PREPARED IN COOPERATION WITH THE
DEPARTMENT OF THE AIR FORCE

INTRODUCTION

The study area is located in southern Elmore County, southwestern Idaho, and includes the Mountain Home Air Force Base located approximately 10 mi southwest of the city of Mountain Home. Chemical analyses have been made periodically since the late 1940's on water samples from supply wells on the Air Force Base. These analyses indicate increases in specific conductance and in concentrations of nitrogen compounds, chloride, and sulfate. The purposes of this report, which was prepared in cooperation with the Department of the Air Force, are to describe the seasonal changes in water quality and water levels and to depict the directions of ground-water movement in the regional aquifer system and perched-water zones. Although data presented in this report are from both the regional ground-water system and perched-water zones, the focus is on the regional system. A previous study by the U.S. Geological Survey (Parliman and Young, 1990) describes the areal changes in water quality and water levels during the fall of 1989.

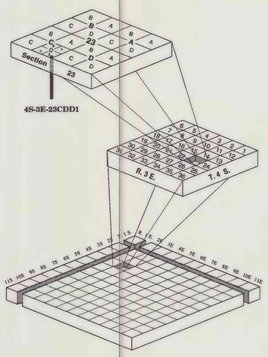
During March, July, and October 1990, 141 wells were inventoried and depth to water was measured. Continuous water-level recorders were installed on 5 of the wells and monthly measurements of depth to water were made in 17 of the wells during March 1990 through February 1991 (map at right). Water samples from 33 wells and 1 spring were collected during the spring and fall of 1990 for chemical analyses. Samples also were collected monthly from 11 of those wells during April to September 1990 (table 1).

Selected well-construction and water-use data and measurements of depth to water for 141 wells are given in table 2 (separate sheets in envelope). Directions of ground-water movement and selected hydrographs showing seasonal fluctuations of water levels in the regional ground-water system and perched-water zones are shown on sheet 2. Changes in water levels in the regional ground-water system during March to October 1990 are shown on sheet 2.

WELL- AND SPRING-NUMBERING SYSTEM

The well- and spring-numbering system (diagram below) used by the U.S. Geological Survey in Idaho indicates the location of wells and springs within the official rectangular subdivision of public lands, with reference to the Boise 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 4S-3E-23CDD1, for example, is in the SE1/4SE1/4SW1/4 sec. 23, T. 4 S., R. 3 E., and is the first well inventoried in that tract. Springs are designated by the letter "S" following the last numeral; for example, 4S-3E-35DCA1S.



CONVERSION FACTORS, VERTICAL DATUM, AND ABBREVIATED WATER-QUALITY UNITS

Multiply	*By*	*To obtain*
acre	4,047	square meter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer

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

$$°F = (1.8)(°C) + 32$$

All water temperatures are reported to the nearest 0.5°C.

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

Abbreviated water-quality units used in report:

µg/L micrograms per liter
µS/cm microsiemens per centimeter at 25°C
mg/L milligrams per liter

Acknowledgments

The authors are grateful to the many landowners in the study area who allowed access to their property, supplied information, and permitted measurements to be made in their wells and springs. Special thanks are given to M.P. Schroeder, B.F. Connor, M.C. Koval, and M.W. Sandstrom, U.S. Geological Survey Laboratory, for their technical expertise and for their analyses of volatile organics.

LOCATIONS OF WELLS AND SPRING IN GROUND-WATER-MONITORING NETWORK

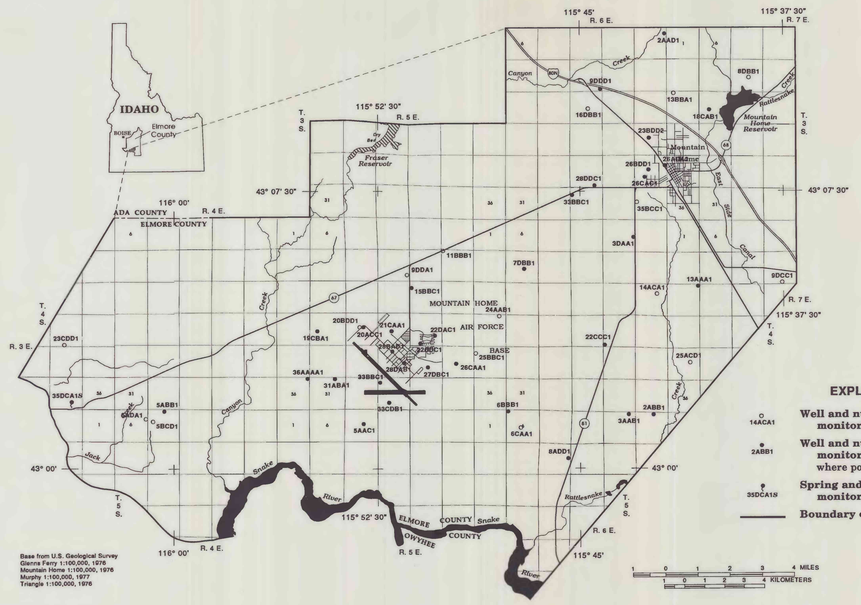


TABLE 1.—*Analyses of selected properties, chemical constituents, trace metals, and volatile organic compounds*

[°C, degrees Celsius; µS/cm, microsiemens per centimeter at 25°C; mg/L, milligrams per liter; µg/L, micrograms per liter; <, less than; –, no data available]

Well or spring No.	Date (1990)	Water temperature (°C)	Specific conductance (µS/cm)	pH (standard units)	Alkalinity, total, field (mg/L as $CaCO_3$)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, ammonia + organic, dissolved (mg/L as N)	Nitrogen, $NO_2 + NO_3$, dissolved (mg/L as N)	Phosphorus, total (mg/L as P)	Phosphorus, ortho, dissolved (mg/L as P)	Hardness, total (mg/L as $CaCO_3$)	Calcium, dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Potassium, dissolved (mg/L as K)	Chloride, dissolved (mg/L as Cl)	Sulfate, dissolved (mg/L as SO_4)	Fluoride, dissolved (mg/L as F)	Silica, dissolved (mg/L as SiO_2)	Iron, dissolved (µg/L as Fe)	Manganese, dissolved (µg/L as Mn)	Dichlorobromomethane, total (µg/L)	Bromoform, total (µg/L)	Chlorodibromomethane, total (µg/L)	Chloroform, total (µg/L)	Toluene, total (µg/L)	Benzene, total (µg/L)	Ethylbenzene, total (µg/L)	Methylene chloride, total (µg/L)	Tri-chloro-ethylene, total (µg/L)	Xylene, whole water, total recoverable (µg/L)
3S-6E- 2AAD1	3-27	14.5	214	8.2	78	<0.010	—	<0.20	1.30	—	—	—	—	—	—	—	9.1	—	—	—	—	—	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2
	10-24	14.0	210	8.2	94	<.010	<0.010	<.20	2.00	—	0.050	—	—	—	—	—	11	21	0.20	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
3S-6E- 9DDD1	3-28	14.0	554	6.9	91	.020	—	<.20	4.60	—	—	—	—	—	—	—	11	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	10-17	14.5	221	6.9	89	<.010	.50	.50	3.60	—	.020	—	—	—	—	—	10	18	<.10	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
3S-6E-23BDDB1	3-28	13.5	248	6.9	84	<.010	—	<.20	4.60	—	—	—	—	—	—	—	5.6	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
3S-6E-26ADA2	8-22	21.0	—	8.5	66	<.010	—	—	.900	0.010	—	49	12	4.7	12	3.0	4.4	5.1	.30	42	<3	<1	—	—	—	—	—	—	—	—	—	—
3S-6E-26BDD1	3-28	12.0	169	6.7	64	<.010	<.20	2.20	—	—	—	—	—	—	—	—	3.4	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	10-24	13.5	199	6.6	61	<.010	<.010	.40	3.70	—	.110	—	—	—	—	—	6.2	5.6	.20	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
3S-6E-26CAC1	8-22	12.5	—	6.7	77	<.010	—	—	1.90	.120	—	67	18	5.3	12	3.8	5.2	6.5	.40	51	13	1	—	—	—	—	—	—	—	—	—	—
3S-6E-28DDC1	3-26	15.5	414	7.1	132	<.010	—	.80	5.30	—	—	—	—	—	—	—	17	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	10-12	16.5	265	7.4	92	<.010	<.010	<.20	2.30	—	.030	—	—	—	—	—	10	18	<.10	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
3S-6E-33BBC1	3-26	13.0	623	7.6	129	<.010	—	.40	17.0	—	—	—	—	—	—	—	38	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	10-23	16.0	501	7.5	122	<.010	<.010	.90	8.90	—	.040	—	—	—	—	—	22	38	.10	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
3S-7E-18CAB1	3-28	12.5	253	8.4	93	<.010	—	<.20	1.50	—	—	—	—	—	—	—	11	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	10-24	13.0	242	8.4	90	<.010	<.010	<.20	1.30	—	.020	—	—	—	—	—	8.4	16	.30	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
4S-3E-35DCA1S	3-30	18.0	147	8.6	56	.020	—	<.20	.600	—	—	—	—	—	—	—	1.9	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	10-15	18.5	147	8.6	60	<.010	<.010	<.20	.600	—	<.101	—	—	—	—	—	2.8	4.1	.20	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
4S-4E-36AAAA1	5-30	19.0	194	8.5	64	.021	—	<.20	2.30	—	—	—	—	—	—	—	4.7	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	.20	.2	<.2	<.2
	6-7	18.5	194	8.3	58	<.010	—	.80	2.00	—	—	—	—	—	—	—	6.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	6-21	19.0	194	8.5	—	<.010	—	.50	2.10	—	—	—	—	—	—	—	6.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	7-25	19.0	193	8.6	59	<.010	—	<.20	2.00	—	—	—	—	—	—	—	7.8	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	8-24	19.0	191	8.5	56	<.010	—	<.20	1.90	—	—	—	—	—	—	—	7.4	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	9-24	19.0	191	8.6	56	<.010	—	<.20	1.90	—	—	—	—	—	—	—	6.1	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	10-12	19.5	191	8.5	59	<.010	<.010	<.20	1.90	—	.010	—	—	—	—	—	5.9	13	.10	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
4S-5E-15BBC1	3-26	20.0	280	8.6	48	<.010	—	<.20	1.60	—	—	—	—	—	—	—	23	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	10-16	20.5	194	8.5	44	<.010	<.010	<.20	1.30	—	<.010	—	—	—	—	—	12	23	<.10	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
4S-5E-19CBA1	4-5	21.0	155	8.5	50	<.010	—	<.20	1.00	—	—	—	—	—	—	—	4.8	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
4S-5E-20AACC1	4-18	19.0	167	8.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
4S-5E-21CAA1	4-2	21.0	183	8.4	64	<.010	—	<.20	1.60	—	—	—	—	—	—	—	5.5	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	5-3	20.5	188	8.2	62	<.010	—	.20	1.50	—	—	—	—	—	—	—	6.4	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	5-25	20.5	185	8.4	51	<.010	—	.30	1.50	.020	—	58	17	3.7	13	3.6	6.2	12	.10	37	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	6-22	20.5	186	8.5	60	<.010	—	.90	1.60	—	—	—	—	—	—	—	6.5	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	7-25	20.5	186	8.6	60	<.010	—	<.20	1.50	—	—	—	—	—	—	—	7.1	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	8-23	20.5	186	8.6	—	<.010	—	<.20	1.50	—	—	—	—	—	—	—	7.1	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	9-20	21.0	186	8.6	68	<.010	—	<.20	1.50	—	—	—	—	—	—	—	5.9	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
4S-5E-22CDC1	10-16	20.5	183	8.5	62	<.010	<.010	<.20	1.50	—	.010	—	—	—	—	—	5.8	13	.20	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	4-2	19.5	467	8.0	50	<.010	—	<.20	3.40	—	—	—	—	—	—	—	29	—	—	—	—	—	.80	7.0	3.0	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	5-3	20.0	565	8.4	46	<.010	—	.20	7.80	—	—	—	—	—	—	—	11	—	—	—	—	—	<.20	2.4	.40	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	5-25	20.5	663	8.2	54	<.010	—	.70	9.00	—	—	—	—	—	—	—	48	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	6-21	20.0	748	7.4	51	<.010	—	.80	9.50	—	—	—	—	—	—	—	52	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	7-26	20.0	904	4.6	—	<.010	—	.70	11.0	—	—	—	—	—	—	—	72	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	9-20	20.5	885	8.3	.59	<.010	—	.70	9.90	—	—	—	—	—	—	—	68	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	10-17	20.0	832	8.2	62	<.010	<.010	1.3	10.0	—	<.010	—	—	—	—	—	68	200	<.010	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
4S-5E-22DAC1	4-3	22.5	496	8.4	38	<.010	—	<.20	3.50	—	—	—	—	—	—	—	33	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	5-3	22.0	617	8.2	51	<.010	—	.30	4.10	—	—	—	—	—	—	—	24	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	5-25	22.5	518	8.3	46	<.010	—	.60	4.10	—	—	—	—	—	—	—	40	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	8-24	21.0	618	8.3	—	<.010	—	.60	4.30	—	—	—	—	—	—	—	44	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	11- 1	22.0	623	8.3	—	<.010	<.010	.40	4.70	—	<.010	—	—	—	—	—	45	130	.40	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
4S-5E-26CAA1	3-27	19.0	500	8.3	46	.010	—	<.20	4.10	—	—	—	—	—	—	—	46	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	5- 4	20.0	598	8.3	51	<.010	—	.50	4.50	—	—	—	—	—	—	—	23	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	6-22	19.5	583	8.2	54	<.010	—	.70	4.50	—	—	—	—	—	—	—	57	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	7-26	19.5	543	8.3	57	<.010	—	.30	4.20	—	—	—	—	—	—	—	53	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	8-24	19.0	534	8.3	—	<.010	—	.40	4.20	—	—	—	—	—	—	—	52	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	9-20	19.0	526	8.3	49	<.010	—	.50	4.10	—	—	—	—	—	—	—	52	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
	10-23	19.0	503	8.2	51	<.010	<.010	.40	4.00	—	<.010	—	—	—	—	—	49	91	<.10	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.2	<.2
4S-5E-27DBC1	4- 3	22.0	1,240	8.0	96	.010	—	.50	20.0	—	—	—	—	—	—	—	110	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.5	<.2	<.2
	5- 2	21.0	781	8.5	70	<.010	—	.90	14.0	—	—	—	—	—	—	—	23	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.4	<.2	<.2
	5-25	20.0	951	7.9	80	<.010	—	1.1	18.0	<.010	—	440	120	33	33	9.1	90	240	.10	39	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.3	<.2	<.2
	6-21	20.0	880	8.2	82	<.010	—	1.1	15.0	—	—	—	—	—	—	—	72	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.4	<.2	<.2
	7-26	20.0	1,080	8.2	80	<.010	—	.90	16.0	—	—	—	—	—	—	—	87	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.4	<.2	<.2
	8-24	20.0	782	8.3	—	<.010	—	.80	14.0	—	—	—	—	—	—	—	63	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.5	<.2	<.2
	9-24	20.5	844	8.2	82	<.010	—	.60	13.0	—	—	—	—	—	—	—	70	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	10-19	20.0	1,100	8.1	95	.010	<.010	1.1	19.0	<.010	.020	440	120	33	33	9.7	94	220	.20	40	—	1	<.20	.40	<.20	<.20	<.20	<.20	<.20	.4	<.2	<.2
4S-5E-28BAD1	4- 2	19.0	381	8.0	84	.010	—	<.20	7.20	—	—	—	—	—	—	—	20	—	—	—	—	—	<.20	.40	<.20	<.20	<.20	<.20	<.20	1.1	<.2	<.2
	5- 2	19.0	395	8.4	74	<.010	—	.30	7.50	—	—	—	—	—	—	—	18	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.1	<.2	<.2
	5-24	18.5	372	8.4	68	<.010	—	.70	7.20	—	—	—	—	—	—	—	15	—	—	—	—	—	<.20	.20	<.20	<.20	<.20	<.20	<.20	1.0	<.2	<.2
	6-21	19.0	379	8.1	82	<.010	—	.30	7.10	—	—	—	—	—	—	—	18	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.2	<.2	<.2
	7-25	19.5	364	8.1	77	<.010	—	.60	6.50	—	—	—	—	—	—	—	21	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.2	<.2	<.2
	8-24	19.0	346	8.2	—	<.010	—	.40	5.90	—	—	—	—	—	—	—	17	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.6	<.2	<.2
	9-20	20.0	338	8.1	78	<.010	—	.50	5.50	—	—	—	—	—	—	—	15	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.0	<.2	<.2
	10-16	18.5	336	8.0	82	<.010	<.010	.60	5.20	—	.020	—	—	—	—	—	19	35	.10	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.0	<.2	<.2
4S- 5E-28DAB1	4- 2	19.0	369	8.1	93	<.010	—	.40	11.0	—	—	—	—	—	—	—	38	—	—	—	—	—	.30	3.7	1.1	.20	<.20	<.20	<.20	1.9	<.2	<.2
	5- 3	19.0	506	8.0	94	<.010	—	<.20	9.50	—	—	—	—	—	—	—	38	—	—	—	—	—	.20	1.3	.60	<.20	<.20	<.20	<.20	1.7	<.2	<.2
	5-24	19.0	507	8.1	44	<.010	—	.60	9.00	—	—	—	—	—	—	—	32	—	—	—	—	—	.30	1.5	.70	<.20	<.20	<.20	<.20	1.4	<.2	<.2
	6-21	19.5	513	8.0	92	<.010	—	.30	8.10	—	—	—	—	—	—	—	33	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.6	<.2	<.2
	8-24	19.5	518	8.2	—	<.010	—	.60	7.70	—	—	—	—	—	—	—	34	—	—	—	—	—	<.20	.30	<.20	.20	<.20	<.20	<.20	2.4	<.2	<.2
	9-21	19.5	502	8.2	96	<.010	—	.50	7.40	—	—	—	—	—	—	—	35	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.5	<.2	<.2
4S-5E-31ABA1	10-17	19.0	503	8.1	97	<.010	<.010	.80	10.0	—	.010	—	—	—	—	—	48	82	.10	—	—	—	<.20	4.9	.50	<.20	<.20	<.20	<.20	1.7	<.2	<.2
	4- 3	20.0	390	8.3	73	<.010	—	.30	4.90	—	—	—	—	—	—	—	24	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	5- 4	19.5	521	8.5	121	<.010	—	.30	5.30	—	—	—	—	—	—	—	25	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.3	<.2	<.2
	6- 7	19.5	579	8.0	133	<.010	—	.80	5.70	—	—	—	—	—	—	—	42	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.3	<.2	<.2
	6-21	19.5	604	8.1	100	<.010	—	.70	6.20	—	—	—	—	—	—	—	38	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.3	<.2	<.2
	7-25	19.5	609	8.2	140	<.010	—	.50	6.10	—	—	—	—	—	—	—	46	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.3	<.2	<.2
	10-12	18.5	523	8.1	140	<.010	<.010	.40	5.30	—	.020	—	—	—	—	—	36	50	.10	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
4S-5E-33BBC1	6- 2	13.0	439	8.0	91	<.010	—	<.20	5.30	—	—	—	—	—	—	—	25	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.4	<.2	<.2
	5- 2	14.0	462	8.8	100	<.010	—	.60	5.30	—	—	—	—	—	—	—	16	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.4	<.2	<.2
	5-24	18.0	436	8.5	87	<.010	—	.30	5.50	—	—	—	—	—	—	—	25	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.2	<.2	<.2
	6-22	21.0	482	8.2	98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.7	<.2	<.2
	7-26	20.5	489	8.2	90	<.010	—	.60	5.60	—	—	—	—	—	—	—	33	—	—	—	—	—	<.20	<.20	<.20	<.20	.30	<.20	<.20	1.4	<.2	<.2
	8-23	19.0	485	8.3	—	<.010	—	.60	5.50	—	—	—	—	—	—	—	29	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.1	<.2	<.2
	9-21	21.5	473	8.2	97	<.010	—	.50	5.30	—	—	—	—	—	—	—	28	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.4	<.2	<.2
4S-5E-33CDB1	10-17	19.0	455	8.2	111	<.010	<.010	.60	5.20	—	.010	—	—	—	—	—	30	64	<.10	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	1.4	<.2	<.2
	4- 3	20.5	784	8.2	84	<.010	—	.30	11.0	—	—	—	—	—	—	—	63	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	5- 2	19.5	729	8.5	80	<.010	—	.80	10.0	—	—	—	—	—	—	—	53	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	5-24	19.5	673	8.4	72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	6-22	19.5	686	8.2	80	<.010	—	.50	10.0	—	—	—	—	—	—	—	59	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	7-26	19.0	640	8.3	69	<.010	—	.50	8.80	—	—	—	—	—	—	—	55	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	8-23	19.0	632	8.3	—	.010	—	.60	8.90	—	—	—	—	—	—	—	51	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20	<.20	<.20	.2	<.2	<.2
	9-21	19.0	603	8.3	80	<.010	—	.60	9.30	—	—	—	—	—	—	—	57	—	—	—	—	—	<.20	<.20	<.20	<.20	<.20