-TETRACHLOROETHANE	--	
01	7/3/1995	1,1,2,2-TETRACHLOROETHANE	--	
01	10/12/1995	1,1,2,2-TETRACHLOROETHANE	--	
01	4/17/1996	1,1,2,2-TETRACHLOROETHANE	--	
01	2/11/1997	1,1,2,2-TETRACHLOROETHANE	--	
01	2/17/2000	1,1,2,2-TETRACHLOROETHANE	--	
01	1/17/1995	1,1,2-TRICHLOROETHANE	--	
01	4/18/1995	1,1,2-TRICHLOROETHANE	--	
01	7/3/1995	1,1,2-TRICHLOROETHANE	--	
01	10/12/1995	1,1,2-TRICHLOROETHANE	--	
01	4/17/1996	1,1,2-TRICHLOROETHANE	--	
01	2/11/1997	1,1,2-TRICHLOROETHANE	--	
01	2/17/2000	1,1,2-TRICHLOROETHANE	--	
01	1/17/1995	1,1-DICHLOROETHANE	--	
01	4/18/1995	1,1-DICHLOROETHANE	--	
01	7/3/1995	1,1-DICHLOROETHANE	--	
01	10/12/1995	1,1-DICHLOROETHANE	--	
01	4/17/1996	1,1-DICHLOROETHANE	--	
01	2/11/1997	1,1-DICHLOROETHANE	--	
01	2/17/2000	1,1-DICHLOROETHANE	--	
01	1/17/1995	1,1-DICHLOROETHYLENE	--	
01	4/18/1995	1,1-DICHLOROETHYLENE	--	
01	7/3/1995	1,1-DICHLOROETHYLENE	--	
01	10/12/1995	1,1-DICHLOROETHYLENE	--	
01	4/17/1996	1,1-DICHLOROETHYLENE	--	
01	2/11/1997	1,1-DICHLOROETHYLENE	--	
01	2/17/2000	1,1-DICHLOROETHYLENE	--	
01	1/17/1995	1,1-DICHLOROPROPENE	--	
01	4/18/1995	1,1-DICHLOROPROPENE	--	
01	7/3/1995	1,1-DICHLOROPROPENE	--	
01	10/12/1995	1,1-DICHLOROPROPENE	--	
01	4/17/1996	1,1-DICHLOROPROPENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	2/11/1997	1,1-DICHLOROPROPENE	--	
01	2/17/2000	1,1-DICHLOROPROPENE	--	
01	1/17/1995	1,2,3-TRICHLOROBENZENE	--	
01	4/18/1995	1,2,3-TRICHLOROBENZENE	--	
01	7/3/1995	1,2,3-TRICHLOROBENZENE	--	
01	10/12/1995	1,2,3-TRICHLOROBENZENE	--	
01	4/17/1996	1,2,3-TRICHLOROBENZENE	--	
01	2/11/1997	1,2,3-TRICHLOROBENZENE	--	
01	2/17/2000	1,2,3-TRICHLOROBENZENE	--	
01	1/17/1995	1,2,3-TRICHLOROPROPANE	--	
01	4/18/1995	1,2,3-TRICHLOROPROPANE	--	
01	7/3/1995	1,2,3-TRICHLOROPROPANE	--	
01	10/12/1995	1,2,3-TRICHLOROPROPANE	--	
01	4/17/1996	1,2,3-TRICHLOROPROPANE	--	
01	2/11/1997	1,2,3-TRICHLOROPROPANE	--	
01	2/17/2000	1,2,3-TRICHLOROPROPANE	--	
01	1/17/1995	1,2,4-TRICHLOROBENZENE	--	
01	4/18/1995	1,2,4-TRICHLOROBENZENE	--	
01	7/3/1995	1,2,4-TRICHLOROBENZENE	--	
01	10/12/1995	1,2,4-TRICHLOROBENZENE	--	
01	4/17/1996	1,2,4-TRICHLOROBENZENE	--	
01	2/11/1997	1,2,4-TRICHLOROBENZENE	--	
01	2/17/2000	1,2,4-TRICHLOROBENZENE	--	
01	1/17/1995	1,2,4-TRIMETHYLBENZENE	--	
01	4/18/1995	1,2,4-TRIMETHYLBENZENE	--	
01	7/3/1995	1,2,4-TRIMETHYLBENZENE	--	
01	10/12/1995	1,2,4-TRIMETHYLBENZENE	--	
01	4/17/1996	1,2,4-TRIMETHYLBENZENE	--	
01	2/11/1997	1,2,4-TRIMETHYLBENZENE	--	
01	2/17/2000	1,2,4-TRIMETHYLBENZENE	--	
01	1/17/1995	1,2-DICHLOROETHANE	--	
01	4/18/1995	1,2-DICHLOROETHANE	--	
01	7/3/1995	1,2-DICHLOROETHANE	--	
01	10/12/1995	1,2-DICHLOROETHANE	--	
01	4/17/1996	1,2-DICHLOROETHANE	--	
01	2/11/1997	1,2-DICHLOROETHANE	--	
01	2/17/2000	1,2-DICHLOROETHANE	--	
01	1/17/1995	1,2-DICHLOROPROPANE	--	
01	4/18/1995	1,2-DICHLOROPROPANE	--	
01	7/3/1995	1,2-DICHLOROPROPANE	--	
01	10/12/1995	1,2-DICHLOROPROPANE	--	
01	4/17/1996	1,2-DICHLOROPROPANE	--	
01	2/11/1997	1,2-DICHLOROPROPANE	--	
01	2/17/2000	1,2-DICHLOROPROPANE	--	
01	1/17/1995	1,3,5-TRIMETHYLBENZENE	--	
01	4/18/1995	1,3,5-TRIMETHYLBENZENE	--	
01	7/3/1995	1,3,5-TRIMETHYLBENZENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	10/12/1995	1,3,5-TRIMETHYLBENZENE	--	
01	4/17/1996	1,3,5-TRIMETHYLBENZENE	--	
01	2/11/1997	1,3,5-TRIMETHYLBENZENE	--	
01	2/17/2000	1,3,5-TRIMETHYLBENZENE	--	
01	1/17/1995	1,3-DICHLOROPROPANE	--	
01	4/18/1995	1,3-DICHLOROPROPANE	--	
01	7/3/1995	1,3-DICHLOROPROPANE	--	
01	10/12/1995	1,3-DICHLOROPROPANE	--	
01	4/17/1996	1,3-DICHLOROPROPANE	--	
01	2/11/1997	1,3-DICHLOROPROPANE	--	
01	2/17/2000	1,3-DICHLOROPROPANE	--	
01	1/17/1995	1,3-DICHLOROPROPENE	--	
01	4/18/1995	1,3-DICHLOROPROPENE	--	
01	7/3/1995	1,3-DICHLOROPROPENE	--	
01	10/12/1995	1,3-DICHLOROPROPENE	--	
01	4/17/1996	1,3-DICHLOROPROPENE	--	
01	2/11/1997	1,3-DICHLOROPROPENE	--	
01	2/17/2000	1,3-DICHLOROPROPENE	--	
01	1/17/1995	2,2-DICHLOROPROPANE	--	
01	4/18/1995	2,2-DICHLOROPROPANE	--	
01	7/3/1995	2,2-DICHLOROPROPANE	--	
01	10/12/1995	2,2-DICHLOROPROPANE	--	
01	4/17/1996	2,2-DICHLOROPROPANE	--	
01	2/11/1997	2,2-DICHLOROPROPANE	--	
01	2/17/2000	2,2-DICHLOROPROPANE	--	
01	1/17/1995	BENZENE	--	
01	4/18/1995	BENZENE	--	
01	7/3/1995	BENZENE	--	
01	10/12/1995	BENZENE	--	
01	4/17/1996	BENZENE	--	
01	2/11/1997	BENZENE	--	
01	2/17/2000	BENZENE	--	
01	1/17/1995	BROMOBENZENE	--	
01	4/18/1995	BROMOBENZENE	--	
01	7/3/1995	BROMOBENZENE	--	
01	10/12/1995	BROMOBENZENE	--	
01	4/17/1996	BROMOBENZENE	--	
01	2/11/1997	BROMOBENZENE	--	
01	2/17/2000	BROMOBENZENE	--	
01	1/17/1995	BROMOCHLOROMETHANE	--	
01	4/18/1995	BROMOCHLOROMETHANE	--	
01	7/3/1995	BROMOCHLOROMETHANE	--	
01	10/12/1995	BROMOCHLOROMETHANE	--	
01	4/17/1996	BROMOCHLOROMETHANE	--	
01	2/11/1997	BROMOCHLOROMETHANE	--	
01	2/17/2000	BROMOCHLOROMETHANE	--	
01	7/3/1995	BROMODICHLOROMETHANE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	10/12/1995	BROMODICHLOROMETHANE	--	
01	4/17/1996	BROMODICHLOROMETHANE	--	
01	2/11/1997	BROMODICHLOROMETHANE	--	
01	2/17/2000	BROMODICHLOROMETHANE	--	
01	7/3/1995	BROMOFORM	--	
01	10/12/1995	BROMOFORM	--	
01	4/17/1996	BROMOFORM	--	
01	2/11/1997	BROMOFORM	--	
01	2/17/2000	BROMOFORM	--	
01	1/17/1995	BROMOMETHANE	--	
01	4/18/1995	BROMOMETHANE	--	
01	7/3/1995	BROMOMETHANE	--	
01	10/12/1995	BROMOMETHANE	--	
01	4/17/1996	BROMOMETHANE	--	
01	2/11/1997	BROMOMETHANE	--	
01	2/17/2000	BROMOMETHANE	--	
01	1/17/1995	CARBON TETRACHLORIDE	--	
01	4/18/1995	CARBON TETRACHLORIDE	--	
01	7/3/1995	CARBON TETRACHLORIDE	--	
01	10/12/1995	CARBON TETRACHLORIDE	--	
01	4/17/1996	CARBON TETRACHLORIDE	--	
01	2/11/1997	CARBON TETRACHLORIDE	--	
01	2/17/2000	CARBON TETRACHLORIDE	--	
01	1/17/1995	CHLOROETHANE	--	
01	4/18/1995	CHLOROETHANE	--	
01	7/3/1995	CHLOROETHANE	--	
01	10/12/1995	CHLOROETHANE	--	
01	4/17/1996	CHLOROETHANE	--	
01	2/11/1997	CHLOROETHANE	--	
01	2/17/2000	CHLOROETHANE	--	
01	7/3/1995	CHLOROFORM	--	
01	10/12/1995	CHLOROFORM	--	
01	4/17/1996	CHLOROFORM	--	
01	2/11/1997	CHLOROFORM	--	
01	2/17/2000	CHLOROFORM	--	
01	1/17/1995	CHLOROMETHANE	--	
01	4/18/1995	CHLOROMETHANE	--	
01	7/3/1995	CHLOROMETHANE	--	
01	10/12/1995	CHLOROMETHANE	--	
01	4/17/1996	CHLOROMETHANE	--	
01	2/11/1997	CHLOROMETHANE	--	
01	2/17/2000	CHLOROMETHANE	--	
01	1/17/1995	cis-1,2-DICHLOROETHYLENE	--	
01	4/18/1995	cis-1,2-DICHLOROETHYLENE	--	
01	7/3/1995	cis-1,2-DICHLOROETHYLENE	--	
01	10/12/1995	cis-1,2-DICHLOROETHYLENE	--	
01	4/17/1996	cis-1,2-DICHLOROETHYLENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	2/11/1997	cis-1,2-DICHLOROETHYLENE	--	
01	2/17/2000	cis-1,2-DICHLOROETHYLENE	--	
01	7/3/1995	DIBROMOCHLOROMETHANE	--	
01	10/12/1995	DIBROMOCHLOROMETHANE	--	
01	4/17/1996	DIBROMOCHLOROMETHANE	--	
01	2/11/1997	DIBROMOCHLOROMETHANE	--	
01	2/17/2000	DIBROMOCHLOROMETHANE	--	
01	1/17/1995	DIBROMOMETHANE	--	
01	4/18/1995	DIBROMOMETHANE	--	
01	7/3/1995	DIBROMOMETHANE	--	
01	10/12/1995	DIBROMOMETHANE	--	
01	4/17/1996	DIBROMOMETHANE	--	
01	2/11/1997	DIBROMOMETHANE	--	
01	2/17/2000	DIBROMOMETHANE	--	
01	1/17/1995	DICHLORODIFLUOROMETHANE	--	
01	4/18/1995	DICHLORODIFLUOROMETHANE	--	
01	7/3/1995	DICHLORODIFLUOROMETHANE	--	
01	10/12/1995	DICHLORODIFLUOROMETHANE	--	
01	4/17/1996	DICHLORODIFLUOROMETHANE	--	
01	2/11/1997	DICHLORODIFLUOROMETHANE	--	
01	2/17/2000	DICHLORODIFLUOROMETHANE	--	
01	1/17/1995	ETHYLBENZENE	--	
01	4/18/1995	ETHYLBENZENE	--	
01	7/3/1995	ETHYLBENZENE	--	
01	10/12/1995	ETHYLBENZENE	--	
01	4/17/1996	ETHYLBENZENE	--	
01	2/11/1997	ETHYLBENZENE	--	
01	2/17/2000	ETHYLBENZENE	--	
01	1/17/1995	HEXACHLOROBUTADIENE	--	
01	4/18/1995	HEXACHLOROBUTADIENE	--	
01	7/3/1995	HEXACHLOROBUTADIENE	--	
01	10/12/1995	HEXACHLOROBUTADIENE	--	
01	4/17/1996	HEXACHLOROBUTADIENE	--	
01	2/11/1997	HEXACHLOROBUTADIENE	--	
01	2/17/2000	HEXACHLOROBUTADIENE	--	
01	1/17/1995	ISOPROPYLBENZENE	--	
01	4/18/1995	ISOPROPYLBENZENE	--	
01	7/3/1995	ISOPROPYLBENZENE	--	
01	10/12/1995	ISOPROPYLBENZENE	--	
01	4/17/1996	ISOPROPYLBENZENE	--	
01	2/11/1997	ISOPROPYLBENZENE	--	
01	2/17/2000	ISOPROPYLBENZENE	--	
01	1/17/1995	m-DICHLOROBENZENE	--	
01	4/18/1995	m-DICHLOROBENZENE	--	
01	7/3/1995	m-DICHLOROBENZENE	--	
01	10/12/1995	m-DICHLOROBENZENE	--	
01	4/17/1996	m-DICHLOROBENZENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	2/11/1997	m-DICHLOROBENZENE	--	
01	2/17/2000	m-DICHLOROBENZENE	--	
01	1/17/1995	METHYLENE CHLORIDE	--	
01	4/18/1995	METHYLENE CHLORIDE	--	
01	7/3/1995	METHYLENE CHLORIDE	--	
01	10/12/1995	METHYLENE CHLORIDE	--	
01	4/17/1996	METHYLENE CHLORIDE	--	
01	2/11/1997	METHYLENE CHLORIDE	--	
01	2/17/2000	METHYLENE CHLORIDE	--	
01	1/17/1995	METHYL-TERT-BUTYL-ETHER	--	
01	1/17/1995	METHYL-TERT-BUTYL-ETHER	--	
01	4/18/1995	METHYL-TERT-BUTYL-ETHER	--	
01	4/18/1995	METHYL-TERT-BUTYL-ETHER	--	
01	7/3/1995	METHYL-TERT-BUTYL-ETHER	--	
01	7/3/1995	METHYL-TERT-BUTYL-ETHER	--	
01	10/12/1995	METHYL-TERT-BUTYL-ETHER	--	
01	10/12/1995	METHYL-TERT-BUTYL-ETHER	--	
01	4/17/1996	METHYL-TERT-BUTYL-ETHER	--	
01	4/17/1996	METHYL-TERT-BUTYL-ETHER	--	
01	2/11/1997	METHYL-TERT-BUTYL-ETHER	--	
01	2/11/1997	METHYL-TERT-BUTYL-ETHER	--	
01	2/17/2000	METHYL-TERT-BUTYL-ETHER	--	
01	2/17/2000	METHYL-TERT-BUTYL-ETHER	--	
01	1/17/1995	MONOCHLOROBENZENE	--	
01	4/18/1995	MONOCHLOROBENZENE	--	
01	7/3/1995	MONOCHLOROBENZENE	--	
01	10/12/1995	MONOCHLOROBENZENE	--	
01	4/17/1996	MONOCHLOROBENZENE	--	
01	2/11/1997	MONOCHLOROBENZENE	--	
01	2/17/2000	MONOCHLOROBENZENE	--	
01	1/17/1995	m-XYLENE	--	
01	4/18/1995	m-XYLENE	--	
01	7/3/1995	m-XYLENE	--	
01	10/12/1995	m-XYLENE	--	
01	4/17/1996	m-XYLENE	--	
01	2/11/1997	m-XYLENE	--	
01	2/17/2000	m-XYLENE	--	
01	1/17/1995	NAPHTHALENE	--	
01	4/18/1995	NAPHTHALENE	--	
01	7/3/1995	NAPHTHALENE	--	
01	10/12/1995	NAPHTHALENE	--	
01	4/17/1996	NAPHTHALENE	--	
01	2/11/1997	NAPHTHALENE	--	
01	2/17/2000	NAPHTHALENE	--	
01	1/17/1995	N-BUTYLBENZENE	--	
01	4/18/1995	N-BUTYLBENZENE	--	
01	7/3/1995	N-BUTYLBENZENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	10/12/1995	N-BUTYLBENZENE	--	
01	4/17/1996	N-BUTYLBENZENE	--	
01	2/11/1997	N-BUTYLBENZENE	--	
01	2/17/2000	N-BUTYLBENZENE	--	
01	1/17/1995	n-PROPYLBENZENE	--	
01	4/18/1995	n-PROPYLBENZENE	--	
01	7/3/1995	n-PROPYLBENZENE	--	
01	10/12/1995	n-PROPYLBENZENE	--	
01	4/17/1996	n-PROPYLBENZENE	--	
01	2/11/1997	n-PROPYLBENZENE	--	
01	2/17/2000	n-PROPYLBENZENE	--	
01	1/17/1995	o-CHLOROTOLUENE	--	
01	4/18/1995	o-CHLOROTOLUENE	--	
01	7/3/1995	o-CHLOROTOLUENE	--	
01	10/12/1995	o-CHLOROTOLUENE	--	
01	4/17/1996	o-CHLOROTOLUENE	--	
01	2/11/1997	o-CHLOROTOLUENE	--	
01	2/17/2000	o-CHLOROTOLUENE	--	
01	1/17/1995	o-DICHLOROENZENE	--	
01	4/18/1995	o-DICHLOROENZENE	--	
01	7/3/1995	o-DICHLOROENZENE	--	
01	10/12/1995	o-DICHLOROENZENE	--	
01	4/17/1996	o-DICHLOROENZENE	--	
01	2/11/1997	o-DICHLOROENZENE	--	
01	2/17/2000	o-DICHLOROENZENE	--	
01	1/17/1995	o-XYLENE	--	
01	4/18/1995	o-XYLENE	--	
01	7/3/1995	o-XYLENE	--	
01	10/12/1995	o-XYLENE	--	
01	4/17/1996	o-XYLENE	--	
01	2/11/1997	o-XYLENE	--	
01	2/17/2000	o-XYLENE	--	
01	1/17/1995	p-CHLOROTOLUENE	--	
01	4/18/1995	p-CHLOROTOLUENE	--	
01	7/3/1995	p-CHLOROTOLUENE	--	
01	10/12/1995	p-CHLOROTOLUENE	--	
01	4/17/1996	p-CHLOROTOLUENE	--	
01	2/11/1997	p-CHLOROTOLUENE	--	
01	2/17/2000	p-CHLOROTOLUENE	--	
01	1/17/1995	p-DICHLOROENZENE	--	
01	4/18/1995	p-DICHLOROENZENE	--	
01	7/3/1995	p-DICHLOROENZENE	--	
01	10/12/1995	p-DICHLOROENZENE	--	
01	4/17/1996	p-DICHLOROENZENE	--	
01	2/11/1997	p-DICHLOROENZENE	--	
01	2/17/2000	p-DICHLOROENZENE	--	
01	1/17/1995	P-ISOPROPYLTOLUENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Volatile Organic Compounds			µg/L	µg/L
01	4/18/1995	P-ISOPROPYLTOLUENE	--	
01	7/3/1995	P-ISOPROPYLTOLUENE	--	
01	10/12/1995	P-ISOPROPYLTOLUENE	--	
01	4/17/1996	P-ISOPROPYLTOLUENE	--	
01	2/11/1997	P-ISOPROPYLTOLUENE	--	
01	2/17/2000	P-ISOPROPYLTOLUENE	--	
01	1/17/1995	p-XYLENE	--	
01	4/18/1995	p-XYLENE	--	
01	7/3/1995	p-XYLENE	--	
01	10/12/1995	p-XYLENE	--	
01	4/17/1996	p-XYLENE	--	
01	2/11/1997	p-XYLENE	--	
01	2/17/2000	p-XYLENE	--	
01	1/17/1995	SEC-BUTYLBENZENE	--	
01	4/18/1995	SEC-BUTYLBENZENE	--	
01	7/3/1995	SEC-BUTYLBENZENE	--	
01	10/12/1995	SEC-BUTYLBENZENE	--	
01	4/17/1996	SEC-BUTYLBENZENE	--	
01	2/11/1997	SEC-BUTYLBENZENE	--	
01	2/17/2000	SEC-BUTYLBENZENE	--	
01	1/17/1995	STYRENE	--	
01	4/18/1995	STYRENE	--	
01	7/3/1995	STYRENE	--	
01	10/12/1995	STYRENE	--	
01	4/17/1996	STYRENE	--	
01	2/11/1997	STYRENE	--	
01	2/17/2000	STYRENE	--	
01	1/17/1995	TERT-BUTYLBENZENE	--	
01	4/18/1995	TERT-BUTYLBENZENE	--	
01	7/3/1995	TERT-BUTYLBENZENE	--	
01	10/12/1995	TERT-BUTYLBENZENE	--	
01	4/17/1996	TERT-BUTYLBENZENE	--	
01	2/11/1997	TERT-BUTYLBENZENE	--	
01	2/17/2000	TERT-BUTYLBENZENE	--	
01	1/17/1995	TETRACHLOROETHYLENE	--	
01	4/18/1995	TETRACHLOROETHYLENE	--	
01	7/3/1995	TETRACHLOROETHYLENE	--	
01	10/12/1995	TETRACHLOROETHYLENE	--	
01	4/17/1996	TETRACHLOROETHYLENE	--	
01	2/11/1997	TETRACHLOROETHYLENE	--	
01	2/17/2000	TETRACHLOROETHYLENE	--	
01	1/17/1995	TOLUENE	--	
01	4/18/1995	TOLUENE	--	
01	7/3/1995	TOLUENE	--	
01	10/12/1995	TOLUENE	--	
01	4/17/1996	TOLUENE	--	
01	2/11/1997	TOLUENE	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
<b>Volatile Organic Compounds</b>			<b>µg/L</b>	<b>µg/L</b>
01	2/17/2000	TOLUENE	--	
01	1/17/1995	trans-1,2-DICHLOROETHYLENE	--	
01	4/18/1995	trans-1,2-DICHLOROETHYLENE	--	
01	7/3/1995	trans-1,2-DICHLOROETHYLENE	--	
01	10/12/1995	trans-1,2-DICHLOROETHYLENE	--	
01	4/17/1996	trans-1,2-DICHLOROETHYLENE	--	
01	2/11/1997	trans-1,2-DICHLOROETHYLENE	--	
01	2/17/2000	trans-1,2-DICHLOROETHYLENE	--	
01	1/17/1995	TRICHLOROETHYLENE	--	
01	4/18/1995	TRICHLOROETHYLENE	--	
01	7/3/1995	TRICHLOROETHYLENE	--	
01	10/12/1995	TRICHLOROETHYLENE	--	
01	4/17/1996	TRICHLOROETHYLENE	--	
01	2/11/1997	TRICHLOROETHYLENE	--	
01	2/17/2000	TRICHLOROETHYLENE	--	
01	1/17/1995	TRICHLOROFLUOROMETHANE	--	
01	4/18/1995	TRICHLOROFLUOROMETHANE	--	
01	7/3/1995	TRICHLOROFLUOROMETHANE	--	
01	10/12/1995	TRICHLOROFLUOROMETHANE	--	
01	4/17/1996	TRICHLOROFLUOROMETHANE	--	
01	2/11/1997	TRICHLOROFLUOROMETHANE	--	
01	2/17/2000	TRICHLOROFLUOROMETHANE	--	
01	1/17/1995	VINYL CHLORIDE	--	
01	4/18/1995	VINYL CHLORIDE	--	
01	7/3/1995	VINYL CHLORIDE	--	
01	10/12/1995	VINYL CHLORIDE	--	
01	4/17/1996	VINYL CHLORIDE	--	
01	2/11/1997	VINYL CHLORIDE	--	
01	2/17/2000	VINYL CHLORIDE	--	
01	1/17/1995	XYLENES, TOTAL	--	
01	4/18/1995	XYLENES, TOTAL	--	
01	7/3/1995	XYLENES, TOTAL	--	
01	10/12/1995	XYLENES, TOTAL	--	
01	4/17/1996	XYLENES, TOTAL	--	
01	2/11/1997	XYLENES, TOTAL	--	
01	2/17/2000	XYLENES, TOTAL	--	
<b>Synthetic Organic Compounds</b>			<b>µg/L</b>	<b>µg/L</b>
01	1/17/1995	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	4/18/1995	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	7/3/1995	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	10/12/1995	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	10/12/1995	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	4/17/1996	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	2/11/1997	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	2/17/2000	1,2-DIBROMO-3-CHLOROPROPANE	--	
01	10/12/1995	2,4,5-T	--	
01	2/17/2000	2,4,5-T	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+=Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Synthetic Organic Compounds			µg/L	µg/L
01	5/18/1994	2,4,5-TP (SILVEX)	--	
01	10/12/1995	2,4,5-TP (SILVEX)	--	
01	2/17/2000	2,4,5-TP (SILVEX)	--	
01	5/18/1994	2,4-D	--	
01	10/12/1995	2,4-D	--	
01	2/17/2000	2,4-D	--	
01	5/18/1994	3-HYDROXYCARBOFURAN	--	
01	2/17/2000	3-HYDROXYCARBOFURAN	--	
01	5/18/1994	ALACHLOR (LASSO)	--	
01	10/12/1995	ALACHLOR (LASSO)	--	
01	2/17/2000	ALACHLOR (LASSO)	--	
01	5/18/1994	ALDICARB	--	
01	2/17/2000	ALDICARB	--	
01	5/18/1994	ALDICARB SULFONE	--	
01	2/17/2000	ALDICARB SULFONE	--	
01	5/18/1994	ALDICARB SULFOXIDE	--	
01	2/17/2000	ALDICARB SULFOXIDE	--	
01	5/18/1994	ALDRIN	--	
01	10/12/1995	ALDRIN	--	
01	2/17/2000	ALDRIN	--	
01	5/18/1994	ATRAZINE	--	
01	10/12/1995	ATRAZINE	--	
01	2/17/2000	ATRAZINE	--	
01	5/18/1994	BENZO(a)PYRENE	--	
01	10/12/1995	BENZO(a)PYRENE	--	
01	2/17/2000	BENZO(a)PYRENE	--	
01	5/18/1994	BHC-GAMMA(LINDANE)	--	
01	10/12/1995	BHC-GAMMA(LINDANE)	--	
01	2/17/2000	BHC-GAMMA(LINDANE)	--	
01	5/18/1994	BUTACHLOR (MACHETE)	--	
01	10/12/1995	BUTACHLOR (MACHETE)	--	
01	2/17/2000	BUTACHLOR (MACHETE)	--	
01	5/18/1994	CARBARYL	--	
01	2/17/2000	CARBARYL	--	
01	5/18/1994	CARBOFURAN	--	
01	2/17/2000	CARBOFURAN	--	
01	5/18/1994	CHLORDANE	--	
01	10/12/1995	CHLORDANE	--	
01	2/17/2000	CHLORDANE	--	
01	5/18/1994	DALAPON	--	
01	10/12/1995	DALAPON	--	
01	2/17/2000	DALAPON	--	
01	5/18/1994	DECACHLOROBIPHENYL	--	
01	10/12/1995	DECACHLOROBIPHENYL	--	
01	5/18/1994	DI(2-ETHYLHEXYL) ADIPATE	--	
01	10/12/1995	DI(2-ETHYLHEXYL) ADIPATE	0.53	400
01	2/17/2000	DI(2-ETHYLHEXYL) ADIPATE	--	

--=Not Detected

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**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Synthetic Organic Compounds			µg/L	µg/L
01	5/18/1994	DI(2-ETHYLHEXYL) PHTHALATE	--	
01	10/12/1995	DI(2-ETHYLHEXYL) PHTHALATE	10.58	6
01	2/17/2000	DI(2-ETHYLHEXYL) PHTHALATE	4.7	6
01	10/12/1995	DIAZINON (SPECTRACIDE)	--	
01	5/18/1994	DICAMBA	--	
01	10/12/1995	DICAMBA	--	
01	2/17/2000	DICAMBA	--	
01	5/18/1994	DIELDRIN	--	
01	10/12/1995	DIELDRIN	--	
01	2/17/2000	DIELDRIN	--	
01	5/18/1994	DINOSEB	--	
01	10/12/1995	DINOSEB	--	
01	2/17/2000	DINOSEB	--	
01	10/12/1995	DURSBAN	--	
01	5/18/1994	ENDRIN	--	
01	10/12/1995	ENDRIN	--	
01	2/17/2000	ENDRIN	--	
01	1/17/1995	ETHYLENE DIBROMIDE (EDB)	--	
01	4/18/1995	ETHYLENE DIBROMIDE (EDB)	--	
01	7/3/1995	ETHYLENE DIBROMIDE (EDB)	--	
01	10/12/1995	ETHYLENE DIBROMIDE (EDB)	--	
01	10/12/1995	ETHYLENE DIBROMIDE (EDB)	--	
01	4/17/1996	ETHYLENE DIBROMIDE (EDB)	--	
01	2/11/1997	ETHYLENE DIBROMIDE (EDB)	--	
01	2/17/2000	ETHYLENE DIBROMIDE (EDB)	--	
01	5/18/1994	HEPTACHLOR	--	
01	10/12/1995	HEPTACHLOR	--	
01	2/17/2000	HEPTACHLOR	--	
01	5/18/1994	HEPTACHLOR EPOXIDE	--	
01	10/12/1995	HEPTACHLOR EPOXIDE	--	
01	2/17/2000	HEPTACHLOR EPOXIDE	--	
01	5/18/1994	HEXACHLOROBENZENE (HCB)	--	
01	10/12/1995	HEXACHLOROBENZENE (HCB)	--	
01	2/17/2000	HEXACHLOROBENZENE (HCB)	--	
01	5/18/1994	HEXACHLOROCYCLOPENTADIENE	--	
01	10/12/1995	HEXACHLOROCYCLOPENTADIENE	--	
01	2/17/2000	HEXACHLOROCYCLOPENTADIENE	--	
01	5/18/1994	METHOMYL	--	
01	2/17/2000	METHOMYL	--	
01	5/18/1994	METHOXYCHLOR	--	
01	10/12/1995	METHOXYCHLOR	--	
01	2/17/2000	METHOXYCHLOR	--	
01	5/18/1994	METOLACHLOR	--	
01	10/12/1995	METOLACHLOR	--	
01	2/17/2000	METOLACHLOR	--	
01	5/18/1994	METRIBUZIN (SENCOR)	--	
01	10/12/1995	METRIBUZIN (SENCOR)	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
<b>Synthetic Organic Compounds</b>			<b>µg/L</b>	<b>µg/L</b>
01	2/17/2000	METRIBUZIN (SENCOR)	--	
01	5/18/1994	OXAMYL (VYDATE)	--	
01	2/17/2000	OXAMYL (VYDATE)	--	
01	5/18/1994	PENTACHLOROPHENOL	--	
01	10/12/1995	PENTACHLOROPHENOL	--	
01	2/17/2000	PENTACHLOROPHENOL	--	
01	5/18/1994	PICLORAM	--	
01	10/12/1995	PICLORAM	--	
01	2/17/2000	PICLORAM	--	
01	5/18/1994	PROPACHLOR (RAMROD)	--	
01	10/12/1995	PROPACHLOR (RAMROD)	--	
01	2/17/2000	PROPACHLOR (RAMROD)	--	
01	5/18/1994	SIMAZINE	--	
01	10/12/1995	SIMAZINE	--	
01	2/17/2000	SIMAZINE	--	
01	5/18/1994	TOXAPHENE	--	
01	10/12/1995	TOXAPHENE	--	
<b>Inorganic Compounds</b>			<b>mg/L</b>	<b>mg/L</b>
01	10/12/1995	ANTIMONY	--	
01	10/22/1998	ANTIMONY	--	
01	10/22/1998	ANTIMONY	--	
01	2/17/2000	ANTIMONY	--	
01	5/18/1994	ARSENIC	0.001	0.05
01	10/12/1995	ARSENIC	--	
01	10/22/1998	ARSENIC	--	
01	10/22/1998	ARSENIC	--	
01	2/17/2000	ARSENIC	--	
01	5/18/1994	BARIUM	--	
01	10/12/1995	BARIUM	0.11	2
01	10/22/1998	BARIUM	0.088	2
01	10/22/1998	BARIUM	0.098	2
01	2/17/2000	BARIUM	0.12	2
01	10/12/1995	BERYLLIUM	--	
01	10/22/1998	BERYLLIUM	--	
01	10/22/1998	BERYLLIUM	--	
01	2/17/2000	BERYLLIUM	--	
01	5/18/1994	CADMIUM	--	
01	10/12/1995	CADMIUM	--	
01	10/22/1998	CADMIUM	--	
01	10/22/1998	CADMIUM	0.008	0.005
01	2/17/2000	CADMIUM	--	
01	2/20/2002	CHLORIDE	7	250 *
01	5/18/1994	CHROMIUM	--	
01	10/12/1995	CHROMIUM	--	
01	10/22/1998	CHROMIUM	--	
01	10/22/1998	CHROMIUM	--	
01	2/17/2000	CHROMIUM	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+=Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
Inorganic Compounds			mg/L	mg/L
01	5/18/1994	FLUORIDE	--	
01	2/20/2002	IRON	--	
01	2/20/2002	MANGANESE	--	
01	5/18/1994	MERCURY	--	
01	10/12/1995	MERCURY	--	
01	10/22/1998	MERCURY	--	
01	10/22/1998	MERCURY	--	
01	2/17/2000	MERCURY	--	
01	10/12/1995	NICKEL	--	
01	10/22/1998	NICKEL	0.014	0.7 ^
01	2/17/2000	NICKEL	--	
01	2/8/1993	NITRATE	0	10
01	12/7/1994	NITRATE	0.55	10
01	10/12/1995	NITRATE	--	
01	11/28/1995	NITRATE	0.5	10
01	4/10/1996	NITRATE	0.3	10
01	8/26/1996	NITRATE	0.47	10
01	8/27/1996	NITRATE	0.39	10
01	2/26/1997	NITRATE	0.3	10
01	4/2/1997	NITRATE	0.4	10
01	10/22/1998	NITRATE	4.8	10
01	10/22/1998	NITRATE	7	10
01	3/17/1999	NITRATE	0.9	10
01	2/16/2000	NITRATE	0.6	10
01	2/16/2000	NITRATE	--	
01	2/17/2000	NITRATE	--	
01	12/17/2001	NITRATE	1.8	10
01	2/20/2002	NITRATE	0.5	10
01	2/8/1993	NITRITE	0	1
01	10/12/1995	NITRITE	0.005	1
01	2/26/1997	NITRITE	0.3	1
01	11/9/1999	NITRITE	--	
01	5/18/1994	SELENIUM	--	
01	10/12/1995	SELENIUM	--	
01	10/22/1998	SELENIUM	--	
01	10/22/1998	SELENIUM	--	
01	2/17/2000	SELENIUM	--	
01	10/12/1995	SILVER	--	
01	10/22/1998	SODIUM	5.6	60 +
01	10/22/1998	SODIUM	7	60 +
01	2/17/2000	SODIUM	9.31	60 +
01	5/18/1994	SULFATE	19	250 *
01	10/12/1995	SULFATE	8.6	250 *
01	2/20/2002	SULFATE	19	250 *
01	10/12/1995	THALLIUM	--	
01	10/22/1998	THALLIUM	--	

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**RESULTS OF GROUND-WATER SAMPLE ANALYSIS FOR THE WISP RESORT HOTEL**

Plant ID	Sample Date	Contaminant Name	Result	MCL
<b>Inorganic Compounds</b>			<b>mg/L</b>	<b>mg/L</b>
01	10/22/1998	THALLIUM	--	
01	2/17/2000	THALLIUM	--	
<b>General Water Quality Parameters</b>				
01	2/20/2002	ALKALINITY, CARBONATE	83	
01	2/20/2002	ALKALINITY, TOTAL	73	
01	2/20/2002	CONDUCTIVITY @ 25 C U-MHO	180	
01	2/20/2002	HARDNESS, TOTAL (AS CaCO3)	82	
01	10/12/1995	pH	7.2	6.5-8.5 *
01	4/10/1996	pH	7.3	6.5-8.5 *
01	2/20/2002	pH	7	6.5-8.5 *
01	2/20/2002	TURBIDITY	0.2	5

--=Not Detected

\*=Secondary Drinking Water Regulation

^=Drinking Water Equivalence Level

+ =Drinking Water Advisory Level

**SUMMARY OF MICROBIOLOGICAL CONTAMINANT ANALYSIS FOR WISP RESORT HOTEL WATER SAMPLES**

<b>Sample Date</b>	<b>Samples Taken</b>	<b>Total Coliform</b>	<b>Total Fecal</b>	<b>Total Indeterminate</b>	<b>Sample Repeats</b>	<b>Repeat Coliforms</b>	<b>Repeat Fecal</b>	<b>Repeat Indeterminate</b>
12/1/1996	2	0	0	0	--	--	--	--
3/1/1997	2	0	0	0	--	--	--	--
6/1/1997	1	0	0	0	--	--	--	--
9/1/1997	2	0	0	0	--	--	--	--
12/1/1997	2	0	0	0	--	--	--	--
1/1/1998	2	0	0	0	--	--	--	--
2/1/1998	2	0	0	0	--	--	--	--
3/1/1998	2	0	0	0	--	--	--	--
4/1/1998	2	0	0	0	--	--	--	--
7/1/1998	2	0	0	0	--	--	--	--
12/1/1998	2	0	0	0	--	--	--	--
1/1/1999	2	0	0	0	--	--	--	--
6/1/1999	2	0	0	0	--	--	--	--
9/1/1999	2	0	0	0	--	--	--	--
12/1/1999	2	0	0	0	--	--	--	--
3/1/2000	2	0	0	0	--	--	--	--
6/1/2000	2	0	0	0	--	--	--	--
7/1/2000	2	0	0	0	--	--	--	--
10/1/2000	2	0	0	0	--	--	--	--
1/1/2001	2	0	0	0	--	--	--	--
6/1/2001	2	0	0	0	--	--	--	--
7/1/2001	2	0	0	0	--	--	--	--
10/1/2001	2	0	0	0	--	--	--	--
1/1/2002	2	0	0	0	--	--	--	--
4/1/2002	2	0	0	0	--	--	--	--

-- = not applicable

0 = not detected