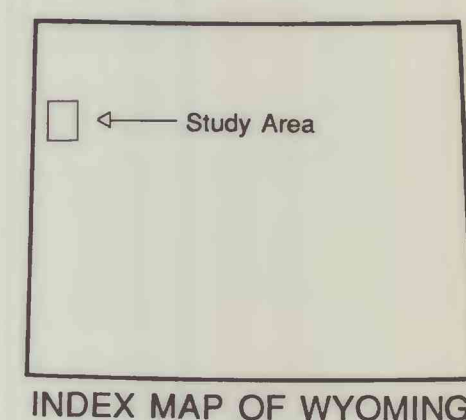


The purpose of this study was to determine concentrations of selected water-chemistry constituents from observation wells in or near Grand Teton National Park, Wyoming. Observation wells were located near sewage lagoons at Flagg Ranch, Colter Bay, Signal Mountain, and Moose Village. The scope of the study was limited to inventory of 10 wells and onsite determination of total well depth, depth to water, specific conductance, pH, water temperature, and concentrations of total alkalinity, dissolved chloride, and dissolved nitrite plus nitrate (as nitrogen). Water samples were collected by means of a portable, 12-volt, helical rotor pump.

Locations of wells are shown on the maps at right. Selected well-inventory and water-chemistry data for 10 wells sampled in September 1988 are shown in the table at right. Pre-1988 water-chemistry data from U.S. Geological Survey files also are included in the table.



Well-inventory and ground-water chemistry data from selected monitoring sites in Grand Teton National Park

[*, onsite analyses only; **, onsite and laboratory analyses; <, less than; --, no data available]

Well location	Well number	Date sampled	Total depth of well (feet)	Water level (feet below land surface)	Specific conductance (µS/cm)	pH (standard units)	Temperature (°C)	Alkalinity, total (mg/L as CaCO ₃)	Chloride, dissolved (mg/L as Cl)	Nitrogen, NO ₂ + NO ₃ dissolved (mg/L as N)
Flagg Ranch	48N-115W-21B1	9-7-88*	37.35	26.70	259	7.7	7.0	131	<1.0	0.7
Colter Bay 1	45N-115W-2ABBA1	9-7-88*	36.35	11.43	67	6.3	6.5	30	<1.0	.7
		9-15-76**	--	--	70	5.8	6.5	26	.8	.17
		7-15-75**	--	--	70	5.3	5.5	27	.5	.11
Colter Bay 2	45N-115W-2ABBD1	9-7-88*	32.45	11.37	90	6.8	8.5	40	1.0	.6
		9-15-76**	--	--	90	6.3	9.0	39	.8	.27
		7-15-75**	--	--	110	--	6.0	48	.5	.15
Colter Bay 3	45N-115W-2AACC1	9-7-88*	32.90	6.33	77	6.6	8.5	35	1.0	.4
		8-13-75**	--	--	85	4.8	7.5	34	.9	.09
		7-15-75**	--	--	90	--	5.0	33	.7	.04
Colter Bay 4	45N-115W-2AACC2	9-7-88*	38.05	6.95	80	6.5	8.5	36	1.0	.3
		9-16-76**	--	--	95	6.3	7.5	45	.5	.13
		8-13-75**	--	--	110	8.0	8.5	43	.5	.15
Colter Bay 5	45N-115W-2ABCD1	9-8-88*	38.35	4.72	551	6.6	11.5	162	73	1.2
		9-16-76**	--	--	320	6.1	10.5	64	48	.01
		9-16-76**	--	--	320	6.1	10.5	64	48	.01
		9-10-75**	--	--	155	5.5	11.5	65	5.9	.08
Signal Mountain 1	45N-115W-36BCCB1	9-8-88*	117.60	Dry	--	--	--	--	--	--
Signal Mountain 2	45N-115W-36BDCB1	9-8-88*	118.83	112.15	203	7.7	8.5	93	1.0	.4
Moose Village 1	43N-116W-25DBDB1	9-8-88*	48.65	15.39	165	8.2	10.0	84	<1.0	.4
		8-22-76**	--	--	200	7.8	10.0	90	.6	.16
		6-28-76**	--	--	220	7.7	10.0	107	1.2	--
Moose Village 2	43N-116W-25CAAD1	9-8-88*	42.85	14.84	139	8.1	8.0	68	<1.0	.8
		8-22-76**	--	--	110	8.2	9.0	43	.8	.29
		6-28-76**	--	--	90	8.4	7.0	41	1.3	--

CONVERSION FACTORS

For readers who prefer to use metric (International System) units, conversion factors for inch-pound units used in this report are listed below. Constituent concentrations are given in mg/L (milligrams per liter), which is equal to parts per million. Specific conductance is expressed as µS/cm (microsiemens per centimeter at 25 degrees Celsius).

Multiply inch-pound unit	By	To obtain SI unit
acre	4,047	square meter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer

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

$$^{\circ}\text{F} = (^{\circ}\text{C})(1.8) + 32$$

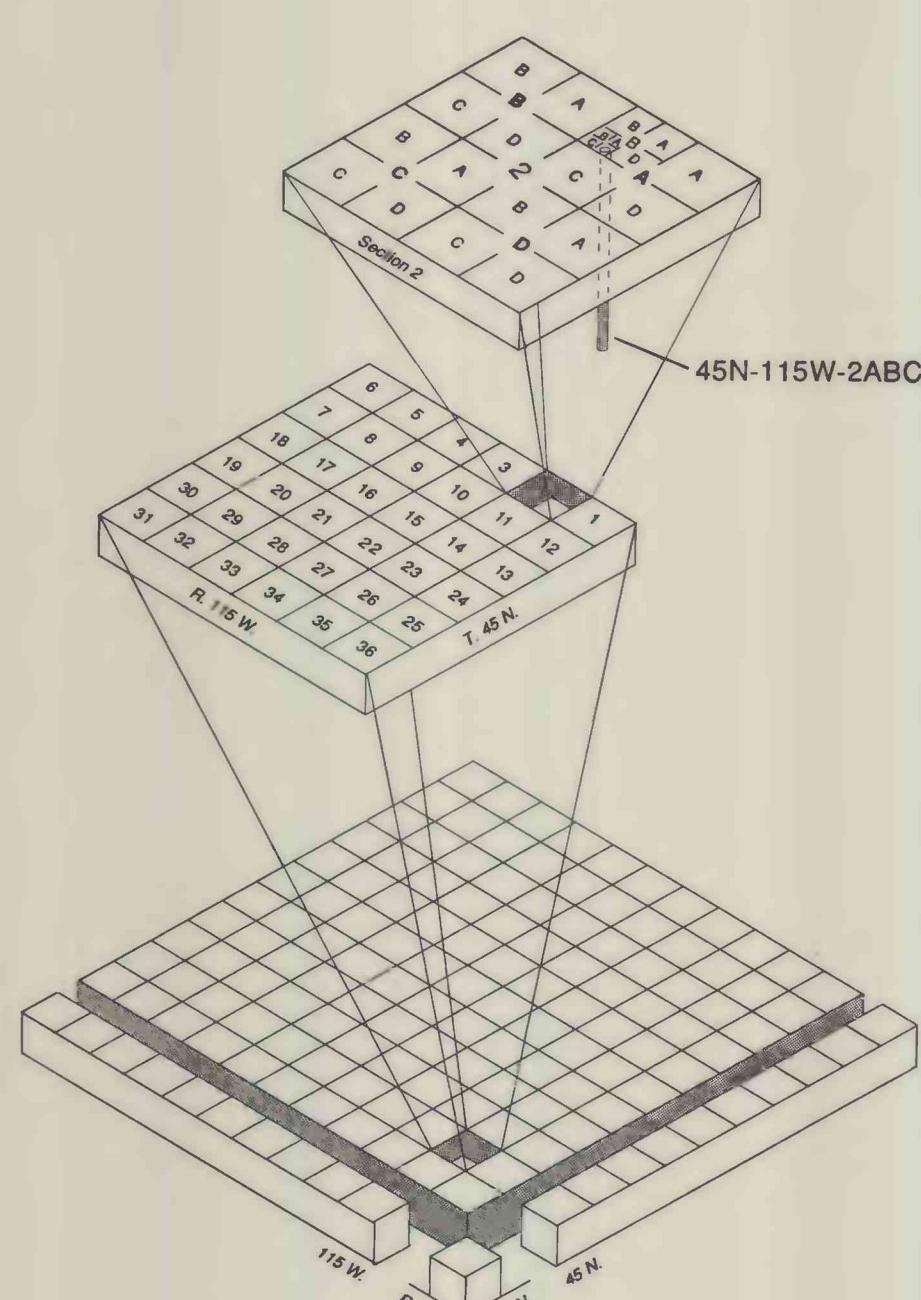
Water temperatures are reported to the nearest 0.5 °C.

For additional information write to:

Jerry L. Hughes
District Chief
U.S. Geological Survey, WRD
230 Collins Road
Boise, ID 83702

Copies of this report can be purchased from:

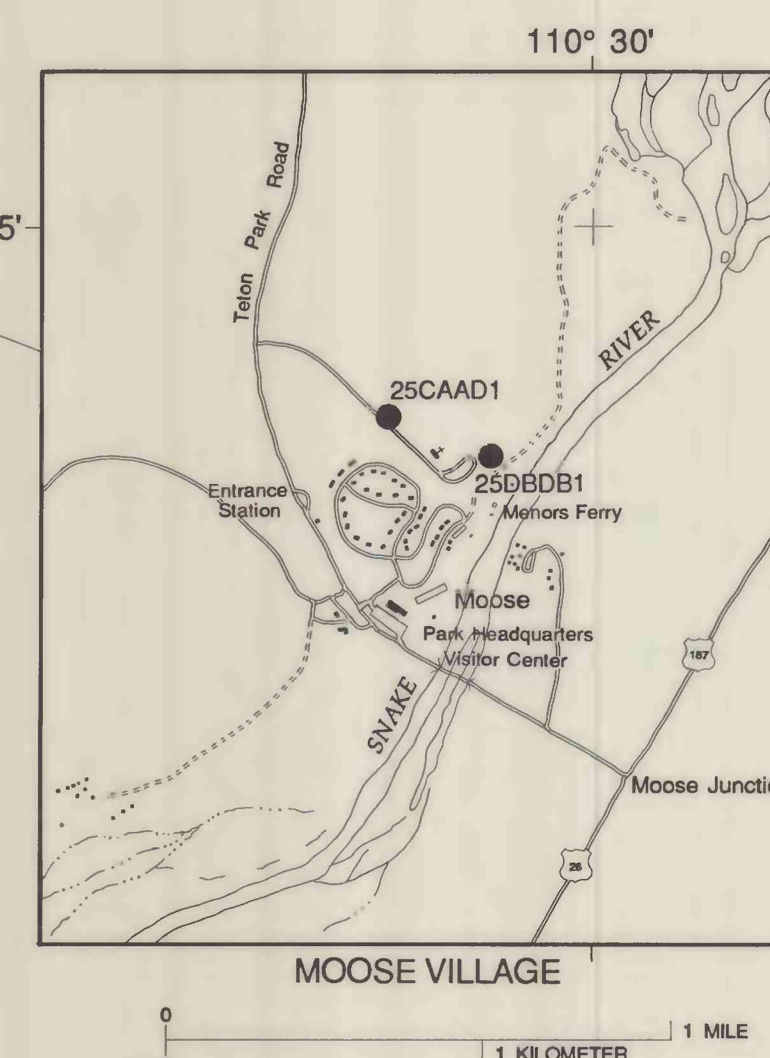
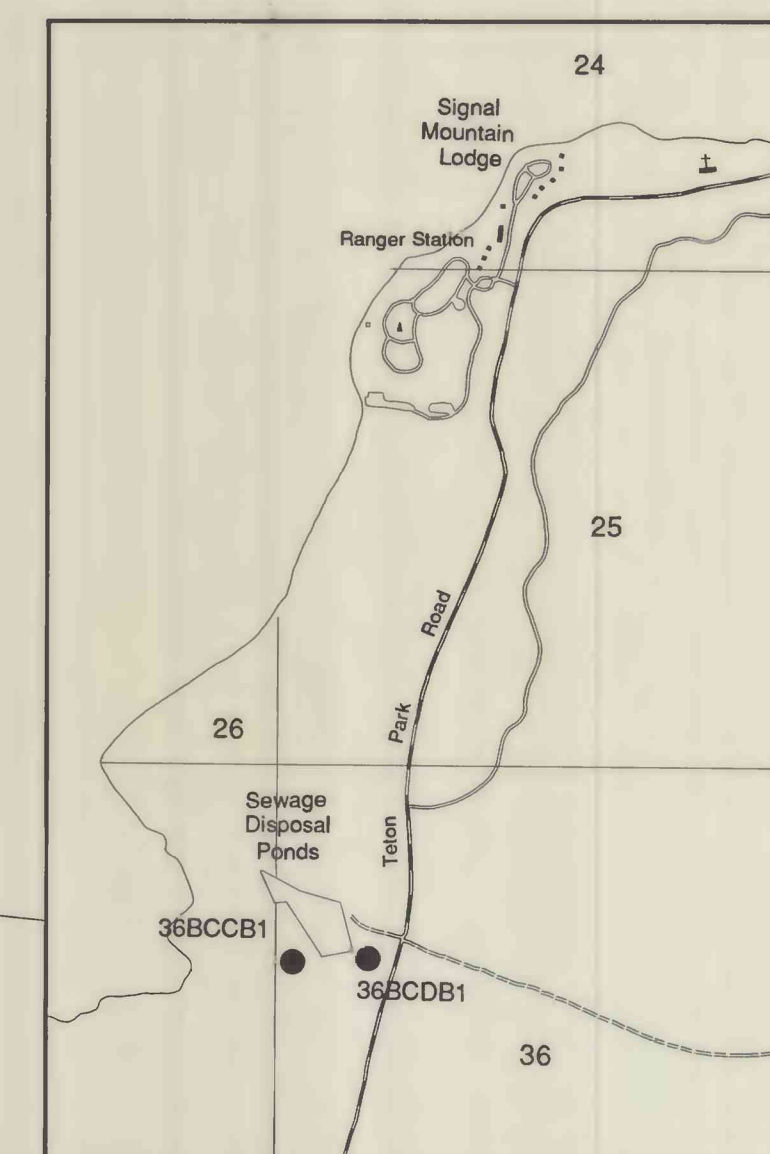
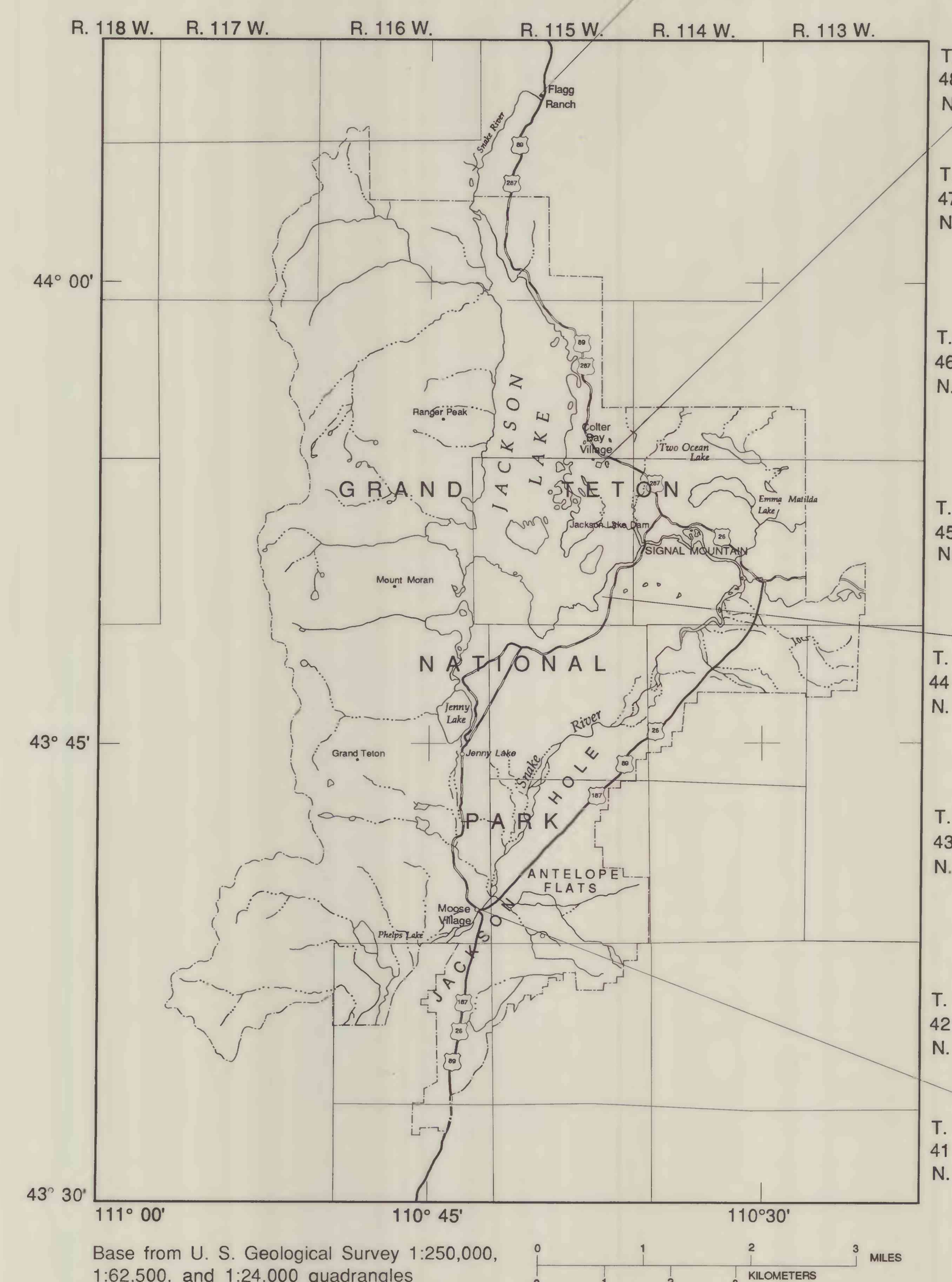
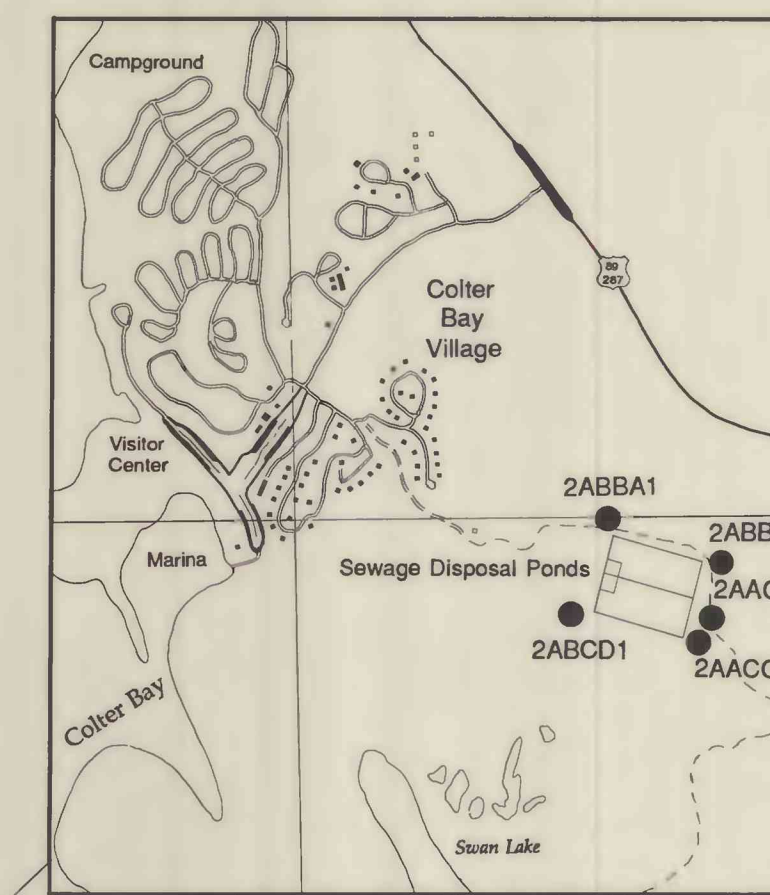
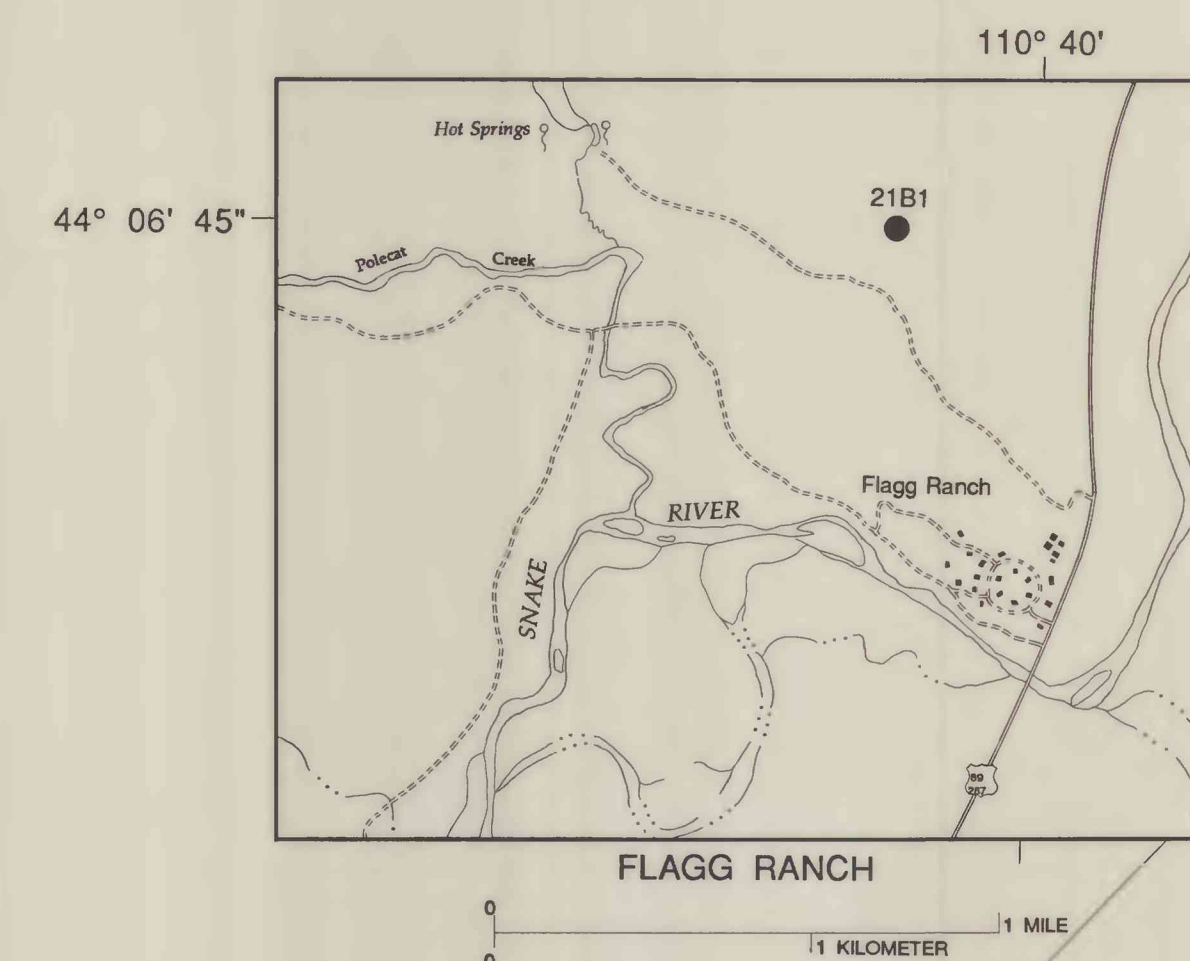
U.S. Geological Survey
Western Distribution Branch
Box 25286, Federal Center
Denver, CO 80225



WELL-NUMBERING SYSTEM

The well-numbering system used by the U.S. Geological Survey in Wyoming indicates the location of wells within the official rectangular subdivision of public land, with reference to the sixth Principal base line and Meridian. The first two segments of the number designate the township (north or south) and range (east or west). The third segment gives the section number; four letters, which indicate the 1/4 section (160-acre tract), 1/4-1/4 section (40-acre tract), 1/4-1/4-1/4 section (10-acre tract), and 1/4-1/4-1/4-1/4 section (2 1/2-acre tract); and serial number of the well within the tract.

Quarter sections are designated by the letters A, B, C, and D in counterclockwise order from the northeast quarter of each section. Forty-acre, 10-acre, and 2 1/2-acre tracts within each quarter section are lettered in the same manner. Well 45N-115W-2ABCD1 (example above) is in the SE 1/4 SW 1/4 NW 1/4 NE 1/4 sec. 2, T. 45 N., R. 115 W., and was the first well inventoried in that tract.



- EXPLANATION
- 25CAAD1 Well and number
 - Boundary of Grand Teton National Park
 - Boundary of study area