PHYSICAL, CHEMICAL, AND BIOLOGICAL DATA FOR DETAILED STUDY OF IRRIGATION DRAINAGE IN THE KENDRICK RECLAMATION PROJECT AREA, WYOMING, 1988-90

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Cheyenne, Wyoming

1992

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U.S. GEOLOGICAL SURVEY

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CONVERSION FACTORS AND ABBREVIATIONS

Multiply	By	To obtain
acre-foot (acre-ft)	0.001233	cubic hectometer
foot (ft)	0.3048	meter
square mile (mi^2)	2.590	square kilometer

Temperature in degrees Fahrenheit (^0F) can be converted to degrees Celsius (^0C) as follows:

$$^0C = 5/9 (^0F - 32)$$

The following abbreviations are used in this report:

mg/L	milligram per liter
mm	millimeter
µg/g	microgram per gram
µg/L	microgram per liter
µm	micrometer
µS/cm	microsiemens per centimeter at 25 degrees Celsius

PHYSICAL, CHEMICAL, AND BIOLOGICAL DATA FOR DETAILED STUDY OF IRRIGATION DRAINAGE IN THE KENDRICK RECLAMATION PROJECT AREA, WYOMING, 1988-90

By Randolph B. See, Pedro Ramirez, Jr., and David A. Peterson

ABSTRACT

In response to increasing concern about the quality of irrigation drainage and its potential effects on fish, wildlife, and human health, the U.S. Department of the Interior formed an interbureau Task Group to address related water-quality problems. The Kendrick Reclamation Project area was one of nine areas assigned the highest priority for investigation by the interbureau Task Group. This report lists data for onsite measurements of physical properties and for water-quality and biota samples from 1988 to 1990, as part of a detailed study of the effect of irrigation drainage on water quality and biota in the Kendrick Reclamation Project area.

Water samples collected for analysis included surface water, ground water, and pore water. Surface-water samples from the North Platte River, major tributaries, lakes, reservoirs, wetlands, drains, and canals were collected. In addition, ground-water samples and pore water from subsurface soil samples were collected. Data includes major-ion and trace-element concentrations, organochlorine compound concentrations, and discharge measurements.

Biological samples collected for analysis included aquatic vegetation, invertebrates, fish, and birds. Aquatic-bird use of the Kendrick area was monitored by weekly census. Adult and juvenile aquatic birds were collected for liver samples. Reproductive success of nesting Canada geese, American avocets, and eared grebes was monitored.

INTRODUCTION

During the last several years, there has been increasing concern about quality of irrigation drainage--both surface and subsurface water draining from irrigated land--and its potential effects on fish, wildlife, and human health. Large concentrations of selenium have been detected in subsurface drainage from irrigated land in the western part of the San Joaquin Valley in California (Gilliom and others, 1989). In 1983, incidences of mortality, birth defects, and reproductive failures in aquatic birds were discovered by the U.S. Fish and Wildlife Service at the Kesterson National Wildlife Refuge in the western San Joaquin Valley where irrigation drainage was impounded. Arsenic, heavy metals, and pesticide residues have been detected in addition to selenium in numerous areas in the western United States that receive irrigation drainage.

Members of Congress, Federal and State agencies, and several environmental organizations interested in the general nature and extent of contaminant problems associated with irrigation drainage have requested information from the U.S. Department of the Interior (DOI). In October 1985, the DOI

developed the Irrigation Drainage Program and formed an interbureau Task Group on Irrigation Drainage to address water-quality problems related to irrigation drainage for which the DOI may have responsibility.

The DOI prepared a management strategy and the Task Group prepared a comprehensive plan for reviewing irrigation drainage concerns, subsequently identifying 19 areas that warranted reconnaissance-level studies. The study areas were identified on the basis of three specific situations: (1) irrigation or drainage facilities constructed or managed by the DOI; (2) National Wildlife Refuges that receive irrigation drainage; and (3) other migratory bird or endangered-species management areas that receive water from DOI-funded projects. The Task Group assigned the highest priority to 9 of the areas identified (Sylvester and Wilber, 1989). The Kendrick Reclamation Project area (Kendrick area), near Casper, Wyoming (fig. 1), was one of these areas.

Analyses of samples collected in or near the Kendrick area during the 1986-87 reconnaissance investigation indicated large concentrations of selenium in water, bottom sediment, and biota (Peterson and others, 1988, p. 41). An evaluation of whether the large concentrations were localized or widespread required additional information about the geochemical and biological processes controlling the mobility and availability of selenium and associated trace elements. This report contains a listing of physical properties, chemical analyses, and observations for samples of water and biota from the detailed study conducted during 1988-90.

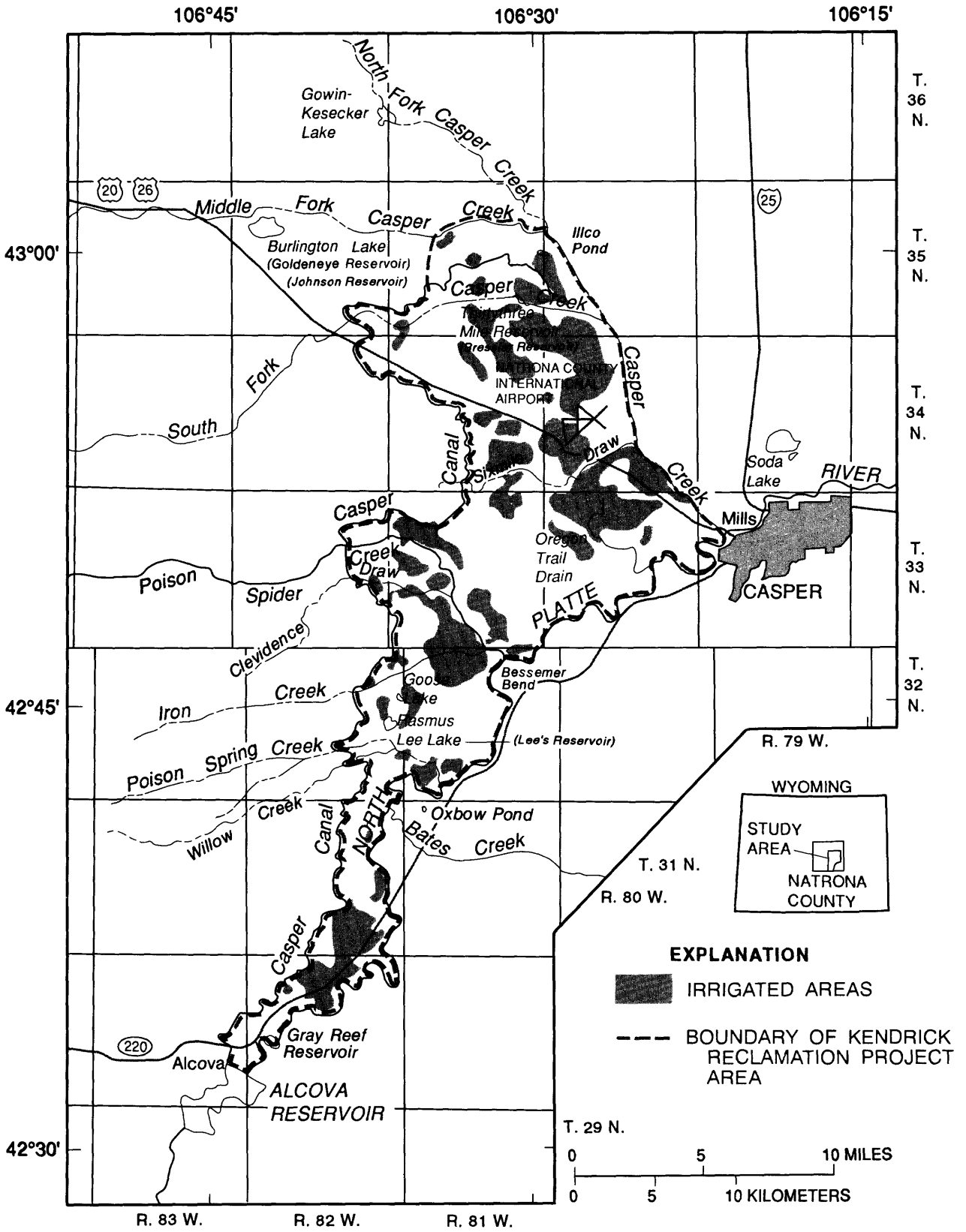
This study was conducted by a DOI interbureau field team composed of a U.S. Geological Survey (USGS) scientist as team leader, with other USGS, U.S. Fish and Wildlife Service, and U.S. Bureau of Reclamation scientists representing several different disciplines. Funding for this study was provided by the U.S. Department of the Interior and the Wyoming Department of Environmental Quality.

A summary report of the detailed investigation was prepared by See and others (1992). Previous reports associated with the detailed study at the Kendrick area have listed geochemical data for soil and plants (Severson and others, 1989b), described the variability in chemical composition of soil (Severson and others, 1989a), and described selenium in soil and plants (Erdman and others, 1989, 1991). Bottom-sediment sample collection, preparation, analytical techniques, and results have been reported by Harms and others (1990). Crist (1974) reported on selenium in ground-water samples from the Kendrick area.

ACCESS TO DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through activities of the USGS and to provide for more effective and efficient means of releasing data to the public. The system is operated and maintained on the central computer facilities of the USGS at its National Center, in Reston, Virginia.

Use of WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to



Base modified from U.S. Geological Survey 1:100,000 digital line graph map series: Casper, 1979; and Midwest, 1981.
Universal Transverse Mercator projection

Figure 1.--Location of the study area and the Kendrick Reclamation Project area. (Irrigated areas modified from maps revised in 1982 by the Casper-Alcova Irrigation District.)

the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the Water Resources Division's Wyoming District office (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

Data for ground-water samples collected by the Natrona County Department of Health are on file at:

City of Casper, Environmental Health Division
Natrona County Health Department
1200 East Third Street
Casper, Wyoming 82601-2990

Bird nesting data are on file at the U.S. Fish and Wildlife Service, Fish and Wildlife Enhancement, Wyoming State Office at Cheyenne, Wyoming. Inquiries may be directed to:

Environmental Contaminants Specialist or State Supervisor
U.S. Fish and Wildlife Service
2617 East Lincolnway, Suite A
Cheyenne, Wyoming 82001
(307) 772-2374

PHYSICAL AND CHEMICAL DATA

Physical data collected during this study include discharge, specific conductance, temperature, and turbidity determinations. Chemical data collected during this study include major-ion and trace-element concentrations, organochlorine compound concentrations, and isotopic ratios.

Except for water samples analyzed for total (dissolved plus suspended) constituents, pH, dissolved oxygen, suspended sediment, specific conductance, and turbidity, all water samples were passed through a 0.45 μm membrane filter. Specific conductance of the water samples was determined onsite with a conductivity meter. Turbidity of the water samples was determined nephelometrically (Fishman and Friedman, 1989). During 1988, 51 water samples from domestic wells were analyzed by the Wyoming Department of Agriculture (WDA) using the graphite furnace atomic absorption method (U.S. Environmental Protection Agency, 1979). Except for samples in which isotopic ratios were determined and the ground-water samples analyzed by WDA, all other water analyses were conducted at the U.S. Geological Survey National Water Quality Laboratory in Arvada, Colorado using techniques described in Fishman and Friedman (1989). Standard USGS guidelines and quality-control procedures were used for sample collection and onsite determinations (Knapton, 1985) and laboratory analyses (Friedman and Erdmann, 1982).

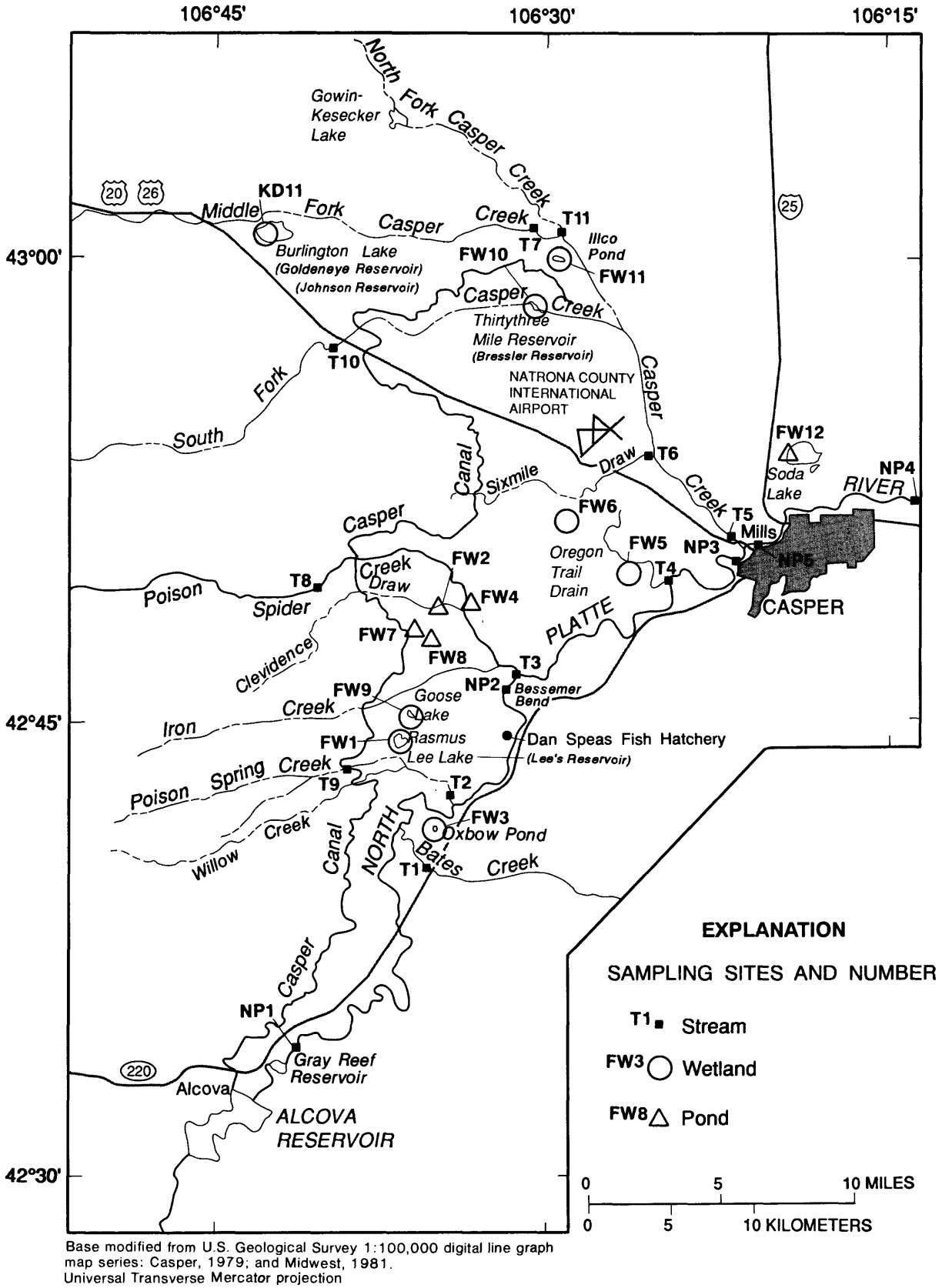
Isotopic ratios were used to investigate evaporative processes of water in the Kendrick area. After filtration, water samples to be analyzed for oxygen-18/oxygen-16 (O-18/O-16) and deuterium/hydrogen-1 (D/H) isotopic ratios were preserved with a mercuric-chloride tablet. The O-18/O-16 isotopic ratio of water samples was determined using a modification of the method developed by Epstein and Mayeda (1953). The D/H isotopic ratio of the water samples was determined by analyzing hydrogen quantitatively extracted from the water (Kendall and Coplen, 1985). The delta values for O-18/O-16 and D/H results are reported in tables relative to Vienna Standard Mean Ocean Water (V-SMOW) in the per mil notation. The O-18/O-16 and D/H isotopic ratios were determined in the USGS Isotope Fractionation Project Laboratory in Reston, Virginia.

Most water samples were collected monthly from the North Platte River and major tributaries. The analytical results for those water samples are listed in table 1 (all tables at the back of report). The monthly water samples from the North Platte were collected using the equal-width-increment sampling method. Locations of surface-water sampling sites are shown in figure 2. During selected periods, point and composite equal-width-increment samples also were collected daily from the North Platte River and major tributaries (table 2). Analytical results for water samples collected from wetlands (ponds, lakes, and reservoirs) are listed in table 3. Location of daily lake sampling point for Rasmus Lee Lake is shown in figure 4. Locations of drainwater sampling sites are shown in figure 3. Analytical results for water samples collected from drains and canals are listed in table 4.

Physical properties and dissolved major-ion and trace-element concentrations in ground-water samples collected by the USGS are listed in table 5. Specific conductance and dissolved selenium concentration in ground-water samples collected by the Natrona County Department of Health (NCDH) are listed in table 6. Because of prior agreement with the NCDH, specific site locations for samples collected by the NCDH are not shown. Pore water was obtained from selected intervals of cores of subsurface material using pressure extraction. Dissolved major-ion and trace-element concentrations in pore water from core samples collected from shallow test wells near Rasmus Lee Lake are listed in table 7. Locations of shallow wells near Rasmus Lee Lake are shown in figure 4.

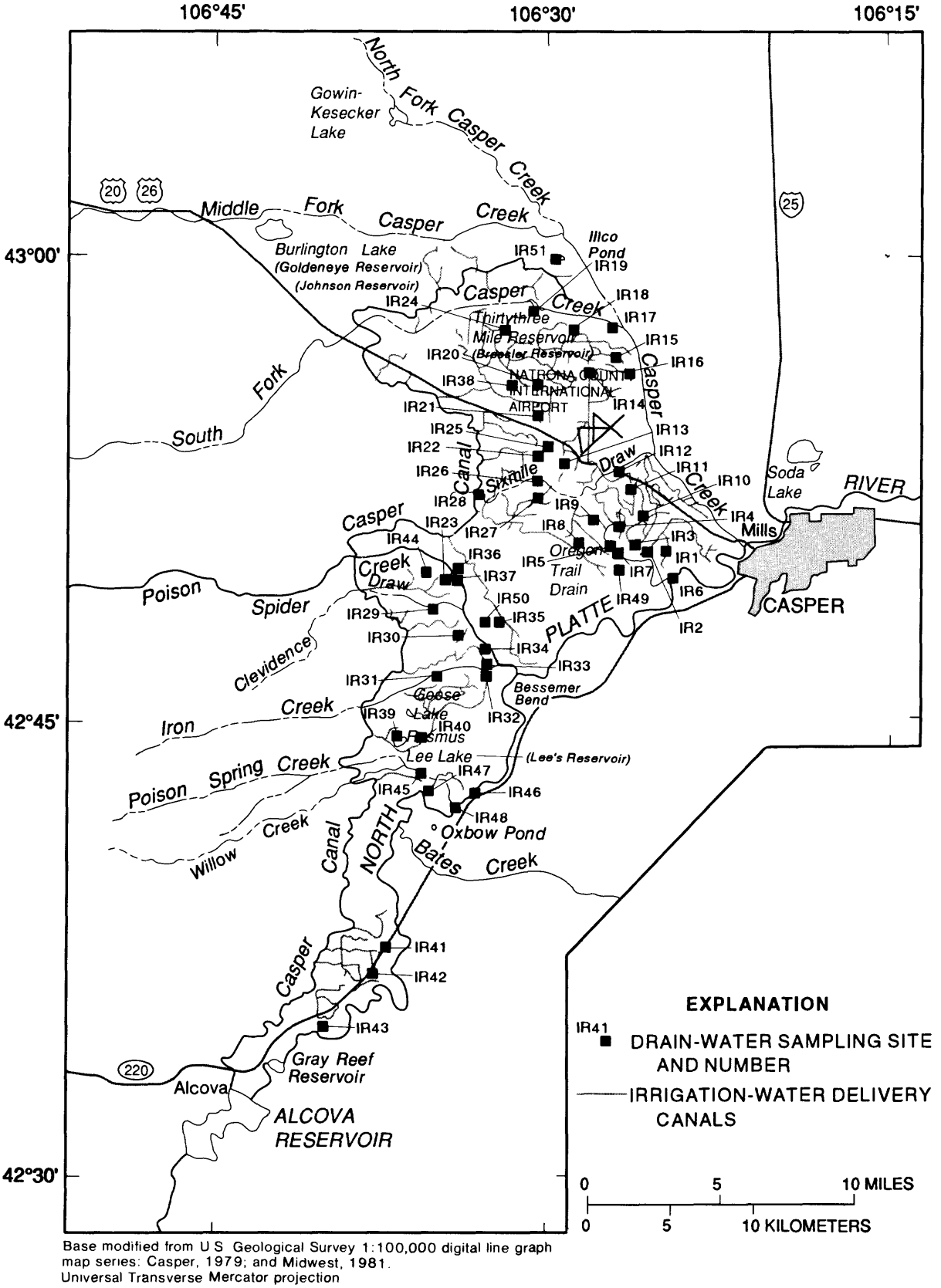
Wells cited in this report are numbered according to the Federal system of land subdivision in Wyoming. The first number indicates the township and north of the 40th Parallel Base Line, the second the range west of the Sixth Principal Meridian, and the third the section in which the well is located. Lower case letters following the section numbers indicate the position of the well in the section. The first letter denotes the quarter section (160 acres), the second letter the quarter-quarter section (40 acres), and the third letter the quarter-quarter-quarter section (10-acre tract). Subdivisions of a section are lettered a, b, c, and d in a counterclockwise direction, starting in the northeast quarter. If more than one well is listed in a 10-acre tract, consecutive numbers starting with 1 follow the lower case letter of the well number. If a section does not measure 1 mi^2, it is treated as a full section with the southeast section corner serving as the reference point for subdivision of the section. An example is illustrated in figure 5.

An eight-digit station identification number is used by the USGS to designate surface-water stations in a downstream order. The first two digits identify the major drainage in which the station is located--in this case, 10 (Great Basin). The remaining six digits identify the relative location of the station, with numbers increasing progressively in the downstream direction.



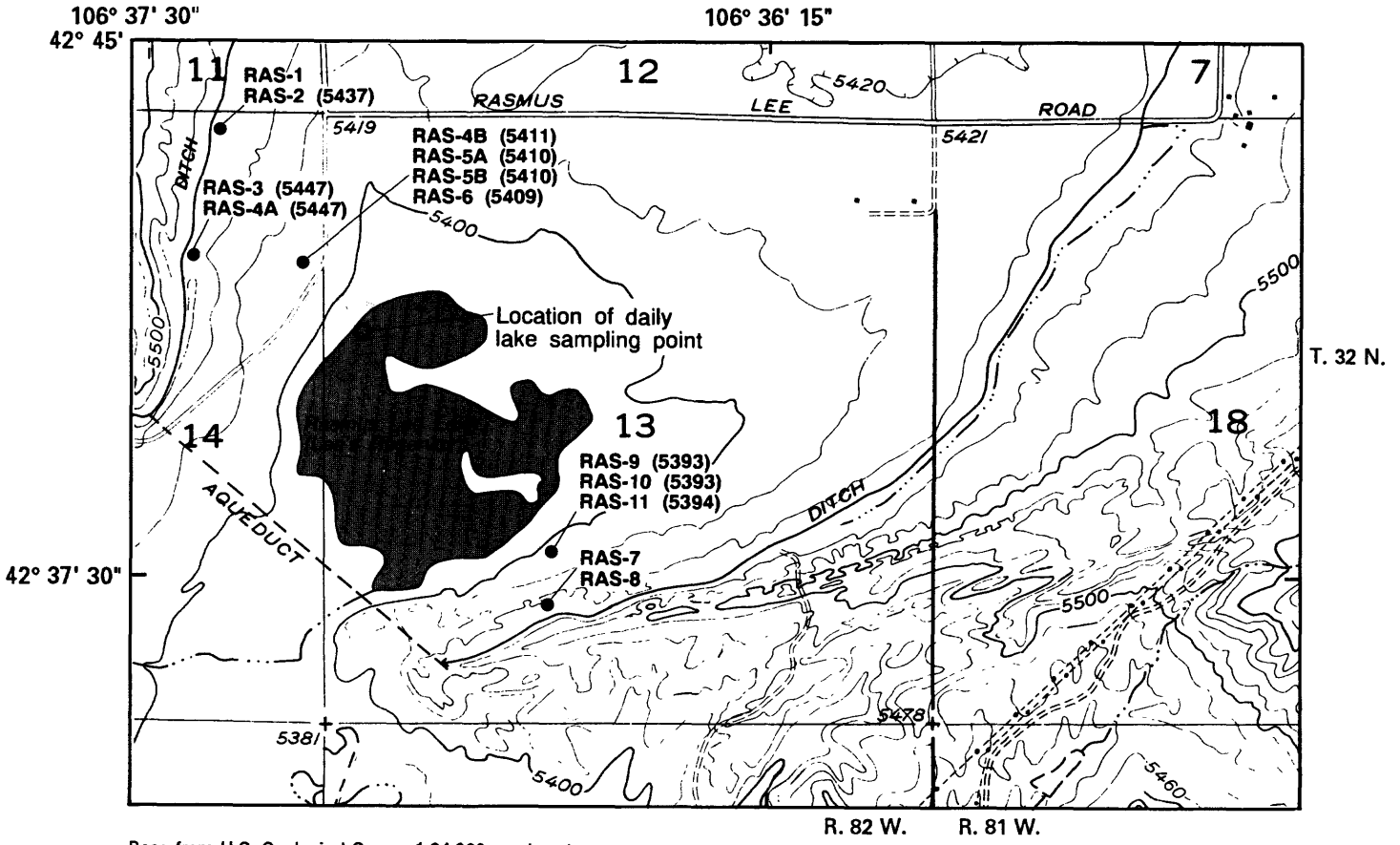
Base modified from U.S. Geological Survey 1:100,000 digital line graph map series: Casper, 1979; and Midwest, 1981.
Universal Transverse Mercator projection

Figure 2.--Location of surface-water sampling sites on the North Platte River, major tributaries, and wetlands.



Base modified from U S Geological Survey 1:100,000 digital line graph map series: Casper, 1979; and Midwest, 1981.
Universal Transverse Mercator projection

Figure 3.--Location of drain-water sampling sites.



Base from U.S. Geological Survey 1:24,000 quadrangle:
Bessemer Mountain, Wyoming, 1951

0 1000 2000 3000 FEET

0 300 600 900 METERS

CONTOUR INTERVAL 20 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

EXPLANATION

RAS-7
● RAS-8 LOCATION OF TWO OR MORE WELLS AND WELL NUMBERS--Numbers in parentheses are ground-water elevations measured in September, 1989

Figure 4.--Location of shallow wells near Rasmus Lee Lake and lake sampling point. (Well numbers refer to table 7.)

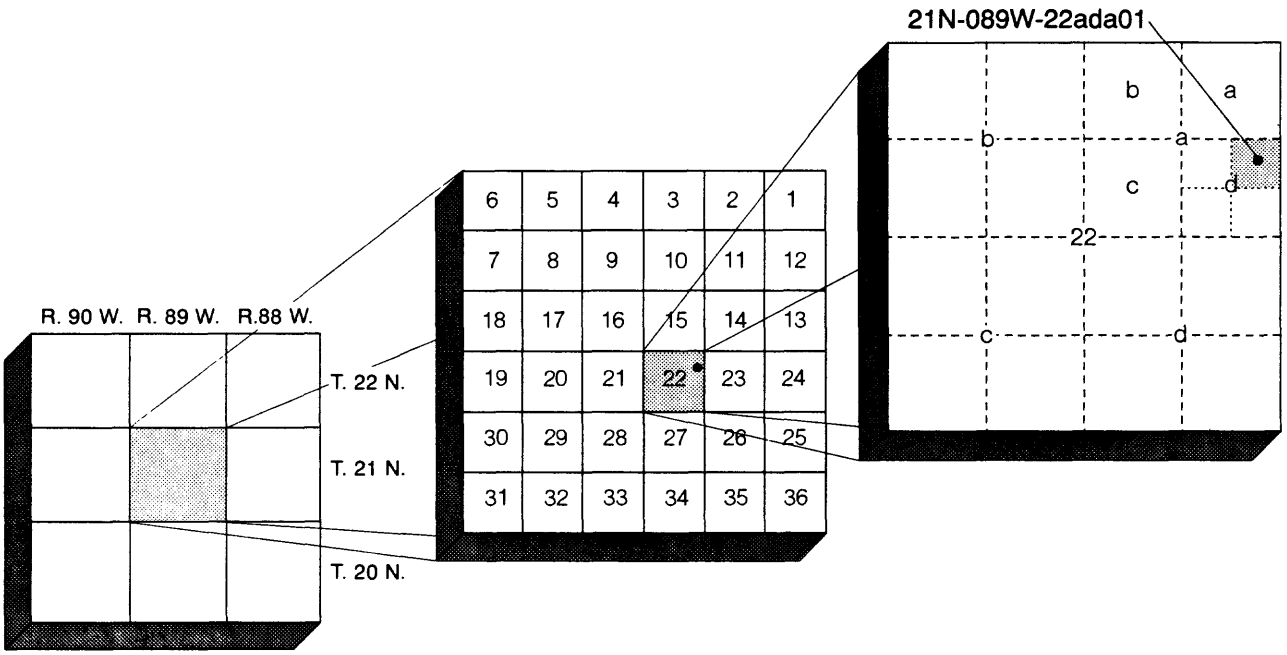


Figure 5.--System for numbering wells and miscellaneous sites (township and range).

BIOLOGICAL DATA

Biological samples were collected by personnel of the U.S. Fish and Wildlife Service with assistance from the Wyoming Game and Fish Department. Samples of aquatic invertebrates were collected at Rasmus Lee and Goose Lakes, Thirtythree Mile Reservoir, and Illco and Oxbow Ponds with light traps similar to those described by Espinosa and Clark (1972). Benthic invertebrates (Chironomid larvae) were picked from bottom grab samples and from the surface with a sweep net at Rasmus Lee Lake and Oxbow Pond. Samples of pondweed (Potamogeton spp.) were collected manually from Rasmus Lee and Goose Lakes, Thirtythree Mile Reservoir, Illco and Oxbow Ponds, and Soda Lake. Fish were collected from Illco Pond and Thirtythree Mile and Goldeneye Reservoirs using seines and gill nets. Electroshocking equipment was used to collect fish from the North Platte River downstream of Grey Reef Dam (NP1), Poison Spider Creek (NP2), downstream of Oregon Trail Drain (NP3), and downstream of Casper Creek (NP4). Site locations are shown in figure 2.

Illco Pond is a small pond located south of the Middle Fork Casper Creek near the junction of North Fork Casper Creek. "Illco" is not a formal geographic name, but it is used by local residents and personnel working on this study. The three remaining wetlands, Oxbow Pond, Soda Lake, and Goldeneye Reservoir (Burlington Lake), were outside the Kendrick area and were used as reference sites. Oxbow Pond, a reference site, which is not identified officially on any USGS map series, is a small body of water east of the junction of Bates Creek and the North Platte River. Soda Lake is a reference site unimpacted by irrigation drainage. The formal geographic name of Goldeneye Reservoir is "Burlington Lake." The Wyoming State Engineer has permitted Goldeneye Reservoir as Johnson No. 1 Reservoir (written communication, Randy Tullis, 1992); however, road signs, project personnel, and residents of the Casper area identify it as Goldeneye Reservoir. Therefore, it is identified as Goldeneye Reservoir in this report. Rasmus Lee Lake is permitted by the Wyoming Engineer's Office as "Lee's Reservoir." Thirtythree Mile Reservoir is permitted by the Wyoming State Engineer's Office as "Bressler Reservoir" (written commun., Randy Tullis, 1992).

Adult and juvenile aquatic birds were collected for liver samples using a shotgun and steel shot. Aquatic bird carcasses found in the Kendrick area were retrieved and submitted for necropsy to the Colorado State University Veterinary Diagnostic Laboratory in Fort Collins, Colorado. Livers from all bird specimens were removed with stainless steel dissection tools and placed in pre-cleansed (acid washed and solvent rinsed) glass jars for tissue-residue analyses. All biological specimens were kept on ice and then frozen as soon as possible.

Biological samples were analyzed for trace elements by one of the following laboratories under contract with the U.S. Fish and Wildlife Service Patuxent Analytical Control Facility (PACF): Hazelton Laboratories America, Inc., Madison, Wisconsin; Environmental Trace Substances Research Center, Columbia, Missouri; and Research Triangle Institute, Research Triangle Park, North Carolina. The laboratories analyzed the samples for selenium and arsenic using hydride generation atomic absorption spectroscopy or graphite furnace atomic absorption spectroscopy, and for mercury by cold vapor reduction. Other elements including boron, cadmium, and lead were analyzed by inductively coupled plasma atomic spectroscopy. Organochlorine pesticides and polychlorinated biphenyls were analyzed using packed, capillary, or megabore column, electron capture gas chromatography. Laboratory quality control was assured through the PACF. The precision and accuracy of the laboratory analyses were confirmed with procedural blanks, duplicate analyses, test recoveries of spiked materials, and reference material analyses. All U.S. Fish and Wildlife Service analyses received a PACF quality-assurance review.

The primary method used to assess accuracy of analyses of biological tissue samples was percentage recovery of spiked analyte. Laboratory accuracy was established for each type of analysis and was expected to be within the standards listed in table 8. Duplicate samples were analyzed to provide a measure of analytical precision. Duplicate analyses were evaluated in accordance with the criteria listed in table 9. The results of the analyses for organochlorine pesticides and polychlorinated biphenyls are listed in table 10. Wet weight organochlorine pesticide and polychlorinated biphenyl concentrations are shown in table 11.

The test recoveries of spiked materials reported with a batch of samples submitted to a laboratory for analysis were compared to the average recovery for that laboratory and each analyte. If the reported recoveries were within the 95-percent confidence interval for the mean recovery, the accuracy of the analysis was considered acceptable by PACF. In addition to the test recoveries of spiked materials, standard reference materials were analyzed. Results were compared to both the laboratory average and the certified value. Accuracy and precision for biota sample analyses included in this report were considered acceptable by PACF. The percentage moisture and dry-weight trace-element concentrations for biota are listed in table 12.

Aquatic-bird use in the Kendrick area was quantified by a weekly census from March through October in 1988 and 1989. Bird surveys were conducted at Rasmus Lee and Goose Lakes, Thirtythree Mile Reservoir, and Illco and Oxbow Ponds. Access to Illco Pond was not permitted in 1989; hence, no data are available for that year. Observations were made using a 15- to 60-power zoom spotting scope and binoculars. Counts were made between 0700 and 1100 hours. Date, time of survey, duration of survey, species, and total number of individuals per species were recorded. Observations of bird species at the Kendrick area are listed in tables 13 to 21.

In 1989, hatching dates were estimated from the date of initial visit, clutch size, incubation period for each species, and stage of incubation of randomly collected eggs. Eggs that failed to hatch were collected and the embryos examined for deformities. The egg contents or embryos were placed in chemically cleansed glass jars and saved for chemical analysis. Onsite data sheets for aquatic bird nest monitoring are on file with the U.S. Fish and Wildlife Service in Cheyenne, Wyoming. Frequency of aquatic bird nest monitoring is listed in table 22.

SUMMARY

In response to increasing concern about the quality of irrigation drainage and its potential effects on fish, wildlife, and human health, the U.S. Department of the Interior formed an interbureau Task Group to address related water-quality problems. The interbureau Task Group identified 19 areas that warranted onsite reconnaissance-level studies. The Kendrick Reclamation Project area was one of nine areas assigned the highest priority for investigation by the interbureau Task Group. Previous reports listed data for soil, plant, and bottom-sediment samples. This report lists data for water-quality and biota samples collected at the Kendrick Reclamation Project area during the 1988-90 detailed study.

Surface-water samples from the North Platte River, major tributaries, wetlands (ponds, lakes, and reservoirs), drains, and canals were collected. In addition, ground-water samples from wells and a spring and pore-water samples from core samples of soil were collected and analyzed. Major constituent and trace-element concentrations were determined for all water samples.

Biological samples collected for trace-element analysis included aquatic vegetation, invertebrates, fish, and birds. Aquatic-bird use was monitored by weekly census. Adult and juvenile aquatic birds were collected for liver samples. Reproductive success of nesting Canada geese, American avocets, and eared grebes was monitored.

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Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89

[INST., instantaneous; US/CM, microsiemens per centimeter at 25 degrees Celsius; DEG C, degrees Celsius; NTU, nephelometric turbidity unit; MM of HG, millimeters of mercury; MG/L, milligrams per liter; DIS IT, dissolved incremental titration; WAT WH TOT FET, water whole total fixed endpoint titration; WAT DIS TOT IT, water dissolved total incremental titration; AC-FT, acre-feet; UG/L, micrograms per liter; PER MIL, parts per thousand; E, estimated; R, River; C or CR, Creek; NR, near; BEL or BL, below; AB, above; N, North; S, South; F, Fork; --, no data; <, less than]

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)	PH, ONSITE (STAND-ARD UNITS)
NP1	06642000	NORTH PLATTE R AT ALCOVA	01-12-88	1325	860	490	8.3
		NORTH PLATTE R AT ALCOVA	02-11-88	1000	682	520	8.2
		NORTH PLATTE R AT ALCOVA	03-03-88	0900	714	--	8.7
		NORTH PLATTE R AT ALCOVA	04-07-88	0930	388	504	8.7
		NORTH PLATTE R AT ALCOVA	05-12-88	0920	964	502	8.6
		NORTH PLATTE R AT ALCOVA	06-23-88	1100	1600	470	8.2
		NORTH PLATTE R AT ALCOVA	07-11-88	1100	2750	530	7.6
		NORTH PLATTE R AT ALCOVA	08-04-88	1630	2820	1510	8.6
		NORTH PLATTE R AT ALCOVA	09-15-88	0915	2750	520	7.9
		NORTH PLATTE R AT ALCOVA	10-20-88	0915	974	510	8.6
		NORTH PLATTE R AT ALCOVA	11-17-88	0915	849	540	8.6
T1	06643000	BATES C NR ALCOVA	01-12-88	1445	13	1460	8.2
		BATES C NR ALCOVA	02-09-88	1505	14	1440	8.2
		BATES C NR ALCOVA	02-29-88	1515	22	1320	8.1
		BATES C NR ALCOVA	04-07-88	1045	27	1320	8.2
		BATES C NR ALCOVA	05-12-88	1100	138	416	7.8
		BATES C NR ALCOVA	06-21-88	0740	5.8	1650	8.0
		BATES C NR ALCOVA	08-05-88	1100	6.1	1500	8.2
		BATES C NR ALCOVA	08-05-88	1130	6.1	1510	8.2
		BATES C NR ALCOVA	09-15-88	0945	5.0	1600	8.2
		BATES C NR ALCOVA	09-15-88	1000	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)
NP1	01-12-88	2.5	--	620	12.5	113	--	--	--	--	--	--	--
	02-11-88	1.5	9.3	638	13.0	111	--	--	--	--	--	--	--
	03-03-88	3.0	9.6	632	12.8	--	200	55	16	33	13	--	--
	04-07-88	5.5	10	620	12.0	117	--	--	--	--	--	--	--
	05-12-88	9.0	8.9	625	11.8	125	--	--	--	--	--	--	--
	06-23-88	11.0	8.3	622	10.8	120	200	52	16	32	3.1	--	--
	07-11-88	13.0	8.0	635	10.2	117	--	--	--	--	--	--	--
	08-04-88	15.0	6.5	625	9.4	115	200	54	17	33	2.9	--	--
	09-15-88	17.0	7.5	--	8.4	--	--	--	--	--	--	--	--
	10-20-88	14.0	6.9	626	8.5	101	--	--	--	--	--	--	--
	11-17-88	7.0	--	617	11.2	114	--	--	--	--	--	--	--
T1	01-12-88	2.5	--	624	12.1	109	--	--	--	--	--	--	--
	02-09-88	4.0	--	618	10.9	103	--	--	--	--	--	--	--
	02-29-88	7.0	--	635	10.0	99	--	--	--	--	--	--	--
	04-07-88	6.5	--	620	10.2	103	--	--	--	--	--	--	--
	05-12-88	12.5	2000	625	8.6	99	--	--	--	--	--	--	--
	06-21-88	14.0	10	624	9.2	110	--	--	--	--	--	--	--
	08-05-88	17.0	2.0	623	8.9	114	740	210	52	84	8.7	--	--
	08-05-88	17.0	0.90	623	8.9	114	740	210	52	83	8.8	--	--
	09-15-88	9.0	6.4	626	9.3	98	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	ALKA-LINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKA-LINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKA-LINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3, DIS-SOLVED (MG/L AS N)
NP1	01-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	02-11-88	--	--	--	--	--	--	--	--	--	--	--	--
	03-03-88	--	--	130	--	120	8.9	--	337	326	0.46	650	<0.10
	04-07-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-23-88	--	--	130	--	110	8.4	--	335	300	0.46	1450	<0.10
	07-11-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-04-88	--	--	130	--	110	8.6	--	333	305	0.45	2540	0.10
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-20-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--	--
T1	01-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--	--	--	--
	04-07-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-21-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-05-88	--	--	210	--	640	9.3	--	1190	1130	1.62	19.5	<0.10
	08-05-88	--	--	210	--	640	9.2	--	1180	1130	1.60	19.4	<0.10
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NP1	01-12-88	--	--	--	--	--	--	--	--	--	--	--
	02-11-88	--	--	--	--	--	--	--	--	--	--	--
	03-03-88	--	2	2	--	50	--	2	1	3	--	<5
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	05-12-88	--	--	--	--	50	--	--	--	--	--	--
	06-23-88	--	--	2	--	50	--	<1	<1	2	--	15
	07-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-04-88	--	--	2	--	50	--	<1	<1	2	--	<5
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	10-20-88	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--
T1	01-12-88	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--
	02-29-88	--	--	--	--	--	--	--	--	--	--	--
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	05-12-88	--	--	--	--	--	--	--	--	--	--	--
	06-21-88	--	--	--	--	--	--	--	--	--	--	--
	08-05-88	--	--	1	--	180	--	<1	1	1	--	6
	08-05-88	--	--	1	--	180	--	<1	<1	1	--	<5
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	SEDI-MENT, SUS-PENDED (MG/L)
NP1	01-12-88	--	--	--	1	2	--	--	--	--	--	--
	02-11-88	--	--	--	<1	<1	--	--	--	--	--	11
	03-03-88	0.2	0.2	5	1	<1	2	10	--	--	--	14
	04-07-88	--	--	--	1	<1	--	--	--	--	--	11
	05-12-88	--	--	--	1	1	--	--	--	--	--	14
	06-23-88	--	--	1	<1	1	3	10	8.2	--	--	9
	07-11-88	--	--	--	1	1	--	--	--	--	--	8
	08-04-88	--	<0.1	<1	<1	<1	3	7	7.2	--	--	17
	09-15-88	--	--	--	1	1	--	--	--	--	--	--
	10-20-88	--	--	--	2	1	--	--	--	--	--	--
	11-17-88	--	--	--	<1	2	--	--	--	--	--	--
T1	01-12-88	--	--	--	5	5	--	--	--	--	--	--
	02-09-88	--	--	--	4	4	--	--	--	--	--	--
	02-29-88	--	--	--	3	3	--	--	--	--	--	--
	04-07-88	--	--	--	4	3	--	--	--	--	--	--
	05-12-88	--	--	--	2	1	--	--	--	--	--	1470
	06-21-88	--	--	--	6	6	--	--	--	--	--	93
	08-05-88	--	<0.1	2	6	6	1	20	30	--	--	22
	08-05-88	--	<0.1	3	7	7	1	<3	28	--	--	--
	09-15-88	--	--	--	7	6	--	--	--	--	--	32
	09-15-88	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)	PH, ONSITE (STAND-ARD UNITS)
T1	0664300	BATES C NR ALCOVA	10-18-88	1800	6.0	1620	8.3
		BATES C NR ALCOVA	10-18-88	1815	6.0	1620	8.3
		BATES C NR ALCOVA	11-17-88	1025	7.9	1550	8.3
FW3	424121106345301	NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	04-26-88	1245	--	2000	8.2
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	05-23-88	1355	--	2480	8.5
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	06-28-88	0915	0.0	1650	8.3
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	08-11-88	1630	--	--	--
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	08-12-88	1145	--	--	--
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	08-12-88	1145	--	2020	8.4
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	08-12-88	1215	--	--	--
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	08-12-88	1215	--	2030	8.6
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	08-12-88	1245	--	--	--
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	09-22-88	1430	--	1620	8.0
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	10-21-88	1430	--	1680	8.3
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	10-21-88	1515	--	1670	8.3
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	11-08-88	0840	--	1630	8.4
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	12-15-88	1305	--	1450	7.8
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	02-17-89	1245	--	1560	7.5
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	02-17-89	1300	--	1560	7.5
		NORTH PLATTE RIVER OXBOW BEL BATES CR, NR ALCOVA	08-17-89	0915	--	1560	7.2

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE WATER DIS IT ONSITE (MG/L AS CO3)
T1	10-18-88	12.0	1.8	627	10.0	114	--	--	--	--	--	--	--
	10-18-88	12.0	--	627	10.0	114	--	--	--	--	--	--	--
	11-17-88	3.0	--	618	11.0	101	--	--	--	--	--	--	--
FW3	04-26-88	13.0	12	623	11.8	138	--	--	--	--	--	--	--
	05-23-88	29.5	--	623	15.6	255	--	--	--	--	--	--	--
	06-28-88	24.5	--	622	8.7	129	700	170	68	120	10	88	0
	08-11-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	18.0	--	--	8.5	--	800	180	84	150	13	--	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	21.5	--	--	12.9	--	790	180	83	150	15	--	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	09-22-88	16.0	--	--	8.2	--	810	210	70	110	11	--	--
	10-21-88	15.0	--	628	13.6	165	780	210	62	97	9.4	--	--
	10-21-88	15.0	--	628	13.6	165	780	210	62	96	9.6	--	--
	11-08-88	3.5	--	622	10.4	97	800	220	60	94	8.3	--	--
	12-15-88	1.0	--	638	19.5	165	720	200	54	91	7.9	--	--
	02-17-89	0.0	--	630	2.2	18	700	200	48	78	7.6	--	--
	02-17-89	0.0	--	630	2.2	18	700	200	48	77	7.7	--	--
	08-17-89	17.5	--	--	5.1	--	730	210	50	81	8.2	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)
T1	10-18-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--	--
FW3	04-26-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-23-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-28-88	--	72	70	--	890	14	--	1450	1320	1.97	--	<0.10
	08-11-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	120	--	110	--	1000	23	0.3	--	1520	2.07	--	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	110	--	100	--	1000	22	0.3	--	1520	2.06	--	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	09-22-88	280	--	250	--	820	15	0.3	--	1400	1.91	--	--
	10-21-88	240	--	240	--	750	13	--	1380	1290	1.88	--	0.16
	10-21-88	240	--	240	--	760	13	--	1390	1300	1.89	--	<0.10
	11-08-88	260	--	250	--	730	11	0.3	--	1280	1.74	--	--
	12-15-88	--	--	260	--	690	9.1	0.3	--	1210	1.65	--	--
	02-17-89	--	--	260	<0.5	640	8.7	0.3	--	1140	1.55	--	--
	02-17-89	--	--	260	--	630	8.6	0.3	--	1130	1.53	--	--
	08-17-89	--	270	260	--	680	8.3	0.3	--	1200	1.63	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
T1	10-18-88	--	--	--	--	--	--	--	--	--	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--
FW3	04-26-88	--	--	--	--	--	--	--	--	--	--	--
	05-23-88	--	--	--	--	370	--	--	--	--	50	--
	06-28-88	--	1	1	370	300	<10	<1	<1	<1	--	<5
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	16	--	--	--	350	--	--	--	--	--	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	18	--	--	--	340	--	--	--	--	--	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--
	09-22-88	--	--	--	--	220	--	--	--	--	--	--
	10-21-88	--	--	1	--	200	--	<1	1	<1	--	<5
	10-21-88	--	--	1	--	200	--	<1	2	1	--	<5
	11-08-88	--	--	--	--	170	--	--	--	--	--	--
	12-15-88	--	--	--	--	170	--	--	2	--	--	--
	02-17-89	--	--	--	--	140	--	--	--	--	--	--
	02-17-89	--	--	--	--	140	--	--	--	--	--	--
	08-17-89	--	--	--	--	210	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	SEDI-MENT, SUS-PENDED (MG/L)
T1	10-18-88	--	--	--	7	6	--	--	--	--	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	6	8	--	--	--	--	--	--
FW3	04-26-88	--	--	--	1	2	--	--	--	--	--	--
	05-23-88	--	--	--	--	3	--	--	--	--	--	--
	06-28-88	--	--	<1	1	1	<1	4	3.4	--	--	--
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	--	--	--	--	1	--	--	--	-83.0	-7.00	--
	08-12-88	--	--	--	--	--	--	--	--	--	--	--
	08-12-88	--	--	--	--	<1	--	--	--	--	--	--
	08-12-88	--	--	--	--	--	--	--	--	-77.0	-4.90	--
	09-22-88	--	--	--	--	<1	--	--	--	-116.5	-13.55	--
	10-21-88	--	--	1	--	<1	2	9	27	-126.5	-15.60	--
	10-21-88	--	--	1	--	<1	2	10	24	--	--	--
	11-08-88	--	--	--	--	1	--	--	--	--	--	--
	12-15-88	--	--	--	--	2	--	--	--	-135.5	-17.30	--
	02-17-89	--	--	--	--	2	--	--	--	--	--	--
	02-17-89	--	--	--	--	2	--	--	--	--	--	--
	08-17-89	--	--	--	--	<1	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)	PH, ONSITE (STAND-ARD UNITS)
T9	06643060	POISON SPRING CR AT CASPER CANAL, NR ALCOVA	03-08-88	1500	0.14	4200	8.4
		POISON SPRING CR AT CASPER CANAL, NR ALCOVA	04-19-88	1350	0.45	2300	8.0
		POISON SPRING CR AT CASPER CANAL, NR ALCOVA	05-19-88	1045	0.69	2300	8.1
		POISON SPRING CR AT CASPER CANAL, NR ALCOVA	06-27-88	1240	0.05	2670	7.8
		POISON SPRING CR AT CASPER CANAL, NR ALCOVA	08-10-88	1418	--	--	--
		POISON SPRING CR AT CASPER CANAL, NR ALCOVA	08-10-88	1425	0.13	2480	7.9
		POISON SPRING CR AT CASPER CANAL, NR ALCOVA	09-15-88	1250	0.40	2530	8.1
		POISON SPRING CR AT CASPER CANAL, NR ALCOVA	10-19-88	1200	0.40	2230	8.3
		POISON SPRING CR AT CASPER CANAL, NR ALCOVA	11-16-88	1505	2.6	1880	8.4
T2	06643100	POISON SPRING CR NR ALCOVA	01-13-88	0850	0.83	5240	8.1
		POISON SPRING CR NR ALCOVA	02-09-88	1410	0.94	4400	8.3
		POISON SPRING CR NR ALCOVA	03-01-88	1230	10	1900	7.6
		POISON SPRING CR NR ALCOVA	04-07-88	1145	2.1	4600	8.2
		POISON SPRING CR NR ALCOVA	05-12-88	1205	1.8	4420	8.2
		POISON SPRING CR NR ALCOVA	06-21-88	0840	0.98	4380	8.1
		POISON SPRING CR NR ALCOVA	08-05-88	0945	2.0	3850	8.0
		POISON SPRING CR NR ALCOVA	09-15-88	1115	1.8	5700	8.1
		POISON SPRING CR NR ALCOVA	10-19-88	1050	1.2	4500	8.2
		POISON SPRING CR NR ALCOVA	10-19-88	1100	1.2	4500	8.2
		POISON SPRING CR NR ALCOVA	11-16-88	1305	1.1	4500	8.3

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)
T9	03-08-88	2.0	10	620	10.6	96	390	73	50	760	6.3	--	--
	04-19-88	10.5	6.9	611	9.2	104	--	--	--	--	--	--	--
	05-19-88	9.5	10	620	8.8	96	--	--	--	--	--	--	--
	06-27-88	25.0	12	618	6.8	103	500	98	62	470	7.6	--	--
	08-10-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	19.0	4.5	--	8.5	--	440	91	52	420	6.2	--	--
	09-15-88	12.5	14	620	8.3	97	--	--	--	--	--	--	--
	10-19-88	8.0	6.5	621	9.4	98	--	--	--	--	--	--	--
	11-16-88	0.0	--	619	12.0	102	--	--	--	--	--	--	--
T2	01-13-88	0.0	32	635	11.0	92	--	--	--	--	--	--	--
	02-09-88	3.5	4.0	619	13.6	128	--	--	--	--	--	--	--
	03-01-88	4.0	450	634	10.6	98	310	65	35	280	7.4	--	--
	04-07-88	10.0	35	620	11.4	126	--	--	--	--	--	--	--
	05-12-88	17.0	18	625	10.8	139	--	--	--	--	--	--	--
	06-21-88	16.0	10	624	7.7	97	930	190	110	780	9.2	--	--
	08-05-88	15.0	16	624	7.2	89	930	190	110	660	9.9	--	--
	09-15-88	11.0	12	626	9.5	107	--	--	--	--	--	--	--
	10-19-88	9.0	6.5	626	8.7	93	--	--	--	--	--	--	--
	10-19-88	9.0	--	626	8.7	93	--	--	--	--	--	--	--
	11-16-88	3.5	--	624	10.9	102	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)
T9	03-08-88	--	--	660	--	1400	84	--	2880	2770	3.92	1.09	<0.10
	04-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	470	--	1000	17	--	2060	1940	2.80	0.28	<0.10
	08-10-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	--	--	460	--	890	18	--	1790	1750	2.43	0.63	<0.10
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-16-88	--	--	--	--	--	--	--	--	--	--	--	--
T2	01-13-88	--	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	230	--	690	17	--	1290	1240	1.75	34.8	1.5
	04-07-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-21-88	--	--	360	--	2100	58	--	3550	3480	4.83	9.39	2.6
	08-05-88	--	--	380	--	1800	50	--	3080	3070	4.19	16.7	3.4
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-16-88	--	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
T9	03-08-88	--	1	1	--	650	--	<1	1	2	--	<5
	04-19-88	--	--	--	500	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	340	--	--	--	--	--	--
	06-27-88	--	--	3	--	460	--	<1	<1	2	--	<5
	08-10-88	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	--	--	2	--	390	--	1	<1	<1	--	<5
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--
	11-16-88	--	--	--	--	--	--	--	--	--	--	--
T2	01-13-88	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--
	03-01-88	--	3	2	--	260	--	1	1	10	--	<5
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	05-12-88	--	--	--	--	640	--	--	--	--	--	--
	06-21-88	--	--	2	--	640	--	<1	<1	2	--	<5
	08-05-88	--	--	3	--	530	--	1	1	3	--	<5
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--
	11-16-88	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	SEDI-MENT, SUS-PENDED (MG/L)
T9	03-08-88	0.2	0.2	6	<1	<1	2	90	--	--	--	26
	04-19-88	--	--	--	<1	<1	--	--	--	--	--	114
	05-19-88	--	--	--	<1	<1	--	--	--	--	--	38
	06-27-88	--	--	<1	<1	<1	3	<10	11	--	--	120
	08-10-88	--	--	--	--	--	--	--	--	--	--	12
	08-10-88	--	<0.1	2	<1	<1	2	<10	10	--	--	--
	09-15-88	--	--	--	<1	<1	--	--	--	--	--	19
	10-19-88	--	--	--	1	<1	--	--	--	--	--	--
	11-16-88	--	--	--	<1	<1	--	--	--	--	--	--
T2	01-13-88	--	--	--	130	130	--	--	--	--	--	84
	02-09-88	--	--	--	160	160	--	--	--	--	--	42
	03-01-88	0.1	<0.1	6	31	28	<1	5	--	--	--	300
	04-07-88	--	--	--	100	94	--	--	--	--	--	120
	05-12-88	--	--	--	82	89	--	--	--	--	--	119
	06-21-88	--	--	8	70	76	3	10	57	--	--	140
	08-05-88	--	<0.1	5	61	68	2	10	48	--	--	96
	09-15-88	--	--	--	80	89	--	--	--	--	--	35
	10-19-88	--	--	--	150	120	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--
	11-16-88	--	--	--	140	130	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)	PH, ONSITE (STAND-ARD UNITS)
NP2	06643510	N PLATTE R AB POISON SPIDER CR	01-13-88	0700	875	610	8.4
		N PLATTE R AB POISON SPIDER CR	02-08-88	1430	920	650	8.4
		N PLATTE R AB POISON SPIDER CR	03-01-88	0900	E850	625	8.1
		N PLATTE R AB POISON SPIDER CR	04-07-88	1450	E460	695	8.4
		N PLATTE R AB POISON SPIDER CR	05-12-88	1310	E1120	524	8.4
		N PLATTE R AB POISON SPIDER CR	06-23-88	1315	E1510	520	8.4
		N PLATTE R AB POISON SPIDER CR	07-13-88	1200	--	529	8.2
		N PLATTE R AB POISON SPIDER CR	08-04-88	1330	--	562	8.2
		N PLATTE R AB POISON SPIDER CR	09-15-88	1115	2710	550	8.1
		N PLATTE R AB POISON SPIDER CR	10-20-88	1245	1000	585	8.8
		N PLATTE R AB POISON SPIDER CR	10-20-88	1315	1000	585	6.8
		N PLATTE R AB POISON SPIDER CR	11-17-88	1210	977	590	8.8
T8	06643900	POISON SPIDER CREEK NR MILLS	03-08-88	1230	6.6	3250	8.2
		POISON SPIDER CREEK NR MILLS	04-19-88	1245	7.2	3050	8.3
		POISON SPIDER CREEK NR MILLS	05-19-88	0950	4.7	4040	8.2
		POISON SPIDER CREEK NR MILLS	06-27-88	1350	0.70	4420	8.1
		POISON SPIDER CREEK NR MILLS	08-10-88	1103	--	--	--
		POISON SPIDER CREEK NR MILLS	08-10-88	1116	0.93	4480	8.2
		POISON SPIDER CREEK NR MILLS	09-15-88	1330	1.8	4300	8.3
		POISON SPIDER CREEK NR MILLS	09-15-88	1440	--	--	--
		POISON SPIDER CREEK NR MILLS	10-19-88	1303	1.8	4350	8.3
		POISON SPIDER CREEK NR MILLS	10-19-88	1330	1.8	4450	8.3

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)
NP2	01-13-88	3.0	--	630	12.5	113	--	--	--	--	--	--	--
	02-08-88	1.5	--	625	11.6	101	--	--	--	--	--	--	--
	03-01-88	5.0	--	638	11.4	107	--	--	--	--	--	--	--
	04-07-88	14.5	--	619	8.2	100	--	--	--	--	--	--	--
	05-12-88	18.0	110	627	9.7	125	--	--	--	--	--	--	--
	06-23-88	20.0	16	625	10.0	135	--	--	--	--	--	--	--
	07-13-88	14.5	7.3	--	10.2	--	--	--	--	--	--	--	--
	08-04-88	17.0	50	628	7.4	93	220	57	18	35	3.1	--	--
	09-15-88	16.0	28	--	9.2	--	--	--	--	--	--	--	--
	10-20-88	14.0	4.3	630	12.9	152	--	--	--	--	--	--	--
	10-20-88	14.0	3.4	630	12.9	152	--	--	--	--	--	--	--
	11-17-88	4.5	--	619	11.6	111	--	--	--	--	--	--	--
T8	03-08-88	2.0	60	699	13.1	105	790	190	77	420	12	--	--
	04-19-88	11.5	120	611	9.8	114	--	--	--	--	--	--	--
	05-19-88	9.5	45	619	9.6	105	--	--	--	--	--	--	--
	06-27-88	25.5	22	616	9.8	151	1300	280	150	630	16	--	--
	08-10-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	18.0	0.10	--	11.2	--	1200	260	130	640	19	--	--
	09-15-88	15.0	8.5	620	10.0	124	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	10.0	7.1	620	10.9	121	--	--	--	--	--	--	--
	10-19-88	10.0	9.6	620	10.9	121	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)
NP2	01-13-88	--	--	--	--	--	--	--	--	--	--	--	--
	02-08-88	--	--	--	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--	--	--	--
	04-07-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-23-88	--	--	--	--	--	--	--	--	--	--	--	--
	07-13-88	140	--	--	--	--	--	--	--	--	--	--	--
	08-04-88	--	--	130	--	130	8.8	--	351	332	0.48	--	<0.10
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-20-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-20-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--	--
T8	03-08-88	--	--	250	--	1400	120	--	2500	2370	3.40	44.6	--
	04-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	180	--	2000	380	--	3710	3570	5.05	7.01	<0.10
	08-10-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	--	--	180	--	1900	400	--	3520	3460	4.79	8.84	0.17
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NP2	01-13-88	--	--	--	--	--	--	--	--	--	--	--
	02-08-88	--	--	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	--	--	--	--	--	--	--	--	--
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	05-12-88	--	--	--	--	--	--	--	--	--	--	--
	06-23-88	--	--	--	--	--	--	--	--	--	--	--
	07-13-88	--	--	--	--	--	--	--	--	--	--	--
	08-04-88	--	--	2	--	50	--	<1	6	3	--	<5
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	10-20-88	--	--	--	--	--	--	--	--	--	--	--
	10-20-88	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--
T8	03-08-88	--	1	<1	--	270	--	<1	2	1	--	<5
	04-19-88	--	--	--	210	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	440	--	--	--	--	--	--
	06-27-88	--	--	1	--	570	--	<1	<1	1	--	<5
	08-10-88	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	--	--	<1	--	560	--	1	1	1	--	<5
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	SEDI-MENT, SUS-PENDED (MG/L)
NP2	01-13-88	--	--	--	2	2	--	--	--	--	--	--
	02-08-88	--	--	--	2	2	--	--	--	--	--	--
	03-01-88	--	--	--	3	3	--	--	--	--	--	--
	04-07-88	--	--	--	4	4	--	--	--	--	--	--
	05-12-88	--	--	--	2	2	--	--	--	--	--	116
	06-23-88	--	--	--	1	1	--	--	--	--	--	18
	07-13-88	--	--	--	--	4	--	--	--	--	--	30
	08-04-88	--	1.9	<1	1	1	2	6	7.7	--	--	519
	09-15-88	--	--	--	2	2	--	--	--	--	--	67
	10-20-88	--	--	--	6	2	--	--	--	--	--	--
	10-20-88	--	--	--	2	5	--	--	--	--	--	--
	11-17-88	--	--	--	3	3	--	--	--	--	--	--
T8	03-08-88	1.1	0.2	4	7	7	2	40	--	--	--	34
	04-19-88	--	--	--	8	7	--	--	--	--	--	216
	05-19-88	--	--	--	10	12	--	--	--	--	--	83
	06-27-88	--	--	<1	8	7	6	<10	20	--	--	54
	08-10-88	--	--	--	--	--	--	--	--	--	--	25
	08-10-88	--	<0.1	2	8	8	6	<10	19	--	--	--
	09-15-88	--	--	--	9	11	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	36
	10-19-88	--	--	--	9	9	--	--	--	--	--	--
	10-19-88	--	--	--	9	9	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)	PH, ONSITE (STAND-ARD UNITS)
T8	06643900	POISON SPIDER CREEK NR MILLS	11-16-88	1600	--	4280	8.4
T3	06644000	POISON SPIDER CREEK	01-21-88	1000	11	3200	8.2
		POISON SPIDER CREEK	02-08-88	1345	9.5	3250	8.1
		POISON SPIDER CREEK	03-01-88	1430	39	1370	7.6
		POISON SPIDER CREEK	04-07-88	1400	13	3250	8.1
		POISON SPIDER CREEK	05-12-88	1420	14	3080	8.1
		POISON SPIDER CREEK	06-21-88	1005	12	2680	8.1
		POISON SPIDER CREEK	08-04-88	1145	19	2080	8.5
		POISON SPIDER CREEK	09-15-88	1540	16	2700	8.3
		POISON SPIDER CREEK	09-15-88	1615	--	--	--
		POISON SPIDER CREEK	10-19-88	0940	11	3050	8.2
		POISON SPIDER CREEK	10-19-88	1000	11	3050	8.2
		POISON SPIDER CREEK	11-17-88	1300	10	3010	8.3
		POISON SPIDER CREEK	11-17-88	1345	--	3110	8.3
T4	06644040	OREGON TRAIL DRAIN	01-13-88	0945	1.4	6750	8.0
		OREGON TRAIL DRAIN	02-09-88	0800	0.68	5850	8.1
		OREGON TRAIL DRAIN	03-01-88	1715	2.9	6350	8.2
		OREGON TRAIL DRAIN	04-08-88	1340	0.78	5950	8.4
		OREGON TRAIL DRAIN	05-13-88	1420	0.25	7200	8.3

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)
T8	11-16-88	1.5	--	618	12.2	109	--	--	--	--	--	--	--
T3	01-21-88	2.0	70	627	10.4	93	--	--	--	--	--	--	--
	02-08-88	6.0	50	625	9.8	97	--	--	--	--	--	--	--
	03-01-88	4.5	1800	635	10.4	97	430	95	47	200	9.2	--	--
	04-07-88	15.5	120	620	7.8	98	--	--	--	--	--	--	--
	05-12-88	23.0	55	626	7.3	105	--	--	--	--	--	--	--
	06-21-88	18.5	75	626	8.5	112	840	180	94	340	7.3	--	--
	08-04-88	19.5	21	630	9.1	121	700	160	74	270	7.6	--	--
	09-15-88	16.0	8.5	626	8.3	104	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	8.5	4.4	628	9.4	99	--	--	--	--	--	--	--
	10-19-88	8.5	--	628	9.4	99	--	--	--	--	--	--	--
	11-17-88	6.0	--	619	9.7	97	--	--	--	--	--	--	--
	11-17-88	6.0	--	619	9.7	97	--	--	--	--	--	--	--
T4	01-13-88	0.0	28	627	11.2	96	--	--	--	--	--	--	--
	02-09-88	1.0	14	623	10.4	92	--	--	--	--	--	--	--
	03-01-88	0.5	160	637	12.6	107	1900	230	320	730	14	--	--
	04-08-88	7.0	26	626	12.4	127	--	--	--	--	--	--	--
	05-13-88	24.0	95	621	11.2	168	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)
T8	11-16-88	--	--	--	--	--	--	--	--	--	--	--	--
T3	01-21-88	--	--	--	--	--	--	--	--	--	--	--	--
	02-08-88	--	--	--	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	160	--	670	34	--	1210	1170	1.65	127	3.1
	04-07-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-12-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-21-88	--	--	220	--	1200	42	--	2170	2020	2.95	70.3	6.8
	08-04-88	--	--	270	--	950	34	--	1710	1680	2.33	88.6	4.5
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--	--
T4	01-13-88	--	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	320	--	3200	46	--	5430	4820	7.38	42.5	18
	04-08-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-13-88	--	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
T8	11-16-88	--	--	--	--	--	--	--	--	--	--	--
T3	01-21-88	--	--	--	--	--	--	--	--	--	--	--
	02-08-88	--	--	--	--	--	--	--	--	--	--	--
	03-01-88	--	3	1	--	190	--	<1	1	5	--	<5
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	05-12-88	--	--	--	--	1200	--	--	--	--	--	--
	06-21-88	--	--	1	--	380	--	<1	1	2	--	<5
	08-04-88	--	--	1	--	290	--	1	<1	3	--	<5
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--
T4	01-13-88	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--
	03-01-88	--	2	1	--	1000	--	<1	2	4	--	<5
	04-08-88	--	--	--	--	--	--	--	--	--	--	--
	05-13-88	--	--	--	--	410	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	SEDI-MENT, SUS-PENDED (MG/L)
T8	11-16-88	--	--	--	11	10	--	--	--	--	--	--
T3	01-21-88	--	--	--	50	68	--	--	--	--	--	180
	02-08-88	--	--	--	83	76	--	--	--	--	--	118
	03-01-88	0.1	<0.1	3	31	31	<1	20	--	--	--	1800
	04-07-88	--	--	--	65	64	--	--	--	--	--	244
	05-12-88	--	--	--	49	54	--	--	--	--	--	186
	06-21-88	--	--	1	59	64	<1	10	30	--	--	152
	08-04-88	--	0.7	1	48	39	<1	10	23	--	--	101
	09-15-88	--	--	--	73	75	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	35
	10-19-88	--	--	--	90	78	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	90	90	--	--	--	--	--	--
	11-17-88	--	--	--	90	88	--	--	--	--	--	--
T4	01-13-88	--	--	--	590	480	--	--	--	--	--	--
	02-09-88	--	--	--	480	510	--	--	--	--	--	24
	03-01-88	0.2	0.1	8	250	250	1	20	--	--	--	278
	04-08-88	--	--	--	490	530	--	--	--	--	--	43
	05-13-88	--	--	--	440	440	--	--	--	--	--	211

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)	PH, ONSITE (STAND-ARD UNITS)
T4	06644040	OREGON TRAIL DRAIN	06-14-88	1240	--	2100	8.5
		OREGON TRAIL DRAIN	06-21-88	1130	17	1100	8.0
		OREGON TRAIL DRAIN	08-04-88	0845	17	1300	8.2
		OREGON TRAIL DRAIN	09-01-88	1610	--	1290	8.6
		OREGON TRAIL DRAIN	10-18-88	1650	1.4	4700	8.4
		OREGON TRAIL DRAIN	10-18-88	1700	1.4	4700	8.4
		OREGON TRAIL DRAIN	11-16-88	1700	E0.90	4950	8.5
NP3	06644085	NORTH PLATTE RIVER AT MILLS	01-13-88	1100	885	625	8.2
		NORTH PLATTE RIVER AT MILLS	02-09-88	0910	930	610	8.2
		NORTH PLATTE RIVER AT MILLS	03-03-88	1530	E910	810	8.3
		NORTH PLATTE RIVER AT MILLS	04-08-88	1030	E530	790	8.4
		NORTH PLATTE RIVER AT MILLS	05-13-88	1330	E1150	600	8.4
		NORTH PLATTE RIVER AT MILLS	06-23-88	1430	E1530	540	8.7
		NORTH PLATTE RIVER AT MILLS	07-11-88	0940	E2960	555	8.2
		NORTH PLATTE RIVER AT MILLS	08-05-88	0745	--	533	8.7
		NORTH PLATTE RIVER AT MILLS	09-15-88	1415	3120	608	7.7
		NORTH PLATTE RIVER AT MILLS	10-21-88	0745	1000	610	8.7
		NORTH PLATTE RIVER AT MILLS	11-18-88	0910	813	680	8.5
T11	430157106304701	NORTH FORK CASPER CREEK NEAR BUCKNUM	04-19-88	1030	0.0	--	--
		NORTH FORK CASPER CREEK NEAR BUCKNUM	05-19-88	0850	0.0	--	--
		NORTH FORK CASPER CREEK NEAR BUCKNUM	06-27-88	0940	0.0	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)
T4	06-14-88	17.0	--	--	4.6	--	840	140	120	230	6.5	--	--
	06-21-88	22.5	650	628	6.8	96	370	77	42	90	4.8	--	--
	08-04-88	16.5	75	--	7.7	--	500	96	63	100	6.2	--	--
	09-01-88	19.0	55	--	--	--	470	97	56	97	5.1	--	--
	10-18-88	10.5	9.0	632	10.7	118	--	--	--	--	--	--	--
	10-18-88	10.5	--	632	10.7	118	--	--	--	--	--	--	--
	11-16-88	0.5	--	--	12.1	--	--	--	--	--	--	--	--
NP3	01-13-88	0.0	--	630	11.4	95	--	--	--	--	--	--	--
	02-09-88	0.5	--	623	10.7	91	--	--	--	--	--	--	--
	03-03-88	5.5	--	632	11.1	107	--	--	--	--	--	--	--
	04-08-88	9.5	--	624	8.6	92	--	--	--	--	--	--	--
	05-13-88	19.0	130	622	8.6	114	--	--	--	--	--	--	--
	06-23-88	21.5	28	625	9.0	125	--	--	--	--	--	--	--
	07-11-88	14.5	37	630	8.6	103	--	--	--	--	--	--	--
	08-05-88	16.0	10	628	7.4	91	210	56	18	37	2.9	--	--
	09-15-88	16.0	65	--	8.4	--	--	--	--	--	--	--	--
	10-21-88	10.5	4.3	633	7.6	82	--	--	--	--	--	--	--
	11-18-88	3.5	--	627	10.4	96	--	--	--	--	--	--	--
T11	04-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)
T4	06-14-88	270	--	230	--	890	33	0.7	--	1580	2.16	--	--
	06-21-88	--	--	170	--	370	16	--	717	702	0.98	32.9	0.59
	08-04-88	--	--	190	--	500	17	--	959	901	1.30	44.3	0.96
	09-01-88	--	--	190	--	450	15	0.5	--	837	1.14	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-16-88	--	--	--	--	--	--	--	--	--	--	--	--
NP3	01-13-88	--	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--	--
	03-03-88	--	--	--	--	--	--	--	--	--	--	--	--
	04-08-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-13-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-23-88	--	--	--	--	--	--	--	--	--	--	--	--
	07-11-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-05-88	--	--	130	--	130	9.2	--	358	334	0.49	--	0.10
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-21-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-18-88	--	--	--	--	--	--	--	--	--	--	--	--
T11	04-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
T4	06-14-88	--	--	--	--	330	--	--	--	--	--	--
	06-21-88	--	--	2	--	160	--	<1	<1	2	--	<5
	08-04-88	--	--	2	--	170	--	<1	<1	4	--	<5
	09-01-88	--	--	--	--	170	--	--	--	--	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--
	11-16-88	--	--	--	--	--	--	--	--	--	--	--
NP3	01-13-88	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--
	03-03-88	--	--	--	--	--	--	--	--	--	--	--
	04-08-88	--	--	--	--	--	--	--	--	--	--	--
	05-13-88	--	--	--	--	--	--	--	--	--	--	--
	06-23-88	--	--	--	--	--	--	--	--	--	--	--
	07-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-05-88	--	--	3	--	50	--	<1	<1	2	--	<5
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	10-21-88	--	--	--	--	--	--	--	--	--	--	--
	11-18-88	--	--	--	--	--	--	--	--	--	--	--
T11	04-19-88	--	--	--	--	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	SEDI-MENT, SUS-PENDED (MG/L)
T4	06-14-88	--	--	--	--	74	--	--	--	--	--	--
	06-21-88	--	--	2	11	12	3	3	15	--	--	771
	08-04-88	--	<0.1	2	12	12	2	8	15	--	--	207
	09-01-88	--	--	--	--	16	--	--	--	--	--	--
	10-18-88	--	--	--	210	200	--	--	--	--	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--
	11-16-88	--	--	--	250	250	--	--	--	--	--	--
NP3	01-13-88	--	--	--	8	3	--	--	--	--	--	--
	02-09-88	--	--	--	4	4	--	--	--	--	--	--
	03-03-88	--	--	--	6	6	--	--	--	--	--	--
	04-08-88	--	--	--	8	6	--	--	--	--	--	--
	05-13-88	--	--	--	4	5	--	--	--	--	--	152
	06-23-88	--	--	--	2	2	--	--	--	--	--	40
	07-11-88	--	--	--	2	2	--	--	--	--	--	78
	08-05-88	--	<0.1	2	2	1	3	5	7.9	--	--	50
	09-15-88	--	--	--	3	3	--	--	--	--	--	156
	10-21-88	--	--	--	4	3	--	--	--	--	--	--
	11-18-88	--	--	--	4	4	--	--	--	--	--	--
T11	04-19-88	--	--	--	--	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)	PH, ONSITE (STAND-ARD UNITS)
T7	06644120	MIDDLE FORK CASPER CR NR BUCKNUM	03-08-88	1055	0.90	1620	7.9
		MIDDLE FORK CASPER CR NR BUCKNUM	04-19-88	1000	2.0	4210	8.2
		MIDDLE FORK CASPER CR NR BUCKNUM	05-19-88	0810	1.6	4840	8.2
		MIDDLE FORK CASPER CR NR BUCKNUM	06-27-88	1000	0.0	--	--
		MIDDLE FORK CASPER CR NR BUCKNUM	11-17-88	1645	0.30	4600	8.5
T10	425733106392001	S F CASPER CREEK AB CASPER CANAL, NR BUCKNUM	03-08-88	0830	0.19	2050	8.6
		S F CASPER CREEK AB CASPER CANAL, NR BUCKNUM	04-19-88	0900	0.30	8700	8.6
		S F CASPER CREEK AB CASPER CANAL, NR BUCKNUM	05-19-88	0725	0.0	--	--
		S F CASPER CREEK AB CASPER CANAL, NR BUCKNUM	06-27-88	1015	0.0	--	--
T6	06644490	SIX MILE DRAW NEAR MILLS	06-28-88	1325	2.0	2150	8.4
		SIX MILE DRAW NEAR MILLS	08-09-88	1700	8.0	1980	8.4
		SIX MILE DRAW NEAR MILLS	09-14-88	0915	8.2	3820	8.0
		SIX MILE DRAW NEAR MILLS	10-19-88	1435	1.8	5000	8.3
		SIX MILE DRAW NEAR MILLS	11-17-88	1530	1.7	4580	8.3
T5	06644500	CASPER C AT CASPER	01-13-88	1145	13	5460	8.0
		CASPER C AT CASPER	02-09-88	1015	9.0	5230	8.2
		CASPER C AT CASPER	03-01-88	1615	17	6400	8.0
		CASPER C AT CASPER	04-08-88	1130	12	5550	8.2
		CASPER C AT CASPER	05-13-88	1130	12	6450	8.3
		CASPER C AT CASPER	06-21-88	1345	41	1780	8.2
		CASPER C AT CASPER	08-03-88	1600	29	2310	8.4
		CASPER C AT CASPER	09-14-88	1300	45	2080	8.3
		CASPER C AT CASPER	09-14-88	1310	--	--	--
		CASPER C AT CASPER	09-14-88	1315	45	2080	8.3

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)
T7	03-08-88	1.0	37	701	10.4	80	400	90	43	260	7.5	--	--
	04-19-88	11.0	110	614	6.3	72	--	--	--	--	--	--	--
	05-19-88	10.5	40	620	6.4	72	--	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	1.5	--	614	11.2	101	--	--	--	--	--	--	--
T1	03-08-88	0.5	240	700	13.6	104	190	42	20	390	4.9	--	--
	04-19-88	9.5	38	618	8.8	98	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--	--
T6	06-28-88	24.5	18	621	12.7	190	850	160	110	270	6.9	--	--
	08-09-88	19.5	6.0	--	9.2	--	770	160	90	160	6.3	--	--
	09-14-88	10.0	4.5	--	--	--	--	--	--	--	--	--	--
	10-19-88	11.5	0.70	626	10.8	123	--	--	--	--	--	--	--
	11-17-88	3.5	--	619	10.2	96	--	--	--	--	--	--	--
T5	01-13-88	1.0	8.0	630	12.0	104	--	--	--	--	--	--	--
	02-09-88	0.5	16	622	10.9	95	--	--	--	--	--	--	--
	03-01-88	6.0	160	637	10.1	100	1800	240	280	880	6.1	--	--
	04-08-88	8.0	22	625	9.3	98	--	--	--	--	--	--	--
	05-13-88	17.0	11	623	8.6	112	--	--	--	--	--	--	--
	06-21-88	27.0	130	627	6.4	99	550	110	67	230	6.4	--	--
	08-03-88	22.0	12	--	7.2	--	760	150	93	280	6.7	--	--
	09-14-88	11.0	45	--	--	--	--	--	--	--	--	--	--
	09-14-88	--	--	--	--	--	--	--	--	--	--	--	--
	09-14-88	11.0	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)
T7	03-08-88	--	--	180	--	770	15	--	1320	1290	1.80	3.21	--
	04-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--	--
T1	03-08-88	--	--	190	--	820	22	--	1440	1420	1.96	0.74	--
	04-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--	--
T6	06-28-88	--	--	280	--	1000	52	--	1890	1800	2.57	10.2	6.7
	08-09-88	--	--	240	--	880	26	--	1630	1480	2.22	35.1	1.9
	09-14-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--	--
T5	01-13-88	--	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--	--
	03-01-88	--	--	310	--	3300	84	--	5490	5020	7.47	252	8.6
	04-08-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-13-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-21-88	--	--	210	--	810	22	--	1410	1370	1.92	156	--
	08-03-88	--	--	240	--	1000	31	--	1750	1710	2.38	139	1.3
	09-14-88	--	--	--	--	--	--	--	--	--	--	--	--
	09-14-88	--	--	--	--	--	--	--	--	--	--	--	--
	09-14-88	--	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
T7	03-08-88	--	1	<1	--	190	--	<1	<1	3	--	<5
	04-19-88	--	--	--	320	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	460	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--
T1	03-08-88	--	2	1	--	180	--	<1	2	5	--	<5
	04-19-88	--	--	--	800	--	--	--	--	--	--	--
	05-19-88	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--
T6	06-28-88	--	2	2	500	540	<10	<1	2	1	--	<5
	08-09-88	--	--	2	--	340	--	<1	<1	3	--	<5
	09-14-88	--	--	--	--	--	--	--	--	--	--	--
	10-19-88	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	--	--	--	--	--	--	--	--
T5	01-13-88	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--
	03-01-88	--	1	<1	--	730	--	<1	2	5	--	<5
	04-08-88	--	--	--	--	--	--	--	--	--	--	--
	05-13-88	--	--	--	--	810	--	--	--	--	--	--
	06-21-88	--	--	1	--	280	--	<1	<1	2	--	<5
	08-03-88	--	--	2	--	330	--	<1	<1	2	--	6
	09-14-88	--	--	--	--	--	--	--	--	--	--	--
	09-14-88	--	--	--	--	--	--	--	--	--	--	--
	09-14-88	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	SEDI-MENT, SUS-PENDED (MG/L)
T7	03-08-88	<0.1	<0.1	4	<1	<1	<1	130	--	--	--	36
	04-19-88	--	--	--	<1	<1	--	--	--	--	--	139
	05-19-88	--	--	--	<1	<1	--	--	--	--	--	39
	06-27-88	--	--	--	--	--	--	--	--	--	--	--
	11-17-88	--	--	--	4	4	--	--	--	--	--	--
T1	03-08-88	0.1	<0.1	5	<1	<1	2	20	--	--	--	172
	04-19-88	--	--	--	3	3	--	--	--	--	--	168
	05-19-88	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	--	--	--	--	--	--	--	--	--	--	--
T6	06-28-88	--	--	6	170	190	4	10	39	--	--	--
	08-09-88	--	<0.1	3	58	55	2	7	21	--	--	17
	09-14-88	--	--	--	96	93	--	--	--	--	--	311
	10-19-88	--	--	--	280	290	--	--	--	--	--	--
	11-17-88	--	--	--	420	390	--	--	--	--	--	--
T5	01-13-88	--	--	--	130	120	--	--	--	--	--	35
	02-09-88	--	--	--	110	110	--	--	--	--	--	28
	03-01-88	0.1	0.1	7	200	180	1	20	--	--	--	216
	04-08-88	--	--	--	100	100	--	--	--	--	--	77
	05-13-88	--	--	--	180	190	--	--	--	--	--	124
	06-21-88	--	--	3	15	15	1	4	17	--	--	213
	08-03-88	--	<0.1	3	27	26	1	10	21	--	--	150
	09-14-88	--	--	--	21	23	--	--	--	--	--	--
	09-14-88	--	--	--	--	--	--	--	--	--	--	145
	09-14-88	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)	PH, ONSITE (STAND-ARD UNITS)
T5	06644500	CASPER C AT CASPER	10-18-88	1550	11	4900	8.4
		CASPER C AT CASPER	10-18-88	1600	11	4900	8.4
		CASPER C AT CASPER	11-18-88	0755	11	5300	8.4
		CASPER C AT CASPER	11-18-88	0815	--	5300	8.4
NP4	06645000	NORTH PLATTE RIVER BL CASPER	01-13-88	1250	910	720	8.2
		NORTH PLATTE RIVER BL CASPER	02-09-88	1235	943	695	8.3
		NORTH PLATTE RIVER BL CASPER	03-03-88	1415	975	980	7.9
		NORTH PLATTE RIVER BL CASPER	04-08-88	0845	552	980	8.3
		NORTH PLATTE RIVER BL CASPER	05-13-88	1015	1170	700	8.3
		NORTH PLATTE RIVER BL CASPER	06-23-88	1600	1590	610	8.7
		NORTH PLATTE RIVER BL CASPER	07-11-88	1420	2930	590	8.4
		NORTH PLATTE RIVER BL CASPER	08-05-88	1330	3240	580	8.5
		NORTH PLATTE RIVER BL CASPER	09-15-88	1545	2960	640	7.9
		NORTH PLATTE RIVER BL CASPER	10-21-88	0930	1000	680	8.8
		NORTH PLATTE RIVER BL CASPER	11-16-88	0930	956	740	7.9

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)
T5	10-18-88	14.0	0.90	632	10.4	124	--	--	--	--	--	--	--
	10-18-88	14.0	--	632	10.4	124	--	--	--	--	--	--	--
	11-18-88	1.5	--	627	11.7	104	--	--	--	--	--	--	--
	11-18-88	1.5	--	627	11.7	104	--	--	--	--	--	--	--
NP4	01-13-88	1.0	--	630	11.5	98	--	--	--	--	--	--	--
	02-09-88	1.0	50	622	10.7	93	--	--	--	--	--	--	--
	03-03-88	6.0	120	635	10.9	106	320	77	31	85	3.4	--	--
	04-08-88	9.5	160	624	8.6	92	--	--	--	--	--	--	--
	05-13-88	17.5	140	626	7.6	97	--	--	--	--	--	--	--
	06-23-88	21.5	36	625	9.0	125	230	58	21	47	3.3	--	--
	07-11-88	18.0	40	624	8.2	106	--	--	--	--	--	--	--
	08-05-88	19.0	45	640	--	--	220	57	19	42	3.0	--	--
	09-15-88	16.0	150	--	7.8	--	--	--	--	--	--	--	--
	10-21-88	10.0	4.6	635	9.8	105	--	--	--	--	--	--	--
	11-16-88	3.5	--	635	11.3	102	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)
T5	10-18-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-18-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-18-88	--	--	--	--	--	--	--	--	--	--	--	--
NP4	01-13-88	--	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--	--
	03-03-88	--	--	160	--	310	16	--	645	619	0.88	1700	0.67
	04-08-88	--	--	--	--	--	--	--	--	--	--	--	--
	05-13-88	--	--	--	--	--	--	--	--	--	--	--	--
	06-23-88	--	--	140	--	160	10	--	404	383	0.55	1730	0.11
	07-11-88	--	--	--	--	--	--	--	--	--	--	--	--
	08-05-88	--	--	140	--	140	9.6	--	384	352	0.52	3360	0.12
	09-15-88	--	--	--	--	--	--	--	--	--	--	--	--
	10-21-88	--	--	--	--	--	--	--	--	--	--	--	--
	11-16-88	--	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
T5	10-18-88	--	--	--	--	--	--	--	--	--	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--
	11-18-88	--	--	--	--	--	--	--	--	--	--	--
	11-18-88	--	--	--	--	--	--	--	--	--	--	--
NP4	01-13-88	--	--	--	--	--	--	--	--	--	--	--
	02-09-88	--	--	--	--	--	--	--	--	--	--	--
	03-03-88	--	2	2	--	100	--	2	<1	2	--	<5
	04-08-88	--	--	--	--	--	--	--	--	--	--	--
	05-13-88	--	--	--	--	80	--	--	--	--	--	--
	06-23-88	--	--	3	--	60	--	1	<1	2	--	<5
	07-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-05-88	--	--	2	--	60	--	<1	<1	5	--	<5
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	10-21-88	--	--	--	--	--	--	--	--	--	--	--
	11-16-88	--	--	--	--	--	--	--	--	--	--	--

Table 1.--Water-quality data for water samples mostly collected monthly, North Platte River and tributaries, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL	SEDI-MENT, SUS-PENDED (MG/L)
T5	10-18-88	--	--	--	3	1	--	--	--	--	--	--
	10-18-88	--	--	--	--	--	--	--	--	--	--	--
	11-18-88	--	--	--	110	100	--	--	--	--	--	--
	11-18-88	--	--	--	110	110	--	--	--	--	--	--
NP4	01-13-88	--	--	--	4	4	--	--	--	--	--	--
	02-09-88	--	--	--	5	5	--	--	--	--	--	86
	03-03-88	0.2	0.2	5	--	--	1	9	--	--	--	125
	04-08-88	--	--	--	10	10	--	--	--	--	--	163
	05-13-88	--	--	--	7	7	--	--	--	--	--	163
	06-23-88	--	--	<1	2	2	2	8	8.4	--	--	31
	07-11-88	--	--	--	2	2	--	--	--	--	--	71
	08-05-88	--	<0.1	2	2	2	3	7	--	--	--	41
	09-15-88	--	--	--	4	5	--	--	--	--	--	313
	10-21-88	--	--	--	5	4	--	--	--	--	--	--
	11-16-88	--	--	--	4	4	--	--	--	--	--	--

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89

[INST., instantaneous; US/CM, microsiemens per centimeter at 25 degrees Celsius; DEG C, degrees Celsius; NTU, nephelometric turbidity unit; MM OF HG, millimeters of mercury; MG/L, milligrams per liter; UG/L, micrograms per liter; N, North; R or RIV, River; AB, above; C or CR, Creek; NR, near; AVE, Avenue; <, less than; --, no data; EWI, equal width increment]

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DISTANCE FROM RIGHT BANK (FEET)	DISCHARGE, INST., CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE, ONSITE (US/CM)
NP2	06643510	N PLATTE R AB POISON SPIDER CR	08-19-89	0835	25	--	538
		N PLATTE R AB POISON SPIDER CR	08-19-89	0840	60	--	555
		N PLATTE R AB POISON SPIDER CR	08-19-89	0850	90	--	548
		N PLATTE R AB POISON SPIDER CR	08-19-89	0854	130	--	535
		N PLATTE R AB POISON SPIDER CR	08-19-89	0900	175	--	545
		N PLATTE R AB POISON SPIDER CR	08-19-89	0905	210	--	552
T4	06644040	OREGON TRAIL DRAIN	03-18-88	1505	EWI	1.3	7020
		OREGON TRAIL DRAIN	03-19-88	1230	--	1.8	7030
		OREGON TRAIL DRAIN	03-20-88	1620	--	8.5	7150
		OREGON TRAIL DRAIN	03-21-88	1430	--	--	5020
		OREGON TRAIL DRAIN	03-21-88	1500	--	--	5080
		OREGON TRAIL DRAIN	03-31-88	1300	--	--	5770
		OREGON TRAIL DRAIN	03-31-88	1500	--	--	5780
		OREGON TRAIL DRAIN	04-08-88	1320	--	--	5780
		OREGON TRAIL DRAIN	04-08-88	1335	--	--	5780
		OREGON TRAIL DRAIN	04-08-88	1350	--	--	5720

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	PH, ONSITE (STANDARD UNITS)	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	BORON, DISSOLVED (UG/L AS B)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SEDIMENT, SUSPENDED (MG/L)
NP2	08-19-89	8.5	--	--	--	--	--	--	--	2	--
	08-19-89	8.5	--	--	--	--	--	--	--	2	--
	08-19-89	8.5	--	--	--	--	--	--	--	2	--
	08-19-89	8.5	--	--	--	--	--	--	--	1	--
	08-19-89	8.6	--	--	--	--	--	--	--	1	--
	08-19-89	8.6	--	--	--	--	--	--	--	2	--
T4	03-18-88	8.3	1.5	--	629	12.4	110	--	400	390	--
	03-19-88	8.3	0.5	--	626	12.2	106	--	390	400	--
	03-20-88	9.5	2.0	--	625	11.8	107	--	200	140	--
	03-21-88	--	--	--	--	--	--	--	170	--	--
	03-21-88	--	--	--	--	--	--	--	200	--	--
	03-31-88	--	--	--	--	--	--	--	490	--	--
	03-31-88	--	--	--	--	--	--	--	420	--	--
	04-08-88	--	--	--	--	--	--	--	480	--	--
	04-08-88	--	--	--	--	--	--	--	540	--	--
	04-08-88	--	--	--	--	--	--	--	380	--	--

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-TANCE FROM RIGHT BANK (FEET)	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
T4	06644040	OREGON TRAIL DRAIN	04-08-88	1500	--	--	5760
		OREGON TRAIL DRAIN	04-09-88	1500	--	--	5720
		OREGON TRAIL DRAIN	04-10-88	1500	--	--	4390
		OREGON TRAIL DRAIN	04-22-88	1145	--	--	7100
		OREGON TRAIL DRAIN	04-22-88	1500	--	--	6730
		OREGON TRAIL DRAIN	04-23-88	1500	--	--	7250
		OREGON TRAIL DRAIN	04-24-88	1500	--	--	7240
		OREGON TRAIL DRAIN	04-26-88	1450	--	--	7200
		OREGON TRAIL DRAIN	04-26-88	1500	--	--	6950
		OREGON TRAIL DRAIN	04-27-88	1500	--	--	6800
		OREGON TRAIL DRAIN	04-28-88	1500	--	--	6520
		OREGON TRAIL DRAIN	04-29-88	1500	--	--	8400
		OREGON TRAIL DRAIN	07-19-88	0740	--	--	1710
		OREGON TRAIL DRAIN	07-19-88	1500	--	--	1840
		OREGON TRAIL DRAIN	07-20-88	1500	--	--	1280
		OREGON TRAIL DRAIN	07-21-88	1500	--	--	1220
		OREGON TRAIL DRAIN	07-22-88	1500	--	--	1020
		OREGON TRAIL DRAIN	07-23-88	1500	--	--	995
		OREGON TRAIL DRAIN	07-24-88	1500	--	--	990
		OREGON TRAIL DRAIN	07-25-88	1500	--	--	989

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	PH, ONSITE (STAND-ARD UNITS)	TEMPER-ATURE, WATER, ONSITE (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE, ONSITE (MM OF HG)	OXYGEN, DIS-SOLVED, ONSITE (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BORON, DIS-SOLVED (UG/L AS B)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SEDI-MENT, SUS-PENDED (MG/L)
T4	04-08-88	--	--	--	--	--	--	--	350	--	--
	04-09-88	--	--	--	--	--	--	--	440	--	--
	04-10-88	--	--	--	--	--	--	--	440	--	--
	04-22-88	--	--	--	--	--	--	--	430	--	--
	04-22-88	--	--	--	--	--	--	--	470	--	--
	04-23-88	--	--	--	--	--	--	--	360	--	--
	04-24-88	--	--	--	--	--	--	--	410	--	--
	04-26-88	--	--	--	--	--	--	--	410	--	--
	04-26-88	--	--	--	--	--	--	--	380	--	--
	04-27-88	--	--	--	--	--	--	--	440	--	--
	04-28-88	--	--	--	--	--	--	--	530	--	--
	04-29-88	--	--	--	--	--	--	--	370	--	--
	07-19-88	8.6	22.0	60	--	--	--	--	--	--	--
	07-19-88	8.6	22.0	80	--	--	--	--	--	--	--
	07-20-88	8.4	22.0	95	--	--	--	--	--	--	--
	07-21-88	8.7	22.0	95	--	--	--	--	--	--	--
	07-22-88	8.1	22.0	120	--	--	--	--	--	--	--
	07-23-88	8.4	22.0	80	--	--	--	--	--	--	--
	07-24-88	8.6	--	75	--	--	--	--	--	--	--
	07-25-88	8.4	--	80	--	--	--	--	--	--	--

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-TANCE FROM RIGHT BANK (FEET)	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
T4	06644040	OREGON TRAIL DRAIN	07-26-88	1500	--	--	1030
		OREGON TRAIL DRAIN	07-27-88	1500	--	--	1010
		OREGON TRAIL DRAIN	07-28-88	1250	--	--	1200
		OREGON TRAIL DRAIN	07-28-88	1500	--	--	1270
		OREGON TRAIL DRAIN	07-31-88	1500	--	--	1070
		OREGON TRAIL DRAIN	08-01-88	1500	--	--	1190
		OREGON TRAIL DRAIN	08-02-88	1500	--	--	1310
		OREGON TRAIL DRAIN	08-03-88	1500	--	--	1090
		OREGON TRAIL DRAIN	08-04-88	1500	--	--	1110
		OREGON TRAIL DRAIN	08-05-88	1500	--	--	1010
		OREGON TRAIL DRAIN	08-06-88	1500	--	--	1310
		OREGON TRAIL DRAIN	08-07-88	1500	--	--	975
		OREGON TRAIL DRAIN	08-08-88	1500	--	--	1040
		OREGON TRAIL DRAIN	08-09-88	1500	--	--	1470
		OREGON TRAIL DRAIN	08-10-88	1500	--	--	1080
		OREGON TRAIL DRAIN	08-11-88	1500	--	--	995
		OREGON TRAIL DRAIN	08-12-88	1500	--	--	968
		OREGON TRAIL DRAIN	08-13-88	1500	--	--	1070
		OREGON TRAIL DRAIN	08-14-88	1500	--	--	1340
		OREGON TRAIL DRAIN	08-15-88	1500	--	--	1530

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	PH, ONSITE (STAND-ARD UNITS)	TEMPER-ATURE, WATER, ONSITE (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE, ONSITE (MM OF HG)	OXYGEN, DIS-SOLVED, ONSITE (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BORON, DIS-SOLVED (UG/L AS B)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SEDI-MENT, SUS-PENDED (MG/L)
T4	07-26-88	8.3	--	150	--	--	--	--	--	--	--
	07-27-88	8.4	--	65	--	--	--	--	--	--	--
	07-28-88	8.7	--	85	--	--	--	--	26	--	--
	07-28-88	8.6	--	55	--	--	--	--	27	--	--
	07-31-88	8.6	--	80	--	--	--	--	19	--	--
	08-01-88	8.6	--	130	--	--	--	--	--	--	--
	08-02-88	8.5	--	65	--	--	--	--	24	--	--
	08-03-88	8.7	--	85	--	--	--	--	14	--	--
	08-04-88	8.7	--	65	--	--	--	--	11	--	--
	08-05-88	8.6	--	60	--	--	--	--	10	--	--
	08-06-88	8.6	--	70	--	--	--	--	29	--	--
	08-07-88	8.6	--	55	--	--	--	--	14	--	--
	08-08-88	8.5	--	55	--	--	--	--	12	--	--
	08-09-88	8.6	--	60	--	--	--	--	57	--	--
	08-10-88	8.5	--	50	--	--	--	--	15	--	--
	08-11-88	8.6	--	50	--	--	--	--	12	--	--
	08-12-88	8.5	--	40	--	--	--	--	10	--	--
	08-13-88	8.5	--	40	--	--	--	--	13	--	--
	08-14-88	8.5	--	37	--	--	--	--	48	--	--
	08-15-88	8.5	--	34	--	--	--	--	32	--	--

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-TANCE FROM RIGHT BANK (FEET)	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
T4	06644040	OREGON TRAIL DRAIN	08-16-88	1500	--	--	2160
		OREGON TRAIL DRAIN	08-17-88	1500	--	--	1520
		OREGON TRAIL DRAIN	08-17-88	1635	--	--	1750
		OREGON TRAIL DRAIN	08-17-88	1645	--	--	1550
		OREGON TRAIL DRAIN	08-18-88	1500	--	--	1280
		OREGON TRAIL DRAIN	08-19-88	0925	--	--	1290
		OREGON TRAIL DRAIN	08-19-88	1500	--	--	1210
		OREGON TRAIL DRAIN	08-20-88	1500	--	--	1180
		OREGON TRAIL DRAIN	08-21-88	1500	--	--	1220
		OREGON TRAIL DRAIN	08-22-88	1500	--	--	1170
		OREGON TRAIL DRAIN	08-26-88	1413	--	--	1290
		OREGON TRAIL DRAIN	08-26-88	1500	--	--	1290
		OREGON TRAIL DRAIN	08-27-88	1500	--	--	1410
		OREGON TRAIL DRAIN	08-28-88	1500	--	--	1550
		OREGON TRAIL DRAIN	08-29-88	1500	--	--	1650
		OREGON TRAIL DRAIN	08-30-88	1500	--	--	1290
		OREGON TRAIL DRAIN	08-31-88	1500	--	--	1530
		OREGON TRAIL DRAIN	09-02-88	0755	--	--	1360
		OREGON TRAIL DRAIN	09-02-88	1500	--	--	1200
		OREGON TRAIL DRAIN	09-03-88	1500	--	--	1280

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	PH, ONSITE (STAND-ARD UNITS)	TEMPER-ATURE, WATER, ONSITE (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE, ONSITE (MM OF HG)	OXYGEN, DIS-SOLVED, ONSITE (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BORON, DIS-SOLVED (UG/L AS B)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SEDI-MENT, SUS-PENDED (MG/L)
T4	08-16-88	8.5	--	29	--	--	--	--	25	--	--
	08-17-88	8.5	--	30	--	--	--	--	23	--	--
	08-17-88	8.7	--	30	--	--	--	--	18	--	--
	08-17-88	8.5	--	--	--	--	--	310	--	23	--
	08-18-88	8.6	--	37	--	--	--	--	10	--	--
	08-19-88	8.6	--	45	--	--	--	--	11	--	--
	08-19-88	8.6	--	37	--	--	--	--	10	--	--
	08-20-88	8.5	--	31	--	--	--	--	11	--	--
	08-21-88	8.5	--	30	--	--	--	--	15	--	--
	08-22-88	8.5	--	23	--	--	--	--	16	--	--
	08-26-88	8.5	--	40	--	--	--	--	43	--	--
	08-26-88	8.5	--	40	--	--	--	--	39	--	--
	08-27-88	8.5	--	38	--	--	--	--	35	--	--
	08-28-88	8.4	--	36	--	--	--	--	35	--	--
	08-29-88	8.4	--	45	--	--	--	--	28	--	--
	08-30-88	8.5	--	45	--	--	--	--	20	--	--
	08-31-88	8.5	--	40	--	--	--	--	24	--	--
	09-02-88	8.5	--	37	--	--	--	--	25	--	--
	09-02-88	8.5	--	21	--	--	--	--	20	--	--
	09-03-88	8.5	--	20	--	--	--	--	19	--	--

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-TANCE FROM RIGHT BANK (FEET)	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
T4	06644040	OREGON TRAIL DRAIN	09-04-88	1500	--	--	1120
		OREGON TRAIL DRAIN	09-05-88	1500	--	--	1110
		OREGON TRAIL DRAIN	09-06-88	1500	--	--	1080
		OREGON TRAIL DRAIN	09-07-88	1500	--	--	2010
		OREGON TRAIL DRAIN	09-08-88	1500	--	--	1620
		OREGON TRAIL DRAIN	09-09-88	1500	--	--	1140
		OREGON TRAIL DRAIN	09-10-88	1500	--	--	1040
		OREGON TRAIL DRAIN	09-11-88	1500	--	--	1370
		OREGON TRAIL DRAIN	09-12-88	1500	--	--	1230
		OREGON TRAIL DRAIN	09-13-88	1500	--	--	1190
		OREGON TRAIL DRAIN	09-13-88	1645	--	--	1230
		OREGON TRAIL DRAIN	09-14-88	1500	--	--	1770
		OREGON TRAIL DRAIN	09-14-88	1640	--	2.1	1720
		OREGON TRAIL DRAIN	09-14-88	1700	--	21	1720
		OREGON TRAIL DRAIN	09-15-88	1500	--	--	1290
		OREGON TRAIL DRAIN	09-16-88	1500	--	--	1230
		OREGON TRAIL DRAIN	09-17-88	1500	--	--	1540
		OREGON TRAIL DRAIN	09-18-88	1500	--	--	1600
		OREGON TRAIL DRAIN	09-19-88	1500	--	--	1790
		OREGON TRAIL DRAIN	09-20-88	1500	--	--	1350
		OREGON TRAIL DRAIN	09-21-88	1500	--	--	1940

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	PH, ONSITE (STAND-ARD UNITS)	TEMPER-ATURE, WATER, ONSITE (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE, ONSITE (MM OF HG)	OXYGEN, DIS-SOLVED, ONSITE (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BORON, DIS-SOLVED (UG/L AS B)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SEDI-MENT, SUS-PENDED (MG/L)
T4	09-04-88	8.6	--	1.8	--	--	--	--	16	--	--
	09-05-88	8.5	--	40	--	--	--	--	14	--	--
	09-06-88	8.5	--	19	--	--	--	--	16	--	--
	09-07-88	8.5	--	20	--	--	--	--	17	--	--
	09-08-88	8.4	--	20	--	--	--	--	34	--	--
	09-09-88	8.5	--	23	--	--	--	--	17	--	--
	09-10-88	8.5	--	20	--	--	--	--	14	--	--
	09-11-88	8.5	--	17	--	--	--	--	15	--	--
	09-12-88	8.5	--	17	--	--	--	--	17	--	--
	09-13-88	8.5	--	26	--	--	--	--	14	--	--
	09-13-88	8.3	11.0	50	--	--	--	170	--	17	--
	09-14-88	8.5	--	23	--	--	--	--	53	--	--
	09-14-88	8.4	13.0	27	--	8.8	--	--	53	49	114
	09-14-88	8.4	13.0	--	--	8.8	--	--	--	--	--
	09-15-88	8.5	--	23	--	--	--	--	21	--	--
	09-16-88	8.5	--	22	--	--	--	--	20	--	--
	09-17-88	8.5	--	28	--	--	--	--	33	--	--
	09-18-88	8.5	--	27	--	--	--	--	40	--	--
	09-19-88	8.5	--	13	--	--	--	--	51	--	--
	09-20-88	8.5	--	30	--	--	--	--	25	--	--
	09-21-88	8.5	--	11	--	--	--	--	63	--	--

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-TANCE FROM RIGHT BANK (FEET)	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
NP3	06644085	NORTH PLATTE RIVER AT MILLS	03-20-89	1400	--	--	--
		NORTH PLATTE RIVER AT MILLS	03-29-89	1045	--	--	--
		NORTH PLATTE RIVER AT MILLS	04-07-89	1600	--	--	--
		NORTH PLATTE RIVER AT MILLS	04-18-89	1800	--	--	--
		NORTH PLATTE RIVER AT MILLS	04-28-89	1615	--	--	--
		NORTH PLATTE RIVER AT MILLS	08-19-89	1040	35	--	570
		NORTH PLATTE RIVER AT MILLS	08-19-89	1045	65	--	568
		NORTH PLATTE RIVER AT MILLS	08-19-89	1050	120	--	572
		NORTH PLATTE RIVER AT MILLS	08-19-89	1055	180	--	570
		NORTH PLATTE RIVER AT MILLS	08-19-89	1100	215	--	570
		NORTH PLATTE RIVER AT MILLS	08-19-89	1105	215	--	--
		NORTH PLATTE RIVER AT MILLS	08-19-89	1110	260	--	572
		NORTH PLATTE RIVER AT MILLS	08-19-89	1115	280	--	575
NP5	425101106195501	N PLATTE RIV AT YELLOWSTONE AVE BRIDGE, AT CASPER	08-19-89	1300	30	--	595
		N PLATTE RIV AT YELLOWSTONE AVE BRIDGE, AT CASPER	08-19-89	1305	60	--	598
		N PLATTE RIV AT YELLOWSTONE AVE BRIDGE, AT CASPER	08-19-89	1310	115	--	600
		N PLATTE RIV AT YELLOWSTONE AVE BRIDGE, AT CASPER	08-19-89	1314	150	--	592
		N PLATTE RIV AT YELLOWSTONE AVE BRIDGE, AT CASPER	08-19-89	1318	185	--	610
		N PLATTE RIV AT YELLOWSTONE AVE BRIDGE, AT CASPER	08-19-89	1322	225	--	610

Table 2.--Water-quality data for water samples collected daily during selected periods, North Platte River and Oregon Trail Drain, 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	PH, ONSITE (STAND-ARD UNITS)	TEMPER-ATURE, WATER, ONSITE (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE, ONSITE (MM OF HG)	OXYGEN, DIS-SOLVED, ONSITE (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	BORON, DIS-SOLVED (UG/L AS B)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SEDI-MENT, SUS-PENDED (MG/L)
NP3	03-20-89	--	--	--	--	--	--	--	6	--	--
	03-29-89	--	--	--	--	--	--	--	--	--	--
	04-07-89	--	--	--	--	--	--	--	6	--	--
	04-18-89	--	--	--	--	--	--	--	2	--	--
	04-28-89	--	--	--	--	--	--	--	2	--	--
	08-19-89	8.7	--	--	--	--	--	--	--	2	--
	08-19-89	8.7	--	--	--	--	--	--	--	2	--
	08-19-89	8.7	--	--	--	--	--	--	--	2	--
	08-19-89	8.7	--	--	--	--	--	--	--	2	--
	08-19-89	8.7	--	--	--	--	--	--	--	2	--
	08-19-89	--	--	--	--	--	--	--	--	2	--
	08-19-89	8.7	--	--	--	--	--	--	--	2	--
	08-19-89	8.7	--	--	--	--	--	--	--	2	--
NP5	08-19-89	8.7	--	--	--	--	--	--	--	2	--
	08-19-89	8.7	--	--	--	--	--	--	--	2	--
	08-19-89	8.8	--	--	--	--	--	--	--	2	--
	08-19-89	8.8	--	--	--	--	--	--	--	2	--
	08-19-89	8.8	--	--	--	--	--	--	--	2	--
	08-19-89	8.8	--	--	--	--	--	--	--	2	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89

[US/CM, microsiemens per centimeter at 25 degrees Celsius; DEG C, degrees Celsius; NTU, nephelometric turbidity unit; MM of HG, millimeters of mercury; MG/L, milligrams per liter; DIS IT, dissolved incremental titration; WAT WH TOT FET, water whole total fixed endpoint titration; AC-FT, acre-feet; UG/L, micrograms per liter; PER MIL, parts per thousand; LK, Lake; NR, near; --, no data; <, less than; RES, reservoir]

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
--	423523106411501	GRAY REEF RESERVOIR, SP-14 NEAR CASPER	07-18-88	1035	2290	7.6
FW3	424133106352101	OXBOW POND, FW-3 NEAR CASPER	01-14-88	1515	--	--
		OXBOW POND, FW-3 NEAR CASPER	07-14-88	1535	1540	9.4
--	424244106350901	SP-11 NEAR CASPER	07-14-88	1715	4850	9.3
		SP-11 NEAR CASPER	08-18-89	1445	6100	8.9
FW1	424413106365601	RASMUS LEE LAKE (SEEP) NEAR CASPER	05-24-88	0920	9250	8.0
		RASMUS LEE LAKE (SEEP) NEAR CASPER	06-28-88	1100	1550	8.4
		RASMUS LEE LAKE (SEEP) NEAR CASPER	09-16-88	0915	6100	8.1
FW1	424414106365201	RASMUS LEE LAKE NEAR OUTLET	03-02-88	0830	15000	8.4
		RASMUS LEE LAKE NEAR OUTLET	06-22-88	1220	10100	10.2
		RASMUS LEE LAKE NEAR OUTLET	10-27-88	0925	12000	9.0
FW1	424423106363801	RASMUS LEE LK NR ISLAND ON EAST END	05-24-88	0945	9500	10.1
		RASMUS LEE LK NR ISLAND ON EAST END	06-22-88	1230	10200	10.1
		RASMUS LEE LK NR ISLAND ON EAST END	08-18-88	--	--	--
		RASMUS LEE LK NR ISLAND ON EAST END	08-18-88	1520	9500	8.7
		RASMUS LEE LK NR ISLAND ON EAST END	09-16-88	0930	10100	9.0

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
--	07-18-88	19.0	--	--	9.5	--	--	--	--	--	--	--
FW3	01-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	26.5	--	--	13.8	--	710	170	69	130	11	--
--	07-14-88	27.0	--	--	18.4	--	--	--	--	--	--	--
	08-18-89	21.5	--	--	14.0	--	1500	130	290	1000	13	--
FW1	05-24-88	19.0	--	--	--	--	--	--	--	--	--	--
	06-28-88	30.0	--	--	--	--	--	--	--	--	--	432
	09-16-88	9.0	--	--	--	--	1400	150	240	980	10	--
FW1	03-02-88	0.0	100	--	0.1	--	3300	230	650	2600	35	--
	06-22-88	31.0	--	622	15.4	265	2300	130	490	2400	19	--
	10-27-88	3.0	--	624	10.3	98	2600	180	530	2300	19	--
FW1	05-24-88	16.5	--	618	14.7	193	--	--	--	--	--	--
	06-22-88	30.0	--	622	19.0	322	2800	170	570	2100	19	275
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	08-18-88	23.0	--	--	10.5	--	2500	180	500	1900	25	--
	09-16-88	10.5	--	--	9.4	--	2300	160	470	1900	19	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
--	07-18-88	--	2290	--	--	--	--	--	--	--	--	--
FW3	01-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	--	50	--	51	--	880	14	0.30	--	1300	1.77
--	07-14-88	--	303	--	--	--	--	--	--	--	--	--
	08-18-89	--	--	296	295	--	3500	43	0.50	--	5150	7.01
FW1	05-24-88	--	--	--	--	1.3	--	--	--	--	--	--
	06-28-88	0	--	354	--	--	--	--	--	--	--	--
	09-16-88	--	--	--	398	--	3200	85	0.60	--	4900	6.67
FW1	03-02-88	--	--	--	471	--	7700	420	--	12000	11900	16.3
	06-22-88	--	--	--	277	--	5800	220	--	9410	9230	12.8
	10-27-88	--	--	--	405	--	7100	270	--	11100	10600	15.1
FW1	05-24-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	0	--	225	243	--	6000	220	--	9320	9220	12.7
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	08-18-88	--	326	--	329	--	5500	210	0.50	--	8510	11.6
	09-16-88	--	370	--	360	--	5900	240	0.60	--	8910	12.1

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
--	07-18-88	--	--	--	--	--	--	--	--	--	--	--
FW3	01-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	--	--	--	--	--	280	--	--	--	--	--
--	07-14-88	--	--	--	--	--	--	--	--	--	--	--
	08-18-89	--	--	--	--	--	1100	--	--	--	--	--
FW1	05-24-88	--	--	--	--	--	--	--	--	--	--	110
	06-28-88	--	--	--	--	--	--	--	--	--	--	--
	09-16-88	--	--	--	--	--	670	--	--	--	--	--
FW1	03-02-88	0.180	--	13	12	--	1700	--	<1.0	2	<1	--
	06-22-88	0.260	--	13	6	1100	1200	20	1.0	<1	5	--
	10-27-88	--	--	--	10	--	1600	--	<1.0	2	2	--
FW1	05-24-88	--	--	--	--	--	1200	--	--	--	--	40
	06-22-88	--	--	10	4	1200	1200	20	<1.0	<1	1	--
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	08-18-88	--	98	--	--	--	1200	--	--	--	--	--
	09-16-88	--	--	--	--	--	1400	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DISSOLVED (UG/L AS PB)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	MERCURY, DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	H-2/H-1 STABLE ISOTOPE RATIO PER MIL	O-18/O-16 STABLE ISOTOPE RATIO PER MIL
--	07-18-88	--	--	--	--	--	6	--	--	--	--	--
FW3	01-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	--	--	--	--	--	1	--	--	--	--	--
	07-14-88	--	--	--	--	--	260	--	--	--	--	--
--	08-18-89	--	--	--	--	--	500	--	--	--	-96.0	-10.25
FW1	05-24-88	--	--	--	--	--	6	--	--	--	--	--
	06-28-88	--	--	--	--	11	8	--	--	--	--	--
	09-16-88	--	--	--	--	--	7	--	--	--	--	--
FW1	03-02-88	<5	--	0.2	2	12	11	12	30	--	--	--
	06-22-88	<5	--	<0.1	4	100	110	10	20	--	--	--
	10-27-88	<5	--	--	4	--	30	16	50	68	--	--
FW1	05-24-88	--	--	--	--	--	120	--	--	--	--	--
	06-22-88	<5	--	--	3	94	120	9	10	40	--	--
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	08-18-88	--	--	--	--	--	26	--	--	--	-62.0	-4.00
	09-16-88	--	--	--	--	--	38	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW1	424423106363801	RASMUS LEE LK NR ISLAND ON EAST END	09-16-88	1000	10100	9.0
		RASMUS LEE LK NR ISLAND ON EAST END	10-27-88	0940	12000	9.0
		RASMUS LEE LK NR ISLAND ON EAST END	02-16-89	1450	19000	8.2
		RASMUS LEE LK NR ISLAND ON EAST END	02-17-89	1110	4200	--
		RASMUS LEE LK NR ISLAND ON EAST END	02-17-89	1115	4420	--
--	424431106370901	FW-1 NEAR CASPER	07-13-88	1615	13500	9.7
FW1	424435106370300	RASMUS LEE LAKE	03-18-88	1530	12500	8.7
		RASMUS LEE LAKE	03-20-88	1500	12000	8.8
		RASMUS LEE LAKE	03-21-88	1530	6300	--
		RASMUS LEE LAKE	03-22-88	1000	3800	--
		RASMUS LEE LAKE	03-22-88	1500	3600	--
		RASMUS LEE LAKE	03-23-88	1500	7600	--
		RASMUS LEE LAKE	03-24-88	1500	10000	--
		RASMUS LEE LAKE	03-25-88	1500	8550	--
		RASMUS LEE LAKE	03-26-88	1500	7050	--
		RASMUS LEE LAKE	03-27-88	1500	7500	--
		RASMUS LEE LAKE	03-28-88	1500	5500	--
		RASMUS LEE LAKE	03-29-88	1500	2440	--
		RASMUS LEE LAKE	03-30-88	1500	1580	--
		RASMUS LEE LAKE	03-31-88	1315	1620	--
		RASMUS LEE LAKE	03-31-88	1500	1840	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW1	09-16-88	10.5	--	--	9.4	--	2300	150	470	1900	23	--
	10-27-88	5.5	--	624	6.5	66	2700	190	530	2200	20	--
	02-16-89	-0.5	--	625	0.4	3	5000	360	990	4200	46	--
	02-17-89	--	--	--	--	--	--	--	--	--	--	--
	02-17-89	--	--	--	--	--	--	--	--	--	--	--
--	07-13-88	29.5	--	--	19.8	--	3400	210	700	2900	30	--
FW1	03-18-88	2.0	--	625	2.0	19	--	--	--	--	--	--
	03-20-88	1.0	--	620	17.3	157	--	--	--	--	--	--
	03-21-88	2.0	--	--	--	--	--	--	--	--	--	--
	03-22-88	--	--	--	--	--	--	--	--	--	--	--
	03-22-88	--	--	--	--	--	--	--	--	--	--	--
	03-23-88	--	--	--	--	--	--	--	--	--	--	--
	03-24-88	--	--	--	--	--	--	--	--	--	--	--
	03-25-88	--	--	--	--	--	--	--	--	--	--	--
	03-26-88	--	--	--	--	--	--	--	--	--	--	--
	03-27-88	--	--	--	--	--	--	--	--	--	--	--
	03-28-88	--	--	--	--	--	--	--	--	--	--	--
	03-29-88	--	--	--	--	--	--	--	--	--	--	--
	03-30-88	--	--	--	--	--	--	--	--	--	--	--
	03-31-88	--	--	--	--	--	--	--	--	--	--	--
	03-31-88	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW1	09-16-88	--	370	--	360	--	6000	240	0.6	--	9010	12.2
	10-27-88	--	416	--	406	--	7000	270	--	11100	10500	15.1
	02-16-89	--	--	--	694	8.8	13000	510	1.0	--	19500	26.6
	02-17-89	--	--	--	--	--	--	--	--	--	--	--
	02-17-89	--	--	--	--	--	--	--	--	--	--	--
--	07-13-88	--	273	--	235	--	7800	320	0.6	--	12100	16.5
FW1	03-18-88	--	--	--	--	--	--	--	--	--	--	--
	03-20-88	--	--	--	--	--	--	--	--	--	--	--
	03-21-88	--	--	--	--	--	--	--	--	--	--	--
	03-22-88	--	--	--	--	--	--	--	--	--	--	--
	03-22-88	--	--	--	--	--	--	--	--	--	--	--
	03-23-88	--	--	--	--	--	--	--	--	--	--	--
	03-24-88	--	--	--	--	--	--	--	--	--	--	--
	03-25-88	--	--	--	--	--	--	--	--	--	--	--
	03-26-88	--	--	--	--	--	--	--	--	--	--	--
	03-27-88	--	--	--	--	--	--	--	--	--	--	--
	03-28-88	--	--	--	--	--	--	--	--	--	--	--
	03-29-88	--	--	--	--	--	--	--	--	--	--	--
	03-30-88	--	--	--	--	--	--	--	--	--	--	--
	03-31-88	--	--	--	--	--	--	--	--	--	--	--
	03-31-88	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITRO-GEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
FW1	09-16-88	--	--	--	--	--	1400	--	--	--	--	--
	10-27-88	--	--	--	7	--	1600	--	<1	2	1	--
	02-16-89	--	--	--	--	--	2600	--	--	--	--	--
	02-17-89	--	--	--	--	--	--	--	--	--	--	--
	02-17-89	--	--	--	--	--	--	--	--	--	--	--
--	07-13-88	--	--	--	--	--	860	--	--	--	--	--
FW1	03-18-88	--	--	--	--	--	--	--	--	--	--	--
	03-20-88	--	--	--	--	--	--	--	--	--	--	--
	03-21-88	--	--	--	--	--	--	--	--	--	--	--
	03-22-88	--	--	--	--	--	--	--	--	--	--	--
	03-22-88	--	--	--	--	--	--	--	--	--	--	--
	03-23-88	--	--	--	--	--	--	--	--	--	--	--
	03-24-88	--	--	--	--	--	--	--	--	--	--	--
	03-25-88	--	--	--	--	--	--	--	--	--	--	--
	03-26-88	--	--	--	--	--	--	--	--	--	--	--
	03-27-88	--	--	--	--	--	--	--	--	--	--	--
	03-28-88	--	--	--	--	--	--	--	--	--	--	--
	03-29-88	--	--	--	--	--	--	--	--	--	--	--
	03-30-88	--	--	--	--	--	--	--	--	--	--	--
	03-31-88	--	--	--	--	--	--	--	--	--	--	--
	03-31-88	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW1	09-16-88	--	--	--	--	--	44	--	--	--	--	--
	10-27-88	<5	--	--	5	--	31	17	50	71	--	--
	02-16-89	--	--	--	--	--	23	--	--	--	--	--
	02-17-89	--	--	--	--	8	--	--	--	--	--	--
	02-17-89	--	--	--	--	10	--	--	--	--	--	--
--	07-13-88	--	--	--	--	--	50	--	--	--	--	--
FW1	03-18-88	--	--	--	--	35	32	--	--	--	--	--
	03-20-88	--	--	--	--	650	630	--	--	--	--	--
	03-21-88	--	--	--	--	800	730	--	--	--	--	--
	03-22-88	--	--	--	--	1300	--	--	--	--	--	--
	03-22-88	--	--	--	--	1000	--	--	--	--	--	--
	03-23-88	--	--	--	--	740	--	--	--	--	--	--
	03-24-88	--	--	--	--	140	--	--	--	--	--	--
	03-25-88	--	--	--	--	520	--	--	--	--	--	--
	03-26-88	--	--	--	--	560	--	--	--	--	--	--
	03-27-88	--	--	--	--	150	--	--	--	--	--	--
	03-28-88	--	--	--	--	56	--	--	--	--	--	--
	03-29-88	--	--	--	--	19	--	--	--	--	--	--
	03-30-88	--	--	--	--	15	--	--	--	--	--	--
	03-31-88	--	--	--	--	17	--	--	--	--	--	--
	03-31-88	--	--	--	--	22	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW1	424435106370300	RASMUS LEE LAKE	04-01-88	1500	1760	--
		RASMUS LEE LAKE	04-02-88	1500	2680	--
		RASMUS LEE LAKE	04-03-88	1500	5600	--
		RASMUS LEE LAKE	04-04-88	1500	7500	--
		RASMUS LEE LAKE	04-05-88	1500	8200	--
		RASMUS LEE LAKE	04-06-88	1500	8400	--
		RASMUS LEE LAKE	04-07-88	1310	8450	--
		RASMUS LEE LAKE	04-07-88	1500	8470	--
		RASMUS LEE LAKE	04-08-88	1500	8500	--
		RASMUS LEE LAKE	04-09-88	1500	8490	--
		RASMUS LEE LAKE	04-10-88	1500	8900	--
		RASMUS LEE LAKE	04-11-88	1500	8750	--
		RASMUS LEE LAKE	04-22-88	1005	9050	--
		RASMUS LEE LAKE	04-22-88	1010	9000	9.3
		RASMUS LEE LAKE	04-22-88	1500	9900	--
		RASMUS LEE LAKE	04-23-88	1500	9950	--
		RASMUS LEE LAKE	04-24-88	1500	9100	--
		RASMUS LEE LAKE	05-02-88	1320	9000	--
		RASMUS LEE LAKE	05-24-88	1015	10000	10.2
		RASMUS LEE LAKE	06-22-88	1240	10100	10.1

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW1	04-01-88	--	--	--	--	--	--	--	--	--	--	--
	04-02-88	--	--	--	--	--	--	--	--	--	--	--
	04-03-88	--	--	--	--	--	--	--	--	--	--	--
	04-04-88	--	--	--	--	--	--	--	--	--	--	--
	04-05-88	--	--	--	--	--	--	--	--	--	--	--
	04-06-88	--	--	--	--	--	--	--	--	--	--	--
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	04-08-88	--	--	--	--	--	--	--	--	--	--	--
	04-09-88	--	--	--	--	--	--	--	--	--	--	--
	04-10-88	--	--	--	--	--	--	--	--	--	--	--
	04-11-88	--	--	--	--	--	--	--	--	--	--	--
	04-22-88	--	--	--	--	--	--	--	--	--	--	--
	04-22-88	3.5	--	617	13.2	127	--	--	--	--	--	225
	04-22-88	--	--	--	--	--	--	--	--	--	--	--
	04-23-88	--	--	--	--	--	--	--	--	--	--	--
	04-24-88	--	--	--	--	--	--	--	--	--	--	--
	05-02-88	--	--	--	--	--	--	--	--	--	--	--
	05-24-88	21.5	--	--	15.2	--	--	--	--	--	--	--
	06-22-88	32.0	--	622	20.0	350	2600	150	540	2200	2.6	276

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW1	04-01-88	--	--	--	--	--	--	--	--	--	--	--
	04-02-88	--	--	--	--	--	--	--	--	--	--	--
	04-03-88	--	--	--	--	--	--	--	--	--	--	--
	04-04-88	--	--	--	--	--	--	--	--	--	--	--
	04-05-88	--	--	--	--	--	--	--	--	--	--	--
	04-06-88	--	--	--	--	--	--	--	--	--	--	--
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	04-08-88	--	--	--	--	--	--	--	--	--	--	--
	04-09-88	--	--	--	--	--	--	--	--	--	--	--
	04-10-88	--	--	--	--	--	--	--	--	--	--	--
	04-11-88	--	--	--	--	--	--	--	--	--	--	--
	04-22-88	--	--	--	--	--	--	--	--	--	--	--
	04-22-88	120	--	384	--	--	--	--	--	--	--	--
	04-22-88	--	--	--	--	--	--	--	--	--	--	--
	04-23-88	--	--	--	--	--	--	--	--	--	--	--
	04-24-88	--	--	--	--	--	--	--	--	--	--	--
	05-02-88	--	--	--	--	--	--	--	--	--	--	--
	05-24-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	0	--	226	263	--	6000	250	--	9330	9280	12.7

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITRO-GEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
FW1	04-01-88	--	--	--	--	--	--	--	--	--	--	--
	04-02-88	--	--	--	--	--	--	--	--	--	--	--
	04-03-88	--	--	--	--	--	--	--	--	--	--	--
	04-04-88	--	--	--	--	--	--	--	--	--	--	--
	04-05-88	--	--	--	--	--	--	--	--	--	--	--
	04-06-88	--	--	--	--	--	--	--	--	--	--	--
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	04-07-88	--	--	--	--	--	--	--	--	--	--	--
	04-08-88	--	--	--	--	--	--	--	--	--	--	--
	04-09-88	--	--	--	--	--	--	--	--	--	--	--
	04-10-88	--	--	--	--	--	--	--	--	--	--	--
	04-11-88	--	--	--	--	--	--	--	--	--	--	--
	04-22-88	--	--	--	--	--	--	--	--	--	--	--
	04-22-88	--	--	--	--	--	1100	--	--	--	--	--
	04-22-88	--	--	--	--	--	--	--	--	--	--	--
	04-23-88	--	--	--	--	--	--	--	--	--	--	--
	04-24-88	--	--	--	--	--	--	--	--	--	--	--
	05-02-88	--	--	--	--	--	--	--	--	--	--	--
	05-24-88	--	--	--	--	--	1300	--	--	--	--	40
	06-22-88	--	--	10	2	1200	1200	20	1	<1	1	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW1	04-01-88	--	--	--	--	32	--	--	--	--	--	--
	04-02-88	--	--	--	--	63	--	--	--	--	--	--
	04-03-88	--	--	--	--	98	--	--	--	--	--	--
	04-04-88	--	--	--	--	95	--	--	--	--	--	--
	04-05-88	--	--	--	--	110	--	--	--	--	--	--
	04-06-88	--	--	--	--	110	--	--	--	--	--	--
	04-07-88	--	--	--	--	95	--	--	--	--	--	--
	04-07-88	--	--	--	--	95	--	--	--	--	--	--
	04-08-88	--	--	--	--	98	--	--	--	--	--	--
	04-09-88	--	--	--	--	110	--	--	--	--	--	--
	04-10-88	--	--	--	--	78	--	--	--	--	--	--
	04-11-88	--	--	--	--	100	--	--	--	--	--	--
	04-22-88	--	--	--	--	210	--	--	--	--	--	--
	04-22-88	--	--	0.1	--	--	83	--	--	--	-83.4	-8.05
	04-22-88	--	--	--	--	470	--	--	--	--	--	--
	04-23-88	--	--	--	--	450	--	--	--	--	--	--
	04-24-88	--	--	--	--	150	--	--	--	--	--	--
	05-02-88	--	--	--	--	140	--	--	--	--	--	--
	05-24-88	--	--	--	--	--	110	--	--	--	--	--
	06-22-88	6	--	--	3	110	120	9	10	35	-64.0	-4.60

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW1	424435106370300	RASMUS LEE LAKE	09-01-88	1519	10000	8.0
		RASMUS LEE LAKE	09-02-88	1525	9800	8.3
		RASMUS LEE LAKE	09-03-88	1525	10100	8.0
		RASMUS LEE LAKE	09-04-88	1525	10000	8.3
		RASMUS LEE LAKE	09-05-88	1525	10100	8.4
		RASMUS LEE LAKE	09-06-88	1525	10100	8.4
		RASMUS LEE LAKE	09-07-88	1525	10100	8.3
		RASMUS LEE LAKE	09-08-88	1525	10100	8.5
		RASMUS LEE LAKE	09-09-88	1525	10000	8.4
		RASMUS LEE LAKE	09-10-88	1525	10100	3.3
		RASMUS LEE LAKE	09-13-88	1745	10000	9.0
		RASMUS LEE LAKE	09-14-88	1525	9800	8.3
		RASMUS LEE LAKE	09-15-88	1525	9900	8.5
		RASMUS LEE LAKE	09-16-88	0855	10100	9.1
		RASMUS LEE LAKE	09-16-88	1100	--	--
		RASMUS LEE LAKE	09-16-88	1525	9900	8.5
		RASMUS LEE LAKE	09-17-88	1525	9900	8.5
		RASMUS LEE LAKE	09-18-88	1525	--	8.6
		RASMUS LEE LAKE	10-22-88	1115	12000	9.0
		RASMUS LEE LAKE	11-08-88	1115	13000	8.9

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW1	09-01-88	--	10	--	--	--	--	--	--	--	--	--
	09-02-88	--	7.5	--	--	--	--	--	--	--	--	--
	09-03-88	--	8.0	--	--	--	--	--	--	--	--	--
	09-04-88	--	6.0	--	--	--	--	--	--	--	--	--
	09-05-88	--	6.8	--	--	--	--	--	--	--	--	--
	09-06-88	--	7.8	--	--	--	--	--	--	--	--	--
	09-07-88	--	9.5	--	--	--	--	--	--	--	--	--
	09-08-88	--	9.0	--	--	--	--	--	--	--	--	--
	09-09-88	--	8.0	--	--	--	--	--	--	--	--	--
	09-10-88	--	36	--	--	--	--	--	--	--	--	--
	09-13-88	11.0	35	--	--	--	--	--	--	--	--	--
	09-14-88	--	25	--	--	--	--	--	--	--	--	--
	09-15-88	--	8.7	--	--	--	--	--	--	--	--	--
	09-16-88	9.5	--	--	10.0	--	2700	200	540	2000	24	--
	09-16-88	--	--	--	--	--	2300	150	470	2000	22	--
	09-16-88	--	5.7	--	--	--	--	--	--	--	--	--
	09-17-88	--	10	--	--	--	--	--	--	--	--	--
	09-18-88	--	10	--	--	--	--	--	--	--	--	--
	10-22-88	8.5	--	619	13.4	148	2500	170	510	2300	23	--
	11-08-88	4.5	--	618	11.8	118	2800	180	570	2400	23	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW1	09-01-88	--	--	--	--	--	--	--	--	--	--	--
	09-02-88	--	--	--	--	--	--	--	--	--	--	--
	09-03-88	--	--	--	--	--	--	--	--	--	--	--
	09-04-88	--	--	--	--	--	--	--	--	--	--	--
	09-05-88	--	--	--	--	--	--	--	--	--	--	--
	09-06-88	--	--	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--	--	--
	09-08-88	--	--	--	--	--	--	--	--	--	--	--
	09-09-88	--	--	--	--	--	--	--	--	--	--	--
	09-10-88	--	--	--	--	--	--	--	--	--	--	--
	09-13-88	--	--	--	--	--	--	--	--	--	--	--
	09-14-88	--	--	--	--	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	09-16-88	--	--	--	365	--	6000	240	0.6	--	9220	12.5
	09-16-88	--	--	--	366	--	6100	240	0.6	--	9200	12.5
	09-16-88	--	--	--	--	--	--	--	--	--	--	--
	09-17-88	--	--	--	--	--	--	--	--	--	--	--
	09-18-88	--	--	--	--	--	--	--	--	--	--	--
	10-22-88	--	395	--	386	--	6800	270	--	888	10300	1.21
	11-08-88	--	425	--	421	--	7200	290	0.7	--	10900	14.9

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
FW1	09-01-88	--	--	--	--	--	--	--	--	--	--	--
	09-02-88	--	--	--	--	--	--	--	--	--	--	--
	09-03-88	--	--	--	--	--	--	--	--	--	--	--
	09-04-88	--	--	--	--	--	--	--	--	--	--	--
	09-05-88	--	--	--	--	--	--	--	--	--	--	--
	09-06-88	--	--	--	--	--	--	--	--	--	--	--
	09-07-88	--	--	--	--	--	--	--	--	--	--	--
	09-08-88	--	--	--	--	--	--	--	--	--	--	--
	09-09-88	--	--	--	--	--	--	--	--	--	--	--
	09-10-88	--	--	--	--	--	--	--	--	--	--	--
	09-13-88	--	--	--	--	--	1400	--	--	--	--	--
	09-14-88	--	--	--	--	--	--	--	--	--	--	--
	09-15-88	--	--	--	--	--	--	--	--	--	--	--
	09-16-88	--	--	--	--	--	1400	--	--	--	--	--
	09-16-88	--	--	--	--	--	1400	--	--	--	--	--
	09-16-88	--	--	--	--	--	--	--	--	--	--	--
	09-17-88	--	--	--	--	--	--	--	--	--	--	--
	09-18-88	--	--	--	--	--	--	--	--	--	--	--
	10-22-88	--	--	--	12	--	1600	--	2	1	3	--
	11-08-88	--	--	--	--	--	1600	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs). 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW1	09-01-88	--	--	--	--	21	--	--	--	--	--	--
	09-02-88	--	--	--	--	22	--	--	--	--	--	--
	09-03-88	--	--	--	--	29	--	--	--	--	--	--
	09-04-88	--	--	--	--	30	--	--	--	--	--	--
	09-05-88	--	--	--	--	24	--	--	--	--	--	--
	09-06-88	--	--	--	--	23	--	--	--	--	--	--
	09-07-88	--	--	--	--	31	--	--	--	--	--	--
	09-08-88	--	--	--	--	29	--	--	--	--	--	--
	09-09-88	--	--	--	--	33	--	--	--	--	--	--
	09-10-88	--	--	--	--	21	--	--	--	--	--	--
	09-13-88	--	--	--	--	20	38	--	--	--	--	--
	09-14-88	--	--	--	--	45	--	--	--	--	--	--
	09-15-88	--	--	--	--	39	--	--	--	--	--	--
	09-16-88	--	--	--	--	--	46	--	--	--	-55.0	-3.10
	09-16-88	--	--	--	--	--	42	--	--	--	--	--
	09-16-88	--	--	--	--	46	--	--	--	--	--	--
	09-17-88	--	--	--	--	38	--	--	--	--	--	--
	09-18-88	--	--	--	--	38	--	--	--	--	--	--
	10-22-88	<5	--	--	4	--	26	16	40	60	-54.0	-2.85
	11-08-88	--	--	--	--	--	27	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW1	424435106370300	RASMUS LEE LAKE	12-15-88	0915	13500	9.2
		RASMUS LEE LAKE	03-06-89	1445	18500	8.1
		RASMUS LEE LAKE	03-07-89	1520	9960	7.8
		RASMUS LEE LAKE	03-08-89	1400	1840	7.9
		RASMUS LEE LAKE	03-09-89	1640	4050	7.7
		RASMUS LEE LAKE	03-10-89	1340	4050	7.7
		RASMUS LEE LAKE	03-13-89	1510	9700	7.2
		RASMUS LEE LAKE	03-13-89	1511	11500	7.1
		RASMUS LEE LAKE	03-15-89	1510	7500	7.4
		RASMUS LEE LAKE	03-16-89	1510	8010	7.3
		RASMUS LEE LAKE	03-17-89	1510	9950	7.3
		RASMUS LEE LAKE	03-18-89	1510	7300	7.3
		RASMUS LEE LAKE	03-19-89	1510	9200	7.3
		RASMUS LEE LAKE	03-20-89	1510	11500	7.5
		RASMUS LEE LAKE	03-20-89	1658	10500	7.2
		RASMUS LEE LAKE	03-21-89	1658	12500	7.2
		RASMUS LEE LAKE	03-22-89	1658	13000	7.1
		RASMUS LEE LAKE	03-23-89	1658	12000	7.3
		RASMUS LEE LAKE	03-24-89	1658	12000	7.2
		RASMUS LEE LAKE	03-25-89	1658	12000	7.2

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW1	12-15-88	-5.0	--	632	20.0	150	3200	180	660	2900	31	--
	03-06-89	--	11	--	--	--	--	--	--	--	--	--
	03-07-89	--	21	--	--	--	--	--	--	--	--	--
	03-08-89	--	7.1	--	--	--	--	--	--	--	--	--
	03-09-89	--	8.1	--	--	--	--	--	--	--	--	--
	03-10-89	--	5.4	--	--	--	--	--	--	--	--	--
	03-13-89	--	23	--	--	--	--	--	--	--	--	--
	03-13-89	--	5.2	--	--	--	--	--	--	--	--	--
	03-15-89	--	20	--	--	--	--	--	--	--	--	--
	03-16-89	--	3.8	--	--	--	--	--	--	--	--	--
	03-17-89	--	15	--	--	--	--	--	--	--	--	--
	03-18-89	--	3.8	--	--	--	--	--	--	--	--	--
	03-19-89	--	11	--	--	--	--	--	--	--	--	--
	03-20-89	--	--	--	--	--	--	--	--	--	--	--
	03-20-89	--	8.8	--	--	--	--	--	--	--	--	--
	03-21-89	--	6.4	--	--	--	--	--	--	--	--	--
	03-22-89	--	9.4	--	--	--	--	--	--	--	--	--
	03-23-89	--	8.6	--	--	--	--	--	--	--	--	--
	03-24-89	--	9.4	--	--	--	--	--	--	--	--	--
	03-25-89	--	14	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW1	12-15-88	--	--	--	399	--	8700	360	0.8	--	13100	17.8
	03-06-89	--	--	--	--	--	--	--	--	--	--	--
	03-07-89	--	--	--	--	--	--	--	--	--	--	--
	03-08-89	--	--	--	--	--	--	--	--	--	--	--
	03-09-89	--	--	--	--	--	--	--	--	--	--	--
	03-10-89	--	--	--	--	--	--	--	--	--	--	--
	03-13-89	--	--	--	--	--	--	--	--	--	--	--
	03-13-89	--	--	--	--	--	--	--	--	--	--	--
	03-15-89	--	--	--	--	--	--	--	--	--	--	--
	03-16-89	--	--	--	--	--	--	--	--	--	--	--
	03-17-89	--	--	--	--	--	--	--	--	--	--	--
	03-18-89	--	--	--	--	--	--	--	--	--	--	--
	03-19-89	--	--	--	--	--	--	--	--	--	--	--
	03-20-89	--	--	--	--	--	--	--	--	--	--	--
	03-20-89	--	--	--	--	--	--	--	--	--	--	--
	03-21-89	--	--	--	--	--	--	--	--	--	--	--
	03-22-89	--	--	--	--	--	--	--	--	--	--	--
	03-23-89	--	--	--	--	--	--	--	--	--	--	--
	03-24-89	--	--	--	--	--	--	--	--	--	--	--
	03-25-89	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
FW1	12-15-88	--	--	--	--	--	1800	--	--	<2	--	--
	03-06-89	--	--	--	--	--	--	--	--	--	--	--
	03-07-89	--	--	--	--	--	--	--	--	--	--	--
	03-08-89	--	--	--	--	--	--	--	--	--	--	--
	03-09-89	--	--	--	--	--	--	--	--	--	--	--
	03-10-89	--	--	--	--	--	--	--	--	--	--	--
	03-13-89	--	--	--	--	--	--	--	--	--	--	--
	03-13-89	--	--	--	--	--	--	--	--	--	--	--
	03-15-89	--	--	--	--	--	--	--	--	--	--	--
	03-16-89	--	--	--	--	--	--	--	--	--	--	--
	03-17-89	--	--	--	--	--	--	--	--	--	--	--
	03-18-89	--	--	--	--	--	--	--	--	--	--	--
	03-19-89	--	--	--	--	--	--	--	--	--	--	--
	03-20-89	--	--	--	--	--	--	--	--	--	--	--
	03-20-89	--	--	--	--	--	--	--	--	--	--	--
	03-21-89	--	--	--	--	--	--	--	--	--	--	--
	03-22-89	--	--	--	--	--	--	--	--	--	--	--
	03-23-89	--	--	--	--	--	--	--	--	--	--	--
	03-24-89	--	--	--	--	--	--	--	--	--	--	--
	03-25-89	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW1	12-15-88	--	--	--	--	--	39	--	--	--	-55.0	-2.80
	03-06-89	--	--	--	--	15	--	--	--	--	--	--
	03-07-89	--	--	--	--	17	--	--	--	--	--	--
	03-08-89	--	--	--	--	7	--	--	--	--	--	--
	03-09-89	--	--	--	--	27	--	--	--	--	--	--
	03-10-89	--	--	--	--	72	--	--	--	--	--	--
	03-13-89	--	--	--	--	41	--	--	--	--	--	--
	03-13-89	--	--	--	--	44	--	--	--	--	--	--
	03-15-89	--	--	--	--	42	--	--	--	--	--	--
	03-16-89	--	--	--	--	99	--	--	--	--	--	--
	03-17-89	--	--	--	--	78	--	--	--	--	--	--
	03-18-89	--	--	--	--	32	--	--	--	--	--	--
	03-19-89	--	--	--	--	79	--	--	--	--	--	--
	03-20-89	--	--	--	--	--	--	--	--	--	--	--
	03-20-89	--	--	--	--	56	--	--	--	--	--	--
	03-21-89	--	--	--	--	36	--	--	--	--	--	--
	03-22-89	--	--	--	--	40	--	--	--	--	--	--
	03-23-89	--	--	--	--	36	--	--	--	--	--	--
	03-24-89	--	--	--	--	35	--	--	--	--	--	--
	03-25-89	--	--	--	--	20	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW1	424435106370300	RASMUS LEE LAKE	03-26-89	1658	11500	7.1
		RASMUS LEE LAKE	04-01-89	1255	12500	7.2
		RASMUS LEE LAKE	04-02-89	1255	13000	7.3
		RASMUS LEE LAKE	04-03-89	1255	13000	7.3
		RASMUS LEE LAKE	04-04-89	1255	13000	7.2
		RASMUS LEE LAKE	04-05-89	1255	13000	7.3
		RASMUS LEE LAKE	04-06-89	1255	13000	7.4
		RASMUS LEE LAKE	04-07-89	1255	12500	7.2
		RASMUS LEE LAKE	04-08-89	1255	13500	7.4
		RASMUS LEE LAKE	04-13-89	0930	13500	7.7
		RASMUS LEE LAKE	04-14-89	0930	13000	7.6
		RASMUS LEE LAKE	04-15-89	0930	13800	7.8
		RASMUS LEE LAKE	04-16-89	0930	13500	7.9
		RASMUS LEE LAKE	04-17-89	0930	13500	7.9
		RASMUS LEE LAKE	04-18-89	0930	13500	7.5
		RASMUS LEE LAKE	04-19-89	0930	13500	8.0
		RASMUS LEE LAKE	04-20-89	0930	13800	8.1
		RASMUS LEE LAKE	04-21-89	0930	13800	7.6
		RASMUS LEE LAKE	04-22-89	0930	13800	8.3
		RASMUS LEE LAKE	04-23-89	0930	13800	7.6

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW1	03-26-89	--	36	--	--	--	--	--	--	--	--	--
	04-01-89	--	22	--	--	--	--	--	--	--	--	--
	04-02-89	--	16	--	--	--	--	--	--	--	--	--
	04-03-89	--	26	--	--	--	--	--	--	--	--	--
	04-04-89	--	22	--	--	--	--	--	--	--	--	--
	04-05-89	--	27	--	--	--	--	--	--	--	--	--
	04-06-89	--	32	--	--	--	--	--	--	--	--	--
	04-07-89	--	25	--	--	--	--	--	--	--	--	--
	04-08-89	--	24	--	--	--	--	--	--	--	--	--
	04-13-89	--	21	--	--	--	--	--	--	--	--	--
	04-14-89	--	20	--	--	--	--	--	--	--	--	--
	04-15-89	--	18	--	--	--	--	--	--	--	--	--
	04-16-89	--	16	--	--	--	--	--	--	--	--	--
	04-17-89	--	19	--	--	--	--	--	--	--	--	--
	04-18-89	--	17	--	--	--	--	--	--	--	--	--
	04-19-89	--	21	--	--	--	--	--	--	--	--	--
	04-20-89	--	18	--	--	--	--	--	--	--	--	--
	04-21-89	--	15	--	--	--	--	--	--	--	--	--
	04-22-89	--	16	--	--	--	--	--	--	--	--	--
	04-23-89	--	22	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW1	03-26-89	--	--	--	--	--	--	--	--	--	--	--
	04-01-89	--	--	--	--	--	--	--	--	--	--	--
	04-02-89	--	--	--	--	--	--	--	--	--	--	--
	04-03-89	--	--	--	--	--	--	--	--	--	--	--
	04-04-89	--	--	--	--	--	--	--	--	--	--	--
	04-05-89	--	--	--	--	--	--	--	--	--	--	--
	04-06-89	--	--	--	--	--	--	--	--	--	--	--
	04-07-89	--	--	--	--	--	--	--	--	--	--	--
	04-08-89	--	--	--	--	--	--	--	--	--	--	--
	04-13-89	--	--	--	--	--	--	--	--	--	--	--
	04-14-89	--	--	--	--	--	--	--	--	--	--	--
	04-15-89	--	--	--	--	--	--	--	--	--	--	--
	04-16-89	--	--	--	--	--	--	--	--	--	--	--
	04-17-89	--	--	--	--	--	--	--	--	--	--	--
	04-18-89	--	--	--	--	--	--	--	--	--	--	--
	04-19-89	--	--	--	--	--	--	--	--	--	--	--
	04-20-89	--	--	--	--	--	--	--	--	--	--	--
	04-21-89	--	--	--	--	--	--	--	--	--	--	--
	04-22-89	--	--	--	--	--	--	--	--	--	--	--
	04-23-89	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
FW1	03-26-89	--	--	--	--	--	--	--	--	--	--	--
	04-01-89	--	--	--	--	--	--	--	--	--	--	--
	04-02-89	--	--	--	--	--	--	--	--	--	--	--
	04-03-89	--	--	--	--	--	--	--	--	--	--	--
	04-04-89	--	--	--	--	--	--	--	--	--	--	--
	04-05-89	--	--	--	--	--	--	--	--	--	--	--
	04-06-89	--	--	--	--	--	--	--	--	--	--	--
	04-07-89	--	--	--	--	--	--	--	--	--	--	--
	04-08-89	--	--	--	--	--	--	--	--	--	--	--
	04-13-89	--	--	--	--	--	--	--	--	--	--	--
	04-14-89	--	--	--	--	--	--	--	--	--	--	--
	04-15-89	--	--	--	--	--	--	--	--	--	--	--
	04-16-89	--	--	--	--	--	--	--	--	--	--	--
	04-17-89	--	--	--	--	--	--	--	--	--	--	--
	04-18-89	--	--	--	--	--	--	--	--	--	--	--
	04-19-89	--	--	--	--	--	--	--	--	--	--	--
	04-20-89	--	--	--	--	--	--	--	--	--	--	--
	04-21-89	--	--	--	--	--	--	--	--	--	--	--
	04-22-89	--	--	--	--	--	--	--	--	--	--	--
	04-23-89	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW1	03-26-89	--	--	--	--	36	--	--	--	--	--	--
	04-01-89	--	--	--	--	16	--	--	--	--	--	--
	04-02-89	--	--	--	--	18	--	--	--	--	--	--
	04-03-89	--	--	--	--	30	--	--	--	--	--	--
	04-04-89	--	--	--	--	16	--	--	--	--	--	--
	04-05-89	--	--	--	--	19	--	--	--	--	--	--
	04-06-89	--	--	--	--	18	--	--	--	--	--	--
	04-07-89	--	--	--	--	15	--	--	--	--	--	--
	04-08-89	--	--	--	--	17	--	--	--	--	--	--
	04-13-89	--	--	--	--	17	--	--	--	--	--	--
	04-14-89	--	--	--	--	16	--	--	--	--	--	--
	04-15-89	--	--	--	--	14	--	--	--	--	--	--
	04-16-89	--	--	--	--	14	--	--	--	--	--	--
	04-17-89	--	--	--	--	12	--	--	--	--	--	--
	04-18-89	--	--	--	--	16	--	--	--	--	--	--
	04-19-89	--	--	--	--	13	--	--	--	--	--	--
	04-20-89	--	--	--	--	14	--	--	--	--	--	--
	04-21-89	--	--	--	--	17	--	--	--	--	--	--
	04-22-89	--	--	--	--	15	--	--	--	--	--	--
	04-23-89	--	--	--	--	17	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW1	424435106370300	RASMUS LEE LAKE	04-24-89	0930	13900	7.4
		RASMUS LEE LAKE	04-25-89	0930	13900	7.7
		RASMUS LEE LAKE	04-26-89	0930	14000	7.5
		RASMUS LEE LAKE	04-26-89	1045	14000	8.3
		RASMUS LEE LAKE	08-17-89	1130	16000	8.6
		RASMUS LEE LAKE	09-21-89	1540	19000	8.4
	424435106370301	RASMUS LEE LAKE	08-05-88	1500	1150	7.5
		RASMUS LEE LAKE	08-05-88	1530	950	7.6
		RASMUS LEE LAKE	08-10-88	1550	930	7.9
		RASMUS LEE LAKE	08-11-88	1630	--	--
		RASMUS LEE LAKE	08-11-88	1630	9000	9.0
		RASMUS LEE LAKE	08-19-88	1000	9600	8.7
		RASMUS LEE LAKE	08-19-88	1005	10000	7.9
		RASMUS LEE LAKE	08-19-88	1435	10000	8.2
		RASMUS LEE LAKE	08-20-88	1515	9800	8.2
		RASMUS LEE LAKE	08-21-88	1515	9800	8.3
	424435106370301	RASMUS LEE LAKE	08-22-88	1515	9900	8.3
		RASMUS LEE LAKE	08-23-88	1515	10200	8.4
		RASMUS LEE LAKE	08-24-88	1515	10500	8.5
		RASMUS LEE LAKE	08-25-88	1515	10500	8.5
		RASMUS LEE LAKE	08-26-88	1515	10500	8.5

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW1	04-24-89	--	21	--	--	--	--	--	--	--	--	--
	04-25-89	--	20	--	--	--	--	--	--	--	--	--
	04-26-89	--	19	--	--	--	--	--	--	--	--	--
	04-26-89	--	20	--	--	--	--	--	--	--	--	--
	08-17-89	22.0	--	--	8.8	--	4000	240	820	3400	42	--
	09-21-89	16.5	--	--	--	--	4900	300	1000	3900	45	--
	08-05-88	--	--	--	--	--	--	--	--	--	--	--
	08-05-88	--	38	--	--	--	--	--	--	--	--	--
	08-10-88	--	40	--	--	--	--	--	--	--	--	--
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	23.0	--	--	10.0	--	2300	160	450	1700	26	--
	08-19-88	--	--	--	--	--	--	--	--	--	--	--
	08-19-88	--	30	--	--	--	--	--	--	--	--	--
	08-19-88	--	9.5	--	--	--	--	--	--	--	--	--
	08-20-88	--	15	--	--	--	--	--	--	--	--	--
	08-21-88	--	8.0	--	--	--	--	--	--	--	--	--
	08-22-88	--	8.0	--	--	--	--	--	--	--	--	--
	08-23-88	--	7.0	--	--	--	--	--	--	--	--	--
	08-24-88	--	8.0	--	--	--	--	--	--	--	--	--
	08-25-88	--	5.0	--	--	--	--	--	--	--	--	--
	08-26-88	--	4.5	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW1	04-24-89	--	--	--	--	--	--	--	--	--	--	--
	04-25-89	--	--	--	--	--	--	--	--	--	--	--
	04-26-89	--	--	--	--	--	--	--	--	--	--	--
	04-26-89	--	--	--	--	--	--	--	--	--	--	--
	08-17-89	--	--	386	432	--	9700	400	0.9	--	14900	20.2
	09-21-89	--	--	552	609	--	13000	470	1.0	--	19100	26.0
	08-05-88	--	--	--	--	--	--	--	--	--	--	--
	08-05-88	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	306	--	315	--	5200	200	0.6	--	7920	10.8
	08-19-88	--	--	--	--	--	--	--	--	--	--	--
	08-19-88	--	--	--	--	--	--	--	--	--	--	--
	08-19-88	--	--	--	--	--	--	--	--	--	--	--
	08-20-88	--	--	--	--	--	--	--	--	--	--	--
	08-21-88	--	--	--	--	--	--	--	--	--	--	--
	08-22-88	--	--	--	--	--	--	--	--	--	--	--
	08-23-88	--	--	--	--	--	--	--	--	--	--	--
	08-24-88	--	--	--	--	--	--	--	--	--	--	--
	08-25-88	--	--	--	--	--	--	--	--	--	--	--
	08-26-88	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
FW1	04-24-89	--	--	--	--	--	--	--	--	--	--	--
	04-25-89	--	--	--	--	--	--	--	--	--	--	--
	04-26-89	--	--	--	--	--	--	--	--	--	--	--
	04-26-89	--	--	--	--	--	--	--	--	--	--	--
	08-17-89	--	--	--	--	--	2400	--	--	--	--	--
	09-21-89	--	--	--	--	--	2700	--	--	--	--	--
	08-05-88	--	--	--	--	--	--	--	--	--	--	--
	08-05-88	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	93	--	--	--	1200	--	--	--	--	--
	08-19-88	--	--	--	--	--	1300	--	--	--	--	--
	08-19-88	--	--	--	--	--	--	--	--	--	--	--
	08-19-88	--	--	--	--	--	--	--	--	--	--	--
	08-20-88	--	--	--	--	--	--	--	--	--	--	--
	08-21-88	--	--	--	--	--	--	--	--	--	--	--
	08-22-88	--	--	--	--	--	--	--	--	--	--	--
	08-23-88	--	--	--	--	--	--	--	--	--	--	--
	08-24-88	--	--	--	--	--	--	--	--	--	--	--
	08-25-88	--	--	--	--	--	--	--	--	--	--	--
	08-26-88	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW1	04-24-89	--	--	--	--	19	--	--	--	--	--	--
	04-25-89	--	--	--	--	15	--	--	--	--	--	--
	04-26-89	--	--	--	--	16	--	--	--	--	--	--
	04-26-89	--	--	--	--	14	--	--	--	--	--	--
	08-17-89	--	--	--	--	--	24	--	--	--	--	--
	09-21-89	--	--	--	--	--	74	--	--	--	-43.5	-0.84
	08-05-88	--	--	--	--	26	--	--	--	--	--	--
	08-05-88	--	--	--	--	11	--	--	--	--	--	--
	08-10-88	--	--	--	--	12	--	--	--	--	--	--
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	--	--	--	--	25	--	--	--	-64.0	-4.65
	08-19-88	--	--	--	--	--	41	--	--	--	--	--
	08-19-88	--	--	--	--	13	--	--	--	--	--	--
	08-19-88	--	--	--	--	17	--	--	--	--	--	--
	08-20-88	--	--	--	--	18	--	--	--	--	--	--
	08-21-88	--	--	--	--	19	--	--	--	--	--	--
	08-22-88	--	--	--	--	20	--	--	--	--	--	--
	08-23-88	--	--	--	--	23	--	--	--	--	--	--
	08-24-88	--	--	--	--	30	--	--	--	--	--	--
	08-25-88	--	--	--	--	35	--	--	--	--	--	--
	08-26-88	--	--	--	--	31	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW1	424435106370301	RASMUS LEE LAKE	08-27-88	1515	11000	8.7
		RASMUS LEE LAKE	09-01-88	1445	11000	9.2
FW9	424509106361801	GOOSE LAKE NEAR EAST END	03-02-88	1000	13000	9.3
		GOOSE LAKE NEAR EAST END	04-22-88	0845	11000	9.4
		GOOSE LAKE NEAR EAST END	05-24-88	0810	11000	9.1
		GOOSE LAKE NEAR EAST END	06-22-88	--	--	--
		GOOSE LAKE NEAR EAST END	06-22-88	1240	--	--
		GOOSE LAKE NEAR EAST END	06-22-88	1615	9500	9.1
		GOOSE LAKE NEAR EAST END	08-10-88	1630	--	--
		GOOSE LAKE NEAR EAST END	08-10-88	1645	12500	9.9
		GOOSE LAKE NEAR EAST END	09-21-88	1530	13000	9.7
		GOOSE LAKE NEAR EAST END	09-21-88	1600	13000	9.7
		GOOSE LAKE NEAR EAST END	10-26-88	1600	13500	9.4
		GOOSE LAKE NEAR EAST END	11-08-88	1425	14000	9.4
		GOOSE LAKE NEAR EAST END	11-08-88	1530	14000	9.4
		GOOSE LAKE NEAR EAST END	12-15-88	1120	13500	9.6
		GOOSE LAKE NEAR EAST END	12-15-88	1155	13000	9.6
		GOOSE LAKE NEAR EAST END	08-17-89	1330	16000	9.8

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW1	08-27-88	--	4.0	--	--	--	--	--	--	--	--	--
	09-01-88	21.5	20	--	--	--	--	--	--	--	--	--
FW9	03-02-88	0.0	45	--	0.6	--	2000	50	460	2300	4.6	--
	04-22-88	5.0	--	609	10.1	103	--	--	--	--	--	183
	05-24-88	14.0	--	--	11.6	--	--	--	--	--	--	--
	06-22-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	30.0	--	619	9.4	160	2600	75	580	2000	19	250
	08-10-88	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	30.0	--	--	13.8	--	2600	55	600	2700	24	--
	09-21-88	15.0	--	--	16.8	--	3000	190	620	2500	27	--
	09-21-88	15.0	--	--	16.8	--	3000	82	680	2400	23	--
	10-26-88	11.5	--	615	10.9	131	2900	72	670	2600	23	--
	11-08-88	6.0	--	618	14.9	156	3000	58	690	2600	29	--
	11-08-88	6.0	--	618	14.9	156	2900	57	680	2500	25	--
	12-15-88	-0.5	--	636	16.2	138	3200	64	750	3000	30	--
	12-15-88	-0.5	--	636	16.2	138	3300	66	770	3000	30	--
	08-17-89	27.0	--	--	13.6	--	3800	52	880	3200	38	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW1	08-27-88	--	--	--	--	--	--	--	--	--	--	--
	09-01-88	--	--	--	--	--	--	--	--	--	--	--
FW9	03-02-88	--	--	--	630	--	6500	430	--	11100	10100	15.1
	04-22-88	264	--	590	--	--	--	--	--	--	--	--
	05-24-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	240	--	605	534	--	5400	390	--	9210	8830	12.5
	08-10-88	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	--	587	--	499	--	6500	460	0.5	--	10700	14.5
	09-21-88	--	586	--	511	--	7000	500	0.5	--	11200	15.2
	09-21-88	--	586	--	514	--	7100	490	0.5	--	11100	15.1
	10-26-88	--	664	--	625	--	7600	510	--	12600	11900	17.1
	11-08-88	--	656	--	604	--	7300	510	0.6	--	11600	15.8
	11-08-88	--	656	--	606	--	7300	510	0.6	--	11500	15.6
	12-15-88	--	--	--	660	--	8200	550	0.6	--	13000	17.7
	12-15-88	--	--	--	645	--	7900	550	0.6	--	12700	17.3
	08-17-89	--	--	616	611	--	9300	650	0.6	--	14500	19.7

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
FW1	08-27-88	--	--	--	--	--	--	--	--	--	--	--
	09-01-88	--	--	--	--	--	570	--	--	--	--	--
FW9	03-02-88	1.4	--	12	12	--	910	--	<1	2	1	--
	04-22-88	--	--	--	--	--	780	--	--	--	--	--
	05-24-88	--	--	--	--	--	880	--	--	--	--	60
	06-22-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	--	--	18	18	770	780	20	<1	200	2	--
	08-10-88	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	--	100	--	--	--	920	--	--	--	--	--
	09-21-88	--	--	--	--	--	970	--	--	--	--	--
	09-21-88	--	--	--	--	--	970	--	--	--	--	--
	10-26-88	--	--	--	19	--	1000	--	<1	<1	3	--
	11-08-88	--	--	--	--	--	960	--	--	--	--	--
	11-08-88	--	--	--	--	--	960	--	--	--	--	--
	12-15-88	--	--	--	--	--	1000	--	--	<2	--	--
	12-15-88	--	--	--	--	--	960	--	--	20	--	--
	08-17-89	--	--	--	--	--	1300	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW1	08-27-88	--	--	--	--	24	--	--	--	--	--	--
	09-01-88	--	--	--	--	--	110	--	--	--	--	--
FW9	03-02-88	<5	0.1	<0.1	14	--	--	16	30	--	--	--
	04-22-88	--	--	0.2	--	--	70	--	--	--	-61.5	-4.65
	05-24-88	--	--	--	--	--	64	--	--	--	--	--
	06-22-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	<5	<0.1	0.4	11	57	54	22	20	36	-63.0	-4.55
	08-10-88	--	--	--	--	--	--	--	--	--	--	--
	08-10-88	--	--	--	--	--	47	--	--	--	-53.5	-2.65
	09-21-88	--	--	--	--	--	54	--	--	--	-46.5	-1.50
	09-21-88	--	--	--	--	--	62	--	--	--	--	--
	10-26-88	<5	--	--	12	--	64	42	50	50	-42.5	-0.89
	11-08-88	--	--	--	--	--	50	--	--	--	--	--
	11-08-88	--	--	--	--	--	48	--	--	--	--	--
	12-15-88	--	--	--	--	--	53	--	--	--	-47.0	-1.75
	12-15-88	--	--	--	--	--	53	--	--	--	--	--
	08-17-89	--	--	--	--	--	71	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW9	424514106362901	GOOSE LAKE (MIDDLE) NEAR CASPER	05-24-88	0800	11100	9.2
		GOOSE LAKE (MIDDLE) NEAR CASPER	06-22-88	1630	11000	8.9
		GOOSE LAKE (MIDDLE) NEAR CASPER	08-18-88	1720	12500	9.4
		GOOSE LAKE (MIDDLE) NEAR CASPER	09-21-88	1455	12500	9.4
		GOOSE LAKE (MIDDLE) NEAR CASPER	10-27-88	1205	13000	9.5
		GOOSE LAKE (MIDDLE) NEAR CASPER	02-16-89	1645	15000	9.4
FW9	424521106363801	GOOSE LAKE NEAR WEST END	08-18-88	1735	--	--
--	424603106332701	SP-2 NEAR CASPER	06-27-88	1340	8800	10.2
		SP-2 NEAR CASPER	08-18-89	1205	15000	9.1
--	424635106344001	SP-1 NEAR CASPER	06-24-88	1330	870	8.8
FW8	424753106351201	FW-8 NEAR CASPER	07-17-88	1215	435	9.2
		FW-8 NEAR CASPER	07-17-88	1400	--	--
--	424814106324001	SP-15 NEAR CASPER	07-18-88	1435	528	8.4
FW7	424818106362501	BSS-7 NEAR CASPER	07-17-88	0940	--	--
--	424822106344401	SP-3 NEAR CASPER	06-27-88	1525	750	8.5
FW7	424822106362301	FW-7 NEAR CASPER	07-17-88	1010	5180	9.7

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW9	05-24-88	15.5	--	619	9.7	125	--	--	--	--	--	--
	06-22-88	27.0	--	620	7.6	123	3100	78	710	2300	20	336
	08-18-88	28.0	--	--	6.9	--	3300	70	760	2300	23	--
	09-21-88	12.5	--	--	8.7	--	2800	68	640	2400	50	--
	10-27-88	7.0	--	624	10.0	106	2900	69	660	2600	21	--
	02-16-89	-0.5	--	625	16.9	148	3700	80	840	3700	35	--
FW9	08-18-88	--	--	--	--	--	--	--	--	--	--	--
--	06-27-88	32.5	--	--	18.8	--	--	--	--	--	--	--
	08-18-89	19.5	--	--	8.7	--	3500	240	710	3000	26	--
--	06-24-88	27.5	--	--	10.1	--	--	--	--	--	--	--
FW8	07-17-88	29.0	--	--	12.2	--	150	34	15	35	9.0	--
	07-17-88	--	--	--	--	--	--	--	--	--	--	--
--	07-18-88	24.0	--	--	7.4	--	--	--	--	--	--	--
FW7	07-17-88	--	--	--	--	--	--	--	--	--	--	--
--	06-27-88	31.0	--	--	7.2	--	--	--	--	--	--	--
FW7	07-17-88	22.0	--	--	11.2	--	1600	210	250	810	9.0	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW9	05-24-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	180	--	575	563	--	6000	420	--	9980	9870	13.6
	08-18-88	--	553	--	554	--	6400	450	0.4	--	10300	14.1
	09-21-88	--	594	--	577	--	6800	490	0.5	--	10800	14.7
	10-27-88	--	--	--	609	--	7400	500	--	2200	11600	2.99
	02-16-89	--	--	--	695	--	8900	660	0.6	--	14600	19.9
FW9	08-18-88	--	--	--	--	--	--	--	--	--	--	--
--	06-27-88	--	134	--	--	--	--	--	--	--	--	--
	08-18-89	--	--	252	252	--	9400	230	0.4	--	13800	18.7
--	06-24-88	--	214	--	--	--	--	--	--	--	--	--
FW8	07-17-88	--	141	--	138	--	79	5.4	0.4	--	263	0.36
	07-17-88	--	--	--	--	--	--	--	--	--	--	--
--	07-18-88	--	146	--	--	--	--	--	--	--	--	--
FW7	07-17-88	--	--	--	--	--	--	--	--	--	--	--
--	06-27-88	--	190	--	--	--	--	--	--	--	--	--
FW7	07-17-88	--	81	--	80	--	3000	56	1.4	--	4390	5.97

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
FW9	05-24-88	--	--	--	--	--	--	--	--	--	--	100
	06-22-88	--	--	16	16	830	860	20	1	<1	1	--
	08-18-88	--	100	--	--	--	860	--	--	--	--	--
	09-21-88	--	--	--	--	--	930	--	--	--	--	--
	10-27-88	--	--	--	23	--	1000	--	<1	<1	3	--
	02-16-89	--	--	--	--	--	1100	--	--	--	--	--
FW9	08-18-88	--	--	--	--	--	--	--	--	--	--	--
--	06-27-88	--	--	--	--	--	--	--	--	--	--	--
	08-18-89	--	--	--	--	--	3100	--	--	--	--	--
--	06-24-88	--	--	--	--	--	--	--	--	--	--	--
FW8	07-17-88	--	--	--	--	--	180	--	--	--	--	--
	07-17-88	--	--	--	--	--	--	--	--	--	--	--
--	07-18-88	--	--	--	--	--	--	--	--	--	--	--
FW7	07-17-88	--	--	--	--	--	--	--	--	--	--	--
--	06-27-88	--	--	--	--	--	--	--	--	--	--	--
FW7	07-17-88	--	--	--	--	--	1200	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW9	05-24-88	--	--	--	--	--	60	--	--	--	--	--
	06-22-88	<5	--	--	9	56	64	23	30	34	--	--
	08-18-88	--	--	--	--	--	44	--	--	--	-52.0	-2.45
	09-21-88	--	--	--	--	--	45	--	--	--	--	--
	10-27-88	<5	--	--	12	--	42	44	60	80	--	--
	02-16-89	--	--	--	--	--	52	--	--	--	--	--
FW9	08-18-88	--	--	--	--	--	--	--	--	--	--	--
--	06-27-88	--	--	--	--	--	1300	--	--	--	--	--
	08-18-89	--	--	--	--	--	1800	--	--	--	-74.5	-5.35
--	06-24-88	--	--	--	--	--	3	--	--	--	--	--
FW8	07-17-88	--	--	--	--	--	<1	--	--	--	--	--
	07-17-88	--	--	--	--	--	--	--	--	--	--	--
--	07-18-88	--	--	--	--	--	1	--	--	--	--	--
FW7	07-17-88	--	--	--	--	--	--	--	--	--	--	--
--	06-27-88	--	--	--	--	--	1	--	--	--	--	--
FW7	07-17-88	--	--	--	--	--	6	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW2	424844106345901	FW-2 NEAR CASPER	07-14-88	1100	--	--
		FW-2 NEAR CASPER	07-14-88	1135	--	--
		FW-2 NEAR CASPER	07-14-88	1210	1570	8.3
		FW-2 NEAR CASPER	07-14-88	1510	1570	8.3
FW5	424956106263701	FW-5 NEAR CASPER	07-16-88	0915	--	--
		FW-5 NEAR CASPER	07-16-88	0930	11000	9.1
--	424959106271201	SP-12 NEAR CASPER	07-16-88	1050	1130	8.3
--	425122106265601	SP-5 NEAR CASPER	06-28-88	0900	538	--
FW6	425123106292901	BSS-6-5 NEAR CASPER	07-16-88	1350	--	--
FW6	425127106293501	BSS-6-N NEAR CASPER	07-16-88	1405	--	--
FW6	425130106292301	FW-6 NEAR CASPER	07-16-88	1235	2750	8.7
--	425159106281901	SP-13 NEAR CASPER	07-16-88	1505	2850	9.2
		SP-13 NEAR CASPER	08-18-89	1750	1560	9.4
--	425233106305401	SP-10 NEAR CASPER	06-28-88	1500	1950	--
--	425354106313201	SP-16 NEAR CASPER	07-18-88	1615	4230	9.3

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW2	07-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	20.5	--	--	7.4	--	570	120	66	190	10	--
	07-14-88	20.5	--	--	7.4	--	200	51	17	33	2.8	--
FW5	07-16-88	--	--	--	--	--	--	--	--	--	--	--
	07-16-88	20.5	--	--	7.1	--	4000	280	800	1900	20	--
--	07-16-88	22.5	--	--	8.2	--	--	--	--	--	--	--
--	06-28-88	24.0	--	--	8.5	--	--	--	--	--	--	--
FW6	07-16-88	--	--	--	--	--	--	--	--	--	--	--
FW6	07-16-88	--	--	--	--	--	--	--	--	--	--	--
FW6	07-16-88	22.5	--	--	11.4	--	910	150	130	330	7.3	--
--	07-16-88	24.5	--	--	5.7	--	--	--	--	--	--	--
	08-18-89	18.5	--	--	11.5	--	350	30	66	220	11	--
--	06-28-88	28.5	--	--	10.6	--	--	--	--	--	--	--
--	07-18-88	23.5	--	--	8.5	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW2	07-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	--	207	--	205	--	780	25	0.4	--	1320	1.79
	07-14-88	--	207	--	132	--	120	8.7	0.4	--	357	0.49
FW5	07-16-88	--	--	--	--	--	--	--	--	--	--	--
	07-16-88	--	178	--	177	--	7400	140	0.3	--	10600	14.5
--	07-16-88	--	153	--	--	--	--	--	--	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
FW6	07-16-88	--	--	--	--	--	--	--	--	--	--	--
FW6	07-16-88	--	--	--	--	--	--	--	--	--	--	--
FW6	07-16-88	--	214	--	210	--	1300	22	0.5	--	2070	2.81
--	07-16-88	--	190	--	--	--	--	--	--	--	--	--
	08-18-89	--	--	248	243	--	460	71	0.5	--	1000	1.37
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
--	07-18-88	--	198	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
FW2	07-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	--	--	--	--	--	260	--	--	--	--	--
	07-14-88	--	--	--	--	--	50	--	--	--	--	--
FW5	07-16-88	--	--	--	--	--	--	--	--	--	--	--
	07-16-88	--	--	--	--	--	1500	--	--	--	--	--
--	07-16-88	--	--	--	--	--	--	--	--	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
FW6	07-16-88	--	--	--	--	--	--	--	--	--	--	--
FW6	07-16-88	--	--	--	--	--	--	--	--	--	--	--
FW6	07-16-88	--	--	--	--	--	460	--	--	--	--	--
--	07-16-88	--	--	--	--	--	--	--	--	--	--	--
	08-18-89	--	--	--	--	--	260	--	--	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
--	07-18-88	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW2	07-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	--	--	--	--	--	--	--	--	--	--	--
	07-14-88	--	--	--	--	--	4	--	--	--	--	--
	07-14-88	--	--	--	--	--	1	--	--	--	--	--
FW5	07-16-88	--	--	--	--	--	--	--	--	--	--	--
	07-16-88	--	--	--	--	--	<1	--	--	--	--	--
--	07-16-88	--	--	--	--	--	1	--	--	--	--	--
--	06-28-88	--	--	--	--	--	2	--	--	--	--	--
FW6	07-16-88	--	--	--	--	--	--	--	--	--	--	--
FW6	07-16-88	--	--	--	--	--	--	--	--	--	--	--
FW6	07-16-88	--	--	--	--	--	<1	--	--	--	--	--
--	07-16-88	--	--	--	--	--	1500	--	--	--	--	--
	08-18-89	--	--	--	--	--	460	--	--	--	-89.0	-8.35
--	06-28-88	--	--	--	--	--	<1	--	--	--	--	--
--	07-18-88	--	--	--	--	--	1700	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
--	425400106304801	SP-4 NEAR CASPER	06-27-88	1645	15000	8.1
		SP-4 NEAR CASPER	08-18-89	1040	12000	8.0
--	425602106305101	SP-9 NEAR CASPER	06-28-88	1410	1300	--
--	425657106271401	SP-6 NEAR CASPER	06-28-88	1135	1100	--
		SP-6 NEAR CASPER	08-18-89	0915	5700	7.8
--	425704106311001	SP-8 NEAR CASPER	06-28-88	1330	1500	--
--	425742106285801	SP-7 NEAR CASPER	06-28-88	1220	1960	--
FW10	425818106302701	THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	03-02-88	1245	1510	7.9
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	04-21-88	0940	4170	8.6
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	05-24-88	1340	1320	8.6
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	06-22-88	0905	925	8.2
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	08-18-88	0900	1300	8.7
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	08-18-88	0920	--	--
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	09-21-88	0930	1000	8.6
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	10-26-88	1250	2950	8.6
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	10-26-88	1300	2950	8.6
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	11-09-88	1330	3480	8.7

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
--	06-27-88	28.5	--	--	--	--	--	--	--	--	--	--
	08-18-89	17.5	--	--	7.5	--	4500	500	780	1600	43	--
--	06-28-88	26.0	--	--	10.0	--	--	--	--	--	--	--
--	06-28-88	28.0	--	--	12.8	--	--	--	--	--	--	--
	08-18-89	15.0	--	--	6.7	--	1700	330	220	780	11	--
--	06-28-88	26.0	--	--	6.8	--	--	--	--	--	--	--
--	06-28-88	26.0	--	--	11.8	--	--	--	--	--	--	--
FW10	03-02-88	0.5	170	636	11.0	92	220	47	26	250	5.9	--
	04-21-88	13.0	--	612	11.3	136	--	--	--	--	--	187
	05-24-88	19.0	--	--	9.6	--	--	--	--	--	--	--
	06-22-88	23.0	110	625	6.1	88	290	64	32	98	4.5	192
	08-18-88	19.5	--	--	7.6	--	400	83	47	140	5.6	--
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	11.0	--	--	9.0	--	320	69	37	100	4.4	--
	10-26-88	9.5	--	620	10.7	117	880	170	110	390	6.1	--
	10-26-88	9.5	--	620	10.7	117	920	170	120	400	6.0	--
	11-09-88	3.5	--	625	11.3	105	1000	190	130	450	5.5	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
--	06-27-88	--	751	--	--	--	--	--	--	--	--	--
	08-18-89	--	--	770	748	--	6400	210	0.5	--	9990	13.6
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
	08-18-89	--	--	248	245	--	3400	51	0.9	--	4940	6.72
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
FW10	03-02-88	--	--	--	114	--	620	14	--	1080	1030	1.47
	04-21-88	50	--	237	--	--	--	--	--	--	--	--
	05-24-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	0	--	157	153	--	330	12	--	640	635	0.87
	08-18-88	--	181	--	178	--	520	17	0.4	--	922	1.25
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	--	166	--	157	--	370	13	0.3	--	693	0.94
	10-26-88	--	216	--	220	--	1500	32	--	2440	2340	3.32
	10-26-88	--	216	--	207	--	1500	32	--	2340	2360	3.18
	11-09-88	--	237	--	221	--	1800	38	0.4	--	2760	3.75

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
--	06-27-88	--	--	--	--	--	--	--	--	--	--	--
	08-18-89	--	--	--	--	--	2100	--	--	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
	08-18-89	--	--	--	--	--	2400	--	--	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--	--
FW10	03-02-88	0.44	--	1	1	--	130	--	2	2	6	--
	04-21-88	--	--	--	--	--	440	--	--	--	--	--
	05-24-88	--	--	--	--	--	130	--	--	--	--	20
	06-22-88	<0.10	--	2	1	60	100	<10	<1	<1	2	--
	08-18-88	--	7.4	--	--	--	140	--	--	--	--	--
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	--	--	--	--	--	100	--	--	--	--	--
	10-26-88	0.83	--	--	1	--	360	--	<1	1	2	--
	10-26-88	0.84	--	--	1	--	360	--	<1	1	3	--
	11-09-88	--	--	--	--	--	430	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
--	06-27-88	--	--	--	--	--	5300	--	--	--	--	--
	08-18-89	--	--	--	--	--	4000	--	--	--	-97.5	-10.30
--	06-28-88	--	--	--	--	--	2	--	--	--	--	--
--	06-28-88	--	--	--	--	--	5	--	--	--	--	--
	08-18-89	--	--	--	--	--	24	--	--	--	-110.5	-13.20
--	06-28-88	--	--	--	--	--	1	--	--	--	--	--
--	06-28-88	--	--	--	--	--	2	--	--	--	--	--
FW10	03-02-88	<5	<0.1	0.1	3	3	4	<1	20	--	--	--
	04-21-88	--	--	0.1	--	--	17	--	--	--	-138.0	-16.50
	05-24-88	--	--	--	--	--	3	--	--	--	--	--
	06-22-88	<5	<0.1	<0.1	1	4	3	2	6	9.4	-112.5	-13.55
	08-18-88	--	--	--	--	--	5	--	--	--	-104.5	-11.90
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	--	--	--	--	--	4	--	--	--	-73.0	-5.60
	10-26-88	<5	--	--	4	--	14	2	30	32	-104.0	-12.00
	10-26-88	<5	--	--	1	--	15	2	10	36	--	--
	11-09-88	--	--	--	--	--	18	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW10	425818106302701	THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	12-14-88	1540	4130	8.7
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	12-14-88	1600	4130	8.7
		THIRTY-THREE MILE RESERVOIR NR OUTLET, NR ILLCO	08-17-89	1520	1350	8.3
FW10	425828106303501	THIRTY-THREE MILE RES (MID-POINT) NR CASPER	05-24-88	1305	1220	8.4
		THIRTY-THREE MILE RES (MID-POINT) NR CASPER	06-22-88	0850	930	8.2
		THIRTY-THREE MILE RES (MID-POINT) NR CASPER	08-18-88	1040	1350	8.6
		THIRTY-THREE MILE RES (MID-POINT) NR CASPER	08-18-88	1100	--	--
		THIRTY-THREE MILE RES (MID-POINT) NR CASPER	09-21-88	0945	990	8.5
		THIRTY-THREE MILE RES (MID-POINT) NR CASPER	10-26-88	1405	3000	8.6
FW10	425841106304701	THIRTY-THREE MILE RESERVOIR NR INLET, NR ILLCO	05-24-88	1250	800	8.1
		THIRTY-THREE MILE RESERVOIR NR INLET, NR ILLCO	06-22-88	0840	948	8.1
		THIRTY-THREE MILE RESERVOIR NR INLET, NR ILLCO	08-18-88	1245	1570	8.6
		THIRTY-THREE MILE RESERVOIR NR INLET, NR ILLCO	08-18-88	1300	--	--
		THIRTY-THREE MILE RESERVOIR NR INLET, NR ILLCO	09-21-88	1155	2260	8.3
		THIRTY-THREE MILE RESERVOIR NR INLET, NR ILLCO	10-26-88	1345	3240	8.6
FW11	430018106300201	ILLCO SEEP NEAR OUTLET, NEAR ILLCO	05-23-88	0830	4380	7.8
		ILLCO SEEP NEAR OUTLET, NEAR ILLCO	06-27-88	0750	1450	7.4
		ILLCO SEEP NEAR OUTLET, NEAR ILLCO	08-11-88	1045	1280	8.0
		ILLCO SEEP NEAR OUTLET, NEAR ILLCO	08-11-88	1050	--	--
		ILLCO SEEP NEAR OUTLET, NEAR ILLCO	09-22-88	1155	5000	8.5

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW10	12-14-88	2.0	--	631	20.0	178	1300	240	180	600	7.1	--
	12-14-88	2.0	--	631	20.0	178	1300	240	180	590	6.9	--
	08-17-89	19.5	--	--	7.1	--	420	89	47	140	6.7	--
FW10	05-24-88	20.0	--	--	8.0	--	--	--	--	--	--	--
	06-22-88	22.0	230	625	5.8	82	300	66	32	98	4.5	198
	08-18-88	20.0	--	--	7.9	--	390	82	46	140	4.6	--
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	11.0	--	--	8.7	--	320	69	36	100	4.2	--
	10-26-88	8.5	--	622	12.0	127	880	170	110	410	6.1	--
FW10	05-24-88	22.0	--	620	6.8	96	--	--	--	--	--	--
	06-22-88	21.0	340	625	6.3	87	300	67	31	91	4.0	189
	08-18-88	24.0	--	--	12.0	--	510	91	68	210	5.4	--
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	12.0	--	626	10.5	120	620	110	84	270	5.3	--
	10-26-88	10.0	--	622	12.2	134	960	170	130	440	6.3	--
FW11	05-23-88	12.0	--	624	2.6	30	--	--	--	--	--	--
	06-27-88	20.5	--	623	0.9	12	450	78	62	160	6.5	251
	08-11-88	17.5	--	--	6.9	--	450	83	59	120	5.9	--
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	09-22-88	11.5	--	626	9.6	109	2100	280	330	660	13	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW10	12-14-88	--	--	--	244	--	2300	47	0.4	--	3520	4.79
	12-14-88	--	--	--	240	--	2400	49	0.4	--	3610	4.91
	08-17-89	--	--	182	184	--	520	15	0.5	--	929	1.26
FW10	05-24-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	0	--	162	155	--	330	12	--	663	640	0.90
	08-18-88	--	188	--	179	--	530	17	0.3	--	933	1.27
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	--	161	--	157	--	370	13	0.3	--	689	0.94
	10-26-88	--	231	--	212	--	1500	33	--	2480	2380	3.37
FW10	05-24-88	--	--	--	--	--	--	--	--	--	--	--
	06-22-88	0	--	155	148	--	320	12	--	648	618	0.88
	08-18-88	--	191	--	185	--	790	24	0.3	--	1300	1.77
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	--	--	--	203	--	1000	29	0.3	--	1620	2.20
	10-26-88	--	237	--	207	--	1700	36	--	2730	2630	3.71
FW11	05-23-88	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	0	--	206	206	--	580	14	--	1050	1020	1.43
	08-11-88	--	191	--	178	--	510	13	0.4	--	906	1.23
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	09-22-88	--	274	--	259	--	3200	39	0.6	--	4690	6.38

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
FW10	12-14-88	--	--	--	--	--	520	--	--	1	--	--
	12-14-88	--	--	--	--	--	540	--	--	2	--	--
	08-17-89	--	--	--	--	--	170	--	--	--	--	--
FW10	05-24-88	--	--	--	--	--	--	--	--	--	--	30
	06-22-88	--	--	1	1	80	110	<10	<1	<1	2	--
	08-18-88	--	7.4	--	--	--	140	--	--	--	--	--
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	--	--	--	--	--	100	--	--	--	--	--
	10-26-88	3.7	--	--	1	--	370	--	<1	2	2	--
FW10	05-24-88	--	--	--	--	--	80	--	--	--	--	40
	06-22-88	--	--	2	1	60	100	<10	<1	<1	1	--
	08-18-88	--	11	--	--	--	170	--	--	--	--	--
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	--	--	--	--	--	180	--	--	--	--	--
	10-26-88	0.48	--	--	1	--	400	--	<1	1	2	--
FW11	05-23-88	--	--	--	--	--	--	--	--	--	--	80
	06-27-88	<0.10	--	2	2	180	180	<10	2	<1	1	--
	08-11-88	--	9.9	--	--	--	180	--	--	--	--	--
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	09-22-88	--	--	--	--	--	830	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW10	12-14-88	--	--	--	--	--	25	--	--	--	-106.5	-12.45
	12-14-88	--	--	--	--	--	19	--	--	--	--	--
	08-17-89	--	--	--	--	--	5	--	--	--	--	--
FW10	05-24-88	--	--	--	--	--	3	--	--	--	--	--
	06-22-88	<5	--	--	2	2	2	2	<3	8.8	--	--
	08-18-88	--	--	--	--	--	6	--	--	--	-104.5	-11.95
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	--	--	--	--	--	5	--	--	--	--	--
	10-26-88	<5	--	--	3	--	23	2	40	29	--	--
FW10	05-24-88	--	--	--	--	--	2	--	--	--	--	--
	06-22-88	<5	--	--	2	2	2	2	8	9.4	--	--
	08-18-88	--	--	--	--	--	10	--	--	--	-106.5	-12.50
	08-18-88	--	--	--	--	--	--	--	--	--	--	--
	09-21-88	--	--	--	--	--	20	--	--	--	--	--
	10-26-88	<5	--	--	3	--	15	1	20	61	--	--
FW11	05-23-88	--	--	--	--	--	4	--	--	--	--	--
	06-27-88	<5	--	--	<1	2	2	2	7	6.1	--	--
	08-11-88	--	--	--	--	--	9	--	--	--	-109.5	-12.95
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	09-22-88	--	--	--	--	--	33	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
FW11	430018106300201	ILLCO SEEP NEAR OUTLET, NEAR ILLCO	10-26-88	1055	4950	8.4
		ILLCO SEEP NEAR OUTLET, NEAR ILLCO	02-17-89	0910	5150	8.2
FW11	430029106300001	ILLCO SEEP NEAR ILLCO	03-02-88	1400	4200	8.1
		ILLCO SEEP NEAR ILLCO	04-21-88	1345	5220	8.6
		ILLCO SEEP NEAR ILLCO	05-23-88	0845	6050	8.6
		ILLCO SEEP NEAR ILLCO	06-27-88	0800	1200	8.5
		ILLCO SEEP NEAR ILLCO	07-28-88	1430	--	--
		ILLCO SEEP NEAR ILLCO	08-11-88	0955	1240	8.2
		ILLCO SEEP NEAR ILLCO	09-22-88	1125	4400	8.3
		ILLCO SEEP NEAR ILLCO	10-26-88	1050	5080	8.3
		ILLCO SEEP NEAR ILLCO	11-09-88	1115	5350	8.5
		ILLCO SEEP NEAR ILLCO	12-14-88	1410	4520	8.4
		ILLCO SEEP NEAR ILLCO	08-17-89	1630	3580	8.5
KD11	430104106421601	BURLINGTON LAKE NEAR BUCKNUM	03-08-88	1000	2940	8.5
		BURLINGTON LAKE NEAR BUCKNUM	04-21-88	1210	3750	8.3
		BURLINGTON LAKE NEAR BUCKNUM	05-23-88	1025	3980	8.5
		BURLINGTON LAKE NEAR BUCKNUM	06-27-88	1045	4100	8.6
		BURLINGTON LAKE NEAR BUCKNUM	08-11-88	1330	--	--
		BURLINGTON LAKE NEAR BUCKNUM	08-11-88	1330	4200	8.7
		BURLINGTON LAKE NEAR BUCKNUM	08-11-88	1830	4200	8.7
		BURLINGTON LAKE NEAR BUCKNUM	09-22-88	0930	4650	8.6
		BURLINGTON LAKE NEAR BUCKNUM	09-22-88	1015	4300	8.6
		BURLINGTON LAKE NEAR BUCKNUM	10-22-88	1550	4950	8.7

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
FW11	10-26-88	7.0	--	621	11.9	123	1900	280	300	610	11	--
	02-17-89	-0.5	--	630	7.7	64	2000	330	280	580	8.6	--
FW11	03-02-88	1.0	75	635	5.9	51	1300	230	180	510	9.4	--
	04-21-88	14.5	--	617	12.1	150	--	--	--	--	--	439
	05-23-88	13.0	--	623	6.0	71	--	--	--	--	--	--
	06-27-88	21.0	--	623	4.3	60	370	57	55	120	4.9	171
	07-28-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	17.5	--	--	6.8	--	470	89	59	88	8.0	--
	09-22-88	11.5	--	626	8.2	93	1900	270	300	550	10	--
	10-26-88	7.5	--	621	12.3	128	2000	320	300	620	10	--
	11-09-88	5.0	--	625	10.8	105	1900	270	300	580	8.4	--
	12-14-88	3.5	--	632	10.8	100	1900	310	280	570	8.7	--
	08-17-89	21.5	--	--	12.0	--	1300	190	200	430	9.5	--
KD11	03-08-88	2.0	11	699	13.8	110	390	53	62	490	8.5	--
	04-21-88	13.0	--	606	9.0	109	--	--	--	--	--	244
	05-23-88	14.5	--	618	10.6	130	--	--	--	--	--	--
	06-27-88	24.5	--	618	7.9	119	730	110	110	790	10	122
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	22.0	--	--	10.6	--	650	96	100	920	14	--
	08-11-88	22.0	--	--	10.6	--	770	110	120	910	16	--
	09-22-88	10.0	--	622	8.7	96	700	100	110	880	13	--
	09-22-88	10.0	--	--	8.7	--	660	100	100	940	12	--
	10-22-88	10.5	--	619	9.7	110	730	110	110	970	12	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
FW11	10-26-88	--	266	--	263	--	3100	33	--	4720	4500	6.42
	02-17-89	--	--	--	353	<0.5	2900	34	0.6	--	4350	5.91
FW11	03-02-88	--	--	--	255	--	2300	31	--	3770	3420	5.13
	04-21-88	0	--	360	--	--	--	--	--	--	--	--
	05-23-88	--	--	--	--	<0.5	--	--	--	--	--	--
	06-27-88	0	--	140	144	--	470	10	--	830	801	1.13
	07-28-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	253	--	251	--	420	13	0.4	--	829	1.13
	09-22-88	--	269	--	253	--	2700	35	0.7	--	4030	5.48
	10-26-88	--	307	--	305	--	3100	32	--	5030	4590	6.84
	11-09-88	--	288	--	280	--	3000	31	0.6	--	4360	5.93
	12-14-88	--	--	--	326	--	2800	28	0.7	--	4190	5.70
	08-17-89	--	--	234	236	--	2000	23	0.7	--	3000	4.07
KD11	03-08-88	--	--	--	130	--	1400	24	--	2230	2120	3.03
	04-21-88	0	--	200	--	--	--	--	--	--	--	--
	05-23-88	--	--	--	--	--	--	--	--	--	--	--
	06-27-88	48	--	180	179	--	2100	41	--	3250	3270	4.42
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	157	--	152	--	2300	44	0.5	--	3570	4.85
	08-11-88	--	157	--	150	--	2300	46	0.6	--	3600	4.89
	09-22-88	--	173	--	162	--	2500	50	0.6	--	3760	5.11
	09-22-88	--	173	--	161	--	2500	50	0.6	--	3810	5.18
	10-22-88	--	193	--	194	--	2500	52	--	3950	3870	5.37

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
FW11	10-26-88	2.4	--	--	<1	--	770	--	<1	2	2	--
	02-17-89	--	--	--	--	--	540	--	--	--	--	--
FW11	03-02-88	0.85	--	1	<1	--	420	--	<1	2	3	--
	04-21-88	--	--	--	--	--	760	--	--	--	--	--
	05-23-88	--	--	--	--	--	890	--	--	--	--	30
	06-27-88	<0.10	--	2	2	180	150	<10	2	<1	1	--
	07-28-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	11	--	--	--	210	--	--	--	--	--
	09-22-88	--	--	--	--	--	780	--	--	--	--	--
	10-26-88	4.9	--	--	<1	--	750	--	<1	2	4	--
	11-09-88	--	--	--	--	--	690	--	--	--	--	--
	12-14-88	--	--	--	--	--	590	--	--	3	--	--
	08-17-89	--	--	--	--	--	570	--	--	--	--	--
KD11	03-08-88	--	--	2	1	--	290	--	<1	<1	2	--
	04-21-88	--	--	--	--	--	390	--	--	--	--	--
	05-23-88	--	--	--	--	--	400	--	--	--	--	30
	06-27-88	<0.10	--	2	2	390	420	<10	<1	<1	<1	--
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	11	--	--	--	440	--	--	--	--	--
	08-11-88	--	10	--	--	--	430	--	--	--	--	--
	09-22-88	--	--	--	--	--	470	--	--	--	--	--
	09-22-88	--	--	--	--	--	500	--	--	--	--	--
	10-22-88	--	--	--	2	--	510	--	<1	<1	1	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
FW11	10-26-88	<5	--	--	6	--	34	1	20	93	--	--
	02-17-89	--	--	--	--	--	39	--	--	--	--	--
FW11	03-02-88	<5	0.1	0.2	4	17	17	<1	30	--	--	--
	04-21-88	--	--	0.2	--	--	11	--	--	--	-96.0	-9.95
	05-23-88	--	--	--	--	--	13	--	--	--	--	--
	06-27-88	<5	<0.1	<0.1	1	2	2	2	6	6.2	-106.5	-12.40
	07-28-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	--	--	--	--	2	--	--	--	-107.5	-12.95
	09-22-88	--	--	--	--	--	18	--	--	--	-104.0	-11.80
	10-26-88	<5	--	--	5	--	44	2	10	84	-111.5	-13.45
	11-09-88	--	--	--	--	--	29	--	--	--	--	--
	12-14-88	--	--	--	--	--	53	--	--	--	-116.0	-14.30
	08-17-89	--	--	--	--	--	28	--	--	--	--	--
KD11	03-08-88	<5	0.2	<0.1	4	<1	<1	<1	20	--	--	--
	04-21-88	--	--	0.2	--	--	<1	--	--	--	--	--
	05-23-88	--	--	--	--	--	<1	--	--	--	--	--
	06-27-88	<5	--	--	3	1	<1	1	<10	12	-87.5	-8.30
	08-11-88	--	--	--	--	--	--	--	--	--	--	--
	08-11-88	--	--	--	--	--	<1	--	--	--	-79.5	-6.80
	08-11-88	--	--	--	--	--	1	--	--	--	-78.5	-6.80
	09-22-88	--	--	--	--	--	<1	--	--	--	-111.0	-13.35
	09-22-88	--	--	--	--	--	<1	--	--	--	--	--
	10-22-88	<5	--	--	4	--	<1	<1	30	24	-73.5	-5.80

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	STATION NUMBER	STATION NAME	DATE	TIME	SPECIFIC CONDUCTANCE, ONSITE (US/CM)	PH, ONSITE (STANDARD UNITS)
KD11	430104106421601	BURLINGTON LAKE NEAR BUCKNUM	11-09-88	0820	5200	8.7
		BURLINGTON LAKE NEAR BUCKNUM	11-09-88	0845	5300	8.6
		BURLINGTON LAKE NEAR BUCKNUM	12-14-88	1645	4680	8.7
		BURLINGTON LAKE NEAR BUCKNUM	08-17-89	1800	5800	8.7
		BURLINGTON LAKE NEAR BUCKNUM	08-17-89	1830	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	TEMPERATURE, WATER, ONSITE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED, ONSITE (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)
KD11	11-09-88	1.5	--	618	12.3	110	730	110	110	910	15	--
	11-09-88	1.5	--	618	12.3	111	730	110	110	960	14	--
	12-14-88	0.0	--	--	--	--	790	120	120	970	14	--
	08-17-89	19.0	--	--	8.3	--	860	130	130	1100	17	--
	08-17-89	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFIDE, TOTAL (MG/L AS S)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
KD11	11-09-88	--	174	--	175	--	2500	50	0.7	--	3800	5.17
	11-09-88	--	174	--	175	--	2600	52	0.7	--	3950	5.37
	12-14-88	--	--	--	179	--	2700	53	0.7	--	4090	5.56
	08-17-89	--	--	200	201	--	3100	62	0.9	--	4660	6.34
	08-17-89	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	NITROGEN, NO2+NO3, DISSOLVED (MG/L AS N)	CARBON, ORGANIC, DISSOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM, DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
KD11	11-09-88	--	--	--	--	--	500	--	--	--	--	--
	11-09-88	--	--	--	--	--	510	--	--	--	--	--
	12-14-88	--	--	--	--	--	510	--	--	1	--	--
	08-17-89	--	--	--	--	--	620	--	--	--	--	--
	08-17-89	--	--	--	--	--	--	--	--	--	--	--

Table 3.--Water-quality data for wetlands (ponds, lakes, and reservoirs), 1988-89--Continued

SITE NUMBER (FIG. 2)	DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
KD11	11-09-88	--	--	--	--	--	<1	--	--	--	--	--
	11-09-88	--	--	--	--	--	<1	--	--	--	--	--
	12-14-88	--	--	--	--	--	<1	--	--	--	-72.0	-5.50
	08-17-89	--	--	--	--	--	<1	--	--	--	--	--
	08-17-89	--	--	--	--	--	<1	--	--	--	--	--

Table 4.--Water-quality data from drains and canals

[INST., instantaneous; US/CM, microsiemens per centimeter at 25 degrees Celsius; DEG C, degrees Celsius; MM OF HG, millimeters of mercury; MG/L, milligrams per liter; DIS IT, dissolved incremental titration; WAT WH TOT FET, water whole total fixed endpoint titration; AC-FT, acre-feet; UG/L, micrograms per liter; PER MIL, parts per thousand; IRR, irrigation; BEL, below; E, estimated; --, no data; <, less than]

SITE NUMBER (FIG. 2 OR 3)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPEC-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
IR-43	423506106402601	IR-43 NEAR CASPER	06-25-88	1715	--	3000
		IR-43 NEAR CASPER	08-26-88	1150	--	2650
		IR-43 NEAR CASPER	08-26-88	1212	--	2740
IR-42	423650106381501	IR-42 NEAR CASPER	06-25-88	1455	--	1100
		IR-42 NEAR CASPER	08-26-88	1305	--	1420
IR-41	423742106374101	IR-41 NEAR CASPER	06-25-88	1310	--	1030
		IR-41 NEAR CASPER	09-02-88	1330	--	1480
IR-48	424218106343301	IR-48 NEAR CASPER	06-27-88	1025	--	4280
		IR-48 NEAR CASPER	09-02-88	1507	--	5100
IR-46	424245106334201	IR-46 NEAR CASPER	06-26-88	1355	--	510
IR-47	424250106354501	IR-47 NEAR CASPER	06-27-88	0830	--	9700
		IR-47 NEAR CASPER	09-02-88	1415	--	920
IR-45	424325106360701	IR-45 NEAR CASPER	06-26-88	1210	--	4400
		IR-45 NEAR CASPER	09-02-88	1545	--	4100
--	424427106372801	IRR DITCH BEL CASPER CANAL, NEAR ALCOVA	06-28-88	--	--	--
		IRR DITCH BEL CASPER CANAL, NEAR ALCOVA	06-28-88	1145	E50	485
		IRR DITCH BEL CASPER CANAL, NEAR ALCOVA	08-19-88	1125	--	520
		IRR DITCH BEL CASPER CANAL, NEAR ALCOVA	09-20-88	1630	--	550
		IRR DITCH BEL CASPER CANAL, NEAR ALCOVA	09-21-89	1450	--	520

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	PH, ONSITE (STAND-ARD UNITS)	TEMPER-ATURE, WATER, ONSITE (DEG C)	BARO-METRIC PRES-SURE, ONSITE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS, TOTAL (MG/L AS CACO3)	CALCIUM, DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
IR-43	06-25-88	8.1	27.5	--	7.2	--	1500	390	130	230	5.3
	08-26-88	8.2	17.0	--	11.0	--	1400	360	110	180	6.5
	08-26-88	8.3	17.0	--	11.0	--	1300	370	98	180	6.5
IR-42	06-25-88	8.0	25.5	--	6.4	--	370	94	34	96	7.6
	08-26-88	8.1	18.0	--	7.6	--	470	110	48	130	8.1
IR-41	06-25-88	7.4	17.0	--	2.2	--	420	110	36	65	3.2
	09-02-88	7.5	14.5	--	3.8	--	590	150	52	77	5.0
IR-48	06-27-88	8.7	22.5	--	12.3	--	980	180	130	840	10
	09-02-88	8.4	21.0	--	12.9	--	1100	200	150	850	10
IR-46	06-26-88	8.6	29.0	--	5.9	--	200	52	16	33	3.2
IR-47	06-27-88	7.5	13.5	--	6.6	--	3200	570	420	1900	15
	09-02-88	8.1	22.0	--	6.3	--	300	77	27	82	6.6
IR-45	06-26-88	8.2	20.0	--	15.8	--	1100	210	140	740	10
	09-02-88	8.1	20.0	--	8.3	--	2500	180	500	2400	25
--	06-28-88	--	--	--	--	--	--	--	--	--	--
	06-28-88	8.3	23.0	616	6.4	93	200	52	17	33	3.0
	08-19-88	8.6	21.5	--	7.8	--	190	50	17	33	3.0
	09-20-88	8.9	15.0	618	8.5	105	200	50	18	35	3.3
	09-21-89	8.6	15.0	--	--	--	200	52	17	33	3.2

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
IR-43	06-25-88	--	--	266	--	250	1700	4.2	0.3	--	2620
	08-26-88	--	--	--	--	233	1500	17	0.8	--	2310
	08-26-88	--	--	268	--	237	1500	18	0.7	--	2330
IR-42	06-25-88	--	--	229	--	210	360	4.1	0.2	--	733
	08-26-88	--	--	269	--	260	470	23	0.5	--	951
IR-41	06-25-88	--	--	314	--	317	260	6.1	0.2	--	669
	09-02-88	--	--	348	--	343	380	11	1.0	--	885
IR-48	06-27-88	--	--	352	--	325	2300	60	0.8	--	3730
	09-02-88	--	--	--	--	352	2400	64	1.4	--	3890
IR-46	06-26-88	--	--	132	--	131	120	8.3	0.2	--	312
IR-47	06-27-88	--	--	642	--	623	5500	110	0.2	--	8900
	09-02-88	--	--	179	--	166	280	12	0.4	--	593
IR-45	06-26-88	--	--	431	--	405	2200	50	1.1	--	3610
	09-02-88	--	--	397	--	338	6100	250	0.7	--	9700
--	06-28-88	--	--	--	--	--	--	--	--	--	--
	06-28-88	159	0	--	130	131	120	8.1	--	349	311
	08-19-88	--	--	137	--	133	120	8.5	0.3	--	314
	09-20-88	--	--	132	--	129	130	8.9	0.3	--	325
	09-21-89	--	--	--	134	130	120	7.5	--	328	311

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
IR-43	06-25-88	3.56	--	--	--	--	--	590	--	--	--
	08-26-88	3.15	--	--	--	--	--	330	--	--	--
	08-26-88	3.17	--	--	--	--	--	340	--	--	--
IR-42	06-25-88	1.0	--	--	--	--	--	120	--	--	--
	08-26-88	1.29	--	--	--	--	--	140	--	--	--
IR-41	06-25-88	0.91	--	--	--	--	--	180	--	--	--
	09-02-88	1.20	--	--	--	--	--	180	--	--	--
IR-48	06-27-88	5.08	--	--	--	--	--	650	--	--	--
	09-02-88	5.29	--	--	--	--	--	680	--	--	--
IR-46	06-26-88	0.42	--	--	--	--	--	50	--	--	--
IR-47	06-27-88	12.1	--	--	--	--	--	1600	--	--	--
	09-02-88	0.81	--	--	--	--	--	120	--	--	--
IR-45	06-26-88	4.91	--	--	--	--	--	630	--	--	--
	09-02-88	13.2	--	--	--	--	--	1400	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--
	06-28-88	0.47	<0.10	--	2	2	140	50	<10	<1	<1
	08-19-88	0.43	--	5.1	--	--	--	50	--	--	--
	09-20-88	0.44	--	--	--	--	--	50	--	--	--
	09-21-89	0.45	<0.10	--	--	2	--	60	--	<1	<1

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
IR-43	06-25-88	--	--	--	--	60	--	--	--	--	--
	08-26-88	--	--	--	--	29	--	--	--	--	--
	08-26-88	--	--	--	--	29	--	--	--	--	--
IR-42	06-25-88	--	--	--	--	10	--	--	--	--	--
	08-26-88	--	--	--	--	18	--	--	--	--	--
IR-41	06-25-88	--	--	--	--	<1	--	--	--	--	--
	09-02-88	--	--	--	--	2	--	--	--	--	--
IR-48	06-27-88	--	--	--	--	110	--	--	--	--	--
	09-02-88	--	--	--	--	73	--	--	--	--	--
IR-46	06-26-88	--	--	--	--	1	--	--	--	--	--
IR-47	06-27-88	--	--	--	--	2100	--	--	--	--	--
	09-02-88	--	--	--	--	63	--	--	--	--	--
IR-45	06-26-88	--	--	--	--	140	--	--	--	--	--
	09-02-88	--	--	--	--	30	--	--	--	--	--
--	06-28-88	--	--	--	--	--	--	--	--	--	--
	06-28-88	<1	7	1	<1	1	3	4	7.3	-113.5	-14.35
	08-19-88	--	--	--	--	1	--	--	--	-114.0	-13.90
	09-20-88	--	--	--	--	<1	--	--	--	-113.5	-13.70
	09-21-89	<1	<1	2	--	1	1	<3	--	-117.0	-14.30

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPEC-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
IR-40	424437106360501	IR-40 NEAR CASPER	06-25-88	1030	--	1320
		IR-40 NEAR CASPER	08-25-88	1740	--	573
IR-39	424439106370901	IR-39 NEAR CASPER	06-25-88	0820	--	758
		IR-39 NEAR CASPER	08-13-88	0825	--	760
IR-32	424636106330601	IR-32 NEAR CASPER	06-23-88	1345	--	811
		IR-32 NEAR CASPER	08-25-88	1355	--	1210
IR-31	424636106351901	IR-31 NEAR CASPER	06-23-88	1112	--	7450
		IR-31 NEAR CASPER	08-23-88	1740	--	2370
IR-33	424637106330701	IR-33 NEAR CASPER	06-23-88	1430	--	2260
		IR-33 NEAR CASPER	08-25-88	1425	--	2030
IR-34	424727106331001	IR-34 NEAR CASPER	06-23-88	1520	--	684
		IR-34 NEAR CASPER	08-25-88	1510	--	615
IR-30	424755106342301	IR-30 NEAR CASPER	06-22-88	1720	--	672
		IR-30 NEAR CASPER	08-19-88	1320	--	11500
		IR-30 NEAR CASPER	08-19-88	1345	--	11500
IR-50	424818106331101	IR-50 NEAR CASPER	07-18-88	1305	--	540
		IR-50 NEAR CASPER	08-25-88	1240	--	653
		IR-50 NEAR CASPER	08-25-88	1630	--	653
IR-35	424819106323101	IR-35 NEAR CASPER	06-23-88	1620	--	500
		IR-35 NEAR CASPER	08-25-88	1555	--	620

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	PH, ONSITE (STAND-ARD UNITS)	TEMPER-ATURE, WATER, ONSITE (DEG C)	BARO-METRIC PRES-SURE, ONSITE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS, TOTAL (MG/L AS CACO3)	CALCIUM, DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
IR-40	06-25-88	7.5	22.0	--	--	--	580	160	45	99	1.1
	08-25-88	7.8	24.0	--	10.4	--	210	53	18	40	3.1
IR-39	06-25-88	7.7	18.0	--	0.8	--	260	59	27	62	6.4
	08-13-88	7.6	12.0	--	2.6	--	300	72	29	54	8.0
IR-32	06-23-88	8.3	27.0	--	6.8	--	280	65	28	66	3.4
	08-25-88	8.4	20.0	--	8.4	--	370	78	42	100	3.8
IR-31	06-23-88	8.1	17.5	--	10.1	--	860	200	87	270	6.5
	08-23-88	8.0	14.5	--	9.1	--	960	220	99	300	6.0
IR-33	06-23-88	7.9	19.0	--	9.2	--	880	200	92	250	7.8
	08-25-88	7.7	17.0	--	7.0	--	690	160	71	200	7.4
IR-34	06-23-88	7.5	31.0	--	1.9	--	280	72	25	41	4.8
	08-25-88	7.5	21.5	--	3.1	--	240	61	21	37	3.1
IR-30	06-22-88	7.5	27.5	--	6.3	--	260	62	26	46	8.9
	08-19-88	8.1	18.0	--	8.8	--	5500	370	1100	1700	15
	08-19-88	8.5	18.0	--	9.6	--	5500	390	1100	1700	16
IR-50	07-18-88	7.9	26.5	--	5.0	--	200	53	16	33	7.4
	08-25-88	8.1	25.5	--	5.1	--	--	--	--	--	--
	08-25-88	8.1	25.5	--	5.1	--	240	63	19	38	10
IR-35	06-23-88	8.1	26.0	--	6.9	--	200	52	16	32	3.0
	08-25-88	7.9	19.0	--	6.9	--	230	59	19	36	4.2

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
IR-40	06-25-88	--	--	397	--	389	400	17	0.2	--	961
	08-25-88	--	--	140	--	137	150	9.1	0.4	--	358
IR-39	06-25-88	--	--	415	--	306	81	16	0.5	--	501
	08-13-88	--	--	246	--	243	160	13	0.4	--	484
IR-32	06-23-88	--	--	155	--	146	240	11	0.5	--	507
	08-25-88	--	--	168	--	161	390	15	0.4	--	730
IR-31	06-23-88	--	--	275	--	280	1100	13	0.4	--	1840
	08-23-88	--	--	298	--	283	1300	16	0.7	--	2120
IR-33	06-23-88	--	--	319	--	322	960	20	0.4	--	1720
	08-25-88	--	--	357	--	348	830	20	0.4	--	1500
IR-34	06-23-88	--	--	254	--	254	100	8.8	0.6	--	405
	08-25-88	--	--	187	--	175	140	8.6	0.4	--	383
IR-30	06-22-88	--	--	205	--	182	150	13	1.2	--	430
	08-19-88	--	--	394	--	382	8800	63	0.3	--	12300
	08-19-88	--	--	441	--	407	8500	61	0.3	--	12000
IR-50	07-18-88	--	--	148	--	142	120	9.3	0.4	--	328
	08-25-88	--	--	164	--	--	--	--	--	--	--
	08-25-88	--	--	--	--	158	160	13	0.5	--	398
IR-35	06-23-88	--	--	138	--	131	120	8.2	0.4	--	314
	08-25-88	--	--	165	--	156	130	8.9	0.3	--	356

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
IR-40	06-25-88	1.31	--	--	--	--	--	390	--	--	--
	08-25-88	0.49	--	--	--	--	--	70	--	--	--
IR-39	06-25-88	0.68	--	--	--	--	--	150	--	--	--
	08-13-88	0.66	--	--	--	--	--	90	--	--	--
IR-32	06-23-88	0.69	--	--	--	--	--	90	--	--	--
	08-25-88	0.99	--	--	--	--	--	130	--	--	--
IR-31	06-23-88	2.51	--	--	--	--	--	320	--	--	--
	08-23-88	2.88	--	--	--	--	--	320	--	--	--
IR-33	06-23-88	2.34	--	--	--	--	--	290	--	--	--
	08-25-88	2.04	--	--	--	--	--	310	--	--	--
IR-34	06-23-88	0.55	--	--	--	--	--	80	--	--	--
	08-25-88	0.52	--	--	--	--	--	60	--	--	--
IR-30	06-22-88	0.58	--	--	--	--	--	80	--	--	--
	08-19-88	16.7	--	--	--	--	--	1100	--	--	--
	08-19-88	16.4	--	--	--	--	--	1100	--	--	--
IR-50	07-18-88	0.45	--	--	--	--	--	70	--	--	--
	08-25-88	--	--	--	--	--	--	--	--	--	--
	08-25-88	0.54	--	--	--	--	--	100	--	--	--
IR-35	06-23-88	0.43	--	--	--	--	--	50	--	--	--
	08-25-88	0.48	--	--	--	--	--	50	--	--	--

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
IR-40	06-25-88	--	--	--	--	<1	--	--	--	--	--
	08-25-88	--	--	--	--	2	--	--	--	--	--
IR-39	06-25-88	--	--	--	--	11	--	--	--	--	--
	08-13-88	--	--	--	--	5	--	--	--	-99.5	-11.10
IR-32	06-23-88	--	--	--	--	100	--	--	--	--	--
	08-25-88	--	--	--	--	250	--	--	--	--	--
IR-31	06-23-88	--	--	--	--	16	--	--	--	--	--
	08-23-88	--	--	--	--	31	--	--	--	--	--
IR-33	06-23-88	--	--	--	--	16	--	--	--	--	--
	08-25-88	--	--	--	--	15	--	--	--	--	--
IR-34	06-23-88	--	--	--	--	<1	--	--	--	--	--
	08-25-88	--	--	--	--	2	--	--	--	--	--
IR-30	06-22-88	--	--	--	--	3	--	--	--	--	--
	08-19-88	--	--	--	--	30	--	--	--	--	--
	08-19-88	--	--	--	--	51	--	--	--	--	--
IR-50	07-18-88	--	--	--	--	11	--	--	--	--	--
	08-25-88	--	--	--	--	--	--	--	--	--	--
	08-25-88	--	--	--	--	2	--	--	--	--	--
IR-35	06-23-88	--	--	--	--	1	--	--	--	--	--
	08-25-88	--	--	--	--	1	--	--	--	--	--

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPEC-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
IR-29	424848106353101	IR-29 NEAR CASPER	06-22-88	1555	--	1590
		IR-29 NEAR CASPER	08-25-88	1310	--	1650
--	424923106384301	CASPER CANAL NEAR CASPER (CC-1)	05-25-89	1535	--	510
FW-4	424924106334801	FW-4 NEAR CASPER	07-15-88	1345	--	--
		FW-4 NEAR CASPER	07-15-88	1410	--	1570
IR-6	424941106245201	IR-6 NEAR CASPER	08-12-88	1420	--	920
IR-23	424944106345501	IR-23 NEAR CASPER	06-16-88	1309	--	780
		IR-23 NEAR CASPER	08-25-88	1140	--	720
IR-37	424952106343001	IR-37 NEAR CASPER	06-24-88	1115	--	3110
		IR-37 NEAR CASPER	08-25-88	1110	--	2180
IR-49	424959106270901	IR-49 NEAR CASPER	07-17-88	0755	--	1740
IR-36	425000106342701	IR-36 NEAR CASPER	06-24-88	0910	--	2700
IR-44	425000106354601	IR-44 NEAR CASPER	06-26-88	0905	--	675
		IR-44 NEAR CASPER	08-25-88	1240	--	695
IR-1	425035106250801	IR-1 NEAR CASPER	06-13-88	1240	--	690
IR-7	425035106271901	IR-7 NEAR CASPER	06-14-88	1340	--	142
		IR-7 NEAR CASPER	08-12-88	1813	--	2720

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	PH, ONSITE (STAND-ARD UNITS)	TEMPER-ATURE, WATER, ONSITE (DEG C)	BARO-METRIC PRES-SURE, ONSITE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS, TOTAL (MG/L AS CACO3)	CALCIUM, DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
IR-29	06-22-88	8.1	29.5	--	10.8	--	580	120	69	200	6.2
	08-25-88	8.0	18.0	--	11.0	--	570	140	53	160	11
--	05-25-89	8.6	13.5	--	--	--	--	--	--	--	--
FW-4	07-15-88	--	--	--	--	--	--	--	--	--	--
	07-15-88	8.0	24.0	--	7.3	--	560	130	57	220	5.0
IR-6	08-12-88	8.5	19.0	--	9.2	--	330	73	37	70	4.8
IR-23	06-16-88	7.4	23.0	--	7.6	--	290	65	30	62	5.2
	08-25-88	8.2	15.5	--	9.9	--	260	59	27	49	5.5
IR-37	06-24-88	8.0	18.0	--	8.6	--	870	210	83	380	7.1
	08-25-88	8.2	13.0	--	9.3	--	560	130	57	280	7.8
IR-49	07-17-88	7.9	15.5	--	4.9	--	530	70	86	180	6.7
IR-36	06-24-88	8.1	15.5	--	8.5	--	680	150	73	370	7.6
IR-44	06-26-88	7.6	19.0	--	5.9	--	250	59	26	51	3.6
	08-25-88	7.7	16.5	--	5.1	--	250	56	26	48	4.8
IR-1	06-13-88	8.2	20.0	--	6.9	--	440	110	41	55	6.9
IR-7	06-14-88	8.1	21.0	--	7.6	--	610	120	76	84	5.8
	08-12-88	8.2	19.5	--	6.6	--	1400	270	170	170	8.0

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
IR-29	06-22-88	--	--	186	--	185	850	18	0.4	--	1380
	08-25-88	--	--	322	--	318	580	21	0.4	--	1160
--	05-25-89	--	--	--	--	--	--	--	--	--	--
FW-4	07-15-88	--	--	--	--	--	--	--	--	--	--
	07-15-88	--	--	256	--	255	730	45	0.5	--	1340
IR-6	08-12-88	--	--	182	--	174	300	13	0.4	--	607
IR-23	06-16-88	--	--	--	--	171	230	11	0.4	--	506
	08-25-88	--	--	173	--	170	180	11	0.4	--	436
IR-37	06-24-88	--	--	311	--	313	1100	86	0.3	--	2050
	08-25-88	--	--	280	--	271	840	61	0.5	--	1540
IR-49	07-17-88	--	--	217	--	217	690	17	0.4	--	1180
IR-36	06-24-88	--	--	306	--	302	1100	89	0.2	--	1970
IR-44	06-26-88	--	--	191	--	191	160	9.0	0.4	--	424
	08-25-88	--	--	182	--	180	170	11	0.4	--	425
IR-1	06-13-88	--	--	187	--	171	370	10	0.6	--	706
IR-7	06-14-88	--	--	175	--	173	610	8.4	0.5	--	1010
	08-12-88	--	--	286	--	284	1500	14	0.4	--	2300

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
IR-29	06-22-88	1.87	--	--	--	--	--	260	--	--	--
	08-25-88	1.58	--	--	--	--	--	210	--	--	--
--	05-25-89	--	--	--	--	--	--	--	--	--	--
FW-4	07-15-88	--	--	--	--	--	--	--	--	--	--
	07-15-88	1.82	--	--	--	--	--	220	--	--	--
IR-6	08-12-88	0.83	--	--	--	--	--	110	--	--	--
IR-23	06-16-88	0.69	--	--	--	--	--	90	--	--	--
	08-25-88	0.59	--	--	--	--	--	80	--	--	--
IR-37	06-24-88	2.79	--	--	--	--	--	300	--	--	--
	08-25-88	2.10	--	--	--	--	--	230	--	--	--
IR-49	07-17-88	1.61	--	--	--	--	--	540	--	--	--
IR-36	06-24-88	2.68	--	--	--	--	--	290	--	--	--
IR-44	06-26-88	0.58	--	--	--	--	--	100	--	--	--
	08-25-88	0.58	--	--	--	--	--	90	--	--	--
IR-1	06-13-88	0.96	--	--	--	--	--	170	--	--	--
IR-7	06-14-88	1.37	--	--	--	--	--	290	--	--	--
	08-12-88	3.13	--	--	--	--	--	510	--	--	--

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
IR-29	06-22-88	--	--	--	--	7	--	--	--	--	--
	08-25-88	--	--	--	--	2	--	--	--	--	--
--	05-25-89	--	--	--	--	<1	--	--	--	--	--
FW-4	07-15-88	--	--	--	--	--	--	--	--	--	--
	07-15-88	--	--	--	--	3	--	--	--	--	--
IR-6	08-12-88	--	--	--	--	12	--	--	--	--	--
IR-23	06-16-88	--	--	--	--	2	--	--	--	--	--
	08-25-88	--	--	--	--	1	--	--	--	--	--
IR-37	06-24-88	--	--	--	--	4	--	--	--	--	--
	08-25-88	--	--	--	--	4	--	--	--	--	--
IR-49	07-17-88	--	--	--	--	1	--	--	--	--	--
IR-36	06-24-88	--	--	--	--	3	--	--	--	--	--
IR-44	06-26-88	--	--	--	--	1	--	--	--	--	--
	08-25-88	--	--	--	--	1	--	--	--	--	--
IR-1	06-13-88	--	--	--	--	30	--	--	--	--	--
IR-7	06-14-88	--	--	--	--	2	--	--	--	--	--
	08-12-88	--	--	--	--	2	--	--	--	--	--

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPEC-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
IR-2	425037106260001	IR-2 NEAR CASPER	06-13-88	1430	--	2390
		IR-2 NEAR CASPER	08-12-88	1500	--	742
IR-5	425044106273501	IR-5 NEAR CASPER	06-13-88	1800	--	4000
		IR-5 NEAR CASPER	08-12-88	1720	--	1360
		IR-5 NEAR CASPER	08-12-88	1930	--	1360
IR-3	425046106262901	IR-3 NEAR CASPER	06-13-88	1550	--	985
		IR-3 NEAR CASPER	08-12-88	1550	--	755
IR-8	425053106285901	IR-8 NEAR CASPER	06-14-88	1425	--	4600
		IR-8 NEAR CASPER	08-13-88	1005	--	1080
IR-4	425122106271301	IR-4 NEAR CASPER	06-13-88	1730	--	780
		IR-4 NEAR CASPER	08-12-88	1635	--	945
IR-9	425135106282301	IR-9 NEAR CASPER	06-14-88	1515	--	9100
		IR-9 NEAR CASPER	08-24-88	0805	--	1320
IR-10	425146106260301	IR-10 NEAR CASPER	06-14-88	1615	--	780
		IR-10 NEAR CASPER	08-24-88	0855	--	605
		IR-10 NEAR CASPER	08-24-88	1355	--	605
IR-27	425225106305001	IR-27 NEAR CASPER	06-22-88	1120	--	4020
		IR-27 NEAR CASPER	08-25-88	0930	--	3550
IR-28	425232106333001	IR-28 NEAR CASPER	06-22-88	1320	--	870
		IR-28 NEAR CASPER	08-25-88	1010	--	625
		IR-28 NEAR CASPER	08-25-88	1610	--	625

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	PH, ONSITE (STAND-ARD UNITS)	TEMPER-ATURE, WATER, ONSITE (DEG C)	BARO-METRIC PRES-SURE, ONSITE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS, TOTAL (MG/L AS CACO3)	CALCIUM, DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
IR-2	06-13-88	8.1	17.0	--	8.8	--	1100	210	140	190	6.4
	08-12-88	8.5	21.0	--	9.2	--	280	68	27	42	3.5
IR-5	06-13-88	8.2	19.0	--	7.7	--	1200	140	210	630	8.9
	08-12-88	8.4	20.5	--	11.2	--	440	77	59	150	7.6
	08-12-88	8.4	20.5	--	11.2	--	440	78	60	150	8.1
IR-3	06-13-88	8.7	20.0	--	8.9	--	320	64	39	85	5.8
	08-12-88	8.5	22.5	--	8.6	--	280	59	31	58	4.9
IR-8	06-14-88	7.1	18.5	--	3.2	--	2900	570	360	260	--
	08-13-88	8.0	16.0	--	7.6	--	450	99	49	55	5.8
IR-4	06-13-88	7.6	16.0	--	2.8	--	280	61	31	57	8.3
	08-12-88	7.5	19.5	--	1.9	--	340	77	37	63	8.0
IR-9	06-14-88	7.6	19.0	--	6.9	--	4600	500	810	1400	7.9
	08-24-88	8.3	13.0	--	9.1	--	530	120	55	100	4.9
IR-10	06-14-88	8.5	17.5	--	16.8	--	280	58	34	64	4.8
	08-24-88	8.3	15.0	--	7.5	--	220	55	21	39	3.3
	08-24-88	8.3	15.0	--	7.5	--	220	55	21	39	3.2
IR-27	06-22-88	8.0	22.5	--	6.5	--	2300	570	210	280	8.0
	08-25-88	8.0	12.5	--	8.2	--	2000	500	180	220	5.2
IR-28	06-22-88	7.4	19.5	--	7.7	--	380	110	25	42	3.4
	08-25-88	7.8	16.0	--	2.9	--	240	65	18	41	2.9
	08-25-88	7.8	16.0	--	2.9	--	230	64	17	41	2.9

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
IR-2	06-13-88	--	--	--	--	262	1100	25	0.6	--	1830
	08-12-88	--	--	157	--	144	220	9.7	0.4	--	465
IR-5	06-13-88	--	--	318	--	311	1900	77	1.0	--	3160
	08-12-88	--	--	192	--	191	540	25	0.5	--	974
	08-12-88	--	--	192	--	191	550	26	0.5	--	988
IR-3	06-13-88	--	--	--	--	177	300	20	0.6	--	621
	08-12-88	--	--	188	--	179	210	14	0.5	--	490
IR-8	06-14-88	--	--	448	--	441	2800	19	0.4	--	--
	08-13-88	--	--	201	--	185	390	10	0.4	--	730
IR-4	06-13-88	--	--	--	--	189	200	11	0.7	--	483
	08-12-88	--	--	200	--	194	270	18	0.4	--	593
IR-9	06-14-88	--	--	391	--	388	6800	84	0.9	--	9840
	08-24-88	--	--	198	--	196	530	12	0.4	--	941
IR-10	06-14-88	--	--	185	--	161	230	15	0.8	--	518
	08-24-88	--	--	156	--	151	150	10	0.3	--	372
	08-24-88	--	--	156	--	151	150	10	0.4	--	372
IR-27	06-22-88	--	--	337	--	306	2500	22	0.9	--	3790
	08-25-88	--	--	303	--	283	2200	20	0.5	--	3310
IR-28	06-22-88	--	--	198	--	199	240	13	0.4	--	553
	08-25-88	--	--	184	--	182	130	8.5	0.3	--	376
	08-25-88	--	--	184	--	182	130	8.5	0.4	--	374

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
IR-2	06-13-88	2.49	--	--	--	--	--	310	--	--	--
	08-12-88	0.63	--	--	--	--	--	70	--	--	--
IR-5	06-13-88	4.30	--	--	--	--	--	630	--	--	--
	08-12-88	1.33	--	--	--	--	--	180	--	--	--
	08-12-88	1.34	--	--	--	--	--	180	--	--	--
IR-3	06-13-88	0.84	--	--	--	--	--	140	--	--	--
	08-12-88	0.67	--	--	--	--	--	100	--	--	--
IR-8	06-14-88	--	--	--	--	--	--	880	--	--	--
	08-13-88	0.99	--	--	--	--	--	220	--	--	--
IR-4	06-13-88	0.66	--	--	--	--	--	200	--	--	--
	08-12-88	0.81	--	--	--	--	--	140	--	--	--
IR-9	06-14-88	13.4	--	--	--	--	--	1000	--	--	--
	08-24-88	1.28	--	--	--	--	--	170	--	--	--
IR-10	06-14-88	0.70	--	--	--	--	--	160	--	--	--
	08-24-88	0.51	--	--	--	--	--	70	--	--	--
	08-24-88	0.51	--	--	--	--	--	70	--	--	--
IR-27	06-22-88	5.16	--	--	--	--	--	710	--	--	--
	08-25-88	4.50	--	--	--	--	--	490	--	--	--
IR-28	06-22-88	0.75	--	--	--	--	--	60	--	--	--
	08-25-88	0.51	--	--	--	--	--	80	--	--	--
	08-25-88	0.51	--	--	--	--	--	80	--	--	--

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
IR-2	06-13-88	--	--	--	--	230	--	--	--	--	--
	08-12-88	--	--	--	--	11	--	--	--	--	--
IR-5	06-13-88	--	--	--	--	9	--	--	--	--	--
	08-12-88	--	--	--	--	4	--	--	--	--	--
	08-12-88	--	--	--	--	4	--	--	--	--	--
IR-3	06-13-88	--	--	--	--	9	--	--	--	--	--
	08-12-88	--	--	--	--	7	--	--	--	--	--
IR-8	06-14-88	--	--	--	--	2	--	--	--	--	--
	08-13-88	--	--	--	--	<1	--	--	--	--	--
IR-4	06-13-88	--	--	--	--	10	--	--	--	--	--
	08-12-88	--	--	--	--	3	--	--	--	--	--
IR-9	06-14-88	--	--	--	--	21	--	--	--	--	--
	08-24-88	--	--	--	--	2	--	--	--	--	--
IR-10	06-14-88	--	--	--	--	6	--	--	--	--	--
	08-24-88	--	--	--	--	2	--	--	--	--	--
	08-24-88	--	--	--	--	2	--	--	--	--	--
IR-27	06-22-88	--	--	--	--	2	--	--	--	--	--
	08-25-88	--	--	--	--	<1	--	--	--	--	--
IR-28	06-22-88	--	--	--	--	4	--	--	--	--	--
	08-25-88	--	--	--	--	<1	--	--	--	--	--
	08-25-88	--	--	--	--	1	--	--	--	--	--

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPEC-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
IR-11	425239106263901	IR-11 NEAR CASPER	06-14-88	1750	--	2580
		IR-11 NEAR CASPER	08-24-88	0940	--	565
IR-26	425252106304701	IR-26 NEAR CASPER	06-22-88	0939	--	3010
		IR-26 NEAR CASPER	08-25-88	0855	--	2340
IR-12	425312106270601	IR-12 NEAR CASPER	06-14-88	1845	--	2500
		IR-12 NEAR CASPER	08-24-88	1015	--	2360
IR-13	425330106293701	IR-13 NEAR CASPER	06-15-88	0915	--	3080
		IR-13 NEAR CASPER	08-24-88	1105	--	4750
IR-22	425347106304701	IR-22 NEAR CASPER	06-16-88	1003	--	6600
IR-25	425403106301601	IR-25 NEAR CASPER	06-22-88	0802	--	4200
		IR-25 NEAR CASPER	08-25-88	0810	--	2340
IR-21	425506106304801	IR-21 NEAR CASPER	06-16-88	0900	--	690
		IR-21 NEAR CASPER	09-02-88	1220	--	620
IR-20	425604106304701	IR-20 NEAR CASPER	06-15-88	1815	--	5180
		IR-20 NEAR CASPER	08-24-88	1755	--	1190
IR-38	425605106315401	IR-38 NEAR CASPER	06-24-88	1615	--	1120
IR-16	425626106264001	IR-16 NEAR CASPER	06-15-88	1325	--	3120
		IR-16 NEAR CASPER	08-24-88	1435	--	2950

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	PH, ONSITE (STAND-ARD UNITS)	TEMPER-ATURE, WATER, ONSITE (DEG C)	BARO-METRIC PRES-SURE, ONSITE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS, TOTAL (MG/L AS CACO3)	CALCIUM, DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
IR-11	06-14-88	7.6	20.0	--	12.8	--	1200	200	180	230	10
	08-24-88	8.6	16.5	--	8.0	--	220	55	20	37	3.2
IR-26	06-22-88	8.1	19.0	--	7.5	--	1200	110	230	290	9.4
	08-25-88	8.3	12.5	--	8.4	--	800	140	110	290	8.0
IR-12	06-14-88	8.2	17.5	--	10.4	--	840	140	120	260	7.1
	08-24-88	7.9	14.5	--	5.6	--	980	210	110	230	6.6
IR-13	06-15-88	7.5	13.5	--	4.5	--	1300	260	150	330	6.8
	08-24-88	7.9	14.0	--	6.3	--	1700	330	220	530	10
IR-22	06-16-88	8.0	19.5	--	11.1	--	2400	310	390	1000	9.1
IR-25	06-22-88	8.1	19.5	--	4.5	--	1600	170	280	530	11
	08-25-88	7.8	13.0	--	1.1	--	940	130	150	240	7.6
IR-21	06-16-88	7.3	19.0	--	3.6	--	240	59	23	50	4.8
	09-02-88	8.1	18.0	--	7.3	--	240	61	21	40	3.7
IR-20	06-15-88	8.2	19.0	--	6.7	--	540	120	59	920	10
	08-24-88	8.6	27.0	--	5.4	--	350	60	48	130	5.1
IR-38	06-24-88	8.2	31.0	--	7.5	--	400	86	46	96	9.4
IR-16	06-15-88	8.2	20.0	--	12.4	--	1200	230	150	400	7.4
	08-24-88	8.0	17.5	--	7.4	--	1000	210	120	370	8.4

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
IR-11	06-14-88	--	--	548	--	550	930	62	1.8	--	1940
	08-24-88	--	--	145	--	143	140	9.3	0.5	--	352
IR-26	06-22-88	--	--	290	--	287	1500	33	0.6	--	2350
	08-25-88	--	--	266	--	249	1100	31	0.7	--	1840
IR-12	06-14-88	--	--	263	--	255	960	34	0.8	--	1680
	08-24-88	--	--	269	--	267	1100	37	0.6	--	1860
IR-13	06-15-88	--	--	354	--	352	1300	110	2.0	--	2370
	08-24-88	--	--	448	--	446	2100	210	2.0	--	3670
IR-22	06-16-88	--	--	--	--	334	3700	120	0.8	--	5730
IR-25	06-22-88	--	--	272	--	270	2100	39	1.2	--	3300
	08-25-88	--	--	224	--	214	1200	23	0.3	--	1890
IR-21	06-16-88	--	--	--	--	158	180	10	0.4	--	422
	09-02-88	--	--	153	--	152	160	9.3	0.4	--	387
IR-20	06-15-88	--	--	--	--	206	2300	39	0.6	--	3570
	08-24-88	--	--	136	--	131	470	13	0.4	--	808
IR-38	06-24-88	--	--	212	--	215	380	18	1.3	--	764
IR-16	06-15-88	--	--	251	--	246	1600	27	0.7	--	2570
	08-24-88	--	--	256	--	245	1500	28	0.6	--	2390

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
IR-11	06-14-88	2.64	--	--	--	--	--	790	--	--	--
	08-24-88	0.48	--	--	--	--	--	60	--	--	--
IR-26	06-22-88	3.19	--	--	--	--	--	290	--	--	--
	08-25-88	2.50	--	--	--	--	--	260	--	--	--
IR-12	06-14-88	2.29	--	--	--	--	--	430	--	--	--
	08-24-88	2.52	--	--	--	--	--	400	--	--	--
IR-13	06-15-88	3.23	--	--	--	--	--	750	--	--	--
	08-24-88	4.99	--	--	--	--	--	1100	--	--	--
IR-22	06-16-88	7.80	--	--	--	--	--	1300	--	--	--
IR-25	06-22-88	4.48	--	--	--	--	--	840	--	--	--
	08-25-88	2.56	--	--	--	--	--	400	--	--	--
IR-21	06-16-88	0.57	--	--	--	--	--	70	--	--	--
	09-02-88	0.53	--	--	--	--	--	60	--	--	--
IR-20	06-15-88	4.86	--	--	--	--	--	430	--	--	--
	08-24-88	1.10	--	--	--	--	--	140	--	--	--
IR-38	06-24-88	1.04	--	--	--	--	--	170	--	--	--
IR-16	06-15-88	3.49	--	--	--	--	--	830	--	--	--
	08-24-88	3.25	--	--	--	--	--	760	--	--	--

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
IR-11	06-14-88	--	--	--	--	25	--	--	--	--	--
	08-24-88	--	--	--	--	<1	--	--	--	--	--
IR-26	06-22-88	--	--	--	--	39	--	--	--	--	--
	08-25-88	--	--	--	--	37	--	--	--	--	--
IR-12	06-14-88	--	--	--	--	250	--	--	--	--	--
	08-24-88	--	--	--	--	93	--	--	--	--	--
IR-13	06-15-88	--	--	--	--	310	--	--	--	--	--
	08-24-88	--	--	--	--	150	--	--	--	--	--
IR-22	06-16-88	--	--	--	--	980	--	--	--	--	--
IR-25	06-22-88	--	--	--	--	240	--	--	--	--	--
	08-25-88	--	--	--	--	120	--	--	--	--	--
IR-21	06-16-88	--	--	--	--	5	--	--	--	--	--
	09-02-88	--	--	--	--	3	--	--	--	--	--
IR-20	06-15-88	--	--	--	--	10	--	--	--	--	--
	08-24-88	--	--	--	--	2	--	--	--	--	--
IR-38	06-24-88	--	--	--	--	1	--	--	--	--	--
IR-16	06-15-88	--	--	--	--	18	--	--	--	--	--
	08-24-88	--	--	--	--	15	--	--	--	--	--

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	STATION NUMBER	STATION NAME	DATE	TIME	DIS-CHARGE, INST., CUBIC FEET PER SECOND	SPEC-CIFIC CON-DUCT-ANCE, ONSITE (US/CM)
IR-14	425628106282701	IR-14 NEAR CASPER	06-15-88	1100	--	6300
		IR-14 NEAR CASPER	08-24-88	1145	--	5050
IR-15	425659106271701	IR-15 NEAR CASPER	06-15-88	1200	--	1390
		IR-15 NEAR CASPER	08-24-88	1250	--	5280
--	425711106382301	CASPER CANAL NEAR CASPER (CC-2)	05-25-89	1635	--	530
IR-18	425752106290801	IR-18 NEAR CASPER	06-15-88	1607	--	5400
		IR-18 NEAR CASPER	08-24-88	1620	--	1390
		IR-18 NEAR CASPER	08-24-88	1645	--	1440
IR-24	425753106321301	IR-24 NEAR CASPER	06-21-88	1515	--	1590
		IR-24 NEAR CASPER	09-02-88	1125	--	745
IR-17	425758106272901	IR-17 NEAR CASPER	06-15-88	1420	--	530
		IR-17 NEAR CASPER	08-24-88	1520	--	6
IR-19	425830106305701	IR-19 NEAR CASPER	06-15-88	1700	--	540
		IR-19 NEAR CASPER	09-02-88	1043	--	630
--	425909106293701	BISHOP LATERAL NEAR CASPER (CC-3)	05-26-89	0920	--	510
IR-51	430012106295901	IR-51 NEAR CASPER	08-11-88	1145	--	2240
		IR-51 NEAR CASPER	09-02-88	0935	--	6050

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	PH, ONSITE (STANDARD UNITS)	TEMPERATURE, WATER, ONSITE (DEG C)	BAROMETRIC PRESSURE, ONSITE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS, TOTAL (MG/L AS CACO3)	CALCIUM, DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)
IR-14	06-15-88	8.3	18.0	--	14.4	--	1800	210	320	1000	11
	08-24-88	7.8	16.5	--	8.2	--	1600	230	250	740	10
IR-15	06-15-88	8.2	18.5	--	11.7	--	480	110	51	180	6.5
	08-24-88	8.0	15.0	--	8.6	--	1600	310	210	860	10
--	05-25-89	8.5	14.5	--	--	--	--	--	--	--	--
IR-18	06-15-88	8.0	21.0	--	11.6	--	1800	280	270	860	10
	08-24-88	8.0	26.5	--	4.7	--	460	95	54	140	8.0
	08-24-88	7.9	26.5	--	4.5	--	460	97	54	150	8.1
IR-24	06-21-88	7.9	26.0	--	--	--	570	110	72	230	9.5
	09-02-88	7.8	18.0	--	3.0	--	280	72	25	49	1.9
IR-17	06-15-88	7.8	19.5	--	10.6	--	200	53	17	34	5.1
	08-24-88	8.8	24.5	--	11.0	--	210	53	20	41	7.2
IR-19	06-15-88	8.0	27.0	--	4.8	--	200	53	16	34	10
	09-02-88	7.9	16.5	--	5.5	--	240	62	20	41	9.0
--	05-26-89	8.5	9.5	--	--	--	--	--	--	--	--
IR-51	08-11-88	7.9	18.0	--	6.8	--	920	170	120	230	5.4
	09-02-88	8.0	10.0	--	9.5	--	2300	350	350	740	8.0

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	BICARBONATE, WATER, DIS IT, ONSITE (MG/L AS HCO3)	CARBONATE, WATER, DIS IT, ONSITE (MG/L AS CO3)	ALKALINITY, WAT WH TOT FET, ONSITE (MG/L AS CACO3)	ALKALINITY, WAT DIS TOT IT, ONSITE (MG/L AS CACO3)	ALKALINITY, LAB (MG/L AS CACO3)	SULFATE, DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
IR-14	06-15-88	--	--	309	--	291	3700	86	0.6	--	5510
	08-24-88	--	--	364	--	364	2800	63	0.7	--	4310
IR-15	06-15-88	--	--	183	--	176	710	17	0.5	--	1190
	08-24-88	--	--	330	--	323	3100	51	0.8	--	4740
--	05-25-89	--	--	--	--	--	--	--	--	--	--
IR-18	06-15-88	--	--	294	--	280	3200	42	0.8	--	4840
	08-24-88	--	--	--	--	194	570	16	0.5	--	1000
	08-24-88	--	--	196	--	195	600	17	0.4	--	1040
IR-24	06-21-88	--	--	318	--	292	700	51	0.3	--	1360
	09-02-88	--	--	187	--	181	180	11	0.4	--	452
IR-17	06-15-88	--	--	161	--	139	130	9.7	0.4	--	346
	08-24-88	--	--	157	--	150	140	11	0.3	--	367
IR-19	06-15-88	--	--	150	--	134	130	9.2	0.4	--	343
	09-02-88	--	--	153	--	150	160	11	0.4	--	395
--	05-26-89	--	--	--	--	--	--	--	--	--	--
IR-51	08-11-88	--	--	242	--	244	1000	15	0.5	--	1690
	09-02-88	--	--	431	--	426	3300	33	0.8	--	5040

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	ARSENIC, TOTAL (UG/L AS AS)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
IR-14	06-15-88	7.50	--	--	--	--	--	830	--	--	--
	08-24-88	5.87	--	--	--	--	--	690	--	--	--
IR-15	06-15-88	1.61	--	--	--	--	--	460	--	--	--
	08-24-88	6.45	--	--	--	--	--	2000	--	--	--
--	05-25-89	--	--	--	--	--	--	--	--	--	--
IR-18	06-15-88	6.58	--	--	--	--	--	1700	--	--	--
	08-24-88	1.36	--	--	--	--	--	300	--	--	--
	08-24-88	1.42	--	--	--	--	--	320	--	--	--
IR-24	06-21-88	1.85	--	--	--	--	--	200	--	--	--
	09-02-88	0.61	--	--	--	--	--	80	--	--	--
IR-17	06-15-88	0.47	--	--	--	--	--	50	--	--	--
	08-24-88	0.50	--	--	--	--	--	60	--	--	--
IR-19	06-15-88	0.47	--	--	--	--	--	110	--	--	--
	09-02-88	0.54	--	--	--	--	--	70	--	--	--
--	05-26-89	--	--	--	--	--	--	--	--	--	--
IR-51	08-11-88	2.29	--	--	--	--	--	300	--	--	--
	09-02-88	6.86	--	--	--	--	--	830	--	--	--

Table 4.--Water-quality data from drains and canals--Continued

SITE NUMBER (FIG. 2 OR 3)	DATE	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	URANIUM, NATURAL, DIS-SOLVED (UG/L AS U)	H-2/ H-1 STABLE ISOTOPE RATIO PER MIL	O-18/ O-16 STABLE ISOTOPE RATIO PER MIL
IR-14	06-15-88	--	--	--	--	15	--	--	--	--	--
	08-24-88	--	--	--	--	6	--	--	--	--	--
IR-15	06-15-88	--	--	--	--	23	--	--	--	--	--
	08-24-88	--	--	--	--	83	--	--	--	--	--
--	05-25-89	--	--	--	--	1	--	--	--	--	--
IR-18	06-15-88	--	--	--	--	70	--	--	--	--	--
	08-24-88	--	--	--	--	8	--	--	--	--	--
	08-24-88	--	--	--	--	10	--	--	--	--	--
IR-24	06-21-88	--	--	--	--	6	--	--	--	--	--
	09-02-88	--	--	--	--	1	--	--	--	--	--
IR-17	06-15-88	--	--	--	--	1	--	--	--	--	--
	08-24-88	--	--	--	--	<1	--	--	--	--	--
IR-19	06-15-88	--	--	--	--	1	--	--	--	--	--
	09-02-88	--	--	--	--	1	--	--	--	--	--
--	05-26-89	--	--	--	--	1	--	--	--	--	--
IR-51	08-11-88	--	--	--	--	19	--	--	--	--	--
	09-02-88	--	--	--	--	43	--	--	--	--	--

Table 5.--Physical properties, dissolved major ions, and dissolved trace elements in ground-water samples collected by the U.S. Geological Survey from wells completed in the Cody Shale

[Depth of well, datum is land surface; uS/cm, microsiemens per centimeter at 25 degrees Celsius; °C, degrees Celsius; mg/L, milligrams per liter; ug/L, micrograms per liter; per mil, parts per thousand; --, no data; <, less than]

Station number	Location	Date	Time	Depth of well (feet)	Specific conductance, onsite (uS/cm)	Specific conductance, lab (uS/cm)	pH, onsite	pH, lab	Temperature, water, onsite (°C)
425147106271701	34-80-32ddd01	05-23-89	0955	40	4,400	4,510	7.3	7.5	10.5
425145106265501	33-80-04bab01	05-23-89	1345	25	2,430	4,710	7.6	7.6	10.5
425128106265901	33-80-04bca01	05-24-89	1030	60	2,880	2,840	7.7	7.7	9.5
425138106261201	33-80-04aac01	05-23-89	1430	25	715	696	7.6	7.9	11.0
425127106264201	33-80-04bca01	05-23-89	1550	16	4,180	--	7.4	--	13.0
		05-23-89	1545	16	4,180	4,040	7.5	7.7	13.0
425142106261601	33-80-04aab01	05-23-89	1705	30	2,340	--	7.6	--	11.0
		05-23-89	1715	30	2,340	2,290	7.6	7.8	11.0
425156106271801	34-80-32dda01	05-24-89	0900	40	2,150	2,140	7.6	7.6	13.5
425438106305901	34-81-14d	05-24-89	1300	--	6,300	6,170	7.1	7.2	10.0
		05-24-89	1310	--	6,300	--	7.1	--	10.0
425123106260901	33-80-04add01	05-24-89	1425	42	2,860	2,770	7.7	7.7	10.0
425145106271101	33-80-04	05-24-89	1700	--	5,700	4,270	7.4	7.5	9.0
425121106255401	33-80-03cbb01	05-24-89	1615	40	2,840	2,340	7.7	8.0	9.0
424844106334801	33-81-21caa01	05-25-89	1500	80	7,900	--	7.7	--	10.0
		05-25-89	1440	80	7,900	--	7.7	--	10.0
		05-25-89	1355	80	7,900	5,570	7.7	7.8	10.0
425133106271101	33-80-04bbc01	05-25-89	1720	28	3,350	3,370	7.6	7.7	11.0
425241106272801	34-80-29ddc01	05-25-89	1845	80	975	942	7.7	7.9	9.0
423543106385601	30-82-03caa01	05-26-89	0715	--	2,950	2,910	7.8	7.8	11.0

Table 5.--Physical properties, dissolved major ions, and dissolved trace elements in ground-water samples collected by the U.S. Geological Survey from wells completed in the Cody Shale--Continued

Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Alkalinity, onsite (mg/L as $CaCO_3$)	Alkalinity, lab (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Solids, residue at 180 C, dissolved (mg/L)	Nitrogen, NO_2+NO_3, dissolved (mg/L as N)	Arsenic, dissolved (ug/L as As)	Boron, dissolved (ug/L as B)
350	250	440	17	340	350	2,200	190	3,970	56	<1	570
220	140	720	7.3	360	370	2,100	240	3,850	13	<1	1,100
150	76	410	5.7	360	350	1,100	130	2,170	15	<1	610
74	28	39	3.3	230	220	140	9.7	450	.83	<1	60
--	--	--	--	490	--	--	--	--	--	--	--
190	150	630	9.8	490	490	2,000	67	3,380	4.8	<1	910
--	--	--	--	260	--	--	--	--	--	--	--
160	84	270	6.3	260	260	920	96	1,750	17	<1	400
190	95	180	6.6	430	430	860	30	1,780	3.2	<1	450
450	150	940	7.3	430	440	3,300	130	5,600	49	<1	660
--	--	--	--	430	--	--	--	--	--	--	--
140	85	420	11	240	240	1,200	83	2,150	5.2	2	660
240	220	560	4.7	600	600	1,800	170	3,600	24	<1	1,300
170	88	250	8.4	310	300	960	79	1,850	10	2	540
--	--	--	--	180	--	--	--	--	--	--	--
--	--	--	--	180	--	--	--	--	--	--	--
460	180	720	12	180	17	3,100	110	5,140	69	<1	220
190	200	370	9.9	420	420	1,400	150	2,790	20	<1	680
78	43	68	3.2	210	210	280	15	645	.67	<1	260
290	120	280	9.1	320	310	1,500	24	2,590	8.1	<1	620

Table 5.--Physical properties, dissolved major ions, and dissolved trace elements in ground-water samples collected by the U.S. Geological Survey from wells completed in the Cody Shale--Continued

Cadmium, dissolved (ug/L as Cd)	Chromium, dissolved (ug/L as Cr)	Copper, dissolved (ug/L as Cu)	Lead, dissolved (ug/L as Pb)	Molybdenum, dissolved (ug/L as Mo)	Selenium, dissolved (ug/L as Se)	Vanadium, dissolved (ug/L as V)	Zinc, dissolved (ug/L as Zn)	Deuterium hydrogen, stable isotope ratio per mil	Oxygen-18/ oxygen-16 stable isotope ratio per mil
<1	27	13	<1	6	1,300	4.0	30	<109.0	<13.65
<1	2	5	<1	18	500	6.0	140	<110.0	<13.65
1	3	8	2	14	340	6.0	30	<116.0	<14.25
<1	<1	67	<1	2	6	1.0	80	<117.0	<14.55
--	--	--	--	--	2	--	--	--	--
<1	2	180	<1	17	280	4.0	160	<113.0	<13.90
--	--	--	--	--	420	--	--	--	--
<1	2	4	<1	10	440	1.0	40	<117.0	<14.65
<1	5	4	1	10	90	<1.0	800	<110.5	<13.45
<1	2	4	<1	3	1,400	3.0	60	<125.0	<15.45
--	--	--	--	--	1,500	--	--	--	--
<1	2	3	<1	46	250	4.0	20	<111.5	<13.75
<1	2	49	<1	14	280	3.0	20	<116.5	<14.60
<1	2	7	<1	48	440	3.0	10	<111.5	<13.50
--	--	--	--	--	34	--	--	--	--
--	--	--	--	--	620	--	--	--	--
<1	3	3	<1	8	640	<1.0	20	<126.5	<15.95
<1	2	12	<1	10	400	4.0	240	<108.0	<13.30
<1	2	12	<1	23	18	<1.0	10	<114.0	<14.35
<1	3	3	<1	2	63	2.0	10	<116.5	<14.75

Table 6.--Specific conductance and dissolved selenium in ground-water samples collected by the Natrona County Department of Health

[Depth of well, datum is land surface; μS/cm, microsiemens per centimeter at 25 degrees Celsius; μg/L, micrograms per liter; --, no data; <, less than]

County sample identification No.	Location			Depth of well (feet)	Specific conductance, onsite (μS/cm)	Selenium, dissolved (μg/L)
	Township north	Range west	Section			
89004251	33	80	4	16	4,690	99
89004252	34	80	32	40	2,210	25
89004253	34	80	32	12	2,790	25
89004254	30	82	9	15	550	<5
89004255	32	81	28	15	930	<5
89004256	33	81	27	110	1,630	<5
89004257	34	81	14	60	6,100	1,400
89004258	33	80	4	40	1,130	8
89004259	--	--	--	500	2,840	6
89004260	34	80	32	10	3,960	41
89004572	33	80	4	15	1,060	5
89004573	34	80	34	20	930	<5
89004574	33	80	4	28	3,310	310
89004575	34	81	14	60	6,380	1,700
89004576	33	80	4	16	3,450	170
89004577	--	--	--	25	1,730	310
89004578	35	80	7	20	2,340	11
89004579	--	--	--	80	5,380	160
89004580	33	80	3	30	2,650	10
89004581	33	80	4	30	660	<5
89004582	33	80	4	12	1,220	<5
89004583	33	80	4	60	3,520	490
89004584	33	80	4	18	8,020	250
89004585	33	80	3	40	2,080	290
89004586	33	80	4	42	3,010	240
89004587	--	--	--	80	3,010	35
89004592	34	81	2	3,000	2,360	<5
89004593	--	--	--	35	950	<5
89004594	--	--	--	250	1,770	53
89004595	--	--	--	--	4,270	6
89004596	34	81	23	1,000	5,810	5
89004597	33	80	4	--	2,140	<5
89004598	--	--	--	43	800	5
89004599	33	80	4	30	1,020	6
89004600	33	80	4	30	1,730	170
89004601	35	81	35	25	2,960	7
89004602	33	80	4	25	3,630	300
89004603	--	--	--	42	1,880	90

Table 6.--Specific conductance and dissolved selenium in ground-water samples collected by the Natrona County Department of Health--Continued

County sample identification No.	Location			Depth of well (feet)	Specific conductance, onsite (μS/cm)	Selenium, dissolved (μg/L)
	Township north	Range west	Section			
89004604	--	--	--	600	3,040	5
89004605	34	80	32	40	2,840	390
89004606	34	81	27	spring	3,250	71
89004607	34	80	34	--	796	13
89004608	--	--	--	75	1,510	63
89004609	34	80	34	15	829	<5
89004834	33	80	3	--	--	9
89004835	33	80	4	--	--	8
89004836	34	81	23	--	--	21

Table 7.--Dissolved major-ion and trace-element concentrations in pore water from core samples of the Cody Shale near Rasmus Lee Lake

[uS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; ug/L, micrograms per liter; --, no data; <, less than]

Site number (fig. 4)	Station number	Date	Time	Depth below land surface (feet)	Specific conductance, onsite (uS/cm)	pH, onsite	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Alkalinity (mg/L as $CaCO_3$)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)
Ras-9	424415106364301	11-17-88	1500	19.5-20.5	7,500	7.9	470	490	910	330	3,700	100
	424415106364301	11-18-88	1230	4.0- 5.0	5,100	7.4	540	200	600	580	3,700	210
	424415106364301	11-18-88	1500	9.5-10.5	6,800	7.8	460	190	1,200	450	4,600	170
	424415106364301	11-21-88	1000	22.5-23.5	9,250	7.9	440	490	1,600	340	2,700	130
	424415106364301	11-21-88	1130	15.5-16.5	6,250	7.9	470	360	780	--	4,000	98
Ras-4B	424442106371001	01-31-89	1030	14.5-15.5	23,000	7.7	600	660	4,700	190	7,000	740
	424442106371001	01-31-89	1345	18.5-19.5	20,500	7.8	600	660	4,700	430	6,900	720
	424442106371001	02-01-89	1000	8.0- 9.0	10,000	8.0	21	4.2	15	340	2,700	410
	424442106371001	02-01-89	1330	29.5-30.5	19,500	7.8	510	590	5,000	320	9,200	950
Ras-9	424415106364301	02-02-89	1100	1.5- 2.0	9,750	8.1	490	420	2,800	250	--	--
Ras-3	424412106364201	02-02-89	1430	3.5- 4.0	4,100	7.9	410	390	210	160	2,800	54

Table 7.--Dissolved major-ion and trace-element concentrations in pore water from core samples of the Cody Shale near Rasmus Lee Lake--Continued

Site number (fig. 4)	Station number	Fluoride, dissolved (mg/L as F)	Bromide, dissolved (mg/L)	Silica, dissolved (mg/L as SiO_2)	Nitrate, dissolved (mg/L as N)	Phosphorous, orthophosphate, dissolved (mg/L)	Barium, dissolved (ug/L)	Beryllium, dissolved (ug/L)	Cadmium, dissolved (ug/L as Cd)	Chromium, dissolved (ug/L as Cr)	Cobalt, dissolved (ug/L)	Copper, dissolved (ug/L as Cu)
Ras-9	424415106364301	9.8	0.0	25	11	<0.01	100	<50	<100	<500	<300	<1,000
	424415106364301	6.6	0.0	25	3.0	<.01	100,000	<50	<100	<500	<300	<1,000
	424415106364301	8.4	0.0	38	2.2	<.01	<100	<50	<100	<500	<300	<1,000
	424415106364301	10	0.0	58	18	<.01	<100	<50	<100	<500	<300	<1,000
	424415106364301	8.8	0.0	41	3.3	<.01	<100	<50	<100	<500	<300	<1,000
Ras-4B	424442106371001	23	<1.6	24	1,900	<1.60	51	<20	<40	<200	140	410
	424442106371001	25	<1.6	24	1,800	<1.60	57	<20	<40	<200	<120	410
	424442106371001	13	<1.6	15	820	<1.60	95	<.5	<1	<5	<3	<10
	424442106371001	23	<1.6	18	1,300	<1.60	65	<20	48	<200	<120	<400
Ras-9	424415106364301	--	--	12	--	--	75	<20	<40	<200	<120	440
Ras-3	424412106364201	12	<1.6	22	5.3	<1.60	600	<20	<40	<200	<120	<400

Table 7.--Dissolved major-ion and trace-element concentrations in pore water from core samples of the Cody Shale near Rasmus Lee Lake--Continued

Site number (fig. 4)	Station number	Iron, dissolved (ug/L as Fe)	Lead, dissolved (ug/L)	Lithium, dissolved (ug/L)	Manganese, dissolved (ug/L)	Molybdenum, dissolved (ug/L)	Nickel, dissolved (ug/L)	Selenium, dissolved (ug/L)	Silver, dissolved (ug/L)	Strontium, dissolved (ug/L)	Vanadium, dissolved (ug/L)	Zinc, dissolved (ug/L)
Ras-9	424415106364301	310	<1,000	1,300	670	<1,000	230	<150	<1,000	7,700	<600	490
	424415106364301	100	<1,000	<400	1,200	<1,000	450	<100	<1,000	4,700	<600	<300
	424415106364301	380	<1,000	950	730	<1,000	450	<100	<1,000	4,200	<600	<300
	424415106364301	<300	<1,000	1,000	170	<1,000	170	<150	<1,000	7,200	<600	440
	424415106364301	350	<1,000	980	1,300	<1,000	230	<100	<1,000	5,900	<600	<300
Ras-4B	424442106371001	<120	<400	3,900	720	<400	<400	30,000	60	16,000	<240	410
	424442106371001	<120	<400	3,900	560	<400	<400	22,000	60	18,000	<240	410
	424442106371001	150	<10	<4	5	<10	<10	8,000	<1	80	<6.0	20
	424442106371001	<120	<400	4,600	51	<400	<400	8,000	60	13,000	<240	300
Ras-9	424415106364301	<120	<400	410	<40	<400	<400	2,200	50	7,400	<240	260
Ras-3	424412106364201	<120	<400	160	<40	<400	<400	76	<40	3,000	<240	340

Table 8.--Standards of accuracy for trace-residue analyses in biological tissue samples

[ICP, inductively coupled plasma spectroscopy; AA, atomic absorption spectroscopy; GC, gas chromatography]

Method	Analyte	Acceptable recovery range of spiked analyte (percent)
ICP	Boron	80-120
	Cadmium	80-120
	Lead	80-120
AA	Selenium	85-115
	Arsenic	85-115
GC	Organochlorine pesticides	80-120

Table 9.--Criteria for laboratory analyses of duplicate biological tissue samples

[ICP, inductively coupled plasma spectroscopy; AA, atomic absorption spectroscopy; LOD, limit of detection; >, greater than; from John Moore, Patuxent Analytical Control Facility Reference Manual, written commun., 1990]

Analyte	Concentration range[1] (micrograms per gram)	± 95-percent confidence interval (percent)	Average relative percentage difference[2] (percent)
Metals (ICP)[3]	2-10 x LOD	30	17.3
Metals (ICP)[3]	> 10 x LOD	15	8.64
Metals (AA)[4]	2-10 x LOD	20	11.5
Metals (AA)[4]	> 10 x LOD	10	5.75
Organochlorine pesticides	2-10 x LOD	30	17.3
Organochlorine pesticides	> 10 x LOD	15	8.64

[1]The range, in multiples of the limit of detection, in which the sample falls. For samples with a concentration less than two times the limit of detection, the 95-percent confidence interval is assumed to be ± 2 x LOD.

[2]The relative percentage difference needed to produce the stated 95-percent confidence interval listed in the table. This is the average of all the relative percentage differences of a given laboratory in a given matrix.

[3]ICP analyses included boron, cadmium, and lead.

[4]AA analyses included selenium and arsenic.

Table 10.--List of analyses of biological samples for organochlorine pesticides and polychlorinated biphenyls

Compound abbreviation	Compound name
HCB	Hexachlorobutadiene
α-BHC	Alpha or hexachlorocyclohexane
γ-BHC	Gamma hexachlorocyclohexane
β-BHC	Beta hexachlorocyclohexane
δ-BHC	Deltahexachlorocyclohexane
Oxychlordane	Oxychlordane
Hept. Epox.	Heptachlor Epoxide
γ-Chlordane	Gamma Chlordane
t-Nonachlor	t-Nonachlor
Toxaphene	Toxaphene
PCBs (total)	Polychlorinated biphenyls (total)
o, p'-DDE	o, p'-1,1-BIS(chlorophenyl)-2,2-dichlorethene
α-Chlordane	Alpha-chlordane
p, p'-DDE	p, p'-(1,1-BIS (chlorophenyl)-2,2-dichloroethene)
Dieldrin	Dieldrin
o,p'-DDD	o, p'-(1,1-BIS (chlorophenyl)-2,2-dichloroethene)
Endrin	Endrin
cis-nonachlor	cis-nonachlor
o, p'-DDT	o, p'-(1,1-BIS (chlorophenyl)-2,2,2-trichloroethene)
p, p'-DDD	p, p'-(1,1-BIS (chlorophenyl)-2,2-dichloroethene)
p, p'-DDT	p, p'-(1,1-BIS (chlorophenyl)-2,2,2-trichloroethene)
Mirex	Mirex

Table 11.--Organochlorine pesticide and polychlorinated biphenyl concentrations in biota (wet weight)
[--, no data]

Sample code	Site	Matrix	HCB	B-BHC	Oxychlor-dane	r-chlor-dane	PCBs	p,p'-DDE
GLEGE-1	Goose Lake	Eared grebe egg	--	--	--	--	--	0.43
GLEGE-2	Goose Lake	Eared grebe egg	--	--	--	--	--	.04
GLEGE-2	Goose Lake	Eared grebe egg	--	--	--	--	--	.38
GLEGE-4	Goose Lake	Eared grebe egg	--	--	--	--	--	.29
GLEGE-5	Goose Lake	Eared grebe egg	--	--	--	--	--	.18
GLEGE-6	Goose Lake	Eared grebe egg	--	--	--	--	--	.36
GLEGE-6	Goose Lake	Duplicate eared grebe egg	--	--	--	--	--	.36
GLEGE-7	Goose Lake	Eared grebe egg	--	--	--	--	--	.40
GLEGE-8	Goose Lake	Eared grebe egg	--	--	--	--	--	.44
GLEGE-9	Goose Lake	Eared grebe egg	--	--	--	--	--	.37
GLEGE-10	Goose Lake	Eared grebe egg	--	--	--	--	--	.33
GLEGE-11	Goose Lake	Eared grebe egg	--	--	--	--	--	.35
GLEGE-12	Goose Lake	Eared grebe egg	--	--	--	--	--	.47
GLEGE-13	Goose Lake	Eared grebe egg	0.01	0.06	0.03	0.05	--	12
GLEGE-14	Goose Lake	Eared grebe egg	--	.05	.03	.05	--	11
GLEGE-15	Goose Lake	Eared grebe egg	.01	--	--	--	--	.43
GLEGE-16	Goose Lake	Eared grebe egg	--	--	--	--	--	.06
GLEGE-17	Goose Lake	Eared grebe egg	.03	--	--	--	--	.11
GLEGE-18	Goose Lake	Eared grebe egg	--	--	--	--	--	.17
GLEGE-19	Goose Lake	Eared grebe egg	.14	--	--	--	--	.99
GLEGE-20	Goose Lake	Eared grebe egg	--	--	--	--	--	.10
GLEGE-47	Goose Lake	Eared grebe egg	--	--	--	--	--	.17
GLEGE-48	Goose Lake	Eared grebe egg	--	--	--	--	--	.33
GLEGE-49	Goose Lake	Eared grebe egg	--	--	--	--	--	.12
GLEGE-50	Goose Lake	Eared grebe egg	--	--	.01	--	--	.71
GLEGE-51	Goose Lake	Eared grebe egg	--	--	--	--	--	.21
GLEGE-52	Goose Lake	Eared grebe egg	--	--	--	--	--	.37
GLEGE-54	Goose Lake	Eared grebe egg	--	--	--	--	--	.08
GLEGE-55	Goose Lake	Eared grebe egg	--	.05	--	--	--	.03
GLEGE-56	Goose Lake	Eared grebe egg	--	--	--	--	--	.75
GLEGE-57	Goose Lake	Eared grebe egg	--	.02	--	.04	--	.60

Table 11.--Organochlorine pesticide and polychlorinated biphenyl concentrations in biota (wet weight)--Continued

Sample code	Site	Matrix	HCB	B-BHC	Oxychlor-dane	r-chlor-dane	PCBs	p,p'-DDE
GLEGE-58	Goose Lake	Eared grebe egg	--	0.01	--	--	--	0.36
GLEGE-59	Goose Lake	Eared grebe egg	--	--	--	--	--	.88
GLEGE-60	Goose Lake	Eared grebe egg	--	--	--	--	--	.05
GLEGE-61	Goose Lake	Eared grebe egg	0.02	--	--	--	--	.04
GLEGE-62	Goose Lake	Eared grebe egg	--	--	--	--	--	.13
GLEGE-63	Goose Lake	Eared grebe egg	--	--	--	--	--	.06
GLEGE-64	Goose Lake	Eared grebe egg	--	--	--	--	--	.16
GLEGE-65	Goose Lake	Eared grebe egg	--	--	--	--	--	.09
GLEGE-66	Goose Lake	Eared grebe egg	--	--	--	--	--	.04
GLEGE-67	Goose Lake	Eared grebe egg	--	--	--	--	--	.30
IPF-1	Illco Pond	Carp	--	--	--	--	--	--
IPF-2	Illco Pond	Carp	--	--	--	--	--	.01
IPF-2	Illco Pond	Duplicate carp	--	--	--	--	--	.01
IPF-3	Illco Pond	Carp	--	--	--	--	--	--
33MF1	Thirty-Three Mile Reservoir	Carp	--	--	--	--	--	.02
33MF2	Thirty-Three Mile Reserroir	Carp	--	--	--	--	--	.01
33MF7	Thirty-Three Mile Reservoir	Carp	--	--	--	--	--	.02
33MF8	Thirty-Three Mile Reserroir	Carp	--	--	--	--	--	.01
GLEGCL-1	Goose Lake	Eared grebe liver	--	--	--	--	--	.23
GLEGCL-2	Goose Lake	Eared grebe liver	--	--	--	--	--	.21
GLJEG03	Goose Lake	Eared grebe carcass	--	--	--	--	--	.09
GLJEG04	Goose Lake	Eared grebe carcass	--	--	--	--	--	.15
GLJEG05	Goose Lake	Eared grebe carcass	--	--	--	--	--	.02
GLGAD01	Goose Lake	Gadwell carcass	--	--	--	--	--	.02
GLSCP01	Goose Lake	Scaup carcass	--	--	--	--	0.30	.09
RLCGE79	Rasmus Lee Lake	Canada goose egg	--	--	--	--	--	--
RLCGE80	Rasmus Lee Lake	Canada goose egg	--	--	--	--	--	--
RLCGE82	Rasmus Lee Lake	Canada goose egg	--	--	--	--	--	--
RLCGE84	Rasmus Lee Lake	Canada goose egg	--	--	--	--	--	.01
RLCGE88	Rasmus Lee Lake	Canada goose egg	--	--	--	--	--	--
RLCGE97	Rasmus Lee Lake	Canada goose egg	--	--	--	--	--	--

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89

[All concentrations in micrograms per gram; <, less than reporting limit; Cr, Creek; juv, juvenile; spp., species; --, no data]

Sample number	Species	Matrix	Site	Date	Moisture (percent)
33MAQV5	Potamogeton	Composite	Thirtythree Mile Reservoir	07-01-88	83.6
33MAQV6	Potamogeton	Composite	Thirtythree Mile Reservoir	07-01-88	81.8
33MAQV7	Potamogeton	Composite	Thirtythree Mile Reservoir	08-06-89	85.9
33MAQV8	Potamogeton	Composite	Thirtythree Mile Reservoir	08-06-89	81.2
33MAQV9	Potamogeton	Composite	Thirtythree Mile Reservoir	08-06-89	80.2
33MAQV-1	Potamogeton	Composite	Thirtythree Mile Reservoir	06-08-88	88.4
33MAQV-3	Potamogeton	Composite	Thirtythree Mile Reservoir	06-30-88	91.4
GLAQV12	Potamogeton	Composite	Goose Lake	07-01-88	83.0
GLAQV13	Potamogeton	Composite	Goose Lake	07-01-88	85.1
GLAQV14	Potamogeton	Composite	Goose Lake	07-01-88	84.5
GLAQV-1	Potamogeton	Composite	Goose Lake	05-26-88	81.1
GLAQV-2	Potamogeton	Composite	Goose Lake	05-26-88	83.6
GLAQV-3	Potamogeton	Composite	Goose Lake	05-26-88	85.3
GLAQV-4	Potamogeton	Composite	Goose Lake	05-26-88	86.0
GLAQV-6	Potamogeton	Composite	Goose Lake	06-30-88	87.0
GLAQV-7	Potamogeton	Composite	Goose Lake	06-30-88	86.5
GLAQV-8	Potamogeton	Composite	Goose Lake	06-30-88	89.3
GLAQV-9	Potamogeton	Composite	Goose Lake	06-30-88	89.0
GLAQV-10	Potamogeton (seeds)	Composite	Goose Lake	07-13-88	87.7
GLAQV-11	Potamogeton (seeds)	Composite	Goose Lake	07-13-88	84.3
IPAQV-1	Potamogeton	Composite	Illco Pond	06-02-88	86.9
IPAQV-2	Potamogeton	Composite	Illco Pond	06-02-88	84.6
IPAQV-3	Potamogeton	Composite	Illco Pond	06-02-88	84.9
IPAQV-4	Potamogeton	Composite	Illco Pond	06-30-88	86.9
IPAQV-5	Potamogeton	Composite	Illco Pond	06-30-88	89.8
IPAQV-6	Potamogeton	Composite	Illco Pond	06-30-88	83.1
IPAQV-7	Potamogeton	Composite	Illco Pond	06-30-88	87.9
OPAQV-1	Potamogeton	Composite	Oxbow Pond	06-06-88	86.6
OPAQV-2	Potamogeton	Composite	Oxbow Pond	07-06-88	86.5
OPAQV-3	Potamogeton	Composite	Oxbow Pond	07-14-88	90.6
OPAQV-4	Potamogeton	Composite	Oxbow Pond	07-14-88	87.3
RLAQV10	Potamogeton	Composite	Rasmus Lee Lake	07-01-88	88.6
RLAQV11	Potamogeton	Composite	Rasmus Lee Lake	07-01-88	85.9
RLAQV-1	Potamogeton	Composite	Rasmus Lee Lake	05-26-88	92.1
RLAQV-2	Potamogeton	Composite	Rasmus Lee Lake	05-26-88	90.1
RLAQV-3	Potamogeton	Composite	Rasmus Lee Lake	05-26-88	92.5
RLAQV-4	Potamogeton	Composite	Rasmus Lee Lake	05-26-88	91.3
RLAQV-5	Potamogeton	Composite	Rasmus Lee Lake	07-06-88	85.1
RLAQV-6	Potamogeton	Composite	Rasmus Lee Lake	07-13-88	86.6
RLAQV-7	Potamogeton	Composite	Rasmus Lee Lake	07-13-88	87.4

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
33MAQV5	6280	2480	<20.0	1.85	118	0.560	199	<0.800
33MAQV6	6100	1120	<20.0	1.55	68.0	0.353	213	<0.800
33MAQV7	4870	3880	<45.0	1.66	68.3	<0.300	590	<0.700
33MAQV8	5620	5420	<45.0	2.31	98.9	<0.300	672	<0.700
33MAQV9	6330	7360	<45.0	2.55	146	0.386	393	<0.700
33MAQV-1	6340	410	<25.0	1.68	20.7	<0.120	177	<0.500
33MAQV-3	6880	871	<25.0	1.54	43.9	<0.120	183	<0.500
GLAQV12	12600	496	<45.0	2.81	5.66	<0.300	641	<0.700
GLAQV13	10800	868	<45.0	1.98	8.26	<0.300	300	<0.700
GLAQV14	10100	522	<45.0	2.30	5.57	<0.300	455	<0.700
GLAQV-1	10000	530	<25.0	4.67	8.45	<0.120	283	0.856
GLAQV-2	9020	105	<25.0	7.00	4.01	<0.120	322	0.582
GLAQV-3	8800	88.7	<25.0	4.98	3.57	<0.120	298	<0.500
GLAQV-4	9520	299	<25.0	2.64	5.48	<0.120	282	<0.500
GLAQV-6	14200	352	<25.0	5.29	9.26	<0.120	582	<0.500
GLAQV-7	16400	184	<25.0	5.73	8.77	<0.120	818	<0.500
GLAQV-8	17200	289	38.8	5.01	8.20	<0.120	625	<0.500
GLAQV-9	12800	257	<25.0	5.31	8.12	<0.120	585	<0.500
GLAQV-10	14300	479	<25.0	1.89	8.89	0.210	111	<0.500
GLAQV-11	13700	1060	<25.0	2.79	14.1	<0.120	126	0.716
IPAQV-1	10100	618	<25.0	2.89	41.4	<0.120	349	0.758
IPAQV-2	11200	158	<25.0	2.18	15.1	<0.120	487	<0.500
IPAQV-3	12000	91.9	<25.0	1.75	10.9	<0.120	616	<0.500
IPAQV-4	10500	572	<25.0	1.80	75.5	<0.120	661	<0.500
IPAQV-5	9020	957	32.0	2.32	112	<0.120	542	<0.500
IPAQV-6	9810	358	<25.0	0.93	38.8	<0.120	320	<0.500
IPAQV-7	10400	1650	<25.0	3.08	100	0.139	429	<0.500
OPAQV-1	9840	69.1	<25.0	0.15	8.53	<0.120	517	1.430
OPAQV-2	9280	45.7	<25.0	0.15	8.39	<0.120	584	0.799
OPAQV-3	7600	<15.0	<25.0	0.15	17.1	<0.120	536	<0.500
OPAQV-4	9000	21.0	<25.0	1.60	17.4	<0.120	562	<0.500
RLAQV10	17700	353	<45.0	44.8	5.10	<0.300	787	<0.700
RLAQV11	16400	415	<45.0	40.4	5.53	<0.300	817	<0.700
RLAQV-1	20500	207	<25.0	7.09	3.84	<0.120	379	<0.500
RLAQV-2	18900	197	<25.0	4.68	3.64	<0.120	364	<0.500
RLAQV-3	20600	320	<25.0	7.04	5.39	<0.120	371	<0.500
RLAQV-4	18200	215	<25.0	4.52	3.67	<0.120	354	<0.500
RLAQV-5	16900	587	<25.0	7.94	9.05	<0.120	588	<0.500
RLAQV-6	13200	459	<25.0	5.99	7.13	<0.120	487	<0.500
RLAQV-7	15800	1080	<25.0	12.2	15.5	<0.120	554	<0.500

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chro-mium	Cobalt	Copper	Iron	Lead	Manga-nese	Mercury	Molyb-denum
33MAQV5	1.00	2.50	2.50	3500	<11.0	451	<0.040	<5.00
33MAQV6	1.00	6.28	2.50	1990	<11.0	411	<0.040	<5.00
33MAQV7	5.15	4.57	6.51	3090	<8.00	557	<0.030	<8.00
33MAQV8	7.20	6.75	6.98	4700	<8.00	930	0.041	<8.00
33MAQV9	10.2	7.94	7.60	7670	<8.00	796	<0.030	<8.00
33MAQV-1	0.95	3.97	6.75	1230	<15.0	292	0.023	<12.0
33MAQV-3	0.95	<3.00	5.10	1750	<15.0	365	<0.020	<12.0
GLAQV12	<3.00	<3.50	<4.00	280	<8.00	157	<0.030	<8.00
GLAQV13	<3.00	<3.50	<4.00	430	<8.00	56.3	<0.030	<8.00
GLAQV14	<3.00	<3.50	<4.00	317	<8.00	134	<0.030	<8.00
GLAQV-1	<1.90	<3.00	<3.40	577	<15.0	437	0.047	<12.0
GLAQV-2	<1.90	3.79	4.37	138	<15.0	473	0.024	<12.0
GLAQV-3	<1.90	<3.00	<3.40	153	<15.0	359	0.054	<12.0
GLAQV-4	<1.90	<3.00	<3.40	314	<15.0	376	0.044	<12.0
GLAQV-6	<1.90	<3.00	<3.40	358	<15.0	2500	<0.020	<12.0
GLAQV-7	<1.90	4.65	4.33	252	<15.0	2390	<0.020	<12.0
GLAQV-8	<1.90	<3.00	<3.40	316	<15.0	2070	<0.020	<12.0
GLAQV-9	<1.90	5.36	<3.40	291	<15.0	2510	<0.020	<12.0
GLAQV-10	<1.90	<3.00	5.71	562	<15.0	90.9	<0.020	<12.0
GLAQV-11	2.08	<3.00	5.79	967	<15.0	89.8	<0.020	<12.0
IPAQV-1	<1.90	<3.00	<3.40	3090	<15.0	1320	<0.020	<12.0
IPAQV-2	<1.90	3.27	<3.40	1790	<15.0	884	0.041	<12.0
IPAQV-3	<1.90	3.37	<3.40	741	<15.0	720	0.031	<12.0
IPAQV-4	<1.90	6.56	<3.40	1060	<15.0	1580	0.053	<12.0
IPAQV-5	<1.90	3.71	<3.40	1610	<15.0	3350	<0.020	<12.0
IPAQV-6	<1.90	<3.00	<3.40	761	<15.0	684	<0.020	<12.0
IPAQV-7	2.14	<3.00	<3.40	2600	<15.0	1170	<0.020	<12.0
OPAQV-1	<1.90	<3.00	8.62	638	<15.0	58.4	<0.020	<12.0
OPAQV-2	<1.90	<3.00	<3.40	296	<15.0	39.4	<0.020	<12.0
OPAQV-3	<1.90	<3.00	<3.40	171	<15.0	40.4	<0.020	<12.0
OPAQV-4	<1.90	<3.00	<3.40	182	<15.0	41.4	<0.020	<12.0
RLAQV10	<3.00	<3.50	6.92	277	<8.00	759	<0.030	<8.00
RLAQV11	<3.00	<3.50	6.04	346	<8.00	671	<0.030	<8.00
RLAQV-1	<1.90	<3.00	8.47	291	<15.0	49.6	<0.020	<12.0
RLAQV-2	<1.90	<3.00	7.36	292	<15.0	42.0	<0.020	<12.0
RLAQV-3	<1.90	<3.00	6.68	452	<15.0	60.9	<0.020	<12.0
RLAQV-4	<1.90	<3.00	6.07	284	<15.0	44.5	<0.020	<12.0
RLAQV-5	<1.90	<3.00	3.44	739	<15.0	48.8	<0.020	<12.0
RLAQV-6	<1.90	5.35	<3.40	521	<15.0	87.3	<0.020	<12.0
RLAQV-7	<1.90	<3.00	<3.40	1290	<15.0	166	<0.020	<12.0

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
33MAQV5	5.85	2.30	<12.0	468	--	<25.0	1.25	28.5
33MAQV6	2.50	2.84	<12.0	285	--	<25.0	1.25	29.2
33MAQV7	5.51	1.81	<13.0	167	--	<40.0	13.5	32.1
33MAQV8	8.51	2.25	<13.0	237	--	<40.0	17.9	43.9
33MAQV9	11.5	1.62	<13.0	374	--	<40.0	22.3	42.7
33MAQV-1	2.25	0.33	< 7.20	104	--	<20.0	2.86	36.9
33MAQV-3	2.25	0.10	<7.20	150	--	<20.0	3.61	24.8
GLAQV12	<4.00	9.00	<13.0	166	--	<40.0	4.27	16.0
GLAQV13	<4.00	3.32	<13.0	162	--	<40.0	4.01	20.8
GLAQV14	<4.00	9.54	<13.0	147	--	<40.0	3.46	16.2
GLAQV-1	<4.50	16.2	<7.20	175	--	<20.0	2.87	7.5
GLAQV-2	<4.50	27.9	<7.20	153	--	<20.0	2.21	7.5
GLAQV-3	<4.50	19.9	<7.20	143	--	<20.0	2.20	7.5
GLAQV-4	<4.50	18.1	<7.20	150	--	<20.0	2.65	7.5
GLAQV-6	<4.50	16.4	<7.20	170	--	<20.0	3.66	26.3
GLAQV-7	4.65	18.3	<7.20	243	--	<20.0	3.21	124
GLAQV-8	4.96	19.2	<7.20	194	--	<20.0	2.85	58.5
GLAQV-9	4.78	15.2	<7.20	166	--	<20.0	3.01	87.3
GLAQV-10	5.91	10.3	<7.20	131	--	<20.0	2.56	33.6
GLAQV-11	<4.50	8.65	<7.20	132	--	<20.0	3.81	39.1
IPAQV-1	<4.50	7.02	<7.20	1200	--	<20.0	3.99	21.9
IPAQV-2	<4.50	7.31	<7.20	434	--	<20.0	2.50	25.1
IPAQV-3	<4.50	7.67	<7.20	333	--	<20.0	1.33	22.1
IPAQV-4	<4.50	2.97	12.1	370	--	<20.0	3.35	21.6
IPAQV-5	<4.50	4.01	<7.20	356	--	<20.0	4.86	23.8
IPAQV-6	<4.50	2.43	<7.20	222	--	<20.0	1.96	15.3
IPAQV-7	<4.50	2.86	<7.20	492	--	<20.0	5.26	18.7
OPAQV-1	<4.50	1.81	<7.20	148	--	<20.0	1.51	43.6
OPAQV-2	<4.50	3.57	<7.20	166	--	<20.0	0.60	7.5
OPAQV-3	<4.50	2.72	<7.20	285	--	<20.0	0.60	16.4
OPAQV-4	<4.50	3.16	<7.20	298	--	<20.0	0.60	7.5
RLAQV10	<4.00	25.7	<13.0	153	--	<40.0	6.17	31.5
RLAQV11	<4.00	25.5	<13.0	142	--	<40.0	5.48	28.7
RLAQV-1	<4.50	20.2	<7.20	133	--	<20.0	7.19	62.0
RLAQV-2	<4.50	12.6	<7.20	129	--	<20.0	6.61	62.6
RLAQV-3	<4.50	82.9	<7.20	147	--	<20.0	7.54	54.4
RLAQV-4	<4.50	104	<7.20	122	--	<20.0	6.50	55.6
RLAQV-5	<4.50	48.5	<7.20	148	--	<20.0	4.92	17.4
RLAQV-6	<4.50	40.0	13.4	125	--	<20.0	3.56	7.5
RLAQV-7	<4.50	42.7	<7.20	150	--	<20.0	6.65	7.5

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
RLAQV-8	Potamogeton	Composite	Rasmus Lee Lake	07-13-88	89.1
RLAQV-9	Potamogeton	Composite	Rasmus Lee Lake	07-13-88	84.3
SLAQV01	Potamogeton	Composite	North Platte at Casper Creek	07-20-89	87.4
SLAQV02	Potamogeton	Composite	North Platte at Casper Creek	07-20-89	84.7
GLAQI-1	Amphipod/Copepod	Composite	Goose Lake	05-12-88	78.3
GLAQI-2	Amphipod/Copepod	Composite	Goose Lake	05-12-88	69.1
GLAQI-3	Amphipod/Copepod	Composite	Goose Lake	05-12-88	65.5
GLAQI-4	Amphipod/Copepod	Composite	Goose Lake	06-07-88	89.1
GLAQI-5	Amphipod/Copepod	Composite	Goose Lake	06-07-88	91.0
GLAQI-6	Amphipod/Copepod	Composite	Goose Lake	06-07-88	90.9
GLAQI-7	Amphipod/Copepod	Composite	Goose Lake	06-07-88	90.6
GLAQI-8	Amphipod/Copepod	Composite	Goose Lake	07-12-88	86.5
GLAQI-9	Amphipod/Copepod	Composite	Goose Lake	07-12-88	85.8
OPBI-1	Chironomid	Composite	Oxbow Pond	06-13-88	86.0
OPBI-2	Chironomid	Composite	Oxbow Pond	07-14-88	93.9
OPBI-3	Chironomid	Composite	Oxbow Pond	07-14-88	90.1
OPBI-4	Chironomid	Composite	Oxbow Pond	07-22-89	90.2
RLBI-3	Chironomid	Composite	Rasmus Lee Lake	07-22-89	88.6
RLBI-1	Chironomid	Composite	Rasmus Lee Lake	06-14-88	86.9
RLBI-2	Chironomid	Composite	Rasmus Lee Lake	07-12-88	79.0
RLAQI-1	Damselfly Nymph	Composite	Rasmus Lee Lake	05-17-88	89.0
RLAQI-3	Damselfly Nymph	Composite	Rasmus Lee Lake	06-14-88	77.7
GLAQI-10	Odonate	Composite	Goose Lake	07-12-88	73.9
OPAQI-1	Odonate	Composite	Oxbow Pond	05-18-88	87.6
IPAQI-4	Snail	Composite	Illco Pond	06-28-88	74.5
OPAQI-3	Snail	Composite	Oxbow Pond	07-07-88	77.4
OPAQI-5	Snail	Composite	Oxbow Pond	07-14-88	79.6
OPAQI-6	Snail	Composite	Oxbow Pond	07-14-88	77.3
33MAQI01	Water boatmen	Composite	Thirtythree Mile Reservoir	07-24-89	87.6
33MAQI02	Water boatmen	Composite	Thirtythree Mile Reservoir	07-24-89	87.6
33MAQI3	Water boatmen	Composite	Thirtythree Mile Reservoir	07-24-89	83.0
33MAQI-1	Water boatmen	Composite	Thirtythree Mile Reservoir	06-09-88	79.6
GLAQI11	Water boatmen	Composite	Goose Lake	06-09-88	75.6
IPAQI-1	Water boatmen	Composite	Illco Pond	05-17-88	81.8
IPAQI-2	Water boatmen	Composite	Illco Pond	05-27-88	63.6
IPAQI-3	Water boatmen	Composite	Illco Pond	05-28-88	89.6
IPAQI-5	Water boatmen	Composite	Illco Pond	06-02-88	77.4
OPAQI-2	Water boatmen	Composite	Oxbow Pond	05-17-88	84.8
OPAQI-4	Water boatmen	Composite	Oxbow Pond	07-14-88	93.0
RLAQI-2	Water boatmen	Composite	Rasmus Lee Lake	08-06-88	79.2
RLAQI-4	Water boatmen	Composite	Rasmus Lee Lake	07-07-88	80.2

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
RLAQV-8	15500	1120	<25.0	7.73	12.3	<0.120	541	<0.500
RLAQV-9	17100	2870	<25.0	20.0	29.5	0.175	514	<0.500
SLAQV01	8090	<40.0	<30.0	13.7	30.8	<0.100	426	<0.400
SLAQV02	7460	<40.0	<30.0	12.8	27.2	<0.100	427	<0.400
GLAQI-1	6500	1370	<25.0	4.71	39.4	<0.120	9.62	<0.500
GLAQI-2	5610	839	<25.0	4.92	30.8	<0.120	9.18	<0.500
GLAQI-3	5530	540	<25.0	5.11	18.6	<0.120	7.24	<0.500
GLAQI-4	7480	242	<25.0	6.69	10.9	<0.120	12.0	0.534
GLAQI-5	8140	348	<25.0	7.56	11.9	<0.120	8.85	<0.500
GLAQI-6	7120	394	<25.0	7.77	12.0	<0.120	12.3	<0.500
GLAQI-7	6390	466	<25.0	6.93	13.1	<0.120	13.3	<0.500
GLAQI-8	6220	187	<25.0	6.24	1.24	<0.120	11.4	<0.500
GLAQI-9	6450	241	<25.0	6.47	13.6	<0.120	13.6	<0.500
OPBI-1	2520	569	<25.0	0.15	23.2	<0.120	8.89	<0.500
OPBI-2	1940	278	<25.0	0.15	13.3	<0.120	6.20	<0.500
OPBI-3	2080	265	<25.0	0.15	13.1	<0.120	5.58	<0.500
OPBI4	1510	256	<13.0	0.64	21.8	<0.120	5.83	<0.500
RLBI3	2170	1690	<13.0	4.30	28.4	<0.120	9.27	<0.500
RLBI-1	2760	841	<25.0	3.04	14.8	<0.120	31.9	<0.500
RLBI-2	2300	825	<25.0	2.59	16.1	<0.120	13.2	<0.500
RLAQI-1	5570	9439	<25.0	1.45	1.42	<0.120	15.0	<0.500
RLAQI-3	1250	71.6	<25.0	2.62	1.43	<0.120	7.76	<0.500
GLAQI-10	3210	156	<25.0	2.06	2.13	<0.120	3.75	<0.500
OPAQI-1	1130	7.50	<25.0	0.15	1.17	<0.120	1.00	<0.500
IPAQI-4	1280	255	<25.0	2.70	28.5	<0.120	2.97	<0.500
OPAQI-3	1680	148	<25.0	0.15	20.7	<0.120	6.73	<0.500
OPAQI-5	1310	44.7	<25.0	1.57	19.0	<0.120	2.34	<0.500
OPAQI-6	1310	31.0	<25.0	1.32	18.1	<0.120	3.05	<0.500
33MAQI01	1450	153	<20.0	0.30	13.8	<0.200	2.23	<0.500
33MAQI02	1310	165	<30.0	0.68	8.58	<0.200	2.15	<0.500
33MAQI3	1390	369	<13.0	1.57	16.4	<0.120	1.26	<0.500
33MAQI-1	1490	345	<25.0	0.96	32.9	<0.120	2.67	1.950
GLAQI11	2060	84.9	<20.0	0.60	2.01	<0.200	2.87	<0.500
IPAQI-1	2420	47.4	<25.0	0.15	2.71	<0.120	3.67	<0.500
IPAQI-2	1430	28.5	<25.0	0.15	1.73	<0.120	1.00	<0.500
IPAQI-3	1580	174	<25.0	1.13	16.3	<0.120	2.57	<0.500
IPAQI-5	2500	28.7	<25.0	0.15	2.86	<0.120	5.09	<0.500
OPAQI-2	1910	70.0	<25.0	0.15	8.80	<0.120	1.00	<0.500
OPAQI-4	1200	7.50	<25.0	0.15	3.23	<0.120	1.00	22.1
RLAQI-2	1230	69.1	<25.0	3.05	1.40	<0.120	7.34	<0.500
RLAQI-4	3520	18.2	<25.0	0.64	1.41	<0.120	8.28	<0.500

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chro-mium	Cobalt	Copper	Iron	Lead	Manga-nese	Mercury	Molyb-denum
RLAQV-8	<1.90	3.23	<3.40	950	<15.0	102	<0.020	<12.0
RLAQV-9	2.15	3.75	<3.40	2600	<15.0	207	<0.020	<12.0
SLAQV01	<2.00	--	4.05	294	<5.00	5960	<0.020	<4.50
SLAQV02	<2.00	--	3.97	191	<5.00	4860	<0.020	6.30
GLAQI-1	1.92	<3.00	54.2	1140	<15.0	50.0	0.010	<12.0
GLAQI-2	<1.90	<3.00	46.3	596	<15.0	54.5	0.010	<12.0
GLAQI-3	<1.90	3.65	47.2	458	<15.0	52.6	0.010	<12.0
GLAQI-4	<1.90	<3.00	19.6	429	<15.0	48.8	0.060	<12.0
GLAQI-5	<1.90	<3.00	17.1	516	<15.0	43.8	0.010	<12.0
GLAQI-6	<1.90	<3.00	18.8	526	<15.0	50.4	0.053	<12.0
GLAQI-7	<1.90	<3.00	20.3	565	<15.0	51.7	0.010	<12.0
GLAQI-8	<1.90	5.42	48.2	201	<15.0	55.4	0.056	<12.0
GLAQI-9	<1.90	3.07	48.9	230	<15.0	56.1	0.010	<12.0
OPBI-1	<1.90	<3.00	12.8	1720	<15.0	27.9	0.010	<12.0
OPBI-2	<1.90	<3.00	8.76	1070	<15.0	13.6	0.042	<12.0
OPBI-3	<1.90	<3.00	9.60	1010	<15.0	11.7	0.053	<12.0
OPBI4	2.17	<5.00	16.0	869	<9.00	11.0	0.010	<4.30
RLBI3	2.80	<5.00	24.1	2790	<9.00	64.1	0.010	<4.30
RLBI-1	<1.90	<3.00	23.0	2170	<15.0	37.8	0.033	<12.0
RLBI-2	<1.90	<3.00	14.2	1840	<15.0	29.5	0.033	<12.0
RLAQI-1	<1.90	<3.00	12.6	148	<15.0	11.0	0.040	<12.0
RLAQI-3	<1.90	<3.00	14.7	185	<15.0	7082	0.010	<12.0
GLAQI-10	<1.90	<3.00	15.2	166	15.4	23.2	0.010	<12.0
OPAQI-1	<1.90	<3.00	14.5	87.3	<15.0	3.54	0.085	<12.0
IPAQI-4	<1.90	<3.00	24.9	665	<15.0	155	0.030	<12.0
OPAQI-3	<1.90	3.39	9.28	389	<15.0	28.3	0.010	<12.0
OPAQI-5	<1.90	<3.00	12.6	316	<15.0	23.5	0.028	<12.0
OPAQI-6	<1.90	<3.00	10.3	299	<15.0	22.5	0.010	<12.0
33MAQI01	<2.00	--	20.6	333	<5.00	25.2	0.068	<5.00
33MAQI02	<1.00	--	25.5	384	<5.00	22.0	0.023	<6.00
33MAQI3	<2.00	<5.00	12.6	597	<9.00	26.3	0.033	<4.30
33MAQI-1	<1.90	<3.00	26.2	604	<15.0	33.9	0.064	<12.0
GLAQI11	<2.00	--	81.9	177	<5.00	28.1	0.010	<5.00
IPAQI-1	<1.90	<3.00	26.5	258	<15.0	37.0	0.053	<12.0
IPAQI-2	<1.90	<3.00	27.4	231	<15.0	35.9	0.029	<12.0
IPAQI-3	<1.90	<3.00	18.5	393	<15.0	39.0	0.095	<12.0
IPAQI-5	<1.90	<3.00	29.9	243	<15.0	45.3	0.045	<12.0
OPAQI-2	<1.90	<3.00	16.7	229	<15.0	9.81	0.083	<12.0
OPAQI-4	<1.90	<3.00	13.1	103	<15.0	7.15	0.032	<12.0
RLAQI-2	<1.90	<3.00	14.1	184	<15.0	7.68	0.010	<12.0
RLAQI-4	<1.90	<3.00	32.0	108	<15.0	17.0	0.054	<12.0

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
RLAQV-8	<4.50	49.5	<7.20	149	--	<20.0	5.06	7.50
RLAQV-9	5.03	45.3	<7.20	167	--	<20.0	11.6	18.3
SLAQV01	3.18	1.20	<5.00	253	--	<20.0	0.75	12.3
SLAQV02	5.09	1.06	<5.00	219	--	<20.0	0.75	14.7
GLAQI-1	<4.50	38.5	<7.20	3200	--	<20.0	3.51	65.3
GLAQI-2	<4.50	38.7	<7.20	3080	--	<20.0	2.71	62.6
GLAQI-3	<4.50	60.6	<7.20	2730	--	<20.0	1.85	63.5
GLAQI-4	<4.50	64.5	<7.20	1930	--	<20.0	<1.20	81.4
GLAQI-5	<4.50	37.5	<7.20	1810	--	<20.0	1.84	73.2
GLAQI-6	<4.50	47.2	<7.20	2230	--	<20.0	1.82	74.2
GLAQI-7	<4.50	48.8	<7.20	2350	--	<20.0	1.84	74.9
GLAQI-8	<4.50	39.8	<7.20	785	--	<20.0	1.94	69.4
GLAQI-9	<4.50	36.5	<7.20	3290	--	<20.0	<1.20	60.0
OPBI-1	<4.50	6.9	<7.20	154	--	<20.0	<1.20	86.4
OPBI-2	<4.50	12.4	<7.20	76.4	--	<20.0	1.37	60.1
OPBI-3	<4.50	13.5	<7.20	68.5	--	<20.0	1.53	59.0
OPBI4	<2.40	19.4	<8.50	101	--	<25.0	1.97	75.6
RLBI3	2.55	160	<8.50	41.5	--	<25.0	5.16	109
RLBI-1	<4.50	166	<7.20	43.8	--	<20.0	5.25	154
RLBI-2	<4.50	150	<7.20	28.7	--	<20.0	3.17	72.9
RLAQI-1	<4.50	102	<7.20	43.6	--	<20.0	<1.20	102
RLAQI-3	<4.50	87.4	<7.20	6.94	--	<20.0	<1.20	99.3
GLAQI-10	<4.50	46.7	<7.20	141	--	<20.0	<1.20	80.5
OPAQI-1	<4.50	13.6	<7.20	21.7	--	<20.0	<1.20	83.2
IPAQI-4	<4.50	8.75	<7.20	694	--	<20.0	<1.20	29.5
OPAQI-3	<4.50	25.2	<7.20	867	--	<20.0	<1.20	22.0
OPAQI-5	<4.50	1.32	<7.20	825	--	<20.0	<1.20	28.9
OPAQI-6	<4.50	0.94	<7.20	757	--	<20.0	<1.20	24.6
33MAQI01	<2.00	16.3	<10.0	15.6	--	<20.0	<1.50	120
33MAQI02	<1.50	17.1	<7.00	16.2	--	<30.0	<0.60	116
33MAQI3	<2.40	10.3	<8.50	43.7	--	<25.0	1.22	115
33MAQI-1	12.40	14.2	<7.20	26.3	--	<20.0	1.59	146
GLAQI11	<2.00	43.7	<10.0	154	--	<20.0	<1.50	236
IPAQI-1	<4.50	30.0	<7.20	34.7	--	<20.0	<1.20	159
IPAQI-2	<4.50	27.9	<7.20	18.7	--	<20.0	<1.20	149
IPAQI-3	<4.50	30.7	<7.20	74.5	--	<20.0	<1.20	162
IPAQI-5	<4.50	30.3	<7.20	74.1	--	<20.0	<1.20	138
OPAQI-2	<4.50	27.4	<7.20	169	--	<20.0	<1.20	91.4
OPAQI-4	<4.50	9.24	<7.20	20.2	--	<20.0	<1.20	143
RLAQI-2	<4.50	89.4	<7.20	8.00	--	<20.0	<1.20	96.3
RLAQI-4	<4.50	110	<7.20	56.1	--	<20.0	<1.20	103

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
IPF-1	Carp	Whole Body	Illco Pond	06-30-88	76.4
IPF-2	Carp	Whole Body	Illco Pond	06-30-88	71.4
IPF-3	Carp	Whole Body	Illco Pond	06-30-88	76.0
33MF1	Carp	Whole Body	Thirtythree Mile Reservoir	06-30-88	78.9
33MF2	Carp	Whole Body	Thirtythree Mile Reservoir	06-30-88	80.0
33MF3	Carp	Whole Body	Thirtythree Mile Reservoir	06-30-88	77.7
33MF4	Carp	Whole Body	Thirtythree Mile Reservoir	06-30-88	82.1
33MF5	Carp	Whole Body	Thirtythree Mile Reservoir	06-30-88	77.7
33MF6	Carp	Whole Body	Thirtythree Mile Reservoir	06-30-88	77.5
33MF7	Black Bullhead	Whole Body	Thirtythree Mile Reservoir	06-30-88	82.3
33MF8	Black Bullhead	Whole Body	Thirtythree Mile Reservoir	06-30-88	78.6
33MF9	Black Bullhead	Whole Body	Thirtythree Mile Reservoir	06-30-88	77.7
IPF-4	Brassy Minnow	Whole Body	Illco Pond	06-30-88	76.2
IPF-5	Brassy Minnow	Whole Body	Illco Pond	06-30-88	76.9
33MF10	Green Sunfish	Whole Body	Thirtythree Mile Reservoir	06-30-88	74.9
KNPCCRT-1	Rainbow Trout	Fillet	North Platte at Casper Creek	08-16-88	75.0
KNPCCRT-2	Rainbow Trout	Fillet	North Platte at Casper Creek	08-16-88	74.6
KNPCCRT-3	Rainbow Trout	Fillet	North Platte at Casper Creek	08-16-88	78.6
KNPCCRT-4	Rainbow Trout	Fillet	North Platte at Casper Creek	08-16-88	72.2
KNPCCRT-5	Rainbow Trout	Fillet	North Platte at Casper Creek	08-16-88	75.8
KNPOTRT-1	Rainbow Trout	Fillet	Oregon Trail Drain	08-16-88	72.0
KNPOTRT-2	Rainbow Trout	Fillet	Oregon Trail Drain	08-16-88	73.8
KNPOTRT-3	Rainbow Trout	Fillet	Oregon Trail Drain	08-16-88	77.8
KNPOTRT-4	Rainbow Trout	Fillet	Oregon Trail Drain	08-16-88	78.5
KNPOTRT-5	Rainbow Trout	Fillet	Oregon Trail Drain	08-16-88	79.3
KNPBBRT-1	Rainbow Trout	Fillet	North Platte at Poison Spider Cr	08-17-88	76.2
KNPBBRT-2	Rainbow Trout	Fillet	North Platte at Poison Spider Cr	08-17-88	75.7
KNPBBRT-3	Rainbow Trout	Fillet	North Platte at Poison Spider Cr	08-17-88	76.8
KNPBBRT-4	Rainbow Trout	Fillet	North Platte at Poison Spider Cr	08-17-88	76.7

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
IPF-1	1140	140	--	<0.20	5.40	<0.100	<4.00	<0.300
IPF-2	959	170	--	0.30	3.10	<0.100	<4.00	<0.200
IPF-3	1150	160	--	<0.20	4.50	<0.100	<4.00	<0.300
33MF1	1130	447	--	<0.20	4.60	<0.100	<4.00	<0.300
33MF2	1070	31.0	--	<0.20	0.97	<0.100	<4.00	<0.200
33MF3	1250	250	--	<0.20	5.00	<0.100	<4.00	<0.300
33MF4	1480	28.0	--	<0.20	3.60	<0.100	<4.00	<0.300
33MF5	1160	8.00	--	<0.20	2.10	<0.100	<4.00	<0.200
33MF6	1700	440	--	0.30	10.6	<0.100	<4.00	<0.300
33MF7	1530	110	--	<0.20	2.80	<0.100	<4.00	<0.300
33MF8	994	98.0	--	<0.20	1.10	<0.100	<4.00	<0.200
33MF9	1830	290	--	0.30	8.50	<0.100	<4.00	<0.300
IPF-4	1770	944	--	<0.20	18.3	<0.100	<4.00	<0.200
IPF-5	1870	1250	--	0.40	21.8	<0.100	<4.00	<0.300
33MF10	1700	90.0	--	0.20	4.60	<0.100	<4.00	<0.300
KNPCCRT-1	1310	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPCCRT-2	1360	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPCCRT-3	1400	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPCCRT-4	1340	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPCCRT-5	1380	20.1	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPOTRT-1	1200	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPOTRT-2	1210	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPOTRT-3	1560	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPOTRT-4	1490	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPOTRT-5	1510	<20.0	<30.0	<0.30	0.70	<0.200	<3.00	0.634
KNPBBRT-1	1600	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPBBRT-2	1330	20.9	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPBBRT-3	1390	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPBBRT-4	1340	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chro-mium	Cobalt	Copper	Iron	Lead	Manga-nese	Mercury	Molyb-denum
IPF-1	<2.00	--	3.90	189	<4.00	7.90	0.028	<1.00
IPF-2	2.00	--	4.00	187	<4.00	13.0	0.037	<1.00
IPF-3	<2.00	--	4.10	229	<4.00	7.50	0.036	<1.00
33MF1	<2.00	--	4.70	545	<4.00	5.50	0.140	<1.00
33MF2	<2.00	--	7.00	182	<4.00	2.20	0.170	<1.00
33MF3	<2.00	--	2.80	353	<4.00	7.70	0.056	<1.00
33MF4	<2.00	--	3.70	166	<4.00	4.30	0.086	<1.00
33MF5	<2.00	--	3.20	126	<4.00	2.80	0.055	<1.00
33MF6	<2.00	--	3.00	493	<4.00	11.0	0.055	<1.00
33MF7	<2.00	--	1.80	265	<4.00	6.20	0.420	<1.00
33MF8	<2.00	--	2.60	234	<4.00	3.00	0.130	<1.00
33MF9	<2.00	--	1.80	354	<4.00	22.3	0.086	<1.00
IPF-4	<2.00	--	5.80	666	<4.00	24.8	0.064	<1.00
IPF-5	3.00	--	6.00	865	<4.00	26.9	0.046	<1.00
33MF10	<2.00	--	2.70	94.0	<4.00	21.6	0.170	<1.00
KNPCCRT-1	<0.80	<3.00	2.92	34.3	<6.00	1.22	0.288	<5.00
KNPCCRT-2	<0.80	<3.00	3.93	<15.0	<6.00	<1.00	0.462	<5.00
KNPCCRT-3	<0.80	<3.00	<2.50	26.6	<6.00	1.44	0.208	<5.00
KNPCCRT-4	0.97	<3.00	<2.50	20.0	<6.00	1.08	0.656	<5.00
KNPCCRT-5	<0.80	<3.00	<2.50	20.7	<6.00	1.29	0.300	<5.00
KNPOTRT-1	<0.80	<3.00	<2.50	21.1	<6.00	<1.00	0.363	<5.00
KNPOTRT-2	1.13	<3.00	<2.50	21.4	<6.00	<1.00	0.241	<5.00
KNPOTRT-3	<0.80	<3.00	3.83	24.3	<6.00	1.64	0.426	<5.00
KNPOTRT-4	<0.80	<3.00	5.05	21.2	<6.00	1.13	0.176	<5.00
KNPOTRT-5	<0.80	<3.00	<2.50	30.4	<6.00	6.17	0.175	<5.00
KNPBBRT-1	<0.80	<3.00	<2.50	20.3	<6.00	2.37	0.235	<5.00
KNPBBRT-2	1.38	<3.00	2.75	29.5	7.97	1.36	0.277	<5.00
KNPBBRT-3	1.53	<3.00	3.08	24.3	<6.00	<1.00	0.224	<5.00
KNPBBRT-4	0.99	<3.00	3.40	21.9	<6.00	1.84	0.212	<5.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
IPF-1	<1.00	39.0	<2.00	106	<5.0	--	<0.30	202
IPF-2	<1.00	21.0	<2.00	95.1	<5.0	--	0.50	229
IPF-3	<1.00	41.0	<2.00	75.1	<5.0	--	0.30	226
33MF1	1.00	27.0	<2.00	29.7	<5.0	--	1.10	208
33MF2	<1.00	32.0	<2.00	22.5	<5.0	--	0.40	294
33MF3	<1.00	18.0	<2.00	93.2	<5.0	--	0.90	254
33MF4	<1.00	37.0	<2.00	88.3	<6.0	--	<0.30	330
33MF5	<1.00	22.0	<2.00	60.5	<5.0	--	<0.30	293
33MF6	<1.00	16.0	<2.00	182	<6.0	--	1.60	206
33MF7	<1.00	16.0	<2.00	135	<5.0	--	0.80	71.8
33MF8	<1.00	13.0	<2.00	11.9	<5.0	--	<0.30	60.6
33MF9	<1.00	12.0	<2.00	215	<5.0	--	2.10	92.3
IPF-4	1.00	26.0	<2.00	195	<5.0	--	2.70	197
IPF-5	1.00	23.0	<2.00	201	<6.0	--	3.40	189
33MF10	<1.00	17.0	<2.00	143	<5.0	--	0.40	113
KNPCCRT-1	<2.50	13.2	<10.0	<4.00	--	<20.0	<0.80	18.1
KNPCCRT-2	<2.50	14.8	<10.0	<4.00	--	<20.0	<0.80	21.6
KNPCCRT-3	<2.50	14.9	<10.0	5.82	--	<20.0	<0.80	32.2
KNPCCRT-4	<2.50	9.29	<10.0	7.88	--	<20.0	<0.80	25.9
KNPCCRT-5	<2.50	11.6	<10.0	<4.00	--	<20.0	<0.80	21.1
KNPOTRT-1	<2.50	11.5	<10.0	<4.00	--	<20.0	<0.80	15.3
KNPOTRT-2	<2.50	7.92	<10.0	<4.00	--	<20.0	<0.80	15.4
KNPOTRT-3	<2.50	11.1	<10.0	7.01	--	<20.0	<0.80	19.8
KNPOTRT-4	<2.50	11.7	<10.0	<4.00	--	<20.0	<0.80	32.5
KNPOTRT-5	<2.50	14.4	<10.0	16.7	--	<20.0	<0.80	57.6
KNPBBRT-1	<2.50	12.6	<10.0	9.49	--	<20.0	<0.80	29.0
KNPBBRT-2	<2.50	9.29	<10.0	<4.00	--	<20.0	<0.80	27.3
KNPBBRT-3	<2.50	11.3	<10.0	<4.00	--	<20.0	<0.80	23.8
KNPBBRT-4	<2.50	8.29	<10.0	<4.00	--	<20.0	<0.80	26.1

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
KNPBBRT-5	Rainbow Trout	Fillet	North Platte at Poison Spider Cr	08-17-88	77.5
KNPGRRT-1	Rainbow Trout	Fillet	North Platte at Grey Reef Dam	08-17-88	74.7
KNPGRRT-2	Rainbow Trout	Fillet	North Platte at Grey Reef Dam	08-17-88	76.1
KNPGRRT-3	Rainbow Trout	Fillet	North Platte at Grey Reef Dam	08-17-88	72.8
KNPGRRT-4	Rainbow Trout	Fillet	North Platte at Grey Reef Dam	08-17-88	75.4
KNPGRRT-5	Rainbow Trout	Fillet	North Platte at Grey Reef Dam	08-17-88	75.2
KNPDSRT-1	Rainbow Trout	Fillet	Dan Speas Fish Hatchery	08-17-88	74.7
KNPDSRT-2	Rainbow Trout	Fillet	Dan Speas Fish Hatchery	08-17-88	75.3
KNPDSRT-3	Rainbow Trout	Fillet	Dan Speas Fish Hatchery	08-17-88	75.9
KNPDSRT-4	Rainbow Trout	Fillet	Dan Speas Fish Hatchery	08-17-88	74.5
KNPDSRT-5	Rainbow Trout	Fillet	Dan Speas Fish Hatchery	08-17-88	75.3
KBLFTF-1	Cutthroat Trout	Fillet	Goldeneye Reservoir	08-16-88	69.9
KBLFTF-2	Cutthroat Trout	Fillet	Goldeneye Reservoir	08-16-88	71.7
KBLFTF-3	Cutthroat Trout	Fillet	Goldeneye Reservoir	08-16-88	72.9
KBLFTF-4	Cutthroat Trout	Fillet	Goldeneye Reservoir	08-16-88	78.5
KBLFTF-5	Cutthroat Trout	Fillet	Goldeneye Reservoir	08-16-88	74.9
KBLFS-1	White Sucker	Whole Body	Goldeneye Reservoir	08-16-88	71.4
KBLFS-2	White Sucker	Whole Body	Goldeneye Reservoir	08-16-88	71.3
KBLFS-3	White Sucker	Whole Body	Goldeneye Reservoir	08-16-88	71.8
KBLFS-4	White Sucker	Whole Body	Goldeneye Reservoir	08-16-88	69.9
KBLFS-5	White Sucker	Whole Body	Goldeneye Reservoir	08-16-88	70.2
KBLFC-1	Carp	Whole Body	Goldeneye Reservoir	08-16-88	77.7
KBLFC-2	Carp	Whole Body	Goldeneye Reservoir	08-16-88	78.3
KBLFC-3	Carp	Whole Body	Goldeneye Reservoir	08-16-88	79.0
KBLFC-4	Carp	Whole Body	Goldeneye Reservoir	08-16-88	69.6
KBLFC-5	Carp	Whole Body	Goldeneye Reservoir	08-16-88	71.8
KBLFT-1	Cutthroat Trout	Whole Body	Goldeneye Reservoir	08-16-88	71.2
KBLFT-2	Cutthroat Trout	Whole Body	Goldeneye Reservoir	08-16-88	69.3
KBLFT-3	Cutthroat Trout	Whole Body	Goldeneye Reservoir	08-16-88	69.2
KBLFT-4	Cutthroat Trout	Whole Body	Goldeneye Reservoir	08-16-88	70.5
KBLFT-5	Cutthroat Trout	Whole Body	Goldeneye Reservoir	08-16-88	68.2
GLAACL01	American Avocet	Liver	Goose Lake	07-24-89	54.0
GLAAL01	American Avocet	Liver	Goose Lake	07-20-89	75.8
GLAAL02	American Avocet	Liver	Goose Lake	07-20-89	75.2
SLAAL01	American Avocet	Liver	Soda Lake	07-20-89	61.3
SLAAL02	American Avocet	Liver	Soda Lake	07-20-89	63.2

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
KNPBBRT-5	1490	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPGRRT-1	1380	21.8	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPGRRT-2	1370	23.9	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPGRRT-3	1260	24.5	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPGRRT-4	1400	24.2	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPGRRT-5	1310	24.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPDSRT-1	1350	<20.0	<30.0	0.95	<0.50	<0.200	<3.00	<0.500
KNPDSRT-2	1380	21.1	<30.0	0.64	<0.50	<0.200	<3.00	<0.500
KNPDSRT-3	1410	<20.0	<30.0	1.00	<0.50	<0.200	<3.00	<0.500
KNPDSRT-4	1370	20.3	<30.0	1.00	<0.50	<0.200	<3.00	<0.500
KNPDSRT-5	1340	<20.0	<30.0	0.81	<0.50	<0.200	<3.00	<0.500
KBLFTF-1	1170	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	0.674
KBLFTF-2	1470	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KBLFTF-3	1380	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KBLFTF-4	1290	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KBLFTF-5	1220	21.7	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KBLFS-1	2010	<20.0	<30.0	<0.30	3.77	0.223	<3.00	<0.500
KBLFS-2	1710	<20.0	<30.0	<0.30	1.81	<0.200	<3.00	<0.500
KBLFS-3	1730	<20.0	<30.0	<0.30	1.97	<0.200	<3.00	<0.500
KBLFS-4	1280	20.2	<30.0	<0.30	1.96	<0.200	<3.00	<0.500
KBLFS-5	1280	<20.0	<30.0	<0.30	1.48	<0.200	<3.00	<0.500
KBLFC-1	1490	23.6	<30.0	0.86	0.89	<0.200	<3.00	<0.500
KBLFC-2	1670	24.7	<30.0	<0.30	1.44	<0.200	<3.00	<0.500
KBLFC-3	1680	29.1	<30.0	0.34	1.20	<0.200	<3.00	<0.500
KBLFC-4	929	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KBLFC-5	1260	24.8	<30.0	<0.30	0.58	<0.200	<3.00	<0.500
KBLFT-1	1300	21.9	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KBLFT-2	1220	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KBLFT-3	1460	23.9	<30.0	<0.30	0.55	<0.200	<3.00	<0.500
KBLFT-4	1220	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KBLFT-5	1060	20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
GLAACL01	1590	<10.0	<13.0	<0.30	0.74	<0.120	2.59	3.220
GLAAL01	750	<30.0	<30.0	<0.30	<0.50	<0.200	1.71	0.836
GLAAL02	1010	<30.0	<30.0	<0.30	0.55	<0.200	2.28	2.890
SLAAL01	716	<30.0	<30.0	<0.30	0.55	0.387	3.29	3.420
SLAAL02	650	<30.0	<30.0	0.33	0.56	0.280	4.56	1.960

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chro-mium	Cobalt	Copper	Iron	Lead	Manga-nese	Mercury	Molyb-denum
KNPBBRT-5	1.39	<3.00	5.10	18.6	6.89	1.96	0.197	<5.00
KNPGRRT-1	2.01	<3.00	3.40	27.3	<6.00	1.39	0.180	<5.00
KNPGRRT-2	1.72	<3.00	<2.50	19.1	<6.00	2.26	0.144	<5.00
KNPGRRT-3	<0.80	<3.00	3.80	15.8	<6.00	5.89	0.171	<5.00
KNPGRRT-4	1.32	<3.00	<2.50	20.0	<6.00	5.15	0.193	<5.00
KNPGRRT-5	0.95	<3.00	<2.50	24.7	<6.00	<1.00	0.205	<5.00
KNPDSRT-1	<0.80	<3.00	<2.50	18.4	<6.00	<1.00	0.101	<5.00
KNPDSRT-2	1.39	<3.00	<2.50	15.6	<6.00	<1.00	0.091	<5.00
KNPDSRT-3	1.11	<3.00	<2.50	22.1	<6.00	1.19	0.088	<5.00
KNPDSRT-4	1.95	<3.00	<2.50	16.2	<6.00	1.13	0.070	<5.00
KNPDSRT-5	1.76	<3.00	<2.50	15.0	<6.00	<1.00	0.112	<5.00
KBLFTF-1	1.21	<3.00	<2.50	29.3	<6.00	1.30	0.715	<5.00
KBLFTF-2	<0.80	<3.00	<2.50	20.4	<6.00	1.59	0.412	<5.00
KBLFTF-3	1.18	<3.00	<2.50	15.7	<6.00	1.39	0.366	<5.00
KBLFTF-4	0.93	<3.00	3.04	30.4	<6.00	2.14	1.400	<5.00
KBLFTF-5	<0.80	<3.00	<2.50	16.6	<6.00	<1.00	0.391	<5.00
KBLFS-1	1.71	<3.00	<2.50	227	<6.00	23.5	0.084	<5.00
KBLFS-2	1.49	<3.00	4.95	155	<6.00	12.8	<0.020	<5.00
KBLFS-3	2.06	<3.00	4.49	155	<6.00	13.0	0.100	<5.00
KBLFS-4	<0.80	<3.00	<2.50	131	<6.00	15.0	<0.020	<5.00
KBLFS-5	<0.80	<3.00	<2.50	128	<6.00	11.8	0.177	<5.00
KBLFC-1	1.28	<3.00	5.16	99.9	<6.00	16.7	0.133	<5.00
KBLFC-2	<0.80	<3.00	6.34	75.9	<6.00	28.5	0.055	<5.00
KBLFC-3	0.90	<3.00	4.67	69.8	<6.00	27.3	0.174	<5.00
KBLFC-4	0.82	<3.00	3.87	90.5	<6.00	3.80	0.214	<5.00
KBLFC-5	<0.80	<3.00	3.17	91.8	<6.00	9.07	0.331	<5.00
KBLFT-1	1.29	<3.00	2.97	61.5	<6.00	9.91	0.518	<5.00
KBLFT-2	<0.80	<3.00	<2.50	42.2	<6.00	8.64	0.367	<5.00
KBLFT-3	2.33	<3.00	14.1	54.3	<6.00	19.9	0.286	<5.00
KBLFT-4	1.07	<3.00	<2.50	57.1	<6.00	8.58	0.351	<5.00
KBLFT-5	1.04	<3.00	3.89	39.9	7.30	4.59	0.260	<5.00
GLAACL01	<2.00	--	21.5	1360	<9.00	24.1	0.600	<4.30
GLAAL01	<1.00	--	9.30	1700	<5.00	12.5	0.981	<6.00
GLAAL02	<1.00	--	17.8	1560	<5.00	11.1	0.191	<6.00
SLAAL01	<1.00	--	16.4	1760	<5.00	14.7	1.530	6.53
SLAAL02	<1.00	--	11.2	2490	6.70	9.49	0.309	<6.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
KNPBBRT-5	<2.50	14.1	<10.0	9.64	--	<20.0	<0.80	24.4
KNPGRRT-1	<2.50	2.92	<10.0	<4.00	--	<20.0	<0.80	16.0
KNPGRRT-2	<2.50	2.39	<10.0	<4.00	--	<20.0	<0.80	23.9
KNPGRRT-3	<2.50	3.21	<10.0	<4.00	--	<20.0	<0.80	19.9
KNPGRRT-4	<2.50	3.63	<10.0	5.68	--	<20.0	0.80	28.8
KNPGRRT-5	<2.50	2.77	<10.0	<4.00	--	<20.0	<0.80	28.7
KNPDSRT-1	<2.50	0.99	<10.0	<4.00	--	<20.0	<0.80	27.5
KNPDSRT-2	<2.50	1.47	<10.0	<4.00	--	<20.0	<0.80	21.2
KNPDSRT-3	<2.50	0.88	<10.0	6.09	--	<20.0	<0.80	32.1
KNPDSRT-4	<2.50	0.92	<10.0	<4.00	--	<20.0	<0.80	26.0
KNPDSRT-5	<2.50	1.00	<10.0	<4.00	--	<20.0	<0.80	21.7
KBLFTF-1	4.72	2.11	<10.0	4.98	--	<20.0	<0.80	23.4
KBLFTF-2	<2.50	2.35	<10.0	5.74	--	<20.0	1.23	23.2
KBLFTF-3	<2.50	2.30	<10.0	9.78	--	<20.0	0.81	22.3
KBLFTF-4	<2.50	2.42	<10.0	7.50	--	<20.0	<0.80	21.7
KBLFTF-5	<2.50	2.61	<10.0	<4.00	--	<20.0	<0.80	13.4
KBLFS-1	<2.50	1.71	<10.0	459	--	<20.0	1.26	41.7
KBLFS-2	<2.50	2.18	<10.0	134	--	<20.0	<0.80	47.3
KBLFS-3	<2.50	2.19	<10.0	139	--	<20.0	<0.80	47.1
KBLFS-4	<2.50	2.21	<10.0	157	--	<20.0	<0.80	35.5
KBLFS-5	<2.50	2.64	<10.0	177	--	<20.0	0.86	39.6
KBLFC-1	<2.50	1.81	<10.0	304	--	<20.0	<0.80	152
KBLFC-2	<2.50	1.77	<10.0	494	--	<20.0	<0.80	137
KBLFC-3	<2.50	1.59	<10.0	454	--	<20.0	<0.80	161
KBLFC-4	2.77	2.04	<10.0	78.4	--	<20.0	<0.80	162
KBLFC-5	<2.50	2.39	<10.0	213	--	<20.0	<0.80	152
KBLFT-1	<2.50	2.78	<10.0	65.2	--	<20.0	<0.80	101
KBLFT-2	<2.50	2.78	<10.0	61.9	--	<20.0	<0.80	49.3
KBLFT-3	3.91	2.64	<10.0	149	--	<20.0	1.16	70.6
KBLFT-4	<2.50	2.60	<10.0	48.5	--	<20.0	<0.80	57.4
KBLFT-5	<2.50	2.60	<10.0	31.9	--	<20.0	<0.80	45.9
GLAACL01	<2.40	54.0	<8.50	8.70	--	<25.0	<0.70	138
GLAAL01	<1.50	57.6	<7.00	<1.00	--	<30.0	<0.60	79.1
GLAAL02	<1.50	94.2	<7.00	1.15	--	<30.0	<0.60	95.3
SLAAL01	3.87	31.9	<7.00	<1.00	--	<30.0	<0.60	98.4
SLAAL02	1.81	41.0	<7.00	1.00	--	<30.0	<0.60	65.7

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
GLEGL03a	Eared Grebe	Liver	Goose Lake	08-04-89	64.8
GLEGL03b	Eared Grebe	Liver	Goose Lake	08-04-89	62.9
GLEGL04a	Eared Grebe	Liver	Goose Lake	08-04-89	58.6
GLEGL04b	Eared Grebe	Liver	Goose Lake	08-04-89	67.7
GLJEGL01	Eared Grebe (juv)	Liver	Goose Lake	08-06-89	75.4
GLJEGL02	Eared Grebe (juv)	Liver	Goose Lake	08-06-89	79.0
GLJEGL05	Eared Grebe (juv)	Liver	Goose Lake	08-06-89	68.6
GLJEGL03	Eared Grebe (juv)	Liver	Goose Lake	08-06-89	73.6
GLJEGL04	Eared Grebe (juv)	Liver	Goose Lake	08-06-89	74.7
SLEGL01	Eared Grebe	Liver	Soda Lake	07-20-89	67.6
SLEGL02	Eared Grebe	Liver	Soda Lake	07-20-89	69.2
SLJEGL01	Eared Grebe (juv)	Liver	Soda Lake	07-20-89	72.8
SLJEGL02	Eared Grebe (juv)	Liver	Soda Lake	07-20-89	76.6
GLEGCL-1	Eared Grebe	Liver	Goose Lake	07-29-88	66.7
GLEGCL-2	Eared Grebe	Liver	Goose Lake	07-29-88	66.3
WYK12L07	Mallard	Liver	Airport Pond	09-20-88	70.3
WYK12L08	Green-Winged Teal	Liver	Airport Pond	09-20-88	0.7
GLGADL01	Gadwall	Liver	Goose Lake	08-06-89	51.8
GLGWTL01	Green-Winged Teal	Liver	Goose Lake	07-20-89	73.3
GLRDL01	Ruddy Duck	Liver	Goose Lake	07-20-89	73.2
GLSCPL01	Scaup	Liver	Goose Lake	08-04-89	66.7
WYK3L005	Mallard	Liver	Illco Pond	09-20-88	72.4
WYK3L006	Green-Winged Teal	Liver	Illco Pond	09-20-88	71.9
WYK3L004	Shoveler	Liver	Illco Pond	09-20-88	73.9
WYK9L001	Mallard	Liver	Emigrant Pond	09-20-88	70.2
WYK9L002	Mallard	Liver	Emigrant Pond	09-20-88	69.6
WYK9L003	Ruddy Duck	Liver	Emigrant Pond	09-20-88	70.8
SLBWTL01	Blue-Winged Teal	Liver	Soda Lake	07-20-89	65.8
RLCGJL01	Canada Goose (juv)	Liver	Rasmus Lee Lake	07-19-89	75.5
RLCGL07	Canada Goose (juv)	Liver	Rasmus Lee Lake	07-19-89	72.2
RLCGL08	Canada Goose (juv)	Liver	Rasmus Lee Lake	07-19-89	72.8
RLCGL09	Canada Goose (juv)	Liver	Rasmus Lee Lake	07-19-89	76.7
RLCGL-1	Canada Goose (juv)	Liver	Rasmus Lee Lake	06-21-88	74.1
RLCGL-2	Canada Goose (juv)	Liver	Rasmus Lee Lake	06-21-88	75.8
RLCGL-3	Canada Goose (juv)	Liver	Rasmus Lee Lake	06-22-88	76.2
RLCGL-4	Canada Goose (juv)	Liver	Rasmus Lee Lake	06-22-88	76.3
GLCGL-1	Canada Goose (juv)	Liver	Goose Lake	06-22-88	67.5
GLCGL-2	Canada Goose (juv)	Liver	Goose Lake	06-22-88	72.0
GLC1	American Coot	Liver	Goose Lake	05-12-88	82.1
GLC2	American Coot	Liver	Goose Lake	05-19-88	78.4
GLC3	Wilson's Phalarope	Liver	Goose Lake	07-13-89	77.1
RLC1	Canada Goose	Liver	Rasmus Lee Lake	05-11-88	72.2
RLC2	Canada Goose	Liver	Rasmus Lee Lake	05-11-88	65.6
RLC3	Canada Goose	Liver	Rasmus Lee Lake	05-11-88	70.7
RLC4	American Coot	Liver	Rasmus Lee Lake	05-11-88	70.9
RLC5	American Coot	Liver	Rasmus Lee Lake	05-11-88	77.2
RLC6	Lesser Scaup	Liver	Rasmus Lee Lake	05-18-88	80.0

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
GLEGL03a	614	<30.0	<30.0	<0.30	<0.50	<0.200	1.52	4.570
GLEGL03b	678	<30.0	<20.0	0.45	<0.50	<0.200	2.42	3.750
GLEGL04a	682	<30.0	<20.0	<0.30	<0.50	<0.200	1.00	1.320
GLEGL04b	732	<30.0	<30.0	0.33	<0.50	<0.200	1.75	1.460
GLJEGL01	844	<30.0	<30.0	0.33	<0.50	<0.200	0.68	0.250
GLJEGL02	868	<30.0	<30.0	<0.30	<0.50	0.243	2.34	0.981
GLJEGL05	712	<10.0	<13.0	<0.30	<0.50	<0.120	0.50	0.250
GLJEGL03	842	<10.0	<13.0	0.55	<0.50	<0.120	0.50	0.550
GLJEGL04	832	<10.0	<13.0	0.42	<0.50	<0.120	0.50	0.250
SLEGL01	693	<30.0	<30.0	<0.30	<0.50	<0.200	2.02	8.270
SLEGL02	700	<30.0	<30.0	<0.30	<0.50	<0.200	1.86	2.900
SLJEGL01	816	<30.0	<30.0	<0.30	<0.50	<0.200	1.22	0.250
SLJEGL02	897	<30.0	<30.0	<0.30	<0.50	<0.200	0.77	0.250
GLEGCL-1	628	4.00	--	<0.40	<0.10	0.100	2.00	3.500
GLEGCL-2	645	<3.00	--	<0.40	<0.10	0.100	1.50	2.000
WYK12L07	575	<30.0	<30.0	<0.46	<1.00	<0.250	3.50	0.824
WYK12L08	737	<30.0	<30.0	<0.46	<1.00	<0.250	2.50	0.648
GLGADL01	683	<10.0	<13.0	<0.30	<0.50	<0.120	3.39	1.550
GLGWTL01	790	<30.0	<20.0	<0.30	<0.50	<0.200	1.00	9.160
GLRDL01	857	<30.0	<20.0	<0.30	<0.50	<0.200	10.8	2.890
GLSCPL01	711	<10.0	<13.0	<0.30	<0.50	<0.120	1.72	1.940
WYK3L005	709	<30.0	<30.0	<0.46	<1.00	0.323	9.36	1.270
WYK3L006	697	<30.0	<30.0	<0.46	<1.00	<0.250	9.75	0.731
WYK3L004	954	<30.0	<30.0	<0.46	<1.00	<0.250	3.30	0.250
WYK9L001	720	<30.0	<30.0	<0.46	<1.00	<0.250	4.38	0.717
WYK9L002	729	<30.0	<30.0	<0.46	<1.00	<0.250	5.18	0.877
WYK9L003	738	<30.0	<30.0	<0.46	<1.00	<0.250	4.34	0.250
SLBWTL01	756	<30.0	<30.0	<0.30	<0.50	<0.200	2.49	0.748
RLCGJL01	790	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLCGL07	716	<30.0	<30.0	2.30	<0.50	<0.200	7.18	<0.500
RLCGL08	708	<30.0	<30.0	5.80	<0.50	0.209	8.08	<0.500
RLCGL09	805	<30.0	<30.0	1.74	<0.50	<0.200	4.05	<0.500
RLCGL-1	767	<3.00	--	<0.20	<0.10	0.100	<3.00	<0.300
RLCGL-2	664	<3.00	--	<0.20	<0.10	0.100	<3.00	0.300
RLCGL-3	838	<3.00	--	<0.20	<0.10	0.200	<3.00	<0.300
RLCGL-4	843	<3.00	--	<0.20	<0.10	<0.100	<3.00	<0.300
GLCGL-1	508	<3.00	--	<0.20	<0.10	<0.100	<3.00	<0.300
GLCGL-2	831	<3.00	--	<0.20	<0.10	0.100	<3.00	<0.300
GLC1	1010	19.0	<20.0	<0.30	0.21	<0.030	14.4	1.140
GLC2	909	<6.30	<20.0	<0.30	0.24	0.082	9.22	1.170
GLC3	1580	<6.30	<20.0	<0.30	7.69	0.035	2.15	3.250
RLC1	683	7.00	<20.0	<0.30	2.02	<0.030	0.90	<0.400
RLC2	1110	<6.30	<20.0	<0.30	4.30	<0.030	<0.83	<0.400
RLC3	1340	<6.30	<20.0	<0.30	3.47	<0.030	<0.83	0.517
RLC4	803	<6.30	<20.0	<0.30	<0.18	<0.030	1.99	0.936
RLC5	950	15.8	<20.0	1.02	0.18	<0.030	3.16	1.260
RLC6	980	<6.30	<20.0	<0.30	0.34	<0.030	0.89	1.510

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chro-mium	Cobalt	Copper	Iron	Lead	Manga-nese	Mercury	Molyb-denum
GLEGL03a	<1.00	--	15.3	1400	<5.00	14.3	5.210	<6.00
GLEGL03b	<2.00	--	23.3	2930	<5.00	13.1	5.420	<5.00
GLEGL04a	<2.00	--	17.6	1480	<5.00	15.0	1.090	<5.00
GLEGL04b	<1.00	--	16.4	1900	<5.00	17.8	1.020	<6.00
GLJEGL01	<1.00	--	18.8	687	<5.00	14.2	0.089	<6.00
GLJEGL02	<1.00	--	14.8	607	<5.00	15.3	0.056	<6.00
GLJEGL05	<2.00	--	17.6	858	<9.00	11.3	0.055	<4.30
GLJEGL03	<2.00	--	29.9	508	<9.00	10.2	0.010	<4.30
GLJEGL04	<2.00	--	68.0	497	<9.00	15.2	0.098	<4.30
SLEGL01	<1.00	--	19.6	1770	<5.00	21.2	7.440	<6.00
SLEGL02	<1.00	--	12.8	1370	<5.00	11.9	5.390	<6.00
SLJEGL01	<1.00	--	18.7	756	<5.00	16.5	0.380	<6.00
SLJEGL02	<1.00	--	35.2	599	<5.00	21.3	0.459	<6.00
GLEGCL-1	<2.00	--	21.0	1140	<4.00	16.0	4.100	1.00
GLEGCL-2	<1.00	--	20.0	977	<4.00	17.0	5.200	2.00
WYK12L07	<1.50	<3.00	36.7	2742	<6.00	9.77	0.331	<10.0
WYK12L08	<1.50	<3.00	61.4	1691	<6.00	16.3	0.399	<10.0
GLGADL01	<2.00	<5.00	154	1540	<9.00	12.5	0.219	<4.30
GLGWTL01	<2.00	--	20.5	1330	<5.00	3.04	1.090	<5.00
GLRDL01	<2.00	--	28.5	12400	<5.00	8.05	0.702	<5.00
GLSCPL01	<2.00	<5.00	149	2780	<9.00	19.2	0.606	<4.30
WYK3L005	<1.50	<3.00	252	6944	<6.00	15.0	0.195	<10.0
WYK3L006	<1.50	<3.00	251	7223	<6.00	14.8	0.219	<10.0
WYK3L004	<1.50	<3.00	108	1584	<6.00	17.1	1.240	<10.0
WYK9L001	<1.50	<3.00	21.3	3413	<6.00	9.58	0.048	<10.0
WYK9L002	<1.50	<3.00	46.1	4131	<6.00	11.4	0.010	<10.0
WYK9L003	<1.50	<3.00	361	1702	<6.00	12.2	0.361	<10.0
SLBWTL01	<1.00	--	102	2880	<5.00	17.7	0.670	7.25
RLCGJL01	<2.00	--	222	511	<5.00	9.09	0.010	2.50
RLCGL07	<1.00	--	88.3	1770	<5.00	11.6	0.010	10.7
RLCGL08	<1.00	--	124	1560	<5.00	12.5	0.010	13.5
RLCGL09	<1.00	--	171	1030	<5.00	12.7	0.010	12.2
RLCGL-1	<1.00	--	74.3	616	<4.00	11.0	0.010	4.00
RLCGL-2	<1.00	--	54.3	1140	<4.00	7.90	0.010	3.00
RLCGL-3	<1.00	--	357	1380	<4.00	13.0	0.020	3.90
RLCGL-4	<1.00	--	188	1350	<4.00	11.0	0.018	5.70
GLCGL-1	<1.00	--	42.7	608	<4.00	7.80	0.009	2.00
GLCGL-2	<1.00	--	279	945	<4.00	13.0	0.020	4.00
GLC1	1.39	3.45	174	13000	<9.00	6.07	0.928	10.5
GLC2	0.61	<2.30	16.4	6530	<9.00	7.34	0.103	<7.00
GLC3	0.71	<2.30	15.4	709	<9.00	6.64	8.860	<7.00
RLC1	<0.50	<2.30	6.71	106	<9.00	3.56	0.041	<7.00
RLC2	<0.50	<2.30	4.52	61.3	<9.00	4.08	0.081	<7.00
RLC3	0.66	<2.30	4.84	152	<9.00	4.44	0.094	<7.00
RLC4	<0.50	<2.30	31.3	3410	<9.00	5.74	0.131	<7.00
RLC5	0.79	<2.30	86.5	4440	<9.00	7.65	0.800	<7.00
RLC6	0.86	<2.30	7.46	5480	19.6	7.91	0.504	<7.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
GLEGL03a	<1.50	72.7	<7.00	<1.00	--	<30.0	<0.60	100
GLEGL03b	<2.00	37.9	<10.0	<2.50	--	<20.0	<1.50	108
GLEGL04a	<2.00	98.3	<10.0	<2.50	--	<20.0	<1.50	78.9
GLEGL04b	<1.50	112	<7.00	<1.00	--	<30.0	<0.60	97.6
GLJEGL01	<1.50	134	<7.00	1.28	--	<30.0	<0.60	112
GLJEGL02	2.93	86.5	<7.00	3.05	--	<30.0	<0.60	107
GLJEGL05	<2.40	81.3	<8.50	1.10	--	<25.0	<0.70	106
GLJEGL03	<2.40	58.7	<8.50	2.91	--	<25.0	<0.70	104
GLJEGL04	<2.40	51.4	<8.50	2.61	--	<25.0	<0.70	104
SLEGL01	<1.50	42.0	<7.00	<1.00	--	<30.0	<0.60	105
SLEGL02	<1.50	24.5	<7.00	<1.00	--	<30.0	<0.60	84.2
SLJEGL01	<1.50	23.4	<7.00	<1.00	--	<30.0	<0.60	82.2
SLJEGL02	<1.50	25.4	<7.00	<1.00	--	<30.0	<0.60	104
GLEGCL-1	<3.00	95.0	<2.00	0.72	--	--	<0.30	106
GLEGCL-2	<3.00	100	<2.00	1.20	--	--	<0.30	96.6
WYK12L07	<3.50	7.63	<10.0	<4.00	--	<30.0	<0.80	92.8
WYK12L08	<3.50	8.09	<10.0	<4.00	--	<30.0	<0.80	118
GLGADL01	<2.40	51.8	<8.50	<1.00	--	<25.0	<0.70	155
GLGWTL01	<2.00	30.7	<10.0	<2.50	--	<20.0	<1.50	63.4
GLRDL01	<2.00	93.0	<10.0	11.4	--	<20.0	<1.50	87.6
GLSCPL01	<2.40	66.7	<8.50	1.28	--	<25.0	<0.70	155
WYK3L005	<3.50	18.6	<10.0	<4.00	--	<30.0	<0.80	164
WYK3L006	<3.50	19.1	<10.0	<4.00	--	<30.0	<0.80	158
WYK3L004	<3.50	39.7	<10.0	<4.00	--	<30.0	<0.80	137
WYK9L001	<3.50	32.3	<10.0	<4.00	--	<30.0	<0.80	111
WYK9L002	<3.50	36.3	<10.0	<4.00	--	<30.0	<0.80	126
WYK9L003	<3.50	17.6	<10.0	6.00	--	<30.0	<0.80	157
SLBWTL01	<1.50	70.5	<7.00	<1.00	--	<30.0	<0.60	145
RLCGJL01	<2.00	21.4	<10.0	<2.50	--	<20.0	<1.50	145
RLCGL07	<1.50	42.1	<7.00	<1.00	--	<30.0	<0.60	159
RLCGL08	<1.50	62.1	<7.00	<1.00	--	<30.0	<0.60	148
RLCGL09	<1.50	55.4	<7.00	<1.00	--	<30.0	<0.60	178
RLCGL-1	<3.00	30.0	<2.00	0.30	<4.0	--	<0.30	154
RLCGL-2	<3.00	22.0	<2.00	0.40	<4.0	--	<0.30	132
RLCGL-3	<3.00	40.0	<2.00	0.30	<4.0	--	<0.30	150
RLCGL-4	<3.00	32.0	<2.00	0.40	<4.0	--	<0.30	200
GLCGL-1	<3.00	22.0	<2.00	0.20	<4.0	--	<0.30	82.2
GLCGL-2	<3.00	57.0	<2.00	<0.20	<4.0	--	<0.30	197
GLC1	<4.50	50.6	<8.10	4.05	--	<21.0	1.41	445
GLC2	<4.50	125	<8.10	6.46	--	<21.0	0.72	102
GLC3	<4.50	34.5	<8.10	51.2	--	<21.0	<0.57	119
RLC1	<4.50	3.78	<8.10	9.16	--	<21.0	<0.57	75.0
RLC2	<4.50	2.63	<8.10	28.6	--	<21.0	<0.57	72.5
RLC3	<4.50	4.86	<8.10	21.7	--	<21.0	<0.57	89.3
RLC4	<4.50	39.5	<8.10	<0.28	--	<21.0	1.19	187
RLC5	<4.50	68.6	<8.10	9.64	--	<21.0	2.07	202
RLC6	<4.50	79.7	<8.10	2.04	--	<21.0	<0.57	167

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
RLCGM07	Canada Goose	Muscle	Rasmus Lee Lake	07-19-89	79.0
RLCGM08	Canada Goose	Muscle	Rasmus Lee Lake	07-19-89	79.2
RLCGM09	Canada Goose	Muscle	Rasmus Lee Lake	07-19-89	82.8
RLCGM-1	Canada Goose	Muscle	Rasmus Lee Lake	06-21-88	82.9
RLCGM-2	Canada Goose	Muscle	Rasmus Lee Lake	06-21-88	84.3
RLCGM-3	Canada Goose	Muscle	Rasmus Lee Lake	06-22-88	81.6
RLCGM-4	Canada Goose	Muscle	Rasmus Lee Lake	06-22-88	81.7
GLCGM-1	Canada Goose	Muscle	Goose Lake	06-22-88	76.4
GLCGM-2	Canada Goose	Muscle	Goose Lake	06-22-88	82.7
GLGADM01	Gadwall	Muscle	Goose Lake	08-06-89	68.3
GLSCPM01	Scaup	Muscle	Goose Lake	08-04-89	73.2
WYK12M07	Mallard	Muscle	Airport Pond	09-20-88	72.9
WYK12M08	Green-Winged Teal	Muscle	Airport Pond	09-20-88	73.2
WYK3M005	Mallard	Muscle	Illco Pond	09-20-88	73.2
WYK3M006	Green-Winged Teal	Muscle	Illco Pond	09-20-88	73.0
WYK3M004	Shoveler	Muscle	Illco Pond	09-20-88	73.9
WYK9M002	Mallard	Muscle	Emigrant Pond	09-20-88	72.6
WYK9M003	Ruddy Duck	Muscle	Emigrant Pond	09-20-88	74.7
WYK9M001	Mallard	Muscle	Emigrant Pond	09-20-88	72.7
RLAAE001	American Avocet	Egg	Rasmus Lee Lake	06-02-88	72.6
RLAAE002	American Avocet	Egg	Rasmus Lee Lake	06-02-88	74.4
RLAAE003	American Avocet	Egg	Rasmus Lee Lake	06-02-88	81.0
RLAAE004	American Avocet	Egg	Rasmus Lee Lake	06-02-88	78.6
RLAAE005	American Avocet	Egg	Rasmus Lee Lake	06-02-88	75.6
RLAAE006	American Avocet	Egg	Rasmus Lee Lake	06-14-88	77.3
RLAAE007	American Avocet	Egg	Rasmus Lee Lake	06-14-88	73.2
RLAAE008	American Avocet	Egg	Rasmus Lee Lake	06-14-88	72.8
RLAAE009	American Avocet	Egg	Rasmus Lee Lake	06-14-88	75.1
RLAAE010	American Avocet	Egg	Rasmus Lee Lake	06-14-88	75.8
RLAAE011	American Avocet	Egg	Rasmus Lee Lake	06-14-88	72.3
RLAAE012	American Avocet	Egg	Rasmus Lee Lake	06-14-88	80.2
RLAAE013	American Avocet	Egg	Rasmus Lee Lake	05-25-89	70.9
RLAAE014	American Avocet	Egg	Rasmus Lee Lake	06-01-89	74.0
RLAAE015	American Avocet	Egg	Rasmus Lee Lake	06-01-89	71.4
RLAAE016	American Avocet	Egg	Rasmus Lee Lake	06-01-89	72.4
RLAAE017	American Avocet	Egg	Rasmus Lee Lake	06-01-89	69.6
RLAAE018	American Avocet	Egg	Rasmus Lee Lake	06-01-89	73.3
RLAAE019	American Avocet	Egg	Rasmus Lee Lake	06-25-89	63.1
RLAAE020	American Avocet	Egg	Rasmus Lee Lake	06-25-89	69.8
RLAAE021	American Avocet	Egg	Rasmus Lee Lake	06-25-89	71.4
RLAAE022	American Avocet	Egg	Rasmus Lee Lake	06-25-89	17.0
RLAAE023	American Avocet	Egg	Rasmus Lee Lake	06-25-89	72.2
RLAAE024	American Avocet	Egg	Rasmus Lee Lake	06-25-89	70.5
RLAAE025	American Avocet	Egg	Rasmus Lee Lake	06-25-89	72.8
RLAAE026	American Avocet	Egg	Rasmus Lee Lake	06-25-89	71.6
RLAAE027	American Avocet	Egg	Rasmus Lee Lake	06-25-89	69.2
RLAAE028	American Avocet	Egg	Rasmus Lee Lake	06-25-89	69.1

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
RLCGM07	1130	<30.0	<30.0	1.02	<0.50	<0.200	7.26	<0.500
RLCGM08	1170	<30.0	<30.0	1.52	<0.50	<0.200	9.33	<0.500
RLCGM09	892	<30.0	<30.0	1.28	<0.50	<0.200	4.62	<0.500
RLCGM-1	926	18.0	--	<0.20	0.30	<0.100	<3.00	<0.300
RLCGM-2	947	25.0	--	<0.20	0.20	0.100	<3.00	<0.300
RLCGM-3	1010	24.0	--	<0.20	0.20	<0.100	<3.00	<0.300
RLCGM-4	1050	10.0	--	<0.20	0.10	<0.100	<3.00	<0.300
GLCGM-1	1110	5.00	--	<0.20	<0.10	<0.100	<3.00	<0.300
GLCGM-2	1030	10.0	--	<0.20	<0.10	<0.100	<3.00	<0.300
GLGADM01	871	<10.0	22.1	<0.30	<0.50	<0.120	3.35	<0.500
GLSCPM01	1050	<10.0	<13.0	<0.30	<0.50	<0.120	<1.00	<0.500
WYK12M07	1208	<30.0	<30.0	<0.46	<1.00	<0.250	<3.00	<0.500
WYK12M08	1265	<30.0	<30.0	<0.46	<1.00	<0.250	<3.00	<0.500
WYK3M005	1232	<30.0	<30.0	<0.46	<1.00	<0.250	<3.00	<0.500
WYK3M006	1297	<30.0	<30.0	<0.46	<1.00	<0.250	<3.00	<0.500
WYK3M004	1253	<30.0	<30.0	<0.46	<1.00	<0.250	<3.00	<0.500
WYK9M002	1210	<30.0	<30.0	<0.46	<1.00	<0.250	<3.00	<0.500
WYK9M003	1183	<30.0	<30.0	<0.46	<1.00	<0.250	<3.00	<0.500
WYK9M001	1202	<30.0	<30.0	<0.46	<1.00	<0.250	<3.00	<0.500
RLAAE001	467	11.9	<20.0	<0.30	2.40	<0.030	1.77	<0.400
RLAAE002	462	<6.30	<20.0	<0.30	0.82	0.166	3.37	<0.400
RLAAE003	427	<6.30	<20.0	<0.30	2.03	0.040	1.45	<0.400
RLAAE004	487	<6.30	<20.0	<0.30	0.59	<0.030	<0.83	<0.400
RLAAE005	476	<6.30	<20.0	<0.30	1.18	<0.030	<0.83	<0.400
RLAAE006	519	<6.30	<20.0	<0.30	1.31	<0.030	<0.83	<0.400
RLAAE007	424	<6.30	<20.0	<0.30	0.91	<0.030	<0.83	<0.400
RLAAE008	502	<6.30	<20.0	<0.30	2.37	<0.030	<0.83	<0.400
RLAAE009	458	<6.30	<20.0	<0.30	1.33	<0.030	0.87	<0.400
RLAAE010	458	<6.30	<20.0	<0.30	1.17	<0.030	<0.83	0.427
RLAAE011	448	<6.30	<20.0	<0.30	2.30	<0.030	<0.83	<0.400
RLAAE012	516	<6.30	<20.0	<0.30	1.55	<0.030	<0.83	<0.400
RLAAE013	413	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE014	483	<30.0	<20.0	<0.30	0.98	<0.200	2.04	<0.500
RLAAE015	393	<30.0	<20.0	<0.30	1.32	<0.200	<2.00	<0.500
RLAAE016	519	<30.0	<20.0	<0.30	0.71	<0.200	<2.00	<0.500
RLAAE017	452	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE018	543	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE019	738	141	<20.0	<0.30	1.76	<0.200	<2.00	<0.500
RLAAE020	572	<30.0	<20.0	<0.30	1.32	<0.200	2.06	<0.500
RLAAE021	809	<30.0	<20.0	<0.30	0.89	<0.200	<2.00	<0.500
RLAAE022	426	<30.0	<20.0	<0.30	0.80	<0.200	<2.00	<0.500
RLAAE023	778	<30.0	<20.0	<0.30	0.99	<0.200	<2.00	<0.500
RLAAE024	458	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE025	728	<30.0	<20.0	<0.30	0.69	<0.200	<2.00	<0.500
RLAAE026	512	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE027	412	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE028	514	<30.0	<20.0	<0.30	0.65	<0.200	<2.00	<0.500

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum
RLCGM07	<1.00	--	20.6	187	<5.00	<1.50	<0.020	<6.00
RLCGM08	<1.00	--	20.2	494	<5.00	<1.50	<0.020	<6.00
RLCGM09	<1.00	--	15.2	100	<5.00	<1.50	<0.020	<6.00
RLCGM-1	2.00	--	18.0	136	<4.00	1.10	0.010	<1.00
RLCGM-2	<1.00	--	18.0	168	<4.00	1.10	0.010	<1.00
RLCGM-3	<1.00	--	11.0	171	<4.00	1.10	0.009	<1.00
RLCGM-4	<1.00	--	11.0	258	<4.00	0.40	0.008	<1.00
GLCGM-1	2.00	--	21.0	156	<4.00	0.60	0.008	<1.00
GLCGM-2	2.00	--	16.0	143	<4.00	0.60	0.010	<1.00
GLGADM01	<2.00	<5.00	29.5	207	<9.00	<2.50	<0.020	<4.30
GLSCPM01	<2.00	<5.00	24.0	391	<9.00	<2.50	0.155	<4.30
WYK12M07	<1.50	<3.00	23.7	302	<6.00	2.23	0.115	<10.0
WYK12M08	<1.50	<3.00	25.0	275	<6.00	2.43	0.100	<10.0
WYK3M005	<1.50	<3.00	24.0	294	<6.00	2.12	<0.020	<10.0
WYK3M006	<1.50	<3.00	28.8	222	<6.00	2.25	0.197	<10.0
WYK3M004	<1.50	<3.00	37.9	286	<6.00	2.46	0.340	<10.0
WYK9M002	<1.50	<3.00	16.1	267	<6.00	1.63	<0.020	<10.0
WYK9M003	<1.50	<3.00	33.0	299	<6.00	2.30	0.190	<10.0
WYK9M001	<1.50	<3.00	17.2	220	<6.00	1.53	<0.020	<10.0
RLAAE001	5.12	<2.30	5.12	132	<9.00	4.46	0.109	<7.00
RLAAE002	<0.50	<2.30	4.90	110	<9.00	3.39	0.140	<7.00
RLAAE003	<0.50	<2.30	4.45	129	<9.00	2.51	0.045	<7.00
RLAAE004	<0.50	<2.30	3.36	124	<9.00	2.81	1.120	<7.00
RLAAE005	<0.50	<2.30	3.00	133	<9.00	2.58	0.117	<7.00
RLAAE006	<0.50	<2.30	3.73	140	<9.00	2.14	0.257	<7.00
RLAAE007	<0.50	<2.30	4.68	106	<9.00	1.91	0.067	<7.00
RLAAE008	<0.50	<2.30	4.70	127	<9.00	1.66	0.081	<7.00
RLAAE009	0.81	<2.30	4.02	124	<9.00	1.93	0.218	<7.00
RLAAE010	0.53	<2.30	4.79	138	<9.00	2.32	0.239	<7.00
RLAAE011	0.91	<2.30	4.16	154	11.4	1.85	0.110	<7.00
RLAAE012	<0.50	<2.30	2.93	146	<9.00	1.67	0.183	<7.00
RLAAE013	<2.00	--	3.11	146	<5.00	2.29	0.344	<5.00
RLAAE014	<2.00	--	<2.00	94.9	<5.00	2.47	0.146	<5.00
RLAAE015	<2.00	--	3.39	135	<5.00	3.02	0.326	<5.00
RLAAE016	<2.00	--	4.17	118	<5.00	1.86	0.529	<5.00
RLAAE017	<2.00	--	4.40	132	<5.00	2.01	0.068	<5.00
RLAAE018	<2.00	--	4.19	116	<5.00	2.41	0.111	<5.00
RLAAE019	<2.00	--	5.06	267	<5.00	5.22	0.719	<5.00
RLAAE020	<2.00	--	3.60	133	<5.00	2.70	0.385	<5.00
RLAAE021	<2.00	--	3.94	138	<5.00	2.93	0.157	<5.00
RLAAE022	<2.00	--	6.36	130	<5.00	2.54	<0.020	<5.00
RLAAE023	<2.00	--	5.13	161	5.06	2.50	0.236	<5.00
RLAAE024	<2.00	--	4.35	108	<5.00	2.95	0.541	<5.00
RLAAE025	<2.00	--	6.17	175	<5.00	3.07	0.386	<5.00
RLAAE026	<2.00	--	4.91	143	<5.00	2.63	0.976	<5.00
RLAAE027	<2.00	--	3.94	102	<5.00	2.16	0.337	<5.00
RLAAE028	<2.00	--	5.07	114	<5.00	2.18	0.565	<5.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
RLCGM07	<1.50	33.4	<7.00	<1.00	--	<30.0	<0.60	60.0
RLCGM08	<1.50	35.2	<7.00	<1.00	--	<30.0	<0.60	61.5
RLCGM09	<1.50	31.3	<7.00	<1.00	--	<30.0	<0.60	59.3
RLCGM-1	<3.00	22.0	<2.00	1.90	<4.0	--	<0.30	98.9
RLCGM-2	<3.00	18.8	<2.00	0.81	<4.0	--	<0.30	79.6
RLCGM-3	<3.00	17.2	<2.00	0.50	<4.0	--	<0.30	58.0
RLCGM-4	<3.00	19.9	<2.00	0.50	<4.0	--	<0.30	55.7
GLCGM-1	<3.00	24.0	<2.00	0.50	<4.0	--	<0.30	49.4
GLCGM-2	<3.00	24.0	<2.00	0.64	<4.0	--	<0.30	69.5
GLGADM01	<2.40	22.9	<8.50	<1.00	--	<25.0	<0.70	45.3
GLSCPM01	<2.40	25.8	<8.50	<1.00	--	<25.0	<0.70	28.7
WYK12M07	<3.50	6.00	<10.0	<4.00	--	<30.0	<0.80	45.7
WYK12M08	<3.50	1.98	<10.0	<4.00	--	<30.0	<0.80	42.9
WYK3M005	<3.50	9.21	<10.0	<4.00	--	<30.0	<0.80	41.5
WYK3M006	<3.50	2.36	<10.0	<4.00	--	<30.0	<0.80	42.3
WYK3M004	<3.50	10.6	<10.0	<4.00	--	<30.0	<0.80	44.1
WYK9M002	<3.50	18.5	<10.0	<4.00	--	<30.0	<0.80	42.5
WYK9M003	<3.50	1.98	<10.0	<4.00	--	<30.0	<0.80	65.1
WYK9M001	<3.50	16.5	<10.0	<4.00	--	<30.0	<0.80	44.0
RLAAE001	<4.50	49.2	<8.10	25.9	--	<21.0	<0.57	55.4
RLAAE002	6.41	77.3	<8.10	40.3	--	<21.0	<0.57	56.0
RLAAE003	<4.50	64.3	<8.10	22.2	--	<21.0	<0.57	62.9
RLAAE004	<4.50	57.6	<8.10	64.9	--	<21.0	<0.57	52.4
RLAAE005	<4.50	59.6	<8.10	42.1	--	<21.0	<0.57	56.4
RLAAE006	<4.50	84.5	<8.10	34.0	--	<21.0	<0.57	50.4
RLAAE007	<4.50	24.2	<8.10	20.3	--	<21.0	<0.57	53.0
RLAAE008	<4.50	94.1	<8.10	17.2	--	<21.0	<0.57	67.1
RLAAE009	<4.50	70.7	<8.10	18.6	--	<21.0	<0.57	53.0
RLAAE010	<4.50	65.4	<8.10	10.7	--	<21.0	<0.57	60.5
RLAAE011	<4.50	73.3	<8.10	24.8	--	<21.0	<0.57	64.3
RLAAE012	<4.50	58.7	<8.10	15.4	--	<21.0	<0.57	58.9
RLAAE013	<2.00	100	<10.0	19.7	--	<20.0	<1.50	48.4
RLAAE014	<2.00	98.3	<10.0	13.7	--	<20.0	<1.50	41.5
RLAAE015	<2.00	74.5	<10.0	11.1	--	<20.0	<1.50	55.4
RLAAE016	<2.00	104	<10.0	16.4	--	<20.0	<1.50	46.9
RLAAE017	<2.00	93.8	<10.0	28.2	--	<20.0	<1.50	47.3
RLAAE018	<2.00	54.0	<10.0	46.9	--	<20.0	<1.50	44.2
RLAAE019	<2.00	77.1	<10.0	105	--	<20.0	<1.50	53.0
RLAAE020	<2.00	78.0	<10.0	32.7	--	<20.0	<1.50	46.3
RLAAE021	<2.00	82.1	<10.0	118	--	<20.0	<1.50	64.8
RLAAE022	<2.00	79.2	<10.0	37.0	--	<20.0	<1.50	59.1
RLAAE023	<2.00	96.2	<10.0	58.1	--	<20.0	<1.50	61.5
RLAAE024	<2.00	62.2	<10.0	28.8	--	<20.0	<1.50	47.7
RLAAE025	<2.00	83.7	<10.0	165	--	<20.0	<1.50	59.4
RLAAE026	<2.00	113	<10.0	20.1	--	<20.0	<1.50	51.1
RLAAE027	<2.00	68.5	<10.0	41.4	--	<20.0	<1.50	41.1
RLAAE028	<2.00	86.2	<10.0	24.3	--	<20.0	<1.50	53.8

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
RLAAE029	American Avocet	Egg	Rasmus Lee Lake	06-25-89	63.4
RLAAE030	American Avocet	Egg	Rasmus Lee Lake	06-25-89	68.8
RLAAE031	American Avocet	Egg	Rasmus Lee Lake	06-25-89	46.2
RLAAE032	American Avocet	Egg	Rasmus Lee Lake	06-25-89	55.4
RLAAE033	American Avocet	Egg	Rasmus Lee Lake	06-25-89	71.4
RLAAE034	American Avocet	Egg	Rasmus Lee Lake	06-25-89	66.7
RLAAE035	American Avocet	Egg	Rasmus Lee Lake	06-25-89	65.4
RLAAE036	American Avocet	Egg	Rasmus Lee Lake	06-25-89	62.2
RLAAE037	American Avocet	Egg	Rasmus Lee Lake	06-25-89	67.2
RLAAE038	American Avocet	Egg	Rasmus Lee Lake	06-25-89	71.6
RLAAE039	American Avocet	Egg	Rasmus Lee Lake	06-25-89	72.2
RLAAE040	American Avocet	Egg	Rasmus Lee Lake	06-25-89	95.7
RLAAE041	American Avocet	Egg	Rasmus Lee Lake	06-26-89	68.8
RLAAE042	American Avocet	Egg	Rasmus Lee Lake	06-26-89	69.0
RLAAE043	American Avocet	Egg	Rasmus Lee Lake	06-26-89	67.9
RLAAE044	American Avocet	Egg	Rasmus Lee Lake	06-26-89	68.0
RLAAE045	American Avocet	Egg	Rasmus Lee Lake	06-26-89	71.5
RLAAE046	American Avocet	Egg	Rasmus Lee Lake	06-26-89	72.6
RLAAE047	American Avocet	Egg	Rasmus Lee Lake	07-11-89	56.9
RLAAE048	American Avocet	Egg	Rasmus Lee Lake	07-11-89	61.6
RLAAE051	American Avocet	Egg	Rasmus Lee Lake	07-11-89	63.0
RLAAE052	American Avocet	Egg	Rasmus Lee Lake	07-11-89	70.2
RLAAE053	American Avocet	Egg	Rasmus Lee Lake	07-11-89	72.8
RLAAE054	American Avocet	Egg	Rasmus Lee Lake	07-11-89	71.7
RLAAE055	American Avocet	Egg	Rasmus Lee Lake	07-11-89	70.8
RLAAE056	American Avocet	Egg	Rasmus Lee Lake	07-11-89	68.2
RLAAE057	American Avocet	Egg	Rasmus Lee Lake	07-11-89	70.9
RLAAE058	American Avocet	Egg	Rasmus Lee Lake	07-11-89	67.9
RLAAE059	American Avocet	Egg	Rasmus Lee Lake	07-11-89	69.0
RLAAE060	American Avocet	Egg	Rasmus Lee Lake	07-11-89	68.9
RLAAE061	American Avocet	Egg	Rasmus Lee Lake	07-11-89	42.1
RLAAE062	American Avocet	Egg	Rasmus Lee Lake	07-11-89	68.3
RLAAE063	American Avocet	Egg	Rasmus Lee Lake	07-11-89	54.4
RLAAE064	American Avocet	Egg	Rasmus Lee Lake	07-11-89	69.5
RLAAE065	American Avocet	Egg	Rasmus Lee Lake	07-11-89	73.7
RLAAE066	American Avocet	Egg	Rasmus Lee Lake	07-11-89	68.7
RLAAE067	American Avocet	Egg	Rasmus Lee Lake	07-11-89	58.6
RLAAE068	American Avocet	Egg	Rasmus Lee Lake	07-11-89	68.3
RLAAE069	American Avocet	Egg	Rasmus Lee Lake	07-11-89	61.1
RLAAE070	American Avocet	Egg	Rasmus Lee Lake	07-11-89	66.0
RLAAE071	American Avocet	Egg	Rasmus Lee Lake	07-11-89	65.9
RLAAE072	American Avocet	Egg	Rasmus Lee Lake	07-11-89	61.0
RLAAE073	American Avocet	Egg	Rasmus Lee Lake	07-11-89	62.2
RLAAE074	American Avocet	Egg	Rasmus Lee Lake	07-11-89	66.2
RLAAE075	American Avocet	Egg	Rasmus Lee Lake	07-11-89	62.5
RLAAE076	American Avocet	Egg	Rasmus Lee Lake	07-11-89	65.5
RLAAE077	American Avocet	Egg	Rasmus Lee Lake	07-11-89	73.3

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
RLAAE029	629	<30.0	<20.0	<0.30	0.54	<0.200	<2.00	<0.500
RLAAE030	558	<30.0	<20.0	<0.30	0.81	<0.200	<2.00	<0.500
RLAAE031	468	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE032	540	<30.0	<20.0	<0.30	2.05	<0.200	2.01	<0.500
RLAAE033	715	<30.0	<20.0	<0.30	0.61	<0.200	<2.00	<0.500
RLAAE034	572	<30.0	<20.0	<0.30	1.62	<0.200	<2.00	<0.500
RLAAE035	462	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE036	532	<30.0	<20.0	<0.30	0.88	<0.200	<2.00	<0.500
RLAAE037	603	<30.0	<20.0	<0.30	1.10	<0.200	<2.00	<0.500
RLAAE038	531	<30.0	<20.0	<0.30	0.78	<0.200	<2.00	<0.500
RLAAE039	464	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE040	467	<30.0	<20.0	<0.30	1.14	<0.200	<2.00	<0.500
RLAAE041	615	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE042	831	<30.0	<20.0	<0.30	2.44	<0.200	<2.00	<0.500
RLAAE043	640	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE044	497	<30.0	<20.0	<0.30	0.89	<0.200	<2.00	<0.500
RLAAE045	439	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE046	410	<30.0	<20.0	<0.30	<0.50	<0.200	<2.00	<0.500
RLAAE047	523	<30.0	<30.0	<0.30	<0.50	<0.200	<0.50	<0.500
RLAAE048	425	<30.0	<30.0	<0.30	1.16	<0.200	<0.50	<0.500
RLAAE051	478	<30.0	<30.0	<0.30	<0.50	<0.200	0.60	<0.500
RLAAE052	483	<30.0	<30.0	<0.30	1.79	<0.200	<0.50	<0.500
RLAAE053	448	<30.0	<30.0	<0.30	<0.50	<0.200	<0.50	<0.500
RLAAE054	431	<30.0	<30.0	<0.30	1.07	<0.200	<0.50	<0.500
RLAAE055	654	<30.0	<30.0	<0.30	0.87	<0.200	1.08	<0.500
RLAAE056	351	<30.0	<30.0	<0.30	0.62	<0.200	1.14	<0.500
RLAAE057	549	<30.0	<30.0	<0.30	1.44	<0.200	1.30	<0.500
RLAAE058	573	<30.0	<30.0	<0.30	<0.50	<0.200	0.71	<0.500
RLAAE059	417	<30.0	<30.0	<0.30	0.60	<0.200	0.85	<0.500
RLAAE060	435	<30.0	<30.0	<0.30	<0.50	<0.200	0.88	<0.500
RLAAE061	524	<30.0	<30.0	<0.30	2.34	<0.200	<0.50	<0.500
RLAAE062	431	<30.0	<30.0	<0.30	<0.50	<0.200	0.84	<0.500
RLAAE063	513	<30.0	<30.0	<0.30	1.98	<0.200	<0.50	<0.500
RLAAE064	798	<30.0	<30.0	<0.30	<0.50	<0.200	1.50	<0.500
RLAAE065	493	<30.0	<30.0	<0.30	0.77	<0.200	1.46	<0.500
RLAAE066	925	<30.0	<30.0	<0.30	0.56	<0.200	1.15	<0.500
RLAAE067	722	<30.0	<30.0	<0.30	0.59	<0.200	0.99	<0.500
RLAAE068	692	<30.0	<30.0	<0.30	<0.50	<0.200	1.25	<0.500
RLAAE069	614	<30.0	<30.0	<0.30	<0.50	<0.200	1.91	<0.500
RLAAE070	404	<30.0	<30.0	<0.30	<0.50	<0.200	1.00	<0.500
RLAAE071	450	<30.0	<30.0	<0.30	<0.50	<0.200	<0.50	<0.500
RLAAE072	470	<30.0	<30.0	<0.30	1.15	<0.200	0.76	<0.500
RLAAE073	458	<30.0	<30.0	<0.30	<0.50	<0.200	1.03	<0.500
RLAAE074	554	<30.0	<30.0	<0.30	0.67	<0.200	0.98	<0.500
RLAAE075	503	<30.0	<30.0	<0.30	<0.50	<0.200	<0.50	<0.500
RLAAE076	539	<30.0	<30.0	<0.30	<0.50	<0.200	<0.50	<0.500
RLAAE077	486	<30.0	<30.0	<0.30	<0.50	<0.200	<0.50	<0.500

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum
RLAAE029	<2.00	--	5.59	134	<5.00	2.96	0.077	<5.00
RLAAE030	<2.00	--	4.62	142	<5.00	2.02	0.606	<5.00
RLAAE031	<2.00	--	3.92	116	<5.00	1.90	0.088	<5.00
RLAAE032	<2.00	--	3.63	135	7.94	1.81	1.130	<5.00
RLAAE033	<2.00	--	4.74	147	<5.00	1.55	0.115	<5.00
RLAAE034	<2.00	--	4.85	125	<5.00	1.88	0.772	<5.00
RLAAE035	<2.00	--	3.88	83.3	<5.00	2.24	0.378	<5.00
RLAAE036	<2.00	--	5.65	133	<5.00	2.27	0.230	<5.00
RLAAE037	<2.00	--	4.44	109	<5.00	3.05	0.124	<5.00
RLAAE038	<2.00	--	4.14	123	<5.00	2.09	0.456	<5.00
RLAAE039	<2.00	--	<2.00	111	<5.00	2.87	0.053	<5.00
RLAAE040	<2.00	--	4.61	135	<5.00	3.18	0.952	<5.00
RLAAE041	<2.00	--	4.18	138	<5.00	2.26	0.103	<5.00
RLAAE042	<2.00	--	2.13	155	<5.00	2.13	0.350	<5.00
RLAAE043	<2.00	--	4.36	132	<5.00	2.70	<0.020	<5.00
RLAAE044	<2.00	--	3.58	105	<5.00	2.30	0.258	<5.00
RLAAE045	<2.00	--	2.71	109	<5.00	1.89	0.591	<5.00
RLAAE046	<2.00	--	5.06	148	5.35	2.34	0.231	<5.00
RLAAE047	<1.00	--	3.15	95.8	<5.00	23.6	0.023	<6.00
RLAAE048	<1.00	--	<2.50	108	<5.00	<1.50	0.686	<6.00
RLAAE051	<1.00	--	4.69	98.6	<5.00	<1.50	0.644	<6.00
RLAAE052	1.12	--	<2.50	140	<5.00	3.66	1.350	<6.00
RLAAE053	<1.00	--	2.60	115	<5.00	2.43	1.430	<6.00
RLAAE054	<1.00	--	2.53	132	<5.00	2.72	1.660	<6.00
RLAAE055	<1.00	--	4.57	175	<5.00	<1.50	0.727	<6.00
RLAAE056	<1.00	--	4.03	93.4	<5.00	1.55	0.510	<6.00
RLAAE057	<1.00	--	4.69	143	5.22	1.62	0.046	<6.00
RLAAE058	<1.00	--	5.10	184	<5.00	1.59	0.427	<6.00
RLAAE059	<1.00	--	4.14	128	<5.00	<1.50	0.284	<6.00
RLAAE060	<1.00	--	3.93	103	<5.00	<1.50	1.230	<6.00
RLAAE061	<1.00	--	3.89	146	<5.00	<1.50	0.313	<6.00
RLAAE062	<1.00	--	4.49	91.5	<5.00	1.81	0.124	<6.00
RLAAE063	<1.00	--	3.31	129	<5.00	<1.50	0.431	<6.00
RLAAE064	<1.00	--	4.43	93.6	<5.00	2.20	0.530	<6.00
RLAAE065	<1.00	--	3.22	110	<5.00	2.49	0.224	<6.00
RLAAE066	<1.00	--	4.52	147	<5.00	2.05	0.432	<6.00
RLAAE067	<1.00	--	3.58	126	<5.00	2.42	0.495	<6.00
RLAAE068	<1.00	--	4.90	107	<5.00	3.29	0.605	<6.00
RLAAE069	<1.00	--	3.99	100	<5.00	2.18	0.283	<6.00
RLAAE070	<1.00	--	2.63	126	<5.00	2.67	0.320	<6.00
RLAAE071	<1.00	--	3.30	117	<5.00	2.15	0.325	<6.00
RLAAE072	1.33	--	3.18	128	<5.00	1.99	0.284	<6.00
RLAAE073	1.35	--	3.85	130	5.30	3.26	0.501	<6.00
RLAAE074	<1.00	--	4.20	143	<5.00	2.70	0.354	<6.00
RLAAE075	<1.00	--	4.30	130	<5.00	2.70	0.212	<6.00
RLAAE076	<1.00	--	4.33	129	<5.00	2.66	2.440	<6.00
RLAAE077	<1.00	--	8.67	147	<5.00	2.14	3.300	<6.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
RLAAE029	<2.00	93.6	<10.0	101	--	<20.0	<1.50	55.9
RLAAE030	<2.00	92.7	<10.0	13.8	--	<20.0	<1.50	51.5
RLAAE031	<2.00	48.4	<10.0	13.5	--	<20.0	<1.50	59.4
RLAAE032	<2.00	59.7	<10.0	54.7	--	<20.0	<1.50	47.6
RLAAE033	<2.00	91.4	<10.0	45.1	--	<20.0	<1.50	59.6
RLAAE034	<2.00	85.4	<10.0	35.4	--	<20.0	<1.50	53.4
RLAAE035	<2.00	123	<10.0	44.3	--	<20.0	<1.50	43.7
RLAAE036	<2.00	82.8	<10.0	48.0	--	<20.0	<1.50	55.1
RLAAE037	<2.00	91.5	<10.0	40.7	--	<20.0	<1.50	47.9
RLAAE038	<2.00	103	<10.0	22.6	--	<20.0	<1.50	51.9
RLAAE039	<2.00	61.7	<10.0	<2.50	--	<20.0	<1.50	55.5
RLAAE040	<2.00	86.5	<10.0	11.6	--	<20.0	<1.50	57.6
RLAAE041	<2.00	82.9	<10.0	76.7	--	<20.0	<1.50	51.4
RLAAE042	<2.00	76.8	<10.0	46.3	--	<20.0	<1.50	59.7
RLAAE043	<2.00	87.9	<10.0	66.5	--	<20.0	<1.50	52.5
RLAAE044	<2.00	125	<10.0	30.1	--	<20.0	<1.50	46.6
RLAAE045	<2.00	76.5	<10.0	22.9	--	<20.0	<1.50	40.2
RLAAE046	<2.00	66.7	<10.0	26.4	--	<20.0	<1.50	52.3
RLAAE047	<1.50	67.9	<7.00	79.7	--	<30.0	<0.60	50.4
RLAAE048	<1.50	83.4	<7.00	20.0	--	<30.0	<0.60	46.7
RLAAE051	<1.50	63.2	<7.00	36.2	--	<30.0	<0.60	36.0
RLAAE052	<1.50	108	<7.00	16.9	--	<30.0	<0.60	62.1
RLAAE053	<1.50	135	<7.00	9.25	--	<30.0	<0.60	41.9
RLAAE054	<1.50	114	<7.00	11.7	--	<30.0	<0.60	47.0
RLAAE055	<1.50	120	<7.00	21.0	--	<30.0	<0.60	51.8
RLAAE056	<1.50	58.5	<7.00	35.9	--	<30.0	0.71	41.6
RLAAE057	<1.50	90.1	<7.00	22.8	--	<30.0	<0.60	61.7
RLAAE058	<1.50	77.5	<7.00	61.1	--	<30.0	<0.60	50.1
RLAAE059	<1.50	89.0	<7.00	26.0	--	<30.0	<0.60	46.5
RLAAE060	<1.50	102	<7.00	8.64	--	<30.0	<0.60	34.7
RLAAE061	<1.50	75.1	<7.00	38.1	--	<30.0	<0.60	65.5
RLAAE062	<1.50	99.2	<7.00	34.9	--	<30.0	<0.60	41.5
RLAAE063	<1.50	78.7	<7.00	49.5	--	<30.0	<0.60	61.6
RLAAE064	<1.50	126	<7.00	90.8	--	<30.0	<0.60	44.4
RLAAE065	<1.50	110	<7.00	45.3	--	<30.0	<0.60	46.4
RLAAE066	<1.50	87.8	<7.00	114	--	<30.0	<0.60	67.8
RLAAE067	<1.50	71.7	<7.00	91.5	--	<30.0	<0.60	57.4
RLAAE068	<1.50	61.3	<7.00	126	--	<30.0	<0.60	52.8
RLAAE069	<1.50	60.3	<7.00	54.7	--	<30.0	<0.60	38.2
RLAAE070	<1.50	58.5	<7.00	52.5	--	<30.0	<0.60	53.2
RLAAE071	<1.50	76.7	<7.00	53.3	--	<30.0	<0.60	47.9
RLAAE072	<1.50	72.3	<7.00	39.2	--	<30.0	<0.60	52.1
RLAAE073	<1.50	66.3	<7.00	58.7	--	<30.0	<0.60	51.7
RLAAE074	<1.50	83.3	<7.00	52.1	--	<30.0	1.01	57.4
RLAAE075	<1.50	67.2	<7.00	84.8	--	<30.0	0.80	55.0
RLAAE076	<1.50	72.3	<7.00	79.5	--	<30.0	<0.60	52.3
RLAAE077	<1.50	79.2	<7.00	43.1	--	<30.0	<0.60	55.3

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
RLAAE078	American Avocet	Egg	Rasmus Lee Lake	07-11-89	65.4
RLAAE079	American Avocet	Egg	Rasmus Lee Lake	07-11-89	62.1
RLAAE080	American Avocet	Egg	Rasmus Lee Lake	07-11-89	64.1
RLAAE081	American Avocet	Egg	Rasmus Lee Lake	07-11-89	69.7
RLAAE082	American Avocet	Egg	Rasmus Lee Lake	07-11-89	67.5
RLAAE083	American Avocet	Egg	Rasmus Lee Lake	07-11-89	71.2
RLAAE084	American Avocet	Egg	Rasmus Lee Lake	07-11-89	70.9
RLAAE085	American Avocet	Egg	Rasmus Lee Lake	07-11-89	66.8
RLAAE086	American Avocet	Egg	Rasmus Lee Lake	07-11-89	73.4
RLAAE087	American Avocet	Egg	Rasmus Lee Lake	07-11-89	73.0
RLAAE090	American Avocet	Egg	Rasmus Lee Lake	07-13-89	65.4
RLAAE091	American Avocet	Egg	Rasmus Lee Lake	07-13-89	65.1
RLAAE092	American Avocet	Egg	Rasmus Lee Lake	07-13-89	63.7
RLAAE093	American Avocet	Egg	Rasmus Lee Lake	07-13-89	67.6
RLAAE094	American Avocet	Egg	Rasmus Lee Lake	07-13-89	71.9
RLAAE095	American Avocet	Egg	Rasmus Lee Lake	07-13-89	69.4
RLAAE096	American Avocet	Egg	Rasmus Lee Lake	07-13-89	70.0
RLAAE097	American Avocet	Egg	Rasmus Lee Lake	07-13-89	74.6
RLAAE098	American Avocet	Egg	Rasmus Lee Lake	07-13-89	69.3
RLAAE099	American Avocet	Egg	Rasmus Lee Lake	07-13-89	70.4
RLAAE100	American Avocet	Egg	Rasmus Lee Lake	07-13-89	72.0
RLAAE101	American Avocet	Egg	Rasmus Lee Lake	07-25-89	74.6
RLAAE102	American Avocet	Egg	Rasmus Lee Lake	07-25-89	69.2
RLAE-2X	American Avocet	Egg	Rasmus Lee Lake	07-07-88	68.5
RLAE-3X	American Avocet	Egg	Rasmus Lee Lake	07-07-88	74.9
RLAE-4X	American Avocet	Egg	Rasmus Lee Lake	07-07-88	67.3
RLAE-5X	American Avocet	Egg	Rasmus Lee Lake	07-07-88	69.1
GLAAE-1	American Avocet	Egg	Goose Lake	06-07-88	73.4
GLAE-101	American Avocet	Egg	Goose Lake	06-13-88	58.3
IPAE-1	American Avocet	Egg	Illco Pond	05-27-88	76.7
33MWPE-1	Wilson's Phalarope	Egg	Thirtythree Mile Reservoir	06-08-88	88.9
33MWPE-2	Wilson's Phalarope	Egg	Thirtythree Mile Reservoir	06-08-88	86.0
33MPWE-3	Wilson's Phalarope	Egg	Thirtythree Mile Reservoir	06-08-88	65.8
33MWPE-180	Wilson's Phalarope	Egg	Thirtythree Mile Reservoir	06-08-88	78.4
33MWPE-181	Wilson's Phalarope	Egg	Thirtythree Mile Reservoir	06-08-88	82.5
EPWPE-1	Wilson's Phalarope	Egg	Emigrant Pond	06-07-88	88.4
JMNPE-1	Northern Pintail	Egg	J. Milne Ranch	06-09-88	69.3
OXSBWE-1	Teal spp.	Egg	Oxbow Pond	06-01-88	71.1
OPME-1	Mallard	Egg	Onstad Pond	05-18-88	90.0
OPWE01	Unidentified Duck	Egg	Oxbow Pond	05-25-89	66.7
RLWFE01	Unidentified Duck	Egg	Rasmus Lee Lake	06-01-89	66.9
RLWFE02	Unidentified Duck	Egg	Rasmus Lee Lake	06-01-89	65.2

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
RLAAE078	457	<30.0	<30.0	<0.30	<0.50	<0.200	<0.50	<0.500
RLAAE079	524	<30.0	<30.0	<0.30	<0.50	<0.200	<0.50	<0.500
RLAAE080	472	<30.0	<30.0	<0.30	<0.50	<0.200	1.56	<0.500
RLAAE081	621	<30.0	<30.0	<0.30	1.55	<0.200	0.55	<0.500
RLAAE082	494	<30.0	<30.0	<0.30	1.48	0.630	2.02	0.923
RLAAE083	535	<30.0	<30.0	<0.30	1.10	0.401	1.32	<0.500
RLAAE084	463	<30.0	<30.0	<0.30	<0.50	<0.200	<0.50	<0.500
RLAAE085	536	<30.0	<30.0	<0.30	1.01	<0.200	<0.50	<0.500
RLAAE086	740	<30.0	<30.0	<0.30	1.57	<0.200	3.61	<0.500
RLAAE087	730	<30.0	<30.0	<0.30	2.19	0.828	2.54	1.380
RLAAE090	478	<30.0	<30.0	<0.30	<0.50	<0.200	1.48	<0.500
RLAAE091	480	<30.0	<30.0	<0.30	<0.50	<0.200	<0.50	<0.500
RLAAE092	530	<30.0	<30.0	<0.30	<0.50	<0.200	0.81	<0.500
RLAAE093	497	<30.0	<30.0	<0.30	<0.50	<0.200	1.91	<0.500
RLAAE094	453	<30.0	<30.0	<0.30	<0.50	<0.200	0.71	<0.500
RLAAE095	547	<30.0	<30.0	<0.30	0.75	<0.200	0.95	<0.500
RLAAE096	457	<30.0	<30.0	<0.30	0.98	<0.200	<0.50	<0.500
RLAAE097	925	<30.0	<30.0	<0.30	1.84	0.770	2.73	1.170
RLAAE098	795	<30.0	<30.0	<0.30	1.50	0.677	1.76	0.729
RLAAE099	489	<30.0	<30.0	<0.30	1.58	<0.200	<0.50	<0.500
RLAAE100	610	<30.0	<30.0	<0.30	1.51	0.962	2.81	1.710
RLAAE101	764	<20.0	<30.0	<0.50	<1.00	<0.200	2.51	<0.500
RLAAE102	942	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
RLAE-2X	527	<6.30	<20.0	<0.30	2.63	<0.030	0.99	<0.400
RLAE-3X	854	<6.30	<20.0	<0.30	2.58	<0.030	1.12	<0.400
RLAE-4X	615	<6.30	<20.0	<0.30	1.12	<0.030	1.23	<0.400
RLAE-5X	469	<6.30	<20.0	<0.30	0.89	<0.030	1.43	<0.400
GLAAE-1	434	<6.30	<20.0	<0.30	1.81	<0.030	1.47	<0.400
GLAE-101	541	<6.30	<20.0	<0.30	0.86	<0.030	<0.83	<0.400
IPAE-1	488	<6.30	<20.0	<0.30	0.74	<0.030	2.47	<0.400
33MWPE-1	423	<6.30	<20.0	<0.30	1.04	<0.030	2.65	0.670
33MWPE-2	428	<6.30	<20.0	<0.30	5.02	<0.030	1.24	<0.400
33MPWE-3	401	<6.30	<20.0	<0.30	9.70	<0.030	<0.83	<0.400
33MWPE-180	416	<6.30	<20.0	<0.30	13.1	<0.030	<0.83	<0.400
33MWPE-181	450	<6.30	<20.0	<0.30	5.24	<0.030	<0.83	<0.400
EPWPE-1	6030	168	<20.0	<0.30	11.6	<0.030	8.71	<0.400
JMNPE-1	420	<6.30	<20.0	<0.30	12.1	<0.030	<0.83	<0.400
OXSBWE-1	303	<6.30	<20.0	<0.30	3.33	<0.030	<0.83	<0.400
OPME-1	928	<6.30	<20.0	<0.30	0.25	<0.030	1.88	<0.400
OPWE01	384	<30.0	<20.0	<0.30	1.73	<0.200	<2.00	<0.500
RLWFE01	335	<30.0	<20.0	<0.30	6.73	<0.200	<2.00	<0.500
RLWFE02	310	<30.0	<20.0	<0.30	2.72	<0.200	<2.00	<0.500

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum
RLAAE078	<1.00	--	5.29	114	<5.00	2.00	0.141	<6.00
RLAAE079	<1.00	--	4.36	118	<5.00	1.50	0.323	<6.00
RLAAE080	<1.00	--	4.68	126	<5.00	3.02	0.384	<6.00
RLAAE081	<1.00	--	4.52	126	<5.00	3.99	0.295	<6.00
RLAAE082	<1.00	--	5.69	94.4	5.05	4.43	0.806	<6.00
RLAAE083	<1.00	--	3.79	108	6.45	2.28	0.556	<6.00
RLAAE084	<1.00	--	3.68	119	<5.00	1.83	0.313	<6.00
RLAAE085	<1.00	--	3.86	158	<5.00	2.73	0.063	<6.00
RLAAE086	<1.00	--	5.41	154	<5.00	4.08	0.219	<6.00
RLAAE087	1.33	--	6.02	192	9.14	2.65	0.126	<6.00
RLAAE090	<1.00	--	4.46	140	<5.00	2.78	0.259	<6.00
RLAAE091	<1.00	--	4.71	125	<5.00	1.58	0.234	<6.00
RLAAE092	<1.00	--	3.14	142	<5.00	1.80	0.347	<6.00
RLAAE093	<1.00	--	4.62	149	<5.00	4.41	0.181	<6.00
RLAAE094	<1.00	--	4.65	118	<5.00	2.29	1.510	<6.00
RLAAE095	<1.00	--	5.64	134	<5.00	5.16	1.210	<6.00
RLAAE096	<1.00	--	3.96	108	<5.00	2.02	0.856	<6.00
RLAAE097	<1.00	--	5.22	160	<5.00	3.28	0.310	<6.00
RLAAE098	1.02	--	5.61	197	<5.00	3.99	0.304	<6.00
RLAAE099	<1.00	--	4.26	109	<5.00	3.34	0.707	<6.00
RLAAE100	1.01	--	5.42	123	7.67	4.43	0.150	6.08
RLAAE101	<2.50	<3.00	6.12	152	<5.00	3.43	1.410	<6.00
RLAAE102	<2.50	<3.00	5.87	138	<5.00	2.98	0.847	<6.00
RLAE-2X	1.04	<2.30	4.79	137	<9.00	1.45	0.530	<7.00
RLAE-3X	1.46	2.90	5.50	174	10.4	3.09	0.314	<7.00
RLAE-4X	0.53	2.40	5.37	111	<9.00	1.73	0.360	<7.00
RLAE-5X	<0.50	<2.30	3.82	117	<9.00	1.37	0.119	<7.00
GLAAE-1	0.69	<2.30	3.20	155	<9.00	2.50	0.284	<7.00
GLAE-101	<0.50	<2.30	3.04	128	10.1	1.29	0.887	<7.00
IPAE-1	<0.50	<2.30	2.33	113	<9.00	2.63	0.066	<7.00
33MWPE-1	0.59	<2.30	5.11	139	<9.00	1.90	1.570	<7.00
33MWPE-2	<0.50	<2.30	3.82	136	11.0	2.60	0.451	<7.00
33MPWE-3	0.78	<2.30	3.21	129	<9.00	3.41	1.240	<7.00
33MWPE-180	0.91	<2.30	3.66	113	<9.00	2.69	1.220	<7.00
33MWPE-181	<0.50	<2.30	5.07	137	<9.00	2.04	0.291	<7.00
EPWPE-1	<0.50	<2.30	42.7	148	<9.00	47.0	0.376	<7.00
JMNPE-1	0.67	<2.30	4.44	112	<9.00	1.41	0.209	<7.00
OXSBWE-1	<0.50	<2.30	3.76	121	<9.00	1.22	0.050	<7.00
OPME-1	<0.50	<2.30	6.29	<30.0	<9.00	<1.00	0.259	<7.00
OPWE01	<2.00	--	5.86	122	<5.00	1.52	0.048	<5.00
RLWFE01	<2.00	--	3.11	117	<5.00	1.61	0.041	<5.00
RLWFE02	<2.00	--	3.91	120	<5.00	2.23	0.032	<5.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
RLAAE078	<1.50	66.1	<7.00	74.5	--	<30.0	<0.60	53.4
RLAAE079	<1.50	118	<7.00	20.5	--	<30.0	<0.60	53.6
RLAAE080	<1.50	79.4	<7.00	49.3	--	<30.0	<0.60	47.0
RLAAE081	<1.50	113	<7.00	34.6	--	<30.0	<0.60	52.1
RLAAE082	2.66	78.7	<7.00	36.0	--	<30.0	1.00	42.6
RLAAE083	1.95	82.8	<7.00	32.4	--	<30.0	<0.60	48.1
RLAAE084	<1.50	65.4	<7.00	56.4	--	<30.0	<0.60	54.1
RLAAE085	<1.50	99.0	<7.00	61.3	--	<30.0	<0.60	50.5
RLAAE086	<1.50	116	<7.00	42.8	--	<30.0	<0.60	61.8
RLAAE087	5.16	103	<7.00	54.7	--	<30.0	<0.60	67.6
RLAAE090	<1.50	113	<7.00	34.0	--	<30.0	<0.60	44.8
RLAAE091	<1.50	130	<7.00	34.4	--	<30.0	<0.60	50.1
RLAAE092	<1.50	107	<7.00	39.6	--	<30.0	<0.60	45.9
RLAAE093	<1.50	109	<7.00	26.6	--	<30.0	<0.60	50.9
RLAAE094	<1.50	89.4	<7.00	29.6	--	<30.0	<0.60	44.6
RLAAE095	<1.50	94.7	<7.00	45.1	--	<30.0	<0.60	49.8
RLAAE096	<1.50	87.8	<7.00	27.7	--	<30.0	<0.60	48.5
RLAAE097	4.13	108	<7.00	89.0	--	<30.0	1.06	65.9
RLAAE098	4.19	97.1	<7.00	61.2	--	<30.0	<0.60	62.1
RLAAE099	<1.50	89.6	<7.00	28.5	--	<30.0	<0.60	53.7
RLAAE100	6.85	69.5	<7.00	117	--	<30.0	1.11	55.8
RLAAE101	<2.50	110	<10.0	77.1	--	<30.0	<1.50	56.7
RLAAE102	<2.50	91.8	<10.0	97.3	--	<30.0	<1.50	65.9
RLAE-2X	<4.50	113	<8.10	12.5	--	<21.0	0.63	53.6
RLAE-3X	<4.50	98.3	<8.10	28.6	--	<21.0	0.60	75.8
RLAE-4X	<4.50	109	<8.10	15.9	--	<21.0	<0.57	44.3
RLAE-5X	<4.50	59.2	<8.10	12.5	--	<21.0	<0.57	49.9
GLAAE-1	<4.50	43.1	<8.10	45.3	--	<21.0	<0.57	54.9
GLAE-101	<4.50	82.3	<8.10	69.9	--	<21.0	<0.57	54.8
IPAE-1	<4.50	50.1	<8.10	12.7	--	<21.0	<0.57	53.5
33MWPE-1	<4.50	19.9	<8.10	12.7	--	<21.0	<0.57	59.7
33MWPE-2	<4.50	12.0	<8.10	12.1	--	<21.0	<0.57	58.7
33MPWE-3	<4.50	10.2	<8.10	13.7	--	<21.0	0.71	63.2
33MWPE-180	<4.50	6.65	<8.10	14.0	--	<21.0	<0.57	64.7
33MWPE-181	<4.50	16.4	<8.10	20.1	--	<21.0	<0.57	68.2
EPWPE-1	<4.50	5.02	<8.10	2340	--	<21.0	1.54	60.6
JMNPE-1	<4.50	8.50	<8.10	8.52	--	<21.0	<0.57	60.6
OXSBWE-1	<4.50	8.96	<8.10	11.5	--	<21.0	<0.57	70.1
OPME-1	<4.50	52.5	<8.10	9.47	--	<21.0	<0.57	<13.0
OPWE01	<2.00	7.71	<10.0	11.7	--	<20.0	<1.50	57.3
RLWFE01	<2.00	12.3	<10.0	6.25	--	<20.0	<1.50	63.0
RLWFE02	<2.00	13.4	<10.0	8.05	--	<20.0	<1.50	50.8

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
RLCGE001	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.7
RLCGE002	Canada Goose	Egg	Rasmus Lee Lake	05-88	68.4
RLCGE003	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.2
RLCGE004	Canada Goose	Egg	Rasmus Lee Lake	05-88	69.0
RLCGE005	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.4
RLCGE006	Canada Goose	Egg	Rasmus Lee Lake	05-88	69.1
RLCGE007	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.9
RLCGE008	Canada Goose	Egg	Rasmus Lee Lake	05-88	63.8
RLCGE009	Canada Goose	Egg	Rasmus Lee Lake	05-88	64.1
RLCGE010	Canada Goose	Egg	Rasmus Lee Lake	05-88	53.8
RLCGE011	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.7
RLCGE012	Canada Goose	Egg	Rasmus Lee Lake	05-88	68.2
RLCGE013	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.0
RLCGE014	Canada Goose	Egg	Rasmus Lee Lake	05-88	60.0
RLCGE015	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.1
RLCGE016	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.6
RLCGE017	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.5
RLCGE018	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.2
RLCGE019	Canada Goose	Egg	Rasmus Lee Lake	05-88	64.9
RLCGE020	Canada Goose	Egg	Rasmus Lee Lake	05-88	63.2
RLCGE021	Canada Goose	Egg	Rasmus Lee Lake	05-88	63.9
RLCGE022	Canada Goose	Egg	Rasmus Lee Lake	05-88	65.1
RLCGE023	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.9
RLCGE024	Canada Goose	Egg	Rasmus Lee Lake	05-88	65.2
RLCGE025	Canada Goose	Egg	Rasmus Lee Lake	05-88	69.9
RLCGE026	Canada Goose	Egg	Rasmus Lee Lake	05-88	69.3
RLCGE027	Canada Goose	Egg	Rasmus Lee Lake	05-88	69.2
RLCGE028	Canada Goose	Egg	Rasmus Lee Lake	05-88	69.3
RLCGE029	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.9
RLCGE030	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.8
RLCGE031	Canada Goose	Egg	Rasmus Lee Lake	05-88	64.3
RLCGE032	Canada Goose	Egg	Rasmus Lee Lake	05-88	64.8
RLCGE033	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.5
RLCGE034	Canada Goose	Egg	Rasmus Lee Lake	05-88	62.0
RLCGE035	Canada Goose	Egg	Rasmus Lee Lake	05-88	61.3
RLCGE036	Canada Goose	Egg	Rasmus Lee Lake	05-88	62.1
RLCGE037	Canada Goose	Egg	Rasmus Lee Lake	05-88	62.4
RLCGE038	Canada Goose	Egg	Rasmus Lee Lake	05-88	61.2
RLCGE039	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.5
RLCGE040	Canada Goose	Egg	Rasmus Lee Lake	05-88	65.0
RLCGE041	Canada Goose	Egg	Rasmus Lee Lake	05-88	64.6
RLCGE042	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.8
RLCGE043	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.0
RLCGE044	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.9
RLCGE045	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.0
RLCGE046	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.0
RLCGE047	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.5

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
RLCGE001	592	<3.00	--	<0.10	7.10	<0.090	<2.00	<0.200
RLCGE002	395	<3.00	--	<0.10	5.30	<0.100	<2.00	<0.200
RLCGE003	498	<3.00	--	<0.10	5.70	<0.100	2.00	<0.200
RLCGE004	558	<3.00	--	<0.10	5.10	<0.100	4.00	<0.200
RLCGE005	404	<3.00	--	<0.10	1.90	<0.100	2.00	<0.200
RLCGE006	572	<3.00	--	<0.10	8.70	<0.100	<2.00	<0.200
RLCGE007	423	<3.00	--	<0.10	3.20	<0.100	<2.00	<0.200
RLCGE008	384	<3.00	--	<0.10	7.70	<0.100	<2.00	<0.200
RLCGE009	508	<3.00	--	<0.10	7.90	<0.100	3.00	<0.200
RLCGE010	429	<3.00	--	<0.10	5.50	<0.100	<2.00	<0.200
RLCGE011	538	<3.00	--	<0.10	1.90	<0.100	2.00	<0.200
RLCGE012	564	<3.00	--	<0.10	5.70	<0.100	<2.00	<0.200
RLCGE013	424	<3.00	--	<0.10	3.90	<0.100	2.00	<0.200
RLCGE014	578	<3.00	--	<0.10	5.50	<0.100	<2.00	<0.200
RLCGE015	387	<3.00	--	<0.10	1.40	<0.100	<2.00	<0.200
RLCGE016	461	<3.00	--	<0.10	4.60	<0.100	<2.00	<0.200
RLCGE017	442	<3.00	--	<0.10	5.70	<0.100	2.00	<0.200
RLCGE018	449	<3.00	--	<0.10	2.40	<0.100	<2.00	<0.200
RLCGE019	392	<3.00	--	<0.10	7.00	<0.100	<2.00	<0.200
RLCGE020	444	<3.00	--	<0.10	7.90	<0.100	3.00	<0.200
RLCGE021	476	<3.00	--	<0.10	4.40	<0.100	<2.00	<0.200
RLCGE022	602	<28.7	0.08	<0.06	<14.3	<1.430	<14.3	<1.430
RLCGE023	529	<3.00	--	<0.10	2.50	<0.100	<2.00	<0.200
RLCGE024	635	<3.00	--	<0.10	11.5	<0.100	2.00	<0.200
RLCGE025	418	<3.00	--	<0.10	5.20	<0.100	<2.00	<0.200
RLCGE026	399	<3.00	--	<0.10	4.20	<0.100	2.00	<0.200
RLCGE027	429	3.00	--	<0.10	3.90	<0.100	3.00	<0.200
RLCGE028	349	<3.00	--	<0.10	2.00	<0.100	<2.00	<0.200
RLCGE029	467	<31.2	<0.08	<0.06	<15.6	<1.560	<15.6	<1.560
RLCGE030	399	<3.00	--	<0.10	1.70	<0.100	<2.00	<0.200
RLCGE031	413	<3.00	--	<0.10	5.30	<0.100	<2.00	<0.200
RLCGE032	380	<3.00	--	<0.10	4.40	<0.100	<2.00	<0.200
RLCGE033	409	<3.00	--	<0.10	4.60	<0.100	<2.00	<0.200
RLCGE034	397	<3.00	--	<0.10	4.20	<0.100	<2.00	<0.200
RLCGE035	413	<3.00	--	<0.10	7.30	<0.100	<2.00	<0.200
RLCGE036	405	<3.00	--	<0.10	8.10	<0.100	2.00	<0.200
RLCGE037	432	<3.00	--	<0.10	6.70	<0.100	2.00	<0.200
RLCGE038	464	<3.00	--	<0.10	5.80	<0.100	<2.00	<0.200
RLCGE039	507	<3.00	--	<0.10	5.10	<0.100	<2.00	<0.200
RLCGE040	408	<3.00	--	<0.10	1.30	<0.100	<2.00	<0.200
RLCGE041	431	<3.00	--	<0.10	2.40	<0.100	<2.00	<0.200
RLCGE042	488	<3.00	--	<0.10	3.10	<0.100	<2.00	<0.200
RLCGE043	382	<3.00	--	<0.10	1.20	<0.100	<2.00	<0.200
RLCGE044	616	<3.00	--	<0.10	2.70	<0.100	<2.00	<0.200
RLCGE045	479	<3.00	--	<0.10	1.80	<0.100	2.00	<0.200
RLCGE046	560	<3.00	--	<0.10	6.30	<0.100	<2.00	<0.200
RLCGE047	546	<3.00	--	<0.10	4.00	<0.100	<2.00	<0.200

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum
RLCGE001	<0.90	--	3.00	126	<4.00	1.90	0.005	<1.00
RLCGE002	<1.00	--	2.80	130	<4.00	2.40	0.030	<1.00
RLCGE003	<1.00	--	3.00	115	<4.00	2.70	0.045	<1.00
RLCGE004	<1.00	--	3.70	80.0	<4.00	2.00	0.062	<1.00
RLCGE005	<1.00	--	2.60	131	<4.00	1.80	0.030	<1.00
RLCGE006	<1.00	--	3.10	138	<4.00	3.00	0.047	<1.00
RLCGE007	<1.00	--	3.30	95.0	<4.00	1.70	0.026	<1.00
RLCGE008	<1.00	--	2.40	110	<4.00	3.20	0.020	<1.00
RLCGE009	<1.00	--	3.60	89.0	<4.00	2.90	0.024	<1.00
RLCGE010	<1.00	--	3.90	87.0	<4.00	1.90	0.051	<1.00
RLCGE011	<1.00	--	3.10	115	<4.00	0.74	<0.005	<1.00
RLCGE012	<1.00	--	3.10	109	<4.00	2.00	0.015	<1.00
RLCGE013	<1.00	--	2.80	115	<4.00	1.40	0.016	<1.00
RLCGE014	<1.00	--	3.10	132	<4.00	2.10	0.051	<1.00
RLCGE015	<1.00	--	2.60	158	<4.00	1.90	0.036	<1.00
RLCGE016	<1.00	--	3.20	104	<4.00	1.80	0.024	<1.00
RLCGE017	<1.00	--	3.60	106	<4.00	1.90	0.020	<1.00
RLCGE018	<1.00	--	3.30	83.0	<4.00	1.50	0.029	<1.00
RLCGE019	<1.00	--	3.50	112	<4.00	1.90	0.015	<1.00
RLCGE020	<1.00	--	3.10	86.0	<4.00	1.80	0.015	<1.00
RLCGE021	<1.00	--	3.10	99.9	<4.00	1.80	0.016	<1.00
RLCGE022	<2.87	--	135	115	<28.7	<4.30	<0.072	<14.3
RLCGE023	<1.00	--	3.30	80.0	<4.00	1.90	0.017	1.00
RLCGE024	<1.00	--	3.30	104	<4.00	2.30	0.021	<1.00
RLCGE025	<1.00	--	3.50	92.0	<4.00	1.80	0.039	<1.00
RLCGE026	<1.00	--	3.20	86.0	<4.00	1.80	0.038	<1.00
RLCGE027	<1.00	--	3.80	92.0	<4.00	1.80	0.043	<1.00
RLCGE028	<1.00	--	3.10	81.0	<4.00	1.50	0.066	<1.00
RLCGE029	<3.12	--	<7.79	77.9	<31.2	<4.67	<0.078	<15.6
RLCGE030	<1.00	--	2.70	59.0	<4.00	2.60	0.021	<1.00
RLCGE031	<1.00	--	2.90	81.0	<4.00	3.10	0.015	<1.00
RLCGE032	<1.00	--	2.40	81.0	<4.00	3.00	0.017	<1.00
RLCGE033	<1.00	--	3.00	50.0	<4.00	1.90	0.016	<1.00
RLCGE034	<1.00	--	2.30	112	<4.00	3.50	0.034	<1.00
RLCGE035	<1.00	--	2.50	115	<4.00	3.50	0.022	<1.00
RLCGE036	<1.00	--	2.60	112	<4.00	3.00	0.021	<1.00
RLCGE037	<1.00	--	2.90	120	<4.00	3.50	0.024	<1.00
RLCGE038	<1.00	--	2.70	121	<4.00	3.50	0.026	<1.00
RLCGE039	<1.00	--	2.90	134	<4.00	2.20	0.022	<1.00
RLCGE040	<1.00	--	2.90	113	<4.00	0.89	0.020	<1.00
RLCGE041	<1.00	--	3.40	98.0	<4.00	1.10	0.010	<1.00
RLCGE042	<1.00	--	3.10	110	<4.00	1.20	0.010	<1.00
RLCGE043	<1.00	--	3.20	74.0	<4.00	0.70	0.01	<1.00
RLCGE044	<1.00	--	3.20	131	<4.00	1.40	0.017	<1.00
RLCGE045	<1.00	--	3.30	83.0	<4.00	0.99	0.021	<1.00
RLCGE046	<1.00	--	3.70	123	<4.00	1.90	0.016	<1.00
RLCGE047	<1.00	--	3.60	111	<4.00	1.80	0.020	<1.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
RLCGE001	<0.90	7.80	<2.00	20.5	<4.0	--	<0.30	68.4
RLCGE002	<1.00	4.50	<2.00	9.99	<4.0	--	<0.30	61.0
RLCGE003	<1.00	8.90	<2.00	13.1	<4.0	--	<0.30	70.3
RLCGE004	<1.00	9.00	<2.00	16.3	<5.0	--	<0.30	63.9
RLCGE005	<1.00	6.20	<2.00	5.30	<4.0	--	<0.30	53.4
RLCGE006	<1.00	7.40	<2.00	14.4	<4.0	--	<0.30	63.4
RLCGE007	<1.00	7.00	<2.00	6.40	<4.0	--	<0.30	51.4
RLCGE008	<1.00	5.40	<2.00	5.10	<4.0	--	<0.30	53.7
RLCGE009	<1.00	8.60	<2.00	8.40	<4.0	--	<0.30	58.8
RLCGE010	<1.00	7.20	<2.00	17.2	<4.0	--	<0.30	45.6
RLCGE011	<1.00	5.40	<2.00	9.70	<4.0	--	<0.30	50.3
RLCGE012	<1.00	4.50	<2.00	18.9	<4.0	--	<0.30	59.0
RLCGE013	<1.00	6.90	<2.00	5.50	<4.0	--	<0.30	50.7
RLCGE014	<1.00	6.90	<2.00	19.6	<4.0	--	<0.30	60.5
RLCGE015	<1.00	3.80	<2.00	3.40	<4.0	--	<0.30	50.0
RLCGE016	<1.00	7.00	<2.00	8.80	<4.0	--	<0.30	52.9
RLCGE017	<1.00	7.60	<2.00	10.5	<4.0	--	<0.30	51.8
RLCGE018	<1.00	6.50	<2.00	6.00	<4.0	--	<0.30	54.0
RLCGE019	<1.00	7.20	<2.00	10.5	<4.0	--	<0.30	54.6
RLCGE020	<1.00	4.20	<2.00	6.20	<4.0	--	<0.30	54.1
RLCGE021	<1.00	3.50	<2.00	5.60	<4.0	--	<0.30	56.6
RLCGE022	<11.5	2.40	<14.3	18.0	<0.3	<14.3	<14.3	142
RLCGE023	<1.00	4.10	<2.00	8.30	<4.0	--	<0.30	60.1
RLCGE024	<1.00	6.60	<2.00	17.3	<4.0	--	<0.30	65.4
RLCGE025	<1.00	5.50	<2.00	7.70	<4.0	--	<0.30	58.0
RLCGE026	<1.00	5.30	<2.00	6.10	<4.0	--	<0.30	54.3
RLCGE027	<1.00	6.20	<2.00	5.30	<4.0	--	<0.30	56.9
RLCGE028	<1.00	3.00	<2.00	2.90	<4.0	--	<0.30	46.7
RLCGE029	<12.5	4.40	<15.6	15.6	<0.3	<15.6	<15.6	63.9
RLCGE030	<1.00	4.40	<2.00	5.90	<4.0	--	<0.30	50.2
RLCGE031	<1.00	4.60	<2.00	7.80	<4.0	--	<0.30	58.3
RLCGE032	<1.00	4.00	<2.00	6.20	<4.0	--	<0.30	57.7
RLCGE033	<1.00	5.40	<2.00	8.20	<4.0	--	<0.30	54.9
RLCGE034	<1.00	3.40	<2.00	4.20	<4.0	--	<0.30	47.4
RLCGE035	<1.00	6.50	<2.00	5.10	<4.0	--	<0.30	54.4
RLCGE036	<1.00	6.40	<2.00	5.40	<4.0	--	<0.30	57.1
RLCGE037	<1.00	4.00	<2.00	4.70	<4.0	--	<0.30	52.4
RLCGE038	<1.00	3.40	<2.00	4.80	<4.0	--	<0.30	50.3
RLCGE039	<1.00	6.30	<2.00	5.90	<4.0	--	<0.30	53.9
RLCGE040	<1.00	5.40	<2.00	4.30	<4.0	--	<0.30	48.6
RLCGE041	<1.00	8.00	<2.00	5.10	<4.0	--	<0.30	49.3
RLCGE042	<1.00	8.50	<2.00	6.70	<4.0	--	<0.30	48.6
RLCGE043	<1.00	6.60	<2.00	3.20	<4.0	--	<0.30	44.8
RLCGE044	<1.00	9.70	<2.00	13.4	<4.0	--	<0.30	51.7
RLCGE045	<1.00	3.40	<2.00	7.90	<4.0	--	<0.30	49.7
RLCGE046	<1.00	4.30	<2.00	23.7	<4.0	--	<0.30	62.0
RLCGE047	<1.00	4.70	<2.00	21.0	<4.0	--	<0.30	59.4

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
RLCGE048	Canada Goose	Egg	Rasmus Lee Lake	05-88	67.0
RLCGE049	Canada Goose	Egg	Rasmus Lee Lake	05-88	65.8
RLCGE050	Canada Goose	Egg	Rasmus Lee Lake	05-88	65.0
RLCGE051	Canada Goose	Egg	Rasmus Lee Lake	05-88	66.2
RLCGE054	Canada Goose	Egg	Rasmus Lee Lake	05-89	70.2
RLCGE055	Canada Goose	Egg	Rasmus Lee Lake	05-89	69.4
RLCGE056	Canada Goose	Egg	Rasmus Lee Lake	05-89	68.9
RLCGE057	Canada Goose	Egg	Rasmus Lee Lake	05-89	70.7
RLCGE058	Canada Goose	Egg	Rasmus Lee Lake	05-89	69.9
RLCGE061	Canada Goose	Egg	Rasmus Lee Lake	05-89	55.6
RLCGE062	Canada Goose	Egg	Rasmus Lee Lake	05-89	64.4
RLCGE064	Canada Goose	Egg	Rasmus Lee Lake	05-89	63.3
RLCGE065	Canada Goose	Egg	Rasmus Lee Lake	05-89	62.8
RLCGE066	Canada Goose	Egg	Rasmus Lee Lake	05-89	61.9
RLCGE068	Canada Goose	Egg	Rasmus Lee Lake	05-89	68.1
RLCGE069	Canada Goose	Egg	Rasmus Lee Lake	05-89	68.0
RLCGE070	Canada Goose	Egg	Rasmus Lee Lake	05-89	63.2
RLCGE071	Canada Goose	Egg	Rasmus Lee Lake	05-89	66.1
RLCGE072	Canada Goose	Egg	Rasmus Lee Lake	05-89	67.6
RLCGE073	Canada Goose	Egg	Rasmus Lee Lake	05-89	67.1
RLCGE074	Canada Goose	Egg	Rasmus Lee Lake	05-89	68.2
RLCGE075	Canada Goose	Egg	Rasmus Lee Lake	05-89	67.9
RLCGE076	Canada Goose	Egg	Rasmus Lee Lake	05-89	69.0
RLCGE077	Canada Goose	Egg	Rasmus Lee Lake	05-89	62.5
RLCGE079	Canada Goose	Egg	Rasmus Lee Lake	06-89	71.3
RLCGE080	Canada Goose	Egg	Rasmus Lee Lake	06-89	63.4
RLCGE081	Canada Goose	Egg	Rasmus Lee Lake	05-89	66.1
RLCGE082	Canada Goose	Egg	Rasmus Lee Lake	06-89	66.2
RLCGE083	Canada Goose	Egg	Rasmus Lee Lake	05-89	65.8
RLCGE084	Canada Goose	Egg	Rasmus Lee Lake	06-89	60.5
RLCGE085	Canada Goose	Egg	Rasmus Lee Lake	05-89	67.1
RLCGE086	Canada Goose	Egg	Rasmus Lee Lake	05-89	64.1
RLCGE087	Canada Goose	Egg	Rasmus Lee Lake	05-89	66.7
RLCGE088	Canada Goose	Egg	Rasmus Lee Lake	06-89	70.4
RLCGE089	Canada Goose	Egg	Rasmus Lee Lake	05-89	66.4
RLCGE090	Canada Goose	Egg	Rasmus Lee Lake	05-89	68.6
RLCGE091	Canada Goose	Egg	Rasmus Lee Lake	05-89	69.0
RLCGE092	Canada Goose	Egg	Rasmus Lee Lake	05-89	65.4
RLCGE094	Canada Goose	Egg	Rasmus Lee Lake	05-89	62.8
RLCGE096	Canada Goose	Egg	Rasmus Lee Lake	05-89	69.1
RLCGE097	Canada Goose	Egg	Rasmus Lee Lake	06-89	68.4
RLCGE098	Canada Goose	Egg	Rasmus Lee Lake	06-89	70.5
RLCGE099	Canada Goose	Egg	Rasmus Lee Lake	05-89	63.3
RLCGE100	Canada Goose	Egg	Rasmus Lee Lake	06-89	67.2
RLCGE101	Canada Goose	Egg	Rasmus Lee Lake	06-89	65.4
RLCGE102	Canada Goose	Egg	Rasmus Lee Lake	06-89	68.9
RLCGE103	Canada Goose	Egg	Rasmus Lee Lake	06-89	68.1

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
RLCGE048	562	<3.00	--	<0.10	3.20	<0.100	<2.00	<0.200
RLCGE049	614	<29.2	0.08	<0.06	<14.6	<1.460	<14.6	<1.460
RLCGE050	533	<3.00	--	<0.10	3.90	<0.100	2.00	<0.200
RLCGE051	653	<3.00	--	<0.10	5.10	<0.100	<2.00	<0.200
RLCGE054	697	<30.0	<40.0	<0.30	4.22	<0.200	<3.00	<0.800
RLCGE055	703	<30.0	<40.0	<0.30	15.2	<0.200	<3.00	<0.800
RLCGE056	1080	<30.0	<40.0	<0.30	7.07	<0.200	<3.00	<0.800
RLCGE057	744	<30.0	<40.0	<0.30	8.06	<0.200	<3.00	<0.800
RLCGE058	1170	<30.0	<40.0	<0.30	6.09	<0.200	<3.00	<0.800
RLCGE061	404	<30.0	<40.0	<0.30	4.48	<0.200	<3.00	<0.800
RLCGE062	391	<30.0	<40.0	<0.30	2.29	<0.200	<3.00	<0.800
RLCGE064	517	<30.0	<40.0	<0.30	7.58	<0.200	<3.00	<0.800
RLCGE065	461	<30.0	<40.0	<0.30	3.16	<0.200	<3.00	<0.800
RLCGE066	538	<30.0	<40.0	<0.30	6.47	<0.200	<3.00	<0.800
RLCGE068	495	<30.0	<40.0	<0.30	2.12	<0.200	<3.00	<0.800
RLCGE069	477	<20.0	<30.0	<0.40	5.51	<0.100	<2.00	<0.500
RLCGE070	480	<20.0	<30.0	<0.40	4.15	<0.100	<2.00	<0.500
RLCGE071	432	34.7	<30.0	1.02	3.04	<0.100	2.58	<0.500
RLCGE072	471	<20.0	<30.0	<0.40	2.96	<0.100	<2.00	<0.500
RLCGE073	772	<20.0	<30.0	<0.40	1.83	<0.100	4.04	0.590
RLCGE074	579	<20.0	<30.0	<0.40	1.58	<0.100	2.35	<0.500
RLCGE075	605	<20.0	<30.0	<0.40	1.76	<0.100	2.07	<0.500
RLCGE076	715	<20.0	<30.0	<0.40	3.52	<0.100	2.46	<0.500
RLCGE077	471	<30.0	<40.0	<0.30	1.92	<0.200	<3.00	<0.800
RLCGE079	362	<20.0	<30.0	<0.50	2.49	<0.200	<2.00	<0.500
RLCGE080	262	<20.0	<30.0	<0.50	4.20	<0.200	<2.00	<0.500
RLCGE081	580	<30.0	<40.0	<0.30	6.85	<0.200	3.36	<0.800
RLCGE082	449	<20.0	<30.0	<0.50	5.44	<0.200	<2.00	<0.500
RLCGE083	492	<30.0	<40.0	<0.30	2.59	<0.200	<3.00	<0.800
RLCGE084	405	<20.0	<30.0	<0.50	3.93	<0.200	<2.00	<0.500
RLCGE085	493	<20.0	<30.0	<0.40	2.92	<0.100	<2.00	<0.500
RLCGE086	537	<30.0	<40.0	<0.30	3.88	<0.200	<3.00	<0.800
RLCGE087	529	<30.0	<40.0	<0.30	4.17	<0.200	<3.00	<0.800
RLCGE088	488	<20.0	<30.0	<0.50	3.18	<0.200	<2.00	<0.500
RLCGE089	414	<30.0	<40.0	<0.30	2.51	<0.200	<3.00	<0.800
RLCGE090	601	<30.0	<40.0	<0.30	7.48	<0.200	<3.00	<0.800
RLCGE091	864	<20.0	<30.0	<0.40	3.94	<0.100	2.26	<0.500
RLCGE092	556	<30.0	<40.0	<0.30	5.22	<0.200	<3.00	<0.800
RLCGE094	839	<30.0	<40.0	<0.30	8.39	<0.200	<3.00	<0.800
RLCGE096	472	<20.0	<30.0	<0.40	4.65	<0.100	<2.00	<0.500
RLCGE097	436	<20.0	<30.0	<0.50	2.77	<0.200	<2.00	<0.500
RLCGE098	418	<20.0	<30.0	<0.50	3.09	<0.200	<2.00	<0.500
RLCGE099	538	<30.0	<40.0	<0.30	8.62	<0.200	<3.00	<0.800
RLCGE100	470	<20.0	<30.0	<0.50	2.09	<0.200	<2.00	<0.500
RLCGE101	454	<20.0	<30.0	<0.50	2.29	<0.200	<2.00	<0.500
RLCGE102	464	<20.0	<30.0	<0.50	1.70	<0.200	<2.00	<0.500
RLCGE103	406	<20.0	<30.0	<0.50	1.65	<0.200	2.56	<0.500

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum
RLCGE048	<1.00	--	3.80	113	<4.00	1.90	0.018	<1.00
RLCGE049	<2.92	--	7.31	152	<29.2	<4.39	0.132	<14.6
RLCGE050	<1.00	--	3.00	122	<4.00	2.50	0.091	<1.00
RLCGE051	<1.00	--	3.30	118	<4.00	2.90	0.053	<1.00
RLCGE054	<2.50	--	<3.00	188	<5.00	3.06	<0.020	<5.00
RLCGE055	<2.50	--	3.32	173	5.30	5.18	0.020	<5.00
RLCGE056	<2.50	--	<3.00	181	8.20	3.89	<0.020	<5.00
RLCGE057	3.08	--	13.2	146	<5.00	2.27	<0.020	<5.00
RLCGE058	3.89	--	11.0	195	<5.00	4.83	<0.020	<5.00
RLCGE061	<2.50	--	11.8	99.7	5.03	3.56	0.074	<5.00
RLCGE062	<2.50	--	5.81	128	<5.00	1.65	0.020	<5.00
RLCGE064	<2.50	--	5.03	134	<5.00	3.07	<0.020	<5.00
RLCGE065	<2.50	--	4.60	136	8.10	2.81	0.043	<5.00
RLCGE066	<2.50	--	4.37	174	9.07	3.32	<0.020	<5.00
RLCGE068	<2.50	--	4.42	134	<5.00	2.00	<0.020	<5.00
RLCGE069	<2.00	--	3.33	139	<6.00	2.96	0.051	<5.00
RLCGE070	<2.00	--	4.72	141	<6.00	3.61	0.058	<5.00
RLCGE071	<2.00	--	3.77	332	<6.00	4.84	0.082	<5.00
RLCGE072	<2.00	--	2.93	136	<6.00	3.65	0.066	<5.00
RLCGE073	<2.00	--	4.29	97.5	<6.00	6.06	0.071	<5.00
RLCGE074	<2.00	--	5.02	141	<6.00	2.48	<0.020	<5.00
RLCGE075	<2.00	--	5.30	138	<6.00	1.82	<0.020	<5.00
RLCGE076	<2.00	--	5.09	145	<6.00	3.66	<0.020	<5.00
RLCGE077	<2.50	--	5.07	92.7	6.73	3.93	0.026	<5.00
RLCGE079	<2.50	--	4.76	116	<5.00	1.46	0.096	<6.00
RLCGE080	<2.50	--	3.63	84.0	<5.00	<1.40	0.104	<6.00
RLCGE081	<2.50	--	4.72	138	<5.00	2.70	<0.020	<5.00
RLCGE082	<2.50	--	3.63	120	<5.00	1.72	<0.020	<6.00
RLCGE083	<2.50	--	5.44	101	<5.00	1.69	<0.020	<5.00
RLCGE084	<2.50	--	4.10	109	<5.00	1.44	0.103	<6.00
RLCGE085	<2.00	--	4.20	111	<6.00	1.64	0.027	<5.00
RLCGE086	<2.50	--	3.49	132	<5.00	2.21	<0.020	<5.00
RLCGE087	<2.50	--	4.34	123	<5.00	2.13	<0.020	<5.00
RLCGE088	<2.50	--	4.30	140	<5.00	1.96	0.105	<6.00
RLCGE089	<2.50	--	3.10	141	<5.00	1.96	<0.020	<5.00
RLCGE090	<2.50	--	<3.00	176	<5.00	2.19	0.032	<5.00
RLCGE091	<2.00	--	2.46	205	<6.00	4.07	0.157	<5.00
RLCGE092	<2.50	--	<3.00	153	<5.00	3.39	<0.020	<5.00
RLCGE094	<2.50	--	<3.00	186	15.0	8.20	<0.020	<5.00
RLCGE096	<2.00	--	4.04	134	<6.00	1.89	0.022	<5.00
RLCGE097	<2.50	--	4.74	116	<5.00	1.46	0.110	<6.00
RLCGE098	<2.50	--	4.21	112	<5.00	<1.40	0.110	<6.00
RLCGE099	<2.50	--	9.64	174	<5.00	3.04	<0.020	<5.00
RLCGE100	<2.50	--	<3.00	92.4	<5.00	3.68	0.102	<6.00
RLCGE101	<2.50	--	3.43	95.4	<5.00	3.73	0.124	<6.00
RLCGE102	<2.50	--	<3.00	102	<5.00	3.59	<0.020	<6.00
RLCGE103	<2.50	--	4.41	94.7	<5.00	3.08	0.105	<6.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
RLCGE048	<1.00	3.90	<2.00	21.3	<4.0	--	<0.30	21.3
RLCGE049	<11.7	6.10	<14.6	36.0	<0.3	<14.6	<14.6	74.3
RLCGE050	<1.00	4.50	<2.00	16.7	<4.0	--	<0.30	53.8
RLCGE051	<1.00	9.30	<2.00	26.7	<4.0	--	<0.30	70.0
RLCGE054	<4.50	16.4	<13.0	15.2	--	<40.0	<1.50	72.7
RLCGE055	<4.50	6.32	<13.0	40.0	--	<40.0	<1.50	99.9
RLCGE056	<4.50	8.17	<13.0	54.0	--	<40.0	<1.50	94.3
RLCGE057	<4.50	10.6	<13.0	26.3	--	<40.0	<1.50	88.3
RLCGE058	<4.50	19.8	<13.0	51.4	--	<40.0	<1.50	88.5
RLCGE061	<4.50	6.16	<13.0	16.4	--	<40.0	<1.50	52.6
RLCGE062	<4.50	7.15	<13.0	6.22	--	<40.0	<1.50	63.9
RLCGE064	<4.50	5.81	<13.0	8.72	--	<40.0	<1.50	62.4
RLCGE065	<4.50	4.61	<13.0	5.76	--	<40.0	<1.50	62.2
RLCGE066	<4.50	5.32	<13.0	9.77	--	<40.0	<1.50	86.0
RLCGE068	<4.50	3.76	<13.0	5.91	--	<40.0	<1.50	62.3
RLCGE069	<2.50	6.72	<10.0	6.23	--	<30.0	<1.50	59.6
RLCGE070	<2.50	8.42	<10.0	4.88	--	<30.0	<1.50	58.5
RLCGE071	<2.50	6.60	<10.0	4.70	--	<30.0	<1.50	51.2
RLCGE072	<2.50	8.41	<10.0	3.59	--	<30.0	<1.50	54.1
RLCGE073	<2.50	9.34	<10.0	31.1	--	<30.0	<1.50	70.9
RLCGE074	<2.50	11.3	<10.0	17.3	--	<30.0	<1.50	65.0
RLCGE075	<2.50	9.30	<10.0	17.2	--	<30.0	<1.50	64.1
RLCGE076	<2.50	9.25	<10.0	29.5	--	<30.0	<1.50	76.2
RLCGE077	<4.50	12.8	<13.0	7.97	--	<40.0	<1.50	71.2
RLCGE079	<2.50	3.11	<10.0	2.75	--	<30.0	<1.50	46.9
RLCGE080	<2.50	6.17	<10.0	12.3	--	<30.0	<1.50	59.6
RLCGE081	<4.50	20.0	<13.0	13.8	--	<40.0	<1.50	68.9
RLCGE082	<2.50	17.8	<10.0	8.30	--	<30.0	<1.50	60.1
RLCGE083	<4.50	12.1	<13.0	8.12	--	<40.0	<1.50	64.7
RLCGE084	<2.50	13.3	<10.0	6.16	--	<30.0	<1.50	59.5
RLCGE085	<2.50	11.0	<10.0	8.43	--	<30.0	<1.50	56.6
RLCGE086	<4.50	16.3	<13.0	7.72	--	<40.0	<1.50	75.5
RLCGE087	<4.50	20.6	<13.0	7.93	--	<40.0	<1.50	75.0
RLCGE088	<2.50	14.6	<10.0	7.00	--	<30.0	<1.50	56.9
RLCGE089	<4.50	7.65	<13.0	6.61	--	<40.0	<1.50	52.2
RLCGE090	<4.50	21.4	<13.0	15.3	--	<40.0	<1.50	82.4
RLCGE091	<2.50	4.25	<10.0	31.1	--	<30.0	<1.50	76.6
RLCGE092	<4.50	7.95	<13.0	6.80	--	<40.0	<1.50	64.8
RLCGE094	<4.50	12.7	<13.0	21.4	--	<40.0	<1.50	107
RLCGE096	<2.50	12.5	<10.0	5.50	--	<30.0	<1.50	57.1
RLCGE097	<2.50	16.1	<10.0	6.57	--	<30.0	<1.50	66.1
RLCGE098	<2.50	14.2	<10.0	6.83	--	<30.0	<1.50	62.6
RLCGE099	<4.50	6.02	<13.0	7.58	--	<40.0	<1.50	81.8
RLCGE100	<2.50	20.4	<10.0	7.48	--	<30.0	<1.50	66.5
RLCGE101	<2.50	23.4	<10.0	9.13	--	<30.0	<1.50	66.0
RLCGE102	<2.50	25.6	<10.0	6.21	--	<30.0	<1.50	64.4
RLCGE103	<2.50	29.8	<10.0	6.17	--	<30.0	<1.50	66.3

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
RLCGE104	Canada Goose	Egg	Rasmus Lee Lake	05-89	64.4
RLCGE105	Canada Goose	Egg	Rasmus Lee Lake	05-89	66.7
RLCGE106	Canada Goose	Egg	Rasmus Lee Lake	05-89	66.2
RLCGE107	Canada Goose	Egg	Rasmus Lee Lake	05-89	67.1
RLCGE108	Canada Goose	Egg	Rasmus Lee Lake	05-89	64.8
RLCGE109	Canada Goose	Egg	Rasmus Lee Lake	05-89	64.0
RLCGE110	Canada Goose	Egg	Rasmus Lee Lake	05-89	66.8
RLCGE111	Canada Goose	Egg	Rasmus Lee Lake	05-89	63.1
RLCGE112	Canada Goose	Egg	Rasmus Lee Lake	05-89	64.4
RLCGE113	Canada Goose	Egg	Rasmus Lee Lake	05-89	65.8
RLCGE114	Canada Goose	Egg	Rasmus Lee Lake	05-89	67.8
RLCGE115	Canada Goose	Egg	Rasmus Lee Lake	05-89	64.7
RLCGE116	Canada Goose	Egg	Rasmus Lee Lake	05-89	61.2
RLCGE117	Canada Goose	Egg	Rasmus Lee Lake	05-89	64.9
RLCGE118	Canada Goose	Egg	Rasmus Lee Lake	05-89	67.5
RLCGE119	Canada Goose	Egg	Rasmus Lee Lake	05-89	69.4
RLCGE120	Canada Goose	Egg	Rasmus Lee Lake	05-89	64.3
RLCGE121	Canada Goose	Egg	Rasmus Lee Lake	05-89	66.5
RLCGE122	Canada Goose	Egg	Rasmus Lee Lake	06-89	69.8
RLCGE123	Canada Goose	Egg	Rasmus Lee Lake	05-89	66.4
RLCGE124	Canada Goose	Egg	Rasmus Lee Lake	05-89	62.4
GLEGE1	Eared Grebe	Egg	Goose Lake	06-22-88	79.5
GLEGE2	Eared Grebe	Egg	Goose Lake	06-22-88	78.5
GLEGE3	Eared Grebe	Egg	Goose Lake	06-22-88	76.6
GLEGE4	Eared Grebe	Egg	Goose Lake	06-22-88	79.4
GLEGE5	Eared Grebe	Egg	Goose Lake	06-22-88	77.1
GLEGE6	Eared Grebe	Egg	Goose Lake	06-22-88	79.2
GLEGE7	Eared Grebe	Egg	Goose Lake	06-22-88	78.5
GLEGE8	Eared Grebe	Egg	Goose Lake	06-22-88	79.2
GLEGE9	Eared Grebe	Egg	Goose Lake	06-22-88	76.9
GLEGE10	Eared Grebe	Egg	Goose Lake	06-22-88	78.6
GLEGE11	Eared Grebe	Egg	Goose Lake	06-22-88	78.8
GLEGE12	Eared Grebe	Egg	Goose Lake	06-22-88	77.6
GLEGE13	Eared Grebe	Egg	Goose Lake	06-22-88	79.0
GLEGE14	Eared Grebe	Egg	Goose Lake	06-22-88	78.7
GLEGE15	Eared Grebe	Egg	Goose Lake	06-22-88	78.5
GLEGE16	Eared Grebe	Egg	Goose Lake	06-23-88	77.6
GLEGE17	Eared Grebe	Egg	Goose Lake	06-23-88	75.9
GLEGE18	Eared Grebe	Egg	Goose Lake	06-23-88	78.0
GLEGE19	Eared Grebe	Egg	Goose Lake	06-23-88	77.0
GLEGE20	Eared Grebe	Egg	Goose Lake	06-23-88	79.2
GLEGE21	Eared Grebe	Egg	Goose Lake	06-23-88	78.3
GLEGE22	Eared Grebe	Egg	Goose Lake	06-23-88	77.8
GLEGE23	Eared Grebe	Egg	Goose Lake	06-23-88	78.8
GLEGE24	Eared Grebe	Egg	Goose Lake	06-23-88	77.9
GLEGE25	Eared Grebe	Egg	Goose Lake	06-23-88	78.0
GLEGE26	Eared Grebe	Egg	Goose Lake	06-23-88	78.4

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
RLCGE104	479	<30.0	<40.0	<0.30	1.16	<0.200	<3.00	<0.800
RLCGE105	464	<30.0	<40.0	<0.30	<1.00	<0.200	<3.00	<0.800
RLCGE106	550	<20.0	<30.0	<0.40	4.43	<0.100	<2.00	<0.500
RLCGE107	676	<20.0	<30.0	<0.40	4.32	<0.100	<2.00	<0.500
RLCGE108	523	<20.0	<30.0	<0.40	2.62	<0.100	<2.00	<0.500
RLCGE109	566	<30.0	<40.0	<0.30	2.01	<0.200	<3.00	<0.800
RLCGE110	400	<20.0	<30.0	0.45	1.56	<0.100	<2.00	<0.500
RLCGE111	545	<20.0	<30.0	<0.40	5.13	<0.100	3.27	<0.500
RLCGE112	469	<20.0	<30.0	<0.40	5.75	<0.100	<2.00	<0.500
RLCGE113	373	<20.0	<30.0	0.43	7.42	<0.100	3.04	<0.500
RLCGE114	427	<20.0	<30.0	<0.40	3.26	<0.100	2.07	<0.500
RLCGE115	434	<20.0	<30.0	<0.40	3.80	<0.100	<2.00	<0.500
RLCGE116	493	<30.0	<40.0	<0.30	<1.00	<0.200	<3.00	<0.800
RLCGE117	470	<20.0	<30.0	<0.40	3.39	<0.100	2.79	<0.500
RLCGE118	548	<30.0	<40.0	<0.30	2.90	<0.200	<3.00	<0.800
RLCGE119	599	<30.0	<40.0	<0.30	2.14	<0.200	<3.00	<0.800
RLCGE120	560	<30.0	<40.0	<0.30	3.37	<0.200	<3.00	<0.800
RLCGE121	390	<30.0	<40.0	<0.30	5.24	<0.200	<3.00	<0.800
RLCGE122	729	<20.0	<30.0	<0.50	1.89	<0.200	<2.00	<0.500
RLCGE123	605	<30.0	<40.0	<0.30	<1.00	<0.200	<3.00	<0.800
RLCGE124	606	<20.0	<30.0	<0.40	3.07	<0.100	<2.00	<0.500
GLEGE1	501	< 3.00	--	<0.20	0.20	<0.200	<4.00	<0.300
GLEGE2	515	< 3.00	--	<0.20	0.89	<0.200	<4.00	<0.300
GLEGE3	513	8.00	--	<0.20	0.77	<0.200	<4.00	<0.300
GLEGE4	604	<3.00	--	0.20	0.20	<0.200	<4.00	<0.300
GLEGE5	484	<3.00	--	<0.20	0.30	<0.200	4 00	<0.300
GLEGE6	521	<3.00	--	<0.20	0.50	<0.200	<4.00	<0.300
GLEGE7	507	<3.00	--	<0.20	0.35	<0.200	<4.00	<0.300
GLEGE8	522	<3.00	--	<0.20	0.35	<0.200	<4.00	<0.300
GLEGE9	384	<5.00	--	<0.20	0.40	<0.300	<6.00	<0.400
GLEGE10	404	<4.00	--	<0.30	0.30	<0.200	<6.00	<0.400
GLEGE11	463	<3.00	--	<0.30	0.61	<0.200	<4.00	<0.300
GLEGE12	468	5.00	--	<0.20	0.42	<0.200	<5.00	<0.300
GLEGE13	514	<3.00	--	<0.20	0.52	<0.200	<4.00	<0.300
GLEGE14	499	3.00	--	0.30	0.40	<0.200	<4.00	<0.300
GLEGE15	529	<3.00	--	<0.20	0.78	<0.200	<4.00	<0.300
GLEGE16	437	<3.00	--	<0.20	0.52	<0.200	<4.00	<0.300
GLEGE17	432	<3.00	--	<0.20	1.10	<0.200	<4.00	<0.300
GLEGE18	561	4.00	--	<0.20	0.34	<0.200	<4.00	<0.300
GLEGE19	477	<3.00	--	<0.20	0.52	<0.200	<4.00	<0.300
GLEGE20	432	<3.00	--	<0.20	0.36	<0.200	<4.00	<0.300
GLEGE21	428	<3.00	--	<0.20	0.36	<0.200	<4.00	<0.300
GLEGE22	373	<3.00	--	<0.20	0.20	<0.200	<4.00	<0.300
GLEGE23	500	<3.00	--	<0.20	0.48	<0.200	<4.00	<0.300
GLEGE24	479	<3.00	--	<0.20	0.78	<0.200	<4.00	<0.300
GLEGE25	450	<3.00	--	<0.20	0.30	<0.200	<4.00	<0.300
GLEGE26	538	6.00	--	<0.20	0.53	<0.200	<4.00	<0.300

Table 12.--Trace-element concentrationsin biota (dry weight), 1988-89--Continued

Sample number	Chro-mium	Cobalt	Copper	Iron	Lead	Manga-nese	Mercury	Molyb-denum
RLCGE104	<2.50	--	7.82	110	<5.00	3.99	<0.020	<5.00
RLCGE105	<2.50	--	10.1	93.4	<5.00	3.70	<0.020	<5.00
RLCGE106	<2.00	--	4.00	156	<6.00	1.93	0.025	<5.00
RLCGE107	<2.00	--	3.67	157	<6.00	2.64	<0.020	<5.00
RLCGE108	<2.00	--	5.64	180	<6.00	2.36	0.225	<5.00
RLCGE109	<2.50	--	8.43	77.5	<5.00	<1.50	<0.020	<5.00
RLCGE110	<2.00	--	5.41	148	<6.00	1.63	0.119	<5.00
RLCGE111	<2.00	--	5.10	167	<6.00	2.31	0.032	<5.00
RLCGE112	<2.00	--	5.43	158	<6.00	2.27	<0.020	<5.00
RLCGE113	<2.00	--	5.95	123	<6.00	2.96	0.076	<5.00
RLCGE114	<2.00	--	5.28	125	<6.00	4.32	0.093	<5.00
RLCGE115	<2.00	--	5.65	127	<6.00	3.70	0.092	<5.00
RLCGE116	<2.50	--	3.88	157	<5.00	1.62	<0.020	<5.00
RLCGE117	<2.00	--	4.32	152	<6.00	2.26	0.039	<5.00
RLCGE118	<2.50	--	4.65	141	<5.00	<1.50	<0.020	<5.00
RLCGE119	<2.50	--	4.33	152	<5.00	<1.50	<0.020	<5.00
RLCGE120	<2.50	--	5.39	147	<5.00	1.56	<0.020	<5.00
RLCGE121	<2.50	--	10.4	165	<5.00	6.23	<0.020	<5.00
RLCGE122	<2.50	--	5.10	101	<5.00	<1.40	0.121	<6.00
RLCGE123	<2.50	--	4.20	117	<5.00	<1.50	<0.020	<5.00
RLCGE124	<2.00	--	5.84	176	<6.00	2.21	0.217	<5.00
GLEGE1	<2.00	--	3.00	63.0	<4.00	3.40	0.230	<1.00
GLEGE2	<2.00	--	3.80	149	<4.00	2.60	0.230	<1.00
GLEGE3	<2.00	--	2.80	191	<4.00	2.50	0.619	<1.00
GLEGE4	<2.00	--	3.20	137	<4.00	2.00	0.270	<1.00
GLEGE5	<2.00	--	3.60	96.0	<4.00	2.60	0.150	<1.00
GLEGE6	<2.00	--	3.20	108	<4.00	1.00	0.160	<1.00
GLEGE7	3.00	--	4.20	135	<4.00	2.40	0.160	<1.00
GLEGE8	<2.00	--	4.60	127	<4.00	2.00	0.180	<1.00
GLEGE9	<3.00	--	3.00	150	<6.00	2.00	0.170	<2.00
GLEGE10	<3.00	--	3.30	140	<6.00	2.00	0.190	<1.00
GLEGE11	<2.00	--	4.00	127	<4.00	1.00	0.290	<1.00
GLEGE12	<3.00	--	2.40	138	<5.00	2.00	0.370	<1.00
GLEGE13	<2.00	--	3.20	137	<4.00	2.00	0.320	<1.00
GLEGE14	<2.00	--	3.50	141	<4.00	2.20	0.310	<1.00
GLEGE15	<2.00	--	3.90	138	<4.00	2.50	0.563	<1.00
GLEGE16	<2.00	--	3.00	134	<4.00	2.00	0.853	<1.00
GLEGE17	<2.00	--	3.30	174	<4.00	4.20	0.430	<1.00
GLEGE18	<2.00	--	3.80	117	<4.00	3.90	0.110	<1.00
GLEGE19	<2.00	--	2.90	151	<4.00	1.70	0.240	<1.00
GLEGE20	<2.00	--	2.90	143	<4.00	2.80	0.320	<1.00
GLEGE21	<2.00	--	2.90	152	<4.00	<0.60	0.200	<1.00
GLEGE22	<2.00	--	3.50	127	<4.00	2.50	0.280	<1.00
GLEGE23	<2.00	--	3.40	153	<4.00	2.00	0.480	<1.00
GLEGE24	<2.00	--	3.60	148	<4.00	3.30	0.310	<1.00
GLEGE25	<2.00	--	3.50	155	<4.00	3.40	0.410	<1.00
GLEGE26	<2.00	--	3.50	159	<4.00	2.00	0.400	<1.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
RLCGE104	<4.50	21.9	<13.0	5.39	--	<40.0	<1.50	75.9
RLCGE105	<4.50	21.6	<13.0	4.17	--	<40.0	<1.50	73.1
RLCGE106	<2.50	22.8	<10.0	11.4	--	<30.0	<1.50	52.5
RLCGE107	<2.50	3.46	<10.0	25.0	--	<30.0	<1.50	61.0
RLCGE108	<2.50	5.87	<10.0	13.0	--	<30.0	<1.50	61.2
RLCGE109	<4.50	8.92	<13.0	12.4	--	<40.0	<1.50	58.2
RLCGE110	<2.50	6.01	<10.0	5.94	--	<30.0	<1.50	53.1
RLCGE111	<2.50	8.32	<10.0	14.5	--	<30.0	<1.50	64.0
RLCGE112	<2.50	6.05	<10.0	14.2	--	<30.0	<1.50	57.6
RLCGE113	<2.50	7.42	<10.0	10.5	--	<30.0	<1.50	71.8
RLCGE114	<2.50	6.14	<10.0	5.48	--	<30.0	<1.50	52.6
RLCGE115	<2.50	8.45	<10.0	5.94	--	<30.0	<1.50	55.2
RLCGE116	<4.50	12.4	<13.0	3.72	--	<40.0	<1.50	57.0
RLCGE117	<2.50	2.76	<10.0	6.88	--	<30.0	<1.50	57.1
RLCGE118	<4.50	7.86	<13.0	8.12	--	<40.0	<1.50	61.9
RLCGE119	<4.50	6.5	<13.0	6.55	--	<40.0	<1.50	59.0
RLCGE120	<4.50	17.6	<13.0	8.85	--	<40.0	<1.50	72.1
RLCGE121	<4.50	11.6	<13.0	11.9	--	<40.0	<1.50	65.2
RLCGE122	<2.50	10.9	<10.0	9.81	--	<30.0	<1.50	57.0
RLCGE123	<4.50	5.71	<13.0	3.46	--	<40.0	<1.50	69.1
RLCGE124	<2.50	5.74	<10.0	15.6	--	<30.0	<1.50	63.3
GLEGE1	<3.00	78.0	<2.00	47.3	<5.0	--	<0.50	46.1
GLEGE2	<3.00	77.0	<2.00	49.7	<5.0	--	<0.50	52.0
GLEGE3	<3.00	66.0	<2.00	52.4	<5.0	--	<0.50	68.9
GLEGE4	<3.00	90.0	<2.00	46.8	<5.0	--	<0.50	38.2
GLEGE5	<3.00	72.0	<2.00	54.2	<5.0	--	<0.50	47.0
GLEGE6	<3.00	80.0	<2.00	58.0	<5.0	--	<0.50	54.2
GLEGE7	<3.00	82.0	<2.00	46.6	<5.0	--	<0.50	49.7
GLEGE8	<3.00	79.0	<2.00	50.4	<6.0	--	<0.60	48.3
GLEGE9	<5.00	64.0	<2.00	63.5	<8.0	--	<0.80	62.1
GLEGE10	<4.00	76.0	<3.00	41.6	<8.0	--	<0.80	51.6
GLEGE11	<3.00	72.0	<2.00	81.9	<5.0	--	<0.50	61.0
GLEGE12	<4.00	64.0	<2.00	71.9	<6.0	--	<0.60	56.9
GLEGE13	<3.00	88.0	<2.00	65.6	<5.0	--	<0.50	54.6
GLEGE14	<3.00	86.0	<2.00	51.5	<5.0	--	<0.50	54.8
GLEGE15	<3.00	110	<2.00	35.9	<5.0	--	<0.50	45.6
GLEGE16	<3.00	73.0	<2.00	72.9	<5.0	--	<0.50	60.4
GLEGE17	<3.00	76.0	<2.00	49.8	<5.0	--	<0.50	53.8
GLEGE18	<3.00	70.0	<2.00	54.1	<5.0	--	<0.50	54.1
GLEGE19	<3.00	56.0	<2.00	91.9	<5.0	--	<0.50	57.8
GLEGE20	<3.00	51.0	<2.00	39.9	<5.0	--	<0.50	51.4
GLEGE21	<3.00	49.0	<2.00	51.7	<5.0	--	<0.50	51.0
GLEGE22	<3.00	56.0	<2.00	37.8	<5.0	--	<0.50	54.7
GLEGE23	<3.00	75.0	<2.00	46.2	<5.0	--	<0.50	48.6
GLEGE24	<3.00	81.0	<2.00	35.7	<5.0	--	<0.50	53.7
GLEGE25	<3.00	73.0	<2.00	50.9	<5.0	--	<0.50	51.5
GLEGE26	<3.00	56.0	<2.00	60.7	<5.0	--	<0.50	53.5

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
GLEGE27	Eared Grebe	Egg	Goose Lake	06-23-88	79.3
GLEGE28	Eared Grebe	Egg	Goose Lake	06-23-88	77.8
GLEGE29	Eared Grebe	Egg	Goose Lake	06-23-88	79.5
GLEGE30	Eared Grebe	Egg	Goose Lake	06-23-88	76.6
GLEGE31	Eared Grebe	Egg	Goose Lake	06-23-88	78.4
GLEGE32	Eared Grebe	Egg	Goose Lake	06-23-88	78.4
GLEGE33	Eared Grebe	Egg	Goose Lake	06-23-88	78.1
GLEGE34	Eared Grebe	Egg	Goose Lake	06-23-88	78.3
GLEGE35	Eared Grebe	Egg	Goose Lake	06-23-88	80.2
GLEGE36	Eared Grebe	Egg	Goose Lake	06-23-88	80.1
GLEGE37	Eared Grebe	Egg	Goose Lake	06-23-88	77.9
GLEGE38	Eared Grebe	Egg	Goose Lake	06-23-88	78.6
GLEGE39	Eared Grebe	Egg	Goose Lake	06-23-88	80.3
GLEGE40	Eared Grebe	Egg	Goose Lake	06-23-88	78.9
GLEGE41	Eared Grebe	Egg	Goose Lake	06-23-88	78.3
GLEGE42	Eared Grebe	Egg	Goose Lake	06-23-88	78.4
GLEGE43	Eared Grebe	Egg	Goose Lake	06-23-88	79.1
GLEGE44	Eared Grebe	Egg	Goose Lake	06-23-88	77.2
GLEGE45	Eared Grebe	Egg	Goose Lake	06-23-88	79.0
GLEGE46	Eared Grebe	Egg	Goose Lake	06-23-88	78.1
GLEGE47	Eared Grebe	Egg	Goose Lake	06-29-88	79.6
GLEGE48	Eared Grebe	Egg	Goose Lake	06-29-88	78.5
GLEGE49	Eared Grebe	Egg	Goose Lake	06-29-88	81.6
GLEGE50	Eared Grebe	Egg	Goose Lake	06-29-88	77.9
GLEGE51	Eared Grebe	Egg	Goose Lake	06-29-88	79.4
GLEGE52	Eared Grebe	Egg	Goose Lake	06-29-88	78.5
GLEGE54	Eared Grebe	Egg	Goose Lake	06-29-88	78.8
GLEGE55	Eared Grebe	Egg	Goose Lake	06-29-88	76.4
GLEGE56	Eared Grebe	Egg	Goose Lake	06-29-88	77.0
GLEGE57	Eared Grebe	Egg	Goose Lake	06-29-88	80.0
GLEGE58	Eared Grebe	Egg	Goose Lake	06-29-88	80.3
GLEGE59	Eared Grebe	Egg	Goose Lake	06-29-88	80.6
GLEGE60	Eared Grebe	Egg	Goose Lake	06-29-88	77.6
GLEGE61	Eared Grebe	Egg	Goose Lake	06-29-88	79.6
GLEGE62	Eared Grebe	Egg	Goose Lake	06-29-88	79.4
GLEGE63	Eared Grebe	Egg	Goose Lake	06-29-88	78.9
GLEGE64	Eared Grebe	Egg	Goose Lake	06-29-88	77.8
GLEGE65	Eared Grebe	Egg	Goose Lake	06-29-88	75.7
GLEGE66	Eared Grebe	Egg	Goose Lake	06-29-88	80.4
GLEGE67	Eared Grebe	Egg	Goose Lake	06-29-88	79.4
GLEGE68	Eared Grebe	Egg	Goose Lake	06-29-88	77.5
GLEGE69	Eared Grebe	Egg	Goose Lake	06-29-88	78.3
GLEGE70	Eared Grebe	Egg	Goose Lake	06-29-88	80.3
GLEGE71	Eared Grebe	Egg	Goose Lake	06-29-88	77.7
GLEGE72	Eared Grebe	Egg	Goose Lake	06-29-88	79.4
GLEGE73	Eared Grebe	Egg	Goose Lake	06-29-88	78.3
GLEGE74	Eared Grebe	Egg	Goose Lake	06-29-88	79.7

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
GLEGE27	509	<3.00	--	<0.20	0.33	<0.200	<4.00	<0.300
GLEGE28	455	8.00	--	<0.20	0.20	<0.200	<4.00	<0.300
GLEGE29	406	4.00	--	<0.20	0.30	<0.200	<4.00	<0.300
GLEGE30	469	<3.00	--	<0.20	0.60	<0.200	<4.00	<0.300
GLEGE31	502	<3.00	--	<0.20	0.20	<0.200	<4.00	<0.300
GLEGE32	509	4.00	--	<0.20	1.20	<0.200	<4.00	<0.300
GLEGE33	429	<3.00	--	<0.20	0.46	<0.100	<3.00	<0.300
GLEGE34	480	<3.00	--	<0.20	0.60	<0.100	<3.00	<0.300
GLEGE35	493	<3.00	--	<0.20	0.10	<0.100	<3.00	<0.300
GLEGE36	541	<3.00	--	<0.20	0.20	<0.100	<3.00	<0.300
GLEGE37	467	<3.00	--	<0.20	0.55	<0.100	<3.00	<0.300
GLEGE38	723	<3.00	--	<0.20	0.65	<0.100	<3.00	<0.300
GLEGE39	461	<3.00	--	<0.20	0.46	<0.100	<3.00	<0.300
GLEGE40	675	7.00	--	<0.20	0.20	<0.100	<3.00	<0.300
GLEGE41	497	<3.00	--	<0.20	0.39	<0.100	<3.00	<0.300
GLEGE42	503	<3.00	--	<0.20	0.42	<0.100	<3.00	<0.300
GLEGE43	496	<3.00	--	<0.20	0.20	<0.100	<3.00	<0.300
GLEGE44	541	<3.00	--	<0.20	0.39	<0.100	<3.00	<0.300
GLEGE45	444	<3.00	--	<0.10	0.20	<0.100	<3.00	<0.300
GLEGE46	473	<3.00	--	<0.20	0.71	<0.100	<3.00	<0.300
GLEGE47	495	<3.00	--	<0.20	0.43	<0.100	<4.00	<0.300
GLEGE48	498	<3.00	--	<0.20	0.79	<0.100	<4.00	<0.300
GLEGE49	509	<3.00	--	<0.20	0.20	<0.100	<4.00	<0.300
GLEGE50	563	<3.00	--	<0.20	0.64	<0.100	<4.00	<0.300
GLEGE51	493	<3.00	--	<0.20	0.37	<0.100	<4.00	<0.300
GLEGE52	441	<3.00	--	<0.20	0.60	<0.100	<4.00	<0.300
GLEGE54	511	<3.00	--	<0.20	0.10	<0.100	<4.00	<0.200
GLEGE55	418	<3.00	--	<0.20	0.55	<0.100	<4.00	<0.300
GLEGE56	455	<3.00	--	<0.20	1.10	<0.100	<4.00	<0.200
GLEGE57	440	3.00	--	<0.20	0.20	<0.100	<4.00	<0.200
GLEGE58	399	<3.00	--	<0.20	<0.10	<0.100	<4.00	<0.300
GLEGE59	672	<3.00	--	<0.20	0.99	<0.100	<4.00	<0.300
GLEGE60	511	<3.00	--	<0.20	0.30	<0.100	<4.00	<0.200
GLEGE61	462	8 00	--	<0.20	0.41	<0.100	<4.00	<0.200
GLEGE62	510	<3.00	--	<0.20	0.39	<0.100	<4.00	<0.300
GLEGE63	467	<3.00	--	<0.20	1.20	<0.100	<4.00	<0.200
GLEGE64	512	<3.00	--	<0.20	0.47	<0.100	<4.00	<0.200
GLEGE65	495	<3.00	--	<0.20	0.53	<0.100	<4.00	<0.300
GLEGE66	478	<3.00	--	<0.20	0.68	<0.100	<4.00	<0.200
GLEGE67	431	<3.00	--	<0.20	0.31	<0.100	<4.00	<0.300
GLEGE68	447	<3.00	--	<0.20	0.57	<0.100	<4.00	<0.200
GLEGE69	514	<3.00	--	<0.20	0.20	<0.100	<4.00	<0.300
GLEGE70	478	<3.00	--	<0.20	0.51	<0.100	<4.00	<0.300
GLEGE71	499	<3.00	--	<0.20	0.31	<0.100	<4.00	<0.200
GLEGE72	452	<3.00	--	0.20	0.37	<0.100	<4.00	<0.300
GLEGE73	572	<3.00	--	0.20	0.43	<0.100	<4.00	<0.200
GLEGE74	482	<3.00	--	<0.20	0.99	<0.100	<4.00	<0.200

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chro-mium	Cobalt	Copper	Iron	Lead	Manga-nese	Mercury	Molyb-denum
GLEGE27	<2.00	--	3.60	148	<4.00	1.00	0.460	<1.00
GLEGE28	<2.00	--	3.10	149	<4.00	3.50	0.390	<1.00
GLEGE29	<2.00	--	3.10	166	<4.00	2.10	0.450	<1.00
GLEGE30	<2.00	--	3.30	167	<4.00	2.50	0.190	<1.00
GLEGE31	<2.00	--	3.30	100	<4.00	3.00	0.064	<1.00
GLEGE32	<2.00	--	3.50	116	<4.00	3.80	0.756	<1.00
GLEGE33	<1.00	--	3.50	158	<4.00	2.20	0.320	<1.00
GLEGE34	<1.00	--	3.80	141	<4.00	5.10	0.200	<1.00
GLEGE35	<1.00	--	4.20	73.0	<4.00	2.90	0.300	<1.00
GLEGE36	<1.00	--	4.00	140	<4.00	2.30	0.589	<1.00
GLEGE37	<1.00	--	3.30	178	<4.00	2.30	0.818	<1.00
GLEGE38	<1.00	--	3.90	142	<4.00	2.50	1.300	<1.00
GLEGE39	<1.00	--	3.60	107	<4.00	3.20	0.300	<1.00
GLEGE40	<1.00	--	5.70	130	<4.00	2.80	0.629	<1.00
GLEGE41	<1.00	--	3.40	135	<4.00	1.50	0.616	<1.00
GLEGE42	<1.00	--	3.30	119	<4.00	3.80	0.160	<1.00
GLEGE43	<1.00	--	2.20	97.0	<4.00	1.70	0.718	<1.00
GLEGE44	<1.00	--	2.90	142	<4.00	3.80	0.120	<1.00
GLEGE45	<1.00	--	4.70	76.0	<4.00	4.40	0.140	<1.00
GLEGE46	<1.00	--	4.00	132	<4.00	2.40	0.310	<1.00
GLEGE47	<2.00	--	3.40	128	<4.00	2.60	0.260	<1.00
GLEGE48	<2.00	--	3.70	137	<4.00	3.00	0.280	<1.00
GLEGE49	<2.00	--	3.40	102	<4.00	4.30	0.170	<1.00
GLEGE50	<2.00	--	2.90	121	<4.00	2.80	0.310	<1.00
GLEGE51	<2.00	--	2.50	155	<4.00	2.70	0.220	<1.00
GLEGE52	<2.00	--	2.90	147	<4.00	3.50	0.300	<1.00
GLEGE54	<2.00	--	3.00	109	<4.00	2.90	0.190	<1.00
GLEGE55	<2.00	--	3.00	150	<4.00	2.50	0.210	<1.00
GLEGE56	<2.00	--	3.20	177	<4.00	2.90	0.100	<1.00
GLEGE57	<2.00	--	3.50	158	<4.00	4.20	0.220	<1.00
GLEGE58	<2.00	--	2.10	92.0	<4.00	1.40	0.430	<1.00
GLEGE59	<2.00	--	4.00	115	<4.00	3.70	0.500	<1.00
GLEGE60	<2.00	--	3.00	146	<4.00	3.40	0.350	<1.00
GLEGE61	<2.00	--	3.50	142	<4.00	2.90	0.310	<1.00
GLEGE62	<2.00	--	3.00	120	<4.00	3.90	0.360	<1.00
GLEGE63	<2.00	--	3.10	151	<4.00	2.40	0.883	<1.00
GLEGE64	<2.00	--	2.80	148	<4.00	2.90	0.250	<1.00
GLEGE65	<2.00	--	3.00	142	<4.00	2.20	0.370	<1.00
GLEGE66	<2.00	--	2.80	125	<4.00	2.40	1.060	<1.00
GLEGE67	<2.00	--	3.10	163	<4.00	2.90	0.500	<1.00
GLEGE68	<2.00	--	3.10	165	<4.00	2.40	0.380	<1.00
GLEGE69	<2.00	--	3.40	159	<4.00	2.50	0.270	<1.00
GLEGE70	<2.00	--	3.70	145	<4.00	2.30	0.190	<1.00
GLEGE71	<2.00	--	3.20	163	<4.00	2.10	0.440	<1.00
GLEGE72	<2.00	--	3.90	139	<4.00	5.00	0.068	<1.00
GLEGE73	<2.00	--	3.20	162	<4.00	2.30	0.490	<1.00
GLEGE74	<2.00	--	3.60	139	<4.00	3.50	0.535	<1.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
GLEGE27	<3.00	62.0	<2.00	55.1	<5.0	--	<0.50	48.4
GLEGE28	<3.00	51.0	<2.00	52.8	<5.0	--	<0.50	55.2
GLEGE29	<3.00	56.0	<2.00	51.4	<5.0	--	<0.50	51.9
GLEGE30	<3.00	85.0	<2.00	42.6	<5.0	--	<0.50	60.4
GLEGE31	<3.00	80.0	<2.00	47.9	<5.0	--	<0.50	49.6
GLEGE32	<3.00	71.0	<2.00	61.4	<5.0	--	<0.50	53.9
GLEGE33	<3.00	62.0	<2.00	72.8	<4.0	--	<0.30	55.2
GLEGE34	<3.00	77.0	<2.00	74.4	<4.0	--	<0.30	59.7
GLEGE35	<3.00	69.0	<2.00	29.1	<4.0	--	<0.30	45.7
GLEGE36	<3.00	93.0	<2.00	50.8	<4.0	--	<0.30	47.0
GLEGE37	<3.00	61.0	<2.00	77.0	<4.0	--	<0.30	48.6
GLEGE38	<3.00	81.0	<2.00	136	<4.0	--	<0.30	75.1
GLEGE39	<3.00	99.0	<2.00	30.0	<4.0	--	<0.30	51.6
GLEGE40	<3.00	99.0	<2.00	87.9	<4.0	--	<0.30	56.2
GLEGE41	<3.00	60.0	<2.00	56.5	<4.0	--	<0.30	61.1
GLEGE42	<3.00	73.0	<2.00	24.2	<4.0	--	<0.30	47.5
GLEGE43	<3.00	43.0	<2.00	35.3	<4.0	--	<0.30	42.3
GLEGE44	<3.00	83.0	<2.00	37.2	<4.0	--	<0.30	47.8
GLEGE45	<3.00	66.0	<2.00	28.9	<4.0	--	<0.30	48.0
GLEGE46	<3.00	86.0	<2.00	59.1	<4.0	--	<0.30	58.4
GLEGE47	<1.00	79.0	<2.00	51.5	<6.0	--	<0.30	53.5
GLEGE48	<1.00	95.0	<2.00	36.6	<6.0	--	<0.30	51.1
GLEGE49	<1.00	81.0	<2.00	42.8	<6.0	--	<0.30	43.7
GLEGE50	<1.00	82.0	<2.00	74.2	<6.0	--	<0.30	57.2
GLEGE51	<1.00	85.0	<2.00	49.5	<6.0	--	<0.30	47.4
GLEGE52	<1.00	77.0	<2.00	64.5	<5.0	--	<0.30	52.0
GLEGE54	<1.00	58.0	<2.00	22.0	<5.0	--	<0.30	52.3
GLEGE55	<1.00	64.0	<2.00	39.4	<5.0	--	<0.30	61.6
GLEGE56	<1.00	71.0	<2.00	55.4	<5.0	--	<0.30	55.6
GLEGE57	<1.00	82.0	<2.00	38.5	<5.0	--	<0.30	50.9
GLEGE58	<1.00	40.0	<2.00	35.8	<6.0	--	<0.30	43.6
GLEGE59	<1.00	70.0	<2.00	47.5	<6.0	--	<0.30	57.8
GLEGE60	<1.00	70.0	<2.00	45.5	<5.0	--	<0.30	58.3
GLEGE61	<1.00	75.0	<2.00	71.1	<5.0	--	<0.30	68.3
GLEGE62	<1.00	82.0	<2.00	38.4	<5.0	--	<0.30	57.7
GLEGE63	<1.00	100	<2.00	35.0	<5.0	--	<0.30	50.8
GLEGE64	<1.00	63.0	<2.00	38.9	<5.0	--	<0.30	62.8
GLEGE65	<1.00	60.0	<2.00	52.6	<6.0	--	<0.30	57.0
GLEGE66	<1.00	110	<2.00	38.8	<5.0	--	<0.30	44.0
GLEGE67	<1.00	77.0	<2.00	47.4	<6.0	--	<0.30	47.2
GLEGE68	<1.00	60.0	<2.00	68.5	<5.0	--	<0.30	63.2
GLEGE69	<1.00	67.0	<2.00	55.8	<5.0	--	<0.30	51.6
GLEGE70	<1.00	76.0	<2.00	73.8	<6.0	--	<0.30	63.3
GLEGE71	<1.00	78.0	<2.00	32.8	<5.0	--	<0.30	54.8
GLEGE72	<1.00	71.0	<2.00	54.2	<6.0	--	<0.30	57.2
GLEGE73	<1.00	58.0	<2.00	58.8	<5.0	--	<0.30	52.6
GLEGE74	<1.00	91.0	<2.00	39.8	<5.0	--	<0.30	58.0

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
GLEGE75	Eared Grebe	Egg	Goose Lake	06-29-88	78.7
GLEGE76	Eared Grebe	Egg	Goose Lake	06-29-88	78.4
GLEGE77	Eared Grebe	Egg	Goose Lake	06-29-88	78.7
GLEGE78	Eared Grebe	Egg	Goose Lake	06-29-88	78.4
GLEGE79	Eared Grebe	Egg	Goose Lake	06-29-88	78.5
GLEGE80	Eared Grebe	Egg	Goose Lake	06-29-88	79.3
GLEGE81	Eared Grebe	Egg	Goose Lake	06-29-88	79.4
GLEGE82	Eared Grebe	Egg	Goose Lake	06-29-88	77.7
GLEGE83	Eared Grebe	Egg	Goose Lake	06-29-88	77.8
GLEGE84	Eared Grebe	Egg	Goose Lake	06-29-88	79.1
GLEGE85	Eared Grebe	Egg	Goose Lake	06-29-88	78.5
GLEGE86	Eared Grebe	Egg	Goose Lake	06-29-88	78.9
GLEGE87	Eared Grebe	Egg	Goose Lake	06-29-88	78.5
GLEGE88	Eared Grebe	Egg	Goose Lake	06-29-88	78.3
GLEGE89	Eared Grebe	Egg	Goose Lake	06-29-88	78.9
GLEGE90	Eared Grebe	Egg	Goose Lake	06-29-88	79.2
GLEGE91	Eared Grebe	Egg	Goose Lake	06-29-88	64.9
GLEGE92	Eared Grebe	Egg	Goose Lake	06-29-88	77.8
GLEGE93	Eared Grebe	Egg	Goose Lake	06-29-88	79.7
GLEGE94	Eared Grebe	Egg	Goose Lake	06-29-88	79.6
GLEGE95	Eared Grebe	Egg	Goose Lake	06-29-88	80.7
GLEGE96	Eared Grebe	Egg	Goose Lake	06-29-88	79.6
GLEGE97	Eared Grebe	Egg	Goose Lake	06-29-88	76.9
GLEGE98	Eared Grebe	Egg	Goose Lake	06-29-88	79.1
GLEGE99	Eared Grebe	Egg	Goose Lake	06-29-88	78.2
GLEGE100	Eared Grebe	Egg	Goose Lake	06-29-88	79.5
GLEGE101	Eared Grebe	Egg	Goose Lake	06-29-88	78.7
GLEGE104	Eared Grebe	Egg	Goose Lake	07-14-88	73.9
GLEGE106	Eared Grebe	Egg	Goose Lake	07-14-88	69.3
GLEGE108	Eared Grebe	Egg	Goose Lake	07-14-88	79.5
GLEGE110	Eared Grebe	Egg	Goose Lake	07-14-88	79.3
GLEGE111	Eared Grebe	Egg	Goose Lake	07-14-88	79.0
GLEGE112	Eared Grebe	Egg	Goose Lake	07-14-88	81.8
GLEGE113	Eared Grebe	Egg	Goose Lake	07-19-88	79.0
GLEGE114	Eared Grebe	Egg	Goose Lake	07-19-88	78.9
GLEGE115	Eared Grebe	Egg	Goose Lake	07-19-88	80.9
GLEGE116	Eared Grebe	Egg	Goose Lake	07-19-88	77.1
GLEGE117	Eared Grebe	Egg	Goose Lake	07-19-88	80.8
GLEGE118	Eared Grebe	Egg	Goose Lake	07-19-88	77.1
GLEGE119	Eared Grebe	Egg	Goose Lake	07-19-88	77.9
GLEGE120	Eared Grebe	Egg	Goose Lake	07-19-88	79.7
GLEGE121	Eared Grebe	Egg	Goose Lake	07-19-88	77.8
GLEGE122	Eared Grebe	Egg	Goose Lake	07-19-88	81.0
GLEGE123	Eared Grebe	Egg	Goose Lake	07-19-88	80.0
GLEGE124	Eared Grebe	Egg	Goose Lake	07-19-88	80.8
GLEGE125	Eared Grebe	Egg	Goose Lake	07-19-88	79.0
GLEGE127	Eared Grebe	Egg	Goose Lake	07-19-88	79.4
GLEGE135	Eared Grebe	Egg	Goose Lake	06-27-89	78.5

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
GLEGE75	444	<3.00	--	<0.20	0.58	<0.100	<4.00	<0.300
GLEGE76	407	<3.00	--	<0.20	0.68	<0.100	<4.00	<0.300
GLEGE77	384	<3.00	--	<0.20	0.37	<0.100	<4.00	<0.200
GLEGE78	498	<3.00	--	<0.20	1.70	<0.100	<4.00	<0.300
GLEGE79	483	<3.00	--	<0.20	0.20	<0.100	<4.00	<0.300
GLEGE80	468	<3.00	--	<0.20	0.41	<0.100	<4.00	<0.200
GLEGE81	521	<3.00	--	<0.20	0.30	<0.100	<4.00	<0.200
GLEGE82	453	<3.00	--	<0.20	0.38	<0.100	<4.00	<0.200
GLEGE83	474	<3.00	--	<0.20	0.20	<0.100	<4.00	<0.200
GLEGE84	647	<3.00	--	<0.20	0.59	<0.100	<4.00	<0.300
GLEGE85	537	<3.00	--	<0.20	0.32	<0.100	<4.00	<0.200
GLEGE86	479	<3.00	--	<0.40	0.36	<0.100	<4.00	<0.200
GLEGE87	764	6.00	--	<0.20	0.66	<0.100	<4.00	<0.200
GLEGE88	386	<3.00	--	<0.20	0.98	<0.100	<4.00	<0.300
GLEGE89	451	<4.00	--	<0.20	0.61	<0.100	<2.00	<0.300
GLEGE90	510	<3.00	--	<0.20	0.30	<0.100	<4.00	<0.300
GLEGE91	454	<3.00	--	<0.20	0.30	<0.100	<4.00	<0.300
GLEGE92	614	<3.00	--	<0.20	0.49	<0.100	<4.00	<0.200
GLEGE93	417	<3.00	--	<0.20	2.10	<0.100	<4.00	<0.200
GLEGE94	478	<3.00	--	<0.20	0.41	<0.100	<4.00	<0.200
GLEGE95	560	<3.00	--	<0.20	0.35	<0.100	<4.00	<0.200
GLEGE96	447	<4.00	--	<0.20	0.40	<0.100	<3.00	<0.400
GLEGE97	376	<3.00	--	<0.20	1.10	<0.100	<4.00	<0.200
GLEGE98	547	<3.00	--	<0.20	0.20	<0.100	<4.00	<0.300
GLEGE99	527	<3.00	--	<0.20	0.20	<0.100	<4.00	<0.200
GLEGE100	486	<3.00	--	<0.20	0.47	<0.100	<4.00	<0.200
GLEGE101	469	<3.00	--	<0.20	0.47	<0.100	<4.00	<0.200
GLEGE104	538	<6.30	<20.0	<0.30	0.46	<0.030	1.04	<0.400
GLEGE106	847	<32.6	<0.08	<0.07	<16.3	<1.630	<16.3	<1.630
GLEGE108	841	<6.30	<20.0	<0.30	1.43	<0.030	1.30	<0.400
GLEGE110	821	<48.3	<0.12	<0.10	<24.2	<2.420	<24.2	<2.420
GLEGE111	461	<6.30	<20.0	<0.30	0.32	<0.030	<0.83	<0.400
GLEGE112	678	<6.30	<20.0	<0.30	0.92	<0.030	<0.83	<0.400
GLEGE113	1560	10.7	<20.0	<0.30	1.90	<0.030	2.16	<0.400
GLEGE114	1140	<6.30	<20.0	<0.30	1.05	<0.030	1.55	<0.400
GLEGE115	981	<6.30	<20.0	<0.30	0.41	<0.030	1.52	<0.400
GLEGE116	696	<6.30	<20.0	<0.30	1.70	<0.030	<0.83	<0.400
GLEGE117	1010	<6.30	<20.0	<0.30	0.26	<0.030	2.41	<0.400
GLEGE118	786	<43.7	<0.11	<0.09	0.34	<2.180	<21.8	<2.180
GLEGE119	719	<6.30	<20.0	<0.30	0.44	<0.030	1.01	<0.400
GLEGE120	625	<6.30	<20.0	<0.30	0.46	<0.030	1.28	<0.400
GLEGE121	433	<6.30	<20.0	<0.30	0.42	<0.030	0.85	<0.400
GLEGE122	1510	<6.30	<20.0	<0.30	1.01	<0.030	4.04	<0.400
GLEGE123	628	<6.30	<20.0	<0.30	0.62	<0.030	1.12	<0.400
GLEGE124	1400	<6.30	<20.0	<0.30	0.73	<0.030	1.71	<0.400
GLEGE125	567	<6.30	<20.0	<0.30	0.37	<0.030	1.01	<0.400
GLEGE127	1170	<6.30	<20.0	<0.30	1.90	<0.030	2.96	0.507
GLEGE135	758	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chro-mium	Cobalt	Copper	Iron	Lead	Manga-nese	Mercury	Molyb-denum
GLEGE75	<2.00	--	3.20	142	<4.00	2.80	0.626	<1.00
GLEGE76	<2.00	--	3.50	153	<4.00	2.20	0.190	<1.00
GLEGE77	<2.00	--	4.10	148	<4.00	3.90	0.558	<1.00
GLEGE78	<2.00	--	3.90	141	<4.00	3.00	0.120	<1.00
GLEGE79	<2.00	--	3.40	137	<4.00	3.40	0.390	<1.00
GLEGE80	<2.00	--	4.20	128	<4.00	2.90	0.980	<1.00
GLEGE81	<2.00	--	3.80	146	<4.00	3.00	0.310	<1.00
GLEGE82	<2.00	--	2.80	91.0	<4.00	3.00	0.190	<1.00
GLEGE83	<2.00	--	3.20	192	<4.00	3.40	0.515	<1.00
GLEGE84	<2.00	--	3.40	138	<4.00	3.30	0.240	<1.00
GLEGE85	<2.00	--	3.50	125	<4.00	3.00	0.240	<1.00
GLEGE86	<2.00	--	3.20	166	<4.00	2.30	0.460	<1.00
GLEGE87	<2.00	--	3.80	82.0	<4.00	8.00	0.220	<1.00
GLEGE88	<2.00	--	2.90	152	<4.00	2.20	0.450	<1.00
GLEGE89	<1.00	--	2.80	155	<4.00	2.80	0.460	<1.00
GLEGE90	<2.00	--	3.70	145	<4.00	4.90	0.260	<1.00
GLEGE91	<2.00	--	3.20	162	<4.00	1.80	0.512	<1.00
GLEGE92	<2.00	--	4.20	154	<4.00	3.80	0.260	<1.00
GLEGE93	<2.00	--	4.70	132	<4.00	3.00	0.380	<1.00
GLEGE94	<2.00	--	3.30	159	<4.00	2.40	0.280	<1.00
GLEGE95	<2.00	--	2.90	122	<4.00	3.70	0.310	<1.00
GLEGE96	<1.00	--	2.00	134	<5.00	3.40	0.310	<1.00
GLEGE97	<2.00	--	4.40	98.9	<4.00	4.20	0.200	<1.00
GLEGE98	<2.00	--	2.70	138	<4.00	3.00	0.200	<1.00
GLEGE99	<2.00	--	2.80	146	<4.00	3.40	0.220	<1.00
GLEGE100	<2.00	--	4.20	125	<4.00	1.50	0.504	<1.00
GLEGE101	<2.00	--	3.30	114	<4.00	4.70	0.160	<1.00
GLEGE104	0.52	<2.30	5.13	136	<9.00	3.28	0.291	<7.00
GLEGE106	<3.26	--	<8.14	166	<32.6	9.44	0.834	<16.30
GLEGE108	0.70	<2.30	7.26	216	<9.00	9.08	0.303	<7.00
GLEGE110	<4.83	--	<12.1	159	<48.3	<7.25	0.353	<24.20
GLEGE111	0.55	<2.30	5.98	134	<9.00	3.66	0.160	<7.00
GLEGE112	1.53	4.24	6.14	166	<9.00	6.56	0.440	<7.00
GLEGE113	0.85	<2.30	7.53	158	<9.00	8.57	0.810	<7.00
GLEGE114	<0.50	<2.30	5.58	172	<9.00	3.57	0.376	<7.00
GLEGE115	<0.50	<2.30	6.59	200	<9.00	3.39	0.748	<7.00
GLEGE116	1.40	<2.30	7.30	97.7	<9.00	6.00	0.212	<7.00
GLEGE117	1.11	<2.30	10.3	228	<9.00	3.07	1.010	<7.00
GLEGE118	<4.37	--	<10.9	140	<43.7	<6.55	0.319	<21.8
GLEGE119	<0.50	<2.30	11.2	211	<9.00	3.20	0.455	<7.00
GLEGE120	0.59	<2.30	9.85	125	<9.00	3.30	0.112	<7.00
GLEGE121	<0.50	<2.30	14.8	199	<9.00	1.06	0.175	<7.00
GLEGE122	2.43	<2.30	11.8	174	<9.00	6.03	0.334	<7.00
GLEGE123	<0.50	<2.30	10.7	125	<9.00	3.19	0.122	<7.00
GLEGE124	<0.50	<2.30	12.1	144	<9.00	6.22	0.734	<7.00
GLEGE125	1.67	<2.30	10.0	147	<9.00	1.00	0.316	<7.00
GLEGE127	1.97	<2.30	12.0	181	<9.00	5.17	0.146	<7.00
GLEGE135	<2.50	<3.00	4.44	136	<5.00	8.43	0.525	<6.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
GLEGE75	<1.00	74.0	<2.00	33.2	<6.0	--	<0.30	56.9
GLEGE76	<1.00	60.0	<2.00	73.9	<6.0	--	<0.30	60.6
GLEGE77	<1.00	87.0	<2.00	37.8	<5.0	--	<0.30	57.1
GLEGE78	<1.00	84.0	<2.00	24.6	<5.0	--	<0.30	64.0
GLEGE79	<1.00	73.0	<2.00	43.2	<6.0	--	<0.30	53.1
GLEGE80	<1.00	100	<2.00	35.3	<5.0	--	<0.30	55.3
GLEGE81	<1.00	78.0	<2.00	50.2	<5.0	--	<0.30	41.2
GLEGE82	<1.00	85.0	<2.00	33.2	<5.0	--	<0.30	58.9
GLEGE83	<1.00	72.0	<2.00	50.0	<5.0	--	<0.30	47.2
GLEGE84	<1.00	76.0	<2.00	51.9	<6.0	--	<0.30	60.1
GLEGE85	<1.00	69.0	<2.00	51.2	<5.0	--	<0.30	61.2
GLEGE86	<1.00	65.0	<2.00	62.6	<5.0	--	<0.30	48.5
GLEGE87	<1.00	77.0	<2.00	89.7	<5.0	--	<0.30	59.2
GLEGE88	<1.00	80.0	<2.00	31.0	<6.0	--	<0.30	47.2
GLEGE89	<1.00	78.0	<2.00	56.7	<4.0	--	<0.30	47.0
GLEGE90	<1.00	74.0	<2.00	65.9	<5.0	--	<0.30	53.8
GLEGE91	<1.00	79.0	<2.00	42.5	<6.0	--	<0.30	46.8
GLEGE92	<1.00	72.0	<2.00	45.4	<5.0	--	<0.30	57.3
GLEGE93	<1.00	84.0	<2.00	34.6	<5.0	--	<0.30	50.0
GLEGE94	<1.00	66.0	<2.00	77.5	<5.0	--	<0.30	59.1
GLEGE95	<1.00	72.0	<2.00	38.7	<5.0	--	<0.30	45.3
GLEGE96	<1.00	73.0	<3.00	36.8	<5.0	--	<0.40	44.0
GLEGE97	<1.00	60.0	<2.00	53.6	<5.0	--	<0.30	52.2
GLEGE98	<1.00	74.0	<2.00	49.7	<6.0	--	<0.30	44.3
GLEGE99	<1.00	75.0	<2.00	37.9	<5.0	--	<0.30	39.1
GLEGE100	<1.00	61.0	<2.00	68.7	<5.0	--	<0.30	55.9
GLEGE101	<1.00	71.0	<2.00	61.9	<5.0	--	<0.30	50.4
GLEGE104	<4.50	91.4	<8.10	54.9	--	<21.0	<0.57	51.3
GLEGE106	<13.0	54.7	<16.3	277	<0.3	<16.3	<16.3	107
GLEGE108	<4.50	108	<8.10	199	--	<21.0	<0.57	86.2
GLEGE110	<19.3	64.3	<24.2	51.2	<0.5	<24.2	<24.2	89.4
GLEGE111	<4.50	83.4	<8.10	37.5	--	<21.0	<0.57	78.2
GLEGE112	<4.50	100	<8.10	192	--	<21.0	1.00	68.1
GLEGE113	<4.50	77.8	<8.10	103	--	<21.0	<0.57	76.7
GLEGE114	<4.50	102	<8.10	78.0	--	<21.0	<0.57	65.2
GLEGE115	<4.50	73.4	<8.10	87.5	--	<21.0	<0.57	60.1
GLEGE116	<4.50	85.0	<8.10	57.2	--	<21.0	<0.57	64.7
GLEGE117	<4.50	60.0	<8.10	101	--	<21.0	0.74	69.8
GLEGE118	<17.5	117	<21.8	57.6	<0.4	<21.8	<21.8	59.4
GLEGE119	<4.50	87.2	<8.10	90.4	--	<21.0	<0.57	76.2
GLEGE120	4.96	88.8	<8.10	58.3	--	<21.0	0.86	75.8
GLEGE121	<4.50	68.9	<8.10	58.0	--	<21.0	<0.57	131
GLEGE122	4.91	108	<8.10	49.6	--	<21.0	0.72	76.7
GLEGE123	<4.50	80.0	<8.10	61.9	--	<21.0	<0.57	78.7
GLEGE124	<4.50	78.5	<8.10	122	--	<21.0	0.79	93.8
GLEGE125	<4.50	39.4	<8.10	52.0	--	<21.0	<0.57	72.9
GLEGE127	<4.50	89.2	<8.10	50.4	--	<21.0	<0.57	105
GLEGE135	<2.50	85.6	<10.0	144	--	<30.0	<1.50	72.7

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Species	Matrix	Site	Date	Moisture (percent)
GLEGE144	Eared Grebe	Egg	Goose Lake	07-13-89	78.5
GLEGE145	Eared Grebe	Egg	Goose Lake	07-13-89	79.1
GLEGE146	Eared Grebe	Egg	Goose Lake	07-13-89	80.4
GLEGE148	Eared Grebe	Egg	Goose Lake	07-13-89	81.2
GLEGE149	Eared Grebe	Egg	Goose Lake	07-13-89	78.8
GLEGE151	Eared Grebe	Egg	Goose Lake	07-13-89	78.3
GLEGE152	Eared Grebe	Egg	Goose Lake	07-13-89	79.6
GLEGE153	Eared Grebe	Egg	Goose Lake	07-13-89	79.7
GLEGE155	Eared Grebe	Egg	Goose Lake	07-13-89	77.9
GLEGE156	Eared Grebe	Egg	Goose Lake	07-13-89	79.8
GLEGE158	Eared Grebe	Egg	Goose Lake	07-13-89	79.6
GLEGE161	Eared Grebe	Egg	Goose Lake	07-13-89	79.7
GLEGE162	Eared Grebe	Egg	Goose Lake	07-13-89	77.3
GLEGE163	Eared Grebe	Egg	Goose Lake	07-13-89	74.5
GLEGE164	Eared Grebe	Egg	Goose Lake	07-13-89	78.7
GLEGE165	Eared Grebe	Egg	Goose Lake	07-13-89	79.8
GLEGE166	Eared Grebe	Egg	Goose Lake	07-13-89	74.1
GLEGE167	Eared Grebe	Egg	Goose Lake	07-13-89	77.2
GLEGE168	Eared Grebe	Egg	Goose Lake	07-13-89	78.3
GLEGE169	Eared Grebe	Egg	Goose Lake	07-13-89	78.8
GLEGE171	Eared Grebe	Egg	Goose Lake	07-13-89	79.4
GLEGE173	Eared Grebe	Egg	Goose Lake	07-14-89	60.0
GLEGE174	Eared Grebe	Egg	Goose Lake	07-14-89	72.7
GLEGE175	Eared Grebe	Egg	Goose Lake	07-14-89	62.8
GLEGE176	Eared Grebe	Egg	Goose Lake	07-14-89	79.8
GLEGE177	Eared Grebe	Egg	Goose Lake	07-25-89	78.7
GLEGE178	Eared Grebe	Egg	Goose Lake	07-25-89	73.4
GLEGE179	Eared Grebe	Egg	Goose Lake	07-25-89	69.9
GLEGE180	Eared Grebe	Egg	Goose Lake	07-25-89	74.1
GLEGE181	Eared Grebe	Egg	Goose Lake	07-25-89	80.0
GLJGAL01	Gadwall (juv)	Liver	Goose Lake	06-09-89	71.0
RLV01	Agropyron spp.	Plant	Rasmus Lee Lake	06-09-89	62.7
RLV02	Carex spp.	Plant	Rasmus Lee Lake	06-09-89	64.7
RLV3	Juncus spp.	Plant	Rasmus Lee Lake	06-09-89	75.0
RLV4	Juncus spp.	Plant	Rasmus Lee Lake	06-09-89	75.0
GLEGE147	Eared Grebe	Egg	Goose Lake	07-13-89	81.9
GLEGE150	Eared Grebe	Egg	Goose Lake	07-13-89	79.6
GLEGE154	Eared Grebe	Egg	Goose Lake	07-13-89	76.6
GLEGE157	Eared Grebe	Egg	Goose Lake	07-13-89	79.2
GLEGE159	Eared Grebe	Egg	Goose Lake	07-13-89	81.3
GLEGE160	Eared Grebe	Egg	Goose Lake	07-13-89	82.6
GLEGE170	Eared Grebe	Egg	Goose Lake	07-13-89	74.3
GLEGE172	Eared Grebe	Egg	Goose Lake	07-13-89	80.0
KNPCCRTL-1	Rainbow Trout	Liver	Casper Creek	08-16-88	75.3
KNPOTRTL-1	Rainbow Trout	Liver	Oregon Trail Drain	08-16-88	77.0
KNPBBRTL-1	Rainbow Trout	Liver	Bessemer	08-17-88	77.1
KNPGRRTL-1	Rainbow Trout	Liver	Grey Reef	08-17-88	70.6
KNPDSRTL-1	Rainbow Trout	Liver	Dan Speas Fish Hatchery	08-17-88	73.8

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Magnesium	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium
GLEGE144	681	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE145	836	<20.0	<30.0	<0.50	<1.00	<0.200	2.69	<0.500
GLEGE146	1240	<20.0	<30.0	<0.50	<1.00	<0.200	2.79	<0.500
GLEGE148	1040	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE149	1820	<20.0	<30.0	<0.50	<1.00	<0.200	4.39	<0.500
GLEGE151	563	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE152	897	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE153	850	<20.0	<30.0	<0.50	<1.00	<0.200	4.37	<0.500
GLEGE155	1330	<20.0	<30.0	<0.50	<1.00	<0.200	2.36	<0.500
GLEGE156	1380	<20.0	<30.0	<0.50	<1.00	<0.200	3.80	<0.500
GLEGE158	933	<20.0	<30.0	<0.50	<1.00	<0.200	2.17	<0.500
GLEGE161	744	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE162	858	<20.0	<30.0	<0.50	<1.00	<0.200	2.07	<0.500
GLEGE163	915	<20.0	<30.0	<0.50	1.46	<0.200	2.50	<0.500
GLEGE164	1100	<20.0	<30.0	<0.50	<1.00	<0.200	4.98	<0.500
GLEGE165	1390	<20.0	<30.0	<0.50	<1.00	<0.200	3.22	<0.500
GLEGE166	417	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE167	2110	<20.0	<30.0	<0.50	<1.00	<0.200	3.17	<0.500
GLEGE168	858	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE169	556	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE171	605	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE173	948	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE174	2550	<20.0	<30.0	<0.50	1.15	<0.200	13.0	0.511
GLEGE175	1070	<20.0	<30.0	<0.50	1.76	<0.200	5.13	<0.500
GLEGE176	1130	<20.0	<30.0	<0.50	<1.00	<0.200	2.74	<0.500
GLEGE177	748	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE178	738	<20.0	<30.0	<0.50	<1.00	<0.200	3.32	<0.500
GLEGE179	700	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE180	610	<20.0	<30.0	<0.50	<1.00	<0.200	<2.00	<0.500
GLEGE181	518	<20.0	<30.0	<0.50	<1.00	<0.200	2.30	<0.500
GLJGAL01	932	<30.0	<30.0	<0.30	<0.50	<0.200	2.65	<0.500
RLV01	2320	<40.0	<30.0	<0.40	1.20	<0.100	16.1	<0.400
RLV02	1950	71.5	<30.0	<0.40	5.50	<0.100	5.23	<0.400
RLV3	1860	<40.0	<30.0	<0.40	2.06	<0.100	16.7	<0.400
RLV4	2060	<40.0	<30.0	<0.40	2.41	<0.100	16.1	<0.400
GLEGE147	970	<20.0	<30.0	<0.40	<1.00	<0.100	<2.00	<0.500
GLEGE150	719	<20.0	<30.0	<0.40	1.05	1.050	2.90	<0.500
GLEGE154	663	<20.0	<30.0	<0.40	<1.00	<0.100	<2.00	<0.500
GLEGE157	825	<20.0	<30.0	<0.40	<1.00	<0.100	<2.00	<0.500
GLEGE159	1420	<20.0	<30.0	<0.40	<1.00	<0.100	2.66	<0.500
GLEGE160	1190	<20.0	<30.0	<0.40	<1.00	<0.100	2.24	<0.500
GLEGE170	837	<20.0	<30.0	0.40	1.01	<0.100	<2.00	<0.500
GLEGE172	1530	<20.0	<30.0	<0.40	<1.00	<0.100	2.49	<0.500
KNPCCRTL-1	756	<20.0	<30.0	0.59	0.50	<0.200	<3.00	<0.500
KNPOTRTL-1	669	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	0.512
KNPBBRTL-1	675	<20.0	<30.0	0.39	<0.50	<0.200	<3.00	<0.500
KNPGRRTL-1	722	<20.0	<30.0	<0.30	<0.50	<0.200	<3.00	<0.500
KNPDSRTL-1	640	<20.0	<30.0	1.03	<0.50	<0.200	<3.00	<0.500

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum
GLEGE144	<2.50	<3.00	5.58	161	<5.00	4.48	0.567	<6.00
GLEGE145	<2.50	<3.00	5.35	216	<5.00	12.1	0.264	<6.00
GLEGE146	<2.50	<3.00	6.40	170	<5.00	5.13	0.192	<6.00
GLEGE148	<2.50	<3.00	6.81	155	<5.00	3.01	0.437	<6.00
GLEGE149	<2.50	<3.00	5.93	196	5.84	4.04	0.236	<6.00
GLEGE151	<2.50	<3.00	5.37	157	<5.00	5.75	0.443	<6.00
GLEGE152	<2.50	<3.00	4.92	159	<5.00	5.10	0.520	<6.00
GLEGE153	<2.50	<3.00	6.54	274	5.82	4.60	0.499	<6.00
GLEGE155	<2.50	<3.00	7.81	127	<5.00	2.89	0.414	<6.00
GLEGE156	<2.50	<3.00	6.11	216	<5.00	7.31	0.496	<6.00
GLEGE158	<2.50	<3.00	5.59	121	<5.00	5.76	0.221	<6.00
GLEGE161	<2.50	<3.00	4.86	98.6	<5.00	4.06	0.214	<6.00
GLEGE162	<2.50	<3.00	5.33	142	<5.00	2.78	0.347	<6.00
GLEGE163	<2.50	<3.00	6.28	282	<5.00	6.67	0.355	<6.00
GLEGE164	<2.50	<3.00	6.63	232	10.5	8.55	0.355	<6.00
GLEGE165	<2.50	<3.00	4.95	214	<5.00	4.58	0.477	<6.00
GLEGE166	<2.50	<3.00	4.57	240	<5.00	5.62	0.131	<6.00
GLEGE167	<2.50	<3.00	3.47	128	<5.00	4.84	0.152	<6.00
GLEGE168	<2.50	<3.00	3.92	158	<5.00	1.75	0.442	<6.00
GLEGE169	<2.50	<3.00	5.16	153	<5.00	3.99	0.187	<6.00
GLEGE171	<2.50	<3.00	3.92	174	<5.00	4.33	0.186	<6.00
GLEGE173	<2.50	<3.00	7.47	227	<5.00	2.75	0.631	<6.00
GLEGE174	<2.50	<3.00	12.8	246	<5.00	11.0	0.435	<6.00
GLEGE175	<2.50	<3.00	5.59	226	<5.00	6.06	0.379	<6.00
GLEGE176	<2.50	<3.00	6.58	213	<5.00	3.56	0.405	<6.00
GLEGE177	<2.50	<3.00	4.72	182	<5.00	1.83	0.184	<6.00
GLEGE178	<2.50	<3.00	7.10	247	<5.00	5.22	0.124	<6.00
GLEGE179	<2.50	<3.00	5.30	200	<5.00	2.34	0.258	<6.00
GLEGE180	<2.50	<3.00	4.38	170	<5.00	3.10	0.382	<6.00
GLEGE181	<2.50	<3.00	6.72	196	<5.00	3.03	0.278	<6.00
GLJGAL01	<1.00	--	151	523	<5.00	13.2	0.031	<6.00
RLV01	<2.00	--	5.57	54.6	<5.00	91.3	<0.020	<4.50
RLV02	<2.00	--	5.88	104	<5.00	170	<0.020	<4.50
RLV3	<2.00	--	3.07	116	<5.00	409	<0.020	<4.50
RLV4	<2.00	--	2.57	87.1	<5.00	659	<0.020	<4.50
GLEGE147	<2.00	<2.50	4.53	199	<6.00	3.88	0.244	<5.00
GLEGE150	<2.00	<2.50	9.57	140	<6.00	3.93	0.238	<5.00
GLEGE154	<2.00	<2.50	7.68	183	<6.00	2.32	0.237	<5.00
GLEGE157	<2.00	<2.50	3.95	128	<6.00	4.36	0.105	<5.00
GLEGE159	<2.00	<2.50	5.94	164	<6.00	4.79	0.192	<5.00
GLEGE160	<2.00	<2.50	3.57	193	<6.00	3.45	0.478	<5.00
GLEGE170	<2.00	<2.50	6.16	206	<6.00	3.43	0.412	<5.00
GLEGE172	<2.00	<2.50	3.74	167	<6.00	2.97	0.089	<5.00
KNPCCRTL-1	0.84	<3.00	209	875	<6.00	9.39	.357	<5.00
KNPOTRTL-1	0.95	<3.00	618	925	<6.00	7.23	.423	<5.00
KNPBBRTL-1	1.20	<3.00	2.84	1250	<6.00	7.19	.222	<5.00
KNPGRRTL-1	1.01	<3.00	413	1680	<6.00	8.38	.222	<5.00
KNPDSRTL-1	1.41	<3.00	159	537	<6.00	4.99	.070	<5.00

Table 12.--Trace-element concentrations in biota (dry weight), 1988-89--Continued

Sample number	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Vanadium	Zinc
GLEGE144	<2.50	86.9	<10.0	54.5	--	<30.0	<1.50	63.9
GLEGE145	<2.50	88.5	<10.0	193	--	<30.0	<1.50	81.6
GLEGE146	<2.50	69.3	<10.0	122	--	<30.0	<1.50	71.8
GLEGE148	<2.50	80.0	<10.0	124	--	<30.0	<1.50	73.7
GLEGE149	<2.50	86.0	<10.0	118	--	<30.0	<1.50	75.3
GLEGE151	<2.50	68.6	<10.0	80.4	--	<30.0	<1.50	59.4
GLEGE152	<2.50	70.8	<10.0	94.0	--	<30.0	<1.50	67.8
GLEGE153	<2.50	79.2	<10.0	74.0	--	<30.0	<1.50	78.9
GLEGE155	<2.50	86.1	<10.0	48.5	--	<30.0	<1.50	64.4
GLEGE156	<2.50	87.0	<10.0	243	--	<30.0	<1.50	67.9
GLEGE158	<2.50	73.5	<10.0	49.6	--	<30.0	<1.50	50.2
GLEGE161	<2.50	69.7	<10.0	23.9	--	<30.0	<1.50	56.7
GLEGE162	<2.50	74.1	<10.0	75.2	--	<30.0	<1.50	73.4
GLEGE163	<2.50	77.5	<10.0	97.8	--	<30.0	<1.50	105
GLEGE164	<2.50	80.5	<10.0	160	--	<30.0	<1.50	73.9
GLEGE165	<2.50	77.6	<10.0	179	--	<30.0	<1.50	84.1
GLEGE166	<2.50	60.3	<10.0	26.6	--	<30.0	<1.50	66.4
GLEGE167	<2.50	70.7	<10.0	91.3	--	<30.0	<1.50	54.7
GLEGE168	<2.50	83.4	<10.0	59.6	--	<30.0	<1.50	61.0
GLEGE169	<2.50	76.4	<10.0	52.8	--	<30.0	<1.50	59.9
GLEGE171	<2.50	76.2	<10.0	56.1	--	<30.0	<1.50	53.0
GLEGE173	<2.50	83.5	<10.0	154	--	<30.0	<1.50	97.7
GLEGE174	<2.50	82.6	<10.0	200	--	<30.0	2.23	113
GLEGE175	<2.50	67.9	<10.0	351	--	<30.0	<1.50	104
GLEGE176	<2.50	115	<10.0	129	--	<30.0	<1.50	82.3
GLEGE177	<2.50	121	<10.0	86.9	--	<30.0	<1.50	58.2
GLEGE178	<2.50	90.7	<10.0	293	--	<30.0	<1.50	96.5
GLEGE179	<2.50	66.1	<10.0	85.6	--	<30.0	<1.50	67.4
GLEGE180	<2.50	79.8	<10.0	165	--	<30.0	<1.50	76.0
GLEGE181	<2.50	80.2	<10.0	196	--	<30.0	<1.50	68.5
GLJGAL01	<1.50	98.0	<7.00	<1.00	--	<30.0	0.61	285
RLV01	2.67	0.71	<5.00	18.4	--	<20.0	<1.50	19.6
RLV02	<2.00	0.76	<5.00	27.0	--	<20.0	<1.50	23.0
RLV3	<2.00	<0.40	<5.00	48.5	--	<20.0	<1.50	20.5
RLV4	2.17	<0.40	<5.00	56.1	--	<20.0	<1.50	18.2
GLEGE147	<2.50	80.5	<10.0	120	--	<30.0	<1.50	63.3
GLEGE150	<2.50	106	<10.0	231	--	<30.0	<1.50	89.4
GLEGE154	<2.50	63.3	<10.0	103	--	<30.0	<1.50	64.3
GLEGE157	<2.50	68.8	<10.0	52.6	--	<30.0	<1.50	46.1
GLEGE159	<2.50	76.6	<10.0	43.9	--	<30.0	<1.50	76.4
GLEGE160	<2.50	76.8	<10.0	63.9	--	<30.0	<1.50	54.1
GLEGE170	<2.50	74.2	<10.0	177	--	<30.0	<1.50	83.2
GLEGE172	<2.50	66.6	<10.0	196	--	<30.0	<1.50	80.7
KNPCCRTL-1	<2.50	138	<10.0	<4.00	--	<20.0	<0.80	109
KNPOTRTL-1	<2.50	250	<10.0	<4.00	--	<20.0	<0.80	109
KNPBBRTL-1	<2.50	121	<10.0	<4.00	--	<20.0	<0.80	98.8
KNPGRRTL-1	<2.50	49.0	<10.0	<4.00	--	<20.0	<0.80	112
KNPDSRTL-1	<2.50	5.38	<10.0	<4.00	--	<20.0	<0.80	68.5

Table 13.--Bird species observed at Rasmus Lee Lake during 1988

[--, not observed]

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	March 30	April 7	April 12	April 19	April 27	May 5	May 11
	15	35	45	45	35	45	32
Western grebe	--	--	--	--	--	2	3
Eared grebe	--	23	5	42	18	10	3
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	1	--
Great blue heron	--	7	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	87	64	23	49	45	33	32
Mallard	--	4	195	209	64	52	14
Gadwall	--	--	--	--	--	12	2
Green-winged teal	5	--	--	6	6	--	--
American widgeon	--	10	--	13	7	16	7
Northern pintail	1	6	--	55	8	13	6
Northern shoveler	--	--	2	2	4	2	4
Blue-winged teal	--	--	--	4	--	4	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	57	--	7
Ruddy duck	--	--	1	3	47	3	--
Canvasback	--	4	18	8	--	8	8
Redhead	--	25	--	5	--	3	2
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	13	17	--	9	--
Bufflehead	--	--	--	--	--	2	--
Diving ducks	--	--	--	6	--	--	--
Duck species	--	45	200	7	43	114	51
Common merganser	--	--	--	--	--	--	--
American coot	--	4	--	5	6	18	5
American avocet	--	--	11	--	16	9	8
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	41	15
California gull	--	--	--	1	--	2	--
Gull species	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	50	2
Willet	--	--	--	--	--	--	1
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--

Table 13.--Bird species observed at Rasmus Lee Lake during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes							
	May 19 27	May 25 39	June 1 45	June 8 21	June 14 23	June 21 25	June 30 30	July 5 16
Western grebe	--	--	--	--	--	--	--	--
Eared grebe	8	--	--	4	4	--	4	--
Pied-billed grebe	--	--	--	--	--	--	--	--
Double-crested cormorant	--	1	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--	--
Canada goose	35	46	39	48	33	34	97	--
Mallard	46	1	2	13	3	7	5	--
Gadwall	--	2	--	--	6	--	1	--
Green-winged teal	4	--	--	--	1	--	1	--
American widgeon	7	--	2	3	1	--	80	--
Northern pintail	2	--	--	2	--	--	--	--
Northern shoveler	--	--	3	7	5	--	15	--
Blue-winged teal	--	--	3	1	3	--	--	--
Cinnamon teal	1	--	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	--	--	--	--
Ruddy duck	6	--	--	--	--	--	--	--
Canvasback	--	--	2	3	13	--	51	--
Redhead	1	3	--	--	2	--	13	--
Ring-necked duck	--	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--	--
Duck species	1	39	110	82	7	111	56	--
Common merganser	--	--	--	--	--	--	--	--
American coot	4	--	6	--	1	1	--	--
American avocet	6	6	10	5	6	8	--	--
Killdeer	--	--	--	--	--	--	--	--
Wilson's phalarope	1	--	4	45	10	--	--	--
California gull	--	--	1	2	--	--	--	--
Gull species	--	--	--	--	--	--	--	--
Shorebird	--	--	--	--	1	10	--	--
Willet	--	--	--	--	--	--	--	--
Yellowlegs	--	1	2	--	--	--	--	--
Black-necked stilt	--	--	1	--	--	--	--	--

Table 13.--Bird species observed at Rasmus Lee Lake during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	July 14	July 19	Aug. 4	Aug. 18	Aug. 26	Aug. 30	Sept. 8
	40	23	25	60	12	10	10
Western grebe	--	--	--	--	--	--	1
Eared grebe	8	4	3	--	--	--	4
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	1	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	92	99	27	88	25	--	--
Mallard	8	6	20	16	--	--	--
Gadwall	--	3	--	1	--	--	--
Green-winged teal	--	--	--	--	--	--	--
American widgeon	16	10	19	17	--	--	--
Northern pintail	--	--	--	9	--	2	1
Northern shoveler	--	2	--	--	25	--	33
Blue-winged teal	--	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	--	3	--	--	--	--	--
Ruddy duck	--	5	--	--	--	--	1
Canvasback	--	14	10	3	--	--	--
Redhead	3	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--
Duck species	250	320	35	420	155	17	283
Common merganser	--	--	--	--	10	--	--
American coot	--	--	--	--	--	1	32
American avocet	1	1	1	1		4	--
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--	--
California gull	--	--	--	--	95	--	--
Gull species	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--

Table 13.--Bird species observed at Rasmus Lee Lake during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	Sept. 15	Sept. 20	Sept. 28	Oct. 4	Oct. 14	Oct. 18	Oct. 27
	38	27	40	40	21	45	60
Western grebe	--	--	--	--	--	--	--
Eared grebe	7	--	--	8	2	--	--
Pied-billed grebe	--	--	1	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	1
Great blue heron	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	23	--	245	258	37	46	--
Mallard	--	--	3	8	1	3	--
Gadwall	--	--	1	--	--	--	--
Green-winged teal	--	--	--	--	--	--	--
American widgeon	59	--	28	18	7	--	--
Northern pintail	14	--	1	--	--	--	--
Northern shoveler	--	--	6	--	--	--	--
Blue-winged teal	--	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	--	--	--
Ruddy duck	3	--	9	1	1	--	--
Canvasback	--	--	--	--	10	--	--
Redhead	--	--	--	--	10	--	--
Ring-necked duck	--	--	--	2	--	--	--
Scaup	--	--	--	--	2	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--
Duck species	7	--	220	102	249	160	--
Common merganser	--	--	--	--	--	--	--
American coot	8	--	35	14	3	1	--
American avocet	--	--	--	--	--	--	--
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--	--
California gull	--	--	--	--	--	--	--
Gull species	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--

Table 14.--Bird species observed at Rasmus Lee Lake during 1989

[--, not observed]

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	April 4	April 19	April 27	May 2	May 12	May 18	May 25
	40	20	27	34	40	45	30
Western grebe	--	--	22	--	--	--	--
Eared grebe	--	--	1	5	--	7	7
Pied-billed grebe	--	--	--	1	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	31	33	35	47	52	74	19
Mallard	1	4	10	--	2	--	6
Gadwall	--	--	4	--	--	--	--
Green-winged teal	--	--	--	5	6	--	11
American widgeon	--	--	1	5	52	--	55
Northern pintail	8	--	3	4	--	--	2
Northern shoveler	--	--	2	12	1	6	--
Blue-winged teal	--	--	--	--	--	--	3
Cinnamon teal	--	--	2	--	--	--	--
Dabbler ducks	--	--	13	--	--	--	--
Ruddy duck	--	--	--	2	--	--	--
Canvasback	45	12	9	6	--	--	6
Redhead	3	--	--	--	--	1	--
Ring-necked duck	1	--	--	--	--	--	--
Scaup	--	--	--	10	--	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--
Duck species	52	248	5	39	16	79	21
Common merganser	--	--	--	--	--	--	--
American coot	--	--	7	5	--	--	--
American avocet	--	13	6	21	23	12	28
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	1	36	14	2
California gull	--	--	10	--	--	--	--
Gull species	--	--	--	--	--	--	--
Shorebird	--	--	--	4	10	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	10	--	--	--	--
Tern species	--	--	2	--	--	--	--
Franklin's gull	--	--	--	3	--	--	--
Long-billed curlew	--	--	--	4	--	--	--
Dowitchers	--	--	--	4	--	--	--
Spotted sandpiper	--	--	--	--	--	--	--

Table 14.--Bird species observed at Rasmus Lee Lake during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes							
	June 2 24	June 7 47	June 13 22	June 22 23	June 27 18	July 6 18	July 12 67	July 21 34
Western grebe	1	--	--	--	--	--	--	--
Eared grebe	8	7	6	10	8	4	6	--
Pied-billed grebe	--	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--	--
Canada goose	6	35	18	5	58	27	95	37
Mallard	17	--	--	--	--	--	17	4
Gadwall	--	--	--	--	--	--	27	--
Green-winged teal	1	--	--	--	--	--	--	--
American widgeon	1	--	--	--	--	1	11	--
Northern pintail	4	2	3	--	--	--	--	--
Northern shoveler	--	2	--	3	--	--	--	--
Blue-winged teal	--	--	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	--	--	3	--
Ruddy duck	1	--	--	--	--	--	1	--
Canvasback	1	--	--	3	--	--	--	--
Redhead	--	1	--	--	--	--	6	--
Ring-necked duck	--	4	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	--	--
Bufflehead	--	4	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--	--
Duck species	27	48	58	13	--	26	--	94
Common merganser	--	--	--	--	--	--	--	--
American coot	3	1	--	--	--	--	--	--
American avocet	30	26	15	25	32	6	6	--
Killdeer	--	--	1	5	--	--	9	--
Wilson's phalarope	2	11	--	--	--	--	--	--
California gull	--	--	--	--	--	--	17	--
Gull species	--	--	1	--	--	7	1	--
Shorebird	--	--	--	--	--	--	56	7
Willet	--	--	--	--	--	1	--	--
Yellowlegs	--	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	--	--	--
Tern species	--	--	--	--	--	--	--	--
Franklin's gull	--	--	--	--	--	--	--	--
Long-billed curlew	--	--	--	--	--	--	--	--
Dowitchers	--	--	--	--	--	--	--	--
Spotted sandpiper	--	--	--	--	--	2	--	--

Table 14.--Bird species observed at Rasmus Lee Lake during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	July 26 18	Aug. 5 7	Aug. 6 22	Aug. 19 14	Aug. 27 28	Sept. 1 14	Sept. 7 52
Western grebe	1	--	--	--	--	--	--
Eared grebe	8	13	6	--	3	8	10
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	2	--	--
Great blue heron	--	--	--	--	--	4	2
White-faced ibis	--	--	--	--	--	--	--
Canada goose	21	54	68	30	1	--	--
Mallard	3	--	--	--	--	--	12
Gadwall	2	--	--	--	3	--	1
Green-winged teal	--	--	--	--	6	--	--
American widgeon	--	--	--	--	--	--	5
Northern pintail	--	--	--	--	--	--	1
Northern shoveler	--	--	--	--	--	--	--
Blue-winged teal	--	--	--	--	22	--	--
Cinnamon teal	--	--	--	--	31	--	--
Dabbler ducks	--	--	4	--	343	297	103
Ruddy duck	--	--	4	--	--	--	--
Canvasback	--	--	--	--	--	--	--
Redhead	6	--	--	--	2	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	--	3	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--
Duck species	33	160	29	198	--	10	334
Common merganser	--	--	--	--	--	--	1
American coot	--	--	--	--	--	--	4
American avocet	--	--	--	--	--	--	--
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--	--
California gull	--	2	--	--	--	--	--
Gull species	--	--	2	--	--	--	--
Shorebird	19	--	6	--	--	35	7
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	--	--
Tern species	--	--	--	--	--	--	--
Franklin's gull	--	--	3	3	--	--	1
Long-billed curlew	--	--	--	--	--	--	--
Dowitchers	--	--	--	--	--	--	--
Spotted sandpiper	--	--	--	--	--	--	--

Table 14.--Bird species observed at Rasmus Lee Lake during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	Sept. 15	Sept. 21	Sept. 29	Oct. 6	Oct. 11	Oct 18	Oct. 26
	52	39	10	6	22	6	30
Western grebe	3	8	--	--	1	7	--
Eared grebe	--	24	--	--	--	--	2
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	4	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	3	18	--	7	--	--	--
Mallard	6	6	--	--	10	49	127
Gadwall	--	--	--	--	--	--	--
Green-winged teal	--	--	--	--	--	--	--
American widgeon	9	--	--	--	--	--	5
Northern pintail	3	4	--	--	1	--	2
Northern shoveler	--	--	--	--	1	--	--
Blue-winged teal	--	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	246	335	--	--	7	--	13
Ruddy duck	13	--	--	--	--	--	7
Canvasback	5	--	--	--	--	--	--
Redhead	--	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	1
Bufflehead	--	--	--	--	--	--	--
Diving ducks	1	--	--	--	--	--	--
Duck species	82	289	126	123	212	165	4
Common merganser	--	--	--	--	--	--	--
American coot	--	4	2	--	--	--	--
American avocet	5	2	--	--	--	--	1
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--	--
California gull	--	--	--	--	--	--	--
Gull species	--	--	--	--	--	--	2
Shorebird	1	3	--	--	1	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	--	--
Tern species	--	--	--	--	--	--	--
Franklin's gull	--	--	--	--	--	--	--
Long-billed curlew	--	--	--	--	--	--	--
Dowitchers	--	--	--	--	--	--	--
Spotted sandpiper	--	--	--	--	--	--	--

Table 15.--Bird species observed at Goose Lake during 1988

[--, not observed]

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	March 30	April 7	April 12	April 19	April 27	May 5	May 11
	15	70	44	40	43	34	53
Western grebe	--	--	--	1	--	1	--
Eared grebe	--	5	125	113	145	104	75
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	2	6	29	24	4	11
Mallard	--	10	3	4	4	1	4
Gadwall	--	--	--	--	--	8	--
Green-winged teal	--	--	--	2	--	20	--
American widgeon	--	10	--	--	7	5	2
Northern pintail	--	--	--	--	--	--	--
Northern shoveler	--	--	3	2	--	7	3
Blue-winged teal	--	--	--	--	--	3	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	--	--	--
Ruddy duck	--	--	20	6	55	11	3
Canvasback	--	20	82	64	35	5	12
Redhead	--	10	31	2	--	43	16
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	105	49	25	44	6	3
Bufflehead	--	--	2	--	2	--	--
Diving ducks	--	--	--	--	--	--	3
Duck species	--	600	9	17	--	3	--
Common merganser	--	--	--	--	--	--	--
American coot	--	--	59	56	53	34	33
American avocet	--	--	--	--	--	31	11
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	4	3
California gull	--	50	25	9	3	--	--
Gull species	--	--	--	--	--	--	--

Table 15.--Bird species observed at Goose Lake during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes							
	May 19	May 25	June 1	June 8	June 14	June 21	June 30	July 5
	32	34	37	70	32	45	31	28
Western grebe	--	3	--	--	--	1	--	--
Eared grebe	--	150	148	197	99	85	146	--
Pied-billed grebe	--	--	--	--	--	--	2	--
Double-crested cormorant	--	--	--	--	--	2	--	--
Great blue heron	--	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--	--
Canada goose	--	6	2	--	11	2	--	--
Mallard	--	2	1	2	6	6	1	--
Gadwall	--	--	--	--	--	--	--	--
Green-winged teal	--	--	--	--	--	--	--	--
American widgeon	--	5	8	12	47	12	24	--
Northern pintail	--	--	1	1	1	--	--	--
Northern shoveler	--	--	4	1	3	--	--	--
Blue-winged teal	--	--	3	3	--	3	--	--
Cinnamon teal	--	1	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	--	--	--	--
Ruddy duck	--	7	3	3	5	--	5	--
Canvasback	--	20	3	46	34	12	26	--
Redhead	--	5	3		21	12	--	--
Ring-necked duck	--	--	--	--	--	--	--	--
Scaup	--	8	3	1	--	4	--	--
Bufflehead	--	--	--	--	--	1	2	--
Diving ducks	--	--	25	1	14	--	--	--
Duck species	--	--	--	2	13	12	11	--
Common merganser	--	--	--	--	--	--	--	--
American coot	--	43	33	29	23	23	38	--
American avocet	--	13	14	14	2	3	2	--
Killdeer	--	--	--	3	--	1	2	--
Wilson's phalarope	--	42	9	1	13	51	2	--
California gull	--	--	1	--	1	2	--	--
Gull species	--	--	--	--	--	--	--	--

Table 15.--Bird species observed at Goose Lake during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	July 14 53	July 19 60	Aug. 4 84	Aug. 18 36	Aug. 26 30	Aug. 30 40	Sept. 8 49
Western grebe	--	--	--	--	--	--	--
Eared grebe	194	129	40	16	--	12	21
Pied-billed grebe	--	--	--	1	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	2	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	--	240	20	--	3	49
Mallard	18	1	55	36	300	42	5
Gadwall	26	4	--	1	--	--	--
Green-winged teal	--	--	--	--	--	--	--
American widgeon	30	23	8	--	700	91	191
Northern pintail	--	--	--	6	100	6	7
Northern shoveler	--	4	--	--	--	--	--
Blue-winged teal	1	1	--	--	--	--	18
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	17	11	--	--	--	--	--
Ruddy duck	7	6	17	27	25	31	29
Canvasback	86	25	106	116	--	217	--
Redhead	--	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	9	--	--	--	2	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	183
Duck species	75	34	85	300	75	619	858
Common merganser	--	--	--	--	--	--	--
American coot	28	26	44	174	400	110	284
American avocet	1	4	2	--	--	--	--
Killdeer	1	--	--	--	--	--	--
Wilson's phalarope	16	1	--	--	--	3	--
California gull	--	--	1	--	--	--	--
Gull species	--	--	--	--	--	--	--

Table 15.--Bird species observed at Goose Lake during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	Sept. 15 65	Sept. 20 103	Sept. 28 45	Oct. 4 64	Oct. 14 52	Oct. 18 90	Oct. 27 60
Western grebe	10	--	--	5	--	--	--
Eared grebe	40	42	5	--	2	8	--
Pied-billed grebe	--	1	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	55	111	1	27	31	193	--
Mallard	250	95	100	20	62	57	--
Gadwall	--	1	--	--	--	--	--
Green-winged teal	--	2	--	--	--	--	--
American widgeon	1000	448	600	500	154	122	--
Northern pintail	50	4		1	--	4	--
Northern shoveler	--	2	10	2	--	--	--
Blue-winged teal	--	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	--	6	--	8	--	--	--
Ruddy duck	100	70	100	15	17	8	--
Canvasback	50	27	150	500	24	89	--
Redhead	50	40	150	400	--	--	--
Ring-necked duck	--	5	5	20	--	--	--
Scaup	--	8	20	200	1	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	28	--	--	4	--	--
Duck species	1000	790	500	282	359	608	--
Common merganser	--	--	--	--	--	--	--
American coot	750	379	500	400	144	82	--
American avocet	--	1	--	--	--	--	--
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	52	--	--	--	--	--
California gull	--	--	--	--	--	--	--
Gull species	--	--	--	--	--	--	--

Table 16.--Bird species observed at Goose Lake during 1989

[--, not observed]

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	April 4 53	April 19 34	April 27 48	May 2 45	May 12 42	May 18 35	May 25 30
Western grebe	--	2	7	2	--	--	--
Eared grebe	--	18	36	32	136	59	68
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	1	--	--	1	--	--
Great blue heron	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	2	--	10	2	--	--
Mallard	27	1	13	10	--	--	4
Gadwall	1	1	1	--	--	--	2
Green-winged teal	--	4	--	--	2	--	--
American widgeon	13	17	12	18	--	2	6
Northern pintail	13	--	4	4	--	--	--
Northern shoveler	5	11	5	11	7	5	3
Blue-winged teal	--	--	--	--	--	--	--
Cinnomon teal	--	--	--	--	--	--	--
Teal species	--	--	--	--	--	--	--
Dabbler ducks	--	--	1	--	--	--	--
Ruddy duck	--	10	24	39	--	--	2
Canvasback	300	128	80	62	39	2	9
Redhead	30	--	--	4	23	8	
Ring-necked duck	31	10	6	--	--	--	--
Scaup	32	9	5	15	--	--	2
Bufflehead	--	2	2	--	--	--	--
Diving ducks	58	7	--	--	--	--	--
Duck species	72	191	1	6	37	35	34
Common merganser	--	--	--	1	--	--	--
American coot	2	12	57	31	22	5	2
American avocet	--	3	20	34	32	20	58
Killdeer	--	--	--	1	1	--	1
Wilson's phalarope	--	--	--	14	74	60	--
California gull	--	--	--	--	--	1	9
Gull species	--	11	--	--	--	--	--
Tern species	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--	--
Willet	--	--	--	--	--	--	1
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
Trumpeter swan	1	--	--	--	--	--	--
Ring-billed gull	1	--	--	--	--	--	--
Eurasian widgeon	--	--	1	--	--	--	--
Dowitcher	--	--	--	8	--	--	--
Spotted sandpiper	--	--	--	--	--	--	--

Table 16.--Bird species observed at Goose Lake during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes							
	June 2 29	June 7 33	June 13 40	June 22 42	June 27 33	July 6 54	July 12 53	July 21 115
Western grebe	--	1	1	--	--	3	--	--
Eared grebe	88	105	111	194	150	177	156	175
Pied-billed grebe	--	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--	--
Canada goose	--	--	--	--	--	1	5	41
Mallard	--	--	--	--	1	--	3	6
Gadwall	--	--	--	--	3	--	18	17
Green-winged teal	--	2	--	--	--	15	--	--
American widgeon	5	8	11	52	55	52	132	18
Northern pintail	--	--	4	--	--	--	--	--
Northern shoveler	6	8	--	--	--	--	--	--
Blue-winged teal	--	--	--	--	--	27	2	2
Cinnomon teal	--	--	--	--	--	--	--	--
Teal species	--	--	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	--	--	26	--
Ruddy duck	1	--	--	--	6	--	2	8
Canvasback	13	9	3	20	32	16	26	5
Redhead	11	13	20	60	18	53	16	1
Ring-necked duck	--	--	--	--	--	--	--	--
Scaup	14	--	10	--	1	--	--	--
Bufflehead	--	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	2	--
Duck species	59	9	55	29	29	82	127	63
Common merganser	--	--	--	--	--	--	--	--
American coot	2	9	6	21	18	57	62	19
American avocet	50	43	53	31	15	11	5	4
Killdeer	--	--	2	2	--	7	7	1
Wilson's phalarope	--	8	--	--	1	--	--	--
California gull	--	13	--	--	1	--	2	2
Gull species	1	--	51	--	--	16	1	--
Tern species	--	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--	2	20
Willet	--	--	--	--	--	4	--	--
Yellowlegs	--	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--	--
Trumpeter swan	--	--	--	--	--	--	--	--
Ring-billed gull	--	--	--	--	--	--	--	--
Eurasian widgeon	--	--	--	--	--	--	--	--
Dowitcher	--	--	--	--	--	--	2	--
Spotted sandpiper	--	--	--	--	--	5	--	--

Table 16.--Bird species observed at Goose Lake during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	July 26 131	Aug. 5 22	Aug. 6 44	Aug. 19 41	Aug. 27 32	Sept. 1 67	Sept. 7 172
Western grebe	--	--	1	--	--	--	--
Eared grebe	216	200	204	88	32	64	86
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	1	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	4	--	9	--	4	--	31
Mallard	3	--	11	--	--	196	112
Gadwall	10	--	4	--	15	--	19
Green-winged teal	--	--	--	--	41	--	--
American widgeon	20	12	6	--	100	68	142
Northern pintail	--	--	--	77	--	6	6
Northern shoveler	--	--	--	259	--	17	--
Blue-winged teal	--	2	--	--	43	--	--
Cinnomon teal	--	--	--	83	33	--	--
Teal species	--	--	--	--	--	--	--
Dabbler ducks	5	--	75	--	890	508	90
Ruddy duck	9	--	29	5	--	16	26
Canvasback	--	2	22	--	--	65	2
Redhead	13	6	14	--	27	--	4
Ring-necked duck	--	--	--	--	--	--	--
Scaup	8	--	--	--	53	--	--
Bufflehead	--	6	--	--	--	--	--
Diving ducks	--	--	2	--	--	--	2
Duck species	163	410	288	373	--	35	1227
Common merganser	--	--	--	--	--	--	--
American coot	16	70	51	55	80	170	305
American avocet	5	--	--	--	--	--	--
Killdeer	15	3	3	33	--	--	--
Wilson's phalarope	17	6	--	15	--	46	21
California gull	--	--	--	--	--	--	--
Gull species	1	--	--	--	--	--	--
Tern species	1	--	--	--	--	--	--
Shorebird	--	--	3	--	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	3	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
Trumpeter swan	--	--	--	--	--	--	--
Ring-billed gull	--	--	--	--	--	--	--
Eurasian widgeon	--	--	--	--	--	--	--
Dowitcher	--	--	--	--	--	--	--
Spotted sandpiper	--	--	--	--	--	--	--

Table 16.--Bird species observed at Goose Lake during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	Sept. 15	Sept. 21	Sept. 29	Oct. 6	Oct. 11	Oct 18	Oct. 26
	95	120	35	26	77	22	90
Western grebe	--	36	5	2	6	3	--
Eared grebe	52	84	3	--	26	--	21
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	2	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	65	78	6	60	303	192	2
Mallard	14	114	76	132	49	156	132
Gadwall	1	8	--	--	1	--	--
Green-winged teal	--	--	--	--	--	4	--
American widgeon	259	403	34	83	130	56	142
Northern pintail	12	33	--	--	6	--	20
Northern shoveler	9	56	20	56	11	12	40
Blue-winged teal	--	10	--	--	--	23	2
Cinnomon teal	--	1	2	6	--	--	3
Teal species	--	--	--	--	8	--	1
Dabbler ducks	133	205	--	--	95	--	128
Ruddy duck	60	124	6	--	12	--	42
Canvasback	7	3	--	23	27	6	195
Redhead	13	9	24	35	19	41	5
Ring-necked duck	--	--	--	--	--	--	--
Scaup	6	20	57	63	2	54	22
Bufflehead	--	--	4	--	--	--	--
Diving ducks	70	78	--	--	137	--	129
Duck species	1147	1380	1370	1536	1405	1250	870
Common merganser	--	--	--	--	--	--	--
American coot	276	420	255	266	52	85	68
American avocet	--	--	--	--	--	--	--
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	21	5	--	--	--	--	--
California gull	--	--	--	7	--	1	--
Gull species	--	--	--	--	--	--	--
Tern species	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
Trumpeter swan	--	--	--	--	--	--	--
Ring-billed gull	--	--	--	--	--	--	--
Eurasian widgeon	--	--	--	--	--	--	--
Dowitcher	--	--	--	--	--	--	--
Spotted sandpiper	--	--	--	--	--	--	--

Table 17.--Bird species observed at Thirtythree Mile Reservoir during 1988

[--, not observed]

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	March 31 40	April 7 15	April 14 24	April 21 30	April 28 34	May 3 36	May 12 20
Western grebe	--	--	--	--	4	2	--
Eared grebe	--	--	--	--	--	--	19
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	1	1	1	5
Great blue heron	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	2	13	4	2	12	1	--
Mallard	400	29	27	5	6	10	7
Gadwall	--	--	--	--	4	2	4
Green-winged teal	--	6	14	9	27	--	2
American widgeon	--	--	--	2	15	1	2
Northern pintail	400	--	26	--	11	--	28
Northern shoveler	--	--	--	1	14	2	25
Blue-winged teal	--	--	--	3	--	--	--
Cinnamon teal	--	--	--	--	--	--	1
Dabbler ducks	--	--	--	--	--	--	--
Ruddy duck	--	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--	--
Redhead	10	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	4	7	6	--	3	9	--
Bufflehead	--	--	--	--	--	2	--
Diving ducks	--	--	--	2	--	--	--
Duck species	--	--	12	9	11	19	11
Common merganser	10	2	--	--	--	--	--
American Coot	--	1	--	2	4	8	3
American avocet	--	--	--	--	2	3	3
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--	--
California gull	12	50	13	14	21	52	30
Gull species	--	--	--	--	--	25	36
Shorebird	--	--	--	--	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--

Table 17.--Bird species observed at Thirtythree Mile Reservoir during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes					
	May 17 12	May 27 16	June 2 16	June 7 16	June 16 16	June 20
Western grebe	--	--	2	--	--	--
Eared grebe	--	--	18	--	--	--
Pied-billed grebe	--	--	--	--	--	--
Double-crested cormorant	11	6	1	--	6	--
Great blue heron	3	4	1	--	1	--
White-faced ibis	--	--	--	--	--	--
Canada goose	--	--	--	5	--	--
Mallard	1	--	--	1	--	--
Gadwall	2	--	--	--	1	--
Green-winged teal	--	--	--	--	--	--
American widgeon	--	--	--	--	2	--
Northern pintail	--	--	1	--	2	--
Northern shoveler	1	--	--	--	2	--
Blue-winged teal	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	--	--
Ruddy duck	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--
Redhead	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--
Scaup	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--
Duck species	--	--	--	--	--	--
Common merganser	--	--	--	--	--	--
American Coot	--	--	--	--	--	--
American avocet	--	2	1	1	--	--
Killdeer	--	1	--	--	--	--
Wilson's phalarope	--	--	7	--	--	--
California gull	45	30	25	17	40	--
Gull species	--	--	28	--	29	--
Shorebird	--	--	--	--	--	--
Willet	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--

Table 17.--Bird species observed at Thirtythree Mile Reservoir during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes					
	June 28	July 6	July 12	July 20	July 25	Aug. 3
	15	14	18	8		7
Western grebe	1	1	--	--	--	--
Eared grebe	--	--	--	2	--	9
Pied-billed grebe	--	--	--	--	--	--
Double-crested cormorant	--	1	2	4	--	2
Great blue heron	--	--	--	1	--	1
White-faced ibis	--	--	--	--	--	--
Canada goose	--	--	--	--	--	1
Mallard	--	--	--	--	--	--
Gadwall	--	--	--	--	--	--
Green-winged teal	--	--	--	--	--	--
American widgeon	--	--	--	--	--	--
Northern pintail	--	--	--	--	--	--
Northern shoveler	--	--	--	--	--	--
Blue-winged teal	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	--	--
Ruddy duck	--	2	--	--	--	--
Canvasback	--	--	--	--	--	--
Redhead	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--
Scaup	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--
Duck species	3	--	--	--	--	--
Common merganser	--	--	--	--	--	--
American Coot	--	--	--	--	--	--
American avocet	3	1	--	4	--	--
Killdeer	--	--	--	--	--	--
Wilson's phalarope	--	5	--	6	--	--
California gull	22	19	47	200	--	72
Gull species	30	31	--	--	--	--
Shorebird	--	10	--	--	--	--
Willet	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--

Table 17.--Bird species observed at Thirtythree Mile Reservoir during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes					
	Aug. 8	Aug. 18	Aug. 26	Aug. 30	Sept. 7	Sept. 16
		9	18	13	14	12
Western grebe	--	--	--	--	2	1
Eared grebe	--	--	--	--	--	--
Pied-billed grebe	--	1	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--
Great blue heron	--	2	2	--	2	--
White-faced ibis	--	--	--	--	--	--
Canada goose	--	--	20	--	--	--
Mallard	--	--	--	--	--	--
Gadwall	--	--	--	--	--	--
Green-winged teal	--	--	--	--	--	--
American widgeon	--	--	1	--	--	--
Northern pintail	--	--	--	--	--	--
Northern shoveler	--	--	--	--	--	--
Blue-winged teal	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--
Dabbler ducks	--	--	--	51	14	--
Ruddy duck	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--
Redhead	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--
Scaup	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--
Duck species	--	13	60	--	--	44
Common merganser	--	--	--	--	--	--
American Coot	--	3	--	--	--	--
American avocet	--	--	--	--	--	--
Killdeer	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--
California gull	--	--	4	--	--	2
Gull species	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--
Willet	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--

Table 17.--Bird species observed at Thirtythree Mile Reservoir during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes					
	Sept. 22 6	Sept. 27 12	Oct. 5 14	Oct. 13 20	Oct. 17 7	Oct. 27 22
Western grebe	1	2	1	--	--	2
Eared grebe	--	--	--	--	--	--
Pied-billed grebe	--	--	2	--	--	--
Double-crested cormorant	--	--	--	--	--	--
Great blue heron	1	--	2	--	--	--
White-faced ibis	--	--	--	--	--	--
Canada goose	--	--	23	--	--	--
Mallard	--	4	17	190	90	100
Gadwall	--	--	--	--	--	--
Green-winged teal	--	--	--	--	--	--
American widgeon	--	--	--	--	--	15
Northern pintail	--	--	--	--	--	10
Northern shoveler	--	--	--	--	--	5
Blue-winged teal	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--
Dabbler ducks	--	--	6	--	--	--
Ruddy duck	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--
Redhead	--	--	--	--	5	--
Ring-necked duck	--	--	--	6	3	--
Scaup	--	--	3	--	--	46
Bufflehead	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--
Duck species	207	1	47	--	--	--
Common merganser	--	--	--	1	--	5
American Coot	--	--	--	--	--	--
American avocet	--	2	--	--	--	--
Killdeer	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--
California gull	--	--	--	--	--	3
Gull species	--	--	--	--	--	--
Shorebird	3	--	--	--	--	--
Willet	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--

Table 18.--Bird species observed at Thirtythree Mile Reservoir during 1989

[--, not observed]

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	April 3	April 19	April 27	May 3	May 12	May 14	May 25
	30	6	8	17	11	15	13
Western grebe	--	--	2	3	--	4	--
Eared grebe	--	--	--	6	--	3	--
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	1	1	1	6	2
Great blue heron	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--	--
Mallard	102	4	2	--	--	--	6
Gadwall	--	3	--	--	--	--	--
Green-winged teal	--	20	--	15	16	--	--
American widgeon	1	1	--	--	2	--	--
Northern pintail	200	--	--	--	--	--	2
Northern shoveler	--	--	--	16	6	10	1
Blue-winged teal	--	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	350	--	--	4	--	--	--
Ruddy duck	--	7	--	2	--	--	--
Canvasback	--	--	--	--	--	--	--
Redhead	--	--	--	1	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	4	--	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	4	--	--	--	--	--	--
Duck species	--	6	--	--	--	--	--
Common merganser	2	--	--	--	--	--	--
American coot	--	--	--	--	--	--	--
American avocet	--	1	1	3	1	--	1
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--	--
Franklin's gull	--	--	--	--	--	--	--
California gull	64	--	5	2	16	66	--
Gull species	--	29	--	--	--	--	600
Shorebird	--	--	--	--	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	4	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	--	--	11	24	--
Caspian tern	--	--	--	--	1	--	--
Common snipe	--	--	--	--	--	--	--
Snowy egret	--	--	--	--	--	--	--

Table 18.--Bird species observed at Thirtythree Mile Reservoir during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	June 2 7	June 4 8	June 13 14	June 22 7	June 28 3	July 6 7	July 12 12
Western grebe	3	1	--	--	--	--	--
Eared grebe	--	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	2	1	--	--	--	--	1
Great blue heron	--	--	1	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--	--
Mallard	--	--	--	--	2	--	--
Gadwall	--	--	--	--	--	--	--
Green-winged teal	--	--	--	--	--	--	--
American widgeon	--	--	--	--	--	--	--
Northern pintail	14	--	--	--	--	--	--
Northern shoveler	--	--	--	--	--	--	--
Blue-winged teal	--	--	6	--	--	3	--
Cinnamon teal	--	--	--	--	--	1	--
Dabbler ducks	--	--	--	--	--	--	--
Ruddy duck	--	--	--	--	--	--	--
Canvasback	3	--	--	--	--	--	--
Redhead	--	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	3	--
Diving ducks	--	--	--	--	--	--	--
Duck species	--	2	--	--	--	--	--
Common merganser	--	--	--	--	--	--	--
American coot	--	--	--	--	--	--	--
American avocet	--	--	--	1	9	3	11
Killdeer	--	--	2	2	--	--	--
Wilson's phalarope	--	--	--	--	--	--	--
Franklin's gull	--	--	--	--	--	--	--
California gull	--	34	--	--	1	--	--
Gull species	70	--	11	3	--	3	68
Shorebird	--	--	--	--	--	--	20
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
White pelican	22	--	--	--	--	--	1
Caspian tern	--	--	--	--	--	--	--
Common snipe	--	--	--	--	--	--	--
Snowy egret	--	--	--	--	--	--	--

Table 18.--Bird species observed at Thirtythree Mile Reservoir during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	July 21 20	July 26 11	Aug. 5 7	Aug. 6 10	Aug. 19 12	Aug. 27 9	Sept. 1 10
Western grebe	--	--	--	--	--	--	--
Eared grebe	--	1	--	4	--	--	--
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	2	1	--	--	--
Great blue heron	1	3	--	2	1	1	2
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	5	--	--	--	10	--
Mallard	--	--	--	1	--	--	--
Gadwall	--	--	--	1	--	--	--
Green-winged teal	--	--	--	--	--	--	--
American widgeon	--	--	--	--	--	--	--
Northern pintail	--	--	--	--	--	--	--
Northern shoveler	--	--	--	--	--	--	--
Blue-winged teal	--	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	--	1	--	1	--	--	9
Ruddy duck	1	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--	--
Redhead	1	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--
Duck species	1	--	22	--	40	7	--
Common merganser	--	--	--	2	--	--	--
American coot	--	--	--	--	--	2	--
American avocet	11	7	28	--	10	--	1
Killdeer	--	--	--	2	45	3	--
Wilson's phalarope	--	--	--	--	--	1	--
Franklin's gull	--	2	--	--	--	--	--
California gull	--	--	4	--	--	--	--
Gull species	18	26	--	6	--	--	--
Shorebird	2	3	--	1	--	--	5
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	1	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	--	--
Caspian tern	--	--	--	--	--	--	--
Common snipe	--	--	--	--	5	--	--
Snowy egret	--	--	--	--	--	2	--

Table 18.--Bird species observed at Thirtythree Mile Reservoir during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	Sept. 7	Sept. 15	Sept. 21	Sept. 29	Oct. 6	Oct. 11	Oct. 18
	33	28	24	12	7	25	9
Western grebe	--	--	1	1	4	3	--
Eared grebe	1	1	--	--	1	2	--
Pied-billed grebe	--	2	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	1	--	1	2	--	2
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--	--
Mallard	--	--	--	2	--	--	--
Gadwall	--	1	--	1	--	9	--
Green-winged teal	--	--	--	2	--	--	--
American widgeon	--	--	--	2	1	9	--
Northern pintail	32	5	--	--	--	--	--
Northern shoveler	--	--	--	--	18	6	--
Blue-winged teal	--	--	--	--	--	--	--
Cinnamon teal	--	--	--	2	--	--	--
Dabbler ducks	27	--	22	--	--	50	--
Ruddy duck	--	--	6	--	--	--	--
Canvasback	--	--	1	--	--	9	--
Redhead	--	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	1	--
Bufflehead	--	--	--	--	--	9	--
Diving ducks	--	--	--	--	--	--	--
Duck species	15	--	30	17	18	19	--
Common merganser	--	--	--	--	38	--	--
American coot	9	3	--	--	--	--	--
American avocet	--	--	--	1	16	6	3
Killdeer	1	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	6	--	--
Franklin's gull	--	--	--	--	--	--	--
California gull	--	--	--	--	10	--	3
Gull species	--	--	--	6	--	--	--
Shorebird	--	--	10	--	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	6	3	--	--	--	5	--
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	--	--
Caspian tern	--	--	2	--	--	--	--
Common snipe	--	--	--	--	--	--	--
Snowy egret	1	--	--	--	--	--	--

Table 19.--Bird species observed at Illco Pond during 1988

[--, not observed]

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	March 30	April 7	April 12	April 19	April 27	May 5	May 11
	30	25	39	62	40	63	50
Western grebe	--	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	1	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--	--
Mallard	2	4	4	6	3	2	2
Gadwall	--	--	--	--	--	2	2
Green-winged teal	53	41	9	20	15	30	--
American widgeon	--	4	2	4	6	--	2
Northern pintail	25	8	6	6	1	2	12
Northern shoveler	--	3	2	11	7	16	--
Blue-winged teal	--	--	--	9	4	8	--
Cinnamon teal	--	1	--	5	4	1	--
Dabbler ducks	--	--	--	--	--	--	--
Ruddy duck	--	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--	--
Redhead	--	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	7	--	--	--	6	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	3	--
Duck species	--	--	8	--	1	--	--
Common merganser	--	--	--	--	--	--	--
American coot	--	--	--	--	--	2	--
American avocet	--	--	3	7	9	7	3
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	3	1	2	20
California gull	--	--	10	--	3	37	--
Gull species	--	--	--	--	--	2	--
Shorebird	--	--	--	--	--	1	--
Willet	--	--	4	--	--	3	--
Yellowlegs	--	--	--	1	1	--	--
Black-necked stilt	--	--	1	--	--	--	--
White pelican	--	--	--	--	--	--	--
Marbled godwit	--	--	--	--	2	2	--
Franklin's gull	--	--	--	--	--	--	--
Forster's tern	--	--	--	--	--	--	--
Black-crowned heron	--	--	--	--	--	--	--

Table 19.--Bird species observed at Illco Pond during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes							
	May 19 28	May 25 20	June 1 6	June 8 19	June 14 12	June 21	June 30 16	July 5 14
Western grebe	--	--	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--	--
Great blue heron	1	--	--	--	4	--	--	--
White-faced ibis	--	1	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--	--	--
Mallard	1	0	2	5	0	--	3	--
Gadwall	--	2	--	--	1	--	--	--
Green-winged teal	4	3	--	--	--	--	--	--
American widgeon	1	--	--	--	2	--	--	--
Northern pintail	2	3	--	3	--	--	--	--
Northern shoveler	--	--	--	8	--	--	--	--
Blue-winged teal	2	--	--	1	2	--	--	--
Cinnamon teal	--	1	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	--	--	--	--
Ruddy duck	--	--	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--	2	--
Redhead	--	--	--	1	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--	--
Duck species	--	--	--	--	--	--	4	--
Common merganser	--	--	--	--	--	--	--	--
American coot	--	--	--	--	--	--	--	--
American avocet	12	18	6	6	--	--	--	--
Killdeer	--	--	--	--	--	--	--	--
Wilson's phalarope	7	12	6	--	--	--	--	--
California gull	5	--	--	--	2	--	--	--
Gull species	--	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--	--	--
Willet	--	2	--	--	--	--	--	--
Yellowlegs	2	--	--	1	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--	--
White pelican	--	--	--	--	5	--	--	--
Marbled godwit	--	--	--	--	--	--	--	--
Franklin's gull	1	--	--	--	--	--	--	--
Forster's tern	--	2	--	--	--	--	--	--
Black-crowned heron	--	--	--	--	--	--	--	--

Table 19.--Bird species observed at Illco Pond during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	July 14	July 19	Aug. 4	Aug. 18	Aug. 26	Aug. 30	Sept. 8
	51	4	5	10	20	12	5
Western grebe	--	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	1	2	3
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--	--
Mallard	7	--	3	36	20	7	2
Gadwall	--	--	--	1	--	--	--
Green-winged teal	--	--	--	--	--	--	--
American widgeon	--	--	--	--	10	--	--
Northern pintail	--	--	--	5	2	1	--
Northern shoveler	--	--	--	--	--	8	19
Blue-winged teal	5	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	--	--	--	--	70	58	--
Ruddy duck	--	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--	--
Redhead	--	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--
Duck species	3	--	--	--	23	32	1
Common merganser	--	--	--	--	--	--	--
American coot	--	--	--	1	1	1	--
American avocet	4	1	--	--	--	--	--
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--	--
California gull	--	--	--	--	--	--	--
Gull species	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	9	--	--	--	--	9	--
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	1	--
Marbled godwit	--	--	--	--	--	--	--
Franklin's gull	--	--	--	--	--	--	--
Forster's tern	--	--	--	--	--	--	--
Black-crowned heron	1	--	--	--	--	--	--

Table 19.--Bird species observed at Illco Pond during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	Sept. 15	Sept. 20	Sept. 28	Oct. 4	Oct. 14	Oct. 18	Oct. 27
	32	12	12	17	2	1	2
Western grebe	--	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	1	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--	--
Mallard	7	112	14	1	--	--	--
Gadwall	4	--	--	4	--	--	--
Green-winged teal	--	12	--	4	--	--	--
American widgeon	60	40	--	--	--	--	--
Northern pintail	--	--	--	--	--	--	--
Northern shoveler	--	--	1	8	--	--	--
Blue-winged teal	--	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	--	--	2	8	--	--	--
Ruddy duck	--	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--	--
Redhead	--	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--
Duck species	--	--	--	--	--	--	--
Common merganser	--	--	--	--	--	--	--
American coot	1	5	--	1	--	--	--
American avocet	1	--	--	--	--	--	--
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--	--
California gull	--	--	--	--	--	--	--
Gull species	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	--	--
Marbled godwit	--	--	--	--	--	--	--
Franklin's gull	--	--	--	--	--	--	--
Forster's tern	--	--	--	--	--	--	--
Black-crowned heron	--	--	--	--	--	--	--

Table 20.--Bird species observed at Oxbow Pond during 1988

[--, not observed]

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	March 30	April 7	April 12	April 19	April 27	May 5	May 11
		35	59	57	45	52	80
Western grebe	--	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	1	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--	1
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	2	16	6	11	--	14
Mallard	--	7	9	8	3	3	8
Gadwall	--	--	--	--	--	--	--
Green-winged teal	--	28	10	4	11	--	3
American widgeon	--	--	--	--	--	--	--
Northern pintail	--	--	13	16	1	4	--
Northern shoveler	--	--	10	13	9	1	1
Blue-winged teal	--	--	2	3	--	--	4
Cinnamon teal	--	7	2	7	5	7	7
Dabbler ducks	--	--	--	--	--	--	--
Ruddy duck	--	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--	--
Redhead	--	--	21	14	6	5	--
Ring-necked duck	--	--	10	5	1	--	--
Scaup	--	--	--	--	--	8	4
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	1	--	--	--
Duck species	--	--	6	3	--	4	2
Common merganser	--	--	--	--	--	--	--
American coot	--	2	5	14	10	20	16
American avocet	--	--	--	--	--	2	3
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	5	3
California gull	--	--	--	--	--	--	6
Gull species	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--	1
Willet	--	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	1	2
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	--	10
Peeps	--	--	--	--	--	--	--

Table 20.--Bird species observed at Oxbow Pond during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes							
	May 19 8	May 25 36	June 1 20	June 8	June 14 51	June 21 5	June 30	July 5 19
Western grebe	--	--	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--	--	--
Pied-billed grebe	--	1	--	--	--	1	--	--
Double-crested cormorant	--	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--	--	1
White-faced ibis	--	--	--	--	--	--	--	--
Canada goose	4	--	--	--	40	--	--	--
Mallard	--	4	24	--	25	5	--	8
Gadwall	1	--	--	--	--	--	--	--
Green-winged teal	8	--	--	--	10	--	--	3
American widgeon	--	--	--	--	--	--	--	--
Northern pintail	--	--	1	--	--	--	--	--
Northern shoveler	3	22	2	--	--	--	--	--
Blue-winged teal	1	4	7	--	9	3	--	--
Cinnamon teal	4	8	7	--	1	--	--	--
Dabbler ducks	--	6	--	--	--	--	--	--
Ruddy duck	--	--	--	--	--	--	--	--
Canvasback	--	--	--	--	--	2	--	1
Redhead	2	--	--	--	6	--	--	--
Ring-necked duck	--	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	6	--	--	--
Duck species	--	11	4	--	--	--	--	5
Common merganser	--	--	--	--	--	--	--	--
American coot	6	10	12	--	--	--	--	--
American avocet	--	--	--	--	2	--	--	--
Killdeer	--	--	--	--	--	--	--	--
Wilson's phalarope	12	9	5	--	4	--	--	--
California gull	--	--	--	--	--	--	--	--
Gull species	--	--	--	--	--	--	--	--
Shorebird	--	--	--	--	2	--	--	--
Willet	--	--	--	--	--	--	--	--
Yellowlegs	--	1	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	--	--	--
Peeps	--	--	--	--	--	--	--	--

Table 20.--Bird species observed at Oxbow Pond during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	July 14	July 19	Aug. 4	Aug. 18	Aug. 26	Aug. 30	Sept. 8
	18	26	10	19	31	7	11
Western grebe	--	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--	--
White-faced ibis	--	--	2	--	--	--	--
Canada goose	--	--	--	--	--	--	--
Mallard	--	26	53	--	7	--	7
Gadwall	--	15	--	--	--	--	--
Green-winged teal	1	--	--	200	200	--	116
American widgeon	--	--	--	--	--	--	2
Northern pintail	--	1	--	--	1	--	8
Northern shoveler	--	--	--	--	--	--	36
Blue-winged teal	4	--	--	--	--	--	2
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	--	10	--	--	--	80	7
Ruddy duck	--	--	--	--	--	--	--
Canvasback	--	--	2	--	--	--	--
Redhead	--	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--
Duck species	37	26	4	4	--	--	--
Common merganser	--	--	--	--	--	--	--
American coot	--	--	--	--	--	--	--
American avocet	--	1	--	--	--	--	--
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	4	5	4	--	--	--
California gull	--	--	--	--	--	--	--
Gull species	--	--	--	--	--	--	--
Shorebird	--	--	--	3	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	7	4	--	11	--	1	3
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	--	--
Peeps	--	--	--	--	25	4	2

Table 20.--Bird species observed at Oxbow Pond during 1988--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes						
	Sept. 15	Sept. 20	Sept. 28	Oct. 4	Oct. 14	Oct. 18	Oct. 27
	34	47	8	24	2	12	
Western grebe	--	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--	--
Mallard	--	5	41	--	40	--	--
Gadwall	--	--	--	--	--	--	--
Green-winged teal	7	65	--	6	--	59	--
American widgeon	50	35	--	--	--	7	--
Northern pintail	30	5	--	4	--	4	--
Northern shoveler	--	--	--	--	--	--	--
Blue-winged teal	--	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--	--
Dabbler ducks	26	--	--	--	--	--	--
Ruddy duck	--	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--	--
Redhead	--	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--	--
Scaup	--	--	--	40	--	--	--
Bufflehead	--	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--	--
Duck species	75	--	--	--	100	--	--
Common merganser	--	--	--	--	--	--	--
American coot	--	--	--	--	--	--	--
American avocet	--	--	--	--	--	--	--
Killdeer	--	--	--	--	--	--	--
Wilson's phalarope	--	--	--	--	--	--	--
California gull	--	--	--	--	--	--	--
Gull species	--	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--	--
Willet	--	--	--	--	--	--	--
Yellowlegs	1	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--	--
White pelican	--	--	--	--	--	--	--
Peeps	--	--	--	--	--	--	--

Table 21.--Bird species observed at Oxbow Pond during 1989

[--, not observed]

Bird species	Number of birds observed for indicated date and length of observation, in minutes					
	April 4	April 19	April 27	May 3	May 10	May 25
	5	48	16	25	20	27
Western grebe	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--
White-faced ibis	--	--	1	--	--	--
Canada goose	4	8	6	7	9	--
Mallard	--	11	3	4	18	9
Gadwall	--	7	8	2	2	--
Green-winged teal	--	13	6	19	2	6
American widgeon	--	--	--	--	--	--
Northern pintail	43	19	11	7	2	5
Northern shoveler	--	7	1	--	4	2
Blue-winged teal	--	--	--	1	2	4
Cinnamon teal	--	6	4	6	2	3
Dabbler ducks	--	--	--	3	--	--
Ruddy duck	--	--	--	--	2	--
Canvasback	--	3	--	2	--	--
Redhead	--	--	--	--	--	--
Ring-necked duck	2	--	--	--	--	--
Scaup	--	1	--	--	--	--
Bufflehead	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--
Duck species	--	2	--	--	--	4
Common merganser	--	--	--	--	--	--
American coot	--	2	3	4	2	--
American avocet	--	--	--	--	--	--
Killdeer	3	6	2	2	2	5
Wilson's phalarope	--	--	--	--	1	3
California gull	--	--	--	--	--	--
Gull species	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--
Willet	--	--	--	1	--	--
Yellowlegs	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--
Dowitchers	--	--	--	6	--	--
Sora	--	--	--	--	--	2
Virginia rail	--	--	--	--	--	--
Common snipe	--	--	--	--	--	--

Table 21.--Bird species observed at Oxbow Pond during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes					
	June 2	June 7	June 13	June 22	June 27	July 6
	20	35	25	28	16	21
Western grebe	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	1
White-faced ibis	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--
Mallard	3	7	5	3	--	--
Gadwall	--	--	--	--	--	7
Green-winged teal	--	2	--	--	--	--
American widgeon	1	--	--	--	--	--
Northern pintail	1	3	9	--	--	--
Northern shoveler	5	2	--	--	--	--
Blue-winged teal	4	2	3	--	2	--
Cinnamon teal	2	2	--	--	2	--
Dabbler ducks	2	--	--	--	1	--
Ruddy duck	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--
Redhead	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--
Scaup	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--
Duck species	--	--	--	1	--	4
Common merganser	--	--	--	--	--	--
American coot	1	2	--	1	3	--
American avocet	1	1	--	1	--	1
Killdeer	6	6	3	3	5	3
Wilson's phalarope	3	3	2	3	--	--
California gull	--	--	--	--	--	--
Gull species	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--
Willet	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	13
Black-necked stilt	2	--	--	--	--	--
Dowitchers	--	--	--	--	--	--
Sora	--	--	--	--	--	--
Virginia rail	--	--	--	--	1	--
Common snipe	--	--	--	--	--	--

Table 21.--Bird species observed at Oxbow Pond during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes					
	July 12	July 21	July 26	Aug. 5	Aug. 6	Aug. 19
	47	52	26		16	1
Western grebe	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--
Mallard	8	1	--	--	--	--
Gadwall	2	1	--	--	--	--
Green-winged teal	--	--	--	--	--	--
American widgeon	2	--	--	--	1	--
Northern pintail	--	--	--	--	--	--
Northern shoveler	--	--	--	--	--	--
Blue-winged teal	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--
Dabbler ducks	5	1	--	--	16	--
Ruddy duck	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--
Redhead	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--
Scaup	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--
Duck species	--	5	--	--	--	--
Common merganser	--	--	--	--	--	--
American coot	4	--	--	--	--	--
American avocet	--	--	--	--	--	--
Killdeer	3	11	19	--	23	2
Wilson's phalarope	--	--	--	--	--	--
California gull	--	--	--	--	--	--
Gull species	--	--	--	--	--	--
Shorebird	11	11	3	--	--	--
Willet	--	--	--	--	--	--
Yellowlegs	--	1	5	--	1	--
Black-necked stilt	--	--	--	--	--	--
Dowitchers	--	--	--	--	--	--
Sora	--	--	1	--	--	--
Virginia rail	--	4	1	--	--	--
Common snipe	2	1	3	--	1	--

Table 21.--Bird species observed at Oxbow Pond during 1989--Continued

Bird species	Number of birds observed for indicated date and length of observation, in minutes					
	Sept. 1	Sept. 7	Sept. 15	Sept. 21	Oct. 11	Oct. 26
	5	10	15	23	22	18
Western grebe	--	--	--	--	--	--
Eared grebe	--	--	--	--	--	--
Pied-billed grebe	--	--	--	--	--	--
Double-crested cormorant	--	--	--	--	--	--
Great blue heron	--	--	--	--	--	--
White-faced ibis	--	--	--	--	--	--
Canada goose	--	--	--	--	--	--
Mallard	--	--	--	--	--	7
Gadwall	--	--	--	--	--	--
Green-winged teal	--	--	--	--	--	--
American widgeon	--	--	--	--	--	--
Northern pintail	--	--	--	--	--	--
Northern shoveler	--	--	--	--	--	--
Blue-winged teal	--	--	--	--	--	--
Cinnamon teal	--	--	--	--	--	--
Dabbler ducks	--	--	--	3	--	--
Ruddy duck	--	--	--	--	--	--
Canvasback	--	--	--	--	--	--
Redhead	--	--	--	--	--	--
Ring-necked duck	--	--	--	--	--	--
Scaup	--	--	--	--	--	--
Bufflehead	--	--	--	--	--	--
Diving ducks	--	--	--	--	--	--
Duck species	--	--	--	--	--	--
Common merganser	--	--	--	--	--	--
American coot	--	--	--	--	--	--
American avocet	--	--	--	--	--	--
Killdeer	--	--	--	4	--	--
Wilson's phalarope	--	--	--	--	--	--
California gull	--	--	--	--	--	--
Gull species	--	--	--	--	--	--
Shorebird	--	--	--	--	--	--
Willet	--	--	--	--	--	--
Yellowlegs	--	--	--	--	--	--
Black-necked stilt	--	--	--	--	--	--
Dowitchers	--	--	--	--	--	--
Sora	--	--	--	--	--	--
Virginia rail	--	--	--	--	--	--
Common snipe	--	--	--	2	--	--

Table 22.--Frequency of aquatic bird nest monitoring in the Kendrick area during 1988 and 1989

Species monitored	Months of monitoring	Maximum number of nest visits	Number of days between visits
	1988		
Canada goose	May and June	6	5-8
American avocet	May, June, and July	4	7-16
Eared grebe	June and July	4	7-16
	1989		
Canada goose	May and June	5	7-15
American avocet	May, June, and July	9	1-24
Eared grebe	June and July	6	2-16

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