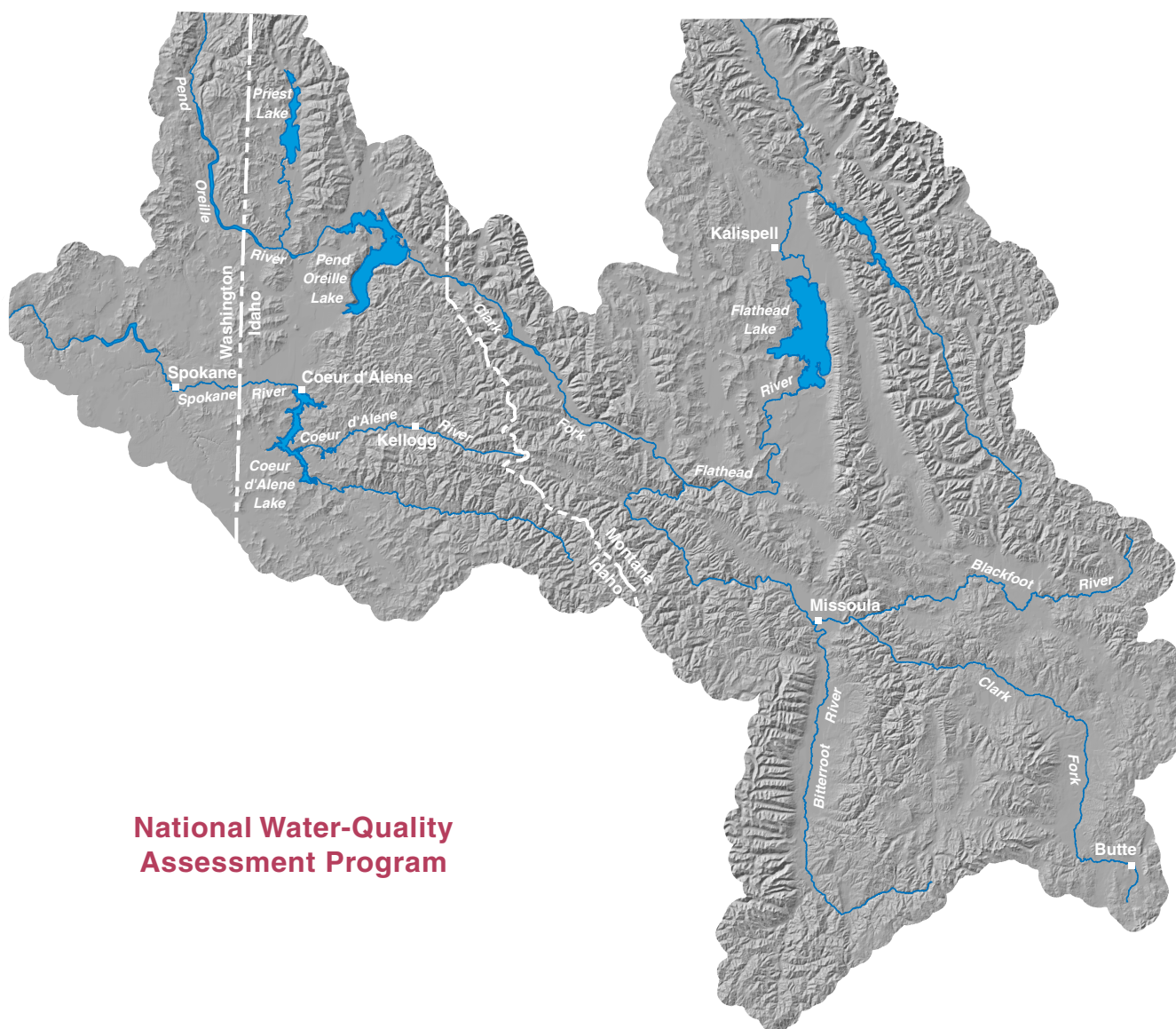


Water-Quality, Streambed-Sediment, and Biological Data from the Clark Fork-Pend Oreille and Spokane River Basins, Montana, Idaho, and Washington, 1998-2001

Open-File Report 03-292



**National Water-Quality
Assessment Program**

**U.S. Department of the Interior
U.S. Geological Survey**

**Water-Quality, Streambed-Sediment, and Biological
Data from the Clark Fork-Pend Oreille and Spokane
River Basins, Montana, Idaho, and Washington,
1998-2001**

**By Craig L. Bowers, Rodney R. Caldwell,
and DeAnn M. Dutton**

Open-File Report 03-292

Helena, Montana
November 2003

U.S. Department of the Interior

GALE A. NORTON, Secretary

U.S. Geological Survey

Charles G. Groat, Director

Any use of trade, product, or firm name in this publication is for descriptive purposes only and does not imply endorsement by the U.S. Government

For additional information write to:

**District Chief
U.S. Geological Survey
3162 Bozeman Avenue
Helena, MT 59601-6456**

Copies of this report may be purchased from:

**U.S. Geological Survey
Branch of Information Services
Box 25286
Denver, CO 80225-0286**

Information regarding the National Water-Quality Assessment (NAWQA) Program is available on the Internet via the world wide web at <http://water.usgs.gov/nawqa>

FOREWORD

The U.S. Geological Survey (USGS) is committed to serve the Nation with accurate and timely scientific information that helps enhance and protect the overall quality of life, and facilitates effective management of water, biological, energy, and mineral resources (<http://www.usgs.gov/>). Information on the quality of the Nation's water resources is of critical interest to the USGS because it is so integrally linked to the long-term availability of water that is clean and safe for drinking and recreation and that is suitable for industry, irrigation, and habitat for fish and wildlife. Escalating population growth and increasing demands for the multiple water uses make water availability, now measured in terms of quantity *and* quality, even more critical to the long-term sustainability of our communities and ecosystems.

The USGS implemented the National Water-Quality Assessment (NAWQA) Program to support national, regional, and local information needs and decisions related to water-quality management and policy (<http://water.usgs.gov/nawqa/>). Shaped by and coordinated with ongoing efforts of other Federal, State, and local agencies, the NAWQA Program is designed to answer: What is the condition of our Nation's streams and ground water? How are the conditions changing over time? How do natural features and human activities affect the quality of streams and ground water, and where are those effects most pronounced? By combining information on water chemistry, physical characteristics, stream habitat, and aquatic life, the NAWQA Program aims to provide science-based insights for current and emerging water issues and priorities. NAWQA results can contribute to informed decisions that result in practical and effective water-resource management and strategies that protect and restore water quality.

Since 1991, the NAWQA Program has implemented interdisciplinary assessments in more than 50 of the Nation's most important river basins and aquifers, referred to as Study Units (<http://water.usgs.gov/nawqa/nawqamap.html>). Collectively, these Study Units account for more than 60 percent of the overall water use and population served by public water supply, and are representative of the Nation's major hydrologic landscapes, priority ecological resources, and agricultural, urban, and natural sources of contamination.

Each assessment is guided by a nationally consistent study design and methods of sampling and analysis. The assessments thereby build local knowledge about water-quality issues and trends in a particular stream or aquifer while providing an understanding of how and why water quality varies regionally and nationally. The consistent, multi-scale approach helps to determine if certain types of water-quality issues are isolated or pervasive, and allows direct comparisons of how human activities and natural processes affect water quality and ecological health in the Nation's diverse geographic and environmental settings. Comprehensive assessments on pesticides, nutrients, volatile organic compounds, trace metals, and aquatic ecology are developed at the national scale through comparative analysis of the Study-Unit findings (<http://water.usgs.gov/nawqa/natsyn.html>).

The USGS places high value on the communication and dissemination of credible, timely, and relevant science so that the most recent and available knowledge about water resources can be applied in management and policy decisions. We hope this NAWQA publication will provide you the needed insights and information to meet your needs, and thereby foster increased awareness and involvement in the protection and restoration of our Nation's waters.

The NAWQA Program recognizes that a national assessment by a single program cannot address all water-resource issues of interest. External coordination at all levels is critical for a fully integrated understanding of watersheds and for cost-effective management, regulation, and conservation of our Nation's water resources. The Program, therefore, depends extensively on the advice, cooperation, and information from other Federal, State, interstate, Tribal, and local agencies, non-government organizations, industry, academia, and other stakeholder groups. The assistance and suggestions of all are greatly appreciated.

Robert M. Hirsch
Associate Director for Water

CONTENTS

	Page
Foreword	iii
Abstract	1
Introduction	1
Purpose and scope	1
Description of study area	6
Site-identification systems	7
Acknowledgments	7
Methods for the collection of water-quality, streambed-sediment, and biological samples	7
Surface water	7
Ground water	15
Streambed sediment	16
Fish tissue	16
Benthic algae	16
Quality-control samples	17
Methods of laboratory analysis	17
References cited	18
Data	21

ILLUSTRATIONS

Figure	1. Map showing surface-water-quality, streambed-sediment, and biological sampling sites in the Northern Rockies Intermontane Basins study unit, Montana, Idaho, and Washington	8
	2. Map showing ground-water study areas within the Northern Rockies Intermontane Basins study unit, Montana, Idaho, and Washington	10
	3. Map showing locations of sampled wells in subunit survey 1, Idaho and Washington	11
	4. Map showing locations of sampled wells in subunit survey 2, Montana	12
	5. Map showing locations of selected wells in the surface-water/ground-water interaction study area, Idaho and Washington	13
	6. Diagram showing location-numbering system for wells and springs	14

TABLES

Table	1. Types of data collected at surface-water sites for the Northern Rockies Intermontane Basins study unit in Montana, Idaho, and Washington, 1998-2001	2
	2. Physical data for wells sampled in subunit survey 1 in Idaho and Washington, Northern Rockies Intermontane Basins study unit	3
	3. Physical data for wells sampled in subunit survey 2 in Montana, Northern Rockies Intermontane Basins study unit	4
	4. Physical data for monitoring wells sampled for the surface-water/ground-water interaction study of the Spokane River in Idaho and Washington, Northern Rockies Intermontane Basins study unit	5
	5. Summary of analytical method references, analyzing laboratories, and field processing of samples for chemical constituents in water, streambed sediment, fish tissue, and benthic algae, Northern Rockies Intermontane Basins study unit	23
	6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001	24
	7. Nutrient and organic-carbon concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001	38
	8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001	44

TABLES--continued

	Page
Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000	68
10. Volatile organic-compound concentration data for surface-water samples collected at fixed water-quality sites along the Spokane River, Idaho and Washington, 1999-2000	78
11. Streamflow, physical, and major-ion concentration data for surface-water samples collected for the synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000	86
12. Nutrient data for surface-water samples collected for the synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000	88
13. Trace-element concentration data for surface-water samples collected for the synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000	89
14. Stable-isotope data for surface-water samples along the Spokane River, Idaho and Washington, 1999-2001	91
15. Physical and major-ion concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001	92
16. Nutrient and dissolved organic-carbon concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001	96
17. Trace-element concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001	98
18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001	102
19. Pesticide and pesticide-degradate concentration data for filtered ground-water samples collected from basin-fill aquifers in Montana, Northern Rockies Intermontane Basins study unit, 2001	112
20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001	119
21. Tritium and radon concentration and stable-isotope data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001	137
22. Radionuclide data from filtered ground-water samples collected from basin-fill aquifers in Idaho and Washington, Northern Rockies Intermontane Basins study unit, 1999	139
23. Water-level, specific-conductance, and ancillary data for selected ground-water sites inventoried for the surface-water/ground-water interaction study of the Spokane River, Idaho and Washington	141
24. Physical and major-ion concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and the surrounding basin-fill aquifers, Idaho and Washington, 2000-01	144
25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01	152
26. Stable-isotope data for ground-water samples collected during the surface-water/ground-water interaction study of the Spokane River and the surrounding basin-fill aquifers, Idaho and Washington, 1999-2001	172
27. Trace-element and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99	176
28. Trace-element and carbon concentration data for streambed-sediment samples collected for a synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000	181
29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99	186
30. Trace-element concentration data for fish-tissue samples, Northern Rockies Intermontane Basins study unit, 1998-99	196

TABLES--continued

	Page
Table 31. Organochlorine-compound concentration data for fish-tissue samples, Northern Rockies Intermontane Basins study unit, 1998-99	199
32. Benthic algae data for samples, Northern Rockies Intermontane Basins study unit, 1999-2001	203

CONVERSION FACTORS, DATUM, ABBREVIATED UNITS, AND ACRONYMS

Multiply	By	To obtain
acre	0.4047	square hectometer
cubic foot per second (ft ³ /s)	0.028317	cubic meter per second
foot	0.3048	meter
gallon	3.7850	liter (L)
inch (in.)	2.54	centimeter (cm)
	25,400	micrometer (μm)
square mile (mi ²)	2.59	square kilometer

Temperature can be converted to degrees Celsius (°C) or degrees Fahrenheit (°F) by the following equations:

$$^{\circ}\text{C} = 5/9 (^{\circ}\text{F} - 32)$$

$$^{\circ}\text{F} = 9/5 (^{\circ}\text{C}) + 32$$

Horizontal coordinate information for surface-water sites is referenced to the North American Datum of 1927 (NAD 27). Horizontal coordinate information for ground-water sites is referenced to North American Datum of 1983 (NAD 83).

Abbreviated units used in this report:

cm	centimeter
g/kg	grams per kilogram (equivalent to parts per thousand)
g/m ²	grams per square meter
μg/g	micrograms per gram (equivalent to parts per million)
μg/kg	micrograms per kilogram (equivalent to parts per billion)
μg/L	micrograms per liter (equivalent to parts per billion)
μm	micrometer
μS/cm	microsiemens per centimeter at 25 degrees Celsius
mg/L	milligrams per liter (equivalent to parts per million)
mg/m ²	milligrams per square meter
mL	milliliter
mm	millimeter
pCi/L	picocuries per liter

Acronyms used in this report:

DOC	dissolved organic carbon
LRL	laboratory reporting level
LT-MDL	long-term method-detection level
MDC	minimum detectable concentration
MRL	minimum reporting level
NAWQA	National Water-Quality Assessment
NROK	Northern Rockies Intermontane Basins
NWQL	National Water Quality Laboratory of the U.S. Geological Survey, Denver, Colo.

Acronyms used in this report (continued)

o,p'-DDD	1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)ethane
o,p'-DDE	1,1-dichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)ethylene
o,p'-DDT	1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)ethane
p,p'-DDD	1,1-dichloro-2,2-bis(p-chlorophenyl)ethane
p,p'-DDE	1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene
p',p'-DDT	1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane
PVC	polyvinyl chloride
RL	reporting level
SMOW	Standard Mean Ocean Water
SUS	subunit survey
SVRP	Spokane Valley/Rathdrum Prairie
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
VOC	volatile organic compound
VSMOW	Vienna Standard Mean Ocean Water

Water-Quality, Streambed-Sediment, and Biological Data from the Clark Fork-Pend Oreille and Spokane River Basins, Montana, Idaho, and Washington, 1998-2001

By Craig L. Bowers, Rodney R. Caldwell, and DeAnn M. Dutton

Abstract

Water-quality, streambed-sediment, and biological data were collected in the Clark Fork-Pend Oreille and Spokane River basins as part of the U.S. Geological Survey's National Water-Quality Assessment Program and are presented in this report. These river basins compose the Northern Rockies Intermontane Basins study unit which was selected to include a river system that has a mixture of forested, agricultural, urban, and developing areas. Water-quality samples were collected from 28 surface-water sites and 86 ground-water sites from June 1998 to September 2001. Data collected included measurements of physical properties and chemical analyses of concentrations of major ions, trace elements, nutrients, organic carbon, pesticides, volatile organic compounds, and radiochemical constituents. Streambed-sediment and biological tissue samples were collected from 41 sites and analyzed for trace elements and organochlorine compounds. Benthic algae were collected to determine chlorophyll concentration and areal density.

INTRODUCTION

The U.S. Geological Survey (USGS) National Water-Quality Assessment (NAWQA) Program is designed to produce a comprehensive assessment of the quality of the Nation's stream and aquifer systems (Hirsch and others, 1988; Leahy and others, 1990). Investigations in more than 50 NAWQA study units use an integrated approach to assess the status and trends of water quality in major river basins of the Nation (Gurtz, 1994). These assessments consist of the collection of physical, chemical, and biological data at sites representing a wide range of environmental conditions.

The Northern Rockies Intermontane Basins (NROK) study area was selected to include several

large river systems that represent a mixture of forested, agricultural, urban, and developing areas. The study area also contains two major sole-source aquifers—the Spokane Valley/Rathdrum Prairie (SVRP) and Missoula sole-source aquifers.

The effects of land-use and water-use practices on surface- and ground-water resources are a concern to local resource managers, citizen groups, and Federal, State, Tribal, and local governments. Information obtained for the NROK NAWQA program will increase the scientific understanding of surface- and ground-water quality and health of aquatic biological communities of this area.

Purpose and Scope

This report presents water-quality, streambed-sediment, and biological data for samples collected in the Clark Fork-Pend Oreille and Spokane River basins that compose the NROK study unit. These data (tables 1-4 in main body of report; tables 5-32, back of the report) were collected between June 1998 and September 2001 at 28 surface-water-quality sites, 86 ground-water sites, 37 streambed-sediment sites, and 19 fish-tissue sample sites. Surface-water-quality sites (table 1) consisted of fixed water-quality and synoptic water-quality sites. Fixed water-quality sites were sampled on a routine basis for about 2 years. All synoptic water-quality sites were sampled once over a short interval of time as part of a targeted characterization in mining-affected areas; some synoptic sites subsequently were sampled more than once. Ground-water-quality sites consisted of 86 wells (tables 2, 3, and 4) that were sampled to assess the quality of water in the Spokane Valley/Rathdrum Prairie (SVRP) and Missoula sole-source aquifers and nearby basin-fill aquifers. In addition, physical and chemical data were collected and compiled to supplement ground-water-quality

Table 1. Types of data collected at surface-water sites for the Northern Rockies Intermontane Basins study unit in Montana, Idaho, and Washington, 1998-2001
[Site locations shown on figure 1. Site identification number described in text. Latitude and longitude given in degrees, minutes, and seconds referenced to North American Datum of 1927]

Site No. (fig. 1)	Site Name	Site identification number	Latitude	Longitude	Types of samples						
					Water quality		Streambed sediment		Biological		
					Synoptic	Fixed	Trace elements	Organic compounds	Fish tissue, trace elements	Fish tissue, organic compounds	Benthic algae (periphyton)
1	Clark Fork near Galen, Montana	12323800	461230	1124559			X		X		
2	Rock Creek near Clinton, Montana	12334510	464321	1134056			X		X	X	
3	Clark Fork at Turah Bridge, near Bonner, Montana	12334550	464934	1134848		X	X	X	X	X	X
4	Blackfoot River above Nevada Creek, near Helmsville, Montana	12335100	465509	1130052			X	X	X	X	
5	Bitterroot River near Missoula, Montana	12352500	464955	1140311		X	X	X	X	X	X
6	St. Regis River above Rainy Creek, near Saltese, Montana	472510115360800	472510	1153608	X		X				X
7	St. Regis River near Haugan, Montana	472304115235900	472304	1152359	X		X				X
8	St. Regis River near St. Regis, Montana	12354000	471749	1150718	X		X				X
9	Clark Fork at St. Regis, Montana	12354500	471807	1150511	X	X	X	X	X	X	
10	North Fork Flathead River near Columbia Falls, Montana	12355500	482944	1140736			X	X			
11	Middle Fork Flathead River near West Glacier, Montana	12358500	482943	1140033			X	X	X	X	
12	Flathead River at Perma, Montana	12388700	472203	1143503		X	X	X	X	X	X
13	Rock Creek near Noxon, Montana	12391420	475828	1154341			X				
14	Lightning Creek at Clark Fork, Idaho	12392155	480904	1161056		X	X	X			X
15	Priest River near Priest River, Idaho	12395000	481231	1165449			X	X	X		X
16	Pend Oreille River above Priest River, Idaho	12395200	481016	1165215			X				
17	North Fork Coeur d'Alene River above Shoshone Creek, near Prichard, Idaho	12411000	474226	1155836	X		X				X
18	Prichard Creek near Murray, Idaho	473733115513000	473733	1155130	X		X				X
19	East Fork Eagle Creek near mouth, near Prichard, Idaho	473925115530200	473925	1155302	X		X				X
20	West Fork Eagle Creek below Settlers Grove, Idaho	474206115513400	474206	1155134	X		X				X
21	Beaver Creek near mouth, near Murray, Idaho	473705115573300	473705	1155733	X		X				X
22	Prichard Creek at mouth, at Prichard, Idaho	12411935	473924	1155804	X		X				X
23	North Fork Coeur d'Alene River at Enaville, Idaho	12413000	473408	1161506	X	X	X	X	X	X	X
24	South Fork Coeur d'Alene River at Shoshone Park, near Mullan, Idaho	12413027	472753	1154331	X		X				X
25	South Fork Coeur d'Alene River above Deadman Gulch, near Mullan, Idaho	12413040	472825	1154555	X		X		X		
26	Canyon Creek near Burke, Idaho	12413118	473132	1154800	X		X				X
27	Canyon Creek at Woodland Park, Idaho	12413123	472919	1155322	X		X				X
28	South Fork Coeur d'Alene River at Silverton, Idaho	12413150	472930	1155715	X		X				X
29	East Fork Pine Creek above Nabob Creek, near Pinehurst, Idaho	12413370	472836	1161314	X		X				X
30	Pine Creek below Amy Gulch, near Pinehurst, Idaho	12413445	473057	1161424	X		X				X
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	12413470	473306	1161413	X	X	X	X	X	X	X
32	Coeur d' Alene River near Harrison, Idaho	12413860	472843	1164356			X				
33	St. Joe River at Red Ives Ranger Station, Idaho	12413875	470322	1152108	X		X	X	X	X	X
34	St. Joe River at Calder, Idaho	12414500	471629	1161117	X		X		X	X	X
35	Spokane River near Post Falls, Idaho	12419000	474211	1165837	X	X	X	X	X	X	X
36	Spokane River above Liberty Bridge, near Otis Orchard, Washington	12419500	474155	1170235					X	X	X
37	Spokane River at Greenacres, Washington	12420500	474045	1170925							X
38	Spokane River at Sullivan Bridge, near Trentwood, Washington	12420800	474022	1171143					X	X	X
39	Spokane River below Green Street, at Spokane, Washington	12422000	474040	1172220							X
40	Hangman Creek at Spokane, Washington	12424000	473910	1172655		X ¹	X	X	X	X	
41	Spokane River at Seven Mile Bridge, near Spokane, Washington	12424500	474425	1173110		X	X	X	X	X	X

¹Samples collected only for pesticide analysis at this site.

Table 2. Physical data for wells sampled in subunit survey 1 in Idaho and Washington, Northern Rockies Intermontane Basins study unit

[Well number (used for cross reference to wells plotted on figure 3), location number, and well identification number described in text. Latitude and longitude reported in degrees, minutes, seconds, and tenths of seconds. Latitude and longitude referenced to North American Datum of 1983]

Well number (fig. 3)	Location number	Well identification number	Latitude	Longitude	Well depth (feet below land surface)	County and State
1	56N01W10BBBB01	481320116261101	481320.7	1162611.6	139	Bonner, Idaho
2	56N02W35BBBD01	480950116324401	480949.9	1163243.6	135	Bonner, Idaho
3	31N45E27DAAD01	480928117053201	480928.4	1170532.2	56	Pend Oreille, Wash.
4	55N05W08BABA01	480813116593701	480813.0	1165937.9	162	Bonner, Idaho
5	55N06W13AAAD01	480718117012501	480718.0	1170125.4	130	Bonner, Idaho
6	54N04W08AADA01	480249116510001	480252.2	1165103.8	198	Bonner, Idaho
7	54N04W10ADDD01	480235116483001	480235.9	1164830.0	80	Bonner, Idaho
8	29N43E02DCBC01	480203117200601	480204.6	1172019.0	60	Spokane, Wash.
9	54N02W18CCDD01	480128116374601	480127.6	1163746.1	76	Bonner, Idaho
10	29N44E07CBCD01	480119117182101	480119.0	1171821.1	123	Spokane, Wash.
11	29N44E21CCCB01	475925117153001	475920.9	1171544.2	77	Spokane, Wash.
12	29N41E34ADDB01	475825117364401	475809.8	1173638.2	67	Stevens, Wash.
13	53N02W07ABDD01	475731116371301	475730.6	1163713.2	431	Kootenai, Idaho
14	28N42E12ABDD01	475637117262501	475636.8	1172625.3	90	Spokane, Wash.
15	53N03W24CCCD01	475510116391201	475509.6	1163912.3	339	Kootenai, Idaho
16	53N03W34ADAA01	475400116404201	475400.0	1164042.0	237	Kootenai, Idaho
17	28N43E28CDAD01	475343117225201	475329.4	1172250.5	150	Spokane, Wash.
18	52N04W06AAAA01	475322116522201	475322.1	1165222.1	443	Kootenai, Idaho
19	27N42E12ABAA01	475130117262201	475134.3	1172619.0	57	Spokane, Wash.
20	52N03W21BACD01	475035116424801	475034.6	1164248.1	338	Kootenai, Idaho
21	51N04W06CDD01	474718116530201	474718.4	1165302.0	298	Kootenai, Idaho
22	26N43E06ACBD01	474708117250501	474655.3	1172514.8	45	Spokane, Wash.
23	26N42E04CCDB01	474629117305101	474627.0	1173054.7	321	Spokane, Wash.
24	51N04W20CBCD01	474456116522001	474456.1	1165220.0	290	Kootenai, Idaho
25	26N42E20ABAC01	474427117312101	474434.5	1173132.5	60	Spokane, Wash.
26	26N43E28CABA01	474317117225301	474317.2	1172253.3	260	Spokane, Wash.
27	50N03W06DACC01	474218116445601	474218.4	1164456.5	209	Kootenai, Idaho
28	50N05W12BCAD01	474147116544001	474147.4	1165440.4	200	Kootenai, Idaho
29	50N06W12DBCD01	474130117015401	474129.7	1170154.4	137	Kootenai, Idaho
30	25N45E08BDAA01	474050117084101	474054.0	1170839.1	128	Spokane, Wash.
31	24N43E05CBBD01	473612117243601	473603.6	1172432.0	59	Spokane, Wash.

Table 3. Physical data for wells sampled in subunit survey 2 in Montana, Northern Rockies Intermontane Basins study unit

[Well number (used for cross reference to wells plotted on figure 4), location number, and well identification number described in text. Latitude and longitude reported in degrees, minutes, seconds, and tenths of seconds. Latitude and longitude referenced to North American Datum of 1983]

Well number (fig. 4)	Location number	Well identification number	Latitude	Longitude	Well depth, (feet below land surface)	County and State
32	16N23W27BBCC01	470719114301401	470714.1	1143013.7	40	Missoula, Mont.
33	15N23W01DCAC01	470502114265301	470502.1	1142653.1	60	Missoula, Mont.
34	15N21W17DBAD01	470328114164301	470327.6	1141642.6	79	Missoula, Mont.
35	15N21W34BACC01	470112114144001	470111.9	1141440.1	174	Missoula, Mont.
36	14N20W16AACB01	465838114074501	465838.3	1140744.7	70	Missoula, Mont.
37	14N20W19BBDC01	465741114110601	465741.4	1141105.6	141.5	Missoula, Mont.
38	13N19W05CBCC01	465440114022101	465440.2	1140221.4	132	Missoula, Mont.
39	13N20W14BACA01	465323114054301	465322.7	1140543.2	119	Missoula, Mont.
40	13N20W26BCDA01	465127114055401	465127.1	1140553.8	51	Missoula, Mont.
41	12N19W06BBCD01	464951114023701	464951.1	1140237.4	82	Missoula, Mont.
42	10N20W02AADA01	463932114035901	463931.6	1140359.4	50	Ravalli, Mont.
43	10N19W08ADAD01	463827114001201	463825.7	1140014.8	340	Ravalli, Mont.
44	09N19W05CCDC01	463335114011701	463334.9	1140116.7	43	Ravalli, Mont.
45	09N20W21CBBB01	463122114074701	463121.9	1140747.0	60	Ravalli, Mont.
46	09N20W34BDAB01	462948114060101	462948.3	1140601.0	50	Ravalli, Mont.
47	08N19W04BDAA01	462859113574401	462858.6	1135847.3	56	Ravalli, Mont.
48	08N20W08BAAB01	462818114074101	462817.7	1140741.1	50	Ravalli, Mont.
49	08N19W08ADDD01	462754113592701	462754.3	1135927.3	234	Ravalli, Mont.
50	08N21W24ACDB01	462616114094301	462614.3	1140945.9	49	Ravalli, Mont.
51	08N20W23CDDD01	462545114034301	462545.0	1140346.7	231.5	Ravalli, Mont.
52	07N21W11BBCD01	462256114114501	462256.2	1141144.7	29	Ravalli, Mont.
53	07N20W12CBDA01	462228114030301	462230.8	1140246.3	79	Ravalli, Mont.
54	06N20W03BDCC01	461823114050901	461822.8	1140512.7	53.5	Ravalli, Mont.
55	06N21W03CDAA01	461807114123001	461807.1	1141230.1	91	Ravalli, Mont.
56	06N20W13BDGD01	461638114023401	461638.3	1140234.0	120	Ravalli, Mont.
57	06N20W30CBAB01	461451114090801	461451.0	1140907.9	40	Ravalli, Mont.
58	05N21W03ACBA01	461320114121501	461318.2	1141218.2	55	Ravalli, Mont.
59	05N21W23BABB01	461055114112601	461055.1	1141125.0	54	Ravalli, Mont.
60	03N21W15ABDA01	460110114110901	460110.2	1141109.5	85	Ravalli, Mont.
61	02N20W18DBAC01	455521114074801	455520.8	1140747.6	50	Ravalli, Mont.

Table 4. Physical data for monitoring wells sampled for the surface-water/ground-water interaction study of the Spokane River in Idaho and Washington, Northern Rockies Intermontane Basins study unit

[Well number (used for cross reference to wells plotted on figure 5), location number, and well identification number described in text. Latitude and longitude reported in degrees, minutes, seconds, and tenths of seconds. Latitude and longitude referenced to North American Datum of 1983]

Well number (fig. 5)	Location number	Well identification number	Latitude	Longitude	Well depth (feet below land surface)	County and State
M1	50N05W07DABC01	474134117002201	474134.3	1170022.4	79.3	Kootenai, Idaho
M2	50N05W07DABC02	474134117002202	474134.6	1170022.3	45.8	Kootenai, Idaho
M3	26N46E31CBBC01	474226117024801	474225.6	1170248.1	151	Spokane, Wash.
M4	25N45E01ABDD01	474151117031101	474150.7	1170310.8	74.3	Spokane, Wash.
M5	25N45E01ABDD02	474151117031102	474150.7	1170310.8	60.7	Spokane, Wash.
M6	25N45E01ABDD03	474149117031101	474149.4	1170311.5	77.8	Spokane, Wash.
M7	25N45E01ACAD01	474144117031401	474144.2	1170314.1	86.9	Spokane, Wash.
M8	25N45E01CBBD02	474130117035902	474130.1	1170358.8	32.9	Spokane, Wash.
M9	25N45E01CBBD01	474130117035901	474130.1	1170358.8	76.1	Spokane, Wash.
M10	25N45E01CBBC01	474131117040401	474130.9	1170403.5	71.0	Spokane, Wash.
M11	25N45E10BAAA01	474106117060501	474106.3	1170605.0	71.6	Spokane, Wash.
M12	25N45E10BAAA03	474107117060502	474106.6	1170605.2	136.7	Spokane, Wash.
M13	25N45E10BAAA02	474107117060501	474107.3	1170604.9	75.5	Spokane, Wash.
M14	25N45E03CDDD01	474110117060601	474109.6	1170605.8	88.8	Spokane, Wash.
M15	25N45E03CDDA01	474115117060301	474115.1	1170603.1	97.5	Spokane, Wash.
M16	25N45E03BDDA01	474140117060401	474140.2	1170604.3	117.3	Spokane, Wash.
M17	25N45E10CBDA01	474033117062501	474033.5	1170625.2	97.1	Spokane, Wash.
M18	25N45E09ADAD01	474050117064201	474050.4	1170641.7	77.4	Spokane, Wash.
M19	25N45E09ADAB01	474053117064701	474053.5	1170646.6	70.9	Spokane, Wash.
M20	25N45E17BBAA05	474016117085601	474015.5	1170855.8	113	Spokane, Wash.
M21	25N45E08CBBC02	474037117091301	474037.2	1170913.1	98	Spokane, Wash.
M22	25N45E08CBBC01	474038117091201	474038.2	1170912.0	97	Spokane, Wash.
M23	25N45E07ADDD01	474046117091501	474045.5	1170914.9	80	Spokane, Wash.
M24	25N45E07AAAA04	474109117091701	474109.3	1170917.1	100	Spokane, Wash.
M25	25N44E11DDAC01	474026117115301	474025.6	1171153.2	67	Spokane, Wash.

data that were collected from the 86 wells (tables 23 and 26). Surface- and ground-water samples were analyzed for physical properties, major ions, nutrients, trace elements, organic carbon, volatile organic compounds (VOCs), dissolved pesticides, and selected isotopes. Selected ground-water samples also were analyzed for organic compounds that represent the breakdown products (degradates) of pesticides. Streambed-sediment and fish-tissue samples were analyzed for trace elements and organochlorine compounds.

Description of Study Area

The NROK study unit (fig. 1) covers about 31,500 mi² in western Montana, northern Idaho, and eastern Washington. The study area is composed of two major river basins: the Clark Fork-Pend Oreille River basin which encompasses about 24,900 mi² within the United States, and the Spokane River basin which encompasses about 6,600 mi² (Maret and Dutton, 1999). The population of the study unit in 1990 was about 725,000 with about 350,000 in Washington; 255,000 in Montana; and 120,000 in Idaho (Tornes, 1997). About 56 percent of the land in the study unit is public, 37 percent is private, and about 7 percent is owned by Tribes.

The NROK study unit includes four ecoregions: Northern Rockies (72 percent); Montana Valley and Foothill Prairies (16 percent); Canadian Rockies (9 percent); and Columbia Plateau (3 percent) (Maret and Dutton, 1999). The Northern and Canadian Rockies ecoregions are characterized by high-altitude mountains primarily covered by coniferous forests. The predominant land uses within these two ecoregions are timber harvesting, mining, and recreation. The Montana Valley and Foothill Prairies and Columbia Plateau ecoregions are characterized by lower-altitude flatlands and rolling rangeland hills primarily covered by grass and, in dryer areas, sagebrush. The predominant land use in these two ecoregions is non-irrigated and irrigated cropland and livestock grazing.

The climate in the NROK study unit is characterized by mild summers and cold winters with most precipitation occurring in the winter and spring months. Precipitation ranges from about 10 in. per year in some intermontane valleys of western Montana to more than 100 in. per year in parts of mountain ranges of northwestern Montana. Most of the valleys receive

between 10 and 30 in. of precipitation per year, much of it as snow (Clark and Kendy, 1991).

Streams in the study unit are predominantly cold water. Snowmelt runoff generally represents the main source of surface water from April to July (Kendy and Tresch, 1996). Upland-forest and lower-altitude streams typically have coarse-grained substrates (gravel and cobble), high gradients, and well-defined riffle-pool habitats for aquatic life, with sparse macrophyte growth. Large rivers and streams at lower altitudes typically have fine-grained substrates and lower gradients.

The study unit has a complex geologic history of sedimentation, compressional deformation, igneous activity, and, most recently, extensional block faulting (Kendy and Tresch, 1996). The principal aquifers within the NROK study unit are composed of Cenozoic basin-fill deposits (Clark and Kendy, 1991). These deposits are present along most reaches of the large rivers and major tributaries within the study unit and are primarily composed of unconsolidated to consolidated gravel, sand, silt, and clay. In most areas, the basin-fill aquifers are underlain and laterally bounded by less-permeable bedrock of Quaternary to Middle Proterozoic age.

Two areas (subunits) were surveyed to assess the general quality of water in basin-fill aquifers of the NROK study unit (fig. 2). The first subunit survey (SUS1) was conducted in northern Idaho and northeastern Washington (fig. 3, table 2); the second subunit survey (SUS2) was conducted in western Montana (fig. 4, table 3). Both subunits contain U.S. Environmental Protection Agency (USEPA) designated sole-source aquifers as defined under section 1424(e) of the Safe Drinking Water Act of 1974 (U.S. Environmental Protection Agency, 2000). The USEPA defines such an aquifer as one that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. People depending on a sole-source aquifer generally do not have a viable alternative drinking-water source.

Part of the SUS1 study area between Post Falls, Idaho, and Spokane, Wash., was selected to better define the surface-water/ground-water interaction of the Spokane River and the adjacent basin-fill aquifer (fig. 5, table 4). Elevated trace-metal concentrations in the Spokane River have caused concerns about potential contamination of water in the sole-source aquifer.

Site-Identification Systems

Surface-water sites are assigned a site number from 1 through 41 (table 1, fig. 1). In addition, most surface-water sites are assigned an eight digit station-identification number that represents the standard USGS numbering system for streamflow-gaging stations. For miscellaneous or temporary surface-water sites, a fifteen digit station-identification number is used; these numbers represent the approximate latitude and longitude of the site (first 13 digits), plus the sequence number (last 2 digits).

Ground-water sites (wells) used in water-quality assessments for the subunit surveys were assigned a well number from 1 through 61 (tables 2 and 3, figs. 3 and 4). Ground-water sites used in the surface-water/ground-water interaction study along the Spokane River were assigned a well number from M1 through M25 (table 4; fig. 5). Fifteen digit site-identification numbers represent the approximate latitude and longitude (referenced to the horizontal coordinate system of North American Datum of 1983) of the well (first 13 digits), plus the sequence number (last 2 digits). However, some well-identification numbers differ from the latitude and longitude where wells were recently field checked with a global positioning system and locations were determined with greater accuracy. Last, ground-water sites were assigned a location number according to their geographic position within the rectangular grid system used for the subdivision of public lands (fig. 6). The location numbering consists of 14 characters. The first three characters specify the township and its position north (N) of the Willamette Base Line in Washington, the Boise Base Line in Idaho, or the Montana Base Line in Montana. The next three characters specify the range and its position west (W) or east (E) of the Willamette Meridian in Washington, the Boise Meridian in Idaho, or the Montana Principal Meridian in Montana. The next two numbers represent the section number. The next four characters sequentially designate the quarter (160-acre tract), quarter-quarter (40-acre tract), quarter-quarter-quarter (10-acre tract), and the quarter-quarter-quarter-quarter section 2 1/2-acre tract). The locations of quarter subdivisions within a section are designated A, B, C, D in a counterclockwise direction, beginning in the northeast quadrant. The final two characters are a sequence number assigned to differentiate multiple wells within a single quarter-quarter-quarter-quarter section. For example, as shown in figure 6,

26N43E06ACBD01 (table 2) was the first well inventoried in the SE1/4NW1/4SW1/4NE1/4 sec. 6, T. 26 N., R. 43 E., in Washington.

Acknowledgments

The authors wish to thank the following people for their efforts collecting and compiling the data included in this report: Fred A. Bailey, Rick L. Backsen, John C. Baker, Dorothy A. Barnett, C. Lee Chambers, Angela K. Frandsen, Keith L. Hein, Doug S. Ott, Karen L. Payne, Gregory J. Perry, Galen J. Schuster, Kenneth D. Skinner, Brett A. Smith, and Tricia R. Wotan. The authors also would like to thank the well owners who provided access to their wells.

METHODS FOR THE COLLECTION OF WATER-QUALITY, STREAMBED-SEDIMENT, AND BIOLOGICAL SAMPLES

Surface Water

Surface-water samples were collected and processed as described in Shelton (1994) and Horowitz and others (1994). Depth-integrated samples were collected at equidistant points along the stream cross section using either hand-held or cable-suspended samplers. Samples were collected in 3-L polyethylene or Teflon bottles and split into subsamples with a Teflon decaport cone splitter. At some surface-water sites, samples were composited and split using a plastic churn splitter. Table 5 summarizes filtration and preservation information for the various type of samples. Specific conductance and pH were measured onsite from an aliquot of the sample. Dissolved oxygen and temperature were measured directly in the stream channel as near to the center of the stream as possible. Prior to each sampling event, the equipment used to collect and process samples was cleaned with a nonphosphate detergent, rinsed with copious amounts of tap and deionized water, soaked for 30 minutes in 5-percent hydrochloric acid, rinsed again with copious amounts of deionized water, and air dried. Between sampling sites the field equipment was cleaned with deionized water, rinsed with 5-percent hydrochloric acid, rinsed again with deionized water, and last, rinsed with native stream water prior to sampling.

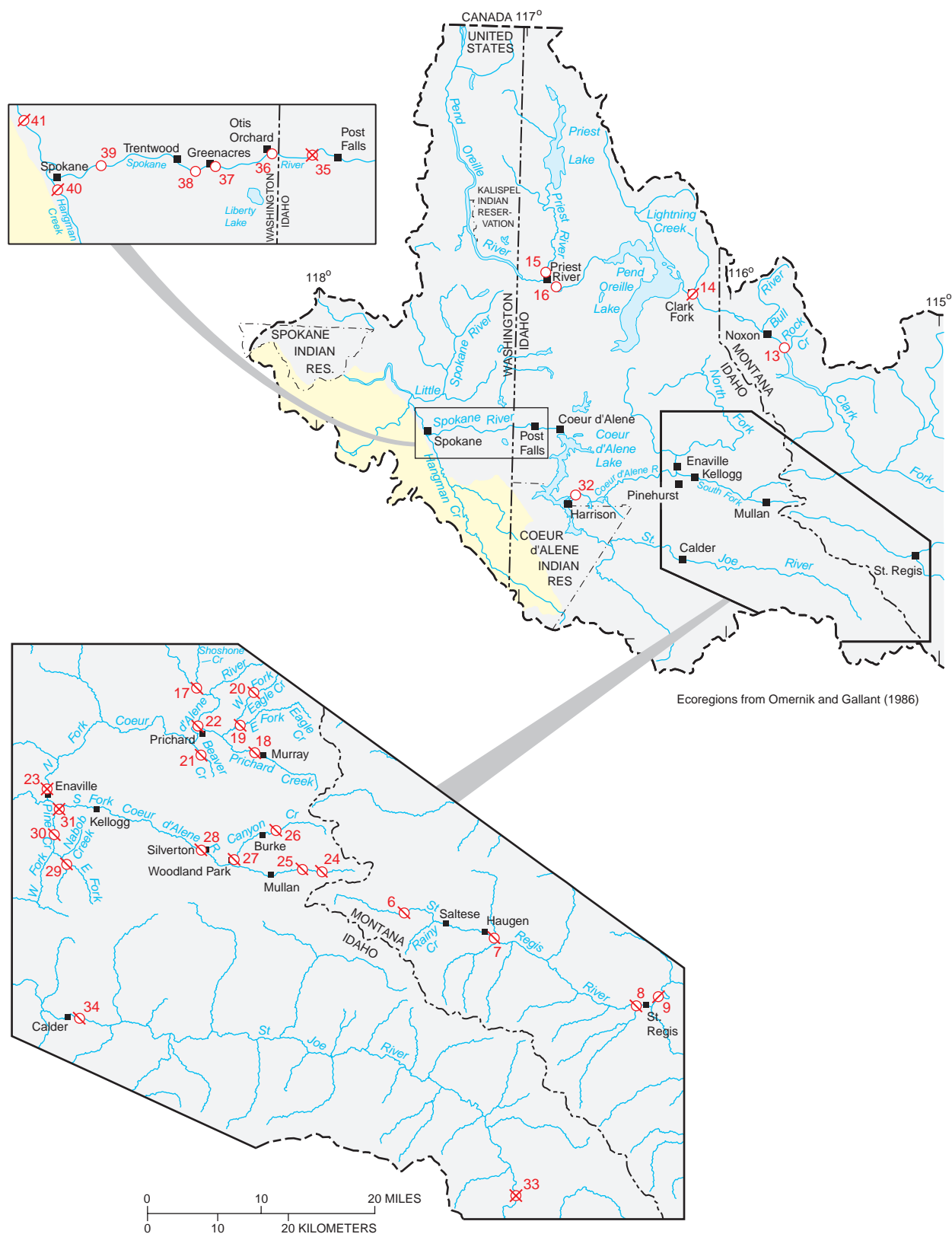
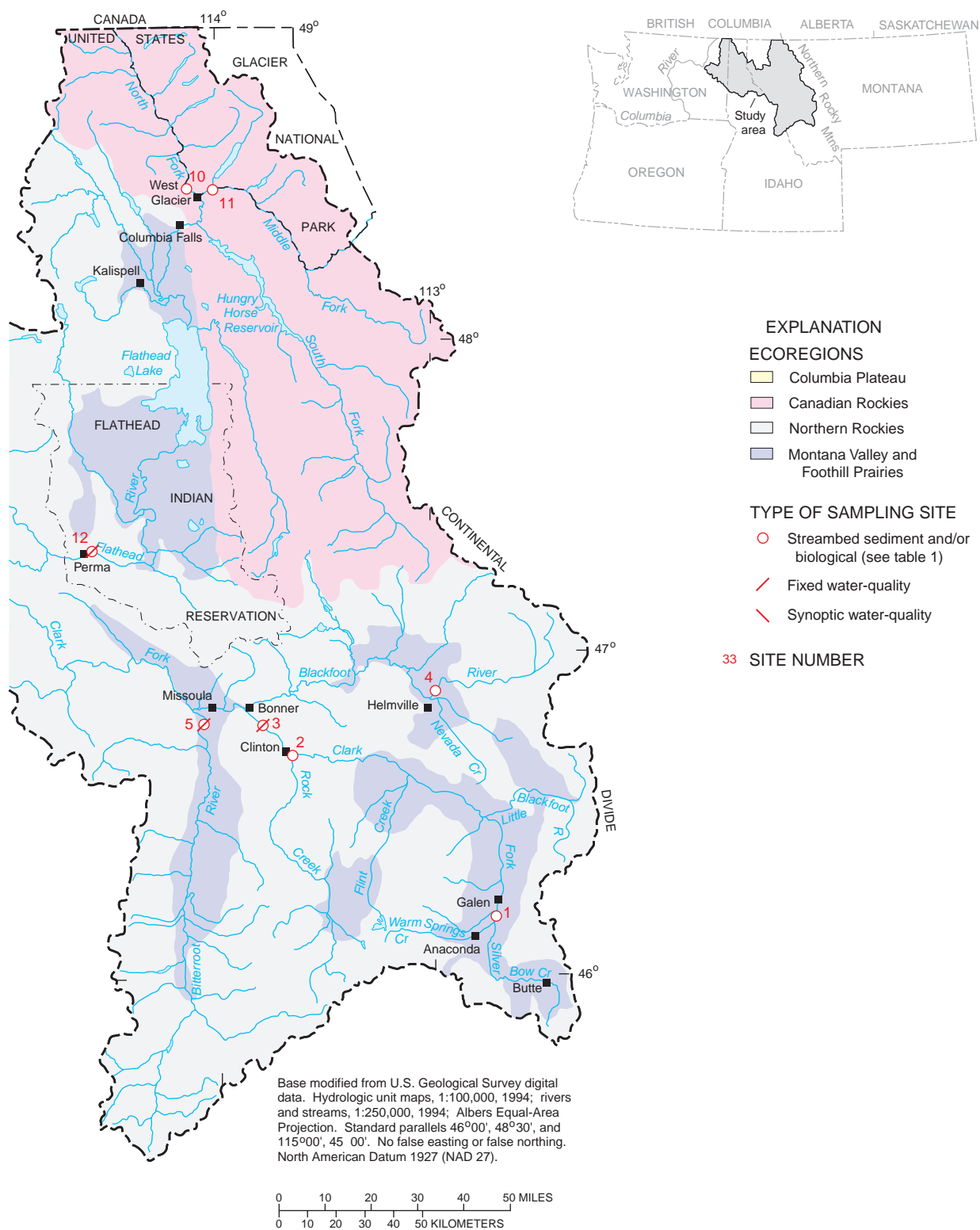


Figure 1. Surface-water-quality, streambed-sediment, and biological sampling sites



in the Northern Rockies Intermontane Basins study unit, Montana, Idaho, and Washington.

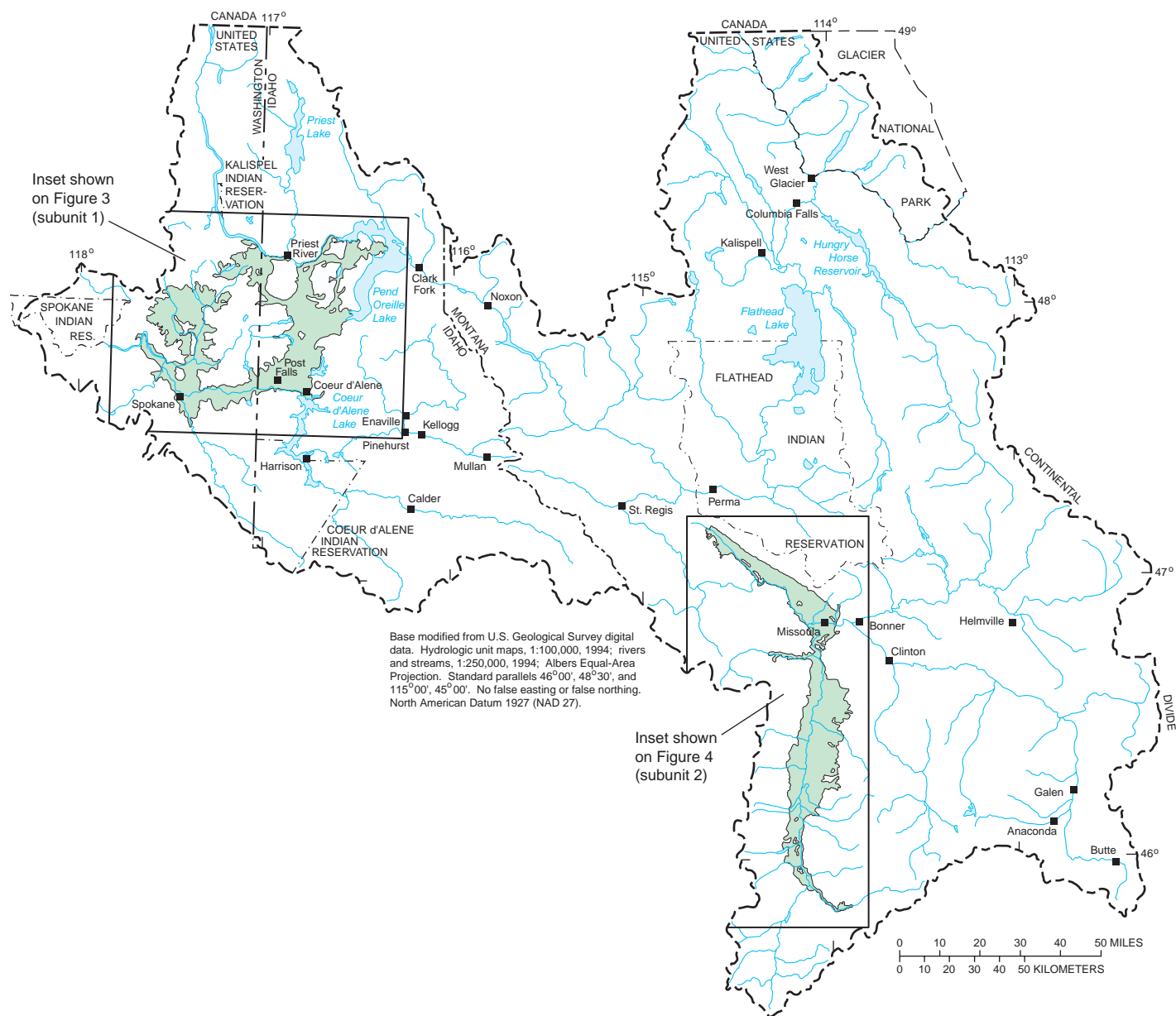


Figure 2. Ground-water study areas within the Northern Rockies Intermontane Basins study unit, Montana, Idaho, and Washington.

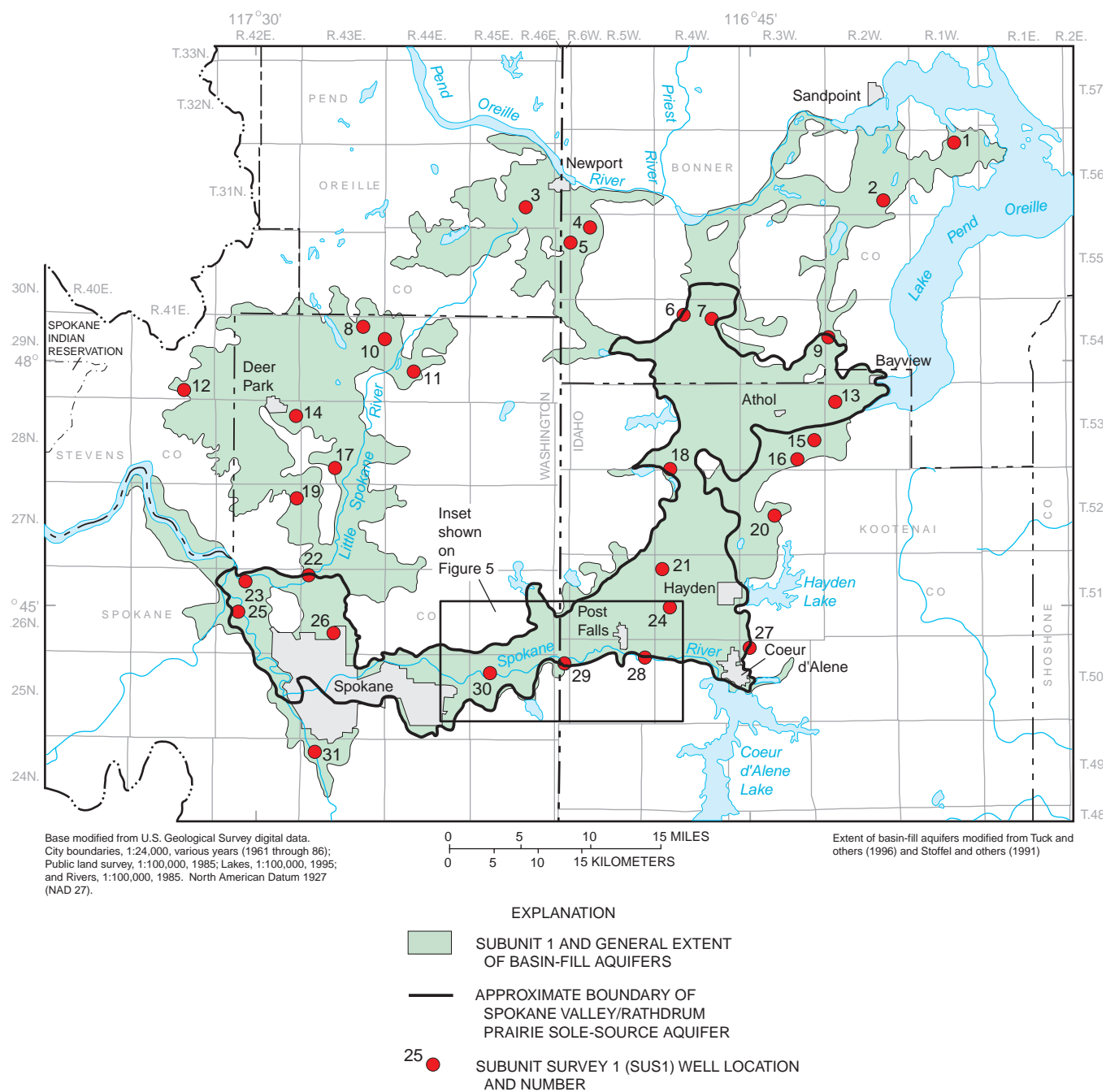


Figure 3. Locations of sampled wells in subunit survey 1, Idaho and Washington.

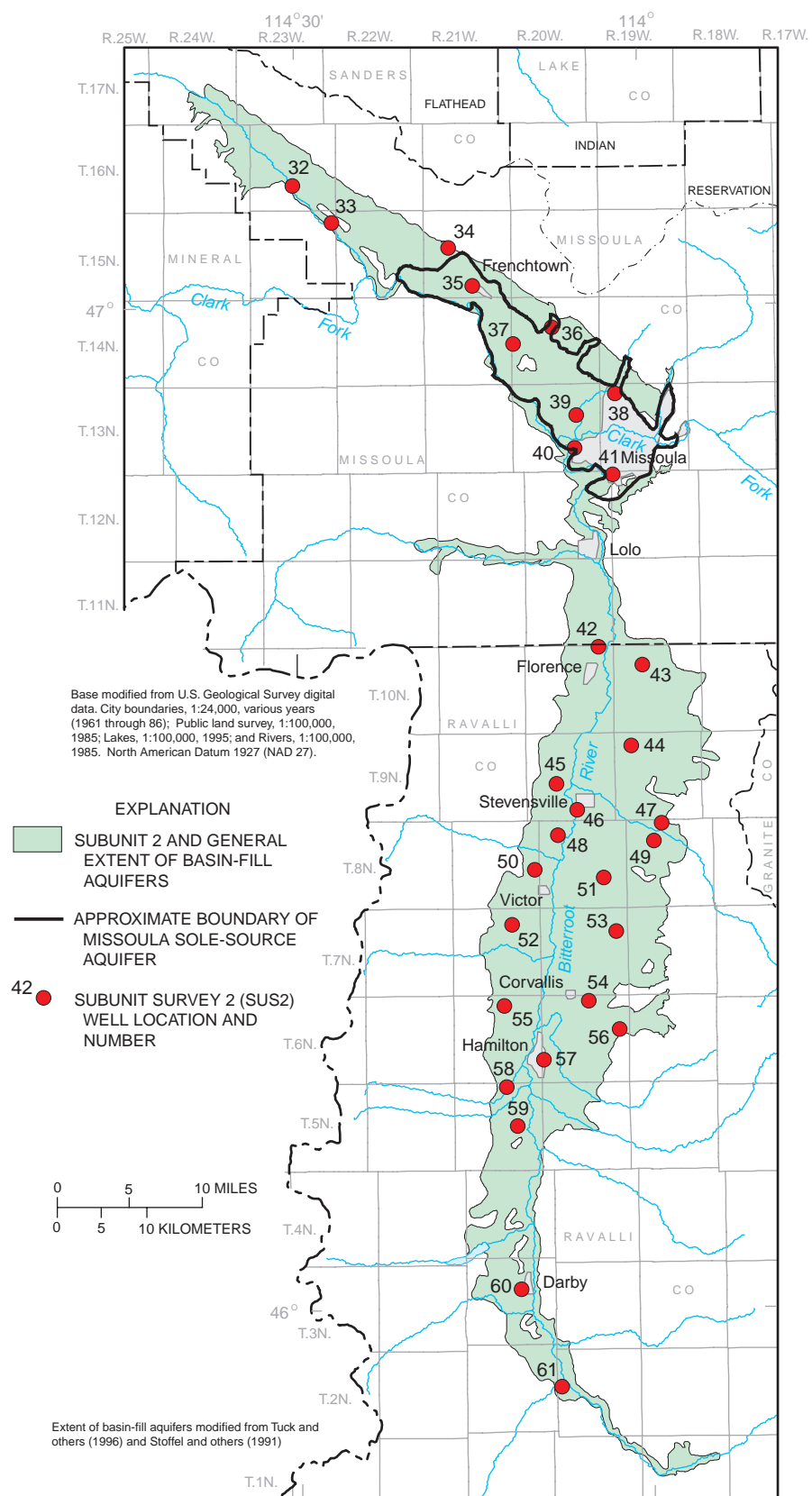


Figure 4. Locations of sampled wells in subunit survey 2, Montana.

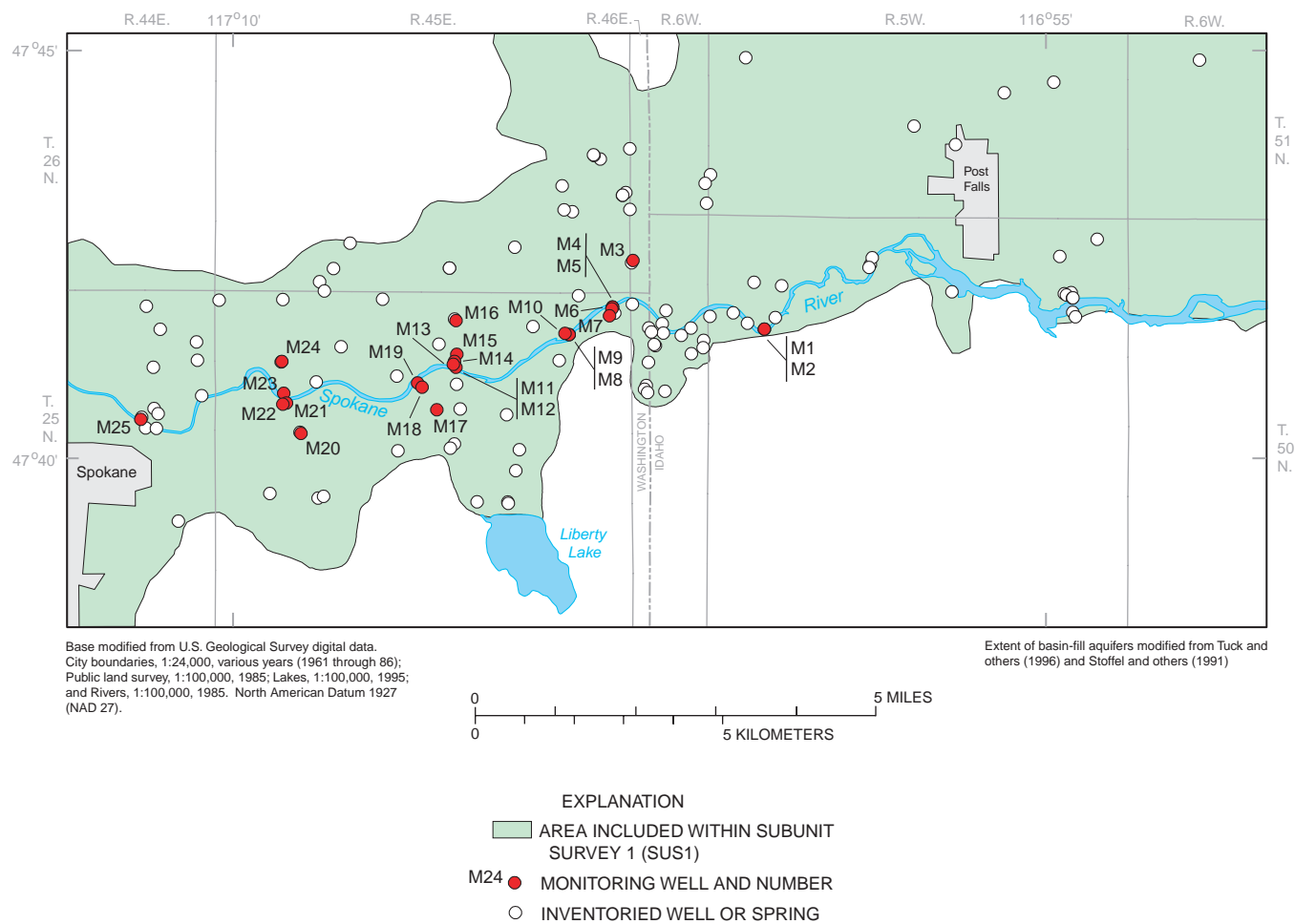


Figure 5. Locations of selected wells in the surface-water/ground-water interaction study area, Idaho and Washington.

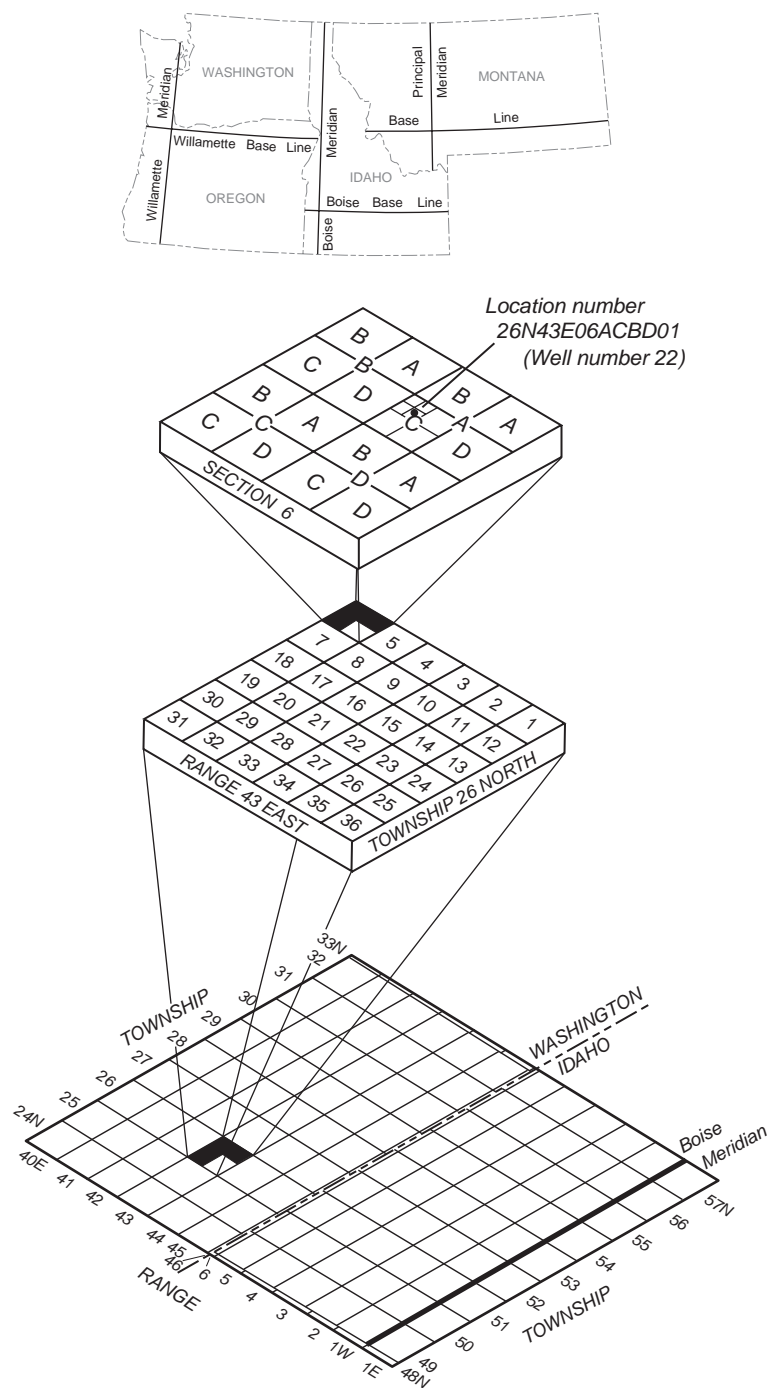


Figure 6. Location-numbering system for wells and springs.

Filtered inorganic samples were passed through a 0.45- μm disposable capsule filter that had been rinsed with 1 L of deionized water and native stream water. Samples for trace metals were preserved with trace-metal-grade nitric acid; samples for mercury were preserved with nitric acid and potassium dichromate. Whole-water (unfiltered) samples for nutrients were preserved with sulfuric acid. Nutrient, organic carbon, and pesticide samples were chilled and shipped on ice overnight to the USGS National Water Quality Laboratory (NWQL) in Denver, Colo.

Teflon sample bottles, nozzles, caps, and cone splitters were used for collecting pesticide samples and were rinsed with methanol in addition to the normal cleaning procedures. Pesticide samples were filtered onsite through a 0.7- μm baked-glass fiber filter using a ceramic piston pump and Teflon tubing. Organic carbon samples were collected using baked-glass bottles and a weighted bottle sampler at a point near the middle of the stream. Samples were filtered through a 0.45- μm silver membrane filter in a stainless-steel chamber pressurized with nitrogen gas.

Stream water was sampled for volatile organic compounds (VOCs) at two sites on the Spokane River using specific protocols detailed in Shelton (1997). The presence of chlorine was suspected at both sites since they were located downstream from municipal-wastewater treatment facilities. Samples were collected at a single point near the middle of the stream using a VOC sampler designed to automatically flush seven volumes of water through 40-mL baked-glass vials before sample collection. Because of the suspected presence of chlorine, VOC samples were preserved with ascorbic acid in addition to nitrogen-purged hydrochloric acid as per standard protocol (Wilde and others, 1999). VOC samples were shipped on ice overnight to NWQL for analysis.

Ground Water

Sixty-one wells sampled as part of the subunit surveys were typically pre-existing, low production water-supply wells, with submersible pumps, steel casing, and open intervals consisting of stainless-steel screens, perforated casing, or open-ended casing (figs. 3 and 4, tables 2 and 3). Samples from each of the subunit survey wells were analyzed for major ions, nutrients, trace elements, radon-222, pesticides, and VOCs. Samples from SUS1 were also analyzed for

radium isotopes, dissolved organic carbon (DOC), and stable isotopes. A subset of samples from each subunit was analyzed for tritium. The subunit survey wells were typically sampled one time for this project.

Twenty-five monitoring wells were sampled as part of the surface-water/ground-water interaction study; eighteen of these wells (wells M1, M2, and M4 through M19) were installed as part of this project between June and September 2000 (fig. 5, table 4). All of the monitoring wells consisted of 2-in. PVC casing, with PVC screen lengths of 5 to 10 ft (wells drilled for this project) or 30 to 40 ft (pre-existing wells) at the bottom of the wells. Wells installed for this project were drilled with an air-rotary drill rig and 6-in. diameter steel casing driven to temporarily keep the hole open; after the 2-in. PVC casing and screen were in place, silica sand was placed from the bottom to about 5 ft above the screen. About 1 ft of bentonite pellets was placed immediately on top of the sand and the remainder of the annulus was filled with bentonite grout. The temporary steel casing was incrementally pulled out as the sand and bentonite material was placed in the annulus between the PVC and steel casing. Samples were collected from the monitoring wells using a 1.75-in. diameter stainless-steel submersible pump with Teflon impellers. Samples were analyzed for major ions and trace elements. Selected samples from the 25 monitoring wells as well as selected existing wells inventoried for this study also were analyzed for stable isotopes. The monitoring wells were sampled over a range of hydrologic conditions between June 2000 and August 2001 to assess effects of variation in streamflow, water-table elevation, and hydraulic gradient.

Sample water was collected using Teflon tubing, stainless-steel connections, and Teflon valves. Flow from the wells was controlled using a two-valve manifold that diverted a continuous stream of sample water to an enclosed collection chamber. All equipment was cleaned immediately after sampling using established NAWQA sampling procedures (Koterba and others, 1995).

Ground-water samples were collected and processed using established NAWQA sampling procedures (Koterba and others, 1995). Prior to sampling at each well, the water level was measured to the nearest 0.01 ft with an electric or steel tape. The casing volume and pumping rate were calculated to estimate a purge time required to evacuate the water from the well. A minimum of three casing volumes

were purged before sample collection in order to remove standing water and ensure that the well was replenished with water representative of the aquifer. Field measurements of specific conductance, pH, temperature, turbidity, and dissolved oxygen were recorded at 3-5 minute intervals during purging. Samples were collected when field measurements had stabilized for three consecutive measurements.

All samples were processed in the field within 1 hour of sample collection. Alkalinity was determined in the field for all ground-water samples using the incremental titration method. Samples for analytically time-dependent constituents (radon, radium, pesticides, nutrients, DOC, and VOC) were shipped overnight on ice to the analyzing laboratories (table 5). Samples for the analysis of trace elements, major ions, nutrients, and radium were filtered onsite with a disposable 0.45- μm pore-size capsule filter. Selected trace-element samples for the surface-water/ground-water interaction study were filtered onsite through a 0.10- μm pore-size capsule filter, filtered onsite through a 0.001- μm pore-size tangential-flow filtration system, or collected as whole-water (unfiltered) samples. Pesticide samples were filtered through a 0.7- μm pore-size glass-fiber plate filter. DOC samples were filtered through a 0.45- μm pore-size silver membrane filter. VOC, radon, and tritium samples were unfiltered. Major-ion (cation species), trace-element, VOC, and radium samples were acidified immediately following collection.

Streambed Sediment

Trace elements and organochlorine compounds in the bottom sediment of stream channels were sampled from sites throughout the study area during low-flow conditions in 1998 and 1999 (fig. 1). Streambed-sediment samples were collected in accordance with USGS NAWQA procedures (Shelton and Capel, 1994). The upper 2 cm of bed sediment was collected from undisturbed, continuously wetted, low-velocity depositional zones by using a plastic scoop. Five to 10 subsamples within a sampling reach were composited and wet sieved onsite (using native water) through a 63- μm (silt and finer) nylon filter. Because trace-element sorption increases with surface area, the smaller size fraction was chosen to maximize the detection of trace elements. Streambed-sediment analyzed for organochlorine compounds was wet

sieved onsite (using native water) through a 2-mm (sand and finer) stainless-steel sieve into pre-cleaned 1-L glass jars. All samples were chilled and shipped on ice to the NWQL for laboratory analysis.

Fish Tissue

Fish were collected using electrofishing techniques from all habitats within a reach (Meador and others, 1993). At most sites, livers and fillet samples were collected for trace-element analysis from different individuals of similar size and of the same species and combined for a single composite sample. At some sites, it was necessary to use the liver and tissue samples from the same fish because of the low populations of adult fish of similar size. Whole-body samples were submitted for organochlorine analysis. Species collected include brook trout (*Salvelinus fontinalis*), brown trout (*Salmo trutta*), cutthroat trout (*Oncorhynchus clarki*), largescale sucker (*Catostomus macrocheilus*), mountain whitefish (*Prosopium williamsoni*), and rainbow trout (*Oncorhynchus mykiss*). All tissue samples were frozen onsite with dry ice and shipped overnight to the NWQL for analysis. Fish-tissue sampling and preparation methods used are detailed in Crawford and Luoma (1993).

Benthic Algae

Epilithic periphyton samples were collected within a riffle and processed using protocols developed by the USGS NAWQA Program to estimate and compare biomass (chlorophyll-a and ash-free dry weight) among sites (Porter and others, 1993). Epilithic periphyton samples were collected from 5 to 10 cobbles per riffle from 5 riffles per reach. A total of 25 to 50 subsamples were composited for a single sample. Periphyton samples were removed from cobbles by using the bottom portion of a 30-mL syringe fitted with a neoprene O-ring to form a watertight seal against a rock surface. Periphyton within the syringe barrel were dislodged with a stiff-bristle brush and collected with a hand pipette. Samples were composited into a sample jar and mixed, and an aliquot of 5 to 10 mL was filtered through a 0.7- μm glass-fiber filter. Filters then were wrapped in aluminum foil, placed in a glass vial, and frozen until they were

processed for chlorophyll-a and ash-free dry weight by the Bureau of Reclamation laboratory in Boise, Idaho.

Quality-Control Samples

Quality-control samples were collected to examine potential contamination and analytical measurement variability and bias in the results of water, streambed-sediment, and biological samples analyses. Quality-control samples collected for this study included replicates, field blanks, source-solution blanks, trip blanks, and surrogate compounds (for pesticide recovery efficiency) in environmental water samples. Quality-control sampling design followed during data collection for this study is presented in Koterba and others (1995) and Mueller and others (1997). The analytical results for quality-control samples are presented along with environmental sample results in tables 6 through 32.

Replicate samples were collected as a subset of all types of samples collected. Replicate samples consist of two or more samples considered to be identical in composition and, therefore, can be used to assess the precision of analytical results. Replicate samples can be obtained by either repeating the collection process to obtain two or more independent samples, or by splitting a single composite sample into two or more subsamples. The individual replicate samples are then processed and analyzed separately. In addition to quality-control samples submitted from the field, internal quality-assurance practices at the NWQL are performed systematically to provide quality control for analytical procedures (Pritt and Raese, 1995).

Blank samples of deionized water were routinely collected to determine if equipment decontamination procedures were adequate, and if sampling or analysis procedures resulted in contamination. Field blanks were processed through the same equipment used for environmental samples and analyzed for concentrations of major ions, trace elements, pesticides, VOCs, and dissolved organic compounds. Source-solution blanks (blank water placed directly in a sample container) were collected for volatile and dissolved organic compounds. Trip blanks were processed for VOCs. Trip blanks are prepared samples that have not been in contact with sampling equipment and that accompany the environmental sample to determine if a sample has been contaminated in shipping, handling, and storage.

A surrogate compound has physical and chemical properties similar to analytes being measured but typically is not present in the environmental sample. A surrogate compound is added to each pesticide sample that is processed at the NWQL as part of their quality-control protocols. The percentage recovery of the surrogate compounds allows a quality check on the amount of recovery relative to the theoretical 100 percent recovery, which can be used to evaluate compound stability and the reliability of environmental concentrations of similarly volatile pesticides.

METHODS OF LABORATORY ANALYSIS

Analytical results presented in this report are listed in reference to reporting levels (RL). The NWQL uses two reporting-level conventions: minimum reporting level (MRL) and laboratory reporting level (LRL). The MRL is defined as the minimum concentration an analyte can be reliably detected using a given analytical method (Timme, 1995). The NWQL collects quality-control data on a continuing basis to evaluate selected analytical methods in order to determine long-term method detection levels (LT-MDLs) and LRLs. These reporting and detection levels are evaluated each year on the basis of the most recent quality-control data, and consequently, might change from year to year. Accordingly, concentrations are reported as <RL for samples in which the constituent was either not detected or did not pass identification standards.

The USGS NWQL has developed a convention for reporting the presence of many constituents at low concentrations. These estimated values (indicated by a remark code “e” in this report) are smaller than a minimum amount reliably reported by a given analytical method (the minimum reporting level), but larger than the method detection limit which was established to keep the possible occurrence of false negative or false positive error to 1 percent or less. The remark code “e” also is used to indicate quantitative uncertainty intermittently introduced by chemical interference or variable recovery efficiency. An estimated value indicates that constituents have been identified in a sample, but the reported concentration has more uncertainty than concentrations that are reported without the “e” remark code (concentrations higher than the minimum reporting level [Childress and others, 1999]). A summary of the laboratory

analytical methods and references to these methods is presented in table 5.

REFERENCES CITED

- American Public Health Association and others, 1998, Standard methods for the examination of water and wastewater (20th ed.): Washington, D.C., American Public Health Association, 1,220 p.
- American Society for Testing and Materials, 2002, Annual book of ASTM standards 2002, volume 11.02: Philadelphia, Pa., p. 178-182.
- Arbogast, B.F., ed., 1996, Analytical methods manual for the Mineral Resource Surveys Program, U.S. Geological Survey: U.S. Geological Survey Open-File Report 96-525, 248 p.
- Beckwith, M.A., 2002, Selected trace-element and synthetic-organic compound data for streambed sediment from the Clark Fork-Pend Oreille and Spokane River basins, Montana, Idaho, and Washington, 1998: U.S. Geological Survey Open-File Report 02-336, 26 p.
- Brenton, R.W., and Arnett, T.L., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of dissolved organic carbon by UV-promoted persulfate oxidation and infrared spectrometry: U.S. Geological Survey Open-File Report 92-480, 12 p.
- Briggs, P.H., and Meier, A.L., 1999, The determination of forty-two elements in geological materials by inductively coupled plasma-mass spectrometry: U.S. Geological Survey Open-File Report 99-166, 15 p.
- Childress, C.J.O., Foreman, W.T., Connor, B.F., Maloney, T.J., 1999, New reporting procedures based on long-term method detection levels and some considerations for interpretations of water-quality data provided by the U.S. Geological Survey National Water Quality Laboratory: U.S. Geological Survey Open-File Report 99-193, 19 p.
- Clark, D.W., and Kendy, Eloise, 1991, Regional analysis of the Northern Rocky Mountains Intermontane Basins, Montana and Idaho, in Prince, K.R., and Johnson, A.I., eds., Regional aquifer systems of the United States; aquifers of the Far West: American Water Resources Association Monograph Series 16, p. 55-64.
- Connor, B.F., Rose, D.L., Noriega, M.C., Murtagh, L.K., and Abney, S.R., 1998, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of 86 volatile organic compounds in water by gas chromatography/mass spectrometry, including detections less than the reporting limits: U.S. Geological Survey Open-File Report 97-829, 78 p.
- Coplen, T.B., Wildman, J.D., and Chen, J., 1991, Improvements in gaseous hydrogen-water equilibration technique for hydrogen isotope ratio analysis: Analytical Chemistry, v. 63, p. 910-912.
- Crawford, J.K., and Luoma, S.N., 1993, Guidelines for studies of contaminants in biological tissues for the National Water-Quality Assessment Program: U.S. Geological Survey Open-File Report 92-494, 69 p.
- Epstein, S., and Mayeda, T., 1953, Variation of the O-18 content of water from natural sources: Geochimica et Cosmochimica Acta, v. 4, p. 213-224.
- Faries, L.M., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of metals in water by inductively coupled plasma-mass spectrometry: U.S. Geological Survey Open-File Report 93-634, 28 p.
- Fishman, M.J., ed., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of inorganic and organic constituents in water and fluvial sediments: U.S. Geological Survey Open-File Report 93-125, 217 p.
- Fishman, M.J., and Friedman, L.C., eds., 1989, Methods for determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, book 5, chap. A1, 545 p.
- Foreman, W.T., Connor, B.F., Furlong, E.T., Vaught, D.G., and Merten, L.M., 1995, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of organochlorine pesticides and polychlorinated biphenyls in bottom sediment by dual capillary-column gas chromatography with electron-capture detection: U.S. Geological Survey Open-File Report 95-140, 78 p.
- Furlong, E.T., Vaught, D.G., Merten, L.M., Foreman, W.T., and Gates, P.M., 1996, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of semivolatile organic compounds in bottom sediment by solvent extraction, gel permeation chromatographic fractionation, and capillary-column gas chromatography/mass spectrometry: U.S. Geological Survey Open-File Report 95-719, 67 p.
- Furlong, E.T., Anderson, B.D., Werner, S.L., Soliven, P.P., Coffey, L.J., Burkhardt, M.R., 2001, Methods of analysis by the U. S. Geological Survey National Water Quality Laboratory—Determination of pesticides in water by graphitized carbon-based solid-phase extraction and high-performance liquid chromatography/mass spectrometry: U.S. Geological Survey Water-Resources Investigations Report 01-4134, 73 p.

- Garbarino, J.R., 1999, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of dissolved arsenic, boron, lithium, selenium, strontium, thallium, and vanadium using inductively coupled plasma-mass spectrometry: U.S. Geological Survey Open-File Report 99-093, 31 p.
- Garbarino, J.R., and Struzeski, T.M., 1998, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of elements in whole-water digests using inductively coupled plasma-optical emission spectrometry and inductively coupled plasma-mass spectrometry: U.S. Geological Survey Open-File Report 98-165, 101 p.
- Gerstel, W.J., and Palmer, S.P., 1994, Geologic and geophysical mapping of the Spokane Aquifer—Relevance to growth management: *Washington Geology*, v. 22, p. 18-24.
- Gurtz, M.E., 1994, Design of biological components of the National Water-Quality Assessment (NAWQA) Program, *in* Loeb, S.L., and Spacie, Anne, eds., *Biological monitoring of aquatic systems*: Boca Raton, Fla., Lewis Publishers, p. 323-354.
- Hirsch, R.M., Alley, W.M., and Wilber, W.G., 1988, Concepts for a National Water-Quality Assessment Program: U.S. Geological Survey Circular 1021, 42 p.
- Hoffman, G.L., 1996, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Preparation procedure for aquatic biological material determined for trace metals: U.S. Geological Survey Open-File Report 96-362, 42 p.
- Hoffman, G.L., Fishman, M.J., and Garbarino, J.R., 1996, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—In-bottle acid digestion of whole-water samples: U.S. Geological Survey Open-File Report 96-225, 28 p.
- Horowitz, A.J., Demas, C.R., Fitzgerald, K.K., Miller, T.L., and Rickert, D.A., 1994, U.S. Geological Survey protocol for the collection and processing of surface-water samples for the subsequent determination of inorganic constituents in filtered water: U.S. Geological Survey Open-File Report 94-539, 57 p.
- Jones, S.R., and Garbarino, J.R., 1999, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of arsenic and selenium in water and sediment by graphite furnace-atomic absorption spectrometry: U.S. Geological Survey Open-File Report 98-639, 39 p.
- Jones, S.R., and McLain, B.J., 1997, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of molybdenum in water by graphite furnace atomic absorption spectrophotometry: U.S. Geological Survey Open-File Report 97-198, 32 p.
- Kendy, Eloise, and Tresch, R.E., 1996, Geographic, geologic, and hydrologic summaries of intermontane basins of the Northern Rocky Mountains, Montana: U.S. Geological Survey Water-Resources Investigations Report 96-4025, 233 p.
- Koterba, M.T., Wilde, F.D., and Lapham, W.W., 1995, Ground-water data collection protocols and procedures for the National Water-Quality Assessment Program—Collection and documentation of water-quality samples and related data: U.S. Geological Survey Open-File Report 95-399, 113 p.
- Leahy, P.P., Rosenshein, J.S., and Knopman, D.S., 1990, Implementation plan for the National Water-Quality Assessment Program: U.S. Geological Survey Open-File Report 90-174, 10 p.
- Leiker, T.J., Madsen, J.E., Deacon, J.R., and Foreman, W.T., 1995, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of chlorinated pesticides in aquatic tissue by capillary-column gas chromatography with electron-capture detection: U.S. Geological Survey Open-File Report 94-710, 42 p.
- Maret, T.R., and Dutton, D.M., 1999, Summary of information on synthetic organic compounds and trace elements in tissue of aquatic biota, Clark Fork-Pend Oreille and Spokane River basins, Montana, Idaho, and Washington, 1974-96: U.S. Geological Survey Water-Resources Investigations Report 98-4254, 55 p.
- Marti, P.B., and Garriques, R.S., 2001, Spokane River/aquifer interaction project results, May-November 1999: Washington State Department of Ecology publication 01-03-024, 40 p.
- McLain, B.J., 1993, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of chromium in water by graphite furnace atomic absorption spectrophotometry: U.S. Geological Survey Open-File Report 93-449, 16 p.
- Meador, M.R., Cuffney, T.F., and Gurtz, M.E., 1993, Methods for sampling fish communities as part of the National Water-Quality Assessment Program: U.S. Geological Survey Open-File Report 93-104, 40 p.
- Mueller, D.K., Martin, J.D., and Lopes, T.J., 1997, Quality-control design for surface-water sampling in the National Water-Quality Assessment Program: U.S. Geological Survey Open-File Report 97-223, 17 p.
- Omernik, J.M., and Gallant, A.L., 1986, Ecoregions of the Pacific Northwest: Corvallis, Ore., Corvallis Environmental Research Laboratory, U.S. Environmental Protection Agency, EPA 600/3-86/033, 39 p.

- Ostlund, H.G., and Dorsey, H.G., 1975, Rapid electrolytic enrichment of hydrogen gas proportional counting of tritium: International Conference on Low Radioactivity Measurement and Applications, High Tatras, Czechoslovakia, October 1975 [Proceedings], 6 p.
- Patton, C.J., and Truitt, E.P., 1992, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of total phosphorus by a Kjeldahl digestion method and an automated colorimetric finish that includes dialysis: U.S. Geological Survey Open File Report 92-146, 39 p.
- Patton, C.J., and Truitt, E.P., 2000, Methods of analysis by the U.S. Geological Survey National Water-Quality Laboratory—Determination of ammonium plus organic nitrogen by a Kjeldahl digestion method and an automated photometric finish that includes digest cleanup by gas diffusion: U.S. Geological Survey Open-File Report 00-170, 31 p.
- Porter, S.D., Cuffney, T.F., Gurtz, M.E., and Meador, M.R., 1993, Methods for collecting algal samples as part of the National Water-Quality Assessment Program: U.S. Geological Survey Open-File Report 93-409, 39 p.
- Pritt, J.W., and Raese, J.W., 1995, Quality assurance/quality control manual—National Water Quality Laboratory: U.S. Geological Survey Open-File Report 95-443, 35 p.
- Rose, D.J., and Schroeder, M.P., 1995, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of volatile organic compounds in water by purge and trap capillary gas chromatography/mass spectrometry: U.S. Geological Survey Open-File Report 94-708, 26 p.
- Shelton, L.R., 1994, Field guide for collecting and processing stream-water samples for the National Water-Quality Assessment Program: U.S. Geological Survey Open-File Report 94-455, 42 p.
- Shelton, L.R., 1997, Field guide for collecting samples for analysis of volatile organic compounds in stream water for the National Water-Quality Assessment Program: U.S. Geological Survey Open-File Report 97-401, 14 p.
- Shelton, L.R., and Capel, P.D., 1994, Guidelines for collecting and processing samples of streambed sediment for the analysis of trace elements and organic contaminants for the National Water-Quality Assessment Program: U.S. Geological Survey Open-File Report 94-458, 20 p.
- Stoffel, K.L., Joseph, N.L., Waggoner, S.Z., Gulick, C.W., Korosec, M.A., and Bunning, B.B., 1991, Geologic map of Washington-northeast quadrant: Washington Division of Geology and Earth Resources Geologic Map GM-39, sheet 1, scale 1:250,000.
- Thatcher, L.L., Janzer, V.J., and Edwards, K.W., 1977, Methods for determination of radioactive substances in water and fluvial substances: U.S. Geological Survey Techniques of Water-Resources Investigations, book 5, chap. A5, 95 p.
- Timme, P.J., 1995, National Water Quality Laboratory 1995 services catalog: U.S. Geological Survey Open-File Report 95-352, 120 p.
- Tornes, L.H., 1997, National Water-Quality Assessment Program, Northern Rockies Intermontane Basins: U.S. Geological Survey Fact Sheet 158-97, 4 p.
- Tuck, L.K., Briar, D.W., and Clark, D.W., 1996, Geologic history and hydrogeologic units of intermontane basins of the northern Rocky Mountains, Montana and Idaho: U.S. Geological Survey Hydrologic Investigations Atlas HA-738-A, 2 sheets, scale 1:750,000.
- U.S. Environmental Protection Agency, 1980a, Prescribed procedures for measurement of radioactivity in drinking water—Section 7 Radium-226 in drinking water radon emanation technique, method 903.1: EPA-600/4-80-032, pages 38-48.
- U.S. Environmental Protection Agency, 1980b, Prescribed procedures for measurement of radioactivity in drinking water—Section 8 radium-228 in drinking water radon emanation technique, method 904.0: EPA-600/4-80-032, pages 49-57.
- U.S. Environmental Protection Agency, 1993, Methods for the determination of inorganic substances in environmental samples: Cincinnati, Ohio, Environmental Monitoring and Support Laboratory, EPA/600/R-93/100, 79 p.
- U.S. Environmental Protection Agency, 1997, Guidelines establishing test procedures for the analysis of pollutants (Appendix B, Part 136, Definitions and procedures for the determination of the method detection limit): U.S. Code of Federal Regulations, Title 40, revised July 1, 1997, p. 265-267.
- U.S. Environmental Protection Agency, 2000, An overview of the Sole Source Aquifer Protection program in EPA Region 10, accessed February 14, 2001 at <http://yosemite.epa.gov/r10/WATER.NSF/>
- Wilde, F.D., Radtke, D.B., Gibb, Jacob, and Iwatsubo, R.T., 1999, Processing of water samples in National field manual for the collection of water-quality data: U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chap. A5 [variously paged].
- Zaugg, S.D., Sandstrom, M.W., Smith, S.G., and Fehlberg, K.M., 1995, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of pesticides in water by C-18 solid-phase extraction and capillary-column gas chromatography/mass spectrometry with selected-ion monitoring: U.S. Geological Survey Open-File Report 95-181, 60 p.

DATA

Table 5. Summary of analytical method references, analyzing laboratories, and field processing of samples for chemical constituents in water, streambed sediment, fish tissue, and benthic algae, Northern Rockies Intermontane Basins study unit

[U.S. Geological Survey analytical schedule numbers are used for a suite of constituents, whereas laboratory codes (labcode) are used for individual constituents. Laboratory: BR, Bureau of Reclamation Laboratory, Boise, Idaho; Duke, Duke Engineering and Services, Westborough, Mass.; IL, U.S. Geological Survey Isotope Laboratory, Reston, Va.; ITL, U.S. Geological Survey Isotope Tracers Laboratory, Menlo Park, Calif.; NWQL, U.S. Geological Survey National Water Quality Laboratory, Denver, Colo; Quanterra, Quanterra, Inc., Richland, Wash. Abbreviations: C-18, carbon-18; DOC, dissolved organic carbon; HCl, hydrochloric acid; μm , micrometers; mm, millimeter; HNO_3 , nitric acid; N_2 , nitrogen gas; USEPA, U.S. Environmental Protection Agency; USGS, U.S. Geological Survey; UV, ultraviolet; VOC, volatile organic compounds]

Constituent or constituent group	Analysis Method	Reference	Laboratory	Filtration or sieve size	Preservation
Water					
Major ions (USGS schedule 2750, 2701, 1256)	Atomic absorption spectrometry	Fishman and Friedman (1989); Fishman (1993)	NWQL	0.45- μm capsule	HNO_3
Nutrients (USGS schedule 2752, 1119, 1257)	Various methods	Patton and Truitt (1992, 2000); USEPA (1993)	NWQL	0.45- μm capsule	chilled ¹
DOC (USGS schedule 2085)	UV-promoted persulfate oxidation and infrared spectrometry	Brenton and Arnett (1993)	NWQL	0.45- μm silver	chilled
Trace elements (USGS schedule 2703, 2705, 2710, 1664)	Various methods	Fishman and Friedman (1989); Faries (1993); Fishman (1993); McLain (1993); Hoffman and others (1996); Jones and McLain (1997); Garbarino and Struzeski (1998); Garbarino (1999); Jones and Garbarino (1999)	NWQL	0.45- μm capsule 0.10- μm capsule 0.001- μm tangential	HNO_3
Pesticides (USGS schedule 2001)	Solid-phase extraction technology using C-18 cartridge and gas chromatography/mass spectrometry	Zaugg and others (1995)	NWQL	0.7- μm glass fiber	chilled
Pesticides (USGS schedule 2060)	Graphitized carbon-based solid-phase extraction and high-performance liquid chromatography/mass spectrometry	Furlong and others (2001)	NWQL	0.7- μm glass fiber	chilled
VOC (USGS schedule 2020)	Purge and trap capillary gas chromatography/mass spectrometry	Rose and Schroeder (1995); Conner and others (1998)	NWQL	none	HCl, chilled
Radium-224 (USGS schedule 1263)	Alpha spectrometry	American Society for Testing and Materials (2002)	Duke	0.45- μm	HNO_3
Radium-226 (USGS schedule 1263)	Radon emanation method	USEPA (1980a)	Quanterra	0.45- μm	HNO_3
Radium-228 (USGS schedule 1263)	Gas proportional counting	USEP (1980b)	Quanterra	0.45- μm	HNO_3
Gross alpha and beta radioactivity (USGS schedule 1263)	Residue procedure	Thatcher and others (1977)	NWQL	0.45- μm	HNO_3
Radon (USGS labcode 1369)	Liquid scintillation	Thatcher and others (1977)	NWQL	none	none
Oxygen-18/Oxygen-16	CO_2 equilibrium technique	Epstein and Mayeda (1953)	IL	none	none
Hydrogen-2/hydrogen-1	Hydrogen equilibrium technique	Coplen and others (1991)	IL	none	none
Tritium (USGS labcode 1565)	Electrolytic enrichment with gas counting	Ostlund and Dorsey (1975)	ITL	none	none
Streambed Sediment					
Trace elements (USGS schedule 2420)	Various methods	Arbogast (1996) Briggs and Meier (1999)	NWQL	<63- μm	none
Organic compounds (USGS schedule 2500)	Various methods	Forman and others (1995) Furlong and others (1996)	NWQL	<2-mm	chilled
Fish Tissue					
Trace elements (USGS schedule 2200)	Various methods	Hoffman (1996)	NWQL	none	freeze
Organic compounds (USGS schedule 2101)	Capillary-column gas chromatography with electron-capture detection	Leiker and others (1995)	NWQL	none	freeze
Benthic algae (periphyton)					
Chlorophyll periphyton (Method 10200h)	Spectrophotometry	American Public Health Association and others (1998)	BR	0.7- μm glass fiber	freeze

¹Unfiltered nutrient samples were preserved with H_2SO_4 (sulfuric acid).

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001

[See figure 1 for site locations. Abbreviations: ft³/s, cubic feet per second; °C, degrees Celsius; e, estimated; Fb, field blank; µS/cm, microsiemens per centimeter at 25 °C; mg/L, milligrams per liter; mm, millimeters; R, replicate. Symbols: <, less than reporting level; --, no data]

Date	Time	Dis-charge, instantaneous (ft ³ /s)	Sedi-ment, sus-pended (mg/L)	Sedi-ment, sus-pended (percent finer than 0.062 mm)	Specific conduct-ance, field (µS/cm)	pH, field (standard units)	Tem-perature, water (°C)	Hard-ness (mg/L as CaCO ₃)	Calci-um, total (mg/L)	Calci-um, dis-solved (mg/L)	Mag-nesi-um, total (mg/L)	Mag-nesium, dis-solved (mg/L)	Sodium adsorp-tion ratio	So-dium, total (mg/L)
SITE 3 12334550--CLARK FORK AT TURAH BRIDGE, NEAR BONNER, MONT.														
11/05/98	1000	988	4	--	371	8.5	4.5	172	51	49	13	12	0.3	10
11/05/98 ^{Fb}	1005	--	--	--	--	--	--	--	--	.003	--	<.001	--	--
12/15/98	1145	975	7	--	376	7.5	1.5	177	--	50	--	13	.3	--
01/27/99	1245	831	8	--	413	7.8	0.0	185	--	52	--	14	.3	--
03/25/99	1215	1,740	41	83	292	8.1	7.0	128	--	36	--	9.4	.3	--
04/26/99	1115	1,800	21	80	248	8.4	11.0	117	32	32	8.4	8.8	.3	6.0
05/12/99	0915	1,780	17	81	259	8.0	9.0	117	--	33	--	8.7	.3	--
05/25/99	1145	3,440	131	69	153	7.7	13.5	64	20	18	5.6	4.8	.2	4.0
06/07/99	1230	5,280	64	74	157	7.7	9.0	74	20	21	5.2	5.2	.2	4.2
06/19/99	1130	4,120	39	61	175	7.8	14.0	77	21	22	5.5	5.5	.2	4.2
07/21/99	1015	1,060	4	48	305	7.9	15.0	133	37	37	9.8	9.9	.3	7.2
08/19/99	1000	750	9	90	352	7.8	17.0	160	45	44	12	12	.3	9.7
10/20/99	1030	841	9	91	375	7.5	5.5	183	51	52	13	13	.3	9.8
12/03/99 ^{Fb}	1030	--	--	--	--	--	--	--	--	.007	--	<.001	--	--
12/03/99	1100	852	6	95	377	7.9	2.5	181	52	51	13	13	.3	10
01/26/00	0945	770	--	--	390	8.0	2.0	179	52	50	14	13	.3	11
03/08/00	1045	929	14	82	355	8.2	5.0	170	49	47	12	12	.3	9.4
03/08/00 ^R	1046	929	13	85	356	8.2	4.5	161	48	45	12	12	.3	9.4
04/12/00	0900	952	16	83	330	8.1	9.0	149	42	42	11	11	.3	8.0
05/25/00	0830	1,230	13	63	198	8.0	11.0	93	24	26	6.5	7.0	.2	4.4
06/21/00	1015	884	6	74	275	8.4	13.0	121	34	33	9.5	9.2	.3	6.4
07/31/00	1045	287	7	67	301	8.4	19.0	146	36	39	11	12	.3	6.6
08/29/00	1100	287	4	77	344	8.3	13.0	160	43	43	13	12	.3	7.8
11/07/00 ^{Fb}	1300	--	--	--	--	--	--	--	--	.006	--	<.001	--	--
11/07/00	1400	820	5	83	391	8.5	4.0	179	--	52	--	12	.4	--
12/20/00	1545	622	4	78	411	8.3	.5	192	--	54	--	14	.3	--
01/30/01	1100	487	3	88	411	8.5	.5	190	--	54	--	14	.3	--
03/12/01 ^{Fb}	1040	--	--	--	--	--	--	--	--	<.002	--	<.001	--	--
03/12/01	1100	830	17	91	410	8.3	3.0	187	--	53	--	13	.3	--
04/10/01	1030	874	9	80	404	8.3	4.5	187	--	53	--	13	.3	--
05/22/01	1100	2,040	13	76	214	8.3	11.0	95	--	27	--	6.9	.2	--
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.														
03/04/99	1630	1,150	6	92	133	8.1	4.0	57	--	16	--	3.9	.3	--
03/24/99	0930	2,150	31	71	96	7.8	8.5	40	11	11	2.8	2.8	.2	3.5
04/15/99	1300	1,530	8	85	102	7.8	7.0	44	--	12	--	3.1	.3	--
05/13/99	0945	2,270	8	68	90	7.6	9.0	36	11	10	2.6	2.4	.2	3.3
05/25/99	0915	10,600	159	59	39	7.4	11.0	15	--	4.3	--	.96	.2	--
06/07/99	1615	12,000	34	73	50	7.3	9.5	22	6.1	6.4	1.5	1.4	.2	2.0
06/19/99	1445	13,700	48	64	39	7.1	13.0	16	4.8	4.7	1.2	1.0	.2	1.6
07/21/99	1530	2,010	2	74	89	8.1	18.0	37	11	11	2.5	2.5	.2	3.2
08/19/99	1500	1,180	3	86	138	7.8	20.5	57	17	17	3.8	3.8	.3	5.0
10/20/99	1430	760	2	75	158	8.6	9.0	70	20	20	4.7	4.7	.3	6.0
12/02/99	1600	980	3	80	127	7.9	4.0	57	--	17	--	3.8	.3	--

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Sodium, dissolved (mg/L)	Potas- sium, total (mg/L)	Potas- sium, dissolved (mg/L)	Alka- linity, field (mg/L as CaCO ₃)	Bicar- bonate, dissolved (mg/L as HCO ₃)	Carbo- nate, dissolved (mg/L as CO ₃)	Sulfate, dissolved (mg/L as SO ₄)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L as SiO ₂)	Dissolved solids, sum of constit- uents (mg/L)	Dissolved solids, residue at 180 °C (mg/L)
SITE 3 12334550--CLARK FORK AT TURAH BRIDGE, NEAR BONNER, MONT.												
11/05/98	9.8	2.6	2.7	142	173	0	54	4.0	0.43	15	232	247
11/05/98 ^{Fb}	<.02	--	--	--	--	--	--	--	--	<.02	--	--
12/15/98	9.3	--	2.6	131	160	0	54	4.0	.40	16	228	242
01/27/99	11	--	2.7	142	173	0	64	4.5	.45	17	251	269
03/25/99	8.0	--	2.7	102	124	0	38	4.6	.24	15	174	193
04/26/99	6.7	1.9	1.9	85	104	0	33	3.4	.22	14	151	166
05/12/99	6.7	--	1.8	86	105	0	35	3.2	.25	14	154	169
05/25/99	3.9	1.7	1.6	46	56	0	18	2.0	.15	12	88	109
06/07/99	4.3	1.5	1.4	56	69	0	17	1.4	.14	13	98	156
06/19/99	4.2	1.5	1.5	63	77	0	17	1.9	.16	12	102	113
07/21/99	7.2	2.3	2.3	104	129	0	36	3.2	.25	15	174	190
08/19/99	9.6	2.8	2.9	130	159	0	47	3.6	.29	16	214	225
10/20/99	9.9	2.8	2.7	138	168	0	57	4.2	.37	18	239	247
12/03/99 ^{Fb}	<.02	--	--	--	--	--	--	--	--	.02	--	--
12/03/99	10	2.6	2.5	130	159	0	60	7.1	.38	16	240	244
01/26/00	10	2.7	2.3	148	180	0	62	4.4	.41	16	247	249
03/08/00	9.7	2.8	2.6	133	162	0	54	3.6	.35	14	224	227
03/08/00 ^R	9.0	2.8	2.5	128	156	0	54	3.7	.38	14	217	239
04/12/00	8.2	2.0	2.3	117	142	0	47	3.2	.37	13	197	210
05/25/00	4.4	1.5	1.5	74	90	0	22	1.8	.19	11	119	123
06/21/00	6.9	2.1	2.1	102	124	0	33	2.9	.30	10	160	177
07/31/00	7.0	2.1	2.2	110	134	0	43	3.4	.31	13	186	195
08/29/00	8.1	2.5	2.4	123	150	0	51	3.3	.32	13	208	216
11/07/00 ^{Fb}	<.02	--	--	--	--	--	--	--	--	<.02	--	--
11/07/00	11	--	2.8	136	162	2	61	5.1	.37	16	241	255
12/20/00	10	--	2.7	142	174	0	67	5.8	.41	16	257	267
01/30/01	10	--	2.6	141	172	0	68	4.9	.40	15	252	283
03/12/01 ^{Fb}	<.02	--	--	--	--	--	--	--	--	<.02	--	--
03/12/01	10	--	3.4	129	157	0	66	5.1	.38	15	244	263
04/10/01	10	--	2.7	132	161	0	64	5.2	.39	14	242	264
05/22/01	4.5	--	1.6	75	91	0	26	2.1	.22	13	126	144
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.												
03/04/99	5.2	--	1.4	61	74	0	3.2	2.4	.13	13	82	92
03/24/99	3.6	1.2	1.1	37	45	0	2.4	1.1	.14	13	57	77
04/15/99	4.1	--	1.0	46	56	0	2.6	2.0	.12	12	65	69
05/13/99	3.3	1.1	1.1	40	49	0	2.2	1.4	.12	11	56	62
05/25/99	1.6	--	.89	14	17	0	1.3	1.3	<.10	8.0	27	39
06/07/99	2.0	.9	.78	21	26	0	1.5	1.2	<.10	9.5	36	52
06/19/99	1.5	.8	.69	16	20	0	.99	.4	<.10	7.3	26	35
07/21/99	3.2	1.2	1.2	40	49	0	2.1	1.2	<.10	10	55	69
08/19/99	5.0	1.7	1.7	65	80	0	2.8	1.4	.12	14	85	88
10/20/99	6.2	2.0	2.0	78	93	0	3.6	2.0	.16	14	99	101
12/02/99	5.1	--	1.5	60	74	0	3.0	1.8	.13	13	82	84

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Dis-charge, instan- taneous (ft ³ /s)	Sedi- ment, sus- pended (mg/L)	Sedi- ment, sus- pended (percent finer than 0.062 mm)	Specific conduct- ance, field (μS/cm)	pH, field (stan- dard units)	Tem- per- ature, water (°C)	Hard- ness (mg/L as CaCO ₃)	Calci- um, total (mg/L)	Calci- um, dis- solved (mg/L)	Mag- nesi- um, total (mg/L)	Mag- nesium, dis- solved (mg/L)	Sodium adsorp- tion ratio	So- dium, total (mg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT. (Continued)														
01/26/00	1000	751	--	--	142	8.0	3.0	61	--	18	--	4.1	.3	--
03/08/00	1415	e1,050	20	55	123	8.0	7.5	51	15	15	3.6	3.5	.3	4.7
03/08/00 ^{Fb}	1500	--	--	--	--	--	--	--	--	.003	--	<.001	--	--
04/12/00	1545	2,510	28	74	72	7.7	9.5	29	6.0	8.4	1.5	1.9	.2	2.3
05/02/00	1300	3,980	18	62	52	7.5	11.0	--	6.0	--	1.5	--	--	2.3
05/23/00	1015	7,960	168	29	39	7.2	11.5	16	4.8	4.5	1.3	.99	.2	1.7
06/20/00	1130	4,190	6	64	59	7.6	13.5	24	6.8	7.1	1.6	1.5	.2	2.1
07/31/00	1430	529	3	69	159	8.3	21.5	72	--	21	--	4.7	.3	--
08/29/00	1430	498	2	83	177	8.2	17.0	77	21	23	4.7	4.9	.3	6.4
09/19/00	1430	482	4	90	171	7.8	15.0	75	--	22	--	4.7	.3	--
10/02/00	1000	3,900	76	64	60	7.8	10.5	--	--	--	--	--	--	--
10/16/00	1200	1,300	2	70	117	7.8	9.5	49	--	14	--	3.1	.3	--
11/08/00	1330	951	2	67	124	8.0	3.5	54	--	16	--	3.4	.3	--
01/30/01	1500	506	1	78	150	8.2	2.0	64	--	19	--	4.2	.3	--
03/12/01	1445	760	5	72	142	8.0	6.0	58	--	17	--	3.9	.3	--
04/10/01	1330	892	6	74	121	7.6	6.5	51	--	15	--	3.3	.3	--
05/22/01	1430	4,290	13	71	65	7.7	13.0	26	--	7.9	--	1.6	.2	--
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.														
03/02/99	1330	4,350	5	81	--	8.0	5.0	106	--	29	--	8.3	.4	--
04/13/99	1500	5,430	5	91	--	8.0	7.5	93	24	25	6.9	7.3	.3	7.0
05/10/99	1500	11,100	9	70	--	7.8	5.5	44	21	12	5.8	3.5	.2	5.0
05/26/99	0930	35,300	280	63	--	7.5	5.0	43	14	12	4.6	3.2	.2	2.6
06/08/99	1045	31,900	58	85	111	7.5	6.0	52	16	14	4.5	3.9	.2	2.6
06/21/99 ^{Fb}	0835	--	--	--	--	--	--	--	--	.005	--	<.001	--	--
06/21/99	1000	31,700	173	30	108	7.9	9.0	44	12	12	3.6	3.3	.1	2.2
07/20/99	1615	6,740	2	88	174	7.8	18.5	78	22	21	6.3	6.2	.2	3.8
08/18/99	0930	3,960	3	88	229	7.8	16.0	100	27	27	7.9	8.0	.3	5.6
10/18/99	1415	2,790	2	88	268	7.6	6.5	124	33	34	9.5	9.6	.3	7.5
11/30/99	1300	3,970	4	76	218	8.1	4.0	101	--	28	--	7.8	.3	--
01/24/00	1400	2,730	--	--	267	8.0	2.0	117	32	32	9.2	9.1	.4	9.6
03/06/00	1400	3,740	8	78	244	8.3	7.0	108	30	29	8.4	8.4	.4	8.6
04/10/00	1400	6,470	11	87	184	8.2	9.0	78	22	21	6.0	6.1	.3	6.5
05/09/00	1215	12,700	11	84	134	8.1	9.0	59	15	16	4.6	4.6	.3	4.5
05/24/00	1230	18,700	53	63	95	7.8	12.5	45	12	13	3.4	3.4	.1	2.5
06/20/00	0930	10,700	6	75	138	8.1	14.0	60	16	16	4.9	4.8	.2	3.3
08/01/00 ^{Fb}	1330	--	--	--	--	--	--	--	--	.003	--	<.001	--	--
08/01/00	1430	2,100	1	83	218	8.4	22.0	107	26	29	7.9	8.6	.2	5.5
08/30/00	1400	1,660	2	83	241	8.5	16.5	109	29	29	8.7	8.8	.3	7.0
11/07/00	1000	3,020	3	67	252	8.0	4.0	111	--	31	--	8.4	.4	--
12/19/00	1645	2,380	2	70	264	8.2	0.0	120	--	33	--	9.2	.3	--
01/31/01	1500	1,920	2	76	274	8.5	1.5	123	--	34	--	9.4	.3	--
03/13/01	1500	2,410	9	94	277	8.4	5.5	117	--	32	--	8.8	.4	--
04/11/01	1400	3,310	9	84	249	8.3	6.5	109	--	30	--	8.3	.4	--
05/23/01	1430	11,600	12	79	140	8.2	14.5	59	--	16	--	4.4	.3	--

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Sodium, dissolved (mg/L)	Potas- sium, total (mg/L)	Potas- sium, dissolved (mg/L)	Alka- linity, field (mg/L as CaCO ₃)	Bicar- bonate, dissolved (mg/L as HCO ₃)	Carbo- nate, dissolved (mg/L as CO ₃)	Sulfate, dissolved (mg/L as SO ₄)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L as SiO ₂)	Dissolved solids, sum of constit- uents (mg/L)	Dissolved solids, residue at 180 °C (mg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT. (Continued)												
01/26/00	5.2	--	1.3	86	105	0	3.6	2.0	.16	14	99	101
03/08/00	4.7	1.3	1.2	59	72	0	2.9	1.6	.16	12	76	86
03/08/00 ^{Fb}	<.02	--	--	--	--	--	--	--	--	<.02	--	--
04/12/00	2.9	.8	1.0	33	40	0	1.9	.9	.14	10	47	52
05/02/00	--	.8	.74	31	38	0	1.4	.7	<.10	8.4	--	39
05/23/00	1.6	.9	.59	18	22	0	1.1	.3	<.10	7.5	28	34
06/20/00	2.3	.8	.73	27	33	0	1.1	.6	<.10	8.2	38	48
07/31/00	6.0	--	1.9	78	95	0	3.1	2.1	.15	13	99	101
08/29/00	6.7	2.1	2.1	86	105	0	3.2	2.2	.17	13	107	109
09/19/00	6.3	--	2.1	84	102	0	3.3	2.1	.16	13	104	103
10/02/00	--	--	--	--	--	--	--	--	--	--	--	--
10/16/00	4.5	--	1.5	--	--	--	2.8	1.6	e.14	11	73	77
11/08/00	4.8	--	1.4	48	59	0	3.0	2.6	e.16	12	72	80
01/30/01	5.5	--	1.5	71	87	0	4.5	2.1	e.16	11	91	106
03/12/01	5.4	--	1.7	62	76	0	3.8	2.2	e.14	11	83	92
04/10/01	4.5	--	1.3	54	67	0	3.7	1.5	e.16	11	74	81
05/22/01	2.6	--	.81	27	33	0	2.4	.8	<.20	9.8	42	46
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.												
03/02/99	9.1	--	1.7	96	114	1.9	20	4.1	.14	11	141	153
04/13/99	7.0	1.4	1.4	120	146	0	15	3.4	.13	11	142	137
05/10/99	3.2	1.0	.64	63	77	0	12	2.2	<.10	5.9	77	101
05/26/99	2.4	1.2	.90	41	50	0	4.9	1.5	<.10	7.9	58	69
06/08/99	2.7	.9	.85	47	57	0	5.5	1.3	<.10	9.3	66	85
06/21/99 ^{Fb}	<.02	--	--	--	--	--	--	--	--	<.02	--	--
06/21/99	2.1	.9	.73	44	53	0	4.1	1.4	<.10	7.6	58	65
07/20/99	3.8	1.1	1.1	76	93	0	6.6	2.7	<.10	8.8	96	92
08/18/99	5.8	1.6	1.6	98	120	0	12	2.4	.12	11	127	135
10/18/99	7.8	1.8	1.8	115	140	0	20	3.1	.18	11	156	158
11/30/99	7.6	--	1.5	94	115	0	16	2.9	.14	12	133	140
01/24/00	9.3	1.7	1.5	116	141	0	23	3.5	.21	11	160	161
03/06/00	8.8	1.7	1.6	97	116	0	20	3.4	.21	11	140	150
04/10/00	6.7	1.2	1.2	80	97	0	13	2.3	.16	10	109	114
05/09/00	4.6	.9	.78	60	73	0	8.5	1.4	.18	8.4	81	85
05/24/00	2.1	.8	.67	43	53	0	3.7	1.0	<.10	7.5	57	60
06/20/00	3.5	.9	1.0	64	78	0	6.2	1.2	<.10	7.7	79	90
08/01/00 ^{Fb}	<.02	--	--	--	--	--	--	--	--	<.02	--	--
08/01/00	5.8	1.4	1.3	102	122	0	10	2.7	.13	9.6	128	132
08/30/00	7.1	1.7	1.7	111	132	1.7	12	3.2	.14	7.7	137	141
11/07/00	8.9	--	1.7	102	124	0	21	3.0	.18	10	145	154
12/19/00	7.8	--	1.6	117	142	0	20	4.3	.18	11	158	159
01/31/01	8.6	--	1.7	116	141	0	24	4.0	.18	8.7	160	179
03/13/01	10	--	2.0	105	128	0	26	4.2	.18	9.3	156	164
04/11/01	8.8	--	1.7	100	122	0	23	3.7	.18	9.1	145	157
05/23/01	4.6	--	1.0	57	69	0	8.4	1.7	<.20	8.9	80	82

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Dis-charge, instan- taneous (ft ³ /s)	Sedi- ment, sus- pended (mg/L)	Sedi- ment, sus- pended (percent finer than 0.062 mm)	Specific conduct- ance, field (μS/cm)	pH, field (stan- dard units)	Tem- per- ature, water (°C)	Hard- ness (mg/L as CaCO ₃)	Calci- um, total (mg/L)	Calci- um, dis- solved (mg/L)	Mag- nesi- um, total (mg/L)	Mag- nesium, dis- solved (mg/L)	Sodium adsorp- tion ratio	So- dium, total (mg/L)
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.														
03/03/99	1015	7,340	3	75	181	8.3	4.0	90	--	25	--	6.6	.1	--
04/14/99	1230	9,450	1	90	182	8.0	8.0	93	--	26	--	6.7	.1	--
05/11/99 ^{Fb}	0945	--	--	--	--	--	--	--	--	.003	--	<.001	--	--
05/11/99	1100	14,800	5	60	175	8.1	9.5	88	26	25	6.5	6.3	.1	1.4
06/20/99	1130	32,400	13	82	175	8.1	16.5	87	24	25	6.1	6.1	.1	1.2
07/19/99	1430	17,500	3	45	162	8.2	19.0	86	24	24	6.2	6.1	.1	1.3
08/17/99	1330	9,880	3	91	158	8.3	21.0	81	23	23	6.1	6.0	.1	1.5
10/19/99	1140	5,470	1	73	--	7.8	8.5	90	25	25	6.6	6.6	.1	1.8
12/01/99	1100	14,900	2	87	164	8.2	6.0	89	--	25	--	6.3	.1	--
01/25/00	1030	10,100	--	--	173	8.0	1.5	91	--	26	--	6.5	.1	--
03/07/00	1100	9,210	3	81	177	8.1	5.5	89	--	25	--	6.5	.1	--
04/11/00	1000	8,840	3	81	176	8.2	8.0	89	--	25	--	6.3	.1	--
05/10/00	1015	17,500	4	86	173	8.3	10.0	86	24	24	6.1	6.1	.1	1.2
06/19/00	1230	28,500	7	85	169	8.3	14.5	84	24	24	6.2	6.0	.1	1.1
08/01/00	1000	12,600	2	79	163	8.4	23.0	87	--	25	--	6.3	.1	--
08/30/00	1030	7,310	1	58	168	8.4	19.0	93	24	26	6.1	6.6	.1	1.3
11/06/00	1400	10,800	3	78	171	8.3	7.5	87	--	25	--	6.1	.1	--
12/19/00	1245	12,700	3	70	172	8.2	.0	89	--	25	--	6.2	.1	--
02/01/01	1000	6,410	1	71	174	8.1	.5	89	--	25	--	6.3	.1	--
03/14/01	0930	4,580	11	98	193	8.2	3.5	93	--	26	--	6.8	.2	--
04/12/01	0930	4,090	5	90	190	8.4	5.5	94	--	27	--	6.8	.1	--
05/24/01	0930	10,600	6	84	172	8.3	13.0	90	--	26	--	6.4	.1	--
SITE 14 12392155--LIGHTNING CREEK AT CLARK FORK, IDAHO														
07/29/99	1015	218	1	80	19	6.8	25.0	7.3	--	2.1	--	.52	.1	--
09/02/99	0945	42	1	50	26	7.1	10.0	10	2.9	2.9	.80	.77	.1	.92
10/26/99	1145	97	1	50	24	7.5	8.0	9.5	2.7	2.6	.72	.70	.1	.87
03/02/00	0815	183	1	50	32	7.2	3.0	13	3.3	3.5	1.1	1.1	.1	.93
03/30/00	0815	314	1	67	26	7.3	3.0	11	2.9	3.0	.88	.85	.1	.84
04/12/00	1330	1,030	3	71	19	7.3	4.5	6.9	1.9	2.0	.45	.45	.1	.87
05/04/00	1000	2,120	6	78	14	6.9	4.5	5.0	1.5	1.5	.34	.31	.1	.57
06/05/00	0915	1,810	4	70	12	6.8	6.0	4.3	1.2	1.3	.26	.27	.1	.46
06/30/00	0830	518	1	80	15	6.7	9.5	5.7	1.6	1.7	.38	.38	.1	.57
07/27/00	1145	69	1	60	25	7.1	14.0	9.6	2.7	2.6	.76	.72	.1	.86
09/01/00	1200	7.1	1	75	26	7.4	9.0	10	2.9	3.0	.70	.73	.1	.89
11/09/00	1015	30	1	80	27	6.9	6.0	11	--	3.2	--	.75	.1	--
12/14/00	1145	5.8	1	67	26	6.6	4.5	10	--	3.1	--	.67	.1	--
01/25/01	1145	7.5	1	75	27	7.3	5.0	10	--	3.0	--	.65	.1	--
03/15/01	0915	44	1	60	31	7.3	4.0	13	--	3.6	--	.99	.1	--
04/11/01	1115	141	1	67	36	7.0	3.5	15	--	3.9	--	1.2	.1	--
05/04/01	1315	616	1	75	21	7.1	7.5	7.8	--	2.3	--	.51	.1	--
06/14/01	1300	880	1	67	16	7.2	7.0	5.9	--	1.7	--	.38	.1	--

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Sodium, dissolved (mg/L)	Potas- sium, total (mg/L)	Potas- sium, dissolved (mg/L)	Alka- linity, field (mg/L as CaCO ₃)	Bicar- bonate, dissolved (mg/L as HCO ₃)	Carbo- nate, dissolved (mg/L as CO ₃)	Sulfate, dissolved (mg/L as SO ₄)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L as SiO ₂)	Dissolved solids, sum of constit- uents (mg/L)	Dissolved solids, residue at 180 °C (mg/L)
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.												
03/03/99	2.0	--	.49	89	109	0	2.9	2.5	<.10	4.9	98	101
04/14/99	1.5	--	.41	85	104	0	2.6	.63	<.10	4.8	94	105
05/11/99 ^{Fb}	<.02	--	--	--	--	--	--	--	--	<.02	--	--
05/11/99	1.5	.43	.42	83	101	0	2.8	.87	<.10	4.6	91	109
06/20/99	1.2	.44	.42	84	102	0	2.8	.42	<.10	4.5	91	97
07/19/99	1.3	.44	.43	84	102	0	2.7	.48	<.10	4.6	91	94
08/17/99	1.5	.46	.45	84	102	.2	2.8	.40	<.10	4.6	89	96
10/19/99	1.8	.48	.48	89	109	0	3.0	.48	<.10	5.0	96	102
12/01/99	1.4	--	.41	87	106	0	3.0	1.6	<.10	4.8	95	95
01/25/00	1.4	--	.45	86	105	0	3.2	<.29	<.10	4.9	--	100
03/07/00	1.8	--	.47	89	109	0	2.8	<.29	<.10	4.6	--	105
04/11/00	1.5	--	.51	91	111	0	2.7	.32	<.10	4.7	96	99
05/10/00	1.3	.48	.38	87	106	0	2.7	.30	<.10	4.5	92	101
06/19/00	1.2	.45	.36	87	105	.4	2.4	.49	<.10	4.4	91	105
08/01/00	1.2	--	.37	86	104	.6	2.5	.37	<.10	4.7	92	94
08/30/00	1.4	.43	.45	86	105	0	2.5	.39	<.10	5.0	94	97
11/06/00	1.4	--	.48	88	104	1.4	2.8	.62	<.16	4.6	93	101
12/19/00	1.3	--	.42	88	108	0	2.8	.60	<.16	4.7	95	96
02/01/01	1.6	--	.44	88	107	0	4.0	.71	<.16	4.3	95	112
03/14/01	3.6	--	1.4	96	117	0	3.9	1.4	<.16	4.5	106	112
04/12/01	3.1	--	.70	91	111	0	4.0	.87	<.16	3.7	100	112
05/24/01	1.2	--	.44	88	107	0	3.0	.43	<.20	4.4	94	111
SITE 14 12392155--LIGHTNING CREEK AT CLARK FORK, IDAHO												
07/29/99	.73	--	.33	8.0	10	0	1.1	.12	<.10	5.8	16	21
09/02/99	.94	.40	.39	11	13	0	1.7	<.29	<.10	7.0	--	28
10/26/99	.81	.39	.41	9.0	11	0	2.0	e.24	<.10	6.2	--	21
03/02/00	.96	.34	.33	11	14	0	2.2	e.22	<.10	7.2	--	27
03/30/00	.86	.34	.31	11	13	0	1.8	e.25	<.10	7.0	--	20
04/12/00	.68	<.1	.29	6.6	8.0	0	1.1	<.29	<.10	5.9	--	21
05/04/00	.56	.23	.24	3.6	4.4	0	.77	<.29	<.10	5.1	--	16
06/05/00	.51	.20	.24	4.2	5.1	0	.80	<.29	<.10	4.6	--	11
06/30/00	.57	.18	.25	5.7	7.0	0	.81	<.29	<.10	5.0	--	<10
07/27/00	.83	.36	.36	11	13	0	1.4	<.29	<.10	6.4	--	24
09/01/00	.96	.37	.40	12	14	0	1.6	e.15	<.10	6.8	--	19
11/09/00	.94	--	.41	10	13	0	1.9	.44	<.16	6.8	21	23
12/14/00	.96	--	.39	10	12	0	2.1	.45	<.16	7.0	21	18
01/25/01	.91	--	.41	10	12	0	2.2	.40	<.16	6.6	21	19
03/15/01	.96	--	.40	11	14	0	2.8	.54	<.16	6.6	23	21
04/11/01	.96	--	.45	13	16	0	2.5	.48	<.16	6.8	25	32
05/04/01	.75	--	.26	6.9	8.4	0	1.6	.29	<.16	6.0	17	16
06/14/01	.60	--	.23	5.2	6.4	0	1.1	.18	<.20	5.1	13	18

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Dis-charge, instantaneous (ft ³ /s)	Sedi-ment, sus-pended (mg/L)	Sedi-ment, sus-pended (percent finer than 0.062 mm)	Specific conduct-ance, field (μS/cm)	pH, field (stand-ard units)	Tem-per-ature, water (°C)	Hard-ness (mg/L as CaCO ₃)	Calci-um, total (mg/L)	Calci-um, dis-solved (mg/L)	Mag-nesi-um, total (mg/L)	Mag-nesium, dis-solved (mg/L)	Sodium adsorp-tion ratio	So-dium, total (mg/L)
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO														
03/02/99	1130	4,450	4	83	62	7.3	3.0	12	--	2.9	--	1.1	.1	--
03/23/99	1000	6,880	14	82	36	6.8	3.5	14	3.6	3.3	1.4	1.4	.1	.96
05/20/99	1000	6,400	7	93	31	7.5	6.0	18	4.9	4.9	1.6	1.5	.2	1.6
05/25/99	0930	11,100	84	76	27	6.7	8.0	11	2.8	2.7	1.3	1.0	.1	.75
06/29/99	1000	1,370	1	60	38	7.6	11.0	17	4.0	4.2	1.6	1.7	.1	.94
07/26/99	1000	522	1	86	46	7.2	13.0	22	4.8	5.3	1.9	2.1	.1	1.1
09/08/99	0930	295	1	80	50	7.3	14.5	23	5.3	5.5	2.2	2.2	.1	1.2
10/19/99	1000	248	1	75	47	7.2	6.5	22	5.3	5.3	2.1	2.1	.1	1.1
12/01/99	1145	1,560	1	80	40	7.4	5.0	19	--	4.5	--	1.8	.1	--
01/11/00	1100	931	1	75	41	7.3	1.5	19	--	4.6	--	1.8	.1	--
02/29/00	0800	2,020	2	69	38	7.0	3.0	17	--	4.1	--	1.7	.1	--
03/27/00	0945	3,290	2	84	37	7.2	4.0	16	4.0	4.0	1.6	1.5	.1	.98
04/10/00	0945	4,680	4	77	34	7.3	5.0	15	3.6	3.7	1.5	1.5	.1	1.1
04/14/00	0945	18,200	207	90	25	7.0	4.5	10	2.9	2.5	1.6	.94	.1	.89
04/17/00	0945	10,900	29	89	29	7.0	5.5	12	3.3	3.0	1.4	1.2	.1	.83
05/02/00	0900	5,080	6	87	32	7.1	7.5	14	3.3	3.3	1.4	1.4	.1	.86
05/18/00	0730	3,770	3	74	32	7.7	8.5	14	--	3.4	--	1.4	.1	--
06/02/00	0715	1,970	3	74	36	7.2	9.5	16	3.8	3.9	1.5	1.6	.1	.92
06/29/00	0800	954	1	80	43	7.3	13.5	19	4.5	4.7	1.8	1.8	.1	1.0
07/24/00	1030	440	1	60	47	7.5	15.5	22	--	5.2	--	2.1	.1	--
08/31/00	0915	236	1	82	48	7.3	14.0	22	5.4	5.3	2.0	2.0	.1	1.2
11/06/00	1030	340	1	67	48	7.1	6.5	22	--	5.5	--	2.0	.1	--
12/13/00	1100	144	1	67	47	6.7	1.5	21	--	5.3	--	2.0	.1	--
01/23/01	1000	216	1	75	45	7.2	2.0	21	--	5.1	--	1.9	.1	--
03/14/01	0845	632	1	88	45	7.3	3.0	21	--	5.1	--	1.9	.1	--
04/10/01	0815	1,110	1	75	44	7.3	3.5	20	--	4.8	--	1.8	.1	--
05/03/01	1015	4,870	3	90	32	7.3	5.0	14	--	3.4	--	1.2	.1	--
06/12/01	0930	902	1	75	44	7.7	10.0	19	--	4.7	--	1.8	.1	--
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO														
11/04/98	1200	105	38	--	260	7.5	7.5	93	24	24	8.3	8.0	.4	8.7
11/04/98 ^{Fb}	1208	--	--	--	--	--	--	--	--	.003	--	<.001	--	--
12/09/98	1210	275	3	--	250	7.0	5.0	90	22	23	8.0	7.8	.3	6.0
02/03/99	1100	322	1	--	205	7.3	3.0	78	--	20	--	6.8	.2	--
03/17/99	1000	748	2	72	152	7.1	3.0	54	13	14	4.2	4.6	.2	3.6
03/23/99	1330	1,610	15	70	95	7.2	6.5	34	9.4	8.8	3.0	3.0	.2	2.8
04/20/99	1200	2,060	27	68	64	7.2	5.5	25	6.9	6.5	2.2	2.0	.1	1.7
05/25/99	1245	4,000	207	80	48	7.1	8.0	18	5.4	4.9	1.8	1.3	.1	.98
05/27/99	1245	2,730	89	79	51	7.0	7.5	19	5.3	5.1	1.7	1.5	.1	1.3
06/29/99	1300	983	7	70	100	7.2	11.0	42	--	12	--	3.0	.1	--
07/26/99	1315	326	2	69	147	7.1	15.0	65	15	17	4.6	5.4	.3	4.2
09/08/99	1300	146	2	82	242	7.4	13.5	94	25	24	8.2	8.0	.3	7.0
10/19/99	1400	107	1	67	286	7.4	9.0	123	31	32	9.8	10	.3	7.1
12/02/99	0850	413	2	69	169	7.1	5.5	68	18	18	5.3	5.4	.2	4.6
01/11/00	1430	237	1	75	212	7.4	3.0	85	23	22	7.2	7.0	.3	5.6
02/28/00 ^{Fb}	1020	--	--	--	--	--	--	--	--	<.002	--	<.001	--	--

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Sodium, dissolved (mg/L)	Potas- sium, total (mg/L)	Potas- sium, dissolved (mg/L)	Alka- linity, field (mg/L as CaCO ₃)	Bicar- bonate, dissolved (mg/L as HCO ₃)	Carbo- nate, dissolved (mg/L as CO ₃)	Sulfate, dissolved (mg/L as SO ₄)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L as SiO ₂)	Dissolved solids, sum of constit- uents (mg/L)	Dissolved solids, residue at 180 °C (mg/L)
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO												
03/02/99	.76	--	.26	16	19	0	1.8	.33	<.10	7.6	24	31
03/23/99	.96	.36	.40	14	17	0	2.0	.30	<.10	9.8	27	35
05/20/99	1.7	.63	.63	14	--	0	4.7	.88	<.10	11	34	39
05/25/99	.81	.45	.40	11	13	0	1.3	.16	<.10	8.0	21	22
06/29/99	1.0	.31	.36	18	21	0	1.6	.22	<.10	9.1	29	30
07/26/99	1.2	.42	.43	22	27	0	1.1	.22	<.10	9.7	33	35
09/08/99	1.3	.44	.51	23	28	0	1.9	e.23	<.10	10	--	25
10/19/99	1.1	.43	.39	22	27	0	2.0	e.28	<.10	9.3	--	36
12/01/99	1.1	--	.39	19	23	0	2.2	.31	<.10	9.8	32	36
01/11/00	1.0	--	.33	17	20	0	2.4	e.26	<.10	9.1	--	34
02/29/00	1.1	--	.36	15	18	0	2.0	.30	<.10	9.5	28	34
03/27/00	.99	.38	.35	17	20	0	1.9	e.25	<.10	9.7	--	25
04/10/00	.92	<.1	.41	16	20	0	1.7	e.22	<.10	9.5	--	33
04/14/00	.73	.66	.71	10	12	0	1.3	e.25	<.10	9.0	--	29
04/17/00	.85	.51	.42	12	15	0	1.2	e.22	<.10	9.5	--	27
05/02/00	1.1	.33	.33	14	17	0	1.2	e.21	<.10	8.9	--	27
05/18/00	.88	--	.33	15	19	0	1.4	e.25	<.10	8.5	--	23
06/02/00	.95	.39	.38	16	20	0	1.5	e.22	<.10	8.6	--	29
06/29/00	1.1	.34	.38	--	--	0	1.4	e.22	<.10	9.1	--	28
07/24/00	1.2	--	.45	22	26	0	1.5	e.18	<.10	9.9	--	35
08/31/00	1.2	.43	.43	30	37	0	1.8	e.19	<.10	9.4	--	33
11/06/00	1.1	--	.42	22	28	0	2.0	.41	<.16	8.8	34	37
12/13/00	1.1	--	.31	21	25	0	2.1	.37	<.16	8.7	32	33
01/23/01	1.1	--	.38	21	26	0	2.2	.31	<.16	8.1	32	31
03/14/01	1.1	--	.34	20	25	0	2.6	.53	<.16	8.1	32	30
04/10/01	1.1	--	.37	19	23	0	2.4	.49	<.16	8.7	31	40
05/03/01	.92	--	.31	13	16	0	1.8	.22	<.16	8.9	25	24
06/12/01	1.1	--	.35	20	24	0	1.9	.30	<.16	9.0	31	34
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO												
11/04/98	8.4	1.8	1.9	38	46	0	71	3.5	.42	11	156	157
11/04/98 ^{Fb}	<.02	--	--	--	--	--	--	--	--	<.02	--	--
12/09/98	5.6	1.2	1.3	29	35	0	67	4.6	.24	11	143	172
02/03/99	4.9	--	1.1	28	34	0	56	4.3	.19	10	122	128
03/17/99	3.8	.84	.82	23	28	0	32	4.0	.11	11	87	93
03/23/99	2.5	.80	.70	20	24	0	18	2.8	<.10	11	59	68
04/20/99	1.6	.55	.53	16	20	0	11	1.3	<.10	8.9	42	48
05/25/99	.99	.69	.45	12	15	0	7.8	.4	<.10	6.7	31	32
05/27/99	1.3	.42	.39	14	16	0	7.6	.5	<.10	7.0	32	35
06/29/99	1.8	--	.52	20	24	0	25	1.6	.12	7.6	64	67
07/26/99	4.8	.92	.17	28	34	0	29	1.3	.14	9.9	86	130
09/08/99	7.2	1.4	1.4	34	41	0	73	2.5	.31	11	151	145
10/19/99	7.3	1.7	1.7	32	39	0	98	2.6	.38	11	186	191
12/02/99	4.5	1.0	1.0	24	29	0	47	3.0	.16	10	108	110
01/11/00	5.4	1.2	1.2	26	32	0	66	3.8	.24	9.7	135	147
02/28/00 ^{Fb}	<.02	--	--	--	--	--	--	--	--	.03	--	--

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Dis-charge, instantaneous (ft ³ /s)	Sedi-ment, sus-pended (mg/L)	Sedi-ment, sus-pended (percent finer than 0.062 mm)	Specific conduct-ance, field (μS/cm)	pH, field (stand-ard units)	Tem-per-ature, water (°C)	Hard-ness (mg/L as CaCO ₃)	Calci-um, total (mg/L)	Calci-um, dis-solved (mg/L)	Mag-nesi-um, total (mg/L)	Mag-nesium, dis-solved (mg/L)	Sodium adsorp-tion ratio	So-dium, total (mg/L)
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO (Continued)														
02/28/00	1100	596	1	75	128	7.1	4.0	48	13	12	4.1	4.1	.2	3.4
03/27/00	1320	700	2	55	124	7.5	8.0	49	13	12	4.5	4.3	.2	3.2
04/10/00	1315	1,290	5	77	91	7.4	8.0	37	9.1	9.3	3.1	3.2	.2	2.3
04/14/00	1315	4,890	302	74	46	7.1	5.5	18	4.9	4.8	2.0	1.5	.1	1.3
04/17/00	1315	2,360	17	76	67	7.3	7.0	27	7.3	7.2	2.4	2.3	.1	1.6
05/02/00	1145	1,890	11	68	73	7.1	6.5	29	7.6	7.7	2.4	2.4	.1	1.5
05/18/00	1000	1,890	8	75	67	7.2	7.5	27	7.2	7.1	2.3	2.3	.1	1.6
06/02/00	0930	1,110	3	65	93	7.0	8.5	36	9.0	9.3	2.8	3.0	.2	2.5
06/29/00 ^{Fb}	1045	--	--	--	--	--	--	--	--	.004	--	<.001	--	--
06/29/00	1130	446	2	83	144	7.2	15.0	56	15	15	4.2	4.2	.2	3.5
07/24/00	1300	241	1	67	224	7.1	18.0	94	23	26	6.7	7.1	.2	4.5
08/31/00	1215	110	4	88	299	7.2	14.0	120	--	30	11	11	.3	6.2
11/06/00	1330	115	1	75	288	7.1	7.5	115	--	29	--	10	.3	--
12/18/00	1200	93	2	82	320	6.6	1.5	129	--	32	--	12	.3	--
01/23/01	1430	86	1	75	328	6.8	3.0	130	--	32	--	12	.3	--
03/14/01	1145	229	5	81	195	7.3	5.0	73	--	19	--	5.9	.3	--
04/10/01	1100	258	2	71	193	7.4	5.5	78	--	20	--	6.5	.2	--
05/03/01	1300	955	3	81	97	7.2	7.5	36	--	9.6	--	3.0	.2	--
06/12/01	1230	378	2	86	142	7.4	9.0	56	--	15	--	4.5	.2	--
09/10/01	1130	82	2	75	325	7.2	13.0	136	--	35	--	12	.2	--
09/10/01 ^{Fb}	1345	--	--	--	--	--	--	--	--	<.01	--	<.008	--	--
SITE 33 12413875--ST. JOE RIVER AT RED IVES RANGER STATION, IDAHO														
02/18/99	1545	79	1	83	48	6.9	0.0	18	5.2	5.4	1.5	1.1	.1	1.9
06/01/99	1415	2,190	9	53	26	7.4	5.5	12	3.4	3.4	.83	.74	.1	.69
06/28/99	1415	1,210	5	41	31	7.4	7.0	13	--	3.7	2.9	.83	.1	1.8
07/20/99	0945	480	1	50	38	7.0	8.0	16	4.4	4.6	1.0	.98	.1	.78
08/18/99	1500	155	1	40	41	7.5	15.0	20	5.9	6.0	1.2	1.2	.1	1.0
11/04/99	1300	153	1	80	44	7.8	2.5	18	5.4	5.2	1.1	1.1	.1	.98
01/21/00	1245	102	1	60	41	6.7	0.0	18	5.3	5.3	1.1	1.1	.1	1.0
05/17/00	1215	1,040	2	92	29	8.0	6.0	13	3.8	3.8	.88	.83	.1	.75
06/01/00	1100	1,040	3	67	30	7.4	5.0	14	3.8	4.0	.86	.89	.1	.68
06/28/00	1100	430	2	83	34	7.3	9.0	16	4.4	4.8	.99	1.0	.1	.77
07/27/00	1115	181	3	70	45	7.8	14.0	19	5.8	5.7	1.3	1.2	.1	1.0
09/07/00	1330	101	1	83	47	7.8	10.5	22	6.4	6.5	1.4	1.4	.1	1.0
11/07/00	1015	46	1	75	49	7.2	0.0	23	--	6.9	--	1.4	.1	--
01/24/01	1345	49	1	67	47	7.5	0.0	21	--	6.4	--	1.3	.1	--
05/09/01	1200	488	2	60	33	7.9	6.0	14	--	4.1	--	.90	.1	--
06/13/01	0930	408	1	75	37	7.6	3.5	17	--	5.1	--	1.1	.1	--
09/13/01	1045	64	1	71	51	7.7	9.5	24	--	7.2	--	1.5	.1	--
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO														
03/04/99	1230	1,3600	2	63	71	7.5	2.5	22	--	5.9	--	1.9	.2	--
04/13/99	1000	9,760	1	87	55	7.4	4.0	21	5.7	5.5	1.8	1.7	.2	1.9
05/19/99	1000	13,800	1	71	47	7.1	8.5	--	--	--	--	--	--	--
06/02/99	0930	23,300	3	89	45	7.0	11.0	18	4.8	4.8	1.5	1.5	.1	1.4
06/23/99	1030	12,500	2	77	41	7.6	15.0	16	4.6	4.4	1.3	1.3	.1	1.2

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Sodium, dissolved (mg/L)	Potas- sium, total (mg/L)	Potas- sium, dissolved (mg/L)	Alka- linity, field (mg/L as CaCO ₃)	Bicar- bonate, dissolved (mg/L as HCO ₃)	Carbo- nate, dissolved (mg/L as CO ₃)	Sulfate, dissolved (mg/L as SO ₄)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L as SiO ₂)	Dissolved solids, sum of constit- uents (mg/L)	Dissolved solids, residue at 180 °C (mg/L)
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO (Continued)												
02/28/00	3.5	.82	.77	20	25	0	28	3.2	<.10	11	77	83
03/27/00	3.2	.87	.81	25	30	0	30	2.8	<.10	11	81	84
04/10/00	2.1	.37	.67	20	25	0	19	1.7	<.10	9.9	59	66
04/14/00	1.1	.70	.61	12	15	0	6.9	.8	<.10	8.4	32	39
04/17/00	1.7	.77	.56	17	21	0	12	1.2	<.10	9.4	45	49
05/02/00	1.7	.51	.48	17	21	0	14	.9	<.10	7.9	46	50
05/18/00	1.6	.43	.47	17	20	0	13	.8	<.10	7.4	43	45
06/02/00	2.7	.56	.57	20	24	0	21	1.2	.10	7.8	58	58
06/29/00 ^{Fb}	.02	--	--	--	--	--	--	--	--	<.02	--	--
06/29/00	3.8	.82	.84	26	31	0	35	1.8	.12	8.8	87	87
07/24/00	4.6	1.1	1.2	30	37	0	65	2.4	.24	10	137	147
08/31/00	6.5	1.6	1.7	34	41	0	100	2.9	.34	10	187	192
11/06/00	6.2	--	1.8	33	40	0	93	3.8	.35	10	180	195
12/18/00	6.6	--	1.9	33	40	0	105	4.1	.39	10	199	208
01/23/01	7.0	--	1.8	31	38	0	108	6.3	.35	9.7	202	213
03/14/01	5.4	--	1.4	28	34	0	48	5.9	.25	10	117	125
04/10/01	4.5	--	1.2	27	33	0	52	5.5	.20	9.9	119	134
05/03/01	2.3	--	.64	20	24	0	20	2.2	<.16	9.2	60	61
06/12/01	3.0	--	.76	25	31	0	32	2.6	e.12	8.3	83	88
09/10/01	5.6	--	1.7	36	44	0	107	4.7	.40	11	203	206
09/10/01 ^{Fb}	<.06	--	--	--	--	--	--	--	--	<.09	--	--
SITE 33 12413875--ST. JOE RIVER AT RED IVES RANGER STATION, IDAHO												
02/18/99	1.1	.56	.52	20	24	0	1.2	.23	<.10	7.5	29	32
06/01/99	.75	.55	.44	12	15	0	.38	<.1	<.10	6.1	--	37
06/28/99	.71	--	.48	14	17	0	.58	<.1	<.10	6.1	--	22
07/20/99	.82	.55	.46	16	19	0	.38	.26	<.10	6.5	23	29
08/18/99	1.0	.58	.72	22	27	0	.87	.12	<.10	7.5	31	33
11/04/99	.92	.63	.59	19	23	0	1.0	e.26	<.10	6.9	--	33
01/21/00	.95	.64	.57	18	23	0	1.3	e.25	<.10	7.3	--	30
05/17/00	.75	.42	.43	14	17	0	.61	e.21	<.10	6.1	--	22
06/01/00	.72	.46	.45	15	19	0	.60	<.29	<.10	6.0	--	21
06/28/00	.79	.37	.42	18	22	0	.53	<.29	<.10	6.4	--	23
07/27/00	.96	.51	.57	23	28	0	.74	<.29	<.10	7.0	--	35
09/07/00	1.0	.62	.66	24	29	0	.97	e.14	<.10	7.3	--	40
11/07/00	1.1	--	.63	24	29	0	1.3	.26	<.16	7.7	34	36
01/24/01	1.1	--	.66	23	28	0	1.2	.20	<.16	7.8	33	31
05/09/01	.79	--	.48	15	18	0	.81	.12	<.16	5.9	22	36
06/13/01	.79	--	.43	19	24	0	.76	.12	<.16	6.4	26	27
09/13/01	1.1	--	.59	25	31	0	1.3	.14	<.16	6.0	33	28
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO												
03/04/99	1.7	--	.85	20	24	0	5.6	1.0	<.10	10	39	45
04/13/99	1.9	.74	.71	18	22	0	5.0	1.1	<.10	10	37	48
05/19/99	--	--	--	17	21	0	--	--	--	--	--	--
06/02/99	1.4	.58	.63	17	20	0	3.0	.74	<.10	10	32	--
06/23/99	1.3	.54	.57	17	20	0	2.5	.50	<.10	8.8	29	42

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Dis-charge, instantaneous (ft ³ /s)	Sedi-ment, sus-pended (mg/L)	Sedi-ment, sus-pended (percent finer than 0.062 mm)	Specific conduct-ance, field (μS/cm)	pH, field (stand-ard units)	Tem-per-ature, water (°C)	Hard-ness (mg/L as CaCO ₃)	Calci-um, total (mg/L)	Calci-um, dis-solved (mg/L)	Mag-nesi-um, total (mg/L)	Mag-nesium, dis-solved (mg/L)	Sodium adsorp-tion ratio	So-dium, total (mg/L)
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO (Continued)														
07/27/99 ^{Fb}	0915	--	--	--	--	--	--	--	--	.006	--	<.001	--	--
07/27/99	1030	1,850	1	67	43	7.2	19.5	17	4.5	4.8	1.4	1.4	.2	1.5
09/09/99	1100	807	2	79	50	7.4	18.5	20	5.0	5.2	1.6	1.6	.2	2.1
10/20/99	1130	2,100	1	75	44	7.5	11.5	18	5.0	4.9	1.5	1.5	.2	1.6
11/30/99	1045	6,310	2	50	46	7.2	8.0	19	--	5.1	--	1.6	.2	--
01/12/00	0910	4,470	1	88	51	7.0	4.0	20	5.3	5.4	1.7	1.6	.2	1.7
02/29/00	1200	7,590	1	67	50	7.4	3.5	20	5.1	5.4	1.7	1.7	.2	1.7
03/28/00	0915	11,500	1	71	51	7.3	4.0	21	5.5	5.5	1.8	1.7	.2	1.7
04/11/00	0800	15,200	1	67	51	7.2	5.0	21	5.2	5.5	1.7	1.7	.2	1.8
04/18/00	1115	28,000	3	84	49	7.3	8.0	21	5.3	5.3	1.7	1.7	.2	1.7
05/03/00	0800	21,200	1	80	44	7.4	9.5	17	4.5	4.5	1.4	1.5	.2	1.3
05/16/00	1315	15,700	1	71	41	7.5	11.5	17	4.6	4.5	1.5	1.4	.2	1.5
05/31/00	1345	12,600	2	83	41	7.6	13.0	17	4.4	4.5	1.3	1.4	.1	1.3
06/27/00	1415	3,860	2	85	43	7.4	18.5	17	4.4	4.7	1.4	1.4	.1	1.4
07/25/00	1300	1,810	2	75	46	7.3	23.5	17	4.7	4.6	1.4	1.4	.2	1.8
08/30/00	1415	242	2	75	55	7.4	22.0	20	5.3	5.5	1.7	1.6	.3	2.7
11/08/00	1400	2,460	1	67	48	7.2	8.5	20	--	5.3	--	1.5	.2	--
12/21/00	1400	1,730	1	67	52	7.0	2.5	20	--	5.5	--	1.6	.2	--
01/22/01	1330	707	1	75	56	7.0	2.0	21	--	5.6	--	1.7	.2	--
03/13/01	1415	1,870	1	71	52	7.4	4.5	20	--	5.4	--	1.7	.2	--
04/09/01	0930	4,510	1	80	52	7.2	4.0	21	--	5.7	--	1.7	.2	--
05/07/01	1345	11,700	1	89	57	7.6	8.5	22	--	6.0	--	1.8	.2	--
05/08/01 ^{Fb}	1100	--	--	--	--	--	--	--	--	.002	--	<.001	--	--
06/11/01	1230	3,730	1	86	53	7.6	15.5	20	--	5.4	--	1.6	.2	--
08/13/01	1630	315	1	67	65	7.7	25.0	23	--	6.0	--	1.9	.2	--
08/14/01	0815	315	1	78	61	7.3	23.5	22	--	6.0	--	1.8	.2	--
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.														
03/03/99	1115	13,300	27	78	95	7.3	3.5	32	--	8.2	--	2.8	.2	--
04/14/99	1230	10,100	2	79	92	7.5	5.5	37	9.5	9.2	3.4	3.4	.2	2.7
04/14/99 ^{Fb}	1235	--	--	--	--	--	--	--	--	<.002	--	<.001	--	--
05/18/99	1100	13,500	19	37	76	7.7	9.0	31	8.0	7.7	2.8	2.8	.2	2.3
06/03/99	1000	22,000	116	4	57	6.9	12.0	23	6.3	6.0	2.1	1.9	.2	1.7
06/24/99	1015	11,800	1	83	76	7.7	15.0	32	8.2	8.2	2.9	2.9	.1	2.0
07/28/99	1000	2,050	1	75	186	8.0	15.5	87	20	21	8.0	8.3	.2	4.0
09/10/99	0940	1,170	27	50	276	8.1	13.0	129	31	31	13	13	.2	6.2
10/21/99	1110	2,230	1	50	157	7.8	10.0	77	17	19	6.8	7.4	.2	3.9
12/03/99	0940	5,940	2	77	88	7.4	7.0	39	--	9.8	--	3.6	.2	--
01/13/00	1000	4,940	2	79	117	7.5	5.5	51	13	13	5.0	4.8	.2	3.2
03/01/00	0830	8,820	10	93	95	7.6	4.0	37	9.2	9.5	3.4	3.3	.2	2.9
03/29/00	1000	11,600	4	74	76	7.6	5.0	32	8.1	8.3	2.9	2.8	.2	2.5
04/11/00	1145	14,600	3	83	71	7.6	6.5	30	--	7.5	--	2.6	.2	--
04/19/00	0945	26,800	--	--	58	7.3	9.0	23	7.5	6.1	3.0	2.0	.2	1.9
05/03/00	1245	21,000	3	96	61	7.5	10.0	26	6.5	6.5	2.3	2.3	.2	1.9
05/16/00	0930	15,900	3	88	67	7.5	11.5	30	7.3	7.5	2.6	2.7	.2	1.9
05/31/00	1015	12,400	2	88	72	7.7	8.0	32	7.8	8.1	2.7	2.9	.2	1.9

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Sodium, dissolved (mg/L)	Potas- sium, total (mg/L)	Potas- sium, dissolved (mg/L)	Alka- linity, field (mg/L as CaCO ₃)	Bicar- bonate, dissolved (mg/L as HCO ₃)	Carbo- nate, dissolved (mg/L as CO ₃)	Sulfate, dissolved (mg/L as SO ₄)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L as SiO ₂)	Dissolved solids, sum of constit- uents (mg/L)	Dissolved solids, residue at 180 °C (mg/L)
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO (Continued)												
07/27/99 ^{Fb}	<.02	--	--	--	--	--	--	--	--	.02	--	--
07/27/99	1.5	.57	1.0	17	20	0	2.5	.71	<.10	8.3	30	38
09/09/99	2.2	.69	.74	18	22	0	3.8	1.4	<.10	6.9	33	34
10/20/99	1.6	.69	.66	17	20	0	3.7	.84	<.10	7.6	32	34
11/30/99	1.5	--	.65	18	22	0	3.8	.74	<.10	9.2	34	38
01/12/00	1.7	.66	.68	16	20	0	4.7	.86	<.10	9.1	34	41
02/29/00	1.7	.66	.71	16	20	0	4.3	.98	<.10	9.5	35	41
03/28/00	1.7	.75	.70	18	22	0	5.2	.99	<.10	9.8	37	39
04/11/00	1.7	.41	.74	19	23	0	4.8	1.0	<.10	10	37	43
04/18/00	1.7	.72	.44	17	21	0	4.2	.88	<.10	12	37	42
05/03/00	1.5	.53	.70	16	19	0	3.4	.74	<.10	11	33	38
05/16/00	1.5	.64	.56	16	20	0	3.4	.64	<.10	11	32	35
05/31/00	1.4	.66	.63	17	20	0	3.2	.67	<.10	9.7	32	35
06/27/00	1.4	.53	.57	16	20	0	2.8	.66	<.10	9.0	30	30
07/25/00	1.7	.59	.63	18	22	0	3.1	.91	<.10	8.3	32	36
08/30/00	2.9	.81	.74	20	25	0	4.1	1.8	<.10	7.4	38	36
11/08/00	1.6	--	.68	20	24	0	3.8	.93	<.16	8.0	34	39
12/21/00	1.9	--	.73	20	24	0	4.2	1.1	<.16	9.4	37	44
01/22/01	2.5	--	.86	19	23	0	4.4	1.6	<.16	9.2	39	39
03/13/01	2.0	--	.78	17	21	0	4.7	1.2	<.16	8.9	35	46
04/09/01	1.7	--	.72	19	23	0	4.9	.94	<.16	8.9	36	45
05/07/01	1.7	--	.80	20	24	0	5.5	.94	<.16	8.6	38	36
05/08/01 ^{Fb}	<.02	--	--	--	--	--	--	--	--	<.02	--	--
06/11/01	1.7	--	.63	18	22	0	4.4	.96	<.20	8.6	34	40
08/13/01	2.7	--	.84	21	25	0	5.1	1.7	<.20	7.7	38	43
08/14/01	2.6	--	.82	20	24	0	5.1	1.6	<.20	7.7	37	38
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.												
03/03/99	2.6	--	.98	26	31	0	6.7	2.2	<.10	12	53	60
04/14/99	2.7	1.1	1.1	32	40	0	7.3	1.9	<.10	10	58	66
04/14/99 ^{Fb}	<.02	--	--	--	--	--	--	--	--	<.02	--	--
05/18/99	2.3	.86	.87	29	36	0	6.1	1.7	<.10	11	52	53
06/03/99	1.7	.66	.74	22	27	0	3.5	1.0	<.10	10	38	--
06/24/99	1.9	.77	.89	33	40	0	4.7	1.2	<.10	9.3	50	60
07/28/99	4.1	1.4	1.5	76	92	0	8.4	3.0	<.10	11	107	112
09/10/99	6.4	2.3	2.2	115	140	0	15	5.9	<.10	12	163	170
10/21/99	4.1	1.4	1.4	66	80	0	8.7	2.8	<.10	11	96	95
12/03/99	2.4	--	.91	35	43	0	5.8	1.6	<.10	10	57	62
01/13/00	3.0	1.2	1.1	43	52	0	7.5	2.7	.12	10	71	77
03/01/00	2.9	1.2	1.0	30	36	0	6.2	1.7	<.10	12	59	67
03/29/00	2.4	.99	.92	29	36	0	6.3	1.6	<.10	11	52	53
04/11/00	2.2	--	.88	27	33	0	5.6	1.4	<.10	11	49	56
04/19/00	2.0	1.0	.82	21	26	0	4.6	1.2	<.10	12	42	49
05/03/00	1.9	.87	.77	24	29	0	4.0	1.2	<.10	11	44	49
05/16/00	2.1	.87	.73	28	34	0	4.6	1.1	<.10	11	48	51
05/31/00	2.0	.86	.85	30	36	0	4.5	1.2	<.10	10	49	51

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Dis-charge, instantaneous (ft ³ /s)	Sedi-ment, sus-pended (mg/L)	Sedi-ment, sus-pended (percent finer than 0.062 mm)	Specific conduct-ance, field (μS/cm)	pH, field (stan-dard units)	Tem-per-ature, water (°C)	Hard-ness (mg/L as CaCO ₃)	Calci-um, total (mg/L)	Calci-um, dis-solved (mg/L)	Mag-nesi-um, total (mg/L)	Mag-nesium, dis-solved (mg/L)	Sodium adsorp-tion ratio	So-dium, total (mg/L)
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH. (Continued)														
06/27/00	1000	4,290	2	83	129	7.9	16.0	60	14	15	5.6	5.7	.2	2.9
07/25/00	0830	1,830	2	78	240	7.9	15.0	116	25	28	11	11	.2	4.6
08/30/00	1000	680	6	87	303	8.0	14.5	133	31	32	13	13	.3	7.3
11/08/00	1000	3,030	1	60	142	7.7	8.0	64	--	16	--	5.9	.2	--
12/21/00	0945	2,280	1	75	172	7.3	4.5	75	--	18	--	7.1	.2	--
01/22/01	0945	1,350	1	71	245	7.6	6.5	106	--	25	--	11	.2	--
03/13/01	1030	2,570	7	94	186	7.8	7.0	77	--	19	--	7.1	.3	--
04/09/01	1315	4,930	3	82	106	7.6	6.0	45	--	12	--	4.0	.2	--
05/07/01	1000	12,300	3	83	76	7.6	8.5	30	--	7.8	--	2.5	.2	--
06/11/01	0900	4,220	1	86	123	7.9	14.0	52	--	13	--	4.8	.2	--

Table 6. Streamflow, physical, and major-ion concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Sodium, dissolved (mg/L)	Potas- sium, total (mg/L)	Potas- sium, dissolved (mg/L)	Alka- linity, field (mg/L as CaCO ₃)	Bicar- bonate, dissolved (mg/L as HCO ₃)	Carbo- nate, dissolved (mg/L as CO ₃)	Sulfate, dissolved (mg/L as SO ₄)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)	Silica, dissolved (mg/L as SiO ₂)	Dissolved solids, sum of constit- uents (mg/L)	Dissolved solids, residue at 180 °C (mg/L)
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH. (Continued)												
06/27/00	3.1	1.1	1.1	52	64	0	6.5	2.2	<.10	10	78	78
07/25/00	4.7	1.8	1.8	98	120	0	11	3.8	<.10	12	137	140
08/30/00	7.8	2.4	2.5	114	139	0	17	7.3	.12	12	170	175
11/08/00	3.3	--	1.2	58	71	0	7.5	2.5	<.16	9.4	84	90
12/21/00	4.2	--	1.5	66	80	0	8.9	3.2	<.16	11	98	103
01/22/01	5.7	--	2.0	92	113	0	11	7.6	<.16	11	136	139
03/13/01	5.1	--	2.1	64	79	0	10	3.6	<.16	13	112	120
04/09/01	3.2	--	1.1	42	51	0	7.5	2.3	<.16	10	68	77
05/07/01	2.3	--	.84	26	32	0	6.3	1.4	<.16	8.9	47	49
06/11/01	3.0	--	1.1	46	56	0	7.4	2.2	<.20	9.5	71	76

Table 7. Nutrient and organic-carbon concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001

[See figure 1 for site locations. Abbreviations: e, estimated; Fb, field blank; mg/L, milligrams per liter; R, replicate. Symbols: <, less than reporting level; --, no data]

Date	Time	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonia, dissolved (mg/L as N)	Ammonia plus organic nitrogen, dissolved (mg/L as N)	Ammonia plus organic nitrogen, total (mg/L as N)	Phos- phorus, dissolved (mg/L)	Phos- phorus, ortho- phosphate dissolved (mg/L as P)	Phos- pho- rus, total (mg/L)	Organic carbon, suspended (mg/L as C)	Organic carbon, dissolved (mg/L as C)
SITE 3 12334550--CLARK FORK AT TURAH BRIDGE, NEAR BONNER, MONT.											
11/05/98	1000	<.001	.006	<.002	<.10	.14	.007	.006	.016	.4	1.4
12/15/98 ^{Fb}	1000	<.001	<.005	.002	<.10	<.10	<.001	.001	.001	--	--
12/15/98	1145	.002	.078	.006	<.10	.16	.006	.006	.019	.8	1.3
01/27/99	1245	.002	.20	.011	.11	.13	.019	.018	.033	.5	1.2
01/27/99 ^{Fb}	1445	--	--	--	--	--	--	--	--	<.2	<.1
03/25/99	1215	.001	.063	.006	.17	.55	.029	.023	.108	2.1	3.3
04/26/99	1115	<.001	.011	.006	.12	.39	.015	.011	.053	.4	3.3
05/12/99	0915	<.001	.007	.005	.16	.29	.013	.007	.037	.4	3.0
05/25/99	1145	.001	.018	.005	.20	.86	.025	.017	.172	4.5	5.1
06/07/99	1230	.003	.034	.002	.14	.25	.023	.015	.087	1.0	--
06/19/99	1130	.001	.017	.002	.20	.22	.021	.018	.056	1.0	3.6
07/21/99	1015	<.001	.008	.005	e.09	.14	.014	.010	.025	.2	2.0
08/19/99	1000	.001	<.005	<.002	.23	.26	.011	.004	.033	--	2.0
10/20/99	1030	.001	.009	<.002	e.10	.21	.012	.008	.029	.8	1.7
12/03/99	1100	.001	.103	<.002	e.06	.15	.012	.005	.023	.3	1.3
01/26/00	0945	.002	.144	.002	e.06	e.08	.008	.005	.023	.4	1.1
03/08/00	1045	.001	.028	<.002	e.10	.28	.015	.013	.043	--	--
03/08/00 ^R	1046	<.001	.025	<.002	.12	.28	.016	.013	.043	--	--
04/12/00	0900	<.001	.013	.005	.12	.34	.013	.006	.038	--	--
05/25/00	0830	<.001	<.005	.003	e.07	.23	.009	.010	.023	--	--
06/21/00	1015	.001	.008	.003	.11	.26	.008	<.001	.017	--	--
07/31/00	1045	<.001	.021	.010	.10	.22	e.005	.004	.014	--	--
08/29/00	1100	<.001	.014	.007	<.10	.15	e.004	.001	.012	--	--
11/07/00	1400	<.001	.009	<.002	.12	.16	e.004	e.004	.016	--	--
12/20/00	1545	.002	.150	<.002	e.07	e.08	.006	e.005	.012	--	--
01/30/01	1100	.001	.055	<.002	.11	.09	e.005	<.007	.011	--	--
03/12/01	1100	.002	.167	.008	.15	.39	.009	<.007	.049	--	--
04/10/01	1030	.001	.010	.008	e.10	.25	.008	e.004	.025	--	--
05/22/01	1100	.001	.013	.003	.13	.26	.012	e.005	.036	--	--
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.											
03/04/99	1630	.001	.061	.012	e.07	.28	.006	.004	.025	.2	2.1
03/24/99	0930	.020	.018	<.002	.15	.40	.007	.001	.040	.3	3.2
04/15/99	1300	.001	.017	.005	e.07	.22	<.004	.004	.023	1.0	2.5
05/13/99	0945	<.001	<.005	.002	.12	.20	.005	.001	.020	.2	2.9
05/25/99	0915	.001	.072	.004	.20	.57	.015	.008	.105	2.8	4.6
06/07/99	1615	.001	<.005	.013	.14	e.05	.011	<.001	.031	.6	3.8
06/19/99	1445	.001	<.005	.006	.14	.22	.009	.001	.031	.8	3.1
07/21/99	1530	<.001	<.005	<.002	.16	.15	.006	.001	.016	.2	2.1
08/19/99	1500	.001	<.005	<.002	.14	.17	.020	.001	.019	--	2.2
10/20/99	1430	.002	.013	<.002	.10	.14	e.005	.001	e.006	.2	1.8
12/02/99	1600	.001	.078	<.002	<.10	.16	e.005	<.001	.018	.2	1.8
01/26/00	1000	.001	.102	.005	e.07	e.09	.009	.004	.014	.2	1.3
03/08/00	1415	.001	.054	.004	.11	.28	.006	.003	.033	--	--
04/12/00	1545	<.001	.033	.005	.12	.31	.008	.002	.040	--	--
05/02/00	1300	<.001	.035	.004	e.08	.17	e.005	.002	.020	--	--

Table 7. Nutrient and organic-carbon concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonia, dissolved (mg/L as N)	Ammonia plus organic nitrogen, dissolved (mg/L as N)	Ammonia plus organic nitrogen, total (mg/L as N)	Phos- phorus, dissolved (mg/L)	Phos- phorus, ortho- phosphate dissolved (mg/L as P)	Phos- pho- rus, total (mg/L)	Organic carbon, suspended (mg/L as C)	Organic carbon, dissolved (mg/L as C)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT. (Continued)											
05/23/00	1015	.001	.039	.005	.18	.36	.007	.004	.056	--	--
06/20/00	1130	.002	.017	<.002	e.10	.16	.006	<.001	.012	--	--
07/31/00	1430	<.001	.016	.003	.12	.18	e.005	.003	.011	--	--
08/29/00	1430	<.001	.019	.004	.13	.14	.006	.002	.012	--	--
09/19/00	1430	.001	.017	.006	e.10	.20	e.005	.003	.016	--	--
10/02/00	1000	.001	.086	.006	.21	.62	.012	.007	.117	--	--
10/16/00	1200	.001	.012	<.002	e.10	.16	<.006	<.007	.012	--	--
11/08/00	1330	<.001	.013	<.002	.12	.09	<.006	<.007	.004	--	--
01/30/01	1500	.001	.052	.002	.10	e.07	<.006	<.007	.009	--	--
03/12/01	1445	.001	.047	.017	.14	.24	.012	e.005	.032	--	--
04/10/01	1330	.001	.031	.007	e.09	.17	.006	<.007	.017	--	--
05/22/01	1430	<.001	.032	.006	.12	.17	.007	<.007	.020	--	--
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.											
03/02/99	1330	.002	.041	.006	e.06	.23	.004	.002	.027	--	1.6
04/13/99	1500	.001	.016	.018	e.06	.25	<.004	.005	.021	.4	2.5
05/10/99	1500	.001	.019	.005	.11	.17	.005	.002	.017	<.2	2.9
05/26/99	0930	.001	.074	.013	.20	.66	.013	.010	.183	3.4	2.0
06/08/99	1045	.001	.040	.002	<.10	.25	.011	.006	.050	.8	3.0
06/21/99 ^{Fb}	0840	--	--	--	--	--	--	--	--	--	.2
06/21/99	1000	.002	.027	.008	.14	.25	.008	.007	.048	.6	1.8
07/20/99	1615	<.001	<.005	.002	e.09	.14	.006	.001	.012	.2	1.4
08/18/99	0930	<.001	<.005	<.002	e.08	.14	.011	<.001	.016	.2	1.8
10/18/99	1415	.003	.021	.009	.12	.20	<.006	.002	e.005	.2	1.6
11/30/99	1300	.003	.090	<.002	<.10	.17	e.004	.001	.014	.2	2.1
01/24/00	1400	.002	.093	.002	e.06	.12	e.003	.001	.009	.2	1.4
03/06/00	1400	.003	.067	<.002	.14	.31	.009	.006	.030	--	--
04/10/00	1400	.001	.041	.004	e.08	.27	.012	.006	.032	--	--
05/09/00	1215	<.001	.047	<.002	e.09	.20	e.004	.002	.020	--	--
05/24/00	1230	<.001	.034	.006	.11	.27	.007	.008	.038	--	--
06/20/00	0930	.001	.024	.002	e.07	.19	e.005	<.001	.013	--	--
08/01/00	1430	<.001	<.005	.005	e.08	.40	<.006	.002	.009	--	--
08/30/00	1400	<.001	<.005	.003	.10	.15	e.003	<.001	e.007	--	--
11/07/00	1000	.001	.028	<.002	.10	.11	<.006	<.007	.005	--	--
12/19/00	1645	.003	.159	.007	e.07	e.06	e.004	<.007	.004	--	--
01/31/01	1500	.003	.060	.002	e.10	.17	<.006	<.007	.004	--	--
03/13/01	1500	.003	.128	.010	.13	.35	.006	<.007	.030	--	--
04/11/01	1400	.002	.037	.008	e.10	.26	.009	.008	.028	--	--
05/23/01	1430	.001	.044	.006	.12	.16	.009	e.004	.028	--	--
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.											
03/03/99	1015	<.001	.031	.002	<.10	.11	<.004	.001	.005	.2	1.3
04/14/99	1230	.001	.026	.006	<.10	.11	<.004	.002	.005	.2	2.6
05/11/99 ^{Fb}	0945	<.001	.005	.004	e.06	<.10	<.004	.001	<.004	--	--
05/11/99	1100	.001	.020	.007	e.09	.14	<.004	.001	.006	<.2	1.5
06/20/99	1130	.002	.019	.006	.11	.13	<.004	.001	.008	.3	2.1
07/19/99	1430	.001	.012	.002	e.08	e.08	<.004	.001	.004	<.2	1.7

Table 7. Nutrient and organic-carbon concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonia, dissolved (mg/L as N)	Ammonia plus organic nitrogen, dissolved (mg/L as N)	Ammonia plus organic nitrogen, total (mg/L as N)	Phos- phorus, dissolved (mg/L)	Phos- phorus, ortho- phosphate dissolved (mg/L as P)	Phos- pho- rus, total (mg/L)	Organic carbon, suspended (mg/L as C)	Organic carbon, dissolved (mg/L as C)
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT. (Continued)											
08/17/99	1330	.001	.007	.002	e.07	e.08	<.004	<.001	.004	<.2	1.6
10/19/99	1140	.002	<.005	<.002	.18	.14	e.004	.001	<.008	<.2	1.6
12/01/99	1100	<.001	.027	<.002	e.06	e.08	<.006	<.001	<.008	<.2	1.5
01/25/00	1030	<.001	.050	<.002	e.06	e.09	<.006	<.001	<.008	.2	1.3
03/07/00	1100	<.001	.029	<.002	e.08	.12	<.006	<.001	e.004	--	--
04/11/00	1000	<.001	.024	<.002	<.10	.12	<.006	<.001	<.008	--	--
05/10/00	1015	<.001	.022	<.002	e.08	.15	<.006	<.001	<.008	--	--
06/19/00	1230	.001	.019	.006	e.06	.13	<.006	<.001	e.004	--	--
08/01/00	1000	<.001	.006	.002	e.09	.21	<.006	.002	<.008	--	--
08/30/00	1030	<.001	.011	.005	e.09	.11	<.006	<.001	<.008	--	--
11/06/00	1400	<.001	.013	<.002	.12	.08	<.006	<.007	e.002	--	--
12/19/00	1245	<.001	.042	<.002	<.10	<.08	<.006	<.007	e.002	--	--
02/01/01	1000	<.001	.033	<.002	e.05	e.07	<.006	<.007	e.002	--	--
03/14/01	0930	.002	.064	.045	.25	.30	.013	.007	.038	--	--
04/12/01	0930	<.001	<.005	.006	e.08	.17	<.006	<.007	.011	--	--
05/24/01	0930	<.001	.018	.003	e.06	.10	<.006	<.007	.008	--	--
SITE 14 12392155--LIGHTNING CREEK AT CLARK FORK, IDAHO											
07/29/99	1015	.001	.028	.002	<.10	e.10	<.004	.002	<.004	<.2	.5
09/02/99	0945	<.001	.050	<.002	<.10	e.10	<.004	<.001	.004	<.2	.5
10/26/99	1145	<.001	.086	.005	.10	e.06	<.006	<.001	<.008	<.2	.6
03/02/00	0815	<.001	.094	.004	<.10	<.10	<.006	.003	<.008	--	.7
03/30/00	0815	<.001	.112	<.002	<.10	<.10	<.006	.003	<.008	--	--
04/12/00	1330	<.001	.207	.005	<.10	e.07	<.006	<.001	<.008	--	--
05/04/00	1000	<.001	.211	<.002	<.10	e.06	<.006	<.001	e.004	--	--
06/05/00	0915	<.001	.107	<.002	<.10	.19	<.006	<.001	<.008	--	--
06/30/00	0830	<.001	.042	<.002	e.07	e.07	<.006	.001	<.008	--	--
07/27/00	1145	.001	.029	.008	<.10	.13	<.006	.001	<.008	--	--
09/01/00	1200	<.001	.025	.006	<.10	<.10	<.006	<.001	<.008	--	--
11/09/00	1015	<.001	.083	<.002	<.10	<.08	<.006	<.007	<.004	--	--
12/14/00	1145	<.001	.114	.024	<.10	<.08	<.006	<.007	<.004	--	--
01/25/01	1145	.001	.156	<.002	<.10	<.08	.009	<.007	e.002	--	--
03/15/01	0915	<.001	.162	.003	<.10	<.08	<.006	<.007	e.003	--	--
04/11/01	1115	.001	.140	.002	<.10	e.06	<.006	<.007	e.002	--	--
05/04/01	1315	<.001	.247	<.002	<.10	e.08	<.006	<.007	<.004	--	--
06/14/01	1300	<.001	.072	.003	<.10	e.06	<.006	<.007	.004	--	--
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO											
03/02/99	1130	<.001	.020	.003	<.10	e.06	<.004	.005	.010	<.2	1.0
03/23/99	1000	.001	.017	<.002	<.10	.11	.009	.005	.021	.2	1.1
05/20/99	1000	<.001	.007	.003	e.05	e.06	<.004	.003	.013	.2	.8
05/25/99	0930	.001	.036	.004	.11	.29	.006	.005	.068	1.5	1.3
06/29/99	1000	<.001	.006	<.002	<.10	e.08	<.004	.002	<.004	<.2	.5
07/26/99	1000	<.001	<.005	<.002	<.10	<.10	<.004	<.001	.004	<.2	.5
09/08/99	0930	.001	.009	.002	.10	e.08	<.004	<.001	.004	<.2	.4
10/19/99	1000	.001	.013	<.002	e.05	.13	<.006	.002	<.008	<.2	.36
12/01/99	1145	<.001	.045	<.002	e.10	<.10	e.004	<.001	.009	<.2	1.1

Table 7. Nutrient and organic-carbon concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonia, dissolved (mg/L as N)	Ammonia plus organic nitrogen, dissolved (mg/L as N)	Ammonia plus organic nitrogen, total (mg/L as N)	Phos- phorus, dissolved (mg/L)	Phos- phorus, ortho- phosphate dissolved (mg/L as P)	Phos- phorus, total (mg/L)	Organic carbon, suspended (mg/L as C)	Organic carbon, dissolved (mg/L as C)
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO (Continued)											
01/11/00	1100	<.001	.038	.014	<.10	<.10	<.006	.003	<.008	<.2	.53
02/29/00	0800	<.001	.010	<.002	<.10	e.09	<.006	.002	e.006	<.2	.74
03/27/00	0945	<.001	.005	<.002	<.10	e.06	<.006	.004	<.008	--	--
04/10/00	0945	<.001	.009	<.002	<.10	e.06	e.005	.007	e.007	--	--
04/14/00	0945	<.001	.048	<.002	e.07	.29	.016	.008	.189	--	--
04/17/00	0945	<.001	.031	.003	<.10	.10	.007	.006	.010	--	--
05/02/00	0900	<.001	.019	.007	<.10	.36	e.004	.004	.009	--	--
05/18/00	0730	<.001	<.005	.002	<.10	e.06	e.003	.002	e.007	--	--
06/02/00	0715	<.001	<.005	.005	e.05	.11	e.004	<.001	e.004	--	--
06/29/00	0800	<.001	<.005	.003	e.05	<.10	e.004	.001	e.005	--	--
07/24/00	1030	<.001	<.005	<.002	<.10	e.07	<.006	.003	e.004	--	--
08/31/00	0915	<.001	.017	.006	<.10	<.10	<.006	.002	<.008	--	--
11/06/00	1030	<.001	.013	.009	e.07	<.08	<.006	<.007	e.003	--	--
12/13/00	1100	<.001	.016	<.002	<.10	<.08	<.006	<.007	e.003	--	--
01/23/01	1000	.001	.022	<.002	<.10	<.08	e.004	<.007	e.003	--	--
03/14/01	0845	<.001	.023	.008	<.10	<.08	e.003	<.007	e.003	--	--
04/10/01	0815	<.001	.013	.004	<.10	e.06	<.006	<.007	.004	--	--
05/03/01	1015	<.001	.017	.002	<.10	<.08	e.005	<.007	.011	--	--
06/12/01	0930	<.001	.005	.002	<.10	<.08	e.004	<.007	.005	--	--
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO											
11/04/98	1200	.015	.326	.387	.42	.58	.029	.027	.096	.3	.6
11/04/98 ^{Fb}	1208	<.001	<.005	<.002	<.10	<.10	.001	.001	<.001	<.2	.2
12/09/98	1210	.006	.408	.184	.23	.26	.012	.014	.023	--	--
02/03/99	1100	--	.252	.070	--	.15	.016	--	.027	<.2	.5
03/17/99	1000	.002	.133	.034	<.10	e.09	.005	.005	.018	.2	.7
03/23/99	1330	.001	.092	.018	e.06	.11	.005	.005	.028	.2	.9
04/20/99	1200	.001	.055	.011	<.10	e.09	.006	.005	.040	.3	.8
05/25/99	1245	<.001	.042	.006	.11	.39	.005	.004	.153	1.5	.7
05/27/99	1245	.001	.038	.016	e.09	.24	.004	.003	.060	.5	.6
06/29/99	1300	.001	.025	.043	.11	.11	.009	.007	.016	<.2	.4
07/26/99	1315	.005	.088	.031	e.07	e.10	.012	.009	.028	<.2	.4
09/08/99	1300	.012	.223	.246	.27	.34	.026	.016	.056	.2	.6
10/19/99	1400	.006	.195	.214	.26	.40	.021	.017	.056	.2	.6
12/02/99	0850	.013	.250	.120	.17	.21	.016	.011	.032	<.2	.7
01/11/00	1430	.007	.253	.122	.19	.16	.012	.006	.033	--	.5
02/28/00	1100	<.001	.155	.060	e.08	.22	.009	.008	.023	<.2	.8
03/27/00	1320	<.001	.119	.046	e.09	.16	.007	.009	.020	--	--
04/10/00	1315	<.001	.080	.027	e.06	e.09	.006	.008	.017	--	--
04/14/00	1315	<.001	.064	.011	<.10	.62	.008	.002	.171	--	--
04/17/00	1315	.001	.067	.026	<.10	.11	.007	.005	.108	--	--
05/02/00	1145	.001	.060	.015	<.10	e.06	e.005	.004	.017	--	--
05/18/00	1000	<.001	.035	.019	<.10	e.08	e.005	.003	.014	--	--
06/02/00	0930	.001	.054	.042	e.08	.13	.007	.005	.012	--	--
06/29/00	1130	.004	.086	.089	.16	.18	.014	.009	.026	--	--
07/24/00	1300	.006	.128	.129	.21	.28	.016	.015	.022	--	--

Table 7. Nutrient and organic-carbon concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonia, dissolved (mg/L as N)	Ammonia plus organic nitrogen, dissolved (mg/L as N)	Ammonia plus organic nitrogen, total (mg/L as N)	Phos- phorus, dissolved (mg/L)	Phos- phorus, ortho- phosphate dissolved (mg/L as P)	Phos- pho- rus, total (mg/L)	Organic carbon, suspended (mg/L as C)	Organic carbon, dissolved (mg/L as C)
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO (Continued)											
08/31/00	1215	.008	.222	.236	.29	.38	.030	.024	.053	--	--
11/06/00	1330	.004	.333	.270	.34	.34	.023	.020	.035	--	--
12/18/00	1200	.003	.406	.408	.41	.40	.020	.020	.061	--	--
01/23/01	1430	.003	.422	.316	.39	.43	.022	.016	.050	--	--
03/14/01	1145	.002	.448	.212	.29	.34	.018	.014	.079	--	--
04/10/01	1100	.002	.275	.142	.17	.21	.015	.013	.037	--	--
05/03/01	1300	.001	.125	.048	e.09	e.07	.009	e.005	.023	--	--
06/12/01	1230	.001	.072	.081	e.09	.28	.014	.011	.023	--	--
09/10/01	1130	.010	.244	.372	.46	.56	.032	.026	.068	--	--
SITE 33 12413875--ST. JOE RIVER AT RED IVES RANGER STATION, IDAHO											
02/18/99	1545	<.001	.024	<.002	<.10	<.10	<.004	.004	.004	<.2	.7
06/01/99	1415	.001	.028	.003	<.10	<.10	.006	.004	.012	.2	8.5
06/28/99	1415	<.001	.009	<.002	<.10	e.08	<.004	.004	.007	.2	.7
07/20/99	0945	<.001	<.005	<.002	e.06	<.10	.005	.002	.007	.2	.7
08/18/99	1500	<.001	<.005	<.002	<.10	e.06	<.004	<.001	.005	<.2	1.7
11/04/99	1300	<.001	.053	<.002	<.10	<.10	e.003	<.001	<.008	<.2	1.2
01/21/00	1245	<.001	.037	<.002	<.10	<.10	e.003	.001	<.008	<.2	.6
05/17/00	1215	<.001	.007	<.002	<.10	e.07	e.003	.002	e.007	--	--
06/01/00	1100	<.001	.011	.009	e.05	.12	e.003	.001	e.004	--	--
06/28/00	1100	<.001	<.005	.003	<.10	e.07	e.005	.001	e.007	--	--
07/27/00	1115	.001	.005	.011	<.10	.15	e.003	.003	e.007	--	--
09/07/00	1330	<.001	<.005	<.002	<.10	e.05	e.003	.001	<.008	--	--
11/07/00	1015	<.001	.010	<.002	<.10	.16	<.006	<.007	e.003	--	--
01/24/01	1345	<.001	.045	<.002	<.10	<.08	.006	<.007	.005	--	--
05/09/01	1200	.003	.028	<.002	<.10	.15	<.006	<.007	.005	--	--
06/13/01	0930	<.001	.005	<.002	<.10	<.08	<.006	<.007	.004	--	--
09/13/01	1045	<.001	.005	<.002	<.10	e.06	<.006	<.007	e.003	--	--
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO											
03/04/99	1230	<.001	.054	.009	<.10	.13	.005	.003	.012	.2	1.6
04/13/99	1000	.001	.073	.006	e.09	.13	.005	.003	.011	.5	1.7
05/19/99	0900	.001	.028	.004	<.10	.13	<.004	.001	.011	.2	1.6
06/02/99	0930	<.001	.013	.002	<.10	e.07	<.004	.001	.009	.2	1.5
06/23/99	1030	.001	.006	.002	.10	.11	<.004	.001	.057	.2	1.3
07/27/99	1030	.002	.033	.002	e.07	e.06	<.004	<.001	.005	--	3.7
09/09/99	1100	.003	.123	<.002	.12	.18	<.004	<.001	.009	.2	1.4
10/20/99	1130	.002	.063	<.002	e.06	.23	.009	.133	.016	.2	1.3
11/30/99	1045	.001	.031	<.002	<.10	e.06	.007	<.001	.013	.2	1.3
01/12/00	0910	.001	.087	.007	e.06	e.08	.010	.005	.012	<.2	1.4
02/29/00	1200	<.001	.073	.006	<.10	e.05	e.004	.002	.010	.2	1.4
03/28/00	0915	<.001	.071	<.002	e.07	.12	e.003	.006	.009	--	--
04/11/00	0800	<.001	.082	.004	e.05	.14	<.006	.001	.009	--	--
04/18/00	1115	<.001	.071	.002	<.10	.18	<.006	.001	.029	--	--
05/03/00	0800	<.001	.030	.014	e.07	.65	<.006	<.001	.009	--	--
05/16/00	1315	<.001	.009	.004	e.09	.17	e.003	<.001	.008	--	--
05/31/00	1345	<.001	<.005	<.002	<.10	.15	<.006	<.001	e.005	--	--

Table 7. Nutrient and organic-carbon concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonia, dissolved (mg/L as N)	Ammonia plus organic nitrogen, dissolved (mg/L as N)	Ammonia plus organic nitrogen, total (mg/L as N)	Phos- phorus, dissolved (mg/L)	Phos- phorus, ortho- phosphate dissolved (mg/L as P)	Phos- pho- rus, total (mg/L)	Organic carbon, suspended (mg/L as C)	Organic carbon, dissolved (mg/L as C)
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO (Continued)											
06/27/00	1415	.001	.026	.003	e.09	.15	<.006	.002	<.008	--	--
07/25/00	1300	.002	.072	.005	e.07	.12	<.006	.002	<.008	--	--
08/30/00	1415	.002	.257	.011	.11	.17	e.004	.001	.009	--	--
11/08/00	1400	.001	.045	<.002	e.07	.10	.007	e.004	.011	--	--
12/21/00	1400	.003	.125	.032	e.10	.10	.018	.014	.022	--	--
01/22/01	1330	.006	.236	.052	.19	.15	.036	.031	.044	--	--
03/13/01	1415	.002	.103	.020	.10	.14	.016	.013	.025	--	--
04/09/01	0930	<.001	.051	.008	<.10	.12	<.006	<.007	.006	--	--
05/07/01	1345	.001	.027	.005	<.10	.35	e.003	<.007	.007	--	--
06/11/01	1230	<.001	.021	.005	e.07	.14	<.006	<.007	.011	--	--
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.											
03/03/99	1115	.002	.591	.067	.14	.26	.016	.015	.062	.4	1.9
04/14/99	1230	.001	.438	.008	e.09	.12	.012	.011	.024	.3	1.7
05/18/99	1100	.001	.235	.003	<.10	e.06	<.004	.002	.027	.2	1.6
06/03/99	1000	.011	.101	.020	e.09	.14	<.004	.002	.026	.3	1.3
06/24/99	1015	.009	.227	<.002	e.10	.11	<.004	.001	.006	.3	1.3
07/28/99	1000	.002	.997	.003	.12	e.10	.016	.011	.022	.2	1.0
09/10/99	0940	.008	2.02	.030	e.08	.24	.017	.012	.048	.3	1.0
10/21/99	1110	.001	.766	<.002	e.09	.12	.036	.023	.036	.2	1.1
12/03/99	0940	.001	.36	<.002	e.08	e.09	.026	.019	.032	.2	1.4
01/13/00	1000	.003	.628	.004	e.05	e.08	.034	.029	.040	<.2	1.3
03/01/00	0830	.001	1.09	.005	e.10	.17	.027	.026	.053	.2	2.0
03/29/00	1000	<.001	.369	<.002	.15	.15	.019	.018	.031	--	--
04/11/00	1145	<.001	.294	.003	<.10	.15	.016	.014	.032	--	--
04/19/00	0945	.001	.170	.005	.10	.23	.011	.008	.081	--	--
05/03/00	1245	<.001	.214	.005	e.07	.18	.009	.008	.021	--	--
05/16/00	0930	.001	.241	.011	e.07	.20	<.006	<.001	.011	--	--
05/31/00	1015	<.001	.223	.003	<.10	.14	e.003	.001	.008	--	--
06/27/00	1000	.001	.606	<.002	e.08	.16	e.005	.002	.010	--	--
07/25/00	0830	.002	1.26	.003	e.07	.15	.013	.012	.011	--	--
08/30/00	1000	.006	2.46	.022	.12	.26	.016	.014	.036	--	--
11/08/00	1000	.001	.714	<.002	e.06	.10	.034	.029	.040	--	--
12/21/00	0945	.002	1.04	<.002	e.05	<.08	.064	.053	.071	--	--
01/22/01	0945	.003	1.65	.010	.15	.16	.117	.108	.118	--	--
03/13/01	1030	.009	2.86	.024	.20	.31	.068	.061	.100	--	--
04/09/01	1315	.002	.626	.007	<.10	.16	.007	e.005	.020	--	--
05/07/01	1000	.001	.202	<.002	e.06	.17	e.003	<.007	.013	--	--
06/11/01	0900	<.001	.461	.006	e.08	.14	e.004	<.007	.015	--	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001

[See figure 1 for site location. Abbreviations: e, estimated; Fb, Field blank; µg/L, micrograms per liter; R, replicate. Symbols: <, less than reporting level; --, no data]

Date	Time	Aluminum, total recoverable (µg/L)	Aluminum, dissolved (µg/L)	Antimony, total recoverable (µg/L)	Antimony, dissolved (µg/L)	Arsenic, total recoverable (µg/L)	Arsenic, dissolved (µg/L)	Barium, total recoverable (µg/L)	Barium, dissolved (µg/L)	Beryllium, total recoverable (µg/L)
SITE 3 12334550--CLARK FORK AT TURAH BRIDGE, NEAR BONNER, MONT.										
11/05/98	1000	71	<1.0	<1.0	<1.0	6.6	6.1	<100	75	<10
11/05/98 ^{Fb}	1005	--	<.3	--	<.2	--	--	--	<.2	--
12/15/98	1145	--	--	--	--	--	--	--	--	--
01/27/99	1245	--	--	--	--	--	--	--	--	--
03/25/99	1215	--	--	--	--	--	--	--	--	--
04/26/99	1115	383	2.6	<1.0	<1.0	6.6	4.7	78	72	<4.0
05/12/99	0915	--	2.9	--	<1.0	--	4.5	--	68	--
05/25/99	1145	1,400	11	<1.0	<1.0	11	4.7	89	55	<4.0
06/07/99	1230	769	12	<1.0	<1.0	9.6	5.6	62	44	<4.0
06/19/99	1130	490	12	<1.0	<1.0	7.6	6.5	62	54	<4.0
07/21/99	1015	28	6.3	<1.0	<1.0	5.7	6.0	79	84	<4.0
08/19/99	1000	133	1.7	<1.0	<1.0	8.2	7.9	92	92	<4.0
10/20/99	1030	107	6.2	<1.0	<1.0	6.9	6.2	80	85	<5.0
12/03/99 ^{Fb}	1030	--	.84	--	<.2	--	--	--	<.2	--
12/03/99	1100	75	<1.0	<1.0	<1.0	6.3	6.6	75	76	<5.0
01/26/00	0945	97	5.3	<1.0	<1.0	5.3	5.5	78	78	<5.0
03/08/00	1045	196	--	<1.0	<1.0	6.4	5.1	77	72	<5.0
03/08/00 ^R	1046	168	--	<1.0	<1.0	6.2	5.8	76	77	<5.0
04/12/00	0900	218	1.3	<1.0	<1.0	6.4	5.5	79	79	<5.0
05/25/00	0830	209	e11	<1.0	<1.0	2.9	3.1	71	67	<5.0
06/21/00	1015	57	1.4	<1.0	<1.0	3.7	4.0	79	81	<5.0
07/31/00	1045	55	<1.0	<1.0	<1.0	4.1	4.1	94	95	<5.0
08/29/00	1100	36	<1.0	<1.0	<1.0	4.6	4.2	94	94	<5.0
11/07/00 ^{Fb}	1300	--	<.3	--	<.2	--	--	--	<.2	--
11/07/00	1400	--	--	--	--	6.1	5.6	--	--	--
12/20/00	1545	--	--	--	--	5.2	5.4	--	--	--
01/30/01	1100	--	--	--	--	4.2	4.7	--	--	--
03/12/01 ^{Fb}	1040	--	<.3	--	<.2	--	--	--	<.2	--
03/12/01	1100	--	--	--	--	7.5	5.8	--	--	--
04/10/01	1030	--	--	--	--	6.6	5.8	--	--	--
05/22/01	1100	--	--	--	--	4.4	3.9	--	--	--
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.										
03/04/99	1630	--	--	--	--	--	--	--	--	--
03/24/99	0930	462	5.1	<1.0	<1.0	<1.0	<1.0	33	27	<4.0
04/15/99	1300	--	--	--	--	--	--	--	--	--
05/13/99	0945	161	9.0	<1.0	<1.0	<1.0	<1.0	28	25	<4.0
05/25/99	0915	--	33	--	<1.0	--	<1.0	--	13	--
06/07/99	1615	480	28	<1.0	<1.0	<1.0	<1.0	21	13	<4.0
06/19/99	1445	591	30	<1.0	<1.0	<1.0	<1.0	19	11	<4.0
07/21/99	1530	42	9.8	<1.0	<1.0	<1.0	<1.0	24	25	<4.0
08/19/99	1500	55	4.4	<1.0	<1.0	<1.0	1.5	37	38	<4.0
10/20/99	1430	<28	5.6	<1.0	<1.0	<2.6	<2.0	40	45	<5.0
12/02/99	1600	--	--	--	--	--	--	--	--	--
01/26/00	1000	--	--	--	--	--	--	--	--	--
03/08/00	1415	216	2.7	<1.0	<1.0	<2.6	<2.0	34	30	<5.0
03/08/00 ^{Fb}	1500	--	<.3	--	<.2	--	--	--	<.2	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Beryllium, dissolved (µg/L)	Boron, dissolved (µg/L)	Cadmium, total recoverable (µg/L)	Cadmium, dissolved (µg/L)	Chromium, total recoverable (µg/L)	Chromium, dissolved (µg/L)	Cobalt, total recoverable (µg/L)	Cobalt, dissolved (µg/L)	Copper, total recoverable (µg/L)	Copper, dissolved (µg/L)	Iron, total recoverable (µg/L)
SITE 3 12334550--CLARK FORK AT TURAH BRIDGE, NEAR BONNER, MONT.											
11/05/98	<1.0	--	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<10	2.0	--
11/05/98 ^{Fb}	<2	<2	--	<3	--	<2	--	<2	--	<2	--
12/15/98	--	--	--	--	--	--	--	--	--	--	--
01/27/99	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--
04/26/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	e9.9	2.8	430
05/12/99	<1.0	--	--	<1.0	--	<1.0	--	<1.0	--	2.7	--
05/25/99	<1.0	--	<1.0	<1.0	1.5	<1.0	2.0	<1.0	48	3.5	1,770
06/07/99	<1.0	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	35	4.8	970
06/19/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	21	4.1	600
07/21/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	e8.1	2.5	40
08/19/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	e6.9	2.9	150
10/20/99	<1.0	--	<1.1	<1.0	<1.0	<80	<1.8	<1.0	<20	2.5	140
12/03/99 ^{Fb}	<2	<2	--	<3	--	<0.1	--	<2	--	.23	--
12/03/99	<1.0	--	<1.1	<1.0	<1.0	<1.0	<2.0	<1.0	<20	2.2	120
01/26/00	<1.0	--	<1.1	<1.0	<1.0	<80	<2.0	<1.0	<20	2.5	130
03/08/00	<1.0	--	<1.1	<1.0	<1.0	<1.0	<2.0	<1.0	<20	6.5	220
03/08/00 ^R	<1.0	--	<1.1	<1.0	<1.0	<1.0	<2.0	<1.0	e14	3.2	210
04/12/00	<1.0	--	e.07	<1.0	<1.0	<80	<2.0	<1.0	e13	2.9	260
05/25/00	<1.0	e10	<1.1	<1.0	<1.0	<80	<2.0	<1.0	<20	3.5	220
06/21/00	<1.0	15	<1.1	<1.0	<1.0	<80	<2.0	<1.0	<20	2.3	90
07/31/00	<1.0	16	<1.1	<1.0	<1.0	<80	<2.0	<1.0	<20	2.1	80
08/29/00	<1.0	21	<1.1	<1.0	<1.0	<80	<1.8	<1.0	<20	1.9	40
11/07/00 ^{Fb}	<2	<2	--	<3	--	<2	--	<2	--	<2	--
11/07/00	--	--	.05	<.04	--	--	--	--	5.3	2.2	--
12/20/00	--	--	.04	e.02	--	--	--	--	3.5	2.0	--
01/30/01	--	--	.04	.04	--	--	--	--	3.6	2.2	--
03/12/01 ^{Fb}	<2	<2	--	<3	--	<2	--	<2	--	<2	--
03/12/01	--	--	.13	e.04	--	--	--	--	17	5.4	--
04/10/01	--	--	.07	e.02	--	--	--	--	8.8	3.4	--
05/22/01	--	--	.07	<.04	--	--	--	--	8.9	2.6	--
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.											
03/04/99	--	--	--	--	--	--	--	--	--	--	--
03/24/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<12	<1.0	540
04/15/99	--	--	--	--	--	--	--	--	--	--	--
05/13/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<12	<1.0	190
05/25/99	<1.0	--	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--
06/07/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<20	<1.0	470
06/19/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<12	<1.0	540
07/21/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<12	<1.0	80
08/19/99	<1.0	--	1.9	<1.0	<1.0	<1.0	<1	<1.0	<12	<1.0	110
10/20/99	<1.0	--	<1.1	<1.0	<1.0	<80	<1.8	<1.0	<20	<1.0	50
12/02/99	--	--	--	--	--	--	--	--	--	--	--
01/26/00	--	--	--	--	--	--	--	--	--	--	--
03/08/00	<1.0	--	<1.1	<1.0	<1.0	<1.0	<1.8	<1.0	<20	<1.0	340
03/08/00 ^{Fb}	<2	3.0	--	<3	--	<2	--	<2	--	<2	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Lead, dis- solved (µg/L)	Lith- ium, total recov- erable (µg/L)	Lith- ium, dis- solved (µg/L)	Manga- nese, total recov- erable (µg/L)	Manga- nese, dis- solved (µg/L)	Mercury, total recov- erable (µg/L)	Molyb- denum, total recov- erable (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, total recov- erable (µg/L)	Nickel, dis- solved (µg/L)
SITE 3 12334550--CLARK FORK AT TURAH BRIDGE, NEAR BONNER, MONT.												
11/05/98	<10	<1.0	<1.0	12	--	--	3.8	<0.10	1.8	2.3	1.0	<1.0
11/05/98 ^{Fb}	<3	--	<3	--	--	--	<1	--	--	<2	--	<5
12/15/98	<10	--	--	--	--	--	7.0	--	--	--	--	--
01/27/99	e8.6	--	--	--	--	--	8.4	--	--	--	--	--
03/25/99	10	--	--	--	--	--	8.9	--	--	--	--	--
04/26/99	12	2.2	<1.0	e9.0	--	52	6.4	<10	1.4	1.5	<1.0	<1.0
05/12/99	11	--	<1.0	--	--	--	5.9	--	--	1.5	--	<1.0
05/25/99	26	10	<1.0	<12	--	187	16	.12	<1.0	1.1	2.0	<1.0
06/07/99	17	5.7	<1.0	<12	--	113	9.0	<10	1.7	1.2	<1.0	<1.0
06/19/99	18	3.1	<1.0	<12	--	76	6.6	<10	1.6	1.4	1.0	<1.0
07/21/99	<10	<1.0	<1.0	e8.0	--	14	7.8	<10	2.1	1.7	<1.0	<1.0
08/19/99	<10	1.5	<1.0	e9.2	--	50	4.1	<10	1.8	2.1	<1.0	1.5
10/20/99	<10	1.5	<1.0	10	--	48	3.7	--	1.6	2.4	<1.8	<1.0
12/03/99 ^{Fb}	<3	--	<3	--	--	--	.1	--	--	<2	--	<5
12/03/99	<10	1.0	<1.0	12	--	30	3.2	<30	2.1	2.4	<2.0	<1.0
01/26/00	<10	1.3	<1.0	10	--	29	4.6	<30	2.3	2.4	<2.0	1.7
03/08/00	e9.0	1.8	<1.0	12	--	40	8.0	<30	2.1	2.3	<2.0	<3.2
03/08/00 ^R	e7.8	1.5	<1.0	12	--	41	8.2	<30	1.7	2.2	<2.0	<1.0
04/12/00	e7.8	1.7	<1.0	9.8	--	48	7.8	<30	1.5	1.9	<2.0	<1.0
05/25/00	11.7	e.51	<1.0	e6.8	5.6	21	4.4	<30	1.1	1.2	<2.0	<1.0
06/21/00	<10	e.50	<1.0	e7.0	6.7	22	5.0	<30	2.1	1.7	<2.0	<1.0
07/31/00	<10	e.53	<1.0	e6.6	8.2	24	6.0	<30	1.8	1.7	<2.0	<1.0
08/29/00	e5.8	<1.0	<1.0	10	11	12	3.8	<30	2.5	1.8	<1.8	<1.0
11/07/00 ^{Fb}	<3	--	<3	--	--	--	<1	--	--	<2	--	<5
11/07/00	<10	<1.0	.09	--	--	--	4.3	--	--	--	--	--
12/20/00	<10	<1.0	e.04	--	--	--	3.4	--	--	--	--	--
01/30/01	<10	<1.0	e.06	--	--	--	7.7	--	--	--	--	--
03/12/01 ^{Fb}	<3	--	<3	--	--	--	<1	--	--	<2	--	<5
03/12/01	e8.2	2.3	.09	--	--	--	8.3	--	--	--	--	--
04/10/01	<10	1.1	.10	--	--	--	11	--	--	--	--	--
05/22/01	10	1.2	e.06	--	--	--	6.4	--	--	--	--	--
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.												
03/04/99	30	--	--	--	--	--	16	--	--	--	--	--
03/24/99	20	<1.0	<1.0	<12	--	40	9.2	<10	<1.0	<1.0	<1.0	<1.0
04/15/99	22	--	--	--	--	--	7.8	--	--	--	--	--
05/13/99	21	<1.0	<1.0	<12	--	13	5.5	<10	<1.0	<1.0	<1.0	<1.0
05/25/99	35	--	<1.0	--	--	--	10	--	--	<1.0	--	<1.0
06/07/99	31	<1.0	<1.0	<12	--	19	7.6	<10	<1.0	<1.0	<1.0	<1.0
06/19/99	35	<1.0	<1.0	<12	--	19	4.9	<10	1.3	<1.0	1.0	<1.0
07/21/99	25	<1.0	<1.0	<12	--	5.8	3.5	<10	<1.0	<1.0	<1.0	<1.0
08/19/99	28	<1.0	<1.0	<12	--	12	3.5	<10	<1.0	<1.0	<1.0	<1.0
10/20/99	30	<1.0	<1.0	<7.0	--	8.2	4.7	<30	<1.0	<1.0	<1.8	<1.0
12/02/99	22	--	--	--	--	--	7.4	--	--	--	--	--
01/26/00	26	--	--	--	--	--	11	--	--	--	--	--
03/08/00	23	<1.0	<1.0	e3.4	--	43	13	<30	<1.0	<1.0	<1.8	<1.0
03/08/00 ^{Fb}	<3	--	<3	--	--	--	<1	--	--	<2	--	<5

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001(Continued)

Date	Selenium, total recov- erable (µg/L)	Selenium, dis- solved (µg/L)	Silver, total recov- erable (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, total recov- erable (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, natural (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)
SITE 3 12334550--CLARK FORK AT TURAH BRIDGE, NEAR BONNER, MONT.											
11/05/98	<1.0	<1.0	<1.0	<1.0	264	--	--	4.3	--	--	3.3
11/05/98 ^{Fb}	--	--	--	<.2	--	<.1	<.1	<.2	--	--	1.2
12/15/98	--	--	--	--	--	--	--	--	--	--	--
01/27/99	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--
04/26/99	<1.0	<1.0	<1.0	<1.0	146	--	--	2.1	--	<40	2.5
05/12/99	--	<1.0	--	<1.0	--	--	--	2.3	--	--	3.0
05/25/99	<1.0	<1.0	<1.0	<1.0	91	--	--	1.1	--	90	4.0
06/07/99	<1.0	<1.0	<1.0	<1.0	91	--	--	1.2	--	62	5.3
06/19/99	<1.0	<1.0	<1.0	<1.0	97	--	--	1.3	--	e34	4.0
07/21/99	<1.0	<1.0	<1.0	<1.0	179	--	--	2.0	--	<40	3.1
08/19/99	<1.0	<1.0	<1.0	<1.0	239	--	--	2.6	--	<40	2.7
10/20/99	<2.6	<2.4	<1.0	<1.0	246	--	--	4.0	--	<31	4.1
12/03/99 ^{Fb}	--	--	--	<.2	--	<.1	<.1	<.2	--	--	<.5
12/03/99	<2.6	<2.4	<1.0	<1.0	277	--	--	5.1	--	<31	3.8
01/26/00	<2.6	<2.4	<1.0	<1.0	260	--	--	5.9	--	<31	5.6
03/08/00	<2.6	<2.4	<1.0	<1.0	237	--	--	4.5	--	e22	6.9
03/08/00 ^R	<2.6	<2.4	<1.0	<1.0	237	--	--	4.5	--	e28	8.1
04/12/00	<2.6	<2.4	<1.0	<1.0	202	--	--	3.4	--	e28	3.8
05/25/00	<2.6	<.7	<1.0	<1.0	117	120	<.90	1.3	<1.0	<31	3.8
06/21/00	<2.6	<.7	<1.0	<1.0	165	182	<.90	1.9	1.9	<31	3.8
07/31/00	<2.6	<.7	<1.0	<1.0	189	201	<.90	1.7	<1.0	e17	6.1
08/29/00	<2.6	<.7	<1.0	<1.0	225	233	<.90	2.1	<1.0	<31	2.2
11/07/00 ^{Fb}	--	--	--	<.2	--	<.1	<.1	<.2	--	--	<.5
11/07/00	--	--	--	--	--	--	--	--	--	11	3.6
12/20/00	--	--	--	--	--	--	--	--	--	8	4.7
01/30/01	--	--	--	--	--	--	--	--	--	8	4.9
03/12/01 ^{Fb}	--	--	--	<.2	--	<.1	<.1	<.2	--	--	<.5
03/12/01	--	--	--	--	--	--	--	--	--	27	7.3
04/10/01	--	--	--	--	--	--	--	--	--	14	4.5
05/22/01	--	--	--	--	--	--	--	--	--	13	2.4
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.											
03/04/99	--	--	--	--	--	--	--	--	--	--	--
03/24/99	<1.0	<1.0	<1.0	<1.0	54	--	--	<1.0	--	<40	<1.0
04/15/99	--	--	--	--	--	--	--	--	--	--	--
05/13/99	<1.0	<1.0	<1.0	<1.0	53	--	--	<1.0	--	<40	1.0
05/25/99	--	<1.0	--	<1.0	--	--	--	<1.0	--	--	<1.0
06/07/99	<1.0	<1.0	<1.0	<1.0	32	--	--	<1.0	--	<31	1.7
06/19/99	<1.0	<1.0	<1.0	<1.0	28	--	--	<1.0	--	<40	<1.0
07/21/99	<1.0	<1.0	<1.0	<1.0	48	--	--	<1.0	--	<40	<1.0
08/19/99	<1.0	<1.0	<1.0	<1.0	70	--	--	1.1	--	<40	<1.0
10/20/99	<2.6	<2.4	<1.0	<1.0	81	--	--	1.7	--	<31	<1.0
12/02/99	--	--	--	--	--	--	--	--	--	--	--
01/26/00	--	--	--	--	--	--	--	--	--	--	--
03/08/00	<2.6	<2.4	<1.0	<1.0	68	--	--	1.3	--	<31	1.8
03/08/00 ^{Fb}	--	--	--	<.2	--	<.1	<.1	<.2	--	--	.8

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Aluminum, total recoverable (µg/L)	Aluminum, dissolved (µg/L)	Antimony, total recoverable (µg/L)	Antimony, dissolved (µg/L)	Arsenic, total recoverable (µg/L)	Arsenic, dissolved (µg/L)	Barium, total recoverable (µg/L)	Barium, dissolved (µg/L)	Beryllium, total recoverable (µg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT. (Continued)										
04/12/00	1545	262	17	<1.0	<1.0	<2.6	<2.0	18	15	<5.0
05/02/00	1300	262	17	<1.0	<1.0	<2.6	<2.0	18	15	<5.0
05/23/00	1130	1,280	<37	<1.0	<1.0	<2.6	<.9	26	11	<5.0
06/20/00	1130	123	19	<1.0	<1.0	<2.6	<.9	17	16	<5.0
07/31/00	1430	--	--	--	--	--	--	--	--	--
08/29/00	1430	e23	<1.0	<1.0	<1.0	<2.6	e.7	46	46	<5.0
09/19/00	1430	--	--	--	--	--	--	--	--	--
10/02/00	1000	--	--	--	--	--	--	--	--	--
10/16/00	1200	--	--	--	--	--	--	--	--	--
11/08/00	1330	--	--	--	--	<1.9	.37	--	--	--
01/30/01	1500	--	--	--	--	<1.9	.41	--	--	--
03/12/01	1445	--	--	--	--	<1.9	.37	--	--	--
04/10/01	1330	--	--	--	--	<1.9	.32	--	--	--
05/22/01	1430	--	--	--	--	<1.9	.24	--	--	--
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.										
03/02/99	1330	--	--	--	--	--	--	--	--	--
04/13/99	1500	82	3.0	<1.0	<1.0	<1.0	1.2	74	82	<4.0
05/10/99	1500	149	4.1	<1.0	<1.0	1.6	1.1	74	43	<4.0
05/26/99	0930	1,980	14	<1.0	<1.0	3.1	1.3	90	42	<4.0
06/08/99	1045	647	14	<1.0	<1.0	2.1	1.5	60	48	<4.0
06/21/99 ^{Fb}	0835	--	<.3	--	<.2	--	--	--	<.2	--
06/21/99	1000	615	19	<1.0	<1.0	2.1	<1.0	56	42	<4.0
07/20/99	1615	e25	5.9	<1.0	<1.0	<1.0	1.3	74	81	<4.0
08/18/99	0930	46	2.5	<1.0	<1.0	2.8	2.3	98	100	<4.0
10/18/99	1415	e15	<1.0	<1.0	<1.0	e2.5	2.4	103	110	<5.0
11/30/99	1300	--	--	--	--	--	--	--	--	--
01/24/00	1400	e24	6.6	<1.0	<1.0	e1.5	2.1	98	103	<5.0
03/06/00	1400	82	1.4	<1.0	<1.0	e2.3	2.3	87	85	<5.0
04/10/00	1400	185	6.9	<1.0	<1.0	e1.4	e1.6	68	70	<5.0
05/09/00	1215	127	<23	<1.0	<1.0	<2.6	e.8	61	63	<5.0
05/24/00	1230	646	<18	<1.0	<1.0	<2.6	e.7	53	42	<5.0
06/20/00	0930	84	<14	<1.0	<1.0	<2.6	e.9	63	64	<5.0
08/01/00 ^{Fb}	1330	--	<.3	--	<.2	--	--	--	<.2	--
08/01/00	1430	<28	1.2	<1.0	<1.0	<2.6	1.6	102	105	<5.0
08/30/00	1400	e20	<1.0	<1.0	<1.0	e2.4	1.7	107	108	<5.0
11/07/00	1000	--	--	--	--	2.0	1.8	--	--	--
12/19/00	1645	--	--	--	--	e1.9	1.6	--	--	--
01/31/01	1500	--	--	--	--	e1.1	1.8	--	--	--
03/13/01	1500	--	--	--	--	2.3	2.0	--	--	--
04/11/01	1400	--	--	--	--	2.5	2.0	--	--	--
05/23/01	1430	--	--	--	--	e1.3	1.1	--	--	--
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.										
03/03/99	1015	--	--	--	--	--	--	--	--	--
04/14/99	1230	--	--	--	--	--	--	--	--	--
05/11/99 ^{Fb}	0945	--	<.3	--	<.2	--	--	--	<.2	--
05/11/99	1100	61	1.1	<1.0	<1.0	<1.0	<1.0	92	91	<4.0
06/20/99	1130	135	3.0	<1.0	<1.0	<1.0	<1.0	87	89	<4.0
07/19/99	1430	37	6.4	<1.0	<1.0	<1.0	<1.0	82	87	<4.0

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Beryl- lium, dis- solved (µg/L)	Boron, dis- solved (µg/L)	Cad- mium, total recov- erable (µg/L)	Cad- mium, dis- solved (µg/L)	Chro- mium, total recov- erable (µg/L)	Chro- mium, dis- solved (µg/L)	Cobalt, total recov- erable (µg/L)	Cobalt, dis- solved (µg/L)	Copper, total recov- erable (µg/L)	Copper, dis- solved (µg/L)	Iron, total recov- erable (µg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT. (Continued)											
04/12/00	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	270
05/02/00	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	270
05/23/00	<1.0	<12	<.11	<1.0	e.84	<.80	<1.8	<1.0	<20	<1.0	1,140
06/20/00	<1.0	<12	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	170
07/31/00	--	--	--	--	--	--	--	--	--	--	--
08/29/00	<1.0	e11	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	90
09/19/00	--	--	--	--	--	--	--	--	--	--	--
10/02/00	--	--	--	--	--	--	--	--	--	--	--
10/16/00	--	--	--	--	--	--	--	--	--	--	--
11/08/00	--	--	<.04	<.04	--	--	--	--	e.52	.52	--
01/30/01	--	--	<.04	e.02	--	--	--	--	e.52	.62	--
03/12/01	--	--	<.04	<.04	--	--	--	--	.76	.54	--
04/10/01	--	--	<.04	<.04	--	--	--	--	.78	.86	--
05/22/01	--	--	<.04	<.04	--	--	--	--	1.2	.79	--
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.											
03/02/99	--	--	--	--	--	--	--	--	--	--	--
04/13/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	1.2	114
05/10/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	179
05/26/99	<1.0	--	<1.0	<1.0	1.7	<1.0	1.0	<1.0	21	1.6	2,660
06/08/99	<1.0	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	e12	2.0	755
06/21/99 ^{Fb}	<2	<2.0	--	<.3	--	<.2	--	<.2	--	<.2	--
06/21/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	e9.0	2.4	704
07/20/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	1.3	42
08/18/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	1.3	77
10/18/99	<1.0	--	<.11	<1.0	<1.0	<.8	<1.8	<1.0	<20	1.2	27
11/30/99	--	--	--	--	--	--	--	--	--	--	--
01/24/00	<1.0	--	<.11	<1.0	<1.0	<.8	<1.8	<1.0	<20	1.1	32
03/06/00	<1.0	--	<.11	<1.0	<1.0	<1.0	<1.8	<1.0	<20	1.4	111
04/10/00	<1.0	--	<.11	<1.0	<1.0	<.8	<1.8	<1.0	<20	<1.0	199
05/09/00	<1.0	e7.3	<.11	<1.0	<1.0	<.8	<1.8	<1.0	<20	<1.0	161
05/24/00	<1.0	<12	<.11	<1.0	<1.0	<.8	e1.0	<1.0	<20	<1.0	640
06/20/00	<1.0	<12	<.11	<1.0	<1.0	<.8	<1.8	<1.0	<20	<1.0	104
08/01/00 ^{Fb}	<2	2.5	--	<.3	--	<.2	--	<.2	--	<.2	--
08/01/00	<1.0	e8.7	<.11	<1.0	<1.0	<.8	<1.8	<1.0	<20	1.1	29
08/30/00	<1.0	e12	<.11	<1.0	<1.0	<.8	<1.8	<1.0	<20	1.1	35
11/07/00	--	--	<.04	<.04	--	--	--	--	1.2	1.0	--
12/19/00	--	--	<.04	<.04	--	--	--	--	1.0	1.0	--
01/31/01	--	--	<.04	e.02	--	--	--	--	1.0	1.2	--
03/13/01	--	--	e.02	<.04	--	--	--	--	2.8	1.6	--
04/11/01	--	--	e.02	<.04	--	--	--	--	2.7	2.0	--
05/23/01	--	--	e.02	<.04	--	--	--	--	3.0	1.4	--
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.											
03/03/99	--	--	--	--	--	--	--	--	--	--	--
04/14/99	--	--	--	--	--	--	--	--	--	--	--
05/11/99 ^{Fb}	<2	<2	--	<.3	--	<.2	--	<.2	--	<.2	--
05/11/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	81
06/20/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	146
07/19/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	36

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Lead, dis- solved (µg/L)	Lith- ium, total recov- erable (µg/L)	Lith- ium, dis- solved (µg/L)	Manga- nese, total recov- erable (µg/L)	Manga- nese, dis- solved (µg/L)	Mercury, total recov- erable (µg/L)	Molyb- denum, total recov- erable (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, total recov- erable (µg/L)	Nickel, dis- solved (µg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT. (Continued)												
04/12/00	20	<1.0	<1.0	<7.0	--	14	4.9	<.30	<1.0	<1.0	<1.8	<1.0
05/02/00	36	<1.0	<1.0	<7.0	--	14	3.6	<.30	<1.0	<1.0	<1.8	<1.0
05/23/00	22	e1.0	<1.0	e3.8	1.1	44	4.5	<.30	<1.0	<1.0	<1.8	<1.0
06/20/00	22	<1.0	<1.0	<7.0	1.1	8.4	3.8	<.30	1.4	<1.0	<1.8	<1.0
07/31/00	63	--	--	--	--	--	6.1	--	--	--	--	--
08/29/00	40	<1.0	<1.0	e3.8	2.7	14	5.8	<.30	<1.0	<1.0	<1.8	<1.0
09/19/00	40	--	--	--	--	--	4.0	--	--	--	--	--
10/02/00	--	--	--	--	--	--	--	--	--	--	--	--
10/16/00	30	--	--	--	--	--	4.8	--	--	--	--	--
11/08/00	27	<1.0	<.08	--	--	--	8.3	--	--	--	--	--
01/30/01	37	<1.0	<.08	--	--	--	24	--	--	--	--	--
03/12/01	40	<1.0	<.08	--	--	--	17	--	--	--	--	--
04/10/01	32	<1.0	<.08	--	--	--	10	--	--	--	--	--
05/22/01	24	<1.0	<.08	--	--	--	5.0	--	--	--	--	--
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.												
03/02/99	e10	--	--	--	--	--	7.4	--	--	--	--	--
04/13/99	e5.1	<1.0	<1.0	<12	--	18	4.6	<.10	1.1	<1.0	<1.0	<1.0
05/10/99	e7.1	<1.0	<1.0	<12	--	17	1.9	<.10	<1.0	<1.0	<1.0	<1.0
05/26/99	19	6.7	<1.0	<12	--	176	2.7	<.10	<1.0	<1.0	2.1	<1.0
06/08/99	17	1.9	<1.0	<12	--	55	3.9	<.10	<1.0	<1.0	<1.0	<1.0
06/21/99 ^{Fb}	<3	--	<.3	--	--	--	<.1	--	--	<.2	--	<.5
06/21/99	17	1.6	<1.0	<12	--	43	1.9	<.10	<1.0	<1.0	<1.0	<1.0
07/20/99	e8.5	<1.0	<1.0	<12	--	7.6	2.3	<.10	1.1	<1.0	<1.0	<1.0
08/18/99	e6.6	<1.0	<1.0	<12	--	17	1.8	<.10	<1.0	<1.0	2.2	<1.0
10/18/99	e7.1	<1.0	<1.0	e5.3	--	7.0	2.0	<.30	<1.0	1.0	<1.8	<1.0
11/30/99	e6.6	--	--	--	--	--	e1.3	--	--	--	--	--
01/24/00	<10	<1.0	<1.0	e4.4	--	7.9	4.0	<.30	1.8	1.1	<1.8	1.1
03/06/00	13	<1.0	<1.0	<7.0	--	28	4.7	<.30	<1.0	<1.0	e1.2	<1.0
04/10/00	11	e.64	<1.0	<7.0	--	28	3.3	<.30	<1.0	<1.0	<1.8	<1.0
05/09/00	11	<1.0	<1.0	<7.0	1.8	16	2.5	<.30	<1.0	<1.0	<1.8	<1.0
05/24/00	e9.9	e.70	<1.0	<7.0	1.4	43	2.4	<.30	<1.0	<1.0	<1.8	<1.0
06/20/00	e8.0	<1.0	<1.0	<7.0	1.8	10	2.1	<.30	1.5	<1.0	<1.8	<1.0
08/01/00 ^{Fb}	<3	--	<.3	--	--	--	<.1	--	--	<.2	--	<.5
08/01/00	<10	e.62	<1.0	<7.0	3.2	17	2.7	<.30	1.4	<1.0	<1.8	<1.0
08/30/00	e6.3	<1.0	<1.0	e4.3	4.1	18	3.2	<.30	<1.0	<1.0	<1.8	<1.0
11/07/00	e6.0	<1.0	e.04	--	--	--	e2.4	--	--	--	--	--
12/19/00	<10	<1.0	e.04	--	--	--	e3.1	--	--	--	--	--
01/31/01	e8.4	<1.0	e.05	--	--	--	6.1	--	--	--	--	--
03/13/01	13	<1.0	e.04	--	--	--	6.2	--	--	--	--	--
04/11/01	e9.2	<1.0	.10	--	--	--	6.2	--	--	--	--	--
05/23/01	13	<1.0	<.08	--	--	--	e2.2	--	--	--	--	--
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.												
03/03/99	<10	--	--	--	--	--	e2.0	--	--	--	--	--
04/14/99	<10	--	--	--	--	--	e2.0	--	--	--	--	--
05/11/99 ^{Fb}	<3	--	<.3	--	--	--	<.1	--	--	<.2	--	<.5
05/11/99	<10	<1.0	<1.0	<12	--	5.9	1.1	<.10	<1.0	<1.0	<1.0	<1.0
06/20/99	<10	<1.0	<1.0	<12	--	10	1.1	<.10	<1.0	<1.0	<1.0	<1.0
07/19/99	<10	<1.0	<1.0	<12	--	3.5	1.1	<.10	<1.0	<1.0	<1.0	<1.0

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Selenium, total recov- erable (µg/L)	Selenium, dis- solved (µg/L)	Silver, total recov- erable (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, total recov- erable (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, natural (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT. (Continued)											
04/12/00	<2.6	<2.4	<1.0	<1.0	34	--	--	<1.0	--	<31	<1.0
05/02/00	<2.6	<2.4	<1.0	<1.0	34	--	--	<1.0	--	<31	<1.0
05/23/00	<2.6	<.7	<1.0	<1.0	32	28	<.90	<1.0	<1.0	<31	<2.5
06/20/00	<2.6	<.7	<1.0	<1.0	35	38	<.90	<1.0	<1.0	<31	<1.0
07/31/00	--	--	--	--	--	--	--	--	--	--	--
08/29/00	<2.6	<.7	<1.0	<1.0	83	86	<.90	1.7	<1.0	<31	<1.0
09/19/00	--	--	--	--	--	--	--	--	--	--	--
10/02/00	--	--	--	--	--	--	--	--	--	--	--
10/16/00	--	--	--	--	--	--	--	--	--	--	--
11/08/00	--	--	--	--	--	--	--	--	--	<1.0	<1.0
01/30/01	--	--	--	--	--	--	--	--	--	<1.0	<1.0
03/12/01	--	--	--	--	--	--	--	--	--	1.8	<1.0
04/10/01	--	--	--	--	--	--	--	--	--	1.6	1.8
05/22/01	--	--	--	--	--	--	--	--	--	1.6	<1.0
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.											
03/02/99	--	--	--	--	--	--	--	--	--	--	--
04/13/99	<1.0	<1.0	<1.0	<1.0	85	--	--	1.4	--	<40	1.1
05/10/99	<1.0	<1.0	<1.0	<1.0	66	--	--	<1.0	--	<40	<1.0
05/26/99	<1.0	<1.0	<1.0	<1.0	40	--	--	<1.0	--	e36	1.3
06/08/99	<1.0	<1.0	<1.0	<1.0	45	--	--	<1.0	--	<40	2.1
06/21/99 ^{Fb}	--	--	--	<.2	--	<.1	<.1	<.2	--	--	.83
06/21/99	<1.0	<1.0	<1.0	<1.0	41	--	--	<1.0	--	<40	1.8
07/20/99	<1.0	<1.0	<1.0	<1.0	66	--	--	<1.0	--	<40	1.3
08/18/99	<1.0	<1.0	<1.0	<1.0	95	--	--	1.1	--	<40	1.4
10/18/99	<2.6	<2.4	<1.0	<1.0	121	--	--	1.7	--	<31	<1.0
11/30/99	--	--	--	--	--	--	--	--	--	--	--
01/24/00	<2.6	<2.4	<1.0	<1.0	121	--	--	2.5	--	<31	1.9
03/06/00	<2.6	<2.4	<1.0	<1.0	111	--	--	1.9	--	e18	2.9
04/10/00	<2.6	<2.4	<1.0	<1.0	72	--	--	1.1	--	e20	<1.0
05/09/00	<2.6	<.70	<1.0	<1.0	47	50	<.90	<1.0	<1.0	<31	<3.9
05/24/00	<2.6	<.70	<1.0	<1.0	37	37	<.90	<1.0	<1.0	<31	<2.6
06/20/00	<2.6	<.70	<1.0	<1.0	52	57	<.90	<1.0	<1.0	<31	<1.0
08/01/00 ^{Fb}	--	--	--	<.2	--	<.1	<.1	<.2	--	--	<.5
08/01/00	<2.6	<.70	<1.0	<1.0	83	90	<.90	<1.0	<1.0	<31	<1.0
08/30/00	<2.6	<.70	<1.0	<1.0	94	98	<.90	1.2	<1.0	<31	1.2
11/07/00	--	--	--	--	--	--	--	--	--	2.4	1.2
12/19/00	--	--	--	--	--	--	--	--	--	2.1	1.4
01/31/01	--	--	--	--	--	--	--	--	--	1.5	1.5
03/13/01	--	--	--	--	--	--	--	--	--	5.4	1.3
04/11/01	--	--	--	--	--	--	--	--	--	4.6	1.6
05/23/01	--	--	--	--	--	--	--	--	--	4.2	1.1
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.											
03/03/99	--	--	--	--	--	--	--	--	--	--	--
04/14/99	--	--	--	--	--	--	--	--	--	--	--
05/11/99 ^{Fb}	--	--	--	<.2	--	<.1	<.1	<.2	--	--	<.5
05/11/99	<1.0	<1.0	<1.0	<1.0	44	--	--	<1.0	--	<40	<1.0
06/20/99	<1.0	<1.0	<1.0	<1.0	42	--	--	<1.0	--	<40	1.0
07/19/99	<1.0	<1.0	<1.0	<1.0	42	--	--	<1.0	--	<40	<1.0

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Aluminum, total recoverable (µg/L)	Aluminum, dissolved (µg/L)	Antimony, total recoverable (µg/L)	Antimony, dissolved (µg/L)	Arsenic, total recoverable (µg/L)	Arsenic, dissolved (µg/L)	Barium, total recoverable (µg/L)	Barium, dissolved (µg/L)	Beryllium, total recoverable (µg/L)
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT. (Continued)										
08/17/99	1330	e19	2.4	<1.0	<1.0	1.1	<1.0	82	85	<4.0
10/19/99	1140	<28	1.1	<1.0	<1.0	<2.6	<2.0	87	93	<5.0
12/01/99	1100	--	--	--	--	--	--	--	--	--
01/25/00	1030	--	--	--	--	--	--	--	--	--
03/07/00	1100	--	--	--	--	--	--	--	--	--
04/11/00	1000	--	--	--	--	--	--	--	--	--
05/10/00	1015	e23	<10	<1.0	<1.0	<2.6	<.90	86	92	<5.0
06/19/00	1230	75	1.5	<1.0	<1.0	<2.6	<.90	83	86	<5.0
08/01/00	1000	--	--	--	--	--	--	--	--	--
08/30/00	1030	e18	1.5	<1.0	<1.0	<2.6	e.49	83	83	<5.0
11/06/00	1400	--	--	--	--	<1.9	.39	--	--	--
12/19/00	1245	--	--	--	--	<2.6	.37	--	--	--
02/01/01	1000	--	--	--	--	<1.9	.46	--	--	--
03/14/01	0930	--	--	--	--	<1.9	.56	--	--	--
04/12/01	0930	--	--	--	--	<1.9	.49	--	--	--
05/24/01	0930	--	--	--	--	<2.0	.39	--	--	--
SITE 14 12392155--LIGHTNING CREEK AT CLARK FORK, IDAHO										
07/29/99	1015	--	--	--	--	--	--	--	--	--
09/02/99	0945	<28	4.2	<1.0	<1.0	<2.6	<2.0	3.8	3.8	<5.0
10/26/99	1145	<28	11	<1.0	<1.0	<2.6	<2.0	3.6	3.9	<5.0
03/02/00	0815	<28	6.0	<1.0	<1.0	<2.6	<2.0	3.9	4.0	<5.0
03/30/00	0815	<28	14	<1.0	<1.0	<2.6	<2.0	3.2	3.5	<5.0
04/12/00	1330	63	15	<1.0	<1.0	<2.6	<2.0	2.6	3.0	<5.0
05/04/00	1000	87	<38	<1.0	<1.0	<2.6	<2.0	2.9	2.8	<5.0
06/05/00	0915	65	<28	<1.0	<1.0	<2.6	<.90	2.7	2.6	<5.0
06/30/00	0830	35	13	<1.0	<1.0	<2.6	<.90	2.7	2.9	<5.0
07/27/00	1145	<28	4.1	<1.0	<1.0	<2.6	<.90	3.0	3.8	<5.0
09/01/00	1200	<28	3.7	<1.0	<1.0	<2.6	<.90	3.5	3.6	<5.0
11/09/00	1015	--	--	--	--	<1.9	e.13	--	--	--
12/14/00	1145	--	--	--	--	<2.6	<.18	--	--	--
01/25/01	1145	--	--	--	--	<1.9	e.12	--	--	--
03/15/01	0915	--	--	--	--	<1.9	e.18	--	--	--
04/11/01	1115	--	--	--	--	<1.9	e.16	--	--	--
05/04/01	1315	--	--	--	--	<1.9	e.16	--	--	--
06/14/01	1300	--	--	--	--	<2.0	e.11	--	--	--
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO										
03/02/99	1130	--	--	--	--	--	--	--	--	--
03/23/99	1000	232	4.6	<1.0	<1.0	<1.0	<1.0	15	13	<4.0
05/20/99	1000	75	3.4	<1.0	<1.0	<1.0	<1.0	13	12	<4.0
05/25/99	0930	811	9.1	<1.0	<1.0	1.7	<1.0	23	11	<4.0
06/29/99	1000	<28	2.9	<1.0	<1.0	<1.0	<1.0	14	15	<4.0
07/26/99	1000	e27	2.6	<1.0	<1.0	<1.0	<1.0	17	17	<4.0
09/08/99	0930	<28	1.9	<1.0	<1.0	<1.0	<1.0	19	20	<5.0
10/19/99	1000	<28	6.1	<1.0	<1.0	<2.6	<2.0	18	19	<5.0
12/01/99	1145	--	--	--	--	--	--	--	--	--
01/11/00	1100	--	--	--	--	--	--	--	--	--
02/29/00	0800	--	--	--	--	--	--	--	--	--
03/27/00	0945	30	3.0	<1.0	<1.0	<2.6	<2.0	13	13	<5.0

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Beryllium, dissolved (µg/L)	Boron, dissolved (µg/L)	Cadmium, total recoverable (µg/L)	Cadmium, dissolved (µg/L)	Chromium, total recoverable (µg/L)	Chromium, dissolved (µg/L)	Cobalt, total recoverable (µg/L)	Cobalt, dissolved (µg/L)	Copper, total recoverable (µg/L)	Copper, dissolved (µg/L)	Iron, total recoverable (µg/L)
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT. (Continued)											
08/17/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<12	<1.0	25
10/19/99	<1.0	--	<.11	<1.0	<1.0	<.8	<1.8	<1.0	<20	<1.0	e19
12/01/99	--	--	--	--	--	--	--	--	--	--	--
01/25/00	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--
04/11/00	--	--	--	--	--	--	--	--	--	--	--
05/10/00	<1.0	<12	<.11	<1.0	<1.0	<.8	<1.8	<1.0	<20	<1.0	43
06/19/00	<1.0	<12	<.11	<1.0	<1.0	e.6	<1.8	<1.0	<20	<1.0	80
08/01/00	--	--	--	--	--	--	--	--	--	--	--
08/30/00	<1.0	17	<.11	<1.0	<1.0	<.8	<1.8	<1.0	<20	<1.0	e20
11/06/00	--	--	<.04	<.04	--	--	--	--	e.44	.4	--
12/19/00	--	--	<.04	<.04	--	--	--	--	e.41	.5	--
02/01/01	--	--	<.04	e.02	--	--	--	--	e.57	.5	--
03/14/01	--	--	<.04	<.04	--	--	--	--	1.1	.8	--
04/12/01	--	--	<.04	<.04	--	--	--	--	.77	.6	--
05/24/01	--	--	.11	<.04	--	--	--	--	e.47	.5	--
SITE 14 12392155--LIGHTNING CREEK AT CLARK FORK, IDAHO											
07/29/99	--	--	--	--	--	--	--	--	--	--	--
09/02/99	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	22
10/26/99	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	26
03/02/00	<1.0	--	<.11	<1.0	<1.0	<1.0	<1.8	<1.0	<20	<1.0	<21
03/30/00	<1.0	--	<.11	<1.0	<1.0	<1.0	<1.8	<1.0	<20	<1.0	<21
04/12/00	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	73
05/04/00	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	101
06/05/00	<1.0	<12	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	55
06/30/00	<1.0	<12	<.11	<1.0	<1.0	e.63	<1.8	<1.0	<20	<1.0	<21
07/27/00	<1.0	<12	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	<21
09/01/00	<1.0	<12	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	27
11/09/00	--	--	<.04	.07	--	--	--	--	<.60	.24	--
12/14/00	--	--	<.04	<.04	--	--	--	--	<.60	e.16	--
01/25/01	--	--	<.04	e.02	--	--	--	--	<.60	e.23	--
03/15/01	--	--	<.04	<.04	--	--	--	--	<.60	e.22	--
04/11/01	--	--	<.04	<.04	--	--	--	--	e.42	.60	--
05/04/01	--	--	<.04	<.04	--	--	--	--	<.60	.29	--
06/14/01	--	--	<.04	<.04	--	--	--	--	e.41	.43	--
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO											
03/02/99	--	--	--	--	--	--	--	--	--	--	--
03/23/99	<1.0	--	<1.0	<1.0	<1.0	--	--	<1.0	<10	<1.0	292
05/20/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	e6.6	<1.0	109
05/25/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	e8.5	<1.0	1,130
06/29/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	28
07/26/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	26
09/08/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	e19
10/19/99	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	<21
12/01/99	--	--	--	--	--	--	--	--	--	--	--
01/11/00	--	--	--	--	--	--	--	--	--	--	--
02/29/00	--	--	--	--	--	--	--	--	--	--	--
03/27/00	<1.0	--	<.11	<1.0	<1.0	<1.0	<1.8	<1.0	e11	<1.0	35

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Lead, dis- solved (µg/L)	Lith- ium, total recov- erable (µg/L)	Lith- ium, dis- solved (µg/L)	Manga- nese, total recov- erable (µg/L)	Manga- nese, dis- solved (µg/L)	Mercury, total recov- erable (µg/L)	Molyb- denum, total recov- erable (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, total recov- erable (µg/L)	Nickel, dis- solved (µg/L)
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT. (Continued)												
08/17/99	<10	<1.0	<1.0	<12	--	4.1	<1.0	<.10	<1.0	<1.0	<1.0	<1.0
10/19/99	<10	<1.0	<1.0	<7.0	--	3.3	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
12/01/99	<10	--	--	--	--	--	<2.2	--	--	--	--	--
01/25/00	<10	--	--	--	--	--	e1.8	--	--	--	--	--
03/07/00	<10	--	--	--	--	--	e1.5	--	--	--	--	--
04/11/00	e5.6	--	--	--	--	--	e1.4	--	--	--	--	--
05/10/00	<10	<1.0	<1.0	<7.0	1.0	4.0	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
06/19/00	<10	<1.0	<1.0	<7.0	.81	5.3	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
08/01/00	e5.7	--	--	--	--	--	<2.2	--	--	--	--	--
08/30/00	<10	<1.0	<1.0	<7.0	1.4	4.7	<1.0	<.30	1.0	<1.0	<1.8	<1.0
11/06/00	<10	<1.0	<.08	--	--	--	<3.2	--	--	--	--	--
12/19/00	<10	<1.0	<.08	--	--	--	<3.2	--	--	--	--	--
02/01/01	<10	<1.0	<.08	--	--	--	<3.2	--	--	--	--	--
03/14/01	14	<1.0	e.04	--	--	--	7.8	--	--	--	--	--
04/12/01	<10	<1.0	<.08	--	--	--	e2.7	--	--	--	--	--
05/24/01	<10	<1.0	<.08	--	--	--	e1.6	--	--	--	--	--
SITE 14 12392155--LIGHTNING CREEK AT CLARK FORK, IDAHO												
07/29/99	e8.3	--	--	--	--	--	<3.0	--	--	--	--	--
09/02/99	e8.1	<1.0	<1.0	<7.0	--	<2.8	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
10/26/99	e8.4	e.58	<1.0	<7.0	--	e2.1	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
03/02/00	e6.6	<1.0	<1.0	e3.1	--	<2.8	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
03/30/00	<10	<1.0	<1.0	<7.0	--	<2.8	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
04/12/00	<10	e.66	<1.0	<7.0	--	e1.8	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
05/04/00	<10	<1.0	<1.0	<7.0	--	e2.5	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
06/05/00	e5.2	<1.0	<1.0	<7.0	<.3	e1.8	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
06/30/00	e5.1	<1.0	<1.0	<7.0	<.3	<2.8	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
07/27/00	e5.1	e.51	<1.0	<7.0	e.16	<2.8	<1.0	<.30	1.2	<1.0	<1.8	<1.0
09/01/00	e8.0	<1.0	<1.0	<7.0	<.3	<2.8	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
11/09/00	e6.1	<1.0	.18	--	--	--	<3.2	--	--	--	--	--
12/14/00	<10	<1.0	e.05	--	--	--	<3.2	--	--	--	--	--
01/25/01	<10	<1.0	.12	--	--	--	<3.2	--	--	--	--	--
03/15/01	<10	<1.0	.15	--	--	--	<3.2	--	--	--	--	--
04/11/01	<10	<1.0	.25	--	--	--	e2.5	--	--	--	--	--
05/04/01	e6.1	<1.0	.20	--	--	--	<3.2	--	--	--	--	--
06/14/01	e7.1	<1.0	.26	--	--	--	<3.0	--	--	--	--	--
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO												
03/02/99	e6.3	--	--	--	--	--	e1.6	--	--	--	--	--
03/23/99	e6.5	2.0	<1.0	<16	--	11	1.4	<.10	<1.0	<1.0	<1.0	<1.0
05/20/99	17	4.0	<1.0	<12	--	7.5	1.1	<.10	<1.0	<1.0	<1.0	<1.0
05/25/99	15	11	<1.0	<12	--	49	4.8	<.10	<1.0	<1.0	1.5	<1.0
06/29/99	e7.9	<1.0	<1.0	<12	--	e2.3	1.6	<.10	<1.0	<1.0	<1.0	<1.0
07/26/99	e5.5	<1.0	<1.0	<12	--	e1.9	1.4	<.10	<1.0	<1.0	<1.0	<1.0
09/08/99	e6.0	<1.0	<1.0	<7.0	--	e1.8	1.4	<.10	<1.0	<1.0	<1.0	<1.0
10/19/99	<10	<1.0	<1.0	<7.0	--	e1.8	1.2	<.30	<1.0	<1.0	<1.8	<1.0
12/01/99	e8.1	--	--	--	--	--	<2.2	--	--	--	--	--
01/11/00	<10	--	--	--	--	--	<2.2	--	--	--	--	--
02/29/00	e6.0	--	--	--	--	--	<2.2	--	--	--	--	--
03/27/00	e7.9	<1.0	<1.0	<7.0	--	e2.0	<1.0	<.30	<1.0	<1.0	<1.8	<1.0

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Selenium, total recov- erable (µg/L)	Selenium, dis- solved (µg/L)	Silver, total recov- erable (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, total recov- erable (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, natural (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT. (Continued)											
08/17/99	<1.0	<1.0	<1.0	<1.0	43	--	--	<1.0	--	<40	<1.0
10/19/99	<2.6	<2.4	<1.0	<1.0	44	--	--	<1.0	--	<31	<1.0
12/01/99	--	--	--	--	--	--	--	--	--	--	--
01/25/00	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--
04/11/00	--	--	--	--	--	--	--	--	--	--	--
05/10/00	<2.6	<.70	<1.0	<1.0	42	44	<.90	<1.0	<1.0	<31	<3.0
06/19/00	<2.6	<.70	<1.0	<1.0	40	44	<.90	<1.0	<1.0	e17	<1.0
08/01/00	--	--	--	--	--	--	--	--	--	--	--
08/30/00	<2.6	<.70	<1.0	<1.0	41	40	<.90	<1.0	<1.0	<31	<1.0
11/06/00	--	--	--	--	--	--	--	--	--	<1.0	<1.0
12/19/00	--	--	--	--	--	--	--	--	--	<1.0	<1.0
02/01/01	--	--	--	--	--	--	--	--	--	<1.0	<1.0
03/14/01	--	--	--	--	--	--	--	--	--	2.7	<1.0
04/12/01	--	--	--	--	--	--	--	--	--	1.0	<1.0
05/24/01	--	--	--	--	--	--	--	--	--	1.2	<1.0
SITE 14 12392155--LIGHTNING CREEK AT CLARK FORK, IDAHO											
07/29/99	--	--	--	--	--	--	--	--	--	--	--
09/02/99	<2.6	<2.4	<1.0	<1.0	18	--	--	<1.0	--	<31	1.1
10/26/99	<2.6	<2.4	<1.0	<1.0	16	--	--	<1.0	--	<31	<1.0
03/02/00	<2.6	<2.4	<1.0	<1.0	17	--	--	<1.0	--	<31	<1.0
03/30/00	<2.6	<2.4	<1.0	<1.0	17	--	--	<1.0	--	<31	3.0
04/12/00	<2.6	<2.4	<1.0	<1.0	12	--	--	<1.0	--	<31	<1.0
05/04/00	<2.6	<2.4	<1.0	<1.0	10	--	--	<1.0	--	<31	<3.6
06/05/00	<2.6	<.70	<1.0	<1.0	9.2	9.2	<.90	<1.0	<1.0	<31	<3.4
06/30/00	<2.6	<.70	<1.0	<1.0	10	10	<.90	<1.0	<1.0	<31	<1.0
07/27/00	<2.6	<.70	<1.0	<1.0	16	17	<.90	<1.0	<1.0	<31	<1.0
09/01/00	<2.6	<.70	<1.0	<1.0	18	18	<.90	<1.0	<1.0	<31	<1.0
11/09/00	--	--	--	--	--	--	--	--	--	<1	1.0
12/14/00	--	--	--	--	--	--	--	--	--	<1	<1.0
01/25/01	--	--	--	--	--	--	--	--	--	<1	<1.0
03/15/01	--	--	--	--	--	--	--	--	--	<1	<1.0
04/11/01	--	--	--	--	--	--	--	--	--	2.0	1.2
05/04/01	--	--	--	--	--	--	--	--	--	<1	<1.0
06/14/01	--	--	--	--	--	--	--	--	--	<1	<1.0
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO											
03/02/99	--	--	--	--	--	--	--	--	--	--	--
03/23/99	<1.0	<1.0	<1.0	<1.0	12	--	--	<1.0	--	e29	6.4
05/20/99	<1.0	<1.0	<1.0	<1.0	17	--	--	<1.0	--	84	66
05/25/99	<1.0	<1.0	<1.0	<1.0	9.2	--	--	<1.0	--	<40	4.9
06/29/99	<1.0	<1.0	<1.0	<1.0	13	--	--	<1.0	--	<40	5.5
07/26/99	<1.0	<1.0	<1.0	<1.0	15	--	--	<1.0	--	<40	3.6
09/08/99	<1.0	<1.0	<1.0	<1.0	16	--	--	<1.0	--	<31	2.7
10/19/99	<2.6	e1.2	<1.0	<1.0	16	--	--	<1.0	--	<31	2.8
12/01/99	--	--	--	--	--	--	--	--	--	--	--
01/11/00	--	--	--	--	--	--	--	--	--	--	--
02/29/00	--	--	--	--	--	--	--	--	--	--	--
03/27/00	<2.6	<2.4	<1.0	<1.0	13	--	--	<1.0	--	<31	5.0

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Aluminum, total recoverable (µg/L)	Aluminum, dissolved (µg/L)	Antimony, total recoverable (µg/L)	Antimony, dissolved (µg/L)	Arsenic, total recoverable (µg/L)	Arsenic, dissolved (µg/L)	Barium, total recoverable (µg/L)	Barium, dissolved (µg/L)	Beryllium, total recoverable (µg/L)
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO (Continued)										
04/10/00	0945	56	--	<1.0	--	<2.6	--	13	--	<5.0
04/14/00	0945	2,160	22	<1.0	<1.0	3.0	<2.0	46	10	<5.0
04/17/00	0945	309	<10	<1.0	<1.0	<2.6	<2.0	18	10	<5.0
05/02/00	0900	81	<15	<1.0	<1.0	<2.6	<2.0	13	12	<5.0
05/18/00	0730	--	--	--	--	--	--	--	--	--
06/02/00	0715	34	<9.7	<1.0	<1.0	<2.6	<.90	14	14	<5.0
06/29/00	0800	e22	1.9	<1.0	<1.0	<2.6	<.90	16	16	<5.0
07/24/00	1030	--	--	--	--	--	--	--	--	--
08/31/00	0915	e16	2.0	<1.0	<1.0	<2.6	<.90	19	19	<5.0
11/06/00	1030	--	--	--	--	<1.9	e.13	--	--	--
12/13/00	1100	--	--	--	--	<2.6	e.09	--	--	--
01/23/01	1000	--	--	--	--	<1.9	e.13	--	--	--
03/14/01	0845	--	--	--	--	<1.9	e.16	--	--	--
04/10/01	0815	--	--	--	--	<1.9	e.16	--	--	--
05/03/01	1015	--	--	--	--	<1.9	e.16	--	--	--
06/12/01	0930	--	--	--	--	<1.9	.22	--	--	--
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO										
11/04/98	1200	455	20	11	7.7	5.9	1.0	<100	47	<10
11/04/98 ^{Fb}	1208	--	<.3	--	<.2	--	--	--	<.2	--
12/09/98	1210	44	8.2	8.3	8.0	1.2	<1.0	<100	41	<10
02/03/99	1100	--	--	--	--	--	--	--	--	--
03/17/99	1000	43	6.9	3.1	3.2	<1.0	<1.0	25	27	<4.0
03/23/99	1330	172	6.9	1.9	1.7	2.5	<1.0	25	23	<4.0
04/20/99	1200	192	6.6	3.3	1.6	4.3	<1.0	23	18	6.9
05/25/99	1245	1,390	6.6	8.2	1.1	13	<1.0	50	14	<4.0
05/27/99	1245	622	7.2	5.1	2.6	4.7	<1.0	29	15	<4.0
06/29/99	1300	--	11	--	2.4	--	<1.0	--	25	--
07/26/99	1315	52	19	5.5	5.2	1.6	1.0	35	36	<4.0
09/08/99	1300	63	19	6.8	6.3	1.2	<1.0	45	44	<5.0
10/19/99	1400	52	21	6.4	6.1	<2.6	<2.0	45	47	<5.0
12/02/99	0850	38	9.5	6.8	6.0	<2.6	<2.0	32	34	<5.0
01/11/00	1430	54	21	5.0	5.4	<2.6	<2.0	36	35	<5.0
02/28/00 ^{Fb}	1020	--	7.0	--	<.2	--	--	--	<.2	--
02/28/00	1100	65	13	3.1	2.5	<2.6	<2.0	25	27	<5.0
03/27/00	1320	92	11	2.7	2.2	<2.6	<2.0	25	25	<5.0
04/10/00	1315	58	8.1	2.4	2.2	<2.6	<2.0	21	22	<5.0
04/14/00	1315	2,030	12	7.7	1.2	12	<2.0	55	13	<5.0
04/17/00	1315	126	6.1	1.9	1.4	e1.5	<2.0	22	19	<5.0
05/02/00	1145	98	20	2.2	1.4	<2.6	<2.0	19	19	<5.0
05/18/00	1000	74	22	2.2	1.4	<2.6	<.90	22	18	<5.0
06/02/00	0930	48	9.8	1.3	1.9	<2.6	<.90	24	23	<5.0
06/29/00 ^{Fb}	1045	--	<.3	--	<.2	--	--	--	<.2	--
06/29/00	1130	39	13	4.4	3.5	<2.6	e.55	32	32	<5.0
07/24/00	1300	31	19	5.7	5.5	<2.6	e.58	40	44	<5.0
08/31/00	1215	50	19	7.0	6.6	<2.6	e.67	47	48	<5.0
11/06/00	1330	--	--	--	--	<1.9	.59	--	--	--
12/18/00	1200	--	--	--	--	<2.6	.40	--	--	--
01/23/01	1430	--	--	--	--	<1.9	.44	--	--	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Beryllium, dissolved (µg/L)	Boron, dissolved (µg/L)	Cadmium, total recoverable (µg/L)	Cadmium, dissolved (µg/L)	Chromium, total recoverable (µg/L)	Chromium, dissolved (µg/L)	Cobalt, total recoverable (µg/L)	Cobalt, dissolved (µg/L)	Copper, total recoverable (µg/L)	Copper, dissolved (µg/L)	Iron, total recoverable (µg/L)
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO (Continued)											
04/10/00	--	--	<.11	--	<1.0	--	<1.8	--	<20	--	68
04/14/00	<1.0	--	.22	<1.0	1.6	<.80	e1.7	<1.0	<20	<1.0	2,870
04/17/00	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	512
05/02/00	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	96
05/18/00	--	--	--	--	--	--	--	--	--	--	--
06/02/00	<1.0	<12	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	44
06/29/00	<1.0	<12	<.11	<1.0	e.58	e.58	<1.8	<1.0	<20	<1.0	24
07/24/00	--	--	--	--	--	--	--	--	--	--	--
08/31/00	<1.0	<12	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	28
11/06/00	--	--	<.04	<.04	--	--	--	--	<.60	e.23	--
12/13/00	--	--	<.04	<.04	--	--	--	--	<.60	e.18	--
01/23/01	--	--	<.04	<.04	--	--	--	--	<.60	e.20	--
03/14/01	--	--	<.04	<.04	--	--	--	--	e.30	.38	--
04/10/01	--	--	<.04	<.04	--	--	--	--	e.35	.45	--
05/03/01	--	--	e.02	<.04	--	--	--	--	e.38	.44	--
06/12/01	--	--	e.02	e.02	--	--	--	--	<.60	.33	--
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO											
11/04/98	<1.0	--	14	12	<1.0	<1.0	2.0	1.5	10	1.2	1,820
11/04/98 ^{Fb}	<2	<2.0	--	<.3	--	<.2	--	<.2	--	<.2	--
12/09/98	<1.0	--	13	13	<1.0	<1.0	1.2	<1.0	<10	<1.0	244
02/03/99	--	--	--	--	--	--	--	--	--	--	--
03/17/99	<1.0	--	6.2	6.5	<1.0	<1.0	<1.0	<1.0	<12	<1.0	173
03/23/99	<1.0	--	5.2	4.5	<1.0	<1.0	<1.0	<1.0	<10	<1.0	664
04/20/99	<1.0	--	4.0	2.8	<1.0	<1.0	<1.0	<1.0	e7.1	<1.0	1,260
05/25/99	<1.0	--	5.0	1.5	1.0	<1.0	2.7	<1.0	14	<1.0	5,720
05/27/99	<1.0	--	3.4	1.8	<1.0	<1.0	2.1	<1.0	e11	1.6	2,320
06/29/99	<1.0	--	--	3.2	--	<1.0	--	<1.0	--	<1.0	--
07/26/99	<3.0	--	6.6	6.6	<1.0	<1.0	<2.0	<3.0	e15	<3.0	199
09/08/99	<1.0	--	8.8	7.9	<1.0	<1.0	1.4	<1.0	<20	1.0	267
10/19/99	<1.0	--	8.4	9.2	<1.0	<.80	e1.2	1.1	<20	1.1	219
12/02/99	<1.0	--	6.8	7.7	<1.0	<.80	<1.8	<1.0	<20	<1.0	179
01/11/00	<1.0	--	10	9.0	<1.0	<.80	<2.0	<1.0	<20	1.1	190
02/28/00 ^{Fb}	<2	3.5	--	<.3	--	<.2	--	<.2	--	<.2	--
02/28/00	<1.0	--	.16	7.2	<1.0	<1.0	<2.0	<1.0	<20	<1.0	168
03/27/00	<1.0	--	5.0	5.7	<1.0	<1.0	<2.0	<1.0	<20	<1.0	162
04/10/00	<1.0	--	4.5	3.7	<1.0	<.80	<2.0	<1.0	<20	<1.0	213
04/14/00	<1.0	--	5.6	1.6	2.0	<.80	3.0	<1.0	e12	<1.0	6,010
04/17/00	<1.0	--	3.6	2.9	<1.0	<.80	<2.0	<1.0	<20	<1.0	583
05/02/00	<1.0	--	3.0	2.6	<1.0	<.80	<2.0	<1.0	<20	<1.0	436
05/18/00	<1.0	<12	2.6	2.4	<1.0	<.80	<2.0	<1.0	<20	<1.0	317
06/02/00	<1.0	<12	3.6	3.5	<1.0	<.80	<2.0	<1.0	<20	<1.0	152
06/29/00 ^{Fb}	<2	2.3	--	<.3	--	<.2	--	<.2	--	<.2	--
06/29/00	<1.0	e6.2	6.0	5.6	<1.0	<.80	<2.0	<1.0	<20	<1.0	172
07/24/00	<1.0	e8.1	7.0	6.7	<1.0	<.80	<2.0	<1.0	<20	<1.0	194
08/31/00	<1.0	e12	8.7	8.4	<1.0	<.80	<1.8	<1.0	<2.0	1.3	302
11/06/00	--	--	8.7	8.7	--	--	--	--	1.9	1.2	--
12/18/00	--	--	9.0	9.4	--	--	--	--	2.2	1.2	--
01/23/01	--	--	8.8	8.9	--	--	--	--	1.5	1.4	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Lead, dis- solved (µg/L)	Lith- ium, total recov- erable (µg/L)	Lith- ium, dis- solved (µg/L)	Manga- nese, total recov- erable (µg/L)	Manga- nese, dis- solved (µg/L)	Mercury, total recov- erable (µg/L)	Molyb- denum, total recov- erable (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, total recov- erable (µg/L)	Nickel, dis- solved (µg/L)
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO (Continued)												
04/10/00	<10	<1.0	--	<7.0	--	e2.0	e1.4	<.30	<1.0	--	<1.8	--
04/14/00	32	24	<1.0	<7.0	--	140	5.2	<.30	<1.0	<1.0	2.1	<1.0
04/17/00	16	2.5	<1.0	<7.0	--	15	2.5	<.30	<1.0	<1.0	<1.8	<1.0
05/02/00	<10	<1.0	<1.0	<7.0	--	3.0	1.4	<.30	<1.0	<1.0	<1.8	<1.0
05/18/00	30	--	--	--	--	--	<2.2	--	--	--	--	--
06/02/00	11	<1.0	<1.0	<7.0	<.3	e2.0	1.4	<.30	<1.0	<1.0	<1.8	<1.0
06/29/00	e8.3	<1.0	<1.0	<7.0	.70	e2.0	1.1	<.30	<1.0	<1.0	<1.8	<1.0
07/24/00	<10	--	--	--	--	--	e1.4	--	--	--	--	--
08/31/00	<10	<1.0	<1.0	<7.0	.38	e1.8	1.4	<.30	<1.0	<1.0	<1.8	<1.0
11/06/00	<10	<1.0	<.08	--	--	--	<3.2	--	--	--	--	--
12/13/00	<10	<1.0	<.08	--	--	--	<3.2	--	--	--	--	--
01/23/01	<10	<1.0	e.05	--	--	--	<3.2	--	--	--	--	--
03/14/01	<10	<1.0	<.08	--	--	--	<3.2	--	--	--	--	--
04/10/01	<10	<1.0	<.08	--	--	--	e1.9	--	--	--	--	--
05/03/01	e8.1	<1.0	.09	--	--	--	<3.2	--	--	--	--	--
06/12/01	e9.2	<1.0	e.04	--	--	--	<3.0	--	--	--	--	--
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO												
11/04/98	56	267	12	<10	--	727	666	.15	<1.0	<1.0	4.7	3.6
11/04/98 ^{Fb}	<3	--	<.3	--	--	--	<.1	--	--	<.2	--	<.5
12/09/98	79	32	3.1	<10	--	358	392	<.10	<1.0	<1.0	2.5	2.6
02/03/99	85	--	--	--	--	--	310	--	--	--	--	--
03/17/99	23	20	2.5	<12	--	139	138	<.10	<1.0	<1.0	1.1	1.4
03/23/99	12	85	3.4	<16	--	154	80	<.10	<1.0	<1.0	1.2	1.0
04/20/99	13	164	5.3	<16	--	--	50	<.10	<1.0	<1.0	<1.0	<1.0
05/25/99	13	790	4.6	<12	--	654	42	.66	<1.0	<1.0	2.6	<1.0
05/27/99	e8.0	350	2.8	<12	--	294	49	.30	<1.0	<1.0	2.0	<1.0
06/29/99	24	--	3.6	--	--	--	102	--	--	<1.0	--	1.2
07/26/99	103	22	8.7	<12	--	224	218	<.10	<1.0	<3.0	<2.0	<3.0
09/08/99	72	22	4.8	<7.0	--	413	388	<.10	<1.0	<1.0	2.5	3.0
10/19/99	74	19	6.3	e4.3	--	481	473	<.30	<1.0	<1.0	2.4	3.1
12/02/99	75	16	2.1	<7.0	--	211	204	<.30	<1.0	<1.0	e1.2	1.6
01/11/00	94	13	3.8	<7.0	--	300	295	<.30	<1.0	<1.0	e1.8	3.2
02/28/00 ^{Fb}	<3	--	<.3	--	--	--	<.1	--	--	<.2	--	<.5
02/28/00	48	13	2.7	e3.1	--	227	233	<.30	<1.0	<1.0	2.8	1.2
03/27/00	42	19	3.7	<7.0	--	319	320	<.30	<1.0	<1.0	e.97	1.1
04/10/00	19	26	2.6	<7.0	--	431	424	<.30	<1.0	<1.0	<1.8	<1.0
04/14/00	19	630	3.1	<7.0	--	705	99	.40	<1.0	<1.0	2.4	<1.0
04/17/00	17	73	3.2	<7.0	--	124	85	<.30	<1.0	<1.0	<1.8	<1.0
05/02/00	18	54	3.8	<7.0	--	126	106	<.30	<1.0	<1.0	<1.8	<1.0
05/18/00	23	40	3.8	<7.0	--	138	117	<.30	<1.0	<1.0	<1.8	<1.0
06/02/00	34	18	4.4	<7.0	--	260	263	<.30	<1.0	<1.0	<1.8	<1.0
06/29/00 ^{Fb}	<3	--	<.3	--	--	--	<.1	--	--	<.2	--	<.5
06/29/00	65	17	5.6	e4.1	--	175	174	<.30	<1.0	<1.0	<1.8	1.5
07/24/00	83	15	6.8	e3.2	--	270	288	<.30	1.6	<1.0	e1.6	2.0
08/31/00	92	17	6.2	e5.3	4.6	940	878	<.30	<1.0	<1.0	2.7	1.9
11/06/00	83	16	5.6	--	--	--	1,400	--	--	--	--	--
12/18/00	86	17	4.5	--	--	--	2,550	--	--	--	--	--
01/23/01	69	13	5.2	--	--	--	1,870	--	--	--	--	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Selenium, total recov- erable (µg/L)	Selenium, dis- solved (µg/L)	Silver, total recov- erable (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, total recov- erable (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, natural (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)
SITE 23 12413000--NORTH FORK COEUR D'ALENE RIVER AT ENAVILLE, IDAHO (Continued)											
04/10/00	<2.6	--	<1.0	--	12	--	--	--	--	e16	--
04/14/00	<2.6	<2.4	<1.0	<1.0	11	--	--	<1.0	--	44	5.4
04/17/00	<2.6	<2.4	<1.0	<1.0	9.4	--	--	<1.0	--	<31	<5.5
05/02/00	<2.6	<2.4	<1.0	<1.0	10	--	--	<1.0	--	<31	<6.5
05/18/00	--	--	--	--	--	--	--	--	--	--	--
06/02/00	<2.6	<.70	<1.0	<1.0	13	13	<.90	<1.0	<1.0	<31	<8.1
06/29/00	<2.6	<.70	<1.0	<1.0	14	14	<.90	<1.0	<1.0	<31	4.3
07/24/00	--	--	--	--	--	--	--	--	--	--	--
08/31/00	<2.6	<.70	<1.0	<1.0	17	17	<.90	<1.0	<1.0	<31	2.7
11/06/00	--	--	--	--	--	--	--	--	--	2.6	2.5
12/13/00	--	--	--	--	--	--	--	--	--	2.1	2.3
01/23/01	--	--	--	--	--	--	--	--	--	2.7	1.8
03/14/01	--	--	--	--	--	--	--	--	--	2.8	3.1
04/10/01	--	--	--	--	--	--	--	--	--	4.4	4.3
05/03/01	--	--	--	--	--	--	--	--	--	5.5	4.5
06/12/01	--	--	--	--	--	--	--	--	--	4.3	5.8
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO											
11/04/98	<1.0	<1.0	<1.0	<1.0	106	--	--	<1.0	--	2,190	2,120
11/04/98 ^{Fb}	--	--	--	<2	--	<1	<1	<2	--	--	.96
12/09/98	<1.0	<1.0	<1.0	<1.0	88	--	--	<1.0	--	1,760	1,900
02/03/99	--	--	--	--	--	--	--	--	--	--	--
03/17/99	<1.0	<1.0	<1.0	<1.0	44	--	--	<1.0	--	906	936
03/23/99	<1.0	<1.0	<1.0	<1.0	35	--	--	<1.0	--	738	331
04/20/99	<1.0	<1.0	<1.0	<1.0	26	--	--	<1.0	--	573	432
05/25/99	<1.0	<1.0	2.5	<1.0	18	--	--	<1.0	--	667	227
05/27/99	<1.0	<1.0	<1.0	<1.0	19	--	--	<1.0	--	446	274
06/29/99	--	<1.0	--	<1.0	--	--	--	<1.0	--	--	482
07/26/99	<1.0	<1.0	<2.0	<3.0	48	--	--	<3.0	--	927	911
09/08/99	<1.0	<1.0	<1.0	<1.0	72	--	--	<1.0	--	1,710	1,440
10/19/99	<2.6	<2.4	<1.0	<1.0	84	--	--	<1.0	--	1,640	1,690
12/02/99	<2.6	<2.4	<1.0	<1.0	54	--	--	<1.0	--	1,140	1,110
01/11/00	<2.6	<2.4	<1.0	<1.0	66	--	--	<1.0	--	1,310	1,400
02/28/00 ^{Fb}	--	--	--	<2	--	<1	<1	<2	--	--	<.5
02/28/00	<2.6	<2.4	<1.0	<1.0	44	--	--	<1.0	--	973	915
03/27/00	<2.6	<2.4	<1.0	<1.0	45	--	--	<1.0	--	750	740
04/10/00	<2.6	<2.4	<1.0	<1.0	32	--	--	<1.0	--	628	551
04/14/00	<2.6	<2.4	1.6	<1.0	21	--	--	<1.0	--	719	242
04/17/00	<2.6	<2.4	<1.0	<1.0	25	--	--	<1.0	--	422	435
05/02/00	<2.6	<2.4	<1.0	<1.0	24	--	--	<1.0	--	383	380
05/18/00	<2.6	<.7	<1.0	<1.0	23	22	<.90	<1.0	<1.0	363	324
06/02/00	<2.6	<.7	<1.0	<1.0	30	32	<.90	<1.0	<1.0	513	515
06/29/02 ^{Fb}	--	--	--	<2	--	<1	<1	<2	--	--	<.5
06/29/00	<2.6	<.7	<1.0	<1.0	43	43	<.90	<1.0	<1.0	836	693
07/24/00	<2.6	<.7	<1.0	<1.0	62	65	<.90	<1.0	<1.0	1,060	1,080
08/31/00	<2.6	<.7	<1.0	<1.0	78	79	<.90	<1.0	<1.0	1,460	1,360
11/06/00	--	--	--	--	--	--	--	--	--	1,390	1,520
12/18/00	--	--	--	--	--	--	--	--	--	1,690	1,710
01/23/01	--	--	--	--	--	--	--	--	--	1,600	1,610

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Aluminum, total recoverable (µg/L)	Aluminum, dissolved (µg/L)	Antimony, total recoverable (µg/L)	Antimony, dissolved (µg/L)	Arsenic, total recoverable (µg/L)	Arsenic, dissolved (µg/L)	Barium, total recoverable (µg/L)	Barium, dissolved (µg/L)	Beryllium, total recoverable (µg/L)
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO (Continued)										
03/14/01	1145	--	--	--	--	e1.4	.53	--	--	--
04/10/01	1100	--	--	--	--	e1.0	.44	--	--	--
05/03/01	1300	--	--	--	--	<1.9	.30	--	--	--
06/12/01	1230	--	--	--	--	<2.0	.47	--	--	--
09/10/01	1130	--	--	--	--	<2.0	.68	--	--	--
09/10/01 ^{Fb}	1345	--	<1.0	--	<.05	--	e.12	--	<1.0	--
SITE 33 12413875--ST. JOE RIVER AT RED IVES RANGER STATION, IDAHO										
02/18/99	1545	33	5.1	<1.0	<1.0	<1.0	<1.0	<100	4.7	<10
06/01/99	1415	165	16	<1.0	<1.0	<1.0	<1.0	4.1	3.4	<4.0
06/28/99	1415	--	13	2.4	<1.0	--	<1.0	--	3.7	--
07/20/99	0945	e23	13	<1.0	<1.0	<1.0	<1.0	4.3	4.7	<4.0
08/18/99	1500	e23	11	<1.0	<1.0	<1.0	<1.0	5.4	5.3	<4.0
11/04/99	1300	e17	16	<1.0	<1.0	<2.6	<2.0	4.7	5.2	<5.0
01/21/00	1245	e18	6.1	<1.0	<1.0	<2.6	<2.0	5.0	5.2	<5.0
05/17/00	1215	56	<26	<1.0	<1.0	<2.6	<.90	3.7	3.6	<5.0
06/01/00	1100	50	<13	<1.0	<1.0	<2.6	<.90	3.9	4.0	<5.0
06/28/00	1100	<28	24	<1.0	<1.0	<2.6	<.90	4.3	4.5	<5.0
07/27/00	1115	e22	11	<1.0	<1.0	<2.6	<.90	5.2	5.7	<5.0
09/07/00	1330	<28	7.9	<1.0	<1.0	<2.6	<.90	5.5	5.8	<5.0
11/07/00	1015	--	--	--	--	<1.9	e.17	--	--	--
01/24/01	1345	--	--	--	--	<1.9	.24	--	--	--
05/09/01	1200	--	--	--	--	<1.9	e.13	--	--	--
06/13/01	0930	--	--	--	--	<1.9	e.11	--	--	--
09/13/01	1045	--	--	--	--	<1.9	.33	--	--	--
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO										
03/04/99	1000	--	--	--	--	--	--	--	--	--
04/13/99	1230	128	4.4	<1.0	<1.0	<1.0	<1.0	14	13	<4.0
05/19/99	1000	121	3.6	--	<1.0	<1.0	<1.0	13	14	<4.0
06/02/99	0900	58	2.8	<1.0	<1.0	1.6	<1.0	12	11	<4.0
06/23/99	0930	31	4.9	<1.0	<1.0	<1.0	<1.0	10	9.9	<4.0
07/27/99 ^{Fb}	0915	--	.33	--	<.2	--	--	--	<.2	--
07/27/99	1030	e19	3.7	<1.0	<1.0	<1.0	<1.0	10	10	<4.0
09/09/99	1100	e21	3.8	<1.0	<1.0	<1.0	<1.0	11	11	<5.0
10/20/99	1130	<28	2.3	<1.0	<1.0	<2.6	<2.0	11	11	<5.0
11/30/99	1045	--	--	--	--	--	--	--	--	--
01/12/00	0910	36	3.6	<1.0	<1.0	<2.6	<2.0	12	12	<5.0
02/29/00	1200	54	2.8	<1.0	<1.0	<2.6	<.90	13	13	<5.0
03/28/00	0915	50	2.7	<1.0	<1.0	<2.6	<.90	13	12	<5.0
04/11/00	0800	67	2.5	<1.0	<1.0	<2.6	<.90	13	13	<5.0
04/18/00	1115	142	16	<1.0	<1.0	<2.6	<.90	14	12	<5.0
05/03/00	0800	93	8.0	<1.0	<1.0	<2.6	<2.0	12	12	<5.0
05/16/00	1315	50	18	<1.0	<1.0	<2.6	<.90	12	11	<5.0
05/31/00	1345	30	10	<1.0	<1.0	<2.6	<.90	11	11	<5.0
06/27/00	1415	e24	3.0	<1.0	<1.0	<2.6	<.90	9.9	9.7	<5.0
07/25/00	1300	<28	3.1	<1.0	<1.0	<2.6	<.90	10	11	<5.0
08/30/00	1415	e21	4.5	<1.0	<1.0	<2.6	e.50	11	11	<5.0
11/08/00	1400	--	--	--	--	<1.9	.44	--	--	--
12/21/00	1400	--	--	--	--	<2.6	.47	--	--	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Beryllium, dissolved (µg/L)	Boron, dissolved (µg/L)	Cadmium, total recoverable (µg/L)	Cadmium, dissolved (µg/L)	Chromium, total recoverable (µg/L)	Chromium, dissolved (µg/L)	Cobalt, total recoverable (µg/L)	Cobalt, dissolved (µg/L)	Copper, total recoverable (µg/L)	Copper, dissolved (µg/L)	Iron, total recoverable (µg/L)
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO (Continued)											
03/14/01	--	--	19	18	--	--	--	--	2.5	1.4	--
04/10/01	--	--	9.0	8.5	--	--	--	--	1.5	1.4	--
05/03/01	--	--	4.8	4.4	--	--	--	--	1.5	.87	--
06/12/01	--	--	5.0	5.0	--	--	--	--	1.2	.84	--
09/10/01	--	--	8.9	8.6	--	--	--	--	1.7	1.9	--
09/10/01 ^{Fb}	<.06	<7.0	--	<.04	--	<.80	--	<.02	--	.35	--
SITE 33 12413875--ST. JOE RIVER AT RED IVES RANGER STATION, IDAHO											
02/18/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	18
06/01/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	185
06/28/99	<1.0	--	--	<1.0	--	<1.0	--	<1.0	--	<1.0	--
07/20/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	29
08/18/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	34
11/04/99	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	23
01/21/00	<1.0	--	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	<21
05/17/00	<1.0	<12	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	39
06/01/00	<1.0	<12	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	50
06/28/00	<1.0	<12	<.11	<1.0	<1.0	.90	<1.8	<1.0	<20	<1.0	<21
07/27/00	<1.0	<12	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	32
09/07/00	<1.0	<12	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	<21
11/07/00	--	--	<.04	<.04	--	--	--	--	<.60	e.16	--
01/24/01	--	--	<.04	<.04	--	--	--	--	<.60	.42	--
05/09/01	--	--	<.04	e.02	--	--	--	--	e.31	.30	--
06/13/01	--	--	<.04	<.04	--	--	--	--	<.60	e.16	--
09/13/01	--	--	<.04	<.04	--	--	--	--	<.60	.43	--
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO											
03/04/99	--	--	--	--	--	--	--	--	--	--	--
04/13/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	140
05/19/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	196
06/02/99	<1.0	--	<1.0	<1.0	<1.0	--	<1.0	<1.0	<12	<1.0	106
06/23/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	46
07/27/99 ^{Fb}	<.2	<2.0	--	<.3	--	.24	--	<.2	--	<2.0	--
07/27/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	1.2	55
09/09/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	33
10/20/99	<1.0	--	.15	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	21
11/30/99	--	--	--	--	--	--	--	--	--	--	--
01/12/00	<1.0	--	.30	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	38
02/29/00	<1.0	<12	.40	<1.0	<1.0	<1.0	<1.8	<1.0	<20	<1.0	63
03/28/00	<1.0	<12	.32	<1.0	<1.0	<1.0	<1.8	<1.0	e11	<1.0	75
04/11/00	<1.0	<12	.37	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	94
04/18/00	<1.0	<12	.44	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	195
05/03/00	<1.0	<12	.29	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	144
05/16/00	<1.0	<12	.26	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	83
05/31/00	<1.0	<12	.21	<1.0	e.58	<.80	<1.8	<1.0	e14	<1.0	131
06/27/00	<1.0	<12	.15	<1.0	<1.0	e.40	<1.8	<1.0	<20	<1.0	31
07/25/00	<1.0	<12	.13	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	27
08/30/00	<1.0	e8.2	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	28
11/08/00	--	--	.18	.14	--	--	--	--	.60	.54	--
12/21/00	--	--	.23	.20	--	--	--	--	.69	.63	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Lead, dis- solved (µg/L)	Lith- ium, total recov- erable (µg/L)	Lith- ium, dis- solved (µg/L)	Manga- nese, total recov- erable (µg/L)	Manga- nese, dis- solved (µg/L)	Mercury, total recov- erable (µg/L)	Molyb- denum, total recov- erable (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, total recov- erable (µg/L)	Nickel, dis- solved (µg/L)
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO (Continued)												
03/14/01	85	32	4.4	--	--	--	317	--	--	--	--	--
04/10/01	90	15	5.1	--	--	--	316	--	--	--	--	--
05/03/01	32	30	3.2	--	--	--	130	--	--	--	--	--
06/12/01	73	13	4.9	--	--	--	187	--	--	--	--	--
09/10/01	129	15	5.4	--	--	--	488	--	--	--	--	--
09/10/01 ^{Fb}	<10	--	<.08	--	<.3	--	<.1	--	--	<.2	--	<.06
SITE 33 12413875--ST. JOE RIVER AT RED IVES RANGER STATION, IDAHO												
02/18/99	e5.4	<1.0	<1.0	<10	--	<10	<1.0	<.10	<1.0	<1.0	<1.0	<1.0
06/01/99	e5.1	<1.0	<1.0	<12	--	4.6	<1.0	<.10	<1.0	<1.0	<1.0	<1.0
06/28/99	<10	--	<1.0	<12	--	--	<1.0	<.10	--	<1.0	--	<1.0
07/20/99	e8.0	<1.0	<1.0	<12	--	<3.0	<1.0	<.10	<1.0	<1.0	<1.0	<1.0
08/18/99	e7.2	<1.0	<1.0	<12	--	e2.0	<1.0	<.10	<1.0	<1.0	<1.0	<1.0
11/04/99	e9.1	<1.0	<1.0	<7.0	--	<2.8	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
01/21/00	e6.3	<1.0	<1.0	<7.0	--	<2.8	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
05/17/00	<10	<1.0	<1.0	<7.0	e.21	3.0	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
06/01/00	e5.7	<1.0	<1.0	<7.0	<.3	e1.5	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
06/28/00	e6.4	<1.0	<1.0	<7.0	<.3	<2.8	1.2	<.30	<1.0	<1.0	<1.8	<1.0
07/27/00	e6.6	<1.0	<1.0	<7.0	e.17	e1.5	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
09/07/00	10	<1.0	<1.0	<7.0	e.20	<2.8	<1.0	<.30	<1.0	<1.0	<1.8	<1.0
11/07/00	e6.9	<1.0	<.08	--	--	--	e2.0	--	--	--	--	--
01/24/01	<10	<1.0	.09	--	--	--	<3.2	--	--	--	--	--
05/09/01	<10	<1.0	<.08	--	--	--	<3.2	--	--	--	--	--
06/13/01	e9.7	<1.0	<.08	--	--	--	<3.0	--	--	--	--	--
09/13/01	<10	<1.0	<.08	--	--	--	<3.0	--	--	--	--	--
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO												
03/04/99	20	--	--	--	--	--	--	--	--	--	--	--
04/13/99	23	2.1	<1.0	<16	--	5.1	1.2	<.10	<1.0	<1.0	<1.0	<1.0
05/19/99	18	<1.0	<1.0	<12	--	6.3	1.6	<.10	<1.0	<1.0	<1.0	<1.0
06/02/99	14	7.7	<1.0	<12	--	11	1.8	<.10	<1.0	<1.0	<1.0	<1.0
06/23/99	13	2.8	<1.0	<12	--	10	1.3	<.10	<1.0	<1.0	<1.0	<1.0
07/27/99 ^{Fb}	<3.0	--	<.3	--	--	--	<.1	--	--	<.2	--	<.5
07/27/99	e5.5	1.1	<1.0	<12	--	10	1.5	<.10	<1.0	<1.0	<1.0	<1.0
09/09/99	e8.5	1.2	<1.0	<7.0	--	4.5	1.6	<.10	<1.0	<1.0	<1.0	<1.0
10/20/99	e7.8	<1.0	<1.0	<7.0	--	4.2	1.8	<.30	<1.0	<1.0	<1.8	<1.0
11/30/99	<10	--	--	--	--	--	e1.4	--	--	--	--	--
01/12/00	<10	e.59	<1.0	<7.0	--	5.6	1.4	<.30	<1.0	<1.0	<1.8	<1.0
02/29/00	10	1.4	<1.0	e4.0	.49	5.2	1.3	<.30	<1.0	<1.0	<1.8	<1.0
03/28/00	17	e.74	<1.0	<7.0	.49	4.8	1.0	<.30	<1.0	<1.0	<1.8	<1.0
04/11/00	19	2.1	<1.0	<7.0	.50	2.9	1.0	<.30	<1.0	<1.0	<1.8	<1.0
04/18/00	26	5.6	<1.0	<7.0	.62	17	4.5	<.30	<1.0	<1.0	<1.8	<1.0
05/03/00	27	7.8	1.6	<7.0	.53	17	3.1	<.30	<1.0	<1.0	<1.8	<1.0
05/16/00	17	3.6	<1.0	<7.0	.53	13	1.6	<.30	<1.0	<1.0	<1.8	<1.0
05/31/00	17	2.1	<1.0	<7.0	e.20	11	1.0	<.30	<1.0	<1.0	<1.8	<1.0
06/27/00	<10	1.1	<1.0	<7.0	.34	6.2	<1.0	<.30	1.8	<1.0	<1.8	<1.0
07/25/00	<10	1.1	<1.0	<7.0	.57	5.7	1.8	<.30	1.1	<1.0	<1.8	<1.0
08/30/00	<10	1.3	<1.0	<7.0	.54	6.3	2.1	<.30	<1.0	<1.0	<1.8	<1.0
11/08/00	<10	<1.0	.13	--	--	--	<3.2	--	--	--	--	--
12/21/00	<10	<1.0	.17	--	--	--	e1.7	--	--	--	--	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Selenium, total recov- erable (µg/L)	Selenium, dis- solved (µg/L)	Silver, total recov- erable (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, total recov- erable (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, natural (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)
SITE 31 12413470--SOUTH FORK COEUR D'ALENE RIVER NEAR PINEHURST, IDAHO (Continued)											
03/14/01	--	--	--	--	--	--	--	--	--	1,780	1,650
04/10/01	--	--	--	--	--	--	--	--	--	1,270	1,340
05/03/01	--	--	--	--	--	--	--	--	--	661	632
06/12/01	--	--	--	--	--	--	--	--	--	805	810
09/10/01	--	--	--	--	--	--	--	--	--	1,630	1,560
09/10/01 ^{Fb}	--	.48	--	<1.0	--	<.08	<.04	<.02	<.2	--	1.3
SITE 33 12413875--ST. JOE RIVER AT RED IVES RANGER STATION, IDAHO											
02/18/99	<1.0	<1.0	<1.0	<1.0	30	--	--	<1.0	--	<10	<1.0
06/01/99	1.6	<1.0	<1.0	<1.0	5.6	--	--	<1.0	--	<40	1.0
06/28/99	--	<1.0	--	<1.0	--	--	--	<1.0	--	--	<1.0
07/20/99	<1.0	<1.0	<1.0	<1.0	7.4	--	--	<1.0	--	<40	<1.0
08/18/99	<1.0	<1.0	<1.0	<1.0	9.8	--	--	<1.0	--	<40	<1.0
11/04/99	<2.6	<2.4	<1.0	<1.0	8.8	--	--	<1.0	--	<31	<1.0
01/21/00	<2.6	<2.4	<1.0	<1.0	8.9	--	--	<1.0	--	<31	<1.0
05/17/00	<2.6	<.70	<1.0	<1.0	6.5	6.4	<.90	<1.0	<1.0	<31	<3.5
06/01/00	<2.6	<.70	<1.0	<1.0	6.7	6.8	<.90	<1.0	<1.0	<31	<3.5
06/28/00	<2.6	<.70	<1.0	<1.0	7.4	7.6	<.90	<1.0	<1.0	<31	<1.0
07/27/00	<2.6	<.70	<1.0	<1.0	9.5	9.7	<.90	<1.0	<1.0	<31	<1.0
09/07/00	<2.6	<.70	<1.0	<1.0	10	11	<.90	<1.0	<1.0	<31	<1.0
11/07/00	--	--	--	--	--	--	--	--	--	<1.0	<1.1
01/24/01	--	--	--	--	--	--	--	--	--	<1.0	<1.0
05/09/01	--	--	--	--	--	--	--	--	--	<1.0	<1.0
06/13/01	--	--	--	--	--	--	--	--	--	<1.0	<1.0
09/13/01	--	--	--	--	--	--	--	--	--	<1.0	<1.0
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO											
03/04/99	--	--	--	--	--	--	--	--	--	--	--
04/13/99	<1.0	<1.0	<1.0	<1.0	21	--	--	<1.0	--	82	90
05/19/99	<1.0	<1.0	<1.0	<1.0	9.6	--	--	<1.0	--	<40	60
06/02/99	<1.0	<1.0	<1.0	<1.0	15	--	--	<1.0	--	69	58
06/23/99	<1.0	<1.0	<1.0	<1.0	14	--	--	<1.0	--	63	46
07/27/99 ^{Fb}	--	--	--	<2	--	<.1	<.1	<.2	--	--	.52
07/27/99	<1.0	<1.0	<1.0	<1.0	14	--	--	<1.0	--	43	44
09/09/99	<1.0	<1.0	<1.0	<1.0	16	--	--	<1.0	--	36	31
10/20/99	<2.6	e1.5	<1.0	<1.0	15	--	--	<1.0	--	37	43
11/30/99	--	--	--	--	--	--	--	--	--	--	--
01/12/00	<2.6	<2.4	<1.0	<1.0	18	--	--	<1.0	--	65	76
02/29/00	<2.6	<.70	<1.0	<1.0	18	21	<.90	<1.0	<1.0	69	75
03/28/00	<2.6	<.70	<1.0	<1.0	20	20	<.90	<1.0	<1.0	81	80
04/11/00	<2.6	<.70	<1.0	<1.0	20	20	<.90	<1.0	<1.0	96	81
04/18/00	<2.6	<.70	<1.0	<1.0	20	19	<.90	<1.0	<1.0	92	71
05/03/00	<2.6	<2.4	<1.0	<1.0	16	18	<.90	<1.0	<1.0	67	56
05/16/00	<2.6	<.70	<1.0	<1.0	16	16	<.90	<1.0	<1.0	62	46
05/31/00	<2.6	<.70	<1.0	<1.0	15	16	<.90	<1.0	<1.0	63	51
06/27/00	<2.6	<.70	<1.0	<1.0	14	14	<.90	<1.0	<1.0	47	38
07/25/00	<2.6	<.70	<1.0	<1.0	15	16	<.90	<1.0	<1.0	e29	38
08/30/00	<2.6	<.70	<1.0	<1.0	17	17	<.90	<1.0	<1.0	e26	22
11/08/00	--	--	--	--	--	--	--	--	--	46	45
12/21/00	--	--	--	--	--	--	--	--	--	68	66

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Time	Aluminum, total reco- verable (µg/L)	Aluminum, dis- solved (µg/L)	Anti- mony, total reco- verable (µg/L)	Anti- mony, dis- solved (µg/L)	Arsenic, total reco- verable (µg/L)	Arsenic, dis- solved (µg/L)	Barium, total reco- verable (µg/L)	Barium, dis- solved (µg/L)	Beryl- lium, total reco- verable (µg/L)
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO (Continued)										
01/22/01	1330	--	--	--	--	<1.9	.53	--	--	--
03/13/01	1415	--	--	--	--	<1.9	.45	--	--	--
04/09/01	0930	--	--	--	--	<1.9	.40	--	--	--
05/07/01	1345	--	--	--	--	<1.9	.38	--	--	--
05/08/01 ^{Fb}	1100	--	<.3	--	<.2	--	--	--	<.2	--
06/11/01	1230	--	--	--	--	<1.9	.39	--	--	--
08/13/01	1630	--	--	--	--	<1.9	.57	--	--	--
08/14/01	0815	--	--	--	--	<1.9	.59	--	--	--
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.										
03/03/99	1115	--	--	--	--	--	--	--	--	--
04/14/99	1230	137	6.3	<1.0	<1.0	<1.0	<1.0	16	16	<4.0
04/14/99 ^{Fb}	1235	--	<.3	--	<.2	--	--	--	<.2	--
05/18/99	1100	208	3.9	<1.0	<1.0	<1.0	<1.0	17	12	<4.0
06/03/99	1000	125	8.7	<1.0	<1.0	1.7	<1.0	13	12	<4.0
06/24/99	1015	e23	5.7	<1.0	<1.0	<1.0	<1.0	13	13	<4.0
07/28/99	1000	e16	4.7	<1.0	<1.0	1.9	1.5	20	20	<4.0
09/10/99	0940	240	16	<1.0	<1.0	2.7	3.2	27	26	<5.0
10/21/99	1110	<28	7.9	<1.0	<1.0	e1.4	e1.7	18	19	<5.0
12/03/99	0940	--	--	--	--	--	--	--	--	--
01/13/00	1000	66	2.5	<1.0	<1.0	<2.6	<2.0	17	17	<5.0
03/01/00	0830	320	4.1	<1.0	<1.0	<2.6	e.66	23	20	<5.0
03/29/00	1000	113	2.5	<1.0	<1.0	<2.6	e.62	16	15	<5.0
04/11/00	1145	--	2.6	<1.0	<1.0	--	e.51	--	15	--
04/19/00	0945	1,140	15	<1.0	<1.0	<2.6	<.90	26	13	<5.0
05/03/00	1245	109	6.6	<1.0	<1.0	<2.6	e.61	14	14	<5.0
05/16/00	0930	80	8.8	<1.0	<1.0	<2.6	e.61	13	13	<5.0
05/31/00	1015	37	17	<1.0	<1.0	<2.6	e.65	13	13	<5.0
06/27/00	1000	34	5.3	<1.0	<1.0	<2.6	1.2	16	16	<5.0
07/25/00	0830	<28	7.4	<1.0	<1.0	e2.0	2.0	22	24	<5.0
08/30/00	1000	76	14	<1.0	<1.0	e2.0	2.6	26	26	<5.0
11/08/00	1000	--	--	--	--	e1.2	1.3	--	--	--
12/21/00	0945	--	--	--	--	e1.6	1.5	--	--	--
01/22/01	0945	--	--	--	--	2.2	2.3	--	--	--
03/13/01	1030	--	--	--	--	e1.7	1.5	--	--	--
04/09/01	1315	--	--	--	--	e1.2	.77	--	--	--
05/07/01	1000	--	--	--	--	<1.9	.51	--	--	--
06/11/01	0900	--	--	--	--	e1.4	1.0	--	--	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Beryllium, dis- solved (µg/L)	Boron, dis- solved (µg/L)	Cad- mium, total recov- erable (µg/L)	Cad- mium, dis- solved (µg/L)	Chro- mium, total recov- erable (µg/L)	Chro- mium, dis- solved (µg/L)	Cobalt, total recov- erable (µg/L)	Cobalt, dis- solved (µg/L)	Copper, total recov- erable (µg/L)	Copper, dis- solved (µg/L)	Iron, total recov- erable (µg/L)
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO (Continued)											
01/22/01	--	--	.22	.19	--	--	--	--	.71	.88	--
03/13/01	--	--	.23	.18	--	--	--	--	.71	.67	--
04/09/01	--	--	.21	.18	--	--	--	--	.72	.64	--
05/07/01	--	--	.29	.22	--	--	--	--	e.58	.58	--
05/08/01 ^{Fb}	<2	<2.0	--	<3	--	<2	--	<2	--	<2	--
06/11/01	--	--	.22	.16	--	--	--	--	.66	.56	--
08/13/01	--	--	.11	.08	--	--	--	--	.82	1.5	--
08/14/01	--	--	.10	.10	--	--	--	--	.74	.66	--
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.											
03/03/99	--	--	--	--	--	--	--	--	--	--	--
04/14/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	e11	<1.0	148
04/14/99 ^{Fb}	<2	<2	--	<3	--	<2	--	<2	--	<2	--
05/18/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	295
06/03/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	207
06/24/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	61
07/28/99	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<12	<1.0	16
09/10/99	<1.0	--	.14	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	335
10/21/99	<1.0	--	e.08	<1.0	<1.0	e.42	e.92	<1.0	<20	<1.0	<21
12/03/99	--	--	--	--	--	--	--	--	--	--	--
01/13/00	<1.0	--	.18	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	61
03/01/00	<1.0	<12	.21	<1.0	<1.0	<1.0	<1.8	<1.0	<20	<1.0	408
03/29/00	<1.0	<12	.22	<1.0	<1.0	<1.0	<1.8	<1.0	<20	<1.0	136
04/11/00	<1.0	<12	--	<1.0	--	<.80	--	<1.0	--	<1.0	--
04/19/00	<1.0	<12	.54	<1.0	1.4	<.80	<1.8	<1.0	<20	<1.0	2,860
05/03/00	<1.0	<12	.27	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	157
05/16/00	<1.0	<12	.24	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	103
05/31/00	<1.0	<12	.18	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	62
06/27/00	<1.0	e6.1	.12	<1.0	e.55	e.68	<1.8	<1.0	<20	<1.0	33
07/25/00	<1.0	e11	<.11	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	e17
08/30/00	<1.0	20	.14	<1.0	<1.0	<.80	<1.8	<1.0	<20	<1.0	86
11/08/00	--	--	.12	.08	--	--	--	--	.80	.61	--
12/21/00	--	--	.11	.09	--	--	--	--	.72	.64	--
01/22/01	--	--	.09	.06	--	--	--	--	.68	.76	--
03/13/01	--	--	.10	.05	--	--	--	--	1.3	.96	--
04/09/01	--	--	.19	.10	--	--	--	--	.86	.69	--
05/07/01	--	--	.27	.18	--	--	--	--	.69	.66	--
06/11/01	--	--	.16	.10	--	--	--	--	.67	.54	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Lead, dis- solved (µg/L)	Lith- ium, total recov- erable (µg/L)	Lith- ium, dis- solved (µg/L)	Manga- nese, total recov- erable (µg/L)	Manga- nese, dis- solved (µg/L)	Mercury, total recov- erable (µg/L)	Molyb- denum, total recov- erable (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, total recov- erable (µg/L)	Nickel, dis- solved (µg/L)
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO (Continued)												
01/22/01	<10	<1.0	.15	--	--	--	e2.0	--	--	--	--	--
03/13/01	e8.8	<1.0	.16	--	--	--	e2.1	--	--	--	--	--
04/09/01	<10	<1.0	e.04	--	--	--	e2.5	--	--	--	--	--
05/07/01	20	1.9	.41	--	--	--	e2.3	--	--	--	--	--
05/08/01 ^{Fb}	<3.0	--	<.3	--	--	--	<.1	--	--	<.2	--	<.5
06/11/01	<10	1.5	.17	--	--	--	<3.0	--	--	--	--	--
08/13/01	<10	1.0	.12	--	--	--	e2.4	--	--	--	--	--
08/14/01	e5.8	1.1	.13	--	--	--	e1.7	--	--	--	--	--
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.												
03/03/99	10	--	--	--	--	--	3.6	--	--	--	--	--
04/14/99	16	2.0	<1.0	<16	--	6.4	2.2	<.10	<1.0	<1.0	<1.0	<1.0
04/14/99 ^{Fb}	<3	--	<.3	--	--	--	<.1	--	--	<.2	--	<.5
05/18/99	15	5.6	<1.0	<12	--	13	1.3	<.10	<1.0	<1.0	<1.0	<1.0
06/03/99	14	8.1	<1.0	<12	--	16	1.5	<.10	<1.0	<1.0	<1.0	<1.0
06/24/99	13	2.4	<1.0	<12	--	9.5	1.4	<.10	<1.0	<1.0	<1.0	<1.0
07/28/99	<10	<1.0	<1.0	<12	--	3.6	1.5	<.10	<1.0	<1.0	<1.0	<1.0
09/10/99	<10	1.4	<1.0	e3.6	--	16	2.6	<.30	1.4	1.2	<1.8	<1.0
10/21/99	<10	<1.0	<1.0	<7.0	--	3.0	1.7	<.30	<1.0	<1.0	<1.8	<1.0
12/03/99	<10	--	--	--	--	--	<2.2	--	--	--	--	--
01/13/00	<10	<1.0	<1.0	<7.0	--	4.9	1.5	<.30	<1.0	<1.0	<1.8	<1.0
03/01/00	14	1.3	<1.0	<7.0	.88	13	2.3	<.30	<1.0	<1.0	<1.8	<1.0
03/29/00	14	1.8	<1.0	<7.0	.76	6.3	1.5	<.30	<1.0	<1.0	<1.8	<1.0
04/11/00	15	<1.0	<1.0	27	.69	--	1.4	<.30	--	<1.0	--	<1.0
04/19/00	30	16	<1.0	<7.0	.63	56	2.6	<.30	<1.0	<1.0	1.8	<1.0
05/03/00	21	7.9	1.4	<7.0	.76	14	3.0	<.30	<1.0	<1.0	<1.8	<1.0
05/16/00	15	3.3	<1.0	<7.0	.87	13	1.6	<.30	<1.0	<1.0	<1.8	<1.0
05/31/00	15	2.2	<1.0	<7.0	1.0	8.6	1.2	<.30	<1.0	<1.0	<1.8	<1.0
06/27/00	<10	e.88	<1.0	<7.0	1.2	5.0	1.3	<.30	<1.0	<1.0	<1.8	<1.0
07/25/00	<10	2.1	<1.0	<7.0	2.7	4.1	1.2	<.30	1.5	<1.0	<1.8	<1.0
08/30/00	<10	1.6	<1.0	<7.0	3.5	11	1.9	<.30	1.8	1.4	<1.8	<1.0
11/08/00	<10	<1.0	.11	--	--	--	e2.0	--	--	--	--	--
12/21/00	<10	<1.0	.10	--	--	--	<3.2	--	--	--	--	--
01/22/01	<10	<1.0	.10	--	--	--	e2.0	--	--	--	--	--
03/13/01	e8.2	<1.0	e.06	--	--	--	e3.1	--	--	--	--	--
04/09/01	<10	<1.0	e.06	--	--	--	e2.5	--	--	--	--	--
05/07/01	12	2.5	.32	--	--	--	e2.9	--	--	--	--	--
06/11/01	<10	<1.0	.11	--	--	--	e1.7	--	--	--	--	--

Table 8. Trace-element concentration data for surface-water samples collected at fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1998-2001 (Continued)

Date	Selenium, total recov- erable (µg/L)	Selenium, dis- solved (µg/L)	Silver, total recov- erable (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, total recov- erable (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, natural (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO (Continued)											
01/22/01	--	--	--	--	--	--	--	--	--	60	66
03/13/01	--	--	--	--	--	--	--	--	--	66	65
04/09/01	--	--	--	--	--	--	--	--	--	65	61
05/07/01	--	--	--	--	--	--	--	--	--	71	60
05/08/01 ^{Fb}	--	--	--	<2	--	<1	<1	<2	--	--	<5
06/11/01	--	--	--	--	--	--	--	--	--	51	46
08/13/01	--	--	--	--	--	--	--	--	--	30	28
08/14/01	--	--	--	--	--	--	--	--	--	33	30
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.											
03/03/99	--	--	--	--	--	--	--	--	--	--	--
04/14/99	<1.0	<1.0	<1.0	<1.0	32	--	--	<1.0	--	70	76
04/14/99 ^{Fb}	--	--	--	<2	--	<1	<1	<2	--	--	<5
05/18/99	<1.0	<1.0	<1.0	<1.0	27	--	--	<1.0	--	73	--
06/03/99	<1.0	<1.0	<1.0	<1.0	19	--	--	<1.0	--	68	51
06/24/99	<1.0	<1.0	<1.0	<1.0	24	--	--	<1.0	--	52	39
07/28/99	<1.0	<1.0	<1.0	<1.0	60	--	--	1.3	--	46	24
09/10/99	<2.6	<2.4	<1.0	<1.0	90	--	--	2.3	--	<31	10
10/21/99	<2.6	<2.4	<1.0	<1.0	52	--	--	<1.0	--	e24	27
12/03/99	--	--	--	--	--	--	--	--	--	--	--
01/13/00	<2.6	<2.4	<1.0	<1.0	42	--	--	<1.0	--	48	49
03/01/00	<2.6	<.70	<1.0	<1.0	37	40	<.90	<1.0	<1.0	58	49
03/29/00	<2.6	<.70	<1.0	<1.0	30	31	<.90	<1.0	<1.0	71	66
04/11/00	--	<.70	--	<1.0	--	26	<.90	<1.0	<1.0	--	71
04/19/00	<2.6	<.70	<1.0	<1.0	24	22	<.90	<1.0	<1.0	114	64
05/03/00	<2.6	<.70	<1.0	<1.0	22	25	<.90	<1.0	<1.0	61	51
05/16/00	<2.6	<.70	<1.0	<1.0	25	25	<.90	<1.0	<1.0	46	40
05/31/00	<2.6	<.70	<1.0	<1.0	26	28	<.90	<1.0	<1.0	46	41
06/27/00	<2.6	<.70	<1.0	<1.0	42	40	<.90	<1.0	<1.0	37	24
07/25/00	<2.6	<.70	<1.0	<1.0	75	79	<.90	2.0	<1.0	<31	14
08/30/00	<2.6	<.70	<1.0	<1.0	93	95	<.90	2.2	<1.0	e20	8.5
11/08/00	--	--	--	--	--	--	--	--	--	35	32
12/21/00	--	--	--	--	--	--	--	--	--	40	38
01/22/01	--	--	--	--	--	--	--	--	--	22	22
03/13/01	--	--	--	--	--	--	--	--	--	28	20
04/09/01	--	--	--	--	--	--	--	--	--	48	40
05/07/01	--	--	--	--	--	--	--	--	--	69	56
06/11/01	--	--	--	--	--	--	--	--	--	36	31

Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000

[See figure 1 for site locations. **Bold text denotes detected concentrations.** Abbreviations: ft³/s, cubic feet per second; e, estimated; Fb, field blank; µg/L, micrograms per liter. Symbols: <, less than reporting level; --, no data]

Date	Time	Discharge, instantaneous (ft ³ /s)	2,6-Diethyl- aniline (µg/L)	Aceto- chlor (µg/L)	Alachlor (µg/L)	alpha- HCH (µg/L)	alpha- HCH-d ₆ , surrogate (percent)	Atra- zine (µg/L)	Azin- phos- methyl (µg/L)	Ben- fluralin (µg/L)	Butyl- ate (µg/L)	Carb- aryl (µg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.												
03/04/99	1630	1,150	<0.003	<0.002	<0.002	<0.002	84	<0.001	<0.001	<0.002	<0.002	<0.003
03/24/99	0930	2,150	<.003	<.002	<.002	<.002	84	<.001	<.001	<.002	<.002	<.003
05/13/99	0945	2,270	<.003	<.002	<.002	<.002	85	<.001	<.001	<.002	<.002	<.003
06/07/99	1615	12,000	<.003	<.002	<.002	<.002	106	<.001	<.001	<.002	<.002	<.003
06/19/99	1445	13,700	<.003	<.002	<.002	<.002	98	<.001	<.001	<.002	<.002	<.003
07/21/99	1530	2,010	<.003	<.002	<.002	<.002	83	<.001	<.001	<.002	<.002	<.003
08/19/99	1500	1,180	<.003	<.002	<.002	<.002	92	.006	<.001	<.002	<.002	<.003
10/20/99	1430	760	<.003	<.002	<.002	<.002	104	<.001	<.001	<.002	<.002	<.003
03/08/00	1415	e1,050	<.003	<.002	<.002	<.002	99	<.001	<.001	<.002	<.002	<.003
05/23/00	1015	7,960	<.003	<.002	<.002	<.002	98	<.006	<.001	<.002	<.002	<.003
06/20/00	1130	4,190	<.003	<.002	<.002	<.002	94	<.001	<.001	<.002	<.002	<.003
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.												
05/10/99	1500	11,100	<.003	<.002	<.002	<.002	94	<.001	<.001	<.002	<.002	<.003
08/18/99	0930	3,960	<.003	<.002	<.002	<.002	107	<.001	<.001	<.002	<.002	<.003
10/18/99	1415	2,790	<.003	<.002	<.002	<.002	98	<.001	<.001	<.002	<.002	<.003
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.												
05/11/99	1100	14,800	<.003	<.002	<.002	<.002	96	<.001	<.001	<.002	<.002	<.003
07/19/99	1430	17,500	<.003	<.002	<.002	<.002	86	<.001	<.001	<.002	<.002	<.003
08/17/99	1330	9,880	<.003	<.002	<.002	<.002	104	<.001	<.001	<.002	<.002	<.003
10/19/99	1140	5,470	<.003	<.002	<.002	<.002	98	<.001	<.001	<.002	<.002	<.003
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO												
04/13/99	1230	9,760	<.003	<.002	<.002	<.002	69	<.001	<.001	<.002	<.002	<.003
04/13/99 ^{Fb}	1235	--	<.003	<.002	<.002	<.002	68	<.001	<.001	<.002	<.002	<.003
05/19/99	1000	13,800	<.003	<.002	<.002	<.002	90	<.001	<.001	<.002	<.002	<.003
06/23/99	0930	12,500	<.003	<.002	<.002	<.002	101	<.001	<.001	<.002	<.002	<.003
07/27/99	1030	1,850	<.003	<.002	<.002	<.002	85	<.001	<.001	<.002	<.002	<.003
09/09/99	1100	807	<.003	<.002	<.002	<.002	96	<.001	<.001	<.002	<.002	<.003
10/20/99	1130	2,100	<.003	<.002	<.002	<.002	96	<.001	<.001	<.002	<.002	<.003
03/28/00	0915	11,500	<.003	<.002	<.002	<.002	103	<.001	<.001	<.002	<.002	<.003
05/03/00	0800	21,200	<.003	<.002	<.002	<.002	94	<.001	<.001	<.002	<.002	<.006
05/31/00	1345	12,600	<.003	<.002	<.002	<.002	107	<.001	<.001	<.002	<.002	e.004
06/27/00	1415	3,860	<.003	<.002	<.002	<.002	102	<.001	<.001	<.002	<.002	<.003
08/30/00	1415	242	<.003	<.002	<.002	<.002	106	<.001	<.001	<.002	<.002	<.003
SITE 40 12424000--HANGMAN CREEK AT SPOKANE, WASH.												
02/16/00	1110	762	<.003	<.002	<.002	<.002	105	e.004	<.001	<.002	<.002	<.003
03/20/00	1100	433	<.003	<.002	<.002	<.002	90	.005	<.001	<.002	<.002	<.003
03/20/00 ^{Fb}	1108	--	<.003	<.002	<.002	<.002	91	<.001	<.001	<.002	<.002	<.003
04/14/00	1230	1,240	<.003	<.002	<.005	<.002	89	.036	<.001	<.002	.009	<.003
05/04/00	1045	249	<.003	<.002	<.002	<.002	94	<.074	<.001	<.002	<.002	e.007
06/01/00	1000	124	<.003	<.002	<.002	<.002	85	<.001	<.001	<.002	<.002	<.003
06/29/00	1315	47.6	<.003	<.002	<.002	<.002	89	<.006	<.001	<.002	<.002	<.003
08/30/00	1130	21.0	<.003	<.002	<.002	<.002	88	<.001	<.001	<.002	<.002	<.003

Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000 (Continued)

Date	Carbo- furan (µg/L)	Chlor- pyrifos (µg/L)	cis-Per- methrin (µg/L)	Cyan- azine (µg/L)	Dacthal (µg/L)	Deethyl- atra- zine (µg/L)	Diaz- inon (µg/L)	Diazinon- d ₁₀ , surrogate (percent)	Dieldrin (µg/L)	Disul- foton (µg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.										
03/04/99	<0.003	<0.004	<0.005	<0.004	<0.002	<0.002	<0.002	103	<0.001	<0.017
03/24/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	81	<.001	<.017
05/13/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	106	<.001	<.017
06/07/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	122	<.001	<.017
06/19/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	94	<.001	<.017
07/21/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	93	<.001	<.017
08/19/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	112	<.001	<.017
10/20/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	91	<.001	<.017
03/08/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	101	<.001	<.017
05/23/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	103	<.001	<.017
06/20/00	<.003	<.004	<.005	<.004	<.002	<.002	e.003	99	<.001	<.017
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.										
05/10/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	92	<.001	<.017
08/18/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	103	<.001	<.017
10/18/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	107	<.001	<.017
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.										
05/11/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	97	<.001	<.017
07/19/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	104	<.001	<.017
08/17/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	107	<.001	<.017
10/19/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	109	<.001	<.017
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO										
04/13/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	99	<.001	<.017
04/13/99 ^{Fb}	<.003	<.004	<.005	<.004	<.002	<.002	<.002	96	<.001	<.017
05/19/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	101	<.001	<.017
06/23/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	91	<.001	<.017
07/27/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	112	<.001	<.017
09/09/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	96	<.001	<.017
10/20/99	<.003	<.004	<.005	<.004	e.003	<.002	<.002	101	<.001	<.017
03/28/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	115	<.001	<.017
05/03/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	108	<.001	<.017
05/31/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	112	<.001	<.017
06/27/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	111	<.001	<.017
08/30/00	<.003	<.004	<.005	<.004	<.002	<.002	e.002	108	<.001	<.017
SITE 40 12424000--HANGMAN CREEK AT SPOKANE , WASH.										
02/16/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	115	<.001	<.017
03/20/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	87	<.001	<.017
03/20/00 ^{Fb}	<.003	<.004	<.005	<.004	<.002	<.002	<.002	85	<.001	<.017
04/14/00	<.003	<.004	<.005	<.004	e.003	e.005	<.005	107	<.001	<.017
05/04/00	<.003	<.004	<.005	<.004	<.002	<.087	<.002	112	<.001	<.017
06/01/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	92	<.001	<.017
06/29/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	98	<.001	<.017
08/30/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	120	<.001	<.017

Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000 (Continued)

Date	EPTC (µg/L)	Ethal- fluralin (µg/L)	Etho- pro- phos (µg/L)	Fonofos (µg/L)	Lindane (µg/L)	Linuron (µg/L)	Mala- thion (µg/L)	Metol- achlor (µg/L)	Metri- buzin (µg/L)	Molin- ate (µg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.										
03/04/99	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005	<0.002	<0.004	<0.004
03/24/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
05/13/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
06/07/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
06/19/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
07/21/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
08/19/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
10/20/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
03/08/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
05/23/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
06/20/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.										
05/10/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
08/18/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
10/18/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.										
05/11/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
07/19/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
08/17/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
10/19/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO										
04/13/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
04/13/99 ^{Fb}	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
05/19/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
06/23/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
07/27/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
09/09/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
10/20/99	.019	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
03/28/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
05/03/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
05/31/00	e.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
06/27/00	<.005	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
08/30/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
SITE 40 12424000--HANGMAN CREEK AT SPOKANE, WASH.										
02/16/00	<.002	<.004	<.003	<.003	.005	<.002	<.005	<.002	.015	<.004
03/20/00	<.002	<.004	<.003	<.003	e.003	<.002	<.005	<.002	.008	<.004
03/20/00 ^{Fb}	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
04/14/00	.008	<.004	.006	<.003	.008	<.002	<.005	.005	.200	<.004
05/04/00	e.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	.138	<.004
06/01/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
06/29/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
08/30/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004

Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000 (Continued)

Date	Naprop- amide (µg/L)	Para- thion (µg/L)	Para- thion- methyl (µg/L)	Pebulate (µg/L)	Pendi- methalin (µg/L)	Phorate (µg/L)	p,p'-DDE (µg/L)	Pro- meton (µg/L)	Prop- achlor (µg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.									
03/04/99	<0.003	<0.004	<0.006	<0.004	<0.004	<0.002	<0.006	<0.018	<0.007
03/24/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	e.002	<.007
05/13/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
06/07/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
06/19/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
07/21/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
08/19/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	e.004	<.007
10/20/99	<.003	<.004	<.006	<.004	<.004	<.002	e.001	e.005	<.007
03/08/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	e.002	<.007
05/23/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
06/20/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.									
05/10/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
08/18/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
10/18/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.									
05/11/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
07/19/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
08/17/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
10/19/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO									
04/13/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
04/13/99 ^{Fb}	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
05/19/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
06/23/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
07/27/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
09/09/99	<.003	<.004	<.006	<.004	<.004	<.002	e.001	<.018	<.007
10/20/99	<.003	<.004	<.006	<.004	.019	<.002	<.006	<.018	<.007
03/28/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
05/03/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
05/31/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
06/27/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
08/30/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
SITE 40 12424000--HANGMAN CREEK AT SPOKANE, WASH.									
02/16/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	e.003	<.007
03/20/00	<.003	<.004	<.006	<.004	<.004	<.002	e.002	e.005	<.007
03/20/00 ^{Fb}	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
04/14/00	<.003	<.004	<.020	<.004	.017	<.002	<.006	e.009	<.007
05/04/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	e.013	<.007
06/01/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
06/29/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	e.005	<.007
08/30/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007

Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000 (Continued)

Date	Prop-anil (µg/L)	Prop-argite (µg/L)	Propyz-amide (µg/L)	Sima-zine (µg/L)	Tebu-thiuron (µg/L)	Terbacil (µg/L)	Terbufos (µg/L)	Thio-ben-carb (µg/L)	Tri-allate (µg/L)	Tri-fluralin (µg/L)
SITE 5 12352500--BITTERROOT RIVER NEAR MISSOULA, MONT.										
03/04/99	<0.004	<0.013	<0.003	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.002
03/24/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
05/13/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
06/07/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
06/19/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
07/21/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
08/19/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
10/20/99	<.004	<.090	<.003	<.005	<.010	<.007	<.013	<.002	e.002	e.004
03/08/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
05/23/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
06/20/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
SITE 9 12354500--CLARK FORK AT ST. REGIS, MONT.										
05/10/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
08/18/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
10/18/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
SITE 12 12388700--FLATHEAD RIVER AT PERMA, MONT.										
05/11/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
07/19/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
08/17/99	<.004	--	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
10/19/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO										
04/13/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
04/13/99 ^{Fb}	<.004	<.013	<.003	<.005	<.077	<.007	<.013	<.002	<.001	<.002
05/19/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	e.002	<.002
06/23/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
07/27/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
09/09/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
10/20/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	.031
03/28/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	e.001	<.002
05/03/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	e.004	<.002
05/31/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	e.003	<.002
06/27/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	e.002	<.002
08/30/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
SITE 40 12424000--HANGMAN CREEK AT SPOKANE, WASH.										
02/16/00	<.004	<.013	<.003	e.004	<.010	e.019	<.013	<.002	.026	<.002
03/20/00	<.004	<.013	<.003	e.005	<.010	e.021	<.013	<.002	.008	<.002
03/20/00 ^{Fb}	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
04/14/00	<.004	<.013	<.003	.008	<.010	e.009	<.013	<.002	.350	<.002
05/04/00	<.004	<.013	<.003	.085	e.007	e.007	<.013	<.002	.020	<.002
06/01/00	<.004	<.013	<.003	.066	e.004	<.020	<.013	<.002	<.001	<.002
06/29/00	<.004	<.013	<.003	.019	<.010	<.007	<.013	<.002	<.001	<.002
08/30/00	<.004	<.013	<.003	<.010	<.010	<.007	<.013	<.002	<.001	<.002

Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000 (Continued)

Date	Time	Discharge, instantaneous (ft ³ /s)	2,6-Diethyl- aniline (µg/L)	Aceto- chlor (µg/L)	Alachlor (µg/L)	alpha- HCH (µg/L)	alpha- HCH-d ₆ , surrogate (percent)	Atra- zine (µg/L)	Azin- phos- methyl (µg/L)	Ben- fluralin (µg/L)	Butyl- ate (µg/L)	Carb- aryl (µg/L)
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.												
04/14/99	1230	10,100	<.003	<.002	<.002	<.002	106	<.001	<.001	<.002	<.002	<.003
05/18/99	1100	13,500	<.003	<.002	<.002	<.002	91	<.001	<.001	<.002	<.002	<.003
06/24/99	1015	11,800	<.003	<.002	<.002	<.002	100	<.001	<.001	<.002	<.002	<.003
07/28/99	1000	2,050	<.003	<.002	<.002	<.002	85	<.074	<.001	<.002	<.002	<.003
09/10/99	0940	1,170	<.003	<.002	<.002	<.002	106	e.003	<.001	<.002	<.002	<.003
10/21/99	1110	2,230	<.003	<.002	<.002	<.002	100	<.001	<.001	<.002	<.002	<.003
03/29/00	1000	11,600	<.003	<.002	<.002	<.002	91	e.002	<.001	<.002	<.002	<.003
05/03/00	1245	21,000	<.003	<.002	<.002	<.002	97	e.004	<.001	<.002	<.002	<.006
05/31/00	1015	12,400	<.003	<.002	<.002	<.002	104	<.001	<.001	<.002	<.002	e.004
06/27/00	1000	4,290	<.003	<.002	<.002	<.002	98	e.002	<.001	<.002	<.002	<.003
08/30/00	1000	680	<.003	<.002	<.002	<.002	103	e.004	<.001	<.002	<.002	<.003

Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000 (Continued)

Date	Carbo- furan (µg/L)	Chlor- pyrifos (µg/L)	cis-Per- methrin (µg/L)	Cyan- azine (µg/L)	Dacthal (µg/L)	Deethyl- atra- zine (µg/L)	Diaz- inon (µg/L)	Diazinon- d ₁₀ , surrogate (percent)	Dieldrin (µg/L)	Disul- foton (µg/L)
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.										
04/14/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	132	<.001	<.017
05/18/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	101	<.001	<.017
06/24/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	99	<.001	<.017
07/28/99	<.003	<.004	<.005	<.004	<.002	<.087	<.002	117	<.001	<.017
09/10/99	<.003	<.004	<.005	<.004	<.002	e.004	<.002	122	<.001	<.017
10/21/99	<.003	<.004	<.005	<.004	<.002	<.002	<.002	87	<.001	<.017
03/29/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	96	<.001	<.017
05/03/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	112	<.001	<.017
05/31/00	<.003	<.004	<.005	<.004	e.001	<.002	<.002	107	<.001	<.017
06/27/00	<.003	<.004	<.005	<.004	<.002	<.002	e.003	104	<.001	<.017
08/30/00	<.003	<.004	<.005	<.004	<.002	<.002	<.002	104	<.001	<.017

Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000 (Continued)

Date	EPTC (µg/L)	Ethal- fluralin (µg/L)	Etho- pro- phos (µg/L)	Fonofos (µg/L)	Lindane (µg/L)	Linuron (µg/L)	Mala- thion (µg/L)	Metol- achlor (µg/L)	Metri- buzin (µg/L)	Molin- ate (µg/L)
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.										
04/14/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
05/18/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
06/24/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
07/28/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
09/10/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
10/21/99	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
03/29/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
05/03/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
05/31/00	e.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
06/27/00	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004	<.004
08/30/00	<.002	<.004	<.003	<.003	e.002	<.002	<.005	<.002	<.004	<.004

Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000 (Continued)

Date	Naprop- amide (µg/L)	Para- thion (µg/L)	Para- thion- methyl (µg/L)	Pebulate (µg/L)	Pendi- methalin (µg/L)	Phorate (µg/L)	p,p'-DDE (µg/L)	Pro- meton (µg/L)	Prop- achlor (µg/L)
SITE 41 12424500 SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.									
04/14/99	<.003	--	<.006	<.004	<.004	<.002	<.006	<.018	<.007
05/18/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
06/24/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
07/28/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
09/10/99	<.003	<.004	<.006	<.004	<.004	<.002	e.002	e.004	<.007
10/21/99	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
03/29/00	<.003	<.004	<.006	<.004	<.004	<.002	e.001	<.018	<.007
05/03/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
05/31/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
06/27/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018	<.007
08/30/00	<.003	<.004	<.006	<.004	<.004	<.002	<.006	e.004	<.007

Table 9. Pesticide concentration data for filtered surface-water samples collected at selected fixed water-quality sites, Northern Rockies Intermontane Basins study unit, 1999-2000 (Continued)

Date	Prop-anil (µg/L)	Prop-argite (µg/L)	Propyz-amide (µg/L)	Sima-zine (µg/L)	Tebu-thiuron (µg/L)	Terbacil (µg/L)	Terbufos (µg/L)	Thio-ben-carb (µg/L)	Tri-allate (µg/L)	Tri-fluralin (µg/L)
SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.										
04/14/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
05/18/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
06/24/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
07/28/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
09/10/99	<.004	<.013	<.003	e.003	<.010	<.007	<.013	<.002	<.001	<.002
10/21/99	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
03/29/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	e.002	<.002
05/03/00	<.004	<.013	<.003	<.007	<.010	<.007	<.013	<.002	e.004	<.002
05/31/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	e.003	<.002
06/27/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	e.002	<.002
08/30/00	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002

Table 10. Volatile organic-compound concentration data for surface-water samples collected at fixed water-quality sites along the Spokane River, Idaho and Washington, 1999-2000

[See figure 1 for site locations. **Bold text denotes detected concentrations.** Abbreviations: ft³/s, cubic feet per second; e, estimated; Fb, field blank; µg/L, micrograms per liter; Sb, source-solution blank; Tb, trip blank. Symbols: <, less than reporting level; --, no data]

Date	Time	Discharge, instantaneous (ft ³ /s)	1,1,1,2-Tetra- chloro- ethane (µg/L)	1,1,1-Trichloro- ethane (µg/L)	1,1,2,2-Tetra- chloro- ethane (µg/L)	1,1,2-Trichloro- ethane (µg/L)	1,1,2-Trichloro- trifluoro- ethane (µg/L)	1,1-Dichloro- ethane (µg/L)	1,1-Dichloro- ethylene (µg/L)	1,1-Dichloro- propene (µg/L)	1,2,3,4-Tetra- methyl- benzene (µg/L)	1,2,3,5-Tetra- methyl- benzene (µg/L)
<u>SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO</u>												
02/09/99	1020	6,380	<0.044	<0.032	<0.130	<0.064	<0.032	<0.066	<0.044	<0.026	<0.230	<0.200
02/09/99 ^{Fb}	1200	--	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
05/19/99 ^{Fb}	0959	--	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
05/19/99	1000	13,800	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
06/23/99	0930	12,500	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
06/23/99 ^{Tb}	0931	--	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
07/27/99	1030	1,850	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
09/09/99	1100	807	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
10/20/99 ^{Fb}	0958	--	<.030	<.032	<.090	<.060	<.060	<.066	<.040	<.026	<.230	<.200
10/20/99 ^{Sb}	1000	--	<.030	<.032	<.090	<.060	<.060	<.066	<.040	<.026	<.230	<.200
10/20/99	1130	2,100	<.030	<.032	<.090	<.060	<.060	<.066	<.040	<.026	<.230	<.200
07/25/00	1300	1,810	<.030	<.032	<.090	<.060	<.060	<.066	<.040	<.026	<.230	<.200
07/25/00 ^{Fb}	1301	--	<.030	<.032	<.090	<.060	<.060	<.066	<.040	<.026	<.230	<.200
08/30/00	1415	242	<.030	<.032	<.090	<.060	<.060	<.066	<.040	<.026	<.230	<.200
08/30/00 ^{Tb}	1416	--	<.030	<.032	<.090	<.060	<.060	<.066	<.040	<.026	<.230	<.200
<u>SITE 41 12424500 SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.</u>												
02/09/99	1400	7,550	<.044	e.006	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
05/18/99	1100	13,600	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
05/18/99 ^{Fb}	1101	--	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
06/24/99	1015	11,900	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
06/24/99 ^{Tb}	1016	--	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
07/28/99	1000	2,110	<.044	e.012	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
07/28/99 ^{Tb}	1001	--	<.044	<.032	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
09/10/99	0940	1,230	<.044	e.014	<.130	<.064	<.032	<.066	<.044	<.026	<.230	<.200
10/21/99	1110	2,230	<.030	e.012	<.090	<.060	<.060	<.066	<.040	<.026	<.230	<.200

Table 10. Volatile organic-compound concentration data for surface-water samples collected at fixed water-quality sites along the Spokane River, Idaho and Washington, 1999-2001 (Continued)

Date	1,2,3- Trichloro- benzene (µg/L)	1,2,3- Trichloro- propane (µg/L)	1,2,3- Trimethyl- benzene (µg/L)	1,2,4- Trichloro- benzene (µg/L)	1,2,4- Trimethyl-1- benzene (µg/L)	1,2,- Dibromo- 3-chloro- propane (µg/L)	1,2- Dibromo- ethane (µg/L)	1,2- Dichloro- benzene (µg/L)	1,2- Dichloro- ethane (µg/L)	1,2,- Dichloro- ethane-d ₄ , surrogate (percent)
<u>SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO</u>										
02/09/99	<0.270	<0.160	<0.120	<0.190	<0.056	<0.210	<0.036	<0.048	<0.130	104
02/09/99 ^{Fb}	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	102
05/19/99 ^{Fb}	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	103
05/19/99	<.270	<.160	<.120	<.190	e.005	<.210	<.036	<.048	<.130	98
06/23/99	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	106
06/23/99 ^{Tb}	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	105
07/27/99	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	105
09/09/99	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	107
10/20/99 ^{Fb}	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.103	101
10/20/99 ^{Sb}	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	108
10/20/99	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	113
07/25/00	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	114
07/25/00 ^{Fb}	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	108
08/30/00	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	91
08/30/00 ^{Tb}	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	104
<u>SITE 41 12424500 SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.</u>										
02/09/99	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	104
05/18/99	<.270	<.160	<.120	<.190	e.008	<.210	<.036	<.048	<.130	99
05/18/99 ^{Fb}	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	100
06/24/99	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	109
06/24/99 ^{Tb}	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	103
07/28/99	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	102
07/28/99 ^{Tb}	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	103
09/10/99	<.270	<.160	<.120	<.190	e.006	<.210	<.036	<.048	<.130	93
10/21/99	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048	<.130	113

Table 10. Volatile organic-compound concentration data for surface-water samples collected at fixed water-quality sites along the Spokane River, Idaho and Washington, 1999-2001 (Continued)

Date	1,2-Dichloro-propane (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,3-Dichloro-propane (µg/L)	1,4-Bromo-fluoro-benzene, surrogate (percent)	1,4-Dichloro-benzene (µg/L)	2,2-Dichloro-propane (µg/L)	2-Butanone (µg/L)	2-Chloro-toluene (µg/L)	2-Hexanone (µg/L)	3-Chloro-propene (µg/L)
<u>SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO</u>											
02/09/99	<0.068	<0.044	<0.054	<0.120	87	<0.050	<0.078	<1.6	<0.042	<0.700	<0.200
02/09/99 ^{Fb}	<.068	<.044	<.054	<.120	90	<.050	<.078	<1.6	<.042	<.700	<.200
05/19/99 ^{Fb}	<.068	<.044	<.054	<.120	109	<.050	<.078	<1.6	<.042	<.700	<.200
05/19/99	<.068	<.044	<.054	<.120	99	<.050	<.078	<1.6	<.042	<.700	<.200
06/23/99	<.068	<.044	<.054	<.120	102	<.050	<.078	<1.6	<.042	<.700	<.200
06/23/99 ^{Tb}	<.068	<.044	<.054	<.120	99	<.050	<.078	<1.6	<.042	<.700	<.200
07/27/99	<.068	<.044	<.054	<.120	97	<.050	<.078	<1.6	<.042	<.700	<.200
09/09/99	<.068	<.044	<.054	<.120	94	<.050	<.078	<1.6	<.042	<.700	<.200
10/20/99 ^{Fb}	<.068	<.044	<.054	<.120	100	<.050	<.050	<1.6	<.042	<.700	<.200
10/20/99 ^{Sb}	<.068	<.044	<.054	<.120	106	<.050	<.050	<1.6	<.042	<.700	<.200
10/20/99	<.068	<.044	<.054	<.120	76	<.050	<.050	<1.6	<.042	<.700	<.200
07/25/00	<.068	<.044	<.054	<.120	66	<.050	<.050	<1.6	<.042	<.700	<.200
07/25/00 ^{Fb}	<.068	<.044	<.054	<.120	73	<.050	<.050	<1.6	<.042	<.700	<.200
08/30/00	<.068	<.044	<.054	<.120	117	<.050	<.050	<1.6	<.042	<.700	<.200
08/30/00 ^{Tb}	<.068	<.044	<.054	<.120	111	<.050	<.050	<1.6	<.042	<.700	<.200
<u>SITE 41 12424500 SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.</u>											
02/09/99	<.068	<.044	<.054	<.120	88	<.050	<.078	<1.6	<.042	<.700	<.200
05/18/99	<.068	<.044	<.054	<.120	103	<.050	<.078	<1.6	<.042	<.700	<.200
05/18/99 ^{Fb}	<.068	<.044	<.054	<.120	108	<.050	<.078	<1.6	<.042	<.700	<.200
06/24/99	<.068	<.044	<.054	<.120	98	<.050	<.078	<1.6	<.042	<.700	<.200
06/24/99 ^{Tb}	<.068	<.044	<.054	<.120	96	<.050	<.078	<1.6	<.042	<.700	<.200
07/28/99	<.068	<.044	<.054	<.120	85	<.050	<.078	<1.6	<.042	<.700	<.200
07/28/99 ^{Tb}	<.068	<.044	<.054	<.120	87	<.050	<.078	<1.6	<.042	<.700	<.200
09/10/99	<.068	<.044	<.054	<.120	103	e.036	<.078	<1.6	<.042	<.700	<.200
10/21/99	<.068	<.044	<.054	<.120	103	<.050	<.050	<1.6	<.042	<.700	<.200

Table 10. Volatile organic-compound concentration data for surface-water samples collected at fixed water-quality sites along the Spokane River, Idaho and Washington, 1999-2001 (Continued)

Date	4-Chloro- toluene (µg/L)	4-Isopro- pyl- 1-methyl- benzene (µg/L)	4-Methyl-2- pentanone (µg/L)	Ace- tone (µg/L)	Acrylo- nitrile (µg/L)	Benzene (µg/L)	Bromo- benzene (µg/L)	Bromo- chloro- methane (µg/L)	Bromo- dichloro- methane (µg/L)	Bromo- ethane (µg/L)	Bromo- form (µg/L)	Bromo- methane (µg/L)
<u>SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO</u>												
02/09/99	<0.056	e0.008	<0.370	e4.8	<1.2	<0.100	<0.036	<0.044	<0.048	<0.100	<0.100	<0.150
02/09/99 ^{Fb}	<.056	<.110	<.370	<5.0	<1.2	<.100	<.036	<.044	<.048	<.100	<.100	<.150
05/19/99 ^{Fb}	<.056	<.110	<.370	<5.0	<1.2	<.100	<.036	<.044	<.048	<.100	<.100	<.150
05/19/99	<.056	<.110	<.370	<5.0	<1.2	e.015	<.036	<.044	<.048	<.100	<.100	<.150
06/23/99	<.056	<.110	<.370	e1.9	<1.2	e.022	<.036	<.044	<.048	<.100	<.100	<.150
06/23/99 ^{Tb}	<.056	<.110	<.370	<5.0	<1.2	<.100	<.036	<.044	<.048	<.100	<.100	<.150
07/27/99	<.056	<.110	<.370	5.6	<1.2	.181	<.036	<.044	e.024	<.100	<.100	<.150
09/09/99	<.056	<.110	<.370	e4.9	<1.2	e.031	<.036	<.044	<.048	<.100	<.100	<.150
10/20/99 ^{Fb}	<.060	<.070	<.370	<7.0	<1.2	<.035	<.036	<.044	<.048	<.100	<.060	<.260
10/20/99 ^{Sb}	<.060	<.070	<.370	e3.7	<1.2	<.035	<.036	<.044	<.048	<.100	<.060	<.260
10/20/99	<.060	<.070	<.370	e5.8	<1.2	<.035	<.036	<.044	<.048	<.100	<.100	<.260
07/25/00	<.060	<.070	<.370	<7.0	<1.2	.115	<.036	<.044	<.048	<.100	<.060	<.260
07/25/00 ^{Fb}	<.060	<.070	<.370	<7.0	<1.2	<.035	<.036	<.044	<.048	<.100	<.060	<.260
08/30/00	<.060	<.070	<.370	<7.0	<1.2	e.012	<.036	<.044	e.022	<.100	<.060	<.260
08/30/00 ^{Tb}	<.060	<.070	<.370	<7.0	<1.2	<.035	<.036	<.044	<.048	<.100	<.060	<.260
<u>SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.</u>												
02/09/99	<.056	<.110	<.370	e2.9	<1.2	e.015	<.036	<.044	<.048	<.100	<.100	<.150
05/18/99	<.056	<.110	<.370	<5.0	<1.2	e.011	<.036	<.044	<.048	<.100	<.100	<.150
05/18/99 ^{Fb}	<.056	<.110	<.370	<5.0	<1.2	<.100	<.036	<.044	<.048	<.100	<.100	<.150
06/24/99	<.056	<.110	<.370	e2.1	<1.2	e.009	<.036	<.044	<.048	<.100	<.100	<.150
06/24/99 ^{Tb}	<.056	<.110	<.370	<5.0	<1.2	<.100	<.036	<.044	<.048	<.100	<.100	<.150
07/28/99	<.056	<.110	<.370	e3.2	<1.2	e.007	<.036	<.044	e.044	<.100	<.100	<.150
07/28/99 ^{Tb}	<.056	<.110	<.370	<5.0	<1.2	<.100	<.036	<.044	<.048	<.100	<.100	<.150
09/10/99	<.056	<.110	<.370	<5.0	<1.2	e.007	<.036	<.044	<.048	<.100	<.100	<.150
10/21/99	<.060	<.070	<.370	15	<1.2	e.013	<.036	<.044	e.024	<.100	<.060	<.260

Table 10. Volatile organic-compound concentration data for surface-water samples collected at fixed water-quality sites along the Spokane River, Idaho and Washington, 1999-2001 (Continued)

Date	Butyl- benzene (µg/L)	Carbon disulfide (µg/L)	Chloro- benzene (µg/L)	Chloro- ethane (µg/L)	Chloro- form (µg/L)	Chloro- methane (µg/L)	cis- 1,2,- Dichloro- ethylene (µg/L)	cis- 1,3- Dichloro- propene (µg/L)	Dibromo- chloro- methane (µg/L)	Dibromo- methane (µg/L)	Dichloro- difluoro- methane (µg/L)
<u>SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO</u>											
02/09/99	<0.190	<0.370	<0.028	<0.120	e.011	<0.250	<0.038	<0.090	<0.180	<0.050	<0.140
02/09/99 ^{Fb}	<.190	<.370	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.140
05/19/99 ^{Fb}	<.190	<.370	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.140
05/19/99	<.190	<.370	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.140
06/23/99	<.190	<.370	<.028	<.120	e.008	<.250	<.038	<.090	<.180	<.050	<.140
06/23/99 ^{Tb}	<.190	<.370	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.140
07/27/99	<.190	<.370	<.028	<.120	e.045	<.250	<.038	<.090	<.180	<.050	<.140
09/09/99	<.190	<.370	<.028	<.120	e.064	<.250	<.038	<.090	<.180	<.050	<.140
10/20/99 ^{Fb}	<.190	<.070	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.270
10/20/99 ^{Sb}	<.190	<.070	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.270
10/20/99	<.190	<.070	<.028	<.120	e.043	<.250	<.038	<.090	<.180	<.050	<.270
07/25/00	<.190	<.070	<.028	<.120	e.087	<.250	<.038	<.090	<.180	<.050	<.270
07/25/00 ^{Fb}	<.190	<.070	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.270
08/30/00	<.190	<.070	<.028	<.120	e.068	<.250	<.038	<.090	<.180	<.050	<.270
08/30/00 ^{Tb}	<.190	<.070	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.270
<u>SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.</u>											
02/09/99	<.190	<.370	<.028	<.120	e.011	<.250	<.038	<.090	<.180	<.050	<.140
05/18/99	<.190	<.370	<.028	<.120	e.019	<.250	<.038	<.090	<.180	<.050	<.140
05/18/99 ^{Fb}	<.190	<.370	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.140
06/24/99	<.190	<.370	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.140
06/24/99 ^{Tb}	<.190	<.370	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.140
07/28/99	<.190	<.370	<.028	<.120	.131	<.250	<.038	<.090	<.180	<.050	<.140
07/28/99 ^{Tb}	<.190	<.370	<.028	<.120	<.052	<.250	<.038	<.090	<.180	<.050	<.140
09/10/99	<.190	<.370	<.028	<.120	e.045	<.250	<.038	<.090	<.180	<.050	<.140
10/21/99	<.190	<.070	<.028	<.120	e.073	<.500	<.038	<.090	<.180	<.050	<.270

Table 10. Volatile organic-compound concentration data for surface-water samples collected at fixed water-quality sites along the Spokane River, Idaho and Washington, 1999-2001 (Continued)

Date	Dichloro- methane (µg/L)	Diethyl ether (µg/L)	Diiso- propyl ether (µg/L)	Ethyl metha- crylate (µg/L)	Ethyl tert- butyl ether (µg/L)	Ethyl- benzene (µg/L)	Hexa- chloro- butadiene (µg/L)	Hexa- chloro- ethane (µg/L)	Isopropyl- benzene (µg/L)	m- and p- Xylene (µg/L)	Methyl acrylate (µg/L)	Methyl acrylo- nitrile (µg/L)
<u>SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO</u>												
02/09/99	<0.380	<0.170	<0.098	<0.280	<0.054	e0.006	<0.140	<0.360	<0.032	e0.026	<1.4	<0.570
02/09/99 ^{Fb}	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	e.031	<1.4	<.570
05/19/99 ^{Fb}	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	<.060	<1.4	<.570
05/19/99	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	e.013	<1.4	<.570
06/23/99	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	<.060	<1.4	<.570
06/23/99 ^{Tb}	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	<.060	<1.4	<.570
07/27/99	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	<.060	<1.4	<.570
09/09/99	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	<.060	<1.4	<.570
10/20/99 ^{Fb}	<.380	<.170	<.100	<.180	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.570
10/20/99 ^{Sb}	<.380	<.170	<.100	<.180	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.570
10/20/99	<.380	<.170	<.100	<.180	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600
07/25/00	<.380	<.170	<.100	<.180	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.570
07/25/00 ^{Fb}	<.380	<.170	<.100	<.180	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.570
08/30/00	<.380	<.170	<.100	<.180	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.570
08/30/00 ^{Tb}	<.380	<.170	<.100	<.180	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.570
<u>SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.</u>												
02/09/99	<.380	<.170	<.098	<.280	<.054	e.009	<.140	<.360	<.032	e.037	<1.4	<.570
05/18/99	<.380	<.170	<.098	<.280	<.054	e.004	<.140	<.360	<.032	e.017	<1.4	<.570
05/18/99 ^{Fb}	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	<.060	<1.4	<.570
06/24/99	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	<.060	<1.4	<.570
06/24/99 ^{Tb}	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	<.060	<1.4	<.570
07/28/99	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	<.060	<1.4	<.570
07/28/99 ^{Tb}	<.380	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	<.060	<1.4	<.570
09/10/99	e.022	<.170	<.098	<.280	<.054	<.030	<.140	<.360	<.032	e.016	<1.4	<.570
10/21/99	<.380	<.170	<.100	<.180	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600

Table 10. Volatile organic-compound concentration data for surface-water samples collected at fixed water-quality sites along the Spokane River, Idaho and Washington, 1999-2001 (Continued)

Date	Methyl iodide (µg/L)	Methyl methacrylate (µg/L)	Naphthalene (µg/L)	n-Propylbenzene (µg/L)	o-Ethyltoluene (µg/L)	o-Xylene (µg/L)	sec-Butylbenzene (µg/L)	Styrene (µg/L)	tert-Butyl methyl ether (µg/L)	tert-Butylbenzene (µg/L)	tert-Pentyl methyl ether (µg/L)
<u>SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO</u>											
02/09/99	<0.210	<0.350	<0.250	<0.042	<0.100	<0.060	<0.048	<0.042	<0.170	<0.100	<0.110
02/09/99 ^{Fb}	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
05/19/99 ^{Fb}	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
05/19/99	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
06/23/99	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
06/23/99 ^{Tb}	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
07/27/99	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	.292	<.100	<.110
09/09/99	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	.285	<.100	<.110
10/20/99 ^{Fb}	<.120	<.350	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110
10/20/99 ^{Sb}	<.120	<.350	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110
10/20/99	<.120	<.350	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110
07/25/00	<.120	<.350	<.250	<.042	<.060	<.038	<.032	<.042	e.108	<.060	<.110
07/25/00 ^{Fb}	<.120	<.350	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110
08/30/00	<.120	<.350	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110
08/30/00 ^{Tb}	<.120	<.350	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110
<u>SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.</u>											
02/09/99	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
05/18/99	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
05/18/99 ^{Fb}	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
06/24/99	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
06/24/99 ^{Tb}	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
07/28/99	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
07/28/99 ^{Tb}	<.210	<.350	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110
09/10/99	<.210	<.350	<.250	<.042	<.100	<.060	<.048	e.007	<.170	<.100	<.110
10/21/99	<.120	<.350	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110

Table 10. Volatile organic-compound concentration data for surface-water samples collected at fixed water-quality sites along the Spokane River, Idaho and Washington, 1999-2001 (Continued)

Date	Tetra-chloro-ethylene (µg/L)	Tetra-chloro-methane (µg/L)	Tetra-hydro-furan (µg/L)	Toluene (µg/L)	Toluene-d ₈ , surrogate (percent)	trans-1,2-Dichloro-ethylene (µg/L)	trans-1,3-Dichloro-propene (µg/L)	trans-1,4-Dichloro-2-butene (µg/L)	Trichloro-ethylene (µg/L)	Trichloro-fluoro-methane (µg/L)	Vinyl chloride (µg/L)
<u>SITE 35 12419000--SPOKANE RIVER NEAR POST FALLS, IDAHO</u>											
02/09/99	<0.100	<0.088	<9.0	0.226	97	<0.032	<0.130	<0.700	<0.038	<0.090	<0.110
02/09/99 ^{Fb}	<.100	<.088	<9.0	.247	97	<.032	<.130	<.700	<.038	<.090	<.110
05/19/99 ^{Fb}	<.100	<.088	<9.0	e.021	105	<.032	<.130	<.700	<.038	<.090	<.110
05/19/99	<.100	<.088	<9.0	e.050	103	<.032	<.130	<.700	<.038	<.090	<.110
06/23/99	<.100	<.088	<9.0	e.034	100	<.032	<.130	<.700	<.038	<.090	<.110
06/23/99 ^{Tb}	<.100	<.088	<9.0	e.013	99	<.032	<.130	<.700	<.038	<.090	<.110
07/27/99	<.100	<.088	<9.0	e.011	101	<.032	<.130	<.700	<.038	<.090	<.110
09/09/99	<.100	<.088	<9.0	e.022	91	<.032	<.130	<.700	<.038	<.090	<.110
10/20/99 ^{Fb}	<.100	<.060	<2.2	<.050	102	<.032	<.090	<.700	<.038	<.090	<.110
10/20/99 ^{Sb}	<.100	<.060	<2.2	e.005	96	<.032	<.090	<.700	<.038	<.090	<.110
10/20/99	<.100	<.060	<2.2	<.050	93	<.032	<.090	<.700	<.038	<.090	<.110
07/25/00	<.100	<.060	<2.2	<.050	92	<.032	<.090	<.700	<.038	<.090	<.110
07/25/00 ^{Fb}	<.100	<.060	<2.2	<.050	95	<.032	<.090	<.700	<.038	<.090	<.110
08/30/00	<.100	<.060	<2.2	<.050	100	<.032	<.090	<.700	<.038	<.090	<.110
08/30/00 ^{Tb}	<.100	<.060	<2.2	e.029	107	<.032	<.090	<.700	<.038	<.090	<.110
<u>SITE 41 12424500--SPOKANE RIVER AT SEVEN MILE BRIDGE, NEAR SPOKANE, WASH.</u>											
02/09/99	e.010	<.088	<9.0	.258	97	<.032	<.130	<.700	<.038	<.090	<.110
05/18/99	<.100	<.088	<9.0	e.049	102	<.032	<.130	<.700	<.038	<.090	<.110
05/18/99 ^{Fb}	e.010	<.088	<9.0	.050	97	<.032	<.130	<.700	<.038	<.090	<.110
06/24/99	<.100	<.088	<9.0	e.020	102	<.032	<.130	<.700	<.038	<.090	<.110
06/24/99 ^{Tb}	e.010	<.088	<9.0	e.014	97	<.032	<.130	<.700	<.038	<.090	<.110
07/28/99	<.100	<.088	<9.0	e.015	102	<.032	<.130	<.700	<.038	<.090	<.110
07/28/99 ^{Tb}	e.010	<.088	<9.0	e.023	97	<.032	<.130	<.700	<.038	<.090	<.110
09/10/99	<.100	<.088	<9.0	e.034	102	<.032	<.130	<.700	<.038	<.090	<.110
10/21/99	e.010	<.088	<9.0	e.021	97	<.032	<.130	<.700	<.038	<.090	<.110

Table 11. Streamflow, physical, and major-ion concentration data for surface-water samples collected for the synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000

[Abbreviations: ft³/s, cubic feet per second; °C, degrees Celsius; e, estimated; Fb, field blank; µS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter. Symbols: --, no data; <, less than reporting level]

Site number (fig. 1)	Site name	Date	Time	Discharge, instantaneous (ft ³ /s)	pH, field (standard units)	Specific conductance, field (µS/cm)
6	St. Regis River above Rainy Creek, near Saltese, Mont.	08/02/00	0930	15	7.6	69
7	St. Regis River near Haugan, Mont.	08/02/00	1330	46	7.3	59
8	St. Regis River near St. Regis, Mont.	08/03/00	0930	84	7.7	93
17	North Fork Coeur d'Alene River above Shoshone Creek, near Prichard, Idaho	09/06/00	1000	108	7.7	55
18	Prichard Creek near Murray, Idaho	08/16/00	1230	1.6	6.9	31
19	East Fork Eagle Creek near mouth, near Prichard, Idaho	08/16/00	1100	5.8	6.9	34
20	West Fork Eagle Creek below Settlers Grove, Idaho	08/16/00	0920	5.0	6.8	30
21	Beaver Creek near mouth, near Murray, Idaho	08/16/00	1530	4.3	7.3	96
22	Prichard Creek at mouth, at Prichard, Idaho	08/16/00	1400	28	6.9	32
23	North Fork Coeur d'Alene River at Enaville, Idaho	09/07/00	1530	283	7.5	46
24	South Fork Coeur d'Alene River at Shoshone Park, near Mullan, Idaho	08/24/00	1000	6.7	7.3	40
25	South Fork Coeur d'Alene River above Deadman Gulch, near Mullan, Idaho	08/24/00	1430	13	7.7	148
26	Canyon Creek near Burke, Idaho	08/23/00	1030	4.5	7.0	15
27	Canyon Creek at Woodland Park, Idaho	08/23/00	1500	16	7.8	105
28	South Fork Coeur d'Alene River at Silverton, Idaho	08/25/00	1000	56	7.7	149
29	East Fork Pine Creek above Nabob Creek, near Pinehurst, Idaho	08/16/00	1730	9.0	7.0	50
30	Pine Creek below Amy Gulch, near Pinehurst, Idaho	08/16/00	1840	21	6.6	30
31 ^{Fb}	South Fork Coeur d'Alene River near Pinehurst, Idaho	09/06/00	1300	--	--	--
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	09/06/00	1400	123	7.2	272
33	St. Joe River at Red Ives Ranger Station, Idaho	09/05/00	1230	100	7.6	52
34	St. Joe River at Calder, Idaho	09/07/00	1100	398	7.5	57

Table 11. Streamflow, physical, and major-ion concentration data for surface-water samples collected for the synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000 (Continued)

Temperature, water (°C)	Oxygen, dis- solved (mg/L)	Dissolved oxygen (percent saturation)	Hard- ness, total (mg/L as CaCO ₃)	Cal- cium, dis- solved (mg/L)	Magne- sium, dis- solved (mg/L)	Alka- linity, field (mg/L as CaCO ₃)	Sodi- um, dis- solved (mg/L)	Sulfate, dissolved (mg/L as SO ₄)	Chlo- ride, dis- solved (mg/L)	Fluo- ride, dis- solved (mg/L)	Silica, dissolved (mg/L as SiO ₂)	Site number (fig. 1)
9.5	10.2	101	33	9.9	2.0	34	1.8	.85	1.6	<0.10	8.1	6
15.0	8.8	98	27	8.0	1.6	30	2.1	.85	1.6	<.10	9.2	7
13.5	9.5	101	41	12	2.6	46	1.9	1.0	1.2	<.10	11	8
12.0	9.8	98	28	6.3	2.9	29	1.0	1.4	<.29	<.10	9.7	17
17.0	--	--	9.8	2.7	.76	10	1.7	5.0	e.14	<.10	13	18
15.0	--	--	12	2.9	1.0	10	1.5	5.9	<.29	<.10	11	19
10.5	--	--	12	3.1	1.1	14	1.1	1.6	<.29	<.10	8.5	20
15.0	--	--	44	11	4.0	42	1.5	6.5	.30	<.10	15	21
15.0	--	--	12	3.0	1.0	14	1.4	3.5	e.14	<.10	12	22
15.0	9.6	104	22	5.4	2.0	24	1.2	1.8	e.20	<.10	11	23
11.5	9.2	96	28	7.2	2.5	28	1.5	2.0	1.8	<.10	9.9	24
13.0	9.2	99	63	18	4.7	46	2.9	21	2.3	<.10	9.1	25
8.0	10.3	100	5.6	1.7	.32	7.0	.86	.83	<.29	<.10	7.9	26
19.0	8.8	101	46	13	3.3	36	1.6	16	.40	<.10	8.9	27
12.5	9.5	98	68	18	5.3	50	3.4	21	3.1	<.10	9.6	28
17.0	--	--	19	4.7	1.8	14	1.4	9.8	e.20	<.10	11	29
13.0	--	--	11	2.9	1.0	10	1.1	4.0	e.19	<.10	10	30
--	--	--	--	.003	<.001	--	<.025	--	--	--	<.02	31 ^{Fb}
13.0	10.0	102	118	30	10	34	6.3	94	2.8	.34	12	31
8.5	10.2	100	22	6.4	1.3	24	1.0	.91	<.29	<.10	7.8	33
12.5	10.1	102	27	8.1	1.7	30	1.3	.94	e.22	<.10	10	34

Table 12. Nutrient data for surface-water samples collected for the synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000

[All constituents are dissolved except phosphorus. Abbreviations: e, estimated; mg/L, milligrams per liter. Symbol: <, less than reporting level]

Site no. (fig. 1)	Site name	Date	Time	Nitrite plus nitrate (mg/L as N)	Ammonia plus organic nitrogen (mg/L as N)	Ammonia (mg/L as N)	Phos- phorus, ortho phos- phate (mg/L as P)	Phos- phorus, total (mg/L)
6	St. Regis River above Rainy Creek, near Saltese, Mont.	08/02/00	0930	0.016	e0.007	0.003	0.003	e0.004
7	St. Regis River near Haugan, Mont.	08/02/00	1330	.012	<.10	<.002	.003	<.008
8	St. Regis River near St. Regis, Mont.	08/03/00	0930	.008	<.10	.002	.003	<.008
17	North Fork Coeur d'Alene River above Shoshone Creek, near Prichard, Idaho	09/06/00	1000	<.005	<.10	<.002	.001	<.008
18	Prichard Creek near Murray, Idaho	08/16/00	1230	.013	e.07	.003	.005	<.008
19	East Fork Eagle Creek near mouth, near Prichard, Idaho	08/16/00	1100	.013	<.10	<.002	.002	<.008
20	West Fork Eagle Creek below Settlers Grove, Idaho	08/16/00	0920	.021	<.10	<.002	.004	<.008
21	Beaver Creek near mouth, near Murray, Idaho	08/16/00	1530	.005	<.10	.002	.003	<.008
22	Prichard Creek at mouth, at Prichard, Idaho	08/16/00	1400	<.005	<.10	<.002	.002	<.008
23	North Fork Coeur d'Alene River at Enaville, Idaho	09/07/00	1530	.012	e.06	.003	.002	e.004
24	South Fork Coeur d'Alene River at Shoshone Park, near Mullan, Idaho	08/24/00	1000	.009	e.05	<.002	.003	e.007
25	South Fork Coeur d'Alene River above Deadman Gulch, near Mullan, Idaho	08/24/00	1430	.036	e.07	.015	.002	e.005
26	Canyon Creek near Burke, Idaho	08/23/00	1030	.006	<.10	.004	.002	e.005
27	Canyon Creek at Woodland Park, Idaho	08/23/00	1500	.005	e.05	<.002	<.001	<.008
28	South Fork Coeur d'Alene River at Silverton, Idaho	08/25/00	1000	.080	e.05	.004	<.001	<.008
29	East Fork Pine Creek above Nabob Creek, near Pinehurst, Idaho	08/16/00	1730	.023	e.06	<.002	.002	<.008
30	Pine Creek below Amy Gulch, near Pinehurst, Idaho	08/16/00	1840	.039	<.10	<.002	.002	<.008
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	09/06/00	1400	.208	.35	.254	.026	.071
33	St. Joe River at Red Ives Ranger Station, Idaho	09/05/00	1230	<.005	<.10	.003	.002	<.008
34	St. Joe River at Calder, Idaho	09/07/00	1100	<.005	e.06	.003	<.001	<.008

Table 13. Trace-element concentration data for surface-water samples collected for the synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000

[Abbreviations: e, estimated; Fb, field blank; µg/L, micrograms per liter. Symbols: <, less than reporting level; --, no data]

Site number (fig. 1)	Site name	Date	Time	Cadmium, total recov- erable (µg/L)	Cad- mium, dissolved (µg/L)
6	St. Regis River above Rainy Creek, near Saltese, Mont.	08/02/00	0930	<1.0	<1.0
7	St. Regis River near Haugan, Mont.	08/02/00	1330	<1.0	<1.0
8	St. Regis River near St. Regis, Mont.	08/03/00	0930	<1.0	<1.0
17	North Fork Coeur d'Alene River above Shoshone Creek, near Prichard, Idaho	09/06/00	1000	<1.0	<1.0
18	Prichard Creek near Murray, Idaho	08/16/00	1230	<1.0	<1.0
19	East Fork Eagle Creek near mouth, near Prichard, Idaho	08/16/00	1100	<1.0	<1.0
20	West Fork Eagle Creek below Settlers Grove, Idaho	08/16/00	0920	<1.0	<1.0
21	Beaver Creek near mouth, near Murray, Idaho	08/16/00	1530	<1.0	<1.0
22	Prichard Creek at mouth, at Prichard, Idaho	08/16/00	1400	<1.0	<1.0
23	North Fork Coeur d'Alene River at Enaville, Idaho	09/07/00	1530	<1.0	<1.0
24	South Fork Coeur d'Alene River at Shoshone Park, near Mullan, Idaho	08/24/00	1000	<1.0	<1.0
25	South Fork Coeur d'Alene River above Deadman Gulch, near Mullan, Idaho	08/24/00	1430	<1.0	<1.0
26	Canyon Creek near Burke, Idaho	08/23/00	1030	<1.0	<1.0
27	Canyon Creek at Woodland Park, Idaho	08/23/00	1500	13	13
28	South Fork Coeur d'Alene River at Silverton, Idaho	08/25/00	1000	7.0	7.0
29	East Fork Pine Creek above Nabob Creek, near Pinehurst, Idaho	08/16/00	1730	1.2	1.3
30	Pine Creek below Amy Gulch, near Pinehurst, Idaho	08/16/00	1840	<1.0	<1.0
31 ^{Fb}	South Fork Coeur d'Alene River near Pinehurst, Idaho	09/06/00	1300	--	<.3
31	South Fork Coeur d'Alene River, near Pinehurst, Idaho	09/06/00	1400	9.0	8.7
33	St. Joe River at Red Ives Ranger Station, Idaho	09/05/00	1230	<1.0	<1.0
34	St. Joe River at Calder, Idaho	09/07/00	1100	<1.0	<1.0

Table 13. Trace-element concentration data for surface-water samples collected for the synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000 (Continued)

Iron, total recov- erable (µg/L)	Iron, dissolved (µg/L)	Lead, total recov- erable (µg/L)	Lead, dissolved (µg/L)	Manganese, total recov- erable (µg/L)	Manganese, dissolved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dissolved (µg/L)	Site number (fig. 1)
<21	<10	<1.0	<1.0	<1.0	<1.0	<8.0	6.2	6
<21	<10	<1.0	<1.0	<1.0	<1.0	<1.2	<1.0	7
<21	<10	<1.0	<1.0	2.2	2.0	<1.0	<1.0	8
<21	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	17
<21	<10	<1.0	<1.0	<1.0	<1.0	44	49	18
<21	<10	<1.0	<1.0	<1.0	<1.0	61	67	19
<21	<10	<1.0	<1.0	<1.0	<1.0	1.1	3.1	20
<21	<10	<1.0	<1.0	<1.0	<1.0	13	14	21
e18	e5.0	<1.0	<1.0	2.1	2.2	21	24	22
30	e7.6	<1.0	<1.0	1.5	1.2	1.4	1.6	23
100	33	<1.0	<1.0	13	12	3.2	3.4	24
176	52	4.3	<1.0	272	280	21	16	25
<21	<10	<1.0	<1.0	<1.0	<1.0	2.8	2.8	26
37	14	38	30	59	67	1,390	1,510	27
26	e5.3	15	11	30	31	899	986	28
<21	<10	1.3	<1.0	<1.0	<1.0	284	324	29
162	<10	<1.0	<1.0	<1.0	<1.0	96	112	30
--	<3	--	<.3	--	<.1	--	<.5	31 ^{Fb}
357	90	23	5.6	1,470	1,450	1,480	1,440	31
22	e8.8	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	33
23	e9.6	<1.0	<1.0	2.2	1.9	<1.0	<1.0	34

Table 14. Stable-isotope data for surface-water samples along the Spokane River, Idaho and Washington, 1999-2001

[See figure 1 for site locations. Stable-isotope ratios are reported relative to the Vienna Standard Mean Ocean Water (VSMOW). Abbreviation: per mil, parts per thousand]

Date	Stable-isotope ratio (per mil)		Date	Stable-isotope ratio (per mil)	
	Hydrogen-2/ Hydrogen-1	Oxygen-18/ Oxygen-16		Hydrogen-2/ Hydrogen-1	Oxygen-18/ Oxygen-16
Site 35 12419000--Spokane River near Post Falls, Idaho					
04/01/99	-111.53	-14.89	06/12/00	-113.31	-15.21
09/09/99	-113.09	-14.92	06/27/00	-112.70	-15.21
10/20/99	-114.04	-15.28	07/05/00	-112.81	-15.10
11/30/99	-112.67	-15.03	07/25/00	-110.52	-14.92
01/13/00	-113.13	-15.19	08/30/00	-109.87	-14.50
02/29/00	-111.68	-15.04	09/06/00	-109.86	-14.46
04/11/00	-112.53	-15.07	12/19/00	-111.34	-14.86
04/18/00	-112.03	-15.04	01/23/01	-110.66	-14.79
05/03/00	-113.02	-15.10	03/13/01	-111.39	-14.83
05/11/00	-112.19	-15.13	05/03/01	-110.60	-14.81
05/16/00	-112.30	-15.15	06/11/01	-111.36	-14.79
05/31/00	-112.66	-15.18	08/14/01	-113.78	-15.02
Site 37 12420500--Spokane River at Greenacres, Wash.					
04/01/99	-111.80	-14.83	11/01/99	-112.74	-15.07
06/01/99	-113.50	-15.30	01/06/00	-112.91	-15.03
07/01/99	-114.06	-15.38	02/17/00	-113.88	-15.00
08/01/99	-113.71	-15.17	03/09/00	-113.53	-15.04
09/01/99	-113.17	-14.84			

Table 15. Physical and major-ion concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001

[Site identification number described in text. Constituents are reported as dissolved, except as noted. Abbreviations: °C, degrees Celsius; e, estimated; Fb, field blank; µS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; NTU, nephelometric turbidity units; R, replicate. Symbols: --, no data; <, less than reporting level]

Well number (figs. 3 and 4)	Site identification number	Date	Time	Specific conductance, field (µS/cm)	pH, field (standard units)	Water temperature (°C)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Hardness, total (mg/L as CaCO ₃)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium adsorption ratio
Subunit Survey 1, Idaho and Washington												
1	481320116261101	07/14/99	1700	360	8.1	9.0	2.2	0.0	131	36	10	1.0
2	480950116324401	07/14/99	1100	67	6.8	9.0	2.2	9.1	25	5.4	2.8	.4
3	480928117053201	07/07/99	1000	253	8.1	9.0	.18	9.9	130	38	8.7	.1
4	480813116593701	07/07/99	1600	153	7.0	8.5	.06	9.2	63	18	4.3	.3
5	480718117012501	07/06/99	1800	432	8.0	7.5	.28	0.0	229	51	25	.2
6	480249116510001	07/08/99	1000	279	8.0	8.0	.14	9.4	119	31	10	.2
7	480235116483001	07/13/99	1700	426	7.6	7.5	.40	7.6	235	56	23	.1
8	480203117200601	06/08/99	0800	125	6.5	9.0	.04	9.4	49	13	3.9	.3
9	480128116374601	08/04/99	0900	116	7.0	7.0	.60	11	53	15	3.6	.2
10	480119117182101	06/08/99	1600	312	8.0	9.5	4.3	4.3	152	44	10	.3
11	475925117153001	07/06/99	1100	179	7.4	9.5	1.1	3.9	79	25	4.1	.3
12	475825117364401	06/09/99	1000	114	6.5	8.5	2.9	4.0	48	12	4.3	.4
13	475731116371301	06/23/99	1200	228	8.1	--	.32	5.7	114	29	10	.1
13		07/27/99	2000	223	8.2	8.0	--	--	--	--	--	--
14	475637117262501	06/09/99	1700	162	7.5	11.0	.13	9.1	76	21	5.8	.2
15	475510116391201	08/03/99	1400	125	8.3	7.5	2.7	11	61	19	3.4	.1
15 ^{Fb}		08/03/99	1411	--	--	--	--	--	--	<.002	<.001	--
16	475400116404201	06/22/99	1700	125	7.1	8.0	3.2	11	58	18	3.3	.1
17	475343117225201	06/10/99	0900	331	7.7	11.0	.80	6.7	165	48	11	.2
18	475322116522201	07/12/99	1200	199	8.1	9.5	.79	7.2	94	24	8.5	.1
18 ^R		07/12/99	1201	--	--	--	--	--	98	25	8.9	.1
18 ^{Fb}		07/12/99	1206	--	--	--	--	--	--	<.02	<.004	--
19	475130117262201	06/07/99	0900	444	7.5	10.0	.53	9.9	228	71	12	.2
20	475035116424801	06/22/99	1100	57	6.2	11.5	18	8.4	19	3.6	2.5	.3
21	474718116530201	06/24/99	0900	185	8.1	9.0	2.6	9.6	90	23	8.3	.1
21 ^R		06/24/99	0901	--	--	--	--	--	90	22	8.2	.1
21 ^{Fb}		06/24/99	0906	--	--	--	--	--	--	<.02	<.004	--
22	474708117250501	06/07/99	1600	381	7.6	10.5	.08	7.8	186	54	13	.3
23	474629117305101	05/25/99	1100	276	8.2	11.5	.22	.1	133	31	14	.1
23 ^R		05/25/99	1101	--	--	--	--	--	132	30	14	.1
23 ^{Fb}		05/26/99	0906	--	--	--	--	--	--	<.002	<.001	--
24	474456116522001	06/21/99	1700	389	7.9	10.0	.20	9.9	210	33	31	.1
25	474427117312101	05/24/99	1400	410	7.8	9.5	.02	.3	195	46	19	.2
26	474317117225301	05/27/99	0900	251	8.1	10.5	.04	5.4	121	26	13	.1
27	474218116445601	07/15/99	1000	210	6.8	9.0	.96	9.4	105	28	8.2	.2
28	474147116544001	07/26/99	1300	121	7.2	14.0	8.0	5.6	59	17	3.8	.1
29	474130117015401	07/29/99	1000	55	7.0	10.5	.41	8.2	23	6.3	1.9	.2
30	474050117084101	07/28/99	1700	50	7.0	16.5	1.6	5.2	20	5.3	1.6	.2
31	473612117243601	05/26/99	1100	406	7.8	10.0	.03	.1	187	51	14	.3

Table 15. Physical and major-ion concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001

Sodium, dis- solved (mg/L)	Potas- sium, dis- solved (mg/L)	Bicar- bonate, dis- solved (mg/L)	Carbo- nate, dis- solved (mg/L as HCO ₃)	Alka- linity, dis- solved (mg/L as CaCO ₃)	Sulfate, dis- solved (mg/L as SO ₄)	Chlo- ride, dis- solved (mg/L)	Fluo- ride, dis- solved (mg/L)	Bromide, dis- solved (mg/L)	Silica, dis- solved (mg/L as SiO ₂)	Dis- solved solids, sum of constit- uents	Dissolved solids, residue at 180 °C (mg/L)	Well number (figs. 3 and 4)
Subunit Survey 1, Idaho and Washington												
25	1.3	120	0	99	74	0.79	0.16	0.02	13	219	226	1
5.2	.18	38	0	31	.61	.61	<.10	<.01	33	68	68	2
3.6	1.5	152	0	125	8.0	1.4	<.10	.01	14	152	177	3
5.7	1.6	83	0	68	5.0	1.4	<.10	.01	33	111	121	4
5.1	3.3	278	0	228	12	1.2	<.10	.02	12	246	213	5
3.8	1.8	140	0	115	7.5	1.3	.11	.02	22	147	167	6
3.4	2.9	251	0	206	16	2.9	.12	.04	14	242	245	7
4.4	1.5	43	0	35	3.6	4.1	.10	<.01	27	94	108	8
3.0	1.4	60	0	49	6.0	1.2	.12	<.01	27	88	92	9
7.6	1.2	170	0	139	5.6	2.4	.13	.02	29	200	205	10
5.3	.90	87	0	72	5.8	2.4	.12	.01	35	131	147	11
5.7	1.1	66	0	54	2.1	1.6	.20	<.01	36	96	99	12
2.9	1.2	130	0	107	11	1.4	<.10	.01	7.4	128	130	13
--	--	--	--	--	--	--	--	--	--	--	--	13
4.2	1.1	91	0	74	1.0	.70	.17	<.01	39	125	136	14
2.1	.94	75	0	62	1.6	.34	<.10	<.01	17	81	81	15
<.02	--	--	--	--	--	--	--	--	<.02	--	--	15 ^{Fb}
2.2	.91	71	0	58	2.2	1.2	<.10	.01	16	81	84	16
4.4	2.1	174	0	143	10	2.7	.17	.02	19	198	221	17
2.3	1.1	107	0	88	7.3	.89	<.10	.01	10	108	111	18
2.4	1.2	--	--	--	7.5	.82	<.10	.01	11	110	111	18 ^R
<.06	<.10	--	--	--	<.10	<.10	<.10	<.01	<.05	--	--	18 ^{Fb}
5.5	2.2	226	0	185	8.1	3.7	<.10	.02	30	277	284	19
3.4	1.6	30	0	24	1.1	1.4	<.10	.02	15	44	42	20
2.2	1.4	104	0	86	5.2	1.5	<.10	.01	12	108	109	21
2.3	1.4	--	--	--	5.2	1.5	<.10	.02	12	--	--	21 ^R
<.06	<.10	--	--	--	<.10	<.10	<.10	<.01	<.05	--	--	21 ^{Fb}
8.1	2.2	204	0	167	9.9	4.9	.24	.02	28	238	245	22
3.5	2.0	144	0	118	21	2.3	<.10	<.01	11	156	159	23
3.5	2.0	--	--	--	22	2.3	<.10	<.01	11	155	159	23 ^R
<.02	<.10	--	--	--	<.10	<.10	<.10	<.01	<.02	--	--	23 ^{Fb}
2.9	2.8	215	0	176	23	1.1	<.10	.02	10	227	234	24
8.0	4.1	210	0	172	39	6.6	.18	.04	13	240	245	25
3.2	1.7	135	0	111	12	2.1	<.10	<.01	11	141	139	26
5.5	1.5	106	0	87	7.8	5.5	<.10	.04	25	141	158	27
2.3	1.3	63	0	52	3.5	1.4	<.10	<.01	17	79	85	28
1.6	.66	26	0	22	3.9	.77	<.10	<.01	9.1	38	40	29
1.6	.75	23	0	19	2.7	.95	<.10	<.01	10	36	40	30
9.2	3.4	234	0	192	15	5.9	.17	.02	21	238	240	31

Table 15. Physical and major-ion concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Site identification number	Date	Time	Specific conductance, field ($\mu\text{S}/\text{cm}$)	pH, field (standard units)	Water temperature ($^{\circ}\text{C}$)	Turbidity (NTU)	Oxygen, dissolved (mg/L)	Hardness, total (mg/L as CaCO_3)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Sodium adsorption ratio
Subunit Survey 2, Montana												
32	470719114301401	06/12/01	1300	75	6.8	5.5	5.2	5.7	34	7.9	3.3	.2
33	470502114265301	06/12/01	0900	81	6.6	8.5	1.8	3.6	34	8.0	3.5	.2
34	470328114164301	06/28/01	0900	420	7.6	8.0	.39	11	226	55	22	.1
35	470112114144001	06/07/01	0900	337	8.1	11.0	.42	3.5	171	44	15	.2
36	465838114074501	06/27/01	1200	236	6.9	10.0	.89	7.0	99	21	11	.5
36 ^R		06/27/01	1201	--	--	--	--	--	100	21	11	.5
36 ^{Fb}		06/27/01	1206	--	--	--	--	--	--	<.01	<.008	--
37	465741114110601	06/27/01	1700	332	7.2	10.0	.54	6.2	149	37	14	.4
38	465440114022101	06/19/01	1100	141	6.7	8.5	1.2	4.1	65	15	6.8	.2
38 ^R		06/19/01	1101	--	--	--	--	--	65	15	6.8	.2
38 ^{Fb}		06/19/01	1106	--	--	--	--	--	--	<.01	<.008	--
39	465323114054301	06/20/01	1300	412	7.8	11.0	.09	4.8	196	52	16	.3
40	465127114055401	06/20/01	1000	379	7.6	11.0	.11	5.5	180	49	14	.2
41	464951114023701	06/19/01	1600	428	7.7	10.5	.17	6.4	201	53	16	.3
42	463932114035901	05/29/01	1300	102	6.6	10.5	.10	.4	32	9.1	2.3	.7
43	463827114001201	05/29/01	1600	316	7.9	13.0	3.6	1.0	126	32	11	.8
44	463335114011701	05/30/01	1600	197	6.7	10.5	3.8	.2	80	23	5.2	.4
44 ^{Fb}		05/30/01	1611	--	--	--	--	--	--	<.01	<.008	--
45	463122114074701	05/30/01	0900	139	6.6	10.0	.80	3.9	60	16	4.8	.4
45 ^R		05/30/01	0901	--	--	--	--	--	59	16	4.8	.4
46	462948114060101	05/30/01	1200	226	6.9	12.0	.90	5.6	95	29	5.5	.4
47	462859113574401	06/11/01	1200	137	7.1	5.5	1.1	7.2	65	19	4.0	.1
48	462818114074101	06/04/01	1200	161	6.6	10.5	.09	3.1	71	20	5.3	.2
48 ^{Fb}		06/04/01	1206	--	--	--	--	--	--	<.01	<.008	--
49	462754113592701	06/05/01	1500	309	8.0	9.5	.47	9.6	116	25	13	1.0
50	462616114094301	06/05/01	1300	132	6.5	9.5	.30	5.5	65	16	6.0	.2
51	462545114034301	06/05/01	1800	373	7.5	14.0	1.6	8.3	124	36	8.2	1.2
52	462256114114501	06/04/01	1700	29	6.1	8.0	12	9.1	8.5	2.3	.68	.3
53	462228114030301	06/06/01	1100	318	7.6	10.5	.22	8.8	127	40	6.9	.9
54	461823114050901	06/06/01	1300	432	7.1	10.0	.20	5.5	212	71	8.2	.6
55	461807114123001	06/11/01	1600	66	6.5	10.0	3.7	4.4	20	5.8	1.3	.7
56	461638114023401	06/06/01	0800	580	7.4	11.0	.64	7.5	210	63	13	1.3
57	461451114090801	06/06/01	1600	301	7.2	12.0	.51	6.6	172	49	12	.2
58	461320114121501	06/05/01	0900	97	6.1	9.5	80	4.4	32	9.2	2.2	.6
59	461055114112601	06/21/01	0900	27	5.8	8.5	31	5.0	9.3	2.6	.65	.3
60	460110114110901	06/20/01	1800	59	6.7	11.5	1.1	8.7	24	6.7	1.7	.2
61	455521114074801	06/20/01	2000	143	6.3	10.0	2.3	.6	59	17	4.0	.4

Table 15. Physical and major-ion concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Sodium, dis- solved (mg/L)	Potas- sium, dis- solved (mg/L)	Bicar- bonate, dis- solved (mg/L)	Carbo- nate, dis- solved (mg/L as HCO ₃)	Alka- linity, dis- solved (mg/L as CaCO ₃)	Sulfate, dis- solved (mg/L as SO ₄)	Chlo- ride, dis- solved (mg/L)	Fluo- ride, dis- solved (mg/L)	Bromide, dis- solved (mg/L)	Silica, dis- solved (mg/L as SiO ₂)	Dis- solved solids, sum of constit- uents	Dissolved solids, residue at 180 °C (mg/L)	Well number (figs. 3 and 4)
Subunit Survey 2, Montana												
2.1	.43	38	0	32	3.7	.46	<.20	<.01	12	49	49	32
2.9	.55	42	0	34	3.0	.63	e.09	<.01	15	55	54	33
3.2	3.3	257	0	211	7.9	1.5	e.13	.02	15	234	243	34
7.4	1.7	195	0	160	14	<.08	.20	.03	20	198	250	35
11	1.1	107	0	88	5.0	12	.17	.02	19	136	129	36
11	1.1	--	--	--	5.0	12	.16	.02	19	--	136	36 ^R
<.06	<.09	--	--	--	<.10	<.08	<.20	<.01	<.09	--	<.10	36 ^{Fb}
12	1.2	167	0	137	9.8	7.0	.18	.02	20	190	194	37
3.4	.77	70	0	57	3.4	4.1	<.20	.01	12	82	90	38
3.4	.74	--	--	--	3.4	4.1	<.20	.02	12	82	91	38 ^R
<.06	<.09	--	--	--	<.10	<.08	<.20	<.01	<.09	--	10	38 ^{Fb}
9.8	1.4	205	0	168	16	10	<.20	.04	14	227	251	39
6.9	1.7	195	0	160	17	5.4	.20	.02	14	209	229	40
10	1.9	218	0	179	16	8.2	e.11	.04	17	237	263	41
9.2	1.1	51	0	42	4.0	4.2	.24	.06	23	79	85	42
20	3.3	178	0	146	19	4.8	.55	.07	22	200	205	43
7.3	3.9	96	0	79	8.2	3.9	.18	.02	41	146	142	44
<.06	--	--	--	--	<.10	<.08	--	--	<.09	--	--	44 ^{Fb}
6.9	.54	82	0	67	2.5	1.4	.18	<.01	36	110	103	45
6.9	.55	--	--	--	2.5	1.4	.20	.02	36	109	103	45 ^R
10	2.8	133	0	109	5.2	2.6	.16	.02	17	141	146	46
2.5	1.6	77	0	63	3.6	.68	e.12	<.01	13	83	85	47
4.7	1.0	88	0	72	3.2	3.2	.19	.01	29	114	127	48
<.06	e.08	--	--	--	<.10	<.08	<.20	<.01	<.09	--	--	48 ^{Fb}
23	6.0	189	0	155	3.0	.50	1.7	<.01	13	180	176	49
2.8	2.0	78	0	64	2.7	2.2	.17	<.01	29	102	109	50
32	9.2	166	0	136	22	20	.46	.17	55	270	269	51
2.2	.70	13	0	11	2.2	.77	<.20	<.01	16	32	47	52
23	8.4	213	0	175	6.0	2.8	.45	.03	22	216	212	53
22	3.7	287	0	237	9.0	2.9	.36	.05	31	291	294	54
7.0	1.0	41	0	33	.29	.57	.22	.01	35	72	69	55
43	4.0	300	0	246	24	16	.36	.09	50	369	372	56
5.9	3.4	206	0	169	4.3	<.08	.20	.02	17	194	200	57
8.4	.41	56	0	46	2.1	1.4	e.12	.02	36	89	103	58
2.2	.26	14	0	11	1.1	.50	<.20	<.01	17	32	46	59
2.8	.27	31	0	25	1.2	1.4	<.20	<.01	36	67	79	60
7.3	1.6	80	0	65	3.5	3.3	e.10	<.01	29	106	120	61

Table 16. Nutrient and dissolved organic-carbon concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001

[Site identification number described in text. Abbreviations: e, estimated; Fb, field blank; mg/L, milligrams per liter; R, replicate; Sb, source-solution blank. Symbols: <, less than reporting level; --, no data]

Well number (figs. 3 and 4)	Site identification number	Date	Time	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonia, dissolved (mg/L as N)	Ammonia plus organic nitrogen, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L)	Phosphorus, ortho-phosphate, dissolved (mg/L as P)	Organic carbon, dissolved (mg/L as C)
Subunit Survey 1, Idaho and Washington										
1	481320116261101	07/14/99	1700	<0.01	<0.05	<0.02	e0.06	0.012	0.02	0.5
2	480950116324401	07/14/99	1100	<.01	.21	<.02	e.07	.051	.05	.7
3	480928117053201	07/07/99	1000	<.01	.34	<.02	e.06	.009	.02	.4
4	480813116593701	07/07/99	1600	<.01	.22	.02	e.09	.025	.03	1.2
5	480718117012501	07/06/99	1800	<.01	<.05	<.02	e.08	.028	.03	.6
6	480249116510001	07/08/99	1000	<.01	.19	.02	e.09	.006	.01	.6
7	480235116483001	07/13/99	1700	<.01	.22	<.02	e.07	<.004	<.01	.7
8	480203117200601	06/08/99	0800	<.01	3.6	.04	e.06	.012	.02	.5
9	480128116374601	08/04/99	0900	<.01	.12	<.02	e.09	.021	.02	1.7
10	480119117182101	06/08/99	1600	<.01	3.7	<.02	<.10	.021	.03	.3
11	475925117153001	07/06/99	1100	<.01	2.0	<.02	e.06	.027	.03	.5
12	475825117364401	06/09/99	1000	<.01	.26	<.02	e.05	.033	.03	.6
13	475731116371301	06/23/99	1200	<.01	.14	<.02	<.10	<.004	.01	.4
14	475637117262501	06/09/99	1700	<.01	1.6	<.02	<.10	.093	.08	.3
15	475510116391201	08/03/99	1400	<.01	.07	<.02	e.05	.006	.01	.4
15 ^R		08/03/99	1401	--	--	--	--	--	--	.6
16	475400116404201	06/22/99	1700	<.01	.44	<.02	<.10	.008	.02	.4
17	475343117225201	06/10/99	0900	<.01	3.3	<.02	<.10	.020	.02	.7
18	475322116522201	07/12/99	1200	<.01	.19	<.02	e.08	<.004	<.01	.4
18 ^R		07/12/99	1201	<.01	.18	<.02	e.09	<.004	<.01	.3
18 ^{Fb}		07/12/99	1205	<.01	<.05	<.02	<.10	<.004	<.01	1.8
18 ^{Sb}		07/12/99	1207	--	--	--	--	--	--	<.1
19	475130117262201	06/07/99	0900	<.01	7.6	.04	<.10	.018	.03	.5
20	475035116424801	06/22/99	1100	<.01	.16	<.02	e.07	.005	.02	.2
21	474718116530201	06/24/99	0900	<.01	.85	<.02	<.10	.005	.02	.4
21 ^R		06/24/99	0901	<.01	.83	<.02	e.06	<.004	.01	.4
21 ^{Fb}		06/24/99	0905	<.01	<.05	<.02	e.08	<.004	.01	4.0
22	474708117250501	06/07/99	1600	<.01	4.0	.03	e.09	.044	.04	.8
23	474629117305101	05/25/99	1100	<.01	<.05	.04	e.08	.026	.03	.2
23 ^R		05/25/99	1101	<.01	<.05	.04	e.10	.025	.03	.2
23 ^{Fb}		05/26/99	0905	<.01	<.05	<.02	e.06	<.004	.01	.5
24	474456116522001	06/21/99	1700	<.01	3.6	<.02	e.06	<.004	.01	.4
25	474427117312101	05/24/99	1400	<.01	<.05	.03	<.10	.007	.04	.5
26	474317117225301	05/27/99	0900	<.01	.92	.03	e.05	<.004	.01	.2
27	474218116445601	07/15/99	1000	<.01	1.6	<.02	e.07	.012	.01	.9
28	474147116544001	07/26/99	1300	<.01	.46	<.02	<.10	<.004	<.01	.3
29	474130117015401	07/29/99	1000	<.01	.15	<.02	<.10	<.004	<.01	.6
30	474050117084101	07/28/99	1700	<.01	.16	<.02	e.05	.006	<.01	.4
31	473612117243601	05/26/99	1100	<.01	.64	<.02	e.10	.054	.05	1.0

Table 16. Nutrient and dissolved organic-carbon concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Site identification number	Date	Time	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonia, dissolved (mg/L as N)	Ammonia plus organic nitrogen, dissolved (mg/L as N)	Phosphorus, dissolved (mg/L)	Phosphorus, ortho-phosphate, dissolved (mg/L as P)	Organic carbon, dissolved (mg/L as C)
Subunit Survey 2, Montana										
32	470719114301401	06/12/01	1300	<.006	.07	<.04	<.10	e.004	<.02	--
33	470502114265301	06/12/01	0900	<.006	.18	<.04	<.10	<.006	<.02	--
34	470328114164301	06/28/01	0900	.006	.05	<.04	<.10	<.006	<.02	--
35	470112114144001	06/07/01	0900	<.006	.93	<.04	<.10	.058	.05	--
36	465838114074501	06/27/01	1200	<.006	.55	<.04	<.10	.019	.02	--
36 ^R		06/27/01	1201	<.006	.55	<.04	<.10	.020	e.02	--
36 ^{Fb}		06/27/01	1206	<.006	<.005	<.04	<.10	<.006	<.02	--
37	465741114110601	06/27/01	1700	e.005	1.4	<.04	<.10	e.005	e.01	--
38	465440114022101	06/19/01	1100	<.006	.45	<.04	<.10	<.006	<.02	--
38 ^R		06/19/01	1101	<.006	.44	<.04	<.10	e.004	<.02	--
38 ^{Fb}		06/19/01	1106	<.006	<.05	<.04	<.10	<.006	<.02	--
39	465323114054301	06/20/01	1300	<.006	1.4	<.04	e.12	e.005	<.02	--
40	465127114055401	06/20/01	1000	<.006	.96	<.04	<.10	.009	<.02	--
41	464951114023701	06/19/01	1600	<.006	1.3	<.04	<.10	.017	<.02	--
42	463932114035901	05/29/01	1300	e.004	e.04	<.04	<.10	.009	<.02	--
43	463827114001201	05/29/01	1600	<.006	<.05	<.04	.25	.046	.04	--
44	463335114011701	05/30/01	1600	<.006	1.3	<.04	<.10	.084	.07	--
45	463122114074701	05/30/01	0900	<.006	.28	<.04	<.10	.018	e.01	--
45 ^R		05/30/01	0901	<.006	.29	<.04	<.10	.017	e.01	--
46	462948114060101	05/30/01	1200	<.006	.72	<.04	<.10	.015	e.01	--
47	462859113574401	06/11/01	1200	e.003	.07	<.04	<.10	.022	.02	--
48	462818114074101	06/04/01	1200	<.006	.80	<.04	<.10	.026	.02	--
48 ^{Fb}		06/04/01	1206	<.006	<.05	<.04	<.10	<.006	<.02	--
49	462754113592701	06/05/01	1500	<.006	.27	<.04	<.10	.036	.03	--
50	462616114094301	06/05/01	1300	<.006	.57	<.04	<.10	.018	e.02	--
51	462545114034301	06/05/01	1800	<.006	1.2	<.04	<.10	.021	e.02	--
52	462256114114501	06/04/01	1700	e.003	.10	.04	<.10	.021	.07	--
53	462228114030301	06/06/01	1100	<.006	.29	<.04	<.10	.015	e.01	--
54	461823114050901	06/06/01	1300	<.006	.45	<.04	e.05	.013	e.01	--
55	461807114123001	06/11/01	1600	e.003	.20	<.04	<.10	.040	.04	--
56	461638114023401	06/06/01	0800	<.006	1.8	<.04	e.05	.040	.03	--
57	461451114090801	06/06/01	1600	<.006	.84	<.04	<.10	.013	<.02	--
58	461320114121501	06/05/01	0900	<.006	.22	<.04	<.10	.041	.04	--
59	461055114112601	06/21/01	0900	<.006	.14	e.02	e.06	.018	.02	--
60	460110114110901	06/20/01	1800	<.006	.36	<.04	<.10	.040	.04	--
61	455521114074801	06/20/01	2000	<.006	.36	e.03	<.10	.027	.03	--

Table 17. Trace-element concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001

[Site identification number described in text. Abbreviations: e, estimated; Fb, field blank; µg/L, micrograms per liter; R, replicate. Symbols: <, less than reporting level; --, no data]

Well number (figs. 3 and 4)	Site identification number	Date	Time	Aluminum, dissolved (µg/L)	Antimony, dissolved (µg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Beryllium, dissolved (µg/L)	Boron, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Cobalt, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Subunit Survey 1, Idaho and Washington														
1	481320116261101	07/14/99	1700	1.6	<1.0	1.4	11	<1.0	--	<1.0	<1.0	<1.0	<1.0	71
2	480950116324401	07/14/99	1100	<1.0	<1.0	<1.0	5.9	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
3	480928117053201	07/07/99	1000	1.2	<1.0	2.4	79	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
4	480813116593701	07/07/99	1600	<1.0	<1.0	<1.0	19	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
5	480718117012501	07/06/99	1800	<1.0	<1.0	31	107	<1.0	--	<1.0	<1.0	<1.0	<1.0	397
6	480249116510001	07/08/99	1000	<1.0	<1.0	1.4	18	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
7	480235116483001	07/13/99	1700	1.1	<1.0	<1.0	67	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
8	480203117200601	06/08/99	0800	<1.0	<1.0	<1.0	31	<1.0	--	<1.0	<1.0	<1.0	<1.0	20
9	480128116374601	08/04/99	0900	<1.0	<1.0	2.0	11	<1.0	--	<1.0	<1.0	<1.0	1.2	49
10	480119117182101	06/08/99	1600	1.9	<1.0	3.1	74	<1.0	--	<1.0	1.1	<1.0	<1.0	<10
11	475925117153001	07/06/99	1100	<1.0	<1.0	<1.0	33	<1.0	--	<1.0	<1.0	<1.0	<1.0	e9.0
12	475825117364401	06/09/99	1000	<1.0	<1.0	<1.0	33	<1.0	--	<1.0	<1.0	<1.0	<1.0	23
13	475731116371301	06/23/99	1200	6.0	<1.0	4.5	12	<1.0	--	<1.0	<1.0	<1.0	<1.0	e7.4
14	475637117262501	06/09/99	1700	<1.0	<1.0	<1.0	18	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
15	475510116391201	08/03/99	1400	1.8	<1.0	5.6	7.4	<1.0	--	<1.0	<1.0	<1.0	<1.0	51
15 ^{Fb}		08/03/99	1411	<.30	<.20	<1.0	<.20	<.20	<2.0	<.30	<.20	<.20	.22	<3.0
16	475400116404201	06/22/99	1700	4.5	<1.0	1.4	14	<1.0	--	<1.0	<1.0	<1.0	<1.0	e6.3
17	475343117225201	06/10/99	0900	2.8	<1.0	5.5	58	<1.0	--	<1.0	1.2	<1.0	<1.0	<10
18	475322116522201	07/12/99	1200	2.7	<1.0	13	65	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
18 ^R		07/12/99	1201	1.4	<1.0	15	64	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
18 ^{Fb}		07/12/99	1211	<.30	<.20	<1.0	<.20	<.20	<2.0	<.30	<.20	<.20	<.20	<3.0
19	475130117262201	06/07/99	0900	<1.0	<1.0	4.1	106	<1.0	--	<1.0	1.4	<1.0	<1.0	<10
20	475035116424801	06/22/99	1100	1.9	<1.0	<1.0	39	<1.0	--	<1.0	<1.0	<1.0	<1.0	59
21	474718116530201	06/24/99	0900	1.2	<1.0	2.6	16	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
21 ^R		06/24/99	0901	1.0	<1.0	2.3	16	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
21 ^{Fb}		06/24/99	0906	<.30	<.20	<1.0	<.20	<.20	<2.0	<.30	<.20	<.20	<1.0	<10
22	474708117250501	06/07/99	1600	1.2	<1.0	5.5	80	<1.0	--	<1.0	1.4	<1.0	<1.0	<10
23	474629117305101	05/25/99	1100	3.1	<1.0	12	129	<1.0	--	<1.0	<1.0	<1.0	<1.0	87
23 ^R		05/25/99	1101	3.3	<1.0	14	130	<1.0	--	<1.0	<1.0	<1.0	<1.0	88
23 ^{Fb}		05/26/99	0906	<.30	<.20	<1.0	<.20	<.20	<2.0	<.30	<.20	<.20	.32	<3.0
24	474456116522001	06/21/99	1700	1.3	<1.0	3.4	37	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
25	474427117312101	05/24/99	1400	2.6	<1.0	5.0	117	<1.0	--	<1.0	<1.0	<1.0	<1.0	604
26	474317117225301	05/27/99	0900	4.7	<1.0	2.2	28	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
27	474218116445601	07/15/99	1000	4.6	<1.0	<1.0	27	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
28	474147116544001	07/26/99	1300	<1.0	<1.0	<1.0	29	<1.0	--	<1.0	<1.0	<1.0	<1.0	e6.2
29	474130117015401	07/29/99	1000	<1.0	<1.0	<1.0	11	<1.0	--	<1.0	<1.0	<1.0	<1.0	<10
30	474050117084101	07/28/99	1700	<1.0	<1.0	<1.0	13	<1.0	--	<1.0	<1.0	<1.0	1.5	e6.2
31	473612117243601	05/26/99	1100	2.5	<1.0	8.0	105	<1.0	--	<1.0	<1.0	<1.0	<1.0	e7.3

Table 17. Trace-element concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Lead, dis- solved (µg/L)	Lith- ium, dis- solved (µg/L)	Man- ganese, dis- solved (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, dis- solved (µg/L)	Sele- nium, dis- solved (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uran- ium, dis- solved (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, dis- solved (µg/L)	Well number (figs. 3 and 4)
Subunit Survey 1, Idaho and Washington												
<1.0	--	3.6	4.7	<1.0	<1.0	<1.0	--	--	1.4	--	4.1	1
<1.0	--	3.2	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	9.9	2
<1.0	--	2.0	1.7	<1.0	<1.0	<1.0	--	--	1.7	--	4.6	3
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	81	4
<1.0	--	129	1.7	<1.0	<1.0	<1.0	--	--	4.0	--	22	5
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	1.1	--	37	6
<1.0	--	<1.0	2.0	1.2	<1.0	<1.0	--	--	3.1	--	3.5	7
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	20	8
<1.0	--	<1.0	2.0	<1.0	<1.0	<1.0	--	--	2.8	--	47	9
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	1.3	--	8.3	10
<1.0	--	2.3	<1.0	<1.0	<1.0	<1.0	--	--	1.3	--	14	11
<1.0	--	1.1	1.1	<1.0	<1.0	<1.0	--	--	<1.0	--	36	12
<1.0	--	<1.0	1.1	<1.0	<1.0	<1.0	--	--	1.2	--	123	13
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	8.0	14
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	25	15
<.30	--	<.10	<.20	<.50	<1.0	<.20	<1.0	<1.0	<.20	--	<.50	15 ^{Fb}
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	349	16
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	2.7	--	28	17
<1.0	--	<1.0	1.3	<1.0	<1.0	<1.0	--	--	2.0	--	55	18
<1.0	--	<1.0	1.2	<1.0	<1.0	<1.0	--	--	2.1	--	54	18 ^R
<.30	--	<.10	<.20	<.50	<1.0	<.20	<1.0	<1.0	<.20	--	<.50	18 ^{Fb}
<1.0	--	<1.0	<1.0	1.1	<1.0	<1.0	--	--	1.6	--	2.6	19
<1.0	--	2.3	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	34	20
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	1.3	--	75	21
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	1.3	--	66	21 ^R
<.30	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	<1.0	21 ^{Fb}
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	4.2	--	4.4	22
<1.0	--	121	2.1	<1.0	<1.0	<1.0	--	--	<1.0	--	33	23
<1.0	--	122	2.1	<1.0	<1.0	<1.0	--	--	<1.0	--	34	23 ^R
<.30	--	<.10	<.20	<.50	<1.0	<.20	<.10	<.10	<.20	--	1.5	23 ^{Fb}
<1.0	--	<1.0	1.9	<1.0	<1.0	<1.0	--	--	5.8	--	51	24
<1.0	--	82	3.2	<1.0	<1.0	<1.0	--	--	4.8	--	7.2	25
<1.0	--	<1.0	1.5	<1.0	<1.0	<1.0	--	--	3.0	--	19	26
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	8.9	27
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	75	28
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	53	29
<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	<1.0	--	208	30
<1.0	--	21	1.5	<1.0	<1.0	<1.0	--	--	1.8	--	1.9	31

Table 17. Trace-element concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Site identification number	Date	Time	Aluminum, dissolved (µg/L)	Antimony, dissolved (µg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Beryllium, dissolved (µg/L)	Boron, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Cobalt, dissolved (µg/L)	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)
Subunit Survey 2, Montana														
32	470719114301401	06/12/01	1300	<1.0	.06	.18	37	<.06	<7.0	<.04	<.80	.02	1.7	e9.7
33	470502114265301	06/12/01	0900	<1.0	e.03	<.20	42	<.06	<7.0	<.04	<.80	e.01	.46	e8.0
34	470328114164301	06/28/01	0900	<1.0	.07	.31	21	<.06	<7.0	<.04	e.60	.09	.35	<10
35	470112114144001	06/07/01	0900	<1.0	.11	4.4	353	<.06	8.6	<.04	.83	.06	.31	e7.3
36	465838114074501	06/27/01	1200	<1.0	.07	.78	160	<.06	9.2	<.04	<.80	.04	.81	<10
36 ^R		06/27/01	1201	<1.0	.07	.80	162	<.06	9.0	<.04	<.80	.04	.50	<10
36 ^{Fb}		06/27/01	1211	<1.0	<.05	<.20	<1.0	<.06	<7.0	<.04	<.80	<.02	<.20	<10
37	465741114110601	06/27/01	1700	<1.0	e.05	e.11	194	<.06	8.0	<.04	e.45	.06	.33	<10
38	465440114022101	06/19/01	1100	<1.0	<.05	<.20	146	<.06	<7.0	e.03	<.80	.03	.88	10
38 ^R	465440114022101	06/19/01	1101	<1.0	<.05	<.20	145	<.06	<7.0	e.03	<.80	.02	.70	e9.4
38 ^{Fb}		06/19/01	1111	<1.0	<.05	<.20	<1.0	<.06	<7.0	<.04	<.80	e.01	<.20	<10
39	465323114054301	06/20/01	1300	<1.0	.06	.23	498	<.06	27	<.04	e.46	.09	.43	<10
40	465127114055401	06/20/01	1000	<1.0	.14	.86	210	<.06	20	<.04	e.55	.08	.60	<10
41	464951114023701	06/19/01	1600	<1.0	.10	.93	288	<.06	21	<.04	e.55	.10	.54	<10
42	463932114035901	05/29/01	1300	<1.0	<.05	<.20	21	<.06	8.6	<.04	<.80	.07	.53	486
43	463827114001201	05/29/01	1600	<1.0	<.05	2.2	112	<.06	7.7	<.04	<.80	.05	e.18	87
44	463335114011701	05/30/01	1600	<1.0	e.04	.51	153	<.06	12	<.04	<.80	.06	.66	60
44 ^{Fb}	463335114011701	05/30/01	1611	<1.0	<.05	<.20	<1.0	<.06	<7.0	<.04	<.80	e.01	<.20	<10
45	463122114074701	05/30/01	0900	<1.0	<.05	<.20	26	<.06	<7.0	<.04	<.80	.02	.52	18
45 ^R		05/30/01	0901	<1.0	<.05	<.20	27	<.06	<7.0	<.04	<.80	.02	.51	19
46	462948114060101	05/30/01	1200	<1.0	.05	.26	56	<.06	14	<.04	<.80	.05	.80	<10
47	462859113574401	06/11/01	1200	<1.0	.05	.53	30	<.06	<7.0	<.04	<.80	.03	.77	11
48	462818114074101	06/04/01	1200	<1.0	e.03	<.20	20	<.06	e6.9	<.04	<.80	.03	.56	<10
48 ^{Fb}		06/04/01	1211	12	e.02	<.20	<1.0	<.06	<7.0	<.04	<.80	.02	<.20	<10
49	462754113592701	06/05/01	1500	1.1	e.04	.87	51	<.06	95	.04	e.46	.04	1.1	<10
50	462616114094301	06/05/01	1300	<1.0	e.05	1.3	39	e.04	e4.3	<.04	<.80	.04	.96	<10
51	462545114034301	06/05/01	1800	<1.0	.08	3.3	40	<.06	20	<.04	e.45	.05	.48	<10
52	462256114114501	06/04/01	1700	5.8	<.05	<.20	1.3	e.03	e4.9	<.04	<.80	.02	2.8	e5.5
53	462228114030301	06/06/01	1100	<1.0	.18	3.9	51	<.06	9.8	<.04	<.80	.05	.46	<10
54	461823114050901	06/06/01	1300	<1.0	.45	3.9	55	<.06	20	<.04	<.80	.10	2.6	<10
55	461807114123001	06/11/01	1600	<1.0	e.03	e.11	9.4	<.06	<7.0	<.04	<.80	e.01	1.5	<10
56	461638114023401	06/06/01	0800	<1.0	.23	5.1	51	<.06	19	<.04	<.80	.10	.55	e6.3
57	461451114090801	06/06/01	1600	<1.0	.07	.52	42	<.06	13	<.04	<.80	.07	1.7	<10
58	461320114121501	06/05/01	0900	<1.0	<.05	<.20	12	<.06	<7.0	<.04	<.80	.02	.42	35
59	461055114112601	06/21/01	0900	14	e.04	<.20	5.0	e.04	<7.0	e.03	<.80	.02	4.2	14
60	460110114110901	06/20/01	1800	<1.0	e.03	1.4	7.6	<.06	<7.0	e.02	<.80	e.01	.34	<10
61	455521114074801	06/20/01	2000	<1.0	e.04	e.11	20	<.06	e6.7	.04	<.80	.04	2.5	36

Table 17. Trace-element concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Lead, dis- solved (µg/L)	Lith- ium, dis- solved (µg/L)	Man- ganese, dis- solved (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, dis- solved (µg/L)	Sele- nium, dis- solved (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uran- ium, dis- solved (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, dis- solved (µg/L)	Well number (figs. 3 and 4)
Subunit Survey 2, Montana												
e.06	.52	1.1	<.20	e.05	.36	<1.0	22	<.04	.02	<.20	1.6	32
.31	1.2	.85	<.20	<.06	<.30	<1.0	26	<.04	<.02	e.10	34	33
<.08	4.0	<1.0	.72	<.06	<.30	<1.0	70	<.04	2.1	.40	<1.0	34
<.08	3.8	.48	.47	<.06	.33	<1.0	123	e.03	1.7	1.5	3.2	35
<.08	4.9	.19	.67	<.06	<.30	<1.0	79	.11	.74	.29	6.7	36
<.08	5.4	.20	.64	<.06	<.30	<1.0	80	<.04	.73	.37	7.2	36 ^R
<.08	<.30	<.10	<.20	<.06	<.30	<1.0	<.08	<.04	<.02	<.20	<1.0	36 ^{Fb}
e.07	6.2	e.08	<.20	<.06	<.30	<1.0	107	<.04	.17	.66	9.5	37
.12	1.5	.48	<.20	.27	<.30	<1.0	49	<.04	.03	e.14	48	38
.14	1.5	.57	<.20	.26	<.30	<1.0	49	<.04	.04	<.20	48	38 ^R
<.08	<.30	<.10	<.20	<.06	<.30	<1.0	<.08	<.04	<.02	<.20	<1.0	38 ^{Fb}
.19	3.7	<1.0	<.20	<.06	<.30	<1.0	142	<.04	1.1	.40	21	39
e.05	6.4	<1.0	.46	<.06	<.30	<1.0	163	<.04	1.4	.85	5.2	40
e.08	6.0	<1.0	.35	<.06	<.30	<1.0	179	<.04	1.5	.88	7.8	41
.09	1.8	42	.40	.21	<.30	<1.0	60	<.04	.11	.23	37	42
<.08	.57	19	1.3	.15	<.30	<1.0	101	<.04	.10	.58	27	43
e.06	10	5.4	.87	.24	<.30	<1.0	126	e.03	1.0	2.0	20	44
<.08	<.30	<.10	<.20	<.06	<.30	<1.0	.26	<.04	<.02	<.20	<1.0	44 ^{Fb}
.12	1.4	.77	e.15	e.03	<.30	<1.0	130	<.04	.19	1.3	7.8	45
.12	1.4	.82	e.16	e.04	<.30	<1.0	131	<.04	.19	1.3	7.6	45 ^R
e.05	1.5	.16	.37	<.06	<.30	<1.0	51	<.04	.76	.69	22	46
e.06	.97	.21	.70	<.06	e.18	<1.0	35	<.04	.72	.62	17	47
<.08	1.4	.10	.28	<.06	<.30	<1.0	181	<.04	.36	.44	1.3	48
<.08	<.30	<.10	<.20	<.06	<.30	<1.0	<.08	<.04	<.02	<.20	<1.0	48 ^{Fb}
.19	.38	e.08	18	<.06	<.30	<1.0	433	<.04	1.4	1.4	6.6	49
e.05	1.4	e.06	.59	.07	<.30	<1.0	66	<.04	.17	1.0	17	50
.40	4.8	.96	3.1	<.06	e.29	<1.0	95	<.04	4.5	4.7	143	51
<.08	1.4	.70	<.20	<.06	<.30	<1.0	33	.05	.02	<.20	1.3	52
<.08	4.1	<1.0	13	<.06	<.30	<1.0	39	<.04	2.3	3.6	19	53
<.08	3.5	e.07	.39	<.06	e.29	<1.0	93	<.04	7.9	1.6	2.6	54
.16	5.7	.49	<.20	<.06	<.30	<1.0	81	<.04	.05	.50	25	55
<.08	7.7	.84	2.0	<.06	e.21	<1.0	133	<.04	6.3	11	6.4	56
.11	1.5	.12	.37	<.06	<.30	<1.0	54	<.04	1.5	.70	23	57
.09	3.4	1.5	<.20	<.06	e.18	<1.0	151	e.02	.34	<.20	4.6	58
.14	5.2	.90	<.20	.12	<.30	<1.0	33	<.04	e.02	.37	24	59
.10	4.7	1.2	<.20	e.03	<.30	<1.0	53	<.04	.03	.81	36	60
.12	9.3	.88	.24	<.06	<.30	<1.0	214	<.04	.68	.41	9.0	61

Table 18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001

[Site identification number described in text. **Bold text denotes detected values.** Abbreviations: e, estimated; Fb, field blank; µg/L, micrograms per liter; R, replicate. Symbols: <, less than reporting level; --, no data]

Well number (figs. 3 and 4)	Site identification number	Date	Time	2,6-Diethyl-aniline (µg/L)	Aceto-chlor (µg/L)	Alachlor (µg/L)	alpha-HCH (µg/L)	alpha-HCH-d ₆ , surrogate (percent)	Atra-zine (µg/L)	Azin-phos-methyl (µg/L)	Ben-fluralin (µg/L)
Subunit Survey 1, Idaho and Washington											
1	481320116261101	07/14/99	1700	<0.003	<0.002	<0.002	<0.002	90	<0.001	<0.001	<0.002
2	480950116324401	07/14/99	1100	<.003	<.002	<.002	<.002	102	<.001	<.001	<.002
3	480928117053201	07/07/99	1000	<.003	<.002	<.002	<.002	89	<.001	<.001	<.002
4	480813116593701	07/07/99	1600	<.003	<.002	<.002	<.002	107	<.001	<.001	<.002
5	480718117012501	07/06/99	1800	<.003	<.002	<.002	<.002	87	<.001	<.001	<.002
6	480249116510001	07/08/99	1000	<.003	<.002	<.002	<.002	102	<.001	<.001	<.002
7	480235116483001	07/13/99	1700	<.003	<.002	<.002	<.002	104	<.001	<.001	<.002
8	480203117200601	06/08/99	0800	<.003	<.002	<.002	<.002	74	<.001	<.001	<.002
9	480128116374601	08/04/99	0900	<.003	<.002	<.002	<.002	94	<.001	<.001	<.002
10	480119117182101	06/08/99	1600	<.003	<.002	<.002	<.002	72	<.001	<.001	<.002
11	475925117153001	07/06/99	1100	<.003	<.002	<.002	<.002	106	<.001	<.001	<.002
12	475825117364401	06/09/99	1000	<.003	<.002	<.002	<.002	77	<.001	<.001	<.002
13	475731116371301	06/23/99	1200	<.003	<.002	<.002	<.002	110	<.001	<.001	<.002
14	475637117262501	06/09/99	1700	<.003	<.002	<.002	<.002	74	<.001	<.001	<.002
15	475510116391201	08/03/99	1400	<.003	<.002	<.002	<.002	93	<.001	<.001	<.002
16	475400116404201	06/22/99	1700	<.003	<.002	<.002	<.002	110	<.001	<.001	<.002
17	475343117225201	06/10/99	0900	<.003	<.002	<.002	<.002	70	<.001	<.001	<.002
18	475322116522201	07/12/99	1200	<.003	<.002	<.002	<.002	103	<.001	<.001	<.002
18 ^R		07/12/99	1201	<.003	<.002	<.002	<.002	108	<.001	<.001	<.002
18 ^{Fb}		07/12/99	1205	<.003	<.002	<.002	<.002	95	<.001	<.001	<.002
19	475130117262201	06/07/99	0900	<.003	<.002	<.002	<.002	104	<.001	<.001	<.002
20	475035116424801	06/22/99	1100	<.003	<.002	<.002	<.002	96	<.001	<.001	<.002
21	474718116530201	06/24/99	0900	<.003	<.002	<.002	<.002	99	<.001	<.001	<.002
21 ^R		06/24/99	0901	<.003	<.002	<.002	<.002	104	<.001	<.001	<.002
21 ^{Fb}		06/24/99	0905	<.003	<.002	<.002	<.002	91	<.001	<.001	<.002
22	474708117250501	06/07/99	1600	<.003	<.002	<.002	<.002	79	<.001	<.001	<.002
23	474629117305101	05/25/99	1100	<.003	<.002	<.002	<.002	100	<.001	<.001	<.002
24	474456116522001	06/21/99	1700	<.003	<.002	<.002	<.002	104	<.001	<.001	<.002
25	474427117312101	05/24/99	1400	<.003	<.002	<.002	<.002	93	<.001	<.001	<.002
26	474317117225301	05/27/99	0900	<.003	<.002	<.002	<.002	103	<.001	<.001	<.002
27	474218116445601	07/15/99	1000	<.003	<.002	<.002	<.002	90	<.001	<.001	<.002
28	474147116544001	07/26/99	1300	<.003	<.002	<.002	<.002	106	<.001	<.001	<.002
29	474130117015401	07/29/99	1000	<.003	<.002	<.002	<.002	94	<.001	<.001	<.002
30	474050117084101	07/28/99	1700	<.003	<.002	<.002	<.002	92	<.001	<.001	<.002
31	473612117243601	05/26/99	1100	<.003	<.002	<.002	<.002	79	<.001	<.001	<.002

Table 18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Butyl- ate (µg/L)	Carb- aryl (µg/L)	Carbo- furan (µg/L)	Chlor- pyrifos (µg/L)	cis-Per- methrin (µg/L)	Cyan- azine (µg/L)	Dacthal (µg/L)	Deethyl- atra- zine (µg/L)	Diaz- inon (µg/L)	Diazinon- d ₁₀ , surrogate (percent)	Dieldrin (µg/L)
Subunit Survey 1, Idaho and Washington											
1	<0.002	e0.010	<0.003	<0.004	<0.005	<0.004	<0.002	<0.002	<0.002	106	<0.001
2	<.002	e.005	<.003	<.004	<.005	<.004	<.002	<.002	<.002	110	<.001
3	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	104	<.001
4	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	127	<.001
5	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	107	<.001
6	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	120	<.001
7	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	105	<.001
8	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	96	<.001
9	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	101	<.001
10	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	96	<.001
11	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	114	<.001
12	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	96	<.001
13	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	102	<.001
14	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	87	<.001
15	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	103	<.001
16	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	99	<.001
17	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	90	<.001
18	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	99	<.001
18 ^R	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	108	<.001
18 ^{Fb}	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	111	<.001
19	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	91	<.001
20	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	92	<.001
21	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	106	<.001
21 ^R	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	113	<.001
21 ^{Fb}	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	117	<.001
22	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	93	<.001
23	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	100	<.001
24	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	105	<.001
25	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	93	<.001
26	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	111	<.001
27	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	104	<.001
28	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	102	<.001
29	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	118	<.001
30	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	116	<.001
31	<.002	<.003	<.003	<.004	<.005	<.004	<.002	<.002	<.002	94	<.001

Table 18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Disulfoton (µg/L)	EPTC (µg/L)	Ethalfuralin (µg/L)	Ethoprophos (µg/L)	Fonofos (µg/L)	Lindane (µg/L)	Linuron (µg/L)	Malathion (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)
Subunit Survey 1, Idaho and Washington										
1	<0.017	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005	<0.002	<0.004
2	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
3	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
4	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
5	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
6	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
7	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
8	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
9	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
10	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
11	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
12	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
13	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
14	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
15	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
16	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
17	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
18	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
18 ^R	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
18 ^{Fb}	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
19	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
20	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
21	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
21 ^R	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
21 ^{Fb}	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
22	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
23	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
24	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
25	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
26	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
27	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
28	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
29	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
30	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004
31	<.017	<.002	<.004	<.003	<.003	<.004	<.002	<.005	<.002	<.004

Table 18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Molin-ate (µg/L)	Naprop- amide (µg/L)	Para- thion (µg/L)	Para- thion- methyl (µg/L)	Pebulate (µg/L)	Pendi- meth- alin (µg/L)	Phorate (µg/L)	p,p'-DDE (µg/L)	Pro- meton (µg/L)
Subunit Survey 1, Idaho and Washington									
1	<0.004	<0.003	<0.004	<0.006	<0.004	<0.004	<0.002	<0.006	<0.018
2	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
3	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
4	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
5	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
6	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
7	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
8	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
9	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
10	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
11	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
12	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
13	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
14	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
15	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
16	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
17	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
18	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
18 ^R	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
18 ^{Fb}	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
19	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
20	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
21	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
21 ^R	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
21 ^{Fb}	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
22	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
23	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
24	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
25	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
26	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
27	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
28	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
29	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
30	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018
31	<.004	<.003	<.004	<.006	<.004	<.004	<.002	<.006	<.018

Table 18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Prop-achlor (µg/L)	Prop-anil (µg/L)	Prop-argite (µg/L)	Propyz-amide (µg/L)	Sim-azine (µg/L)	Tebu-thiuron (µg/L)	Terbacil (µg/L)	Terbufos (µg/L)	Thio-bencarb (µg/L)	Tri-allate (µg/L)	Tri-fluralin (µg/L)
Subunt Survey 1, Idaho and Washington											
1	<0.007	<0.004	<0.013	<0.003	<0.005	<0.010	<0.007	<0.013	<0.002	<0.001	<0.002
2	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
3	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
4	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
5	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
6	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
7	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
8	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
9	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
10	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
11	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
12	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
13	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
14	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
15	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
16	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
17	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
18	<.007	<.004	--	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
18 ^R	<.007	<.004	--	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
18 ^{Fb}	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
19	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
20	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
21	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
21 ^R	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
21 ^{Fb}	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
22	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
23	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
24	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
25	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
26	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
27	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
28	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
29	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
30	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002
31	<.007	<.004	<.013	<.003	<.005	<.010	<.007	<.013	<.002	<.001	<.002

Table 18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Site identification number	Date	Time	2,6-Diethyl-aniline (µg/L)	Aceto-chlor (µg/L)	Alachlor (µg/L)	alpha-HCH (µg/L)	alpha-HCH-d ₆ , surrogate (percent)	Atra-zine (µg/L)	Azin-phos-methyl (µg/L)	Ben-fluralin (µg/L)
Subunit Survey 2, Montana											
32	470719114301401	06/12/01	1300	<.002	<.004	<.002	<.005	80	<.007	<.050	<.010
33	470502114265301	06/12/01	0900	<.002	<.004	<.002	<.005	89	<.007	<.050	<.010
34	470328114164301	06/28/01	0900	<.002	<.004	<.002	<.005	89	<.007	<.050	<.010
35	470112114144001	06/07/01	0900	<.002	<.004	<.002	<.005	103	<.007	<.050	<.010
36	465838114074501	06/27/01	1200	<.002	<.004	<.002	<.005	86	<.007	<.050	<.010
36 ^R		06/27/01	1201	<.002	<.004	<.002	<.005	94	<.007	<.050	<.010
36 ^{Fb}		06/27/01	1205	<.002	<.004	<.002	<.005	88	<.007	<.050	<.010
37	465741114110601	06/27/01	1700	<.002	<.004	<.002	<.005	95	<.007	<.050	<.010
38	465440114022101	06/19/01	1100	<.002	<.004	<.002	<.005	78	<.007	<.050	<.010
38 ^R		06/19/01	1101	<.002	<.004	<.002	<.005	106	<.009	<.050	<.010
38 ^{Fb}		06/19/01	1105	<.002	<.004	<.002	<.005	87	<.007	<.050	<.010
39	465323114054301	06/20/01	1300	<.002	<.004	<.002	<.005	88	.031	<.050	<.010
40	465127114055401	06/20/01	1000	<.002	<.004	<.002	<.005	92	<.007	<.050	<.010
41	464951114023701	06/19/01	1600	<.002	<.004	<.002	<.005	75	.015	<.050	<.010
42	463932114035901	05/29/01	1300	<.002	<.004	<.002	<.005	95	<.007	<.050	<.010
43	463827114001201	05/29/01	1600	<.002	<.004	<.002	<.005	85	<.007	<.050	<.010
44	463335114011701	05/30/01	1600	<.002	<.004	<.002	<.005	89	<.007	<.050	<.010
45	463122114074701	05/30/01	0900	<.002	<.004	<.002	<.005	59	<.007	<.050	<.010
45 ^R		05/30/01	0901	<.002	<.004	<.002	<.005	75	<.007	<.050	<.010
46	462948114060101	05/30/01	1200	<.002	<.004	<.002	<.005	94	<.007	<.050	<.010
47	462859113574401	06/11/01	1200	<.002	<.004	<.002	<.005	91	<.007	<.050	<.010
48	462818114074101	06/04/01	1200	<.002	<.004	<.002	<.005	96	<.007	<.050	<.010
48 ^{Fb}		06/04/01	1205	<.002	<.004	<.002	<.005	93	<.007	<.050	<.010
49	462754113592701	06/05/01	1500	<.002	<.004	<.002	<.005	77	<.007	<.050	<.010
50	462616114094301	06/05/01	1300	<.002	<.004	<.002	<.005	90	<.007	<.050	<.010
51	462545114034301	06/05/01	1800	<.002	<.004	<.002	<.005	88	<.007	<.050	<.010
52	462256114114501	06/04/01	1700	<.002	<.004	<.002	<.005	92	<.007	<.050	<.010
53	462228114030301	06/06/01	1100	<.002	<.004	<.002	<.005	91	<.007	<.050	<.010
54	461823114050901	06/06/01	1300	<.002	<.004	<.002	<.005	90	<.007	<.050	<.010
55	461807114123001	06/11/01	1600	<.002	<.004	<.002	<.005	91	<.007	<.050	<.010
56	461638114023401	06/06/01	0800	<.002	<.004	<.002	<.005	88	<.007	<.050	<.010
57	461451114090801	06/06/01	1600	<.002	<.004	<.002	<.005	101	<.007	<.050	<.010
58	461320114121501	06/05/01	0900	<.002	<.004	<.002	<.005	88	<.007	<.050	<.010
59	461055114112601	06/21/01	0900	<.002	<.004	<.002	<.005	89	<.007	<.050	<.010
60	460110114110901	06/20/01	1800	<.002	<.004	<.002	<.005	101	<.007	<.050	<.010
61	455521114074801	06/20/01	2000	<.002	<.004	<.002	<.005	106	<.007	<.050	<.010

Table 18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Butyl- ate (µg/L)	Carb- aryl (µg/L)	Carbo- furan (µg/L)	Chlor- pyrifos (µg/L)	cis-Per- methrin (µg/L)	Cyan- azine (µg/L)	Dacthal (µg/L)	Deethyl- atra- zine (µg/L)	Diaz- inon (µg/L)	Diazinon- d ₁₀ , surrogate (percent)	Dieldrin (µg/L)
Subunit Survey 2, Montana											
32	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	89	<.005
33	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	103	<.005
34	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	83	<.005
35	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	102	<.005
36	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	90	<.005
36 ^R	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	91	<.005
36 ^{Fb}	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	82	<.005
37	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	85	<.005
38	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	97	<.005
38 ^R	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	119	<.005
38 ^{Fb}	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	106	<.005
39	<.002	<.041	<.020	<.005	<.006	<.018	<.003	e.005	<.005	107	<.005
40	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	116	<.005
41	<.002	<.041	<.020	<.005	<.006	<.018	<.003	e.003	<.005	112	<.005
42	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	109	<.005
43	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	95	<.005
44	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	95	<.005
45	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	84	<.005
45 ^R	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	83	<.005
46	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	98	<.005
47	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	99	<.005
48	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	95	<.005
48 ^{Fb}	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	91	<.005
49	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	93	<.005
50	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	93	<.005
51	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	100	<.005
52	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	96	<.005
53	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	110	<.005
54	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	102	<.005
55	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	103	<.005
56	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	97	<.005
57	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	102	<.005
58	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	90	<.005
59	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	85	<.005
60	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	98	<.005
61	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006	<.005	0	<.005

Table 18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Disul- foton (µg/L)	EPTC (µg/L)	Ethal- fluralin (µg/L)	Etho- pro- phos (µg/L)	Fonofos (µg/L)	Lindane (µg/L)	Linuron (µg/L)	Mala- thion (µg/L)	Metol- achlor (µg/L)	Metri- buzin (µg/L)
Subunit Survey 2, Montana										
32	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
33	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
34	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
35	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
36	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
36 ^R	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
36 ^{Fb}	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
37	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
38	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
38 ^R	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
38 ^{Fb}	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
39	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
40	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
41	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
42	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
43	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
44	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
45	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
45 ^R	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
46	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
47	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
48	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
48 ^{Fb}	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
49	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
50	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
51	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
52	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
53	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
54	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
55	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
56	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
57	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
58	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
59	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
60	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006
61	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006

Table 18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Molin-ate (µg/L)	Naprop-amide (µg/L)	Para-thion (µg/L)	Para-thion-methyl (µg/L)	Pebulate (µg/L)	Pendi-meth-alin (µg/L)	Phorate (µg/L)	p,p'-DDE (µg/L)	Pro-meton (µg/L)
Subunit Survey 2, Montana									
32	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
33	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
34	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
35	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
36	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
36 ^R	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
36 ^{Fb}	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
37	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
38	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
38 ^R	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
38 ^{Fb}	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
39	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	e.007
40	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
41	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	e.005
42	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
43	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
44	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
45	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
45 ^R	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
46	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	e.002
47	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
48	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
48 ^{Fb}	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.002	<.015
49	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
50	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
51	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
52	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
53	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
54	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
55	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
56	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
57	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	e.003
58	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
59	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
60	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015
61	<.002	<.007	<.007	<.006	<.002	<.010	<.011	<.003	<.015

Table 18. Pesticide-concentration data for filtered ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Prop- achlor (µg/L)	Prop- anil (µg/L)	Prop- argite (µg/L)	Propyz- amide (µg/L)	Sim- azine (µg/L)	Tebu- thiuron (µg/L)	Terbacil (µg/L)	Terbufos (µg/L)	Thio- bencarb (µg/L)	Tri- allate (µg/L)	Tri- fluralin (µg/L)
Subunit Survey 2, Montana											
32	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
33	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
34	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
35	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
36	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
36 ^R	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
36 ^{Fb}	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
37	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
38	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
38 ^R	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
38 ^{Fb}	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
39	<.010	<.011	<.023	<.004	<.011	.044	<.034	<.017	<.005	<.002	<.009
40	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
41	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
42	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
43	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
44	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
45	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
45 ^R	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
46	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
47	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
48	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
48 ^{Fb}	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
49	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
50	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
51	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
52	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
53	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
54	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
55	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
56	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
57	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
58	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
59	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
60	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
61	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009

Table 19. Pesticides and pesticide-degradate concentration data for filtered ground-water samples collected from basin-fill aquifers in Montana, Northern Rockies Intermontane Basins study unit, 2001

[Site identification number described in text. **Bold text denotes detected values.** Abbreviations: e, estimated; Fb, field blank; µg/L, micrograms per liter; R, replicate. Symbols: <, less than reporting level; --, no data]

Well number (figs. 3 and 4)	Site identification number	Date	Time	2,4,5,-T, surrogate (percent)	2,4-D (µg/L)	2,4-D methyl ester (µg/L)	2,4-DB (µg/L)	2-Hydroxy-atrazine (µg/L)	3(4-Chloro-phenyl)-1-methyl urea (µg/L)	3-Hydroxy-carbo-furan (µg/L)
Subunit Survey 2, Montana										
32	470719114301401	06/12/01	1300	81	<0.022	<0.009	<0.016	<0.008	<0.024	<0.006
33	470502114265301	06/12/01	0900	74	<.022	<.009	<.016	<.008	<.024	<.006
34	470328114164301	06/28/01	0900	81	<.022	<.009	<.016	<.008	<.024	<.006
35	470112114144001	06/07/01	0900	61	<.022	<.009	<.016	<.008	<.024	<.006
36	465838114074501	06/27/01	1200	60	<.022	<.028	<.016	<.008	<.024	<.006
36 ^R		06/27/01	1201	66	<.022	<.032	<.016	e.005	<.024	<.006
36 ^{Fb}		06/27/01	1205	63	<.022	<.023	<.016	<.008	<.024	<.006
37	465741114110601	06/27/01	1700	80	<.022	<.009	<.016	<.008	<.024	<.006
38	465440114022101	06/19/01	1100	62	<.022	<.009	<.016	<.008	<.024	<.006
38 ^R		06/19/01	1101	60	<.022	<.009	<.016	<.008	<.024	<.006
38 ^{Fb}		06/19/01	1105	e85	<.022	<.009	<.016	<.008	<.024	<.006
39	465323114054301	06/20/01	1300	60	<.022	<.009	<.016	<.002	<.024	<.006
40	465127114055401	06/20/01	1000	59	<.022	<.009	<.016	<.008	<.024	<.006
41	464951114023701	06/19/01	1600	58	<.022	<.009	<.016	<.001	<.024	<.006
42	463932114035901	05/29/01	1300	82	<.022	<.009	<.016	<.008	<.024	<.006
43	463827114001201	05/29/01	1600	79	<.022	<.009	<.016	<.008	<.024	<.006
44	463335114011701	05/30/01	1600	e62	<.022	<.009	<.016	<.008	<.024	<.006
45	463122114074701	05/30/01	0900	e82	<.022	<.009	<.016	<.008	<.024	<.006
45 ^R		05/30/01	0901	e97	<.022	<.009	<.016	<.008	<.024	<.006
46	462948114060101	05/30/01	1200	67	<.022	<.009	<.016	<.008	<.024	<.006
47	462859113574401	06/11/01	1200	84	<.022	<.009	<.016	<.008	<.024	<.006
48	462818114074101	06/04/01	1200	e91	<.022	<.009	<.016	<.008	<.024	<.006
48 ^{Fb}		06/04/01	1205	e90	<.022	<.009	<.016	<.008	<.024	<.006
49	462754113592701	06/05/01	1500	58	<.022	<.009	<.016	<.008	<.024	<.006
50	462616114094301	06/05/01	1300	e91	<.022	<.009	<.016	<.008	<.024	<.006
51	462545114034301	06/05/01	1800	37	<.022	<.009	<.016	<.008	<.024	<.006
52	462256114114501	06/04/01	1700	61	<.022	<.009	<.016	<.008	<.024	<.006
53	462228114030301	06/06/01	1100	58	<.022	<.009	<.016	<.008	<.024	<.006
54	461823114050901	06/06/01	1300	e25	<.022	<.009	<.016	<.008	<.024	<.006
55	461807114123001	06/11/01	1600	73	<.022	<.009	<.016	<.008	<.024	<.006
56	461638114023401	06/06/01	0800	59	<.022	<.009	<.016	<.008	<.024	<.006
57	461451114090801	06/06/01	1600	63	<.022	<.009	<.016	<.008	<.024	<.006
58	461320114121501	06/05/01	0900	64	<.022	<.009	<.016	<.008	<.024	<.006
59	461055114112601	06/21/01	0900	55	<.022	<.009	<.016	<.008	<.024	<.006
60	460110114110901	06/20/01	1800	66	<.022	.014	<.016	<.008	<.024	<.006
61	455521114074801	06/20/01	2000	52	<.022	<.009	<.016	<.008	<.024	<.006

Table 19. Pesticides and pesticide-degradate concentration data for filtered ground-water samples collected from basin-fill aquifers in Montana, Northern Rockies Intermontane Basins study unit, 2001 (Continued)

Well number (figs. 3 and 4)	3-Keto-carbo-furan (µg/L)	Acifluor-fen (µg/L)	Aldi-carb (µg/L)	Aldi-carb sulfone (µg/L)	Aldi-carb sulfoxide (µg/L)	Barban, surrogate (percent)	Bendio-carb (µg/L)	Benomyl (µg/L)	Ben-sul-furon-methyl (µg/L)	Ben-tazon (µg/L)
Subunit Survey 2, Montana										
32	<1.50	<0.007	<0.040	<0.02	<0.008	107	<0.025	<0.004	<0.016	<0.011
33	<1.50	<0.007	<0.040	<0.02	<0.008	94	<0.025	<0.004	<0.016	<0.011
34	<1.50	<0.007	<0.040	<0.02	<0.008	125	<0.025	<0.004	<0.016	<0.011
35	<1.50	<0.007	<0.040	<0.02	<0.008	101	<0.025	<0.004	<0.016	<0.011
36	<1.50	<0.007	<0.040	<0.02	<0.008	e86	<0.025	<0.004	<0.016	<0.011
36 ^R	<1.50	<0.007	<0.040	<0.02	<0.008	e96	<0.025	<0.004	<0.016	<0.011
36 ^{Fb}	<1.50	<0.007	<0.040	<0.02	<0.008	e75	<0.025	<0.004	<0.016	<0.011
37	<1.50	<0.007	<0.040	<0.02	<0.008	107	<0.025	<0.004	<0.016	<0.011
38	<1.50	<0.007	<0.040	<0.02	<0.008	85	<0.025	<0.004	<0.016	<0.011
38 ^R	<1.50	<0.007	<0.040	<0.02	<0.008	84	<0.025	<0.004	<0.016	<0.011
38 ^{Fb}	<1.50	<0.007	<0.040	<0.02	<0.008	79	<0.025	<0.004	<0.016	<0.011
39	<1.50	<0.007	<0.040	<0.02	<0.008	92	<0.025	<0.004	<0.016	<0.011
40	<1.50	<0.007	<0.040	<0.02	<0.008	95	<0.025	<0.004	<0.016	<0.011
41	<1.50	<0.007	<0.040	<0.02	<0.008	90	<0.025	<0.004	<0.016	<0.011
42	<1.50	<0.007	<0.040	<0.02	<0.008	107	<0.025	<0.004	<0.016	<0.011
43	<1.50	<0.007	<0.040	<0.02	<0.008	83	<0.025	<0.004	<0.016	<0.011
44	<1.50	<0.007	<0.040	<0.02	<0.008	62	<0.025	<0.004	<0.016	<0.011
45	<1.50	<0.007	<0.040	<0.02	<0.008	64	<0.025	<0.004	<0.016	<0.011
45 ^R	<1.50	<0.007	<0.040	<0.02	<0.008	91	<0.025	<0.004	<0.016	<0.011
46	<1.50	<0.007	<0.040	<0.02	<0.008	70	<0.025	<0.004	<0.016	<0.011
47	<1.50	<0.007	<0.040	<0.02	<0.008	111	<0.025	<0.004	<0.016	<0.011
48	<1.50	<0.007	<0.040	<0.02	<0.008	105	<0.025	<0.004	<0.016	<0.011
48 ^{Fb}	<1.50	<0.007	<0.040	<0.02	<0.008	85	<0.025	<0.004	<0.016	<0.011
49	<1.50	<0.007	<0.040	<0.02	<0.008	91	<0.025	<0.004	<0.016	<0.011
50	<1.50	<0.007	<0.040	<0.02	<0.008	104	<0.025	<0.004	<0.016	<0.011
51	<1.50	<0.007	<0.040	<0.02	<0.008	e8.9	<0.025	<0.004	<0.016	<0.011
52	<1.50	<0.007	<0.040	<0.02	<0.008	99	<0.025	<0.004	<0.016	<0.011
53	<1.50	<0.007	<0.040	<0.02	<0.008	e16	<0.025	<0.004	<0.016	<0.011
54	<1.50	<0.007	<0.040	<0.02	<0.008	e0	<0.025	<0.004	<0.016	<0.011
55	<1.50	<0.007	<0.040	<0.02	<0.008	e95	<0.025	<0.004	<0.016	<0.011
56	<1.50	<0.007	<0.040	<0.02	<0.008	113	<0.025	<0.004	<0.016	<0.011
57	<1.50	<0.007	<0.040	<0.02	<0.008	103	<0.025	<0.004	<0.016	<0.011
58	<1.50	<0.007	<0.040	<0.02	<0.008	103	<0.025	<0.004	<0.016	<0.011
59	<1.50	<0.007	<0.040	<0.02	<0.008	81	<0.025	<0.004	<0.016	<0.011
60	<1.50	<0.007	<0.040	<0.02	<0.008	97	<0.025	<0.004	<0.016	<0.011
61	<1.50	<0.007	<0.040	<0.02	<0.008	104	<0.025	<0.004	<0.016	<0.011

Table 19. Pesticides and pesticide-degradate concentration data for filtered ground-water samples collected from basin-fill aquifers in Montana, Northern Rockies Intermontane Basins study unit, 2001 (Continued)

Well number (figs. 3 and 4)	Bro-macil (µg/L)	Brom-oxynil (µg/L)	Caf-feine (µg/L)	Caffeine C-13, surrogate (percent)	Chlor-amben methyl ester (µg/L)	Chlorimuron-ethyl (µg/L)	Chloro-thalonil (µg/L)	Clopyralid (µg/L)
Subunit Survey 2, Montana								
32	<0.033	<0.017	<0.010	116	<0.018	<0.010	<0.035	<0.014
33	<.033	<.017	e.004	103	<.018	<.010	<.035	<.014
34	<.033	<.017	<.010	111	<.018	<.010	<.035	<.014
35	<.033	<.017	<.010	113	<.018	<.010	<.035	<.014
36	<.033	<.017	<.010	100	<.018	<.010	<.035	<.014
36 ^R	<.033	<.017	<.010	100	<.018	<.010	<.035	<.014
36 ^{Fb}	<.033	<.017	<.010	105	<.018	<.010	<.035	<.014
37	<.033	<.017	<.010	113	<.018	<.010	<.035	<.014
38	<.033	<.017	<.010	e107	<.018	<.010	<.035	<.014
38 ^R	<.033	<.017	<.010	e109	<.018	<.010	<.035	<.014
38 ^{Fb}	<.033	<.017	<.010	e133	<.018	<.010	<.035	<.014
39	<.033	<.017	<.010	e110	<.018	<.010	<.035	<.014
40	<.033	<.017	<.010	e112	<.018	<.010	<.035	<.014
41	<.033	<.017	<.010	e101	<.018	<.010	<.035	<.014
42	<.033	<.017	<.002	109	<.018	<.010	<.035	<.014
43	<.033	<.017	<.010	162	<.018	<.010	<.035	<.014
44	<.033	<.017	<.010	89	<.018	<.010	<.035	<.014
45	<.033	<.017	<.010	105	<.018	<.010	<.035	<.014
45 ^R	<.033	<.017	e.003	102	<.018	<.010	<.035	<.014
46	<.033	<.017	<.010	87	<.018	<.010	<.035	<.014
47	<.033	<.017	<.010	94	<.018	<.010	<.035	<.014
48	<.033	<.017	<.010	91	<.018	<.010	<.035	<.014
48 ^{Fb}	<.033	<.017	<.010	e149	<.018	<.010	<.035	<.014
49	<.033	<.017	<.010	98	<.018	<.010	<.035	<.014
50	<.033	<.017	<.010	93	<.018	<.010	<.035	<.014
51	<.033	<.017	<.010	78	<.018	<.010	<.035	<.014
52	<.033	<.017	<.010	e19	<.018	<.010	<.035	<.014
53	<.033	<.017	<.010	105	<.018	<.010	<.035	<.014
54	<.033	<.017	<.010	e265	<.018	<.010	<.035	<.014
55	<.033	<.017	e.004	131	<.018	<.010	<.035	<.014
56	<.033	<.017	<.010	89	<.018	<.010	<.035	<.014
57	<.033	<.017	<.010	97	<.018	<.010	<.035	<.014
58	<.033	<.017	<.010	94	<.018	<.010	<.035	<.014
59	<.033	<.017	<.010	52	<.018	<.010	<.035	<.014
60	<.033	<.017	<.010	86	<.018	<.010	<.035	<.014
61	<.033	<.017	<.010	71	<.018	<.010	<.035	<.014

Table 19. Pesticides and pesticide-degradate concentration data for filtered ground-water samples collected from basin-fill aquifers in Montana, Northern Rockies Intermontane Basins study unit, 2001 (Continued)

Well number (figs. 3 and 4)	Cycloate (µg/L)	Dacthal mono- acid (µg/L)	Deethyl- deisopropyl- atrazine (µg/L)	Deiso- propyl- atrazine (µg/L)	Di- camba (µg/L)	Dichlor- prop (µg/L)	Dinoseb (µg/L)	Diphen- amid (µg/L)	Diuron (µg/L)
Subunit Survey 2, Montana									
32	<0.013	<0.012	<0.010	<0.044	<0.013	<0.014	<0.012	<0.026	<0.015
33	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
34	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
35	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
36	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
36 ^R	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.007
36 ^{Fb}	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
37	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
38	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
38 ^R	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
38 ^{Fb}	<.013	<.012	<.001	<.044	<.013	<.014	<.012	<.026	<.001
39	<.013	<.012	<.002	<.044	<.013	<.014	<.012	<.026	<.015
40	<.013	<.012	<.001	<.044	<.013	<.014	<.012	<.026	<.001
41	<.013	<.012	<.001	<.044	<.013	<.014	<.012	<.026	<.015
42	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
43	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.001
44	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.001
45	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.001
45 ^R	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
46	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.001
47	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.001
48	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.001
48 ^{Fb}	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.001
49	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
50	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.001
51	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
52	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
53	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
54	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
55	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
56	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
57	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
58	<.013	<.012	<.010	<.044	<.013	<.014	<.012	<.026	<.015
59	<.013	<.012	<.001	<.044	<.013	<.014	<.012	<.026	<.015
60	<.013	<.012	<.001	<.044	.034	<.014	<.012	<.026	<.015
61	<.013	<.012	<.002	<.044	<.013	<.014	<.012	<.026	<.015

Table 19. Pesticides and pesticide-degradate concentration data for filtered ground-water samples collected from basin-fill aquifers in Montana, Northern Rockies Intermontane Basins study unit, 2001 (Continued)

Well number (figs. 3 and 4)	Fenuron (µg/L)	Flumetsulam (µg/L)	Fluo- meturon (µg/L)	Imazaquin (µg/L)	Imazethapyr (µg/L)	Imidacloprid (µg/L)	MCPA (µg/L)	MCPB (µg/L)	Metalaxyl (µg/L)
Subunit Survey 2, Montana									
32	<0.032	<0.011	<0.031	<0.016	<0.017	<0.007	<0.016	<0.015	<0.020
33	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
34	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
35	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
36	<.032	<.011	<.031	<.016	e.014	<.007	<.016	<.015	<.020
36 ^R	<.001	<.011	e.004	<.016	<.017	<.007	<.016	<.015	<.020
36 ^{Fb}	<.001	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
37	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
38	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
38 ^R	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
38 ^{Fb}	<.001	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
39	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
40	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
41	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
42	<.001	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
43	<.001	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
44	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
45	<.002	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
45 ^R	<.002	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
46	<.001	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
47	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
48	<.001	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
48 ^{Fb}	<.001	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
49	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
50	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
51	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
52	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
53	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
54	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
55	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
56	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
57	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
58	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
59	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
60	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020
61	<.032	<.011	<.031	<.016	<.017	<.007	<.016	<.015	<.020

Table 19. Pesticides and pesticide-degradate concentration data for filtered ground-water samples collected from basin-fill aquifers in Montana, Northern Rockies Intermontane Basins study unit, 2001 (Continued)

Well number (figs. 3 and 4)	Methio-carb (µg/L)	Methomyl (µg/L)	Metsul-furon methyl (µg/L)	Neburon (µg/L)	Nico-sulfuron (µg/L)	Nor-flurazon (µg/L)	Oryzalin (µg/L)	Oxamyl (µg/L)
Subunit Survey 2, Montana								
32	<0.008	<0.004	<0.025	<0.012	<0.013	<0.016	<0.018	<0.012
33	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
34	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
35	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
36	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
36 ^R	<.008	<.004	<.025	<.012	<.013	e.006	<.018	<.012
36 ^{Fb}	<.008	<.004	<.025	<.012	<.013	<.016	e.007	<.012
37	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
38	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
38 ^R	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
38 ^{Fb}	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
39	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
40	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
41	<.008	<.004	<.017	<.012	<.013	<.016	<.018	<.012
42	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
43	<.008	<.004	<.025	<.012	<.013	<.016	e.012	<.012
44	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
45	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
45 ^R	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
46	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
47	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
48	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
48 ^{Fb}	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
49	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
50	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
51	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
52	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
53	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
54	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
55	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
56	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
57	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
58	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
59	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
60	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012
61	<.008	<.004	<.025	<.012	<.013	<.016	<.018	<.012

Table 19. Pesticides and pesticide-degradate concentration data for filtered ground-water samples collected from basin-fill aquifers in Montana, Northern Rockies Intermontane Basins study unit, 2001 (Continued)

Well number (figs. 3 and 4)	Picloram (µg/L)	Prop- ham (µg/L)	Propicon- azole (µg/L)	Propoxur (µg/L)	Siduron (µg/L)	Sulfo- meturon- methyl (µg/L)	Triben- uron- methyl (µg/L)	Triclopyr (µg/L)
Subunit Survey 2, Montana								
32	<0.020	<0.010	<0.021	<0.008	<0.017	<0.009	<0.009	<0.022
33	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
34	<.020	<.010	<.008	<.008	<.017	<.009	<.009	<.022
35	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
36	<.020	<.010	<.019	<.008	<.017	<.009	--	<.022
36 ^R	<.020	<.010	<.020	<.008	<.017	<.009	--	<.022
36 ^{Fb}	<.020	<.010	<.017	<.008	<.017	<.009	--	<.022
37	<.020	<.010	<.007	<.008	<.017	<.009	<.009	<.022
38	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
38 ^R	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
38 ^{Fb}	<.020	<.010	<.021	<.008	<.017	<.002	<.009	<.022
39	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
40	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
41	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
42	<.020	<.010	<.021	<.008	<.001	<.009	<.009	<.022
43	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
44	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
45	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
45 ^R	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
46	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
47	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
48	<.020	<.010	<.021	<.008	<.017	<.009	--	<.022
48 ^{Fb}	<.020	<.010	<.021	<.008	<.017	<.001	<.009	<.022
49	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
50	<.020	<.010	<.021	<.008	<.017	<.009	--	<.022
51	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
52	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
53	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
54	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
55	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
56	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
57	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
58	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
59	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
60	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022
61	<.020	<.010	<.021	<.008	<.017	<.009	<.009	<.022

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001

[Site identification number described in text. **Bold text denotes detected concentrations.** Abbreviations: e, estimated; Fb, field blank; µg/L, micrograms per liter; R, replicate; Sb, source-solution blank; Tb, trip blank. Symbols: <, less than reporting level; --, no data]

Well number (figs. 3 and 4)	Site identification number	Date	Time	1,1,1,2-Tetra-chloro-ethane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1,2,2-Tetra-chloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,2-Trichloro-trifluoro-ethane (µg/L)	1,1-Dichloro-ethane (µg/L)	1,1-Dichloro-ethylene (µg/L)
Subunit Survey 1, Idaho and Washington										
1	481320116261101	07/14/99	1700	<0.044	<0.032	<0.130	<0.064	<0.032	<0.066	<0.044
2	480950116324401	07/14/99	1100	<.044	<.032	<.130	<.064	<.032	<.066	<.044
3	480928117053201	07/07/99	1000	<.044	e.008	<.130	<.064	<.032	<.066	<.044
4	480813116593701	07/07/99	1600	<.044	<.032	<.130	<.064	<.032	<.066	<.044
5	480718117012501	07/06/99	1800	<.044	<.032	<.130	<.064	<.032	<.066	<.044
6	480249116510001	07/08/99	1000	<.044	e.014	<.130	<.064	<.032	<.066	<.044
7	480235116483001	07/13/99	1700	<.044	<.032	<.130	<.064	<.032	<.066	<.044
8	480203117200601	06/08/99	0800	<.044	<.032	<.130	<.064	<.032	<.066	<.044
9	480128116374601	08/04/99	0900	<.044	<.032	<.130	<.064	<.032	<.066	<.044
10	480119117182101	06/08/99	1600	<.044	<.032	<.130	<.064	<.032	<.066	<.044
11	475925117153001	07/06/99	1100	<.044	<.032	<.130	<.064	<.032	<.066	<.044
12	475825117364401	06/09/99	1000	<.044	<.032	<.130	<.064	<.032	<.066	<.044
13	475731116371301	06/23/99	1200	<.044	<.032	<.130	<.064	<.032	<.066	<.044
13		07/27/99	2000	<.044	<.032	<.130	<.064	<.032	<.066	<.044
14	475637117262501	06/09/99	1700	<.044	<.032	<.130	<.064	<.032	<.066	<.044
15	475510116391201	08/03/99	1400	<.044	e.005	<.130	<.064	<.032	<.066	<.044
16	475400116404201	06/22/99	1700	<.044	<.032	<.130	<.064	<.032	<.066	<.044
17	475343117225201	06/10/99	0900	<.044	<.032	<.130	<.064	<.032	<.066	<.044
18	475322116522201	07/12/99	1200	<.044	<.032	<.130	<.064	<.032	<.066	<.044
18 ^R		07/12/99	1201	<.044	<.032	<.130	<.064	<.032	<.066	<.044
18 ^{Fb}		07/12/99	1205	<.044	<.032	<.130	<.064	<.032	<.066	<.044
18 ^{Sb}		07/12/99	1207	<.044	<.032	<.130	<.064	<.032	<.066	<.044
19	475130117262201	06/07/99	0900	<.044	<.032	<.130	<.064	<.032	<.066	<.044
20	475035116424801	06/22/99	1100	<.044	<.032	<.130	<.064	<.032	<.066	<.044
21	474718116530201	06/24/99	0900	<.044	<.032	<.130	<.064	<.032	<.066	<.044
21 ^R		06/24/99	0901	<.044	<.032	<.130	<.064	<.032	<.066	<.044
21 ^{Fb}		06/24/99	0905	<.044	<.032	<.130	<.064	<.032	<.066	<.044
22	474708117250501	06/07/99	1600	<.044	<.032	<.130	<.064	<.032	<.066	<.044
23	474629117305101	05/25/99	1100	<.044	<.032	<.130	<.064	<.032	<.066	<.044
23 ^{Fb}		05/26/99	0905	<.044	<.032	<.130	<.064	<.032	<.066	<.044
23 ^{Sb}		05/26/99	0907	<.044	<.032	<.130	<.064	<.032	<.066	<.044
24	474456116522001	06/21/99	1700	<.044	<.032	<.130	<.064	<.032	<.066	<.044
25	474427117312101	05/24/99	1400	<.044	<.032	<.130	<.064	<.032	<.066	<.044
26	474317117225301	05/27/99	0900	<.044	e.082	<.130	<.064	<.032	<.066	<.044
26 ^{Tb}		05/27/99	0908	<.044	<.032	<.130	<.064	<.032	<.066	<.044
27	474218116445601	07/15/99	1000	<.044	<.032	<.130	<.064	<.032	<.066	<.044
28	474147116544001	07/26/99	1300	<.044	<.032	<.130	<.064	<.032	<.066	<.044
29	474130117015401	07/29/99	1000	<.044	<.032	<.130	<.064	<.032	<.066	<.044
30	474050117084101	07/28/99	1700	<.044	<.032	<.130	<.064	<.032	<.066	<.044
31	473612117243601	05/26/99	1100	<.044	<.032	<.130	<.064	<.032	.184	<.044

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	1,1-Dichloro-propene (µg/L)	1,2,3,4-Tetra-methyl-benzene (µg/L)	1,2,3,5-Tetra-methyl-benzene (µg/L)	1,2,3-Trichloro-benzene (µg/L)	1,2,3-Trichloro-propane (µg/L)	1,2,3-Trimethyl-benzene (µg/L)	1,2,4-Trichloro-benzene (µg/L)	1,2,4-Tri-methyl-benzene (µg/L)	1,2,-Dibromo-3-chloro-propane (µg/L)	1,2-Dibromo-ethane (µg/L)	1,2-Dichloro-benzene (µg/L)
Subunit Survey 1, Idaho and Washington											
1	<0.026	<0.230	<0.200	<0.270	<0.160	<0.120	<0.190	<0.056	<0.210	<0.036	<0.048
2	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
3	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
4	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
5	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
6	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
7	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
8	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
9	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
10	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
11	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
12	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
13	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
13	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
14	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
15	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
16	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
17	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
18	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
18 ^R	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
18 ^{Fb}	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
18 ^{Sb}	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
19	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
20	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
21	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
21 ^R	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
21 ^{Fb}	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
22	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
23	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
23 ^{Fb}	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
23 ^{Sb}	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
24	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
25	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
26	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
26 ^{Tb}	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
27	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
28	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
29	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
30	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048
31	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.048

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	1,2-Dichloro-ethane (µg/L)	1,2,-Dichloro-ethane-d ₄ , surrogate (percent)	1,2-Dichloro-propane (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,3-Dichloro-propane (µg/L)	1,4-Bromo-fluoro-benzene, surrogate (percent)	1,4-Dichloro-benzene (µg/L)	2,2-Dichloro-propane (µg/L)	2-Butanone (µg/L)
Subunit Survey 1, Idaho and Washington										
1	<0.130	105	<0.068	<0.044	<0.054	<0.120	101	<0.050	<0.078	<1.60
2	<.130	103	<.068	<.044	<.054	<.120	102	<.050	<.078	<1.60
3	<.130	110	<.068	<.044	<.054	<.120	94	<.050	<.078	<1.60
4	<.130	101	<.068	<.044	<.054	<.120	81	<.050	<.078	<1.60
5	<.130	109	<.068	<.044	<.054	<.120	94	<.050	<.078	<1.60
6	<.130	100	<.068	<.044	<.054	<.120	81	<.050	<.078	<1.60
7	<.130	101	<.068	<.044	<.054	<.120	101	<.050	<.078	<1.60
8	<.130	108	<.068	<.044	<.054	<.120	103	<.050	<.078	<1.60
9	<.130	99	<.068	<.044	<.054	<.120	93	<.050	<.078	<1.60
10	<.130	110	<.068	<.044	<.054	<.120	110	<.050	<.078	<1.60
11	<.130	107	<.068	<.044	<.054	<.120	94	<.050	<.078	<1.60
12	<.130	109	<.068	<.044	<.054	<.120	108	<.050	<.078	<1.60
13	<.130	112	<.068	<.044	<.054	<.120	103	<.050	<.078	<1.60
13	<.130	100	<.068	<.044	<.054	<.120	99	<.050	<.078	<1.60
14	<.130	105	<.068	<.044	<.054	<.120	108	<.050	<.078	<1.60
15	<.130	100	<.068	<.044	<.054	<.120	93	<.050	<.078	<1.60
16	<.130	109	<.068	<.044	<.054	<.120	104	<.050	<.078	<1.60
17	<.130	105	<.068	<.044	<.054	<.120	112	<.050	<.078	<1.60
18	<.130	103	<.068	<.044	<.054	<.120	101	<.050	<.078	<1.60
18 ^R	<.130	100	<.068	<.044	<.054	<.120	101	<.050	<.078	<1.60
18 ^{Fb}	<.130	106	<.068	<.044	<.054	<.120	95	<.050	<.078	<1.60
18 ^{Sb}	<.130	106	<.068	<.044	<.054	<.120	95	<.050	<.078	<1.60
19	<.130	105	<.068	<.044	<.054	<.120	103	<.050	<.078	<1.60
20	<.130	106	<.068	<.044	<.054	<.120	102	<.050	<.078	<1.60
21	<.130	106	<.068	<.044	<.054	<.120	96	<.050	<.078	<1.60
21 ^R	<.130	112	<.068	<.044	<.054	<.120	99	<.050	<.078	<1.60
21 ^{Fb}	<.130	103	<.068	<.044	<.054	<.120	73	<.050	<.078	<1.60
22	<.130	108	<.068	<.044	<.054	<.120	105	<.050	<.078	<1.60
23	<.130	101	<.068	<.044	<.054	<.120	94	<.050	<.078	<1.60
23 ^{Fb}	<.130	102	<.068	<.044	<.054	<.120	92	<.050	<.078	<1.60
23 ^{Sb}	<.130	103	<.068	<.044	<.054	<.120	92	<.050	<.078	<1.60
24	<.130	110	<.068	<.044	<.054	<.120	103	<.050	<.078	<1.60
25	<.130	97	<.068	<.044	<.054	<.120	92	<.050	<.078	<1.60
26	<.130	105	<.068	<.044	<.054	<.120	94	<.050	<.078	<1.60
26 ^{Tb}	<.130	104	<.068	<.044	<.054	<.120	91	<.050	<.078	<1.60
27	<.130	106	<.068	<.044	<.054	<.120	100	<.050	<.078	<1.60
28	<.130	108	<.068	<.044	<.054	<.120	100	<.050	<.078	<1.60
29	<.130	107	<.068	<.044	<.054	<.120	89	<.050	<.078	<1.60
30	<.130	105	<.068	<.044	<.054	<.120	86	<.050	<.078	<1.60
31	<.130	99	<.068	<.044	<.054	<.120	90	<.050	<.078	<1.60

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	2-Chloro- toluene (µg/L)	2- Hexanone (µg/L)	3-Chloro- propene (µg/L)	4-Chloro- toluene (µg/L)	4-Isopro- pyl-1- methyl- benzene (µg/L)	4-Methyl-2- pentanone (µg/L)	Ace- tone (µg/L)	Acrylo- nitrile (µg/L)	Benzene (µg/L)	Bromo- benzene (µg/L)
Subunit Survey 1, Idaho and Washington										
1	<0.042	<0.700	<0.200	<0.056	<0.110	<0.370	<5.00	<1.20	<0.100	<0.036
2	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
3	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
4	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
5	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
6	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
7	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
8	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
9	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
10	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
11	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
12	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
13	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
13	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
14	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
15	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
16	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
17	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
18	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
18 ^R	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
18 ^{Fb}	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
18 ^{Sb}	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
19	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
20	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
21	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
21 ^R	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
21 ^{Fb}	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
22	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
23	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
23 ^{Fb}	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
23 ^{Sb}	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
24	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
25	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
26	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
26 ^{Tb}	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
27	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
28	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
29	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
30	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036
31	<.042	<.700	<.200	<.056	<.110	<.370	<5.00	<1.20	<.100	<.036

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Bromo-chloro-methane (µg/L)	Bromo-dichloro-methane (µg/L)	Bromo-ethane (µg/L)	Bromo-form (µg/L)	Bromo-methane (µg/L)	Butyl-benzene (µg/L)	Carbon disulfide (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloro-form (µg/L)
Subunit Survey 1, Idaho and Washington										
1	<0.044	<0.048	<0.100	<0.100	<0.150	<0.190	<0.370	<0.028	<0.120	<0.052
2	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
3	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
4	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
5	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
6	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
7	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	e.024
8	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
9	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
10	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
11	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
12	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
13	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
13	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
14	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
15	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
16	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
17	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
18	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
18 ^R	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
18 ^{Fb}	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
18 ^{Sb}	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
19	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
20	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
21	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
21 ^R	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
21 ^{Fb}	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
22	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
23	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
23 ^{Fb}	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
23 ^{Sb}	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
24	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
25	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
26	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
26 ^{Tb}	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
27	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
28	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
29	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052
30	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	e.021
31	<.044	<.048	<.100	<.100	<.150	<.190	<.370	<.028	<.120	<.052

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Chloro- methane (µg/L)	cis- 1,2- Dichloro- ethylene (µg/L)	cis- 1,3- Dichloro- propene (µg/L)	Dibromo- chloro- methane (µg/L)	Dibromo- methane (µg/L)	Dichloro- difluoro- methane (µg/L)	Dichloro- methane (µg/L)	Diethyl ether (µg/L)	Diiso- propyl ether (µg/L)	Ethyl meth- acrylate (µg/L)
Subunit Survey 1, Idaho and Washington										
1	<0.250	<0.038	<0.090	<0.180	<0.050	<0.140	<0.380	<0.170	<0.098	<0.280
2	<.250	<.038	<.090	<.180	<.050	e.254	<.380	<.170	<.098	<.280
3	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
4	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
5	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
6	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
7	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
8	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
9	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
10	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
11	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
12	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
13	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
13	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
14	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
15	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
16	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
17	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
18	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
18 ^R	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
18 ^{Fb}	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
18 ^{Sb}	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
19	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
20	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
21	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
21 ^R	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
21 ^{Fb}	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
22	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
23	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
23 ^{Fb}	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
23 ^{Sb}	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
24	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
25	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
26	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
26 ^{Tb}	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
27	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
28	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
29	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
30	<.250	<.038	<.090	<.180	<.050	<.140	<.380	<.170	<.098	<.280
31	<.250	e.029	<.090	<.180	<.050	e.1.60	e.129	<.170	<.098	<.280

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Ethyl tert-butyl ether (µg/L)	Ethylbenzene (µg/L)	Hexachlorobutadiene (µg/L)	Hexachloroethane (µg/L)	Isopropylbenzene (µg/L)	m- and p-Xylene (µg/L)	Methyl acrylate (µg/L)	Methyl acrylonitrile (µg/L)	Methyl iodide (µg/L)	Methyl methacrylate (µg/L)
Subunit Survey 1, Idaho and Washington										
1	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
2	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
3	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
4	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
5	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
6	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
7	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
8	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
9	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
10	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
11	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
12	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
13	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
13	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
14	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
15	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
16	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
17	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
18	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
18 ^R	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
18 ^{Fb}	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
18 ^{Sb}	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
19	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
20	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
21	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
21 ^R	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
21 ^{Fb}	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
22	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
23	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
23 ^{Fb}	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
23 ^{Sb}	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
24	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
25	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
26	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
26 ^{Tb}	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
27	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
28	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
29	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
30	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350
31	<0.054	<0.030	<0.140	<0.360	<0.032	<0.060	<1.4	<0.570	<0.210	<0.350

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Naphthalene (µg/L)	n-Propyl- benzene (µg/L)	o-Ethyl toluene (µg/L)	o-Xylene (µg/L)	sec-Butyl- benzene (µg/L)	Styrene (µg/L)	tert- Butyl methyl ether (µg/L)	tert- Butyl- benzene (µg/L)	tert- Pentyl methyl ether (µg/L)	Tetra- chloro- ethylene (µg/L)
Subunit Survey 1, Idaho and Washington										
1	<0.250	<0.042	<0.100	<0.060	<0.048	<0.042	<0.170	<0.100	<0.110	1.64
2	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
3	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
4	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
5	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
6	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
7	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
8	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
9	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
10	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
11	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
12	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
13	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
13	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
14	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
15	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
16	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
17	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
18	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
18 ^R	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
18 ^{Fb}	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
18 ^{Sb}	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
19	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
20	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
21	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
21 ^R	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
21 ^{Fb}	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
22	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
23	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
23 ^{Fb}	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
23 ^{Sb}	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
24	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
25	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
26	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
26 ^{Tb}	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
27	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
28	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
29	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
30	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100
31	<.250	<.042	<.100	<.060	<.048	<.042	<.170	<.100	<.110	<.100

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Tetra-chloro-methane (µg/L)	Tetra-hydrofuran (µg/L)	Toluene (µg/L)	Toluene-d ₈ , surrogate (percent)	trans-1,2-Dichloro-ethylene (µg/L)	trans-1,3-Dichloro-propene (µg/L)	trans-1,4-Dichloro-2-butene (µg/L)	Trichloro-ethylene (µg/L)	Trichloro-fluoro-methane (µg/L)	Vinyl chloride (µg/L)
Subunit Survey 1, Idaho and Washington										
1	<0.088	<9.0	<0.050	100	<0.032	<0.130	<0.700	<0.038	<0.090	<0.110
2	<.088	<9.0	<.050	101	<.032	<.130	<.700	<.038	<.090	<.110
3	<.088	<9.0	<.050	100	<.032	<.130	<.700	<.038	<.090	<.110
4	<.088	<9.0	e.008	93	<.032	<.130	<.700	<.038	<.090	<.110
5	<.088	<9.0	<.050	101	<.032	<.130	<.700	<.038	<.090	<.110
6	<.088	<9.0	<.050	95	<.032	<.130	<.700	<.038	<.090	<.110
7	<.088	<9.0	<.050	102	<.032	<.130	<.700	<.038	<.090	<.110
8	<.088	<9.0	<.050	103	<.032	<.130	<.700	<.038	<.090	<.110
9	<.088	<9.0	<.050	98	<.032	<.130	<.700	<.038	<.090	<.110
10	<.088	<9.0	e.007	106	<.032	<.130	<.700	<.038	<.090	<.110
11	<.088	<9.0	<.050	101	<.032	<.130	<.700	<.038	<.090	<.110
12	<.088	<9.0	e.008	105	<.032	<.130	<.700	<.038	<.090	<.110
13	<.088	<9.0	1.45	103	<.032	<.130	<.700	<.038	<.090	<.110
13	<.088	<9.0	4.31	102	<.032	<.130	<.700	<.038	<.090	<.110
14	<.088	<9.0	<.050	106	<.032	<.130	<.700	<.038	<.090	<.110
15	<.088	<9.0	<.050	99	<.032	<.130	<.700	<.038	<.090	<.110
16	<.088	<9.0	e.016	103	<.032	<.130	<.700	<.038	<.090	<.110
17	<.088	<9.0	<.050	107	<.032	<.130	<.700	<.038	<.090	<.110
18	<.088	<9.0	<.050	102	<.032	<.130	<.700	<.038	<.090	<.110
18 ^R	<.088	<9.0	<.050	103	<.032	<.130	<.700	<.038	<.090	<.110
18 ^{Fb}	<.088	<9.0	<.050	98	<.032	<.130	<.700	<.038	<.090	<.110
18 ^{Sb}	<.088	<9.0	<.050	100	<.032	<.130	<.700	<.038	<.090	<.110
19	<.088	<9.0	<.050	101	<.032	<.130	<.700	<.038	<.090	<.110
20	<.088	<9.0	<.050	102	<.032	<.130	<.700	<.038	<.090	<.110
21	<.088	<9.0	e.017	102	<.032	<.130	<.700	<.038	<.090	<.110
21 ^R	<.088	<9.0	e.009	99	<.032	<.130	<.700	<.038	<.090	<.110
21 ^{Fb}	<.088	<9.0	<.050	88	<.032	<.130	<.700	<.038	<.090	<.110
22	<.088	<9.0	<.050	104	<.032	<.130	<.700	<.038	<.090	<.110
23	<.088	<9.0	<.050	100	<.032	<.130	<.700	<.038	<.090	<.110
23 ^{Fb}	<.088	<9.0	e.013	96	<.032	<.130	<.700	<.038	<.090	<.110
23 ^{Sb}	<.088	<9.0	e.034	99	<.032	<.130	<.700	<.038	<.090	<.110
24	<.088	<9.0	<.050	102	<.032	<.130	<.700	<.038	<.090	<.110
25	<.088	<9.0	<.050	100	<.032	<.130	<.700	<.038	<.090	<.110
26	<.088	<9.0	<.050	101	<.032	<.130	<.700	<.038	.111	<.110
26 ^{Tb}	<.088	<9.0	e.025	98	<.032	<.130	<.700	<.038	<.090	<.110
27	e.012	<9.0	<.050	100	<.032	<.130	<.700	<.038	<.090	<.110
28	<.088	<9.0	<.050	101	<.032	<.130	<.700	<.038	<.090	<.110
29	<.088	<9.0	<.050	98	<.032	<.130	<.700	<.038	<.090	<.110
30	<.088	<9.0	<.050	98	<.032	<.130	<.700	<.038	<.090	<.110
31	<.088	<9.0	<.050	100	<.032	<.130	<.700	<.038	<.090	<.110

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Site identification number	Date	Time	1,1,1,2-Tetra-chloro-ethane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1,2,2-Tetra-chloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,2-Trichloro-trifluoro-ethane (µg/L)	1,1-Dichloro-ethane (µg/L)	1,1-Dichloro-ethylene (µg/L)
Subunit Survey 2, Montana										
32	470719114301401	06/12/01	1300	<.030	<.032	<.090	<.060	<.060	<.035	<.040
33	470502114265301	06/12/01	0900	<.030	<.032	<.090	<.060	<.060	<.035	<.040
34	470328114164301	06/28/01	0900	<.030	<.032	<.090	<.060	<.060	<.035	<.040
35	470112114144001	06/07/01	0900	<.030	<.032	<.090	<.060	<.060	<.035	<.040
36	465838114074501	06/27/01	1200	<.030	<.032	<.090	<.060	<.060	<.035	<.040
36 ^R		06/27/01	1201	<.030	<.032	<.090	<.060	<.060	<.035	<.040
36 ^{Fb}		06/27/01	1205	<.030	<.032	<.090	<.060	<.060	<.035	<.040
37	465741114110601	06/27/01	1700	<.030	<.032	<.090	<.060	<.060	<.035	<.040
38	465440114022101	06/19/01	1100	<.030	<.032	<.090	<.060	<.060	<.035	<.040
38 ^R		06/19/01	1101	<.030	<.032	<.090	<.060	<.060	<.035	<.040
38 ^{Fb}		06/19/01	1105	<.030	<.032	<.090	<.060	<.060	<.035	<.040
39	465323114054301	06/20/01	1300	<.030	.130	<.090	<.060	<.060	<.035	<.040
40	465127114055401	06/20/01	1000	<.030	e.060	<.090	<.060	<.060	<.035	<.040
41	464951114023701	06/19/01	1600	<.030	<.032	<.090	<.060	<.060	<.035	<.040
42	463932114035901	05/29/01	1300	<.030	<.032	<.090	<.060	<.060	<.035	<.040
43	463827114001201	05/29/01	1600	<.030	<.032	<.090	<.060	<.060	<.035	<.040
44	463335114011701	05/30/01	1600	<.030	<.032	<.090	<.060	<.060	<.035	<.040
45	463122114074701	05/30/01	0900	<.030	<.032	<.090	<.060	<.060	<.035	<.040
46	462948114060101	05/30/01	1200	<.030	<.032	<.090	<.060	<.060	<.035	<.040
47	462859113574401	06/11/01	1200	<.030	<.032	<.090	<.060	<.060	<.035	<.040
48	462818114074101	06/04/01	1200	<.030	<.032	<.090	<.060	<.060	<.035	<.040
48 ^{Fb}		06/04/01	1205	<.030	<.032	<.090	<.060	<.060	<.035	<.040
49	462754113592701	06/05/01	1500	<.030	<.032	<.090	<.060	<.060	<.035	<.040
50	462616114094301	06/05/01	1300	<.030	<.032	<.090	<.060	<.060	<.035	<.040
51	462545114034301	06/05/01	1800	<.030	<.032	<.090	<.060	<.060	<.035	<.040
52	462256114114501	06/04/01	1700	<.030	<.032	<.090	<.060	<.060	<.035	<.040
53	462228114030301	06/06/01	1100	<.030	<.032	<.090	<.060	<.060	<.035	<.040
54	461823114050901	06/06/01	1300	<.030	<.032	<.090	<.060	<.060	<.035	<.040
55	461807114123001	06/11/01	1600	<.030	<.032	<.090	<.060	<.060	<.035	<.040
56	461638114023401	06/06/01	0800	<.030	<.032	<.090	<.060	<.060	<.035	<.040
57	461451114090801	06/06/01	1600	<.030	<.032	<.090	<.060	<.060	<.035	<.040
58	461320114121501	06/05/01	0900	<.030	e.007	<.090	<.060	<.060	<.035	<.040
58 ^R		06/05/01	0901	<.030	e.008	<.090	<.060	<.060	<.035	<.040
59	461055114112601	06/21/01	0900	<.030	<.032	<.090	<.060	<.060	<.035	<.040
60	460110114110901	06/20/01	1800	<.030	<.032	<.090	<.060	<.060	<.035	<.040
61	455521114074801	06/20/01	2000	<.030	<.032	<.090	<.060	<.060	<.035	<.040

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	1,1-Dichloro-propene (µg/L)	1,2,3,4-Tetra-methyl-benzene (µg/L)	1,2,3,5-Tetra-methyl-benzene (µg/L)	1,2,3-Trichloro-benzene (µg/L)	1,2,3-Trichloro-propane (µg/L)	1,2,3-Trimethyl-benzene (µg/L)	1,2,4-Trichloro-benzene (µg/L)	1,2,4-Tri-methyl-benzene (µg/L)	1,2,-Dibromo-3-chloro-propane (µg/L)	1,2-Dibromo-ethane (µg/L)	1,2-Dichloro-benzene (µg/L)
Subunit Survey 2, Montana											
32	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
33	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
34	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
35	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
36	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
36 ^R	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
36 ^{Fb}	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
37	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
38	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
38 ^R	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
38 ^{Fb}	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
39	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
40	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
41	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
42	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
43	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
44	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
45	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
46	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
47	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
48	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
48 ^{Fb}	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
49	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
50	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
51	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
52	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
53	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
54	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
55	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
56	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
57	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
58	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
58 ^R	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
59	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
60	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031
61	<.026	<.230	<.200	<.270	<.160	<.120	<.190	<.056	<.210	<.036	<.031

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	1,2-Dichloro-ethane (µg/L)	1,2,-Dichloro-ethane-d ₄ , surrogate (percent)	1,2-Dichloro-propane (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)	1,3-Dichloro-propane (µg/L)	1,4-Bromo-fluoro-benzene, surrogate (percent)	1,4-Dichloro-benzene (µg/L)	2,2-Dichloro-propane (µg/L)	2-Butanone (µg/L)
Subunit Survey 2, Montana										
32	<.130	128	<.029	<.044	<.030	<.120	70	<.050	<.050	<1.60
33	<.130	123	<.029	<.044	<.030	<.120	69	<.050	<.050	<1.60
34	<.130	91	<.029	<.044	<.030	<.120	94	<.050	<.050	<1.60
35	<.130	110	<.029	<.044	<.030	<.120	79	<.050	<.050	<1.60
36	<.130	106	<.029	<.044	<.030	<.120	79	<.050	<.050	<1.60
36 ^R	<.130	106	<.029	<.044	<.030	<.120	77	<.050	<.050	<1.60
36 ^{Fb}	<.130	104	<.029	<.044	<.030	<.120	81	<.050	<.050	<1.60
37	<.130	89	<.029	<.044	<.030	<.120	95	<.050	<.050	<1.60
38	<.130	106	<.029	<.044	<.030	<.120	67	<.050	<.050	<1.60
38 ^R	<.130	108	<.029	<.044	<.030	<.120	66	<.050	<.050	<1.60
38 ^{Fb}	<.130	102	<.029	<.044	<.030	<.120	69	<.050	<.050	<1.60
39	<.130	149	<.029	<.044	<.030	<.120	64	<.050	<.050	<1.60
40	<.130	149	<.029	<.044	<.030	<.120	61	<.050	<.050	<1.60
41	<.130	130	<.029	<.044	<.030	<.120	68	<.050	<.050	<1.60
42	<.130	117	<.029	<.044	<.030	<.120	72	<.050	<.050	<1.60
43	<.130	111	<.029	<.044	<.030	<.120	79	<.050	<.050	<1.60
44	<.130	113	<.029	<.044	<.030	<.120	81	<.050	<.050	<1.60
45	<.130	106	<.029	<.044	<.030	<.120	97	<.050	<.050	<1.60
46	<.130	116	<.029	<.044	<.030	<.120	77	<.050	<.050	<1.60
47	<.130	126	<.029	<.044	<.030	<.120	70	<.050	<.050	<1.60
48	<.130	122	<.029	<.044	<.030	<.120	77	<.050	<.050	<1.60
48 ^{Fb}	<.130	112	<.029	<.044	<.030	<.120	81	<.050	<.050	<1.60
49	<.130	112	<.029	<.044	<.030	<.120	78	<.050	<.050	<1.60
50	<.130	120	<.029	<.044	<.030	<.120	74	<.050	<.050	<1.60
51	<.130	109	<.029	<.044	<.030	<.120	79	<.050	<.050	<1.60
52	<.130	114	<.029	<.044	<.030	<.120	83	<.050	<.050	<1.60
53	<.130	109	<.029	<.044	<.030	<.120	82	<.050	<.050	<1.60
54	<.130	111	<.029	<.044	<.030	<.120	80	<.050	<.050	<1.60
55	<.130	116	<.029	<.044	<.030	<.120	70	<.050	<.050	<1.60
56	<.130	106	<.029	<.044	<.030	<.120	77	<.050	<.050	<1.60
57	<.130	107	<.029	<.044	<.030	<.120	75	<.050	<.050	<1.60
58	<.130	111	<.029	<.044	<.030	<.120	83	<.050	<.050	<1.60
58 ^R	<.130	111	<.029	<.044	<.030	<.120	84	<.050	<.050	<1.60
59	<.130	108	<.029	<.044	<.030	<.120	76	<.050	<.050	<1.60
60	<.130	104	<.029	<.044	<.030	<.120	80	<.050	<.050	<1.60
61	<.130	101	<.029	<.044	<.030	<.120	83	<.050	<.050	<1.60

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	2-Chloro- toluene (µg/L)	2- Hexanone (µg/L)	3-Chloro- propene (µg/L)	4-Chloro- toluene (µg/L)	4-Isopro- pyl-1- methyl- benzene (µg/L)	4-Methyl-2- pentanone (µg/L)	Acce- tone (µg/L)	Acrylo- nitrile (µg/L)	Benzene (µg/L)	Bromo- benzene (µg/L)
Subunit Survey 2, Montana										
32	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
33	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
34	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
35	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
36	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
36 ^R	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
36 ^{Fb}	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
37	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
38	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
38 ^R	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
38 ^{Fb}	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
39	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
40	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
41	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
42	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
43	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
44	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
45	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
46	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
47	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
48	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
48 ^{Fb}	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
49	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
50	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
51	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
52	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
53	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
54	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
55	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
56	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
57	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
58	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
58 ^R	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
59	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
60	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036
61	<.026	<.700	<.070	<.060	<.070	<.370	<7.00	<1.20	<.035	<.036

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Bromo-chloro-methane (µg/L)	Bromo-dichloro-methane (µg/L)	Bromo-ethane (µg/L)	Bromo-form (µg/L)	Bromo-methane (µg/L)	Butyl-benzene (µg/L)	Carbon disulfide (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloro-form (µg/L)
Subunit Survey 2, Montana										
32	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
33	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
34	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
35	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
36	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
36 ^R	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
36 ^{Fb}	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
37	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
38	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
38 ^R	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
38 ^{Fb}	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
39	<.044	e.062	<.100	<.060	<.260	<.190	<.070	<.028	<.120	.111
40	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	e.023
41	<.044	.165	<.100	<.060	<.260	<.190	<.070	<.028	<.120	.214
42	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
43	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
44	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
45	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
46	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
47	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
48	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
48 ^{Fb}	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
49	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
50	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
51	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
52	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
53	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
54	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
55	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
56	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
57	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	e.007
58	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
58 ^R	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
59	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
60	<.044	<.048	<.100	<.060	<.260	<.190	<.070	<.028	<.120	<.024
61	<.044	.163	<.100	<.060	<.260	<.190	<.070	<.028	<.120	.540

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Chloro- methane (µg/L)	cis- 1,2- Dichloro- ethylene (µg/L)	cis- 1,3- Dichloro- propene (µg/L)	Dibromo- chloro- methane (µg/L)	Dibromo- methane (µg/L)	Dichloro- difluoro- methane (µg/L)	Dichloro- methane (µg/L)	Diethyl ether (µg/L)	Diiso- propyl ether (µg/L)	Ethyl meth- acrylate (µg/L)
Subunit Survey 2, Montana										
32	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
33	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
34	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
35	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
36	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
36 ^R	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
36 ^{Fb}	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
37	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
38	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
38 ^R	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
38 ^{Fb}	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
39	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
40	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
41	<.250	<.038	<.090	e.062	<.050	e.131	<.160	<.170	<.100	<.180
42	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
43	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
44	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
45	<.250	<.038	<.090	<.180	<.050	e.475	<.160	<.170	<.100	<.180
46	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
47	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
48	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
48 ^{Fb}	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
49	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
50	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
51	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
52	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
53	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
54	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
55	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
56	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
57	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
58	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
58 ^R	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
59	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
60	<.250	<.038	<.090	<.180	<.050	<.270	<.160	<.170	<.100	<.180
61	<.250	<.038	<.090	e.054	<.050	<.270	<.160	<.170	<.100	<.180

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Ethyl tert-butyl ether (µg/L)	Ethylbenzene (µg/L)	Hexachlorobutadiene (µg/L)	Hexachloroethane (µg/L)	Isopropylbenzene (µg/L)	m- and p-Xylene (µg/L)	Methyl acrylate (µg/L)	Methyl acrylonitrile (µg/L)	Methyl iodide (µg/L)	Methyl methacrylate (µg/L)
Subunit Survey 2, Montana										
32	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
33	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
34	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
35	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
36	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
36 ^R	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
36 ^{Fb}	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
37	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
38	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
38 ^R	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
38 ^{Fb}	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
39	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
40	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
41	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
42	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
43	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
44	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
45	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
46	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
47	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
48	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
48 ^{Fb}	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
49	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
50	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
51	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
52	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
53	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
54	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
55	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
56	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
57	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
58	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
58 ^R	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
59	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
60	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350
61	<.054	<.030	<.140	<.190	<.032	<.060	<1.4	<.600	<.120	<.350

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Naphthalene (µg/L)	n-Propyl- benzene (µg/L)	o-Ethyl toluene (µg/L)	o-Xylene (µg/L)	sec-Butyl- benzene (µg/L)	Styrene (µg/L)	tert- Butyl methyl ether (µg/L)	tert- Butyl- benzene (µg/L)	tert- Pentyl methyl ether (µg/L)	Tetra- chloro- ethylene (µg/L)
Subunit Survey 2, Montana										
32	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
33	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
34	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
35	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
36	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
36 ^R	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
36 ^{Fb}	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
37	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
38	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
38 ^R	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
38 ^{Fb}	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
39	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	.171
40	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	e.071
41	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	.303
42	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
43	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
44	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
45	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	e.020
46	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
47	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
48	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
48 ^{Fb}	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
49	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
50	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
51	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
52	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
53	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
54	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
55	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
56	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	e.021
57	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
58	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
58 ^R	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
59	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
60	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100
61	<.250	<.042	<.060	<.038	<.032	<.042	<.170	<.060	<.110	<.100

Table 20. Volatile organic-compound concentration data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Tetra-chloro-methane (µg/L)	Tetra-hydrofuran (µg/L)	Toluene (µg/L)	Toluene-d ₈ , surrogate (percent)	trans-1,2-Dichloro-ethylene (µg/L)	trans-1,3-Dichloro-propene (µg/L)	trans-1,4-Dichloro-2-butene (µg/L)	Trichloro-ethylene (µg/L)	Trichloro-fluoro-methane (µg/L)	Vinyl chloride (µg/L)
Subunit Survey 2, Montana										
32	<.060	<2.2	<.050	99	<.032	<.090	<.700	<.038	<.090	<.110
33	<.060	<2.2	<.050	96	<.032	<.090	<.700	<.038	<.090	<.110
34	<.060	<2.2	<.050	98	<.032	<.090	<.700	<.038	<.090	<.110
35	<.060	<2.2	<.050	100	<.032	<.090	<.700	<.038	<.090	<.110
36	<.060	<2.2	<.050	96	<.032	<.090	<.700	<.038	<.090	<.110
36 ^R	<.060	<2.2	<.050	96	<.032	<.090	<.700	<.038	<.090	<.110
36 ^{Fb}	<.060	<2.2	<.050	96	<.032	<.090	<.700	<.038	<.090	<.110
37	<.060	<2.2	<.050	100	<.032	<.090	<.700	<.038	<.090	<.110
38	<.060	<2.2	<.050	96	<.032	<.090	<.700	<.038	<.090	<.110
38 ^R	<.060	<2.2	<.050	94	<.032	<.090	<.700	<.038	<.090	<.110
38 ^{Fb}	<.060	<2.2	<.050	97	<.032	<.090	<.700	<.038	<.090	<.110
39	<.060	<2.2	e.010	98	<.032	<.090	<.700	<.038	<.090	<.110
40	<.060	<2.2	e.010	98	<.032	<.090	<.700	<.038	<.090	<.110
41	<.060	<2.2	<.050	97	<.032	<.090	<.700	<.038	<.090	<.110
42	<.060	<2.2	<.050	95	<.032	<.090	<.700	<.038	<.090	<.110
43	<.060	<2.2	<.050	94	<.032	<.090	<.700	<.038	<.090	<.110
44	<.060	<2.2	<.050	94	<.032	<.090	<.700	<.038	<.090	<.110
45	<.060	<2.2	<.050	102	<.032	<.090	<.700	<.038	<.090	<.110
46	<.060	<2.2	<.050	96	<.032	<.090	<.700	<.038	<.090	<.110
47	<.060	<2.2	<.050	98	<.032	<.090	<.700	<.038	<.090	<.110
48	<.060	<2.2	<.050	96	<.032	<.090	<.700	<.038	<.090	<.110
48 ^{Fb}	<.060	<2.2	<.050	95	<.032	<.090	<.700	<.038	<.090	<.110
49	<.060	<2.2	<.050	99	<.032	<.090	<.700	<.038	<.090	<.110
50	<.060	<2.2	<.050	98	<.032	<.090	<.700	<.038	<.090	<.110
51	<.060	<2.2	e.009	100	<.032	<.090	<.700	<.038	<.090	<.110
52	<.060	<2.2	<.050	99	<.032	<.090	<.700	<.038	<.090	<.110
53	<.060	<2.2	<.050	99	<.032	<.090	<.700	<.038	<.090	<.110
54	<.060	<2.2	<.050	99	<.032	<.090	<.700	<.038	<.090	<.110
55	<.060	<2.2	<.050	98	<.032	<.090	<.700	<.038	<.090	<.110
56	<.060	<2.2	<.050	99	<.032	<.090	<.700	<.038	<.090	<.110
57	<.060	<2.2	<.050	100	<.032	<.090	<.700	<.038	<.090	<.110
58	<.060	<2.2	<.050	100	<.032	<.090	<.700	<.038	<.090	<.110
58 ^R	<.060	<2.2	<.050	99	<.032	<.090	<.700	<.038	<.090	<.110
59	<.060	<2.2	e.006	100	<.032	<.090	<.700	<.038	<.090	<.110
60	<.060	<2.2	<.050	92	<.032	<.090	<.700	<.038	<.090	<.110
61	<.060	<2.2	<.050	91	<.032	<.090	<.700	<.038	<.090	<.110

Table 21. Tritium and radon concentration and stable-isotope data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001

[Site identification number described in text. The 2-sigma (2 standard deviations) precision represents the amount of uncertainty (\pm in pCi/L) associated with the reported concentration. Stable-isotope ratios are reported relative to the Vienna Standard Mean Ocean Water (VSMOW). Abbreviations: permil, parts per thousand; pCi/L, picocuries per liter; R, replicate. Symbol: --, no data]

Well number (figs. 3 and 4)	Site identification number	Date	Time	Tritium, total (pCi/L)	Tritium 2-sigma precision (pCi/L)	Radon-222, total (pCi/L)	Radon-222 2-sigma precision (pCi/L)	Stable-isotope ratio (permil)	
								Hydrogen-2/ Hydrogen-1	Oxygen-18/ Oxygen-16
Subunit Survey 1, Idaho and Washington									
1	481320116261101	07/14/99	1700	1.0	1.0	1,140	35	-120.5	-16.16
2	480950116324401	07/14/99	1100	--	--	2,450	44	-118.6	-15.64
3	480928117053201	07/07/99	1000	--	--	830	29	-117.1	-15.55
4	480813116593701	07/07/99	1600	--	--	839	30	-116.8	-15.46
5	480718117012501	07/06/99	1800	1.9	1.0	423	25	-119.7	-15.91
6	480249116510001	07/08/99	1000	--	--	376	21	-115.9	-15.57
7	480235116483001	07/13/99	1700	--	--	533	26	-117.6	-15.57
8	480203117200601	06/08/99	0800	--	--	769	28	-115.8	-15.34
9	480128116374601	08/04/99	0900	--	--	632	28	-118.3	-15.86
10	480119117182101	06/08/99	1600	--	--	986	33	-116.8	-15.48
11	475925117153001	07/06/99	1100	--	--	2,077	41	-114.1	-15.10
12	475825117364401	06/09/99	1000	--	--	740	28	-116.1	-15.45
13	475731116371301	06/23/99	1200	--	--	814	29	-121.2	-15.86
14	475637117262501	06/09/99	1700	--	--	642	28	-120.1	-15.81
15	475510116391201	08/03/99	1400	--	--	646	30	-110.7	-15.15
16	475400116404201	06/22/99	1700	--	--	733	30	-111.1	-14.96
17	475343117225201	06/10/99	0900	--	--	1,091	32	-116.2	-15.48
18	475322116522201	07/12/99	1200	--	--	530	23	-102.2	-13.76
18 ^R		07/12/99	1201	--	--	525	23	-105.6	-13.69
19	475130117262201	06/07/99	0900	--	--	788	27	-115.3	-15.52
20	475035116424801	06/22/99	1100	--	--	2,943	52	-115.2	-15.47
21	474718116530201	06/24/99	0900	--	--	767	28	-105.6	-14.06
21 ^R		06/24/99	0901	--	--	804	28	-104.7	-13.98
22	474708117250501	06/07/99	1600	--	--	870	32	-116.1	-15.35
23	474629117305101	05/25/99	1100	54.7	3.2	460	23	-113.3	-14.94
23 ^R		05/25/99	1101	--	--	477	23	--	--
24	474456116522001	06/21/99	1700	--	--	742	32	-115.0	-15.39
25	474427117312101	05/24/99	1400	48.6	3.2	387	22	-117.3	-15.45
26	474317117225301	05/27/99	0900	--	--	731	43	-110.1	-14.61
27	474218116445601	07/15/99	1000	--	--	1,592	38	-114.6	-15.37
28	474147116544001	07/26/99	1300	--	--	893	29	-110.5	-14.76
29	474130117015401	07/29/99	1000	--	--	781	28	-113.3	-15.01
30	474050117084101	07/28/99	1700	--	--	635	28	-115.1	-15.41
31	473612117243601	05/26/99	1100	--	--	984	32	-109.5	-14.21
Subunit Survey 2, Montana									
32	470719114301401	06/12/01	1300	--	--	1,116	34	--	--
33	470502114265301	06/12/01	0900	--	--	1,336	36	--	--
34	470328114164301	06/28/01	0900	--	--	853	28	--	--
35	470112114144001	06/07/01	0900	33.3	2.6	600	25	--	--
36	465838114074501	06/27/01	1200	26.9	1.9	949	29	--	--
36 ^R		06/27/01	1201	--	--	942	29	--	--
37	465741114110601	06/27/01	1700	37.1	2.6	931	31	--	--
38	465440114022101	06/19/01	1100	38.4	2.6	2,289	47	--	--
38 ^R		06/19/01	1101	--	--	2,448	49	--	--
39	465323114054301	06/20/01	1300	36.2	2.6	358	23	--	--

Table 21. Tritium and radon concentration and stable-isotope data for ground-water samples collected from basin-fill aquifers, Northern Rockies Intermontane Basins study unit, 1999 and 2001 (Continued)

Well number (figs. 3 and 4)	Site identification number	Date	Time	Tritium, total (pCi/L)	Tritium 2-sigma precision (pCi/L)	Radon-222, total (pCi/L)	Radon-222 2-sigma precision (pCi/L)	Stable-isotope ratio (permil)	
								Hydrogen-2/ Hydrogen-1	Oxygen-18/ Oxygen-16
Subunit Survey 2, Montana--Continued									
40	465127114055401	06/20/01	1000	39.4	2.6	401	23	--	--
41	464951114023701	06/19/01	1600	38.7	2.6	683	30	--	--
42	463932114035901	05/29/01	1300	36.5	2.6	958	29	--	--
43	463827114001201	05/29/01	1600	--	--	1,314	36	--	--
44	463335114011701	05/30/01	1600	32.3	2.6	1,424	35	--	--
45	463122114074701	05/30/01	0900	--	--	2,559	47	--	--
45 ^R		05/30/01	0901	--	--	2,555	47	--	--
46	462948114060101	05/30/01	1200	--	--	2,169	43	--	--
47	462859113574401	06/11/01	1200	--	--	1,399	34	--	--
48	462818114074101	06/04/01	1200	--	--	1,678	36	--	--
49	462754113592701	06/05/01	1500	--	--	1,359	38	--	--
50	462616114094301	06/05/01	1300	--	--	2,129	42	--	--
51	462545114034301	06/05/01	1800	6.4	1.0	253	22	--	--
52	462256114114501	06/04/01	1700	--	--	1,472	38	--	--
53	462228114030301	06/06/01	1100	--	--	367	22	--	--
54	461823114050901	06/06/01	1300	--	--	478	24	--	--
55	461807114123001	06/11/01	1600	--	--	1,227	37	--	--
56	461638114023401	06/06/01	0800	--	--	332	22	--	--
57	461451114090801	06/06/01	1600	--	--	1,626	40	--	--
58	461320114121501	06/05/01	0900	--	--	3,047	50	--	--
59	461055114112601	06/21/01	0900	--	--	490	24	--	--
60	460110114110901	06/20/01	1800	--	--	1,814	42	--	--
61	455521114074801	06/20/01	2000	--	--	1,690	41	--	--

Table 22. Radionuclide data from filtered ground-water samples collected from basin-fill aquifers in Idaho and Washington, Northern Rockies Intermontane Basins study unit, 1999

[Site identification number described in text. Radiation concentrations are listed as reported by the respective laboratories. The 2-sigma (2 standard deviations) precision represents the amount of uncertainty (\pm in pCi/L) associated with the reported concentration. Sample-specific minimum detectable concentration at the 95-percent confidence level was computed for each radium analysis based on instrument operating conditions. Where the combined value of the radium concentration plus the 2-sigma quantity equals or exceeds the MDC, there is less uncertainty compared to those combined values that are less than the MDC. Abbreviations: MDC, minimum detectable concentration; pCi/L, picocuries per liter; Cs, Cesium; Th, Thorium. Symbols: <, less than reporting level; --, no data]

Well number (figs. 3 and 4)	Site identification number	Date	Time	Gross alpha radioactivity (pCi/L as Th-230)	Gross alpha radioactivity 2-sigma precision (pCi/L as Th-230)	Gross beta radioactivity (pCi/L as Cs-137)	Gross beta radioactivity 2-sigma precision (pCi/L as Cs-137)
Subunit Survey 1, Idaho and Washington							
1	481320116261101	07/14/99	1700	<3.0	2.9	4.9	4.3
2	480950116324401	07/14/99	1100	4.0	2.9	<4.0	4.0
3	480928117053201	07/07/99	1000	<3.0	3.2	4.1	4.3
4	480813116593701	07/07/99	1600	<3.0	2.9	<4.0	4.0
5	480718117012501	07/06/99	1800	4.0	3.4	6.3	4.7
6	480249116510001	07/08/99	1000	3.7	3.3	<4.0	4.3
7	480235116483001	07/13/99	1700	3.9	3.3	7.6	4.7
8	480203117200601	06/08/99	0800	3.1	2.8	5.5	4.1
9	480128116374601	08/04/99	0900	<3.0	2.2	<4.0	4.0
10	480119117182101	06/08/99	1600	<3.0	2.8	4.4	4.3
11	475925117153001	07/06/99	1100	<3.0	2.7	<4.0	4.2
12	475825117364401	06/09/99	1000	<3.0	2.1	<4.0	3.8
13	475731116371301	06/23/99	1200	<3.0	2.8	6.1	4.3
14	475637117262501	06/09/99	1700	<3.0	2.7	<4.0	4.0
15	475510116391201	08/03/99	1400	<3.0	2.6	<4.0	4.0
16	475400116404201	06/22/99	1700	4.0	3.1	4.3	4.1
17	475343117225201	06/10/99	0900	5.5	3.4	5.4	4.4
18	475322116522201	07/12/99	1200	<3.0	2.7	<4.0	4.1
19	475130117262201	06/07/99	0900	<3.0	2.7	<4.0	4.3
20	475035116424801	06/22/99	1100	<3.0	2.1	<4.0	4.0
21	474718116530201	06/24/99	0900	<3.0	2.9	<4.0	4.1
22	474708117250501	06/07/99	1600	8.6	3.9	6.8	4.6
23	474629117305101	05/25/99	1100	3.3	2.9	2.6	4.1
24	474456116522001	06/21/99	1700	3.1	3.3	<4.0	4.4
25	474427117312101	05/24/99	1400	6.2	3.5	7.2	4.4
26	474317117225301	05/27/99	0900	9.6	4.0	7.4	4.3
27	474218116445601	07/15/99	1000	<3.0	2.7	<4.0	4.1
28	474147116544001	07/26/99	1300	<3.0	2.1	<4.0	3.9
29	474130117015401	07/29/99	1000	<3.0	1.7	<4.0	3.8
30	474050117084101	07/28/99	1700	<3.0	2.2	<4.0	3.7
31	473612117243601	05/26/99	1100	<3.0	2.7	4.7	4.3

¹Radiation measurement is less than long-term average background radiation and it is unlikely that the radionuclide is present in a quantifiable amount.

Table 22. Radionuclide data from filtered ground-water samples collected from basin-fill aquifers in Idaho and Washington, Northern Rockies Intermontane Basins study unit, 1999 (Continued)

Radium-224 (pCi/L)	Radium-224 2-sigma precision (pCi/L)	Radium-224, MDC (pCi/L)	Radium-226 (pCi/L)	Radium-226 2-sigma precision (pCi/L)	Radium-226, MDC (pCi/L)	Radium-228 (pCi/L)	Radium-228 2-sigma precision (pCi/L)	Radium-228, MDC (pCi/L)	Well number (figs. 3 and 4)
Subunit Survey 1, Idaho and Washington									
0.01	0.19	0.42	0.08	0.07	0.07	0.32	0.25	0.48	1
¹ -.04	.10	.18	.01	.03	.05	.35	.24	.46	2
.26	.12	.17	.13	.04	.05	.68	.38	.59	3
¹ -.005	.13	.31	¹ -.005	.04	.09	.81	.32	.39	4
.52	.18	.22	.23	.06	.05	1.40	.64	.92	5
¹ -.05	.16	.32	.04	.04	.07	.22	.22	.41	6
.10	.17	.28	.14	.05	.06	.95	.35	.51	7
.01	.16	.31	.06	.04	.06	.62	.31	.52	8
.05	.21	.38	-.004	.07	.15	.56	.26	.36	9
.22	.13	.19	.11	.04	.05	.70	.33	.56	10
.05	.25	.46	.19	.08	.06	.61	.58	1.1	11
¹ -.001	.10	.17	.03	.03	.05	.45	.27	.50	12
.12	.83	1.4	.02	.12	.22	.67	.29	.40	13
.03	.14	.26	.03	.02	.03	.23	.21	.38	14
.08	.10	.16	.03	.03	.04	.28	.20	.33	15
.17	.51	.92	.02	.08	.16	.52	.24	.32	16
.02	.14	.24	.08	.04	.04	.41	.24	.38	17
¹ -.02	.48	.96	⁻¹ .04	.13	.32	.45	.30	.56	18
.23	.12	.15	.49	.12	.06	.54	.28	.49	19
.06	.09	.15	.01	.02	.04	.16	.20	.38	20
.05	.19	.37	.01	.04	.09	.73	.30	.39	21
.18	.30	.49	.12	.10	.13	.26	.21	.36	22
--	--	--	--	--	--	--	.39	--	23
.33	.15	.21	.09	.06	.08	.55	.27	.39	24
.67	.14	.12	.37	.06	.02	.86	.42	.69	25
.04	.24	.42	.06	.03	.05	1.2	.54	.82	26
.00	.18	.35	.02	.05	.09	.72	.31	.50	27
¹ -.01	.08	.16	.06	.04	.05	.38	.29	.50	28
¹ -.001	.10	.18	.02	.02	.04	.96	.34	.36	29
¹ -.02	.13	.27	.02	.04	.07	.11	.29	.62	30
.03	.06	.10	.06	.02	.02	--	--	--	31

Table 23. Water-level, specific-conductance, and ancillary data for selected ground-water sites inventoried for the surface-water/ground-water interaction study of the Spokane River, Idaho and Washington

[See figure 5 for well locations. All wells are completed in Quaternary alluvium. Location number described in text. Altitude of land surface referenced to National Geodetic Vertical Datum of 1929 (NGVD 29). Depth of well: in feet below land surface. Depth to water: in feet below land surface. Method of measurement: A, air line; R, reported by driller; S, steel tape; T, electric tape. Abbreviations: ft, feet; $\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius. Symbol: --, no data or not applicable]

Well number ¹	Location number	Altitude of land surface (ft)	Depth of well (ft)	Water level			Specific conductance (μS/cm)	Date of measurement
				Depth to water (ft)	Method of measurement	Date of measurement		
Sites located in Idaho								
--	50N05W01ACBB01	2,238	243	187.54	T	03/16/00	292	03/16/00
--	50N05W01CBBB01	2,194.1	279	198.93	S	09/26/78	230	12/09/99
--	50N05W04CABD01	2,100	160	130	R	03/01/78	60	12/10/99
--	50N05W04CACB01	2,107	165	92.98	S	03/16/00	53	03/16/00
--	50N05W04CACC02	2,083.4	140	89.80	T	08/16/00	59	08/16/00
--	50N05W06DCDC01	2,110.7	190	121.67	T	03/15/00	62	03/15/00
--	50N05W07ADDD01	2,065	110	74.03	S	03/16/00	53	03/16/00
--	50N05W07BCCC01	2,063.8	140	80.05	S	08/03/00	55	08/03/00
M1	50N05W07DABC01	2,069.5	79.3	63.37	T	08/08/00	148	08/08/00
M2	50N05W07DABC02	2,070.3	45.8	32.74	T	09/27/00	45	09/27/00
--	50N05W07DBBA01	2,082.8	200	39.10	T	08/18/00	110	08/18/00
--	50N05W07DBBA02	2,040	135	95	R	08/03/93	52	12/15/99
--	50N05W08BBBB01	2,090	196	110	R	09/05/92	55	09/30/99
--	50N05W10BAAA01	2,150	59	23.06	S	03/14/00	279	03/14/00
--	50N05W12BBAB01	2,165	206	180	R	06/12/77	94	02/08/00
--	50N05W12BBBD01	2,165	217.5	163.12	S	03/14/00	153	03/14/00
--	50N05W12BBBD02	2,160	200	160.13	S	03/14/00	95	03/14/00
--	50N05W12BBDA01	2,160	180	120.86	S	12/16/99	93	03/15/00
--	50N05W12BBDA02	2,160	185	138	R	10/02/79	105	12/16/99
--	50N05W12BCAD01	2,130	200	115.40	S	03/14/00	128	03/14/00
--	50N05W12BCDA01	2,183	250	115.79	S	03/21/00	169	03/21/00
--	50N06W12BDAC01	2,065	137	95	R	06/06/95	112	08/03/00
--	50N06W12CABA01	2,030	133	56.20	S	11/17/99	76	11/17/99
--	50N06W12CACA01	2,044.9	137	62.39	S	08/18/00	57	08/18/00
--	50N06W12CBDB01	2,081.2	150	98.44	S	08/18/00	81	08/18/00
--	50N06W12CCAD01	2,105	157	122.19	S	03/14/00	89	03/14/00
--	50N06W12CCAD02	2,102.6	157	119.68	S	03/14/00	139	08/03/00
--	50N06W12DBAD01	2,058.9	126	75.94	S	08/18/00	55	08/18/00
--	50N06W12DBCD01	2,069.2	137	86.40	S	08/18/00	56	08/18/00
--	50N06W12DCDD01	2,110	165	137	R	12/16/92	252	11/19/99
--	50N06W12DDAB01	2,100.3	157	116.68	S	08/03/00	106	08/03/00
--	50N06W12DDCD01	2,100.6	168	122.32	S	03/14/00	456	08/17/00
--	50N06W12DDDB02	2,103.2	170	120.34	S	08/18/00	444	08/18/00
--	50N06W13CABA01	2,123.8	209	138.10	S	08/18/00	207	08/18/00
--	51N04W20CBCD01	2,245	290	239.68	T	03/15/00	390	03/15/00
--	51N05W19DBCC01	2,128.6	212	135.54	S	08/30/99	354	08/30/99
--	51N05W26AAAA01	2,229	268	238.46	S	04/29/77	286	09/23/88
--	51N05W26BBDD01	2,241.1	274	253.10	S	05/19/77	293	08/14/90
--	51N05W27DCCC01	2,228	328	245	R	10/07/80	247	12/09/99
--	51N05W28DADA01	2,153	276	160.57	R	03/31/75	251	09/23/88
--	51N05W31BCCB01	2,106	156	117.90	T	08/16/00	328	08/16/00
--	51N06W36DAAA01	2,102.9	150	115.66	S	08/18/00	340	08/18/00
--	51N06W36DDAA01	2,099.3	162	112.01	T	03/14/00	312	03/14/00
Sites located in Washington								
--	25N44E01BBCC01	2,051.6	150	107.10	S	03/15/00	362	10/20/99
--	25N44E01CBAA01	2,020	160	76.2	R	09/10/70	293	10/21/99
--	25N44E01DBDD01	2,020	120	--	--	--	304	10/20/99

Table 23. Water-level, specific-conductance, and ancillary data for selected ground-water sites inventoried for the surface-water/ground-water interaction study of the Spokane River, Idaho and Washington (Continued)

Well number ¹	Location number	Altitude of land surface (ft)	Depth of well (ft)	Water level			Specific conductance (μS/cm)	Date of measurement
				Depth to water (ft)	Method of measurement	Date of measurement		
Sites located in Washington (Continued)								
--	25N44E01DCDD01	2,018.2	150	72.66	T	08/11/00	325	08/11/00
M25	25N44E11DDAC01	1,965.9	67	33.79	T	08/10/00	264	08/10/00
--	25N44E11DDAD01	1,967.2	69	34.58	T	08/10/00	262	08/10/00
--	25N44E11DDDD01	1,987.4	85	55.65	T	08/10/00	268	08/10/00
--	25N44E12BBBD01	2,004	117	67.8	R	09/10/70	332	10/21/99
--	25N44E12CBCD01	1,998.1	100	54.42	T	08/10/00	--	--
--	25N44E12CCAB01	1,987.2	--	50.35	T	08/10/00	275	03/14/00
--	25N44E12CCDC01 ²	1,960	--	--	--	--	108	01/23/01
--	25N44E12DABB01	2,005.7	--	61.19	T	08/10/00	217	08/10/00
--	25N44E24BDAA01	2,040	127	96.39	S	03/17/00	359	11/04/99
M4	25N45E01ABDD01	2,035.4	74.3	62.64	T	08/07/00	54	08/07/00
M5	25N45E01ABDD02	2,035.3	60.7	57.17	T	08/07/00	54	08/07/00
M6	25N45E01ABDD03	2,034.9	77.8	61.93	T	08/07/00	55	08/07/00
M7	25N45E01ACAD01	2,045.8	86.9	73.46	T	08/08/00	87	08/08/00
--	25N45E01ADBB01	2,051	185	77.17	S	08/09/00	82	08/09/00
--	25N45E01BBAA01	2,078.2	150	107.25	S	08/07/00	228	08/07/00
M10	25N45E01CBBC01	2,031.2	71.0	46.36	T	08/09/00	53	08/09/00
M9	25N45E01CBBD01	2,024.9	76.1	28.68	T	08/09/00	52	08/09/00
M8	25N45E01CBBD02	2,025	32.9	11.95	T	08/09/00	51	08/09/00
--	25N45E02ACCD01	2,070	235	104	R	12/29/64	266	08/09/00
--	25N45E02DDDD01	2,060	128	104	R	--	58	09/30/99
M16	25N45E03BDDA01	2,052.6	117.3	89.53	T	08/10/00	324	08/10/00
--	25N45E03BDDA02	2,050	200	92.8	R	09/08/64	327	08/16/00
--	25N45E03CBDD01	2,048.2	138	83.50	S	03/13/00	303	08/07/00
M15	25N45E03CDDA01	2,040.2	97.5	77.05	T	08/10/00	302	08/10/00
M14	25N45E03CDDD01	2,033.1	88.8	70.52	T	09/20/00	55	09/26/00
--	25N45E04BAAC02	2,060	195	105.1	R	10/30/64	293	08/16/00
--	25N45E05BBBC01	2,045.2	128	91.50	T	08/11/00	³ 373	05/21/99
--	25N45E05DDBA01	2,024.3	96	68.42	T	08/09/00	332	08/09/00
--	25N45E06BBCA01	2,063.3	147	115.55	S	08/08/00	405	08/08/00
--	25N45E07AAAA02	2,020	168	71.7	R	08/31/64	340	08/09/00
M24	25N45E07AAAA04	2,021.7	100	69.78	T	08/10/00	349	08/10/00
M23	25N45E07ADDD01	2,001.5	80	48.86	T	08/10/00	55	08/10/00
--	25N45E08BDAA01	2,018.3	128	64.63	S	08/09/00	58	08/09/00
M22	25N45E08CBBC01	2,017.5	97	66.29	T	08/10/00	55	08/10/00
M21	25N45E08CBBC02	2,018	98	67.67	T	08/10/00	55	08/10/00
--	25N45E09ABCD01	2,029	107	70.00	S	08/08/00	--	--
M19	25N45E09ADAB01	2,021.3	70.9	55.05	T	08/08/00	55	08/08/00
M18	25N45E09ADAD01	2,023.1	77.4	59.44	T	08/08/00	55	08/08/00
M11	25N45E10BAAA01	2,030.6	71.6	45.25	T	08/09/00	52	08/09/00
M13	25N45E10BAAA02	2,036.5	75.5	59.14	T	08/09/00	53	08/09/00
M12	25N45E10BAAA03	2,031.5	136.7	69.50	T	09/21/00	48	10/04/00
--	25N45E10BDAD01	2,030.6	80	67.82	T	08/08/00	86	08/08/00
M17	25N45E10CBDA01	2,038	97.1	76.95	T	08/08/00	95	08/08/00
--	25N45E10DBCB01	2,058.3	140	95.64	S	08/07/00	--	--
--	25N45E11CCAA01	2,107.3	210	144.00	S	09/26/00	--	--
--	25N45E14BACD01	2,143.3	238	172	A	09/26/00	185	09/26/00

Table 23. Water-level, specific-conductance, and ancillary data for selected ground-water sites inventoried for the surface-water/ground-water interaction study of the Spokane River, Idaho and Washington (Continued)

Well number ¹	Location number	Altitude of land surface (ft)	Depth of well (ft)	Water level			Specific conductance (μS/cm)	Date of measurement
				Depth to water (ft)	Method of measurement	Date of measurement		
Sites located in Washington (Continued)								
--	25N45E14CABB01	2,139.2	250	169.07	S	03/15/00	261	09/26/00
--	25N45E14CCDD01	2,110	186	163.5	R	11/25/57	114	09/26/00
--	25N45E15BADA01	2,081.6	157	116.46	T	03/16/00	253	09/26/00
--	25N45E15BADC01	2,080	173	117.94	S	03/14/00	--	--
--	25N45E15DDCC01	2,072.5	155	106.16	S	03/16/00	272	09/26/00
--	25N45E16ACAB01	2,050	124	³ 92.78	T	05/19/99	³ 305	05/19/99
M20	25N45E17BBAA01	2,040	230	87.9	R	11/02/64	150	08/16/00
	25N45E17BBAA05	2,035.6	113	83.80	T	08/10/00	130	08/10/00
	25N45E17CDDD01	2,044	207	94.2	R	08/18/64	217	08/16/00
	25N45E17DCCB01	2,044.8	287	92.47	S	08/11/00	--	--
	25N45E18DDCB01	2,040	190	88.6	R	04/24/63	174	08/16/00
	25N45E23BBAA01	2,121.5	191	157.67	T	09/26/00	129	09/26/00
	25N46E06BBCB01	2,046.8	120	72.78	S	08/03/00	57	08/03/00
	25N46E06BCDD01	2,081.2	180	100.02	S	08/18/00	--	--
	25N46E06CCDD01	2,074.4	175	90.50	S	08/03/00	--	--
	25N46E07BCAC01	2,150	241	163.44	S	09/14/99	350	09/14/99
--	25N46E07BCAD01	2,174.3	248	189.25	S	08/03/00	--	--
--	25N46E07BCDA01	2,170	240	195.45	S	09/15/99	296	09/15/99
--	26N45E24DDDA01	2,080.3	178	122.80	T	08/11/00	--	--
--	26N45E25ABBC01	2,095	213	130	R	11/18/94	288	09/17/99
--	26N45E25BAAA01	2,095	190	113.13	S	03/13/00	287	09/16/99
--	26N45E25BAAA02	2,095	195	124.05	S	09/16/99	304	09/16/99
--	26N45E25BCCC01	2,077.2	169	103.35	T	08/11/00	291	09/17/99
--	26N45E25CCAC01	2,087.2	150	112.18	T	08/11/00	282	08/11/00
--	26N45E25CCBB01	2,080	150	110.39	S	03/13/00	289	03/13/00
--	26N45E25DAAB01	2,090	159	110.39	S	03/13/00	293	03/13/00
--	26N45E25DAAC01	2,081	140	101.40	S	08/11/00	296	08/11/00
--	26N45E25DAAC02	2,080	155	100.70	S	03/14/00	287	09/15/99
--	26N45E25DDAA01	2,080.3	146	100.91	T	08/11/00	304	12/14/99
--	26N45E32ADAA01	2,106	190	144.30	S	03/13/00	421	03/13/00
--	26N45E32DBDA01	2,075	157	114.50	S	03/13/00	--	--
--	26N45E32DCBC01	2,061	157	105.73	S	08/11/00	336	08/11/00
--	26N45E32DCCD01	2,060	141	100.12	S	03/13/00	383	03/13/00
--	26N45E34CADB01	2,067	199.7	105.10	S	03/08/00	--	--
--	26N45E34CADB02	2,067	238	105.3	R	01/16/65	273	08/16/00
--	26N45E35BDBD03	2,080	249	117.3	R	01/27/65	294	08/16/00
M3	26N46E31CBBC01	2,090.2	151	112.60	T	08/11/00	279	03/07/00
--	26N46E31DBAD03	2,090	222	120	R	12/10/64	261	08/16/00

¹Well numbers were assigned only for monitoring wells (table 4, figure 2).

²Site is a spring.

³From Marti and Garrigues (2001).

Table 24. Physical and major-ion concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and the surrounding basin-fill aquifers, Idaho and Washington, 2000-01

[Site identification number described in text. Constituents are reported as dissolved (0.45 µm filtration), unless otherwise indicated. Abbreviations: °C, degrees Celsius; lab, laboratory; µm, micrometer; µS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; NTU, nephelometric turbidity units; R, replicate. Symbols: <, less than reporting level; --, no data]

Well number (fig. 5)	Site identification number	Date	Time	Specific conductance, field (µS/cm)	pH, field (standard units)	Temperature, water (°C)	Turbidity, field (NTU)	Oxygen (mg/L)	Hardness (mg/L as CaCO ₃)	Calcium (mg/L)	Magnesium (mg/L)	Sodium adsorption ratio
M1	474134117002201	08/08/00	0800	148	6.5	11.0	1.6	7.9	66	18	5.3	0.2
		09/27/00	1300	56	6.7	15.5	1.0	6.4	22	6.1	1.7	.2
		12/15/00	0800	90	6.9	10.5	.52	7.0	39	11	3.1	.2
		03/28/01	1400	54	6.9	9.0	.19	9.5	20	5.6	1.5	.2
		05/03/01	0900	55	6.8	7.5	.22	8.6	22	6.0	1.7	.2
		05/23/01	0800	74	6.7	10.0	.33	7.7	33	9.2	2.5	.2
		08/14/01	1200	107	6.7	11.0	1.1	6.9	45	13	3.6	.2
M2	474134117002202	09/27/00	1400	45	6.9	16.0	.37	7.4	19	5.2	1.5	.2
		12/15/00	0900	49	7.2	3.5	.73	10.9	20	5.4	1.7	.2
		12/15/00 ^R	0901	--	--	--	--	--	20	5.4	1.7	.2
		03/28/01	1300	53	7.2	5.5	.67	11.3	20	5.5	1.6	.2
		04/30/01	1700	49	7.2	8.0	1.3	11.0	22	5.8	1.8	.2
		05/03/01	0800	54	7.2	7.5	.67	10.6	22	5.9	1.8	.2
		05/03/01	1600	55	7.0	8.0	.51	10.7	22	5.9	1.8	.2
		05/23/01	0700	56	6.9	12.0	1.2	7.4	23	6.3	1.8	.2
		08/14/01	1100	68	6.7	22.5	2.6	1.7	25	6.7	2.0	.2
M3	474226117024801	10/04/00	1500	269	7.9	13.0	.62	6.0	140	32	14	.1
		12/20/00	0800	284	8.0	11.5	.67	6.8	136	31	14	.1
		05/01/01	1700	270	8.0	12.5	.57	3.6	141	32	15	.1
		05/23/01	1900	308	8.0	--	--	--	148	34	15	.1
		08/14/01	1400	299	7.7	14.0	.22	6.7	145	33	15	.1
M4	474151117031101	06/19/00	1800	47	--	15.0	3.8	--	22	6.1	1.5	.2
		08/07/00	1300	54	6.6	23.5	.22	3.3	20	5.4	1.5	.2
		09/25/00	1600	47	6.7	18.0	.27	6.3	19	5.3	1.5	.2
		12/14/00	1300	50	7.4	5.5	.52	9.3	21	5.6	1.7	.2
		03/26/01	1300	54	7.1	6.0	1.0	9.6	22	5.8	1.7	.2
		04/30/01	1300	51	7.1	7.5	1.3	10.6	21	5.7	1.7	.2
		05/22/01	0900	56	7.0	10.5	.36	8.0	22	6.1	1.7	.2
		08/13/01	1900	63	6.7	22.5	.48	3.2	23	6.3	1.8	.2
M5	474151117031102	06/19/00	1545	49	6.6	14.0	5.9	--	20	5.6	1.5	.2
		08/07/00	1500	54	6.6	21.0	3.8	3.7	20	5.6	1.6	.2
		09/26/00	1300	48	6.7	18.0	.52	6.1	20	5.4	1.5	.2
		03/26/01	1400	54	7.0	6.0	1.4	9.9	21	5.8	1.7	.2
		04/30/01	1200	54	7.3	7.0	6.4	11	21	5.8	1.7	.2
		05/22/01	0800	57	7.0	10.0	1.2	8.0	23	6.1	1.7	.2
		08/13/01	1800	63	6.8	20.5	5.3	4.3	24	6.5	1.9	.2
M6	474149117031101	08/07/00	1600	55	6.6	20.0	.32	3.8	21	5.6	1.6	.2
		09/26/00	1500	48	6.6	18.5	.59	6.0	19	5.3	1.5	.2
		12/14/00	1400	49	7.3	9.5	.49	8.5	21	5.6	1.6	.2
		03/26/01	1500	54	6.9	7.5	1.7	9.8	22	5.8	1.7	.2
		04/30/01	1500	51	7.0	7.0	1.0	11	22	5.9	1.7	.2
		05/22/01	1000	55	6.9	10.0	.47	8.4	23	6.2	1.8	.2
		08/13/01	2000	63	6.7	18.5	.33	3.9	24	6.5	1.9	.2
M7	474144117031401	08/08/00	1000	87	7.2	12.0	.71	7.7	37	10	2.8	.1
		09/27/00	1600	81	7.2	13.0	1.5	7.8	38	11	2.7	.1
		12/14/00	1500	79	7.6	10.5	.47	7.6	37	10	2.8	.1
		03/26/01	1600	87	7.2	11.5	4.0	7.5	39	11	2.8	.1
		04/30/01	1600	81	7.4	11.0	2.5	8.5	38	11	2.8	.1
		05/22/01	1100	90	7.3	13.0	2.4	7.4	41	12	2.9	.1
		08/14/01	0800	95	7.1	12.0	2.1	7.4	40	11	3.0	.2

Table 24. Physical and major-ion concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Sodium (mg/L)	Potas- sium (mg/L)	Bicar- bonate (mg/L as HCO ₃)	Carbo- nate (mg/L as CO ₃)	Alka- linity, field (mg/L as CaCO ₃)	Alka- linity, lab (mg/L as CaCO ₃)	Sulfate (mg/L as SO ₄)	Chlo- ride (mg/L)	Fluo- ride (mg/L)	Bro- mide (mg/L)	Silica (mg/L as SiO ₂)	Dis- solved solids, sum (mg/L)	Dis- solved solids, residue at 180 °C (mg/L)	Well number (fig. 5)
4.3	1.0	73	0	60	--	6.8	3.0	<.1	0.01	16	90	101	M1
2.3	.82	26	0	22	24	4.2	1.2	<.1	.01	13	43	41	
3.5	.92	49	0	--	40	5.1	1.9	<.16	<.01	18	68	71	
2.2	.56	26	0	--	21	4.5	1.2	<.16	<.01	11	40	46	
1.8	.58	26	0	--	21	5.0	.97	<.16	<.01	10	39	50	
2.5	.75	39	0	--	32	5.0	1.4	<.2	.01	13	54	47	
3.8	.89	55	0	--	45	5.4	1.6	<.2	<.01	17	72	75	
1.6	.63	22	0	18	19	3.9	.84	<.1	<.01	8.2	33	30	M2
1.9	.58	24	0	--	20	4.4	1.1	<.16	<.01	9.2	37	38	
1.9	.65	24	0	--	20	4.2	1.1	<.16	<.01	9.2	36	38	
1.8	.64	24	0	--	20	4.8	1.0	<.16	<.01	9.0	36	47	
1.7	.75	13	0	--	11	5.2	.94	<.2	.01	9.4	32	40	
1.8	.65	24	0	--	20	5.6	.89	<.16	<.01	9.1	38	45	
1.7	.66	26	0	--	21	5.6	.89	<.16	<.01	8.9	38	50	
1.9	.81	27	0	--	22	4.9	.87	<.2	<.01	9.4	39	33	
2.6	.85	29	0	--	24	5.1	1.6	<.2	<.01	9.9	43	46	
2.9	2.3	155	0	127	128	12	2.8	<.16	.02	13	156	163	M3
2.7	2.1	156	0	--	128	12	2.4	<.16	.02	13	154	163	
2.9	2.3	142	0	--	116	12	2.4	<.2	.01	14	151	120	
3.0	2.1	170	0	--	139	12	2.4	<.2	.03	13	166	162	
2.9	2.2	165	0	--	135	13	2.5	<.2	.01	13	163	177	
2.6	.99	27	0	--	22	4.2	2.0	<.1	.07	10	41	46	M4
1.9	.88	24	0	20	--	3.5	.99	<.1	.02	9.6	36	41	
1.7	.72	23	0	19	20	4.0	.88	<.1	<.01	8.3	34	30	
1.8	.56	24	0	--	20	4.3	1.1	<.16	<.01	8.7	36	36	
1.9	.66	26	0	--	21	4.9	1.1	<.16	<.01	8.9	38	46	
1.8	.75	26	0	--	21	5.4	.86	<.16	<.01	9.0	38	38	
1.9	.80	27	0	--	22	4.9	.86	<.2	<.01	9.1	38	26	
2.5	.91	28	0	--	23	5.4	1.6	<.2	<.01	9.3	42	46	
2.1	1.2	28	0	--	23	4.1	.73	<.1	.07	10	39	48	M5
1.9	.91	24	0	20	--	3.5	.98	<.1	<.01	10	36	43	
1.7	.76	22	0	18	20	3.9	.93	<.1	<.01	8.8	34	30	
1.9	.61	26	0	--	21	4.8	1.1	<.16	<.01	8.7	37	45	
2.0	.68	26	0	--	21	5.6	1.0	<.16	<.01	8.9	38	39	
2.0	.77	27	0	--	22	4.9	.87	<.2	<.01	9.6	39	37	
2.4	.91	24	0	--	20	5.1	1.6	<.2	<.01	9.9	40	48	
1.9	.88	23	0	19	--	3.5	.93	<.1	<.01	11	37	44	M6
1.7	.83	22	0	18	19	3.9	.91	<.1	<.01	9.0	34	32	
1.7	.55	24	0	--	20	4.4	1.1	<.16	<.01	8.4	35	33	
1.9	.54	26	0	--	21	4.7	1.1	<.16	<.01	8.6	37	48	
1.7	.63	26	0	--	21	5.2	.84	<.16	<.01	9.0	38	40	
1.9	.76	26	0	--	21	5.0	.90	<.2	<.01	9.6	39	32	
2.3	.93	28	0	--	23	5.0	1.5	<.2	<.01	10	42	45	
1.9	.93	46	0	37	--	4.9	.94	<.1	<.01	11	56	61	M7
2.1	1.0	43	0	35	37	5.0	1.2	<.1	<.01	12	56	55	
1.9	.95	44	0	--	36	4.8	1.1	<.16	.01	12	55	54	
2.1	1.0	46	0	--	38	5.1	1.2	<.16	.01	11	57	<10	
1.9	.94	46	0	--	38	5.2	1.2	<.16	<.01	11	57	66	
2.0	1.2	46	0	--	38	4.8	1.2	<.2	.01	12	59	55	
2.1	.98	48	0	--	39	5.0	1.1	<.2	<.01	12	59	62	

Table 24. Physical and major-ion concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and the surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Site identification number	Date	Time	Specific conductance, field ($\mu\text{S}/\text{cm}$)	pH, field (standard units)	Temperature, water ($^{\circ}\text{C}$)	Turbidity, field (NTU)	Oxygen (mg/L)	Hardness (mg/L as CaCO_3)	Calcium (mg/L)	Magnesium (mg/L)	Sodium adsorption ratio
M8	474130117035902	07/12/00	1300	44	7.0	21.0	8.0	6.6	18	4.8	1.3	.2
		08/09/00	1000	51	6.8	25.0	1.8	4.8	19	5.1	1.6	.2
		08/09/00 ¹	1020	51	6.8	25.0	1.8	4.8	19	5.1	1.6	.2
		09/26/00	0800	47	7.0	15.0	4.4	8.1	20	5.4	1.6	.2
		12/14/00	1000	50	7.5	2.5	6.9	11	21	5.5	1.7	.2
		03/28/01	1100	54	7.3	5.0	5.9	11	21	5.7	1.7	.2
		05/02/01	1100	54	7.5	7.5	3.1	11	23	6.0	1.8	.2
		05/02/01 ^R	1101	--	--	--	--	--	23	6.0	1.8	.2
		05/23/01	1000	55	6.9	12.5	11.0	7.5	22	5.8	1.8	.2
		08/13/01	1400	62	7.0	25.0	1.3	5.0	22	6.0	1.8	.2
		08/14/01	0600	65	6.9	24.5	.85	4.1	23	6.1	1.8	.2
		08/14/01 ^R	0601	--	--	--	--	--	23	6.2	1.8	.2
M9	474130117035901	08/09/00	0900	52	6.8	24.5	.52	4.6	20	5.2	1.6	.2
		08/09/00 ¹	0920	--	--	--	--	--	19	5.2	1.6	.2
		09/26/00	0900	47	6.9	22.0	3.7	7.4	20	5.4	1.6	.2
		12/14/00	0900	50	7.4	3.5	2.5	11	21	5.6	1.7	.2
		03/28/01	1000	54	7.4	5.0	2.6	11	21	5.6	1.6	.2
		05/02/01	1200	54	7.2	7.5	2.9	10	22	5.9	1.8	.2
		05/23/01	0900	54	6.8	12.0	7.6	7.5	22	5.9	1.7	.2
		08/13/01	1600	62	7.0	23.0	.93	4.5	22	6.0	1.8	.2
		08/14/01	0500	64	7.0	23.0	.80	4.2	22	6.0	1.8	.2
M10	474131117040401	08/09/00	1100	53	6.7	25.0	1.8	2.7	20	5.4	1.6	.2
		09/26/00	1100	47	6.8	18.5	6.6	6.4	19	5.3	1.5	.2
		12/14/00	1100	49	7.4	5.5	12.0	10	21	5.5	1.7	.2
		03/28/01	1200	54	7.2	5.5	11.0	10	21	5.7	1.7	.2
		05/02/01	1300	55	7.1	8.5	6.3	9.3	22	5.9	1.7	.2
		05/23/01	1100	60	6.9	12.0	25.0	7.0	23	6.3	1.8	.2
		08/13/01	1200	62	7.0	24.0	3.2	3.1	23	6.2	1.8	.2
M11	474106117060501	08/09/00	1300	52	6.8	25.0	2.0	3.7	19	5.1	1.5	.2
		08/09/00 ^R	1301	--	--	--	--	--	19	5.1	1.6	.2
		08/09/00 ^{R,1}	1321	--	--	--	--	--	19	5.2	1.6	.2
		10/04/00	1000	44	7.1	15.5	9.3	7.2	20	5.3	1.5	.2
		12/19/00	1000	50	7.1	4.0	11.0	11	21	5.6	1.7	.2
		03/27/01	1400	53	7.0	5.5	13.0	9.7	22	5.9	1.7	.2
		05/01/01	1000	48	7.1	7.5	14.0	8.4	21	5.7	1.7	.2
		05/23/01	1400	55	6.9	12.0	12.0	7.2	22	5.8	1.7	.2
		05/23/01 ^R	1401	--	--	--	--	--	22	6.0	1.7	.2
		08/16/01	0800	65	6.8	23.5	4.9	3.7	23	6.2	1.8	.2
M12	474107117060502	10/04/00	1200	48	7.0	16.0	1.6	6.9	21	5.8	1.5	.2
		12/19/00	0900	49	7.1	6.0	.85	10	21	5.7	1.6	.2
		03/27/01	1200	54	7.0	5.5	4.0	9.7	22	5.9	1.7	.2
		05/01/01	0900	49	7.1	7.0	.49	7.8	23	6.3	1.8	.2
		05/23/01	1500	56	6.8	10.5	1.7	7.3	23	6.1	1.8	.2
		08/16/01	0600	64	6.8	20.5	1.6	4.1	23	6.4	1.8	.2
M13	474107117060501	08/09/00	1500	53	6.8	23.5	2.1	4.2	20	5.2	1.6	.2
		10/04/00	0800	45	7.0	16.5	4.1	7.4	20	5.3	1.5	.2
		12/19/00	1100	49	7.0	8.0	7.6	9.7	21	5.6	1.6	.2
		03/27/01	1500	56	7.0	7.5	3.9	9.9	23	6.2	1.8	.2
		05/01/01	0800	49	7.4	7.0	.56	9.2	23	6.2	1.8	.2
		05/23/01	1300	55	6.9	12.5	.50	7.6	23	6.1	1.8	.2
		08/16/01	0900	64	6.8	23.0	.64	4.2	23	6.2	1.8	.2

Table 24. Physical and major-ion concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Sodium (mg/L)	Potas- sium (mg/L)	Bicar- bonate (mg/L as HCO ₃)	Carbo- nate (mg/L as CO ₃)	Alka- linity, field (mg/L as CaCO ₃)	Alka- linity, lab (mg/L as CaCO ₃)	Sulfate (mg/L as SO ₄)	Chlo- ride (mg/L)	Fluo- ride (mg/L)	Bro- mide (mg/L)	Silica (mg/L as SiO ₂)	Dis- solved solids, sum (mg/L)	Dis- solved solids, residue at 180 °C (mg/L)	Well number (fig. 5)
1.6	.65	16	0	13	--	3.0	.65	<.1	<.01	8.6	29	34	M8
1.9	.75	23	0	19	--	3.6	1.1	<.1	<.01	8.7	34	42	
1.8	.71	23	0	19	--	3.6	1.1	<.1	<.01	8.6	34	39	
1.7	.67	22	0	18	20	3.9	.84	<.1	<.01	8.3	33	31	
1.9	.66	26	0	--	21	4.3	1.1	<.16	<.01	9.4	37	38	
1.8	.66	26	0	--	21	4.8	.98	<.16	<.01	9.1	37	49	
1.7	.73	26	0	--	21	5.4	.90	<.16	<.01	9.1	39	46	
1.7	.74	26	0	--	21	5.4	.86	<.16	<.01	9.1	38	42	
1.8	.80	26	0	--	21	5.0	.92	<.2	<.01	9.3	38	36	
2.5	.79	27	0	--	22	5.1	1.6	<.2	<.01	8.3	40	44	
2.5	.82	28	0	--	23	5.1	1.6	<.2	<.01	8.4	40	44	
2.5	.80	28	0	--	23	5.0	1.5	<.2	<.01	8.4	40	45	
1.9	.73	23	0	19	--	3.6	1.1	<.1	<.01	8.7	34	42	M9
1.8	.71	--	0	--	--	3.6	1.1	<.1	<.01	8.7	--	38	
1.6	.70	22	0	18	20	4.0	.86	<.1	<.01	8.4	33	42	
1.9	.63	26	0	--	21	4.4	1.1	<.16	<.01	9.4	37	40	
1.8	.65	26	0	--	21	4.7	1.0	<.16	<.01	8.8	37	52	
1.7	.70	26	0	--	21	5.3	.91	<.16	<.01	9.0	38	37	
1.8	.79	26	0	--	21	4.9	.94	<.2	<.01	9.0	38	29	
2.5	.82	24	0	--	20	5.2	1.6	<.2	<.01	8.8	39	45	
2.4	.82	28	0	--	23	5.1	1.6	<.2	<.01	8.7	40	47	
1.8	.83	23	0	19	--	3.6	1.0	<.1	<.01	10	36	42	M10
1.7	.74	22	0	18	20	4.0	.88	<.1	<.01	8.5	33	50	
1.8	.57	24	0	--	20	4.3	1.1	<.16	<.01	8.7	36	37	
1.9	.59	26	0	--	21	4.8	1.1	<.16	<.01	8.8	37	47	
1.7	.58	26	0	--	21	5.0	.96	<.16	<.01	8.8	37	49	
1.9	.78	27	0	--	22	5.0	.88	<.2	<.01	9.7	40	37	
2.4	.93	28	0	--	23	5.1	1.6	<.2	<.01	9.9	42	44	
1.9	.75	23	0	18	--	3.7	1.1	<.1	<.01	9.6	35	40	M11
1.8	.83	23	0	19	--	3.7	1.1	<.1	<.01	9.6	35	40	
1.8	.94	--	--	--	--	--	--	--	--	9.5	--	--	
1.7	.69	22	0	18	20	3.9	.76	<.16	<.01	8.4	33	36	
1.8	.58	24	0	--	20	4.2	1.1	<.16	<.01	8.7	36	41	
2.0	.63	26	0	--	21	4.8	1.0	<.16	<.01	9.0	38	45	
1.8	.79	26	0	--	21	5.6	.97	<.16	<.01	8.8	38	63	
1.8	.67	24	0	--	20	5.0	.91	<.2	<.01	9.4	38	39	
1.9	.66	26	0	--	21	5.0	.94	<.2	<.01	9.3	38	32	
2.6	.92	28	0	--	23	5.2	1.6	<.2	<.01	8.7	41	37	
1.8	.74	24	0	20	21	4.0	.79	<.16	<.01	9.0	35	38	M12
1.7	.60	24	0	--	20	4.1	1.1	<.16	<.01	8.4	35	38	
1.9	.66	26	0	--	21	4.8	1.1	<.16	<.01	8.6	37	42	
1.9	.67	26	0	--	21	5.0	.90	<.16	<.01	9.1	38	45	
1.9	.73	27	0	--	22	4.9	.90	<.2	<.01	9.4	39	37	
2.4	.91	28	0	--	23	5.0	1.5	<.2	<.01	9.6	41	41	
1.8	.97	22	0	18	--	3.6	1.1	<.1	<.01	10	35	42	M13
1.7	.74	23	0	19	20	4.0	.74	<.16	<.01	8.7	34	36	
1.7	.63	24	0	--	20	4.1	1.1	<.16	<.01	8.0	35	40	
1.9	.56	26	0	--	21	4.9	1.3	<.16	<.01	8.2	38	47	
1.9	.65	26	0	--	21	5.4	.99	<.16	<.01	9.0	38	47	
1.9	.61	27	0	--	22	5.0	.92	<.2	<.01	9.5	39	25	
2.6	.91	27	0	--	22	5.2	1.6	<.2	<.01	8.9	41	40	

Table 24. Physical and major-ion concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and the surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Site identification number	Date	Time	Specific conductance, field ($\mu\text{S/cm}$)	pH, field (standard units)	Temperature, water ($^{\circ}\text{C}$)	Turbidity, field (NTU)	Oxygen (mg/L)	Hardness (mg/L as CaCO_3)	Calcium (mg/L)	Magnesium (mg/L)	Sodium adsorption ratio
M14	474110117060601	10/03/00	1800	50	7.1	15.5	2.9	7.3	21	5.9	1.5	.2
		12/19/00	1400	53	7.2	5.5	2.3	11	21	5.9	1.6	.2
		03/27/01	1100	58	7.1	6.0	3.6	9.9	23	6.5	1.7	.2
		05/02/01	0800	51	7.3	6.5	.51	9.8	24	6.6	1.9	.2
		05/24/01	1200	61	7.2	9.5	2.0	8.5	26	7.1	1.9	.2
		08/15/01	1600	65	6.9	23.0	.21	4.1	24	6.7	1.8	.2
M15	474115117060301	08/10/00	1000	302	7.7	10.5	.16	6.8	155	35	16	.1
		10/03/00	1700	307	7.8	10.0	.29	6.9	157	35	17	.1
		12/19/00	1300	304	7.9	9.0	4.0	7.2	155	35	17	.1
		03/28/01	0900	309	7.9	9.5	3.1	7.8	156	35	17	.1
		05/02/01	1000	308	7.9	9.5	1.5	7.9	163	37	17	.1
		05/24/01	1100	314	7.8	10.0	2.0	8.3	159	35	17	.1
		08/13/01	1100	304	7.8	11.0	1.3	7.6	156	35	17	.1
M16	474140117060401	08/10/00	0800	324	7.6	7.5	.19	8.7	163	36	18	.1
		10/04/00	1400	324	7.7	9.0	.28	9.0	168	37	18	.1
		12/19/00	1200	321	7.8	8.5	1.5	8.7	164	37	18	.1
		05/01/01	1600	302	7.8	9.5	.69	5.1	164	37	17	.1
		05/23/01	1700	331	7.7	11.0	.30	8.7	165	37	18	.1
		08/15/01	1400	322	7.6	10.0	.65	8.8	165	37	18	.1
M17	474033117062501	08/08/00	1300	95	7.7	13.0	4.7	7.8	43	13	2.8	.1
		10/03/00	1500	91	7.6	12.0	1.7	7.8	42	12	2.8	.1
		12/14/00	1600	85	8.2	11.0	1.9	6.8	41	12	2.7	.1
		03/27/01	0800	89	8.0	12.0	1.7	6.6	41	12	2.6	.1
		05/01/01	1500	81	7.8	12.0	1.9	5.6	41	12	2.6	.1
		05/22/01	1200	92	7.9	14.5	1.6	6.8	42	12	2.7	.1
		08/15/01	1100	91	7.7	13.0	.40	7.4	40	12	2.7	.1
M18	474050117064201	08/08/00	1500	55	6.9	13.5	5.5	5.4	23	6.4	1.7	.2
		10/03/00	1200	58	6.8	16.5	155	6.2	25	7.1	1.7	.2
		12/19/00	1600	57	6.9	14.0	3.5	7.1	23	6.4	1.6	.2
		03/27/01	0900	63	7.0	13.0	1.3	7.0	27	7.7	1.9	.2
		05/01/01	1200	57	7.0	13.0	2.5	7.4	26	7.2	1.9	.1
		05/22/01	1500	63	7.0	14.0	2.1	8.4	26	7.5	1.8	.2
		08/15/01	1200	70	7.0	13.5	.27	7.2	29	8.1	2.2	.2
M19	474053117064701	08/08/00	1600	55	6.7	15.0	1.8	4.9	22	5.9	1.7	.2
		10/03/00	1400	52	6.8	17.0	1.9	6.9	21	5.9	1.6	.2
		12/19/00	1500	53	6.9	13.5	3.5	7.5	21	5.7	1.5	.2
		03/27/01	1000	53	7.0	7.5	1.2	9.8	21	5.8	1.6	.2
		05/01/01	1300	51	6.9	8.5	1.5	7.8	22	6.0	1.6	.2
		05/22/01	1300	56	7.0	11.0	.37	8.4	23	6.2	1.7	.2
		08/15/01	1300	64	6.7	12.5	.61	3.9	25	6.7	2.0	.2
M20	474016117085601	10/05/00	0800	117	7.4	11.0	.15	7.8	56	14	4.9	.1
		12/20/00	1000	121	7.4	10.5	1.2	7.0	54	14	4.7	.1
		03/29/01	0800	136	7.6	12.0	.88	7.4	64	17	5.4	.1
		05/02/01	1600	141	7.4	12.5	.31	7.1	68	18	5.9	.1
		05/21/01	1300	136	7.4	13.5	.07	7.5	64	16	5.7	.1
		08/15/01	0600	132	7.4	12.5	.96	7.6	61	15	5.4	.1
M21	474037117091301	10/05/00	1200	52	6.6	17.0	.69	4.2	22	6.0	1.6	.2
		12/20/00	1400	49	6.7	13.0	.91	7.6	20	5.7	1.5	.2
		03/29/01	0900	54	7.0	8.0	.39	9.0	22	5.9	1.6	.2
		05/03/01	1200	51	6.8	8.0	.35	9.5	23	6.1	1.8	.2
		05/21/01	1600	52	6.9	9.5	.19	8.2	22	6.0	1.7	.2
		08/15/01	0700	64	6.8	14.0	.12	1.7	25	6.9	1.9	.2

Table 24. Physical and major-ion concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Sodium (mg/L)	Potas- sium (mg/L)	Bicar- bonate (mg/L as HCO ₃)	Carbo- nate (mg/L as CO ₃)	Alka- linity, field (mg/L as CaCO ₃)	Alka- linity, lab (mg/L as CaCO ₃)	Sulfate (mg/L as SO ₄)	Chlo- ride (mg/L)	Fluo- ride (mg/L)	Bro- mide (mg/L)	Silica (mg/L as SiO ₂)	Dis- solved solids, sum (mg/L)	Dis- solved solids, residue at 180 °C (mg/L)	Well number (fig. 5)
1.9	.77	24	0	19	21	4.0	.74	<.16	<.01	8.3	35	38	M14
1.7	.54	24	0	--	20	4.5	1.2	<.16	<.01	7.6	35	36	
2.1	.64	28	0	--	23	4.8	1.2	<.16	<.01	8.3	39	48	
1.9	.65	28	0	--	23	5.2	.90	<.16	<.01	9.1	40	47	
2.1	.70	29	0	--	24	5.0	.89	<.2	<.01	9.7	42	39	
2.4	1.0	28	0	--	23	5.3	1.6	<.2	<.01	10	43	41	
2.7	2.2	171	0	140	--	14	1.7	<.10	.02	12	168	179	M15
3.0	2.2	176	0	144	147	14	1.8	<.16	.02	12	172	179	
2.8	2.1	181	0	--	148	15	2.1	<.16	.03	11	174	176	
2.9	2.1	183	0	--	150	15	1.9	<.16	.02	12	175	185	
2.8	2.3	183	0	--	150	15	1.7	<.16	.02	12	178	178	
3.1	2.2	185	--	--	152	15	1.7	<.2	.02	12	178	176	
2.8	2.0	181	--	--	148	14	1.8	<.2	<.01	12	173	176	
2.9	2.1	184	0	154	--	15	1.6	<.10	.04	11	177	190	M16
3.2	2.2	191	0	157	156	16	2.0	<.16	.01	11	184	191	
3.0	2.0	192	--	--	157	16	2.0	<.16	.02	11	183	190	
2.9	2.0	192	--	--	157	16	1.4	<.16	<.01	11	181	184	
3.1	1.9	192	--	--	157	15	1.4	<.2	.02	11	182	180	
3.1	2.1	188	--	--	154	15	1.6	<.2	<.01	11	181	179	
1.9	.94	49	0	40	--	4.4	1.1	<.10	<.01	9.9	58	64	M17
1.8	1.0	46	0	38	41	4.9	.92	<.16	<.01	10	56	59	
1.8	.92	49	--	--	40	4.4	1.2	<.16	<.01	10	57	56	
1.8	1.1	50	--	--	41	4.6	1.0	<.16	<.01	10	58	68	
1.7	.90	50	--	--	41	4.5	.95	<.16	<.01	10	57	63	
1.8	.97	50	--	--	41	4.2	1.0	<.2	<.01	11	58	50	
1.8	.94	48	--	--	39	4.5	1.1	<.2	<.01	11	57	53	
1.7	.68	27	0	22	--	3.4	.83	<.10	<.01	11	39	45	M18
2.0	.93	28	0	23	25	4.0	.86	<.16	<.01	12	42	45	
1.7	.76	28	0	--	23	3.9	.98	<.16	<.01	10	39	41	
1.8	.81	32	0	--	26	4.2	1.2	<.16	<.01	10	44	50	
1.7	.73	31	0	--	25	4.5	1.6	<.16	<.01	9.5	42	44	
1.8	.81	31	0	--	25	5.3	1.3	<.2	.01	10	44	48	
1.9	.82	34	0	--	28	4.8	1.1	<.2	<.01	11	46	44	
2.0	.79	26	0	21	--	3.6	.84	<.10	<.01	11	39	46	M19
2.3	.93	25	0	21	23	4.0	.77	<.16	<.01	11	39	43	
1.7	.79	26	0	--	21	4.0	1.1	<.16	.01	9.3	37	40	
1.8	.65	26	0	--	21	4.6	1.1	<.16	<.01	8.5	36	45	
1.9	.69	27	0	--	22	5.3	.82	<.16	<.01	9.3	39	41	
1.8	.69	27	0	--	22	5.0	.88	<.2	<.01	9.5	39	38	
2.2	.85	29	0	--	24	5.0	1.3	<.2	<.01	10	43	43	
2.1	1.2	61	0	50	53	5.8	1.1	<.16	<.01	11	70	76	M20
2.0	1.1	65	0	--	53	6.0	1.4	<.16	.02	11	71	75	
2.2	1.3	74	0	--	61	6.9	1.6	<.16	.02	11	81	84	
2.5	1.2	74	0	--	61	7.1	1.8	<.16	.01	11	84	92	
2.6	1.3	73	0	--	60	6.6	1.6	<.2	.01	11	82	74	
2.2	1.2	70	0	--	57	6.4	1.6	<.2	<.01	11	78	84	
2.2	.92	26	0	22	23	4.1	.84	<.16	<.01	11	39	41	M21
1.7	.77	24	0	--	20	4.0	1.1	<.16	<.01	9.3	36	41	
1.6	.61	26	0	--	21	4.6	1.3	<.16	<.01	7.7	35	39	
1.8	.59	26	0	--	21	5.2	.91	<.16	<.01	8.9	38	42	
1.9	.56	26	0	--	21	5.1	.93	<.2	<.01	8.8	38	30	
2.3	.92	29	0	--	24	4.8	1.3	<.2	<.01	11	43	44	

Table 24. Physical and major-ion concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and the surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Site identification number	Date	Time	Specific conductance, field ($\mu\text{S}/\text{cm}$)	pH, field (standard units)	Temperature, water ($^{\circ}\text{C}$)	Turbidity, field (NTU)	Oxygen (mg/L)	Hardness (mg/L as CaCO_3)	Calcium (mg/L)	Magnesium (mg/L)	Sodium adsorption ratio
M22	474038117091201	10/05/00	1300	52	6.9	17.5	.73	3.1	21	5.9	1.6	.2
		10/05/00 ^R	1301	--	--	--	--	--	22	5.9	1.6	.2
		12/20/00	1500	50	6.6	13.5	.99	5.2	21	5.8	1.6	.2
		12/20/00 ^R	1501	--	--	--	--	--	21	5.8	1.6	.2
		03/29/01	1000	54	6.9	6.5	.29	7.9	21	5.8	1.6	.2
		05/03/01	1300	52	6.7	7.0	.39	7.1	22	5.8	1.8	.2
		05/21/01	1700	55	6.9	8.5	.17	6.5	22	5.9	1.8	.2
		08/15/01	0800	63	6.7	12.5	.75	1.4	25	6.8	1.9	.2
M23	474046117091501	10/05/00	1100	48	6.4	16.5	.77	5.9	20	5.6	1.5	.2
		12/20/00	1300	50	6.8	7.5	4.2	11	21	5.8	1.7	.2
		03/29/01	1100	62	6.8	6.0	.47	11	24	6.6	1.9	.2
		05/03/01	1100	61	6.8	7.5	.76	10	25	6.7	2.0	.2
		05/21/01	1500	55	6.9	10.0	.27	7.9	23	6.2	1.8	.2
		08/15/01	1000	66	6.6	20.5	.27	1.8	24	6.5	1.9	.2
M24	474109117091701	10/05/00	1000	353	7.7	9.0	.06	8.7	187	44	19	.1
		12/20/00	1200	361	7.7	8.5	.46	9.1	180	42	18	.1
		03/29/01	1200	340	7.7	9.0	.04	9.0	170	40	17	.1
		03/29/01 ^R	1201	--	--	--	--	--	169	40	17	.1
		05/03/01	1000	332	7.6	9.5	.09	8.9	177	42	17	.1
		05/21/01	1400	338	7.7	10.0	.07	8.8	179	42	18	.1
		08/15/01	0900	352	7.4	9.5	.07	8.6	180	42	18	.1
M25	474026117115301	10/04/00	1700	271	7.8	10.5	.07	9.0	142	32	15	.1
		12/20/00	0900	287	7.9	9.0	.09	9.4	140	32	14	.1
		03/29/01	1400	285	8.0	8.5	.12	9.6	142	33	15	.1
		05/02/01	1700	74	8.2	9.0	.27	11	36	8.3	3.7	.1
		05/21/01	1900	229	7.9	11.0	.16	9.4	115	26	12	.1
		08/14/01	1500	247	7.8	12.5	.06	8.4	119	27	12	.1

¹Sample filtered through 0.10- μm capsule filter.

Table 24. Physical and major-ion concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Sodium (mg/L)	Potas- sium (mg/L)	Bicar- bonate (mg/L as HCO ₃)	Carbo- nate (mg/L as CO ₃)	Alka- linity, field (mg/L as CaCO ₃)	Alka- linity, lab (mg/L as CaCO ₃)	Sulfate (mg/L as SO ₄)	Chlo- ride (mg/L)	Fluo- ride (mg/L)	Bro- mide (mg/L)	Silica (mg/L as SiO ₂)	Dis- solved solids, sum (mg/L)	Dis- solved solids, residue at 180 °C (mg/L)	Well number (fig. 5)
2.1	.92	24	0	20	22	4.0	.87	<.16	<.01	10	38	40	M22
2.0	.87	27	0	--	22	4.0	.96	<.16	<.01	10	39	37	
1.8	.78	26	0	--	21	4.0	1.1	<.16	<.01	9.5	37	39	
1.8	.76	26	0	--	21	4.0	1.1	<.16	<.01	9.4	37	39	
1.7	.58	24	0	--	20	4.6	1.2	<.16	<.01	8.1	36	38	
1.8	.66	26	0	--	21	5.4	.90	<.16	<.01	9.0	38	47	
1.8	.70	26	0	--	21	5.0	.95	<.2	<.01	9.0	38	30	
2.2	.80	29	0	--	24	4.8	1.4	<.2	<.01	10	43	44	
1.9	.84	23	0	18	21	4.0	.78	<.16	<.01	9.0	35	38	M23
1.7	.54	24	0	--	20	4.4	1.4	<.16	<.01	7.9	36	41	
1.8	.56	27	0	--	22	4.8	2.4	<.16	.01	8.3	40	45	
1.9	.73	28	0	--	23	5.6	1.2	<.16	<.01	9.5	42	38	
2.1	.75	26	0	--	21	5.1	1.0	<.2	<.01	9.5	39	35	
2.4	.99	28	0	--	23	5.0	1.6	<.2	<.01	10	43	42	
3.3	2.2	210	0	172	177	16	1.5	<.16	<.01	12	200	210	M24
3.1	2.1	212	0	--	174	16	2.0	<.16	.02	11	199	207	
2.9	2.0	206	0	--	169	16	1.4	<.16	.02	11	191	201	
2.9	2.0	205	0	--	168	16	1.4	<.16	.02	11	191	201	
3.1	2.0	206	0	--	169	15	1.3	<.16	.02	11	194	205	
3.3	2.1	206	0	--	169	15	1.3	<.2	<.02	12	195	186	
3.1	2.1	210	0	--	172	15	1.5	<.2	.01	12	197	208	
3.1	1.9	160	0	131	132	14	1.6	<.16	.01	12	157	162	M25
2.8	1.6	162	0	--	133	14	1.9	<.16	.02	11	158	163	
2.7	1.7	168	0	--	138	14	1.8	<.16	.02	10	161	171	
1.4	.80	39	0	--	32	5.7	1.3	<.16	<.01	9.5	50	55	
2.8	1.7	134	0	--	110	11	2.0	<.2	.01	12	134	135	
2.7	1.8	139	0	--	114	11	1.4	<.2	.01	12	137	143	

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01

[Site identification number described in text. Constituents are reported as dissolved (0.45 µm filtration), unless otherwise indicated. Abbreviations: e, estimated; Fb, field blank; µg/L, microgram per liter; µm, micrometer; R, replicate. Symbols: <, less than reporting level; --, no data]

Well number (fig. 5)	Site identification number	Date	Time	Aluminum, dissolved (µg/L)	Antimony, dissolved (µg/L)	Arsenic, total recoverable (µg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Beryllium, dissolved (µg/L)
M1	474134117002201	08/08/00	0800	5.7	<1.0	--	<0.90	26	<1.0
		09/27/00	1300	3.7	<1.0	--	<.90	10	<1.0
		12/15/00	0800	3.5	.05	--	e.17	17	<.06
		03/28/01	1400	<1.0	.17	--	e.12	8.2	<.06
		05/03/01	0900	<1.0	.34	--	e.09	8.6	<.06
		05/23/01	0800	<1.0	.21	--	e.10	14	<.06
		08/14/01	1200	6.4	.20	<2.0	e.13	17	<.06
		08/14/01 ^{Fb}	1211	<1.0	<.05	<2.0	<.20	<1.0	<.06
M2	474134117002202	09/27/00	1400	<1.0	<1.0	--	<.90	12	<1.0
		12/15/00	0900	5.0	.40	--	.36	12	<.06
		12/15/00 ^R	0901	<1.0	.43	--	.41	12	<.06
		12/15/00 ^{Fb}	0911	<.30	<.20	--	--	<.2	<.20
		03/28/01	1300	<1.0	.45	--	.31	12	<.06
		04/30/01	1700	6.0	.56	--	.32	14	<.06
		05/03/01	0800	4.3	.51	--	.27	13	<.06
		05/03/01	1600	<1.0	.52	--	.30	13	<.06
		05/23/01	0700	5.0	.51	--	.38	16	<.06
		08/14/01	1100	4.6	.70	<2.0	.48	18	<.06
M3	474226117024801	10/04/00	1500	5.7	.17	--	4.4	20	<.06
		12/20/00	0800	5.2	.24	--	4.3	21	<.06
		05/01/01	1700	5.7	.20	--	4.1	19	<.06
		05/23/01	1900	1.3	.11	--	4.4	23	<.06
		08/14/01	1400	<1.0	.19	--	4.0	17	<.06
M4	474151117031101	06/19/00	1800	1.4	<1.0	--	1.3	9.6	<1.0
		08/07/00	1300	<1.0	<1.0	<2.6	e.52	16	<1.0
		09/25/00	1600	<1.0	<1.0	--	<.90	13	<1.0
		12/14/00	1300	<1.0	.40	--	.28	13	<.06
		03/26/01	1300	<1.0	.43	--	.32	14	<.06
		04/30/01	1300	5.4	.58	--	.42	14	<.06
		05/22/01	0900	<1.0	.53	--	.38	16	<.06
		08/13/01	1900	5.7	.66	<2.0	.42	17	<.06
M5	474151117031102	06/19/00	1545	2.0	<1.0	--	e.83	1.6	<1.0
		08/07/00	1500	3.9	<1.0	<2.6	<.90	17	<1.0
		09/26/00	1300	<1.0	<1.0	--	<.90	14	<1.0
		03/26/01	1400	<1.0	.41	--	.30	14	<.06
		04/30/01	1200	5.1	.58	--	.37	14	<.06
		05/22/01	0800	3.6	.49	--	.36	17	<.06
		08/13/01	1800	5.4	.64	<2.0	.37	18	<.06

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Boron, dis- solved (µg/L)	Cadmium, total recov- erable (µg/L)	Cad- mium, dis- solved (µg/L)	Chro- mium, dis- solved (µg/L)	Cobalt, dis- solved (µg/L)	Copper, dis- solved (µg/L)	Iron, total recov- erable (µg/L)	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Well number (fig. 5)
16	--	<1.0	<0.80	<1.0	<1.0	--	<10	--	M1
13	--	<1.0	e.55	<1.0	<1.0	--	<10	--	
9.1	--	<.04	<.80	.03	1.4	--	<10	--	
<7.0	--	<.04	<.80	.02	.30	--	<10	--	
<7.0	--	<.04	<.80	e.01	.30	--	<10	--	
<7.0	--	<.04	e.50	e.01	.30	--	<10	--	
14	<.04	<.04	.86	.04	<.20	163	<10	<1.0	
<7.0	<.04	e.02	<.80	.03	<.20	e10	<10	<1.0	
<12	--	<1.0	<.80	<1.0	<1.0	--	<10	--	M2
7.2	--	.35	<.80	.02	1.2	--	<10	--	
<7.0	--	.34	<.80	.02	.69	--	<10	--	
<2.0	--	<.30	<.20	<.20	<.20	--	<3.0	--	
<7.0	--	.32	<.80	.02	.74	--	<10	--	
17	--	.36	<.80	.02	.97	--	<10	--	
10	--	.36	1.1	.02	.59	--	e8.1	--	
<7.0	--	.37	e.43	e.01	.62	--	<10	--	
12	--	.40	.85	.02	.70	--	<10	--	
14	.70	.68	e.67	.02	.48	69	<10	2.6	
11	--	e.03	2.4	.13	.37	--	10	--	M3
15	--	<.04	e.47	.06	.29	--	<10	--	
17	--	<.04	1.5	.05	.29	--	<10	--	
e5.6	--	<.04	2.1	.06	.31	--	e5.6	--	
<7.0	--	<.04	e.59	.04	e.23	--	e6.0	--	
25	--	<1.0	<.80	<1.0	4.7	--	<10	--	M4
<12	<1.0	<1.0	<.80	<1.0	<1.0	<21	<10	<1.0	
<12	--	<1.0	1.0	<1.0	<1.0	--	e5.2	--	
<7.0	--	.30	<.80	.02	1.1	--	<10	--	
<7.0	--	.33	<.80	.02	.78	--	<10	--	
14	--	.33	e.54	.02	.78	--	<10	--	
<7.0	--	.35	e.70	.02	.66	--	<10	--	
12	.45	.42	.83	.03	.65	31	<10	<1.0	M5
e9.9	--	<1.0	<.80	<1.0	7.3	--	<10	--	
12	<1.0	<1.0	<.80	<1.0	<1.0	135	<10	<1.0	
<12	--	<1.0	e.72	<1.0	<1.0	--	<10	--	
<7.0	--	.26	<.80	.02	.73	--	<10	--	
11	--	.27	<.80	.02	.72	--	<10	--	
10	--	.31	e.71	e.01	.77	--	<10	--	
11	.33	.28	<.80	.03	.53	393	<10	1.5	

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Date	Time	Lead, dis- solved (µg/L)	Lithium, dis- solved (µg/L)	Manganese, total recov- erable (µg/L)	Manganese, dis- solved (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, dis- solved (µg/L)
M1	08/08/00	0800	<1.0	2.4	--	<1.0	<1.0	<1.0
	09/27/00	1300	<1.0	1.1	--	<1.0	<1.0	<1.0
	12/15/00	0800	<.08	1.3	--	.10	e.11	.34
	03/28/01	1400	<.08	.75	--	e.07	e.12	.37
	05/03/01	0900	<.08	.88	--	<1.0	e.12	.14
	05/23/01	0800	<.08	.79	--	.11	<.20	.23
	08/14/01	1200	<.08	1.1	6.6	<1.0	.22	.33
	08/14/01 ^{Fb}	1211	<.08	<.3	<1.0	e.08	<.20	.21
M2	09/27/00	1400	<1.0	.38	--	<1.0	<1.0	<1.0
	12/15/00	0900	.12	.51	--	.11	<.20	.49
	12/15/00 ^R	0901	.10	e.19	--	<1.0	<.20	.30
	12/15/00 ^{Fb}	0911	<.30	--	--	<1.0	<.20	<.50
	03/28/01	1300	.09	.44	--	<1.0	<.20	.36
	04/30/01	1700	.09	.49	--	.15	e.17	.55
	05/03/01	0800	.11	.58	--	.13	e.18	.81
	05/03/01	1600	.12	.59	--	<1.0	<.20	.25
	05/23/01	0700	.12	.84	--	e.07	e.14	.51
	08/14/01	1100	<.08	.60	5.0	<1.0	e.17	.60
M3	10/04/00	1500	<.08	3.9	--	.27	1.0	2.0
	12/20/00	0800	<.08	3.6	--	.12	.98	.34
	05/01/01	1700	<.08	3.1	--	.20	1.0	.33
	05/23/01	1900	<.08	3.6	--	.26	.86	1.0
	08/14/01	1400	<.08	3.2	--	<1.0	.79	<.06
M4	06/19/00	1800	<1.0	.96	--	5.9	<1.0	<1.0
	08/07/00	1300	<1.0	.53	<1.0	<1.0	<1.0	<1.0
	09/25/00	1600	<1.0	.44	--	<1.0	<1.0	<1.0
	12/14/00	1300	e.05	.47	--	e.09	<.20	.37
	03/26/01	1300	<.08	.56	--	<1.0	e.10	.40
	04/30/01	1300	<.08	.44	--	.16	e.10	.40
	05/22/01	0900	<.08	.65	--	e.05	e.11	.26
	08/13/01	1900	<.08	.53	1.3	<1.0	e.19	.50
M5	06/19/00	1545	<1.0	.67	--	4.7	<1.0	<1.0
	08/07/00	1500	<1.0	.46	4.7	<1.0	<1.0	<1.0
	09/26/00	1300	<1.0	.45	--	<1.0	<1.0	<1.0
	03/26/01	1400	<.08	.39	--	<1.0	<.20	.23
	04/30/01	1200	<.08	.39	--	.91	e.11	.37
	05/22/01	0800	<.08	.44	--	e.10	<.20	.39
	08/13/01	1800	<.08	.43	14	<1.0	e.16	.54

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Selenium, dis- solved (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, dis- solved (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)	Well number (fig. 5)
<0.70	<1.0	81	<0.90	<1.0	<1.0	--	<1.0	M1
<.70	<1.0	25	<.90	<1.0	<1.0	--	<1.0	
<.33	<1.0	44	<.04	e.02	.29	--	1.3	
<.33	<1.0	20	<.04	<.02	e.16	--	<1.0	
<.33	<1.0	24	<.04	<.02	<.21	--	<1.0	
<.30	<1.0	35	<.04	<.02	.21	--	<1.0	
<.30	<1.0	49	<.04	<.02	e.15	1.7	<1.0	
<.30	<1.0	<.08	<.04	<.02	<.20	1.1	<1.0	
<.70	<1.0	16	<.90	<1.0	<1.0	--	54	M2
<.33	<1.0	18	<.04	.04	<.21	--	61	
<.33	<1.0	17	<.04	e.01	<.21	--	58	
--	<.20	<.10	<.10	<.20	--	--	<.50	
<.33	<1.0	16	<.04	<.02	e.12	--	56	
<.30	<1.0	20	<.04	e.02	e.11	--	63	
<.33	<1.0	20	e.03	<.02	<.21	--	60	
<.33	<1.0	20	<.04	<.02	<.21	--	61	
<.30	<1.0	21	e.02	e.02	e.16	--	71	M3
<.30	<1.0	22	<.04	<.02	e.18	74	66	
<.33	<1.0	101	<.04	2.0	.26	--	<1.0	
<.33	<1.0	98	<.04	2.3	.39	--	<1.0	
<.30	<1.0	103	<.04	2.4	e.20	--	<1.0	
<.30	<1.0	105	.08	2.4	1.0	--	<1.0	
<.30	<1.0	98	<.04	2.1	e.20	--	<1.0	
<.70	<1.0	19	<.90	<1.0	<1.0	--	25	M4
<.70	<1.0	18	<.90	<1.0	<1.0	35	34	
<.70	<1.0	17	<.90	<1.0	<1.0	--	38	
<.33	<1.0	18	<.04	e.01	e.11	--	43	
<.33	<1.0	16	.18	<.02	e.12	--	46	
<.33	<1.0	22	<.04	<.02	.25	--	49	
<.30	<1.0	21	<.04	e.02	<.20	--	49	
<.30	<1.0	21	<.04	<.02	e.16	46	42	
e.43	<1.0	18	<.90	<1.0	<1.0	--	25	M5
<.70	<1.0	18	<.90	<1.0	<1.0	22	21	
<.70	<1.0	17	<.90	<1.0	<1.0	--	24	
<.33	<1.0	16	<.04	.02	e.13	--	34	
<.33	<1.0	23	<.04	e.01	.24	--	36	
<.30	<1.0	21	<.04	<.02	e.11	--	41	
<.30	<1.0	21	<.04	<.02	e.21	36	29	

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Site identification number	Date	Time	Aluminum, dissolved (µg/L)	Antimony, dissolved (µg/L)	Arsenic, total recoverable (µg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Beryllium, dissolved (µg/L)
M6	474149117031101	08/07/00	1600	3.1	<1.0	--	e.48	19	<1.0
		09/26/00	1500	<1.0	<1.0	--	<.90	16	<1.0
		12/14/00	1400	3.6	.48	--	.27	16	<.06
		03/26/01	1500	4.5	.44	--	.21	15	<.06
		04/30/01	1500	5.6	.65	--	.27	17	<.06
		05/22/01	1000	5.6	.53	--	.33	18	<.06
		08/13/01	2000	<1.0	.75	<2.0	.37	20	<.06
M7	474144117031401	08/08/00	1000	<1.0	<1.0	--	e.52	12	<1.0
		09/27/00	1600	1.0	<1.0	--	e.47	12	<1.0
		12/14/00	1500	3.9	<.05	--	.45	12	<.06
		03/26/01	1600	4.8	e.05	--	.37	12	<.06
		04/30/01	1600	6.1	.05	--	.50	13	<.06
		05/22/01	1100	5.9	<.05	--	.45	13	<.06
		08/14/01	0800	3.0	.05	--	.42	12	<.06
M8	474130117035902	07/12/00	1300	2.3	<1.0	--	e.45	12	<1.0
		07/12/00 ^{Fb}	1308	<.30	<.20	--	--	<.20	<.20
		08/09/00	1000	5.6	<1.0	<2.6	<.90	13	<1.0
		08/09/00 ²	1020	<1.0	<1.0	--	e.49	13	<1.0
		09/26/00	0800	<1.0	<1.0	--	<.90	11	<1.0
		12/14/00	1000	3.5	.45	--	.46	12	<.06
		03/28/01	1100	<1.0	.40	--	.35	12	<.06
		05/02/01	1100	3.9	.48	<1.9	.30	13	<.06
		05/02/01 ^R	1101	<1.0	.46	e.94	.21	12	<.06
		05/02/01 ¹	1130	1.7	.54	--	.29	12	<.06
		05/02/01 ^{R,1}	1131	<1.0	.50	--	.33	13	<.06
		05/02/01 ^{Fb,1}	1132	<.30	<.20	--	<.20	<.20	<.20
		05/23/01	1000	6.3	.42	--	.44	15	<.06
		08/13/01	1400	<1.0	.49	<2.0	.54	14	<.06
		08/14/01	0600	<1.0	.48	<2.0	.52	14	<.06
		08/14/01 ^R	0601	<1.0	.49	<2.0	.55	14	<.06
M9	474130117035901	08/09/00	0900	4.7	<1.0	<2.6	e.47	14	<1.0
		08/09/00 ²	0920	<1.0	<1.0	--	e.48	14	<1.0
		09/26/00	0900	<1.0	<1.0	--	<.90	11	<1.0
		12/14/00	0900	<1.0	.41	--	.39	13	<.06
		03/28/01	1000	<1.0	.46	--	.30	12	<.06
		05/02/01	1200	5.6	.51	--	.28	13	<.06
		05/23/01	0900	6.4	.45	--	.38	15	<.06
		08/13/01	1600	<1.0	.51	<2.0	.51	14	<.06
		08/14/01	0500	<1.0	.64	<2.0	.45	14	<.06

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Boron, dis- solved (µg/L)	Cadmium, total recov- erable (µg/L)	Cad- mium, dis- solved (µg/L)	Chro- mium, dis- solved (µg/L)	Cobalt, dis- solved (µg/L)	Copper, dis- solved (µg/L)	Iron, total recov- erable (µg/L)	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Well number (fig. 5)
e10	--	<1.0	<.80	<1.0	<1.0	--	<10	--	M6
<12	--	<1.0	e.61	<1.0	<1.0	--	<10	--	
e6.3	--	.33	1.6	.03	.82	--	<10	--	
14	--	.32	e.74	.02	.76	--	<10	--	
12	--	.29	e.74	.02	.69	--	<10	--	
13	--	.32	.87	e.01	.72	--	<10	--	
<7.0	.38	.34	<.80	.03	.53	17	<10	<1.0	
<12	--	<1.0	<.80	<1.0	<1.0	--	<10	--	M7
<12	--	<1.0	e.68	<1.0	<1.0	--	<10	--	
e6.2	--	<.04	e.48	.03	1.3	--	<10	--	
12	--	<.04	<.80	.03	.23	--	<10	--	
12	--	<.04	1.2	.05	.40	--	<10	--	
15	--	<.04	1.1	.02	.27	--	<10	--	
e6.7	--	<.04	2.4	.05	<.20	--	14	--	
<12	<1.0	<1.0	.81	<1.0	<1.0	234	<10	<1.0	M8
2.2	--	<.30	<.20	<.20	.25	--	<3.0	--	
13	<1.0	<1.0	e.54	<1.0	<1.0	46	<10	<1.0	
<12	--	<1.0	e.50	<1.0	<1.0	--	<10	--	
<12	--	<1.0	e.77	<1.0	<1.0	--	<10	--	
e6.5	--	.18	<.80	.02	.67	--	<10	--	
<7.0	--	.21	<.80	.02	.69	--	<10	--	
11	.24	.21	e.71	.02	.50	133	e8.7	1.3	
<7.0	.22	.20	<.80	e.01	.51	78	e9.3	<1.0	
<7.0	--	.20	<.80	.02	.52	--	--	--	
<7.0	--	.21	<.80	.02	.57	--	--	--	
<2.0	--	<.30	<.20	<.20	.35	--	<3.0	--	
13	--	.24	1.1	.02	.62	--	e6.7	--	
<7.0	.22	.20	<.80	.02	.46	63	<10	<1.0	
<7.0	.22	.19	<.80	e.01	.45	40	<10	<1.0	
<7.0	.21	.19	<.80	.02	.48	46	<10	<1.0	
13	<1.0	<1.0	<.80	<1.0	<1.0	e17	<10	<1.0	M9
<12	--	<1.0	<.80	<1.0	<1.0	--	<10	--	
<12	--	<1.0	e.57	<1.0	<1.0	--	<10	--	
<7.0	--	.16	<.80	.02	.76	--	<10	--	
e4.7	--	.15	<.80	.02	.71	--	e7.1	--	
11	--	.17	.89	.02	.73	--	e8.1	--	
15	--	.18	.97	.02	.59	--	e7.2	--	
<7.0	.16	.15	<.80	.02	.49	38	<10	<1.0	
<7.0	.16	.13	<.80	e.01	.51	31	<10	<1.0	

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Date	Time	Lead, dis- solved (µg/L)	Lithium, dis- solved (µg/L)	Manganese, total recov- erable (µg/L)	Manganese, dis- solved (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, dis- solved (µg/L)
M6	08/07/00	1600	<1.0	.46	--	<1.0	<1.0	<1.0
	09/26/00	1500	<1.0	.47	--	<1.0	<1.0	<1.0
	12/14/00	1400	<.08	.49	--	.24	e.12	1.1
	03/26/01	1500	<.08	.36	--	e.07	<.20	.54
	04/30/01	1500	<.08	.33	--	.12	e.10	.46
	05/22/01	1000	<.08	.42	--	e.07	<.20	.36
	08/13/01	2000	<.08	.45	<1.0	<.10	<.20	.06
M7	08/08/00	1000	<1.0	.42	--	<1.0	<1.0	<1.0
	09/27/00	1600	<1.0	.50	--	<1.0	<1.0	<1.0
	12/14/00	1500	e.06	.52	--	.33	e.17	.77
	03/26/01	1600	<.08	.61	--	.16	e.17	.43
	04/30/01	1600	<.08	.60	--	.40	.26	.90
	05/22/01	1100	<.08	.56	--	.23	e.18	.78
	08/14/01	0800	<.08	.36	--	<.10	.36	1.3
M8	07/12/00	1300	<1.0	.42	7.8	<1.0	<1.0	<1.0
	07/12/00 ^{Fb}	1308	<.30	--	--	<.10	<.20	<.50
	08/09/00	1000	<1.0	.41	2.9	<1.0	<1.0	<1.0
	08/09/00 ²	1020	<1.0	.41	--	<1.0	<1.0	<1.0
	09/26/00	0800	<1.0	.43	--	<1.0	<1.0	<1.0
	12/14/00	1000	e.07	e.18	--	e.05	<.20	.49
	03/28/01	1100	.13	.54	--	e.07	e.10	.46
	05/02/01	1100	e.06	.48	9.3	.14	e.13	.56
	05/02/01 ^R	1101	e.06	.50	5.6	e.09	<.20	.37
	05/02/01 ¹	1130	<.08	.94	--	.12	e.11	.51
	05/02/01 ^{R,1}	1131	<.08	.65	--	.10	<.20	.43
	05/02/01 ^{Fb,1}	1132	<.30	--	--	.30	<.20	<.50
	05/23/01	1000	e.06	.58	--	.23	e.10	.61
	08/13/01	1400	<.08	.44	4.0	<.10	e.15	.15
	08/14/01	0600	<.08	.42	2.5	<.10	e.16	.19
	08/14/01 ^R	0601	<.08	.40	2.6	<.10	.20	.38
M9	08/09/00	0900	<1.0	.41	<1.0	<1.0	<1.0	<1.0
	08/09/00 ²	0920	<1.0	.42	--	<1.0	<1.0	<1.0
	09/26/00	0900	<1.0	.39	--	<1.0	<1.0	<1.0
	12/14/00	0900	e.07	.57	--	.12	<.20	.44
	03/28/01	1000	<.08	.63	--	e.07	e.10	.33
	05/02/01	1200	e.07	.79	--	.20	e.15	.72
	05/23/01	0900	e.05	.60	--	.23	e.15	.73
	08/13/01	1600	<.08	.39	2.4	<.10	e.14	.09
	08/14/01	0500	<.08	.35	2.4	<.10	e.13	.12

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Sele- nium, dis- solved (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, dis- solved (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)	Well number (fig. 5)
<.70	<1.0	19	<.90	<1.0	<1.0	--	29	M6
<.70	<1.0	17	<.90	<1.0	<1.0	--	29	
<.33	<1.0	18	<.04	e.01	e.14	--	34	
<.33	<1.0	16	<.04	e.01	<.21	--	35	
<.33	<1.0	22	<.04	e.01	.23	--	42	
<.30	<1.0	20	<.04	<.02	<.20	--	38	
<.30	<1.0	21	<.04	<.02	e.17	41	32	
<.70	<1.0	27	<.90	<1.0	<1.0	--	<1.0	M7
<.70	<1.0	28	<.90	<1.0	<1.0	--	<1.0	
<.33	<1.0	27	<.04	.10	e.19	--	<1.0	
<.33	<1.0	25	<.04	.10	.21	--	<1.0	
<.33	<1.0	33	.08	.10	.45	--	<1.0	
<.30	<1.0	30	<.04	.10	.34	--	6.8	
<.30	<1.0	29	<.04	.04	e.14	--	<1.0	
<.70	<1.0	22	<.90	<1.0	<1.0	31	26	M8
--	<.20	<.10	<.10	<.20	--	--	2.0	
<.70	<1.0	17	<.90	<1.0	<1.0	34	32	
<.70	<1.0	17	<.90	<1.0	<1.0	--	32	
<.70	<1.0	16	<.90	<1.0	<1.0	--	33	
<.33	<1.0	17	<.04	e.01	e.20	--	53	
<.33	<1.0	16	<.04	e.01	e.14	--	54	
<.33	<1.0	19	<.04	<.02	<.21	62	56	
<.33	<1.0	19	<.04	<.02	<.21	60	54	
<.33	<1.0	19	.06	<.02	e.10	--	54	
<.33	<1.0	19	<.04	<.02	.31	--	57	
<.30	<.20	<.10	<.10	<.20	--	--	<.50	
<.30	<1.0	20	<.04	<.02	e.20	--	62	
<.30	<1.0	19	<.04	<.02	.25	35	32	
<.30	<1.0	20	<.04	<.02	.25	43	31	
<.30	<1.0	20	<.04	<.02	.24	32	31	
<.70	<1.0	18	<.90	<1.0	<1.0	22	22	M9
<.70	<1.0	18	<.90	<1.0	<1.0	--	22	
<.70	<1.0	17	<.90	<1.0	<1.0	--	23	
<.33	<1.0	19	<.04	e.02	e.14	--	45	
<.33	<1.0	16	.12	e.01	e.12	--	41	
<.33	<1.0	20	<.04	<.02	<.21	--	45	
<.30	<1.0	21	<.04	e.02	e.16	--	48	
<.30	<1.0	20	<.04	<.02	.23	26	24	
<.30	<1.0	20	<.04	<.02	.24	24	23	

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Site identification number	Date	Time	Aluminum, dissolved (µg/L)	Antimony, dissolved (µg/L)	Arsenic, total recoverable (µg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Beryllium, dissolved (µg/L)
M10	474131117040401	08/09/00	1100	<1.0	<1.0	--	e.46	15	<1.0
		09/26/00	1100	6.0	<1.0	--	<.90	12	<1.0
		12/14/00	1100	3.6	.37	--	.30	12	<.06
		03/28/01	1200	<1.0	.41	--	.29	12	<.06
		05/02/01	1300	<1.0	.51	--	e.18	16	<.06
		05/23/01	1100	<1.0	.38	--	.33	15	<.06
		08/13/01	1200	3.5	.50	<2.0	.39	16	<.06
M11	474106117060501	08/09/00	1300	<1.0	<1.0	<2.6	e.49	15	<1.0
		08/09/00 ^R	1301	<1.0	<1.0	2.8	e.48	15	<1.0
		08/09/00 ^{Fb}	1311	<.30	<.20	--	<2.0	<.20	<.20
		08/09/00 ²	1320	<1.0	<1.0	--	e.50	14	<1.0
		08/09/00 ^{R,2}	1321	<1.0	<1.0	--	e.51	14	<1.0
		10/04/00	1000	<1.0	.46	--	.35	13	<.06
		12/19/00	1000	3.9	.41	--	.34	13	<.06
		03/27/01	1400	<1.0	.43	--	.32	14	<.06
		05/01/01	1000	5.7	.53	<1.9	.39	15	<.06
		05/01/01 ¹	1030	<1.0	.50	--	.37	14	<.06
		05/23/01	1400	<1.0	.38	--	.40	16	<.06
		05/23/01 ^R	1401	<1.0	.38	--	.39	16	<.06
		05/23/01 ^{Fb}	1411	<.30	<.20	--	<.20	<.20	<.20
		08/16/01	0800	1.2	.63	<2.0	.51	17	<.06
M12	474107117060502	10/04/00	1200	4.7	.52	--	.51	10	<.06
		12/19/00	0900	3.8	.47	--	.31	11	<.06
		03/27/01	1200	5.5	.46	--	.27	12	<.06
		05/01/01	0900	<1.0	.51	<1.9	.28	12	<.06
		05/01/01 ¹	0930	<1.0	.51	--	.34	12	<.06
		05/23/01	1500	5.1	.44	--	.34	14	<.06
		08/16/01	0600	<1.0	.64	<2.0	.43	14	<.06
M13	474107117060501	08/09/00	1500	<1.0	<1.0	<2.6	e.46	14	<1.0
		08/09/00 ²	1520	<1.0	<1.0	--	e.49	13	<1.0
		10/04/00	0800	<1.0	.43	--	.39	13	<.06
		12/19/00	1100	<1.0	.34	--	.20	12	<.06
		03/27/01	1500	<1.0	.35	--	e.17	13	<.06
		05/01/01	0800	<1.0	.53	<1.9	.23	14	<.06
		05/01/01 ¹	0830	<1.0	.48	--	.29	14	<.06
		05/23/01	1300	4.7	.35	--	.30	16	<.06
M14	474110117060601	08/16/01	0900	3.4	.59	<2.0	.47	16	<.06
		10/03/00	1800	6.4	.39	--	.37	9.4	<.06
		12/19/00	1400	<1.0	.32	--	.20	9.1	<.06
		03/27/01	1100	<1.0	.32	--	.21	9.8	<.06
		05/02/01	0800	3.8	.40	<1.9	e.17	10	<.06
		05/02/01 ¹	0830	<1.0	.40	--	.18	9.6	<.06
		05/24/01	1200	1.6	.34	--	.27	12	<.06
		08/15/01	1600	3.1	.57	<2.0	.47	13	<.06

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Boron, dis- solved (µg/L)	Cadmium, total recov- erable (µg/L)	Cad- mium, dis- solved (µg/L)	Chro- mium, dis- solved (µg/L)	Cobalt, dis- solved (µg/L)	Copper, dis- solved (µg/L)	Iron, total recov- erable (µg/L)	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Well number (fig. 5)
<12	--	<1.0	e.57	<1.0	<1.0	--	<10	--	M10
e12	--	<1.0	e.69	<1.0	<1.0	--	<10	--	
e4.4	--	.09	e.66	.02	1.2	--	<10	--	
e4.5	--	.09	<.80	.02	.69	--	<10	--	
<7.0	--	.24	<.80	e.01	.56	--	<10	--	
<7.0	--	.11	e.79	.02	.63	--	<10	--	
7.8	.16	.10	11	.18	.88	151	45	<1.0	
<12	<1.0	<1.0	e.53	<1.0	<1.0	97	<10	<1.0	M11
<12	<1.0	<1.0	e.49	<1.0	<1.0	100	<10	1.2	
<2.0	--	<.30	<.20	<.20	.35	--	<3.0	--	
<12	--	<1.0	<.80	<1.0	<1.0	--	--	--	
e6.8	--	<1.0	<.80	<1.0	<1.0	--	<10	--	
<7.0	--	.25	e.42	.02	.56	--	<10	--	
7.8	--	.22	e.63	.02	.70	--	<10	--	
<7.0	--	.29	e.48	.02	.64	--	<10	--	
13	.31	.27	1.2	.03	.79	405	e8.7	2.1	
<7.0	--	.27	<.80	.02	.90	--	--	--	
<7.0	--	<.30	.97	.02	.65	--	<10	--	
e5.6	--	.30	e.51	.02	.71	--	<10	--	
2.5	--	<.30	<.20	<.20	<.20	--	<3.0	--	
e5.5	.34	.27	<.80	.02	.76	400	<10	4.2	
8.2	--	.05	e.78	.03	.71	--	<10	--	M12
7.7	--	.07	<.80	.02	.81	--	<10	--	
14	--	.12	e.49	.02	1.0	--	e5.8	--	
<7.0	.10	.10	<.80	.02	1.1	22	<10	<1.0	
<7.0	--	.10	<.80	e.01	1.2	--	--	--	
13	--	.10	e.73	.02	1.3	--	<10	--	
e5.2	.11	.08	<.80	.02	2.5	81	<10	<1.0	
<12	<1.0	<1.0	.95	<1.0	<1.0	92	<10	<1.0	M13
<12	--	<1.0	e.41	<1.0	<1.0	--	--	--	
<7.0	--	.12	e.55	.02	.61	--	<10	--	
<7.0	--	.08	e.62	.03	7.4	--	<10	--	
<7.0	--	.08	e.57	.02	.60	--	e6.4	--	
<7.0	.15	.15	<.80	e.01	.78	22	e7.5	<1.0	
<7.0	--	.15	<.80	e.01	.77	--	--	--	
13	--	.18	<.80	.02	.70	--	<10	--	
e6.4	.16	.15	<.80	e.01	.85	27	<10	<1.0	
14	--	<.04	1.0	.04	.65	--	<10	--	M14
<7.0	--	<.04	e.74	.03	5.3	--	<10	--	
<7.0	--	<.04	1.1	.03	1.0	--	13	--	
9.3	<.04	<.04	.89	.02	.71	31	e6.2	<1.0	
<7.0	--	<.04	<.80	.02	1.2	--	--	--	
<7.0	--	<.04	e.69	.04	.74	--	<10	--	
e5.3	<.04	<.04	<.80	.02	1.7	e8.1	<10	<1.0	M15
<12	--	<1.0	.94	<1.0	<1.0	--	<10	--	

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Date	Time	Lead, dis- solved (µg/L)	Lithium, dis- solved (µg/L)	Manganese, total recov- erable (µg/L)	Manganese, dis- solved (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, dis- solved (µg/L)
M10	08/09/00	1100	<1.0	.47	--	<1.0	<1.0	<1.0
	09/26/00	1100	<1.0	.41	--	<1.0	<1.0	<1.0
	12/14/00	1100	<.08	<.30	--	.13	<.20	.66
	03/28/01	1200	<.08	.46	--	<.10	<.20	.38
	05/02/01	1300	<.08	.46	--	<.10	<.20	.22
	05/23/01	1100	<.08	.49	--	.34	<.20	.57
	08/13/01	1200	<.08	.44	11	2.2	.97	6.4
M11	08/09/00	1300	<1.0	.48	4.6	<1.0	<1.0	<1.0
	08/09/00 ^R	1301	<1.0	.48	5.4	<1.0	<1.0	<1.0
	08/09/00 ^{Fb}	1311	<.30	--	--	<.10	<.20	<.50
	08/09/00 ²	1320	<1.0	.51	--	<.10	<1.0	<1.0
	08/09/00 ^{R,2}	1321	<1.0	.55	--	<.10	<1.0	<1.0
	10/04/00	1000	<.08	.45	--	.68	e.12	.42
	12/19/00	1000	e.06	.40	--	.12	e.10	.48
	03/27/01	1400	<.08	.45	--	e.09	<.20	.58
	05/01/01	1000	<.08	.54	18	.50	e.17	.99
	05/01/01 ¹	1030	<.08	--	--	.58	e.13	.80
	05/23/01	1400	<.08	.61	--	e.28	<.20	.64
	05/23/01 ^R	1401	<.08	--	--	.28	<.20	.65
	05/23/01 ^{Fb}	1411	<.30	--	--	<.10	<.20	<.50
	08/16/01	0800	<.08	.63	21	<.10	e.15	.36
M12	10/04/00	1200	<.08	.47	--	3.0	e.12	.53
	12/19/00	0900	e.06	.32	--	.20	<.20	.33
	03/27/01	1200	<.08	.42	--	.17	<.20	.58
	05/01/01	0900	<.08	.48	<1.0	.11	<.20	.23
	05/01/01 ¹	0930	<.08	--	--	.15	e.10	.34
	05/23/01	1500	<.08	.50	--	.23	e.11	.64
	08/16/01	0600	<.08	.60	3.6	<.10	e.14	.24
M13	08/09/00	1500	<1.0	.47	4.8	<1.0	<1.0	<1.0
	08/09/00 ²	1520	<1.0	.50	--	<1.0	<1.0	<1.0
	10/04/00	0800	<.08	.42	--	e.07	<.20	.38
	12/19/00	1100	1.6	.35	--	.18	<.20	.56
	03/27/01	1500	<.08	.34	--	e.10	<.20	.66
	05/01/01	0800	<.08	.90	1.3	.27	e.12	.19
	05/01/01 ¹	0830	<.08	--	--	.31	<.20	.32
	05/23/01	1300	e.04	.58	--	.14	<.20	.65
M14	08/16/01	0900	<.08	.60	1.0	<.10	e.17	.19
	10/03/00	1800	<.08	.40	--	.59	e.13	.51
	12/19/00	1400	1.1	e.21	--	.18	<.20	.46
	03/27/01	1100	<.08	.31	--	.48	<.20	.88
	05/02/01	0800	<.08	e.29	<1.0	.16	e.13	.48
	05/02/01 ¹	0830	<.08	e.28	--	.12	<.20	.25
	05/24/01	1200	<.08	.37	--	.38	e.10	.22
	08/15/01	1600	<.08	.57	<1.0	<.10	e.12	<.06

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Selenium, dis- solved (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, dis- solved (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)	Well number (fig. 5)
<.70	<1.0	17	<.90	<1.0	<1.0	--	14	M10
<.70	<1.0	17	<.90	<1.0	<1.0	--	15	
<.33	<1.0	17	<.04	<.02	e.13	--	19	
<.33	<1.0	16	<.04	e.01	e.11	--	20	
<.33	<1.0	19	<.04	<.02	<.21	--	40	
<.30	<1.0	20	<.04	<.02	e.12	--	25	
<.30	<1.0	20	<.04	<.02	e.10	23	16	
<.70	<1.0	17	<.90	<1.0	<1.0	27	23	M11
<.70	<1.0	17	<.90	<1.0	<1.0	27	23	
<2.4	<.20	<.10	<.10	<.20	--	--	<.50	
<.70	<1.0	17	<.90	<1.0	<1.0	--	23	
<.70	<1.0	17	<.90	<1.0	<1.0	--	23	
<.33	<1.0	16	.04	e.01	e.12	--	28	
<.33	<1.0	18	<.04	e.01	<.21	--	40	
<.33	<1.0	16	<.04	<.02	e.11	--	45	
<.33	<1.0	21	<.04	<.02	.22	51	43	
<.33	<1.0	20	<.04	<.02	.28	--	43	
<.30	<1.0	20	<.04	<.02	e.16	--	48	
<.30	<1.0	20	<.04	<.02	e.16	--	48	
<.30	<.20	<.10	<.10	<.20	--	--	<.50	
<.30	<1.0	21	<.04	<.02	.24	42	27	
<.33	<1.0	18	<.04	e.01	e.21	--	4.0	M12
<.33	<1.0	18	<.04	e.01	e.11	--	11	
<.33	<1.0	16	<.04	<.02	e.12	--	18	
<.33	<1.0	19	<.04	<.02	e.18	18	18	
<.33	<1.0	19	<.04	<.02	.41	--	19	
<.30	<1.0	20	<.04	<.02	e.16	--	18	
<.30	<1.0	20	<.04	<.02	e.17	12	8.4	
<.70	<1.0	17	<.90	<1.0	<1.0	14	12	M13
<.70	<1.0	17	<.90	<1.0	<1.0	--	11	
<.33	<1.0	16	<.04	e.01	e.14	--	13	
<.33	<1.0	18	<.04	e.02	e.10	--	12	
<.33	<1.0	17	<.04	e.01	<.21	--	10	
<.33	<1.0	20	.11	<.02	<.21	23	23	
<.33	<1.0	19	<.04	<.02	.27	--	23	
<.30	<1.0	21	<.04	e.01	e.11	--	25	
<.30	<1.0	21	<.04	<.02	e.19	15	14	M14
<.33	<1.0	15	<.04	.03	e.18	--	<1.0	
<.33	<1.0	17	<.04	.03	<.21	--	<1.0	
<.33	<1.0	16	<.04	.03	e.10	--	<1.0	
<.33	<1.0	19	<.04	e.01	<.21	1.1	<1.0	
<.33	<1.0	18	<.04	e.01	<.21	--	<1.0	
<.30	<1.0	20	e.03	.03	e.15	--	<1.0	
<.30	<1.0	20	<.04	<.02	.26	1.5	<1.0	

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Site identification number	Date	Time	Aluminum, dissolved (µg/L)	Antimony, dissolved (µg/L)	Arsenic, total recoverable (µg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Beryllium, dissolved (µg/L)
M15	474115117060301	08/10/00	1000	<1.0	<1.0	--	4.6	23	<1.0
		10/03/00	1700	3.9	.19	--	4.5	24	<.06
		12/19/00	1300	5.3	.19	--	4.3	26	<.06
		03/28/01	0900	<1.0	.18	--	3.6	24	<.06
		05/02/01	1000	<1.0	.19	4.8	4.0	24	<.06
		05/02/01 ¹	1030	<1.0	.18	--	4.0	23	<.06
		05/24/01	1100	<1.0	.20	--	4.2	26	<.06
		08/13/01	1100	<1.0	.22	4.6	4.2	20	<.06
M16	474140117060401	08/10/00	0800	8.8	<1.0	3.0	3.1	27	<1.0
		10/04/00	1400	4.3	.22	--	2.9	27	<.06
		12/19/00	1200	5.4	.24	--	3.1	28	<.06
		05/01/01	1600	6.5	.22	--	3.4	27	<.06
		05/23/01	1700	5.1	.07	--	3.0	28	<.06
		08/15/01	1400	14	.30	--	2.9	24	<.06
M17	474033117062501	08/08/00	1300	3.1	<1.0	--	<.90	12	<1.0
		10/03/00	1500	2.7	.06	--	.32	12	<.06
		12/14/00	1600	2.6	<.05	--	.28	12	<.06
		03/27/01	0800	6.4	.06	--	.29	12	<.06
		05/01/01	1500	2.8	.05	--	.32	12	<.06
		05/22/01	1200	2.7	<.05	--	.30	13	<.06
		08/15/01	1100	2.1	.07	--	.28	11	<.06
M18	474050117064201	08/08/00	1500	<1.0	<1.0	--	<.90	8.8	<1.0
		10/03/00	1200	5.8	.61	--	.31	10	<.06
		12/19/00	1600	<1.0	.52	--	.20	9.5	<.06
		03/27/01	0900	<1.0	.41	--	e.17	9.9	<.06
		05/01/01	1200	<1.0	.50	--	.24	9.8	<.06
		05/22/01	1500	4.5	.40	--	e.17	10	<.06
		08/15/01	1200	1.0	.43	--	.22	11	<.06
M19	474053117064701	08/08/00	1600	4.4	<1.0	--	<.90	15	<1.0
		10/03/00	1400	4.8	.71	--	.52	15	<.06
		12/19/00	1500	<1.0	.59	--	.25	15	<.06
		03/27/01	1000	4.6	.42	--	.23	14	<.06
		05/01/01	1300	6.7	.55	--	.38	15	<.06
		05/22/01	1300	5.3	.47	--	.26	15	<.06
		08/15/01	1300	4.8	.70	<2.0	.35	18	<.06
M20	474016117085601	10/05/00	0800	3.7	.17	--	.94	13	<.06
		12/20/00	1000	5.1	.24	--	1.0	13	<.06
		03/29/01	0800	<1.0	.23	--	1.0	15	<.06
		05/02/01	1600	5.4	.18	--	.98	15	<.06
		05/21/01	1300	1.0	.12	--	1.0	16	<.06
		08/15/01	0600	4.9	.21	--	1.1	13	<.06

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Boron, dis- solved (µg/L)	Cadmium, total recov- erable (µg/L)	Cad- mium, dis- solved (µg/L)	Chro- mium, dis- solved (µg/L)	Cobalt, dis- solved (µg/L)	Copper, dis- solved (µg/L)	Iron, total recov- erable (µg/L)	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Well number (fig. 5)
9.2	--	.15	1.2	.13	.63	--	<10	--	
12	--	<.04	e.50	.07	.28	--	<10	--	
<7.0	--	<.04	<.80	.06	.25	--	<10	--	
<7.0	<.04	<.04	e.54	.04	e.20	81	e6.8	<1.0	
<7.0	--	<.04	e.52	.04	.29	--	--	--	
e5.5	--	<.04	e.74	.08	.28	--	<10	--	
<7.0	.04	e.02	<.80	.09	e.17	40	<10	<1.0	
e11	<1.0	<1.0	e.65	<1.0	1.3	<21	<10	<1.0	M16
10	--	<.04	e.60	.12	.34	--	<10	--	
14	--	<.04	e.44	.07	.31	--	<10	--	
14	--	<.04	1.5	.08	.32	--	<10	--	
16	--	<.04	e.72	.06	.36	--	<10	--	
e6.1	--	<.04	<.80	.04	.47	--	<10	--	
<12	--	<1.0	<.80	<1.0	<1.0	--	<10	--	M17
<7.0	--	<.04	.85	.04	.30	--	<10	--	
<7.0	--	<.04	<.80	.03	1.0	--	<10	--	
12	--	<.04	e.63	.03	.24	--	<10	--	
<7.0	--	<.04	e.77	.04	e.16	--	<10	--	
<7.0	--	<.04	1.3	.02	e.15	--	<10	--	
<7.0	--	<.04	<.80	e.01	e.18	--	<10	--	
<12	--	<1.0	<.80	<1.0	<1.0	--	<10	--	M18
16	--	<.04	1.2	.08	.41	--	e5.4	--	
<7.0	--	<.04	<.80	.02	.39	--	<10	--	
<7.0	--	<.04	e.53	.02	.31	--	<10	--	
<7.0	--	<.04	<.80	.03	.36	--	<10	--	
12	--	<.04	.90	.02	.40	--	<10	--	
e4.3	--	<.04	2.3	e.01	.23	--	e7.7	--	
14	--	<1.0	<.80	<1.0	<1.0	--	<10	--	M19
14	--	.09	e.63	.04	.64	--	<10	--	
<7.0	--	.07	<.80	.02	4.1	--	<10	--	
14	--	.16	.88	.02	.82	--	<10	--	
11	--	.06	e.55	.02	.91	--	<10	--	
12	--	.26	1.2	.02	.76	--	<10	--	
9.9	.17	.16	9.1	.12	.89	60	34	<1.0	
8.1	--	<.04	e.45	.04	.61	--	<10	--	M20
14	--	<.04	<.80	.04	1.1	--	<10	--	
<7.0	--	<.04	e.44	.03	.62	--	<10	--	
15	--	<.04	.99	.05	.39	--	e8.1	--	
e6.2	--	<.04	<.80	.03	.30	--	<10	--	
11	--	<.04	1.0	.03	.29	--	e6.4	--	

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Date	Time	Lead, dis- solved (µg/L)	Lithium, dis- solved (µg/L)	Manganese, total recov- erable (µg/L)	Manganese, dis- solved (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, dis- solved (µg/L)
M15	08/10/00	1000	<1.0	3.5	--	<1.0	1.6	<1.0
	10/03/00	1700	e.05	4.2	--	.11	1.5	.94
	12/19/00	1300	<.08	3.9	--	.11	1.4	.22
	03/28/01	0900	<.08	3.8	--	e.08	1.4	.27
	05/02/01	1000	<.08	3.7	2.1	e.08	1.4	e.03
	05/02/01 ¹	1030	<.08	--	--	e.10	1.4	e.03
	05/24/01	1100	<.08	3.6	--	.22	1.5	.24
	08/13/01	1100	<.08	3.2	1.2	<.10	1.4	<.06
M16	08/10/00	0800	<1.0	3.8	<1.0	<1.0	1.9	<1.0
	10/04/00	1400	<.08	4.6	--	e.06	1.8	.89
	12/19/00	1200	<.08	4.2	--	.13	1.8	.30
	05/01/01	1600	.10	4.1	--	.19	1.9	.19
	05/23/01	1700	<.08	4.3	--	.13	1.9	.50
	08/15/01	1400	e.08	3.7	--	<.10	1.8	<.06
M17	08/08/00	1300	<1.0	.51	--	1.2	<1.0	<1.0
	10/03/00	1500	<.08	.54	--	.44	e.17	.49
	12/14/00	1600	<.08	.70	--	.32	e.17	.57
	03/27/01	0800	<.08	.55	--	.17	e.16	.58
	05/01/01	1500	<.08	.52	--	.21	e.14	.26
	05/22/01	1200	<.08	.54	--	.16	e.14	.46
	08/15/01	1100	1.0	.53	--	<.10	e.15	<.06
M18	08/08/00	1500	<1.0	e.20	--	<1.0	<1.0	<1.0
	10/03/00	1200	<.08	.46	--	.71	.21	1.4
	12/19/00	1600	<.08	e.28	--	.13	<.20	.45
	03/27/01	0900	<.08	.36	--	e.08	<.20	.23
	05/01/01	1200	<.08	e.30	--	.12	e.11	.27
	05/22/01	1500	<.08	e.30	--	.19	e.11	.58
	08/15/01	1200	<.08	.31	--	<.10	e.12	<.06
M19	08/08/00	1600	<1.0	.44	--	1.7	<1.0	<1.0
	10/03/00	1400	<.08	.51	--	6.0	e.14	.51
	12/19/00	1500	.34	.36	--	.15	<.20	.39
	03/27/01	1000	<.08	.36	--	e.09	<.20	.65
	05/01/01	1300	e.04	.36	--	3.4	e.11	.47
	05/22/01	1300	<.08	.38	--	.16	<.20	.60
	08/15/01	1300	<.08	.48	3.8	.81	.60	9.8
M20	10/05/00	0800	<.08	.97	--	e.06	.30	.40
	12/20/00	1000	.23	1.0	--	e.08	.33	.34
	03/29/01	0800	<.08	.98	--	e.07	.23	.29
	05/02/01	1600	<.08	1.1	--	.13	.36	.61
	05/21/01	1300	<.08	1.2	--	.11	.31	.30
	08/15/01	0600	<.08	.76	--	<.10	.36	.23

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Sele- nium, dis- solved (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, dis- solved (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)	Well number (fig. 5)
e.36	<1.0	106	<.90	3.1	<1.0	--	<1.0	M15
e.33	<1.0	111	<.04	3.0	.43	--	<1.0	
e.20	<1.0	108	<.04	3.5	.24	--	<1.0	
<.33	<1.0	104	<.04	3.1	.44	--	<1.0	
<.33	<1.0	104	<.04	3.3	e.18	<1.0	<1.0	
<.33	<1.0	102	<.04	3.3	.27	--	<1.0	
<.30	<1.0	111	e.04	3.6	.59	--	<1.0	
<.30	<1.0	104	<.04	3.0	e.20	1.1	<1.0	
e.40	<1.0	118	<.90	3.6	<1.0	<1.0	<1.0	M16
e.29	<1.0	122	<.04	3.9	e.12	--	<1.0	
e.23	<1.0	119	<.04	3.8	.37	--	<1.0	
e.21	<1.0	117	<.04	3.6	.93	--	<1.0	
e.19	<1.0	117	<.04	3.8	.65	--	<1.0	
e.25	<1.0	112	<.04	3.3	e.14	--	2.3	
<.70	<1.0	26	<.90	<1.0	<1.0	--	<1.0	M17
<.33	<1.0	25	<.04	.10	<.21	--	<1.0	
<.33	<1.0	26	e.04	.12	e.16	--	1.2	
<.33	<1.0	24	<.04	.11	e.16	--	<1.0	
<.33	<1.0	30	<.04	.11	.35	--	<1.0	
<.30	<1.0	27	<.04	.10	e.12	--	<1.0	
<.30	<1.0	26	<.04	.03	e.11	--	<1.0	
<.70	<1.0	17	<.90	<1.0	<1.0	--	<1.0	M18
<.33	<1.0	18	<.04	.03	e.15	--	<1.0	
<.33	<1.0	18	<.04	.02	e.16	--	<1.0	
<.33	<1.0	18	<.04	.02	e.18	--	<1.0	
<.33	<1.0	23	<.04	.03	.28	--	<1.0	
<.30	<1.0	21	<.04	.02	e.14	--	<1.0	
<.30	<1.0	22	<.04	<.02	e.14	--	<1.0	
<.70	<1.0	20	<.90	<1.0	<1.0	--	8.9	M19
<.33	<1.0	19	<.04	e.02	e.18	--	9.9	
<.33	<1.0	19	<.04	e.01	e.17	--	9.3	
<.33	<1.0	17	<.04	e.01	e.12	--	19	
<.33	<1.0	29	<.04	e.02	.31	--	12	
<.30	<1.0	20	<.04	e.01	e.13	--	26	
<.30	<1.0	23	<.04	<.02	<.20	20	20	
<.33	<1.0	36	<.04	.38	<.21	--	<1.0	M20
<.33	<1.0	38	<.04	.45	.33	--	<1.0	
<.33	<1.0	45	<.04	.62	.42	--	<1.0	
<.33	<1.0	46	<.04	.59	<.21	--	<1.0	
<.30	<1.0	44	<.04	.63	.38	--	1.1	
<.30	<1.0	42	<.04	.40	<.20	--	<1.0	

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Site identification number	Date	Time	Aluminum, dissolved (µg/L)	Antimony, dissolved (µg/L)	Arsenic, total recoverable (µg/L)	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Beryllium, dissolved (µg/L)
M21	474037117091301	10/05/00	1200	3.7	.94	--	.27	18	<.06
		12/20/00	1400	<1.0	.84	--	.29	13	<.06
		03/29/01	0900	<1.0	.34	--	.22	13	<.06
		05/03/01	1200	<1.0	.62	--	.12	15	<.06
		05/21/01	1600	4.5	.49	--	e.18	17	<.06
		08/15/01	0700	3.2	.83	<2.0	.22	18	<.06
M22	474038117091201	10/05/00	1300	<1.0	.74	--	.33	19	<.06
		10/05/00 ^R	1301	4.6	.75	--	.33	18	<.06
		10/05/00 ^{Fb}	1305	<.30	<.20	--	--	<.20	<.20
		12/20/00	1500	5.1	.71	--	.25	17	<.06
		12/20/00 ^R	1501	5.2	.68	--	.26	17	<.06
		12/20/00 ^{Fb}	1511	<.30	<.20	--	--	<.20	<.20
		03/29/01	1000	<1.0	.24	--	.22	16	<.06
		05/03/01	1300	<1.0	.45	--	.28	13	<.06
		05/21/01	1700	4.9	.48	--	.21	18	<.06
		08/15/01	0800	4.8	.70	<2.0	.20	18	<.06
M23	474046117091501	10/05/00	1100	<1.0	.65	--	.35	17	<.06
		12/20/00	1300	4.9	.50	--	.22	16	<.06
		03/29/01	1100	<1.0	.26	--	.24	19	<.06
		05/03/01	1100	<1.0	.59	--	.21	18	<.06
		05/21/01	1500	5.1	.58	--	.33	19	<.06
		08/15/01	1000	<1.0	.85	<2.0	.49	22	<.06
M24	474109117091701	10/05/00	1000	3.8	.19	--	1.7	32	<.06
		12/20/00	1200	<1.0	.18	--	1.8	32	<.06
		03/29/01	1200	<1.0	<.05	--	2.0	30	<.06
		03/29/01 ^R	1201	<1.0	<.05	--	1.9	30	<.06
		03/29/01 ^{Fb}	1211	<.30	<.20	--	<.20	<.20	<.20
		05/03/01	1000	4.4	.21	--	1.8	29	<.06
		05/21/01	1400	<5.1	.13	--	2.0	32	<.06
		08/15/01	0900	2.7	.20	--	1.8	26	<.06
M25	474026117115301	10/04/00	1700	4.3	.30	--	2.4	25	e.04
		12/20/00	0900	5.5	.28	--	2.0	25	<.06
		03/29/01	1400	1.0	<.05	--	2.6	24	<.06
		05/02/01	1700	5.5	.44	--	3.2	5.7	<.06
		05/21/01	1900	1.3	.27	--	2.6	21	<.06
		08/14/01	1500	1.2	.31	3.0	2.7	18	<.06

¹Sample filtered through 0.001-tangential-flow filtration unit.

²Sample filtered through 0.1-µm capsule filter.

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Boron, dis- solved (µg/L)	Cadmium, total recov- erable (µg/L)	Cad- mium, dis- solved (µg/L)	Chro- mium, dis- solved (µg/L)	Cobalt, dis- solved (µg/L)	Copper, dis- solved (µg/L)	Iron, total recov- erable (µg/L)	Iron, dis- solved (µg/L)	Lead, total recov- erable (µg/L)	Well number (fig. 5)
8.9	--	.06	<.80	.03	.90	--	<10	--	M21
<7.0	--	<.04	<.80	.02	2.3	--	<10	--	
<7.0	--	<.04	<.80	e.01	.82	--	<10	--	
<7.0	--	.05	e.47	.02	.58	--	e6.8	--	
15	--	.04	e.63	.02	.55	--	<10	--	
9.9	.06	.05	1.8	.04	.54	e9.1	10	<1.0	M22
<7.0	--	.21	e.48	.02	.50	--	<10	--	
9.8	--	.22	e.78	.04	.56	--	<10	--	
<2.0	--	<.30	<.20	<.20	<.20	--	<3.0	--	
14	--	.13	<.80	.03	.56	--	<10	--	
15	--	.13	<.80	.02	.44	--	<10	--	
<2.0	--	<.30	<.20	<.20	<.20	--	<3.0	--	
<7.0	--	.27	<.80	e.01	.92	--	<10	--	
<7.0	--	.08	e.62	.02	.64	--	e8.7	--	
12	--	.25	1.3	.02	.58	--	<10	--	
15	.15	.12	<.80	.03	.41	27	e5.2	<1.0	M23
<7.0	--	.41	<.80	.02	.64	--	<10	--	
13	--	.41	.88	.04	1.3	--	<10	--	
<7.0	--	.46	<.80	e.01	.79	--	<10	--	
<7.0	--	.42	<.80	.02	.62	--	e5.6	--	
15	--	.39	<.80	.02	.76	--	<10	--	
e4.7	.50	.52	<.80	e.01	.72	16	<10	<1.0	M24
9.2	--	<.04	e.58	.11	.30	--	<10	--	
e4.3	--	<.04	<.80	.08	.38	--	<10	--	
<7.0	--	<.04	<.80	.05	.45	--	<10	--	
<7.0	--	<.04	e.55	.05	.72	--	<10	--	
<2.0	--	<.30	<.20	<.20	<.20	--	<3.0	--	
12	--	<.04	1.3	.06	.31	--	e7.5	--	
<13	--	<.04	1.1	.06	.26	--	<10	--	M25
7.2	--	<.04	6.2	.10	e.20	--	28	--	
11	--	<.04	<.80	.11	.32	--	<10	--	
16	--	<.04	<.80	.06	.28	--	<10	--	
<7.0	--	<.04	<.80	.04	1.8	--	<10	--	
12	--	<.04	<.80	.02	.67	--	e6.2	--	
e5.3	--	<.04	1.1	.04	.24	--	<10	--	
<7.0	<.04	<.04	.94	.02	e.14	<14	<10	<1.0	

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Well number (fig. 5)	Date	Time	Lead, dis- solved (µg/L)	Lithium, dis- solved (µg/L)	Manganese, total recov- erable (µg/L)	Manganese, dis- solved (µg/L)	Molyb- denum, dis- solved (µg/L)	Nickel, dis- solved (µg/L)
M21	10/05/00	1200	<.08	.45	--	e.08	e.13	.38
	12/20/00	1400	.14	.34	--	.13	e.10	.35
	03/29/01	0900	<.08	e.26	--	<.10	<.20	.10
	05/03/01	1200	<.08	.52	--	e.10	e.13	.42
	05/21/01	1600	<.08	.35	--	e.08	<.20	.50
	08/15/01	0700	<.08	e.29	<1.0	<.10	.25	1.1
M22	10/05/00	1300	<.08	.52	--	e.05	<.20	.45
	10/05/00 ^R	1301	<.08	.54	--	<1.0	e.18	1.1
	10/05/00 ^{Fb}	1305	<.30	--	--	<.10	<.20	<.50
	12/20/00	1500	<.08	.59	--	e.06	e.13	.43
	12/20/00 ^R	1501	<.08	.38	--	e.07	<.20	.38
	12/20/00 ^{Fb}	1511	<.30	--	--	<.10	<.20	<.50
	03/29/01	1000	<.08	e.25	--	<.10	<.20	.18
	05/03/01	1300	<.08	.59	--	.17	e.11	.48
	05/21/01	1700	<.08	.40	--	.11	<.20	.64
	08/15/01	0800	<.08	.34	1.2	.10	e.14	.36
M23	10/05/00	1100	<.08	.54	--	<.10	<.20	.29
	12/20/00	1300	.09	.32	--	.16	<.20	.82
	03/29/01	1100	e.04	.32	--	<.10	<.20	.19
	05/03/01	1100	e.05	.48	--	<.10	<.20	.22
	05/21/01	1500	<.08	.52	--	e.07	<.20	.34
	08/15/01	1000	<.08	.70	<1.0	<.10	e.10	.10
M24	10/05/00	1000	<.08	4.2	--	<.10	1.6	.55
	12/20/00	1200	e.04	4.2	--	<.10	1.5	<.06
	03/29/01	1200	e.07	4.1	--	<.10	1.6	<.06
	03/29/01 ^R	1201	e.04	4.0	--	<.10	1.6	<.06
	03/29/01 ^{Fb}	1211	<.30	--	--	<.10	<.20	<.50
	05/03/01	1000	<.08	4.1	--	.11	1.8	.32
	05/21/01	1400	<.08	3.9	--	e.08	<1.7	.14
	08/15/01	0900	<.08	3.7	--	.31	2.0	2.7
M25	10/04/00	1700	<.08	3.7	--	<.10	1.5	.80
	12/20/00	0900	<.08	3.1	--	<.10	1.4	.10
	03/29/01	1400	e.07	3.4	--	<.10	1.3	<.06
	05/02/01	1700	e.05	1.5	--	e.06	.98	.23
	05/21/01	1900	<.08	3.2	--	<.10	1.5	.09
	08/14/01	1500	<.08	2.7	<1.0	<.10	1.4	<.06

Table 25. Trace-element concentration data for ground-water samples collected for the surface-water/ground-water interaction study of the Spokane River and surrounding basin-fill aquifers, Idaho and Washington, 2000-01 (Continued)

Sele- nium, dis- solved (µg/L)	Silver, dis- solved (µg/L)	Stron- tium, dis- solved (µg/L)	Thal- lium, dis- solved (µg/L)	Uranium, dis- solved (µg/L)	Vana- dium, dis- solved (µg/L)	Zinc, total recov- erable (µg/L)	Zinc, dis- solved (µg/L)	Well number (fig. 5)
<.33	<1.0	19	<.04	e.02	.22	--	10	M21
<.33	<1.0	19	<.04	e.02	e.17	--	1.6	
<.33	<1.0	20	<.04	<.02	.24	--	3.7	
<.33	<1.0	19	.18	<.02	<.21	--	11	
<.30	<1.0	20	<.04	e.01	e.13	--	12	
<.30	<1.0	22	<.04	<.02	e.12	12	9.8	
<.33	<1.0	18	<.04	e.01	e.14	--	27	M22
<.33	<1.0	17	<.04	e.01	e.18	--	23	
--	<.20	<.10	<.10	<.20	--	--	<.50	
<.33	<1.0	21	<.04	e.02	e.17	--	19	
<.33	<1.0	19	<.04	e.01	e.16	--	18	
--	<.20	<.10	<.10	<.20	--	--	<.50	
<.33	<1.0	19	<.04	<.02	.22	--	43	
<.33	<1.0	19	<.04	<.02	<.21	--	21	
<.30	<1.0	20	<.04	<.02	e.14	--	42	
<.30	<1.0	21	<.04	<.02	<.20	18	17	
<.33	<1.0	17	<.04	e.01	e.18	--	42	M23
<.33	<1.0	20	<.04	e.01	e.11	--	48	
<.33	<1.0	22	<.04	<.02	e.18	--	60	
<.33	<1.0	22	<.04	<.02	<.21	--	53	
<.30	<1.0	20	<.04	e.01	e.19	--	49	
<.30	<1.0	22	<.04	<.02	e.16	44	44	
.40	<1.0	137	<.04	3.3	e.32	--	<1.0	M24
e.22	<1.0	130	<.04	3.8	<.21	--	<1.0	
e.31	<1.0	129	<.04	3.7	.63	--	<1.0	
e.25	<1.0	127	<.04	3.7	.72	--	1.1	
<.30	<.20	<.10	<.10	<.20	--	--	<.50	
<.33	<1.0	122	<.04	3.6	e.18	--	<1.0	
e.26	<1.0	127	<.04	<3.7	e.87	--	<1.0	
<.30	<1.0	123	<.04	3.2	<.20	--	<1.0	
e.25	<1.0	109	.10	3.2	e.16	--	<1.0	M25
<.33	<1.0	102	<.04	3.4	.31	--	<1.0	
e.26	<1.0	109	<.04	3.6	.91	--	1.2	
<.33	<1.0	25	<.04	.28	e.15	--	1.8	
<.30	<1.0	86	e.02	2.6	.53	--	<1.0	
<.30	<1.0	85	<.04	2.4	e1.7	<1.0	<1.0	

Table 26. Stable-isotope data for ground-water samples collected during the surface-water/ground-water interaction study of the Spokane River and the surrounding basin-fill aquifers, Idaho and Washington, 1999-2001

[Location number described in text. Abbreviation: per mil, parts per thousand. Symbol: --, no well number assigned]

Well number (fig. 5)	Location number	Date	Stable-isotope ratio (per mil)	
			Hydrogen-2/ Hydrogen-1	Oxygen-18/ Oxygen-16
Sites located in Washington				
31	24N43E05CBBD01	05/26/99	-109.54	-14.21
--	25N44E01DCDD01	08/11/00	-111.82	-14.81
M25	25N44E11DDAC01	08/10/00	-113.22	-14.98
		12/20/00	-114.02	-14.94
		05/02/01	-111.12	-14.75
		08/14/01	-112.12	-14.90
--	25N44E11DDAD01	08/10/00	-112.80	-15.03
--	25N44E11DDDD01	08/10/00	-112.87	-14.91
--	25N44E12DABB01	08/10/00	-113.94	-15.06
M4	25N45E01ABDD01	08/07/00	-111.59	-14.78
		12/14/00	-111.06	-14.81
		04/30/01	-110.37	-14.65
		08/13/01	-108.25	-14.31
M5	25N45E01ABDD02	08/07/00	-111.74	-14.82
M6	25N45E01ABDD03	08/07/00	-111.71	-14.83
M7	25N45E01ACAD01	08/08/00	-113.59	-15.01
		12/14/00	-111.09	-15.01
		04/30/01	-111.02	-14.95
		08/14/01	-111.80	-14.88
--	25N45E01ADBB01	08/09/00	-112.54	-15.05
--	25N45E01BBAA01	08/07/00	-110.76	-14.50
M10	25N45E01CBBC01	08/09/00	-113.51	-14.75
		12/14/00	-111.93	-14.80
		05/02/01	-110.28	-14.73
		08/13/01	-108.42	-14.32
M9	25N45E01CBBD01	08/09/00	-110.39	-14.75
M8	25N45E01CBBD02	08/09/00	-111.84	-14.71
		12/14/00	-110.79	-14.80
		05/02/01	-111.40	-14.80
		08/13/01	-109.24	-14.26
--	25N45E02ACCD01	08/09/00	-110.36	-14.68
M16	25N45E03BDDA01	08/10/00	-114.15	-14.99
		12/19/00	-114.56	-14.99
--	25N45E03BDDA02	08/09/00	-113.86	-15.06
--	25N45E03CBDD01	08/07/00	-112.65	-14.76
M15	25N45E03CDDA01	08/10/00	-110.92	-14.72
		12/19/00	-110.66	-14.76
		05/02/01	-112.24	-14.71
		08/13/01	-111.94	-14.68

Table 26. Stable-isotope data for ground-water samples collected during the surface-water/ground-water interaction study of the Spokane River and the surrounding basin-fill aquifers, Idaho and Washington, 1999-2001 (Continued)

Well number (fig. 5)	Location number	Date	Stable-isotope ratio (per mil)	
			Hydrogen-2/ Hydrogen-1	Oxygen-18/ Oxygen-16
Sites located in Washington (Continued)				
M14	25N45E03CDDD01	12/19/00	-111.53	-14.75
		05/02/01	-110.97	-14.73
		08/15/01	-108.64	-14.30
--	25N45E04BAAC02	08/09/00	-110.39	-14.42
--	25N45E05DDBA01	08/09/00	-115.14	-15.08
--	25N45E06BBCA01	08/08/00	-113.06	-14.75
--	25N45E07AAAA02	08/09/00	-112.34	-14.94
M24	25N45E07AAAA04	04/01/99	-113.94	-14.91
		08/01/99	-114.44	-14.96
		12/01/99	-114.02	-14.94
		01/31/00	-113.17	-14.95
		03/09/00	-113.95	-14.92
		08/10/00	-113.92	-14.92
		12/20/00	-113.28	-14.91
		05/03/01	-113.46	-14.93
		08/18/01	-113.74	-14.94
M23	25N45E07ADDD01	04/01/99	-112.84	-14.97
		08/01/99	-113.03	-15.16
		12/01/99	-113.59	-15.06
		01/31/00	-114.34	-15.11
		03/09/00	-112.29	-15.02
		04/25/00	-113.71	-15.12
		08/10/00	-111.66	-14.72
30	25N45E08BDAA01	08/09/00	-112.02	-14.78
M22	25N45E08CBBC01	04/01/99	-111.76	-14.93
		08/01/99	-112.50	-15.21
		12/01/99	-113.43	-15.07
		01/31/00	-113.27	-14.99
		03/09/00	-112.04	-14.96
		04/25/00	-112.93	-14.71
		08/10/00	-113.02	-14.88
		12/20/00	-111.55	-14.77
		05/03/01	-111.36	-14.74
M21	25N45E08CBBC02	08/15/01	-109.98	-14.58
		04/01/99	-110.30	-14.71
		08/01/99	-113.89	-15.19
		12/01/99	-111.59	-15.10
		01/31/00	-113.85	-15.02
		03/09/00	-113.37	-15.00
		04/25/00	-113.86	-15.06
		08/10/00	-112.30	-14.90
M19	25N45E09ADAB01	08/08/00	-111.26	-14.95
		12/19/00	-111.11	-14.81
		05/01/01	-111.38	-14.84
		08/15/01	-109.22	-14.44
M18	25N45E09ADAD01	08/08/00	-112.82	-14.99
		12/19/00	-110.52	-14.85
		05/01/01	-111.63	-14.78
		08/15/01	-108.94	-14.69

Table 26. Stable-isotope data for ground-water samples collected during the surface-water/ground-water interaction study of the Spokane River and the surrounding basin-fill aquifers, Idaho and Washington, 1999-2001 (Continued)

Well number (fig. 5)	Location number	Date	Stable-isotope ratio (per mil)	
			Hydrogen-2/ Hydrogen-1	Oxygen-18/ Oxygen-16
Sites located in Washington (Continued)				
M11	25N45E10BAAA01	08/09/00	-112.99	-14.74
		12/19/00	-110.27	-14.78
		05/01/01	-110.34	-14.70
		08/16/01	-109.52	-14.27
M13	25N45E10BAAA02	08/09/00	-112.33	-14.72
M12	25N45E10BAAA03	12/19/00	-112.30	-14.78
		05/01/01	-110.42	-14.74
		08/16/01	-109.22	-14.34
--	25N45E10BDAD01	08/08/00	-112.83	-15.10
M17	25N45E10CBDA01	08/08/00	-112.64	-15.02
		12/14/00	-112.66	-14.95
		05/01/01	-112.62	-14.88
		08/15/01	-111.28	-14.83
--	25N45E17BBAA01	08/09/00	-110.03	-14.86
M20	25N45E17BBAA05	08/16/99	-109.81	-14.87
		12/14/99	-111.69	-14.98
		01/31/00	-111.96	-14.89
		03/08/00	-111.12	-14.83
		04/25/00	-110.66	-14.85
		08/10/00	-110.52	-14.92
		12/20/00	-110.60	-14.79
		05/02/01	-111.03	-14.79
		08/15/01	-111.18	-14.84
--	25N45E17CDDD01	08/09/00	-105.80	-13.70
--	25N45E18DDCB01	08/09/00	-108.07	-14.42
--	25N46E06BBCB01	08/03/00	-110.51	-14.89
--	26N45E25CCAC01	08/11/00	-109.83	-14.62
--	26N45E25DAAC01	08/11/00	-114.02	-15.02
--	26N45E32DCBC01	08/11/00	-116.38	-15.26
--	26N45E34CADB02	08/09/00	-108.32	-14.24
--	26N45E35BDBD03	08/09/00	-109.06	-14.72
M3	26N46E31CBBC01	04/26/99	-110.54	-14.56
		08/17/99	-106.07	-14.53
		12/13/99	-108.67	-14.54
		03/07/00	-109.58	-14.56
		12/20/00	-109.23	-14.60
		05/01/01	-111.29	-14.57
		08/14/01	-110.05	-14.50
--	26N46E31DBAD03	08/09/00	-109.34	-14.61

Table 26. Stable-isotope data for ground-water samples collected during the surface-water/ground-water interaction study of the Spokane River and the surrounding basin-fill aquifers, Idaho and Washington, 1999-2001 (Continued)

Well number (fig. 5)	Location number	Date	Stable-isotope ratio (per mil)	
			Hydrogen-2/ Hydrogen-1	Oxygen-18/ Oxygen-16
<u>Sites located in Idaho</u>				
--	50N05W04CACC02	08/17/00	-112.42	-14.94
--	50N05W06DCDC01	08/17/00	-113.00	-15.04
--	50N05W07BCCC01	08/03/00	-112.48	-15.16
M1	50N05W07DABC01	08/08/00	-115.04	-15.11
		12/15/00	-114.79	-15.10
		05/03/01	-111.28	-14.74
		08/14/01	-110.09	-14.24
M2	50N05W07DABC02	12/15/00	-111.62	-14.81
		04/30/01	-110.83	-14.71
		08/14/01	-109.07	-14.33
--	50N05W07DBBA01	08/18/00	-110.20	-14.74
--	50N06W12BDAC01	10/01/99	-108.20	-14.34
--	50N06W12BDAC01	12/01/99	-109.96	-14.64
--	50N06W12BDAC01	08/03/00	-111.31	-15.00
--	50N06W12CBDB01	08/18/00	-110.07	-14.91
--	50N06W12CCAD02	08/03/00	-109.08	-14.71
--	50N06W12DBAD01	08/18/00	-110.24	-14.69
29	50N06W12DBCD01	12/01/99	-112.45	-15.00
		08/18/00	-111.24	-14.77
--	50N06W12DDAB01	08/03/00	-112.65	-15.11
--	50N06W12DDCD01	08/18/00	-107.06	-13.51
--	50N06W12DDDB02	08/18/00	-112.65	-14.79
--	50N06W13CABA01	08/18/00	-113.43	-15.03
--	51N05W31BCCB01	08/18/00	-112.98	-14.98
--	51N06W36DAAA01	08/18/00	-114.10	-15.08

Table 27. Trace-element and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99¹

[Samples were wet sieved in the field through a 63-micrometer nylon-mesh sieve. Abbreviation: µg/g, micrograms per gram, dry weight; R, replicate. Symbol: <, less than reporting level]

Site number (fig. 1)	Site name	Date	Time	Aluminum (percent)	Antimony (µg/g)	Arsenic (µg/g)	Barium (µg/g)
1	Clark Fork near Galen, Mont.	08/18/98	1600	6.8	9.9	180	803
2	Rock Creek near Clinton, Mont.	08/11/98	1300	6.1	2.2	11	675
3	Clark Fork at Turah Bridge, near Bonner, Mont.	08/11/98	1030	6.7	6.1	66	856
3 ^R	Clark Fork at Turah Bridge, near Bonner, Mont.	08/11/98	1045	7.2	6.3	63	880
3 ^R	Clark Fork at Turah Bridge, near Bonner, Mont.	08/11/98	1130	7.3	6.3	75	849
4	Blackfoot River above Nevada Creek, near Helmville, Mont.	08/17/98	1510	6.5	1.7	12	794
5	Bitterroot River near Missoula, Mont.	08/10/98	1715	6.9	.57	2.6	819
9	Clark Fork at St. Regis, Mont.	09/08/98	1330	6.1	2.2	22	760
10	North Fork Flathead River near Columbia Falls, Mont.	07/22/98	1100	6.5	.76	6.1	656
11	Middle Fork Flathead River near West Glacier, Mont.	07/21/98	1430	5.6	.78	5.6	706
12	Flathead River at Perma, Mont.	09/09/98	1105	6.7	.80	5.4	760
13	Rock Creek near Noxon, Mont.	06/21/98	1500	6.0	1.1	9.2	740
14	Lightning Creek at Clark Fork, Idaho	07/29/98	1005	8.0	.80	8.3	667
15	Priest River near Priest River, Idaho	07/28/98	1300	8.3	.51	7.0	883
16	Pend Oreille River above Priest River, Idaho	07/28/98	1400	8.0	1.3	10	851
23	North Fork Coeur d'Alene River at Enaville, Idaho	06/16/98	1130	6.4	1.9	14	620
24	South Fork Coeur d'Alene River at Shoshone Park, near Mullan, Idaho	06/23/98	1000	7.0	4.7	17	920
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	06/17/98	1100	5.3	54	120	760
31 ^R	South Fork Coeur d'Alene River near Pinehurst, Idaho	06/17/98	1105	6.0	74	140	900
31 ^R	South Fork Coeur d'Alene River near Pinehurst, Idaho	06/18/98	1100	5.9	88	120	860
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	08/17/99	1200	6.6	66	170	750
32	Coeur d'Alene River near Harrison, Idaho	06/18/98	1430	5.0	58	190	820
33	St. Joe River at Red Ives Ranger Station, Idaho	07/06/98	1540	7.7	.26	8.5	511
33	St. Joe River at Red Ives Ranger Station, Idaho	08/30/99	1500	7.0	.19	4.9	450
34	St. Joe River at Calder, Idaho	07/08/98	0945	6.8	.75	7.0	576
35	Spokane River near Post Falls, Idaho	08/03/98	1045	8.2	12	27	630
40	Hangman Creek at Spokane, Wash.	06/19/98	1130	6.6	.90	7.8	650
41	Spokane River at Seven Mile Bridge, near Spokane, Wash.	08/05/98	1215	7.6	1.1	7.8	670

¹Some data previously published in Beckwith (2002).

Table 27. Trace-element and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99¹(Continued)

Site number (fig. 1)	Beryllium (µg/g)	Bismuth (µg/g)	Cadmium (µg/g)	Calcium (percent)	Cerium (µg/g)	Cobalt (µg/g)	Chromium (µg/g)	Copper (µg/g)	Europium (µg/g)	Gallium (µg/g)	Gold (µg/g)
1	3.2	9.4	6.9	3.3	72	12	65	1,200	1.4	17	<1.0
2	2.4	<1.0	.22	.70	96	6.2	45	20	1.9	14	<1.0
3	2.5	2.8	4.2	1.7	81	11	57	490	1.6	16	<1.0
3 ^R	2.5	2.9	4.2	1.8	84	11	66	500	1.6	17	<1.0
3 ^R	2.7	3.3	4.8	1.9	81	11	60	570	1.5	17	<1.0
4	1.9	<1.0	.21	2.0	106	9.5	61	42	1.7	16	<1.0
5	2.1	<1.0	.22	1.0	96	5.4	45	26	1.4	17	<1.0
9	2.4	1.0	1.0	.86	76	8.1	48	140	1.4	15	<1.0
10	2.1	<1.0	.32	3.7	96	7.6	44	19	1.7	14	<1.0
11	1.7	<1.0	<10	2.5	89	7.0	35	18	1.4	12	<1.0
12	2.5	<1.0	.14	.85	84	9.8	48	25	1.4	16	<1.0
13	2.0	<1.0	.50	.40	92	9.1	36	48	1.7	13	<.05
14	2.5	<1.0	.17	1.2	79	12	33	26	1.6	17	<1.0
15	3.0	<1.0	.13	1.7	128	8.7	40	19	1.9	19	<1.0
16	2.5	<1.0	.75	1.0	73	8.6	56	93	1.4	18	<1.0
23	2.4	<1.0	1.1	.40	99	8.9	43	30	1.8	13	<.05
24	2.2	<1.0	1.4	.69	95	12	43	38	1.7	16	<.05
31	1.9	1.3	28	.40	78	14	36	140	1.7	12	<.05
31 ^R	2.2	1.5	43	.40	92	17	42	190	2.0	14	<.05
31 ^R	2.3	1.5	83	.30	70	22	42	210	1.8	13	<.05
31	2.3	1.2	41	.44	72	14	43	180	1.6	14	<1.0
32	1.8	1.5	26	.40	72	14	38	140	2.1	11	<.05
33	2.6	<1.0	.10	.72	115	10	44	24	2.0	19	<1.0
33	2.2	<1.0	<1.0	.69	100	8.2	42	20	1.7	16	<1.0
34	2.2	<1.0	.16	.82	106	9.4	40	26	1.8	16	<1.0
35	2.2	1.0	24	1.0	75	13	44	62	1.7	18	<1.0
40	2.0	<1.0	.40	1.5	92	12	48	20	1.9	14	<.05
41	1.8	<1.0	3.3	1.5	85	9.8	38	26	1.6	16	<1.0

Table 27. Trace-element and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99¹(Continued)

Site number (fig. 1)	Holmium (µg/g)	Iron (percent)	Lanthanum (µg/g)	Lead (µg/g)	Lithium (µg/g)	Magnesium (percent)	Manganese (µg/g)	Mercury (µg/g)	Molybdenum (µg/g)	Neodymium (µg/g)	Nickel (µg/g)
1	1.5	4.1	40	200	46	1.5	2,710	0.65	2.7	34	24
2	1.6	2.5	52	17	31	.82	267	.07	.63	49	15
3	1.5	3.1	43	120	33	1.0	1,740	1.1	.89	38	21
3 ^R	1.6	3.3	46	120	34	1.1	1,340	.90	.95	41	21
3 ^R	1.6	3.3	44	120	35	1.1	1,120	.80	1.2	39	23
4	1.8	3.0	57	24	56	1.4	574	.03	<.50	52	20
5	1.2	2.3	56	49	37	.67	194	.09	.54	48	12
6	1.2	3.1	44	53	39	.99	270	.33	.51	37	17
10	1.6	2.5	54	17	51	2.3	395	.04	.50	47	18
11	1.3	2.3	48	14	44	1.9	314	.03	<.50	42	14
12	1.3	2.8	45	23	64	1.6	400	.03	<.50	39	19
13	1.0	2.5	51	58	35	.71	720	.02	.70	43	16
14	1.5	3.8	43	25	24	.88	581	.02	1.4	39	14
15	1.4	2.8	72	26	33	1.1	519	.02	<.50	58	15
16	1.1	2.8	42	47	47	1.4	282	.18	.56	37	23
23	<1.0	2.6	51	120	37	.74	410	.09	.70	46	19
24	<1.0	2.9	50	190	44	.48	1,200	.19	.90	43	18
31	<1.0	5.6	42	4,400	27	.37	3,600	4.5	1.4	37	19
31	<1.0	6.5	48	6,300	30	.41	3,400	5.9	1.8	44	22
31 ²	<1.0	6.2	37	9,100	32	.39	2,700	6.2	1.5	33	25
31 ²	<1.0	6.5	38	5,600	34	.58	3,200	4.5	2.0	34	20
32	<1.0	10	36	6,600	26	.48	7,600	3.9	1.1	34	22
33	1.6	3.3	63	12	30	1.1	452	.02	.71	56	19
33	1.0	2.6	54	4.4	26	.91	370	.02	<.50	48	15
34	1.4	2.9	57	17	38	1.1	390	.04	<.50	52	18
35	1.6	3.7	39	1,600	40	1.1	2,000	.71	.80	36	29
40	1.1	3.4	53	37	25	.78	740	.02	.50	42	21
41	1.2	3.2	48	47	27	.87	488	.05	<.50	40	17

Table 27. Trace-element and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99¹(Continued)

Site number (fig. 1)	Niobium (µg/g)	Phosphorus (percent)	Potassium (percent)	Scandium (µg/g)	Selenium (µg/g)	Silver (µg/g)	Sodium (percent)	Strontium (µg/g)	Sulfur (percent)	Tantalum (µg/g)	Thallium (µg/g)	Thorium (µg/g)
1	10	0.15	1.9	10	0.92	3.8	0.87	256	0.51	1.3	<1.0	16
2	7.8	.11	1.9	7.2	.47	.90	.88	86	.08	1.0	<1.0	15
3	11	.13	1.9	8.9	.54	2.0	.90	212	.16	1.4	<1.0	14
3 ^R	12	.13	2.1	9.2	.44	2.0	1.0	235	.13	1.7	<1.0	14
3 ^R	12	.12	2.1	9.0	.78	2.3	.93	224	.23	1.6	<1.0	14
4	11	.09	1.4	10	.23	1.1	.75	148	<.05	1.3	<1.0	15
5	9.4	.08	1.9	5.6	.29	.92	1.7	245	.12	1.2	<1.0	17
9	13	.12	2.1	7.8	.36	.70	1.1	130	.10	<1.0	<1.0	13
10	7.2	.10	2.4	10	.33	.37	.79	75	.05	<1.0	<1.0	13
11	5.7	.08	2.5	8.5	.15	.26	.84	64	<.05	<1.0	<1.0	12
12	10	.06	2.7	9.4	.19	.41	.81	49	<.05	<1.0	<1.0	12
13	9.8	.08	2.0	9.1	.34	.45	1.0	62	<.05	<1.0	<1.0	12
14	11	.07	2.5	16	.15	.61	1.7	156	<.05	1.3	<1.0	12
15	15	.15	2.6	12	<10	.85	1.9	322	.05	1.9	<1.0	20
16	9.1	.07	2.6	13	.38	.54	1.0	137	.12	<1.0	<1.0	12
23	10	.07	2.2	10	.25	.44	.75	61	<.05	<1.0	<1.0	13
24	11	.11	2.3	10	.44	.55	.81	90	.06	<1.0	<1.0	12
31	7.4	.10	1.8	8.8	.32	.19	.70	72	.23	<1.0	<1.0	11
31 ^R	10	.14	2.0	9.9	.43	28	.69	72	.29	<1.0	1.0	13
31 ^R	7.5	.22	2.0	9.7	.54	29	.59	58	.55	<1.0	1.1	11
31	9.8	.18	2.2	10	.45	25	.76	75	.20	1.0	<1.0	11
32	6.3	.07	1.8	8.5	.28	21	.42	41	.52	<1.0	<1.0	9.9
33	11	.13	1.9	12	.24	.56	1.9	71	<.05	1.4	<1.0	16
33	17	.11	1.7	10	.18	.16	2.0	66	<.05	1.2	<1.0	14
34	7.3	.10	1.8	11	.24	.35	1.5	75	<.05	<1.0	<1.0	14
35	7.7	.16	1.7	15	.54	3.0	.91	121	.09	<1.0	<1.0	12
40	13	.08	1.6	13	.16	.44	1.3	230	<.05	<1.0	<1.0	11
41	8.9	.10	1.8	13	.20	.50	1.6	217	<.05	<1.0	<1.0	11

Table 27. Trace-element and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99¹(Continued)

Site number (fig. 1)	Tin (µg/g)	Titanium (percent)	Uranium (µg/g)	Vanadium (µg/g)	Yttrium (µg/g)	Ytterbium (µg/g)	Zinc (µg/g)	Inorganic carbon (percent)	Organic carbon (percent)	Carbon, total (percent)
1	6.7	0.36	6.5	67	24	2.2	1,300	0.42	3.0	3.4
2	2.1	.27	6.4	44	25	2.9	54	.02	3.9	4.0
3	3.4	.36	4.5	65	25	2.7	1,000	.17	2.6	2.7
3 ^R	3.8	.37	4.6	70	27	2.7	1,200	.14	2.0	2.2
3 ^R	3.7	.37	5.7	69	26	2.8	1,000	.20	2.4	2.6
4	2.0	.41	3.5	62	28	3.1	96	.56	1.4	1.9
5	6.5	.25	8.0	35	20	1.8	94	.01	2.9	2.9
9	2.6	.27	2.9	58	25	2.9	320	.06	2.5	2.6
10	1.9	.42	4.0	61	26	3.0	110	1.2	1.1	2.4
11	1.6	.36	3.6	55	22	2.6	50	.86	.67	1.5
12	2.4	.23	2.3	58	23	3.1	74	.17	1.4	1.5
13	2.0	.30	5.4	47	27	2.6	92	.02	3.0	3.1
14	2.7	.79	4.2	89	24	3.3	79	.01	1.2	1.2
15	2.7	.49	6.7	64	23	2.5	75	.02	.88	.90
16	2.8	.39	3.4	64	19	2.1	210	.06	1.8	1.9
23	2.0	.30	4.3	54	24	2.7	210	.01	2.1	2.1
24	3.0	.30	5.6	58	23	2.7	260	.03	4.9	5.0
31	5.0	.20	3.4	47	18	2.1	3,700	.47	1.4	1.9
31 ^R	6.0	.30	4.2	54	22	2.9	4,700	.43	1.7	2.1
31 ^R	5.8	.30	4.4	52	20	2.6	10,000	.30	2.3	2.6
31	6.5	.23	4.0	54	17	1.8	5,300	.32	2.3	2.6
32	5.3	.20	3.4	43	18	2.4	4,600	1.3	1.3	2.6
33	2.4	.72	7.0	62	26	2.7	47	.02	2.7	2.7
33	2.3	.54	4.9	56	22	2.3	38	.01	2.3	2.3
34	2.3	.54	5.4	62	23	3.5	65	.02	2.4	2.4
35	5.9	.49	7.0	70	25	3.1	3,200	.02	3.7	3.7
40	2.0	.60	2.5	92	29	3.0	100	.06	1.4	1.5
41	3.0	.72	3.3	81	21	2.4	320	.02	1.4	1.4

Table 28. Trace-element and carbon concentration data for streambed-sediment samples collected for a synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000

[Samples were wet-sieved in the field through a 63-micrometer nylon-mesh sieve. Abbreviations: °C, degrees Celsius; µg/g, micrograms per gram, dry weight; R, replicate. Symbols: <, less than reporting level; --, no data]

Site num- ber (fig. 1)	Station name	Date	Time	Water temper- ature (°C)	Alumi- num (per- cent)	Anti- mony (µg/g)	Arsenic (µg/g)
6	St. Regis River above Rainy Creek, near Saltese, Mont.	08/02/00	0930	9.5	5.3	2.2	13
7	St Regis River near Haugan, Mont.	08/02/00	1330	15.0	5.4	2.4	10
8	St. Regis River near St. Regis, Mont.	08/03/00	0930	13.5	5.0	1.1	5.1
17	North Fork Coeur d'Alene River above Shoshone Creek, near Prichard, Idaho	09/06/00	1000	12.0	5.9	1.4	16
18	Prichard Creek near Murray, Idaho	08/22/00	0900	14.0	7.7	1.9	87
19	East Fork Eagle Creek near mouth, near Prichard, Idaho	08/21/00	1530	16.5	7.1	4.1	21
20	West Fork Eagle Creek below Settlers Grove, Idaho	08/21/00	1330	11.5	5.9	1.7	11
21	Beaver Creek near mouth, near Murray, Idaho	08/21/00	1130	14.5	7.2	4.5	26
22	Prichard Creek at mouth, at Prichard, Idaho	08/22/00	1200	14.5	6.8	2.5	51
23	North Fork Coeur d'Alene River at Enaville, Idaho	09/07/00	1530	15.0	6.1	2.2	14
24	South Fork Coeur d'Alene River at Shoshone Park, near Mullan, Idaho	08/24/00	1000	11.5	6.2	3.7	22
25	South Fork Coeur d'Alene River above Deadman Gulch, near Mullan, Idaho	08/24/00	1430	13.0	4.5	28	50
26	Canyon Creek near Burke, Idaho	08/23/00	1030	8.0	5.9	3.7	9.4
27	Canyon Creek at Woodland Park, Idaho	08/23/00	1500	19.0	4.7	110	79
28	South Fork Coeur d'Alene River at Silverton, Idaho	08/25/00	1000	12.5	5.0	45	78
29	East Fork Pine Creek above Nabob Creek, near Pinehurst, Idaho	08/22/00	1400	17.5	6.1	10	60
30	Pine Creek below Amy Gulch, near Pinehurst, Idaho	08/22/00	1600	14.0	6.1	6.4	33
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	09/06/00	1400	13.0	4.7	62	140
33	St. Joe River at Red Ives Ranger Station, Idaho	09/05/00	1230	8.5	5.7	.24	8.1
34	St. Joe River at Calder, Idaho	09/07/00	1100	12.5	6.2	.73	7.5
34 ^R	St. Joe River at Calder, Idaho	09/07/00	1101	--	6.4	.80	6.5

Table 28. Trace-element and carbon concentration data for streambed-sediment samples collected for a synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000 (Continued)

Site num- ber (fig. 1)	Barium (µg/g)	Beryllium (µg/g)	Bismuth (µg/g)	Cadmium (µg/g)	Calcium (percent)	Cerium (µg/g)	Cobalt (µg/g)	Chromium (µg/g)	Copper (µg/g)	Europium (µg/g)	Gallium (µg/g)
6	600	1.8	<1.0	1.1	0.67	76	7.7	35	26	1.1	14
7	580	1.6	<1.0	.52	.51	66	6.5	32	21	1.0	13
8	530	1.8	<1.0	<.1	.36	76	5.6	28	18	1.1	12
17	540	1.8	<1.0	<.1	.51	84	8.4	45	18	1.3	14
18	630	2.6	<1.0	3.1	.48	85	16	49	52	1.2	19
19	540	2.4	<1.0	3.0	.34	72	10	46	130	1.1	18
20	770	1.9	<1.0	.62	.63	83	7.6	37	38	1.2	15
21	620	2.1	<1.0	2.2	.52	96	11	47	31	1.4	18
22	600	2.0	<1.0	2.1	.35	87	9.4	45	50	1.2	18
23	610	2.1	<1.0	1.1	.40	95	9.2	45	30	1.3	16
24	820	2.3	<1.0	1.4	.76	63	10	40	32	1.1	16
25	1,100	1.4	<1.0	6.4	.78	40	60	30	220	<1.0	13
26	690	1.8	<1.0	1.7	.74	72	10	36	78	1.2	15
27	500	1.7	<1.0	.62	.34	54	12	35	230	1.0	13
28	790	1.6	1.0	.43	.55	47	13	36	170	<1.0	13
29	490	1.7	<1.0	3.6	.41	79	11	39	50	1.1	15
30	540	2.1	<1.0	3.2	.37	98	9.5	44	39	1.3	15
31	630	1.8	1.3	150	.43	38	15	34	180	<1.0	12
33	420	1.7	<1.0	<.1	.71	66	8.9	38	18	1.1	14
34	530	1.9	<1.0	<.1	.82	78	9.8	42	25	1.2	15
34 ^R	550	2.4	<1.0	<.1	.84	88	10	44	29	1.4	16

Table 28. Trace-element and carbon concentration data for streambed-sediment samples collected for a synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000 (Continued)

Site num- ber (fig. 1)	Gold (µg/g)	Holmium (µg/g)	Iron (percent)	Lantha- num (µg/g)	Lead (µg/g)	Lithium (µg/g)	Magne- sium (percent)	Manga- nese (µg/g)	Mercury (µg/g)	Molyb- denum (µg/g)	Neody- mium (µg/g)
6	<1.0	<1.0	2.6	39	81	41	0.77	640	0.15	0.50	34
7	<1.0	<1.0	2.3	34	41	38	.75	410	.05	<.50	30
8	<1.0	<1.0	2.1	39	20	34	.72	210	.03	<.50	35
17	<1.0	<1.0	3.1	43	20	46	.72	370	.05	<.50	38
18	<1.0	<1.0	4.0	42	710	31	.71	860	.71	2.1	37
19	<1.0	<1.0	3.4	39	1,000	27	.55	580	.13	1.2	33
20	<1.0	<1.0	2.4	41	69	29	.50	680	.06	.80	36
21	<1.0	<1.0	3.3	48	200	45	.56	720	.12	.94	42
22	<1.0	<1.0	3.3	44	460	28	.55	500	.18	1.3	38
23	<1.0	<1.0	2.7	48	160	41	.67	580	.09	.66	42
24	<1.0	<1.0	2.9	34	150	39	.54	1,900	.13	.83	31
25	<1.0	<1.0	4.7	21	850	29	.42	21,000	.30	1.8	19
26	<1.0	<1.0	2.8	37	200	27	.44	1,200	.19	1.4	34
27	<1.0	<1.0	5.6	28	11,000	21	.34	2,100	5.1	1.6	25
28	<1.0	<1.0	4.4	24	4,400	31	.51	2,800	2.3	1.4	22
29	<1.0	<1.0	3.5	40	1,000	28	.44	670	.32	.78	34
30	<1.0	<1.0	3.2	49	550	29	.43	560	.16	.71	43
31	<1.0	<1.0	6.1	20	6,400	25	.40	3,300	4.0	1.1	18
33	<1.0	<1.0	2.8	34	8.8	24	.73	480	.02	.65	30
34	<1.0	<1.0	2.9	41	17	38	.95	440	.03	.52	36
34 ^R	<1.0	<1.0	3.0	46	22	39	.96	470	.03	<.50	40

Table 28. Trace-element and carbon concentration data for streambed-sediment samples collected for a synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000 (Continued)

Site num- ber (fig. 1)	Nickel (µg/g)	Niobium (µg/g)	Phosphorus (percent)	Potassium (percent)	Sandium (µg/g)	Selenium (µg/g)	Silver (µg/g)	Sodium (µg/g)	Strontium (µg/g)	Sulfur (percent)	Tantalum (µg/g)
6	14	9.0	0.10	1.7	8.1	0.45	0.15	1.1	88	0.06	<1.0
7	13	7.7	.09	1.8	8.3	.29	.15	1.0	67	.06	<1.0
8	11	5.5	.07	1.7	7.0	.19	<.1	1.2	51	<.05	<1.0
17	17	8.9	.10	2.1	10	.32	.10	.65	67	.06	<1.0
18	34	15	.08	2.4	14	.45	.44	1.1	110	<.05	1.2
19	23	14	.06	2.3	12	.35	.49	1.0	88	<.05	1.0
20	15	12	.10	1.8	9.3	.45	.19	.93	110	.06	<1.0
21	25	15	.08	2.1	12	.42	.32	.72	100	<.05	1.1
22	21	13	.06	2.2	11	.26	.30	.89	90	<.05	1.1
23	18	11	.07	2.1	10	.25	.19	.70	71	<.05	<1.0
24	15	10	.12	2.0	9.8	.69	.37	.78	110	.08	<1.0
25	21	5.8	.15	1.6	7.0	.72	4.2	.55	88	.18	<1.0
26	15	12	.12	1.7	8.7	.72	.54	1.0	120	.07	<1.0
27	18	9.0	.07	1.8	7.4	.43	26	.64	79	.43	<1.0
28	17	8.1	.09	1.8	7.9	.46	13	.73	86	.27	<1.0
29	19	11	.06	2.2	10	.33	1.9	.69	85	.07	<1.0
30	19	11	.07	2.1	10	.38	.54	.68	75	.05	<1.0
31	20	6.7	.37	1.6	7.3	.68	18	.56	74	.41	<1.0
33	16	14	.12	1.4	9.2	.26	.14	1.5	69	.08	1.1
34	18	13	.09	1.6	11	.19	.12	1.3	84	<.05	1.0
34 ^R	18	14	.09	1.7	12	.22	.15	1.4	89	<.05	1.0

Table 28. Trace-element and carbon concentration data for streambed-sediment samples collected for a synoptic study of mining-affected areas, Northern Rockies Intermontane Basins study unit, August-September 2000 (Continued)

Site num- ber (fig. 1)	Thallium (µg/g)	Thorium (µg/g)	Tin (µg/g)	Titanium (µg/g)	Uranium (µg/g)	Vanadium (µg/g)	Yttrium (µg/g)	Ytterbium (µg/g)	Zinc (µg/g)	Inorganic carbon (percent)	Organic carbon (percent)	Total carbon (percent)
6	<1.0	11	2.8	0.23	4.6	49	20	2.1	430	0.03	4.9	4.9
7	<1.0	11	3.5	.20	4.3	46	17	1.9	180	.02	3.7	3.7
8	<1.0	11	2.4	.16	3.0	38	13	1.4	74	.02	1.8	1.8
17	<1.0	14	2.7	.22	5.8	54	24	2.6	62	.03	4.3	4.3
18	<1.0	14	3.8	.36	4.8	79	18	2.4	840	.02	2.2	2.2
19	<1.0	14	7.4	.27	4.2	66	14	1.8	790	.03	2.3	2.3
20	<1.0	13	2.9	.28	7.6	55	16	1.7	100	.03	5.2	5.2
21	<1.0	15	3.3	.31	5.2	65	24	2.6	620	.02	2.3	2.3
22	<1.0	14	3.5	.28	4.1	64	15	1.9	480	.03	1.9	2.0
23	<1.0	16	3.2	.24	5.1	58	21	2.2	290	.01	2.4	2.4
24	<1.0	11	3.2	.25	7.6	53	21	2.2	340	.04	6.1	6.1
25	<1.0	7.1	2.6	.16	5.4	40	14	1.5	2,200	.21	6.6	6.8
26	<1.0	12	2.8	.29	9.3	52	17	1.9	260	.03	8.0	8.0
27	<1.0	11	9.9	.20	4.7	46	13	1.7	8,200	.27	2.3	2.6
28	<1.0	10	6.4	.20	4.4	49	16	1.9	5,400	.26	3.9	4.2
29	<1.0	15	4.2	.29	3.8	58	15	2.1	1,100	.05	2.1	2.2
30	<1.0	16	5.1	.25	3.7	58	16	1.9	740	.02	2.8	2.9
31	<1.0	8.7	5.8	.16	3.6	45	16	1.5	10,000	.28	5.1	5.4
33	<1.0	10	2.4	.37	5.4	50	23	2.1	39	.02	4.8	4.8
34	<1.0	12	3.0	.38	5.0	63	24	2.6	65	.02	2.4	2.4
34 ^R	<1.0	13	3.3	.40	5.0	67	25	3.6	72	.02	2.4	2.4

Table 29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99

[Samples were wet-sieved in the field through a 2-millimeter mesh stainless-steel screen. **Bold text denotes detected concentrations.** Abbreviations: e, estimated; g/kg, grams per kilogram; µg/kg, micrograms per kilogram, dry weight; R, replicate. Symbols: <, less than reporting level; --, no data]

Site num- ber (fig. 1)	Site name	Date	Time	1,2,4- Trichloro- benzene (µg/kg)	1,2- Dichloro- benzene (µg/kg)	1,2- Dimethyl- naphtha- lene (µg/kg)	1,3- Dichloro- benzene (µg/kg)	1,4- Dichloro- benzene (µg/kg)
3	Clark Fork at Turah Bridge, near Bonner, Mont.	08/11/98	1035	<50	<50	<50	<50	<50
3 ^R	Clark Fork at Turah Bridge, near Bonner, Mont.	08/11/98	1050	<50	<50	<50	<50	<50
3 ^R	Clark Fork at Turah Bridge, near Bonner, Mont.	08/11/98	1135	<50	<50	<50	<50	<50
4	Blackfoot River above Nevada Creek, near Helmville, Mont.	08/17/98	1500	<50	<50	<50	<50	<50
5	Bitterroot River near Missoula, Mont.	08/10/98	1720	<50	<50	<50	<50	<50
9	Clark Fork at St. Regis, Mont.	09/08/98	1340	<50	<50	<50	<50	<50
9	Clark Fork at St. Regis, Mont.	08/23/99	1200	<50	<50	<50	<50	<50
10	North Fork Flathead River near Columbia Falls, Mont.	07/22/98	1105	<50	<50	<50	<50	<50
11	Middle Fork Flathead River near West Glacier, Mont.	07/21/98	1435	<50	<50	<50	<50	<50
12	Flathead River at Perma, Mont.	09/09/98	1100	<50	<50	<50	<50	<50
14	Lightning Creek at Clark Fork, Idaho	07/29/98	1000	<50	<50	<50	<50	<50
23	North Fork Coeur d'Alene River at Enaville, Idaho	07/20/98	1000	<50	<50	<50	<50	<50
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	06/18/98	1105	<50	<50	<50	<50	<50
33	St. Joe River at Red Ives Ranger Station, Idaho	07/06/98	1535	<50	<50	<50	<50	<50
35	Spokane River near Post Falls, Idaho	08/03/98	1100	<50	<50	<50	<50	<50
40	Hangman Creek at Spokane, Wash.	06/19/98	1135	<50	<50	<50	<50	<50
41	Spokane River at Seven Mile Bridge, near Spokane, Wash.	08/05/98	1115	<50	<50	<50	<50	<50
41 ^R	Spokane River at Seven Mile Bridge, near Spokane, Wash.	08/05/98	1130	<50	<50	<50	<50	<50
41 ^R	Spokane River at Seven Mile Bridge, near Spokane, Wash.	08/05/98	1145	<50	<50	<50	<50	<50
41	Spokane River at Seven Mile Bridge, near Spokane, Wash.	07/30/99	1100	<50	<50	<50	<50	<50

Table 29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site number (fig. 1)	1,6-Dimethylnaphthalene (µg/kg)	1-Methyl-9H-fluorene (µg/kg)	1-Methylphenanthrene (µg/kg)	1-Methylpyrene (µg/kg)	2,2'-Biquinolene (µg/kg)	2,3,6-Trimethylnaphthalene (µg/kg)	2,4-Dinitrotoluene (µg/kg)	2,6-Dimethylnaphthalene (µg/kg)	2,6-Dinitrotoluene (µg/kg)	2-Chloronaphthalene (µg/kg)
3	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
3 ^R	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
3 ^R	<50	<50	<50	<50	<50	<50	<50	e32	<50	<50
4	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
5	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
9	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
9	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
10	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
11	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
12	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
14	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
23	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
31	<50	<50	<50	<50	<50	<50	<50	94	<50	<50
33	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
35	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
40	<50	<50	<50	<50	<50	<50	<50	e8.8	<50	<50
41	<50	<50	<50	e11	e33	<50	<50	<50	<50	<50
41 ^R	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
41 ^R	<50	<50	<50	<50	<50	<50	<50	e31	<50	<50
41	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50

Table 29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site number (fig. 1)	2-Chloro-phenol (µg/kg)	2-Ethyl-naphthalene (µg/kg)	2-Fluoro-biphenyl, surrogate (percent)	2-Methyl-anthracene (µg/kg)	3,5-Dimethyl-phenol (µg/kg)	4-Bromo-phenyl-phenyl-ether (µg/kg)	4-Chloro-3-methyl-phenol (µg/kg)	4-Chloro-phenyl-phenyl-ether (µg/kg)	4H-Cyclopenta[def]-phenanthrene (µg/kg)	Acenaphthene (µg/kg)	Acenaphthylene (µg/kg)
3	<50	<50	38	<50	<50	<50	<50	<50	<50	<50	<50
3 ^R	<50	<50	58	<50	<50	<50	<50	<50	<50	<50	<50
3 ^R	<50	<50	57	<50	<50	<50	<50	<50	<50	<50	<50
4	<50	<50	58	<50	<50	<50	<50	<50	<50	<50	<50
5	<50	<50	58	<50	<50	<50	<50	<50	<50	<50	<50
9	<50	<50	55	<50	<50	<50	<50	<50	<50	<50	<50
9	<50	<50	53	<50	<50	<50	<50	<50	<50	<50	<50
10	<50	e1.8	51	<50	<50	<50	<50	<50	<50	<50	<50
11	<50	<50	64	<50	<50	<50	<50	<50	<50	<50	<50
12	<50	<50	56	<50	<50	<50	<50	<50	<50	<50	<50
14	<50	<50	54	<50	<50	<50	<50	<50	<50	<50	<50
23	<50	<50	52	<50	<50	<50	<50	<50	<50	<50	<50
31	--	<50	82	<50	<50	<50	<50	<50	<50	<50	<50
33	<50	<50	59	<50	<50	<50	<50	<50	<50	<50	<50
35	<50	<50	47	<50	<50	<50	<50	<50	<50	<50	<50
40	--	<50	76	<50	<50	<50	<50	<50	<50	<50	<50
41	<50	<50	48	<50	<50	<50	<50	<50	<50	<50	<50
41 ^R	<50	<50	48	<50	<50	<50	<50	<50	<50	<50	<50
41 ^R	<50	<50	51	<50	<50	<50	<50	<50	<50	<50	e17
41	<50	<50	57	<50	<50	<50	<50	<50	<50	<50	e18

Table 29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site number (fig. 1)	Acridine (µg/kg)	Aldrin (µg/kg)	alpha-Endo-sulfan (µg/kg)	alpha-HCH (µg/kg)	alpha-HCH-d ₆ , surrogate (percent)	Anthracene (µg/kg)	Anthraquinone (µg/kg)	Azo-benzene (µg/kg)	Benz[a]-anthracene (µg/kg)	Benzo[a]-pyrene (µg/kg)	Benzo[b]-fluoranthene (µg/kg)
3	<50	<1.0	<1.0	<1.0	71	<50	<50	<50	<50	<50	<50
3 ^R	<50	<1.0	<1.0	<1.0	78	<50	<50	<50	<50	<50	<50
3 ^R	<50	<1.0	<1.0	<1.0	74	<50	<50	<50	<50	<50	<50
4	<50	<1.0	<1.0	<1.0	82	<50	<50	<50	<50	<50	<50
5	<50	<1.0	<1.0	<1.0	71	<50	<50	<50	e14	<50	e22
9	<50	<1.0	<1.0	<1.0	73	<50	<50	<50	<50	<50	<50
9	<50	<1.0	<1.0	<1.0	64	<50	<50	<50	<50	<50	<50
10	<50	<1.0	<1.0	<1.0	98	<50	<50	<50	<50	<50	<50
11	<50	<1.0	<1.0	<1.0	95	<50	<50	<50	<50	<50	<50
12	<50	<1.0	<1.0	<1.0	90	<50	<50	<50	<50	<50	<50
14	<50	<1.0	<1.0	<1.0	84	<50	<50	<50	<50	<50	<50
23	<50	<1.0	<1.0	<1.0	91	<50	<50	<50	<50	<50	<50
31	<50	<1.0	<1.0	<1.0	77	<50	<50	<50	e13	<50	<50
33	<50	<1.0	<1.0	<1.0	88	<50	<50	<50	<50	<50	<50
35	<50	<1.0	<1.0	<1.0	111	<50	<50	<50	e9.8	e15	e20
40	<50	<1.0	<1.0	<1.0	75	<50	<50	<50	<50	<50	<50
41	<50	<1.0	<1.0	<1.0	79	e6.6	<50	<50	e17	e24	<50
41 ^R	<50	<1.0	<1.0	<1.0	76	e14	<50	<50	e26	e30	<50
41 ^R	<50	<1.0	<1.0	<1.0	78	e25	<50	<50	96	99	68
41	<50	<1.0	<1.0	<1.0	68	<50	<50	<50	e24	e25	e6.2

Table 29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site number (fig. 1 and table 1)	Benzo-[c]-cinnoline (µg/kg)	Benzo-[ghi]-perylene (µg/kg)	Benzo-[k]-fluoranthene (µg/kg)	beta-HCH (µg/kg)	bis(2-Chloro-ethoxy)-methane (µg/kg)	bis(2-Chloro-ethyl) ether (µg/kg)	bis(2-Ethyl-hexyl) phthalate (µg/kg)	Butyl-benzyl phthalate (µg/kg)	C8-Alkyl-phenol (µg/kg)	Carbazole (µg/kg)
3	<50	<50	<50	<1.0	<50	--	<50	<50	<50	<50
3 ^R	<50	e9.6	<50	<1.0	<50	--	<50	<50	<50	<50
3 ^R	<50	<50	<50	<1.0	<50	--	<50	<50	<50	<50
4	<50	<50	<50	<1.0	<50	--	e29	e20	<50	<50
5	<50	e24	e22	<1.0	<50	--	e32	e20	<50	<50
9	<50	<50	<50	<1.0	<50	--	e33	<50	<50	<50
9	<50	<50	<50	<1.0	<50	<50	66	102	<50	<50
10	<50	<50	<50	<1.0	<50	--	e48	e23	<50	<50
11	<50	<50	<50	<1.0	<50	--	e25	<50	<50	<50
12	<50	<50	<50	<1.0	<50	--	<50	<50	<50	<50
14	<50	<50	<50	<1.0	<50	--	e23	e20	<50	<50
23	<50	<50	<50	<1.0	<50	--	e40	e16	<50	<50
31	--	<50	<50	<1.0	<50	--	120	e28	<50	<50
33	<50	<50	<50	<1.0	<50	--	e15	<50	<50	<50
35	<50	e13	e19	<1.0	<50	--	e36	e30	<50	<50
40	--	<50	<50	<1.0	<50	--	60	e20	<50	<50
41	<50	<50	<50	<1.0	<50	--	e45	e26	<50	<50
41 ^R	<50	<50	<50	<1.0	<50	--	72	e18	<50	<50
41 ^R	<50	52	56	<1.0	<50	--	e49	<50	<50	<50
41	<50	e5.4	e47	<1.0	<50	<50	92	e31	<50	<50

Table 29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site number (fig. 1)	Chlor- oneb (µg/kg)	Chry- sene (µg/kg)	cis-Chlor- dane (µg/kg)	cis-Nona- chlor (µg/kg)	cis- Permethrin (µg/kg)	Dacthal (µg/kg)	Dibenz- [a,h]- anthra- cene (µg/kg)	Dibenzo- thiophene (µg/kg)	Deldrin (µg/kg)	Diethyl phthalate (µg/kg)	Dimethyl phthalate (µg/kg)
3	<5.0	e20	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
3 ^R	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
3 ^R	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
4	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
5	<5.0	e9.3	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
9	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
9	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
10	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
11	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
12	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
14	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
23	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
31	<5.0	e6.9	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	e35	<50
33	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	e1.1	<50
35	<5.0	e5.1	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
40	<5.0	<50	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	e12	<50
41	<5.0	e17	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
41 ^R	<5.0	e25	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
41 ^R	<5.0	86	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50
41	<5.0	e35	<1.0	<1.0	<5.0	<5.0	<50	<50	<1.0	<50	<50

Table 29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site num- ber (fig. 1)	Di-n- butyl phtha- late (µg/kg)	Di-n- octyl phthalate (µg/kg)	Endrin (µg/kg)	Fluor- anthene (µg/kg)	Fluo- rene (µg/kg)	Hepta- chlor (µg/kg)	Hepta- chlor epoxide (µg/kg)	Hexa- chloro- benzene (µg/kg)	Indeno- [1,2,3-cd]- pyrene (µg/kg)	Isodrin (µg/kg)
3	e36	<50	<2.0	e25	<50	<1.0	<1.0	<1.0	<50	<1.0
3 ^R	e27	<50	<2.0	e19	<50	<1.0	<1.0	<1.0	<50	<1.0
3 ^R	e35	<50	<2.0	e24	<50	<1.0	<1.0	<1.0	<50	<1.0
4	e41	<50	<2.0	<50	<50	<1.0	<1.0	<1.0	<50	<1.0
5	e42	<50	<2.0	e7.2	<50	<1.0	<1.0	<1.0	e24	<1.0
9	<50	<50	<2.0	e13	<50	<1.0	<1.0	<1.0	<50	<1.0
9	91	<50	<2.0	<50	<50	<1.0	<1.0	<1.0	<50	<1.0
10	e43	<50	<2.0	<50	<50	<1.0	<1.0	<1.0	<50	<1.0
11	e42	<50	<2.0	e11	<50	<1.0	<1.0	<1.0	<50	<1.0
12	e30	<50	<2.0	<50	<50	<1.0	<1.0	<1.0	<50	<1.0
14	e30	<50	<2.0	<50	<50	<1.0	<1.0	<1.0	e5.9	<1.0
23	e39	<50	<2.0	e15	<50	<1.0	<1.0	<1.0	<50	<1.0
31	e56	<50	<2.0	--	<50	<1.0	<1.0	<1.0	<50	<1.0
33	e47	<50	<2.0	<50	<50	<1.0	<1.0	<1.0	<50	<1.0
35	e33	<50	<2.0	e33	<50	<1.0	<1.0	<1.0	e11	<1.0
40	e42	<50	<2.0	--	<50	<1.0	<1.0	<1.0	<50	<1.0
41	e28	<50	<2.0	e39	<50	<1.0	<1.0	<1.0	<50	<1.0
41 ^R	e41	<50	<2.0	53	<50	<1.0	<1.0	<1.0	<50	<1.0
41 ^R	e27	<50	<2.0	130	<50	<1.0	<1.0	<1.0	51	<1.0
41	<50	<50	<2.0	e25	<50	<1.0	<1.0	<1.0	<50	<1.0

Table 29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site number (fig. 1)	Iso-phorone (µg/kg)	Iso-quin-oline (µg/kg)	Lindane (µg/kg)	Mirex (µg/kg)	Naptha-lene (µg/kg)	N-Nitrosodin-n-propyl-amine (µg/kg)	N-Nitro-sodo-diphenyl-amine (µg/kg)	Nitro-benzene (µg/kg)	Nitro-benzene-d ₅ , surrogate (percent)	o,p'-DDD (µg/kg)	o,p'-DDE (µg/kg)
3	<50	<50	<1.0	<1.0	<50	<50	<50	<50	60	<1.0	<1.0
3 ^R	<50	<50	<1.0	<1.0	<50	<50	<50	<50	54	<1.0	<1.0
3 ^R	<50	<50	<1.0	<1.0	<50	<50	<50	<50	63	<1.0	<1.0
4	<50	<50	<1.0	<1.0	<50	<50	<50	<50	55	<1.0	<1.0
5	<50	<50	<1.0	<1.0	<50	<50	<50	<50	52	<1.0	<1.0
9	<50	<50	<1.0	<1.0	<50	<50	<50	<50	61	<1.0	<1.0
9	<50	<50	<1.0	<1.0	<50	<50	<50	<50	39	<1.0	<1.0
10	<50	<50	<1.0	<1.0	<50	<50	<50	<50	52	<1.0	<1.0
11	<50	<50	<1.0	<1.0	<50	<50	<50	<50	90	<1.0	<1.0
12	<50	<50	<1.0	<1.0	<50	<50	<50	<50	62	<1.0	<1.0
14	<50	<50	<1.0	<1.0	<50	<50	<50	<50	73	<1.0	<1.0
23	<50	<50	<1.0	<1.0	<50	<50	<50	<50	86	<1.0	<1.0
31	<50	<50	<1.0	<1.0	<50	<50	<50	<50	103	<1.0	<1.0
33	<50	<50	<1.0	<1.0	<50	<50	<50	<50	70	<1.0	<1.0
35	<50	<50	<1.0	<1.0	e6.9	<50	<50	<50	56	<1.0	<1.0
40	<50	<50	<1.0	<1.0	<50	<50	<50	<50	72	<1.0	<1.0
41	<50	<50	<1.0	<1.0	e7.1	<50	<50	<50	41	<1.0	<1.0
41 ^R	<50	<50	<1.0	<1.0	e15	<50	<50	<50	44	<1.0	<1.0
41 ^R	<50	<50	<1.0	<1.0	e20	<50	<50	<50	43	<1.0	<1.0
41	<50	<50	<1.0	<1.0	<50	<50	<50	<50	49	<1.0	<1.0

Table 29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site num- ber (fig. 1 and table 1)	o,p'- DDT (µg/kg)	o,p'-Meth- oxychlor (µg/kg)	Oxychlor- dane (µg/kg)	p,p'- DDD (µg/kg)	p,p'- DDE (µg/kg)	p,p'- DDT (µg/kg)	p,p'- Methoxy- chlor (µg/kg)	p- Cresol (µg/kg)	Penta- chloro- anisole (µg/kg)	Penta- chloro- nitro- benzene (µg/kg)	Pen- anthrene (µg/kg)	Pen- anthri- dine (µg/kg)
3	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	680	<1.0	<50	<50	<50
3 ^R	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	540	<1.0	<50	<50	<50
3 ^R	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	78	<1.0	<50	e6.4	<50
4	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	e31	<1.0	<50	<50	<50
5	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	e47	<1.0	<50	<50	<50
9	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	1,100	<1.0	<50	<50	<50
9	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	2,690	<1.0	<50	<50	<50
10	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	190	<1.0	<50	<50	<50
11	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	87	<1.0	<50	<50	<50
12	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	120	<1.0	<50	<50	<50
14	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	<50	<1.0	<50	<50	<50
23	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	100	<1.0	<50	<50	<50
31	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	88	<1.0	<50	e6.4	--
33	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	200	<1.0	<50	<50	<50
35	<2.0	<5.0	<1.0	<1.0	<1.0	<2.0	<5.0	<50	<1.0	<50	e9.0	<50
40	<2.0	<5.0	<1.0	<1.0	1.4	<2.0	<5.0	84	<1.0	<50	<50	--
41	<2.0	<5.0	<1.0	1.2	2.9	<2.0	<5.0	160	<1.0	<50	e15	<50
41 ^R	<2.0	<5.0	<1.0	1.8	4.5	<2.0	<5.0	120	<1.0	<50	e27	<50
41 ^R	<2.0	<5.0	<1.0	1.4	4.0	<2.0	<5.0	270	<1.0	<50	e27	<50
41	<2.0	<5.0	<1.0	<1.0	1.2	<2.0	<5.0	1,350	<1.0	<50	<50	<50

Table 29. Organochlorine-compound and carbon concentration data for streambed-sediment samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site num- ber (fig. 1)	Phenol (µg/kg)	Poly- chlorinated biphenyls (µg/kg)	Pyrene (µg/kg)	Quin- oline (µg/kg)	Ter- phenyl- d ₁₄ , surrogate (µg/kg)	Toxa- phene (µg/kg)	trans- Chlora- dane (µg/kg)	trans- Nona- chlor (µg/kg)	trans- Permethrin (µg/kg)	Inor- ganic carbon (g/kg)	Organic carbon (g/kg)	Total carbon (g/kg)
3	51	<50	e27	<50	60	<200	<1.0	<1.0	<5.0	1.0	32	33
3 ^R	e50	<50	e7.2	<50	72	<200	<1.0	<1.0	<5.0	.40	24	24
3 ^R	<50	<50	e10	<50	74	<200	<1.0	<1.0	<5.0	1.2	22	23
4	<50	<50	<50	<50	70	<200	<1.0	<1.0	<5.0	3.4	14	14
5	e9.0	<50	e9.2	<50	70	<200	<1.0	<1.0	<5.0	<.10	11	11
9	72	<50	<50	<50	66	<200	<1.0	<1.0	<5.0	.60	20	20
9	75	<50	<50	<50	74	<200	<1.0	<1.0	<5.0	1.0	20	21
10	<50	<50	<50	<50	64	<200	<1.0	<1.0	<5.0	6.7	11	18
11	<50	<50	<50	<50	69	<200	<1.0	<1.0	<5.0	5.4	4.6	10
12	e11	<50	<50	<50	72	<200	<1.0	<1.0	<5.0	2.3	4.7	7.0
14	<50	<50	<50	<50	69	<200	<1.0	<1.0	<5.0	<.10	3.1	3.1
23	e7.8	<50	e3.9	<50	60	<200	<1.0	<1.0	<5.0	<.10	15	15
31	e22	e26	e14	<50	86	<200	<1.0	<1.0	<5.0	.40	15	15
33	e9.1	<50	<50	<50	70	<200	<1.0	<1.0	<5.0	<.10	7.6	7.6
35	<50	<50	e20	<50	65	<200	<1.0	<1.0	<5.0	<.10	9.2	9.2
40	e16	<50	<50	<50	84	<200	<1.0	<1.0	<5.0	.40	15	11
41	<50	<50	e30	<50	74	<200	<1.0	<1.0	<5.0	.30	8.7	13
41 ^R	<50	<50	e46	<50	76	<200	<1.0	<1.0	<5.0	<.10	13	9.0
41 ^R	e38	<50	160	<50	60	<200	<1.0	<1.0	<5.0	<.10	14	14
41	e8.9	<50	e18	<50	73	<200	<1.0	<1.0	<5.0	1.0	13	14

Table 30. Trace-element concentration data for fish-tissue samples, Northern Rockies Intermontane Basins study unit, 1998-99

[Body part: L, liver; F, fillet. Abbreviations: µg/g, micrograms per gram, dry weight; R, replicate. Symbol: <, less than reporting level]

Site number (fig. 1)	Site name	Date	Time	Body part ana- lyzed	Fish species	Num- ber of fish com- posited
1	Clark Fork near Galen, Mont.	08/19/98	1130	L	Largescale sucker	8
1	Clark Fork near Galen, Mont.	08/19/98	1145	F	Mountain whitefish	5
1	Clark Fork near Galen, Mont.	08/19/98	1200	F	Brown trout	5
2	Rock Creek near Clinton, Mont.	08/11/98	1305	L	Brown trout	7
2	Rock Creek near Clinton, Mont.	08/11/98	1310	F	Brown trout	7
3	Clark Fork at Turah Bridge, near Bonner, Mont.	08/12/98	1315	L	Largescale sucker	8
3	Clark Fork at Turah Bridge, near Bonner, Mont.	08/12/98	1330	F	Mountain whitefish	6
3	Clark Fork at Turah Bridge, near Bonner, Mont.	08/12/98	1415	L	Largescale sucker	8
3 ^R	Clark Fork at Turah Bridge, near Bonner, Mont.	08/12/98	1515	L	Largescale sucker	8
4	Blackfoot River above Nevada Creek, near Helmville, Mont.	08/18/98	1205	L	Largescale sucker	8
4	Blackfoot River above Nevada Creek, near Helmville, Mont.	08/18/98	1210	F	Mountain whitefish	4
5	Bitterroot River near Missoula, Mont.	08/10/98	1705	F	Mountain whitefish	8
5	Bitterroot River near Missoula, Mont.	08/10/98	1710	L	Mountain whitefish	17
9	Clark Fork at St. Regis, Mont.	09/08/98	1505	L	Largescale sucker	6
9	Clark Fork at St. Regis, Mont.	09/08/98	1510	F	Mountain whitefish	6
11	Middle Fork Flathead River near West Glacier, Mont.	07/21/98	1305	L	Mountain whitefish	8
11	Middle Fork Flathead River near West Glacier, Mont.	07/21/98	1310	F	Mountain whitefish	8
11 ^R	Middle Fork Flathead River near West Glacier, Mont.	07/21/98	1315	F	Mountain whitefish	8
12	Flathead River at Perma, Mont.	10/16/98	0115	L	Largescale sucker	6
12	Flathead River at Perma, Mont.	10/16/98	0130	F	Mountain whitefish	6
15	Priest River near Priest River, Idaho	09/10/98	1405	L	Largescale sucker	8
23	North Fork Coeur d'Alene River at Enaville, Idaho	06/16/98	1600	L	Mountain whitefish	7
23	North Fork Coeur d'Alene River at Enaville, Idaho	06/16/98	1610	F	Mountain whitefish	7
25	South Fork Coeur d'Alene River above Deadman Gulch, near Mullan, Idaho	06/23/98	1200	L	Rainbow trout	7
25	South Fork Coeur d'Alene River above Deadman Gulch, near Mullan, Idaho	06/23/98	1205	F	Rainbow trout	7
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	06/17/98	1615	L	Brook trout	6
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	06/17/98	1620	F	Brook trout	6
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	08/17/99	1205	F	Brook trout	5
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	08/17/99	1210	L	Brook trout	10
33	St. Joe River at Red Ives Ranger Station, Idaho	07/07/98	1345	L	Cutthroat trout	8
33	St. Joe River at Red Ives Ranger Station, Idaho	07/07/98	1350	F	Cutthroat trout	8
33	St. Joe River at Red Ives Ranger Station, Idaho	09/01/99	1530	L	Cutthroat trout	9
34	St. Joe River at Calder, Idaho	07/08/98	1405	L	Largescale sucker	8
34	St. Joe River at Calder, Idaho	07/08/98	1410	F	Mountain whitefish	8
35	Spokane River near Post Falls, Idaho	07/12/99	1305	L	Largescale sucker	5
36	Spokane River above Liberty Bridge, near Otis Orchard, Wash.	07/27/99	1205	L	Largescale sucker	5
38	Spokane River at Sullivan Bridge, near Trentwood, Wash.	07/28/99	1205	L	Largescale sucker	10
40	Hangman Creek at Spokane, Wash.	06/19/98	1505	L	Largescale sucker	8
40	Hangman Creek at Spokane, Wash.	06/19/98	1510	F	Rainbow trout	5
41	Spokane River at Seven Mile Bridge, near Spokane, Wash.	08/05/98	1115	L	Largescale sucker	8
41	Spokane River at Seven Mile Bridge, near Spokane, Wash.	08/05/98	1145	F	Rainbow trout	5

Table 30. Trace-element concentration data for fish-tissue samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site number (fig. 1)	Aluminum (µg/g)	Antimony (µg/g)	Arsenic (µg/g)	Barium (µg/g)	Beryllium (µg/g)	Boron (µg/g)	Cadmium (µg/g)	Chromium (µg/g)	Cobalt (µg/g)	Copper (µg/g)	Iron (µg/g)	Lead (µg/g)
1	2.1	0.44	0.89	<0.10	<0.16	0.30	9.0	<0.50	<0.16	52	281	<0.16
1	<1.0	<.15	.32	.13	<.15	.58	<.15	<.50	<.15	1.2	15	<.15
1	<1.0	<.18	.25	<.10	<.18	.35	<.18	.54	<.18	1.2	18	<.18
2	22	<.14	.28	.11	<.14	.44	.62	.62	.27	387	1,300	<.14
2	<1.0	<.21	.99	.12	<.21	.45	<.21	<.50	<.21	1.0	25	<.21
3	7.0	.27	1.3	.20	<.16	.63	2.5	<.50	<.16	71	498	.28
3	<1.0	<.18	<.18	.11	<.18	.65	<.18	<.50	<.18	1.4	16	<.18
3	6.0	.29	1.4	.35	<.20	.94	5.6	<.50	<.20	70	1,020	.43
3 ^R	2.4	<.19	.99	.29	<.19	.78	4.4	<.50	<.19	83	501	.25
4	3.1	<.14	.55	.15	<.14	.32	1.0	<.50	.19	70	719	<.14
4	<1.0	<.18	.28	.73	<.18	.28	<.18	.59	<.18	1.6	19	<.18
5	1.2	<.18	<.18	.32	<.18	.50	<.18	.57	<.18	1.2	23	<.18
5	2.0	<.17	<.17	<.10	<.17	.48	.36	.57	.30	11	529	<.17
9	2.1	<.18	.76	<.10	<.18	.25	.30	<.50	<.18	57	483	<.18
9	<1.0	<.18	.24	.19	<.18	.40	<.18	<.50	<.18	1.4	17	<.18
11	1.7	<.19	.32	.12	<.19	.70	.32	.51	.64	8.8	602	<.19
11	1.1	<.18	.21	.44	<.18	.48	<.18	<.50	<.18	1.5	24	<.18
11 ^R	<1.0	<.20	.31	1.4	<.20	.53	<.20	.66	<.20	1.6	26	<.20
12	19	<.10	.71	1.2	<.10	.37	.93	.61	.30	67	824	.16
12	5.1	<.09	.32	.40	<.09	.45	<.09	.61	<.09	1.1	13	<.09
15	154	<.21	.56	1.9	<.21	.29	1.0	.62	.31	42	1,970	.29
23	<1.0	<.24	<.24	<.10	<.24	.39	8.2	.55	.72	13	253	2.9
23	<1.0	<.12	.22	.35	<.12	.36	<.12	<.50	<.12	1.5	19	.72
25	5.2	<.17	1.5	<.10	<.17	.66	.33	.54	<.17	346	671	1.3
25	<1.0	<.16	1.8	.51	<.16	.48	<.16	.54	<.16	2.2	17	<.16
31	<1.0	<.18	.24	<.10	<.18	.38	10	<.50	.55	153	597	12
31	<1.0	<.17	<.17	.14	<.17	.65	.57	<.50	<.17	1.8	18	1.7
31	<1.0	<.20	.21	.25	<.20	.79	.22	<.50	<.20	1.8	17	2.1
31	2.7	<.25	.34	<.10	<.25	.46	17	<.50	.40	209	493	13
33	1.0	<.02	<.10	<.10	<.02	<.20	<.10	<.50	<.10	1.4	91	<.02
33	14	<.21	.47	.41	<.21	.61	<.21	.62	<.21	1.8	39	<.21
33	20	<.16	.67	<.10	<.16	.23	.51	.64	.48	17	1,010	<.16
34	20	<.22	.65	.14	<.22	.36	3.8	.56	.52	85	1,850	3.4
34	1.5	<.18	<.18	.26	<.18	.39	<.18	<.50	<.18	1.5	21	<.18
35	35	<.21	.78	.10	<.21	.80	3.4	.56	<.21	35	1,080	2.3
36	5.1	<.17	1.1	<.10	<.17	<.20	1.6	<.50	<.17	8.9	309	1.7
38	3.7	<.22	1.2	<.10	<.22	.49	1.7	<.50	<.22	23	594	1.4
40	35	<.21	1.2	.52	<.21	.53	2.7	<.50	.30	47	997	1.4
40	<1.0	<.20	<.20	.56	<.20	.65	<.20	.61	<.20	1.4	17	<.20
41	8.8	<.24	.99	.10	<.24	.79	3.2	<.50	<.24	50	829	1.4
41	<1.0	<.22	<.22	.56	<.22	.56	<.22	.54	<.22	1.2	16	.83

Table 30. Trace-element concentration data for fish-tissue samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site number (fig. 1)	Manganese (µg/g)	Mercury (µg/g)	Molybdenum (µg/g)	Nickel (µg/g)	Selenium (µg/g)	Silver (µg/g)	Strontium (µg/g)	Uranium (µg/g)	Vanadium (µg/g)	Zinc (µg/g)	Water present in tissue (percent)
1	8.5	0.15	1.1	<0.16	3.1	<0.16	0.16	<0.16	0.21	94	70
1	2.1	.15	<.15	<.15	.70	<.15	1.9	<.15	.23	11	67
1	1.6	.37	.22	<.18	1.3	<.18	1.8	<.18	<.18	15	77
2	4.5	.20	1.1	<.14	24	.46	.12	<.14	1.3	99	70
2	.35	1.9	.34	<.21	.61	<.21	.31	<.21	<.21	15	77
3	6.0	.32	.90	<.16	2.9	.19	.32	<.16	.31	121	68
3	.76	.39	<.18	<.18	1.0	<.18	.71	<.18	<.18	13	71
3	10	.28	.92	<.20	2.6	<.20	.72	<.20	.41	148	73
3 ^R	9.2	.26	.85	<.19	2.1	<.19	.66	<.19	.26	159	72
4	5.2	.24	1.1	.22	4.0	.25	.14	<.14	.35	93	70
4	1.2	.15	.33	.28	1.7	<.18	1.6	<.18	<.18	15	74
5	1.7	.36	.28	<.18	.60	<.18	1.8	<.18	<.18	15	75
5	6.0	1.0	.87	<.17	7.5	<.17	.28	<.17	.40	90	76
9	8.1	.31	.83	<.18	2.3	<.18	.16	<.18	.35	115	72
9	.79	.22	<.18	<.18	.77	<.18	.58	<.18	.21	15	72
11	4.8	.48	.72	<.19	24	<.19	.17	<.19	<.19	91	77
11	.81	.15	<.18	<.18	1.3	<.18	.65	<.18	<.18	15	74
11 ^R	1.8	.20	<.20	<.20	2.3	<.20	2.1	<.20	<.20	17	73
12	11	.17	.79	.17	5.3	.38	.49	<.10	.31	149	78
12	1.1	.25	<.09	<.09	1.1	<.09	.86	<.09	.18	13	77
15	16	.25	.66	.25	3.2	.26	.62	<.21	.75	111	76
23	6.3	.59	.79	<.24	7.6	<.24	.26	<.24	<.24	96	76
23	2.5	.13	.15	<.12	.83	<.12	1.2	<.12	<.12	20	68
25	4.4	.22	.97	<.17	8.1	.99	.20	<.17	.38	86	75
25	1.5	.08	<.16	<.16	1.6	<.16	2.6	<.16	<.16	18	76
31	3.6	.30	1.0	<.18	4.8	1.3	.33	<.18	.26	294	74
31	2.0	.07	<.17	<.17	1.1	<.17	1.5	<.17	<.17	36	73
31	3.1	.09	<.20	<.20	1.4	<.20	2.6	<.20	<.20	45	76
31	4.8	.26	1.1	<.25	5.6	2.4	.33	<.25	<.25	595	76
33	.42	<.20	.11	<.02	.44	<.02	<.10	<.02	<.10	9.0	76
33	.84	.14	<.21	<.21	.89	<.21	1.5	<.21	<.21	18	76
33	5.4	.28	.97	<.16	5.6	.26	<.10	<.16	.22	87	74
34	7.6	.38	1.3	<.22	3.9	.31	.16	<.22	.41	157	78
34	1.4	.16	<.18	<.18	.98	<.18	1.2	<.18	<.18	16	71
35	5.8	.09	.85	<.21	4.4	.30	.20	<.21	<.21	150	75
36	2.0	.07	.56	<.17	3.3	.22	<.10	<.17	<.17	43	70
38	.56	.04	.66	<.22	4.1	<.22	.24	<.22	<.22	127	74
40	13	.10	1.2	<.21	4.4	<.21	.53	<.21	.63	131	77
40	3.4	.11	<.20	<.20	.87	<.20	2.8	<.20	<.20	25	79
41	5.9	.09	1.2	.30	4.8	.61	.31	<.24	.42	204	77
41	2.2	.18	<.22	<.22	1.2	<.22	3.7	<.22	<.22	23	77

Table 31. Organochlorine-compound concentration data for fish-tissue samples, Northern Rockies Intermontane Basins study unit, 1998-99

[**Bold text denotes detected concentrations.** Sample weight was 10 grams. Abbreviations: µg/kg, micrograms per kilogram, wet weight; R, replicate. Symbol: <, less than reporting level]

Site number (fig. 1)	Site name	Date	Time	Body part analyzed	Fish species	Number of fish com- posited
2	Rock Creek near Clinton, Mont.	08/11/98	1320	Whole fish	Mountain whitefish	6
3	Clark Fork at Turah Bridge, near Bonner, Mont.	08/12/98	1300	Whole fish	Largescale sucker	8
3 ^R	Clark Fork at Turah Bridge, near Bonner, Mont.	08/12/98	1400	Whole fish	Largescale sucker	8
3 ^R	Clark Fork at Turah Bridge, near Bonner, Mont.	08/12/98	1500	Whole fish	Largescale sucker	6
4	Blackfoot River above Nevada Creek, near Helmsville, Mont.	08/18/98	1200	Whole fish	Largescale sucker	8
5	Bitterroot River near Missoula, Mont.	08/10/98	1700	Whole fish	Largescale sucker	7
9	Clark Fork at St. Regis, Mont.	09/08/98	1500	Whole fish	Largescale sucker	6
11	Middle Fork Flathead River near West Glacier, Mont.	07/21/98	1300	Whole fish	Mountain whitefish	8
12	Flathead River at Perma, Mont.	10/16/98	0100	Whole fish	Largescale sucker	6
15	Priest River near Priest River, Idaho	09/10/98	1400	Whole fish	Largescale sucker	8
23	North Fork Coeur d'Alene River at Enaville, Idaho	06/16/98	1605	Whole fish	Mountain whitefish	5
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	06/17/98	1625	Whole fish	Rainbow trout	5
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	08/17/99	1200	Whole fish	Brook trout	5
33	St. Joe River at Red Ives Ranger Station, Idaho	07/07/98	1340	Whole fish	Cutthroat trout	5
33	St. Joe River at Red Ives Ranger Station, Idaho	09/01/99	1500	Whole fish	Cutthroat trout	5
34	St. Joe River at Calder, Idaho	07/08/98	1400	Whole fish	Largescale sucker	8
35	Spokane River near Post Falls, Idaho	07/12/99	1200	Whole fish	Largescale sucker	5
36	Spokane River above Liberty Bridge, near Otis Orchard, Wash.	07/27/99	1200	Whole fish	Largescale sucker	5
38	Spokane River at Sullivan Bridge, near Trentwood, Wash	07/28/99	1200	Whole fish	Largescale sucker	5
40	Hangman Creek at Spokane, Wash.	06/19/98	1500	Whole fish	Largescale sucker	8
41	Spokane River at Seven Mile Bridge, near Spokane, Wash.	08/05/98	1100	Whole fish	Largescale sucker	8
41	Spokane River at Seven Mile Bridge, near Spokane, Wash.	08/05/98	1130	Fillet	Rainbow trout	5

Table 31. Organochlorine-compound concentration data for fish-tissue samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site number (fig. 1)	Aldrin (µg/kg)	alpha-HCH (µg/kg)	alpha-HCH-d ₆ , surrogate (in percent)	beta-HCH (µg/kg)	cis-Chlor-dane (µg/kg)	cis-Nona-chlor (µg/kg)	Dacthal (µg/kg)	delta-HCH (µg/kg)	Dieldrin (µg/kg)	Endrin (µg/kg)
2	<5.0	<5.0	89	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
3	<5.0	<5.0	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
3 ^R	<5.0	<5.0	85	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
3 ^R	<5.0	<5.0	94	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<6.0
4	<5.0	<5.0	82	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
5	<5.0	<5.0	90	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<17
9	<5.0	<5.0	80	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
11	<5.0	<5.0	70	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
12	<5.0	<5.0	83	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
15	<5.0	<5.0	74	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
23	<5.0	<5.0	77	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
31	<5.0	<5.0	101	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
31	<5.0	<5.0	90	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
33	<5.0	<5.0	82	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
33	<5.0	<5.0	121	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
34	<5.0	<5.0	82	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
35	<5.0	<5.0	100	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
36	<5.0	<5.0	109	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
38	<5.0	<5.0	103	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
40	<5.0	<5.0	90	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
41	<5.0	<5.0	89	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
41	<5.0	<5.0	88	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0

Table 31. Organochlorine-compound concentration data for fish-tissue samples, Northern Rockies Intermontane Basins study unit, 1998-99 (Continued)

Site number (fig. 1)	Heptachlor (µg/kg)	Heptachlor epoxide (µg/kg)	Hexa- chloro- benzene (µg/kg)	Lindane (µg/kg)	Lipids (percent)	Mirex (µg/kg)	o,p'-DDD (µg/kg)	o,p'DDE (µg/kg)	o,p'-DDT (µg/kg)	o,p'- Methoxy- chlor (µg/kg)
2	<5.0	<5.0	<5.0	<5.0	9.1	<5.0	<5.0	<5.0	<5.0	<5.0
3	<5.0	<5.0	<5.0	<5.0	6.2	<5.0	<5.0	<5.0	<5.0	<5.0
3 ^R	<5.0	<5.0	<5.0	<5.0	6.0	<5.0	<5.0	<5.0	<5.0	<5.0
3 ^R	<5.0	<5.0	<5.0	<5.0	5.7	<5.0	<5.0	<5.0	<5.0	<5.0
4	<5.0	<5.0	<5.0	<5.0	5.4	<5.0	<5.0	<5.0	<5.0	<5.0
5	<5.0	<5.0	<5.0	<5.0	7.5	<5.0	<5.0	<5.0	<5.0	<5.0
9	<5.0	<5.0	<5.0	<5.0	4.9	<5.0	<5.0	<5.0	<5.0	<5.0
11	<5.0	<5.0	<5.0	<5.0	7.2	<5.0	<5.0	<5.0	<5.0	<5.0
12	<5.0	<5.0	<5.0	<5.0	6.8	<5.0	<5.0	<5.0	<5.0	<5.0
15	<5.0	<5.0	<5.0	<5.0	3.4	<5.0	<5.0	<5.0	<5.4	<5.0
23	<5.0	<5.0	<5.0	<5.0	9.4	<5.0	<5.0	<5.0	<5.0	<5.0
31	<5.0	<5.0	<5.0	<5.0	7.1	<5.0	<5.0	<5.0	<5.0	<5.0
31	<5.0	<5.0	<5.0	<5.0	11	<5.0	<5.0	<5.0	<5.0	<5.0
33	<5.0	<5.0	<5.0	<5.0	8.9	<5.0	<5.0	<5.0	<5.0	<5.0
33	<5.0	<5.0	<5.0	<5.0	5.8	<5.0	<5.0	<5.0	<5.0	<5.0
34	<5.0	<5.0	<5.0	<5.0	3.9	<5.0	<5.0	<5.0	<5.0	<5.0
35	<5.0	<5.0	<5.0	<5.0	3.0	<5.0	<5.0	<5.0	<5.0	<5.0
36	<5.0	<5.0	<5.0	<5.0	5.7	<5.0	<5.0	<5.0	<5.0	<5.0
38	<5.0	<5.0	<5.0	<5.0	2.2	<5.0	<5.0	<5.0	<5.0	<5.0
40	<5.0	<5.0	<5.0	<5.0	2.6	<5.0	<5.0	<5.0	<5.0	<5.0
41	<5.0	<5.0	<5.0	<5.0	2.6	<5.0	<5.0	<5.0	<5.0	<5.0
41	<5.0	<5.0	<5.0	<5.0	14	<5.0	<5.0	<5.0	<5.0	<5.0

Table 31. Organochlorine-compound concentration data for fish-tissue samples, Northern Rockies Intermontane Basins study unit, 1998-99 Continued)

Site number (fig. 1)	Oxy-chlor-dane (µg/kg)	p,p'-DDD (µg/kg)	p,p'-DDE (µg/kg)	p,p'-DDT (µg/kg)	p,p'-Meth-oxychlor (µg/kg)	Penta-chloro-anisole (µg/kg)	Poly-chlorinated biphenyls (µg/kg)	Toxa-phene (µg/kg)	trans-Chlor-dane (µg/kg)	trans-Nona-chlor (µg/kg)
2	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<200	<5.0	<5.0
3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<200	<5.0	<5.0
3 ^R	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	120	<200	<5.0	<5.0
3 ^R	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<200	<5.0	<5.0
4	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	160	<200	<5.0	<5.0
5	<5.0	<5.0	9.0	<5.0	<5.0	<5.0	140	<200	<5.0	<5.0
9	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	220	<200	<5.0	<5.0
11	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
12	<5.0	<5.0	6.6	<5.0	<5.0	<5.0	<50	<200	<5.0	<5.0
15	<5.0	<5.0	11	<5.0	<5.0	<5.0	62	<200	<5.0	<5.0
23	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	150	<200	<5.0	<5.0
31	<5.0	<5.0	14	<5.0	<5.0	<5.0	310	<200	<5.0	<5.0
31	<5.0	<5.0	8.7	<5.0	<5.0	<5.0	200	<200	<5.0	<5.0
33	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<200	<5.0	<5.0
33	<5.0	<5.0	5.0	<5.0	<5.0	<5.0	<50	<200	<5.0	<5.0
34	<5.0	<5.0	10	<5.0	<5.0	<5.0	<50	<200	<5.0	<5.0
35	<5.0	<5.0	11	<5.0	<5.0	<5.0	270	<200	<5.0	<5.0
36	<5.0	<5.0	16	<5.0	<5.0	<5.0	500	<200	<5.0	<5.0
38	<5.0	<5.0	12	<5.0	<5.0	<5.0	310	<200	<5.0	<5.0
40	<5.0	<5.0	38	6.6	<5.0	<5.0	570	<200	<5.0	<5.0
41	<5.0	<5.0	20	<5.0	<5.0	<5.0	140	<200	<5.0	<5.0
41	<5.0	<5.0	11	<5.0	<5.0	<5.0	210	<200	<5.0	<5.0

Table 32. Benthic algae (periphyton) data for samples, Northern Rockies Intermontane Basins study unit, 1999-2001

[Abbreviations: mg/m², milligrams per square meter; mg/L, milligrams per liter; g/m², grams per square meter; R, replicate.
 Symbol: <, less than reporting level]

Site num- ber (fig.1)	Site name	Date	Chloro- phyll-a (mg/m ²)	Pheo- phytin-a, area- weighted average (mg/L)	Biomass, Peri- phyton ash weight (g/m ²)
3	Clark Fork at Turah Bridge, near Bonner, Montana	08/10/99	4	2	5.3
5	Bitterroot River near Missoula, Montana	08/11/99	25	15	14
6	St. Regis River above Rainy Creek, near Saltese, Montana	08/23/00	3	2	3
7	St. Regis River near Haugan, Montana	08/23/00	3	3	5
8	St. Regis River near St. Regis, Montana	08/24/00	4	2	5
9	Clark Fork at St. Regis, Montana	08/24/99	26	12	10
12	Flathead River at Perma, Montana	08/25/99	1	9	7
14	Lightning Creek at Clark Fork, Idaho	08/02/99	<1	6	2
15	Priest River near Priest River, Idaho	09/06/00	13	4	9
17	North Fork Coeur d'Alene River above Shoshone Creek, near Prichard, Idaho	09/11/00	5	2	9
18	Prichard Creek near Murray, Idaho	08/07/00	<1	<1	2
19	East Fork Eagle Creek near mouth, near Prichard, Idaho	08/09/00	3	2	5
20	West Fork Eagle Creek below Settlers Grove, Idaho	08/09/00	17	4	10
21	Beaver Creek near mouth, near Murray, Idaho	08/10/00	1	1	4
22	Prichard Creek at mouth, at Prichard, Idaho	08/08/00	2	<1	2
23	North Fork Coeur d'Alene River at Enaville, Idaho	07/14/99	4	5	2
		09/12/00	17	11	10
24	South Fork Coeur d'Alene River at Shoshone Park, near Mullan, Idaho	08/22/00	2	1	2
26	Canyon Creek near Burke, Idaho	08/21/00	4	2	4
27	Canyon Creek at Woodland Park, Idaho	08/21/00	9	4	8
28	South Fork Coeur d'Alene River at Silverton, Idaho	08/22/00	6	4	6
29	East Fork Pine Creek above Nabob Creek, near Pinehurst, Idaho	08/10/00	<1	<1	2
30	Pine Creek below Amy Gulch, near Pinehurst, Idaho	08/10/00	1	1	2
31	South Fork Coeur d'Alene River near Pinehurst, Idaho	08/16/99	<1	6	2
31 ^R		08/16/99	<1	5	2
31 ^R		08/16/99	<1	6	4
31		09/12/00	2	1	3
31		09/11/01	24	8	11
33	St. Joe River at Red Ives Ranger Station, Idaho	08/31/99	4	8	5
33 ^R		08/31/99	1	9	5
33 ^R		08/31/99	2	4	5
33		09/13/00	12	7	13
33		09/13/01	46	17	17
35	Spokane River near Post Falls, Idaho	07/26/99	6	<1	2
35		08/29/00	15	4	12
36	Spokane River above Liberty Bridge, near Otis Orchard, Wash.	07/27/99	2	.9	1
37	Spokane River at Greenacres, Wash.	07/28/99	2	3	.4
38	Spokane River at Sullivan Bridge, near Trentwood, Wash.	07/28/99	4	6	4
39	Spokane River below Green Street, at Spokane, Wash.	07/29/99	10	5	6
41	Spokane River at Seven Mile Bridge, near Spokane Wash.	07/30/99	94	5	25