

**Selected Ground-Water Information for the Columbia Plateau
Regional Aquifer System, Washington and Oregon, 1982-85:
Volume III. Ground-Water Quality Data**

By Richard J. Wagner and R.C. Lane

**A Contribution of the Regional
Aquifer-System Analysis Program**

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CONVERSION FACTORS AND VERTICAL DATUM

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

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

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

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 both the United States and Canada, formerly called Sea Level Datum of 1929.

Selected Ground-Water Information For The Columbia Plateau Regional Aquifer System, Washington and Oregon 1982—1985: Volume III.

Ground-Water Quality Data

By Richard J. Wagner and R.C. Lane

ABSTRACT

This data report presents ground-water information collected and analyzed as part of the U.S. Geological Survey's Regional Aquifer-System Analysis Program study of the Columbia Plateau. The information was gathered from July 1982 through August 1985 in the part of the aquifer system located in central and eastern Washington and north-central and northeastern Oregon. The report consists of three volumes: volume I, geohydrology; volume II, ground-water levels; and volume III, ground-water quality. This volume, III, presents ground-water quality data gathered from about 570 wells during the study.

INTRODUCTION

This report presents ground-water information collected and analyzed from July 1982 through August 1985 in the Columbia Plateau regional aquifer system of central and eastern Washington and north-central and northeastern Oregon (fig. 1). It is intended as a data report only, and any interpretive material herein has been published previously. The information was collected by the U.S. Geological Survey as part of its Regional Aquifer-System Analysis (RASA) program, to aid in the effective management of the region's important ground-water resources by providing information about the geohydrology and geochemistry of the aquifer system (Vaccaro, 1986a). Interpretive reports produced during this study are listed in the section Selected References.

The report consists of three volumes: volume I, geohydrology; volume II, ground-water levels; and volume III, ground-water quality. This volume presents ground-water quality data collected from about 570 selected wells in the Columbia Plateau regional aquifer system area during the period July 1982 through August 1985. Water samples from the Hanford area in north-central Benton County were also analyzed for various radiochemical constituents. The radiochemical data from these

and other well samples from the Hanford area are available in a report by Eddy and others (1983). The data in this volume are sorted by county, the counties are listed alphabetically, and wells within a county are listed in order of the local well numbers (township/range/section; see tables 1 and 2 at end of report). Many of the wells listed in the tables in this volume are also listed in volumes I and II. In particular, volume I gives the geohydrologic unit that contributes water to the wells presented in this report.

WELL-NUMBERING SYSTEM

Wells in Washington and Oregon are identified according to their location in the rectangular system used for the subdivision of public lands. The identification consists of the township number, north or south of the Willamette base line; the range number, east or west of the Willamette meridian; and the section number, numbered consecutively beginning with '1' in the northeast corner of the township-range, and progressing sinusoidally to '36' in the southeast corner as shown on figure 2.

In Washington, a section is further divided into sixteen 40-acre tracts called quarter-quarter sections. These 40-acre tracts are lettered consecutively (except for 'I' and 'O'), beginning with 'A' in the northeast corner of the section and progressing sinusoidally to 'R' in the southeast corner (fig. 2a). Within the 40-acre tract, each well is assigned a unique two-digit serial number.

In Oregon, a section is divided into sixty-four 10-acre tracts by first dividing the section into four 160-acre quarters, lettered consecutively 'a' through 'd', starting in the northeast corner and progressing counterclockwise. Each 160-acre quarter section is then divided into four 40-acre quarter-quarter sections, lettered 'a' through 'd' in the same manner as for the quarter sections. Each quarter-quarter section is then divided into four 10-acre tracts or quarter-quarter-quarter sections, which are also lettered 'a' through 'd' in the same manner used for the quarter and quarter-

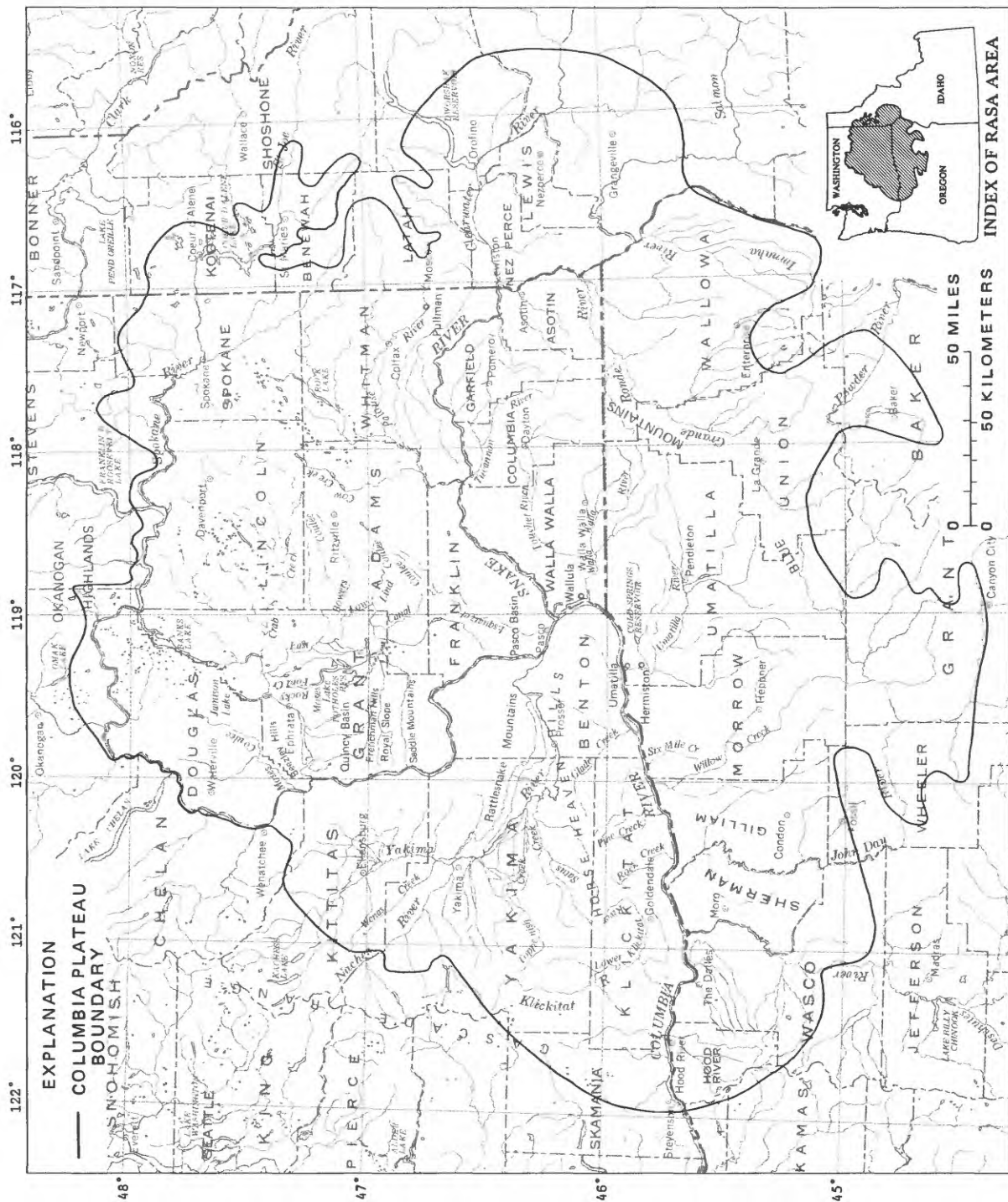
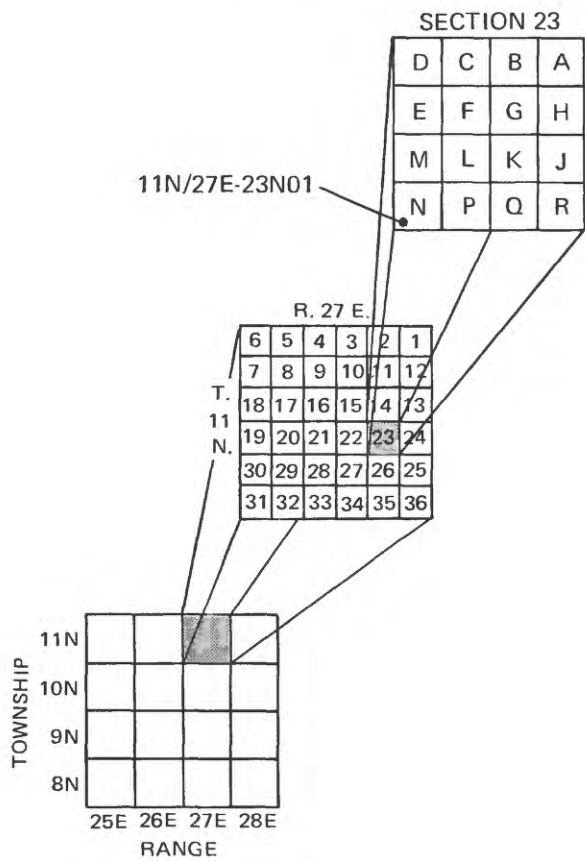


Figure 1.--Location of study area.

a. WASHINGTON



b. OREGON

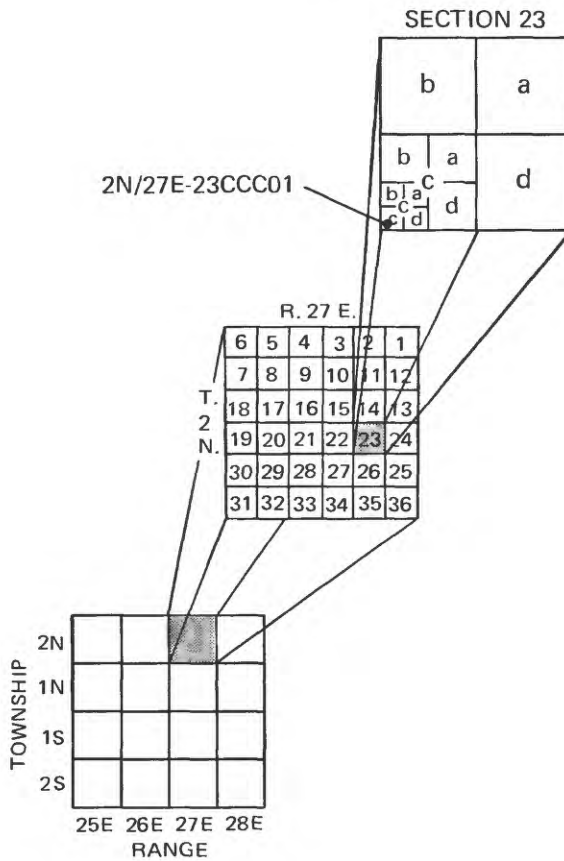


Figure 2.--Well-numbering system.

quarter sections. Where two or more wells are in the same 10-acre tract, a unique two-digit serial number is assigned to each well (fig. 2b).

For both States, the letter D and a one digit sequence number following the serial number indicate that a well has been deepened.

ACKNOWLEDGMENTS

The cooperation of the well owners, tenants, and well drillers who supplied information and allowed access to wells is gratefully acknowledged.

ORGANIZATION OF DATA TABLES

Table 1 lists all wells, by their local well number (see fig. 2), that have been sampled for analysis of the ground-water quality in the study area. The wells are also sorted by county. The depth of the well, the altitude of land surface, and the types of constituents analyzed are presented in table 1. The ground-water quality data are presented in tables 2, 3, and 4. Table 2 presents field data, and concentrations of major ions, nitrite plus nitrate, bacteria, boron, iron, magnesium, strontium, and lithium. Table 3 presents concentrations of trace elements. Table 4 presents concentrations of selected isotopes; these isotopes are the stable isotopes carbon-13, carbon-14, deuterium, and oxygen-18, and tritium.

METHODS OF ANALYSIS

The methods of water-quality analysis used by the U.S. Geological Survey to obtain the ground-water quality information listed in this volume are equivalent to or similar to those outlined by Fishman and Friedman (1989) or by other currently standard methods. Many of the terms used in the field of hydrology and water quality were defined by Hem (1985), Langbein and Iseri (1960), Lohman and others (1972), and the American Public Health Association and others (1989).

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Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985

[NO₂ + NO₃, nitrogen, nitrite plus nitrate, dissolved as N; bacteria, fecal coliform; Fe, iron; Mn, manganese; Sr, strontium; Li, lithium; --, no data]

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|----------------------------|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Adams County, Wash.</u> | | | | | |
| 15N/29E-04A02 | 1,210 | 1,050 | X | -- | X |
| 15N/30E-12L01 | 1,380 | 1,240 | X | -- | -- |
| 15N/31E-05L01 | 1,330 | 1,260 | X | -- | -- |
| 15N/31E-08J01D1 | 1,210 | 1,275 | X | -- | -- |
| 15N/31E-08N01 | 1,030 | 1,220 | X | -- | -- |
| 15N/31E-16D01 | 1,410 | 1,260 | X | -- | -- |
| 15N/31E-31R01 | 304 | 1,120 | X | -- | -- |
| 15N/32E-07J01 | 1,900 | 1,300 | X | -- | -- |
| 15N/32E-08E01 | 1,980 | 1,309 | X | -- | -- |
| 15N/33E-02A01 | 830 | 1,500 | X | -- | -- |
| 15N/33E-02A01D1 | 1,200 | 1,500 | X | -- | -- |
| 15N/33E-15N02 | 480 | 1,420 | X | -- | -- |
| 15N/35E-02D01 | 342 | 1,710 | X | -- | -- |
| 15N/36E-28N01D1 | 380 | 1,012 | X | -- | -- |
| 15N/36E-33A02 | 510 | 1,030 | X | -- | -- |
| 16N/28E-04B01 | 179 | 1,020 | X | -- | -- |
| 16N/28E-05N01 | 290 | 1,000 | X | -- | -- |
| 16N/29E-34D01 | 1,040 | 1,080 | X | -- | -- |
| 16N/30E-26A02D1 | 1,060 | 1,370 | X | -- | -- |
| 16N/31E-14K01 | 1,340 | 1,410 | X | -- | X |
| 16N/31E-33P01 | 540 | 1,300 | X | -- | X |
| 16N/32E-11D01D1 | 1,410 | 1,480 | X | -- | -- |
| 16N/32E-14D01 | 1,310 | 1,378 | X | -- | -- |
| 16N/32E-18G01D2 | 1,540 | 1,580 | X | -- | -- |
| 16N/33E-17B02 | 600 | 1,660 | X | -- | X |
| 16N/34E-13R02 | 400 | 1,700 | X | -- | -- |
| 16N/35E-31B01 | 620 | 1,575 | X | -- | -- |
| 16N/35E-32N01D1 | 1,100 | 1,583 | X | -- | -- |
| 16N/36E-06B02 | 560 | 1,690 | X | -- | -- |
| 16N/36E-11H01D1 | 200 | 1,560 | X | -- | X |
| 16N/38E-04B01D1 | 300 | 1,640 | X | -- | -- |
| 17N/31E-03B01 | 1,360 | 1,420 | X | -- | -- |
| 17N/31E-07E01 | 126 | 1,260 | X | -- | X |
| 17N/31E-11Q01 | 1,130 | 1,220 | X | -- | -- |
| 17N/31E-12D01 | 1,950 | 1,260 | X | -- | X |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---------------------------------------|---|---|---|----------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Adams County, Wash.--Continued</u> | | | | | |
| 17N/33E-06D03 | 1,200 | 1,775 | X | -- | -- |
| 17N/33E-12F02 | 1,020 | 1,540 | X | X | X |
| 17N/34E-23F01 | -- | 1,510 | X | X | -- |
| 17N/35E-11H01D2 | 349 | 1,645 | X | -- | -- |
| 17N/37E-21G01 | 755 | 1,620 | X | -- | -- |
| 17N/38E-02K01 | 140 | 1,620 | X | -- | -- |
| 18N/31E-07E01D1 | 1,170 | 1,360 | X | -- | -- |
| 18N/31E-13E01 | 982 | 1,390 | X | -- | -- |
| 18N/31E-32R01 | 1,260 | 1,335 | X | -- | -- |
| 18N/31E-33D01 | 2,400 | 1,420 | X | X | X |
| 18N/32E-16C02 | 280 | 1,420 | X | -- | -- |
| 18N/33E-12C02 | 500 | 1,820 | X | -- | -- |
| 18N/35E-04B01 | 180 | 1,750 | X | -- | -- |
| 18N/35E-11K01 | 747 | 1,840 | X | -- | -- |
| 18N/35E-12Q01 | 256 | 1,789 | X | -- | -- |
| 18N/37E-09C02 | 294 | 1,760 | X | -- | -- |
| 18N/38E-28N02 | 155 | 1,685 | X | -- | -- |
| 18N/38E-29D01 | -- | 1,645 | X | -- | -- |
| 19N/31E-14H02 | 630 | 1,425 | X | -- | -- |
| 19N/31E-24H01 | 1,060 | 1,480 | X | -- | X |
| 19N/31E-27G01D1 | 1,410 | 1,480 | X | -- | -- |
| 19N/32E-04H02 | 710 | 1,620 | X | -- | -- |
| 19N/32E-24N01 | 2,240 | 1,700 | X | -- | -- |
| 19N/33E-07R01 | 1,720 | 1,790 | X | -- | -- |
| 19N/33E-08Q02 | 2,430 | 1,840 | X | -- | X |
| 19N/34E-20B02 | 1,120 | 1,860 | X | -- | -- |
| 19N/36E-05B01 | 155 | 1,850 | X | -- | -- |
| 19N/36E-20H01D1 | 1,030 | 1,864 | X | X | -- |
| 19N/36E-21C01D1 | 1,280 | 1,810 | X | -- | -- |
| 19N/38E-14K02 | 200 | 1,790 | X | -- | -- |
| 20N/31E-07H02 | 800 | 1,590 | X | -- | -- |
| 20N/31E-31A03 | 620 | 1,440 | X | -- | -- |
| 20N/32E-15D02 | 220 | 1,600 | X | -- | X |
| 20N/32E-15L01D2 | 1,040 | 1,711 | X | -- | -- |
| 20N/33E-16E03 | 310 | 1,670 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---------------------------------------|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Adams County, Wash.--Continued</u> | | | | | |
| 20N/33E-16E06 | 704 | 1,670 | X | -- | -- |
| 20N/34E-13R01 | 340 | 1,930 | X | -- | X |
| 20N/35E-27A01 | 1,260 | 2,000 | X | -- | -- |
| 20N/35E-34M02 | 320 | 1,880 | X | -- | -- |
| 20N/37E-32D01 | 180 | 2,000 | X | -- | -- |
| <u>Asotin County, Wash.</u> | | | | | |
| 08N/45E-29H01 | 180 | 1,620 | X | -- | -- |
| 08N/45E-35B01 | 164 | 3,620 | X | -- | -- |
| 10N/45E-02P01 | 205 | 1,520 | X | -- | -- |
| 10N/46E-20A02 | 225 | 800 | X | X | -- |
| 10N/46E-21D01 | 539 | 800 | X | -- | -- |
| 11N/45E-20K01D1 | 190 | 759 | X | -- | -- |
| 11N/46E-32E01 | 1340 | 1,180 | X | X | X |
| <u>Benton County, Wash.</u> | | | | | |
| 05N/24E-28G01 | 264 | 500 | X | -- | X |
| 05N/24E-35R02 | 398 | 295 | X | -- | -- |
| 05N/25E-22M01 | 336 | 400 | X | -- | X |
| 05N/26E-05N01D1 | 525 | 435 | X | X | X |
| 06N/24E-23N01 | 220 | 610 | X | -- | X |
| 06N/26E-19K01 | 345 | 650 | X | -- | X |
| 07N/24E-26B01 | 532 | 870 | X | -- | -- |
| 07N/25E-12R01 | 446 | 960 | X | -- | -- |
| 07N/25E-36N06 | 860 | 740 | X | X | X |
| 07N/26E-04E01 | 300 | 1,140 | X | -- | X |
| 07N/26E-05B02D1 | 1,070 | 1,140 | X | -- | X |
| 07N/27E-29Q01 | 325 | 1,150 | X | -- | X |
| 08N/24E-01J01 | 1,260 | 735 | X | -- | -- |
| 08N/24E-15F01 | 410 | 1,200 | X | -- | -- |
| 08N/27E-01A01D1 | 155 | 670 | X | -- | -- |
| 08N/27E-01K01 | 510 | 770 | X | -- | -- |
| 08N/28E-07P01 | 435 | 720 | X | -- | -- |
| 08N/29E-17G01D1 | 430 | 760 | X | -- | -- |
| 08N/29E-17G02 | 245 | 760 | X | X | -- |
| 08N/30E-07G04 | 66 | 380 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|--|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Benton County, Wash.--Continued</u> | | | | | |
| 08N/30E-17D02 | 62 | 400 | X | -- | -- |
| 08N/30E-19M01 | 330 | 570 | X | -- | -- |
| 08N/30E-22M02 | 30 | 360 | X | -- | -- |
| 09N/24E-04H01 | 320 | 1,200 | X | -- | -- |
| 09N/25E-33B01 | 715 | 660 | X | -- | -- |
| 09N/26E-12N01 | 130 | 590 | X | -- | -- |
| 09N/27E-07D01 | 360 | 600 | X | X | -- |
| 09N/27E-21D01 | 825 | 720 | X | -- | -- |
| 09N/28E-04G01 | 314 | 370 | X | -- | -- |
| 09N/28E-06A02 | 90 | 460 | X | -- | -- |
| 09N/28E-17A01 | 1,100 | 560 | X | X | -- |
| 09N/28E-27K01 | 525 | 620 | X | -- | -- |
| 09N/29E-33M01 | 292 | 510 | X | -- | -- |
| 10N/24E-31P01 | 359 | 1,100 | X | -- | -- |
| 10N/26E-28L02 | 925 | 1,280 | X | -- | -- |
| 10N/27E-29R02 | 330 | 570 | X | -- | -- |
| 10N/28E-14C02 | 80 | 400 | X | X | X |
| 12N/24E-30B01 | 1,280 | 1,100 | X | -- | -- |
| 13N/24E-27M04 | 970 | 1,160 | X | -- | -- |
| <u>Chelan County, Wash.</u> | | | | | |
| 21N/21E-34A01 | 52 | 1,780 | X | -- | -- |
| 21N/22E-19K02 | 98 | 960 | X | -- | -- |
| <u>Columbia County, Wash.</u> | | | | | |
| 10N/39E-20G01 | 50 | 1,680 | X | -- | -- |
| 10N/39E-31M01 | 460 | 1,920 | X | -- | -- |
| 10N/39E-32C01 | 484 | 1,660 | X | -- | -- |
| 10N/39E-32F01 | 1,440 | 1,660 | X | X | X |
| 12N/39E-10P01 | 395 | 1,040 | X | -- | -- |
| 13N/38E-27L02 | 399 | 607 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|-------------------------------|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Douglas County, Wash.</u> | | | | | |
| 21N/22E-12G01D1 | 767 | 840 | X | -- | -- |
| 23N/24E-09E01 | 625 | 2,160 | X | -- | -- |
| 23N/26E-20D03 | 940 | 1,920 | X | -- | -- |
| 24N/21E-13A03 | 475 | 4,080 | X | -- | -- |
| 24N/25E-18E01 | 515 | 2,480 | X | X | -- |
| 24N/26E-06H01 | 205 | 2,400 | X | X | X |
| 25N/22E-21H01D1 | 615 | 2,640 | X | -- | X |
| 25N/25E-20Q01 | 640 | 2,260 | X | -- | -- |
| 26N/22E-25N01 | 325 | 2,850 | X | -- | -- |
| 26N/27E-17R01 | 80 | 2,200 | X | -- | -- |
| <u>Franklin County, Wash.</u> | | | | | |
| 09N/29E-02G02 | 470 | 460 | X | -- | -- |
| 09N/30E-02R01 | 211 | 520 | X | X | -- |
| 10N/28E-12F01 | 196 | 500 | X | -- | -- |
| 10N/29E-25G01 | 81 | 480 | X | -- | |
| 10N/30E-03J01 | 230 | 630 | X | | X |
| 10N/30E-35R01 | 127 | 520 | X | -- | -- |
| 10N/31E-09D01 | 310 | 540 | X | -- | -- |
| 10N/31E-32L02 | 350 | 540 | X | -- | -- |
| 10N/32E-03R01 | 540 | 860 | X | -- | -- |
| 10N/32E-23J01 | 300 | 560 | X | -- | -- |
| 11N/29E-03H01 | 552 | 915 | X | -- | |
| 11N/29E-31N01 | 746 | 850 | X | -- | -- |
| 11N/30E-02R01 | 124 | 600 | X | -- | -- |
| 11N/30E-12D01 | 410 | 630 | X | -- | -- |
| 11N/30E-36M01 | 237 | 720 | X | -- | -- |
| 11N/31E-04P01 | 1,310 | 850 | X | -- | -- |
| 12N/28E-23H01D1 | 413 | 400 | X | -- | -- |
| 12N/29E-34B01D1 | 997 | 920 | X | -- | -- |
| 12N/30E-05B01 | 457 | 920 | X | -- | X |
| 13N/28E-13N01 | 1,120 | 953 | X | | |
| 13N/29E-08H01 | 453 | 1,000 | X | X | X |
| 13N/30E-31N01 | 235 | 900 | X | -- | -- |
| 13N/31E-01E01 | 1,320 | 860 | X | X | X |
| 13N/32E-03C01 | 300 | 790 | X | -- | X |
| 13N/32E-07E02 | 652 | 1,070 | X | X | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|--|---|---|---|----------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Franklin County, Wash.--Continued</u> | | | | | |
| 13N/33E-06M01D1 | 380 | 775 | X | -- | -- |
| 14N/29E-05A01 | 305 | 1,110 | X | -- | X |
| 14N/29E-19Q01 | 420 | 1,090 | X | -- | -- |
| 14N/30E-10P01 | 433 | 1,016 | X | -- | -- |
| 14N/31E-19B01 | 320 | 1,115 | X | -- | -- |
| 14N/34E-25P01D1 | 220 | 1,000 | X | -- | -- |
| 14N/36E-19N01 | 940 | 1,360 | X | -- | -- |
| <u>Garfield County, Wash.</u> | | | | | |
| 11N/41E-24E01 | 140 | 2,180 | X | -- | -- |
| 11N/42E-05C01 | 347 | 1,920 | X | X | X |
| 11N/43E-16H01 | 575 | 2,780 | X | -- | -- |
| 12N/42E-33Q01 | 130 | 1,980 | X | -- | -- |
| 12N/42E-34R01 | 57 | 2,060 | X | -- | -- |
| 13N/40E-14C01 | 250 | 660 | X | -- | X |
| 14N/41E-34K01 | 105 | 1,380 | X | -- | X |
| 14N/43E-32C01 | 220 | 656 | X | -- | -- |
| 14N/43E-33M01 | 340 | 749 | X | -- | -- |
| <u>Gilliam County, Oreg.</u> | | | | | |
| 01N/21E-12CCD1 | 1,090 | 1,090 | X | -- | -- |
| 01N/22E-08ABD | 590 | 690 | X | -- | -- |
| 03N/21E-28BBB | 644 | 300 | X | -- | -- |
| <u>Grant County, Wash.</u> | | | | | |
| 14N/23E-13D01 | 970 | 740 | X | -- | -- |
| 14N/23E-26A01D1 | 412 | 640 | X | -- | -- |
| 14N/23E-36L02 | 236 | 560 | X | -- | -- |
| 14N/25E-02C01 | 445 | 680 | X | -- | -- |
| 15N/23E-35J01 | 424 | 780 | X | -- | -- |
| 15N/23E-35P01 | 993 | 750 | X | -- | -- |
| 15N/25E-35H01 | 420 | 720 | X | -- | -- |
| 16N/23E-21J01 | 173 | 530 | X | -- | -- |
| 16N/24E-04H01 | 811 | 1,230 | X | -- | -- |
| 16N/25E-01Q01 | 907 | 1,040 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---------------------------------------|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Grant County, Wash.--Continued</u> | | | | | |
| 16N/25E-04N01 | 70 | 1,180 | X | X | -- |
| 16N/27E-10N01 | 250 | 960 | X | -- | -- |
| 17N/23E-02B01 | 364 | 1,500 | X | -- | X |
| 17N/23E-23A01D1 | 905 | 1,260 | X | -- | X |
| 17N/24E-22L01 | 280 | 1,230 | X | -- | -- |
| 17N/26E-18H01 | 310 | 1,187 | X | -- | -- |
| 17N/27E-31D01 | 810 | 1,170 | X | -- | -- |
| 17N/29E-24C01 | 210 | 1,270 | X | -- | -- |
| 17N/30E-33K01 | 1000 | 1,344 | X | -- | -- |
| 18N/23E-36H01 | 669 | 1,302 | X | | X |
| 18N/24E-04D02 | 280 | 1,200 | X | -- | -- |
| 18N/25E-08C01 | 120 | 1,165 | X | X | -- |
| 18N/26E-32C01 | 450 | 1,130 | X | X | -- |
| 18N/26E-34K01 | 66 | 1,125 | X | X | -- |
| 18N/28E-26F01 | 801 | 1,110 | X | -- | X |
| 18N/29E-01A02 | 510 | 1,274 | X | -- | -- |
| 18N/29E-02A01 | 270 | 1,250 | X | X | -- |
| 18N/30E-16R01 | 185 | 1,206 | X | -- | X |
| 19N/23E-22M01 | 111 | 1,276 | X | -- | -- |
| 19N/25E-08A01 | 722 | 1,225 | X | -- | -- |
| 19N/26E-25D01 | 140 | 1,225 | X | -- | -- |
| 19N/26E-36E01 | 515 | 1,230 | X | -- | -- |
| 19N/27E-24H02 | 96 | 1,060 | X | -- | -- |
| 19N/27E-30N01 | 460 | 1,220 | X | -- | -- |
| 19N/29E-03B01 | 1,200 | 1,340 | X | -- | -- |
| 19N/29E-08L01 | 273 | 1,220 | X | -- | -- |
| 19N/30E-03E01 | 1,100 | 1,460 | X | -- | -- |
| 19N/30E-07L01 | 930 | 1,420 | X | -- | -- |
| 19N/30E-15L01 | 1,180 | 1,440 | X | -- | -- |
| 19N/30E-33B01 | 245 | 1,270 | X | -- | -- |
| 20N/23E-16D01 | 238 | 1,480 | X | -- | -- |
| 20N/25E-14K01 | 59 | 1,220 | X | -- | -- |
| 20N/25E-17Q01 | 158 | 1,190 | X | -- | -- |
| 20N/26E-26J01 | 527 | 1,260 | X | -- | -- |
| 20N/28E-11R01 | 110 | 1,250 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---------------------------------------|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Grant County, Wash.--Continued</u> | | | | | |
| 20N/28E-32H01 | 712 | 1,187 | X | -- | -- |
| 20N/29E-01A01 | 1,360 | 1,460 | X | -- | X |
| 20N/29E-33R01 | 112 | 1,280 | X | -- | -- |
| 21N/26E-15H01 | 1,850 | 1,330 | X | X | X |
| 21N/26E-28A01 | 65 | 1,240 | X | X | -- |
| 21N/28E-19F02 | 115 | 1,155 | X | -- | X |
| 21N/28E-36R01 | 138 | 1,280 | X | -- | -- |
| 21N/30E-03E02 | 1,340 | 1,670 | X | X | -- |
| 21N/30E-23J01D1 | 1,330 | 1,680 | X | -- | X |
| 22N/26E-04C02 | 105 | 2,240 | X | | |
| 22N/26E-36B01 | 451 | 1,215 | X | -- | -- |
| 22N/27E-22H01 | 345 | 1,200 | X | -- | -- |
| 23N/27E-10B01 | 830 | 1,860 | X | -- | -- |
| 23N/29E-16E01 | 935 | 1,590 | X | -- | -- |
| 24N/28E-03B01 | 550 | 1,610 | X | -- | -- |
| 24N/29E-27P01 | 242 | 1,810 | X | -- | -- |
| 25N/30E-05L01 | 220 | 1,890 | X | -- | -- |
| <u>Kittitas County, Wash.</u> | | | | | |
| 15N/19E-22R01 | 1,280 | 1,480 | X | -- | -- |
| 15N/20E-15R01 | 425 | 2,000 | X | -- | -- |
| 16N/20E-07Q01 | 543 | 2,100 | X | -- | -- |
| 16N/20E-32N01 | 580 | 2,040 | X | -- | -- |
| 17N/18E-04B01 | 150 | 1,580 | X | -- | -- |
| 17N/18E-11E01 | 750 | 1,490 | X | -- | -- |
| 17N/19E-05M01 | 69 | 1,590 | X | X | -- |
| 17N/19E-11M01 | 145 | 1,590 | X | -- | -- |
| 17N/19E-32N01 | 715 | 1,900 | X | -- | -- |
| 17N/20E-05K01 | 450 | 1,960 | X | -- | X |
| 17N/20E-16J01 | 127 | 1,900 | X | -- | -- |
| 17N/21E-21L01 | 631 | 2,500 | X | -- | -- |
| 17N/22E-23K01 | 310 | 1,080 | X | -- | -- |
| 17N/23E-30H01 | 200 | 640 | X | -- | -- |
| 18N/17E-26P01 | 340 | 1,960 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|--|---|---|---|----------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Kittitas County, Wash.--Continued</u> | | | | | |
| 18N/18E-26F01 | 132 | 1,660 | X | -- | -- |
| 18N/18E-28C01 | 57 | 1,570 | X | -- | -- |
| 18N/20E-06B01 | 380 | 2,500 | X | -- | -- |
| 18N/20E-27A01 | 465 | 2,280 | X | -- | -- |
| 19N/16E-23Q01D1 | 585 | 2,320 | X | -- | -- |
| 19N/16E-25B01 | 464 | 2,240 | X | -- | -- |
| 19N/16E-25C02 | 500 | 2,240 | X | -- | -- |
| 19N/17E-27N01 | 341 | 1,840 | X | -- | -- |
| 19N/18E-21A01 | 700 | 2,400 | X | -- | -- |
| 20N/13E-11C01 | 65 | 2,160 | X | X | -- |
| 20N/14E-10A03 | 167 | 2,240 | X | -- | -- |
| 20N/14E-27J02 | 290 | 2,080 | X | -- | -- |
| 20N/15E-34N01 | 198 | 1,960 | X | | |
| <u>Klickitat County, Wash.</u> | | | | | |
| 02N/12E-03G01 | 340 | 100 | X | -- | -- |
| 02N/12E-03H01 | 175 | 120 | X | -- | -- |
| 02N/15E-18A01D1 | 300 | 560 | X | -- | -- |
| 03N/11E-05N03 | 420 | 1,640 | X | -- | -- |
| 03N/11E-30H01 | 423 | 120 | X | -- | -- |
| 03N/12E-16Q01 | 235 | 1,240 | X | -- | -- |
| 03N/13E-31L01 | 340 | 1,160 | X | -- | -- |
| 03N/15E-11N01 | 100 | 1,600 | X | X | -- |
| 03N/15E-28P01 | 311 | 1,640 | X | -- | -- |
| 03N/16E-09C01 | 225 | 1,640 | X | -- | -- |
| 03N/17E-20H01 | 1,130 | 500 | X | -- | -- |
| 03N/21E-09N01D1 | 201 | 307 | X | X | X |
| 04N/11E-23P01 | 82 | 2,040 | X | -- | -- |
| 04N/12E-22P01 | 400 | 2,480 | X | -- | -- |
| 04N/13E-22Q01 | 143 | 480 | X | -- | -- |
| 04N/14E-01B01D2 | 700 | 1,640 | X | -- | -- |
| 04N/15E-05A02 | 280 | 1,720 | X | -- | -- |
| 04N/15E-15G01 | 295 | 1,640 | X | -- | -- |
| 04N/16E-11D03D1 | 1,080 | 1,920 | X | -- | -- |
| 04N/16E-17H03 | 305 | 1,680 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Klickitat County, Wash.--Continued</u> | | | | | |
| 04N/16E-32A01 | 102 | 1,720 | X | -- | -- |
| 04N/18E-17D01 | 352 | 1,840 | X | -- | -- |
| 05N/13E-01H01 | 297 | 1,200 | X | -- | -- |
| 05N/13E-26R01 | 103 | 2,280 | X | -- | -- |
| 05N/15E-15A01 | 362 | 2,320 | X | -- | -- |
| 05N/16E-27M02 | 380 | 2,200 | X | -- | -- |
| 05N/18E-29F01 | 530 | 2,320 | X | -- | -- |
| 05N/20E-28B01 | 330 | 2,500 | X | -- | -- |
| 05N/22E-27P02D1 | 812 | 1,120 | X | -- | -- |
| 05N/23E-13R02D1 | 1,450 | 580 | X | -- | X |
| 05N/23E-30D01 | 843 | 900 | X | X | X |
| 06N/11E-31R01 | 223 | 1,640 | X | -- | -- |
| 06N/12E-35Q01 | 202 | 1,920 | X | -- | -- |
| 06N/20E-22G01 | 172 | 2,960 | X | -- | -- |
| 06N/20E-30P01 | 120 | 3,090 | X | X | X |
| 06N/23E-24B01 | 965 | 870 | X | X | X |
| <u>Lincoln County, Wash.</u> | | | | | |
| 21N/32E-12H01D1 | 225 | 1,540 | X | -- | -- |
| 21N/32E-31C01 | 744 | 1,815 | X | -- | -- |
| 21N/33E-08K01 | 595 | 1,690 | X | -- | -- |
| 21N/33E-24B01 | 120 | 1,665 | X | -- | -- |
| 21N/34E-14M01 | 150 | 1,620 | X | -- | -- |
| 21N/34E-21K01 | 737 | 1,940 | X | -- | -- |
| 21N/34E-35A01 | 337 | 1,980 | X | -- | -- |
| 21N/36E-27P02 | 200 | 1,920 | X | -- | -- |
| 21N/38E-14E01 | 353 | 2,180 | X | -- | -- |
| 21N/38E-14J01 | 178 | 2,010 | X | -- | X |
| 21N/38E-23L01 | 502 | 1,920 | X | -- | X |
| 22N/31E-21F01 | 100 | 1,330 | X | -- | -- |
| 22N/32E-30D01 | 505 | 1,670 | X | -- | -- |
| 22N/33E-02K01 | 165 | 1,930 | X | -- | -- |
| 22N/33E-17N01 | 615 | 1,920 | X | -- | -- |
| 22N/34E-18M01 | 45 | 1,790 | X | -- | -- |
| 22N/35E-13H01 | 67 | 1,990 | X | -- | -- |
| 22N/35E-23E01D1 | 346 | 1,920 | X | X | X |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---|---|---|---|----------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Lincoln County, Wash.--Continued</u> | | | | | |
| 22N/36E-18N02D1 | 212 | 2,040 | X | -- | -- |
| 22N/36E-20A01 | 400 | 2,180 | X | -- | -- |
| 22N/37E-12C02D1 | 510 | 2,190 | X | -- | -- |
| 22N/38E-02D01D1 | 300 | 2,260 | X | -- | -- |
| 22N/39E-36H01 | 154 | 2,040 | X | -- | -- |
| 23N/31E-33E01 | 685 | 1,720 | X | X | X |
| 23N/33E-10A01 | 146 | 2,080 | X | -- | -- |
| 23N/35E-03H01D1 | 445 | 2,320 | X | -- | -- |
| 23N/35E-30F01 | 240 | 2,110 | X | -- | -- |
| 23N/36E-13N01 | 247 | 2,300 | X | -- | -- |
| 23N/37E-29F01 | 213 | 2,180 | X | -- | -- |
| 23N/38E-12A01 | 100 | 2,340 | X | -- | -- |
| 23N/39E-04B01 | 300 | 2,400 | X | -- | -- |
| 24N/31E-14E01 | 250 | 2,000 | X | -- | X |
| 24N/33E-06Q01 | 185 | 2,040 | X | -- | -- |
| 24N/33E-18H01 | 350 | 1,990 | X | -- | -- |
| 24N/34E-23L01 | 596 | 2,250 | X | -- | -- |
| 24N/36E-03D01 | 125 | 2,380 | X | -- | -- |
| 24N/36E-16A02 | 160 | 2,370 | X | -- | -- |
| 24N/36E-16A03 | 224 | 2,370 | X | X | -- |
| 24N/36E-16A04 | 261 | 2,370 | X | -- | -- |
| 24N/36E-16A05 | 365 | 2,370 | X | -- | -- |
| 24N/36E-16A07 | 635 | 2,370 | X | X | -- |
| 24N/36E-16A08 | 750 | 2,370 | X | | |
| 24N/37E-06Q01 | 165 | 2,370 | X | -- | -- |
| 24N/38E-02D01 | 85 | 2,400 | X | -- | -- |
| 24N/39E-26K01 | 100 | 2,440 | X | -- | -- |
| 25N/32E-17K01 | 300 | 2,060 | X | -- | -- |
| 25N/32E-35P01 | 1140 | 2,140 | X | -- | X |
| 25N/33E-01B01 | 60 | 2,280 | X | -- | -- |
| 25N/33E-27A01 | 850 | 2,320 | X | -- | X |
| 25N/35E-03E01D1 | 200 | 2,350 | X | -- | X |
| 25N/35E-20D01 | 410 | 2,250 | X | | |
| 25N/36E-27Q01 | 324 | 2,368 | X | -- | -- |
| 25N/37E-21L04 | 975 | 2,420 | X | -- | X |
| 25N/37E-27E01 | 100 | 2,420 | X | -- | X |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Lincoln County, Wash.--Continued</u> | | | | | |
| 25N/38E-15N01 | 121 | 2,480 | X | -- | -- |
| 26N/32E-26D01 | 166 | 2,060 | X | | X |
| 26N/33E-07E01 | 154 | 2,160 | X | -- | -- |
| 26N/33E-19D01 | 233 | 2,180 | X | -- | -- |
| 28N/37E-29L01 | 189 | 1,297 | X | -- | -- |
| <u>Morrow County, Oreg.</u> | | | | | |
| 01N/25E-10CDD | 227 | 1,000 | X | -- | -- |
| 01N/26E-05BBA | 1,500 | 1,110 | X | -- | -- |
| 01N/27E-05CCB | 892 | 1,280 | X | -- | -- |
| 01S/24E-03CDB | 675 | 1,100 | X | -- | -- |
| 03S/28E-07CAD | 422 | 2,700 | X | X | X |
| 04N/24E-14DAC | -- | 310 | X | X | -- |
| 04N/25E-10BDC | 685 | 280 | X | -- | X |
| 04N/25E-13ADA | 555 | 380 | X | -- | -- |
| <u>Sherman County, Oreg.</u> | | | | | |
| 01N/17E-04CAA | 712 | 1,320 | X | -- | -- |
| 01S/17E-18ADD | 605 | 1,790 | X | -- | |
| 03N/17E-28DDB1 | 458 | 200 | X | -- | |
| 04S/15E-11DCB1 | 711 | 2,310 | X | -- | -- |
| <u>Spokane County, Wash.</u> | | | | | |
| 21N/40E-27R01 | 400 | 2,180 | X | -- | -- |
| 21N/41E-02Q01 | 450 | 2,280 | X | -- | -- |
| 21N/43E-07G01 | 225 | 2,540 | X | -- | -- |
| 22N/41E-18Q01D1 | 196 | 2,260 | X | -- | -- |
| 22N/43E-04F02 | 566 | 2,420 | X | -- | |
| 23N/40E-32R01D1 | 160 | 2,300 | X | -- | -- |
| 23N/41E-04C01 | 100 | 2,390 | X | -- | -- |
| 23N/41E-24P02D1 | 300 | 2,300 | X | -- | -- |
| 23N/42E-22H01 | 52 | 2,340 | X | -- | -- |
| 23N/43E-06G01 | 125 | 2,410 | X | -- | -- |
| 23N/43E-30R03 | 360 | 2,400 | X | -- | -- |
| 24N/40E-05Q01 | 50 | 2,400 | X | -- | -- |
| 24N/41E-01J02 | 60 | 2,390 | X | -- | -- |
| 24N/41E-14D01 | 775 | 2,410 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---|---|---|---|----------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Spokane County, Wash.--Continued</u> | | | | | |
| 24N/42E-02E02 | 100 | 2,320 | X | -- | -- |
| 24N/42E-09Q03 | 325 | 2,350 | X | -- | -- |
| <u>Umatilla County, Oreg.</u> | | | | | |
| 01S/32E-09BBA | 1500 | 1,560 | X | X | X |
| 02N/28E-01DBB | 640 | 930 | X | -- | -- |
| 02N/28E-10ABD | 908 | 930 | X | -- | -- |
| 02N/32E-10CCD | 1,010 | 1,080 | X | -- | -- |
| 02N/33E-14DAC | 800 | 1,470 | X | -- | -- |
| 03N/28E-06DCC | 1,140 | 670 | X | -- | -- |
| 03N/28E-35BAA | 1,250 | 770 | X | -- | -- |
| 03N/29E-20BBB | 300 | 690 | X | -- | -- |
| 04N/28E-11BAB | 1,040 | 445 | X | -- | X |
| 04N/30E-28CBB | 665 | 805 | X | -- | -- |
| 04N/35E-19CDA | 1,280 | 1,720 | X | -- | -- |
| 05N/28E-16ADD | 1,130 | 455 | X | X | X |
| <u>Union County, Oreg.</u> | | | | | |
| 01S/38E-24DDC1 | 1,150 | 2,750 | X | -- | -- |
| 01S/39E-09CDC1 | 1,460 | 2,710 | X | -- | -- |
| 03S/38E-05CBA1 | 1,540 | 2,775 | X | -- | -- |
| 04S/40E-19BAA1 | 1,200 | 2,793 | X | -- | -- |
| <u>Walla Walla County, Wash.</u> | | | | | |
| 06N/31E-04P01 | 96 | 350 | X | -- | -- |
| 06N/32E-01Q01D1 | 1,150 | 450 | X | -- | -- |
| 06N/33E-03R01 | 170 | 480 | X | -- | -- |
| 06N/33E-08P01 | 325 | 563 | X | X | -- |
| 06N/34E-07R01 | 1,660 | 520 | X | -- | -- |
| 06N/36E-04A03 | 190 | 980 | X | -- | -- |
| 06N/36E-07E02 | 605 | 820 | X | -- | -- |
| 07N/31E-10R01 | 84 | 380 | X | -- | -- |
| 07N/32E-07D01 | 400 | 590 | X | -- | -- |
| 07N/33E-35G01 | 100 | 450 | X | X | -- |
| 07N/34E-21M03 | 675 | 530 | X | -- | -- |
| 07N/34E-36B02 | 145 | 585 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Walla Walla County, Wash.--Continued</u> | | | | | |
| 07N/35E-31B01 | 1,100 | 650 | X | -- | -- |
| 07N/35E-32H02 | 170 | 650 | X | -- | -- |
| 07N/35E-33H03 | 802 | 690 | X | -- | -- |
| 07N/35E-35C01 | 210 | 770 | X | X | -- |
| 07N/36E-10B01 | 930 | 1,140 | X | | |
| 07N/36E-27N04 | 122 | 1,040 | X | -- | -- |
| 07N/36E-30R01 | 270 | 900 | X | -- | -- |
| 08N/30E-01N01 | 58 | 390 | X | X | -- |
| 08N/30E-11A01 | 298 | 380 | X | -- | -- |
| 08N/31E-21R01 | 125 | 370 | X | -- | -- |
| 08N/36E-21N01 | 703 | 940 | X | -- | -- |
| 09N/30E-35R01 | 56 | 350 | X | -- | -- |
| 09N/31E-34P01 | 243 | 500 | X | -- | -- |
| 09N/32E-20F01 | 175 | 570 | X | -- | -- |
| 09N/37E-11P01 | 342 | 1,280 | X | -- | -- |
| <u>Wallowa County, Oreg.</u> | | | | | |
| 01N/42E-11CAC1 | 208 | 2,900 | X | -- | -- |
| 02S/44E-03ACD1 | 942 | 3,720 | X | -- | -- |
| 03N/46E-14ADA1 | 100 | 3,760 | X | -- | -- |
| 05N/43E-03BBC1 | 110 | 1,620 | X | -- | -- |
| <u>Wasco County, Oreg.</u> | | | | | |
| 01N/12E-28DCD1 | 1,000 | 972 | X | -- | -- |
| 01S/13E-34ABC1 | 560 | 1,380 | X | -- | -- |
| 02S/12E-15DAB1 | 728 | 1,940 | X | -- | -- |
| <u>Whitman County, Wash.</u> | | | | | |
| 11N/45E-17E01 | 225 | 840 | X | -- | -- |
| 11N/46E-19D01 | 530 | 800 | X | -- | -- |
| 13N/37E-15A01 | 850 | 1,240 | X | -- | -- |
| 13N/38E-28K01 | 165 | 591 | X | -- | -- |
| 13N/39E-07E01 | 630 | 1,440 | X | -- | -- |
| 13N/40E-03E01 | 279 | 720 | X | -- | -- |
| 13N/43E-02M01 | 250 | 780 | X | -- | -- |
| 13N/45E-03P01 | 120 | 2,640 | X | -- | -- |
| 14N/39E-12G01 | 604 | 1,360 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---|---|---|---|----------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Whitman County, Wash.--Continued</u> | | | | | |
| 14N/39E-14B01 | 92 | 1,280 | X | -- | -- |
| 14N/40E-22D02 | 610 | 1,680 | X | -- | -- |
| 14N/42E-04F01 | 60 | 1,760 | X | -- | -- |
| 14N/42E-13B01 | 90 | 660 | X | -- | -- |
| 14N/43E-24R01 | 162 | 2,320 | X | -- | -- |
| 14N/44E-14P02 | 432 | 2,580 | X | X | -- |
| 14N/45E-04D01 | 702 | 2,536 | X | -- | -- |
| 14N/45E-05D03 | 167 | 2,342 | X | X | -- |
| 14N/45E-08E01 | 712 | 2,442 | X | -- | -- |
| 14N/46E-05B01 | 338 | 2,520 | X | -- | -- |
| 14N/46E-19M01 | 80 | 2,481 | X | -- | -- |
| 15N/40E-19K01 | 250 | 1,560 | X | -- | -- |
| 15N/43E-09P01 | 207 | 1,935 | X | -- | -- |
| 15N/43E-13H01 | 112 | 2,400 | X | -- | -- |
| 15N/45E-07R03 | 242 | 2,550 | X | -- | -- |
| 15N/45E-29G03 | 400 | 2,480 | X | -- | -- |
| 15N/45E-32N02 | 954 | 2,356 | X | -- | -- |
| 16N/39E-22J01 | 400 | 1,500 | X | -- | -- |
| 16N/41E-16K01 | 90 | 1,780 | X | -- | -- |
| 16N/42E-28M01 | 185 | 1,740 | X | | |
| 16N/42E-34L01 | 141 | 1,840 | X | -- | -- |
| 16N/43E-14N02 | 750 | 2,114 | X | -- | -- |
| 16N/43E-17A01 | 120 | 2,190 | X | -- | -- |
| 16N/44E-26J01 | 125 | 2,550 | X | -- | -- |
| 16N/45E-16F01 | 170 | 2,610 | X | -- | -- |
| 17N/40E-20K01 | 60 | 1,520 | X | -- | -- |
| 17N/41E-09E01 | 95 | 1,600 | X | -- | -- |
| 17N/41E-30R01 | 175 | 1,760 | X | -- | -- |
| 17N/42E-01F01 | 199 | 2,260 | X | -- | -- |
| 17N/43E-29N01 | 207 | 1,950 | X | -- | -- |
| 17N/44E-11L01 | 88 | 2,200 | X | -- | -- |
| 17N/45E-04C01 | 380 | 2,490 | X | -- | -- |
| 18N/41E-04E01 | 119 | 2,040 | X | -- | -- |
| 18N/42E-23B01 | 225 | 2,320 | X | -- | -- |
| 18N/43E-32B01 | 85 | 2,280 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|---|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Whitman County, Wash.--Continued</u> | | | | | |
| 18N/43E-35P03 | 425 | 2,320 | X | -- | -- |
| 19N/40E-02B01 | 421 | 2,070 | X | -- | -- |
| 19N/41E-36Q02D1 | 480 | 1,960 | X | -- | -- |
| 19N/42E-15B01 | 185 | 2,240 | X | -- | X |
| 19N/42E-19H01 | 500 | 2,180 | X | -- | -- |
| 19N/44E-21M01 | 325 | 2,520 | X | -- | -- |
| 19N/44E-22F01 | 280 | 2,520 | X | -- | -- |
| 20N/39E-12N02 | 284 | 2,120 | X | -- | -- |
| 20N/39E-32A01D1 | 363 | 1,940 | X | -- | -- |
| 20N/42E-19J01 | 241 | 2,020 | X | -- | -- |
| 20N/43E-10R01 | 308 | 2,220 | X | -- | X |
| 20N/44E-12M01 | 145 | 2,460 | X | -- | -- |
| <u>Yakima County, Wash.</u> | | | | | |
| 07N/22E-09E01 | 297 | 1,985 | X | X | X |
| 07N/22E-36H01 | 304 | 1,725 | X | -- | -- |
| 07N/23E-36R01 | 805 | 940 | X | -- | -- |
| 08N/22E-01G03 | 1,000 | 720 | X | -- | -- |
| 08N/22E-03K01 | 189 | 768 | X | -- | -- |
| 08N/22E-12N01 | 500 | 780 | X | X | -- |
| 08N/23E-11M01D1 | 120 | 700 | X | -- | -- |
| 09N/21E-17C01 | 83 | 763 | X | -- | -- |
| 09N/21E-25J03 | 312 | 710 | X | -- | -- |
| 09N/22E-10R01 | 95 | 695 | X | -- | -- |
| 09N/22E-12P01 | 310 | 690 | X | -- | -- |
| 09N/23E-25G01 | 118 | 820 | X | -- | -- |
| 09N/23E-31F01 | 398 | 700 | X | -- | -- |
| 10N/16E-20E01D1 | 425 | 1,480 | X | -- | -- |
| 10N/17E-04F01 | 103 | 940 | X | -- | -- |
| 10N/17E-07R01 | 65 | 1,030 | X | -- | -- |
| 10N/18E-31N01 | 1,040 | 1,140 | X | -- | -- |
| 10N/20E-04L01 | 1,020 | 760 | X | -- | -- |
| 10N/20E-19J01 | 60 | 745 | X | -- | -- |
| 10N/21E-03H01 | 775 | 920 | X | -- | -- |
| 10N/21E-07K01 | 61 | 725 | X | -- | -- |
| 10N/21E-34L01 | 44 | 690 | X | X | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|--|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Yakima County, Wash.--Continued</u> | | | | | |
| 10N/22E-31F01 | 420 | 760 | X | -- | -- |
| 10N/22E-15C01 | 185 | 860 | X | -- | -- |
| 10N/22E-25F02 | 1,160 | 750 | X | -- | -- |
| 10N/22E-36E01 | 1,060 | 730 | X | -- | -- |
| 10N/23E-08H01 | 120 | 1,073 | X | -- | -- |
| 11N/16E-34K02 | 457 | 1,200 | X | -- | -- |
| 11N/17E-02P01 | 870 | 1,060 | X | -- | -- |
| 11N/17E-32L02 | 177 | 930 | X | -- | -- |
| 11N/19E-10Q01 | 765 | 860 | X | -- | -- |
| 11N/19E-27H01 | 35 | 820 | X | -- | -- |
| 11N/20E-02H01 | 675 | 1,280 | X | X | -- |
| 11N/20E-22R01 | 528 | 840 | X | -- | -- |
| 11N/21E-07F01 | 1,620 | 1,200 | X | -- | -- |
| 11N/21E-20D01 | 544 | 1,100 | X | -- | -- |
| 11N/21E-22G02 | 1,810 | 1,280 | X | -- | -- |
| 11N/21E-26F01 | 955 | 1,200 | X | -- | -- |
| 11N/22E-19N01 | 843 | 1,260 | X | -- | -- |
| 12N/14E-24L01 | 70 | 3,200 | X | -- | -- |
| 12N/15E-13D01 | 480 | 2,400 | X | -- | -- |
| 12N/16E-15F01D1 | 806 | 1,900 | X | -- | -- |
| 12N/17E-12J03 | 625 | 1,280 | X | -- | -- |
| 12N/18E-06B02 | 70 | 1,260 | X | X | -- |
| 12N/19E-01E01 | 130 | 1,040 | X | X | -- |
| 12N/19E-10L01 | 212 | 1,040 | X | -- | -- |
| 12N/19E-16P01 | 500 | 1,160 | X | -- | -- |
| 12N/20E-31H01 | 1,160 | 1,140 | X | -- | -- |
| 12N/21E-17Q01 | 1,550 | 1,480 | X | -- | -- |
| 12N/22E-21N01 | 1,430 | 1,820 | X | -- | -- |
| 13N/16E-24H01 | 1,470 | 1,942 | X | -- | -- |
| 13N/17E-19E01 | 800 | 1,860 | X | -- | -- |
| 13N/17E-27C01 | 186 | 1,520 | X | -- | -- |
| 13N/18E-18K01 | 1,050 | 1,680 | X | -- | -- |
| 13N/18E-28R01 | 32 | 1,120 | X | -- | -- |
| 13N/19E-22J01 | 131 | 1,140 | X | -- | -- |
| 13N/19E-26R01 | 76 | 1,100 | X | -- | -- |

Table 1.--Depth, altitude, and constituents determined in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Depth of well (feet below land surface) | Altitude of land surface (feet above sea level) | Constituents analyzed for | | |
|--|--|--|---|-------------------|----------|
| | | | Field data, major ions, NO ₂ + NO ₃ , bacteria, B, Fe, Mn, Sr, Li | Trace elements | Isotopes |
| <u>Yakima County, Wash.--Continued</u> | | | | | |
| 13N/19E-31B04 | 55 | 1,020 | X | -- | -- |
| 13N/20E-29E01 | 675 | 1,440 | X | -- | -- |
| 13N/21E-12D01 | 135 | 2,560 | X | -- | -- |
| 14N/16E-13B01 | 889 | 2,000 | X | -- | -- |
| 14N/17E-04H02 | 1,000 | 1,480 | X | -- | -- |
| 14N/17E-33Q01 | 335 | 1,730 | X | -- | -- |
| 14N/18E-12B08 | 122 | 1,300 | X | -- | -- |
| 14N/18E-12J02 | 290 | 1,260 | X | -- | -- |
| 14N/18E-15L01 | 770 | 1,560 | X | -- | -- |
| 14N/18E-25D01 | 110 | 1,200 | X | -- | -- |
| 14N/18E-32E01 | 80 | 1,270 | X | -- | -- |
| 14N/19E-11L01 | 623 | 2,000 | X | -- | X |
| 14N/19E-15M01 | 380 | 1,520 | X | -- | X |
| 14N/19E-32L01 | 56 | 1,160 | X | -- | -- |
| 14N/20E-20N02D1 | 600 | 2,020 | X | -- | X |
| 15N/17E-12N01 | 550 | 1,720 | X | -- | -- |
| 16N/16E-24D01D1 | 818 | 2,288 | X | -- | |
| 16N/17E-34J01D1 | 326 | 2,080 | X | -- | |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985

[μ S/cm, microsiemens per centimeter at 25°C; °C, degrees Celsius; mg/L, milligrams per liter; cols./100 mL, colonies per 100 milliliters; μ g/L, micrograms per liter; <, less than; --, no data]

| Local number | Date | Time | Specific conductance (μ S/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform, fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|----------------------------|----------|------|------------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Adams County, Wash.</u> | | | | | | | | |
| 15N/29E-04A02 | 08-10-82 | 1500 | 440 | 9.3 | 26.5 | 0.8 | -- | 21 |
| | 03-15-83 | 1355 | 432 | 9.3 | 26.0 | 1.4 | <1 | 30 |
| | 07-27-83 | 0835 | 419 | 9.1 | 26.5 | .9 | -- | 19 |
| 15N/30E-12L01 | 05-19-83 | 1230 | 362 | 8.6 | 17.5 | 1.8 | -- | 82 |
| | 07-29-83 | 1145 | 352 | 8.7 | 19.0 | -- | -- | 75 |
| 15N/31E-05L01 | 05-27-83 | 1650 | 397 | 8.0 | 19.0 | 1.9 | -- | 99 |
| | 08-01-83 | 1230 | 392 | 8.0 | 19.5 | -- | -- | 90 |
| 15N/31E-08J01D1 | 05-26-83 | 1100 | 389 | 7.8 | 22.5 | -- | -- | 63 |
| 15N/31E-08N01 | 08-10-82 | 1045 | 390 | 8.8 | 23.0 | 3.3 | -- | 45 |
| | 05-19-83 | 1330 | 400 | 8.8 | 23.0 | .4 | -- | 44 |
| | 07-29-83 | 1400 | 379 | 8.7 | 25.0 | .7 | -- | 33 |
| 15N/31E-16D01 | 05-26-83 | 1000 | 372 | 9.1 | 28.5 | .5 | -- | 14 |
| 15N/31E-31R01 | 08-10-82 | 0900 | 787 | 7.7 | 15.5 | 7.6 | -- | 360 |
| | 03-14-83 | 1155 | 790 | 7.4 | 14.5 | 8.0 | <1 | 360 |
| | 07-27-83 | 1230 | 788 | 7.7 | 15.5 | 7.8 | -- | 360 |
| 15N/32E-07J01 | 05-20-83 | 1130 | 348 | 8.3 | 25.5 | 1.0 | -- | 43 |
| | 08-02-83 | 0945 | 336 | 8.4 | 25.5 | .8 | -- | 43 |
| 15N/32E-08E01 | 08-09-82 | 1200 | 320 | 8.6 | 26.0 | 3.1 | -- | 44 |
| 15N/33E-02A01 | 08-07-82 | 1400 | 318 | 8.4 | 17.0 | 4.3 | -- | 130 |
| 15N/33E-02A01D1 | 03-16-83 | 1150 | 318 | 8.6 | 17.0 | 4.5 | <1 | 110 |
| | 08-01-83 | 1545 | 336 | 8.5 | 19.0 | .7 | -- | 120 |
| 15N/33E-15N02 | 08-07-82 | 1600 | 565 | 8.1 | 17.0 | 7.3 | -- | 260 |
| | 03-16-83 | 0915 | 527 | 7.7 | 16.0 | 9.8 | <1 | 230 |
| | 08-01-83 | 1430 | 785 | 8.0 | 17.0 | 9.2 | -- | 340 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 15N/29E-04A02 | 08-10-82 | 0 | 4.9 | 2.2 | 88 | 86 | 8 | 8.3 |
| | 03-15-83 | 0 | 6.7 | 3.3 | 89 | 83 | 7 | 8.3 |
| | 07-27-83 | 0 | 4.2 | 2.0 | 89 | 87 | 9 | 8.5 |
| 15N/30E-12L01 | 05-19-83 | 0 | 13 | 12 | 42 | 50 | 2 | 6.4 |
| | 07-29-83 | 0 | 12 | 11 | 46 | 54 | 2 | 7.0 |
| 15N/31E-05L01 | 05-27-83 | 0 | 20 | 12 | 41 | 44 | 2 | 9.7 |
| | 08-01-83 | 0 | 18 | 11 | 45 | 49 | 2 | 10 |
| 15N/31E-08J01D1 | 05-26-83 | 0 | 14 | 6.9 | 54 | 59 | 3 | 13 |
| 15N/31E-08N01 | 08-10-82 | 0 | 9.5 | 5.2 | 65 | 71 | 4 | 10 |
| | 05-19-83 | 0 | 9.6 | 4.9 | 69 | 72 | 5 | 11 |
| | 07-29-83 | 0 | 7.0 | 3.7 | 68 | 76 | 5 | 10 |
| 15N/31E-16D01 | 05-26-83 | 0 | 3.7 | 1.1 | 78 | 87 | 9 | 8.6 |
| 15N/31E-31R01 | 08-10-82 | 190 | 74 | 43 | 18 | 10 | .4 | 4.4 |
| | 03-14-83 | 190 | 73 | 43 | 18 | 10 | .4 | 4.1 |
| | 07-27-83 | 180 | 74 | 43 | 18 | 10 | .4 | 4.0 |
| 15N/32E-07J01 | 05-20-83 | 0 | 9.3 | 4.9 | 57 | 70 | 4 | 7.0 |
| | 08-02-83 | 0 | 9.5 | 4.8 | 57 | 70 | 4 | 7.1 |
| 15N/32E-08E01 | 08-09-82 | 0 | 10 | 4.6 | 50 | 66 | 3 | 8.6 |
| 15N/33E-02A01 | 08-07-82 | 0 | 31 | 12 | 16 | 21 | .6 | 3.7 |
| 15N/33E-02A01D1 | 03-16-83 | 0 | 27 | 9.6 | 27 | 34 | 1 | 4.8 |
| | 08-01-83 | 0 | 30 | 12 | 20 | 25 | .8 | 4.2 |
| 15N/33E-15N02 | 08-07-82 | 140 | 68 | 23 | 15 | 11 | .4 | 3.9 |
| | 03-16-83 | 98 | 58 | 20 | 14 | 12 | .4 | 3.6 |
| | 08-01-83 | 210 | 90 | 28 | 16 | 9 | .4 | 4.6 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---------------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Adams County, Wash.--Continued | | | | | | | | |
| 15N/29E-04A02 | 08-10-82 | 156 | 111 | 39 | 31 | 14 | 4.3 | 84 |
| | 03-15-83 | 162 | 112 | 42 | 34 | 16 | 4.8 | 87 |
| | 07-27-83 | 176 | 143 | 35 | 31 | 18 | 4.4 | 83 |
| 15N/30E-12L01 | 05-19-83 | 119 | 129 | 8 | 32 | 15 | 1.0 | 53 |
| | 07-29-83 | 125 | 124 | 14 | 26 | 17 | 1.3 | 57 |
| 15N/31E-05L01 | 05-27-83 | 136 | 166 | 0 | 31 | 19 | .7 | 48 |
| | 08-01-83 | 135 | 165 | 0 | 32 | 19 | .6 | 48 |
| 15N/31E-08J01D1 | 05-26-83 | 138 | 168 | 0 | 42 | 11 | 1.7 | 60 |
| 15N/31E-08N01 | 08-10-82 | 150 | 151 | 16 | 28 | 10 | 2.3 | 63 |
| | 05-19-83 | 153 | 156 | 15 | 29 | 11 | 2.3 | 65 |
| | 07-29-83 | 146 | 131 | 23 | 24 | 13 | 3.0 | 67 |
| 15N/31E-16D01 | 05-26-83 | 146 | 148 | 15 | 21 | 11 | 2.8 | 83 |
| 15N/31E-31R01 | 08-10-82 | 176 | 214 | 0 | 120 | 48 | .4 | 45 |
| | 03-14-83 | 169 | 206 | 0 | 130 | 48 | .4 | 45 |
| | 07-27-83 | 181 | 221 | 0 | 130 | 49 | .4 | 44 |
| 15N/32E-07J01 | 05-20-83 | 149 | 172 | 0 | 18 | 9.8 | 1.8 | 66 |
| | 08-02-83 | 144 | 159 | 8 | 13 | 9.1 | 1.8 | 65 |
| 15N/32E-08E01 | 08-09-82 | 134 | 164 | 0 | 17 | 8.8 | 1.7 | 66 |
| 15N/33E-02A01 | 08-07-82 | 129 | 156 | 0 | 14 | 11 | .3 | 44 |
| 15N/33E-02A01D1 | 03-16-83 | 127 | 139 | 8 | 16 | 15 | .9 | 56 |
| | 08-01-83 | 129 | 145 | 6 | 18 | 16 | .5 | 48 |
| 15N/33E-15N02 | 08-07-82 | 125 | 153 | 0 | 26 | 46 | .2 | 41 |
| | 03-16-83 | 129 | 157 | 0 | 22 | 36 | .3 | 43 |
| | 08-01-83 | 132 | 161 | 0 | 33 | 58 | .2 | 40 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Adams County, Wash.--Continued | | | | | | | | |
| 15N/29E-04A02 | 08-10-82 | 332 | 0.36 | -- | 35 | 13 | 2 | 31 |
| | 03-15-83 | 349 | .58 | 90 | 36 | -- | 2 | -- |
| | 07-27-83 | 347 | .34 | 90 | 40 | -- | <1 | -- |
| 15N/30E-12L01 | 05-19-83 | 252 | 1.3 | 20 | 20 | -- | <10 | -- |
| | 07-29-83 | 257 | 1.1 | 30 | 4 | -- | <1 | -- |
| 15N/31E-05L01 | 05-27-83 | 265 | .34 | 20 | <3 | -- | 3 | -- |
| | 08-01-83 | 266 | .29 | 20 | <3 | -- | <1 | -- |
| 15N/31E-08J01D1 | 05-26-83 | 286 | <.10 | 40 | 480 | -- | 55 | -- |
| 15N/31E-08N01 | 08-10-82 | 283 | <.10 | -- | <3 | 14 | <1 | 58 |
| | 05-19-83 | 294 | <.10 | 50 | 20 | -- | <10 | -- |
| | 07-29-83 | 283 | <.10 | 60 | 11 | -- | 1 | -- |
| 15N/31E-16D01 | 05-26-83 | 297 | <.10 | 50 | 26 | -- | 2 | -- |
| 15N/31E-31R01 | 08-10-82 | 512 | 12 | -- | 3 | 9 | 2 | 590 |
| | 03-14-83 | 504 | 9.2 | 20 | 7 | -- | 7 | -- |
| | 07-27-83 | 524 | 12 | 20 | 4 | -- | <1 | -- |
| 15N/32E-07J01 | 05-20-83 | 259 | .18 | 50 | 12 | -- | <1 | -- |
| | 08-02-83 | 254 | <.10 | 50 | 3 | -- | 1 | -- |
| 15N/32E-08E01 | 08-09-82 | 249 | .26 | -- | <3 | 10 | 2 | 52 |
| 15N/33E-02A01 | 08-07-82 | 215 | 1.5 | -- | <3 | 4 | <1 | 150 |
| 15N/33E-02A01D1 | 03-16-83 | 240 | 1.6 | 20 | <3 | -- | 3 | -- |
| | 08-01-83 | 235 | 2.1 | 20 | <3 | -- | <1 | -- |
| 15N/33E-15N02 | 08-07-82 | 409 | 25 | -- | <3 | 7 | 14 | 330 |
| | 03-16-83 | 327 | 12 | 20 | 7 | -- | 1 | -- |
| | 08-01-83 | 504 | 35 | 10 | 6 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (µS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---------------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 15N/35E-02D01 | 08-07-82 | 1030 | 301 | 8.1 | 15.0 | 3.8 | -- | 96 |
| | 05-24-83 | 1015 | 291 | 8.2 | 14.5 | 5.1 | <1 | 92 |
| | 08-03-83 | 1045 | 293 | 8.1 | 15.0 | 5.1 | -- | 92 |
| 15N/36E-28N01D1 | 08-06-82 | 1745 | 520 | 8.0 | 16.5 | -- | -- | 190 |
| | 05-24-83 | 1320 | 520 | 7.9 | 17.0 | -- | -- | 160 |
| | 08-22-83 | 1530 | 602 | 8.0 | 16.0 | -- | -- | 230 |
| 15N/36E-33A02 | 09-08-82 | 1015 | 410 | 7.7 | 20.0 | .1 | -- | 150 |
| | 05-24-83 | 1200 | 435 | 7.4 | 20.0 | -- | -- | 150 |
| | 08-26-83 | 1430 | 445 | 7.7 | 20.0 | -- | -- | 150 |
| 16N/28E-04B01 | 08-12-82 | 0730 | 710 | 7.7 | 15.0 | 7.8 | -- | 320 |
| | 03-15-83 | 1715 | 860 | 7.4 | 15.0 | 8.0 | <1 | 320 |
| | 07-28-83 | 0900 | 750 | 7.7 | 16.0 | 7.8 | -- | 310 |
| 16N/28E-05N01 | 03-15-83 | 1705 | 695 | 7.8 | 15.0 | 8.0 | <1 | 280 |
| | 07-28-83 | 1030 | 668 | 7.9 | 17.0 | 7.1 | -- | 230 |
| 16N/29E-34D01 | 05-27-83 | 1500 | 385 | 8.3 | 24.5 | .3 | -- | 7 |
| | 08-22-83 | 1300 | 368 | 8.5 | 25.0 | -- | -- | 6 |
| 16N/30E-26A02D1 | 08-10-82 | 1200 | 350 | 9.0 | 29.5 | .1 | -- | 5 |
| | 05-19-83 | 1000 | 371 | 9.0 | 21.5 | 5.3 | -- | 28 |
| | 08-30-83 | 1200 | 342 | 9.0 | 30.0 | 1.2 | -- | 6 |
| 16N/31E-14K01 | 09-09-82 | 1345 | 320 | 8.6 | 25.5 | .3 | -- | 24 |
| | 05-24-83 | 0910 | 317 | 8.5 | 26.0 | .2 | -- | 26 |
| 16N/31E-33P01 | 09-08-82 | 1555 | 370 | 7.9 | 20.0 | 4.4 | -- | 100 |
| | 03-15-83 | 1115 | 341 | 7.7 | 14.5 | 4.4 | <1 | 110 |
| | 07-28-83 | 0915 | 353 | 7.9 | 20.0 | 5.1 | -- | 100 |
| 16N/32E-11D01D1 | 08-09-82 | 0930 | 313 | 8.1 | 23.5 | .2 | -- | 43 |
| | 05-19-83 | 1530 | 300 | 8.2 | 23.0 | .9 | -- | 51 |
| | 08-02-83 | 1625 | 300 | 8.3 | 23.0 | .7 | -- | 47 |
| 16N/32E-14D01 | 05-27-83 | 1200 | 392 | 8.3 | 24.5 | .3 | -- | 62 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 15N/35E-02D01 | 08-07-82 | 0 | 17 | 13 | 25 | 34 | 1 | 7.1 |
| | 05-24-83 | 0 | 17 | 12 | 26 | 36 | 1 | 7.1 |
| | 08-03-83 | 0 | 17 | 12 | 27 | 37 | 1 | 7.2 |
| 15N/36E-28N01D1 | 08-06-82 | 0 | 44 | 20 | 47 | 33 | 1 | 8.5 |
| | 05-24-83 | 0 | 35 | 17 | 53 | 41 | 2 | 9.2 |
| | 08-22-83 | 0 | 53 | 24 | 42 | 27 | 1 | 8.7 |
| 15N/36E-33A02 | 09-08-82 | 0 | 29 | 19 | 40 | 35 | 1 | 7.1 |
| | 05-24-83 | 0 | 28 | 19 | 39 | 35 | 1 | 7.7 |
| | 08-26-83 | 0 | 28 | 19 | 39 | 35 | 1 | 7.7 |
| 16N/28E-04B01 | 08-12-82 | 41 | 62 | 39 | 29 | 16 | .7 | 8.4 |
| | 03-15-83 | 42 | 64 | 39 | 33 | 18 | .8 | 13 |
| | 07-28-83 | 31 | 63 | 38 | 33 | 18 | .8 | 13 |
| 16N/28E-05N01 | 03-15-83 | 64 | 52 | 37 | 44 | 25 | 1 | 9.2 |
| | 07-28-83 | 32 | 44 | 29 | 50 | 31 | 1 | 11 |
| 16N/29E-34D01 | 05-27-83 | 0 | 1.8 | .5 | 81 | 89 | 14 | 12 |
| | 08-22-83 | 0 | 1.6 | .3 | 77 | 89 | 14 | 12 |
| 16N/30E-26A02D1 | 08-10-82 | 0 | 2.0 | .1 | 75 | 91 | 14 | 8.5 |
| | 05-19-83 | 0 | 6.8 | 2.6 | 68 | 78 | 6 | 11 |
| | 08-30-83 | 0 | 1.9 | .2 | 75 | 91 | 14 | 8.1 |
| 16N/31E-14K01 | 09-09-82 | 0 | 6.7 | 1.7 | 62 | 79 | 6 | 9.2 |
| | 05-24-83 | 0 | 7.1 | 1.9 | 60 | 78 | 5 | 9.5 |
| 16N/31E-33P01 | 09-08-82 | 0 | 22 | 12 | 31 | 37 | 1 | 9.0 |
| | 03-15-83 | 0 | 23 | 12 | 32 | 37 | 1 | 9.1 |
| | 07-28-83 | 0 | 22 | 12 | 32 | 37 | 1 | 9.2 |
| 16N/32E-11D01D1 | 08-09-82 | 0 | 12 | 3.1 | 47 | 66 | 3 | 8.7 |
| | 05-19-83 | 0 | 14 | 3.9 | 50 | 64 | 3 | 7.8 |
| | 08-02-83 | 0 | 13 | 3.5 | 46 | 64 | 3 | 8.3 |
| 16N/32E-14D01 | 05-27-83 | 0 | 17 | 4.8 | 57 | 62 | 3 | 11 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alka- linity, field (mg/L as CaCO ₃) | Bicar- bonate, field (mg/L as HCO ₃) | Car- bonate, field (mg/L as CO ₃) | Sulfate, dis- solved (mg/L as SO ₄) | Chlo- ride, dis- solved (mg/L as Cl) | Fluo- ride, dis- solved (mg/L as F) | Silica, dis- solved (mg/L as SiO ₂) |
|---------------------------------------|----------|---|---|--|--|--|---|--|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 15N/35E-02D01 | 08-07-82 | 146 | 177 | 0 | 7 | 4.2 | 0.4 | 44 |
| | 05-24-83 | 144 | 176 | 0 | 7.7 | 4.1 | .4 | 44 |
| | 08-03-83 | 145 | 177 | 0 | 8 | 4.1 | .4 | 42 |
| 15N/36E-28N01D1 | 08-06-82 | 249 | 304 | 0 | 23 | 16 | .5 | 52 |
| | 05-24-83 | 240 | 293 | 0 | 19 | 12 | .6 | 53 |
| | 08-22-83 | 271 | 331 | 0 | 25 | 19 | .5 | 50 |
| 15N/36E-33A02 | 09-08-82 | 230 | 281 | 0 | 11 | 6.1 | .8 | 76 |
| | 05-24-83 | 226 | 275 | 0 | 10 | 6.3 | .9 | 76 |
| | 08-26-83 | 229 | 279 | 0 | 11 | 6.2 | .9 | 73 |
| 16N/28E-04B01 | 08-12-82 | 276 | 336 | 0 | 60 | 12 | .4 | 54 |
| | 03-15-83 | 278 | 339 | 0 | 83 | 18 | .3 | 53 |
| | 07-28-83 | 283 | 345 | 0 | 80 | 20 | .3 | 52 |
| 16N/28E-05N01 | 03-15-83 | 218 | 266 | 0 | 110 | 21 | .7 | 56 |
| | 07-28-83 | 198 | 241 | 0 | 100 | 23 | .6 | 53 |
| 16N/29E-34D01 | 05-27-83 | 170 | 207 | 0 | 26 | 14 | 2.6 | 64 |
| | 08-22-83 | 148 | 168 | 6 | 26 | 12 | 2.6 | 62 |
| 16N/30E-26A02D1 | 08-10-82 | 114 | 127 | 26 | 15 | 9.9 | 2.4 | 93 |
| | 05-19-83 | 151 | 160 | 12 | 22 | 11 | 1.8 | 79 |
| | 08-30-83 | 145 | 142 | 17 | 14 | 11 | 2.5 | 91 |
| 16N/31E-14K01 | 09-09-82 | 134 | 155 | 8 | 15 | 7.6 | 1.6 | 72 |
| | 05-24-83 | 144 | 168 | 4 | 13 | 6.8 | 1.7 | 72 |
| 16N/31E-33P01 | 09-08-82 | 143 | 174 | 0 | 26 | 12 | .5 | 57 |
| | 03-15-83 | 143 | 174 | 0 | 24 | 10 | .6 | 59 |
| | 07-28-83 | 148 | 180 | 0 | 25 | 12 | .5 | 61 |
| 16N/32E-11D01D1 | 08-09-82 | 130 | 159 | 0 | 13 | 8.8 | 1.5 | 69 |
| | 05-19-83 | 128 | 156 | 0 | 16 | 10 | 1.5 | 68 |
| | 08-02-83 | 132 | 161 | 0 | 12 | 9.7 | 1.5 | 64 |
| 16N/32E-14D01 | 05-27-83 | 146 | 178 | 0 | 31 | 18 | 1.5 | 66 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 15N/35E-02D01 | 08-07-82 | 207 | 0.48 | -- | <3 | 7 | 14 | 330 |
| | 05-24-83 | 210 | 1.2 | 30 | 17 | -- | 9 | -- |
| | 08-03-83 | 207 | .49 | 30 | 6 | -- | 9 | -- |
| 15N/36E-28N01D1 | 08-06-82 | 375 | 3.2 | -- | <3 | 33 | 2 | 180 |
| | 05-24-83 | 350 | 1.6 | 20 | 9 | -- | 4 | -- |
| | 08-22-83 | 404 | 4.2 | 20 | 21 | -- | 5 | -- |
| 15N/36E-33A02 | 09-08-82 | 327 | <.10 | -- | 8 | 26 | 80 | 75 |
| | 05-24-83 | 323 | .14 | 20 | 21 | -- | 74 | -- |
| | 08-26-83 | 322 | <.10 | 20 | 10 | -- | 80 | -- |
| 16N/28E-04B01 | 08-12-82 | 472 | 9.3 | -- | <3 | 10 | 4 | 590 |
| | 03-15-83 | 495 | 5.7 | 20 | 12 | -- | 1 | -- |
| | 07-28-83 | 504 | 8.0 | 10 | <3 | -- | <1 | -- |
| 16N/28E-05N01 | 03-15-83 | 487 | 5.9 | 30 | 16 | -- | 2 | -- |
| | 07-28-83 | 460 | 6.9 | 20 | 26 | -- | 1 | -- |
| 16N/29E-34D01 | 05-27-83 | 305 | .17 | 50 | 23 | -- | 14 | -- |
| | 08-22-83 | 282 | <.10 | 50 | 18 | -- | 4 | -- |
| 16N/30E-26A02D1 | 08-10-82 | 294 | <.10 | -- | 13 | 19 | 5 | 7 |
| | 05-19-83 | 294 | .25 | 50 | 56 | -- | 2 | -- |
| | 08-30-83 | 291 | <.10 | 60 | 16 | -- | <1 | -- |
| 16N/31E-14K01 | 09-09-82 | 263 | .74 | -- | 16 | 16 | 3 | 25 |
| | 05-24-83 | 260 | .26 | 40 | 11 | -- | 5 | -- |
| 16N/31E-3301 | 09-08-82 | 257 | .35 | -- | 24 | 12 | 3 | 120 |
| | 03-15-83 | 257 | .32 | 30 | 34 | -- | 4 | -- |
| | 07-28-83 | 265 | .68 | 20 | 6 | -- | <1 | -- |
| 16N/32E-11D01D1 | 08-09-82 | 243 | .35 | -- | <3 | 15 | <1 | 46 |
| | 05-19-83 | 250 | .57 | 40 | 30 | -- | <10 | -- |
| | 08-02-83 | 241 | .77 | 40 | 4 | -- | <1 | -- |
| 16N/32E-14D01 | 05-27-83 | 295 | .24 | 40 | <3 | -- | 2 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---------------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| Adams County, Wash.--Continued | | | | | | | | |
| 16N/32E-18G01D2 | 05-26-83 | 1530 | 375 | 9.4 | 26.0 | 0.5 | -- | 12 |
| | 08-03-83 | 1030 | 355 | 9.2 | 26.0 | .7 | -- | 12 |
| 16N/33E-17B02 | 08-09-82 | 1700 | 287 | 8.0 | 19.5 | 6.9 | -- | 110 |
| | 03-17-83 | 1250 | 277 | 7.9 | 12.5 | 7.4 | <1 | 110 |
| | 08-02-83 | 1115 | 279 | 7.8 | 20.0 | -- | -- | 110 |
| 16N/34E-13R02 | 08-09-82 | 0940 | 240 | 7.8 | 17.5 | -- | -- | 100 |
| | 05-24-83 | 1510 | 231 | 8.3 | 16.0 | -- | <1 | 100 |
| | 08-02-83 | 1245 | 231 | 8.0 | 17.5 | -- | -- | 100 |
| 16N/35E-31B01 | 08-07-82 | 0815 | 266 | 7.9 | 16.0 | 8.8 | -- | 110 |
| | 05-24-83 | 0900 | 261 | 7.4 | 16.0 | 8.2 | -- | 110 |
| | 08-30-83 | 1400 | 255 | 7.9 | 16.0 | 8.4 | -- | 110 |
| 16N/35E-32N01D1 | 05-27-83 | 0945 | 262 | 7.6 | 16.5 | 7.9 | -- | 120 |
| | 09-06-83 | 1630 | 260 | 7.9 | 16.5 | 8.1 | -- | 120 |
| 16N/36E-06B02 | 08-05-82 | 1300 | 381 | 7.8 | 17.0 | 8.3 | -- | 160 |
| | 05-25-83 | 1100 | 389 | 8.0 | 15.0 | -- | <1 | 160 |
| | 08-02-83 | 1430 | 372 | 7.6 | 17.5 | 8.8 | -- | 160 |
| 16N/36E-11H01D1 | 08-05-82 | 1155 | 340 | 7.8 | 14.0 | 7.3 | -- | 160 |
| | 05-25-83 | 1245 | 348 | 8.2 | 14.5 | 8.9 | -- | 160 |
| | 08-02-83 | 1600 | 337 | 7.6 | 14.0 | 9.3 | -- | 160 |
| 16N/38E-04B01D1 | 08-06-82 | 0915 | 790 | 7.6 | 15.0 | 7.6 | -- | 340 |
| | 08-30-83 | 1115 | 740 | 7.9 | 16.0 | 1.4 | -- | 270 |
| 17N/31E-03B01 | 05-24-83 | 1310 | 301 | 8.3 | 23.5 | 8.3 | -- | 35 |
| 17N/31E-07E01 | 08-11-82 | 1600 | 976 | 7.6 | 15.0 | 6.2 | -- | 390 |
| | 03-17-83 | 0855 | 625 | 7.7 | 14.5 | 7.7 | <1 | 240 |
| | 08-01-83 | 1500 | 710 | 7.9 | 15.0 | 6.9 | -- | 270 |
| 17N/31E-11Q01 | 05-20-83 | 1105 | 372 | 8.1 | 18.5 | 4.5 | -- | 87 |
| | 08-02-83 | 1430 | 370 | 8.1 | 18.0 | 5.2 | -- | 90 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 16N/32E-18G01D2 | 05-26-83 | 0 | 2.9 | 1.1 | 78 | 89 | 10 | 7.2 |
| | 08-03-83 | 0 | 2.9 | 1.1 | 77 | 89 | 10 | 7.4 |
| 16N/33E-17B02 | 08-09-82 | 0 | 23 | 13 | 20 | 27 | .8 | 3.5 |
| | 03-17-83 | 0 | 23 | 13 | 20 | 27 | .8 | 3.4 |
| | 08-02-83 | 0 | 22 | 13 | 20 | 28 | .8 | 3.5 |
| 16N/34E-13R02 | 08-09-82 | 0 | 25 | 9.1 | 9.6 | 17 | .4 | 3.6 |
| | 05-24-83 | 0 | 25 | 9.3 | 9.1 | 16 | .4 | 3.4 |
| | 08-02-83 | 0 | 25 | 9.4 | 9.6 | 17 | .4 | 3.5 |
| 16N/35E-31B01 | 08-07-82 | 0 | 26 | 10 | 12 | 19 | .5 | 2.9 |
| | 05-24-83 | 0 | 26 | 11 | 12 | 19 | .5 | 2.9 |
| | 08-30-83 | 0 | 27 | 11 | 12 | 18 | .5 | 2.7 |
| 16N/35E-32N01D1 | 05-27-83 | 0 | 28 | 11 | 13 | 19 | .5 | 3.1 |
| | 09-06-83 | 0 | 28 | 11 | 12 | 18 | .5 | 3.3 |
| 16N/36E-06B02 | 08-05-82 | 45 | 39 | 15 | 14 | 16 | .5 | 3.2 |
| | 05-25-83 | 49 | 39 | 16 | 12 | 14 | .4 | 3.1 |
| | 08-02-83 | 49 | 40 | 15 | 13 | 15 | .4 | 3.3 |
| 16N/36E-11H01D1 | 08-05-82 | 23 | 43 | 12 | 8.2 | 10 | .3 | 2.5 |
| | 05-25-83 | 18 | 43 | 13 | 8.5 | 10 | .3 | 2.6 |
| | 08-02-83 | 26 | 44 | 13 | 8.3 | 10 | .3 | 2.7 |
| 16N/38E-04B01D1 | 08-06-82 | 100 | 75 | 38 | 34 | 18 | .8 | 3.6 |
| | 08-30-83 | 43 | 58 | 30 | 47 | 27 | 1 | 6.2 |
| 17N/31E-03B01 | 05-24-83 | 0 | 9.2 | 3.0 | 52 | 72 | 4 | 7.4 |
| 17N/31E-07E01 | 08-11-82 | 130 | 76 | 48 | 48 | 21 | 1 | 3.4 |
| | 03-17-83 | 5 | 47 | 30 | 43 | 27 | 1 | 5.3 |
| | 08-01-83 | 32 | 51 | 34 | 45 | 26 | 1 | 4.8 |
| 17N/31E-11Q01 | 05-20-83 | 0 | 22 | 7.7 | 43 | 49 | 2 | 8.8 |
| | 08-02-83 | 0 | 23 | 7.9 | 42 | 47 | 2 | 8.9 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---------------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Adams County, Wash.--Continued | | | | | | | | |
| 16N/32E-18G01D2 | 05-26-83 | 155 | 115 | 42 | 14 | 11 | 3.7 | 93 |
| | 08-03-83 | 149 | 133 | 33 | 12 | 12 | 2.8 | 89 |
| 16N/33E-17B02 | 08-09-82 | 139 | 169 | 0 | 10 | 2.8 | .4 | 48 |
| | 03-17-83 | 141 | 172 | 0 | 8.3 | 2.8 | .5 | 48 |
| | 08-02-83 | 139 | 169 | 0 | 9.0 | 3.0 | .4 | 46 |
| 16N/34E-13R02 | 08-09-82 | 116 | 142 | 0 | <5.0 | 2.2 | .2 | 49 |
| | 05-24-83 | 119 | 145 | 0 | 3.6 | 2.1 | .2 | 49 |
| | 08-02-83 | 120 | 147 | 0 | <5.0 | 2.2 | .2 | 49 |
| 16N/35E-31B01 | 08-07-82 | 126 | 148 | 0 | 6.0 | 4.7 | .3 | 47 |
| | 05-24-83 | 123 | 150 | 0 | 6.2 | 4.8 | .3 | 47 |
| | 08-30-83 | 127 | 155 | 0 | 6.3 | 4.9 | .3 | 47 |
| 16N/35E-32N01D1 | 05-27-83 | 125 | 152 | 0 | 7.5 | 6.3 | .3 | 49 |
| | 09-06-83 | 123 | 150 | 0 | 7.6 | 6.1 | .3 | 49 |
| 16N/36E-06B02 | 08-05-82 | 114 | 139 | 0 | 19 | 23 | .3 | 45 |
| | 05-25-83 | 114 | 139 | 0 | 19 | 26 | .3 | 45 |
| | 08-02-83 | 112 | 137 | 0 | 17 | 27 | .3 | 44 |
| 16N/36E-11H01D1 | 08-05-82 | 134 | 163 | 0 | 13 | 13 | .2 | 36 |
| | 05-25-83 | 143 | 174 | 0 | 14 | 11 | .2 | 36 |
| | 08-02-83 | 137 | 167 | 0 | 12 | 13 | .2 | 35 |
| 16N/38E-04B01D1 | 08-06-82 | 241 | 294 | 0 | 80 | 55 | .3 | 44 |
| | 08-30-83 | 226 | 275 | 0 | 80 | 54 | .4 | 38 |
| 17N/31E-03B01 | 05-24-83 | 148 | 180 | 0 | 12 | 6.8 | 1.6 | 63 |
| 17N/31E-07E01 | 08-11-82 | 261 | 318 | 0 | 50 | 61 | .4 | 43 |
| | 03-17-83 | 236 | 288 | 0 | 53 | 12 | .4 | 47 |
| | 08-01-83 | 235 | 287 | 0 | 53 | 31 | .4 | 44 |
| 17N/31E-11Q01 | 05-20-83 | 144 | 176 | 0 | 30 | 11 | 1.1 | 59 |
| | 08-02-83 | 134 | 163 | 0 | 27 | 13 | 1.1 | 57 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Adams County, Wash.--Continued | | | | | | | | |
| 16N/32E-18G01D2 | 05-26-83 | 310 | <0.10 | 70 | 34 | -- | <1 | -- |
| | 08-03-83 | 303 | .10 | 70 | 28 | -- | <1 | -- |
| 16N/33E-17B02 | 08-09-82 | 206 | .50 | -- | <3 | 5 | <1 | 130 |
| | 03-17-83 | 205 | .37 | 20 | 5 | -- | 1 | -- |
| | 08-02-83 | 202 | .51 | 20 | 3 | -- | <1 | -- |
| 16N/34E-13R02 | 08-09-82 | -- | .27 | -- | <3 | 10 | 1 | 140 |
| | 05-24-83 | 174 | .33 | 20 | 7 | -- | <1 | -- |
| | 08-02-83 | -- | .34 | 20 | 5 | -- | 2 | -- |
| 16N/35E-31B01 | 08-07-82 | 184 | .56 | -- | <3 | <4 | <1 | 130 |
| | 05-24-83 | 192 | 1.8 | 20 | 9 | -- | <1 | -- |
| | 08-30-83 | 190 | .54 | 20 | 4 | -- | <1 | -- |
| 16N/35E-32N01D1 | 05-27-83 | 196 | .76 | 20 | 13 | -- | <1 | -- |
| | 09-06-83 | 194 | .70 | 20 | 5 | -- | 5 | -- |
| 16N/36E-06B02 | 08-05-82 | 255 | 6.4 | -- | <3 | 9 | 3 | 170 |
| | 05-25-83 | 258 | 6.6 | 10 | 12 | -- | <1 | -- |
| | 08-02-83 | 254 | 6.1 | 10 | 4 | -- | <1 | -- |
| 16N/36E-11H01D1 | 08-05-82 | 224 | 3.6 | -- | <3 | <4 | 6 | 170 |
| | 05-25-83 | 232 | 4.0 | 10 | 13 | -- | <1 | -- |
| | 08-02-83 | 226 | 3.5 | 10 | 3 | -- | <1 | -- |
| 16N/38E-04B01D1 | 08-06-82 | 502 | 6.1 | -- | 4 | 16 | 2 | 460 |
| | 08-30-83 | 465 | 3.7 | 20 | 7 | -- | 3 | -- |
| 17N/31E-03B01 | 05-24-83 | 244 | <.10 | 40 | 11 | -- | <1 | -- |
| 17N/31E-07E01 | 08-11-82 | 584 | 22 | -- | <3 | 18 | <1 | 520 |
| | 03-17-83 | 418 | 8.8 | 30 | <3 | -- | 2 | -- |
| | 08-01-83 | 457 | 12 | 30 | <3 | -- | <1 | -- |
| 17N/31E-11Q01 | 05-20-83 | 280 | 2.4 | 30 | <3 | -- | 2 | -- |
| | 08-02-83 | 272 | 2.6 | 30 | 4 | -- | 1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---------------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| Adams County, Wash.--Continued | | | | | | | | |
| 17N/31E-12D01 | 08-10-82 | 1300 | 295 | 8.2 | 27.5 | 0.1 | -- | 39 |
| | 05-24-83 | 1125 | 293 | 8.3 | 28.0 | .1 | -- | 39 |
| | 07-29-83 | 1245 | 290 | 8.0 | 27.5 | .3 | -- | 47 |
| 17N/33E-06D03 | 05-25-83 | 1020 | 273 | 8.0 | 26.5 | 1.3 | -- | 44 |
| | 08-02-83 | 1155 | 283 | 8.2 | 26.5 | 1.5 | -- | 46 |
| 17N/33E-12F02 | 08-10-82 | 1050 | 300 | 7.8 | 19.0 | .6 | -- | 32 |
| | 03-17-83 | 1445 | 295 | 8.2 | 19.0 | 1.0 | <1 | 34 |
| | 08-02-83 | 0940 | 300 | 8.3 | 19.0 | 1.0 | -- | 31 |
| 17N/34E-23F01 | 08-10-82 | 0845 | 780 | 7.7 | 14.5 | 5.7 | -- | 320 |
| | 05-24-83 | 1630 | 1,020 | 7.8 | 14.0 | 8.1 | <1 | 420 |
| 17N/34E-23F01 | 08-03-83 | 1730 | 1,170 | 7.6 | 14.0 | 6.5 | -- | 460 |
| 17N/35E-11H01D2 | 08-06-82 | 1230 | 350 | 7.7 | 15.5 | 7.8 | -- | 140 |
| | 05-25-83 | 1430 | 243 | 7.7 | 14.5 | -- | -- | 100 |
| | 08-30-83 | 1630 | 262 | 7.7 | 14.5 | 8.0 | -- | 100 |
| 17N/37E-21G01 | 08-05-82 | 1600 | 257 | 8.6 | 19.5 | -- | -- | 37 |
| | 08-04-83 | 1645 | 266 | 8.4 | 18.5 | 2.7 | -- | 52 |
| 17N/38E-02K01 | 08-04-82 | 1750 | 418 | 7.3 | 12.0 | 4.1 | -- | 180 |
| | 05-24-83 | 1630 | 565 | 7.3 | 12.0 | 4.8 | <1 | 230 |
| | 08-03-83 | 1515 | 395 | 7.1 | 12.5 | 5.0 | -- | 160 |
| 18N/31E-07E01D1 | 08-12-82 | 1030 | 372 | 8.3 | 21.5 | .2 | -- | 21 |
| | 05-19-83 | 1455 | 348 | 8.4 | 20.5 | .1 | -- | 23 |
| | 08-03-83 | 1410 | 380 | 8.5 | 21.5 | .3 | -- | 21 |
| 18N/31E-13E01 | 05-24-83 | 1450 | 362 | 8.2 | 19.5 | .3 | -- | 56 |
| | 08-31-83 | 1005 | 365 | 8.1 | 19.5 | 2.4 | -- | 59 |
| 18N/31E-32R01 | 08-11-82 | 0930 | 330 | 7.9 | 21.0 | .4 | -- | 68 |
| | 05-19-83 | 1755 | 360 | 8.0 | 19.5 | .2 | -- | 79 |
| | 07-29-83 | 1120 | 323 | 8.1 | 21.0 | .5 | -- | 72 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Adams County, Wash.--Continued | | | | | | | | |
| 17N/31E-12D01 | 08-10-82 | 0 | 11 | 2.9 | 45 | 67 | 3 | 7.5 |
| | 05-24-83 | 0 | 11 | 2.9 | 50 | 69 | 3 | 7.8 |
| | 07-29-83 | 0 | 13 | 3.5 | 45 | 63 | 3 | 7.5 |
| 17N/33E-06D03 | 05-25-83 | 0 | 12 | 3.3 | 41 | 63 | 3 | 7.4 |
| | 08-02-83 | 0 | 13 | 3.4 | 42 | 62 | 3 | 7.4 |
| 17N/33E-12F02 | 08-10-82 | 0 | 9.0 | 2.2 | 52 | 73 | 4 | 7.5 |
| | 03-17-83 | 0 | 9.5 | 2.4 | 55 | 73 | 4 | 7.5 |
| | 08-02-83 | 0 | 8.8 | 2.3 | 52 | 73 | 4 | 7.7 |
| 17N/34E-23F01 | 08-10-82 | 170 | 74 | 32 | 32 | 18 | .8 | 6.9 |
| | 05-24-83 | 220 | 95 | 45 | 62 | 24 | 1 | 7.3 |
| 17N/34E-23F01 | 08-03-83 | 270 | 110 | 46 | 62 | 22 | 1 | 7.2 |
| 17N/35E-11H01D2 | 08-06-82 | 0 | 31 | 16 | 15 | 18 | .5 | 3.4 |
| | 05-25-83 | 0 | 22 | 11 | 13 | 21 | .6 | 3.2 |
| | 08-30-83 | 0 | 22 | 11 | 13 | 21 | .6 | 3.1 |
| 17N/37E-21G01 | 08-05-82 | 0 | 9.5 | 3.3 | 42 | 66 | 3 | 7.0 |
| | 08-04-83 | -- | 12 | 5.4 | 36 | 56 | 2 | 6.8 |
| 17N/38E-02K01 | 08-04-82 | 50 | 42 | 17 | 16 | 16 | .5 | 2.2 |
| | 05-24-83 | 80 | 54 | 23 | 21 | 16 | .6 | 2.4 |
| | 08-03-83 | 39 | 38 | 17 | 17 | 18 | .6 | 2.0 |
| 18N/31E-07E01D1 | 08-12-82 | 0 | 5.8 | 1.6 | 69 | 82 | 7 | 8.7 |
| | 05-19-83 | 0 | 6.1 | 1.8 | 67 | 81 | 6 | 8.2 |
| | 08-03-83 | 0 | 5.8 | 1.7 | 70 | 83 | 7 | 8.3 |
| 18N/31E-13E01 | 05-24-83 | 0 | 12 | 6.4 | 55 | 64 | 3 | 8.4 |
| | 08-31-83 | 0 | 13 | 6.5 | 58 | 65 | 3 | 8.0 |
| 18N/31E-32R01 | 08-11-82 | 0 | 16 | 6.9 | 43 | 54 | 2 | 9.1 |
| | 05-19-83 | 0 | 18 | 8.3 | 43 | 50 | 2 | 9.9 |
| | 07-29-83 | 0 | 17 | 7.2 | 43 | 53 | 2 | 8.7 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---------------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Adams County, Wash.--Continued | | | | | | | | |
| 17N/31E-12D01 | 08-10-82 | 127 | 155 | 0 | 9.0 | 12 | 1.5 | 67 |
| | 05-24-83 | 143 | 174 | 0 | 9.2 | 6.5 | 1.5 | 70 |
| | 07-29-83 | 134 | 163 | 0 | 9.0 | 6.3 | 1.4 | 67 |
| 17N/33E-06D03 | 05-25-83 | 133 | 162 | 0 | 5.9 | 5.6 | 1.7 | 65 |
| | 08-02-83 | 132 | 161 | 0 | 6.0 | 5.6 | 1.6 | 63 |
| 17N/33E-12F02 | 08-10-82 | 131 | 160 | 0 | 7.0 | 10 | 1.9 | 66 |
| | 03-17-83 | 134 | 163 | 0 | 7.7 | 10 | .5 | 68 |
| | 08-02-83 | 137 | 167 | 0 | 7.0 | 10 | 2.1 | 63 |
| 17N/34E-23F01 | 08-10-82 | 144 | 176 | 0 | 110 | 79 | .3 | 46 |
| | 05-24-83 | 207 | 252 | 0 | 180 | 110 | .3 | 45 |
| 17N/34E-23F01 | 08-03-83 | 192 | 234 | 0 | 200 | 13 | .3 | 45 |
| 17N/35E-11H01D2 | 08-06-82 | 156 | 190 | 0 | 11 | 7.0 | .3 | 46 |
| | 05-25-83 | 123 | 150 | 0 | 5.3 | 3.4 | .4 | 47 |
| | 08-30-83 | 123 | 150 | 0 | 5.5 | 3.7 | .4 | 46 |
| 17N/37E-21G01 | 08-05-82 | 118 | -- | -- | 10 | 3.5 | .8 | 60 |
| | 08-04-83 | -- | -- | -- | 9.0 | 4.1 | .9 | 55 |
| 17N/38E-02K01 | 08-04-82 | 125 | 152 | 0 | 20 | 17 | .2 | 40 |
| | 05-24-83 | 149 | 182 | 0 | 28 | 32 | .2 | 39 |
| | 08-03-83 | 125 | 153 | 0 | 22 | 14 | .2 | 39 |
| 18N/31E-07E01D1 | 08-12-82 | 169 | 206 | 0 | 29 | 10 | 1.5 | 65 |
| | 05-19-83 | 141 | 168 | 2 | 32 | 8.7 | 1.5 | 64 |
| | 08-03-83 | 139 | 170 | 0 | 31 | 11 | 1.4 | 64 |
| 18N/31E-13E01 | 05-24-83 | 144 | 176 | 0 | 21 | 12 | 1.6 | 57 |
| | 08-31-83 | 144 | 176 | 0 | 19 | 13 | 1.5 | 60 |
| 18N/31E-32R01 | 08-11-82 | 140 | 171 | 0 | 19 | 9.1 | 1.3 | 62 |
| | 05-19-83 | 146 | 178 | 0 | 28 | 12 | 1.0 | 55 |
| | 07-29-83 | 140 | 171 | 0 | 20 | 9.6 | 1.2 | 60 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 17N/31E-12D01 | 08-10-82 | 233 | 0.18 | -- | <3 | 23 | <1 | 44 |
| | 05-24-83 | 245 | <.10 | 40 | 5 | -- | <1 | -- |
| | 07-29-83 | 233 | .10 | 30 | 6 | -- | <1 | -- |
| 17N/33E-06D03 | 05-25-83 | 222 | .15 | 40 | 19 | -- | 4 | -- |
| | 08-02-83 | 222 | .15 | 40 | 3 | -- | <1 | -- |
| 17N/33E-12F02 | 08-10-82 | 235 | .22 | -- | <3 | 30 | 2 | 29 |
| | 03-17-83 | 242 | .35 | 50 | <3 | -- | <1 | -- |
| | 08-02-83 | 236 | .24 | 50 | 3 | -- | <1 | -- |
| 17N/34E-23F01 | 08-10-82 | 503 | 8.1 | -- | <3 | 20 | <1 | 340 |
| | 05-24-83 | 731 | 14 | 30 | 8 | -- | <1 | -- |
| 17N/34E-23F01 | 08-03-83 | 769 | 12 | 20 | 4 | -- | <1 | -- |
| 17N/35E-11H01D2 | 08-06-82 | 230 | 1.6 | -- | <3 | 5 | <1 | 15 |
| | 05-25-83 | 184 | 1.1 | 10 | 7 | -- | 1 | -- |
| | 08-30-83 | 183 | 1.1 | 10 | 4 | -- | 4 | -- |
| 17N/37E-21G01 | 08-05-82 | 210 | .30 | -- | <3 | 27 | 1 | 47 |
| | 08-04-83 | 207 | .58 | 20 | 4 | -- | 1 | -- |
| 17N/38E-02K01 | 08-04-82 | 274 | 10 | -- | 5 | 13 | 4 | 220 |
| | 05-24-83 | 351 | 14 | 10 | 16 | -- | <1 | -- |
| | 08-03-83 | 264 | 9 | 10 | 8 | -- | 6 | -- |
| 18N/31E-07E01D1 | 08-12-82 | 292 | <.10 | -- | <3 | 38 | 4 | 19 |
| | 05-19-83 | 274 | <.10 | 30 | <3 | -- | 3 | -- |
| | 08-03-83 | 277 | <.10 | 30 | 4 | -- | 2 | -- |
| 18N/31E-13E01 | 05-24-83 | 260 | .11 | 30 | <3 | -- | 6 | -- |
| | 08-31-83 | 266 | <.10 | 30 | 12 | -- | 7 | -- |
| 18N/31E-32R01 | 08-11-82 | 251 | <.10 | -- | 7 | 14 | 5 | 69 |
| | 05-19-83 | 264 | .19 | 30 | 3 | -- | 4 | -- |
| | 07-29-83 | 251 | .13 | 30 | 5 | -- | 4 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (µS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---------------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| Adams County, Wash.--Continued | | | | | | | | |
| 18N/31E-33D01 | 05-19-83 | 1905 | 400 | 9.3 | 36.5 | 0.0 | -- | 5 |
| | 08-01-83 | 1615 | 385 | 9.2 | 36.5 | .2 | -- | 6 |
| 18N/32E-16C02 | 08-10-82 | 1705 | 303 | 8.3 | 18.5 | .1 | -- | 26 |
| | 03-17-83 | 1045 | 341 | 8.3 | 17.5 | .4 | <1 | 52 |
| | 08-01-83 | 1315 | 340 | 8.4 | 18.0 | .7 | -- | 35 |
| 18N/33E-12C02 | 08-11-82 | 0825 | 325 | 8.0 | 17.5 | 5.7 | -- | 94 |
| | 03-17-83 | 1630 | 321 | 8.0 | 17.5 | 4.1 | <1 | 110 |
| | 08-04-83 | 1230 | 358 | 8.2 | 18.0 | 5.5 | -- | 120 |
| 18N/35E-04B01 | 08-09-82 | 1700 | 231 | 8.0 | 14.0 | 6.8 | -- | 87 |
| | 05-19-83 | 1630 | 271 | 7.9 | 13.0 | -- | <1 | 110 |
| | 08-03-83 | 1300 | 247 | 8.2 | 14.5 | 6.0 | -- | 89 |
| 18N/35E-11K01 | 08-09-82 | 1800 | 320 | 8.2 | 18.5 | 2.5 | -- | 81 |
| | 05-20-83 | 1330 | 305 | 8.2 | 18.5 | 2.6 | <1 | 70 |
| | 08-03-83 | 1130 | 318 | 8.3 | 15.5 | 5.5 | -- | 110 |
| 18N/35E-12Q01 | 05-25-83 | 1730 | 790 | 7.8 | 14.0 | 2.4 | -- | 350 |
| | 09-06-83 | 1515 | 755 | 7.9 | 15.0 | 6.0 | -- | 320 |
| 18N/37E-09C02 | 09-09-82 | 1630 | 335 | 7.9 | 15.0 | 8.4 | -- | 150 |
| 18N/38E-28N02 | 08-30-83 | 1345 | 212 | 7.3 | 13.5 | 8.3 | -- | 85 |
| 18N/38E-29D01 | 08-10-82 | 1300 | 213 | 7.7 | 13.5 | 7.4 | -- | 97 |
| | 08-04-83 | 1130 | 216 | 8.0 | 13.0 | 7.2 | -- | 94 |
| 19N/31E-14H02 | 08-14-82 | 1245 | 750 | 7.9 | 18.0 | 6.3 | -- | 240 |
| 19N/31E-24H01 | 05-19-83 | 1130 | 470 | 8.9 | 19.5 | .4 | -- | 42 |
| | 07-30-83 | 1615 | 455 | 8.6 | 19.0 | .3 | -- | 38 |
| 19N/31E-27G01D1 | 05-23-83 | 1730 | 361 | 8.6 | 26.0 | .1 | -- | 12 |
| 19N/32E-04H02 | 05-24-83 | 1715 | 360 | 8.1 | 17.0 | 4.4 | -- | 110 |
| | 08-30-83 | 1425 | 382 | 7.6 | 17.0 | 2.3 | -- | 110 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 18N/31E-33D01 | 05-19-83 | 0 | 1.8 | 0.13 | 89 | 93 | 17 | 7.1 |
| | 08-01-83 | 0 | 1.9 | .33 | 87 | 93 | 15 | 6.8 |
| 18N/32E-16C02 | 08-10-82 | 0 | 6.9 | 2.1 | 53 | 75 | 5 | 9.5 |
| | 03-17-83 | 0 | 13 | 4.8 | 48 | 60 | 3 | 14 |
| | 08-01-83 | 0 | 9.0 | 3.0 | 54 | 71 | 4 | 10 |
| 18N/33E-12C02 | 08-11-82 | 0 | 21 | 10 | 27 | 36 | 1 | 9.1 |
| | 03-17-83 | 0 | 24 | 11 | 25 | 32 | 1 | 7.8 |
| | 08-04-83 | 0 | 26 | 13 | 22 | 27 | .9 | 7.4 |
| 18N/35E-04B01 | 08-09-82 | 5 | 24 | 6.6 | 12 | 22 | .6 | 2.5 |
| | 05-19-83 | 20 | 31 | 7.4 | 9.1 | 15 | .4 | 2.0 |
| | 08-03-83 | 2 | 24 | 7.1 | 12 | 22 | .6 | 2.6 |
| 18N/35E-11K01 | 08-09-82 | 0 | 17 | 9.3 | 36 | 47 | 2 | 5.7 |
| | 05-20-83 | 0 | 14 | 8.4 | 38 | 52 | 2 | 5.6 |
| | 08-03-83 | 0 | 21 | 13 | 26 | 33 | 1 | 5.1 |
| 18N/35E-12Q01 | 05-25-83 | 130 | 85 | 33 | 25 | 13 | .6 | 4.3 |
| | 09-06-83 | 110 | 76 | 32 | 27 | 15 | .7 | 4.6 |
| 18N/37E-09C02 | 09-09-82 | 0 | 34 | 15 | 15 | 18 | .5 | 2.1 |
| 18N/38E-28N02 | 08-30-83 | 0 | 20 | 8.4 | 9.2 | 19 | .4 | 2.1 |
| 18N/38E-29D01 | 08-10-82 | 2 | 24 | 8.9 | 8.9 | 16 | .4 | 2.4 |
| | 08-04-83 | 0 | 23 | 8.8 | 8.8 | 17 | .4 | 2.5 |
| 19N/31E-14H02 | 08-14-82 | 120 | 58 | 24 | 50 | 30 | 1 | 9.1 |
| 19N/31E-24H01 | 05-19-83 | 0 | 10 | 4.1 | 84 | 78 | 6 | 7.5 |
| | 07-30-83 | 0 | 9.4 | 3.5 | 83 | 79 | 6 | 8.3 |
| 19N/31E-27G01D1 | 05-23-83 | 0 | 3.9 | .49 | 76 | 88 | 10 | 8.0 |
| 19N/32E-04H02 | 05-24-83 | 0 | 26 | 10 | 32 | 38 | 1 | 6.5 |
| | 08-30-83 | 0 | 26 | 11 | 34 | 38 | 1 | 6.4 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---------------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Adams County, Wash.--Continued | | | | | | | | |
| 18N/31E-33D01 | 05-19-83 | 177 | 127 | 44 | 12 | 13 | 4.1 | 110 |
| | 08-01-83 | 173 | 114 | 48 | 11 | 13 | 3.0 | 100 |
| 18N/32E-16C02 | 08-10-82 | 134 | 164 | 0 | 13 | 6.9 | 1.3 | 62 |
| | 03-17-83 | 136 | 166 | 0 | 25 | 10 | .6 | 49 |
| | 08-01-83 | 139 | 165 | 2 | 15 | 8.2 | 1.1 | 58 |
| 18N/33E-12C02 | 08-11-82 | 121 | 148 | 0 | 22 | 6.1 | .5 | 47 |
| | 03-17-83 | 119 | 145 | 0 | 25 | 7.6 | .5 | 46 |
| | 08-04-83 | 127 | 155 | 0 | 25 | 8.1 | .4 | 47 |
| 18N/35E-04B01 | 08-09-82 | 82 | 100 | 0 | 12 | 9.4 | .3 | 33 |
| | 05-19-83 | 88 | 107 | 0 | 16 | 12 | .1 | 30 |
| | 08-03-83 | 87 | 106 | 0 | 11 | 9.6 | .3 | 32 |
| 18N/35E-11K01 | 08-09-82 | 134 | 164 | 0 | 12 | 8.5 | 1.2 | 55 |
| | 05-20-83 | 134 | 164 | 0 | 9.2 | 7.3 | 1.4 | 55 |
| | 08-03-83 | 135 | 165 | 0 | 13 | 10 | .7 | 48 |
| 18N/35E-12Q01 | 05-25-83 | 220 | 268 | 0 | 40 | 30 | .5 | 37 |
| | 09-06-83 | 213 | 260 | 0 | 39 | 29 | .4 | 36 |
| 18N/37E-09C02 | 09-09-82 | 147 | 179 | 0 | 10 | 7.8 | .2 | 46 |
| 18N/38E-28N02 | 08-30-83 | 91 | 111 | 0 | 7.3 | 3.7 | .2 | 41 |
| 18N/38E-29D01 | 08-10-82 | 95 | 116 | 0 | 8.0 | 3.5 | .2 | 45 |
| | 08-04-83 | 94 | 115 | 0 | 8.0 | 3.5 | .2 | 43 |
| 19N/31E-14H02 | 08-14-82 | 121 | 148 | 0 | 110 | 79 | .5 | 47 |
| 19N/31E-24H01 | 05-19-83 | 148 | 154 | 13 | 45 | 25 | 2.1 | 63 |
| | 07-30-83 | 157 | -- | -- | 45 | 30 | 2.2 | 60 |
| 19N/31E-27G01D1 | 05-23-83 | 149 | 166 | 8 | 21 | 13 | 1.9 | 73 |
| 19N/32E-04H02 | 05-24-83 | 130 | 159 | 0 | 31 | 14 | .6 | 46 |
| | 08-30-83 | 130 | 159 | 0 | 33 | 15 | .5 | 47 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 18N/31E-33D01 | 05-19-83 | 344 | <0.10 | 70 | 62 | -- | <1 | -- |
| | 08-01-83 | 327 | <.10 | 70 | 70 | -- | 2 | -- |
| 18N/32E-16C02 | 08-10-82 | 235 | <.10 | -- | <3 | 28 | <1 | 24 |
| | 03-17-83 | 246 | <.10 | 20 | 5 | -- | 1 | -- |
| | 08-01-83 | 241 | <.10 | 30 | 4 | -- | 1 | -- |
| 18N/33E-12C02 | 08-11-82 | 230 | 3.2 | -- | <3 | 21 | 2 | 110 |
| | 03-17-83 | 235 | 3.9 | 20 | 5 | -- | 3 | -- |
| | 08-04-83 | 248 | 5.1 | 10 | 5 | -- | <1 | -- |
| 18N/35E-04B01 | 08-09-82 | 159 | 2.2 | -- | <3 | 9 | <1 | 91 |
| | 05-19-83 | 182 | 4.9 | 20 | <3 | -- | 1 | -- |
| | 08-03-83 | 160 | 2.2 | 10 | 4 | -- | <1 | -- |
| 18N/35E-11K01 | 08-09-82 | 242 | 3.7 | -- | <3 | 13 | <1 | 79 |
| | 05-20-83 | 228 | 2.0 | 60 | <3 | -- | 1 | -- |
| | 08-03-83 | 233 | 3.4 | 40 | 7 | -- | 1 | -- |
| 18N/35E-12Q01 | 05-25-83 | 519 | 30 | 10 | 15 | -- | 2 | -- |
| | 09-06-83 | 500 | 29 | 10 | 7 | -- | 19 | -- |
| 18N/37E-09C02 | 09-09-82 | 230 | 2.6 | -- | 3 | <4 | 2 | 170 |
| 18N/38E-28N02 | 08-30-83 | 156 | 2.2 | <10 | 11 | -- | 4 | -- |
| 18N/38E-29D01 | 08-10-82 | 171 | 2.9 | -- | <3 | <4 | <1 | 96 |
| | 08-04-83 | 167 | 2.8 | <10 | 7 | -- | 3 | -- |
| 19N/31E-14H02 | 08-14-82 | 464 | 3.1 | -- | 20 | 16 | 5 | 290 |
| 19N/31E-24H01 | 05-19-83 | 331 | .28 | 30 | 25 | -- | 4 | -- |
| | 07-30-83 | 330 | .27 | 30 | 19 | -- | 5 | -- |
| 19N/31E-27G01D1 | 05-23-83 | 287 | <.10 | 30 | 5 | -- | 2 | -- |
| 19N/32E-04H02 | 05-24-83 | 246 | .41 | 10 | 31 | -- | 9 | -- |
| | 08-30-83 | 253 | .47 | 20 | 6 | -- | 1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---------------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| Adams County, Wash.--Continued | | | | | | | | |
| 19N/32E-24N01 | 05-26-83 | 1000 | 398 | 9.3 | 30.0 | 0.1 | -- | 3 |
| | 07-30-83 | 1140 | 405 | 9.4 | 32.5 | .3 | -- | 2 |
| 19N/33E-07R01 | 05-25-83 | 1245 | 310 | 8.8 | 24.5 | .2 | -- | 18 |
| | 08-03-83 | 1600 | 322 | 8.8 | 23.5 | .4 | -- | 26 |
| 19N/33E-08Q02 | 08-13-82 | 0845 | 320 | 8.9 | 31.5 | .2 | -- | 4 |
| | 05-25-83 | 1430 | 312 | 9.0 | 31.5 | .1 | -- | 7 |
| | 08-30-83 | 1005 | 299 | 8.9 | 31.5 | .1 | -- | 7 |
| 19N/34E-20B02 | 08-11-82 | 1130 | 295 | 8.9 | 22.0 | .2 | -- | 15 |
| | 05-19-83 | 1445 | 295 | 9.0 | 21.0 | .3 | -- | 18 |
| | 08-04-83 | 1030 | 295 | 8.9 | 22.5 | .3 | -- | 12 |
| 19N/36E-05B01 | 08-09-82 | 1500 | 804 | 7.4 | 12.5 | 6.9 | -- | 260 |
| | 05-20-83 | 1000 | 795 | 7.3 | 11.5 | 7.1 | <1 | 270 |
| | 08-02-83 | 1430 | 785 | 7.5 | 12.0 | 9.5 | -- | 250 |
| 19N/36E-20H01D1 | 08-09-82 | 0830 | 273 | 8.4 | 26.5 | .1 | -- | 29 |
| | 05-20-83 | 1130 | 271 | 8.3 | 20.5 | .1 | -- | 29 |
| | 08-03-83 | 1000 | 271 | 8.2 | 20.5 | .1 | -- | 29 |
| 19N/36E-21C01D1 | 05-26-83 | 0830 | 291 | 8.3 | 22.5 | .3 | -- | 35 |
| 19N/38E-14K02 | 08-09-82 | 1045 | 440 | 7.6 | 12.5 | -- | -- | 170 |
| 20N/31E-07H02 | 05-19-83 | 1300 | 488 | 8.0 | 19.0 | 2.5 | -- | 130 |
| 20N/31E-31A03 | 08-11-82 | 1525 | 347 | 8.3 | 18.5 | 4.3 | -- | 79 |
| | 03-18-83 | 1140 | 326 | 8.1 | 16.0 | 7.8 | <1 | 100 |
| | 08-05-83 | 1145 | 335 | 8.2 | 18.5 | 4.5 | -- | 80 |
| 20N/32E-15D02 | 08-13-82 | 1300 | 353 | 8.2 | 14.5 | 6.6 | -- | 140 |
| | 03-18-83 | 0930 | 368 | 8.0 | 12.0 | 1.9 | <1 | 150 |
| | 07-30-83 | 1420 | 440 | 8.1 | 14.0 | 7.3 | -- | 170 |
| 20N/32E-15L01D2 | 05-26-83 | 1230 | 320 | 8.4 | 20.5 | .8 | -- | 39 |
| | 08-30-83 | 1530 | 332 | -- | 21.0 | .8 | -- | 37 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Adams County, Wash.--Continued | | | | | | | | |
| 19N/32E-24N01 | 05-26-83 | 0 | 1.0 | 0.05 | 89 | 95 | 24 | 6.6 |
| | 07-30-83 | 0 | .95 | .03 | 90 | 95 | 25 | 6.6 |
| 19N/33E-07R01 | 05-25-83 | 0 | 4.4 | 1.7 | 62 | 83 | 6 | 8.0 |
| | 08-03-83 | 0 | 6.4 | 2.5 | 57 | 77 | 5 | 9.0 |
| 19N/33E-08Q02 | 08-13-82 | 0 | 1.7 | .02 | 69 | 92 | 14 | 7.2 |
| | 05-25-83 | 0 | 2.1 | .53 | 67 | 90 | 11 | 6.9 |
| | 08-30-83 | 0 | 2.1 | .41 | 69 | 91 | 11 | 6.6 |
| 19N/34E-20B02 | 08-11-82 | 0 | 4.0 | 1.1 | 60 | 84 | 7 | 7.6 |
| | 05-19-83 | 0 | 4.6 | 1.5 | 58 | 82 | 6 | 7.2 |
| | 08-04-83 | 0 | 3.4 | .82 | 62 | 86 | 8 | 7.6 |
| 19N/36E-05B01 | 08-09-82 | 27 | 63 | 25 | 69 | 36 | 2 | 3.5 |
| | 05-20-83 | 24 | 61 | 28 | 64 | 34 | 2 | 4.0 |
| | 08-02-83 | 7 | 57 | 26 | 67 | 36 | 2 | 3.7 |
| 19N/36E-20H01D1 | 08-09-82 | 0 | 7.3 | 2.6 | 50 | 74 | 4 | 6.7 |
| | 05-20-83 | 0 | 7.3 | 2.7 | 50 | 74 | 4 | 6.5 |
| | 08-03-83 | 0 | 7.1 | 2.7 | 49 | 74 | 4 | 6.8 |
| 19N/36E-21C01D1 | 05-26-83 | 0 | 8.1 | 3.6 | 51 | 72 | 4 | 6.2 |
| 19N/38E-14K02 | 08-09-82 | 0 | 42 | 16 | 27 | 25 | .9 | 3.8 |
| 20N/31E-07H02 | 05-19-83 | 0 | 29 | 15 | 44 | 40 | 2 | 8.6 |
| 20N/31E-31A03 | 08-11-82 | 0 | 20 | 7.1 | 38 | 48 | 2 | 9.3 |
| | 03-18-83 | 0 | 25 | 10 | 27 | 34 | 1 | 8.5 |
| | 08-05-83 | 0 | 20 | 7.4 | 38 | 47 | 2 | 9.0 |
| 20N/32E-15D02 | 08-13-82 | 16 | 37 | 12 | 19 | 22 | .7 | 3.8 |
| | 03-18-83 | 31 | 40 | 13 | 19 | 21 | .7 | 3.7 |
| | 07-30-83 | 39 | 44 | 14 | 20 | 20 | .7 | 4.3 |
| 20N/32E-15L01D2 | 05-26-83 | 0 | 9.6 | 3.6 | 54 | 71 | 4 | 7.0 |
| | 08-30-83 | -- | 9.3 | 3.4 | 56 | 73 | 4 | 6.6 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---------------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 19N/32E-24N01 | 05-26-83 | 181 | 107 | 56 | 5.1 | 11 | 4.6 | 110 |
| | 07-30-83 | 185 | 112 | 56 | 5.0 | 12 | 4.9 | 100 |
| 19N/33E-07R01 | 05-25-83 | 149 | 162 | 10 | 7.8 | 6.8 | 2.6 | 66 |
| | 08-03-83 | 148 | 168 | 6 | 9.0 | 7.2 | 2.4 | 64 |
| 19N/33E-08Q02 | 08-13-82 | 150 | 130 | 26 | <5.0 | 6.1 | 3.1 | 82 |
| | 05-25-83 | 150 | 152 | 15 | 2.2 | 6.1 | 3.2 | 80 |
| | 08-30-83 | 146 | 140 | 19 | <0.2 | 6.6 | 2.9 | 83 |
| 19N/34E-20B02 | 08-11-82 | 141 | 140 | 16 | <5.0 | 5.2 | 2.4 | 73 |
| | 05-19-83 | 151 | 133 | 25 | 5.5 | 5.0 | 2.0 | 67 |
| | 08-04-83 | 144 | 145 | 15 | <5.0 | 5.5 | 2.6 | 74 |
| 19N/36E-05B01 | 08-09-82 | 234 | 285 | 0 | 70 | 49 | .3 | 39 |
| | 05-20-83 | 244 | 297 | 0 | 74 | 52 | .3 | 39 |
| | 08-02-83 | 243 | 296 | 0 | 67 | 49 | .3 | 39 |
| 19N/36E-20H01D1 | 08-09-82 | 128 | -- | -- | 10 | 3.6 | 1.2 | 59 |
| | 05-20-83 | 131 | 160 | 0 | 12 | 3.4 | 1.2 | 58 |
| | 08-03-83 | 127 | 155 | 0 | 10 | 3.6 | 1.1 | 56 |
| 19N/36E-21C01D1 | 05-26-83 | 141 | 172 | 0 | 11 | 4.7 | 1.2 | 59 |
| 19N/38E-14K02 | 08-09-82 | 193 | 235 | 0 | 25 | 8.3 | .3 | 44 |
| 20N/31E-07H02 | 05-19-83 | 144 | 176 | 0 | 49 | 33 | .6 | 54 |
| 20N/31E-31A03 | 08-11-82 | 119 | 145 | 0 | 35 | 13 | .6 | 46 |
| | 03-18-83 | 124 | 151 | 0 | 31 | 11 | .5 | 43 |
| | 08-05-83 | 123 | 150 | 0 | 34 | 16 | .6 | 44 |
| 20N/32E-15D02 | 08-13-82 | 125 | 153 | 0 | 31 | 17 | .4 | 45 |
| | 03-18-83 | 122 | 149 | 0 | 35 | 22 | .4 | 45 |
| | 07-30-83 | 129 | 157 | 0 | 42 | 32 | .4 | 42 |
| 20N/32E-15L01D2 | 05-26-83 | 131 | 160 | 0 | 18 | 12 | 2.3 | 55 |
| | 08-30-83 | -- | -- | -- | 16 | 11 | 2.3 | 56 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 19N/32E-24N01 | 05-26-83 | 336 | <0.10 | 90 | 65 | -- | 1 | -- |
| | 07-30-83 | 331 | <.10 | 90 | 100 | -- | 1 | -- |
| 19N/33E-07R01 | 05-25-83 | 249 | <.10 | 40 | 17 | -- | 1 | -- |
| | 08-03-83 | 246 | <.10 | 40 | 6 | -- | 4 | -- |
| 19N/33E-08Q02 | 08-13-82 | -- | <.10 | -- | 11 | 24 | 8 | 3 |
| | 05-25-83 | 258 | <.10 | 50 | 17 | -- | 1 | -- |
| | 08-30-83 | -- | <.10 | 60 | 15 | -- | 3 | -- |
| 19N/34E-20B02 | 08-11-82 | -- | <.10 | -- | 11 | 27 | 3 | 15 |
| | 05-19-83 | 241 | <.10 | 40 | 12 | -- | <1 | -- |
| | 08-04-83 | -- | <.10 | 50 | 8 | -- | <1 | -- |
| 19N/36E-05B01 | 08-09-82 | 503 | 10 | -- | <3 | 11 | <1 | 270 |
| | 05-20-83 | 501 | 7.4 | 30 | 17 | -- | 1 | -- |
| | 08-02-83 | 494 | 9.0 | 20 | 5 | -- | <1 | -- |
| 19N/36E-20H01D1 | 08-09-82 | 218 | <.10 | -- | <3 | 26 | 5 | 22 |
| | 05-20-83 | 220 | <.10 | 20 | 6 | -- | 1 | -- |
| | 08-03-83 | 214 | .22 | 20 | 5 | -- | <1 | -- |
| 19N/36E-21C01D1 | 05-26-83 | 229 | <.10 | 20 | 17 | -- | 3 | -- |
| 19N/38E-14K02 | 08-09-82 | 285 | .72 | -- | <3 | 7 | 2 | 180 |
| 20N/31E-07H02 | 05-19-83 | 330 | 2.4 | 20 | <3 | -- | <1 | -- |
| 20N/31E-31A03 | 08-11-82 | 241 | .17 | -- | 3 | 19 | 1 | 58 |
| | 03-18-83 | 232 | .34 | 10 | 6 | -- | <1 | -- |
| | 08-05-83 | 244 | .32 | 10 | 5 | -- | <1 | -- |
| 20N/32E-15D02 | 08-13-82 | 243 | .46 | -- | <3 | 14 | 4 | 150 |
| | 03-18-83 | 254 | .52 | 20 | 22 | -- | 8 | -- |
| | 07-30-83 | 284 | 1.9 | 20 | 9 | -- | 2 | -- |
| 20N/32E-15L01D2 | 05-26-83 | 241 | .20 | 20 | <3 | -- | 1 | -- |
| | 08-30-83 | 239 | .19 | 30 | 5 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---------------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 20N/33E-16E03 | 07-19-83 | 2030 | 352 | 8.0 | 14.5 | -- | -- | 78 |
| 20N/33E-16E06 | 07-19-83 | 2100 | 320 | 8.1 | 15.5 | -- | -- | 28 |
| 20N/34E-13R01 | 08-10-82 | 0925 | 598 | 8.0 | 15.5 | 3.6 | -- | 180 |
| | 05-24-83 | 1030 | 612 | 8.0 | 14.0 | 3.5 | <1 | 180 |
| | 08-04-83 | 0900 | 598 | 8.1 | 15.0 | 4.7 | -- | 180 |
| 20N/35E-27A01 | 09-09-82 | 0910 | 285 | 8.4 | 21.0 | 2.4 | -- | 48 |
| | 05-24-83 | 0800 | 291 | 8.2 | 21.5 | 1.6 | -- | 45 |
| | 08-31-83 | 1100 | 284 | 8.1 | 22.0 | 1.4 | -- | 41 |
| 20N/35E-34M02 | 05-25-83 | 1200 | 421 | 7.6 | 12.5 | 9.0 | -- | 180 |
| | 08-03-83 | 1500 | 425 | 7.8 | 15.0 | 8.7 | -- | 180 |
| 20N/37E-32D01 | 08-09-82 | 1255 | 308 | 7.9 | 14.0 | 9.2 | -- | 150 |
| | 05-24-83 | 1330 | 512 | 7.8 | 13.0 | 8.9 | <1 | 220 |
| | 08-02-83 | 1300 | 370 | 8.0 | 13.5 | 10.6 | -- | 160 |
| <u>Asotin County, Wash.</u> | | | | | | | | |
| 08N/45E-29H01 | 08-10-83 | 1345 | 292 | 8.4 | 16.5 | 4.6 | -- | 110 |
| 08N/45E-35B01 | 06-21-82 | 0830 | 258 | 7.7 | 19.5 | -- | <1 | 110 |
| 10N/45E-02P01 | 08-11-83 | 0845 | 560 | 7.7 | 15.0 | .1 | -- | 180 |
| 10N/46E-20A02 | 06-21-82 | 1230 | 335 | 7.5 | 18.5 | -- | <1 | 130 |
| 10N/46E-21D01 | 06-21-82 | 1115 | 200 | 7.7 | 22.0 | -- | <1 | 61 |
| 11N/45E-20K01D1 | 08-12-83 | 1530 | 625 | 7.5 | 15.5 | 6.6 | -- | 260 |
| 11N/46E-32E01 | 06-21-82 | 1400 | 238 | 7.7 | 25.5 | -- | <1 | 56 |
| | 08-10-83 | 1000 | 253 | 7.9 | 26.0 | .5 | -- | 44 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 20N/33E-16E03 | 07-19-83 | 0 | 21 | 6.1 | 43 | 52 | 2 | 6.5 |
| 20N/33E-16E06 | 07-19-83 | 0 | 9.2 | 1.1 | 62 | 78 | 5 | 7.4 |
| 20N/34E-13R01 | 08-10-82 | 8 | 34 | 23 | 51 | 37 | 2 | 8.2 |
| | 05-24-83 | 0 | 34 | 24 | 51 | 36 | 2 | 8.7 |
| | 08-04-83 | 1 | 34 | 23 | 52 | 37 | 2 | 8.8 |
| 20N/35E-27A01 | 09-09-82 | 0 | 11 | 5.0 | 45 | 64 | 3 | 5.2 |
| | 05-24-83 | 0 | 10 | 4.8 | 46 | 66 | 3 | 5.6 |
| | 08-31-83 | 0 | 9.7 | 4.1 | 48 | 68 | 3 | 5.6 |
| 20N/35E-34M02 | 05-25-83 | 62 | 42 | 18 | 12 | 13 | .4 | 1.9 |
| | 08-03-83 | 65 | 42 | 18 | 11 | 12 | .4 | 1.8 |
| 20N/37E-32D01 | 08-09-82 | 0 | 35 | 14 | 10 | 13 | .4 | 1.6 |
| | 05-24-83 | 42 | 54 | 21 | 19 | 16 | .6 | 1.9 |
| | 08-02-83 | 7 | 39 | 15 | 13 | 15 | .4 | 1.6 |
| <u>Asotin County, Wash.</u> | | | | | | | | |
| 08N/45E-29H01 | 08-10-83 | 0 | 21 | 13 | 13 | 21 | .5 | 2.7 |
| 08N/45E-35B01 | 06-21-82 | 0 | 23 | 13 | 12 | 19 | .5 | 3.1 |
| 10N/45E-02P01 | 08-11-83 | 3 | 32 | 24 | 44 | 34 | 1 | 5.7 |
| 10N/46E-20A02 | 06-21-82 | 0 | 33 | 11 | 20 | 24 | .8 | 7.6 |
| 10N/46E-21D01 | 06-21-82 | 0 | 18 | 3.9 | 15 | 30 | .8 | 11 |
| 11N/45E-20K01D1 | 08-12-83 | 41 | 71 | 21 | 22 | 15 | .6 | 7.7 |
| 11N/46E-32E01 | 06-21-82 | 0 | 19 | 2.1 | 32 | 50 | 2 | 10 |
| | 08-10-83 | 0 | 14 | 2.3 | 35 | 57 | 2 | 10 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alka- linity, field (mg/L as CaCO ₃) | Bicar- bonate, field (mg/L as HCO ₃) | Car- bonate, field (mg/L as CO ₃) | Sulfate, dis- solved (mg/L as SO ₄) | Chlo- ride, dis- solved (mg/L as Cl) | Fluo- ride, dis- solved (mg/L as F) | Silica, dis- solved (mg/L as SiO ₂) |
|---------------------------------------|----------|---|---|--|--|--|---|--|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 20N/33E-16E03 | 07-19-83 | 139 | 169 | 0 | 29 | 14 | 0.3 | 33 |
| 20N/33E-16E06 | 07-19-83 | 146 | 178 | 0 | 19 | 11 | 1.5 | 35 |
| 20N/34E-13R01 | 08-10-82 | 171 | 209 | 0 | 34 | 49 | .5 | 41 |
| | 05-24-83 | 192 | 234 | 0 | 24 | 53 | .6 | 40 |
| | 08-04-83 | 179 | 218 | 0 | 37 | 53 | .5 | 39 |
| 20N/35E-27A01 | 09-09-82 | 131 | 149 | 5 | 8.0 | 7.1 | 1.6 | 55 |
| | 05-24-83 | 151 | 184 | 0 | 8.9 | 7.0 | 1.9 | 56 |
| | 08-31-83 | 132 | 161 | 0 | 9.0 | 7.2 | 1.9 | 57 |
| 20N/35E-34M02 | 05-25-83 | 117 | 143 | 0 | 28 | 26 | .3 | 39 |
| | 08-03-83 | 114 | 139 | 0 | 29 | 29 | .3 | 36 |
| 20N/37E-32D01 | 08-09-82 | 149 | 182 | 0 | 6.0 | 5.9 | .4 | 47 |
| | 05-24-83 | 180 | 219 | 0 | 13 | 27 | .4 | 45 |
| | 08-02-83 | 152 | 186 | 0 | 9.0 | 13 | .4 | 45 |
| <u>Asotin County, Wash</u> | | | | | | | | |
| 08N/45E-29H01 | 08-10-83 | 129 | 149 | 4 | 7.9 | 1.6 | .4 | 36 |
| 08N/45E-35B01 | 06-21-82 | 145 | 177 | 0 | 7.0 | 2.1 | .3 | 28 |
| 10N/45E-02P01 | 08-11-83 | 176 | 214 | 0 | 63 | 30 | .5 | 56 |
| 10N/46E-20A02 | 06-21-82 | 142 | 173 | 0 | 25 | 16 | .2 | 58 |
| 10N/46E-21D01 | 06-21-82 | 94 | 115 | 0 | 7.0 | 6.4 | .3 | 66 |
| 11N/45E-20K01D1 | 08-12-83 | 222 | 271 | 0 | 53 | 18 | .3 | 53 |
| 11N/46E-32E01 | 06-21-82 | 106 | 129 | 0 | 13 | 12 | .7 | 68 |
| | 08-10-83 | 108 | 132 | 0 | 19 | 12 | .7 | 66 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Adams County, Wash.--Continued</u> | | | | | | | | |
| 20N/33E-16E03 | 07-19-83 | 237 | 0.33 | -- | 12 | -- | <1 | -- |
| 20N/33E-16E06 | 07-19-83 | 234 | <.10 | -- | 220 | -- | 12 | -- |
| 20N/34E-13R01 | 08-10-82 | 370 | 6.0 | -- | <3 | 17 | 11 | 190 |
| | 05-24-83 | 377 | 5.9 | 20 | 4 | -- | 13 | -- |
| | 08-04-83 | 378 | 5.3 | 20 | 6 | -- | 7 | -- |
| 20N/35E-27A01 | 09-09-82 | 218 | .30 | -- | 29 | 22 | 2 | 51 |
| | 05-24-83 | 232 | .26 | 30 | 17 | -- | 1 | -- |
| | 08-31-83 | 222 | .17 | 30 | 11 | -- | <1 | -- |
| 20N/35E-34M02 | 05-25-83 | 269 | 7.2 | 10 | 15 | -- | <1 | -- |
| | 08-03-83 | 268 | 7.4 | 10 | 5 | -- | 1 | -- |
| 20N/37E-32D01 | 08-09-82 | 218 | 1.9 | -- | <3 | <4 | 2 | 170 |
| | 05-24-83 | 338 | 11 | 10 | 29 | -- | <1 | -- |
| | 08-02-83 | 247 | 4.5 | <10 | 8 | -- | <1 | -- |
| <u>Asotin County, Wash.</u> | | | | | | | | |
| 08N/45E-29H01 | 08-10-83 | 173 | <.10 | <10 | 6 | -- | 10 | -- |
| 08N/45E-35B01 | 06-21-82 | 179 | .85 | -- | 4 | -- | 18 | -- |
| 10N/45E-02P01 | 08-11-83 | 361 | <.10 | 10 | 210 | -- | 68 | -- |
| 10N/46E-20A02 | 06-21-82 | 264 | 1.7 | -- | 3 | -- | <1 | -- |
| 10N/46E-21D01 | 06-21-82 | 185 | .11 | -- | 8 | -- | 2 | -- |
| 11N/45E-20K01D1 | 08-12-83 | 401 | 5.0 | 20 | 9 | -- | 1 | -- |
| 11N/46E-32E01 | 06-21-82 | 220 | <.10 | -- | 9 | -- | 13 | -- |
| | 08-10-83 | 224 | <.10 | 20 | 18 | -- | 9 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|-----------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Benton County, Wash.</u> | | | | | | | | |
| 05N/24E-28G01 | 03-29-82 | 0935 | 565 | 7.8 | 17.0 | -- | <1 | 190 |
| 05N/24E-35R02 | 03-29-82 | 0810 | 620 | 7.9 | 15.5 | -- | <1 | 220 |
| 05N/25E-22M01 | 08-25-82 | 1605 | 470 | 7.8 | 18.5 | 1.6 | -- | 64 |
| | 03-02-83 | 1130 | 488 | 8.2 | 18.5 | 1.9 | -- | 64 |
| | 07-21-83 | 1000 | 490 | 8.3 | 19.0 | 3.2 | -- | 64 |
| 05N/26E-05N01D1 | 03-30-82 | 1545 | 465 | 8.8 | 19.0 | -- | <1 | 11 |
| | 04-18-84 | 1430 | 436 | 8.8 | -- | -- | -- | 11 |
| 06N/24E-23N01 | 08-25-82 | 1510 | 448 | 7.5 | 19.0 | 8.2 | -- | 160 |
| | 03-07-83 | 1100 | 422 | 7.5 | 17.5 | 8.3 | -- | 170 |
| | 07-19-83 | 1800 | 430 | 7.8 | 18.0 | 7.1 | -- | 170 |
| 06N/26E-19K01 | 03-31-82 | 1520 | 1,010 | 7.7 | 18.0 | -- | <1 | 350 |
| | 08-26-82 | 1100 | -- | 7.6 | 19.0 | 9.0 | -- | 390 |
| | 03-02-83 | 1000 | 1,330 | 7.5 | 17.5 | 6.8 | -- | 450 |
| | 07-20-83 | 1000 | 1,460 | 7.6 | 18.5 | 6.8 | -- | 480 |
| 07N/24E-26B01 | 03-31-82 | 1810 | 290 | 7.8 | 19.5 | -- | <1 | 100 |
| 07N/25E-12R01 | 03-30-82 | 1735 | 450 | 8.1 | 18.5 | -- | <1 | 110 |
| 7N/25E-36N06 | 03-31-82 | 1355 | 410 | 8.3 | 21.5 | -- | <1 | 25 |
| | 04-18-84 | 0940 | 403 | 8.3 | 21.5 | -- | -- | 20 |
| 07N/26E-04E01 | 08-26-82 | 1305 | 470 | 7.8 | 18.5 | 8.6 | -- | 130 |
| | 03-02-83 | 0930 | 425 | 8.2 | 11.5 | 8.3 | -- | 130 |
| 07N/26E-05B02D1 | 03-31-82 | 1645 | 490 | 7.6 | 20.5 | -- | <1 | 120 |
| | 08-26-82 | 1135 | 510 | 8.0 | 22.0 | .4 | -- | 120 |
| 07N/27E-29Q01 | 03-30-82 | 1045 | 1,140 | 7.4 | 15.0 | -- | <1 | 520 |
| 08N/24E-01J01 | 06-11-82 | 0905 | 412 | 8.3 | 22.0 | -- | <1 | 39 |
| | 08-25-82 | 1345 | 410 | 8.6 | 21.5 | .3 | -- | 35 |
| | 07-20-83 | 1230 | 405 | 8.7 | 22.0 | .1 | -- | 31 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|-----------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Benton County, Wash.</u> | | | | | | | | |
| 05N/24E-28G01 | 03-29-82 | 35 | 38 | 22 | 50 | 36 | 2 | 5.0 |
| 05N/24E-35R02 | 03-29-82 | 18 | 63 | 15 | 48 | 31 | 1 | 7.6 |
| 05N/25E-22M01 | 08-25-82 | 0 | 16 | 5.8 | 83 | 71 | 5 | 8.6 |
| | 03-02-83 | 0 | 16 | 5.9 | 82 | 70 | 4 | 8.3 |
| | 07-21-83 | 0 | 16 | 5.9 | 82 | 70 | 4 | 8.6 |
| 05N/26E-05N01D1 | 03-30-82 | 0 | 3.6 | .50 | 100 | 91 | 13 | 8.7 |
| | 04-18-84 | -- | 3.2 | .60 | 100 | 91 | 13 | 9.2 |
| 06N/24E-23N01 | 08-25-82 | 40 | 41 | 15 | 20 | 20 | .7 | 4.6 |
| | 03-07-83 | -- | 43 | 16 | 20 | 20 | .7 | 4.6 |
| | 07-19-83 | 41 | 42 | 15 | 20 | 20 | .7 | 4.7 |
| 06N/26E-19K01 | 03-31-82 | 210 | 74 | 39 | 76 | 32 | 2 | 7.4 |
| | 08-26-82 | 260 | 85 | 44 | 85 | 31 | 2 | 8.9 |
| | 03-02-83 | 310 | 94 | 52 | 91 | 30 | 2 | 8.8 |
| | 07-20-83 | 350 | 98 | 58 | 96 | 30 | 2 | 9.9 |
| 07N/24E-26B01 | 03-31-82 | 0 | 25 | 10 | 20 | 28 | .9 | 6.5 |
| 07N/25E-12R01 | 03-30-82 | 0 | 27 | 9.5 | 49 | 45 | 2 | 17 |
| 07N/25E-36N06 | 03-31-82 | 0 | 6.8 | 1.9 | 80 | 79 | 7 | 17 |
| | 04-18-84 | -- | 5.1 | 1.7 | 80 | 83 | 8 | 13 |
| 07N/26E-04E01 | 08-26-82 | 0 | 32 | 13 | 37 | 36 | 1 | 5.8 |
| | 03-02-83 | 0 | 32 | 13 | 38 | 37 | 1 | 5.6 |
| 07N/26E-05B02D1 | 03-31-82 | 0 | 31 | 11 | 49 | 42 | 2 | 18 |
| | 08-26-82 | 0 | 31 | 11 | 51 | 43 | 2 | 17 |
| 07N/27E-29Q01 | 03-30-82 | 360 | 120 | .53 | 42 | 15 | .8 | 7.5 |
| 08N/24E-01J01 | 06-11-82 | 0 | 11 | 2.9 | 77 | 75 | 5 | 14 |
| | 08-25-82 | 0 | 8.8 | 3.1 | 75 | 75 | 6 | 15 |
| | 07-20-83 | 0 | 7.9 | 2.8 | 80 | 78 | 6 | 15 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|-----------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Benton County, Wash.</u> | | | | | | | | |
| 05N/24E-28G01 | 03-29-82 | 150 | 183 | 0 | 78 | 41 | 0.3 | 50 |
| 05N/24E-35R02 | 03-29-82 | 201 | 245 | 0 | 75 | 34 | .3 | 40 |
| 05N/25E-22M01 | 08-25-82 | 164 | 200 | 0 | 68 | 15 | 1.1 | 56 |
| | 03-02-83 | 162 | 198 | 0 | 66 | 18 | 1.1 | 55 |
| | 07-21-83 | 164 | 200 | 0 | 61 | 18 | 1.1 | 55 |
| 05N/26E-05N01D1 | 03-30-82 | 209 | 226 | 14 | 5.0 | 25 | 1.9 | 60 |
| | 04-18-84 | -- | -- | -- | 6.3 | 28 | 2.2 | 57 |
| 06N/24E-23N01 | 08-25-82 | 125 | 152 | 0 | 48 | 26 | .3 | 58 |
| | 03-07-83 | -- | -- | -- | 49 | 29 | .3 | 59 |
| | 07-19-83 | 125 | 153 | 0 | 47 | 27 | .3 | 56 |
| 06N/26E-19K01 | 03-31-82 | 140 | 171 | 0 | 170 | 81 | .3 | 57 |
| | 08-26-82 | 134 | 163 | 0 | 160 | 110 | .4 | 55 |
| | 03-02-83 | 138 | 168 | 0 | 200 | 120 | .4 | 57 |
| | 07-20-83 | 129 | 157 | 0 | 210 | 130 | .4 | 55 |
| 07N/24E-26B01 | 03-31-82 | 116 | 142 | 0 | 27 | 7.6 | .1 | 52 |
| 07N/25E-12R01 | 03-30-82 | 171 | 208 | 0 | 45 | 20 | .5 | 62 |
| 07N/25E-36N06 | 03-31-82 | 172 | 210 | 0 | 27 | 26 | .6 | 55 |
| | 04-18-84 | -- | -- | -- | 26 | 15 | 1.0 | 54 |
| 07N/26E-04E01 | 08-26-82 | 138 | 168 | 0 | 41 | 19 | .5 | 54 |
| | 03-02-83 | 135 | 165 | 0 | 42 | 20 | .5 | 53 |
| 07N/26E-05B02D1 | 03-31-82 | 176 | 214 | 0 | 56 | 20 | .2 | 69 |
| | 08-26-82 | 173 | 211 | 0 | 55 | 19 | .3 | 69 |
| 07N/27E-29Q01 | 03-30-82 | 157 | 191 | 0 | 250 | 120 | .2 | 54 |
| 08N/24E-01JO1 | 06-11-82 | 205 | -- | -- | <5.0 | 9.4 | 1.2 | 62 |
| | 08-25-82 | 204 | 217 | 16 | <5.0 | 11 | 1.0 | 62 |
| | 07-20-83 | 210 | 228 | 14 | 1.2 | 9.5 | 1.1 | 63 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|-----------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Benton County, Wash.</u> | | | | | | | | |
| 05N/24E-28G01 | 03-29-82 | 394 | 4.5 | -- | 9 | -- | <3 | -- |
| 05N/24E-35R02 | 03-29-82 | 428 | 5.5 | -- | 9 | -- | 4 | -- |
| 05N/25E-22M01 | 08-25-82 | 352 | <.10 | -- | 30 | 18 | 100 | 130 |
| | 03-02-83 | 350 | <.10 | 40 | 30 | -- | 99 | -- |
| | 07-21-83 | 346 | <.10 | -- | 36 | -- | 98 | -- |
| 05N/26E-05N01D1 | 03-30-82 | 330 | <.10 | -- | 9 | -- | 5 | -- |
| | 04-18-84 | 328 | -- | -- | 31 | 16 | 5 | 27 |
| 06N/24E-23N01 | 08-25-82 | 296 | 1.8 | -- | <3 | 17 | 1 | 240 |
| | 03-07-83 | 303 | 1.8 | <10 | 24 | -- | 4 | -- |
| | 07-19-83 | 296 | 1.9 | -- | 25 | -- | 1 | -- |
| 06N/26E-19K01 | 03-31-82 | 735 | 33 | -- | 9 | -- | 5 | -- |
| | 08-26-82 | 828 | 45 | -- | 4 | 21 | 25 | 710 |
| | 03-02-83 | 914 | 47 | 30 | 8 | -- | 9 | -- |
| | 07-20-83 | 974 | 54 | -- | 26 | -- | 8 | -- |
| 07N/24E-26B01 | 03-31-82 | 222 | .89 | -- | 16 | -- | 3 | -- |
| 07N/25E-12R01 | 03-30-82 | 332 | <.10 | -- | 96 | -- | 120 | -- |
| 07N/25E-36N06 | 03-31-82 | 318 | <.10 | -- | 25 | -- | 14 | -- |
| | 04-18-84 | 300 | -- | -- | 6 | 29 | 7 | 26 |
| 07N/26E-04E01 | 08-26-82 | 307 | 5.0 | -- | <3 | 12 | 2 | 230 |
| | 03-02-83 | 308 | 5.1 | 20 | <3 | -- | 1 | -- |
| 07N/26E-05B02D1 | 03-31-82 | 360 | <.10 | -- | 290 | -- | 160 | -- |
| | 08-26-82 | 358 | <.10 | -- | 260 | 23 | 160 | 230 |
| 07N/27E-29Q01 | 03-30-82 | 838 | 22 | -- | <9 | -- | <3 | -- |
| 08N/24E-01JO1 | 06-11-82 | 308 | .26 | -- | 27 | -- | 37 | -- |
| | 08-25-82 | -- | <.10 | -- | 28 | 32 | 42 | 60 |
| | 07-20-83 | 307 | <.10 | -- | 29 | -- | 27 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Benton County, Wash.--Continued</u> | | | | | | | | |
| 08N/24E-15F01 | 08-25-82 | 1600 | 455 | 7.9 | 24.0 | 8.0 | -- | 200 |
| | 03-09-83 | 1030 | 385 | 7.4 | 18.0 | 6.6 | -- | 180 |
| | 07-20-83 | 1430 | 435 | 7.9 | 19.0 | 4.6 | -- | 200 |
| 08N/27E-01A01D1 | 08-27-82 | 1015 | 574 | 7.9 | 22.5 | 7.0 | -- | 250 |
| | 03-08-83 | 1530 | 550 | 7.8 | 10.5 | -- | -- | 240 |
| | 07-22-83 | 0830 | 595 | 7.8 | 18.0 | 10.0 | -- | 240 |
| 08N/27E-01K01 | 08-27-82 | 1515 | 464 | 7.9 | 19.0 | 8.1 | -- | 170 |
| 08N/28E-07P01 | 08-27-82 | 1320 | 579 | 8.1 | 20.5 | -- | -- | 97 |
| 08N/29E-17G01D1 | 08-28-82 | 1320 | 570 | 7.5 | 19.5 | -- | -- | 190 |
| | 03-09-83 | 1130 | 495 | 7.7 | 19.0 | 5.8 | -- | 170 |
| | 07-25-83 | 0915 | 525 | 7.7 | 18.5 | 5.1 | -- | 190 |
| 08N/29E-17G02 | 06-25-82 | 1030 | 820 | 7.9 | 18.5 | -- | <1 | 360 |
| 08N/30E-07G04 | 06-24-82 | 1500 | 730 | 7.5 | 17.5 | -- | <1 | 300 |
| 08N/30E-17D02 | 06-25-82 | 0915 | 605 | 7.4 | 18.5 | -- | <1 | 260 |
| 08N/30E-19M01 | 06-24-82 | 1700 | 550 | 7.6 | 18.5 | -- | <1 | 200 |
| 08N/30E-22M02 | 06-24-82 | 1800 | 570 | 7.5 | -- | -- | <1 | 200 |
| 09N/24E-04H01 | 06-11-82 | 0745 | 661 | 7.6 | 17.0 | -- | <1 | 310 |
| 09N/25E-33B01 | 08-26-82 | 1500 | 320 | 8.4 | 21.0 | .4 | -- | 49 |
| | 03-09-83 | 1330 | 312 | 8.2 | 20.5 | .1 | -- | 49 |
| | 07-20-83 | 1630 | 301 | 8.7 | 21.0 | .1 | -- | 50 |
| 09N/26E-12N01 | 08-26-82 | 1100 | 690 | 7.5 | 16.0 | 3.9 | -- | 300 |
| | 03-08-83 | 1230 | 650 | 7.4 | 15.0 | 4.5 | -- | 300 |
| | 07-20-83 | 1600 | 670 | 7.6 | 15.5 | 4.5 | -- | 290 |
| 09N/27E-07D01 | 06-25-82 | 0820 | 700 | 7.7 | 15.0 | -- | <1 | 300 |
| 09N/27E-21D01 | 08-28-82 | 1125 | 400 | 8.0 | 22.5 | -- | -- | 55 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Benton County, Wash.--Continued | | | | | | | | |
| 08N/24E-15F01 | 08-25-82 | 34 | 50 | 19 | 15 | 14 | 0.5 | 4.4 |
| | 03-09-83 | 8 | 43 | 17 | 14 | 14 | .5 | 4.0 |
| | 07-20-83 | 26 | 48 | 19 | 15 | 14 | .5 | 4.4 |
| 08N/27E-01A01D1 | 08-27-82 | 99 | 63 | 22 | 23 | 17 | .6 | 3.6 |
| | 03-08-83 | 78 | 58 | 22 | 23 | 17 | .7 | 3.3 |
| | 07-22-83 | 85 | 58 | 22 | 23 | 17 | .7 | 3.5 |
| 08N/27E-01K01 | 08-27-82 | 39 | 41 | 17 | 22 | 21 | .7 | 9.2 |
| 08N/28E-07P01 | 08-27-82 | 0 | 19 | 12 | 81 | 60 | 4 | 16 |
| 08N/29E-17G01D1 | 08-28-82 | 11 | 46 | 19 | 34 | 27 | 1 | 7.3 |
| | 03-09-83 | 29 | 42 | 17 | 30 | 26 | 1 | 8.2 |
| | 07-25-83 | 0 | 45 | 18 | 32 | 26 | 1 | 7.8 |
| 08N/29E-17G02 | 06-25-82 | 0 | 77 | 40 | 53 | 24 | 1 | 5.1 |
| 08N/30E-07G04 | 06-24-82 | 13 | 87 | 21 | 45 | 24 | 1 | 7.6 |
| 08N/30E-17D02 | 06-25-82 | 0 | 77 | 17 | 35 | 22 | .9 | 7.1 |
| 08N/30E-19M01 | 06-24-82 | 36 | 41 | 23 | 39 | 29 | 1 | 12 |
| 08N/30E-22M02 | 06-24-82 | 0 | 52 | 16 | 50 | 35 | 2 | 4.8 |
| 09N/24E-04H01 | 06-11-82 | 100 | 86 | 22 | 16 | 10 | .4 | 5.0 |
| 09N/25E-33B01 | 08-26-82 | 0 | 12 | 4.5 | 48 | 62 | 3 | 12 |
| | 03-09-83 | 0 | 12 | 4.7 | 47 | 61 | 3 | 12 |
| | 07-20-83 | 0 | 12 | 4.8 | 48 | 62 | 3 | 12 |
| 09N/26E-12N01 | 08-26-82 | 1 | 74 | 29 | 36 | 20 | .9 | 4.0 |
| | 03-08-83 | 0 | 70 | 30 | 36 | 21 | .9 | 3.7 |
| | 07-20-83 | 0 | 68 | 30 | 37 | 21 | .9 | 4.0 |
| 09N/27E-07D01 | 06-25-82 | 0 | 73 | 28 | 35 | 20 | .9 | 6.7 |
| 09N/27E-21D01 | 08-28-82 | 0 | 14 | 4.9 | 56 | 63 | 3 | 14 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|--|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Benton County, Wash.--Continued | | | | | | | | |
| 08N/24E-15F01 | 08-25-82 | 169 | 206 | 0 | 52 | 6.0 | 0.3 | 53 |
| | 03-09-83 | 169 | 206 | 0 | 46 | 6.0 | .4 | 52 |
| | 07-20-83 | 172 | 210 | 0 | 50 | 5.4 | .3 | 50 |
| 08N/27E-01A01D1 | 08-27-82 | 149 | 182 | 0 | 84 | 22 | .5 | 50 |
| | 03-08-83 | 157 | 192 | 0 | 79 | 21 | .5 | 49 |
| | 07-22-83 | 151 | 184 | 0 | 80 | 22 | .4 | 47 |
| 08N/27E-01K01 | 08-27-82 | 134 | 163 | 0 | 87 | 7.0 | .5 | 61 |
| 08N/28E-07P01 | 08-27-82 | 189 | 230 | 0 | 88 | 15 | 1.3 | 71 |
| 08N/29E-17G01D1 | 08-28-82 | 182 | 222 | 0 | 56 | 27 | .4 | 56 |
| | 03-09-83 | 146 | 178 | 0 | 58 | 29 | .4 | 58 |
| | 07-25-83 | 189 | 231 | 0 | 58 | 30 | .4 | 57 |
| 08N/29E-17G02 | 06-25-82 | 395 | 481 | 0 | 65 | 19 | .6 | 50 |
| 08N/30E-07G04 | 06-24-82 | 290 | 354 | 0 | 67 | 29 | .3 | 39 |
| 08N/30E-17D02 | 06-25-82 | 284 | 346 | 0 | 41 | 15 | .4 | 40 |
| 08N/30E-19M01 | 06-24-82 | 161 | 196 | 0 | 94 | 21 | .4 | 50 |
| 08N/30E-22M02 | 06-24-82 | 224 | 273 | 0 | 51 | 19 | .7 | 35 |
| 09N/24E-04H01 | 06-11-82 | 203 | 248 | 0 | 79 | 22 | .3 | 51 |
| 09N/25E-33B01 | 08-26-82 | 152 | -- | -- | 10 | 5.7 | .5 | 58 |
| | 03-09-83 | 175 | 213 | 0 | 11 | 5.6 | .6 | 57 |
| | 07-20-83 | 142 | 173 | 8 | 11 | 5.6 | .6 | 57 |
| 09N/26E-12N01 | 08-26-82 | 303 | 370 | 0 | 52 | 11 | .7 | 47 |
| | 03-08-83 | 322 | 392 | 0 | 42 | 12 | .8 | 47 |
| | 07-20-83 | 321 | 391 | 0 | 44 | 11 | .7 | 45 |
| 09N/27E-07D01 | 06-25-82 | 304 | 371 | 0 | 48 | 16 | .7 | 55 |
| 09N/27E-21D01 | 08-28-82 | 138 | 168 | 0 | 57 | 4.4 | .7 | 61 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Benton County, Wash.--Continued | | | | | | | | |
| 08N/24E-15F01 | 08-25-82 | 312 | 2.4 | -- | <3 | 14 | 3 | 200 |
| | 03-09-83 | 294 | 2.4 | 10 | 6 | -- | 1 | -- |
| | 07-20-83 | 306 | 2.4 | -- | 18 | -- | 6 | -- |
| 08N/27E-01A01D1 | 08-27-82 | 407 | 11 | -- | <3 | 11 | 5 | 300 |
| | 03-08-83 | 385 | 7.9 | 20 | 6 | -- | 6 | -- |
| | 07-22-83 | 395 | 11 | -- | 5 | -- | 2 | -- |
| 08N/27E-01K01 | 08-27-82 | 327 | .33 | -- | 9 | 31 | 110 | 180 |
| 08N/28E-07P01 | 08-27-82 | 417 | <.10 | -- | 110 | 29 | 50 | 81 |
| 08N/29E-17G01D1 | 08-28-82 | 371 | 3.6 | -- | <3 | 14 | 2 | 270 |
| | 03-09-83 | 347 | 3.7 | 10 | <3 | -- | <1 | -- |
| | 07-25-83 | 378 | 3.6 | -- | <3 | -- | <1 | -- |
| 08N/29E-17G02 | 06-25-82 | 554 | 1.8 | -- | <3 | -- | <1 | -- |
| 08N/30E-07G04 | 06-24-82 | 491 | 4.8 | -- | 8 | -- | 2 | -- |
| 08N/30E-17D02 | 06-25-82 | 415 | 2.8 | -- | 4 | -- | 1 | -- |
| 08N/30E-19M01 | 06-24-82 | 399 | 5.0 | -- | 24 | -- | 16 | -- |
| 08N/30E-22M02 | 06-24-82 | 373 | 2.2 | -- | 30 | -- | 3 | -- |
| 09N/24E-04H01 | 06-11-82 | 437 | 7.6 | -- | <3 | -- | <1 | -- |
| 09N/25E-33B01 | 08-26-82 | 240 | <.10 | -- | 28 | 30 | 42 | 94 |
| | 03-09-83 | 255 | <.10 | 30 | 37 | -- | 42 | -- |
| | 07-20-83 | 244 | <.10 | -- | 45 | -- | 42 | -- |
| 09N/26E-12N01 | 08-26-82 | 444 | 1.8 | -- | 3 | 13 | 2 | 510 |
| | 03-08-83 | 443 | 1.9 | 30 | <3 | -- | <1 | -- |
| | 07-20-83 | 440 | 1.9 | -- | 5 | -- | <1 | -- |
| 09/27E-07D01 | 06-25-82 | 460 | 3.4 | -- | <3 | -- | <1 | -- |
| 09N/27E-21D01 | 08-28-82 | 299 | .93 | -- | 70 | 34 | 53 | 67 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Benton County, Wash.--Continued</u> | | | | | | | | |
| 09N/28E-04G01 | 06-24-82 | 1135 | 382 | 7.8 | 17.5 | -- | <1 | 37 |
| 09N/28E-06A02 | 06-24-82 | 1305 | 633 | 8.0 | 18.5 | -- | <1 | 230 |
| 09N/28E-17A01 | 06-24-82 | 1455 | 505 | 8.2 | 26.5 | -- | <1 | 61 |
| | 08-27-82 | 1630 | 514 | 8.0 | 26.5 | 1.4 | -- | 60 |
| | 05-17-83 | 1330 | 495 | 8.1 | 26.0 | 1.3 | -- | 61 |
| 09N/28E-27K01 | 06-24-82 | 1730 | 1,010 | 7.3 | 19.0 | -- | <1 | 410 |
| 09N/29E-33M01 | 08-27-82 | 1250 | 575 | 8.0 | 17.0 | -- | -- | 220 |
| | 05-17-83 | 0920 | 632 | 7.2 | 17.5 | 6.1 | -- | 260 |
| | 07-22-83 | 1230 | 650 | 7.3 | 17.5 | 6.0 | -- | 290 |
| 10N/24E-31P01 | 08-25-82 | 1115 | 420 | 8.0 | 18.0 | 8.3 | -- | 180 |
| | 03-09-83 | 1630 | 411 | 7.8 | 13.5 | -- | -- | 180 |
| | 07-21-83 | 1400 | 420 | 7.9 | 17.5 | -- | -- | 190 |
| 10N/26E-28L02 | 08-26-82 | 1400 | 384 | 8.2 | 24.5 | -- | -- | 52 |
| | 07-21-83 | 1530 | 390 | 8.2 | 24.5 | -- | -- | 57 |
| 10N/27E-29R02 | 08-28-82 | 1005 | 430 | 7.5 | 19.0 | .2 | -- | 140 |
| | 03-08-83 | 1030 | 412 | 7.9 | 18.0 | .1 | -- | 150 |
| | 07-22-83 | 1100 | 435 | 8.0 | 19.5 | .2 | -- | 150 |
| 10N/28E-14C02 | 04-19-82 | 1010 | 450 | 7.5 | 16.5 | -- | -- | 200 |
| 12N/24E-30B01 | 09-10-82 | 1050 | 260 | 8.1 | 26.5 | -- | -- | 97 |
| | 07-28-83 | 0940 | 274 | 8.0 | 26.0 | -- | -- | 97 |
| 13N/24E-27M04 | 09-10-82 | 1230 | 305 | 7.5 | -- | 6.8 | -- | 110 |
| | 07-28-83 | 1125 | 310 | 8.2 | 19.5 | .3 | -- | 99 |
| <u>Chelan County, Wash.</u> | | | | | | | | |
| 21N/21E-34A01 | 07-29-82 | 1120 | 210 | 7.6 | 12.0 | .3 | -- | 60 |
| 21N/22E-19K02 | 09-10-82 | 1115 | 315 | 7.5 | 14.5 | -- | -- | 140 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Benton County, Wash.--Continued</u> | | | | | | | | |
| 09N/28E-04G01 | 06-24-82 | 0 | 11 | 2.2 | 72 | 76 | 5 | 9.4 |
| 09N/28E-06A02 | 06-24-82 | 53 | 48 | 26 | 42 | 28 | 1 | 10 |
| 09N/28E-17A01 | 06-24-82 | 0 | 14 | 6.2 | 86 | 71 | 5 | 13 |
| | 08-27-82 | 0 | 14 | 6.0 | 86 | 71 | 5 | 13 |
| | 05-17-83 | 0 | 14 | 6.2 | 85 | 71 | 5 | 12 |
| 09N/28E-27K01 | 06-24-82 | 120 | 86 | 47 | 57 | 23 | 1 | 13 |
| 09N/29E-33M01 | 08-27-82 | 0 | 47 | 26 | 31 | 22 | .9 | 7.9 |
| | 05-17-83 | 16 | 52 | 32 | 34 | 21 | .9 | 7.7 |
| | 07-22-83 | 45 | 56 | 36 | 30 | 18 | .8 | 7.0 |
| 10N/24E-31P01 | 08-25-82 | 51 | 45 | 16 | 13 | 13 | .4 | 5.8 |
| | 03-09-83 | 34 | 45 | 16 | 13 | 13 | .4 | 5.5 |
| | 07-21-83 | 61 | 48 | 17 | 13 | 13 | .4 | 5.8 |
| 10N/26E-28L02 | 08-26-82 | 0 | 14 | 4.1 | 58 | 63 | 4 | 18 |
| | 07-21-83 | 0 | 15 | 4.7 | 55 | 59 | 3 | 20 |
| 10N/27E-29R02 | 08-28-82 | 0 | 28 | 18 | 29 | 29 | 1 | 8.4 |
| | 03-08-83 | 3 | 29 | 19 | 29 | 28 | 1 | 8.2 |
| | 07-22-83 | 0 | 28 | 19 | 29 | 28 | 1 | 8.4 |
| 10N/28E-14C02 | 04-19-82 | 0 | 60 | 12 | 17 | 15 | .5 | 6.0 |
| 12N/24E-30B01 | 09-10-82 | 0 | 19 | 12 | 21 | 30 | .9 | 7.1 |
| | 07-28-83 | 0 | 19 | 12 | 21 | 30 | .9 | 7.0 |
| 13N/24E-27M04 | 09-10-82 | 0 | 21 | 13 | 26 | 33 | 1 | 5.9 |
| | 07-28-83 | 0 | 20 | 12 | 26 | 35 | 1 | 5.9 |
| <u>Chelan County, Wash.</u> | | | | | | | | |
| 021N/21E-34A01 | 07-29-82 | 0 | 13 | 6.6 | 19 | 39 | 1 | 4.7 |
| 21N/22E-19K02 | 09-10-82 | 0 | 35 | 13 | 15 | 18 | .5 | 4.6 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|--|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Benton County, Wash.--Continued</u> | | | | | | | | |
| 09N/28E-04G01 | 06-24-82 | 197 | 240 | 0 | 5.0 | 8.1 | 1.5 | 60 |
| 09N/28E-06A02 | 06-24-82 | 174 | 212 | 0 | 140 | 15 | .8 | 55 |
| 09N/28E-17A01 | 06-24-82 | 213 | 260 | 0 | 34 | 12 | 1.7 | 74 |
| | 08-27-82 | 215 | 262 | 0 | 35 | 13 | 1.5 | 74 |
| | 05-17-83 | 208 | 254 | 0 | 32 | 11 | 1.6 | 72 |
| 09N/28E-27K01 | 06-24-82 | 290 | 354 | 0 | 180 | 47 | .3 | 73 |
| 09N/29E-33M01 | 08-27-82 | 228 | 278 | 0 | 35 | 24 | .4 | 47 |
| | 05-17-83 | 245 | 299 | 0 | 42 | 27 | .3 | 46 |
| | 07-22-83 | 242 | 296 | 0 | 47 | 30 | .3 | 44 |
| 10N/24E-31P01 | 08-25-82 | 128 | 156 | 0 | 52 | 19 | .3 | 57 |
| | 03-09-83 | 144 | 176 | 0 | 48 | 18 | .4 | 56 |
| | 07-21-83 | 129 | 157 | 0 | 51 | 18 | .3 | 57 |
| 10N/26E-28L02 | 08-26-82 | 195 | 238 | 0 | <5.0 | 6.0 | 1.3 | 65 |
| | 07-21-83 | 176 | 214 | 0 | 6.1 | 5.2 | 1.1 | 63 |
| 10N/27E-29R02 | 08-28-82 | 149 | 182 | 0 | 64 | 7.2 | .7 | 59 |
| | 03-08-83 | 148 | 180 | 0 | 67 | 7.2 | .8 | 60 |
| | 07-22-83 | 148 | 181 | 0 | 67 | 6.9 | .6 | 58 |
| 10N/28E-14C02 | 04-19-82 | 203 | 248 | 0 | 18 | 4.1 | .2 | 32 |
| 12N/24E-30B01 | 09-10-82 | 143 | 174 | 0 | <5.0 | 4.2 | .5 | 61 |
| | 07-28-83 | 145 | 177 | 0 | .2 | 4.3 | .6 | 61 |
| 13N/24E-27M04 | 09-10-82 | 162 | 198 | 0 | <5.0 | 5.6 | .5 | 59 |
| | 07-28-83 | 164 | 200 | 0 | .5 | 5.4 | .6 | 58 |
| <u>Chelan County, Wash.</u> | | | | | | | | |
| 21N/21E-34A01 | 07-29-82 | 100 | 122 | 0 | 7.0 | 1.6 | .4 | 42 |
| 21N/22E-19K02 | 09-10-82 | 156 | 190 | 0 | 8.0 | 2.6 | .3 | 52 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Benton County, Wash.--Continued</u> | | | | | | | | |
| 09N/28E-04G01 | 06-24-82 | 287 | <0.10 | -- | 62 | -- | 41 | -- |
| 09N/28E-06A02 | 06-24-82 | 441 | <.10 | -- | 19 | -- | 84 | -- |
| 09N/28E-17A01 | 06-24-82 | 369 | <.10 | -- | 14 | -- | 26 | -- |
| | 08-27-82 | 371 | <.10 | -- | 13 | 39 | 29 | 84 |
| | 05-17-83 | 359 | <.10 | 110 | 14 | -- | 27 | -- |
| 09N/28E-27K01 | 06-24-82 | 714 | 8.2 | -- | <3 | -- | 2 | -- |
| 09N/29E-33M01 | 08-27-82 | 371 | 3.6 | -- | <3 | 23 | 13 | 280 |
| | 05-17-83 | 412 | 5.3 | 50 | <3 | -- | 7 | -- |
| | 07-22-83 | 421 | 5.6 | -- | 12 | -- | 4 | -- |
| 10N/24E-31P01 | 08-25-82 | 298 | 3.0 | -- | 3 | 17 | 1 | 280 |
| | 03-09-83 | 303 | 3.3 | <10 | 13 | -- | 5 | -- |
| | 07-21-83 | 301 | 3.1 | -- | 11 | -- | 3 | -- |
| 10N/26E-28L02 | 08-26-82 | -- | <.10 | -- | 17 | 32 | 30 | 97 |
| | 07-21-83 | 275 | <.10 | -- | 29 | -- | 37 | -- |
| 10N/27E-29R02 | 08-28-82 | 304 | <.10 | -- | 84 | 19 | 30 | 210 |
| | 03-08-83 | 309 | <.10 | 30 | 110 | -- | 29 | -- |
| | 07-22-83 | 306 | <.10 | -- | 82 | -- | 26 | -- |
| 10N/28E-14C02 | 04-19-82 | 291 | 4.5 | -- | -- | -- | -- | -- |
| 12N/24E-30B01 | 09-10-82 | -- | <.10 | -- | 57 | 16 | 52 | 75 |
| | 07-28-83 | 212 | <.10 | 20 | 50 | -- | 52 | -- |
| 13N/24E-27M04 | 09-10-82 | -- | .10 | -- | 25 | 12 | 9 | 68 |
| | 07-28-83 | 227 | <.10 | 20 | 37 | -- | 40 | -- |
| <u>Chelan County, Wash.</u> | | | | | | | | |
| 21N/21E-34A01 | 07-29-82 | 155 | <.10 | -- | 240 | 17 | 90 | 30 |
| 21N/22E-19K02 | 09-10-82 | 227 | .72 | -- | 3 | 5 | 2 | 110 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|-------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Columbia County, Wash.</u> | | | | | | | | |
| 10N/39E-20G01 | 06-22-82 | 1300 | 350 | 7.0 | 12.5 | -- | <1 | 160 |
| 10N/39E-31M01 | 09-02-82 | 1700 | 510 | 7.7 | 13.0 | -- | -- | 230 |
| | 03-01-83 | 1300 | 510 | 7.4 | 12.5 | 8.6 | -- | 230 |
| 10N/39E-32C01 | 06-22-82 | 1415 | 192 | 7.0 | 16.5 | -- | <1 | 89 |
| 10N/39E-32F01 | 08-13-83 | 0935 | 215 | 7.8 | 19.0 | 7.1 | -- | 94 |
| 12N/39E-10P01 | 09-03-82 | 1330 | 210 | 7.9 | 19.5 | 8.3 | -- | 89 |
| | 06-21-83 | 1030 | 206 | 7.8 | 19.5 | 7.8 | -- | 85 |
| 13N/38E-27L02 | 09-02-82 | 1645 | 232 | 7.8 | 23.5 | 5.4 | -- | 96 |
| | 03-01-83 | 1050 | 210 | 7.5 | 19.5 | 5.8 | -- | 94 |
| | 08-26-83 | 1230 | 225 | 7.9 | 24.0 | 5.5 | -- | 95 |
| <u>Douglas County, Wash.</u> | | | | | | | | |
| 21N/22E-12G01D1 | 07-28-82 | 1015 | 343 | 9.0 | 20.0 | 1.0 | -- | 35 |
| 23N/24E-09E01 | 07-28-82 | 1330 | 245 | 8.2 | 17.0 | 4.2 | -- | 88 |
| | 06-07-83 | 1345 | 221 | 8.2 | 18.5 | 1.6 | <1 | 79 |
| | 09-01-83 | 1315 | 242 | 8.2 | 17.5 | 3.1 | -- | 87 |
| 23N/26E-20D03 | 07-15-83 | 2100 | 254 | 8.1 | 16.0 | -- | -- | 49 |
| 24N/21E-13A03 | 07-29-82 | 1300 | 220 | 7.8 | -- | 8.1 | -- | 93 |
| | 06-07-83 | 1040 | 220 | 8.0 | 11.5 | -- | <1 | 95 |
| 24N/25E-18E01 | 07-28-82 | 1000 | 490 | 7.5 | 14.5 | 7.6 | -- | 190 |
| | 06-07-83 | 1035 | 705 | 7.2 | 13.5 | 10.4 | <1 | 270 |
| | 09-01-83 | 1430 | 565 | 7.5 | 13.5 | 9.2 | -- | 220 |
| 24N/26E-06H01 | 07-27-82 | 1515 | 385 | 7.5 | 13.5 | -- | -- | 170 |
| | 06-07-83 | 1345 | 388 | 7.5 | 12.5 | 7.3 | <1 | 170 |
| | 08-12-83 | 1000 | 455 | 7.4 | 13.0 | 8.3 | -- | 190 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|-------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Columbia County, Wash.</u> | | | | | | | | |
| 10N/39E-20G01 | 06-22-82 | 0 | 42 | 14 | 13 | 15 | 0.4 | 2.4 |
| 10N/39E-31M01 | 09-02-82 | 25 | 61 | 19 | 18 | 14 | .5 | 1.4 |
| | 03-01-83 | 17 | 60 | 19 | 18 | 15 | .5 | 1.4 |
| 10N/39E-32C01 | 06-22-82 | 0 | 23 | 7.6 | 6.2 | 13 | .3 | 2.7 |
| 10N/39E-32F01 | 08-13-83 | 0 | 23 | 8.9 | 8.1 | 15 | .4 | 2.8 |
| 12N/39E-10P01 | 09-03-82 | 0 | 22 | 8.2 | 8.7 | 17 | .4 | 4.2 |
| | 06-21-83 | 0 | 21 | 8.0 | 8.3 | 17 | .4 | 4.1 |
| 13N/38E-27L02 | 09-02-82 | 0 | 24 | 8.8 | 8.6 | 15 | .4 | 4.9 |
| | 03-01-83 | 0 | 23 | 8.9 | 8.6 | 16 | .4 | 4.7 |
| | 08-26-83 | 0 | 23 | 9.0 | 8.8 | 16 | .4 | 4.8 |
| <u>Douglas County, Wash.</u> | | | | | | | | |
| 21N/22E-12G01D1 | 07-28-82 | 0 | 9.0 | 3.1 | 64 | 77 | 5 | 4.2 |
| 23N/24E-09E01 | 07-28-82 | 0 | 21 | 8.5 | 16 | 28 | .7 | 2.2 |
| | 06-07-83 | 0 | 19 | 7.6 | 15 | 29 | .7 | 2.0 |
| | 09-01-83 | 0 | 21 | 8.4 | 16 | 28 | .7 | 1.8 |
| 23N/26E-20D03 | 07-15-83 | 0 | 19 | .31 | 33 | 57 | 2 | 4.3 |
| 24N/21E-13A03 | 07-29-82 | 0 | 19 | 11 | 7.8 | 15 | .4 | 1.7 |
| | 06-07-83 | 0 | 20 | 11 | 7.8 | 15 | .3 | 1.9 |
| 24N/25E-18E01 | 07-28-82 | 110 | 43 | 19 | 17 | 16 | .5 | 2.4 |
| | 06-07-83 | 170 | 62 | 29 | 22 | 15 | .6 | 2.7 |
| | 09-01-83 | 140 | 50 | 22 | 20 | 17 | .6 | 2.3 |
| 24N/26E-06H01 | 07-27-82 | 60 | 45 | 15 | 12 | 13 | .4 | 3.7 |
| | 06-07-83 | 53 | 42 | 15 | 12 | 13 | .4 | 3.8 |
| | 08-12-83 | 81 | 48 | 18 | 13 | 12 | .4 | 4.4 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alka- linity, field (mg/L as CaCO ₃) | Bicar- bonate, field (mg/L as HCO ₃) | Car- bonate, field (mg/L as CO ₃) | Sulfate, dis- solved (mg/L as SO ₄) | Chlo- ride, dis- solved (mg/L as Cl) | Fluo- ride, dis- solved (mg/L as F) | Silica, dis- solved (mg/L as SiO ₂) |
|-------------------------------|----------|---|---|--|--|--|---|--|
| <u>Columbia County, Wash.</u> | | | | | | | | |
| 10N/39E-20G01 | 06-22-82 | 177 | 210 | 0 | 9.0 | 4.0 | 0.4 | 49 |
| 10N/39E-31M01 | 09-02-82 | 206 | 251 | 0 | 8.0 | 14 | .3 | 44 |
| | 03-01-83 | 211 | 257 | 0 | 8.8 | 16 | .4 | 43 |
| 10N/39E-32C01 | 06-22-82 | 107 | 131 | 0 | 6.0 | 2.2 | .2 | 51 |
| 10N/39E-32F01 | 08-13-83 | 110 | 134 | 0 | 1.6 | 1.3 | .3 | 58 |
| 12N/39E-10P01 | 09-03-82 | 102 | 124 | 0 | <5.0 | 2.3 | .2 | 62 |
| | 06-21-83 | 97 | 118 | 0 | 3.7 | 2.4 | .2 | 57 |
| 13N/38E-27L02 | 09-02-82 | 115 | 140 | 0 | <5.0 | 1.7 | .2 | 69 |
| | 03-01-83 | 116 | 141 | 0 | 2.8 | 1.9 | .2 | 69 |
| | 08-26-83 | 115 | 140 | 0 | 2.2 | 1.7 | .3 | 67 |
| <u>Douglas County, Wash.</u> | | | | | | | | |
| 21N/22E-12G01D1 | 07-28-82 | 160 | 153 | 21 | 12 | 5.1 | 2.0 | 60 |
| 23N/24E-09E01 | 07-28-82 | 105 | 128 | 0 | 16 | 4.7 | .4 | 43 |
| | 06-07-83 | 98 | 119 | 0 | 15 | 4.3 | .3 | 43 |
| | 09-01-83 | 101 | 123 | 0 | 17 | 5.2 | .4 | 42 |
| 23N/26E-20D03 | 07-15-83 | 91 | 111 | 0 | 28 | 2.9 | 1.0 | 51 |
| 24N/21E-13A03 | 07-29-82 | 112 | 136 | 0 | <5.0 | .8 | .2 | 47 |
| | 06-07-83 | 116 | 141 | 0 | 4.1 | 1.1 | .2 | 47 |
| 24N/25E-18E01 | 07-28-82 | 77 | 94 | 0 | 32 | 42 | .3 | 48 |
| | 06-07-83 | 101 | 123 | 0 | 50 | 74 | .3 | 46 |
| | 09-01-83 | 80 | 97 | 0 | 46 | 55 | .3 | 45 |
| 24N/26E-06H01 | 07-27-82 | 114 | 139 | 0 | 34 | 18 | .2 | 34 |
| | 06-07-83 | 114 | 139 | 0 | 34 | 21 | .2 | 32 |
| | 08-12-83 | 113 | 138 | 0 | 44 | 32 | .2 | 31 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|-------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Columbia County, Wash.</u> | | | | | | | | |
| 10N/39E-20G01 | 06-22-82 | 256 | 4.3 | -- | <3 | -- | 6 | -- |
| 10N/39E-31M01 | 09-02-82 | 330 | 9.1 | -- | 11 | 10 | 1 | 250 |
| | 03-01-83 | 337 | 10 | 20 | <3 | -- | <1 | -- |
| 10N/39E-32C01 | 06-22-82 | 168 | 1.0 | -- | <3 | -- | 1 | -- |
| 10N/39E-32F01 | 08-13-83 | 172 | .52 | <10 | 8 | -- | <1 | -- |
| 12N/39E-10P01 | 09-03-82 | -- | .56 | -- | <3 | 6 | 1 | 72 |
| | 06-21-83 | 165 | .61 | <10 | 7 | -- | 3 | -- |
| 13N/38E-27L02 | 09-02-82 | -- | .39 | -- | 3 | 12 | <1 | 71 |
| | 03-01-83 | 190 | .41 | 10 | <3 | -- | <1 | -- |
| | 08-26-83 | 187 | .41 | -- | <3 | -- | <1 | -- |
| <u>Douglas County, Wash.</u> | | | | | | | | |
| 21N/22E-12G01D1 | 07-28-82 | 257 | .26 | -- | 35 | 26 | 4 | 28 |
| 23N/24E-09E01 | 07-28-82 | 176 | .19 | -- | 5 | 18 | 3 | 72 |
| | 06-07-83 | 166 | .30 | <10 | 16 | -- | 2 | -- |
| | 09-01-83 | 174 | .35 | <10 | 9 | -- | 3 | -- |
| 23N/26E-20D03 | 07-15-83 | 194 | <.10 | -- | 31 | -- | 3 | -- |
| 24N/21E-13A03 | 07-29-82 | -- | .62 | -- | 5 | 15 | 4 | 58 |
| | 06-07-83 | 165 | .66 | <10 | 14 | -- | 1 | -- |
| 24N/25E-18E01 | 07-28-82 | 308 | 13 | -- | <3 | 4 | 4 | 190 |
| | 06-07-83 | 444 | 22 | <10 | 5 | -- | <3 | -- |
| | 09-01-83 | 372 | 19 | <10 | 12 | -- | 1 | -- |
| 24N/26E-06H01 | 07-27-82 | 251 | 4.6 | -- | 17 | 13 | 11 | 210 |
| | 06-07-83 | 248 | 4.2 | 10 | 12 | -- | 8 | -- |
| | 08-12-83 | 284 | 5.7 | <10 | 18 | -- | 6 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Douglas County, Wash.--Continued</u> | | | | | | | | |
| 25N/22E-21H01D1 | 07-29-82 | 0930 | 560 | 7.3 | 14.5 | 1.5 | -- | 230 |
| | 08-12-83 | 1145 | 625 | 7.5 | 12.5 | 6.3 | -- | 260 |
| 25N/25E-20Q01 | 07-28-82 | 1230 | 260 | 7.3 | 17.0 | 6.6 | -- | 87 |
| 26N/22E-25N01 | 07-29-82 | 1600 | 225 | 7.0 | 12.0 | 4.3 | -- | 95 |
| | 06-07-83 | 1030 | 215 | 7.3 | 11.5 | 3.8 | <1 | 97 |
| | 08-12-83 | 1320 | 212 | 7.3 | 11.5 | 4.5 | -- | 92 |
| 26N/27E-17R01 | 07-28-82 | 1700 | 1,040 | 7.6 | 11.5 | 6.6 | -- | 460 |
| <u>Franklin County, Wash.</u> | | | | | | | | |
| 09N/29E-02G02 | 05-18-83 | 0940 | 445 | 7.9 | 22.0 | .2 | -- | 23 |
| 09N/30E-02R01 | 08-27-82 | 1415 | 575 | 8.0 | 17.5 | 9.0 | -- | 220 |
| | 03-08-83 | 1430 | 575 | 7.8 | 16.0 | 8.4 | <1 | 220 |
| | 07-19-83 | 1530 | 568 | 8.0 | 17.5 | 8.6 | -- | 230 |
| 10N/28E-12F01 | 03-10-83 | 0915 | 415 | 7.9 | 16.5 | .8 | -- | 130 |
| 10N/29E-25G01 | 07-26-83 | 0945 | 705 | 7.6 | 16.0 | 8.1 | -- | 240 |
| 10N/30E-03J01 | 08-27-82 | 1045 | 690 | 8.0 | 18.0 | -- | -- | 250 |
| | 03-11-83 | 0900 | 645 | 7.7 | 15.5 | -- | <1 | 260 |
| | 07-21-83 | 1715 | 660 | 8.0 | 18.5 | 9.7 | -- | 260 |
| 10N/30E-35R01 | 03-10-83 | 1545 | 645 | 7.8 | 17.0 | 8.2 | <1 | 240 |
| 10N/31E-09D01 | 07-21-83 | 1900 | 622 | 8.0 | 17.5 | 7.2 | -- | 250 |
| 10N/31E-32L02 | 08-30-82 | 0930 | 415 | 8.0 | 19.5 | 2.4 | -- | 140 |
| | 03-09-83 | 0900 | 405 | 7.8 | 18.5 | 2.2 | <1 | 140 |
| | 07-20-83 | 0945 | 412 | 7.8 | 19.0 | 1.7 | -- | 140 |
| 10N/32E-03R01 | 07-19-83 | 1230 | 728 | 7.9 | 19.0 | 10.2 | -- | 220 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Douglas County, Wash.--Continued</u> | | | | | | | | |
| 25N/22E-21H01D1 | 07-29-82 | 49 | 50 | 26 | 22 | 17 | 0.6 | 2.6 |
| | 08-12-83 | 81 | 59 | 28 | 26 | 18 | .7 | 2.2 |
| 25N/25E-20Q01 | 07-28-82 | 0 | 20 | 8.9 | 20 | 32 | .9 | 3.4 |
| 26N/22E-25N01 | 07-29-82 | 0 | 25 | 7.8 | 7.8 | 15 | .3 | 1.1 |
| | 06-07-83 | 0 | 25 | 8.3 | 8.3 | 16 | .4 | 1.2 |
| | 08-12-83 | 0 | 24 | 7.8 | 7.8 | 15 | .4 | 1.3 |
| 26N/27E-17R01 | 07-28-82 | 280 | 93 | 54 | 32 | 13 | .7 | 6.8 |
| <u>Franklin County, Wash.</u> | | | | | | | | |
| 09N/29E-02G02 | 05-18-83 | 0 | 5.2 | 2.4 | 90 | 84 | 8 | 12 |
| 09N/30E-02R01 | 08-27-82 | 48 | 47 | 24 | 31 | 23 | .9 | 4.8 |
| | 03-08-83 | 44 | 46 | 25 | 31 | 23 | .9 | 4.7 |
| | 07-19-83 | 65 | 48 | 26 | 32 | 23 | .9 | 4.8 |
| 10N/28E-12F01 | 03-10-83 | 4 | 28 | 14 | 34 | 35 | 1 | 8.3 |
| 10N/29E-25G01 | 07-26-83 | 24 | 57 | 23 | 54 | 33 | 2 | 2.8 |
| 10N/30E-03J01 | 08-27-82 | 66 | 43 | 35 | 35 | 22 | 1 | 11 |
| | 03-11-83 | 52 | 44 | 36 | 35 | 22 | .9 | 11 |
| | 07-21-83 | 76 | 44 | 36 | 36 | 22 | 1 | 11 |
| 10N/30E-35R01 | 03-10-83 | 85 | 59 | 23 | 35 | 23 | 1 | 6.6 |
| 10N/31E-09D01 | 07-21-83 | 67 | 61 | 23 | 31 | 21 | .9 | 6.6 |
| 10N/31E-32L02 | 08-30-82 | 1 | 24 | 19 | 30 | 30 | 1 | 10 |
| | 03-09-83 | 3 | 24 | 19 | 29 | 29 | 1 | 10 |
| | 07-20-83 | 1 | 24 | 19 | 30 | 30 | 1 | 10 |
| 10N/32E-03R01 | 07-19-83 | 100 | 46 | 25 | 61 | 37 | 2 | 9.4 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Douglas County, Wash.--Continued</u> | | | | | | | | |
| 25N/22E-21H01D1 | 07-29-82 | 183 | 223 | 0 | 49 | 37 | 0.3 | 37 |
| | 08-12-83 | 182 | 222 | 0 | 51 | 45 | .4 | 42 |
| 25N/25E-20Q01 | 07-28-82 | 118 | 144 | 0 | 11 | 4.5 | .6 | 54 |
| 26N/22E-25N01 | 07-29-82 | 105 | 128 | 0 | 7.0 | 2.2 | .3 | 45 |
| | 06-07-83 | 104 | 127 | 0 | 7.0 | 2.3 | .3 | 45 |
| | 08-12-83 | 102 | 125 | 0 | 6.5 | 2.2 | .3 | 42 |
| 26N/27E-17R01 | 07-28-82 | 176 | 215 | 0 | 200 | 85 | .3 | 48 |
| <u>Franklin County, Wash.</u> | | | | | | | | |
| 09N/29E-02G02 | 05-18-83 | 215 | 262 | 0 | .2 | 26 | 1.5 | 62 |
| 09N/30E-02R01 | 08-27-82 | 169 | 206 | 0 | 76 | 26 | .5 | 41 |
| | 03-08-83 | 174 | 212 | 0 | 75 | 25 | .6 | 41 |
| | 07-19-83 | 162 | 198 | 0 | 72 | 25 | .5 | 41 |
| 10N/28E-12F01 | 03-10-83 | 124 | 151 | 0 | 81 | 3.4 | .5 | 43 |
| 10N/29E-25G01 | 07-26-83 | 213 | 260 | 0 | 90 | 37 | .4 | 46 |
| 10N/30E-03J01 | 08-27-82 | 186 | 227 | 0 | 70 | 39 | .5 | 56 |
| | 03-11-83 | 206 | 251 | 0 | 68 | 39 | .6 | 57 |
| | 07-21-83 | 182 | 222 | 0 | 67 | 38 | .6 | 55 |
| 10N/30E-35R01 | 03-10-83 | 157 | 192 | 0 | 75 | 36 | .6 | 44 |
| 10N/31E-09D01 | 07-21-83 | 180 | 220 | 0 | 87 | 31 | .4 | 39 |
| 10N/31E-32L02 | 08-30-82 | 137 | 167 | 0 | 53 | 9.9 | .8 | 58 |
| | 03-09-83 | 135 | 165 | 0 | 52 | 9.5 | .9 | 59 |
| | 07-20-83 | 137 | 167 | 0 | 52 | 11 | .9 | 56 |
| 10N/32E-03R01 | 07-19-83 | 114 | 139 | 0 | 92 | 74 | .4 | 58 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Douglas County, Wash.--Continued</u> | | | | | | | | |
| 25N/22E-21H01D1 | 07-29-82 | 342 | 1.8 | -- | 5 | 24 | 32 | 250 |
| | 08-12-83 | 395 | 7.3 | 10 | 9 | -- | 9 | -- |
| 25N/25E-20Q01 | 07-28-82 | 199 | 1.3 | -- | 18 | <4 | 6 | 83 |
| 26N/22E-25N01 | 07-29-82 | 160 | .25 | -- | 6 | <4 | 27 | 120 |
| | 06-07-83 | 161 | .24 | <10 | 19 | -- | 5 | -- |
| | 08-12-83 | 154 | .23 | <10 | 7 | -- | 2 | -- |
| 26N/27E-17R01 | 07-28-82 | 679 | 12 | -- | 4 | 18 | 8 | 800 |
| <u>Franklin County, Wash.</u> | | | | | | | | |
| 09N/29E-02G02 | 05-18-83 | 328 | <.10 | 100 | 73 | -- | 23 | -- |
| 09N/30E-02R01 | 08-27-82 | 370 | 4.0 | -- | <3 | 11 | 1 | 390 |
| | 03-08-83 | 372 | 4.3 | 20 | 11 | -- | 1 | -- |
| | 07-19-83 | 365 | 4.1 | -- | 13 | -- | 3 | -- |
| 10N/28E-12F01 | 03-10-83 | 287 | <.10 | 20 | 34 | -- | 39 | -- |
| 10N/29E-25G01 | 07-26-83 | 469 | 6.9 | 20 | 6 | -- | <1 | -- |
| 10N/30E-03J01 | 08-27-82 | 442 | 9.2 | -- | 5 | 11 | <1 | 470 |
| | 03-11-83 | 455 | 9.3 | 10 | 9 | -- | 1 | -- |
| | 07-21-83 | 439 | 9.5 | -- | 24 | -- | 9 | -- |
| 10N/30E-35R01 | 03-10-83 | 431 | 13 | 20 | 5 | -- | 2 | -- |
| 10N/31E-09D01 | 07-21-83 | 412 | 5.6 | -- | 7 | -- | 2 | -- |
| 10N/31E-32L02 | 08-30-82 | 294 | 1.6 | -- | <3 | 17 | 1 | 180 |
| | 03-09-83 | 292 | 1.6 | 20 | 7 | -- | <1 | -- |
| | 07-20-83 | 293 | 1.7 | -- | 14 | -- | 3 | -- |
| 10N/32E-03R01 | 07-19-83 | 483 | 11 | -- | 10 | -- | 2 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| Franklin County, Wash.--Continued | | | | | | | | |
| 10N/32E-23J01 | 08-30-82 | 1245 | 260 | 8.0 | 23.0 | 4.8 | -- | 71 |
| | 03-08-83 | 1100 | 250 | 7.7 | 22.0 | 4.6 | <1 | 72 |
| | 07-20-83 | 1200 | 260 | 7.9 | 23.0 | 4.9 | -- | 73 |
| 11N/29E-03H01 | 05-23-83 | 1300 | 296 | 8.1 | 22.0 | .1 | -- | 69 |
| | 07-25-83 | 1130 | 286 | 7.8 | 21.5 | .1 | -- | 69 |
| 11N/29E-31N01 | 08-30-82 | 1430 | 435 | 7.8 | 24.5 | .1 | -- | 81 |
| | 03-09-83 | 1130 | 430 | 7.9 | 24.0 | .4 | <1 | 82 |
| | 07-25-83 | 1315 | 423 | 7.5 | 24.5 | .1 | -- | 81 |
| 11N/30E-02R01 | 03-10-83 | 1100 | 555 | 7.8 | 14.5 | 8.8 | -- | 220 |
| 11N/30E-12D01 | 08-30-82 | 1745 | 585 | 8.2 | 17.5 | .8 | -- | 110 |
| | 03-09-83 | 1415 | -- | 8.3 | 16.5 | 2.6 | <1 | 120 |
| | 07-21-83 | 1445 | 588 | 8.3 | 17.5 | .6 | -- | 110 |
| 11N/30E-36M01 | 05-17-83 | 1600 | 830 | 7.8 | 16.5 | 8.7 | -- | 380 |
| | 07-22-83 | 0815 | 838 | 7.8 | 17.0 | 8.5 | -- | 400 |
| 11N/31E-04P01 | 08-30-82 | 1615 | 375 | 8.2 | 21.5 | 3.4 | -- | 73 |
| | 05-18-83 | 1310 | 380 | 7.8 | 21.0 | 3.3 | -- | 78 |
| | 07-21-83 | 1315 | 375 | 8.0 | 22.0 | 3.2 | -- | 77 |
| 12N/28E-23H01D1 | 08-30-82 | 1030 | 395 | 8.2 | 18.5 | .2 | -- | 53 |
| | 03-09-83 | 1630 | 378 | 8.2 | 18.5 | .1 | <1 | 54 |
| | 07-26-83 | 1200 | 386 | 8.1 | 19.0 | .2 | -- | 56 |
| 12N/29E-34B01D1 | 03-11-83 | 1100 | 370 | 8.3 | 12.5 | 3.4 | -- | 25 |
| 12N/30E-05B01 | 09-01-82 | 1615 | 745 | 7.8 | 17.5 | 7.8 | -- | 340 |
| | 03-10-83 | 1430 | 735 | 7.6 | 17.0 | 8.4 | <1 | 320 |
| | 07-22-83 | 1000 | 735 | 7.7 | 17.5 | 7.5 | -- | 330 |
| 13N/28E-13N01 | 03-14-83 | 1615 | 375 | 8.4 | 28.5 | 3.8 | <1 | 3 |
| | 07-26-83 | 1340 | 382 | 8.4 | 29.5 | -- | -- | 4 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Franklin County, Wash.--Continued | | | | | | | | |
| 10N/32E-23J01 | 08-30-82 | 0 | 17 | 6.9 | 24 | 40 | 1 | 6.5 |
| | 03-08-83 | 0 | 17 | 7.1 | 24 | 40 | 1 | 6.3 |
| | 07-20-83 | 0 | 17 | 7.4 | 25 | 40 | 1 | 6.7 |
| 11N/29E-03H01 | 05-23-83 | 0 | 18 | 5.9 | 32 | 47 | 2 | 6.2 |
| | 07-25-83 | 0 | 18 | 5.9 | 31 | 47 | 2 | 6.3 |
| 11N/29E-31N01 | 08-30-82 | 0 | 20 | 7.4 | 60 | 58 | 3 | 11 |
| | 03-09-83 | 0 | 20 | 7.8 | 60 | 58 | 3 | 11 |
| | 07-25-83 | 0 | 20 | 7.6 | 59 | 57 | 3 | 11 |
| 11N/30E-02R01 | 03-10-83 | 9 | 53 | 22 | 29 | 21 | .8 | 6.9 |
| 11N/30E-12D01 | 08-30-82 | 0 | 30 | 8.5 | 81 | 57 | 3 | 18 |
| | 03-09-83 | 0 | 33 | 8.9 | 80 | 55 | 3 | 19 |
| | 07-21-83 | 0 | 29 | 8.1 | 80 | 57 | 3 | 20 |
| 11N/30E-36M01 | 05-17-83 | 180 | 60 | 57 | 25 | 12 | .6 | 2.1 |
| | 07-22-83 | 190 | 60 | 60 | 27 | 13 | .6 | 2.0 |
| 11N/31E-04P01 | 08-30-82 | 0 | 18 | 6.9 | 46 | 53 | 2 | 11 |
| | 05-18-83 | 0 | 19 | 7.3 | 47 | 53 | 2 | 11 |
| | 07-21-83 | 0 | 19 | 7.2 | 46 | 52 | 2 | 11 |
| 12N/28E-23H01D1 | 08-30-82 | 0 | 15 | 3.7 | 62 | 68 | 4 | 9.6 |
| | 03-09-83 | 0 | 15 | 3.9 | 63 | 68 | 4 | 9.6 |
| | 07-26-83 | 0 | 16 | 4.0 | 62 | 66 | 4 | 9.3 |
| 12N/29E-34B01D1 | 03-11-83 | 0 | 6.8 | 1.9 | 72 | 79 | 6 | 13 |
| 12N/30E-05B01 | 09-01-82 | 190 | 72 | 39 | 22 | 12 | .5 | 5.1 |
| | 03-10-83 | -- | 66 | 38 | 21 | 12 | .5 | 5.1 |
| | 07-22-83 | 170 | 69 | 38 | 21 | 12 | .5 | 5.1 |
| 13N/28E-13N01 | 03-14-83 | 0 | .77 | .34 | 76 | 87 | 18 | 16 |
| | 07-26-83 | 0 | .79 | .43 | 75 | 88 | 17 | 15 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|--|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Franklin County, Wash.--Continued</u> | | | | | | | | |
| 10N/32E-23J01 | 08-30-82 | 98 | 119 | 0 | 21 | 7.2 | 0.6 | 69 |
| | 03-08-83 | 98 | 119 | 0 | 19 | 7.0 | .7 | 69 |
| | 07-20-83 | 100 | 122 | 0 | 20 | 7.3 | .6 | 69 |
| 11N/29E-03H01 | 05-23-83 | 117 | 143 | 0 | 23 | 6.4 | .7 | 51 |
| | 07-25-83 | 121 | 148 | 0 | 24 | 6.4 | .6 | 50 |
| 11N/29E-31N01 | 08-30-82 | 195 | 238 | 0 | 10 | 19 | .8 | 68 |
| | 03-09-83 | 199 | 243 | 0 | .9 | 19 | .9 | 72 |
| | 07-25-83 | 212 | 258 | 0 | 1.6 | 20 | .8 | 68 |
| 11N/30E-02R01 | 03-10-83 | 214 | 261 | 0 | 68 | 23 | .3 | 41 |
| 11N/30E-12D01 | 08-30-82 | 162 | 198 | 0 | 94 | 31 | .3 | 37 |
| | 03-09-83 | 162 | 198 | 0 | 100 | 34 | .3 | 32 |
| | 07-21-83 | 164 | 200 | 0 | 89 | 29 | .4 | 35 |
| 11N/30E-36M01 | 05-17-83 | 203 | 248 | 0 | 120 | 55 | .3 | 50 |
| | 07-22-83 | 204 | 249 | 0 | 120 | 54 | .4 | 51 |
| 11N/31E-04P01 | 08-30-82 | 139 | 169 | 0 | 27 | 8.7 | .9 | 85 |
| | 05-18-83 | 144 | 176 | 0 | 27 | 8.0 | 1.0 | 84 |
| | 07-21-83 | 130 | 159 | 0 | 27 | 8.6 | 1.0 | 80 |
| 12N/28E-23H01D1 | 08-30-82 | 158 | 193 | 0 | 11 | 19 | .8 | 62 |
| | 03-09-83 | 171 | 208 | 0 | 9.6 | 18 | .9 | 62 |
| | 07-26-83 | 176 | 215 | 0 | 9.6 | 20 | .9 | 61 |
| 12N/29E-34B01D1 | 03-11-83 | 167 | 204 | 0 | 14 | 14 | 1.7 | 61 |
| 12N/30E-05B01 | 09-01-82 | 152 | 185 | 0 | 120 | 54 | .3 | 57 |
| | 03-10-83 | -- | -- | -- | 120 | 51 | .3 | 56 |
| | 07-22-83 | 156 | 190 | 0 | 130 | 53 | .3 | 55 |
| 13N/28E-13N01 | 03-14-83 | 149 | 157 | 12 | 19 | 14 | 2.4 | 66 |
| | 07-26-83 | 154 | 164 | 12 | 20 | 15 | 2.4 | 64 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Franklin County, Wash.--Continued | | | | | | | | |
| 10N/32E-23J01 | 08-30-82 | 215 | 0.87 | -- | 6 | 13 | <1 | 67 |
| | 03-08-83 | 213 | .93 | 30 | 7 | -- | <1 | -- |
| | 07-20-83 | 217 | 1.0 | -- | 7 | -- | 2 | -- |
| 11N/29E-03H01 | 05-23-83 | 214 | <.10 | 30 | 10 | -- | 8 | -- |
| | 07-25-83 | 215 | <.10 | 30 | 5 | -- | 9 | -- |
| 11N/29E-31N01 | 08-30-82 | 314 | <.10 | -- | 120 | 35 | 53 | 150 |
| | 03-09-83 | 311 | <.10 | 70 | 150 | -- | 47 | -- |
| | 07-25-83 | 316 | .22 | 70 | 130 | -- | 46 | -- |
| 11N/30E-02R01 | 03-10-83 | 389 | 4.0 | 30 | 3 | -- | <1 | -- |
| 11N/30E-12D01 | 08-30-82 | 405 | 1.7 | -- | 4 | 21 | 67 | 130 |
| | 03-09-83 | 413 | 1.9 | 30 | 8 | -- | 64 | -- |
| | 07-21-83 | 396 | 1.6 | -- | 6 | -- | 59 | -- |
| 11N/30E-36M01 | 05-17-83 | 527 | 8.1 | 20 | 14 | -- | 3 | -- |
| | 07-22-83 | 554 | 13 | -- | 8 | -- | 3 | -- |
| 11N/31E-04P01 | 08-30-82 | 302 | 3.4 | -- | 6 | 15 | <1 | 92 |
| | 05-18-83 | 309 | 4.1 | 40 | 16 | -- | 2 | -- |
| | 07-21-83 | 293 | 3.4 | -- | 9 | -- | 8 | -- |
| 12N/28E-23H01D1 | 08-30-82 | 278 | <.10 | -- | 35 | 18 | 29 | 97 |
| | 03-09-83 | 284 | <.10 | 30 | 57 | -- | 23 | -- |
| | 07-26-83 | 289 | <.10 | 30 | 49 | -- | 22 | -- |
| 12N/29E-34B01D1 | 03-11-83 | 285 | <.10 | 80 | 9 | -- | 1 | -- |
| 12N/30E-05B01 | 09-01-82 | 497 | 8.2 | -- | 6 | 15 | 5 | 670 |
| | 03-10-83 | 487 | 7.9 | 20 | <3 | -- | 2 | -- |
| | 07-22-83 | 498 | 7.6 | -- | 5 | -- | <1 | -- |
| 13N/28E-13N01 | 03-14-83 | 285 | .22 | 80 | 38 | -- | 6 | -- |
| | 07-26-83 | 285 | <.10 | 80 | 39 | -- | 3 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Franklin County, Wash.--Continued</u> | | | | | | | | |
| 13N/29E-08H01 | 09-01-82 | 0930 | 320 | 8.0 | 21.0 | 0.1 | -- | 81 |
| | 03-10-83 | 1000 | 341 | 7.9 | 20.0 | 1.5 | <1 | 94 |
| | 07-22-83 | 1200 | 435 | 7.9 | 20.5 | .1 | -- | 140 |
| 13N/30E-31N01 | 09-01-82 | 1345 | 925 | 7.9 | 16.0 | 8.0 | -- | 380 |
| | 03-10-83 | 1250 | 955 | 7.5 | 15.5 | 9.2 | <1 | 360 |
| | 07-26-83 | 1530 | 845 | 7.6 | 16.0 | 9.2 | -- | 350 |
| 13N/31E-01E01 | 08-31-82 | 1130 | 560 | 7.6 | 20.5 | 3.0 | -- | 220 |
| | 03-10-83 | 1430 | 525 | 7.6 | 20.0 | 3.2 | <1 | 220 |
| | 07-21-83 | 1430 | 545 | 7.6 | 20.5 | 3.1 | -- | 230 |
| 13N/32E-03C01 | 08-31-82 | 1300 | 420 | 7.9 | 18.5 | 5.8 | -- | 100 |
| | 05-18-83 | 1500 | 471 | 7.8 | 18.0 | 6.0 | -- | 120 |
| | 07-21-83 | 1300 | 449 | 7.8 | 18.5 | 6.6 | -- | 120 |
| 13N/32E-07E02 | 08-31-82 | 1530 | 310 | 8.0 | -- | 7.4 | -- | 110 |
| | 03-10-83 | 1230 | 298 | 8.0 | 9.5 | 7.7 | <1 | 120 |
| | 07-21-83 | 1130 | 310 | 7.9 | 19.5 | 6.4 | -- | 120 |
| 13N/33E-06M01D1 | 09-02-82 | 0900 | 395 | 8.7 | 16.5 | .4 | -- | 45 |
| | 03-10-83 | 1030 | 391 | 8.8 | 17.0 | .1 | -- | 33 |
| 14N/29E-05A01 | 08-31-82 | 1130 | 560 | 8.2 | 19.0 | 5.8 | -- | 220 |
| | 03-15-83 | 0900 | 557 | 7.8 | 14.0 | 8.4 | <1 | 240 |
| | 07-26-83 | 1645 | 580 | 8.3 | 18.5 | 8.2 | -- | 220 |
| 14N/29E-19Q01 | 08-31-82 | 1630 | 660 | 7.8 | 22.5 | 4.2 | -- | 230 |
| | 03-10-83 | 1400 | 645 | 7.6 | 20.0 | 5.7 | -- | 240 |
| | 07-27-83 | 0900 | 661 | 7.7 | 20.0 | 5.5 | -- | 240 |
| 14N/30E-10P01 | 08-31-82 | 0845 | 375 | 7.7 | 16.5 | 7.6 | -- | 150 |
| | 03-14-83 | 1345 | 370 | 7.5 | 15.0 | 8.5 | <1 | 150 |
| | 07-26-83 | 1830 | 375 | 7.7 | 16.5 | 8.2 | -- | 150 |
| 14N/31E-19B01 | 09-02-82 | 0930 | 440 | 8.0 | 17.5 | 7.8 | -- | 180 |
| | 03-11-83 | 0950 | 440 | 7.6 | 17.0 | 7.7 | <1 | 170 |
| | 07-27-83 | 1030 | 432 | 7.8 | 17.5 | -- | -- | 170 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Franklin County, Wash.--Continued</u> | | | | | | | | |
| 13N/29E-08H01 | 09-01-82 | 0 | 19 | 8.2 | 38 | 48 | 2 | 6.8 |
| | 03-10-83 | 0 | 22 | 9.4 | 40 | 47 | 2 | 7.1 |
| | 07-22-83 | 0 | 31 | 14 | 38 | 36 | 1 | 8.0 |
| 13N/30E-31N01 | 09-01-82 | 150 | 86 | 41 | 52 | 23 | 1 | 4.8 |
| | 03-10-83 | 100 | 80 | 39 | 51 | 23 | 1 | 4.3 |
| | 07-26-83 | 90 | 77 | 39 | 52 | 24 | 1 | 4.2 |
| 13N/31E-01E01 | 08-31-82 | 0 | 53 | 22 | 25 | 19 | .7 | 7.3 |
| | 03-10-83 | 0 | 52 | 21 | 24 | 19 | .7 | 6.7 |
| | 07-21-83 | 0 | 55 | 23 | 26 | 19 | .7 | 7.2 |
| 13N/32E-03C01 | 08-31-82 | 0 | 23 | 11 | 48 | 49 | 2 | 5.5 |
| | 05-18-83 | 0 | 28 | 13 | 52 | 46 | 2 | 5.8 |
| | 07-21-83 | 0 | 25 | 13 | 51 | 47 | 2 | 5.8 |
| 13N/32E-07E02 | 08-31-82 | 0 | 25 | 12 | 18 | 25 | .7 | 4.9 |
| | 03-10-83 | 0 | 27 | 12 | 18 | 24 | .7 | 4.7 |
| | 07-21-83 | 0 | 27 | 13 | 18 | 24 | .7 | 5.1 |
| 13N/33E-06M01D1 | 09-02-82 | 0 | 13 | 3.1 | 69 | 74 | 4 | 6.9 |
| | 03-10-83 | 0 | 9.5 | 2.2 | 76 | 80 | 6 | 6.9 |
| 14N/29E-05A01 | 08-31-82 | 63 | 38 | 30 | 32 | 24 | .9 | 5.9 |
| | 03-15-83 | 78 | 41 | 33 | 34 | 23 | 1 | 6.0 |
| | 07-26-83 | 58 | 37 | 32 | 32 | 23 | .9 | 6.0 |
| 14N/29E-19Q01 | 08-31-82 | 86 | 49 | 27 | 41 | 26 | 1 | 11 |
| | 03-10-83 | 73 | 50 | 29 | 42 | 26 | 1 | 11 |
| | 07-27-83 | 89 | 50 | 28 | 42 | 26 | 1 | 11 |
| 14N/30E-10P01 | 08-31-82 | 0 | 30 | 19 | 22 | 23 | .8 | 4.8 |
| | 03-14-83 | 0 | 29 | 18 | 21 | 23 | .8 | 4.7 |
| | 07-26-83 | 0 | 28 | 19 | 21 | 23 | .8 | 5.1 |
| 14N/31E-19B01 | 09-02-82 | 18 | 36 | 21 | 22 | 21 | .7 | 6.4 |
| | 03-11-83 | 16 | 33 | 21 | 22 | 21 | .7 | 6.4 |
| | 07-27-83 | 13 | 34 | 21 | 22 | 21 | .7 | 6.0 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|--|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Franklin County, Wash.--Continued | | | | | | | | |
| 13N/29E-08H01 | 09-01-82 | 145 | 177 | 0 | 11 | 10 | 0.5 | 64 |
| | 03-10-83 | 184 | 225 | 0 | 13 | 12 | .5 | 61 |
| | 07-22-83 | 198 | 241 | 0 | 17 | 12 | .4 | 61 |
| 13N/30E-31N01 | 09-01-82 | 230 | 280 | 0 | 150 | 49 | .3 | 48 |
| | 03-10-83 | 260 | 317 | 0 | 150 | 47 | .3 | 46 |
| | 07-26-83 | 262 | 320 | 0 | 120 | 47 | .8 | 51 |
| 13N/31E-01E01 | 08-31-82 | 228 | 278 | 0 | 32 | 19 | .3 | 54 |
| | 03-10-83 | 226 | 276 | 0 | 30 | 18 | .4 | 54 |
| | 07-21-83 | 232 | 283 | 0 | 31 | 21 | .3 | 54 |
| 13N/32E-03C01 | 08-31-82 | 154 | 188 | 0 | 33 | 9.4 | 1.3 | 50 |
| | 05-18-83 | 171 | 209 | 0 | 43 | 11 | 1.3 | 49 |
| | 07-21-83 | 164 | 200 | 0 | 39 | 10 | 1.2 | 49 |
| 13N/32E-07E02 | 08-31-82 | 125 | 153 | 0 | 21 | 9.2 | .5 | 49 |
| | 03-10-83 | 127 | 155 | 0 | 19 | 10 | .6 | 48 |
| | 07-21-83 | 127 | 155 | 0 | 20 | 8.6 | .5 | 48 |
| 13N/33E-06M01D1 | 09-02-82 | 137 | 167 | 10 | 44 | 7.8 | .7 | 39 |
| | 03-10-83 | 161 | 170 | 13 | 33 | 9.2 | .8 | 41 |
| 14N/29E-05A01 | 08-31-82 | 156 | 190 | 0 | 76 | 32 | .5 | 57 |
| | 03-15-83 | 161 | 196 | 0 | 80 | 32 | .7 | 59 |
| | 07-26-83 | 166 | 202 | 0 | 80 | 34 | .6 | 56 |
| 14N/29E-19Q01 | 08-31-82 | 148 | 180 | 0 | 100 | 30 | .5 | 61 |
| | 03-10-83 | 171 | 209 | 0 | 110 | 29 | .6 | 63 |
| | 07-27-83 | 151 | 184 | 0 | 110 | 30 | .5 | 60 |
| 14N/30E-10P01 | 08-31-82 | 156 | 190 | 0 | 28 | 7.7 | .4 | 53 |
| | 03-14-83 | 154 | 188 | 0 | 29 | 8.3 | .5 | 51 |
| | 07-26-83 | 159 | 194 | 0 | 31 | 7.9 | .5 | 51 |
| 14N/31E-19B01 | 09-02-82 | 158 | 193 | 0 | 55 | 17 | .4 | 58 |
| | 03-11-83 | 152 | 186 | 0 | 49 | 11 | .5 | 58 |
| | 07-27-83 | 158 | 193 | 0 | 48 | 14 | .5 | 63 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Franklin County, Wash.--Continued | | | | | | | | |
| 13N/29E-08H01 | 09-01-82 | 245 | <0.10 | -- | 35 | 13 | 51 | 170 |
| | 03-10-83 | 276 | <.10 | 30 | 84 | -- | 71 | -- |
| | 07-22-83 | 301 | <.10 | -- | 790 | -- | 150 | -- |
| 13N/30E-31N01 | 09-01-82 | 605 | 8.0 | -- | 4 | 18 | 2 | 810 |
| | 03-10-83 | 604 | 6.8 | 30 | 8 | -- | <1 | -- |
| | 07-26-83 | 581 | 7.4 | 30 | 5 | -- | <1 | -- |
| 13N/31E-01E01 | 08-31-82 | 358 | 2.0 | -- | <3 | 19 | 2 | 270 |
| | 03-10-83 | 352 | 2.2 | 30 | <3 | -- | 2 | -- |
| | 07-21-83 | 367 | 2.3 | -- | 4 | -- | 3 | -- |
| 13N/32E-03C01 | 08-31-82 | 291 | 3.9 | -- | <3 | 17 | <1 | 120 |
| | 05-18-83 | 330 | 5.5 | 40 | <3 | -- | <1 | -- |
| | 07-21-83 | 312 | 4.5 | -- | 3 | -- | <1 | -- |
| 13N/32E-07E02 | 08-31-82 | 219 | .95 | -- | 4 | 12 | <1 | 150 |
| | 03-10-83 | 220 | 1.0 | 30 | <3 | -- | 2 | -- |
| | 07-21-83 | 221 | .99 | -- | 10 | -- | <1 | -- |
| 13N/33E-06M01D1 | 09-02-82 | 278 | .54 | -- | 39 | 29 | 2 | 44 |
| | 03-10-83 | 275 | <.10 | 30 | 120 | -- | <1 | -- |
| 14N/29E-05A01 | 08-31-82 | 383 | 4.0 | -- | 3 | 11 | 2 | 380 |
| | 03-15-83 | 400 | 4.1 | 30 | <3 | -- | 1 | -- |
| | 07-26-83 | 396 | 4.4 | 20 | <3 | -- | <1 | -- |
| 14N/29E-19Q01 | 08-31-82 | 461 | 12 | -- | 4 | 18 | 1 | 350 |
| | 03-10-83 | 486 | 11 | 20 | <3 | -- | <1 | -- |
| | 07-27-83 | 475 | 12 | 30 | 6 | -- | <1 | -- |
| 14N/30E-10P01 | 08-31-82 | 264 | 1.2 | -- | 3 | 8 | 2 | 240 |
| | 03-14-83 | 260 | 1.4 | 40 | 20 | -- | 6 | -- |
| | 07-26-83 | 265 | 1.3 | 40 | 13 | -- | 1 | -- |
| 14N/31E-19B01 | 09-02-82 | 320 | 2.0 | -- | <3 | 12 | 3 | 270 |
| | 03-11-83 | 301 | 1.9 | 40 | 12 | -- | 1 | -- |
| | 07-27-83 | 312 | 1.9 | 40 | 14 | -- | 1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Franklin County, Wash.--Continued</u> | | | | | | | | |
| 14N/34E-25P01D1 | 09-02-82 | 1045 | 835 | 7.7 | 18.5 | 2.9 | -- | 350 |
| | 05-20-83 | 1400 | 820 | 7.7 | 16.5 | 3.8 | <1 | 330 |
| | 07-21-83 | 1645 | 830 | 7.7 | 17.0 | 3.6 | -- | 340 |
| 14N/36E-19N01 | 09-01-82 | 1345 | 790 | 7.5 | 29.0 | .1 | -- | 240 |
| | 05-20-83 | 1530 | 790 | 7.4 | 28.5 | .1 | <1 | 240 |
| | 08-03-83 | 1215 | 766 | 7.2 | 29.5 | .1 | -- | 240 |
| <u>Garfield County, Wash.</u> | | | | | | | | |
| 11N/41E-24E01 | 09-03-82 | 0945 | 350 | 7.2 | 15.5 | 6.9 | -- | 140 |
| | 03-01-83 | 0930 | 580 | 7.2 | 12.5 | 5.9 | -- | 260 |
| 11N/42E-05C01 | 08-11-83 | 1400 | 320 | 7.6 | 16.0 | 5.8 | -- | 130 |
| 11N/43E-16H01 | 08-11-83 | 1645 | 313 | 8.1 | 16.5 | 3.4 | -- | 140 |
| 12N/42E-33Q01 | 06-22-82 | 1045 | 300 | 7.2 | 15.5 | -- | <1 | 140 |
| 12N/42E-34R01 | 06-22-82 | 0915 | 202 | 7.3 | 17.5 | -- | <1 | 99 |
| 13N/40E-14C01 | 09-03-82 | 0830 | 375 | 7.7 | 17.5 | 10.2 | -- | 180 |
| | 06-21-83 | 1330 | 410 | 7.7 | 17.0 | 9.4 | -- | 180 |
| 14N/41E-34K01 | 09-03-82 | 1100 | 490 | 7.7 | 13.0 | 8.7 | -- | 210 |
| | 03-01-83 | 1435 | 552 | 7.7 | 12.0 | 9.0 | -- | 230 |
| | 08-23-83 | 1300 | 460 | 7.7 | 13.0 | 9.2 | -- | 180 |
| 14N/43E-32C01 | 09-03-82 | 0920 | 259 | 8.2 | 15.0 | -- | -- | 61 |
| | 03-01-83 | 1245 | 259 | 8.4 | 15.0 | .2 | -- | 61 |
| | 08-24-83 | 1000 | 256 | 8.4 | 15.5 | .3 | -- | 61 |
| 14N/43E-33M01 | 08-12-83 | 1215 | 262 | 7.5 | 16.0 | 4.5 | -- | 96 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Franklin County, Wash.--Continued</u> | | | | | | | | |
| 14N/34E-25P01D1 | 09-02-82 | 100 | 77 | 37 | 40 | 20 | 0.9 | 5.9 |
| | 05-20-83 | 92 | 73 | 36 | 41 | 21 | 1 | 5.7 |
| | 07-21-83 | 93 | 74 | 37 | 41 | 21 | 1 | 5.9 |
| 14N/36E-19N01 | 09-01-82 | 0 | 37 | 35 | 80 | 40 | 2 | 19 |
| | 05-20-83 | 0 | 35 | 36 | 81 | 40 | 2 | 21 |
| | 08-03-83 | 0 | 35 | 36 | 82 | 41 | 2 | 18 |
| <u>Garfield County, Wash.</u> | | | | | | | | |
| 11N/41E-24E01 | 09-03-82 | 23 | 38 | 12 | 13 | 16 | .5 | 2.1 |
| | 03-01-83 | 31 | 67 | 23 | 19 | 14 | .5 | 2.2 |
| 11N/42E-05C01 | 08-11-83 | 6 | 31 | 12 | 9.7 | 14 | .4 | 3.4 |
| 11N/43E-16H01 | 08-11-83 | 0 | 31 | 15 | 12 | 15 | .4 | 3.3 |
| 12N/42E-33Q01 | 06-22-82 | 0 | 36 | 12 | 10 | 13 | .4 | 4.0 |
| 12N/42E-34R01 | 06-22-82 | 0 | 26 | 8.3 | 7.1 | 13 | .3 | 3.5 |
| 13N/40E-14C01 | 09-03-82 | 36 | 46 | 15 | 12 | 13 | .4 | 3.7 |
| | 06-21-83 | 39 | 46 | 16 | 12 | 12 | .4 | 3.7 |
| 14N/41E-34K01 | 09-03-82 | 0 | 46 | 22 | 29 | 23 | .9 | 2.6 |
| | 03-01-83 | 0 | 50 | 25 | 32 | 23 | .9 | 2.7 |
| | 08-23-83 | 0 | 39 | 20 | 28 | 25 | .9 | 2.5 |
| 14N/43E-32C01 | 09-03-82 | 0 | 19 | 3.3 | 30 | 49 | 2 | 6.3 |
| | 03-01-83 | 0 | 19 | 3.4 | 29 | 47 | 2 | 6.8 |
| | 08-24-83 | 0 | 19 | 3.4 | 29 | 48 | 2 | 6.4 |
| 14N/43E-33M01 | 08-12-83 | 0 | 26 | 7.5 | 16 | 26 | .7 | 3.6 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Franklin County, Wash.--Continued</u> | | | | | | | | |
| 14N/34E-25P01D1 | 09-02-82 | 243 | 296 | 0 | 92 | 55 | 0.3 | 42 |
| | 05-20-83 | 239 | 291 | 0 | 92 | 54 | .4 | 42 |
| | 07-21-83 | 244 | 298 | 0 | 90 | 56 | .3 | 41 |
| 14N/36E-19N01 | 09-01-82 | 401 | 489 | 0 | 17 | 16 | .6 | 100 |
| | 05-20-83 | 405 | 494 | 0 | 16 | 14 | .7 | 100 |
| | 08-03-83 | 403 | 491 | 0 | 17 | 13 | .7 | 99 |
| <u>Garfield County, Wash.</u> | | | | | | | | |
| 11N/41E-24E01 | 09-03-82 | 121 | 148 | 0 | 18 | 14 | .3 | 44 |
| | 03-01-83 | 231 | 282 | 0 | 18 | 33 | .3 | 44 |
| 11N/42E-05C01 | 08-11-83 | 120 | 147 | 0 | 12 | 7.2 | .2 | 53 |
| 11N/43E-16H01 | 08-11-83 | 153 | 187 | 0 | 8.1 | 3.7 | .4 | 54 |
| 12N/42E-33Q01 | 06-22-82 | 142 | 173 | 0 | 13 | 7.7 | .2 | 55 |
| 12N/42E-34R01 | 06-22-82 | 107 | 131 | 0 | 6.0 | 3.3 | .3 | 54 |
| 13N/40E-14C01 | 09-03-82 | 141 | 172 | 0 | 21 | 15 | .4 | 49 |
| | 06-21-83 | 142 | 173 | 0 | 19 | 17 | .4 | 48 |
| 14N/41E-34K01 | 09-03-82 | 215 | 262 | 0 | 8.0 | 4.2 | .5 | 43 |
| | 03-01-83 | 230 | 280 | 0 | 12 | 7.3 | .6 | 41 |
| | 08-23-83 | 218 | 266 | 0 | 8.9 | 4.3 | .6 | 40 |
| 14N/43E-32C01 | 09-03-82 | 114 | 139 | 0 | 15 | 7.2 | .5 | 56 |
| | 03-01-83 | 109 | 121 | 6 | 16 | 7.3 | .6 | 55 |
| | 08-24-83 | 111 | -- | -- | 15 | 7.6 | .6 | 54 |
| 14N/43E-33M01 | 08-12-83 | 119 | 145 | 0 | 7.8 | 2.1 | .8 | 53 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Franklin County, Wash.--Continued | | | | | | | | |
| 14N/34E-25P01D1 | 09-02-82 | 521 | 5.8 | -- | 4 | 17 | 5 | 350 |
| | 05-20-83 | 518 | 7.0 | 40 | 7 | -- | 3 | -- |
| | 07-21-83 | 523 | 7.0 | -- | 18 | -- | 6 | -- |
| 14N/36E-19N01 | 09-01-82 | 548 | .48 | -- | 32 | 81 | 42 | 190 |
| | 05-20-83 | 549 | .39 | 300 | 39 | -- | 41 | -- |
| | 08-03-83 | 544 | .29 | 300 | 21 | -- | 41 | -- |
| Garfield County, Wash. | | | | | | | | |
| 11N/41E-24E01 | 09-03-82 | 234 | 4.5 | -- | 4 | 9 | 2 | 120 |
| | 03-01-83 | 363 | 4.1 | 10 | <3 | -- | 40 | -- |
| 11N/42E-05C01 | 08-11-83 | 215 | 3.3 | <10 | 8 | -- | <1 | -- |
| 11N/43E-16H01 | 08-11-83 | 222 | .61 | <10 | 17 | -- | 8 | -- |
| 12N/42E-33Q01 | 06-22-82 | 235 | 2.8 | -- | <3 | -- | <1 | -- |
| 12N/42E-34R01 | 06-22-82 | 178 | 1.2 | -- | <3 | -- | 3 | -- |
| 13N/40E-14C01 | 09-03-82 | 271 | 5.5 | -- | 5 | 8 | 1 | 150 |
| | 06-21-83 | 272 | 5.6 | 10 | 8 | -- | 7 | -- |
| 14N/41E-34K01 | 09-03-82 | 326 | 9.4 | -- | 5 | 6 | 2 | 210 |
| | 03-01-83 | 357 | 11 | <10 | <3 | -- | <1 | -- |
| | 08-23-83 | 309 | 7.9 | -- | <3 | -- | 1 | -- |
| 14N/43E-32C01 | 09-03-82 | 206 | <.10 | -- | 14 | 18 | 10 | 40 |
| | 03-01-83 | 203 | <.10 | 20 | 9 | -- | 6 | -- |
| | 08-24-83 | 202 | <.10 | -- | 12 | -- | 8 | -- |
| 14N/43E-33M01 | 08-12-83 | 196 | 1.7 | 30 | 24 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Gilliam County, Oreg.</u> | | | | | | | | |
| 01N/21E-12CCD1 | 08-05-83 | 1100 | 305 | 8.9 | 27.5 | 0.8 | -- | 6 |
| 01N/22E-08ABD | 08-05-83 | 0930 | 485 | 8.0 | 18.0 | 2.4 | -- | 89 |
| 03N/21E-28BBD | 07-22-83 | 1200 | 420 | 8.8 | 19.5 | .2 | -- | 8 |
| <u>Grant County, Wash.</u> | | | | | | | | |
| 14N/23E-13D01 | 08-13-82 | 1200 | 240 | 8.3 | 23.0 | -- | -- | 54 |
| | 07-28-83 | 1530 | 250 | 8.3 | 23.5 | .6 | -- | 54 |
| 14N/23E-26A01D1 | 08-12-82 | 1745 | 283 | 8.2 | 23.0 | 1.1 | -- | 66 |
| | 03-16-83 | 1715 | 262 | 8.1 | 16.5 | 1.5 | <1 | 71 |
| | 07-27-83 | 1745 | 290 | 8.1 | 22.5 | 2.5 | -- | 66 |
| 14N/23E-36L02 | 08-12-82 | 1200 | 350 | 7.9 | 15.5 | 9.6 | -- | 160 |
| | 03-16-83 | 1400 | 348 | 7.7 | 14.0 | 9.0 | <1 | 160 |
| | 07-28-83 | 1710 | 355 | 8.0 | 14.5 | -- | -- | 160 |
| 14N/25E-02C01 | 08-11-82 | 0900 | 300 | 7.8 | 21.0 | 3.4 | -- | 120 |
| | 03-16-83 | 0945 | 298 | 7.7 | 18.5 | 4.0 | <1 | 120 |
| | 07-26-83 | 1720 | 310 | 7.9 | 20.5 | -- | -- | 120 |
| 15N/23E-35J01 | 08-12-82 | 1500 | 238 | 8.1 | 18.0 | -- | -- | 98 |
| | 03-16-83 | 1140 | 206 | 8.7 | 11.0 | 2.1 | <1 | 56 |
| | 07-27-83 | 1230 | 221 | 8.2 | 23.0 | .3 | -- | 57 |
| 15N/23E-35P01 | 08-12-82 | 1400 | 210 | 8.1 | 21.5 | .1 | -- | 56 |
| | 03-15-83 | 1615 | 220 | 8.5 | 16.5 | .8 | <1 | 56 |
| | 07-27-83 | 1525 | 214 | 8.2 | 21.5 | .1 | -- | 57 |
| 15N/25E-35H01 | 08-19-82 | 1630 | 310 | 7.8 | 20.0 | 3.4 | -- | 110 |
| | 03-15-83 | 1300 | 300 | 7.8 | 16.5 | 3.5 | <1 | 110 |
| | 07-26-83 | 1850 | 305 | 7.9 | 20.0 | 3.3 | -- | 110 |
| 16N/23E-21J01 | 08-13-82 | 0930 | 390 | 8.0 | 21.5 | .1 | -- | 140 |
| | 03-16-83 | 1115 | 395 | 7.5 | 21.0 | .5 | <1 | 140 |
| | 07-27-83 | 1200 | 390 | 8.0 | 21.5 | .1 | -- | 140 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Gilliam County, Oreg.</u> | | | | | | | | |
| 01N/21E-12CCD1 | 08-05-83 | 0 | 1.9 | 0.2 | 63 | 87 | 12 | 11 |
| 01N/22E-08ABD | 08-05-83 | 0 | 23 | 7.7 | 64 | 57 | 3 | 11 |
| 03N/21E-28BBD | 07-22-83 | 0 | 2.5 | .4 | 83 | 90 | 13 | 10 |
| <u>Grant County, Wash.</u> | | | | | | | | |
| 14N/23E-13D01 | 08-13-82 | 0 | 13 | 5.2 | 30 | 50 | 2 | 9.3 |
| | 07-28-83 | 0 | 13 | 5.3 | 30 | 50 | 2 | 8.8 |
| 14N/23E-26A01D1 | 08-12-82 | 0 | 17 | 5.6 | 31 | 46 | 2 | 9.6 |
| | 03-16-83 | -- | 19 | 5.7 | 30 | 44 | 2 | 8.4 |
| | 07-27-83 | 0 | 18 | 5.2 | 32 | 48 | 2 | 8.1 |
| 14N/23E-36L02 | 08-12-82 | 32 | 46 | 11 | 10 | 12 | .3 | 4.1 |
| | 03-16-83 | -- | 45 | 11 | 11 | 13 | .4 | 4.2 |
| | 07-28-83 | 32 | 46 | 12 | 8.6 | 10 | .3 | 4.1 |
| 14N/25E-02C01 | 08-11-82 | 1 | 30 | 11 | 17 | 23 | .7 | 5.5 |
| | 03-16-83 | -- | 30 | 11 | 17 | 23 | .7 | 5.2 |
| | 07-26-83 | 0 | 30 | 11 | 17 | 23 | .7 | 5.1 |
| 15N/23E-35J01 | 08-12-82 | 10 | 26 | 8.1 | 5.8 | 11 | .3 | 3.5 |
| | 03-16-83 | -- | 13 | 5.6 | 23 | 43 | 1 | 8.1 |
| | 07-27-83 | 0 | 13 | 5.9 | 20 | 40 | 1 | 7.4 |
| 15N/23E-35P01 | 08-12-82 | 0 | 13 | 5.7 | 20 | 40 | 1 | 7.9 |
| | 03-15-83 | 0 | 13 | 5.7 | 23 | 43 | 1 | 8.0 |
| | 07-27-83 | 0 | 13 | 6.0 | 21 | 41 | 1 | 7.8 |
| 15N/25E-35H01 | 08-19-82 | 0 | 27 | 11 | 18 | 25 | .7 | 4.6 |
| | 03-15-83 | -- | 27 | 11 | 18 | 25 | .7 | 4.4 |
| | 07-26-83 | 0 | 26 | 11 | 18 | 25 | .7 | 4.5 |
| 16N/23E-21J01 | 08-13-82 | 0 | 30 | 16 | 30 | 30 | 1 | 6.5 |
| | 03-16-83 | 0 | 30 | 16 | 30 | 31 | 1 | 6.2 |
| | 07-27-83 | 0 | 29 | 16 | 29 | 30 | 1 | 6.4 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Gilliam County, Oreg.</u> | | | | | | | | |
| 01N/21E-12CCD1 | 08-05-83 | 128 | 112 | 22 | 17 | 11 | 1.6 | 70 |
| 01N/22E-08ABD | 08-05-83 | 179 | 218 | 0 | 40 | 21 | 1.0 | 51 |
| 03N/21E-28BBD | 07-22-83 | 175 | 177 | 18 | 1.8 | 25 | 2.2 | 10 |
| <u>Grant County, Wash.</u> | | | | | | | | |
| 14N/23E-13D01 | 08-13-82 | 112 | 137 | 0 | 13 | 2.6 | .9 | 57 |
| | 07-28-83 | 120 | 147 | 0 | 12 | 2.8 | .9 | 57 |
| 14N/23E-26A01D1 | 08-12-82 | 117 | 143 | 0 | 14 | 4.3 | .9 | 53 |
| | 03-16-83 | -- | -- | -- | 13 | 3.8 | .9 | 51 |
| | 07-27-83 | 119 | 145 | 0 | 17 | 5.1 | .8 | 49 |
| 14N/23E-36L02 | 08-12-82 | 128 | 156 | 0 | 39 | 10 | .2 | 31 |
| | 03-16-83 | -- | -- | -- | 36 | 10 | .2 | 29 |
| | 07-28-83 | 132 | 161 | 0 | 38 | 11 | .2 | 62 |
| 14N/25E-02C01 | 08-11-82 | 119 | 145 | 0 | 24 | 7.4 | .3 | 65 |
| | 03-16-83 | -- | -- | -- | 22 | 7.7 | .3 | 59 |
| | 07-26-83 | 124 | 151 | 0 | 22 | 7.3 | .3 | 63 |
| 15N/23E-35J01 | 08-12-82 | 88 | 108 | 0 | 23 | 4.7 | .2 | 35 |
| | 03-16-83 | -- | -- | -- | 12 | 1.8 | .7 | 53 |
| | 07-27-83 | 97 | 118 | 0 | 13 | 1.9 | .7 | 27 |
| 15N/23E-35P01 | 08-12-82 | 95 | 116 | 0 | 13 | 1.7 | .7 | 53 |
| | 03-15-83 | 117 | -- | -- | 12 | 1.8 | .7 | 54 |
| | 07-27-83 | 98 | 120 | 0 | 13 | 1.9 | .7 | 5.8 |
| 15N/25E-35H01 | 08-19-82 | 125 | 153 | 0 | 23 | 7.1 | .3 | 62 |
| | 03-15-83 | -- | -- | -- | 22 | 7.1 | .3 | 62 |
| | 07-26-83 | 129 | 157 | 0 | 23 | 7.1 | .3 | 48 |
| 16N/23E-21J01 | 08-13-82 | 158 | 193 | 0 | 42 | 8.1 | .6 | 52 |
| | 03-16-83 | 156 | 190 | 0 | 39 | 7.9 | .7 | 51 |
| | 07-27-83 | 161 | 196 | 0 | 38 | 8.0 | .7 | 49 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Gilliam County, Oreg.</u> | | | | | | | | |
| 01N/21E-12C01 | 08-05-83 | 253 | <0.10 | 40 | 13 | -- | <1 | -- |
| 01N/22E-DBABD | 08-05-83 | 328 | .54 | 20 | 12 | -- | 7 | -- |
| 03N/21E-28BBD | 07-22-83 | 240 | <.10 | 100 | 6 | -- | 85 | -- |
| <u>Grant County, Wash.</u> | | | | | | | | |
| 14N/23E-13D01 | 08-13-82 | 198 | <.10 | -- | 19 | 20 | 24 | 51 |
| | 07-28-83 | 202 | <.10 | 20 | 19 | -- | 24 | -- |
| 14N/23E-26A01D1 | 08-12-82 | 212 | 1.4 | -- | <3 | 10 | 5 | 60 |
| | 03-16-83 | 213 | 1.5 | 20 | 10 | -- | 1 | -- |
| | 07-27-83 | 214 | 1.8 | 20 | <3 | -- | 2 | -- |
| 14N/23E-36L02 | 08-12-82 | 234 | 1.3 | -- | 7 | 4 | 2 | 200 |
| | 03-16-83 | 229 | 1.2 | 10 | 4 | -- | 17 | -- |
| | 07-28-83 | 266 | 1.2 | <10 | 11 | -- | 3 | -- |
| 14N/25E-02C01 | 08-11-82 | 235 | .83 | -- | <3 | 7 | 1 | 170 |
| | 03-16-83 | 231 | .71 | <10 | 72 | -- | 4 | -- |
| | 07-26-83 | 234 | .84 | <10 | 8 | -- | 2 | -- |
| 15N/23E-35J01 | 08-12-82 | 162 | .54 | -- | 8 | 19 | <1 | 160 |
| | 03-16-83 | 178 | <.10 | -- | 24 | -- | 2 | -- |
| | 07-27-83 | 147 | .10 | 10 | 30 | -- | 30 | -- |
| 15N/23E-35P01 | 08-12-82 | 172 | <.10 | -- | <3 | 14 | 15 | 45 |
| | 03-15-83 | 194 | <.10 | 10 | 10 | -- | 4 | -- |
| | 07-27-83 | 128 | <.10 | 10 | <3 | -- | <1 | -- |
| 15N/25E-35H01 | 08-19-82 | 232 | .81 | -- | <3 | 6 | 18 | 170 |
| | 03-15-83 | 228 | .10 | 10 | 4 | -- | <1 | -- |
| | 07-26-83 | 218 | .76 | 10 | 5 | -- | 3 | -- |
| 16N/23E-21J01 | 08-13-82 | 280 | <.10 | -- | 51 | 18 | 45 | 130 |
| | 03-16-83 | 276 | .36 | 10 | 90 | -- | 46 | -- |
| | 07-27-83 | 273 | <.10 | 20 | 78 | -- | 44 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance ($\mu\text{S}/\text{cm}$) | pH (standard units) | Temperature water ($^{\circ}\text{C}$) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO_3) |
|---------------------------------------|----------|------|--|---------------------|--|--------------------------|-------------------------------|-------------------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 16N/24E-04H01 | 08-17-82 | 1300 | 1,000 | 7.6 | 18.0 | 4.1 | -- | 440 |
| | 03-15-83 | 1145 | 940 | 7.3 | 17.5 | 3.5 | <1 | 440 |
| | 07-27-83 | 1430 | 815 | 7.7 | 16.5 | 4.3 | -- | 370 |
| 16N/25E-01Q01 | 08-17-82 | 1100 | 510 | 7.9 | 21.0 | .6 | -- | 140 |
| | 03-15-83 | 1015 | 530 | 7.7 | 18.5 | 3.8 | <1 | 200 |
| | 07-27-83 | 1600 | 520 | 8.0 | 20.5 | .5 | -- | 160 |
| 16N/25E-04N01 | 08-17-82 | 1545 | 1,100 | 7.9 | -- | 7.3 | -- | 490 |
| | 03-15-83 | 1530 | 1,040 | 7.6 | 8.5 | 10.0 | <1 | 490 |
| | 07-27-83 | 1330 | 1,060 | 7.6 | -- | 8.8 | -- | 490 |
| 16N/27E-10N01 | 08-11-82 | 1500 | 750 | 7.6 | 17.5 | 6.0 | -- | 300 |
| | 03-11-83 | 1400 | 735 | 7.4 | 17.0 | 6.4 | <1 | 280 |
| | 07-27-83 | 1800 | 760 | 7.7 | 17.5 | 5.3 | -- | 300 |
| 17N/23E-02B01 | 08-19-82 | 1000 | 440 | 7.8 | 17.0 | 8.9 | -- | 200 |
| | 05-16-83 | 1300 | 340 | 7.7 | 17.0 | 8.8 | -- | 160 |
| | 07-28-83 | 1400 | 385 | 7.9 | 17.0 | 8.9 | -- | 180 |
| 17N/23E-23A01D1 | 08-19-82 | 1400 | 950 | 7.6 | 25.0 | 3.0 | -- | 230 |
| | 03-16-83 | 0945 | 960 | 7.3 | 23.5 | 4.8 | <1 | 250 |
| | 07-30-83 | 1330 | 950 | 7.6 | 24.0 | 4.8 | -- | 240 |
| 17N/24E-22L01 | 08-18-82 | 1140 | 653 | 7.8 | 16.5 | 6.8 | -- | 230 |
| | 03-15-83 | 1320 | 640 | 7.6 | 16.0 | 7.0 | <1 | 230 |
| | 07-30-83 | 1230 | 690 | 7.8 | 17.0 | 7.0 | -- | 240 |
| 17N/26E-18H01 | 08-18-82 | 1545 | 790 | 7.4 | 16.5 | .7 | -- | 260 |
| 17N/27E-31D01 | 08-18-82 | 1415 | 580 | 7.8 | 21.0 | 3.4 | -- | 170 |
| | 03-11-83 | 1200 | 495 | 7.5 | 17.5 | 2.6 | <1 | 180 |
| | 07-28-83 | 1145 | 472 | 7.8 | 16.5 | 8.4 | -- | 180 |
| 17N/29E-24C01 | 08-11-82 | 1415 | 590 | 7.8 | 16.5 | 7.7 | -- | 94 |
| 17N/30E-33K01 | 08-11-82 | 1130 | 700 | 7.4 | 21.5 | .3 | -- | 180 |
| | 03-16-83 | 1510 | 676 | 7.7 | 16.5 | .1 | -- | 200 |
| | 07-28-83 | 1115 | 790 | 8.0 | 16.5 | .1 | -- | 220 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 16N/24E-04H01 | 08-17-82 | 230 | 73 | 63 | 35 | 14 | 0.7 | 9.5 |
| | 03-15-83 | 250 | 72 | 62 | 36 | 15 | .8 | 11 |
| | 07-27-83 | 150 | 61 | 53 | 28 | 14 | .6 | 7.9 |
| 16N/25E-01Q01 | 08-17-82 | 0 | 32 | 15 | 45 | 38 | 2 | 12 |
| | 03-15-83 | 34 | 42 | 23 | 38 | 28 | 1 | 8.6 |
| | 07-27-83 | 0 | 36 | 18 | 41 | 33 | 1 | 11 |
| 16N/25E-04N01 | 08-17-82 | 350 | 98 | 60 | 24 | 10 | .5 | 3.3 |
| | 03-15-83 | 350 | 94 | 62 | 22 | 9 | .4 | 3.1 |
| | 07-27-83 | 330 | 96 | 60 | 24 | 10 | .5 | 3.4 |
| 16N/27E-10N01 | 08-11-82 | 120 | 62 | 36 | 40 | 22 | 1 | 9.1 |
| | 03-11-83 | 110 | 62 | 30 | 37 | 22 | 1 | 11 |
| | 07-27-83 | 110 | 59 | 37 | 39 | 21 | 1 | 8.8 |
| 17N/23E-02B01 | 08-19-82 | 61 | 37 | 26 | 9.9 | 10 | .3 | 1.7 |
| | 05-16-83 | 23 | 29 | 21 | 8.6 | 10 | .3 | 1.5 |
| | 07-28-83 | 37 | 33 | 23 | 9.5 | 10 | .3 | 1.8 |
| 17N/23E-23A01D1 | 08-19-82 | 67 | 46 | 29 | 110 | 49 | 3 | 12 |
| | 03-16-83 | 83 | 47 | 31 | 110 | 48 | 3 | 13 |
| | 07-30-83 | 71 | 45 | 31 | 110 | 48 | 3 | 13 |
| 17N/24E-22L01 | 08-18-82 | 61 | 49 | 26 | 46 | 30 | 1 | 6.1 |
| | 03-15-83 | 60 | 48 | 26 | 47 | 30 | 1 | 5.9 |
| | 07-30-83 | 73 | 50 | 28 | 48 | 30 | 1 | 6.3 |
| 17N/26E-18H01 | 08-18-82 | 6 | 48 | 35 | 72 | 36 | 2 | 8.9 |
| 17N/27E-31D01 | 08-18-82 | 0 | 37 | 18 | 46 | 35 | 2 | 13 |
| | 03-11-83 | 18 | 38 | 20 | 36 | 29 | 1 | 8.7 |
| | 07-28-83 | 16 | 36 | 21 | 28 | 25 | .9 | 5.6 |
| 17N/29E-24C01 | 08-11-82 | 0 | 13 | 15 | 86 | 64 | 4 | 7.4 |
| 17N/30E-33K01 | 08-11-82 | 6 | 33 | 24 | 68 | 43 | 2 | 11 |
| | 03-16-83 | 0 | 35 | 28 | 67 | 41 | 2 | 8.6 |
| | 07-28-83 | 7 | 37 | 31 | 73 | 41 | 2 | 9.6 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---------------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 16N/24E-04H01 | 08-17-82 | 215 | 262 | 0 | 260 | 29 | 0.5 | 54 |
| | 03-15-83 | 188 | 229 | 0 | 250 | 31 | .5 | 56 |
| | 07-27-83 | 217 | 265 | 0 | 180 | 24 | .6 | 52 |
| 16N/25E-01Q01 | 08-17-82 | 165 | 201 | 0 | 70 | 18 | .6 | 50 |
| | 03-15-83 | 166 | 202 | 0 | 72 | 21 | .5 | 53 |
| | 07-27-83 | 166 | 202 | 0 | 71 | 21 | .6 | 50 |
| 16N/25E-04N01 | 08-17-82 | 148 | 180 | 0 | 200 | 110 | .4 | 37 |
| | 03-15-83 | 138 | 168 | 0 | 200 | 120 | .5 | 39 |
| | 07-27-83 | 152 | 186 | 0 | 200 | 110 | .4 | 36 |
| 16N/27E-10N01 | 08-11-82 | 182 | 222 | 0 | 150 | 30 | .8 | 60 |
| | 03-11-83 | 171 | 208 | 0 | 120 | 39 | .6 | 66 |
| | 07-27-83 | 190 | 232 | 0 | 150 | 33 | .8 | 55 |
| 17N/23E-02B01 | 08-19-82 | 139 | 169 | 0 | 37 | 25 | .6 | 61 |
| | 05-16-83 | 136 | 166 | 0 | 26 | 12 | .7 | 60 |
| | 07-28-83 | 140 | 171 | 0 | 31 | 17 | .6 | 60 |
| 17N/23E-23A01D1 | 08-19-82 | 167 | 204 | 0 | 270 | 21 | 1.0 | 71 |
| | 03-16-83 | 162 | 198 | 0 | 280 | 22 | 1.1 | 72 |
| | 07-30-83 | 169 | 206 | 0 | 280 | 25 | 1.1 | 71 |
| 17N/24E-22L01 | 08-18-82 | 169 | 206 | 0 | 94 | 39 | .7 | 52 |
| | 03-15-83 | 167 | 204 | 0 | 93 | 39 | .8 | 52 |
| | 07-30-83 | 167 | 204 | 0 | 110 | 47 | .7 | 51 |
| 17N/26E-18H01 | 08-18-82 | 258 | 315 | 0 | 120 | 37 | .6 | 55 |
| 17N/27E-31D01 | 08-18-82 | 173 | 211 | 0 | 57 | 34 | .5 | 56 |
| | 03-11-83 | 159 | 194 | 0 | 68 | 16 | .6 | 57 |
| | 07-28-83 | 161 | 196 | 0 | 48 | 15 | .6 | 59 |
| 17N/29E-24C01 | 08-11-82 | 185 | 226 | 0 | 67 | 22 | .5 | 47 |
| 17N/30E-33K01 | 08-11-82 | 176 | 214 | 0 | 54 | 26 | .5 | 44 |
| | 03-16-83 | 202 | 247 | 0 | 45 | 18 | .5 | 44 |
| | 07-28-83 | 213 | 260 | 0 | 46 | 21 | .4 | 56 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Grant County, Wash.--Continued | | | | | | | | |
| 16N/24E-04H01 | 08-17-82 | 675 | 4.8 | -- | 13 | 24 | 6 | 530 |
| | 03-15-83 | 654 | 5.2 | 10 | 16 | -- | 5 | -- |
| | 07-27-83 | 554 | 3.9 | 10 | 23 | -- | 14 | -- |
| 16N/25E-01Q01 | 08-17-82 | 343 | .31 | -- | <3 | 29 | 3 | 220 |
| | 03-15-83 | 368 | 2.4 | 10 | <3 | -- | 3 | -- |
| | 07-27-83 | 354 | 1.3 | 20 | 18 | -- | 1 | -- |
| 16N/25E-04N01 | 08-17-82 | 684 | 14 | -- | 11 | 11 | 24 | 810 |
| | 03-15-83 | 668 | 10 | <10 | 6 | -- | <1 | -- |
| | 07-27-83 | 683 | 14 | <10 | 11 | -- | <1 | -- |
| 16N/27E-10N01 | 08-11-82 | 529 | 7.0 | -- | 13 | 18 | 3 | 560 |
| | 03-11-83 | 496 | 6.4 | 20 | 18 | -- | 2 | -- |
| | 07-27-83 | 526 | 6.7 | 20 | 19 | -- | 3 | -- |
| 17N/23E-02B01 | 08-19-82 | 292 | 2.4 | -- | 10 | 8 | 5 | 240 |
| | 05-16-83 | 245 | .99 | 10 | 15 | -- | 1 | -- |
| | 07-28-83 | 267 | 1.6 | <10 | 14 | -- | 18 | -- |
| 17N/23E-23A01D1 | 08-19-82 | 661 | .11 | -- | 5 | 44 | 31 | 190 |
| | 03-16-83 | 674 | .10 | 70 | 14 | -- | 2 | -- |
| | 07-30-83 | 678 | .11 | 70 | 14 | -- | 2 | -- |
| 17N/24E-22L01 | 08-18-82 | 430 | 3.6 | -- | 3 | 11 | 21 | 270 |
| | 03-15-83 | 428 | 3.7 | <10 | 4 | -- | <1 | -- |
| | 07-30-83 | 463 | 5.0 | <10 | 5 | -- | <1 | -- |
| 17N/26E-18H01 | 08-18-82 | 532 | <.10 | -- | 140 | 19 | 160 | 430 |
| 17N/27E-31D01 | 08-18-82 | 372 | 1.5 | -- | 4 | 28 | 93 | 230 |
| | 03-11-83 | 349 | 2.1 | 10 | 6 | -- | 2 | -- |
| | 07-28-83 | 331 | 4.9 | 20 | 4 | -- | <1 | -- |
| 17N/29E-24C01 | 08-11-82 | 393 | 5.5 | -- | <3 | 13 | 3 | 84 |
| 17N/30E-33K01 | 08-11-82 | 468 | 23 | -- | 16 | 29 | 150 | 200 |
| | 03-16-83 | 461 | 21 | 30 | 14 | -- | 69 | -- |
| | 07-28-83 | 557 | 35 | 30 | 14 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---------------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| Grant County, Wash.--Continued | | | | | | | | |
| 18N/23E-36H01 | 08-19-82 | 1225 | 545 | 7.6 | 15.5 | 7.5 | -- | 250 |
| 18N/24E-04D02 | 08-16-82 | 1245 | 455 | 7.8 | 16.0 | 7.6 | -- | 200 |
| | 05-16-83 | 1530 | 389 | 7.7 | 17.0 | 8.9 | -- | 160 |
| | 07-28-83 | 1545 | 450 | 7.8 | 15.5 | 8.4 | -- | 190 |
| 18N/25E-08C01 | 05-18-83 | 1615 | 750 | 7.8 | 14.0 | 4.6 | -- | 310 |
| 18N/26E-32C01 | 08-17-82 | 1830 | 580 | 7.6 | 20.0 | .5 | -- | 220 |
| | 05-20-83 | 1545 | 540 | 7.6 | 20.5 | .2 | -- | 230 |
| | 08-01-83 | 0845 | 559 | 7.6 | 20.0 | .2 | -- | 230 |
| 18N/26E-34K01 | 05-18-83 | 1345 | 815 | 7.8 | 21.0 | .0 | <1 | 280 |
| 18N/28E-26F01 | 08-12-82 | 1100 | 432 | 8.5 | 22.5 | .7 | -- | 17 |
| | 05-17-83 | 1745 | 440 | 8.4 | 22.0 | .3 | -- | 18 |
| | 07-28-83 | 1600 | 442 | 8.5 | 22.5 | .4 | -- | 17 |
| 18N/29E-01A02 | 05-18-83 | 1040 | 460 | 7.9 | 16.0 | 5.5 | -- | 130 |
| | 07-29-83 | 0930 | 345 | 8.1 | 16.0 | -- | -- | 85 |
| 18N/29E-02A01 | 08-13-82 | 0830 | 398 | 7.7 | 14.5 | 8.5 | -- | 66 |
| | 03-17-83 | 0920 | 415 | 7.8 | 13.5 | 9.0 | <1 | 69 |
| | 07-28-83 | 1415 | 458 | 8.0 | 14.5 | 8.8 | -- | 63 |
| 18N/30E-16R01 | 08-12-82 | 1330 | 1,100 | 7.7 | 15.0 | 6.3 | -- | 450 |
| | 03-18-83 | 1320 | 1,090 | 7.6 | 15.0 | 7.6 | <1 | 460 |
| | 07-28-83 | 1300 | 1,080 | 7.8 | 15.0 | 6.9 | -- | 470 |
| 19N/23E-22M01 | 08-16-82 | 1400 | 610 | 7.8 | 15.5 | 5.8 | -- | 290 |
| | 03-16-83 | 1400 | 575 | 7.8 | 14.5 | 8.8 | <1 | 290 |
| | 07-28-83 | 1700 | 612 | 7.8 | 15.5 | 8.3 | -- | 310 |
| 19N/25E-08A01 | 08-17-82 | 0830 | 435 | 7.9 | 21.5 | 5.8 | -- | 140 |
| | 07-29-83 | 1745 | 447 | 8.0 | 23.0 | -- | -- | 140 |
| 19N/26E-25D01 | 05-19-83 | 1000 | 318 | 7.9 | 17.5 | 10.2 | <1 | 110 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Grant County, Wash.--Continued | | | | | | | | |
| 18N/23E-36H01 | 08-19-82 | 43 | 50 | 31 | 13 | 10 | 0.4 | 2.3 |
| 18N/24E-04D02 | 08-16-82 | 37 | 41 | 23 | 15 | 14 | .5 | 2.9 |
| | 05-16-83 | 23 | 34 | 18 | 16 | 18 | .6 | 2.7 |
| | 07-28-83 | 32 | 40 | 23 | 15 | 14 | .5 | 3.0 |
| 18N/25E-08C01 | 05-18-83 | 81 | 72 | 32 | 42 | 22 | 1 | 4.5 |
| 18N/26E-32C01 | 08-17-82 | 0 | 45 | 26 | 30 | 22 | .9 | 8.3 |
| | 05-20-83 | 0 | 46 | 27 | 31 | 22 | .9 | 8.0 |
| | 08-01-83 | 0 | 47 | 27 | 31 | 22 | .9 | 8.2 |
| 18N/26E-34K01 | 05-18-83 | 76 | 56 | 33 | 48 | 26 | 1 | 12 |
| 18N/28E-26F01 | 08-12-82 | 0 | 4.1 | 1.7 | 84 | 84 | 9 | 13 |
| | 05-17-83 | 0 | 4.2 | 1.9 | 84 | 84 | 9 | 12 |
| | 07-28-83 | 0 | 3.9 | 1.8 | 86 | 85 | 9 | 12 |
| 18N/29E-01A02 | 05-18-83 | 0 | 25 | 16 | 47 | 43 | 2 | 5.8 |
| | 07-29-83 | 0 | 16 | 11 | 42 | 50 | 2 | 6.1 |
| 18N/29E-02A01 | 08-13-82 | 0 | 11 | 9.3 | 60 | 65 | 3 | 2.6 |
| | 03-17-83 | 0 | 11 | 10 | 67 | 67 | 4 | 3.0 |
| | 07-28-83 | 0 | 9.5 | 9.5 | 79 | 72 | 4 | 2.2 |
| 18N/30E-16R01 | 08-12-82 | 300 | 89 | 55 | 44 | 17 | .9 | 4.5 |
| | 03-18-83 | 320 | 87 | 59 | 46 | 18 | .9 | 4.2 |
| | 07-28-83 | 320 | 92 | 59 | 45 | 17 | .9 | 4.2 |
| 19N/23E-22M01 | 08-16-82 | 56 | 55 | 38 | 10 | 7 | .3 | 2.4 |
| | 03-16-83 | 56 | 53 | 38 | 10 | 7 | .3 | 2.4 |
| | 07-28-83 | 69 | 59 | 40 | 10 | 6 | .2 | 2.4 |
| 19N/25E-08A01 | 08-17-82 | 14 | 28 | 18 | 29 | 29 | 1 | 6.7 |
| | 07-29-83 | 15 | 28 | 18 | 30 | 30 | 1 | 6.6 |
| 19N/26E-25D01 | 05-19-83 | 0 | 30 | 7.8 | 24 | 31 | 1 | 6.0 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---------------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Grant County, Wash.--Continued | | | | | | | | |
| 18N/23E-36H01 | 08-19-82 | 210 | 256 | 0 | 40 | 14 | 0.5 | 58 |
| 18N/24E-04D02 | 08-16-82 | 161 | 196 | 0 | 35 | 13 | .5 | 54 |
| | 05-16-83 | 136 | 166 | 0 | 25 | 14 | .5 | 52 |
| | 07-28-83 | 162 | 198 | 0 | 36 | 16 | .5 | 51 |
| 18N/25E-08C01 | 05-18-83 | 230 | 281 | 0 | 110 | 21 | .5 | 44 |
| 18N/26E-32C01 | 08-17-82 | 228 | 278 | 0 | 33 | 18 | .4 | 62 |
| | 05-20-83 | 229 | 279 | 0 | 37 | 21 | .4 | 60 |
| | 08-01-83 | 229 | 279 | 0 | 36 | 22 | .5 | 62 |
| 18N/26E-34K01 | 05-18-83 | 200 | 244 | 0 | 41 | 120 | .4 | 57 |
| 18N/28E-26F01 | 08-12-82 | 158 | 171 | 11 | 37 | 18 | 1.7 | 55 |
| | 05-17-83 | 159 | 174 | 10 | 35 | 16 | 1.8 | 54 |
| | 07-28-83 | 167 | 174 | 14 | 36 | 18 | 1.8 | 55 |
| 18N/29E-01A02 | 05-18-83 | 156 | 190 | 0 | 47 | 14 | .4 | 42 |
| | 07-29-83 | 129 | 157 | 0 | 36 | 6.8 | .4 | 40 |
| 18N/29E-02A01 | 08-13-82 | 156 | 190 | 0 | 33 | 7.7 | .6 | 52 |
| | 03-17-83 | 139 | 170 | 0 | 52 | 12 | .7 | 50 |
| | 07-28-83 | 176 | 215 | 0 | 42 | 13 | .6 | 58 |
| 18N/30E-16R01 | 08-12-82 | 153 | 187 | 0 | 180 | 93 | .5 | 54 |
| | 03-18-83 | 136 | 166 | 0 | 200 | 100 | .5 | 54 |
| | 07-28-83 | 154 | 188 | 0 | 200 | 97 | .5 | 50 |
| 19N/23E-22M01 | 08-16-82 | 239 | 291 | 0 | 46 | 14 | .3 | 54 |
| | 03-16-83 | 233 | 284 | 0 | 46 | 16 | .3 | 53 |
| | 07-28-83 | 243 | 296 | 0 | 50 | 23 | .3 | 53 |
| 19N/25E-08A01 | 08-17-82 | 130 | 159 | 0 | 41 | 22 | .4 | 52 |
| | 07-29-83 | 129 | 157 | 0 | 44 | 24 | .5 | 60 |
| 19N/26E-25D01 | 05-19-83 | 157 | 191 | 0 | 16 | 2.2 | .4 | 45 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Grant County, Wash.--Continued | | | | | | | | |
| 18N/23E-36H01 | 08-19-82 | 353 | 4.1 | -- | <3 | 7 | 8 | 360 |
| 18N/24E-04D02 | 08-16-82 | 301 | 4.4 | -- | <3 | 8 | <1 | 300 |
| | 05-16-83 | 266 | 5.1 | <10 | <3 | -- | 2 | -- |
| | 07-28-83 | 301 | 4.4 | <10 | <3 | -- | <1 | -- |
| 18N/25E-08C01 | 05-18-83 | 501 | 8.3 | 50 | <3 | -- | 1 | -- |
| 18N/26E-32C01 | 08-17-82 | 371 | 2.6 | -- | <3 | 15 | 9 | 440 |
| | 05-20-83 | 382 | 3.2 | 20 | <3 | -- | <1 | -- |
| | 08-01-83 | 383 | 2.8 | 20 | 4 | -- | <1 | -- |
| 18N/26E-34K01 | 05-18-83 | 488 | <.10 | 30 | 59 | -- | 97 | -- |
| 18N/28E-26F01 | 08-12-82 | 312 | .42 | -- | 9 | 30 | 1 | 23 |
| | 05-17-83 | 305 | .21 | 40 | 16 | -- | 6 | -- |
| | 07-28-83 | 316 | .39 | 40 | 8 | -- | <1 | -- |
| 18N/29E-01A02 | 05-18-83 | 304 | 3.1 | 30 | 10 | -- | 10 | -- |
| | 07-29-83 | 241 | 1.2 | 20 | 3 | -- | <1 | -- |
| 18N/29E-02A01 | 08-13-82 | 279 | 2.1 | -- | <3 | 10 | <1 | 120 |
| | 03-17-83 | 300 | 2.5 | 30 | 9 | -- | 4 | -- |
| | 07-28-83 | 335 | 3.5 | 40 | 3 | -- | <1 | -- |
| 18N/30E-16R01 | 08-12-82 | 728 | 26 | -- | <3 | 26 | 1 | 760 |
| | 03-18-83 | 716 | 19 | 30 | 16 | -- | <1 | -- |
| | 07-28-83 | 746 | 24 | 30 | 11 | -- | <1 | -- |
| 19N/23E-22M01 | 08-16-82 | 383 | 4.5 | -- | <3 | 7 | 6 | 420 |
| | 03-16-83 | 378 | 4.4 | <10 | 3 | -- | <1 | -- |
| | 07-28-83 | 403 | 4.5 | <10 | 4 | -- | <1 | -- |
| 19N/25E-08A01 | 08-17-82 | 295 | 4.5 | -- | <3 | 15 | 4 | 200 |
| | 07-29-83 | 309 | 4.6 | 10 | 47 | -- | 51 | -- |
| 19N/26E-25D01 | 05-19-83 | 226 | .21 | 10 | <3 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---------------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 19N/26E-36E01 | 08-13-82 | 1700 | 417 | 7.5 | 20.0 | 0.4 | -- | 140 |
| | 08-29-83 | 1400 | 412 | 7.7 | 20.0 | .4 | -- | 140 |
| 19N/27E-24H02 | 03-16-83 | 1615 | 850 | 7.2 | 13.5 | 8.5 | <1 | 300 |
| 19N/27E-30N01 | 08-13-82 | 1420 | 453 | 7.6 | 19.5 | 5.0 | -- | 170 |
| | 05-16-83 | 1800 | 497 | 7.7 | 19.0 | 7.2 | -- | 180 |
| 19N/29E-03B01 | 08-14-82 | 1000 | 333 | 8.8 | 22.5 | .2 | -- | 7 |
| | 05-27-83 | 0840 | 335 | 8.8 | 22.0 | .1 | -- | 14 |
| | 07-29-83 | 1530 | 340 | 8.8 | 22.5 | .3 | -- | 9 |
| 19N/29E-08L01 | 08-12-82 | 1300 | 362 | 7.7 | 15.0 | 6.1 | -- | 110 |
| | 05-26-83 | 1545 | 326 | 7.7 | 15.0 | 6.0 | -- | 110 |
| | 07-29-83 | 1425 | 348 | 8.0 | 15.0 | 6.1 | -- | 120 |
| 19N/30E-03E01 | 05-26-83 | 1415 | 385 | 9.2 | 21.5 | .0 | -- | 17 |
| | 07-30-83 | 1810 | 395 | 9.2 | 21.0 | .2 | -- | 15 |
| 19N/30E-07L01 | 05-23-83 | 1645 | 360 | 9.0 | 23.0 | .2 | -- | 4 |
| | 09-06-83 | 1415 | 362 | 9.1 | 23.0 | .2 | -- | 12 |
| 19N/30E-15L01 | 08-14-82 | 0815 | 410 | 8.9 | 23.5 | .4 | -- | 14 |
| | 05-17-83 | 1545 | 393 | 9.0 | 24.0 | .0 | -- | 3 |
| 19N/30E-33B01 | 07-14-83 | 1400 | 350 | 8.2 | 15.0 | -- | -- | 110 |
| 20N/23E-16D01 | 08-16-82 | 1600 | 580 | 7.9 | 16.0 | 7.4 | -- | 270 |
| | 03-18-83 | 0930 | 545 | 7.7 | 7.5 | -- | <1 | 240 |
| | 07-29-83 | 1200 | 540 | 8.1 | 14.5 | 8.8 | -- | 260 |
| 20N/25E-14K01 | 05-17-83 | 1600 | 430 | 7.4 | 15.0 | 8.0 | <1 | 180 |
| 20N/25E-17Q01 | 08-12-82 | 1730 | 353 | 7.8 | 18.5 | 7.4 | -- | 140 |
| | 03-18-83 | 1215 | 380 | 7.8 | 14.0 | 8.0 | <1 | 150 |
| | 07-30-83 | 1100 | 368 | 7.8 | 18.0 | 7.3 | -- | 160 |
| 20N/26E-26J01 | 08-12-82 | 1930 | 345 | 7.6 | 20.5 | 3.8 | -- | 99 |
| | 07-29-83 | 0900 | 340 | 7.7 | 21.0 | 4.2 | -- | 110 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 19N/26E-36E01 | 08-13-82 | 0 | 30 | 15 | 36 | 35 | 1 | 9.3 |
| | 08-29-83 | 0 | 30 | 15 | 34 | 33 | 1 | 8.5 |
| 19N/27E-24H02 | 03-16-83 | 0 | 52 | 41 | 71 | 32 | 2 | 19 |
| 19N/27E-30N01 | 08-13-82 | 0 | 36 | 19 | 32 | 29 | 1 | 5.0 |
| | 05-16-83 | 2 | 38 | 21 | 33 | 28 | 1 | 4.6 |
| 19N/29E-03B01 | 08-14-82 | 0 | 2.4 | .30 | 68 | 89 | 11 | 8.9 |
| | 05-27-83 | 0 | 4.0 | .89 | 66 | 85 | 8 | 9.5 |
| | 07-29-83 | 0 | 2.8 | .51 | 68 | 88 | 10 | 9.0 |
| 19N/29E-08L01 | 08-12-82 | 0 | 24 | 13 | 28 | 34 | 1 | 3.9 |
| | 05-26-83 | 0 | 22 | 13 | 28 | 35 | 1 | 3.4 |
| | 07-29-83 | 0 | 24 | 14 | 29 | 34 | 1 | 3.5 |
| 19N/30E-03E01 | 05-26-83 | 0 | 4.3 | 1.4 | 80 | 88 | 9 | 6.4 |
| | 07-30-83 | 0 | 3.9 | 1.2 | 78 | 88 | 9 | 6.5 |
| 19N/30E-07L01 | 05-23-83 | 0 | 1.3 | .30 | 79 | 93 | 16 | 6.6 |
| | 09-06-83 | 0 | 3.3 | 1.0 | 77 | 89 | 10 | 6.9 |
| 19N/30E-15L01 | 08-14-82 | 0 | 4.0 | .90 | 79 | 88 | 9 | 8.0 |
| | 05-17-83 | 0 | 1.2 | .12 | 84 | 94 | 20 | 5.7 |
| 19N/30E-33B01 | 07-14-83 | -- | 23 | 12 | 30 | 36 | 1 | 7.8 |
| 20N/23E-16D01 | 08-16-82 | 83 | 27 | 49 | 18 | 13 | .5 | 3.1 |
| | 03-18-83 | -- | 22 | 46 | 18 | 14 | .5 | 2.5 |
| | 07-29-83 | 63 | 23 | 48 | 18 | 13 | .5 | 2.6 |
| 20N/25E-14K01 | 05-17-83 | 0 | 49 | 14 | 17 | 16 | .6 | 6.2 |
| 20N/25E-17Q01 | 08-12-82 | 19 | 34 | 14 | 17 | 20 | .6 | 4.1 |
| | 03-18-83 | -- | 36 | 15 | 18 | 20 | .6 | 3.8 |
| | 07-30-83 | 34 | 37 | 16 | 18 | 19 | .6 | 4.0 |
| 20N/26E-26J01 | 08-12-82 | 0 | 23 | 10 | 28 | 36 | 1 | 6.0 |
| | 07-29-83 | 0 | 25 | 11 | 30 | 36 | 1 | 6.1 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---------------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Grant County, Wash.--Continued | | | | | | | | |
| 19N/26E-36E01 | 08-13-82 | 182 | 222 | 0 | 26 | 6.9 | 0.5 | 61 |
| | 08-29-83 | 182 | 222 | 0 | 23 | 6.5 | .5 | 61 |
| 19N/27E-24H02 | 03-16-83 | 385 | 470 | 0 | 51 | 14 | .7 | 33 |
| 19N/27E-30N01 | 08-13-82 | 171 | 208 | 0 | 43 | 8.0 | .5 | 62 |
| | 05-16-83 | 180 | 219 | 0 | 51 | 10 | .5 | 60 |
| 19N/29E-03B01 | 08-14-82 | 133 | 130 | 16 | 11 | 14 | 2.2 | 69 |
| | 05-27-83 | 140 | 150 | 10 | 12 | 17 | 2.2 | 64 |
| | 07-29-83 | 135 | 126 | 19 | 10 | 16 | 2.3 | 36 |
| 19N/29E-08L01 | 08-12-82 | 152 | 185 | 0 | 25 | 4.3 | .6 | 50 |
| | 05-26-83 | 143 | 174 | 0 | 24 | 3.8 | .7 | 50 |
| | 07-29-83 | 148 | 181 | 0 | 25 | 4.0 | .6 | 56 |
| 19N/30E-03E01 | 05-26-83 | 149 | 127 | 27 | 22 | 20 | 3.1 | 74 |
| | 07-30-83 | 151 | 137 | 23 | 15 | 19 | 2.8 | 72 |
| 19N/30E-07L01 | 05-23-83 | 139 | 135 | 17 | 23 | 18 | 2.3 | 72 |
| | 09-06-83 | 137 | 129 | 19 | 22 | 16 | 2.0 | 69 |
| 19N/30E-15L01 | 08-14-82 | 138 | 132 | 18 | 30 | 17 | 2.1 | 72 |
| | 05-17-83 | 139 | 139 | 15 | 27 | 16 | 2.4 | 73 |
| 19N/30E-33B01 | 07-14-83 | -- | -- | -- | 29 | 6.9 | .5 | 44 |
| 20N/23E-16D01 | 08-16-82 | 186 | 227 | 0 | 69 | 21 | .6 | 55 |
| | 03-18-83 | -- | -- | -- | 61 | 23 | .7 | 54 |
| | 07-29-83 | 192 | 234 | 0 | 62 | 20 | .6 | 55 |
| 20N/25E-14K01 | 05-17-83 | 185 | 225 | 0 | 36 | 6.4 | .3 | 43 |
| 20N/25E-17Q01 | 08-12-82 | 124 | 151 | 0 | 36 | 10 | .6 | 61 |
| | 03-18-83 | -- | -- | -- | 36 | 10 | .6 | 63 |
| | 07-30-83 | 124 | 151 | 0 | 37 | 12 | .6 | 61 |
| 20N/26E-26J01 | 08-12-82 | 148 | 180 | 0 | 17 | 4.5 | .5 | 61 |
| | 07-29-83 | 148 | 181 | 0 | 17 | 4.6 | .5 | 61 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 19N/26E-36E01 | 08-13-82 | 303 | 2.0 | -- | <3 | 14 | 6 | 230 |
| | 08-29-83 | 297 | 2.2 | 20 | <3 | -- | 6 | -- |
| 19N/27E-24H02 | 03-16-83 | 535 | 4.9 | 40 | 4 | -- | 2 | -- |
| 19N/27E-30N01 | 08-13-82 | 326 | 4.0 | -- | <3 | 8 | <1 | 330 |
| | 05-16-83 | 350 | 5.5 | 20 | 13 | -- | 5 | -- |
| 19N/29E-03B01 | 08-14-82 | 256 | <.10 | -- | 13 | 32 | 21 | 6 |
| | 05-27-83 | 259 | <.10 | 40 | 19 | -- | 4 | -- |
| | 07-29-83 | 226 | <.10 | 40 | 26 | -- | 16 | -- |
| 19N/29E-08L01 | 08-12-82 | 249 | 2.0 | -- | <3 | 14 | 2 | 170 |
| | 05-26-83 | 238 | 1.6 | 20 | 9 | -- | 4 | -- |
| | 07-29-83 | 253 | 1.8 | 20 | 19 | -- | 24 | -- |
| 19N/30E-03E01 | 05-26-83 | 302 | .22 | 50 | 4 | -- | 1 | -- |
| | 07-30-83 | 289 | .10 | 50 | 28 | -- | 1 | -- |
| 19N/30E-07L01 | 05-23-83 | 286 | <.10 | 40 | 58 | -- | 1 | -- |
| | 09-06-83 | 280 | <.10 | 40 | 41 | -- | 3 | -- |
| 19N/30E-15L01 | 08-14-82 | 296 | <.10 | -- | 28 | 32 | 24 | 12 |
| | 05-17-83 | 293 | <.10 | 40 | 36 | -- | 5 | -- |
| 19N/30E-33B01 | 07-14-83 | 243 | 0.43 | -- | 56 | -- | 47 | -- |
| 20N/23E-16D01 | 08-16-82 | 374 | 4.3 | -- | 120 | 9 | 34 | 350 |
| | 03-18-83 | 350 | 2.7 | 20 | 15 | -- | 53 | -- |
| | 07-29-83 | 360 | 3.6 | 20 | 3 | -- | <1 | -- |
| 20N/25E-14K01 | 05-17-83 | 291 | 1.9 | 10 | 17 | -- | <1 | -- |
| 20N/25E-17Q01 | 08-12-82 | 268 | 3.7 | -- | <3 | 18 | 2 | 180 |
| | 03-18-83 | 275 | 3.9 | 20 | 40 | -- | 30 | -- |
| | 07-30-83 | 276 | 3.6 | 10 | 12 | -- | <1 | -- |
| 20N/26E-26J01 | 08-12-82 | 251 | 2.8 | -- | <3 | 19 | 2 | 190 |
| | 07-29-83 | 257 | 2.9 | 10 | 3 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---------------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 20N/28E-11R01 | 08-18-82 | 0950 | 422 | 7.7 | 16.5 | 8.1 | -- | 190 |
| 20N/28E-32H01 | 08-13-82 | 1100 | 335 | 8.0 | 21.0 | 1.4 | -- | 86 |
| | 03-17-83 | 1100 | 320 | 7.7 | 21.5 | 2.8 | <1 | 76 |
| | 07-29-83 | 1430 | 334 | 8.1 | 21.5 | 2.2 | -- | 83 |
| 20N/29E-01A01 | 08-12-82 | 0930 | 355 | 8.0 | 18.0 | .2 | -- | 84 |
| | 05-17-83 | 1400 | 361 | 8.0 | 18.0 | .3 | -- | 84 |
| 20N/29E-33R01 | 07-13-83 | 1530 | 435 | 7.8 | 16.0 | -- | -- | 150 |
| 21N/26E-15H01 | 07-27-82 | 0930 | 280 | 8.0 | 26.5 | .1 | -- | 89 |
| | 03-18-83 | 1415 | 285 | 7.5 | 25.0 | .2 | <1 | 91 |
| | 09-02-83 | 1015 | 280 | 8.1 | 25.5 | .1 | -- | 91 |
| 21N/26E-28A01 | 03-17-83 | 1330 | 650 | 7.5 | 13.5 | 9.5 | <1 | 290 |
| 21N/28E-19F02 | 07-26-82 | 1040 | 380 | 7.7 | 15.5 | 9.1 | -- | 140 |
| 21N/28E-36R01 | 07-26-82 | 1330 | 200 | 7.1 | 15.5 | 8.3 | -- | 90 |
| | 03-18-83 | 0900 | 200 | 7.4 | 15.0 | 8.4 | -- | 90 |
| | 07-29-83 | 1630 | 200 | 7.3 | 14.5 | 8.1 | -- | 87 |
| 21N/30E-03E02 | 09-08-82 | 1230 | 405 | 8.2 | 23.0 | 1.2 | -- | 72 |
| | 05-18-83 | 1430 | 410 | 8.3 | 23.0 | .2 | -- | 66 |
| | 09-01-83 | 1145 | 405 | 8.2 | 22.5 | 4.0 | -- | 72 |
| 21N/30E-23J01D1 | 09-08-82 | 1000 | 372 | 8.6 | 23.0 | -- | -- | 50 |
| | 05-18-83 | 1200 | 373 | 8.7 | 23.5 | .4 | -- | 47 |
| | 09-01-83 | 1015 | 378 | 8.6 | 23.0 | 7.8 | -- | 47 |
| 22N/26E-04C02 | 09-09-82 | 1850 | 159 | 7.6 | 12.0 | 9.1 | -- | 63 |
| | 05-17-83 | 0930 | 220 | 7.0 | 12.0 | 10.2 | -- | 83 |
| | 09-01-83 | 1700 | 210 | 7.3 | 12.0 | 10.0 | -- | 81 |
| 22N/26E-36B01 | 07-27-82 | 1720 | 325 | 7.6 | 18.5 | 3.2 | -- | 130 |
| | 05-17-83 | 1130 | 361 | 7.4 | 17.0 | 3.4 | -- | 150 |
| | 09-02-83 | 1115 | 390 | 7.2 | 16.5 | 5.5 | -- | 170 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 20N/28E-11R01 | 08-18-82 | 0 | 45 | 18 | 19 | 18 | 0.6 | 2.3 |
| 20N/28E-32H01 | 08-13-82 | 0 | 20 | 8.8 | 37 | 45 | 2 | 8.7 |
| | 03-17-83 | 0 | 17 | 8.1 | 38 | 49 | 2 | 8.8 |
| | 07-29-83 | 0 | 19 | 8.7 | 37 | 46 | 2 | 9.0 |
| 20N/29E-01A01 | 08-12-82 | 0 | 19 | 8.8 | 39 | 47 | 2 | 9.0 |
| | 05-17-83 | 0 | 19 | 8.9 | 40 | 48 | 2 | 8.3 |
| 20N/29E-33R01 | 07-13-83 | -- | 29 | 20 | 29 | 28 | 1 | 5.5 |
| 21N/26E-15H01 | 07-27-82 | 0 | 20 | 9.5 | 24 | 35 | 1 | 4.7 |
| | 03-18-83 | -- | 20 | 10 | 25 | 36 | 1 | 4.7 |
| | 09-02-83 | 0 | 20 | 9.9 | 24 | 35 | 1 | 4.5 |
| 21N/26E-28A01 | 03-17-83 | 36 | 63 | 31 | 25 | 16 | .6 | 7.4 |
| 21N/28E-19F02 | 07-26-82 | 0 | 35 | 13 | 26 | 28 | 1 | 5.2 |
| 21N/28E-36R01 | 07-26-82 | 0 | 23 | 7.9 | 7.8 | 15 | .4 | 3.4 |
| | 03-18-83 | 5 | 22 | 8.5 | 5.0 | 10 | .2 | 3.5 |
| | 07-29-83 | 0 | 22 | 7.7 | 8.1 | 16 | .4 | 3.1 |
| 21N/30E-03E02 | 09-08-82 | 0 | 22 | 4.2 | 48 | 55 | 2 | 10 |
| | 05-18-83 | 0 | 20 | 3.9 | 53 | 59 | 3 | 10 |
| | 09-01-83 | 0 | 22 | 4.1 | 51 | 56 | 3 | 12 |
| 21N/30E-23J01D1 | 09-08-82 | 0 | 16 | 2.4 | 55 | 65 | 3 | 11 |
| | 05-18-83 | 0 | 15 | 2.4 | 57 | 67 | 4 | 11 |
| | 09-01-83 | 0 | 15 | 2.4 | 56 | 67 | 4 | 10 |
| 22N/26E-04C02 | 09-09-82 | 2 | 15 | 6.1 | 6.1 | 17 | .3 | 1.7 |
| | 05-17-83 | 11 | 20 | 8.1 | 7.6 | 16 | .4 | 2.0 |
| | 09-01-83 | 9 | 20 | 7.6 | 7.3 | 16 | .4 | 1.7 |
| 22N/26E-36B01 | 07-27-82 | 0 | 29 | 14 | 17 | 21 | .6 | 5.0 |
| | 05-17-83 | 0 | 34 | 16 | 18 | 20 | .6 | 5.1 |
| | 09-02-83 | 0 | 39 | 17 | 18 | 18 | .6 | 5.2 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---------------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Grant County, Wash.--Continued | | | | | | | | |
| 20N/28E-11R01 | 08-18-82 | 210 | 256 | 0 | 19 | 1.8 | 0.4 | 47 |
| 20N/28E-32H01 | 08-13-82 | 127 | 155 | 0 | 26 | 12 | .6 | 49 |
| | 03-17-83 | 125 | 153 | 0 | 26 | 11 | .7 | 47 |
| | 07-29-83 | 130 | 159 | 0 | 26 | 11 | .7 | 47 |
| 20N/29E-01A01 | 08-12-82 | 130 | 159 | 0 | 30 | 12 | .6 | 46 |
| | 05-17-83 | 136 | 166 | 0 | 28 | 12 | .6 | 46 |
| 20N/29E-33R01 | 07-13-83 | -- | -- | -- | 61 | 19 | .3 | 35 |
| 21N/26E-15H01 | 07-27-82 | 128 | 156 | 0 | 16 | 4.1 | .5 | 60 |
| | 03-18-83 | -- | -- | -- | 16 | 4.3 | .6 | 59 |
| | 09-02-83 | 133 | 162 | 0 | 16 | 4.4 | .5 | 58 |
| 21N/26E-28A01 | 03-17-83 | 249 | 304 | 0 | 44 | 29 | .3 | 57 |
| 21N/28E-19F02 | 07-26-82 | 154 | 188 | 0 | 22 | 7.6 | .3 | 42 |
| 21N/28E-36R01 | 07-26-82 | 94 | 114 | 0 | 14 | 1.8 | .2 | 23 |
| | 03-18-83 | 85 | 104 | 0 | 15 | 2.2 | .2 | 22 |
| | 07-29-83 | 92 | 112 | 0 | 13 | 1.7 | .2 | 23 |
| 21N/30E-03E02 | 09-08-82 | 108 | 132 | 0 | 49 | 24 | .6 | 60 |
| | 05-18-83 | 119 | 145 | 0 | 48 | 25 | .9 | 60 |
| | 09-01-83 | 109 | 133 | 0 | 50 | 23 | .7 | 61 |
| 21N/30E-23J01D1 | 09-08-82 | 110 | 124 | 5 | 35 | 20 | .9 | 68 |
| | 05-18-83 | 131 | 133 | 13 | 34 | 20 | 1.1 | 67 |
| | 09-01-83 | 121 | 131 | 8 | 33 | 18 | 1.1 | 69 |
| 22N/26E-04C02 | 09-09-82 | 61 | 74 | 0 | <5.0 | 2.3 | .2 | 48 |
| | 05-17-83 | 72 | 88 | 0 | 10 | 10 | .2 | 47 |
| | 09-01-83 | 72 | 88 | 0 | 8.7 | 7.5 | .2 | 48 |
| 22N/26E-36B01 | 07-27-82 | 148 | 180 | 0 | 15 | 5.1 | .4 | 58 |
| | 05-17-83 | 176 | 215 | 0 | 16 | 6.1 | .4 | 58 |
| | 09-02-83 | 171 | 209 | 0 | 18 | 6.2 | .4 | 61 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---------------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Grant County, Wash.--Continued | | | | | | | | |
| 20N/28E-11R01 | 08-18-82 | 283 | 1.0 | -- | <3 | 11 | 48 | 410 |
| 20N/28E-32H01 | 08-13-82 | 241 | .60 | -- | <3 | 9 | <1 | 98 |
| | 03-17-83 | 233 | .28 | 20 | 6 | -- | 1 | -- |
| | 07-29-83 | 239 | .54 | 20 | 3 | -- | <1 | -- |
| 20N/29E-01A01 | 08-12-82 | 243 | <.10 | -- | 7 | 12 | 18 | 86 |
| | 05-17-83 | 244 | <.10 | 20 | 10 | -- | 11 | -- |
| 20N/29E-33R01 | 07-13-83 | 287 | 2.1 | -- | 6 | -- | <1 | -- |
| 21N/26E-15H01 | 07-27-82 | 216 | <.10 | -- | 29 | 22 | 15 | 60 |
| | 03-18-83 | 216 | <.10 | 10 | 24 | -- | 21 | -- |
| | 09-02-83 | 217 | <.10 | 10 | 34 | -- | 14 | -- |
| 21N/26E-28A01 | 03-17-83 | 431 | 5.6 | 10 | 7 | -- | <1 | -- |
| 21N/28E-19F02 | 07-26-82 | 261 | 3.9 | -- | 6 | 13 | 2 | 180 |
| 21N/28E-36R01 | 07-26-82 | 140 | .56 | -- | 6 | 10 | 2 | 110 |
| | 03-18-83 | 133 | .78 | <10 | 5 | -- | 1 | -- |
| | 07-29-83 | 136 | .49 | <10 | 4 | -- | <1 | -- |
| 21N/30E-03E02 | 09-08-82 | 283 | .11 | -- | 6 | 31 | 5 | 62 |
| | 05-18-83 | 293 | .15 | <10 | <3 | -- | 3 | -- |
| | 09-01-83 | 290 | .11 | 10 | 14 | -- | 4 | -- |
| 21N/30E-23J01D1 | 09-08-82 | 274 | <.10 | -- | 8 | 32 | 7 | 46 |
| | 05-18-83 | 286 | <.10 | 20 | 7 | -- | 5 | -- |
| | 09-01-83 | 277 | <.10 | 20 | 10 | -- | 5 | -- |
| 22N/26E-04C02 | 09-09-82 | -- | 1.5 | -- | 7 | <4 | 2 | 53 |
| | 05-17-83 | 166 | 4.0 | <10 | 16 | -- | 1 | -- |
| | 09-01-83 | 160 | 3.5 | <10 | 10 | -- | 1 | -- |
| 22N/26E-36B01 | 07-27-82 | 236 | .84 | -- | 8 | 17 | 3 | 110 |
| | 05-17-83 | 264 | 1.1 | 20 | <3 | -- | 2 | -- |
| | 09-02-83 | 278 | 2.4 | 10 | <3 | -- | 1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---------------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 22N/27E-22H01 | 07-26-82 | 1710 | 198 | 8.2 | 18.5 | 7.1 | -- | 44 |
| | 03-17-83 | 1500 | 175 | 8.1 | 17.0 | 7.2 | <1 | 36 |
| | 09-02-83 | 1245 | 210 | 8.1 | 18.0 | 8.1 | -- | 51 |
| 23N/27E-10B01 | 07-27-82 | 1350 | 261 | 7.9 | 20.5 | .8 | -- | 84 |
| | 03-17-83 | 1240 | 255 | 8.0 | 15.5 | .2 | <1 | 85 |
| | 08-12-83 | 1200 | 268 | 7.9 | 17.5 | .5 | -- | 86 |
| 23N/29E-16E01 | 07-27-82 | 1145 | 275 | 8.0 | 19.0 | -- | -- | 83 |
| 24N/28E-03B01 | 07-27-82 | 1300 | 305 | 7.8 | 18.5 | 4.6 | -- | 98 |
| | 03-17-83 | 0940 | 258 | 8.0 | 17.5 | 4.0 | <1 | 98 |
| | 08-12-83 | 1000 | 258 | 8.0 | 18.0 | 3.7 | -- | 95 |
| 24N/29E-27P01 | 07-27-82 | 1705 | 700 | 7.8 | 13.0 | 7.2 | -- | 200 |
| | 08-11-83 | 1800 | 905 | 7.8 | 13.0 | -- | -- | 290 |
| 25N/30E-05L01 | 07-27-82 | 1000 | 595 | 7.9 | -- | -- | -- | 210 |
| <u>Kittitas County, Wash.</u> | | | | | | | | |
| 15N/19E-22R01 | 07-29-82 | 1625 | 254 | 7.8 | 28.0 | .0 | -- | 66 |
| | 06-08-83 | 1145 | 245 | 8.0 | 27.0 | .1 | -- | 68 |
| | 07-12-83 | 1345 | 253 | 7.9 | 26.5 | 1.0 | -- | 67 |
| 15N/20E-15R01 | 07-29-82 | 1300 | 352 | 7.3 | 12.5 | 6.6 | -- | 130 |
| | 03-31-83 | 1030 | 339 | 7.3 | 12.0 | 7.2 | -- | 130 |
| | 07-13-83 | 1130 | 362 | 7.4 | 12.0 | 6.9 | -- | 130 |
| 16N/20E-07Q01 | 08-31-82 | 1420 | 334 | 7.8 | 19.0 | -- | -- | 140 |
| | 07-12-83 | 1155 | 350 | 7.6 | 17.5 | -- | -- | 140 |
| 16N/20E-32N01 | 07-29-82 | 1420 | 403 | 7.4 | 14.0 | 7.9 | -- | 190 |
| | 06-09-83 | 0930 | 390 | 7.6 | 13.5 | 9.2 | -- | 190 |
| | 07-13-83 | 1010 | 395 | 7.5 | 13.5 | 8.0 | -- | 180 |
| 17N/18E-04B01 | 06-08-82 | 0840 | 190 | 6.8 | 12.5 | -- | <1 | 86 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 22N/27E-22H01 | 07-26-82 | 0 | 11 | 4.0 | 24 | 51 | 2 | 5.1 |
| | 03-17-83 | 0 | 8.6 | 3.5 | 26 | 57 | 2 | 5.1 |
| | 09-02-83 | 0 | 13 | 4.5 | 24 | 48 | 1 | 4.9 |
| 23N/27E-10B01 | 07-27-82 | 0 | 19 | 8.9 | 22 | 35 | 1 | 5.1 |
| | 03-17-83 | -- | 19 | 9.1 | 22 | 34 | 1 | 4.9 |
| | 08-12-83 | 0 | 19 | 9.3 | 22 | 34 | 1 | 5.0 |
| 23N/29E-16E01 | 07-27-82 | 0 | 19 | 8.6 | 28 | 40 | 1 | 5.4 |
| 24N/28E-03B01 | 07-27-82 | 0 | 21 | 11 | 20 | 29 | .9 | 5.1 |
| | 03-17-83 | 0 | 21 | 11 | 19 | 28 | .8 | 4.9 |
| | 08-12-83 | 0 | 20 | 11 | 19 | 29 | .8 | 4.9 |
| 24N/29E-27P01 | 07-27-82 | 66 | 39 | 26 | 55 | 36 | 2 | 9.2 |
| | 08-11-83 | 130 | 53 | 38 | 65 | 32 | 2 | 11 |
| 25N/30E-05L01 | 07-27-82 | 40 | 46 | 23 | 43 | 30 | 1 | 4.9 |
| <u>Kittitas County, Wash.</u> | | | | | | | | |
| 15N/19E-22R01 | 07-29-82 | 0 | 15 | 6.9 | 29 | 47 | 2 | 3.7 |
| | 06-08-83 | 0 | 15 | 7.3 | 29 | 47 | 2 | 3.7 |
| | 07-12-83 | 0 | 15 | 7.2 | 29 | 47 | 2 | 3.7 |
| 15N/20E-15R01 | 07-29-82 | 0 | 29 | 14 | 23 | 27 | .9 | 4.2 |
| | 03-31-83 | 0 | 29 | 15 | 23 | 26 | .9 | 4.3 |
| | 07-13-83 | 0 | 29 | 15 | 23 | 26 | .9 | 3.9 |
| 16N/20E-07Q01 | 08-31-82 | 0 | 23 | 20 | 17 | 20 | .6 | 9.6 |
| | 07-12-83 | 0 | 23 | 19 | 17 | 20 | .6 | 9.0 |
| 16N/20E-32N01 | 07-29-82 | 6 | 33 | 25 | 12 | 12 | .4 | 2.2 |
| | 06-09-83 | 0 | 32 | 26 | 12 | 12 | .4 | 2.1 |
| | 07-13-83 | 5 | 31 | 25 | 12 | 12 | .4 | 2.2 |
| 17N/18E-04B01 | 06-08-82 | 0 | 21 | 8.2 | 5.3 | 11 | .2 | 2.9 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---------------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 22N/27E-22H01 | 07-26-82 | 80 | 98 | 0 | 18 | 2.8 | 0.7 | 54 |
| | 03-17-83 | 88 | 107 | 0 | 16 | 2.4 | .8 | 57 |
| | 09-02-83 | 81 | 99 | 0 | 20 | 3.1 | .6 | 52 |
| 23N/27E-10B01 | 07-27-82 | 111 | 135 | 0 | 25 | 3.3 | .6 | 56 |
| | 03-17-83 | -- | -- | -- | 25 | 3.3 | .7 | 47 |
| | 08-12-83 | 109 | 133 | 0 | 23 | 3.4 | .6 | 53 |
| 23N/29E-16E01 | 07-27-82 | 134 | 163 | 0 | 13 | 4.0 | .6 | 57 |
| 24N/28E-03B01 | 07-27-82 | 130 | 158 | 0 | 13 | 3.4 | .4 | 56 |
| | 03-17-83 | 147 | 179 | 0 | 13 | 3.5 | .4 | 54 |
| | 08-12-83 | 125 | 152 | 0 | 13 | 3.5 | .4 | 52 |
| 24N/29E-27P01 | 07-27-82 | 139 | 169 | 0 | 54 | 65 | .5 | 49 |
| | 08-11-83 | 160 | 195 | 0 | 86 | 100 | .5 | 46 |
| 25N/30E-05L01 | 07-27-82 | 170 | 207 | 0 | 80 | 35 | .5 | 49 |
| <u>Kittitas County, Wash.</u> | | | | | | | | |
| 15N/19E-22R01 | 07-29-82 | 130 | 159 | 0 | <5.0 | 3.9 | .9 | 72 |
| | 06-08-83 | 136 | 166 | 0 | .5 | 4.0 | .9 | 70 |
| | 07-12-83 | 129 | 157 | 0 | .4 | 3.9 | .9 | 70 |
| 15N/20E-15R01 | 07-29-82 | 148 | 180 | 0 | 20 | 12 | .5 | 49 |
| | 03-31-83 | 151 | 184 | 0 | 21 | 12 | .6 | 47 |
| | 07-13-83 | 148 | 181 | 0 | 19 | 14 | .6 | 48 |
| 16N/20E-07Q01 | 08-31-82 | 162 | 198 | 0 | 26 | 4.4 | .3 | 60 |
| | 07-12-83 | 157 | 192 | 0 | 23 | 4.2 | .4 | 54 |
| 16N/20E-32N01 | 07-29-82 | 180 | 219 | 0 | 11 | 9.4 | .2 | 54 |
| | 06-09-83 | 188 | 229 | 0 | 10 | 8.2 | .3 | 54 |
| | 07-13-83 | 176 | 214 | 0 | 11 | 7.8 | .3 | 52 |
| 17N/18E-04B01 | 06-08-82 | 92 | 112 | 0 | <5.0 | 2.0 | .1 | 39 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | | |
| 22N/27E-22H01 | 07-26-82 | 169 | 0.30 | -- | <3 | 16 | <1 | 42 |
| | 03-17-83 | 173 | .19 | 10 | 14 | -- | 1 | -- |
| | 09-02-83 | 172 | .36 | <10 | 5 | -- | <1 | -- |
| 23N/27E-10B01 | 07-27-82 | 207 | .16 | -- | 17 | 15 | 14 | 64 |
| | 03-17-83 | 199 | <.10 | 10 | 370 | -- | 19 | -- |
| | 08-12-83 | 201 | <.10 | 10 | 94 | -- | 13 | -- |
| 23N/29E-16E01 | 07-27-82 | 216 | <.10 | -- | 31 | 20 | 20 | 64 |
| 24N/28E-03B01 | 07-27-82 | 209 | .32 | -- | 68 | 18 | 5 | 84 |
| | 03-17-83 | 216 | .29 | 20 | 6 | -- | 1 | -- |
| | 08-12-83 | 200 | .27 | <10 | 4 | -- | <1 | -- |
| 24N/29E-27P01 | 07-27-82 | 434 | 12 | -- | 7 | 7 | <1 | 220 |
| | 08-11-83 | 584 | 20 | 40 | 8 | -- | <1 | -- |
| 25N/30E-05L01 | 07-27-82 | 402 | 4.1 | -- | 4 | 13 | 3 | 230 |
| <u>Kittitas County, Wash.</u> | | | | | | | | |
| 15N/19E-22R01 | 07-29-82 | -- | <.10 | -- | 66 | 21 | 25 | 44 |
| | 06-08-83 | 212 | <.10 | 20 | 55 | -- | 24 | -- |
| | 07-12-83 | 207 | <.10 | -- | 68 | -- | 24 | -- |
| 15N/20E-15R01 | 07-29-82 | 242 | .36 | -- | 17 | <4 | 3 | 130 |
| | 03-31-83 | 244 | .36 | <10 | 12 | -- | 2 | -- |
| | 07-13-83 | 243 | .40 | -- | 8 | -- | 2 | -- |
| 16N/20E-07Q01 | 08-31-82 | 258 | <.10 | -- | 5 | 10 | <1 | 93 |
| | 07-12-83 | 244 | <.10 | -- | 15 | -- | 2 | -- |
| 16N/20E-32N01 | 07-29-82 | 269 | 3.2 | -- | 9 | <4 | 2 | 150 |
| | 06-09-83 | 274 | 3.7 | <10 | 5 | -- | 3 | -- |
| | 07-13-83 | 262 | 3.6 | -- | 6 | -- | 4 | -- |
| 17N/18E-04B01 | 06-08-82 | 143 | 1.2 | -- | 36 | -- | 23 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| Kittitas County, Wash.--Continued | | | | | | | | |
| 17N/18E-11E01 | 06-07-82 | 1615 | 175 | 8.0 | 16.0 | -- | <1 | 54 |
| 17N/19E-05M01 | 06-08-82 | 1100 | 248 | 6.8 | 11.5 | -- | <1 | 100 |
| 17N/19E-11M01 | 06-08-82 | 1300 | 304 | 7.0 | -- | -- | <1 | 120 |
| 17N/19E-32N01 | 07-30-82 | 0915 | 548 | 8.0 | 18.5 | -- | -- | 180 |
| | 03-30-83 | 1130 | 532 | 7.9 | 18.5 | -- | -- | 180 |
| | 07-12-83 | 1350 | 555 | 8.0 | 19.5 | 0.3 | -- | 170 |
| 17N/20E-05K01 | 09-01-82 | 0930 | 413 | 7.8 | 14.0 | -- | -- | 180 |
| | 07-18-83 | 1500 | 435 | 7.7 | 14.0 | -- | -- | 180 |
| 17N/20E-16J01 | 08-31-82 | 1815 | 392 | 7.3 | 12.5 | 1.9 | -- | 150 |
| | 03-31-83 | 1400 | 410 | 7.3 | 12.5 | 2.3 | -- | 140 |
| | 07-11-83 | 1650 | 475 | 7.2 | 13.5 | 4.0 | -- | 160 |
| 17N/21E-21L01 | 09-01-82 | 1715 | 269 | 7.6 | 17.0 | 9.0 | -- | 120 |
| | 03-31-83 | 1000 | 280 | 7.8 | 7.5 | 9.0 | -- | 110 |
| | 07-11-83 | 1450 | 290 | 7.6 | 18.0 | 7.8 | -- | 110 |
| 17N/22E-23K01 | 09-01-82 | 1150 | 421 | 7.2 | 17.5 | 7.6 | -- | 170 |
| | 03-30-83 | 1255 | 650 | 7.2 | 13.5 | 8.6 | -- | 250 |
| | 07-11-83 | 1320 | 485 | 7.2 | 18.5 | 6.6 | -- | 190 |
| 17N/23E-30H01 | 07-29-82 | 1520 | 795 | 7.3 | 26.0 | -- | -- | 340 |
| | 03-30-83 | 1030 | 370 | 7.6 | 15.0 | 1.5 | -- | 150 |
| | 07-11-83 | 1120 | 830 | 7.5 | 18.5 | 5.4 | -- | 360 |
| 18N/17E-26P01 | 08-31-82 | 0900 | 172 | 7.6 | 14.0 | 5.1 | -- | 67 |
| | 03-30-83 | 1235 | 178 | 7.8 | 14.0 | 5.5 | -- | 66 |
| | 07-11-83 | 1440 | 187 | 8.0 | 14.5 | 5.4 | -- | 67 |
| 18N/18E-26F01 | 06-07-82 | 1115 | 282 | 6.9 | 12.0 | -- | <1 | 120 |
| 18N/18E-28C01 | 06-07-82 | 1245 | 249 | 7.0 | 11.0 | -- | <1 | 96 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Kittitas County, Wash.--Continued | | | | | | | | |
| 17N/18E-11E01 | 06-07-82 | 0 | 15 | 3.9 | 16 | 38 | 1 | 3.2 |
| 17N/19E-05M01 | 06-08-82 | 0 | 22 | 12 | 11 | 18 | .5 | 1.4 |
| 17N/19E-11M01 | 06-08-82 | 0 | 27 | 13 | 14 | 20 | .6 | 3.1 |
| 17N/19E-32N01 | 07-30-82 | 4 | 40 | 20 | 46 | 34 | 1 | 7.4 |
| | 03-30-83 | 0 | 38 | 20 | 49 | 36 | 2 | 7.7 |
| | 07-12-83 | 0 | 37 | 19 | 51 | 38 | 2 | 7.2 |
| 17N/20E-05K01 | 09-01-82 | 0 | 39 | 20 | 23 | 21 | .7 | 5.7 |
| | 07-18-83 | 0 | 39 | 21 | 23 | 21 | .7 | 5.8 |
| 17N/20E-16J01 | 08-31-82 | 0 | 31 | 17 | 35 | 33 | 1 | 5.4 |
| | 03-31-83 | 0 | 31 | 16 | 34 | 33 | 1 | 5.4 |
| | 07-11-83 | 0 | 35 | 18 | 38 | 33 | 1 | 5.3 |
| 17N/21E-21L01 | 09-01-82 | 0 | 20 | 16 | 13 | 19 | .5 | 3.1 |
| | 03-31-83 | 0 | 19 | 16 | 13 | 19 | .5 | 3.0 |
| | 07-11-83 | 0 | 19 | 16 | 13 | 19 | .5 | 3.0 |
| 17N/22E-23K01 | 09-01-82 | 5 | 40 | 18 | 24 | 22 | .8 | 5.6 |
| | 03-30-83 | 41 | 59 | 26 | 35 | 23 | 1 | 6.0 |
| | 07-11-83 | 12 | 43 | 19 | 26 | 23 | .8 | 5.5 |
| 17N/23E-30H01 | 07-29-82 | 77 | 88 | 30 | 31 | 16 | .7 | 7.3 |
| | 03-30-83 | 0 | 33 | 16 | 18 | 20 | .6 | 5.3 |
| | 07-11-83 | 87 | 88 | 33 | 33 | 16 | .8 | 7.0 |
| 18N/17E-26P01 | 08-31-82 | 0 | 12 | 9.0 | 12 | 27 | .6 | 2.6 |
| | 03-30-83 | 0 | 12 | 8.8 | 12 | 27 | .6 | 2.5 |
| | 07-11-83 | 0 | 12 | 9.0 | 12 | 27 | .6 | 2.5 |
| 18N/18E-26F01 | 06-07-82 | 0 | 25 | 14 | 8.8 | 14 | .3 | 2.0 |
| 18N/18E-28C01 | 06-07-82 | 0 | 22 | 10 | 14 | 24 | .6 | 2.0 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|--|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Kittitas County, Wash.--Continued | | | | | | | | |
| 17N/18E-11E01 | 06-07-82 | 89 | 108 | 0 | <5.0 | 1.7 | 0.2 | 45 |
| 17N/19E-05M01 | 06-08-82 | 132 | 161 | 0 | <5.0 | 1.5 | .2 | 51 |
| 17N/19E-11M01 | 06-08-82 | 135 | 164 | 0 | 9.0 | 8.1 | .3 | 56 |
| 17N/19E-32N01 | 07-30-82 | 178 | 217 | 0 | 92 | 7.3 | .7 | 62 |
| | 03-30-83 | 184 | 225 | 0 | 96 | 11 | .7 | 61 |
| | 07-12-83 | 180 | 220 | 0 | 93 | 8.4 | .7 | 62 |
| 17N/20E-05K01 | 09-01-82 | 199 | 243 | 0 | 17 | 10 | .4 | 60 |
| | 07-18-83 | 201 | 245 | 0 | 17 | 12 | .4 | 59 |
| 17N/20E-16J01 | 08-31-82 | 208 | 253 | 0 | 7.0 | 3.7 | .7 | 60 |
| | 03-31-83 | 215 | 262 | 0 | 8.0 | 4.0 | .7 | 57 |
| | 07-11-83 | 222 | 271 | 0 | 11 | 5.3 | .7 | 60 |
| 17N/21E-21L01 | 09-01-82 | 131 | 160 | 0 | 7.0 | 4.0 | .4 | 57 |
| | 03-31-83 | 141 | 172 | 0 | 7.1 | 4.1 | .5 | 55 |
| | 07-11-83 | 130 | 159 | 0 | 7.4 | 4.1 | .4 | 57 |
| 17N/22E-23K01 | 09-01-82 | 169 | 206 | 0 | 26 | 15 | .4 | 50 |
| | 03-30-83 | 213 | 260 | 0 | 59 | 37 | .4 | 43 |
| | 07-11-83 | 174 | 212 | 0 | 30 | 21 | .4 | 49 |
| 17N/23E-30H01 | 07-29-82 | 266 | 325 | 0 | 84 | 42 | .3 | 51 |
| | 03-30-83 | 149 | 182 | 0 | 31 | 12 | .4 | 56 |
| | 07-11-83 | 269 | 328 | 0 | 90 | 42 | .4 | 51 |
| 18N/17E-26P01 | 08-31-82 | 92 | 112 | 0 | <5.0 | 1.8 | .3 | 53 |
| | 03-30-83 | 94 | 114 | 0 | 2.8 | 1.8 | .3 | 51 |
| | 07-11-83 | 92 | 112 | 0 | 3.0 | 1.6 | .3 | 53 |
| 18N/18E-26F01 | 06-07-82 | 146 | 178 | 0 | <5.0 | 2.1 | .2 | 48 |
| 18N/18E-28C01 | 06-07-82 | 122 | 149 | 0 | <5.0 | 3.8 | .1 | 31 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Kittitas County, Wash.--Continued</u> | | | | | | | | |
| 17N/18E-11E01 | 06-07-82 | 144 | 0.24 | -- | 7 | -- | <1 | -- |
| 17N/19E-05M01 | 06-08-82 | 183 | .43 | -- | 9 | -- | <1 | -- |
| 17N/19E-11M01 | 06-08-82 | 223 | 2.6 | -- | 19 | -- | 1 | -- |
| 17N/19E-32N01 | 07-30-82 | 382 | <.10 | -- | 90 | 30 | 13 | 130 |
| | 03-30-83 | 394 | <.10 | 20 | 65 | -- | 11 | -- |
| | 07-12-83 | 387 | <.10 | -- | 36 | -- | 9 | -- |
| 17N/20E-05K01 | 09-01-82 | 300 | 1.3 | -- | 9 | 18 | 1 | 130 |
| | 07-18-83 | 304 | 1.4 | -- | 6 | -- | <1 | -- |
| 17N/20E-16J01 | 08-31-82 | 287 | .61 | -- | <3 | 16 | 1 | 120 |
| | 03-31-83 | 289 | .84 | 10 | <3 | -- | <1 | -- |
| | 07-11-83 | 322 | 3.4 | -- | 10 | -- | 1 | -- |
| 17N/21E-21L01 | 09-01-82 | 206 | 1.6 | -- | 4 | 15 | <1 | 57 |
| | 03-31-83 | 209 | 1.5 | <10 | 12 | -- | 2 | -- |
| | 07-11-83 | 205 | 1.6 | -- | 8 | -- | <1 | -- |
| 17N/22E-23K01 | 09-01-82 | 297 | 3.7 | -- | 4 | 14 | 2 | 140 |
| | 03-30-83 | 414 | 4.6 | 30 | 7 | -- | 3 | -- |
| | 07-11-83 | 316 | 4.1 | -- | 6 | -- | <1 | -- |
| 17N/23E-30H01 | 07-29-82 | 517 | 5.2 | -- | 6 | 21 | 4 | 340 |
| | 03-30-83 | 266 | 1.1 | 10 | <3 | -- | 2 | -- |
| | 07-11-83 | 531 | 5.6 | -- | 67 | -- | 6 | -- |
| 18N/17E-26P01 | 08-31-82 | -- | .73 | -- | <3 | 10 | <1 | 44 |
| | 03-30-83 | 151 | .75 | <10 | <3 | -- | 2 | -- |
| | 07-11-83 | 152 | .80 | -- | 10 | -- | <1 | -- |
| 18N/18E-26F01 | 06-07-82 | 196 | .79 | -- | 55 | -- | 6 | -- |
| 18N/18E-28C01 | 06-07-82 | 167 | 1.4 | -- | <3 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| Kittitas County, Wash.--Continued | | | | | | | | |
| 18N/20E-06B01 | 07-30-82 | 0900 | 178 | 7.5 | 15.5 | 7.8 | -- | 76 |
| | 03-31-83 | 1215 | 179 | 7.5 | 15.5 | 8.0 | -- | 76 |
| | 07-12-83 | 1110 | 190 | 7.4 | 16.0 | 6.4 | -- | 77 |
| 18N/20E-27A01 | 07-30-82 | 1110 | 175 | 8.3 | 21.5 | -- | -- | 52 |
| | 06-08-83 | 1100 | 173 | 8.2 | 21.0 | -- | -- | 50 |
| | 07-12-83 | 0855 | 173 | 8.4 | 21.0 | -- | -- | 53 |
| 19N/16E-23Q01D1 | 09-04-82 | 1945 | 229 | 7.4 | 16.5 | -- | -- | 100 |
| | 03-30-83 | 1515 | 242 | 7.5 | 14.0 | 3.2 | -- | 110 |
| | 07-11-83 | 1105 | 246 | 7.6 | 15.0 | 3.2 | -- | 110 |
| 19N/16E-25B01 | 08-30-82 | 1230 | 194 | 8.1 | 14.5 | .1 | -- | 85 |
| | 05-20-83 | 1820 | 200 | 7.8 | 14.5 | -- | -- | 90 |
| | 07-11-83 | 1220 | 208 | 7.6 | 14.5 | -- | -- | 85 |
| 19N/16E-25C02 | 04-01-83 | 1415 | 154 | 7.3 | 12.5 | 7.3 | -- | 54 |
| | 07-26-83 | 1030 | 159 | 7.5 | 12.5 | -- | -- | 51 |
| 19N/17E-27N01 | 08-30-82 | 1700 | 362 | 7.6 | 15.0 | -- | -- | 160 |
| | 03-30-83 | 1720 | 370 | 7.4 | 15.0 | 7.4 | -- | 160 |
| | 07-12-83 | 0930 | 381 | 7.7 | 15.0 | 4.4 | -- | 160 |
| 19N/18E-21A01 | 07-30-82 | 1400 | 215 | 7.4 | 17.5 | -- | -- | 90 |
| | 07-18-83 | 1200 | 210 | 7.6 | 18.5 | -- | -- | 90 |
| 20N/13E-11C01 | 06-07-82 | 1000 | 71 | 6.5 | 7.0 | -- | <1 | 30 |
| 20N/14E-10A03 | 06-07-82 | 1345 | 118 | 7.8 | 9.0 | -- | <1 | 59 |
| 20N/14E-27J02 | 06-07-82 | 1630 | 188 | 8.1 | 9.0 | -- | <1 | 90 |
| 20N/15E-34N01 | 06-07-82 | 1540 | 350 | 6.7 | 10.0 | -- | <1 | 140 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Kittitas County, Wash.--Continued | | | | | | | | |
| 18N/20E-06B01 | 07-30-82 | 0 | 15 | 9.3 | 6.8 | 16 | 0.3 | 3.0 |
| | 03-31-83 | 0 | 15 | 9.4 | 6.9 | 16 | .3 | 3.0 |
| | 07-12-83 | 0 | 15 | 9.7 | 7.0 | 16 | .3 | 3.0 |
| 18N/20E-27A01 | 07-30-82 | 0 | 15 | 3.5 | 15 | 37 | .9 | 3.5 |
| | 06-08-83 | 0 | 14 | 3.6 | 15 | 38 | .9 | 3.5 |
| | 07-12-83 | 0 | 15 | 3.7 | 15 | 36 | .9 | 3.4 |
| 19N/16E-23Q01D1 | 09-04-82 | 0 | 18 | 14 | 7.7 | 13 | .3 | 3.8 |
| | 03-30-83 | 0 | 20 | 15 | 8.1 | 13 | .3 | 3.4 |
| | 07-11-83 | 0 | 19 | 14 | 8.0 | 14 | .3 | 3.7 |
| 19N/16E-25B01 | 08-30-82 | 0 | 16 | 11 | 11 | 22 | .5 | 1.5 |
| | 05-20-83 | 0 | 18 | 11 | 11 | 21 | .5 | 1.7 |
| | 07-11-83 | 0 | 16 | 11 | 11 | 22 | .5 | 1.6 |
| 19N/16E-25C02 | 04-01-83 | 0 | 10 | 7.0 | 11 | 30 | .7 | 2.6 |
| | 07-26-83 | 0 | 9.5 | 6.6 | 11 | 31 | .7 | 2.6 |
| 19N/17E-27N01 | 08-30-82 | 0 | 31 | 20 | 20 | 21 | .7 | 3.4 |
| | 03-30-83 | 0 | 31 | 19 | 20 | 21 | .7 | 3.2 |
| | 07-12-83 | 0 | 32 | 20 | 19 | 20 | .6 | 3.2 |
| 19N/18E-21A01 | 07-30-82 | 0 | 18 | 11 | 10 | 19 | .5 | 2.4 |
| | 07-18-83 | 0 | 18 | 11 | 10 | 19 | .5 | 3.1 |
| 20N/13E-11C01 | 06-07-82 | 0 | 8.7 | 2.1 | 2.2 | 13 | .2 | .40 |
| 20N/14E-10A03 | 06-07-82 | 1 | 10 | 8.2 | 1.6 | 6 | .1 | .40 |
| 20N/14E-27J02 | 06-07-82 | 0 | 26 | 6.2 | 3.9 | 8 | .2 | .80 |
| 20N/15E-34N01 | 06-07-82 | 55 | 23 | 21 | 8.6 | 11 | .3 | 1.1 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|--|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Kittitas County, Wash.--Continued | | | | | | | | |
| 18N/20E-06B01 | 07-30-82 | 94 | 114 | 0 | <5.0 | 0.8 | 0.2 | 52 |
| | 03-31-83 | 93 | 113 | 0 | 2.5 | 1.1 | .2 | 50 |
| | 07-12-83 | 90 | 110 | 0 | 2.3 | 1.2 | .2 | 49 |
| 18N/20E-27A01 | 07-30-82 | 93 | 114 | 0 | <5.0 | .9 | .2 | 53 |
| | 06-08-83 | 82 | 100 | 0 | 4.9 | 1.0 | .2 | 51 |
| | 07-12-83 | 85 | 104 | 2 | 4.8 | 1.0 | .2 | 52 |
| 19N/16E-23Q01D1 | 09-04-82 | 130 | 158 | 0 | <5.0 | 1.6 | .1 | 66 |
| | 03-30-83 | 130 | 158 | 0 | 3.0 | 1.6 | .1 | 60 |
| | 07-11-83 | 127 | 155 | 0 | 2.9 | 1.6 | <.1 | 61 |
| 19N/16E-25B01 | 08-30-82 | 107 | 131 | 0 | 7.0 | 3.2 | .2 | 54 |
| | 05-20-83 | 107 | 130 | 0 | 10 | 2.0 | .3 | 53 |
| | 07-11-83 | 107 | 130 | 0 | 6.1 | 1.7 | .2 | 53 |
| 19N/16E-25C02 | 04-01-83 | 82 | 100 | 0 | 5.7 | 1.4 | .4 | 57 |
| | 07-26-83 | 82 | 100 | 0 | <0.2 | 1.6 | .5 | 81 |
| 19N/17E-27N01 | 08-30-82 | 193 | 235 | 0 | <5.0 | 4.7 | .3 | 50 |
| | 03-30-83 | 193 | 235 | 0 | 4.4 | 4.2 | .3 | 50 |
| | 07-12-83 | 193 | 235 | 0 | 4.5 | 4.1 | .3 | 48 |
| 19N/18E-21A01 | 07-30-82 | 111 | 135 | 0 | <5.0 | 2.2 | .2 | 66 |
| | 07-18-83 | 111 | 135 | 0 | 3.3 | 3.1 | .3 | 62 |
| 20N/13E-11C01 | 06-07-82 | 32 | 39 | 0 | <5.0 | 1.5 | <.1 | 9.8 |
| 20N/14E-10A03 | 06-07-82 | 57 | 70 | 0 | <5.0 | .7 | .1 | 22 |
| 20N/14E-27J02 | 06-07-82 | 94 | 114 | 0 | <5.0 | 1.2 | .1 | 12 |
| 20N/15E-34N01 | 06-07-82 | 89 | 108 | 0 | 13 | 8.2 | .1 | 29 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Kittitas County, Wash.--Continued | | | | | | | | |
| 18N/20E-06B01 | 07-30-82 | -- | 0.60 | -- | 5 | 10 | 3 | 43 |
| | 03-31-83 | 146 | .44 | <10 | 4 | -- | 1 | -- |
| | 07-12-83 | 143 | .44 | -- | 8 | -- | 2 | -- |
| 18N/20E-27A01 | 07-30-82 | -- | <.10 | -- | 13 | 6 | 5 | 39 |
| | 06-08-83 | 142 | <.10 | <10 | 18 | -- | 3 | -- |
| | 07-12-83 | 148 | <.10 | -- | 12 | -- | 1 | -- |
| 19N/16E-23Q01D1 | 09-04-82 | -- | <.10 | -- | 14 | 8 | 3 | 110 |
| | 03-30-83 | 189 | .10 | <10 | 10 | -- | 2 | -- |
| | 07-11-83 | 186 | <.10 | -- | 20 | -- | 3 | -- |
| 19N/16E-25B01 | 08-30-82 | 169 | <.10 | -- | 290 | 17 | 39 | 90 |
| | 05-20-83 | 171 | <.10 | <10 | 300 | -- | 40 | -- |
| | 07-11-83 | 165 | <.10 | -- | 98 | -- | 34 | -- |
| 19N/16E-25C02 | 04-01-83 | 147 | .69 | <10 | 4 | -- | 11 | -- |
| | 07-26-83 | -- | .83 | <10 | 39 | -- | 1 | -- |
| 19N/17E-27N01 | 08-30-82 | -- | 1.6 | -- | <3 | 20 | 4 | 180 |
| | 03-30-83 | 254 | 1.5 | 20 | 4 | -- | 2 | -- |
| | 07-12-83 | 254 | 1.6 | -- | 8 | -- | 13 | -- |
| 19N/18E-21A01 | 07-30-82 | -- | .51 | -- | 7 | 12 | 10 | 66 |
| | 07-18-83 | 179 | .51 | -- | 7 | -- | 2 | -- |
| 20N/13E-11C01 | 06-07-82 | 51 | <.10 | -- | <3 | -- | <1 | -- |
| 20N/14E-10A03 | 06-07-82 | 85 | .13 | -- | <3 | -- | <1 | -- |
| 20N/14E-27J02 | 06-07-82 | 112 | <.10 | -- | 60 | -- | 11 | -- |
| 20N/15E-34N01 | 06-07-82 | 228 | 16 | -- | <3 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Klickitat County, Wash.</u> | | | | | | | | |
| 02N/12E-03G01 | 03-04-83 | 1000 | 270 | 7.8 | 18.0 | 0.2 | -- | 93 |
| 02N/12E-03H01 | 08-24-82 | 0945 | 355 | 7.3 | 15.0 | 4.7 | -- | 160 |
| 02N/15E-18A01D1 | 08-24-82 | 1200 | 295 | 7.4 | 18.5 | 1.3 | -- | 97 |
| | 03-03-83 | 1130 | 375 | 7.8 | 15.5 | 7.5 | -- | 160 |
| 03N/11E-05N03 | 07-14-82 | 0800 | 375 | 7.5 | 12.5 | -- | <1 | 190 |
| 03N/11E-30H01 | 08-23-82 | 1330 | 215 | 8.8 | 16.5 | -- | -- | 15 |
| | 03-04-83 | 1320 | 212 | 8.8 | 15.5 | -- | -- | 20 |
| 03N/12E-16Q01 | 07-14-82 | 1915 | 253 | 7.3 | 15.5 | -- | <1 | 120 |
| 03N/13E-31L01 | 08-24-82 | 1600 | 290 | 7.0 | 15.5 | 4.7 | -- | 120 |
| | 03-03-83 | 1430 | 280 | 6.8 | 15.0 | 4.6 | -- | 130 |
| 03N/15E-11N01 | 07-14-82 | 1530 | 220 | 7.6 | 13.0 | -- | <1 | 81 |
| 03N/15E-28P01 | 08-24-82 | 1420 | 205 | 7.6 | 15.0 | 6.8 | -- | 73 |
| 03N/16E-09C01 | 08-24-82 | 1800 | 183 | 7.7 | 15.0 | -- | -- | 71 |
| | 03-04-83 | 0800 | 168 | 7.4 | 11.5 | 7.9 | -- | 69 |
| 03N/17E-20H01 | 08-24-82 | 1500 | 322 | 8.2 | 18.5 | -- | -- | 130 |
| | 03-03-83 | 0930 | 325 | 7.7 | 18.0 | -- | -- | 130 |
| 03N/21E-09N01D1 | 04-19-84 | 1500 | 340 | 7.6 | 15.0 | -- | -- | 110 |
| 04N/11E-23P01 | 08-24-82 | 1130 | 211 | 7.2 | 13.0 | -- | -- | 93 |
| | 03-04-83 | 1200 | 210 | 6.7 | 9.5 | 5.0 | -- | 100 |
| 04N/12E-22P01 | 08-24-82 | 1535 | 205 | 7.6 | 14.0 | -- | -- | 90 |
| | 03-03-83 | 1615 | 105 | 6.6 | 10.0 | 1.0 | -- | 30 |
| 04N/13E-22Q01 | 08-23-82 | 1700 | 220 | 7.6 | 11.0 | .7 | -- | 95 |
| | 03-03-83 | 1410 | 187 | 7.7 | 9.5 | 1.6 | -- | 87 |
| 04N/14E-01B01D2 | 08-24-82 | 1110 | 477 | 6.8 | 17.0 | .4 | -- | 190 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Klickitat County, Wash.--Continued | | | | | | | | |
| 02N/12E-03G01 | 03-04-83 | 0 | 21 | 9.9 | 22 | 33 | 1 | 3.0 |
| 02N/12E-03H01 | 08-24-82 | 38 | 39 | 14 | 12 | 14 | .4 | 3.3 |
| 02N/15E-18A01D1 | 08-24-82 | 0 | 19 | 12 | 20 | 30 | .9 | 4.9 |
| | 03-03-83 | 0 | 28 | 23 | 19 | 19 | .6 | 6.0 |
| 03N/11E-05N03 | 07-14-82 | 0 | 33 | 25 | 9.8 | 10 | .3 | 4.6 |
| 03N/11E-30H01 | 08-23-82 | 0 | 4.8 | .8 | 40 | 81 | 4 | 4.2 |
| | 03-04-83 | 0 | 6.0 | 1.2 | 39 | 77 | 4 | 4.6 |
| 03N/12E-16Q01 | 07-14-82 | 0 | 23 | 15 | 7.1 | 11 | .3 | 3.1 |
| 03N/13E-31L01 | 08-24-82 | 0 | 27 | 12 | 9.4 | 15 | .4 | 2.4 |
| | 03-03-83 | 0 | 29 | 14 | 10 | 14 | .4 | 2.4 |
| 03N/15E-11N01 | 07-14-82 | 1 | 19 | 8.1 | 13 | 26 | .6 | 1.1 |
| 03N/15E-28P01 | 08-24-82 | 0 | 16 | 8.1 | 13 | 27 | .7 | 2.1 |
| 03N/16E-09C01 | 08-24-82 | 0 | 13 | 9.4 | 9.2 | 21 | .5 | 2.4 |
| | 03-04-83 | 0 | 13 | 8.8 | 9.1 | 22 | .5 | 1.9 |
| 03N/17E-20H01 | 08-24-82 | 3 | 30 | 13 | 15 | 20 | .6 | 3.7 |
| | 03-03-83 | 3 | 30 | 13 | 15 | 20 | .6 | 3.6 |
| 03N/21E-09N01D1 | 04-19-84 | -- | 24 | 12 | 39 | 42 | 2 | 6.5 |
| 04N/11E-23P01 | 08-24-82 | 0 | 21 | 9.9 | 6.8 | 13 | .3 | 2.4 |
| | 03-04-83 | 0 | 23 | 11 | 7.1 | 13 | .3 | 2.4 |
| 04N/12E-22P01 | 08-24-82 | 0 | 18 | 11 | 4.6 | 10 | .2 | 2.2 |
| | 03-03-83 | 0 | 7.2 | 3.0 | 2.4 | 14 | .2 | 1.1 |
| 04N/13E-22Q01 | 08-23-82 | 0 | 20 | 11 | 9.0 | 17 | .4 | 2.3 |
| | 03-03-83 | 0 | 19 | 9.6 | 7.0 | 14 | .3 | 2.3 |
| 04N/14E-01B01D2 | 08-24-82 | 0 | 30 | 28 | 31 | 26 | 1 | 4.2 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Klickitat County, Wash.--Continued</u> | | | | | | | | |
| 02N/12E-03G01 | 03-04-83 | 138 | 168 | 0 | 0.6 | 3.5 | 0.5 | 62 |
| 02N/12E-03H01 | 08-24-82 | 117 | 143 | 0 | 22 | 10 | .2 | 42 |
| 02N/15E-18A01D1 | 08-24-82 | 134 | 164 | 0 | 11 | 6.4 | .4 | 38 |
| | 03-03-83 | 183 | 223 | 0 | 14 | 9.6 | .5 | 30 |
| 03N/11E-05N03 | 07-14-82 | 208 | 253 | 0 | <5.0 | 2.6 | .2 | 56 |
| 03N/11E-30H01 | 08-23-82 | 94 | 104 | 5 | <5.0 | 13 | .2 | 54 |
| | 03-04-83 | 90 | 90 | 10 | 4.3 | 13 | .3 | 54 |
| 03N/12E-16Q01 | 07-14-82 | 135 | 164 | 0 | 5.0 | 1.7 | <.1 | 58 |
| 03N/13E-31L01 | 08-24-82 | 145 | 177 | 0 | <5.0 | 4.8 | .3 | 62 |
| | 03-03-83 | 144 | 176 | 0 | 4.1 | 4.8 | .3 | 66 |
| 03N/15E-11N01 | 07-14-82 | 80 | 97 | 0 | <5.0 | 6.9 | .4 | 60 |
| 03N/15E-28P01 | 08-24-82 | 104 | 127 | 0 | <5.0 | 4.8 | .5 | 61 |
| 03N/16E-09C01 | 08-24-82 | 87 | 106 | 0 | <5.0 | 2.5 | .3 | 50 |
| | 03-04-83 | 87 | 106 | 0 | 1.9 | 2.2 | .3 | 51 |
| 03N/17E-20H01 | 08-24-82 | 125 | 153 | 0 | 35 | 4.9 | .4 | 49 |
| | 03-03-83 | 125 | 153 | 0 | 34 | 4.9 | .4 | 49 |
| 03N/21E-09N01D1 | 04-19-84 | -- | -- | -- | 15 | 12 | .7 | 48 |
| 04N/11E-23P01 | 08-24-82 | 118 | 144 | 0 | <5.0 | 1.8 | <.1 | 65 |
| | 03-04-83 | 117 | 143 | 0 | .7 | 1.7 | .2 | 68 |
| 04N/12E-22P01 | 08-24-82 | 121 | 147 | 0 | <5.0 | 2.0 | .1 | 39 |
| | 03-03-83 | 45 | 55 | 0 | 9.3 | 1.2 | <.1 | 18 |
| 04N/13E-22Q01 | 08-23-82 | 111 | 135 | 0 | <5.0 | 1.4 | .2 | 48 |
| | 03-03-83 | 101 | 123 | 0 | 2.5 | 1.4 | .2 | 41 |
| 04N/14E-01B01D2 | 08-24-82 | 258 | 315 | 0 | <5.0 | 6.7 | .5 | 93 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Klickitat County, Wash.--Continued | | | | | | | | |
| 02N/12E-03G01 | 03-04-83 | 205 | <0.10 | 30 | 4 | -- | 14 | -- |
| 02N/12E-03H01 | 08-24-82 | 244 | 7.0 | -- | <3 | 14 | 2 | 89 |
| 02N/15E-18A01D1 | 08-24-82 | 193 | .10 | -- | <3 | 20 | 3 | 62 |
| | 03-03-83 | 247 | 1.6 | 10 | <3 | -- | <1 | -- |
| 03N/11E-05N03 | 07-14-82 | 264 | .23 | -- | 17 | -- | 3 | -- |
| 03N/11E-30H01 | 08-23-82 | -- | <.10 | -- | <3 | 16 | 2 | 5 |
| | 03-04-83 | 177 | <.10 | 70 | <3 | -- | 2 | -- |
| 03N/12E-16Q01 | 07-14-82 | 197 | .76 | -- | 17 | -- | 3 | -- |
| 03N/13E-31L01 | 08-24-82 | -- | .10 | -- | <3 | 11 | 2 | 94 |
| | 03-03-83 | 218 | .10 | <10 | 11 | -- | 3 | -- |
| 03N/15E-11N01 | 07-14-82 | 183 | 4.7 | -- | 5 | -- | <1 | -- |
| 03N/15E-28P01 | 08-24-82 | -- | .74 | -- | <3 | 10 | 1 | 52 |
| 03N/16E-09C01 | 08-24-82 | -- | .75 | -- | <3 | 12 | 1 | 58 |
| | 03-04-83 | 145 | 1.1 | <10 | <3 | -- | <1 | -- |
| 03N/17E-20H01 | 08-24-82 | 226 | <.10 | -- | 16 | 20 | 7 | 43 |
| | 03-03-83 | 225 | <.10 | 10 | 16 | -- | 10 | -- |
| 03N/21E-09N01D1 | 04-19-84 | 259 | -- | -- | 69 | 9 | 14 | 110 |
| 04N/11E-23P01 | 08-24-82 | -- | .52 | -- | <3 | 9 | 2 | 120 |
| | 03-04-83 | 187 | .52 | <10 | <3 | -- | <1 | -- |
| 04N/12E-22P01 | 08-24-82 | -- | <.10 | -- | 30 | 9 | 160 | 110 |
| | 03-03-83 | 72 | .69 | <20 | 13 | -- | 38 | -- |
| 04N/13E-22Q01 | 08-23-82 | -- | .14 | -- | 4 | 17 | 8 | 66 |
| | 03-03-83 | 144 | .19 | <10 | 39 | -- | 4 | -- |
| 04N/14E-01B01D2 | 08-24-82 | -- | <.10 | -- | 1,100 | 56 | 38 | 58 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| Klickitat County, Wash.--Continued | | | | | | | | |
| 04N/15E-05A02 | 08-24-82 | 1615 | 274 | 8.1 | 15.0 | 0.8 | -- | 97 |
| | 03-03-83 | 1100 | 258 | 8.4 | 11.5 | .7 | -- | 90 |
| 04N/15E-15G01 | 07-14-82 | 1700 | 990 | 7.5 | 17.0 | -- | <1 | 450 |
| 04N/16E-11D03D1 | 08-25-82 | 1200 | 1,010 | 7.3 | 21.5 | 1.8 | -- | 360 |
| 04N/16E-17H03 | 08-24-82 | 1130 | 409 | 7.9 | 16.0 | -- | -- | 180 |
| 04N/16E-32A01 | 07-13-82 | 1700 | 152 | 7.6 | 14.5 | -- | <1 | 62 |
| 04N/18E-17D01 | 08-25-82 | 1910 | 170 | 7.9 | 13.5 | 7.4 | -- | 68 |
| | 03-02-83 | 1355 | 164 | 7.7 | 13.0 | 7.7 | -- | 69 |
| 05N/13E-01H01 | 08-23-82 | 1310 | 146 | 7.2 | 13.5 | 8.2 | -- | 58 |
| | 03-04-83 | 1045 | 114 | 7.2 | 12.0 | 8.1 | -- | 53 |
| 05N/13E-26R01 | 08-23-82 | 1115 | 303 | 6.9 | 13.0 | 3.7 | -- | 140 |
| | 03-04-83 | 0840 | 273 | 6.9 | 10.0 | 4.0 | -- | 130 |
| 05N/15E-15A01 | 08-24-82 | 1445 | 114 | 6.7 | 13.0 | 8.8 | -- | 47 |
| | 03-03-83 | 1635 | 102 | 6.9 | 11.0 | 9.9 | -- | 44 |
| 05N/16E-27M02 | 08-25-82 | 0850 | 143 | 7.9 | 15.5 | 8.5 | -- | 66 |
| 05N/18E-29F01 | 08-25-82 | 1500 | 290 | 7.1 | 16.0 | .3 | -- | 130 |
| | 03-02-83 | 1430 | 270 | 7.5 | 14.0 | 3.4 | -- | 130 |
| 05N/20E-28B01 | 04-01-82 | 1055 | 208 | 7.9 | 13.0 | -- | <1 | 82 |
| 05N/22E-27P02D1 | 08-25-82 | 1225 | 370 | 8.1 | 24.5 | -- | -- | 49 |
| | 07-19-83 | 1000 | 369 | 8.2 | 24.0 | .1 | -- | 50 |
| 05N/23E-13R02D1 | 03-31-82 | 1010 | 335 | 8.7 | 25.0 | -- | <1 | 7 |
| 05N/23E-30D01 | 03-29-82 | 1150 | 325 | 8.1 | 23.5 | -- | <1 | 68 |
| | 08-25-82 | 1600 | 351 | 8.0 | 24.0 | .1 | -- | 68 |
| | 03-02-83 | 1400 | 345 | 8.0 | 22.5 | .1 | -- | 69 |
| | 07-19-83 | 1230 | 353 | 8.0 | 24.0 | .1 | -- | 72 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Klickitat County, Wash.--Continued | | | | | | | | |
| 04N/15E-05A02 | 08-24-82 | 0 | 14 | 15 | 20 | 30 | 0.9 | 4.9 |
| | 03-03-83 | 0 | 13 | 14 | 20 | 31 | .9 | 4.8 |
| 04N/15E-15G01 | 07-14-82 | 0 | 50 | 79 | 48 | 18 | 1 | 8.1 |
| 04N/16E-11D03D1 | 08-25-82 | 0 | 23 | 73 | 61 | 26 | 1 | 9.4 |
| 04N/16E-17H03 | 08-24-82 | 13 | 38 | 20 | 14 | 14 | .5 | 3.7 |
| 04N/16E-32A01 | 07-13-82 | 3 | 16 | 5.4 | 9.8 | 25 | .5 | 1.9 |
| 04N/18E-17D01 | 08-25-82 | 0 | 14 | 8.0 | 6.8 | 17 | .4 | 2.8 |
| | 03-02-83 | 0 | 14 | 8.2 | 6.8 | 17 | .4 | 2.7 |
| 05N/13E-01H01 | 08-23-82 | 0 | 12 | 6.7 | 4.2 | 13 | .2 | 1.6 |
| | 03-04-83 | 0 | 11 | 6.1 | 4.0 | 14 | .2 | 1.5 |
| 05N/13E-26R01 | 08-23-82 | 0 | 30 | 15 | 7.7 | 11 | .3 | 2.5 |
| | 03-04-83 | 0 | 29 | 15 | 7.6 | 11 | .3 | 2.2 |
| 05N/15E-15A01 | 08-24-82 | 0 | 9.9 | 5.3 | 4.7 | 18 | .3 | 1.1 |
| | 03-03-83 | 0 | 9.3 | 5.1 | 4.5 | 18 | .3 | .9 |
| 05N/16E-27M02 | 08-25-82 | 0 | 13 | 8.1 | 6.3 | 17 | .3 | 1.8 |
| 05N/18E-29F01 | 08-25-82 | 0 | 25 | 17 | 7.9 | 11 | .3 | 3.4 |
| | 03-02-83 | 0 | 26 | 17 | 7.7 | 11 | .3 | 3.1 |
| 05N/20E-28B01 | 04-01-82 | 0 | 19 | 8.4 | 15 | 27 | .7 | 3.3 |
| 05N/22E-27P02D1 | 08-25-82 | 0 | 13 | 3.9 | 56 | 64 | 3 | 15 |
| | 07-19-83 | 0 | 13 | 4.2 | 56 | 63 | 3 | 17 |
| 05N/23E-13R02D1 | 03-31-82 | 0 | 2.3 | .31 | 74 | 87 | 12 | 13 |
| 05N/23E-30D01 | 03-29-82 | 0 | 15 | 7.5 | 45 | 53 | 2 | 14 |
| | 08-25-82 | 0 | 15 | 7.3 | 44 | 53 | 2 | 13 |
| | 03-02-83 | 0 | 15 | 7.7 | 45 | 53 | 2 | 13 |
| | 07-19-83 | 0 | 16 | 7.9 | 45 | 52 | 2 | 14 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Klickitat County, Wash.--Continued | | | | | | | | |
| 04N/15E-05A02 | 08-24-82 | 147 | 179 | 0 | <5.0 | 1.7 | 0.1 | 41 |
| | 03-03-83 | 130 | 159 | 6 | .5 | 1.7 | .1 | 36 |
| 04N/15E-15G01 | 07-14-82 | 530 | 646 | 0 | <5.0 | 3.8 | .4 | 79 |
| 04N/16E-11D03D1 | 08-25-82 | 594 | 724 | 0 | <5.0 | 4.2 | .4 | 93 |
| 04N/16E-17H03 | 08-24-82 | 165 | 201 | 0 | 8.0 | 29 | .2 | 58 |
| 04N/16E-32A01 | 07-13-82 | 59 | 72 | 0 | <5.0 | 3.7 | .4 | 56 |
| 04N/18E-17D01 | 08-25-82 | 80 | 98 | 0 | <5.0 | 1.9 | .3 | 51 |
| | 03-02-83 | 82 | 100 | 0 | 4.7 | 1.8 | .3 | 51 |
| 05N/13E-01H01 | 08-23-82 | 72 | 88 | 0 | <5.0 | 1.0 | <.1 | 44 |
| | 03-04-83 | 62 | 76 | 0 | 2.2 | .90 | .1 | 43 |
| 05N/13E-26R01 | 08-23-82 | 160 | 195 | 0 | <5.0 | 1.7 | <.1 | 53 |
| | 03-04-83 | 149 | 182 | 0 | .9 | 1.6 | <.1 | 53 |
| 05N/15E-15A01 | 08-24-82 | 59 | 72 | 0 | <5.0 | 1.0 | <.1 | 36 |
| | 03-03-83 | 55 | 67 | 0 | .5 | .70 | <.1 | 34 |
| 05N/16E-27M02 | 08-25-82 | 81 | 99 | 0 | <5.0 | 1.9 | <.1 | 40 |
| 05N/18E-29F01 | 08-25-82 | 148 | 180 | 0 | 7.0 | 1.7 | .2 | 45 |
| | 03-02-83 | 146 | 178 | 0 | 5.0 | 1.6 | .3 | 38 |
| 05N/20E-28B01 | 04-01-82 | 108 | 132 | 0 | 5.0 | 3.3 | <.1 | 48 |
| 05N/22E-27P02D1 | 08-25-82 | 173 | 211 | 0 | 17 | 6.4 | .7 | 59 |
| | 07-19-83 | 176 | 214 | 0 | 18 | 6.0 | .7 | 58 |
| 05N/23E-13R02D1 | 03-31-82 | 176 | 195 | 10 | <5.0 | 8.4 | 1.1 | 62 |
| 05N/23E-30D01 | 03-29-82 | 169 | 206 | 0 | 9.0 | 6.5 | .5 | 60 |
| | 08-25-82 | 173 | 211 | 0 | 8.0 | 6.9 | .6 | 58 |
| | 03-02-83 | 174 | 212 | 0 | 7.5 | 6.9 | .7 | 58 |
| | 07-19-83 | 177 | 216 | 0 | 7.0 | 6.7 | .6 | 58 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Klickitat County, Wash.--Continued | | | | | | | | |
| 04N/15E-05A02 | 08-24-82 | -- | <0.10 | -- | 24 | 14 | 37 | 90 |
| | 03-03-83 | 174 | <.10 | 50 | 33 | -- | 35 | -- |
| 04N/15E-15G01 | 07-14-82 | 620 | <.10 | -- | 240 | -- | 55 | -- |
| 04N/16E-11D03D1 | 08-25-82 | -- | <.10 | -- | 150 | 120 | 37 | 200 |
| 04N/16E-17H03 | 08-24-82 | 277 | 1.7 | -- | <3 | 25 | <1 | 150 |
| 04N/16E-32A01 | 07-13-82 | 148 | 3.0 | -- | 28 | -- | 10 | -- |
| 04N/18E-17D01 | 08-25-82 | -- | .91 | -- | 6 | 13 | <1 | 64 |
| | 03-02-83 | 143 | .96 | <10 | <3 | -- | <1 | -- |
| 05N/13E-01H01 | 08-23-82 | -- | <.10 | -- | 51 | 7 | 2 | 55 |
| | 03-04-83 | 106 | <.10 | <10 | 120 | -- | 17 | -- |
| 05N/13E-26R01 | 08-23-82 | -- | .22 | -- | 7 | 7 | 47 | 150 |
| | 03-04-83 | 200 | .31 | <10 | 7 | -- | 15 | -- |
| 05N/15E-15A01 | 08-24-82 | -- | .23 | -- | 19 | 6 | 2 | 110 |
| | 03-03-83 | 89 | .20 | <10 | 14 | -- | <1 | -- |
| 05N/16E-27M02 | 08-25-82 | -- | .12 | -- | 5 | 9 | <1 | 110 |
| 05N/18E-29F01 | 08-25-82 | 196 | <.10 | -- | 7 | 22 | 6 | 91 |
| | 03-02-83 | 186 | <.10 | <10 | 6 | -- | 5 | -- |
| 05N/20E-28B01 | 04-01-82 | 167 | <.10 | -- | 110 | -- | 85 | -- |
| 05N/22E-27P02D1 | 08-25-82 | 275 | <.10 | -- | 24 | 27 | 23 | 57 |
| | 07-19-83 | 278 | <.10 | -- | 27 | -- | 18 | -- |
| 05N/23E-13R02D1 | 03-31-82 | 274 | <.10 | -- | 9 | -- | 5 | -- |
| 05N/23E-30D01 | 03-29-82 | 259 | <.10 | -- | 41 | -- | 60 | -- |
| | 08-25-82 | 259 | .52 | -- | 36 | 19 | 60 | 67 |
| | 03-02-83 | 258 | <.10 | 20 | 86 | -- | 60 | -- |
| | 07-19-83 | 262 | <.10 | -- | 43 | -- | 62 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Klickitat County, Wash.--Continued</u> | | | | | | | | |
| 06N/11E-31R01 | 08-23-82 | 1505 | 85 | 6.7 | 12.0 | 7.2 | -- | 24 |
| 06N/12E-35Q01 | 08-24-82 | 0845 | 263 | 6.9 | 11.0 | .6 | -- | 110 |
| | 03-04-83 | 1220 | 318 | 6.7 | 9.5 | -- | -- | 140 |
| 06N/20E-22G01 | 09-04-82 | 1100 | 196 | 7.5 | 12.5 | 7.9 | -- | 76 |
| | 03-02-83 | 1730 | 208 | 7.6 | 11.0 | 7.6 | -- | 84 |
| 06N/20E-30P01 | 04-01-82 | 0930 | 170 | 7.1 | 11.5 | -- | <1 | 70 |
| | 04-20-84 | 1000 | 163 | 7.2 | 11.5 | -- | -- | 66 |
| 06N/23E-24B01 | 03-29-82 | 1435 | 333 | 8.3 | 20.5 | -- | <1 | 25 |
| | 08-25-82 | 1355 | 358 | 8.3 | 21.0 | .2 | -- | 24 |
| | 03-07-83 | 1530 | 358 | 8.2 | 19.5 | .2 | -- | 25 |
| | 07-19-83 | 1500 | 343 | 8.4 | 24.5 | .1 | -- | 25 |
| | 04-19-84 | 1100 | 311 | 8.4 | 19.0 | -- | -- | 24 |
| <u>Lincoln County, Wash.</u> | | | | | | | | |
| 21N/32E-12H01D1 | 07-22-82 | 1815 | 380 | 7.9 | 14.0 | 3.8 | -- | 150 |
| | 05-27-83 | 1300 | 455 | 7.8 | 14.0 | 3.8 | -- | 180 |
| | 08-04-83 | 1530 | 535 | 7.9 | 13.5 | 4.8 | -- | 220 |
| 21N/32E-31C01 | 06-03-83 | 1440 | 430 | 8.1 | 20.0 | .6 | -- | 110 |
| | 09-07-83 | 1530 | 412 | 8.2 | 20.0 | 7.4 | -- | 110 |
| 21N/33E-08K01 | 07-26-82 | 0810 | 410 | 8.2 | 16.0 | .4 | -- | 100 |
| | 05-26-83 | 1445 | 410 | 8.2 | 16.0 | .1 | <1 | 100 |
| | 08-05-83 | 0900 | 404 | 8.1 | 15.5 | .1 | -- | 110 |
| 21N/33E-24B01 | 07-23-82 | 0800 | -- | 7.3 | 13.5 | 7.2 | -- | 640 |
| | 05-26-83 | 1300 | 1,750 | 7.3 | 13.5 | 6.9 | -- | 610 |
| | 08-04-83 | 1200 | 1,970 | 7.1 | 14.0 | -- | -- | 760 |
| 21N/34E-14M01 | 06-03-83 | 1830 | 860 | 7.2 | 14.0 | 4.6 | -- | 360 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Klickitat County, Wash.--Continued</u> | | | | | | | | |
| 06N/11E-31R01 | 08-23-82 | 0 | 5.0 | 2.9 | 4.5 | 27 | 0.4 | 2.1 |
| 06N/12E-35Q01 | 08-24-82 | 6 | 24 | 13 | 9.9 | 16 | .4 | 3.1 |
| | 03-04-83 | 31 | 31 | 16 | 8.1 | 11 | .3 | 3.0 |
| 06N/20E-22G01 | 09-04-82 | 0 | 18 | 7.6 | 12 | 25 | .6 | 2.3 |
| | 03-02-83 | 0 | 20 | 8.2 | 12 | 23 | .6 | 2.4 |
| 06N/20E-30P01 | 04-01-82 | 0 | 16 | 7.2 | 7.6 | 19 | .4 | 2.2 |
| | 04-20-84 | -- | 15 | 6.9 | 7.7 | 20 | .4 | 2.2 |
| 06N/23E-24B01 | 03-29-82 | 0 | 6.2 | 2.2 | 64 | 76 | 6 | 15 |
| | 08-25-82 | 0 | 6.1 | 2.2 | 63 | 76 | 6 | 14 |
| | 03-07-83 | 0 | 6.3 | 2.3 | 65 | 77 | 6 | 14 |
| | 07-19-83 | 0 | 6.4 | 2.3 | 64 | 76 | 6 | 14 |
| | 04-19-84 | -- | 5.8 | 2.2 | 62 | 77 | 6 | 14 |
| <u>Lincoln County, Wash.</u> | | | | | | | | |
| 21N/32E-12H01D1 | 07-22-82 | 0 | 36 | 14 | 22 | 24 | .8 | 4.9 |
| | 05-27-83 | 0 | 44 | 18 | 23 | 21 | .7 | 5.1 |
| | 08-04-83 | 15 | 52 | 22 | 24 | 19 | .7 | 5.8 |
| 21N/32E-31C01 | 06-03-83 | 0 | 25 | 11 | 44 | 44 | 2 | 9.7 |
| | 09-07-83 | 0 | 24 | 11 | 45 | 45 | 2 | 10 |
| 21N/33E-08K01 | 07-26-82 | 0 | 24 | 10 | 48 | 49 | 2 | 6.3 |
| | 05-26-83 | 0 | 24 | 10 | 48 | 49 | 2 | 5.9 |
| | 08-05-83 | 0 | 24 | 11 | 49 | 49 | 2 | 5.4 |
| 21N/33E-24B01 | 07-23-82 | 430 | 150 | 64 | 110 | 27 | 2 | 6.7 |
| | 05-26-83 | 390 | 140 | 64 | 110 | 28 | 2 | 7.1 |
| | 08-04-83 | 530 | 180 | 75 | 120 | 25 | 2 | 7.2 |
| 21N/34E-14M01 | 06-03-83 | 210 | 84 | 36 | 33 | 16 | .8 | 9.5 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alka- linity, field (mg/L as CaCO ₃) | Bicar- bonate, field (mg/L as HCO ₃) | Car- bonate, field (mg/L as CO ₃) | Sulfate, dis- solved (mg/L as SO ₄) | Chlo- ride, dis- solved (mg/L as Cl) | Fluo- ride, dis- solved (mg/L as F) | Silica, dis- solved (mg/L as SiO ₂) |
|---|----------|---|---|--|--|--|---|--|
| <u>Klickitat County, Wash.--Continued</u> | | | | | | | | |
| 06N/11E-31R01 | 08-23-82 | 35 | 43 | 0 | <5.0 | 1.0 | <0.1 | 38 |
| 06N/12E-35Q01 | 08-24-82 | 107 | 131 | 0 | 36 | 2.1 | .2 | 63 |
| | 03-04-83 | 112 | 137 | 0 | 76 | 1.4 | .2 | 60 |
| 06N/20E-22G01 | 09-04-82 | 101 | 123 | 0 | <5.0 | 2.5 | .4 | 63 |
| | 03-02-83 | 102 | 125 | 0 | 3.7 | 3.3 | .4 | 57 |
| 06N/20E-30P01 | 04-01-82 | 80 | 97 | 0 | 5.0 | 1.2 | .2 | 61 |
| | 04-20-84 | -- | -- | -- | 3.4 | 1.2 | .4 | 61 |
| 06N/23E-24B01 | 03-29-82 | 172 | 210 | 0 | <5.0 | 8.7 | .8 | 57 |
| | 08-25-82 | 175 | 214 | 0 | <5.0 | 8.8 | 1.0 | 54 |
| | 03-07-83 | 194 | 237 | 0 | .4 | 8.9 | 1.0 | 57 |
| | 07-19-83 | 170 | 208 | 0 | .3 | 8.6 | 1.0 | 55 |
| | 04-19-84 | -- | -- | -- | .7 | 8.9 | 1.1 | 54 |
| <u>Lincoln County, Wash.</u> | | | | | | | | |
| 21N/32E-12H01D1 | 07-22-82 | 167 | 204 | 0 | 19 | 12 | .3 | 40 |
| | 05-27-83 | 192 | 234 | 0 | 26 | 15 | .3 | 40 |
| | 08-04-83 | 206 | 251 | 0 | 35 | 21 | .3 | 39 |
| 21N/32E-31C01 | 06-03-83 | 128 | 156 | 0 | 63 | 14 | .6 | 47 |
| | 09-07-83 | 127 | 155 | 0 | 56 | 15 | .5 | 47 |
| 21N/33E-08K01 | 07-26-82 | 178 | 217 | 0 | 20 | 10 | .9 | 44 |
| | 05-26-83 | 185 | 225 | 0 | 21 | 10 | 1.0 | 44 |
| | 08-05-83 | 180 | 220 | 0 | 20 | 11 | .9 | 44 |
| 21N/33E-24B01 | 07-23-82 | 208 | 254 | 0 | 250 | 250 | .3 | 39 |
| | 05-26-83 | 221 | 270 | 0 | 240 | 260 | .3 | 38 |
| | 08-04-83 | 232 | 283 | 0 | 290 | 300 | .3 | 37 |
| 21N/34E-14M01 | 06-03-83 | 144 | 176 | 0 | 250 | 18 | .3 | 41 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Klickitat County, Wash.--Continued</u> | | | | | | | | |
| 06N/11E-31R01 | 08-23-82 | -- | 0.28 | -- | 5 | <4 | 6 | 27 |
| 06N/12E-35Q01 | 08-24-82 | 216 | <.10 | -- | 180 | 16 | 160 | 72 |
| | 03-04-83 | 274 | <.10 | <10 | 10,000 | -- | 490 | -- |
| 06N/20E-22G01 | 09-04-82 | -- | .80 | -- | <3 | 6 | 2 | 100 |
| | 03-02-83 | 174 | 1.3 | <10 | <3 | -- | 3 | -- |
| 06N/20E-30P01 | 04-01-82 | 161 | 2.9 | -- | 9 | -- | <3 | -- |
| | 04-20-84 | 140 | -- | -- | <3 | 5 | <1 | 55 |
| 06N/23E-24B01 | 03-29-82 | 204 | <.10 | -- | 72 | -- | 12 | -- |
| | 08-25-82 | -- | <.10 | -- | 100 | 31 | 24 | 40 |
| | 03-07-83 | 273 | .28 | 30 | 100 | -- | 15 | -- |
| | 07-19-83 | 273 | .28 | 30 | 100 | -- | 15 | -- |
| | 04-19-84 | 249 | -- | -- | 81 | 23 | 12 | 36 |
| <u>Lincoln County, Wash.</u> | | | | | | | | |
| 21N/32E-12H01D1 | 07-22-82 | 254 | 1.3 | -- | 3 | 21 | <1 | 130 |
| | 05-27-83 | 296 | 2.1 | 10 | 13 | -- | <1 | -- |
| | 08-04-83 | 338 | 3.6 | <10 | 6 | -- | <1 | -- |
| 21N/32E-31C01 | 06-03-83 | 291 | <.10 | <10 | <3 | -- | <1 | -- |
| | 09-07-83 | 285 | .17 | <10 | <3 | -- | 3 | -- |
| 21N/33E-08K01 | 07-26-82 | 270 | <.10 | -- | 66 | 34 | 24 | 65 |
| | 05-26-83 | 275 | <.10 | 10 | 71 | -- | 23 | -- |
| | 08-05-83 | 274 | <.10 | 10 | 60 | -- | 24 | -- |
| 21N/33E-24B01 | 07-23-82 | 1090 | 21 | -- | 10 | 27 | 2 | 650 |
| | 05-26-83 | 1080 | 19 | 30 | 19 | -- | <1 | -- |
| | 08-04-83 | 1250 | 24 | 30 | 11 | -- | 3 | -- |
| 21N/34E-14M01 | 06-03-83 | 593 | 7.8 | 20 | 5 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance ($\mu\text{S}/\text{cm}$) | pH (standard units) | Temperature water ($^{\circ}\text{C}$) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO_3) |
|---|----------|------|--|---------------------|--|--------------------------|-------------------------------|-------------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 21N/34E-21K01 | 07-23-82 | 1030 | 520 | 8.0 | 20.0 | 0.7 | -- | 190 |
| | 05-27-83 | 1015 | 465 | 8.0 | 20.0 | .2 | -- | 170 |
| | 08-04-83 | 1045 | 513 | 7.8 | 21.0 | .3 | -- | 200 |
| 21N/34E-35A01 | 07-23-82 | 0915 | 405 | 8.0 | 15.0 | -- | -- | 150 |
| | 05-26-83 | 1100 | 398 | 8.0 | 15.5 | -- | <1 | 140 |
| | 08-04-83 | 0915 | 396 | 7.8 | 15.0 | -- | -- | 130 |
| 21N/36E-27P02 | 07-22-82 | 1150 | 326 | 8.1 | 15.0 | .2 | -- | 110 |
| | 05-31-83 | 1500 | 372 | 7.9 | 14.5 | .4 | <1 | 110 |
| | 08-10-83 | 1030 | 362 | 8.0 | 14.5 | .1 | -- | 110 |
| 21N/38E-14E01 | 09-08-83 | 1000 | 425 | 7.9 | 14.5 | 9.0 | -- | 180 |
| 21N/38E-14J01 | 07-21-82 | 1440 | 372 | 8.2 | 16.0 | .7 | -- | 130 |
| | 06-02-83 | 1050 | 391 | 7.9 | 15.0 | .8 | <1 | 140 |
| | 08-02-83 | 0830 | 351 | 8.2 | 15.5 | 1.5 | -- | 130 |
| 21N/38E-23L01 | 07-21-82 | 1210 | 248 | 8.4 | 21.5 | .1 | -- | 52 |
| | 06-20-83 | 1200 | 250 | 8.1 | 21.0 | .2 | -- | 50 |
| | 08-02-83 | 1030 | 249 | 8.4 | 21.0 | .1 | -- | 51 |
| 22N/31E-21F01 | 07-26-82 | 1015 | 560 | 7.5 | 14.5 | -- | -- | 200 |
| | 05-31-83 | 1700 | 550 | 7.7 | 15.0 | -- | -- | 200 |
| | 08-05-83 | 0910 | 510 | 7.9 | 14.0 | -- | -- | 190 |
| 22N/32E-30D01 | 06-03-83 | 1645 | 310 | 8.2 | 19.0 | .6 | -- | 89 |
| | 08-08-83 | 1345 | 320 | -- | 18.5 | .2 | -- | 90 |
| 22N/33E-02K01 | 07-25-82 | 1850 | 453 | 7.9 | 13.0 | 9.9 | -- | 170 |
| | 06-02-83 | 0830 | 465 | 7.7 | 13.0 | 8.0 | <1 | 180 |
| | 09-08-83 | 1330 | 482 | 7.6 | 13.0 | 8.6 | -- | 190 |
| 22N/33E-17N01 | 06-03-83 | 1300 | 325 | 8.1 | 22.0 | -- | -- | 43 |
| | 08-05-83 | 1230 | 324 | 8.5 | 21.5 | .1 | -- | 42 |
| 22N/34E-18M01 | 07-23-82 | 1340 | 380 | 7.0 | 12.5 | 3.9 | -- | 140 |
| | 06-01-83 | 1000 | 371 | 7.2 | 13.0 | 5.7 | <1 | 130 |
| | 08-05-83 | 1045 | 429 | 7.2 | 12.0 | 4.9 | -- | 160 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Lincoln County, Wash.--Continued | | | | | | | | |
| 21N/34E-21K01 | 07-23-82 | 0 | 47 | 18 | 38 | 29 | 1 | 5.8 |
| | 05-27-83 | 0 | 40 | 16 | 39 | 33 | 1 | 5.7 |
| | 08-04-83 | 0 | 48 | 19 | 38 | 29 | 1 | 6.0 |
| 21N/34E-35A01 | 07-23-82 | 0 | 27 | 19 | 27 | 28 | 1 | 3.5 |
| | 05-26-83 | 0 | 25 | 18 | 29 | 31 | 1 | 3.6 |
| | 08-04-83 | 0 | 24 | 17 | 27 | 30 | 1 | 3.5 |
| 21N/36E-27P02 | 07-22-82 | 0 | 23 | 13 | 29 | 35 | 1 | 3.9 |
| | 05-31-83 | 0 | 22 | 14 | 29 | 35 | 1 | 3.7 |
| | 08-10-83 | 0 | 22 | 14 | 29 | 35 | 1 | 3.7 |
| 21N/38E-14E01 | 09-08-83 | 5 | 39 | 20 | 20 | 19 | .6 | 4.9 |
| 21N/38E-14J01 | 07-21-82 | 7 | 26 | 16 | 21 | 25 | .8 | 5.9 |
| | 06-02-83 | 9 | 27 | 17 | 21 | 24 | .8 | 5.8 |
| | 08-02-83 | 0 | 25 | 16 | 21 | 25 | .8 | 5.4 |
| 21N/38E-23L01 | 07-21-82 | 0 | 15 | 3.6 | 34 | 56 | 2 | 5.0 |
| | 06-20-83 | 0 | 14 | 3.7 | 33 | 56 | 2 | 4.9 |
| | 08-02-83 | 0 | 14 | 3.8 | 35 | 57 | 2 | 5.2 |
| 22N/31E-21F01 | 07-26-82 | 0 | 49 | 20 | 37 | 27 | 1 | 7.4 |
| | 05-31-83 | 0 | 47 | 20 | 37 | 28 | 1 | 7.1 |
| | 08-05-83 | 0 | 46 | 19 | 36 | 28 | 1 | 7.7 |
| 22N/32E-30D01 | 06-03-83 | 0 | 21 | 8.8 | 33 | 43 | 2 | 5.6 |
| | 08-08-83 | -- | 21 | 9.1 | 34 | 43 | 2 | 5.3 |
| 22N/33E-02K01 | 07-25-82 | 39 | 43 | 15 | 22 | 22 | .7 | 3.8 |
| | 06-02-83 | 38 | 45 | 17 | 23 | 21 | .7 | 3.5 |
| | 09-08-83 | 57 | 47 | 17 | 23 | 21 | .7 | 3.7 |
| 22N/33E-17N01 | 06-03-83 | 0 | 11 | 3.7 | 54 | 70 | 4 | 6.4 |
| | 08-05-83 | 0 | 11 | 3.6 | 54 | 70 | 4 | 6.6 |
| 22N/34E-18M01 | 07-23-82 | 41 | 28 | 16 | 24 | 27 | .9 | 4.0 |
| | 06-01-83 | 25 | 26 | 16 | 23 | 27 | .9 | 3.9 |
| | 08-05-83 | 52 | 31 | 20 | 26 | 26 | .9 | 4.3 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 21N/34E-21K01 | 07-23-82 | 219 | 267 | 0 | 29 | 18 | 0.5 | 47 |
| | 05-27-83 | 234 | 285 | 0 | 17 | 7.9 | .6 | 46 |
| | 08-04-83 | 219 | 267 | 0 | 28 | 21 | .5 | 45 |
| 21N/34E-35A01 | 07-23-82 | 156 | 190 | 0 | 17 | 19 | .4 | 50 |
| | 05-26-83 | 162 | 197 | 0 | 18 | 13 | .5 | 49 |
| | 08-04-83 | 150 | 183 | 0 | 13 | 13 | .5 | 48 |
| 21N/36E-27P02 | 07-22-82 | 139 | 169 | 0 | 22 | 9.0 | .7 | 46 |
| | 05-31-83 | 139 | 170 | 0 | 24 | 11 | .8 | 45 |
| | 08-10-83 | 137 | 167 | 0 | 22 | 10 | .8 | 44 |
| 21N/38E-14E01 | 09-08-83 | 175 | 213 | 0 | 24 | 12 | .4 | 46 |
| 21N/38E-14J01 | 07-21-82 | 134 | 151 | 0 | 16 | 32 | .4 | 42 |
| | 06-02-83 | 128 | 156 | 0 | 15 | 38 | .4 | 41 |
| | 08-02-83 | 129 | 157 | 0 | 12 | 29 | .4 | 41 |
| 21N/38E-23L01 | 07-21-82 | 123 | 140 | 5 | <5.0 | 3.0 | .9 | 63 |
| | 06-20-83 | 128 | 156 | 0 | 3.0 | 3.0 | .9 | 58 |
| | 08-02-83 | 129 | 153 | 2 | <5.0 | 3.1 | 1.1 | 62 |
| 22N/31E-21F01 | 07-26-82 | 247 | 301 | 0 | 25 | 11 | .5 | 49 |
| | 05-31-83 | 253 | 308 | 0 | 24 | 12 | .5 | 47 |
| | 08-05-83 | 251 | 306 | 0 | 21 | 14 | .5 | 44 |
| 22N/32E-30D01 | 06-03-83 | 144 | 176 | 0 | 16 | 6.8 | .7 | 48 |
| | 08-08-83 | -- | -- | -- | 15 | 6.4 | .6 | 48 |
| 22N/33E-02K01 | 07-25-82 | 130 | 159 | 0 | 25 | 24 | .3 | 45 |
| | 06-02-83 | 144 | 176 | 0 | 28 | 23 | .3 | 44 |
| | 09-08-83 | 130 | 159 | 0 | 26 | 27 | .2 | 44 |
| 22N/33E-17N01 | 06-03-83 | 144 | 176 | 0 | 17 | 8.6 | .9 | 53 |
| | 08-05-83 | 147 | 163 | 8 | 15 | 8.6 | .8 | 50 |
| 22N/34E-18M01 | 07-23-82 | 95 | 116 | 0 | 66 | 17 | .3 | 45 |
| | 06-01-83 | 106 | 129 | 0 | 53 | 20 | .3 | 43 |
| | 08-05-83 | 107 | 131 | 0 | 74 | 19 | .3 | 43 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Lincoln County, Wash.--Continued | | | | | | | | |
| 21N/34E-21K01 | 07-23-82 | 339 | 0.84 | -- | 5 | 30 | 7 | 160 |
| | 05-27-83 | 312 | <.10 | 10 | 13 | -- | 14 | -- |
| | 08-04-83 | 341 | 1.0 | 10 | 5 | -- | 11 | -- |
| 21N/34E-35A01 | 07-23-82 | 276 | 4.5 | -- | <3 | 11 | <1 | 200 |
| | 05-26-83 | 273 | 4.5 | 20 | <3 | -- | <1 | -- |
| | 08-04-83 | 251 | 3.4 | 20 | 5 | -- | <1 | -- |
| 21N/36E-27P02 | 07-22-82 | 231 | .16 | -- | 6 | 31 | 7 | 76 |
| | 05-31-83 | 234 | .21 | 10 | <3 | -- | 8 | -- |
| | 08-10-83 | 228 | .16 | 10 | 68 | -- | 24 | -- |
| 21N/38E-14E01 | 09-08-83 | 288 | 3.9 | <10 | 4 | -- | 3 | -- |
| 21N/38E-14J01 | 07-21-82 | 235 | .20 | -- | 26 | 23 | 9 | 92 |
| | 06-02-83 | 243 | .24 | <10 | 54 | -- | 13 | -- |
| | 08-02-83 | 228 | .16 | <10 | 28 | -- | 9 | -- |
| 21N/38E-23L01 | 07-21-82 | -- | .22 | -- | 11 | 32 | 6 | 38 |
| | 06-20-83 | 198 | .22 | 10 | 7 | -- | 5 | -- |
| | 08-02-83 | -- | <.10 | 10 | 9 | -- | 6 | -- |
| 22N/31E-21F01 | 07-26-82 | 348 | .13 | -- | <3 | 30 | 5 | 180 |
| | 05-31-83 | 347 | .17 | 20 | <3 | -- | 9 | -- |
| | 08-05-83 | 339 | .13 | 10 | 5 | -- | 2 | -- |
| 22N/32E-30D01 | 06-03-83 | 226 | <.10 | 10 | <3 | -- | 2 | -- |
| | 08-08-83 | 226 | <.10 | 10 | 3 | -- | 3 | -- |
| 22N/33E-02K01 | 07-25-82 | 305 | 11 | -- | 5 | 12 | 4 | 220 |
| | 06-02-83 | 314 | 9.8 | <10 | 10 | -- | 2 | -- |
| | 09-08-83 | 315 | 11 | <10 | 6 | -- | 2 | -- |
| 22N/33E-17N01 | 06-03-83 | 241 | <.10 | 20 | 18 | -- | 2 | -- |
| | 08-05-83 | 238 | <.10 | 10 | 6 | -- | 2 | -- |
| 22N/34E-18M01 | 07-23-82 | 265 | 1.7 | -- | 31 | 14 | 32 | 92 |
| | 06-01-83 | 254 | 1.3 | 10 | <3 | -- | 3 | -- |
| | 08-05-83 | 287 | 1.2 | <10 | 33 | -- | 13 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 22N/35E-13H01 | 07-22-82 | 1325 | 880 | 7.6 | 12.5 | 0.3 | -- | 180 |
| | 06-01-83 | 1015 | 860 | 7.5 | 12.0 | 1.0 | <1 | 180 |
| | 08-10-83 | 1440 | 912 | 7.7 | 12.0 | .2 | -- | 180 |
| 22N/35E-23E01D1 | 07-22-82 | 1450 | 330 | 7.6 | 13.0 | 6.0 | -- | 150 |
| | 06-01-83 | 1205 | 340 | 7.7 | 11.0 | 5.2 | <1 | 130 |
| | 08-11-83 | 0855 | 345 | 7.6 | 12.0 | 4.7 | -- | 120 |
| 22N/36E-18N02D1 | 07-22-82 | 1200 | 530 | 7.4 | 11.5 | -- | -- | 240 |
| | 06-01-83 | 0845 | 520 | 7.4 | 12.5 | 6.8 | -- | 240 |
| | 08-10-83 | 1330 | 462 | 7.5 | 12.0 | 7.4 | -- | 190 |
| 22N/36E-20A01 | 09-07-83 | 1600 | 308 | 7.8 | 13.0 | 9.2 | -- | 150 |
| 22N/37E-12C02D1 | 07-22-82 | 1000 | 325 | 8.0 | 15.5 | 2.5 | -- | 99 |
| | 06-01-83 | 1500 | 315 | 8.1 | 15.5 | 1.4 | <1 | 92 |
| | 08-06-83 | 1400 | 319 | 7.9 | 17.0 | 2.2 | -- | 99 |
| 22N/38E-02D01D1 | 07-21-82 | 1350 | 315 | 7.7 | 13.0 | 10.1 | -- | 140 |
| 22N/39E-36H01 | 07-20-82 | 1600 | 190 | 7.7 | 14.5 | 1.8 | -- | 79 |
| | 06-02-83 | 1340 | 194 | 7.3 | 14.0 | 3.2 | <1 | 75 |
| | 08-09-83 | 1400 | 198 | 7.6 | 14.0 | 3.4 | -- | 77 |
| 23N/31E-33E01 | 09-08-82 | 1500 | 315 | 8.9 | 19.5 | 3.3 | -- | 38 |
| | 06-02-83 | 1140 | 310 | 8.7 | 19.5 | 3.0 | -- | 34 |
| | 08-12-83 | 1130 | -- | 8.7 | 19.5 | 2.8 | -- | 36 |
| 23N/33E-10A01 | 07-27-82 | 1005 | 850 | 7.6 | 18.0 | 8.3 | -- | 340 |
| | 06-02-83 | 1415 | 843 | 7.7 | 14.5 | 10.2 | <1 | 400 |
| | 08-12-83 | 0930 | 848 | 7.4 | 14.0 | 10.1 | -- | 390 |
| 23N/35E-03H01D1 | 07-23-82 | 1005 | 380 | 8.2 | 14.0 | 2.8 | -- | 110 |
| | 06-01-83 | 1735 | 400 | 8.3 | 13.5 | 3.8 | <1 | 110 |
| | 08-11-83 | 1300 | 370 | 8.2 | 14.5 | 2.0 | -- | 100 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| Lincoln County, Wash.--Continued | | | | | | | | |
| 22N/35E-13H01 | 07-22-82 | 0 | 42 | 19 | 120 | 58 | 4 | 6.4 |
| | 06-01-83 | 0 | 40 | 19 | 120 | 58 | 4 | 6.4 |
| | 08-10-83 | 0 | 41 | 20 | 130 | 59 | 4 | 6.4 |
| 22N/35E-23E01D1 | 07-22-82 | 14 | 37 | 13 | 20 | 22 | .7 | 3.5 |
| | 06-01-83 | 0 | 29 | 13 | 19 | 24 | .7 | 3.4 |
| | 08-11-83 | 0 | 28 | 13 | 19 | 24 | .7 | 3.7 |
| 22N/36E-18N02D1 | 07-22-82 | 72 | 60 | 22 | 18 | 14 | .5 | 2.5 |
| | 06-01-83 | 61 | 58 | 22 | 18 | 14 | .5 | 2.4 |
| | 08-10-83 | 36 | 45 | 18 | 17 | 16 | .5 | 2.5 |
| 22N/36E-20A01 | 09-07-83 | -- | 37 | 13 | 11 | 14 | .4 | 2.0 |
| 22N/37E-12C02D1 | 07-22-82 | 0 | 20 | 12 | 33 | 41 | 1 | 3.9 |
| | 06-01-83 | 0 | 17 | 12 | 33 | 43 | 1 | 3.8 |
| | 08-06-83 | 0 | 20 | 12 | 33 | 41 | 1 | 3.5 |
| 22N/38E-02D01D1 | 07-21-82 | -- | 37 | 11 | 14 | 18 | .5 | 2.3 |
| 22N/39E-36H01 | 07-20-82 | 0 | 16 | 9.4 | 9.6 | 20 | .5 | 2.8 |
| | 06-02-83 | 2 | 15 | 9.0 | 8.9 | 20 | .4 | 2.9 |
| | 08-09-83 | 0 | 15 | 9.6 | 9.8 | 21 | .5 | 2.7 |
| 23N/31E-33E01 | 09-08-82 | 0 | 9.0 | 3.7 | 56 | 73 | 4 | 5.6 |
| | 06-02-83 | 0 | 8.2 | 3.3 | 56 | 75 | 4 | 5.7 |
| | 08-12-83 | 0 | 8.7 | 3.5 | 55 | 73 | 4 | 5.5 |
| 23N/33E-10A01 | 07-27-82 | 210 | 85 | 30 | 23 | 13 | .5 | 4.9 |
| | 06-02-83 | 260 | 99 | 36 | 22 | 11 | .5 | 4.9 |
| | 08-12-83 | 270 | 96 | 36 | 24 | 12 | .5 | 4.3 |
| 23N/35E-03H01D1 | 07-23-82 | 0 | 17 | 16 | 37 | 40 | 2 | 11 |
| | 06-01-83 | 0 | 18 | 16 | 36 | 39 | 1 | 11 |
| | 08-11-83 | 0 | 19 | 13 | 30 | 37 | 1 | 6.9 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 22N/35E-13H01 | 07-22-82 | 310 | 378 | 0 | 85 | 47 | 0.6 | 47 |
| | 06-01-83 | 312 | 381 | 0 | 78 | 49 | .7 | 45 |
| | 08-10-83 | 310 | 378 | 0 | 89 | 50 | .6 | 45 |
| 22N/35E-23E01D1 | 07-22-82 | 132 | 161 | 0 | 20 | 12 | .4 | 42 |
| | 06-01-83 | 130 | 158 | 0 | 22 | 15 | .4 | 39 |
| | 08-11-83 | 129 | 157 | 0 | 19 | 12 | .4 | 37 |
| 22N/36E-18N02D1 | 07-22-82 | 169 | 206 | 0 | 52 | 29 | .3 | 44 |
| | 06-01-83 | 175 | 213 | 0 | 51 | 27 | .3 | 43 |
| | 08-10-83 | 151 | 184 | 0 | 31 | 18 | .3 | 42 |
| 22N/36E-20A01 | 09-07-83 | -- | -- | -- | 14 | 12 | .3 | 46 |
| 22N/37E-12C02D1 | 07-22-82 | 156 | 190 | 0 | 11 | 5.1 | .6 | 44 |
| | 06-01-83 | 156 | 190 | 0 | 8.9 | 5.1 | .6 | 44 |
| | 08-06-83 | 160 | 195 | 0 | 11 | 5.0 | .6 | 43 |
| 22N/38E-02D01D1 | 07-21-82 | -- | -- | -- | 11 | 6.1 | .3 | 47 |
| 22N/39E-36H01 | 07-20-82 | 95 | 116 | 0 | <5.0 | 1.6 | .3 | 43 |
| | 06-02-83 | 72 | 88 | 0 | 7.8 | 2.8 | .3 | 44 |
| | 08-09-83 | 95 | 116 | 0 | 5.0 | 1.7 | .3 | 42 |
| 23N/31E-33E01 | 09-08-82 | 137 | 135 | 16 | 12 | 8.0 | 1.2 | 59 |
| | 06-02-83 | 145 | 161 | 8 | 12 | 8.1 | 1.4 | 57 |
| | 08-12-83 | 134 | 151 | 6 | 12 | 7.9 | 1.3 | 56 |
| 23N/33E-10A01 | 07-27-82 | 125 | 153 | 0 | 64 | 91 | .3 | 47 |
| | 06-02-83 | 139 | 170 | 0 | 80 | 120 | .3 | 45 |
| | 08-12-83 | 122 | 149 | 0 | 78 | 110 | .3 | 45 |
| 23N/35E-03H01D1 | 07-23-82 | 167 | 204 | 0 | 24 | 13 | .5 | 38 |
| | 06-01-83 | 166 | 203 | 0 | 24 | 11 | .5 | 37 |
| | 08-11-83 | 150 | 183 | 0 | 16 | 7.4 | .4 | 37 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 22N/35E-13H01 | 07-22-82 | 554 | <0.10 | -- | 320 | 18 | 880 | 200 |
| | 06-01-83 | 547 | <.10 | 10 | 390 | -- | 860 | -- |
| | 08-10-83 | 576 | 1.6 | <10 | 360 | -- | 890 | -- |
| 22N/35E-23E01D1 | 07-22-82 | 233 | 1.3 | -- | 27 | 10 | 13 | 130 |
| | 06-01-83 | 226 | 1.7 | <10 | 5 | -- | 4 | -- |
| | 08-11-83 | 216 | 1.5 | <10 | 8 | -- | <1 | -- |
| 22N/36E-18N02D1 | 07-22-82 | 348 | 4.3 | -- | 10 | 18 | 5 | 280 |
| | 06-01-83 | 346 | 4.4 | <10 | 13 | -- | 2 | -- |
| | 08-10-83 | 280 | 3.6 | <10 | 6 | -- | 4 | -- |
| 22N/36E-20A01 | 09-07-83 | 223 | 2.1 | <10 | 5 | -- | 1 | -- |
| 22N/37E-12C02D1 | 07-22-82 | 226 | .55 | -- | 7 | 29 | 6 | 76 |
| | 06-01-83 | 219 | .32 | <10 | 12 | -- | 6 | -- |
| | 08-06-83 | 226 | .56 | <10 | 8 | -- | 3 | -- |
| 22N/38E-02D01D1 | 07-21-82 | 235 | 4.7 | -- | 7 | 13 | 2 | 160 |
| 22N/39E-36H01 | 07-20-82 | -- | <.10 | -- | 7 | 14 | 10 | 55 |
| | 06-02-83 | 137 | .57 | <10 | 11 | -- | 2 | -- |
| | 08-09-83 | 143 | <.10 | <10 | 12 | -- | 8 | -- |
| 23N/31E-33E01 | 09-08-82 | 237 | .11 | -- | 6 | 14 | <1 | 33 |
| | 06-02-83 | 239 | <.10 | 30 | 3 | -- | <1 | -- |
| | 08-12-83 | 230 | <.10 | 20 | <3 | -- | <1 | -- |
| 23N/33E-10A01 | 07-27-82 | 509 | 20 | -- | 48 | 19 | 2 | 390 |
| | 06-02-83 | 597 | 24 | 10 | 32 | -- | 4 | -- |
| | 08-12-83 | 573 | 24 | 10 | 25 | -- | 2 | -- |
| 23N/35E-03H01D1 | 07-23-82 | 258 | .16 | -- | 7 | 33 | 5 | 74 |
| | 06-01-83 | 254 | .19 | <10 | 14 | -- | 2 | -- |
| | 08-11-83 | 220 | <.10 | <10 | 15 | -- | 3 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 23N/35E-30F01 | 07-23-82 | 1315 | 485 | 7.5 | 12.5 | 9.1 | -- | 220 |
| | 06-02-83 | 1320 | 581 | 7.8 | 14.0 | 5.0 | <1 | 250 |
| | 08-11-83 | 1145 | 472 | 7.6 | 14.0 | 8.8 | -- | 200 |
| 23N/36E-13N01 | 07-22-82 | 1630 | 490 | 7.6 | 12.0 | 8.0 | -- | 210 |
| | 06-02-83 | 1130 | 490 | 7.8 | 12.0 | 7.4 | <1 | 200 |
| 23N/37E-29F01 | 07-22-82 | 1020 | 350 | 7.6 | 13.0 | 5.5 | -- | 130 |
| | 06-02-83 | 1000 | -- | 7.7 | 12.0 | 4.2 | <1 | 120 |
| | 08-10-83 | 1500 | 329 | 7.5 | 13.0 | 4.9 | -- | 130 |
| 23N/38E-12A01 | 07-21-82 | 1720 | 275 | 8.0 | 12.5 | .2 | -- | 100 |
| | 06-20-83 | 1500 | 279 | 8.0 | 12.5 | .4 | -- | 100 |
| | 08-06-83 | 1230 | 268 | 8.0 | 12.5 | .3 | -- | 100 |
| 23N/39E-04B01 | 07-21-82 | 0910 | 280 | 7.7 | 11.0 | -- | -- | 110 |
| 24N/31E-14E01 | 07-23-82 | 1445 | 278 | 8.2 | 15.0 | .3 | -- | 75 |
| | 06-03-83 | 0930 | 268 | 8.2 | 14.5 | .9 | <1 | 75 |
| | 08-11-83 | 0900 | 260 | 8.2 | 15.0 | .4 | -- | 75 |
| 24N/33E-06Q01 | 06-22-83 | 1300 | 260 | 7.8 | 13.5 | 2.4 | -- | 94 |
| | 09-07-83 | 1315 | 258 | 7.9 | 13.0 | 1.6 | -- | 86 |
| 24N/33E-18HO1 | 09-08-83 | 1600 | 245 | 7.9 | 15.0 | 2.2 | -- | 88 |
| 24N/34E-23L01 | 07-27-82 | 1315 | 265 | 8.0 | 16.0 | -- | -- | 94 |
| 24N/36E-03D01 | 07-21-82 | 1330 | 182 | 7.6 | 12.5 | 5.0 | -- | 65 |
| | 06-01-83 | 1100 | 181 | 7.3 | 12.0 | 6.3 | <1 | 63 |
| | 08-11-83 | 1315 | 180 | 7.4 | 11.5 | 5.9 | -- | 63 |
| 24N/36E-16A02 | 07-16-83 | 1900 | 297 | 8.5 | 12.0 | -- | -- | 120 |
| 24N/36E-16A03 | 07-16-83 | 2030 | 225 | 9.6 | 12.0 | -- | -- | 87 |
| 24N/36E-16A04 | 07-18-83 | 1910 | 203 | 8.0 | 18.0 | -- | -- | 65 |
| 24N/36E-16A05 | 07-19-83 | 1000 | 295 | 9.4 | 14.0 | -- | -- | 56 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 23N/35E-30F01 | 07-23-82 | 74 | 53 | 21 | 16 | 14 | 0.5 | 2.6 |
| | 06-02-83 | 100 | 58 | 25 | 17 | 13 | .5 | 2.7 |
| | 08-11-83 | 52 | 46 | 20 | 15 | 14 | .5 | 2.5 |
| 23N/36E-13N01 | 07-22-82 | 68 | 54 | 19 | 21 | 17 | .6 | 2.9 |
| | 06-02-83 | 64 | 54 | 17 | 17 | 15 | .5 | 2.6 |
| 23N/37E-29F01 | 07-22-82 | 0 | 26 | 15 | 21 | 26 | .8 | 2.4 |
| | 06-02-83 | 0 | 24 | 15 | 21 | 27 | .8 | 2.1 |
| | 08-10-83 | 0 | 27 | 14 | 21 | 26 | .8 | 2.4 |
| 23N/38E-12A01 | 07-21-82 | 0 | 23 | 11 | 18 | 27 | .8 | 3.2 |
| | 06-20-83 | 0 | 23 | 11 | 18 | 27 | .8 | 3.1 |
| | 08-06-83 | 0 | 23 | 11 | 18 | 27 | .8 | 3.3 |
| 23N/39E-04B01 | 07-21-82 | 4 | 27 | 9.9 | 15 | 23 | .6 | 1.7 |
| 24N/31E-14E01 | 07-23-82 | -- | 12 | 11 | 29 | 43 | 1 | 7.5 |
| | 06-03-83 | 0 | 12 | 11 | 27 | 41 | 1 | 7.7 |
| | 08-11-83 | 0 | 12 | 11 | 27 | 41 | 1 | 6.8 |
| 24N/33E-06Q01 | 06-22-83 | 0 | 21 | 10 | 16 | 26 | .7 | 4.1 |
| | 09-07-83 | 0 | 18 | 10 | 16 | 28 | .8 | 4.4 |
| 24N/33E-18H01 | 09-08-83 | 0 | 17 | 11 | 18 | 30 | .8 | 4.6 |
| 24N/34E-23L01 | 07-27-82 | 0 | 21 | 10 | 14 | 24 | .6 | 3.3 |
| 24N/36E-03D01 | 07-21-82 | 0 | 15 | 6.7 | 9.9 | 23 | .5 | 4.3 |
| | 06-01-83 | 0 | 15 | 6.2 | 8.7 | 22 | .5 | 4.5 |
| | 08-11-83 | 1 | 15 | 6.3 | 8.9 | 22 | .5 | 4.3 |
| 24N/36E-16A02 | 07-16-83 | -- | 34 | 8.0 | 12 | 18 | .5 | 2.9 |
| 24N/36E-16A03 | 07-16-83 | -- | 24 | 6.5 | 14 | 25 | .7 | 4.4 |
| 24N/36E-16A04 | 07-18-83 | 0 | 20 | 3.7 | 17 | 35 | .9 | 3.7 |
| 24N/36E-16A05 | 07-19-83 | 0 | 22 | .14 | 38 | 57 | 2 | 4.5 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 23N/35E-30F01 | 07-23-82 | 145 | 177 | 0 | 25 | 35 | 0.3 | 50 |
| | 06-02-83 | 144 | 176 | 0 | 31 | 11 | .3 | 47 |
| | 08-11-83 | 145 | 177 | 0 | 22 | 30 | .3 | 49 |
| 23N/36E-13N01 | 07-22-82 | 145 | 177 | 0 | 32 | 32 | .3 | 46 |
| | 06-02-83 | 141 | 172 | 0 | 31 | 26 | .3 | 46 |
| 23N/37E-29F01 | 07-22-82 | 145 | 177 | 0 | 11 | 7.7 | .3 | 41 |
| | 06-02-83 | 149 | 182 | 0 | 11 | 6.7 | .3 | 40 |
| | 08-10-83 | 148 | 181 | 0 | 10 | 7.5 | .3 | 39 |
| 23N/38E-12A01 | 07-21-82 | 132 | 161 | 0 | 11 | 3.3 | .5 | 39 |
| | 06-20-83 | 138 | 168 | 0 | 10 | 3.1 | .5 | 35 |
| | 08-06-83 | 136 | 166 | 0 | 11 | 3.1 | .5 | 37 |
| 23N/39E-04B01 | 07-21-82 | 104 | 127 | 0 | 12 | 6.8 | .3 | 41 |
| 24N/31E-14E01 | 07-23-82 | -- | -- | -- | 18 | 7.0 | .7 | 37 |
| | 06-03-83 | 129 | 157 | 0 | 17 | 5.0 | .7 | 36 |
| | 08-11-83 | 121 | 148 | 0 | 16 | 4.9 | .7 | 36 |
| 24N/33E-06Q01 | 06-22-83 | 99 | 121 | 0 | 16 | 7.3 | .4 | 37 |
| | 09-07-83 | 102 | 125 | 0 | 15 | 6.2 | .4 | 37 |
| 24N/33E-18H01 | 09-08-83 | 116 | 142 | 0 | 8.1 | 3.9 | .4 | 46 |
| 24N/34E-23L01 | 07-27-82 | 107 | 130 | 0 | 17 | 5.1 | .3 | 46 |
| 24N/36E-03D01 | 07-21-82 | 71 | 87 | 0 | 9.0 | 3.3 | .2 | 45 |
| | 06-01-83 | 64 | 78 | 0 | 9.7 | 3.6 | .2 | 48 |
| | 08-11-83 | 62 | 76 | 0 | 9.2 | 3.8 | .3 | 45 |
| 24N/36E-16A02 | 07-16-83 | -- | -- | -- | 26 | 14 | .2 | 38 |
| 24N/36E-16A03 | 07-16-83 | -- | -- | -- | 21 | 7.3 | .4 | 33 |
| 24N/36E-16A04 | 07-18-83 | 98 | 119 | 0 | 18 | 3.5 | .5 | 32 |
| 24N/36E-16A05 | 07-19-83 | 114 | 96 | 21 | 28 | 3.7 | .7 | 11 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 23N/35E-30F01 | 07-23-82 | 327 | 8.2 | -- | 12 | 15 | 3 | 250 |
| | 06-02-83 | 375 | 14 | <10 | <3 | -- | 1 | -- |
| | 08-11-83 | 304 | 7.3 | <10 | 17 | -- | 1 | -- |
| 23N/36E-13N01 | 07-22-82 | 332 | 8.4 | -- | 3 | 18 | 1 | 250 |
| | 06-02-83 | 323 | 10 | 10 | <3 | -- | <1 | -- |
| 23N/37E-29F01 | 07-22-82 | 223 | 2.5 | -- | 7 | 18 | 7 | 110 |
| | 06-02-83 | 219 | 2.1 | <10 | 13 | -- | 3 | -- |
| | 08-10-83 | 222 | 2.7 | 10 | 10 | -- | 2 | -- |
| 23N/38E-12A01 | 07-21-82 | 189 | <.10 | -- | 220 | 19 | 25 | 96 |
| | 06-20-83 | 187 | <.10 | <10 | 200 | -- | 23 | -- |
| | 08-06-83 | 189 | <.10 | <10 | 160 | -- | 22 | -- |
| 23N/39E-04B01 | 07-21-82 | 196 | 4.4 | -- | 13 | 14 | 3 | 120 |
| 24N/31E-14E01 | 07-23-82 | 189 | <.10 | -- | 10 | 17 | 18 | 47 |
| | 06-03-83 | 194 | <.10 | 10 | 15 | -- | 14 | -- |
| | 08-11-83 | 187 | <.10 | <10 | 9 | -- | 14 | -- |
| 24N/33E-06Q01 | 06-22-83 | 180 | 1.9 | <10 | 19 | -- | 10 | -- |
| | 09-07-83 | 174 | 1.2 | <10 | 7 | -- | 7 | -- |
| 24N/33E-18H01 | 09-08-83 | 182 | .64 | <10 | 3 | -- | 2 | -- |
| 24N/34E-23L01 | 07-27-82 | 187 | 1.5 | -- | <3 | 5 | <1 | 110 |
| 24N/36E-03D01 | 07-21-82 | 146 | 2.3 | -- | 6 | 15 | 3 | 71 |
| | 06-01-83 | 149 | 3.3 | <10 | 9 | -- | <1 | -- |
| | 08-11-83 | 143 | 3.0 | <10 | <3 | -- | 2 | -- |
| 24N/36E-16A02 | 07-16-83 | 208 | 5.3 | -- | 6 | -- | 1 | -- |
| 24N/36E-16A03 | 07-16-83 | 166 | .65 | <10 | 5 | -- | 2 | -- |
| 24N/36E-16A04 | 07-18-83 | 157 | <.10 | -- | 17 | -- | 3 | -- |
| 24N/36E-16A05 | 07-19-83 | 176 | <.10 | -- | 8 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance ($\mu\text{S}/\text{cm}$) | pH (standard units) | Temperature water ($^{\circ}\text{C}$) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO_3) |
|---|----------|------|--|---------------------|--|--------------------------|-------------------------------|-------------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 24N/36E-16A07 | 07-17-83 | 2000 | 400 | 11.0 | 14.0 | -- | -- | 78 |
| 24N/36E-16A08 | 07-18-83 | 1730 | 241 | 8.1 | 15.5 | -- | -- | 36 |
| 24N/37E-06Q01 | 07-21-82 | 1700 | 235 | 6.5 | 9.5 | 6.6 | -- | 88 |
| | 06-01-83 | 1245 | 243 | 6.8 | 9.0 | -- | -- | 83 |
| | 08-11-83 | 1145 | 233 | 6.8 | 9.5 | -- | -- | 79 |
| 24N/38E-02D01 | 07-20-82 | 1535 | 430 | 7.2 | 9.5 | 8.3 | -- | 140 |
| 24N/39E-26K01 | 07-20-82 | 1345 | 280 | 7.4 | 11.5 | .5 | -- | 130 |
| | 06-02-83 | 1630 | 292 | 7.3 | 11.5 | 2.8 | <1 | 120 |
| | 08-10-83 | 1130 | 268 | 7.6 | 11.5 | 3.5 | -- | 120 |
| 25N/32E-17K01 | 07-23-82 | 1320 | 349 | 7.3 | 14.0 | 7.7 | -- | 140 |
| 25N/32E-35P01 | 09-09-82 | 0800 | 270 | 8.2 | 21.5 | .6 | -- | 52 |
| | 06-04-83 | 1100 | 268 | 8.2 | 21.5 | .1 | -- | 50 |
| | 08-31-83 | 1100 | 268 | 8.2 | 21.5 | .1 | -- | 51 |
| 25N/33E-01B01 | 07-22-82 | 1235 | 350 | 7.3 | 11.5 | 8.4 | -- | 140 |
| | 06-03-83 | 1400 | 370 | 7.4 | 10.5 | 8.3 | <1 | 140 |
| | 08-31-83 | 1330 | 360 | 7.3 | 11.5 | 8.5 | -- | 130 |
| 25N/33E-27A01 | 06-03-83 | 1100 | 260 | 7.9 | 19.5 | .3 | <1 | 80 |
| 25N/35E-03E01D1 | 07-22-82 | 1105 | 400 | 6.7 | 11.5 | 6.2 | -- | 140 |
| | 06-02-83 | 1525 | 410 | 6.6 | 12.0 | 4.7 | <1 | 150 |
| | 08-11-83 | 1600 | 409 | 7.0 | 11.5 | 5.1 | -- | 140 |
| 25N/35E-20D01 | 07-22-82 | 0955 | 232 | 7.4 | 14.5 | 2.8 | -- | 95 |
| 25N/36E-27Q01 | 07-21-82 | 1445 | 185 | 7.2 | 12.5 | 5.7 | -- | 68 |
| | 06-01-83 | 0900 | 262 | 7.1 | 11.5 | 5.6 | -- | 99 |
| 25N/37E-21L04 | 07-21-82 | 1030 | 288 | 8.2 | 22.5 | .4 | -- | 61 |
| | 06-01-83 | 1500 | 278 | 8.4 | 23.5 | .1 | <1 | 40 |
| | 08-10-83 | 1345 | 288 | 8.4 | 24.0 | .1 | -- | 37 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 24N/36E-16A07 | 07-17-83 | -- | 31 | 0.22 | 34 | 46 | 2 | 6.5 |
| 24N/36E-16A08 | 07-18-83 | 0 | 11 | 2.0 | 40 | 68 | 3 | 4.0 |
| 24N/37E-06Q01 | 07-21-82 | 0 | 24 | 6.8 | 17 | 29 | .8 | 3.7 |
| | 06-01-83 | 0 | 22 | 6.7 | 15 | 27 | .7 | 3.7 |
| | 08-11-83 | 0 | 21 | 6.4 | 15 | 28 | .7 | 4.1 |
| 24N/38E-02D01 | 07-20-82 | 0 | 38 | 12 | 26 | 28 | .9 | 2.9 |
| 24N/39E-26K01 | 07-20-82 | 0 | 31 | 12 | 11 | 16 | .4 | 2.9 |
| | 06-02-83 | 0 | 30 | 12 | 13 | 18 | .5 | 3.3 |
| | 08-10-83 | 0 | 28 | 12 | 12 | 18 | .5 | 2.9 |
| 25N/32E-17K01 | 07-23-82 | 20 | 34 | 14 | 16 | 19 | .6 | 3.0 |
| 25N/32E-35P01 | 09-09-82 | 0 | 12 | 5.3 | 39 | 59 | 2 | 4.8 |
| | 06-04-83 | 0 | 11 | 5.4 | 39 | 60 | 2 | 5.0 |
| | 08-31-83 | 0 | 12 | 5.1 | 40 | 60 | 2 | 4.7 |
| 25N/33E-01B01 | 07-22-82 | 30 | 36 | 12 | 18 | 22 | .7 | 2.8 |
| | 06-03-83 | 24 | 35 | 12 | 22 | 25 | .8 | 2.8 |
| | 08-31-83 | 26 | 34 | 11 | 17 | 22 | .6 | 2.5 |
| 25N/33E-27A01 | 06-03-83 | 0 | 16 | 9.8 | 28 | 42 | 1 | 3.1 |
| 25N/35E-03E01D1 | 07-22-82 | 15 | 37 | 11 | 23 | 26 | .9 | 3.8 |
| | 06-02-83 | 24 | 39 | 12 | 24 | 26 | .9 | 3.8 |
| | 08-11-83 | 20 | 38 | 12 | 24 | 26 | .9 | 4.0 |
| 25N/35E-20D01 | 07-22-82 | 0 | 24 | 8.5 | 16 | 26 | .7 | 3.2 |
| 25N/36E-27Q01 | 07-21-82 | 0 | 18 | 5.6 | 9.8 | 23 | .5 | 2.0 |
| | 06-01-83 | -- | 26 | 8.3 | 13 | 22 | .6 | 2.2 |
| 25N/37E-21L04 | 07-21-82 | 0 | 15 | 5.8 | 40 | 56 | 2 | 4.8 |
| | 06-01-83 | 0 | 11 | 3.1 | 48 | 69 | 3 | 5.7 |
| | 08-10-83 | 0 | 10 | 2.9 | 48 | 70 | 3 | 5.5 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| Lincoln County, Wash.--Continued | | | | | | | | |
| 24N/36E-16A07 | 07-17-83 | -- | -- | -- | 39 | 5.2 | 0.5 | 39 |
| 24N/36E-16A08 | 07-18-83 | 141 | 172 | 0 | 3.6 | 2.9 | 1.2 | 50 |
| 24N/37E-06Q01 | 07-21-82 | 109 | 133 | 0 | 13 | 5.9 | .2 | 47 |
| | 06-01-83 | 96 | 117 | 0 | 15 | 7.7 | .2 | 45 |
| | 08-11-83 | 89 | 109 | 0 | 14 | 6.1 | .2 | 44 |
| 24N/38E-02D01 | 07-20-82 | 145 | 177 | 0 | 28 | 15 | .2 | 38 |
| 24N/39E-26K01 | 07-20-82 | 152 | 185 | 0 | 5.0 | 5.4 | .3 | 46 |
| | 06-02-83 | 151 | 184 | 0 | 7.0 | 4.0 | .3 | 43 |
| | 08-10-83 | 147 | 179 | 0 | 4.7 | 3.5 | .3 | 41 |
| 25N/32E-17K01 | 07-23-82 | 123 | 150 | 0 | 22 | 12 | .2 | 45 |
| 25N/32E-35P01 | 09-09-82 | 124 | 151 | 0 | 7.0 | 4.6 | .8 | 57 |
| | 06-04-83 | 134 | 163 | 0 | 7.7 | 4.7 | 1.0 | 58 |
| | 08-31-83 | 130 | 158 | 0 | 7.5 | 4.7 | .9 | 58 |
| 25N/33E-01B01 | 07-22-82 | 109 | 133 | 0 | 31 | 18 | .2 | 45 |
| | 06-03-83 | 112 | 137 | 0 | 33 | 18 | .3 | 43 |
| | 08-31-83 | 104 | 127 | 0 | 30 | 19 | .3 | 43 |
| 25N/33E-27A01 | 06-03-83 | 131 | 160 | 0 | 11 | 4.6 | .7 | 47 |
| 25N/35E-03E01D1 | 07-22-82 | 123 | 150 | 0 | 19 | 13 | .2 | 48 |
| | 06-02-83 | 123 | 150 | 0 | 19 | 11 | .2 | 48 |
| | 08-11-83 | 125 | 152 | 0 | 17 | 14 | .2 | 46 |
| 25N/35E-20D01 | 07-22-82 | 112 | 136 | 0 | 10 | 2.0 | .4 | 44 |
| 25N/36E-27Q01 | 07-21-82 | 69 | 84 | 0 | 12 | 3.2 | .2 | 49 |
| | 06-01-83 | -- | -- | -- | 17 | 5.4 | .2 | 48 |
| 25N/37E-21L04 | 07-21-82 | 143 | 174 | 0 | 11 | 4.3 | .9 | 50 |
| | 06-01-83 | 149 | -- | -- | 4.3 | 3.6 | 1.2 | 53 |
| | 08-10-83 | 139 | 165 | 2 | 4.0 | 3.6 | 1.3 | 51 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Lincoln County, Wash.--Continued | | | | | | | | |
| 24N/36E-16A07 | 07-17-83 | 190 | <0.10 | <10 | 3 | -- | <1 | -- |
| 24N/36E-16A08 | 07-18-83 | 199 | <.10 | <10 | 21 | -- | 3 | -- |
| 24N/37E-06Q01 | 07-21-82 | 189 | 1.4 | -- | 25 | 10 | 2 | 130 |
| | 06-01-83 | 183 | 2.2 | <10 | 48 | -- | 1 | -- |
| | 08-11-83 | 172 | 1.6 | <10 | 37 | -- | 3 | -- |
| 24N/38E-02D01 | 07-20-82 | 281 | 7.6 | -- | 20 | 16 | 7 | 190 |
| 24N/39E-26K01 | 07-20-82 | 205 | <.10 | -- | 27 | 16 | 23 | 130 |
| | 06-02-83 | 204 | .15 | <10 | 20 | -- | 20 | -- |
| | 08-10-83 | 192 | <.10 | <10 | 17 | -- | 17 | -- |
| 25N/32E-17K01 | 07-23-82 | 239 | 4.3 | -- | 5 | 17 | 2 | 150 |
| 25N/32E-35P01 | 09-09-82 | 205 | <.10 | -- | 21 | 32 | 6 | 36 |
| | 06-04-83 | 213 | .21 | <10 | 26 | -- | 8 | -- |
| | 08-31-83 | 211 | <.10 | <10 | 18 | -- | 7 | -- |
| 25N/33E-01B01 | 07-22-82 | 247 | 4.2 | -- | 8 | 13 | 8 | 170 |
| | 06-03-83 | 253 | 4.3 | <10 | 15 | -- | 2 | -- |
| | 08-31-83 | 239 | 4.4 | <10 | 8 | -- | 1 | -- |
| 25N/33E-27A01 | 06-03-83 | 199 | <.10 | <10 | 27 | -- | 12 | -- |
| 25N/35E-03E01D1 | 07-22-82 | 282 | 12 | -- | 6 | 13 | 15 | 210 |
| | 06-02-83 | 279 | 11 | <10 | 15 | -- | 2 | -- |
| | 08-11-83 | 274 | 10 | 10 | 6 | -- | 2 | -- |
| 25N/35E-20D01 | 07-22-82 | 179 | .71 | -- | 10 | <10 | 300 | 140 |
| | 07-21-82 | 155 | 3.2 | -- | 4 | 13 | 19 | 88 |
| 25N/36E-27Q01 | 06-01-83 | 194 | 4.8 | <10 | 11 | -- | <1 | -- |
| 25N/37E-21L04 | 07-21-82 | 217 | <.10 | -- | 18 | 39 | 7 | 68 |
| | 06-01-83 | 214 | <.10 | <10 | 30 | -- | 4 | -- |
| | 08-10-83 | 209 | <.10 | <10 | 13 | -- | 4 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 25N/37E-27E01 | 07-21-82 | 0900 | 190 | 7.0 | 11.0 | -- | -- | 68 |
| | 05-31-83 | 1730 | 191 | 7.0 | 11.0 | 8.8 | <1 | 64 |
| | 08-11-83 | 0945 | 211 | 6.9 | 11.0 | 9.1 | -- | 71 |
| 25N/38E-15N01 | 07-20-82 | 1755 | 420 | 7.2 | 12.0 | 7.7 | -- | 160 |
| | 06-02-83 | 1825 | 431 | 7.0 | 11.0 | 9.5 | <1 | 160 |
| | 08-10-83 | 1600 | 410 | 7.2 | 11.0 | 8.9 | -- | 150 |
| 26N/32E-26D01 | 07-23-82 | 1100 | 213 | 8.2 | 11.5 | 1.1 | -- | 74 |
| | 06-04-83 | 0840 | 210 | 8.4 | 11.5 | 1.8 | -- | 74 |
| | 09-07-83 | 1045 | 210 | 8.4 | 11.5 | .7 | -- | 75 |
| 26N/33E-07E01 | 07-23-82 | 0740 | 548 | 7.1 | 12.5 | 2.9 | -- | 220 |
| | 06-21-83 | 1630 | -- | 7.6 | 12.5 | 2.8 | -- | 300 |
| | 08-11-83 | 1915 | 870 | 7.5 | 14.0 | 2.7 | -- | 350 |
| 26N/33E-19D01 | 06-04-83 | 1140 | 200 | 8.3 | 13.5 | 1.8 | <1 | 70 |
| | 08-11-83 | 1800 | 208 | 8.4 | 13.0 | 1.7 | -- | 70 |
| 28N/37E-29L01 | 06-03-83 | 1130 | 221 | 7.2 | 11.5 | 9.3 | -- | 110 |
| <u>Morrow County, Oreg.</u> | | | | | | | | |
| 01N/25E-10CDD | 07-28-83 | 1505 | 318 | 7.9 | 17.0 | .8 | -- | 110 |
| 01N/26E-05BBA | 07-25-83 | 2045 | 342 | 8.1 | 24.0 | .1 | -- | 100 |
| 01N/27E-05CCB | 07-28-83 | 1650 | 310 | 7.8 | 22.5 | 1.6 | -- | 120 |
| 01S/24E-03CDB | 08-04-83 | 1515 | 478 | 7.9 | 16.5 | .2 | -- | 170 |
| 03S/28E-07CAD | 07-28-83 | 0950 | 281 | 8.1 | 19.0 | 1.1 | -- | 100 |
| 04N/24E-14DAC | 08-10-83 | 1500 | 618 | 8.1 | 20.0 | .5 | -- | 67 |
| 04N/25E-10BDC | 08-04-83 | 0920 | 390 | 8.7 | 21.5 | .2 | -- | 4 |
| 04N/25E-13ADA | 08-01-83 | 1600 | 375 | 8.6 | 22.0 | 10.0 | -- | 6 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 25N/37E-27E01 | 07-21-82 | 9 | 18 | 5.5 | 12 | 27 | 0.6 | 3.3 |
| | 05-31-83 | 0 | 17 | 5.2 | 11 | 26 | .6 | 3.2 |
| | 08-11-83 | 15 | 19 | 5.6 | 11 | 24 | .6 | 3.3 |
| 25N/38E-15N01 | 07-20-82 | 32 | 43 | 12 | 26 | 26 | .9 | 2.0 |
| | 06-02-83 | 31 | 43 | 13 | 27 | 26 | .9 | 2.0 |
| | 08-10-83 | 28 | 40 | 12 | 26 | 27 | .9 | 2.1 |
| 26N/32E-26D01 | 07-23-82 | 0 | 14 | 9.4 | 18 | 34 | .9 | 3.0 |
| | 06-04-83 | 0 | 14 | 9.5 | 17 | 32 | .9 | 3.2 |
| | 09-07-83 | 0 | 14 | 9.7 | 17 | 32 | .9 | 2.9 |
| 26N/33E-07E01 | 07-23-82 | 41 | 50 | 24 | 29 | 22 | .8 | 4.4 |
| | 06-21-83 | 70 | 66 | 33 | 38 | 21 | 1 | 5.4 |
| | 08-11-83 | 68 | 78 | 38 | 43 | 21 | 1 | 5.2 |
| 26N/33E-19D01 | 06-04-83 | -- | 13 | 9.0 | 15 | 31 | .8 | 3.3 |
| | 08-11-83 | 0 | 13 | 9.2 | 15 | 31 | .8 | 3.0 |
| 28N/37E-29L01 | 06-03-83 | 5 | 33 | 5.8 | 5.6 | 10 | .2 | 1.4 |
| <u>Morrow County, Oreg.</u> | | | | | | | | |
| 01N/25E-10CDD | 07-28-83 | 0 | 24 | 13 | 23 | 29 | .9 | 7.4 |
| 01N/26E-05BBA | 07-25-83 | 0 | 22 | 11 | 35 | 41 | 2 | 8.3 |
| 01N/27E-05CCB | 07-28-83 | 0 | 27 | 13 | 23 | 28 | .9 | 5.7 |
| 01S/24E-03CDB | 08-04-83 | 0 | 42 | 17 | 29 | 26 | 1 | 4.5 |
| 03S/28E-07CAD | 07-28-83 | 0 | 25 | 9.7 | 24 | 32 | 1 | 6.3 |
| 04N/24E-14DAC | 08-10-83 | 0 | 16 | 6.5 | 100 | 73 | 5 | 10 |
| 04N/25E-10BDC | 08-04-83 | 0 | 1.1 | .2 | 81 | 89 | 18 | 14 |
| 04N/25E-13ADA | 08-01-83 | 0 | 1.9 | .3 | 77 | 89 | 14 | 12 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 25N/37E-27E01 | 07-21-82 | 58 | 71 | 0 | 12 | 6.3 | 0.2 | 50 |
| | 05-31-83 | 64 | 78 | 0 | 12 | 5.2 | .2 | 49 |
| | 08-11-83 | 56 | 68 | 0 | 13 | 7.4 | .2 | 47 |
| 25N/38E-15N01 | 07-20-82 | 125 | 152 | 0 | 30 | 18 | .2 | 48 |
| | 06-02-83 | 130 | 158 | 0 | 33 | 20 | .2 | 47 |
| | 08-10-83 | 121 | 148 | 0 | 32 | 21 | .3 | 46 |
| 26N/32E-26D01 | 07-23-82 | 105 | 128 | 0 | 6.0 | 2.5 | .5 | 39 |
| | 06-04-83 | 108 | 119 | 6 | 6.7 | 2.4 | .5 | 37 |
| | 09-07-83 | 107 | 114 | 8 | 6.3 | 2.4 | .5 | 37 |
| 26N/33E-07E01 | 07-23-82 | 183 | 223 | 0 | 59 | 25 | .3 | 46 |
| | 06-21-83 | 230 | 281 | 0 | 90 | 35 | .3 | 43 |
| | 08-11-83 | 283 | 345 | 0 | 110 | 42 | .3 | 44 |
| 26N/33E-19D01 | 06-04-83 | -- | -- | -- | 6.2 | 2.3 | .5 | 37 |
| | 08-11-83 | 101 | -- | -- | 6.0 | 2.5 | .5 | 37 |
| 28N/37E-29L01 | 06-03-83 | 101 | 123 | 0 | 10 | 1.2 | 1.0 | 27 |
| <u>Morrow County, Oreg.</u> | | | | | | | | |
| 01N/25E-10CDD | 07-28-83 | 139 | 169 | 0 | 18 | 11 | .5 | 61 |
| 01N/26E-05BBA | 07-25-83 | 144 | 176 | 0 | 20 | 20 | .6 | 67 |
| 01N/27E-05CCB | 07-28-83 | 157 | 192 | 0 | 9.1 | 11 | .5 | 67 |
| 01S/24E-03COB | 08-04-83 | 209 | 255 | 0 | 17 | 14 | .3 | 57 |
| 03S/28E-07CAD | 07-28-83 | 141 | 172 | 0 | 11 | 6.3 | .5 | 54 |
| 04N/24E-14DAC | 08-10-83 | 205 | 250 | 0 | 51 | 35 | 1.0 | 51 |
| 04N/25E-10BDC | 08-04-83 | 165 | 181 | 10 | .6 | 22 | 1.6 | 72 |
| 04N/25E-13ADA | 08-01-83 | 158 | 179 | 7 | .6 | 19 | 1.4 | 71 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | | |
| 25N/37E-27E01 | 07-21-82 | 166 | 5.3 | -- | <3 | 12 | <1 | 83 |
| | 05-31-83 | 165 | 5.3 | <10 | 12 | -- | <1 | -- |
| | 08-11-83 | 166 | 5.9 | <10 | 4 | -- | <1 | -- |
| 25N/38E-15N01 | 07-20-82 | 293 | 8.8 | -- | 3 | 12 | 3 | 200 |
| | 06-02-83 | 300 | 8.4 | <10 | 16 | -- | <1 | -- |
| | 08-10-83 | 280 | 6.3 | <10 | 7 | -- | 3 | -- |
| 26N/32E-26D01 | 07-23-82 | 160 | .91 | -- | 83 | 20 | 17 | 50 |
| | 06-04-83 | 155 | <.10 | <10 | 77 | -- | 15 | -- |
| | 09-07-83 | 154 | <.10 | <10 | 36 | -- | 17 | -- |
| 26N/33E-07E01 | 07-23-82 | 359 | 2.6 | -- | 12 | 19 | <1 | 240 |
| | 06-21-83 | 463 | 3.2 | 40 | 10 | -- | <1 | -- |
| | 08-11-83 | 543 | 3.0 | 40 | 5 | -- | <1 | -- |
| 26N/33E-19D01 | 06-04-83 | 146 | <.10 | <10 | 33 | -- | 11 | -- |
| | 08-11-83 | 146 | <.10 | <10 | 26 | -- | 20 | -- |
| 28N/37E-29L01 | 06-03-83 | 147 | .37 | <10 | <3 | -- | <1 | -- |
| <u>Morrow County, Oreg.--Continued</u> | | | | | | | | |
| 01N/25E-10CDD | 07-28-83 | 243 | .45 | 10 | 22 | -- | <1 | -- |
| 01N/26E-05BBA | 07-25-83 | 271 | <.10 | 20 | 26 | -- | 19 | -- |
| 01N/27E-05CCB | 07-28-83 | 254 | .70 | 20 | 34 | -- | <1 | -- |
| 01S/24E-03COB | 08-04-83 | 306 | <.10 | 30 | 110 | -- | 31 | -- |
| 03S/28E-07CAD | 07-28-83 | 223 | .33 | 10 | 13 | -- | <1 | -- |
| 04N/24E-14DAC | 08-10-83 | 394 | <.10 | 40 | 18 | -- | 72 | -- |
| 04N/25E-10BDC | 08-04-83 | 292 | <.10 | 60 | 88 | -- | 6 | -- |
| 04N/25E-13ADA | 08-01-83 | 278 | <.10 | 70 | 13 | -- | 4 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Sherman County, Oreg.</u> | | | | | | | | |
| 01N/17E-04CAA | 08-10-83 | 0900 | 335 | 7.8 | 20.0 | 0.6 | -- | 110 |
| 01S/17E-18ADD | 08-09-83 | 1400 | 322 | 7.8 | 18.0 | 4.9 | -- | 120 |
| 03N/17E-28DDB1 | 08-10-83 | 1045 | 400 | 7.7 | 19.5 | .3 | -- | 160 |
| 04S/15E-11DCB1 | 08-09-83 | 1630 | 370 | 7.8 | 17.0 | 1.5 | -- | 100 |
| <u>Spokane County, Wash.</u> | | | | | | | | |
| 21N/40E-27R01 | 07-21-82 | 1020 | 260 | 8.1 | 17.5 | .1 | -- | 88 |
| 21N/41E-02Q01 | 07-19-82 | 1630 | 350 | 8.0 | 18.0 | .4 | -- | 130 |
| 21N/43E-07G01 | 07-19-82 | 1450 | 205 | 7.4 | 13.0 | 5.7 | -- | 85 |
| | 03-22-83 | 1140 | 195 | 7.1 | 11.0 | 5.8 | -- | 82 |
| | 08-09-83 | 1100 | 200 | 7.5 | 12.5 | 5.4 | -- | 83 |
| 22N/41E-18Q01D1 | 07-21-82 | 0850 | 610 | 7.8 | 12.5 | .1 | -- | 290 |
| | 03-22-83 | 1100 | 625 | 7.4 | 10.5 | .1 | -- | 320 |
| 22N/43E-04F02 | 07-20-82 | 1200 | 232 | 8.0 | 18.0 | 1.2 | -- | 77 |
| | 08-26-83 | 1500 | 245 | 7.8 | 18.0 | 1.4 | -- | 81 |
| 23N/40E-32R01D1 | 07-20-82 | 1505 | 285 | 6.7 | 11.5 | 4.0 | -- | 99 |
| | 03-22-83 | 0900 | 218 | 6.5 | 9.5 | 5.5 | -- | 75 |
| | 08-09-83 | 1055 | 247 | 6.7 | 13.0 | 4.6 | -- | 84 |
| 23N/41E-04C01 | 07-20-82 | 1120 | 190 | 7.5 | 13.0 | 7.2 | -- | 81 |
| | 03-22-83 | 0900 | 184 | 7.4 | 11.5 | -- | -- | 79 |
| | 09-07-83 | 1230 | 193 | 7.2 | 12.5 | 7.6 | -- | 83 |
| 23N/41E-24P02D1 | 07-20-82 | 1720 | 481 | 7.7 | 14.5 | .6 | -- | 230 |
| | 03-22-83 | 1400 | 455 | 7.7 | 14.0 | .3 | -- | 220 |
| | 08-09-83 | 1430 | 421 | 8.0 | 15.5 | .6 | -- | 190 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|-------------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Sherman County, Oreg.</u> | | | | | | | | |
| 01N/17E-04CAA | 08-10-83 | 0 | 26 | 12 | 21 | 28 | 0.9 | 4.5 |
| 01S/17E-18ADD | 08-09-83 | 0 | 27 | 12 | 20 | 26 | .8 | 4.9 |
| 03N/17E-28DDB1 | 08-10-83 | 0 | 33 | 19 | 21 | 22 | .7 | 4.8 |
| 04S/15E-11DCB1 | 08-09-83 | 0 | 19 | 13 | 34 | 40 | 1 | 6.4 |
| <u>Spokane County, Wash.</u> | | | | | | | | |
| 21N/40E-27R01 | 07-21-82 | 0 | 17 | 11 | 23 | 35 | 1 | 3.0 |
| 21N/41E-02Q01 | 07-19-82 | 0 | 21 | 18 | 27 | 31 | 1 | 3.1 |
| 21N/43E-07G01 | 07-19-82 | 0 | 21 | 7.8 | 9.9 | 20 | .5 | 2.4 |
| | 03-22-83 | 0 | 20 | 7.8 | 10 | 20 | .5 | 2.0 |
| | 08-09-83 | 0 | 20 | 8.1 | 10 | 20 | .5 | 2.2 |
| 22N/41E-18Q01D1 | 07-21-82 | 130 | 60 | 35 | 15 | 10 | .4 | 2.5 |
| | 03-22-83 | 120 | 61 | 40 | 16 | 10 | .4 | 2.5 |
| 22N/43E-04F02 | 07-20-82 | 0 | 15 | 9.6 | 22 | 37 | 1 | 2.6 |
| | 08-26-83 | 0 | 16 | 9.9 | 23 | 37 | 1 | 2.3 |
| 23N/40E-32R01D1 | 07-20-82 | 47 | 24 | 9.4 | 14 | 22 | .6 | 5.0 |
| | 03-22-83 | 32 | 18 | 7.3 | 10 | 21 | .5 | 4.1 |
| | 08-09-83 | 25 | 20 | 8.2 | 13 | 24 | .6 | 4.6 |
| 23N/41E-04C01 | 07-20-82 | 0 | 22 | 6.3 | 8.3 | 18 | .4 | 1.5 |
| | 03-22-83 | 0 | 21 | 6.4 | 7.9 | 18 | .4 | 1.4 |
| | 09-07-83 | 0 | 22 | 6.7 | 8.3 | 18 | .4 | 1.5 |
| 23N/41E-24P02D1 | 07-20-82 | 0 | 48 | 26 | 22 | 17 | .6 | 2.5 |
| | 03-22-83 | 0 | 46 | 26 | 21 | 17 | .6 | 2.4 |
| | 08-09-83 | 0 | 38 | 22 | 17 | 16 | .5 | 2.6 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|------------------------------|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Sherman County, Oreg.</u> | | | | | | | | |
| 01N/17E-04CAA | 08-10-83 | 134 | 163 | 0 | 15 | 11 | 0.5 | 63 |
| 01S/17E-18ADD | 08-09-83 | 130 | 158 | 0 | 12 | 11 | .5 | 61 |
| 03N/17E-28DDB1 | 08-10-83 | 185 | 225 | 0 | 20 | 7.2 | .8 | 53 |
| 04S/15E-11DCB1 | 08-09-83 | 135 | 165 | 0 | 23 | 17 | .8 | 49 |
| <u>Spokane County, Wash.</u> | | | | | | | | |
| 21N/40E-27R01 | 07-21-82 | 137 | 167 | 0 | <5.0 | 2.2 | .6 | 56 |
| 21N/41E-02Q01 | 07-19-82 | 182 | 222 | 0 | 8.0 | 2.4 | .4 | 45 |
| 21N/43E-07G01 | 07-19-82 | 102 | 124 | 0 | <5.0 | 2.2 | .3 | 57 |
| | 03-22-83 | 98 | 119 | 0 | 2.3 | 2.0 | .3 | 56 |
| | 08-09-83 | 102 | 125 | 0 | 2.5 | 2.2 | .3 | 54 |
| 22N/41E-18Q01D1 | 07-21-82 | 169 | 206 | 0 | 140 | 7.5 | .3 | 49 |
| | 03-22-83 | 199 | 243 | 0 | 160 | 7.6 | .3 | 49 |
| 22N/43E-04F02 | 07-20-82 | 125 | 153 | 0 | <5.0 | 2.2 | .6 | 51 |
| | 08-26-83 | 123 | 150 | 0 | 2.5 | 3.2 | .6 | 51 |
| 23N/40E-32R01D1 | 07-20-82 | 52 | 63 | 0 | 30 | 22 | .1 | 46 |
| | 03-22-83 | 43 | 53 | 0 | 23 | 13 | .1 | 42 |
| | 08-09-83 | 58 | 71 | 0 | 24 | 13 | .2 | 45 |
| 23N/41E-04C01 | 07-20-82 | 87 | 106 | 0 | <5.0 | 2.6 | .2 | 53 |
| | 03-22-83 | 89 | 109 | 0 | 4.2 | 3.4 | .2 | 49 |
| | 09-07-83 | 84 | 103 | 0 | 4.2 | 2.3 | .2 | 52 |
| 23N/41E-24P02D1 | 07-20-82 | 276 | 336 | 0 | <5.0 | 2.4 | .3 | 51 |
| | 03-22-83 | 270 | 329 | 0 | 4.6 | 2.4 | .2 | 48 |
| | 08-09-83 | 278 | 339 | 0 | 3.9 | 2.1 | .3 | 47 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Sherman County, Oreg.</u> | | | | | | | | |
| 01N/17E-04CAA | 08-10-83 | 234 | 0.23 | 10 | 14 | -- | 3 | -- |
| 01S/17E-18ADD | 08-09-83 | 232 | 1.3 | <10 | 7 | -- | 2 | -- |
| 03N/17E-28DDB1 | 08-10-83 | 270 | <.10 | 40 | 110 | -- | 41 | -- |
| 04S/15E-11DCB1 | 08-09-83 | 251 | 1.8 | <10 | 83 | -- | 9 | -- |
| <u>Spokane County, Wash.</u> | | | | | | | | |
| 21N/40E-27R01 | 07-21-82 | -- | <.10 | -- | 8 | 24 | 9 | 57 |
| 21N/41E-02Q01 | 07-19-82 | 234 | <.10 | -- | 6 | 33 | 7 | 76 |
| 21N/43E-07G01 | 07-19-82 | -- | 1.2 | -- | <3 | 10 | 1 | 91 |
| | 03-22-83 | 165 | 1.3 | <10 | <3 | -- | 3 | -- |
| | 08-09-83 | 167 | 1.5 | -- | 3 | -- | <1 | -- |
| 22N/41E-18Q01D1 | 07-21-82 | 412 | <.10 | -- | 660 | 26 | 590 | 250 |
| | 03-22-83 | 458 | <.10 | 10 | 1,100 | -- | 680 | -- |
| 22N/43E-04F02 | 07-20-82 | -- | .57 | -- | 4 | 23 | 2 | 63 |
| | 08-26-83 | 187 | 1.1 | -- | 6 | -- | <1 | -- |
| 23N/40E-32R01D1 | 07-20-82 | 208 | 6.0 | -- | 24 | 12 | 3 | 100 |
| | 03-22-83 | 168 | 5.6 | 60 | 83 | -- | 2 | -- |
| | 08-09-83 | 183 | 4.5 | -- | 36 | -- | 2 | -- |
| 23N/41E-04C01 | 07-20-82 | -- | 1.8 | -- | 5 | 11 | 1 | 100 |
| | 03-22-83 | 155 | 1.7 | <10 | 10 | -- | 5 | -- |
| | 09-07-83 | 156 | 1.8 | <10 | <3 | -- | 20 | -- |
| 23N/41E-24P02D1 | 07-20-82 | -- | .10 | -- | 94 | 25 | 44 | 200 |
| | 03-22-83 | 313 | <.10 | <10 | 110 | -- | 29 | -- |
| | 08-09-83 | 300 | <.10 | <10 | 34 | -- | 18 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Spokane County, Wash.--Continued</u> | | | | | | | | |
| 23N/42E-22H01 | 07-19-82 | 1015 | 198 | 6.1 | 10.0 | 4.8 | -- | 71 |
| | 03-22-83 | 1510 | 174 | 6.3 | 9.5 | 6.7 | -- | 65 |
| | 08-09-83 | 1600 | 180 | 6.6 | 10.0 | 4.1 | -- | 68 |
| 23N/43E-06G01 | 07-19-82 | 0855 | 196 | 7.4 | 12.0 | 7.7 | -- | 100 |
| | 03-22-83 | 1630 | 197 | 7.1 | 9.5 | 7.7 | -- | 90 |
| | 08-10-83 | 0930 | 201 | 7.5 | 11.5 | 8.2 | -- | 88 |
| 23N/43E-30R03 | 07-20-82 | 0950 | 265 | 8.1 | 14.5 | -- | -- | 100 |
| 24N/40E-05Q01 | 07-20-82 | 1205 | 360 | 7.4 | 10.5 | 5.3 | -- | 130 |
| | 03-22-83 | 1335 | 342 | 7.7 | 7.5 | 5.0 | -- | 130 |
| | 08-09-83 | 1030 | 410 | 7.5 | 10.5 | 6.7 | -- | 150 |
| 24N/41E-01J02 | 07-19-82 | 1410 | 372 | 6.9 | 9.5 | 2.7 | -- | 140 |
| | 03-23-83 | 1155 | 370 | 6.9 | 9.0 | 1.8 | -- | 140 |
| | 08-09-83 | 1545 | 402 | 6.9 | 10.5 | 1.5 | -- | 140 |
| 24N/41E-14D01 | 07-19-82 | 1600 | 213 | 7.7 | 15.5 | .4 | -- | 82 |
| | 03-22-83 | 1030 | 201 | 8.0 | 16.0 | .1 | -- | 77 |
| | 08-09-83 | 1315 | 211 | 7.9 | 16.0 | .1 | -- | 77 |
| 24N/42E-02E02 | 07-19-82 | 0845 | 332 | 7.2 | 11.0 | 4.5 | -- | 130 |
| | 03-22-83 | 1605 | 416 | 7.3 | 10.0 | -- | -- | 140 |
| | 08-10-83 | 1030 | 350 | 7.5 | 11.0 | 4.8 | -- | 130 |
| 24N/42E-09Q03 | 07-20-82 | 0925 | 330 | 7.6 | 11.5 | 7.9 | -- | 160 |
| | 03-23-83 | 1020 | 318 | 7.6 | 11.5 | 10.2 | -- | 160 |
| | 08-09-83 | 1730 | 322 | 7.7 | 12.0 | 9.2 | -- | 160 |
| <u>Umatilla County, Oreg.</u> | | | | | | | | |
| 01S/32E-09BBA | 08-03-83 | 1900 | 300 | 8.0 | 25.0 | 2.3 | -- | 97 |
| 02N/28E-01DBB | 07-21-83 | 1553 | 295 | -- | 21.0 | -- | -- | 130 |
| 02N/28E-10ABD | 08-02-83 | 1026 | 342 | 7.8 | 24.0 | .2 | -- | 130 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Spokane County, Wash.--Continued</u> | | | | | | | | |
| 23N/42E-22H01 | 07-19-82 | 4 | 17 | 7.0 | 8.0 | 18 | 0.4 | 5.5 |
| | 03-22-83 | 0 | 15 | 6.6 | 7.0 | 18 | .4 | 5.4 |
| | 08-09-83 | 0 | 16 | 6.8 | 7.5 | 18 | .4 | 5.4 |
| 23N/43E-06G01 | 07-19-82 | 7 | 30 | 6.7 | 8.1 | 14 | .3 | 1.4 |
| | 03-22-83 | 0 | 25 | 6.8 | 8.1 | 16 | .4 | 1.3 |
| | 08-10-83 | 0 | 24 | 6.7 | 8.0 | 16 | .4 | 1.4 |
| 23N/43E-30R03 | 07-20-82 | 0 | 21 | 12 | 15 | 24 | .6 | 1.8 |
| 24N/40E-05Q01 | 07-20-82 | 0 | 31 | 12 | 23 | 28 | .9 | 3.3 |
| | 03-22-83 | 0 | 33 | 12 | 24 | 28 | .9 | 3.6 |
| | 08-09-83 | 0 | 37 | 14 | 26 | 27 | .9 | 4.4 |
| 24N/41E-01J02 | 07-19-82 | 0 | 38 | 11 | 25 | 27 | .9 | 3.1 |
| | 03-23-83 | 0 | 37 | 11 | 24 | 27 | .9 | 3.2 |
| | 08-09-83 | 0 | 38 | 12 | 24 | 26 | .9 | 3.3 |
| 24N/41E-14D01 | 07-19-82 | 0 | 19 | 8.4 | 17 | 30 | .8 | 3.1 |
| | 03-22-83 | 0 | 17 | 8.3 | 16 | 30 | .8 | 3.1 |
| | 08-09-83 | 0 | 17 | 8.4 | 16 | 30 | .8 | 2.8 |
| 24N/42E-02E02 | 07-19-82 | 0 | 34 | 11 | 21 | 26 | .8 | 2.4 |
| | 03-22-83 | 0 | 38 | 12 | 32 | 32 | 1 | 2.4 |
| | 08-10-83 | 0 | 33 | 11 | 20 | 25 | .8 | 2.4 |
| 24N/42E-09Q03 | 07-20-82 | 4 | 45 | 11 | 4.2 | 5 | .1 | 2.8 |
| | 03-23-83 | 12 | 46 | 12 | 4.1 | 5 | .1 | 2.7 |
| | 08-09-83 | 0 | 43 | 12 | 4.2 | 5 | .1 | 3.0 |
| <u>Umatilla County, Oreg.</u> | | | | | | | | |
| 01S/32E-09BBA | 08-03-83 | 0 | 24 | 8.9 | 22 | 31 | 1 | 6.5 |
| 02N/28E-01DBB | 07-21-83 | -- | 32 | 13 | 16 | 20 | .6 | 5.6 |
| 02N/28E-10ABD | 08-02-83 | 0 | 31 | 13 | 20 | 24 | .8 | 6.8 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Spokane County, Wash.--Continued</u> | | | | | | | | |
| 23N/42E-22H01 | 07-19-82 | 67 | 82 | 0 | 16 | 5.9 | 0.1 | 55 |
| | 03-22-83 | 69 | 84 | 0 | 13 | 4.6 | .1 | 51 |
| | 08-09-83 | 74 | 90 | 0 | 14 | 4.3 | .1 | 51 |
| 23N/43E-06G01 | 07-19-82 | 95 | 116 | 0 | <5.0 | 1.1 | .3 | 51 |
| | 03-22-83 | 98 | 119 | 0 | 3.1 | 1.1 | .3 | 50 |
| | 08-10-83 | 98 | 119 | 0 | 2.9 | 1.1 | .3 | 48 |
| 23N/43E-30R03 | 07-20-82 | 125 | 153 | 0 | 10 | 1.8 | .4 | 51 |
| 24N/40E-05Q01 | 07-20-82 | 161 | 196 | 0 | 15 | 5.5 | .3 | 37 |
| | 03-22-83 | 157 | 192 | 0 | 19 | 6.1 | .2 | 31 |
| | 08-09-83 | 193 | 235 | 0 | 14 | 6.1 | .2 | 34 |
| 24N/41E-01J02 | 07-19-82 | 148 | 180 | 0 | 24 | 15 | .2 | 39 |
| | 03-23-83 | 138 | 168 | 0 | 23 | 17 | .2 | 37 |
| | 08-09-83 | 152 | 186 | 0 | 25 | 17 | .2 | 38 |
| 24N/41E-14D01 | 07-19-82 | 112 | 136 | 0 | 8 | 2.0 | .4 | 50 |
| | 03-22-83 | 99 | 121 | 0 | 8 | 2.0 | .4 | 48 |
| | 08-09-83 | 106 | 129 | 0 | 8 | 1.9 | .4 | 49 |
| 24N/42E-02E02 | 07-19-82 | 139 | 169 | 0 | 17 | 4.3 | .3 | 51 |
| | 03-22-83 | 159 | 194 | 0 | 25 | 7.0 | .4 | 47 |
| | 08-10-83 | 141 | 172 | 0 | 17 | 5.0 | .4 | 48 |
| 24N/42E-09Q03 | 07-20-82 | 154 | 188 | 0 | 10 | 2.3 | .1 | 38 |
| | 03-23-83 | 152 | 186 | 0 | 10 | 2.7 | .1 | 36 |
| | 08-09-83 | 159 | 194 | 0 | 11 | 2.4 | .1 | 35 |
| <u>Umatilla County, Oreg.</u> | | | | | | | | |
| 01S/32E-09BBA | 08-03-83 | 136 | 166 | 0 | 13 | 7.6 | .5 | 70 |
| 02N/28E-01DBB | 07-21-83 | -- | -- | -- | 13 | 14 | .3 | 60 |
| 02N/28E-10ABD | 08-02-83 | 176 | 214 | 0 | .9 | 9.7 | .3 | 66 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Spokane County, Wash.--Continued</u> | | | | | | | | |
| 23N/42E-22H01 | 07-19-82 | 159 | 0.85 | -- | 10 | 8 | 1 | 75 |
| | 03-22-83 | 149 | 1.2 | <10 | 26 | -- | 5 | -- |
| | 08-09-83 | 153 | .73 | -- | 28 | -- | <1 | -- |
| 23N/43E-06G01 | 07-19-82 | -- | 2.2 | -- | 4 | 8 | 5 | 120 |
| | 03-22-83 | 164 | 2.3 | 20 | 11 | -- | 9 | -- |
| | 08-10-83 | 161 | 2.3 | -- | 5 | -- | <1 | -- |
| 23N/43E-30R03 | 07-20-82 | 189 | <.10 | -- | 190 | 18 | 15 | 76 |
| 24N/40E-05Q01 | 07-20-82 | 229 | 1.2 | -- | 10 | 17 | 6 | 160 |
| | 03-22-83 | 227 | .72 | <10 | 10 | -- | 2 | -- |
| | 08-09-83 | 255 | .90 | <10 | <3 | -- | 2 | -- |
| 24N/41E-01J02 | 07-19-82 | 252 | 1.9 | -- | 7 | 17 | 1 | 170 |
| | 03-23-83 | 243 | 1.8 | 10 | 41 | -- | 5 | -- |
| | 08-09-83 | 255 | 1.3 | 10 | 42 | -- | <1 | -- |
| 24N/41E-14D01 | 07-19-82 | 175 | <.10 | -- | 91 | 12 | 13 | 110 |
| | 03-22-83 | 163 | <.10 | <10 | 92 | -- | 10 | -- |
| | 08-09-83 | 137 | <.10 | <10 | 96 | -- | 12 | -- |
| 24N/42E-02E02 | 07-19-82 | 241 | 3.7 | -- | 5 | 11 | <1 | 150 |
| | 03-22-83 | 286 | 6.0 | <10 | 6 | -- | <1 | -- |
| | 08-10-83 | 240 | 4.2 | <10 | <3 | -- | 5 | -- |
| 24N/42E-09Q03 | 07-20-82 | 212 | 1.4 | -- | 3 | 12 | 4 | 150 |
| | 03-23-83 | 213 | 1.7 | <10 | 4 | -- | 4 | -- |
| | 08-09-83 | 212 | 1.4 | <10 | <3 | -- | 1 | -- |
| <u>Umatilla County, Oreg.--Continued</u> | | | | | | | | |
| 01S/32E-09BBA | 08-03-83 | 238 | .95 | 40 | 30 | -- | <1 | -- |
| 02N/28E-01DBB | 07-21-83 | 242 | 1.0 | 10 | 11 | -- | <1 | -- |
| 03N/28E-10ABD | 08-02-83 | 253 | <.10 | 20 | 9 | -- | 140 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (µS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/l as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Umatilla County, Oreg.--Continued</u> | | | | | | | | |
| 02N/32E-10CCD | 07-27-83 | 1500 | 413 | 7.6 | 19.0 | 3.3 | -- | 130 |
| 02N/33E-14DAC | 08-02-83 | 1400 | 268 | 8.1 | 17.0 | .2 | -- | 90 |
| 03N/28E-06DCC | 07-26-83 | 1000 | 282 | 8.0 | 19.5 | 7.8 | -- | 89 |
| 03N/28E-35BAA | 07-21-83 | 1335 | 328 | 8.1 | 26.0 | -- | -- | 89 |
| 03N/29E-20BBB | 08-02-83 | 0830 | 585 | 8.2 | 18.5 | .4 | -- | 51 |
| 04N/28E-11BAB | 07-22-83 | 0900 | 382 | 8.3 | 23.5 | .3 | -- | 29 |
| 04N/30E-28CBB | 07-21-83 | 0612 | 375 | 8.0 | 22.0 | .4 | -- | 48 |
| 04N/35E-19CDA | 08-02-83 | 1515 | 290 | 8.1 | 24.0 | .2 | -- | 80 |
| 05N/28E-16ADD | 07-21-83 | 1230 | 440 | 9.1 | 24.5 | .2 | -- | 5 |
| <u>Union County, Oreg.</u> | | | | | | | | |
| 01S/38E-24DDC1 | 08-23-83 | 1323 | 135 | 9.2 | 31.5 | .2 | -- | -- |
| 01S/39E-09CDC1 | 08-23-83 | 1100 | 141 | 8.8 | 22.0 | -- | -- | 16 |
| 03S/38E-05CBA1 | 08-23-83 | 0710 | 119 | 8.7 | 28.5 | -- | -- | 16 |
| 04S/40E-19BAA1 | 08-23-83 | 1541 | 263 | 8.2 | 22.5 | .8 | -- | 50 |
| <u>Walla Walla County, Wash.</u> | | | | | | | | |
| 06N/31E-04P01 | 08-30-82 | 1310 | 765 | 7.6 | 17.5 | 9.3 | -- | 310 |
| | 05-16-83 | 1215 | 695 | 7.5 | 18.0 | 8.0 | -- | 290 |
| | 07-20-83 | 1715 | 659 | 7.5 | 18.5 | 8.5 | -- | 270 |
| 06N/32E-01Q01D1 | 08-30-82 | 1000 | 300 | 7.9 | 21.5 | .4 | -- | 91 |
| | 05-16-83 | 1445 | 305 | 8.2 | 21.5 | .1 | -- | 88 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Umatilla County, Oreg.--Continued</u> | | | | | | | | |
| 02N/32E-10CCD | 07-27-83 | 0 | 36 | 10 | 41 | 39 | 2 | 7.4 |
| 02N/33E-14DAC | 08-02-83 | 0 | 23 | 8.0 | 18 | 29 | .8 | 4.4 |
| 03N/28E-06DCC | 07-26-83 | 0 | 23 | 7.7 | 25 | 36 | 1 | 5.1 |
| 03N/28E-35BAA | 07-21-83 | 0 | 21 | 8.8 | 39 | 47 | 2 | 7.0 |
| 03N/29E-20BBB | 08-02-83 | 0 | 9.7 | 6.6 | 90 | 71 | 5 | 22 |
| 04N/28E-11BAB | 07-22-83 | 0 | 9.0 | 1.5 | 70 | 78 | 6 | 12 |
| 04N/30E-28CBB | 07-21-83 | 0 | 14 | 3.1 | 65 | 69 | 4 | 13 |
| 04N/33E-19COA | 08-02-83 | -- | 22 | 6.1 | 32 | 44 | 2 | 6.6 |
| 05N/28E-16ADD | 07-21-83 | 0 | 1.8 | <.1 | 100 | 92 | 20 | 12 |
| <u>Union County, Oreg.</u> | | | | | | | | |
| 01S/38E-24DDC1 | 08-23-83 | -- | 2.2 | <.1 | 27 | -- | -- | 5.4 |
| 01S/39E-09CDC1 | 08-23-83 | 0 | 6.2 | <.1 | 23 | 69 | 3 | 5.6 |
| 03S/38E-05CBA1 | 08-23-83 | -- | 5.7 | .3 | 21 | 67 | 2 | 5.8 |
| 04S/40E-19BAA1 | 08-23-83 | 0 | 14 | 3.7 | 37 | 58 | 2 | 6.6 |
| <u>Walla Walla County, Wash.</u> | | | | | | | | |
| 06N/31E-04P01 | 08-30-82 | 110 | 76 | 29 | 35 | 19 | .9 | 7.2 |
| | 05-16-83 | 81 | 72 | 27 | 34 | 20 | .9 | 6.8 |
| | 07-20-83 | 110 | 64 | 27 | 26 | 17 | .7 | 7.3 |
| 06N/32E-01Q01D1 | 08-30-82 | 0 | 24 | 7.6 | 28 | 37 | 1 | 8.1 |
| | 05-16-83 | 0 | 23 | 7.5 | 27 | 37 | 1 | 7.6 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|--|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Umatilla County, Oreg.--Continued</u> | | | | | | | | |
| 02N/32E-10CCD | 07-27-83 | 175 | 213 | 0 | 26 | 16 | 0.6 | 56 |
| 02N/33E-14DAC | 08-02-83 | 122 | 149 | 0 | 9.5 | 3.8 | .4 | 57 |
| 03N/28E-06DCC | 07-26-83 | 132 | 161 | 0 | 9.4 | 7.6 | .5 | 55 |
| 03N/28E-35BAA | 07-21-83 | 166 | 202 | 0 | 1.3 | 20 | 1.0 | 75 |
| 03N/29E-20BBB | 08-02-83 | 126 | 154 | 0 | 93 | 44 | .6 | 55 |
| 04N/28E-11BAB | 07-22-83 | 157 | 191 | 0 | 23 | 16 | 1.5 | 89 |
| 04N/30E-28CBB | 07-21-83 | 149 | 182 | 0 | 29 | 16 | .9 | 67 |
| 04N/33E-19CDA | 08-02-83 | -- | -- | -- | 10 | 5.0 | .8 | 79 |
| 05N/28E-16ADD | 07-21-83 | 148 | 114 | 33 | 34 | 34 | 3.4 | 63 |
| <u>Union County, Oreg.</u> | | | | | | | | |
| 01S/38E-24DDC1 | 08-23-83 | 65 | 41 | 19 | 6.3 | 1.7 | 1.7 | 89 |
| 01S/39E-09CDC1 | 08-23-83 | 66 | 63 | 9 | 4.4 | 1.0 | .6 | 67 |
| 03S/38E-05CBA1 | 08-23-83 | -- | -- | -- | 3.6 | .8 | .5 | 79 |
| 04S/40E-19BAA1 | 08-23-83 | 116 | 142 | 0 | 8.5 | 9.1 | .6 | 63 |
| <u>Walla Walla County, Wash.</u> | | | | | | | | |
| 06N/31E-04P01 | 08-30-82 | 204 | 249 | 0 | 100 | 44 | .4 | 43 |
| | 05-16-83 | 210 | 256 | 0 | 94 | 35 | .4 | 40 |
| | 07-20-83 | 159 | 194 | 0 | 94 | 37 | .4 | 45 |
| 06N/32E-01Q01D1 | 08-30-82 | 131 | 160 | 0 | 18 | 8.7 | .5 | 76 |
| | 05-16-83 | 130 | 158 | 0 | 18 | 8.6 | .6 | 75 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Umatilla County, Oreg.--Continued</u> | | | | | | | | |
| 02N/32E-10CCD | 07-27-83 | 306 | 1.8 | 20 | 4 | -- | <1 | -- |
| 02N/33E-14DAC | 08-02-83 | 197 | <.10 | 10 | 13 | -- | 7 | -- |
| 03N/28E-06DCC | 07-26-83 | 213 | .16 | 30 | 28 | -- | 8 | -- |
| 03N/28E-35BAA | 07-21-83 | 273 | <.10 | 100 | 33 | -- | 12 | -- |
| 03N/29E-20BBB | 08-02-83 | 397 | .15 | 30 | 19 | -- | 18 | -- |
| 04N/28E-11BAB | 07-22-83 | 294 | <.10 | 60 | 8 | -- | 5 | -- |
| 04N/30E-28CBB | 07-21-83 | 301 | .37 | 40 | 10 | -- | <1 | -- |
| 04N/35E-19CDA | 08-02-83 | 236 | <.10 | 20 | 18 | -- | 2 | -- |
| 05N/28E-16ADD | 07-21-83 | 346 | <.10 | 130 | 18 | -- | 2 | -- |
| <u>Union County, Oreg.</u> | | | | | | | | |
| 01S/38E-24DC1 | 08-23-83 | -- | <.10 | 90 | 8 | -- | 1 | -- |
| 01S/39E-09CDC1 | 08-23-83 | 148 | <.10 | 30 | 26 | -- | 7 | -- |
| 03S/38E-05CBA1 | 08-23-83 | 155 | <.10 | 30 | 31 | -- | 4 | -- |
| 04S/40E-19BAA1 | 08-23-83 | 213 | <.10 | 220 | 82 | -- | 37 | -- |
| <u>Walla Walla County, Wash.</u> | | | | | | | | |
| 06N/31E-04PO1 | 08-30-82 | 496 | 8.8 | -- | 7 | 18 | 12 | 340 |
| | 05-16-83 | 460 | 5.6 | 70 | 15 | -- | 2 | -- |
| | 07-20-83 | 426 | 6.7 | -- | 22 | -- | 23 | -- |
| 06N/32E-01Q01D1 | 08-30-82 | 250 | <.10 | -- | 22 | 14 | 29 | 80 |
| | 05-16-83 | 245 | <.10 | 40 | 20 | -- | 28 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (µS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Walla Walla County, Wash.--Continued</u> | | | | | | | | |
| 06N/33E-03R01 | 06-23-82 | 1145 | 538 | 7.4 | 16.0 | -- | <1 | 220 |
| 06N/33E-08P01 | 07-13-82 | 1200 | 422 | 7.9 | 19.5 | -- | <1 | 150 |
| 06N/34E-07R01 | 06-23-82 | 0815 | 525 | 8.8 | 38.0 | -- | <1 | 85 |
| | 08-13-83 | 1700 | 520 | 9.1 | 43.5 | -- | -- | 11 |
| 06N/36E-04A03 | 06-22-82 | 1800 | 375 | 7.6 | 14.0 | -- | <1 | 150 |
| 06N/36E-07E02 | 06-23-82 | 0810 | 236 | 8.0 | 20.0 | -- | <1 | 75 |
| 07N/31E-10R01 | 06-24-82 | 0800 | 349 | 7.6 | 19.0 | -- | <1 | 120 |
| 07N/32E-07D01 | 06-24-82 | 1000 | 308 | 7.7 | -- | -- | <1 | 36 |
| 07N/33E-35G01 | 06-23-82 | 1330 | 2,200 | 7.4 | 13.0 | -- | <1 | 660 |
| 07N/34E-21M03 | 06-23-82 | 1615 | 330 | 7.8 | 18.5 | -- | <1 | 89 |
| 07N/34E-36B02 | 06-23-82 | 1745 | 508 | 7.0 | 14.5 | -- | <1 | 200 |
| 07N/35E-31B01 | 06-24-82 | 0740 | 505 | 7.4 | 14.5 | -- | <1 | 180 |
| 07N/35E-32H02 | 06-24-82 | 0855 | 500 | 7.5 | 13.5 | -- | <1 | 180 |
| 07N/35E-33H03 | 06-23-82 | 1320 | 245 | 7.9 | 19.5 | -- | <1 | 76 |
| 07N/35E-35C01 | 06-23-82 | 1130 | 462 | 6.8 | 15.0 | -- | <1 | 180 |
| 07N/36E-10B01 | 06-22-82 | 1530 | 227 | 8.0 | 20.5 | -- | <1 | 81 |
| 07N/36E-27N04 | 06-22-82 | 1655 | 262 | 7.3 | 13.0 | -- | <1 | 120 |
| 07N/36E-30R01 | 06-23-82 | 1020 | 192 | 6.6 | 13.0 | -- | <1 | 80 |
| 08N/30E-01N01 | 06-24-82 | 1330 | 885 | 7.7 | 17.5 | -- | <1 | 340 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hard- ness, noncar- bonate (mg/L as CaCO ₃) | Calcium, dis- solved (mg/L as Ca) | Magne- sium, dis- solved (mg/L as Mg) | Sodium, dis- solved (mg/L as Na) | Sodium percent | Sodium ad- sor- ption ratio | Potas- sium, dis- solved (mg/L as K) |
|---|----------|---|---|--|--|-------------------|---|---|
| <u>Walla Walla County, Wash.--Continued</u> | | | | | | | | |
| 06N/33E-03R01 | 06-23-82 | 11 | 62 | 16 | 32 | 23 | 0.9 | 5.2 |
| 06N/33E-08P01 | 07-13-82 | 20 | 35 | 14 | 30 | 30 | 1 | 7.4 |
| 06N/34E-07R01 | 06-23-82 | 0 | 24 | 6.1 | 81 | 64 | 4 | 9.8 |
| | 08-13-83 | 0 | 4.1 | .30 | 90 | 89 | 12 | 10 |
| 06N/36E-04A03 | 06-22-82 | 0 | 37 | 14 | 25 | 26 | .9 | 3.5 |
| 06N/36E-07E02 | 06-23-82 | 0 | 20 | 6.2 | 19 | 34 | 1 | 5.0 |
| 07N/31E-10R01 | 06-24-82 | 0 | 32 | 9.5 | 31 | 35 | 1 | 4.6 |
| 07N/32E-07D01 | 06-24-82 | 0 | 11 | 2.1 | 50 | 68 | 4 | 12 |
| 07N/33E-35G01 | 06-23-82 | 0 | 160 | 63 | 310 | 50 | 5 | 14 |
| 07N/34E-21M03 | 06-23-82 | 0 | 26 | 5.8 | 41 | 47 | 2 | 8.5 |
| 07N/34E-36B02 | 06-23-82 | 18 | 52 | 18 | 24 | 20 | .7 | 8.2 |
| 07N/35E-31B01 | 06-24-82 | 8 | 50 | 14 | 29 | 25 | .9 | 8.0 |
| 07N/35E-32H02 | 06-24-82 | 15 | 44 | 18 | 29 | 25 | .9 | 7.0 |
| 07N/35E-33H03 | 06-23-82 | 0 | 21 | 5.7 | 21 | 35 | 1 | 5.7 |
| 07N/35E-35C01 | 06-23-82 | 13 | 4.3 | 17 | 27 | 24 | .9 | 7.1 |
| 07N/36E-10B01 | 06-22-82 | 0 | 20 | 7.6 | 16 | 29 | .8 | 4.0 |
| 07N/36E-27N04 | 06-22-82 | 0 | 28 | 12 | 9.6 | 15 | .4 | 2.7 |
| 07N/36E-30R01 | 06-23-82 | 0 | 19 | 7.8 | 6.4 | 14 | .3 | 4.0 |
| 08N/30E-01N01 | 06-24-82 | 25 | 97 | 24 | 57 | 26 | 1 | 9.9 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Walla Walla County, Wash.--Continued</u> | | | | | | | | |
| 06N/33E-03R01 | 06-23-82 | 210 | 256 | 0 | 67 | 16 | 0.3 | 51 |
| 06N/33E-08P01 | 07-13-82 | 125 | 152 | 0 | 38 | 29 | .5 | 56 |
| 06N/34E-07R01 | 06-23-82 | 151 | 133 | 25 | 28 | 72 | 2.4 | 98 |
| | 08-13-83 | 61 | 74 | 33 | 2.9 | 72 | 2.4 | 100 |
| 06N/36E-04A03 | 06-22-82 | 175 | 213 | 0 | 10 | 6.7 | .6 | 54 |
| 06N/36E-07E02 | 06-23-82 | 109 | 133 | 0 | 11 | 5.4 | .5 | 64 |
| 07N/31E-10R01 | 06-24-82 | 150 | 183 | 0 | 23 | 16 | .7 | 43 |
| 07N/32E-07D01 | 06-24-82 | 125 | 152 | 0 | 6.0 | 26 | 2.4 | 97 |
| 07N/33E-35G01 | 06-23-82 | 1,040 | 1,270 | 0 | 50 | 140 | .2 | 46 |
| 07N/34E-21M03 | 06-23-82 | 166 | 202 | 0 | 12 | 9.1 | .7 | 65 |
| 07N/34E-36B02 | 06-23-82 | 186 | 227 | 0 | 30 | 36 | .3 | 50 |
| 07N/35E-31B01 | 06-24-82 | 175 | 213 | 0 | 30 | 39 | .3 | 50 |
| 07N/35E-32H02 | 06-24-82 | 169 | 206 | 0 | 26 | 34 | .2 | 53 |
| 07N/35E-33H03 | 06-23-82 | 113 | 138 | 0 | 6.0 | 6.5 | .5 | 63 |
| 07N/35E-35C01 | 06-23-82 | 164 | 200 | 0 | 29 | 17 | .2 | 53 |
| 07N/36E-10B01 | 06-22-82 | 118 | 144 | 0 | 6.0 | 1.7 | .5 | 62 |
| 07N/36E-27N04 | 06-22-82 | 130 | 158 | 0 | 7.0 | 2.2 | .2 | 47 |
| 07N/36E-30R01 | 06-23-82 | 87 | 106 | 0 | 10 | 4.8 | .1 | 44 |
| 08N/30E-01N01 | 06-24-82 | 316 | 385 | 0 | 69 | 51 | .4 | 42 |

Table 2. Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Walla Walla County, Wash.--Continued</u> | | | | | | | | |
| 06N/33E-03R01 | 06-23-82 | 378 | 0.49 | -- | 110 | -- | 83 | -- |
| 06N/33E-08P01 | 07-13-82 | 306 | 4.8 | -- | 130 | -- | 5 | -- |
| 06N/34E-07R01 | 06-23-82 | 414 | .52 | -- | 7 | -- | 11 | -- |
| | 08-13-83 | 355 | <.10 | 3,500 | 9 | -- | 16 | -- |
| 06N/36E-04A03 | 06-22-82 | 267 | 2.7 | -- | <3 | -- | 3 | -- |
| 06N/36E-07E02 | 06-23-82 | 197 | <.10 | -- | 46 | -- | 31 | -- |
| 07N/31E-10R01 | 06-24-82 | 252 | .47 | -- | 18 | -- | 3 | -- |
| 07N/32E-07D01 | 06-24-82 | 281 | <.10 | -- | 10 | -- | 10 | -- |
| 07N/33E-35G01 | 06-23-82 | 1,470 | 14 | -- | 40 | -- | 30 | -- |
| 07N/34E-21M03 | 06-23-82 | 269 | .37 | -- | 11 | -- | 7 | -- |
| 07N/34E-36B02 | 06-23-82 | 344 | 3.1 | -- | 8 | -- | 2 | -- |
| 07N/35E-31B01 | 06-24-82 | 329 | .93 | -- | 17 | -- | 70 | -- |
| 07N/35E-32H02 | 06-24-82 | 336 | 5.2 | -- | 14 | -- | 66 | -- |
| 07N/35E-33H03 | 06-23-82 | 199 | .29 | -- | 9 | -- | 23 | -- |
| 07N/35E-35C01 | 06-23-82 | 322 | 6.9 | -- | 13 | -- | 1 | -- |
| 07N/36E-10B01 | 06-22-82 | 189 | <.10 | -- | <3 | -- | 2 | -- |
| 07N/36E-27N04 | 06-22-82 | 194 | 1.8 | -- | <3 | -- | 2 | -- |
| 07N/36E-30R01 | 06-23-82 | 163 | 3.3 | -- | 7 | -- | <1 | -- |
| 08N/30E-01N01 | 06-24-82 | 580 | 9.1 | -- | 5 | -- | 2 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Walla Walla County, Wash.--Continued</u> | | | | | | | | |
| 08N/30E-11A01 | 08-31-82 | 0920 | 405 | 8.6 | 18.0 | 0.0 | -- | 28 |
| | 05-16-83 | 0930 | 560 | 8.3 | 17.5 | .8 | -- | 58 |
| | 07-22-83 | 1030 | 380 | 8.5 | 18.0 | .1 | -- | 21 |
| 08N/31E-21R01 | 08-30-82 | 1500 | 1,190 | 8.0 | 22.0 | .0 | -- | 490 |
| 08N/36E-21N01 | 08-14-83 | 0910 | 402 | 7.8 | 16.0 | -- | -- | 150 |
| 09N/30E-35R01 | 06-24-82 | 1130 | 565 | 7.3 | 16.0 | -- | <1 | 240 |
| 09N/31E-34P01 | 08-31-82 | 1200 | 901 | 8.3 | 16.0 | -- | -- | 350 |
| | 03-07-83 | 1345 | 940 | 7.8 | 15.5 | -- | -- | 350 |
| | 07-20-83 | 1600 | 920 | 7.8 | 15.5 | -- | -- | 360 |
| 09N/32E-20F01 | 08-31-82 | 1745 | 532 | 8.2 | 19.0 | 9.8 | -- | 230 |
| | 04-08-83 | 0915 | 520 | 7.6 | 18.5 | 8.0 | -- | 230 |
| | 07-20-83 | 1400 | 530 | 7.8 | 18.5 | 9.7 | -- | 230 |
| 09N/37E-11P01 | 09-02-82 | 1115 | 253 | 7.4 | 15.0 | 9.7 | -- | 110 |
| | 06-23-83 | 0945 | 258 | 7.5 | 15.0 | 9.4 | -- | 120 |
| <u>Wallowa County, Oreg.</u> | | | | | | | | |
| 01N/42E-11CAC1 | 08-24-83 | 1030 | 220 | 7.8 | 11.5 | 1.5 | -- | 92 |
| 02S/44E-03ACD1 | 08-25-83 | 0915 | 253 | 8.5 | 14.5 | 2.8 | -- | 63 |
| 03N/46E-14ADA1 | 08-25-83 | 1305 | 125 | 8.8 | 9.0 | -- | -- | 48 |
| 05N/43E-03BBC1 | 08-24-83 | 1525 | 395 | 8.1 | 13.0 | .9 | -- | 130 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Walla Walla County, Wash.--Continued</u> | | | | | | | | |
| 08N/30E-11A01 | 08-31-82 | 0 | 7.7 | 2.2 | 74 | 79 | 6 | 11 |
| | 05-16-83 | -- | 16 | 4.3 | 72 | 69 | 4 | 10 |
| | 07-22-83 | -- | 5.5 | 1.7 | 75 | 82 | 7 | 11 |
| 08N/31E-21R01 | 08-30-82 | 400 | 96 | 61 | 69 | 23 | 1 | 9.7 |
| 08N/36E-21N01 | 08-14-83 | 0 | 36 | 15 | 19 | 21 | .7 | 5.7 |
| 09N/30E-35R01 | 06-24-82 | 0 | 67 | 17 | 31 | 22 | .9 | 6.2 |
| 09N/31E-34P01 | 08-31-82 | 220 | 80 | 37 | 36 | 18 | .8 | 8.2 |
| | 03-07-83 | 220 | 77 | 38 | 38 | 19 | .9 | 8.3 |
| | 07-20-83 | 230 | 79 | 39 | 39 | 19 | .9 | 8.6 |
| 09N/32E-20F01 | 08-31-82 | 81 | 46 | 28 | 17 | 14 | .5 | 4.1 |
| | 04-08-83 | 97 | 46 | 29 | 17 | 13 | .5 | 4.0 |
| | 07-20-83 | 97 | 46 | 29 | 17 | 13 | .5 | 4.3 |
| 09N/37E-11P01 | 09-02-82 | 0 | 28 | 10 | 10 | 16 | .4 | 2.7 |
| | 06-23-83 | 0 | 28 | 11 | 10 | 16 | .4 | 2.6 |
| <u>Wallowa County, Oreg.</u> | | | | | | | | |
| 01N/42E-11CAC1 | 08-24-83 | 0 | 30 | 4.2 | 5.6 | 11 | .3 | 3.3 |
| 02S/44E-03ACD1 | 08-25-83 | 0 | 22 | 1.9 | 21 | 40 | 1 | 4.6 |
| 03N/46E-14ADA1 | 08-25-83 | 0 | 14 | 3.1 | 4.2 | 15 | .3 | 3.4 |
| 05N/43E-03BBC1 | 08-24-83 | 0 | 37 | 8.6 | 34 | 36 | 1 | 4.5 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Walla Walla County, Wash.--Continued</u> | | | | | | | | |
| 08N/30E-11A01 | 08-31-82 | 168 | 182 | 11 | 5.0 | 26 | 2.6 | 62 |
| | 05-16-83 | -- | -- | -- | 10 | 29 | 2.5 | 61 |
| | 07-22-83 | -- | -- | -- | .8 | 27 | 2.9 | 63 |
| 08N/31E-21R01 | 08-30-82 | 97 | 118 | 0 | 490 | 41 | .7 | 61 |
| 08N/36E-21N01 | 08-14-83 | 175 | 213 | 0 | 6.8 | 5.7 | .4 | 49 |
| 09N/30E-35R01 | 06-24-82 | 256 | 312 | 0 | 30 | 18 | .4 | 38 |
| 09N/31E-34P01 | 08-31-82 | 134 | 163 | 0 | 89 | 90 | .4 | 50 |
| | 03-07-83 | 129 | 157 | 0 | 88 | 99 | .5 | 49 |
| | 07-20-83 | 129 | 157 | 0 | 86 | 110 | .4 | 49 |
| 09N/32E-20F01 | 08-31-82 | 149 | 182 | 0 | 38 | 32 | .5 | 59 |
| | 04-08-83 | 138 | 168 | 0 | 38 | 36 | .6 | 58 |
| | 07-20-83 | 137 | 167 | 0 | 38 | 33 | .5 | 59 |
| 09N/37E-11P01 | 09-02-82 | 125 | 152 | 0 | <5.0 | 1.5 | .3 | 56 |
| | 06-23-83 | 129 | 157 | 0 | 2.2 | 1.5 | .3 | 55 |
| <u>Wallowa County, Oreg.</u> | | | | | | | | |
| 01N/42E-11CAC1 | 08-24-83 | 94 | 114 | 0 | 10 | 2.2 | <.1 | 35 |
| 02S/44E-03ACD1 | 08-23-83 | 66 | 74 | 3 | 54 | 1.4 | .2 | 37 |
| 03N/46E-14ADA1 | 08-25-83 | 66 | 73 | 4 | 1.4 | .8 | .1 | 32 |
| 03N/43E-03BBC1 | 08-24-83 | 196 | 239 | 0 | 5.4 | 1.7 | .3 | 41 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Walla Walla County, Wash.--Continued</u> | | | | | | | | |
| 08N/30E-11A01 | 08-31-82 | 291 | <0.10 | -- | 4 | 26 | 7 | 30 |
| | 05-16-83 | 309 | .92 | 280 | 13 | -- | 5 | -- |
| | 07-22-83 | 281 | <.10 | -- | 6 | -- | 6 | -- |
| 8N/31E-21R01 | 08-30-82 | 890 | .50 | -- | 110 | 51 | 230 | 920 |
| 08N/36E-21N01 | 08-14-83 | 254 | 2.6 | 30 | 10 | -- | <1 | -- |
| 09N/30E-35R01 | 06-24-82 | 381 | 4.6 | -- | 19 | -- | 9 | -- |
| 09N/31E-34P01 | 08-31-82 | 587 | 26 | -- | 4 | 18 | 2 | 830 |
| | 03-07-83 | 577 | 23 | 40 | 3 | -- | 2 | -- |
| | 07-20-83 | 603 | 26 | -- | 7 | -- | 2 | -- |
| 09N/32E-20F01 | 08-31-82 | 368 | 12 | -- | <3 | 15 | 26 | 380 |
| | 04-08-83 | 364 | 12 | 20 | 6 | -- | <1 | -- |
| | 07-20-83 | 362 | 12 | -- | 16 | -- | 3 | -- |
| 09N/37E-11P01 | 09-02-82 | -- | 1.0 | -- | 27 | 11 | 4 | 92 |
| | 06-23-83 | 193 | 1.1 | 10 | 5 | -- | <1 | -- |
| <u>Wallowa County, Oreg.</u> | | | | | | | | |
| 01N/42E-11CAC1 | 08-24-83 | 150 | .71 | <10 | 17 | -- | 1 | -- |
| 02S/44E-03ACD1 | 08-25-83 | 182 | <.10 | 20 | 14 | -- | 1 | -- |
| 03N/46E-14ADA1 | 08-25-83 | 99 | <.10 | <10 | 30 | -- | 8 | -- |
| 05N/43E-03BBC1 | 08-24-83 | 250 | .10 | 10 | 22 | -- | 2 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|------------------------------|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Wasco County, Oreg.</u> | | | | | | | | |
| 01N/12E-28DCD1 | 08-23-83 | 0930 | 450 | 7.9 | 31.5 | 0.3 | -- | 62 |
| 01S/13E-34ABC1 | 08-12-83 | 1000 | 272 | 7.8 | 17.0 | .3 | -- | 57 |
| 02S/12E-15DAB1 | 08-23-83 | 1330 | 360 | 7.9 | 24.0 | .3 | -- | 76 |
| <u>Whitman County, Wash.</u> | | | | | | | | |
| 11N/45E-17E01 | 08-02-82 | 1340 | 422 | 9.2 | 17.5 | .0 | -- | 3 |
| | 03-26-83 | 1720 | 419 | 9.0 | 17.0 | 3.9 | -- | 3 |
| | 08-25-83 | 1400 | 408 | 9.3 | 17.5 | 3.6 | -- | 3 |
| 11N/46E-19D01 | 08-02-82 | 1130 | 312 | 7.6 | 14.0 | 6.3 | -- | 110 |
| | 03-26-83 | 1445 | 300 | 7.8 | 14.5 | 4.3 | -- | 110 |
| | 08-25-83 | 1300 | 282 | 7.6 | 14.0 | 6.2 | -- | 110 |
| 13N/37E-15A01 | 08-06-82 | 1300 | 750 | 7.6 | 26.5 | 4.2 | -- | 320 |
| | 03-29-83 | 1530 | 480 | 7.8 | 21.5 | 7.7 | -- | 200 |
| 13N/38E-28K01 | 08-06-82 | 1030 | 298 | 7.8 | 14.5 | 7.6 | -- | 130 |
| | 03-29-83 | 1510 | 292 | 7.7 | 14.0 | -- | -- | 130 |
| | 08-26-83 | 1215 | 270 | 7.6 | 15.0 | -- | -- | 130 |
| 13N/39E-07E01 | 08-05-82 | 1420 | 420 | 7.8 | 29.0 | 6.3 | -- | 160 |
| | 03-29-83 | 1700 | -- | 7.7 | 27.5 | -- | -- | 180 |
| | 08-26-83 | 1100 | 405 | 7.9 | 26.5 | 7.6 | -- | 180 |
| 13N/40E-03E01 | 08-05-82 | 0845 | 350 | 7.7 | 18.5 | 7.0 | -- | 140 |
| | 06-21-83 | 1445 | 366 | 7.6 | 19.0 | 8.1 | -- | 150 |
| | 08-23-83 | 1030 | 335 | 7.2 | 18.0 | -- | -- | 140 |
| 13N/43E-02M01 | 08-02-82 | 1545 | 300 | 7.2 | 17.5 | 7.6 | -- | 120 |
| | 06-23-83 | 1400 | 321 | 7.3 | 17.5 | 8.5 | -- | 120 |
| | 08-24-83 | 1500 | 318 | 7.4 | 18.0 | -- | -- | 120 |
| 13N/45E-03P01 | 08-03-82 | 0830 | 400 | 7.2 | 10.5 | 2.3 | -- | 180 |
| | 03-26-83 | 1105 | 395 | 7.1 | 10.5 | 3.4 | -- | 180 |
| | 08-26-83 | 1200 | 412 | 7.0 | 11.0 | 1.8 | -- | 190 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|------------------------------|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Wasco County, Oreg.</u> | | | | | | | | |
| 01N/12E-28DCD1 | 08-23-83 | 0 | 15 | 6.0 | 78 | 68 | 4 | 13 |
| 01S/13E-34ABC1 | 08-12-83 | 0 | 14 | 5.3 | 30 | 51 | 2 | 5.1 |
| 02S/12E-15DAB1 | 08-23-83 | 0 | 16 | 8.8 | 51 | 57 | 3 | 6.6 |
| <u>Whitman County, Wash.</u> | | | | | | | | |
| 11N/45E-17E01 | 08-02-82 | 0 | 1.1 | .07 | 91 | 95 | 23 | 5.1 |
| | 03-26-83 | 0 | 1.1 | .08 | 95 | 95 | 24 | 5.3 |
| | 08-25-83 | 0 | 1.1 | .03 | 93 | 95 | 24 | 5.4 |
| 11N/46E-19D01 | 08-02-82 | 2 | 34 | 7.2 | 18 | 25 | .7 | 4.0 |
| | 03-26-83 | 0 | 31 | 6.8 | 20 | 28 | .8 | 4.4 |
| | 08-25-83 | 0 | 31 | 6.8 | 17 | 25 | .7 | 3.9 |
| 13N/37E-15A01 | 08-06-82 | 0 | 66 | 38 | 41 | 21 | 1 | 8.6 |
| | 03-29-83 | 0 | 44 | 23 | 28 | 22 | .9 | 7.2 |
| 13N/38E-28K01 | 08-06-82 | 17 | 33 | 11 | 10 | 14 | .4 | 4.4 |
| | 03-29-83 | 13 | 32 | 11 | 10 | 14 | .4 | 4.3 |
| | 08-26-83 | 10 | 32 | 11 | 10 | 14 | .4 | 4.3 |
| 13N/39E-07E01 | 08-05-82 | 56 | 36 | 16 | 19 | 20 | .7 | 5.6 |
| | 03-29-83 | 76 | 42 | 19 | 19 | 18 | .6 | 5.9 |
| | 08-26-83 | 71 | 41 | 18 | 20 | 19 | .7 | 6.0 |
| 13N/40E-03E01 | 08-05-82 | 0 | 36 | 13 | 14 | 17 | .5 | 4.9 |
| | 06-21-83 | 0 | 38 | 14 | 15 | 17 | .5 | 4.9 |
| | 08-23-83 | 0 | 36 | 13 | 15 | 18 | .5 | 5.3 |
| 13N/43E-02M01 | 08-02-82 | 0 | 28 | 11 | 19 | 26 | .8 | 4.0 |
| | 06-23-83 | 0 | 28 | 12 | 19 | 25 | .8 | 3.8 |
| | 08-24-83 | 0 | 30 | 12 | 18 | 23 | .7 | 4.1 |
| 13N/45E-03P01 | 08-03-82 | 17 | 47 | 15 | 14 | 14 | .5 | 1.9 |
| | 03-26-83 | 17 | 48 | 14 | 14 | 15 | .5 | 1.7 |
| | 08-26-83 | 23 | 50 | 15 | 14 | 14 | .4 | 1.8 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alka- linity, field (mg/L as CaCO ₃) | Bicar- bonate, field (mg/L as HCO ₃) | Car- bonate, field (mg/L as CO ₃) | Sulfate, dis- solved (mg/L as SO ₄) | Chlo- ride, dis- solved (mg/L as Cl) | Fluo- ride, dis- solved (mg/L as F) | Silica, dis- solved (mg/L as SiO ₂) |
|------------------------------|----------|---|---|--|--|--|---|--|
| <u>Wasco County, Oreg.</u> | | | | | | | | |
| 01N/12E-28DC1 | 08-23-83 | 234 | 285 | 0 | 0.6 | 8.4 | 1.9 | 110 |
| 01S/13E-34ABC1 | 08-12-83 | 123 | 150 | 0 | 1.7 | 4.9 | .7 | 64 |
| 02S/12E-15DAB1 | 08-23-83 | 177 | 216 | 0 | 2.6 | 11 | 1.1 | 80 |
| <u>Whitman County, Wash.</u> | | | | | | | | |
| 11N/45E-17E01 | 08-02-82 | 177 | 143 | 36 | 8.0 | 24 | .4 | 52 |
| | 03-26-83 | 184 | 158 | 33 | 5.7 | 24 | .4 | 53 |
| | 08-25-83 | 188 | 168 | 30 | 5.6 | 23 | .4 | 52 |
| 11N/46E-19D01 | 08-02-82 | 112 | 137 | 0 | 30 | 10 | .3 | 30 |
| | 03-26-83 | 114 | 139 | 0 | 29 | 9.5 | .4 | 33 |
| | 08-25-83 | 113 | 138 | 0 | 24 | 8.7 | .3 | 29 |
| 13N/37E-15AD1 | 08-06-82 | 373 | 455 | 0 | 22 | 14 | .2 | 75 |
| | 03-29-83 | 244 | 298 | 0 | 18 | 11 | .4 | 68 |
| 13N/38E-28K01 | 08-06-82 | 111 | 135 | 0 | 25 | 9.5 | .3 | 45 |
| | 03-29-83 | 112 | 137 | 0 | 25 | 9.4 | .3 | 42 |
| | 08-26-83 | 115 | 140 | 0 | 26 | 10 | .3 | 43 |
| 13N/39E-07E01 | 08-05-82 | 100 | 122 | 0 | 28 | 28 | .3 | 60 |
| | 03-29-83 | 107 | 131 | 0 | 30 | 38 | .3 | 56 |
| | 08-26-83 | 106 | 129 | 0 | 27 | 34 | .3 | 61 |
| 13N/40E-03E01 | 08-05-82 | 154 | 188 | 0 | 13 | 7.4 | .4 | 55 |
| | 06-21-83 | 159 | 194 | 0 | 15 | 7.3 | .4 | 54 |
| | 08-23-83 | 158 | 193 | 0 | 14 | 7.6 | .4 | 55 |
| 13N/43E-02M01 | 08-02-82 | 139 | 169 | 0 | 9.0 | 2.8 | .4 | 56 |
| | 06-23-83 | 144 | 175 | 0 | 10 | 2.6 | .4 | 56 |
| | 08-24-83 | 153 | 187 | 0 | 10 | 3.5 | .4 | 54 |
| 13N/45E-03P01 | 08-03-82 | 162 | 198 | 0 | 21 | 10 | .2 | 53 |
| | 03-26-83 | 161 | 196 | 0 | 21 | 12 | .2 | 52 |
| | 08-26-83 | 164 | 200 | 0 | 21 | 12 | .2 | 53 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis- solved, sum of consti- tuents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis- solved (mg/L as N) | Boron, dis- solved (µg/L as B) | Iron, dis- solved (µg/L as Fe) | Lithium, dis- solved (µg/L as Li) | Manga- nese, dis- solved (µg/L as Mn) | Stron- tium, dis- solved (µg/L as Sr) |
|------------------------------|----------|---|---|--|--|---|--|--|
| <u>Wasco County, Oreg.</u> | | | | | | | | |
| 01N/12E-28DCD1 | 08-23-83 | 373 | <0.10 | 170 | 110 | -- | 19 | -- |
| 01S/13E-34ABC1 | 08-12-83 | 201 | <.10 | 100 | 680 | -- | 810 | -- |
| 02S/12E-15DAB1 | 08-23-83 | 284 | <.10 | 320 | 140 | -- | 10 | -- |
| <u>Whitman County, Wash.</u> | | | | | | | | |
| 11N/45E-17E01 | 08-02-82 | 288 | <.10 | -- | 14 | 27 | 1 | 3 |
| | 03-26-83 | 295 | <.10 | 110 | 13 | -- | 3 | -- |
| | 08-25-83 | 293 | <.10 | -- | 12 | -- | 2 | -- |
| 11N/46E-19D01 | 08-02-82 | 204 | .75 | -- | <3 | 12 | <1 | 80 |
| | 03-26-83 | 205 | .51 | 30 | 8 | -- | 4 | -- |
| | 08-25-83 | 193 | .93 | -- | 23 | -- | 2 | -- |
| 13N/37E-15A01 | 08-06-82 | 492 | .74 | -- | <3 | 14 | <1 | 330 |
| | 03-29-83 | 354 | 1.7 | 40 | 10 | -- | <1 | -- |
| 13N/38E-28K01 | 08-06-82 | 209 | .89 | -- | <3 | 8 | <1 | 110 |
| | 03-29-83 | 205 | .82 | 20 | <3 | -- | 1 | -- |
| | 08-26-83 | 209 | .85 | -- | <3 | -- | 2 | -- |
| 13N/39E-07E01 | 08-05-82 | 292 | 8.8 | -- | <3 | 11 | 3 | 130 |
| | 03-29-83 | 332 | 13 | 10 | 11 | -- | 3 | -- |
| | 08-26-83 | 315 | 10 | -- | 10 | -- | <1 | -- |
| 13N/40E-03E01 | 08-05-82 | 244 | 1.8 | -- | <3 | 20 | 2 | 120 |
| | 06-21-83 | 252 | 1.8 | 10 | 4 | -- | 1 | -- |
| | 08-23-83 | 249 | 1.7 | -- | <3 | -- | 1 | -- |
| 13N/43E-02M01 | 08-02-82 | 221 | 1.7 | -- | <3 | 17 | 1 | 75 |
| | 06-23-83 | 227 | 2.0 | <10 | 5 | -- | 2 | -- |
| | 08-24-83 | 231 | 1.7 | -- | 9 | -- | 4 | -- |
| 13N/45E-03P01 | 08-03-82 | 279 | 4.4 | -- | 3 | 17 | 1 | 240 |
| | 03-26-83 | 277 | 3.9 | <10 | 6 | -- | 2 | -- |
| | 08-26-83 | 287 | 4.9 | -- | <3 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance ($\mu\text{S}/\text{cm}$) | pH (standard units) | Temperature water ($^{\circ}\text{C}$) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO_3) |
|---|----------|------|--|---------------------|--|--------------------------|--------------------------------|-------------------------------------|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 14N/39E-12G01 | 09-08-82 | 1230 | 430 | 7.9 | 15.0 | 7.6 | -- | 180 |
| | 06-22-83 | 1130 | 421 | 7.7 | 15.0 | 8.5 | -- | 180 |
| 14N/39E-14B01 | 08-05-82 | 1120 | 410 | 7.4 | 13.0 | 4.0 | -- | 170 |
| | 03-28-83 | 1300 | 440 | 7.3 | 12.0 | 8.5 | -- | 200 |
| | 08-23-83 | 1345 | 428 | 7.3 | 14.0 | 7.8 | -- | 190 |
| 14N/40E-22D02 | 08-05-82 | 1645 | 370 | 8.0 | 18.5 | 7.1 | -- | 150 |
| | 03-28-83 | 1150 | 371 | 7.8 | 18.5 | 8.1 | -- | 150 |
| 14N/42E-04F01 | 08-03-82 | 0905 | 312 | 7.3 | 13.0 | 8.7 | -- | 140 |
| | 03-28-83 | 1505 | 315 | 7.3 | 12.5 | 8.7 | -- | 130 |
| | 08-23-83 | 1500 | 362 | 7.4 | 12.5 | 8.1 | -- | 150 |
| 14N/42E-13B01 | 08-04-82 | 1030 | 685 | 7.1 | 15.5 | 4.3 | -- | 300 |
| | 03-28-83 | 1710 | 616 | 7.0 | 15.0 | 5.3 | -- | 260 |
| | 08-24-83 | 1200 | 576 | 7.1 | 15.5 | 5.6 | -- | 240 |
| 14N/43E-24R01 | 08-04-82 | 1745 | 285 | 7.7 | 12.0 | .2 | -- | 130 |
| | 03-25-83 | 1640 | 313 | 6.9 | 11.0 | .1 | -- | 140 |
| | 08-24-83 | 1700 | 296 | 7.7 | 12.0 | .2 | -- | 130 |
| 14N/44E-14P02 | 06-21-82 | 1355 | 273 | 7.2 | 14.5 | -- | <1 | 110 |
| 14N/45E-04D01 | 08-03-82 | 1700 | 330 | 7.8 | 15.0 | .1 | -- | 110 |
| | 03-25-83 | 0950 | 321 | 7.7 | 14.5 | .0 | -- | 120 |
| | 08-26-83 | 1000 | 319 | 7.8 | 14.5 | .1 | -- | 120 |
| 14N/45E-05D03 | 06-22-82 | 0800 | 331 | 7.7 | 14.0 | -- | <1 | 130 |
| 14N/45E-08E01 | 06-22-82 | 0855 | 307 | 7.6 | 13.0 | -- | <1 | 120 |
| 14N/46E-05B01 | 08-03-82 | 1100 | 275 | 7.3 | 13.0 | .2 | -- | 120 |
| | 03-25-83 | 1415 | 272 | 7.2 | 13.0 | .0 | -- | 120 |
| | 08-25-83 | 0900 | 278 | 7.3 | 17.0 | .1 | -- | 110 |
| 14N/46E-19M01 | 06-21-82 | 1650 | 345 | 7.3 | 10.5 | -- | <1 | 160 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 14N/39E-12G01 | 09-08-82 | 1 | 41 | 19 | 16 | 16 | 0.5 | 2.5 |
| | 06-22-83 | 3 | 42 | 18 | 15 | 15 | .5 | 2.6 |
| 14N/39E-14B01 | 08-05-82 | 36 | 41 | 16 | 16 | 17 | .5 | 2.8 |
| | 03-28-83 | 55 | 47 | 19 | 17 | 16 | .5 | 2.8 |
| | 08-23-83 | 53 | 48 | 18 | 17 | 16 | .5 | 2.8 |
| 14N/40E-22D02 | 08-05-82 | 0 | 35 | 15 | 17 | 20 | .6 | 2.3 |
| | 03-28-83 | 2 | 37 | 15 | 17 | 19 | .6 | 2.3 |
| 14N/42E-04F01 | 08-03-82 | 0 | 38 | 10 | 16 | 20 | .6 | 1.2 |
| | 03-28-83 | 0 | 37 | 9.9 | 16 | 21 | .6 | 1.2 |
| | 08-23-83 | 0 | 40 | 12 | 19 | 21 | .7 | 1.5 |
| 14N/42E-13B01 | 08-04-82 | 30 | 74 | 27 | 31 | 18 | .8 | 4.7 |
| | 03-28-83 | 9 | 64 | 25 | 29 | 19 | .8 | 4.6 |
| | 08-24-83 | 0 | 59 | 22 | 27 | 19 | .8 | 4.5 |
| 14N/43E-24R01 | 08-04-82 | 0 | 27 | 14 | 12 | 17 | .5 | 3.0 |
| | 03-25-83 | 0 | 30 | 15 | 17 | 21 | .6 | 2.6 |
| | 08-24-83 | 0 | 27 | 15 | 13 | 18 | .5 | 3.0 |
| 14N/44E-14P02 | 06-21-82 | 0 | 24 | 12 | 18 | 26 | .7 | 2.3 |
| 14N/45E-04D01 | 08-03-82 | 0 | 21 | 15 | 25 | 31 | 1 | 4.9 |
| | 03-25-83 | 0 | 22 | 16 | 27 | 32 | 1 | 4.7 |
| | 08-26-83 | 0 | 22 | 15 | 26 | 32 | 1 | 4.6 |
| 14N/45E-05D03 | 06-22-82 | 0 | 25 | 16 | 23 | 27 | .9 | 4.5 |
| 14N/45E-08E01 | 06-22-82 | 0 | 24 | 14 | 20 | 26 | .8 | 3.6 |
| 14N/46E-05B01 | 08-03-82 | 0 | 30 | 12 | 12 | 17 | .5 | 3.3 |
| | 03-25-83 | 0 | 29 | 11 | 12 | 18 | .5 | 3.0 |
| | 08-25-83 | 0 | 27 | 11 | 12 | 18 | .5 | 3.2 |
| 14N/46E-19M01 | 06-21-82 | 0 | 36 | 16 | 14 | 16 | .5 | 3.0 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 14N/39E-12G01 | 09-08-82 | 180 | 219 | 0 | 19 | 12 | 0.3 | 48 |
| | 06-22-83 | 176 | 214 | 0 | 16 | 10 | .3 | 44 |
| 14N/39E-14B01 | 08-05-82 | 132 | 161 | 0 | 40 | 18 | .3 | 45 |
| | 03-28-83 | 141 | 172 | 0 | 40 | 25 | .3 | 40 |
| | 08-23-83 | 141 | 172 | 0 | 43 | 28 | .3 | 44 |
| 14N/40E-22D02 | 08-05-82 | 152 | 185 | 0 | 9.0 | 10 | .4 | 43 |
| | 03-28-83 | 152 | 186 | 0 | 9.6 | 10 | .4 | 42 |
| 14N/42E-04F01 | 08-03-82 | 158 | 193 | 0 | <5.0 | 1.8 | .4 | 42 |
| | 03-28-83 | 184 | 225 | 0 | 1.0 | 1.7 | .4 | 40 |
| | 08-23-83 | 189 | 230 | 0 | 2.9 | 3.5 | .4 | 42 |
| 14N/42E-13B01 | 08-04-82 | 266 | 325 | 0 | 45 | 8.7 | .3 | 54 |
| | 03-28-83 | 253 | 309 | 0 | 32 | 8.1 | .4 | 53 |
| | 08-24-83 | 245 | 299 | 0 | 29 | 8.6 | .4 | 52 |
| 14N/43E-24R01 | 08-04-82 | 154 | 188 | 0 | <5.0 | 1.7 | .3 | 55 |
| | 03-25-83 | 165 | 201 | 0 | 6.1 | 1.9 | .4 | 55 |
| | 08-24-83 | 162 | 198 | 0 | 4.1 | 1.8 | .3 | 54 |
| 14N/44E-14P02 | 06-21-82 | 145 | 177 | 0 | 6.0 | 2.1 | .4 | 58 |
| 14N/45E-04D01 | 08-03-82 | 180 | 219 | 0 | <5.0 | 2.6 | .5 | 65 |
| | 03-25-83 | 178 | 217 | 0 | .7 | 2.5 | .5 | 66 |
| | 08-26-83 | 181 | 221 | 0 | 1.2 | 2.7 | .5 | 65 |
| 14N/45E-05D03 | 06-22-82 | 169 | 206 | 0 | 8.0 | 4.9 | .4 | 62 |
| 14N/45E-08E01 | 06-22-82 | 164 | 200 | 0 | 6.0 | 2.6 | .4 | 63 |
| 14N/46E-05B01 | 08-03-82 | 143 | 174 | 0 | <5.0 | 1.7 | .3 | 52 |
| | 03-25-83 | 144 | 176 | 0 | 5.3 | 1.6 | .3 | 50 |
| | 08-25-83 | 155 | 189 | 0 | 2.7 | 1.8 | .4 | 44 |
| 14N/46E-19M01 | 06-21-82 | 176 | 215 | 0 | 11 | 4.0 | .3 | 47 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Whitman County, Wash.--Continued | | | | | | | | |
| 14N/39E-12G01 | 09-08-82 | 280 | 3.2 | -- | 3 | <4 | 2 | 210 |
| | 06-22-83 | 266 | 3.0 | <10 | 7 | -- | 3 | -- |
| 14N/39E-14B01 | 08-05-82 | 277 | 4.2 | -- | <3 | 20 | 12 | 170 |
| | 03-28-83 | 293 | 4.0 | <10 | 42 | -- | 2 | -- |
| | 08-23-83 | 306 | 4.5 | -- | 10 | -- | 3 | -- |
| 14N/40E-22D02 | 08-05-82 | 252 | 6.5 | -- | 8 | 22 | 3 | 140 |
| | 03-28-83 | 249 | 5.5 | <10 | <3 | -- | 2 | -- |
| 14N/42E-04F01 | 08-03-82 | -- | 2.1 | -- | <3 | 9 | <1 | 150 |
| | 03-28-83 | 227 | 2.1 | <10 | <3 | -- | 3 | -- |
| | 08-23-83 | 246 | 2.7 | -- | 6 | -- | 2 | -- |
| 14N/42E-13B01 | 08-04-82 | 471 | 15 | -- | <3 | 18 | <1 | 250 |
| | 03-28-83 | 417 | 11 | 160 | 5 | -- | 2 | -- |
| | 08-24-83 | 392 | 9.7 | -- | 5 | -- | 1 | -- |
| 14N/43E-24R01 | 08-04-82 | -- | <.10 | -- | 67 | 21 | 18 | 100 |
| | 03-25-83 | 228 | .19 | <10 | 36 | -- | 17 | -- |
| | 08-24-83 | 216 | <.10 | -- | 75 | -- | 16 | -- |
| 14N/44E-14P02 | 06-21-82 | 210 | .12 | -- | 5 | -- | 6 | -- |
| 14N/45E-04D01 | 08-03-82 | -- | <.10 | -- | 250 | 26 | 65 | 170 |
| | 03-25-83 | 246 | <.10 | 10 | 270 | -- | 67 | -- |
| | 08-26-83 | 246 | <.10 | -- | 260 | -- | 63 | -- |
| 14N/45E-05D03 | 06-22-82 | 245 | <.10 | -- | 220 | -- | 46 | -- |
| 14N/45E-08E01 | 06-22-82 | 232 | <.10 | -- | 330 | -- | 44 | -- |
| 14N/46E-05B01 | 08-03-82 | -- | <.10 | -- | 310 | 8 | 21 | 180 |
| | 03-25-83 | 199 | <.10 | <10 | 370 | -- | 22 | -- |
| | 08-25-83 | 196 | <.10 | -- | 760 | -- | 25 | -- |
| 14N/46E-19M01 | 06-21-82 | 239 | <.10 | -- | 1,900 | -- | 200 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 15N/40E-19K01 | 08-04-82 | 1040 | 412 | 7.5 | 16.5 | 8.5 | -- | 190 |
| | 03-28-83 | 1500 | 410 | 7.5 | 14.0 | 8.2 | -- | 190 |
| | 08-23-83 | 1015 | 399 | 7.7 | 16.5 | 8.0 | -- | 190 |
| 15N/43E-09P01 | 08-04-82 | 1400 | 285 | 8.0 | 14.0 | 2.3 | -- | 120 |
| | 03-25-83 | 1145 | 285 | 7.9 | 14.0 | 1.2 | -- | 120 |
| | 08-25-83 | 1530 | 290 | 8.1 | 14.0 | 3.0 | -- | 120 |
| 15N/43E-13H01 | 08-04-82 | 1545 | 225 | 7.4 | 12.5 | 6.3 | -- | 91 |
| | 03-25-83 | 1000 | 225 | 7.0 | 11.5 | 6.8 | -- | 92 |
| 15N/45E-07R03 | 06-21-82 | 1115 | 233 | 7.3 | 11.0 | -- | <1 | 110 |
| 15N/45E-29G03 | 06-21-82 | 1225 | 392 | 7.6 | 14.5 | -- | <1 | 160 |
| 15N/45E-32N02 | 08-03-82 | 1400 | 300 | 7.9 | 15.5 | .1 | -- | 110 |
| | 03-25-83 | 1130 | 303 | 7.6 | 15.0 | .0 | -- | 120 |
| | 08-25-83 | 1000 | 301 | 7.7 | 15.5 | .1 | -- | 110 |
| 16N/39E-22J01 | 08-04-82 | 1230 | 260 | 8.4 | 17.5 | .8 | -- | 31 |
| | 03-28-83 | 1630 | 260 | 8.4 | 15.5 | .2 | -- | 34 |
| | 08-24-83 | 1200 | 248 | 8.6 | 16.0 | .4 | -- | 32 |
| 16N/41E-16K01 | 08-03-82 | 1720 | 510 | 7.3 | 14.0 | 6.6 | -- | 220 |
| | 03-24-83 | 1200 | 579 | 7.2 | 12.0 | 7.9 | -- | 210 |
| | 08-23-83 | 1715 | 422 | 7.5 | 12.5 | 7.5 | -- | 210 |
| 16N/42E-28M01 | 08-02-82 | 1905 | 312 | 7.9 | 14.0 | .2 | -- | 110 |
| | 06-22-83 | 0955 | 318 | 8.1 | 14.0 | .2 | -- | 120 |
| 16N/42E-34L01 | 08-02-82 | 1510 | 339 | 7.4 | 14.0 | 6.3 | -- | 140 |
| | 03-24-83 | 1330 | 325 | 7.4 | 11.5 | 5.5 | -- | 140 |
| | 08-24-83 | 1130 | 330 | 7.4 | 13.0 | 5.5 | -- | 130 |
| 16N/43E-14N02 | 08-02-82 | 1040 | 290 | 7.9 | 21.0 | .6 | -- | 98 |
| | 03-24-83 | 1030 | 270 | 7.7 | 20.0 | .6 | -- | 98 |
| | 08-25-83 | 0900 | 279 | 7.9 | 21.0 | .1 | -- | 95 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 15N/40E-19K01 | 08-04-82 | 41 | 50 | 16 | 11 | 11 | 0.3 | 1.8 |
| | 03-28-83 | 38 | 50 | 16 | 12 | 12 | .4 | 1.8 |
| | 08-23-83 | 60 | 50 | 17 | 12 | 12 | .4 | 1.8 |
| 15N/43E-09P01 | 08-04-82 | 0 | 27 | 12 | 17 | 23 | .7 | 3.4 |
| | 03-25-83 | 0 | 27 | 12 | 17 | 23 | .7 | 3.6 |
| | 08-25-83 | 0 | 27 | 13 | 17 | 23 | .7 | 3.5 |
| 15N/43E-13H01 | 08-04-82 | -- | 24 | 7.6 | 12 | 22 | .5 | 1.5 |
| | 03-25-83 | 0 | 24 | 7.7 | 12 | 22 | .5 | 1.5 |
| 15N/45E-07R03 | 06-21-82 | 0 | 27 | 9.5 | 10 | 17 | .4 | 1.6 |
| 15N/45E-29G03 | 06-21-82 | 3 | 30 | 20 | 24 | 24 | .8 | 4.5 |
| 15N/45E-32N02 | 08-03-82 | 0 | 22 | 14 | 23 | 30 | .9 | 4.2 |
| | 03-25-83 | 0 | 22 | 15 | 23 | 29 | .9 | 3.9 |
| | 08-25-83 | 0 | 21 | 14 | 23 | 30 | 1 | 4.2 |
| 16N/39E-22J01 | 08-04-82 | -- | 10 | 1.4 | 45 | 71 | 4 | 7.6 |
| | 03-28-83 | -- | 11 | 1.6 | 46 | 70 | 3 | 7.7 |
| | 08-24-83 | 0 | 11 | 1.2 | 46 | 70 | 4 | 8.0 |
| 16N/41E-16K01 | 08-03-82 | 0 | 58 | 18 | 25 | 20 | .7 | 1.9 |
| | 03-24-83 | 0 | 54 | 18 | 24 | 20 | .7 | 1.8 |
| | 08-23-83 | 0 | 55 | 17 | 21 | 18 | .6 | 1.8 |
| 16N/42E-28M01 | 08-02-82 | 0 | 27 | 11 | 23 | 29 | .9 | 5.5 |
| | 06-22-83 | 0 | 28 | 11 | 23 | 29 | .9 | 5.2 |
| 16N/42E-34L01 | 08-02-82 | 0 | 38 | 11 | 19 | 22 | .7 | 1.8 |
| | 03-24-83 | 0 | 37 | 11 | 18 | 22 | .7 | 1.8 |
| | 08-24-83 | 0 | 34 | 12 | 18 | 22 | .7 | 2.2 |
| 16N/43E-14N02 | 08-02-82 | 0 | 21 | 11 | 23 | 33 | 1 | 3.6 |
| | 03-24-83 | 0 | 21 | 11 | 23 | 33 | 1 | 3.7 |
| | 08-25-83 | 0 | 20 | 11 | 24 | 34 | 1 | 3.5 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 15N/40E-19K01 | 08-04-82 | 150 | 183 | 0 | 15 | 10 | 0.3 | 40 |
| | 03-28-83 | 152 | 186 | 0 | 17 | 14 | .3 | 39 |
| | 08-23-83 | 135 | 165 | 0 | 20 | 18 | .3 | 40 |
| 15N/43E-09P01 | 08-04-82 | 149 | 182 | 0 | 11 | 1.7 | .4 | 56 |
| | 03-25-83 | 152 | 186 | 0 | 12 | 1.8 | .4 | 54 |
| | 08-25-83 | 148 | 181 | 0 | 12 | 1.7 | .4 | 55 |
| 15N/43E-13H01 | 08-04-82 | -- | -- | -- | <5.0 | 3.4 | .2 | 55 |
| | 03-25-83 | 99 | 121 | 0 | 2.4 | 3.5 | .2 | 53 |
| 15N/45E-07R03 | 06-21-82 | 130 | 158 | 0 | 6.0 | .9 | .2 | 55 |
| 15N/45E-29G03 | 06-21-82 | 154 | 188 | 0 | 53 | 2.6 | .4 | 63 |
| 15N/45E-32N02 | 08-03-82 | 162 | 198 | 0 | <5.0 | 2.9 | .4 | 63 |
| | 03-25-83 | 166 | 203 | 0 | 2.1 | 2.6 | .4 | 60 |
| | 08-25-83 | 169 | 206 | 0 | 2.2 | 2.7 | .4 | 62 |
| 16N/39E-22J01 | 08-04-82 | 130 | -- | -- | 8.0 | 3.3 | .8 | 45 |
| | 03-28-83 | 132 | -- | -- | 7.7 | 3.3 | .9 | 46 |
| | 08-24-83 | 134 | 157 | 3 | 8.0 | 3.2 | .9 | 47 |
| 16N/41E-16K01 | 08-03-82 | 219 | 267 | 0 | 19 | 15 | .3 | 43 |
| | 03-24-83 | 231 | 282 | 0 | 19 | 15 | .3 | 44 |
| | 08-23-83 | 226 | 275 | 0 | 17 | 15 | .4 | 43 |
| 16N/42E-28M01 | 08-02-82 | 161 | 196 | 0 | 7.0 | 2.7 | .4 | 61 |
| | 06-22-83 | 161 | 196 | 0 | 7.1 | 2.5 | .4 | 61 |
| 16N/42E-34L01 | 08-02-82 | 162 | 188 | 0 | <5.0 | 2.9 | .3 | 45 |
| | 03-24-83 | -- | 198 | 0 | 4.9 | 3.0 | .3 | 43 |
| | 08-24-83 | 163 | 199 | 0 | 4.8 | 2.8 | .4 | 43 |
| 16N/43E-14N02 | 08-02-82 | 141 | 172 | 0 | 5.0 | 2.2 | .5 | 67 |
| | 03-24-83 | 144 | 176 | 0 | 5.5 | 2.1 | .4 | 64 |
| | 08-25-83 | 147 | 179 | 0 | 4.9 | 2.2 | .5 | 65 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 15N/40E-19K01 | 08-04-82 | 273 | 8.8 | -- | <3 | 9 | 2 | 210 |
| | 03-28-83 | 281 | 8.9 | <10 | 14 | -- | <1 | -- |
| | 08-23-83 | 282 | 9.4 | -- | 11 | -- | 3 | -- |
| 15N/43E-09P01 | 08-04-82 | 218 | <.10 | -- | 48 | 20 | 2 | 88 |
| | 03-25-83 | 219 | <.10 | <10 | 16 | -- | <1 | -- |
| | 08-25-83 | 219 | <.10 | -- | 14 | -- | <1 | -- |
| 15N/43E-13H01 | 08-04-82 | -- | 3.5 | -- | 4 | 9 | <1 | 110 |
| | 03-25-83 | 180 | 3.7 | <10 | 6 | -- | <1 | -- |
| 15N/45E-07R03 | 06-21-82 | 189 | .20 | -- | <3 | -- | 1 | -- |
| 15N/45E-29G03 | 06-21-82 | 290 | <.10 | -- | 180 | -- | 71 | -- |
| 15N/45E-32N02 | 08-03-82 | -- | <.10 | -- | 250 | 16 | 45 | 140 |
| | 03-25-83 | 229 | <.10 | <10 | 280 | -- | 48 | -- |
| | 08-25-83 | 231 | <.10 | -- | 270 | -- | 47 | -- |
| 16N/39E-22J01 | 08-04-82 | 198 | .14 | -- | <3 | 18 | 11 | 30 |
| | 03-28-83 | 205 | .21 | 20 | 18 | -- | <1 | -- |
| | 08-24-83 | 206 | <.10 | -- | 7 | -- | 1 | -- |
| 16N/41E-16K01 | 08-03-82 | 346 | 7.8 | -- | <3 | 8 | 30 | 250 |
| | 03-24-83 | 315 | -- | 30 | 4 | -- | 3 | -- |
| | 08-23-83 | 328 | 5.2 | -- | 6 | -- | 2 | -- |
| 16N/42E-28M01 | 08-02-82 | 234 | <.10 | -- | 72 | 31 | -- | 80 |
| | 06-22-83 | 235 | <.10 | 10 | 88 | -- | 36 | -- |
| 16N/42E-34L01 | 08-02-82 | -- | 4.0 | -- | 8 | 14 | 29 | 150 |
| | 03-24-83 | 233 | 3.8 | <10 | 23 | -- | <1 | -- |
| | 08-24-83 | 228 | 2.9 | -- | 3 | -- | <1 | -- |
| 16N/43E-14N02 | 08-02-82 | 218 | <.10 | -- | 30 | 28 | 22 | 82 |
| | 03-24-83 | 217 | <.10 | 10 | 59 | -- | 18 | -- |
| | 08-25-83 | 219 | <.10 | -- | 44 | -- | 21 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 16N/43E-17A01 | 08-02-82 | 1300 | 255 | 7.3 | 13.0 | 5.7 | -- | 120 |
| | 03-29-83 | 0930 | 243 | 7.3 | 12.0 | 6.5 | -- | 120 |
| | 08-24-83 | 0930 | 248 | 7.4 | 13.0 | 6.3 | -- | 110 |
| 16N/44E-26J01 | 08-03-82 | 0820 | 196 | 6.8 | 11.0 | -- | -- | 80 |
| 16N/45E-16F01 | 06-22-82 | 1145 | 277 | 7.4 | 13.0 | -- | <1 | 120 |
| 17N/40E-20K01 | 08-04-82 | 1520 | 750 | 7.1 | 15.5 | 8.7 | -- | 280 |
| | 03-24-83 | 1450 | 715 | 7.4 | 11.5 | 8.4 | -- | 260 |
| | 08-23-83 | 1530 | 622 | 7.4 | 12.5 | 8.3 | -- | 260 |
| 17N/41E-09E01 | 08-03-82 | 1550 | 382 | 7.7 | 15.5 | 6.2 | -- | 160 |
| | 03-25-83 | 1045 | 378 | 7.3 | 13.0 | 7.5 | -- | 160 |
| | 08-24-83 | 1000 | 352 | 7.7 | 13.5 | 7.2 | -- | 160 |
| 17N/41E-30R01 | 08-03-82 | 1420 | 442 | 7.3 | 15.0 | 5.3 | -- | 190 |
| | 03-29-83 | 1330 | 429 | 7.3 | 14.0 | 8.4 | -- | 180 |
| | 08-25-83 | 1330 | 440 | 7.6 | 14.5 | 7.4 | -- | 180 |
| 17N/42E-01F01 | 08-03-82 | 1055 | 242 | 7.1 | 12.5 | 6.9 | -- | 110 |
| | 03-23-83 | 1400 | 238 | 7.3 | 12.0 | 8.4 | -- | 96 |
| | 08-22-83 | 1530 | 252 | 7.4 | 13.0 | 7.1 | -- | 110 |
| 17N/43E-29N01 | 08-02-82 | 1745 | 298 | 7.7 | 18.0 | .4 | -- | 110 |
| | 03-24-83 | 0940 | 297 | 7.3 | 17.5 | .3 | -- | 110 |
| | 08-24-83 | 1330 | 296 | 7.9 | 18.5 | .5 | -- | 110 |
| 17N/44E-11L01 | 08-02-82 | 1720 | 259 | 7.2 | 11.5 | 2.5 | -- | 110 |
| | 03-24-83 | 1530 | 250 | 7.3 | 10.5 | 3.0 | -- | 110 |
| | 08-25-83 | 1030 | 279 | 7.2 | 11.0 | 3.8 | -- | 120 |
| 17N/45E-04C01 | 08-02-82 | 1445 | 279 | 7.6 | 14.0 | .1 | -- | 100 |
| | 03-23-83 | 1600 | 263 | 7.5 | 14.0 | .1 | -- | 110 |
| | 08-24-83 | 1600 | 272 | 7.7 | 14.0 | .0 | -- | 100 |
| 18N/41E-04E01 | 08-04-82 | 1700 | 358 | 7.3 | 15.0 | 8.5 | -- | 160 |
| | 03-23-83 | 1430 | 344 | 7.3 | 15.0 | 8.6 | -- | 160 |
| | 08-25-83 | 1105 | 362 | 7.4 | 16.5 | 6.5 | -- | 190 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 16N/43E-17A01 | 08-02-82 | 0 | 32 | 9.3 | 8.2 | 13 | 0.3 | 1.7 |
| | 03-29-83 | 0 | 31 | 9.2 | 8.1 | 13 | .3 | 1.6 |
| | 08-24-83 | 0 | 30 | 9.1 | 8.1 | 13 | .3 | 1.8 |
| 16N/44E-26J01 | 08-03-82 | 0 | 21 | 6.6 | 9.1 | 20 | .4 | 1.2 |
| 16N/45E-16F01 | 06-22-82 | 0 | 24 | 14 | 13 | 19 | .5 | 3.0 |
| 17N/40E-20K01 | 08-04-82 | 0 | 74 | 24 | 54 | 29 | 1 | 5.9 |
| | 03-24-83 | 0 | 64 | 24 | 58 | 32 | 2 | 6.0 |
| | 08-23-83 | 0 | 67 | 22 | 56 | 32 | 2 | 5.1 |
| 17N/41E-09E01 | 08-03-82 | 0 | 41 | 15 | 17 | 18 | .6 | 3.1 |
| | 03-25-83 | 0 | 40 | 15 | 17 | 18 | .6 | 3.2 |
| | 08-24-83 | 0 | 41 | 15 | 17 | 18 | .6 | 3.0 |
| 17N/41E-30R01 | 08-03-82 | 0 | 50 | 15 | 24 | 22 | .8 | 2.6 |
| | 03-29-83 | 0 | 49 | 15 | 25 | 22 | .8 | 2.6 |
| | 08-25-83 | 0 | 46 | 15 | 24 | 22 | .8 | 2.7 |
| 17N/42E-01F01 | 08-03-82 | 0 | 28 | 9.2 | 10 | 16 | .4 | 2.0 |
| | 03-23-83 | 0 | 26 | 7.6 | 12 | 21 | .5 | 1.5 |
| | 08-22-83 | 0 | 28 | 9.8 | 10 | 16 | .4 | 2.4 |
| 17N/43E-29N01 | 08-02-82 | 0 | 24 | 13 | 21 | 28 | .9 | 3.1 |
| | 03-24-83 | 0 | 24 | 13 | 21 | 28 | .9 | 3.0 |
| | 08-24-83 | 0 | 23 | 13 | 22 | 29 | .9 | 3.2 |
| 17N/44E-11L01 | 08-02-82 | 0 | 26 | 11 | 8.9 | 15 | .4 | 3.1 |
| | 03-24-83 | 0 | 26 | 11 | 9.0 | 15 | .4 | 3.1 |
| | 08-25-83 | 0 | 29 | 12 | 10 | 15 | .4 | 3.2 |
| 17N/45E-04C01 | 08-02-82 | 0 | 22 | 11 | 19 | 28 | .8 | 3.3 |
| | 03-23-83 | 0 | 23 | 12 | 19 | 27 | .8 | 3.5 |
| | 08-24-83 | 0 | 22 | 12 | 19 | 28 | .8 | 3.5 |
| 18N/41E-04E01 | 08-04-82 | 8 | 44 | 11 | 9.6 | 12 | .3 | 2.2 |
| | 03-23-83 | 17 | 44 | 12 | 9.7 | 12 | .3 | 2.4 |
| | 08-25-83 | 34 | 54 | 14 | 11 | 11 | .3 | 2.5 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 16N/43E-17A01 | 08-02-82 | 125 | 153 | 0 | <5.0 | 3.3 | 0.1 | 54 |
| | 03-29-83 | 127 | 155 | 0 | 1.7 | 2.6 | .1 | 52 |
| | 08-24-83 | 126 | 154 | 0 | 1.5 | 2.7 | .2 | 51 |
| 16N/44E-26J01 | 08-03-82 | 89 | 109 | 0 | <5.0 | 1.2 | .2 | 50 |
| 16N/45E-16F01 | 06-22-82 | 150 | 183 | 0 | 7.0 | 2.3 | .4 | 57 |
| 17N/40E-20K01 | 08-04-82 | 333 | 406 | 0 | 38 | 18 | .2 | 44 |
| | 03-24-83 | 343 | 418 | 0 | 25 | 13 | .3 | 45 |
| | 08-23-83 | 294 | 358 | 0 | 29 | 19 | .3 | 46 |
| 17N/41E-09E01 | 08-03-82 | 172 | 210 | 0 | 7.0 | 4.4 | .3 | 46 |
| | 03-25-83 | 184 | 225 | 0 | 6.9 | 4.4 | .4 | 45 |
| | 08-24-83 | 173 | 211 | 0 | 6.8 | 4.5 | .4 | 45 |
| 17N/41E-30R01 | 08-03-82 | 201 | 245 | 0 | 12 | 8.8 | .3 | 48 |
| | 03-29-83 | 202 | 247 | 0 | 11 | 8.6 | .4 | 47 |
| | 08-25-83 | 202 | 246 | 0 | 12 | 8.9 | .4 | 46 |
| 17N/42E-01F01 | 08-03-82 | 118 | 144 | 0 | <5.0 | 2.9 | .2 | 50 |
| | 03-23-83 | 122 | 149 | 0 | .8 | 2.9 | .2 | 47 |
| | 08-22-83 | 121 | 148 | 0 | 1.2 | 2.8 | .2 | 49 |
| 17N/43E-29N01 | 08-02-82 | 152 | 185 | 0 | 9.0 | 2.3 | .4 | 59 |
| | 03-24-83 | 149 | 182 | 0 | 8.9 | 2.2 | .5 | 58 |
| | 08-24-83 | 150 | 183 | 0 | 8.8 | 2.5 | .6 | 59 |
| 17N/44E-11L01 | 08-02-82 | 114 | 139 | 0 | 10 | 7.1 | .3 | 44 |
| | 03-24-83 | 115 | 140 | 0 | 10 | 6.8 | .3 | 43 |
| | 08-25-83 | 128 | 156 | 0 | 5.1 | 6.7 | .3 | 46 |
| 17N/45E-04C01 | 08-02-82 | 143 | 174 | 0 | <5.0 | 3.2 | .4 | 60 |
| | 03-23-83 | 146 | 178 | 0 | 2.9 | 3.1 | .4 | 59 |
| | 08-24-83 | 145 | 177 | 0 | 2.3 | 3.1 | .5 | 61 |
| 18N/41E-04E01 | 08-04-82 | 148 | 180 | 0 | <5.0 | 7.5 | .2 | 50 |
| | 03-23-83 | 143 | 174 | 0 | 5.8 | 10 | .2 | 48 |
| | 08-25-83 | 158 | 193 | 0 | 14 | 21 | .3 | 49 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Whitman County, Wash.--Continued | | | | | | | | |
| 16N/43E-17A01 | 08-02-82 | -- | 1.4 | -- | 5 | 11 | 5 | 150 |
| | 03-29-83 | 187 | .98 | <10 | 5 | -- | 6 | -- |
| | 08-24-83 | 185 | 1.1 | -- | <3 | -- | 1 | -- |
| 16N/44E-26J01 | 08-03-82 | -- | 3.6 | -- | <3 | 10 | 9 | 93 |
| 16N/45E-16F01 | 06-22-82 | 211 | <.10 | -- | 500 | -- | 47 | -- |
| 17N/40E-20K01 | 08-04-82 | 471 | 3.0 | -- | <3 | 16 | 2 | 280 |
| | 03-24-83 | 452 | 2.5 | 30 | 18 | -- | 4 | -- |
| | 08-23-83 | 433 | 2.8 | -- | 9 | -- | 3 | -- |
| 17N/41E-09E01 | 08-03-82 | 254 | 3.8 | -- | <3 | 16 | 4 | 150 |
| | 03-25-83 | 260 | 3.9 | <10 | 3 | -- | 2 | -- |
| | 08-24-83 | 255 | 4.1 | -- | 6 | -- | 2 | -- |
| 17N/41E-30R01 | 08-03-82 | 300 | 4.2 | -- | <3 | 5 | 450 | 210 |
| | 03-29-83 | 297 | 3.9 | <10 | 15 | -- | 1 | -- |
| | 08-25-83 | 294 | 4.1 | -- | <3 | -- | <1 | -- |
| 17N/42E-01F01 | 08-03-82 | -- | 3.3 | -- | <3 | <4 | 7 | 120 |
| | 03-23-83 | 185 | 3.1 | <10 | 3 | -- | 7 | -- |
| | 08-22-83 | 191 | 3.3 | -- | <3 | -- | 1 | -- |
| 17N/43E-29N01 | 08-02-82 | 224 | .31 | -- | <3 | 23 | 17 | 100 |
| | 03-24-83 | 223 | .58 | 20 | <3 | -- | 10 | -- |
| | 08-24-83 | 225 | .56 | -- | 5 | -- | 10 | -- |
| 17N/44E-11L01 | 08-02-82 | 184 | 1.1 | -- | <3 | 13 | <1 | 90 |
| | 03-24-83 | 182 | .89 | <10 | 20 | -- | 2 | -- |
| | 08-25-83 | 194 | 1.2 | -- | 6 | -- | 2 | -- |
| 17N/45E-04C01 | 08-02-82 | -- | <.10 | -- | 460 | 16 | 26 | 110 |
| | 03-23-83 | 211 | <.10 | <10 | 420 | -- | 26 | -- |
| | 08-24-83 | 212 | .14 | -- | 460 | -- | 25 | -- |
| 18N/41E-04E01 | 08-04-82 | -- | 5.0 | -- | <3 | 9 | <1 | 190 |
| | 03-23-83 | 238 | 4.5 | <10 | 4 | -- | 10 | -- |
| | 08-25-83 | 297 | 8.3 | -- | 11 | -- | 4 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| Whitman County, Wash.--Continued | | | | | | | | |
| 18N/42E-23B01 | 08-03-82 | 0925 | 254 | 7.5 | 15.0 | 5.5 | -- | 110 |
| | 03-24-83 | 1050 | 245 | 7.5 | 13.5 | 6.4 | -- | 110 |
| | 08-23-83 | 1600 | 245 | 7.5 | 16.0 | 6.1 | -- | 110 |
| 18N/43E-32B01 | 08-02-82 | 1140 | 274 | 7.2 | 13.5 | 7.9 | -- | 110 |
| | 03-23-83 | 1550 | 277 | 7.0 | 12.5 | 8.3 | -- | 110 |
| | 08-22-83 | 1700 | 275 | 7.2 | 13.0 | 8.0 | -- | 100 |
| 18N/43E-35P03 | 08-03-82 | 1225 | 388 | 6.9 | 12.5 | .7 | -- | 110 |
| | 03-23-83 | 1715 | 420 | 6.9 | 11.0 | 1.3 | -- | 110 |
| | 08-23-83 | 1730 | 412 | 7.0 | 12.5 | 1.1 | -- | 170 |
| 19N/40E-02B01 | 08-06-82 | 0930 | 280 | 8.0 | 19.5 | .2 | -- | 82 |
| | 03-23-83 | 1630 | 293 | 7.6 | 14.0 | .4 | -- | 130 |
| | 08-25-83 | 1640 | 275 | 7.8 | 14.5 | .8 | -- | 130 |
| 19N/41E-36Q02D1 | 08-05-82 | 1200 | 290 | 7.8 | 14.5 | .3 | -- | 130 |
| | 03-23-83 | 1630 | 293 | 7.6 | 14.0 | .4 | -- | 130 |
| | 08-25-83 | 1640 | 275 | 7.8 | 14.5 | .8 | -- | 130 |
| 19N/42E-15B01 | 08-04-82 | 1400 | 365 | 7.0 | 11.0 | 6.2 | -- | 110 |
| | 03-24-83 | 1630 | 376 | 6.5 | 9.5 | 4.9 | -- | 120 |
| | 08-24-83 | 1500 | 370 | 6.9 | 11.5 | 5.4 | -- | 120 |
| 19N/42E-19H01 | 08-04-82 | 1200 | 295 | 8.0 | 19.5 | .1 | -- | 94 |
| | 03-24-83 | 1250 | 290 | 8.1 | 18.0 | .1 | -- | 94 |
| | 08-25-83 | 1000 | 268 | 7.9 | 18.5 | .2 | -- | 94 |
| 19N/44E-21M01 | 06-21-82 | 0825 | 222 | 6.9 | 11.0 | -- | <1 | 96 |
| 19N/44E-22F01 | 08-03-82 | 1030 | 232 | 7.2 | 13.0 | 4.1 | -- | 97 |
| | 03-23-83 | 1400 | 220 | 7.1 | 10.5 | 4.1 | -- | 97 |
| | 08-23-83 | 1330 | 230 | 7.2 | 12.5 | 4.8 | -- | 95 |
| 20N/39E-12N02 | 08-05-82 | 1610 | 214 | 7.7 | 14.0 | 4.1 | -- | 90 |
| | 03-23-83 | 1015 | 252 | 7.4 | 6.0 | 4.2 | -- | 97 |
| | 08-25-83 | 1345 | -- | 7.7 | 15.5 | 3.9 | -- | 88 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 18N/42E-23B01 | 08-03-82 | 0 | 29 | 8.4 | 8.4 | 14 | 0.4 | 2.4 |
| | 03-24-83 | 0 | 29 | 8.8 | 8.5 | 14 | .4 | 2.5 |
| | 08-23-83 | 0 | 28 | 8.7 | 8.7 | 15 | .4 | 2.5 |
| 18N/43E-32B01 | 08-02-82 | 0 | 30 | 8.2 | 15 | 23 | .6 | 2.1 |
| | 03-23-83 | 0 | 29 | 8.4 | 15 | 23 | .6 | 2.2 |
| | 08-22-83 | 0 | 28 | 8.5 | 15 | 23 | .6 | 2.2 |
| 18N/43E-35P03 | 08-03-82 | 0 | 43 | 14 | 21 | 21 | .7 | 2.4 |
| | 03-23-83 | 0 | 46 | 14 | 24 | 22 | .8 | 12 |
| | 08-23-83 | 0 | 43 | 15 | 23 | 23 | .8 | 2.3 |
| 19N/40E-02B01 | 08-06-82 | 0 | 19 | 8.4 | 29 | 42 | 1 | 4.1 |
| | 03-23-83 | 0 | 24 | 11 | 27 | 35 | 1 | 4.7 |
| | 08-22-83 | 0 | 19 | 8.4 | 28 | 41 | 1 | 4.0 |
| 19N/41E-36Q02D1 | 08-05-82 | 0 | 28 | 14 | 15 | 20 | .6 | 3.1 |
| | 03-23-83 | 0 | 27 | 14 | 15 | 20 | .6 | 3.1 |
| | 08-25-83 | 0 | 27 | 14 | 16 | 21 | .6 | 3.0 |
| 19N/42E-15B01 | 08-04-82 | 0 | 29 | 8.2 | 36 | 42 | 2 | 1.8 |
| | 03-24-83 | 0 | 32 | 9.2 | 37 | 40 | 1 | 2.0 |
| | 08-24-83 | 0 | 34 | 9.4 | 38 | 40 | 1 | 1.9 |
| 19N/42E-19H01 | 08-04-82 | 0 | 21 | 10 | 28 | 38 | 1 | 3.5 |
| | 03-24-83 | 0 | 21 | 10 | 28 | 38 | 1 | 3.5 |
| | 08-25-83 | 0 | 21 | 10 | 27 | 37 | 1 | 3.4 |
| 19N/44E-21M01 | 06-21-82 | 0 | 26 | 7.6 | 11 | 20 | .5 | 1.6 |
| 19N/44E-22F01 | 08-03-82 | 0 | 25 | 8.3 | 11 | 19 | .5 | 2.1 |
| | 03-23-83 | 0 | 25 | 8.4 | 11 | 19 | .5 | 2.1 |
| | 08-23-83 | 0 | 24 | 8.5 | 11 | 20 | .5 | 2.2 |
| 20N/39E-12N02 | 08-05-82 | 0 | 23 | 8.0 | 13 | 23 | .6 | 2.4 |
| | 03-23-83 | 0 | 23 | 9.6 | 13 | 22 | .6 | 2.9 |
| | 08-25-83 | 0 | 22 | 8.1 | 13 | 24 | .6 | 2.6 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alka- linity, field (mg/L as CaCO ₃) | Bicar- bonate, field (mg/L as HCO ₃) | Car- bonate, field (mg/L as CO ₃) | Sulfate, dis- solved (mg/L as SO ₄) | Chlo- ride, dis- solved (mg/L as Cl) | Fluo- ride, dis- solved (mg/L as F) | Silica, dis- solved (mg/L as SiO ₂) |
|---|----------|---|---|--|--|--|---|--|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 18N/42E-23B01 | 08-03-82 | 124 | 151 | 0 | <5.0 | 2.3 | 0.2 | 53 |
| | 03-24-83 | 125 | 152 | 0 | 2.0 | 2.2 | .2 | 53 |
| | 08-23-83 | 125 | 152 | 0 | 1.7 | 2.2 | .3 | 53 |
| 18N/43E-32B01 | 08-02-82 | 121 | 148 | 0 | <5.0 | 2.5 | .2 | 50 |
| | 03-23-83 | 129 | 158 | 0 | 1.8 | 2.4 | .2 | 49 |
| | 08-22-83 | 126 | 154 | 0 | 1.4 | 2.3 | .3 | 49 |
| 18N/43E-35P03 | 08-03-82 | 176 | 215 | 0 | 16 | 4.4 | .2 | 47 |
| | 03-23-83 | 193 | 235 | 0 | 19 | 14 | .2 | 46 |
| | 08-23-83 | 190 | 232 | 0 | 20 | 4.8 | .2 | 47 |
| 19N/40E-02B01 | 08-06-82 | 148 | 180 | 0 | <5.0 | 3.1 | .7 | 62 |
| | 03-23-83 | 144 | 176 | 0 | 26 | 2.8 | .6 | 54 |
| | 08-22-83 | 146 | 178 | 0 | 3.3 | 3.0 | .8 | 61 |
| 19N/41E-36Q02D1 | 08-05-82 | 161 | 196 | 0 | <5.0 | 2.2 | .4 | 57 |
| | 03-23-83 | 172 | 210 | 0 | 2.8 | 2.2 | .4 | 54 |
| | 08-25-83 | 164 | 200 | 0 | 2.8 | 2.2 | .4 | 60 |
| 19N/42E-15B01 | 08-04-82 | 145 | 177 | 0 | 12 | 5.9 | .3 | 44 |
| | 03-24-83 | 159 | 194 | 0 | 15 | 6.9 | .3 | 44 |
| | 08-24-83 | 153 | 187 | 0 | 20 | 6.6 | .4 | 45 |
| 19N/42E-19H01 | 08-04-82 | 156 | 190 | 0 | <5.0 | 2.4 | .7 | 54 |
| | 03-24-83 | 159 | 194 | 0 | .7 | 3.5 | .7 | 54 |
| | 08-25-83 | 157 | 191 | 0 | .4 | 2.3 | .8 | 54 |
| 19N/44E-21M01 | 06-21-82 | 107 | 131 | 0 | 8.0 | 2.9 | .3 | 54 |
| 19N/44E-22F01 | 08-03-82 | 117 | 143 | 0 | <5.0 | 1.7 | .2 | 53 |
| | 03-23-83 | 119 | 145 | 0 | 1.8 | 1.6 | .2 | 51 |
| | 08-23-83 | 118 | 144 | 0 | 1.2 | 1.5 | .2 | 53 |
| 20N/39E-12N02 | 08-05-82 | 117 | 143 | 0 | <5.0 | 2.0 | .2 | 44 |
| | 03-23-83 | 130 | 158 | 0 | 8.4 | 2.5 | .3 | 41 |
| | 08-25-83 | 118 | 144 | 0 | 3.7 | 1.9 | .3 | 43 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| Whitman County, Wash.--Continued | | | | | | | | |
| 18N/42E-23B01 | 08-03-82 | -- | 1.4 | -- | <3 | 13 | <1 | 120 |
| | 03-24-83 | 188 | 1.5 | <10 | <3 | -- | 1 | -- |
| | 08-23-83 | 186 | 1.4 | -- | 5 | -- | <1 | -- |
| 18N/43E-32B01 | 08-02-82 | -- | 4.4 | -- | <3 | 11 | <1 | 130 |
| | 03-23-83 | 206 | 4.6 | <10 | <3 | -- | 4 | -- |
| | 08-22-83 | 203 | 4.6 | -- | <3 | -- | <1 | -- |
| 18N/43E-35P03 | 08-03-82 | 267 | 3.0 | -- | 72 | 10 | 36 | 190 |
| | 03-23-83 | 310 | 4.3 | 60 | 10 | -- | 23 | -- |
| | 08-23-83 | 284 | 3.3 | -- | 17 | -- | 23 | -- |
| 19N/40E-02B01 | 08-06-82 | -- | <.10 | -- | 19 | 33 | 23 | 60 |
| | 03-23-83 | 237 | .12 | 10 | 39 | -- | 130 | -- |
| | 08-22-83 | 215 | <.10 | -- | 41 | -- | 25 | -- |
| 19N/41E-36Q02D1 | 08-05-82 | -- | <.10 | -- | <3 | 21 | 13 | 78 |
| | 03-23-83 | 222 | <.10 | <10 | 6 | -- | 7 | -- |
| | 08-25-83 | 225 | .17 | -- | 10 | -- | 10 | -- |
| 19N/42E-15B01 | 08-04-82 | 256 | 7.2 | -- | <3 | 13 | 2 | 130 |
| | 03-24-83 | 268 | 6.0 | <10 | 4 | -- | 7 | -- |
| | 08-24-83 | 281 | 7.7 | -- | 5 | -- | 2 | -- |
| 19N/42E-19H01 | 08-04-82 | -- | <.10 | -- | 54 | 28 | 13 | 78 |
| | 03-24-83 | 217 | <.10 | 10 | 65 | -- | 15 | -- |
| | 08-25-83 | 213 | <.10 | -- | 65 | -- | 13 | -- |
| 19N/44E-21M01 | 06-21-82 | 185 | 2.0 | -- | 3 | -- | 2 | -- |
| 19N/44E-22F01 | 08-03-82 | -- | 1.0 | -- | <3 | 8 | 3 | 120 |
| | 03-23-83 | 177 | 1.1 | <10 | 16 | -- | 6 | -- |
| | 08-23-83 | 177 | 1.1 | -- | 4 | -- | 5 | -- |
| 20N/39E-12N02 | 08-05-82 | -- | .46 | -- | <3 | 10 | 2 | 89 |
| | 03-23-83 | 180 | .43 | 10 | <3 | -- | 9 | -- |
| | 08-25-83 | 167 | .45 | -- | 22 | -- | 2 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 20N/39E-32A01D1 | 08-06-82 | 1210 | 399 | 8.2 | 16.0 | 1.0 | -- | 130 |
| | 08-25-83 | 1250 | 332 | 8.2 | 16.5 | .6 | -- | 110 |
| 20N/42E-19J01 | 08-05-82 | 0915 | 279 | 6.8 | 12.0 | 5.0 | -- | 120 |
| | 03-24-83 | 1450 | 269 | 6.7 | 11.0 | 3.2 | -- | 110 |
| | 08-24-83 | 1600 | 280 | 6.9 | 12.0 | 6.8 | -- | 130 |
| 20N/43E-10R01 | 08-03-82 | 1220 | 316 | 7.4 | 13.0 | .3 | -- | 120 |
| | 03-23-83 | 1000 | 278 | 7.4 | 8.0 | .1 | -- | 110 |
| | 08-23-83 | 1045 | 278 | 7.7 | 12.5 | .1 | -- | 110 |
| 20N/44E-12M01 | 08-03-82 | 1510 | 328 | 7.2 | 11.0 | 3.4 | -- | 130 |
| | 03-23-83 | 1200 | 308 | 7.0 | 10.5 | 5.5 | -- | 130 |
| | 08-23-83 | 1200 | 315 | 7.1 | 11.5 | 8.2 | -- | 120 |
| <u>Yakima County, Wash.</u> | | | | | | | | |
| 07N/22E-09E01 | 03-29-82 | 1715 | 385 | 7.4 | 14.5 | -- | <1 | 170 |
| | 04-19-84 | 0930 | 356 | 7.4 | 14.0 | -- | -- | 160 |
| 07N/22E-36H01 | 03-29-82 | 1600 | 275 | 7.7 | 15.5 | -- | <1 | 67 |
| 07N/23E-36R01 | 03-31-82 | 1150 | 330 | 8.3 | 19.0 | -- | <1 | 33 |
| 08N/22E-01G03 | 08-21-82 | 1000 | 705 | 7.9 | 15.5 | -- | -- | 270 |
| | 04-11-83 | 1130 | 700 | 7.7 | 15.0 | -- | -- | 290 |
| | 07-19-83 | 1630 | 705 | 7.9 | 15.5 | -- | -- | 270 |
| 08N/22E-03K01 | 07-12-82 | 1945 | 740 | 7.9 | 17.0 | -- | <1 | 260 |
| 08N/22E-12N01 | 06-10-82 | 1530 | 675 | 7.7 | 16.5 | -- | <1 | 280 |
| 08N/23E-11M01D1 | 09-02-82 | 1400 | 358 | 7.6 | 15.5 | 7.1 | -- | 150 |
| | 04-11-83 | 1230 | 390 | 7.6 | 14.5 | 6.3 | -- | 170 |
| | 07-19-83 | 1800 | 350 | 7.8 | 17.0 | 7.4 | -- | 140 |
| 09N/21E-17C01 | 06-11-82 | 1130 | 208 | 7.2 | 15.0 | -- | <1 | 95 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 20N/39E-32A01D1 | 08-06-82 | 0 | 29 | 13 | 36 | 37 | 1 | 7.8 |
| | 08-25-83 | 0 | 26 | 12 | 31 | 35 | 1 | 7.5 |
| 20N/42E-19J01 | 08-05-82 | 23 | 30 | 10 | 9.8 | 15 | .4 | 3.1 |
| | 03-24-83 | 24 | 29 | 9.9 | 10 | 16 | .4 | 3.3 |
| | 08-24-83 | 20 | 33 | 11 | 10 | 14 | .4 | 3.5 |
| 20N/43E-10R01 | 08-03-82 | 0 | 26 | 13 | 20 | 26 | .8 | 1.8 |
| | 03-23-83 | 0 | 25 | 12 | 19 | 27 | .8 | 1.8 |
| | 08-23-83 | 0 | 23 | 12 | 19 | 27 | .8 | 2.1 |
| 20N/44E-12M01 | 08-03-82 | 16 | 35 | 11 | 16 | 21 | .6 | .90 |
| | 03-23-83 | 11 | 34 | 11 | 16 | 21 | .6 | 1.0 |
| | 08-23-83 | 2 | 31 | 10 | 16 | 23 | .6 | 1.0 |
| <u>Yakima County, Wash.</u> | | | | | | | | |
| 07N/22E-09E01 | 03-29-82 | 0 | 40 | 16 | 20 | 21 | .7 | 1.9 |
| | 04-19-84 | -- | 39 | 16 | 18 | 19 | .6 | 2.1 |
| 07N/22E-36H01 | 03-29-82 | 0 | 14 | 7.8 | 27 | 42 | 1 | 12 |
| 07N/23E-36R01 | 03-31-82 | 0 | 9.0 | 2.5 | 58 | 71 | 4 | 15 |
| 08N/22E-01G03 | 08-21-82 | 44 | 68 | 25 | 36 | 22 | .9 | 3.9 |
| | 04-11-83 | 55 | 70 | 27 | 37 | 22 | 1 | 3.8 |
| | 07-19-83 | 42 | 65 | 26 | 36 | 22 | 1 | 3.7 |
| 08N/22E-03K01 | 07-12-82 | 100 | 64 | 25 | 38 | 24 | 1 | 3.2 |
| 08N/22E-12N01 | 06-10-82 | 130 | 70 | 26 | 27 | 17 | .7 | 5.5 |
| 08N/23E-11M01D1 | 09-02-82 | 0 | 36 | 14 | 19 | 21 | .7 | 4.8 |
| | 04-11-83 | 0 | 45 | 15 | 20 | 19 | .7 | 4.8 |
| | 07-19-83 | 0 | 38 | 12 | 18 | 21 | .7 | 5.1 |
| 09N/21E-17C01 | 06-11-82 | 2 | 24 | 8.6 | 8.5 | 16 | .4 | 2.1 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|---|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Whitman County, Wash.--Continued</u> | | | | | | | | |
| 20N/39E-32A01D1 | 08-06-82 | 186 | 227 | 0 | 20 | 5.7 | 0.4 | 44 |
| | 08-25-83 | 180 | 219 | 0 | 21 | 4.6 | .5 | 44 |
| 20N/42E-19J01 | 08-05-82 | 94 | 114 | 0 | 19 | 9.3 | .2 | 42 |
| | 03-24-83 | 89 | 109 | 0 | 24 | 6.2 | .2 | 42 |
| | 08-24-83 | 107 | 131 | 0 | 17 | 8.7 | .2 | 43 |
| 20N/43E-10R01 | 08-03-82 | 152 | 185 | 0 | 6.0 | 4.1 | .4 | 49 |
| | 03-23-83 | 148 | 180 | 0 | 5.5 | 4.0 | .4 | 45 |
| | 08-23-83 | 144 | 175 | 0 | 2.8 | 3.1 | .5 | 49 |
| 20N/44E-12M01 | 08-03-82 | 117 | 143 | 0 | 14 | 8.6 | .3 | 48 |
| | 03-23-83 | 119 | 145 | 0 | 10 | 7.8 | .3 | 48 |
| | 08-23-83 | 116 | 142 | 0 | 19 | 6.9 | .4 | 46 |
| <u>Yakima County, Wash.</u> | | | | | | | | |
| 07N/22E-09E01 | 03-29-82 | 166 | 202 | 0 | 20 | 13 | .3 | 56 |
| | 04-19-84 | -- | -- | -- | 20 | 14 | .5 | 54 |
| 07N/22E-36H01 | 03-29-82 | 115 | 140 | 0 | 21 | 7.0 | .3 | 53 |
| 07N/23E-36R01 | 03-31-82 | 172 | 210 | 0 | 6.0 | 8.4 | .3 | 57 |
| 08N/22E-01G03 | 08-21-82 | 230 | 280 | 0 | 67 | 21 | .5 | 51 |
| | 04-11-83 | 231 | 282 | 0 | 71 | 18 | .6 | 50 |
| | 07-19-83 | 227 | 277 | 0 | 80 | 21 | .5 | 50 |
| 08N/22E-03K01 | 07-12-82 | 162 | 198 | 0 | 74 | 27 | .9 | 61 |
| 08N/22E-12N01 | 06-10-82 | 149 | 182 | 0 | 120 | 21 | .5 | 66 |
| 08N/23E-11M01D1 | 09-02-82 | 184 | 225 | 0 | 10 | 3.7 | .4 | 66 |
| | 04-11-83 | 203 | 248 | 0 | 10 | 3.6 | .4 | 62 |
| | 07-19-83 | 171 | 208 | 0 | 11 | 3.7 | .3 | 64 |
| 09N/21E-17C01 | 06-11-82 | 94 | 114 | 0 | 13. | 7.0 | .2 | 44 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|----------------------------------|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Whitman County, Continued</u> | | | | | | | | |
| 20N/39E-32A01D1 | 08-06-82 | 268 | <0.10 | -- | 4 | 31 | 10 | 98 |
| | 08-25-83 | 254 | <.10 | -- | 11 | -- | 12 | -- |
| 20N/42E-19J01 | 08-05-82 | 204 | 5.6 | -- | <3 | 11 | 5 | 120 |
| | 03-24-83 | 194 | 3.5 | <10 | 9 | -- | 5 | -- |
| | 08-24-83 | 211 | 4.6 | -- | 6 | -- | 1 | -- |
| 20N/43E-10R01 | 08-03-82 | 219 | 1.8 | -- | <3 | 20 | 2 | 99 |
| | 03-23-83 | 202 | .17 | 10 | 20 | -- | 10 | -- |
| | 08-23-83 | 198 | <.10 | -- | 7 | -- | 6 | -- |
| 20N/44E-12M01 | 08-03-82 | 234 | 6.8 | -- | <3 | 12 | 2 | 160 |
| | 03-23-83 | 234 | 7.9 | <10 | 4 | -- | <1 | -- |
| | 08-23-83 | 220 | 4.4 | -- | 3 | -- | 2 | -- |
| <u>Yakima County, Wash.</u> | | | | | | | | |
| 07N/22E-09E01 | 03-29-82 | 271 | 1.0 | -- | 9 | -- | 3 | -- |
| | 04-19-84 | 262 | -- | -- | 4 | 9 | <1 | 170 |
| 07N/22E-36H01 | 03-29-82 | 211 | <.10 | -- | 84 | -- | 100 | -- |
| 07N/23E-36R01 | 03-31-82 | 260 | <.10 | -- | 130 | -- | 19 | -- |
| 08N/22E-01G03 | 08-21-82 | 464 | 12 | -- | <3 | 15 | 3 | 410 |
| | 04-11-83 | 465 | 11 | 30 | 16 | -- | 26 | -- |
| | 07-19-83 | 467 | 11 | -- | 4 | -- | <1 | -- |
| 08N/22E-03K01 | 07-12-82 | 488 | 22 | -- | 11 | -- | 2 | -- |
| 08N/22E-12N01 | 06-10-82 | 492 | 15 | -- | 7 | -- | 2 | -- |
| 08N/23E-11M01D1 | 09-02-82 | 267 | .49 | -- | 5 | 12 | 2 | 190 |
| | 04-11-83 | 285 | .56 | 20 | 8 | -- | <1 | -- |
| | 07-19-83 | 257 | .52 | -- | 5 | -- | 1 | -- |
| 09N/21E-17C01 | 06-11-82 | 165 | .27 | -- | 8 | -- | 3 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coli-form fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|--------------------------------|---------------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 09N/21E-25J03 | 09-03-82 | 1700 | 430 | 7.8 | 17.5 | 0.4 | -- | 180 |
| | 04-12-83 | 1045 | 454 | 7.9 | 17.0 | .4 | -- | 200 |
| | 07-20-83 | 1000 | 480 | 7.8 | 17.0 | .4 | -- | 200 |
| 09N/22E-10R01 | 06-10-82 | 1150 | 310 | 7.7 | 16.0 | -- | <1 | 110 |
| 09N/22E-12P01 | 08-19-82 | 1115 | 283 | 7.8 | 21.0 | .1 | -- | 77 |
| 09N/23E-25G01 | 06-10-82 | 1705 | 550 | 7.7 | 14.0 | -- | <1 | 210 |
| 09N/23E-31F01 | 09-02-82 | 1730 | -- | 8.0 | 19.0 | .7 | -- | 89 |
| 10N/16E-20E01D1 | 08-18-82 | 1800 | 285 | 7.3 | 16.0 | 4.6 | -- | 120 |
| | 07-14-83 | 1055 | 272 | 7.1 | 16.0 | 4.4 | -- | 120 |
| 10N/17E-04F01 | 08-18-82 | 1440 | 185 | 7.0 | 15.0 | 5.4 | -- | 75 |
| | 04-12-83 | 0930 | 175 | 7.2 | 12.5 | 5.0 | -- | 75 |
| | 07-14-83 | 0925 | 181 | 7.1 | 13.0 | 5.0 | -- | 71 |
| 10N/17E-07R01 | 06-09-82 | 1350 | 152 | 7.1 | 12.5 | -- | <1 | 65 |
| 10N/18E-31N01 | 08-18-82 | 1205 | 340 | 7.8 | 22.0 | .5 | -- | 110 |
| | 07-14-83 | 1255 | 347 | 7.8 | 24.0 | -- | -- | 110 |
| 10N/20E-04L01 | 06-10-82 | 1630 | 200 | 7.9 | 25.0 | -- | <1 | 57 |
| 10N/20E-19J01 | 06-10-82 | 1400 | 360 | 7.4 | 15.5 | -- | <1 | 160 |
| 10N/21E-03H01 | 08-21-82 | 1420 | 375 | 7.8 | 23.0 | .3 | -- | 130 |
| | 07-15-83 | 0950 | 368 | 7.9 | 23.0 | .9 | -- | 140 |
| 10N/21E-07K01 | 06-11-82 | 1000 | 288 | 6.9 | 13.5 | -- | <1 | 130 |
| 10N/21E-34L01 | 06-11-82 | 0815 | 292 | 7.3 | 15.0 | -- | <1 | 140 |
| 10N/22E-15C01 | 06-10-82 | 0820 | 1,180 | 7.6 | 14.0 | -- | <1 | 510 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 09N/21E-25J03 | 09-03-82 | 48 | 42 | 17 | 19 | 19 | 0.6 | 5.5 |
| | 04-12-83 | 71 | 49 | 19 | 19 | 17 | .6 | 5.5 |
| | 07-20-83 | 75 | 49 | 19 | 18 | 16 | .6 | 5.7 |
| 09N/22E-10R01 | 06-10-82 | 0 | 29 | 9.9 | 19 | 26 | .8 | 4.9 |
| 09N/22E-12P01 | 08-19-82 | 0 | 22 | 5.3 | 24 | 37 | 1 | 11 |
| 09N/23E-25G01 | 06-10-82 | 0 | 43 | 26 | 37 | 27 | 1 | 4.8 |
| 09N/23E-31F01 | 09-02-82 | 0 | 24 | 7.1 | 25 | 35 | 1 | 8.8 |
| 10N/16E-20E01D1 | 08-18-82 | 0 | 25 | 14 | 8.7 | 13 | .3 | 4.4 |
| | 07-14-83 | 0 | 25 | 14 | 8.7 | 13 | .3 | 4.3 |
| 10N/17E-04F01 | 08-18-82 | -- | 15 | 9.0 | 7.4 | 17 | .4 | 3.2 |
| | 04-12-83 | 0 | 15 | 9.1 | 7.4 | 17 | .4 | 3.2 |
| | 07-14-83 | 0 | 14 | 8.7 | 7.3 | 18 | .4 | 3.1 |
| 10N/17E-07R01 | 06-09-82 | 0 | 14 | 7.2 | 6.3 | 17 | .3 | 3.1 |
| 10N/18E-31N01 | 08-18-82 | 0 | 21 | 14 | 30 | 36 | 1 | 6.1 |
| | 07-14-83 | 0 | 21 | 14 | 32 | 37 | 1 | 5.8 |
| 10N/20E-04L01 | 06-10-82 | 0 | 14 | 5.4 | 25 | 46 | 1 | 5.0 |
| 10N/20E-19J01 | 06-10-82 | 0 | 41 | 14 | 15 | 17 | .5 | 3.7 |
| 10N/21E-03H01 | 08-21-82 | 0 | 37 | 8.5 | 25 | 28 | 1 | 7.8 |
| | 07-15-83 | 0 | 40 | 8.7 | 26 | 28 | 1 | 7.3 |
| 10N/21E-07K01 | 06-11-82 | 0 | 32 | 12 | 15 | 20 | .6 | 2.8 |
| 10N/21E-34L01 | 06-11-82 | 0 | 31 | 14 | 11 | 15 | .4 | 3.5 |
| 10N/22E-15C01 | 06-10-82 | 180 | 140 | 40 | 57 | 19 | 1 | 4.5 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alka- linity, field (mg/L as CaCO ₃) | Bicar- bonate, field (mg/L as HCO ₃) | Car- bonate, field (mg/L as CO ₃) | Sulfate, dis- solved (mg/L as SO ₄) | Chlo- ride, dis- solved (mg/L as Cl) | Fluo- ride, dis- solved (mg/L as F) | Silica, dis- solved (mg/L as SiO ₂) |
|--|----------|---|---|--|--|--|---|--|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 09N/21E-25J03 | 09-03-82 | 127 | 155 | 0 | 65 | 20 | 0.3 | 52 |
| | 04-12-83 | 130 | 158 | 0 | 71 | 19 | .3 | 52 |
| | 07-20-83 | 125 | 153 | 0 | 75 | 24 | .3 | 48 |
| 09N/22E-10R01 | 06-10-82 | 148 | 180 | 0 | 12 | 3.4 | .5 | 48 |
| 09N/22E-12P01 | 08-19-82 | 140 | 171 | 0 | <5.0 | 6.7 | .4 | 64 |
| 09N/23E-25G01 | 06-10-82 | 257 | 313 | 0 | 19 | 5.0 | .8 | 53 |
| 09N/23E-31F01 | 09-02-82 | 147 | 179 | 0 | <5.0 | 7.5 | .4 | 64 |
| 10N/16E-20E01D1 | 08-18-82 | 144 | 176 | 0 | <5.0 | 1.1 | .1 | 63 |
| | 07-14-83 | 140 | 171 | 0 | 2.9 | 1.1 | .2 | 60 |
| 10N/17E-04F01 | 08-18-82 | -- | -- | -- | <5.0 | 1.4 | .2 | 56 |
| | 04-12-83 | 94 | 115 | 0 | 1.7 | 1.4 | .2 | 53 |
| | 07-14-83 | 88 | 108 | 0 | 1.7 | 1.3 | .2 | 53 |
| 10N/17E-07R01 | 06-09-82 | 76 | 93 | 0 | <5.0 | 1.0 | .1 | 50 |
| 10N/18E-31N01 | 08-18-82 | 180 | 219 | 0 | <5.0 | 3.6 | .7 | 75 |
| | 07-14-83 | 180 | 220 | 0 | .3 | 3.1 | .8 | 79 |
| 10N/20E-04L01 | 06-10-82 | 111 | 135 | 0 | <5.0 | 2.7 | .7 | 73 |
| 10N/20E-19J01 | 06-10-82 | 163 | 199 | 0 | 13 | 5.6 | .1 | 34 |
| 10N/21E-03H01 | 08-21-82 | 195 | 238 | 0 | <5.0 | 5.0 | .3 | 44 |
| | 07-15-83 | 190 | 232 | 0 | 2.7 | 4.8 | .3 | 44 |
| 10N/21E-07K01 | 06-11-82 | 144 | 176 | 0 | 8.0 | 5.3 | .1 | 32 |
| 10N/21E-34L01 | 06-11-82 | 149 | 182 | 0 | 12 | 5.8 | .2 | 37 |
| 10N/22E-15C01 | 06-10-82 | 338 | 412 | 0 | 260 | 25 | .3 | 46 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 09N/21E-25J03 | 09-03-82 | 309 | 2.7 | -- | 10 | 25 | 26 | 250 |
| | 04-12-83 | 335 | 5.1 | 10 | 22 | -- | <1 | -- |
| | 07-20-83 | 335 | 4.7 | -- | 13 | -- | 25 | -- |
| 09N/22E-10R01 | 06-10-82 | 216 | <.10 | -- | 26 | -- | 300 | -- |
| 09N/22E-12P01 | 08-19-82 | -- | <.10 | -- | 23 | 19 | 160 | 160 |
| 09N/23E-25G01 | 06-10-82 | 362 | 4.5 | -- | <3 | -- | <1 | -- |
| 09N/23E-31F01 | 09-02-82 | -- | <.10 | -- | 25 | 27 | 110 | 130 |
| 10N/16E-20E01D1 | 08-18-82 | -- | .28 | -- | <3 | 14 | 2 | 49 |
| | 07-14-83 | 201 | .25 | -- | 7 | -- | 2 | -- |
| 10N/17E-04F01 | 08-18-82 | -- | .13 | -- | 7 | 7 | 2 | 52 |
| | 04-12-83 | 148 | .15 | <10 | 29 | -- | 1 | -- |
| | 07-14-83 | 143 | .14 | -- | 8 | -- | <1 | -- |
| 10N/17E-07R01 | 06-09-82 | 135 | .36 | -- | <3 | -- | <1 | -- |
| 10N/18E-31N01 | 08-18-82 | -- | <.10 | -- | 230 | 40 | 41 | 59 |
| | 07-14-83 | 264 | <.10 | -- | 110 | -- | 35 | -- |
| 10N/20E-04L01 | 06-10-82 | 197 | <.10 | -- | 40 | -- | 120 | -- |
| 10N/20E-19J01 | 06-10-82 | 245 | 4.7 | -- | <3 | -- | 1 | -- |
| 10N/21E-03H01 | 08-21-82 | -- | <.10 | -- | 110 | 33 | 84 | 140 |
| | 07-15-83 | 248 | <.10 | -- | 77 | -- | 77 | -- |
| 10N/21E-07K01 | 06-11-82 | 201 | 1.6 | -- | 5 | -- | 3 | -- |
| 10N/21E-34L01 | 06-11-82 | 207 | .62 | -- | 4 | -- | 18 | -- |
| 10N/22E-15C01 | 06-10-82 | 797 | 4.9 | -- | <3 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 10N/22E-25F02 | 08-19-82 | 1330 | 320 | 7.5 | 21.5 | 2.8 | -- | 120 |
| | 06-10-83 | 1100 | 320 | 7.6 | 20.5 | 3.6 | -- | 120 |
| | 07-19-83 | 1230 | 310 | 7.8 | 21.0 | 3.7 | -- | 120 |
| 10N/22E-31F01 | 08-19-82 | 0950 | 300 | 8.3 | 21.5 | .1 | -- | 40 |
| | 06-10-83 | 1300 | 291 | 8.5 | 21.5 | .1 | -- | 39 |
| 10N/22E-31F01 | 07-19-83 | 1000 | 290 | 8.5 | 21.5 | .1 | -- | 39 |
| 10N/22E-36E01 | 06-10-82 | 1035 | 302 | 8.0 | 24.5 | -- | <1 | 100 |
| 10N/23E-08H01 | 08-20-82 | 1145 | 205 | 7.8 | 17.5 | 7.0 | -- | 68 |
| | 06-10-83 | 1015 | 215 | 7.6 | 16.5 | 7.4 | -- | 79 |
| | 07-19-83 | 1430 | 198 | 8.1 | 16.5 | 7.4 | -- | 72 |
| 11N/16E-34K02 | 08-18-82 | 1615 | 488 | 6.7 | 23.5 | .2 | -- | 180 |
| 11N/17E-02P01 | 08-18-82 | 1545 | -- | 7.9 | 26.0 | .0 | -- | 81 |
| | 07-14-83 | 1440 | 287 | 7.8 | 26.0 | .2 | -- | 82 |
| 11N/17E-32L02 | 06-09-82 | 1245 | 250 | 7.4 | 12.5 | -- | <1 | 99 |
| 11N/19E-10Q01 | 06-09-82 | 1635 | 110 | 8.1 | 18.5 | -- | <1 | 32 |
| 11N/19E-27H01 | 06-09-82 | 1525 | 202 | 7.0 | 14.5 | -- | <1 | 91 |
| 11N/20E-02H01 | 06-10-82 | 1030 | 240 | 8.9 | 23.5 | -- | <1 | 11 |
| 11N/20E-22R01 | 06-10-82 | 1200 | 130 | 8.0 | -- | -- | <1 | 62 |
| 11N/21E-07F01 | 08-21-82 | 1530 | 309 | 8.8 | 27.5 | .2 | -- | 5 |
| | 06-09-83 | 1500 | 311 | 8.9 | 27.5 | .1 | -- | 5 |
| | 07-15-83 | 1055 | 304 | 8.9 | 27.5 | .1 | -- | 5 |
| 11N/21E-20D01 | 06-11-82 | 1315 | 358 | 7.5 | 18.0 | -- | <1 | 110 |
| 11N/21E-22G02 | 09-02-82 | 1100 | 237 | 8.4 | 28.0 | 1.5 | -- | 28 |
| | 06-09-83 | 1100 | 235 | 8.3 | 27.0 | 1.6 | -- | 29 |
| | 07-14-83 | 1510 | 246 | 8.4 | 28.0 | .1 | -- | 27 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 10N/22E-25F02 | 08-19-82 | 0 | 32 | 9.8 | 13 | 18 | 0.5 | 6.6 |
| | 06-10-83 | 0 | 32 | 10 | 13 | 18 | .5 | 6.7 |
| | 07-19-83 | 0 | 33 | 10 | 13 | 18 | .5 | 6.6 |
| 10N/22E-31F01 | 08-19-82 | 0 | 13 | 1.7 | 43 | 63 | 3 | 12 |
| | 06-10-83 | -- | 13 | 1.7 | 44 | 63 | 3 | 13 |
| 10N/22E-31F01 | 07-19-83 | 0 | 13 | 1.6 | 42 | 63 | 3 | 12 |
| 10N/22E-36E01 | 06-10-82 | 0 | 24 | 9.9 | 22 | 30 | 1 | 8.6 |
| 10N/23E-08H01 | 08-20-82 | 0 | 19 | 5.0 | 13 | 29 | .7 | 2.2 |
| | 06-10-83 | 0 | 22 | 5.9 | 14 | 27 | .7 | 2.5 |
| | 07-19-83 | 0 | 20 | 5.4 | 13 | 27 | .7 | 2.5 |
| 11N/16E-34K02 | 08-18-82 | 0 | 33 | 23 | 32 | 27 | 1 | 6.9 |
| 11N/17E-02P01 | 08-18-82 | 0 | 19 | 8.2 | 28 | 41 | 1 | 5.1 |
| | 07-14-83 | 0 | 19 | 8.3 | 28 | 41 | 1 | 5.0 |
| 11N/17E-32L02 | 06-09-82 | 0 | 20 | 12 | 15 | 24 | .7 | 3.0 |
| 11N/19E-10Q01 | 06-09-82 | 0 | 9.6 | 1.9 | 10 | 39 | .8 | 2.3 |
| 11N/19E-27H01 | 06-09-82 | 1 | 23 | 8.2 | 8.2 | 16 | .4 | 2.6 |
| 11N/20E-02H01 | 06-10-82 | 0 | 3.8 | .40 | 52 | 86 | 7 | 5.6 |
| 11N/20E-22R01 | 06-10-82 | 0 | 18 | 4.2 | 17 | 36 | .9 | 3.7 |
| 11N/21E-07F01 | 08-21-82 | 0 | 1.8 | .10 | 68 | 93 | 13 | 5.0 |
| | 06-09-83 | 0 | 1.8 | .16 | 70 | 93 | 13 | 4.8 |
| | 07-15-83 | 0 | 1.7 | .11 | 68 | 93 | 14 | 4.7 |
| 11N/21E-20D01 | 06-11-82 | 0 | 30 | 8.8 | 32 | 37 | 1 | 7.1 |
| 11N/21E-22G02 | 09-02-82 | 0 | 8.3 | 1.7 | 41 | 70 | 3 | 8.9 |
| | 06-09-83 | 0 | 8.8 | 1.7 | 41 | 69 | 3 | 8.7 |
| | 07-14-83 | 0 | 8.3 | 1.5 | 40 | 70 | 3 | 8.5 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alka- linity, field (mg/L as CaCO ₃) | Bicar- bonate, field (mg/L as HCO ₃) | Car- bonate, field (mg/L as CO ₃) | Sulfate, dis- solved (mg/L as SO ₄) | Chlo- ride, dis- solved (mg/L as Cl) | Fluo- ride, dis- solved (mg/L as F) | Silica, dis- solved (mg/L as SiO ₂) |
|--|----------|---|---|--|--|--|---|--|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 10N/22E-25F02 | 08-19-82 | 130 | 158 | 0 | 19 | 6.2 | 0.3 | 69 |
| | 06-10-83 | 133 | 162 | 0 | 17 | 6.2 | .4 | 69 |
| | 07-19-83 | 130 | 159 | 0 | 23 | 6.4 | .3 | 71 |
| 10N/22E-31F01 | 08-19-82 | 130 | 166 | 0 | <5.0 | 14 | .6 | 64 |
| | 06-10-83 | 138 | -- | -- | .4 | 14 | .6 | 64 |
| 10N/22E-31F01 | 07-19-83 | 135 | 153 | 6 | .3 | 14 | .5 | 62 |
| 10N/22E-36E01 | 06-10-82 | 153 | 186 | 0 | <5.0 | 5.9 | .4 | 63 |
| 10N/23E-08H01 | 08-20-82 | 92 | 112 | 0 | <5.0 | 2.5 | .5 | 47 |
| | 06-10-83 | 101 | 123 | 0 | 6.3 | 2.5 | .5 | 47 |
| | 07-19-83 | 95 | 116 | 0 | 5.0 | 2.5 | .4 | 48 |
| 11N/16E-34K02 | 08-18-82 | 217 | 265 | 0 | 36 | 2.6 | .4 | 79 |
| 11N/17E-02P01 | 08-18-82 | 149 | 182 | 0 | <5.0 | 12 | .7 | 67 |
| | 07-14-83 | 96 | 117 | 0 | .2 | 5.2 | .8 | -- |
| 11N/17E-32L02 | 06-09-82 | 127 | 155 | 0 | <5.0 | 2.2 | .4 | 60 |
| 11N/19E-10Q01 | 06-09-82 | 52 | 64 | 0 | <5.0 | 1.3 | .3 | 45 |
| 11N/19E-27H01 | 06-09-82 | 90 | 110 | 0 | 10 | 4.3 | .2 | 33 |
| 11N/20E-02H01 | 06-10-82 | 127 | 122 | 16 | <5.0 | 5.7 | .8 | 50 |
| 11N/20E-22R01 | 06-10-82 | 71 | 87 | 0 | 19 | 5.9 | .3 | 46 |
| 11N/21E-07F01 | 08-21-82 | 149 | 161 | 10 | <5.0 | 7.8 | 1.5 | 58 |
| | 06-09-83 | 150 | 163 | 10 | 3.2 | 8.5 | 1.5 | 58 |
| | 07-15-83 | 149 | 157 | 12 | 3.4 | 8.0 | 1.5 | 55 |
| 11N/21E-20D01 | 06-11-82 | 184 | 224 | 0 | 10 | 7.6 | .5 | 40 |
| 11N/21E-22G02 | 09-02-82 | 124 | 152 | 0 | <5.0 | 5.0 | .7 | 53 |
| | 06-09-83 | 125 | 153 | 0 | .4 | 5.2 | .7 | 53 |
| | 07-14-83 | 120 | 143 | 2 | .3 | 5.2 | .7 | 52 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|---|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 10N/22E-25F02 | 08-19-82 | 241 | 1.7 | -- | <3 | 17 | 2 | 200 |
| | 06-10-83 | 242 | 1.7 | 10 | 10 | -- | 2 | -- |
| | 07-19-83 | 249 | 1.7 | -- | <3 | -- | <1 | -- |
| 10N/22E-31F01 | 08-19-82 | -- | <.10 | -- | <3 | 28 | 21 | 49 |
| | 06-10-83 | 232 | <.10 | 50 | <5 | -- | 18 | -- |
| 10N/22E-31F01 | 07-19-83 | 227 | <.10 | -- | 7 | -- | 20 | -- |
| 10N/22E-36E01 | 06-10-82 | 230 | <.10 | -- | 26 | -- | 42 | -- |
| 10N/23E-08H01 | 08-20-82 | -- | .42 | -- | <3 | 5 | 1 | 91 |
| | 06-10-83 | 164 | .54 | <10 | 38 | -- | 2 | -- |
| | 07-19-83 | 156 | .48 | -- | 5 | -- | <1 | -- |
| 11N/16E-34K02 | 08-18-82 | 349 | <.10 | -- | 5,700 | 32 | 180 | 67 |
| 11N/17E-02P01 | 08-18-82 | -- | <.10 | -- | 65 | 27 | 52 | 55 |
| | 07-14-83 | 124 | <.10 | -- | 83 | -- | 48 | -- |
| 11N/17E-32L02 | 06-09-82 | 198 | .64 | -- | 4 | -- | 1 | -- |
| 11N/19E-10Q01 | 06-09-82 | 109 | <.10 | -- | <3 | -- | 2 | -- |
| 11N/19E-27H01 | 06-09-82 | 152 | 1.8 | -- | 4 | -- | <1 | -- |
| 11N/20E-02H01 | 06-10-82 | -- | <.10 | -- | <3 | -- | <1 | -- |
| 11N/20E-22R01 | 06-10-82 | 158 | .29 | -- | 72 | -- | 12 | -- |
| 11N/21E-07F01 | 08-21-82 | -- | <.10 | -- | 6 | 24 | 9 | 6 |
| | 06-09-83 | 238 | <.10 | 50 | 16 | -- | 3 | -- |
| | 07-15-83 | 232 | <.10 | -- | 11 | -- | 3 | -- |
| 11N/21E-20D01 | 06-11-82 | 247 | <.10 | -- | 390 | -- | 120 | -- |
| 11N/21E-22G02 | 09-02-82 | -- | <.10 | -- | 10 | 30 | 15 | 32 |
| | 06-09-83 | 195 | <.10 | 30 | 25 | -- | 19 | -- |
| | 07-14-83 | 189 | <.10 | -- | 16 | -- | 14 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 11N/21E-26F01 | 08-21-82 | 1025 | 270 | 8.1 | 25.5 | 0.2 | -- | 56 |
| 11N/22E-19N01 | 08-20-82 | 1015 | 300 | 7.6 | 20.5 | 7.3 | -- | 110 |
| | 04-12-83 | 1410 | 275 | 7.9 | 19.5 | 9.0 | -- | 110 |
| | 07-14-83 | 1635 | 280 | 7.8 | 21.0 | 7.8 | -- | 110 |
| 12N/14E-24L01 | 08-17-82 | 1600 | 180 | 7.8 | 11.5 | 5.1 | -- | 56 |
| | 04-14-83 | 1000 | 165 | 7.9 | 9.0 | -- | -- | 60 |
| | 07-15-83 | 1225 | 180 | 7.9 | 11.0 | 5.3 | -- | 59 |
| 12N/15E-13D01 | 08-17-82 | 1410 | 185 | 7.6 | 15.5 | 7.6 | -- | 68 |
| 12N/16E-15F01D1 | 08-18-82 | 0935 | 175 | 8.0 | 18.5 | .3 | -- | 65 |
| | 06-09-83 | 1530 | 183 | 7.8 | 18.5 | .6 | -- | 65 |
| | 07-15-83 | 0940 | 170 | 7.8 | 18.5 | -- | -- | 65 |
| 12N/17E-12J03 | 07-12-82 | 1415 | 148 | 7.6 | 18.5 | -- | <1 | 53 |
| 12N/18E-06B02 | 06-08-82 | 1740 | 555 | 7.1 | 12.5 | -- | <1 | 220 |
| 12N/19E-01E01 | 06-08-82 | 1100 | 302 | 7.4 | 13.5 | -- | <1 | 98 |
| 12N/19E-10L01 | 06-08-82 | 0920 | 710 | 7.7 | 14.5 | -- | <1 | 280 |
| 12N/19E-16P01 | 08-20-82 | 1330 | 262 | 8.7 | 19.5 | -- | -- | 110 |
| | 06-09-83 | 1600 | 265 | 8.2 | 19.5 | -- | -- | 110 |
| | 07-14-83 | 1310 | 261 | 8.0 | 19.5 | -- | -- | 110 |
| 12N/20E-31H01 | 08-19-82 | 1130 | -- | 8.0 | 16.5 | -- | -- | 170 |
| | 07-15-83 | 1250 | 330 | 8.4 | 26.5 | -- | -- | 49 |
| 12N/21E-17Q01 | 09-03-82 | 1000 | 268 | 7.8 | 27.0 | .1 | -- | 59 |
| | 06-09-83 | 1115 | 280 | 8.0 | 27.0 | .1 | -- | 59 |
| | 07-14-83 | 1130 | 275 | 8.1 | 27.0 | .1 | -- | 57 |
| 12N/22E-21N01 | 08-20-82 | 1600 | 260 | 8.0 | 23.5 | .3 | -- | 76 |
| | 06-09-83 | 0945 | 260 | 7.9 | 23.0 | .1 | -- | 81 |
| | 07-14-83 | 1010 | 260 | 8.2 | 23.0 | .1 | -- | 79 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|---|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 11N/21E-26F01 | 08-21-82 | 0 | 15 | 4.4 | 33 | 52 | 2 | 8.8 |
| 11N/22E-19N01 | 08-20-82 | 5 | 26 | 10 | 12 | 19 | .5 | 4.9 |
| | 04-12-83 | 4 | 27 | 11 | 12 | 18 | .5 | 4.8 |
| | 07-14-83 | 3 | 26 | 10 | 12 | 19 | .5 | 4.7 |
| 12N/14E-24L01 | 08-17-82 | 0 | 12 | 6.2 | 12 | 31 | .7 | 3.1 |
| | 04-14-83 | 0 | 13 | 6.6 | 12 | 29 | .7 | 3.1 |
| | 07-15-83 | 0 | 13 | 6.4 | 12 | 29 | .7 | 3.1 |
| 12N/15E-13D01 | 08-17-82 | 0 | 14 | 8.0 | 6.8 | 17 | .4 | 2.6 |
| 12N/16E-15F01D1 | 08-18-82 | 0 | 13 | 7.8 | 11 | 26 | .6 | 2.8 |
| | 06-09-83 | 0 | 13 | 7.8 | 11 | 26 | .6 | 2.7 |
| | 07-15-83 | 0 | 13 | 7.8 | 11 | 26 | .6 | 2.7 |
| 12N/17E-12J03 | 07-12-82 | 0 | 12 | 5.7 | 8.5 | 24 | .5 | 3.3 |
| 12N/18E-06B02 | 06-08-82 | 0 | 50 | 23 | 35 | 25 | 1 | 6.3 |
| 12N/19E-01E01 | 06-08-82 | 0 | 21 | 11 | 32 | 41 | 1 | .7 |
| 12N/19E-10L01 | 06-08-82 | 9 | 71 | 25 | 48 | 27 | 1 | 2.9 |
| 12N/19E-16P01 | 08-20-82 | 0 | 24 | 11 | 9.0 | 15 | .4 | 4.9 |
| | 06-09-83 | 5 | 24 | 12 | 9.3 | 15 | .4 | 4.8 |
| | 07-14-83 | 0 | 24 | 12 | 9.2 | 15 | .4 | 4.6 |
| 12N/20E-31H01 | 08-19-82 | 9 | 38 | 17 | 36 | 31 | 1 | 6.4 |
| | 07-15-83 | 0 | 11 | 5.3 | 50 | 65 | 3 | 7.4 |
| 12N/21E-17Q01 | 09-03-82 | 0 | 13 | 6.4 | 37 | 55 | 2 | 6.5 |
| | 06-09-83 | 0 | 13 | 6.5 | 37 | 55 | 2 | 6.0 |
| | 07-14-83 | 0 | 12 | 6.5 | 38 | 56 | 2 | 5.9 |
| 12N/22E-21N01 | 08-20-82 | -- | 15 | 9.4 | 23 | 38 | 1 | 5.4 |
| | 06-09-83 | 0 | 16 | 10 | 26 | 39 | 1 | 5.2 |
| | 07-14-83 | 0 | 16 | 9.6 | 24 | 38 | 1 | 5.1 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|--|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 11N/21E-26F01 | 08-21-82 | 132 | 161 | 0 | <5.0 | 8.7 | 0.6 | 56 |
| 11N/22E-19N01 | 08-20-82 | 101 | 123 | 0 | 21 | 5.6 | .6 | 57 |
| | 04-12-83 | 109 | 133 | 0 | 20 | 5.6 | .4 | 58 |
| | 07-14-83 | 103 | 126 | 0 | 19 | 5.4 | .4 | 57 |
| 12N/14E-24L01 | 08-17-82 | 87 | 106 | 0 | <5.0 | .6 | .2 | 50 |
| | 04-14-83 | 89 | 109 | 0 | 3.9 | .7 | .3 | 50 |
| | 07-15-83 | 87 | 106 | 0 | 3.9 | .6 | .3 | 50 |
| 12N/15E-13D01 | 08-17-82 | 85 | 104 | 0 | <5.0 | 1.3 | .2 | 58 |
| 12N/16E-15F01D1 | 08-18-82 | 82 | 99 | 0 | 8.0 | 1.1 | .3 | 57 |
| | 06-09-83 | 87 | 106 | 0 | 8.4 | 1.1 | .3 | 54 |
| | 07-15-83 | 84 | 102 | 0 | 8.2 | 1.1 | .3 | 54 |
| 12N/17E-12J03 | 07-12-82 | 73 | 89 | 0 | <5.0 | 1.2 | .3 | 63 |
| 12N/18E-06B02 | 06-08-82 | 241 | 294 | 0 | 28 | 12 | .3 | 49 |
| 12N/19E-01E01 | 06-08-82 | 151 | 184 | 0 | <5.0 | 9.1 | .7 | 56 |
| 12N/19E-10L01 | 06-08-82 | 271 | 331 | 0 | 63 | 28 | .6 | 56 |
| 12N/19E-16P01 | 08-20-82 | 126 | 137 | 8 | 16 | 6.3 | .3 | 41 |
| | 06-09-83 | 104 | 127 | 0 | 15 | 5.4 | .3 | 39 |
| | 07-14-83 | 114 | 139 | 0 | 15 | 5.7 | .3 | 40 |
| 12N/20E-31H01 | 08-19-82 | 157 | 190 | 0 | 63 | 21 | .6 | 45 |
| | 07-15-83 | 117 | 139 | 2 | 31 | 12 | .8 | 51 |
| 12N/21E-17Q01 | 09-03-82 | 143 | 174 | 0 | <5.0 | 5.0 | .8 | 57 |
| | 06-09-83 | 154 | 188 | 0 | .3 | 4.8 | .8 | 57 |
| | 07-14-83 | 142 | 173 | 0 | .4 | 4.9 | .8 | 57 |
| 12N/22E-21N01 | 08-20-82 | -- | -- | -- | <5.0 | 4.5 | .6 | 52 |
| | 06-09-83 | 126 | 154 | 0 | .2 | 4.4 | .6 | 54 |
| | 07-14-83 | 132 | 161 | 0 | <.2 | 4.3 | .6 | 52 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 11N/21E-26F01 | 08-21-82 | -- | <0.10 | -- | 15 | 26 | 47 | 76 |
| 11N/22E-19N01 | 08-20-82 | 213 | 3.5 | -- | <3 | 11 | 2 | 130 |
| | 04-12-83 | 221 | 3.7 | 10 | 12 | -- | <1 | -- |
| | 07-14-83 | 212 | 3.5 | -- | <3 | -- | <1 | -- |
| 12N/14E-24L01 | 08-17-82 | -- | <.10 | -- | <3 | 17 | 1 | 28 |
| | 04-14-83 | 143 | <.10 | 10 | 18 | -- | 2 | -- |
| | 07-15-83 | 141 | <.10 | -- | 6 | -- | <1 | -- |
| 12N/15E-13D01 | 08-17-82 | -- | .64 | -- | <3 | 5 | <1 | 29 |
| 12N/16E-15F01D1 | 08-18-82 | 150 | <.10 | -- | 12 | 14 | 19 | 38 |
| | 06-09-83 | 150 | <.10 | <10 | 15 | -- | 14 | -- |
| | 07-15-83 | 148 | <.10 | -- | 19 | -- | 17 | -- |
| 12N/17E-12J03 | 07-12-82 | 145 | .24 | -- | 4 | -- | <1 | -- |
| 12N/18E-06B02 | 06-08-82 | 363 | 3.3 | -- | <3 | -- | <1 | -- |
| 12N/19E-01E01 | 06-08-82 | 227 | <.10 | -- | 510 | -- | 440 | -- |
| 12N/19E-10L01 | 06-08-82 | 469 | 2.6 | -- | <3 | -- | <1 | -- |
| 12N/19E-16P01 | 08-20-82 | 188 | <.10 | -- | <3 | 9 | 23 | 69 |
| | 06-09-83 | 172 | <.10 | 10 | 17 | -- | 27 | -- |
| | 07-14-83 | 179 | <.10 | -- | 7 | -- | 25 | -- |
| 12N/20E-31H01 | 08-19-82 | 328 | 1.7 | -- | 8 | 27 | 31 | 180 |
| | 07-15-83 | 240 | .29 | -- | 31 | -- | 3 | -- |
| 12N/21E-17Q01 | 09-03-82 | -- | <.10 | -- | 26 | 35 | 39 | 44 |
| | 06-09-83 | 218 | <.10 | 20 | 32 | -- | 37 | -- |
| | 07-14-83 | 211 | <.10 | -- | 29 | -- | 37 | -- |
| 12N/22E-21N01 | 08-20-82 | -- | <.10 | -- | 22 | 20 | 28 | 64 |
| | 06-09-83 | 192 | <.10 | 20 | 26 | -- | 23 | -- |
| | 07-14-83 | -- | <.10 | -- | 32 | -- | 22 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|--|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 13N/16E-24H01 | 08-17-82 | 1130 | 200 | 7.8 | 28.0 | 0.2 | -- | 52 |
| | 07-13-83 | 1650 | 197 | 7.8 | 27.5 | .2 | -- | 52 |
| 13N/17E-19E01 | 08-18-82 | 1050 | 197 | 8.1 | 28.0 | -- | -- | 53 |
| | 07-13-83 | 1545 | 190 | 8.0 | 28.0 | -- | -- | 53 |
| 13N/17E-27C01 | 06-09-82 | 0830 | 630 | 7.7 | 12.5 | -- | <1 | 210 |
| 13N/18E-18K01 | 08-16-82 | 1445 | 249 | 8.1 | 23.0 | .1 | -- | 52 |
| | 04-01-83 | 1125 | 253 | 7.9 | 22.5 | .1 | -- | 56 |
| | 07-13-83 | 0900 | 250 | 8.0 | 22.5 | .4 | -- | 53 |
| 13N/18E-28R01 | 07-12-82 | 1600 | 610 | 7.2 | 12.0 | -- | <1 | 250 |
| 13N/19E-22J01 | 06-08-82 | 1430 | 880 | 7.7 | 13.0 | -- | <1 | 300 |
| 13N/19E-26R01 | 06-08-82 | 1220 | 530 | 7.8 | 13.0 | -- | <1 | 180 |
| 13N/19E-31B04 | 06-08-82 | 1615 | 297 | 6.9 | 13.5 | -- | <1 | 120 |
| 13N/20E-29E01 | 08-19-82 | 1450 | 312 | 7.6 | 23.5 | 5.0 | -- | 110 |
| | 06-09-83 | 1230 | 328 | 7.6 | 23.0 | 2.8 | -- | 110 |
| | 07-13-83 | 1705 | 320 | 7.7 | 22.5 | 3.2 | -- | 110 |
| 13N/21E-12D01 | 08-20-82 | 1215 | 200 | 7.5 | 13.5 | 6.3 | -- | 76 |
| | 03-31-83 | 1300 | 225 | 7.4 | 13.0 | 5.6 | -- | 86 |
| | 07-13-83 | 1340 | 202 | 7.5 | 13.5 | 7.3 | -- | 76 |
| 14N/16E-13B01 | 08-16-82 | 1500 | 215 | 7.5 | 18.0 | 4.2 | -- | 83 |
| | 04-01-83 | 0940 | 199 | 7.6 | 16.5 | 4.1 | -- | 78 |
| | 07-13-83 | 1055 | 215 | 7.5 | 17.5 | 4.0 | -- | 79 |
| 14N/17E-04H02 | 08-16-82 | 1340 | 157 | 7.7 | 18.0 | 4.8 | -- | 62 |
| | 03-31-83 | 1115 | 162 | 7.9 | 17.5 | 4.8 | -- | 65 |
| | 07-13-83 | 1305 | 170 | 7.7 | 18.0 | 4.7 | -- | 62 |
| 14N/17E-33Q01 | 06-09-82 | 1400 | 985 | 7.4 | -- | -- | <1 | 460 |
| 14N/18E-12B08 | 06-09-82 | 0845 | 655 | 7.6 | 13.5 | -- | <1 | 300 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 13N/16E-24H01 | 08-17-82 | 0 | 14 | 4.1 | 21 | 44 | 1 | 4.6 |
| | 07-13-83 | 0 | 14 | 4.1 | 21 | 44 | 1 | 4.2 |
| 13N/17E-19E01 | 08-18-82 | 0 | 14 | 4.4 | 21 | 44 | 1 | 4.2 |
| | 07-13-83 | 0 | 14 | 4.5 | 22 | 45 | 1 | 4.1 |
| 13N/17E-27C01 | 06-09-82 | 0 | 48 | 23 | 55 | 35 | 2 | 8.8 |
| 13N/18E-18K01 | 08-16-82 | 0 | 13 | 4.7 | 33 | 56 | 2 | 4.5 |
| | 04-01-83 | 0 | 14 | 5.0 | 35 | 55 | 2 | 4.6 |
| | 07-13-83 | 0 | 13 | 4.9 | 34 | 56 | 2 | 4.3 |
| 13N/18E-28R01 | 07-12-82 | 0 | 51 | 30 | 27 | 19 | .7 | 6.0 |
| 13N/19E-22J01 | 06-08-82 | 0 | 72 | 30 | 82 | 37 | 2 | 2.9 |
| 13N/19E-26R01 | 06-08-82 | 0 | 47 | 14 | 50 | 38 | 2 | 3.8 |
| 13N/19E-31B04 | 06-08-82 | 22 | 33 | 8.4 | 11 | 16 | .4 | 3.6 |
| 13N/20E-29E01 | 08-19-82 | 0 | 25 | 12 | 24 | 30 | 1 | 5.9 |
| | 06-09-83 | 0 | 24 | 12 | 23 | 30 | 1 | 5.9 |
| | 07-13-83 | 0 | 24 | 12 | 23 | 30 | 1 | 5.7 |
| 13N/21E-12D01 | 08-20-82 | 0 | 17 | 8.1 | 12 | 25 | .6 | 2.2 |
| | 03-31-83 | 0 | 19 | 9.4 | 14 | 25 | .7 | 2.3 |
| | 07-13-83 | 0 | 17 | 8.1 | 12 | 25 | .6 | 2.0 |
| 14N/16E-13B01 | 08-16-82 | 0 | 15 | 11 | 11 | 21 | .5 | 3.9 |
| | 04-01-83 | 0 | 15 | 9.9 | 10 | 21 | .5 | 3.5 |
| | 07-13-83 | 0 | 15 | 10 | 11 | 22 | .5 | 3.6 |
| 14N/17E-04H02 | 08-16-82 | 0 | 16 | 5.3 | 8.0 | 21 | .4 | 3.7 |
| | 03-31-83 | 0 | 17 | 5.5 | 8.1 | 20 | .4 | 3.7 |
| | 07-13-83 | 0 | 16 | 5.4 | 7.9 | 20 | .4 | 3.8 |
| 14N/17E-33Q01 | 06-09-82 | 70 | 91 | 57 | 41 | 16 | .8 | 8.1 |
| 14N/18E-12B08 | 06-09-82 | 55 | 65 | 33 | 25 | 15 | .6 | 5.9 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alka- linity, field (mg/L as CaCO ₃) | Bicar- bonate, field (mg/L as HCO ₃) | Car- bonate, field (mg/L as CO ₃) | Sulfate, dis- solved (mg/L as SO ₄) | Chlo- ride, dis- solved (mg/L as Cl) | Fluo- ride, dis- solved (mg/L as F) | Silica, dis- solved (mg/L as SiO ₂) |
|--|----------|---|---|--|--|--|---|--|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 13N/16E-24H01 | 08-17-82 | 97 | 118 | 0 | <5.0 | 2.2 | 0.6 | 67 |
| | 07-13-83 | 98 | 120 | 0 | 1.9 | 2.0 | .7 | 65 |
| 13N/17E-19E01 | 08-18-82 | 107 | 130 | 0 | <5.0 | 2.3 | .7 | 71 |
| | 07-13-83 | 103 | 126 | 0 | <.2 | 2.1 | .7 | 72 |
| 13N/17E-27C01 | 06-09-82 | 300 | 366 | 0 | 29 | 6.3 | .9 | 53 |
| 13N/18E-18K01 | 08-16-82 | 125 | 153 | 0 | <5.0 | 6.7 | 1.0 | 69 |
| | 04-01-83 | 128 | 156 | 0 | .3 | 6.6 | 1.1 | 70 |
| | 07-13-83 | 125 | 153 | 0 | .2 | 6.6 | 1.1 | 69 |
| 13N/18E-28R01 | 07-12-82 | 262 | 319 | 0 | 32 | 14 | .2 | 58 |
| 13N/19E-22J01 | 06-08-82 | 422 | 515 | 0 | 43 | 13 | .6 | 59 |
| 13N/19E-26R01 | 06-08-82 | 227 | 277 | 0 | 29 | 12 | .6 | 53 |
| 13N/19E-31B04 | 06-08-82 | 95 | 116 | 0 | 19 | 11 | .2 | 37 |
| 13N/20E-29E01 | 08-19-82 | 145 | 177 | 0 | 15 | 6.2 | .5 | 71 |
| | 06-09-83 | 149 | 182 | 0 | 14 | 6.2 | .5 | 69 |
| | 07-13-83 | 147 | 179 | 0 | 13 | 6.7 | .5 | 70 |
| 13N/21E-12D01 | 08-20-82 | 91 | 111 | 0 | 8.0 | 3.8 | .5 | 52 |
| | 03-31-83 | 95 | 116 | 0 | 18 | 7.8 | .6 | 48 |
| | 07-13-83 | 87 | 106 | 0 | 8.0 | 3.6 | .5 | 50 |
| 14N/16E-13B01 | 08-16-82 | 97 | 118 | 0 | 7.0 | 3.5 | .2 | 56 |
| | 04-01-83 | 94 | 115 | 0 | 6.2 | 3.2 | .3 | 54 |
| | 07-13-83 | 97 | 118 | 0 | 6.6 | 3.1 | .3 | 56 |
| 14N/17E-04H02 | 08-16-82 | 77 | 94 | 0 | 6.0 | 2.4 | .2 | 54 |
| | 03-31-83 | 75 | 92 | 0 | 5.8 | 2.4 | .2 | 53 |
| | 07-13-83 | 74 | 90 | 0 | 6.0 | 2.3 | .2 | 53 |
| 14N/17E-33Q01 | 06-09-82 | 392 | 478 | 0 | 87 | 52 | .7 | 60 |
| 14N/18E-12B08 | 06-09-82 | 243 | 296 | 0 | 59 | 33 | .3 | 59 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 13N/16E-24H01 | 08-17-82 | -- | <.10 | -- | 18 | 25 | 10 | 34 |
| | 07-13-83 | 172 | <.10 | -- | 17 | -- | 10 | -- |
| 13N/17E-19E01 | 08-18-82 | -- | <.10 | -- | 4 | 24 | 9 | 39 |
| | 07-13-83 | -- | <.10 | -- | 20 | -- | 8 | -- |
| 13N/17E-27C01 | 06-09-82 | 421 | 3.8 | -- | <3 | -- | 1 | -- |
| 13N/18E-18K01 | 08-16-82 | -- | <.10 | -- | 53 | 32 | 27 | 34 |
| | 04-01-83 | 213 | <.10 | 40 | 66 | -- | 29 | -- |
| | 07-13-83 | 208 | <.10 | 50 | 61 | -- | 27 | -- |
| 13N/18E-28R01 | 07-12-82 | 390 | 3.3 | -- | 4 | -- | 1 | -- |
| 13N/19E-22J01 | 06-08-82 | 578 | 5.0 | -- | <3 | -- | <1 | -- |
| 13N/19E-26R01 | 06-08-82 | 357 | 2.6 | -- | <3 | -- | 1 | -- |
| 13N/19E-31B04 | 06-08-82 | 198 | 4.0 | -- | 15 | -- | <1 | -- |
| 13N/20E-29E01 | 08-19-82 | 249 | .49 | -- | <3 | 16 | 3 | 110 |
| | 06-09-83 | 246 | .53 | 10 | <3 | -- | 3 | -- |
| | 07-13-83 | 245 | .55 | -- | 5 | -- | 1 | -- |
| 13N/21E-12D01 | 08-20-82 | 162 | .77 | -- | 8 | 6 | 31 | 58 |
| | 03-31-83 | 179 | .66 | <10 | 57 | -- | 15 | -- |
| | 07-13-83 | 157 | .75 | -- | 24 | -- | 11 | -- |
| 14N/16E-13B01 | 08-16-82 | 170 | .95 | -- | 3 | 11 | <1 | 60 |
| | 04-01-83 | 162 | .74 | <10 | 6 | -- | 4 | -- |
| | 07-13-83 | 167 | .79 | -- | 6 | -- | 2 | -- |
| 14N/17E-04H02 | 08-16-82 | 144 | .58 | -- | <3 | 7 | <1 | 84 |
| | 03-31-83 | 144 | .60 | 10 | <3 | -- | 2 | -- |
| | 07-13-83 | 142 | .60 | -- | 3 | -- | 1 | -- |
| 14N/17E-33Q01 | 06-09-82 | 659 | 6.1 | -- | 8 | -- | 2 | -- |
| 14N/18E-12B08 | 06-09-82 | 442 | 3.7 | -- | <3 | -- | <1 | -- |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Specific conductance (μS/cm) | pH (standard units) | Temperature water (°C) | Oxygen, dissolved (mg/L) | Coliform fecal (cols./100 mL) | Hardness (mg/L as CaCO ₃) |
|---|----------|------|------------------------------|---------------------|------------------------|--------------------------|-------------------------------|---------------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 14N/18E-12J02 | 06-08-82 | 1800 | 358 | 7.8 | 16.5 | -- | <1 | 140 |
| 14N/18E-15L01 | 08-16-82 | 1010 | 219 | 8.1 | 25.5 | 0.1 | -- | 52 |
| | 04-01-83 | 1140 | 212 | 8.1 | 24.0 | .1 | -- | 56 |
| | 07-12-83 | 1805 | 220 | 8.1 | 20.5 | .2 | -- | 49 |
| 14N/18E-25D01 | 06-08-82 | 1600 | 435 | 7.7 | 16.0 | -- | <1 | 170 |
| 14N/18E-32E01 | 06-09-82 | 1200 | 305 | 7.0 | 20.5 | -- | <1 | 140 |
| 14N/19E-11L01 | 08-17-82 | 0910 | 305 | 7.9 | 20.0 | .6 | -- | 110 |
| | 04-14-83 | 1340 | 303 | 8.0 | 20.0 | .6 | -- | 120 |
| 14N/19E-15M01 | 08-17-82 | 1150 | 295 | 8.1 | 17.5 | .3 | -- | 110 |
| | 04-14-83 | 1530 | 300 | 8.2 | 16.0 | .2 | -- | 120 |
| | 07-14-83 | 1700 | 313 | 8.1 | 17.5 | .5 | -- | 110 |
| 14N/19E-32L01 | 06-09-82 | 1915 | 360 | 7.5 | -- | -- | <1 | 140 |
| 14N/20E-20N02D1 | 08-20-82 | 1100 | 310 | 7.9 | 18.0 | .8 | -- | 120 |
| | 03-31-83 | 1500 | 298 | 7.8 | 17.5 | .8 | -- | 120 |
| | 07-13-83 | 1530 | 302 | 8.0 | 18.0 | 1.5 | -- | 120 |
| 15N/17E-12N01 | 08-16-82 | 0815 | 163 | 7.9 | 17.5 | .9 | -- | 30 |
| | 03-30-83 | 1600 | 160 | 8.2 | 17.0 | .6 | -- | 30 |
| | 07-12-83 | 1615 | 175 | 8.2 | 18.0 | .7 | -- | 30 |
| 16N/16E-24D01D1 | 08-16-82 | 1100 | 215 | 7.6 | 19.0 | 6.0 | -- | 52 |
| | 07-12-83 | 1500 | 210 | 7.8 | 20.0 | -- | -- | 46 |
| 16N/17E-34J01D1 | 08-17-82 | 0840 | 180 | 6.8 | 18.5 | 8.8 | -- | 70 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Hardness, noncarbonate (mg/L as CaCO ₃) | Calcium, dissolved (mg/L as Ca) | Magnesium, dissolved (mg/L as Mg) | Sodium, dissolved (mg/L as Na) | Sodium percent | Sodium adsorption ratio | Potassium, dissolved (mg/L as K) |
|--|----------|---|---------------------------------|-----------------------------------|--------------------------------|----------------|-------------------------|----------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| I4N/18E-12J02 | 06-08-82 | 0 | 31 | 15 | 21 | 24 | 0.8 | 5.8 |
| I4N/18E-15L01 | 08-16-82 | -- | 14 | 4.1 | 25 | 48 | 2 | 4.7 |
| | 04-01-83 | 0 | 15 | 4.6 | 27 | 48 | 2 | 4.7 |
| | 07-12-83 | 0 | 13 | 4.0 | 26 | 51 | 2 | 4.4 |
| I4N/18E-25D01 | 06-08-82 | 0 | 45 | 15 | 27 | 24 | .9 | 5.6 |
| I4N/18E-32E01 | 06-09-82 | 4 | 38 | 10 | 12 | 16 | .4 | 3.8 |
| I4N/19E-11L01 | 08-17-82 | 0 | 21 | 15 | 17 | 23 | .7 | 4.9 |
| | 04-14-83 | 0 | 22 | 16 | 18 | 24 | .7 | 4.8 |
| I4N/19E-15M01 | 08-17-82 | 0 | 21 | 14 | 20 | 27 | .8 | 4.5 |
| | 04-14-83 | 0 | 22 | 15 | 21 | 27 | .8 | 4.5 |
| | 07-14-83 | 0 | 21 | 14 | 21 | 28 | .9 | 4.1 |
| I4N/19E-32L01 | 06-09-82 | 0 | 32 | 15 | 27 | 29 | 1 | 4.5 |
| I4N/20E-20N02D1 | 08-20-82 | 0 | 24 | 14 | 19 | 25 | .8 | 3.8 |
| | 03-31-83 | 0 | 24 | 14 | 19 | 25 | .8 | 3.7 |
| | 07-13-83 | 0 | 23 | 14 | 19 | 26 | .8 | 3.8 |
| I5N/17E-12N01 | 08-16-82 | 0 | 6.0 | 3.6 | 23 | 59 | 2 | 3.9 |
| | 03-30-83 | 0 | 6.1 | 3.6 | 24 | 60 | 2 | 3.8 |
| | 07-12-83 | 0 | 6.0 | 3.7 | 24 | 60 | 2 | 3.7 |
| I6N/16E-24D01D1 | 08-16-82 | 0 | 12 | 5.3 | 22 | 46 | 1 | 4.1 |
| | 07-12-83 | 0 | 12 | 3.8 | 27 | 53 | 2 | 4.4 |
| I6N/17E-34J01D1 | 08-17-82 | 14 | 15 | 8.0 | 5.8 | 14 | .3 | 3.5 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Alkalinity, field (mg/L as CaCO ₃) | Bicarbonate, field (mg/L as HCO ₃) | Carbonate, field (mg/L as CO ₃) | Sulfate, dissolved (mg/L as SO ₄) | Chloride, dissolved (mg/L as Cl) | Fluoride, dissolved (mg/L as F) | Silica, dissolved (mg/L as SiO ₂) |
|--|----------|--|--|---|---|----------------------------------|---------------------------------|---|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 14N/18E-12J02 | 06-08-82 | 165 | 201 | 0 | 14 | 8.4 | 0.4 | 58 |
| 14N/18E-15L01 | 08-16-82 | -- | -- | -- | <5.0 | 7.6 | .6 | 57 |
| | 04-01-83 | 119 | 145 | 0 | 3.0 | 4.7 | .7 | 57 |
| | 07-12-83 | 107 | 131 | 0 | .8 | 4.2 | .7 | 58 |
| 14N/18E-25D01 | 06-08-82 | 178 | 217 | 0 | 29 | 15 | .4 | 32 |
| 14N/18E-32E01 | 06-09-82 | 132 | 161 | 0 | 14 | 4.5 | .1 | 37 |
| 14N/19E-11L01 | 08-17-82 | 130 | 159 | 0 | 21 | 4.9 | .4 | 44 |
| | 04-14-83 | 138 | 168 | 0 | 20 | 4.9 | .5 | 43 |
| 14N/19E-15M01 | 08-17-82 | 149 | 182 | 0 | 9.0 | 4.2 | .5 | 49 |
| | 04-14-83 | 154 | 188 | 0 | 7.9 | 4.2 | .5 | 49 |
| | 07-14-83 | 150 | 183 | 0 | 9.8 | 4.1 | .5 | 48 |
| 14N/19E-32L01 | 06-09-82 | 162 | 197 | 0 | 19 | 13 | .4 | 44 |
| 14N/20E-20N02D1 | 08-20-82 | 152 | 185 | 0 | 9.0 | 6.5 | .5 | 46 |
| | 03-31-83 | 151 | 184 | 0 | 8.7 | 6.4 | .6 | 46 |
| | 07-13-83 | 145 | 177 | 0 | 8.5 | 6.2 | .5 | 46 |
| 15N/17E-12N01 | 08-16-82 | 79 | 96 | 0 | 12 | 1.1 | .4 | 51 |
| | 03-30-83 | 79 | 96 | 0 | 11 | 1.1 | .5 | 46 |
| | 07-12-83 | 77 | 94 | 0 | 10 | 1.0 | .5 | 51 |
| 16N/16E-24D01D1 | 08-16-82 | 107 | 131 | 0 | <5.0 | 1.6 | .4 | 66 |
| | 07-12-83 | 109 | 133 | 0 | 2.7 | 1.5 | .5 | 65 |
| 16N/17E-34J01D1 | 08-17-82 | 56 | 69 | 0 | 18 | 4.5 | .2 | 49 |

Table 2.--Values and concentrations of field data, major ions, nitrate plus nitrite, bacteria, boron, iron, manganese, strontium, and lithium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Solids, dis-solved, sum of constituents (mg/L) | Nitrogen, NO ₂ +NO ₃ dis-solved (mg/L as N) | Boron, dis-solved (µg/L as B) | Iron, dis-solved (µg/L as Fe) | Lithium, dis-solved (µg/L as Li) | Manganese, dis-solved (µg/L as Mn) | Strontium, dis-solved (µg/L as Sr) |
|--|----------|--|---|-------------------------------|-------------------------------|----------------------------------|------------------------------------|------------------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | | |
| 14N/18E-12J02 | 06-08-82 | 256 | 0.82 | -- | 5 | -- | 3 | -- |
| 14N/18E-15L01 | 08-16-82 | -- | <.10 | -- | 18 | 20 | 13 | 55 |
| | 04-01-83 | 188 | <.10 | 20 | 9 | -- | 13 | -- |
| | 07-12-83 | 176 | <.10 | 20 | 19 | -- | 9 | -- |
| 14N/18E-25D01 | 06-08-82 | 279 | .75 | -- | 7 | -- | 130 | -- |
| 14N/18E-32E01 | 06-09-82 | 215 | 3.8 | -- | <3 | -- | 3 | -- |
| 14N/19E-11L01 | 08-17-82 | 208 | .22 | -- | 39 | 13 | 31 | 80 |
| | 04-14-83 | 213 | .30 | <10 | 42 | -- | 27 | -- |
| 14N/19E-15M01 | 08-17-82 | 212 | <.10 | -- | 4 | 18 | 35 | 81 |
| | 04-14-83 | 217 | <.10 | 10 | 12 | -- | 32 | -- |
| | 07-14-83 | 213 | <.10 | -- | 12 | -- | 31 | -- |
| 14N/19E-32L01 | 06-09-82 | 259 | 1.6 | -- | <3 | -- | 1 | -- |
| 14N/20E-20N02D1 | 08-20-82 | 215 | .29 | -- | <3 | 7 | 4 | 93 |
| | 03-31-83 | 214 | .16 | <10 | <3 | -- | <1 | -- |
| | 07-13-83 | 208 | <.10 | -- | 5 | -- | <1 | -- |
| 15N/17E-12N01 | 08-16-82 | 148 | <.10 | -- | <3 | 10 | 1 | 15 |
| | 03-30-83 | 144 | .24 | <10 | 7 | -- | <1 | -- |
| | 07-12-83 | 146 | <.10 | -- | <3 | -- | <1 | -- |
| 16N/16E-24D01D1 | 08-16-82 | -- | <.10 | -- | <3 | 9 | 23 | 78 |
| | 07-12-83 | 182 | <.10 | -- | 4 | -- | 24 | -- |
| 16N/17E-34J01D1 | 08-17-82 | 143 | 1.2 | -- | <3 | <4 | 3 | 59 |

Table 3.--Concentrations of dissolved trace elements in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985

[µg/L, micrograms per liter; <, less than; --, no data]

| Local number | Date | Time | Aluminum, dissolved (µg/L as Al) | Arsenic, dissolved (µg/L as As) | Barium, dissolved (µg/L as Ba) | Cadmium, dissolved (µg/L as Cd) | Chromium, dissolved (µg/L as Cr) |
|-------------------------------|----------|------|----------------------------------|---------------------------------|--------------------------------|---------------------------------|----------------------------------|
| <u>Adams County, Wash.</u> | | | | | | | |
| 17N/33E-12F02 | 03-17-83 | 1445 | <10 | 1 | 33 | <1 | <10 |
| 17N/34E-23F01 | 05-24-83 | 1630 | 10 | 1 | 73 | <1 | <10 |
| 18N/31E-33D01 | 05-19-83 | 1905 | -- | <1 | 9 | <1 | <10 |
| 19N/36E-20H01D1 | 05-20-83 | 1130 | 10 | <1 | 17 | <1 | <1 |
| <u>Asotin County, Wash.</u> | | | | | | | |
| 10N/46E-20A02 | 06-21-82 | 1230 | <10 | 1 | 31 | <1 | <10 |
| 11N/46E-32E01 | 08-10-83 | 1000 | -- | 1 | 35 | <1 | <10 |
| <u>Benton County, Wash.</u> | | | | | | | |
| 05N/26E-05N01D1 | 03-30-82 | 1545 | 10 | <1 | 35 | <3 | <10 |
| | 04-18-84 | 1430 | -- | -- | 31 | -- | -- |
| 07N/25E-36N06 | 03-31-82 | 1355 | 10 | 1 | 24 | <3 | <10 |
| | 04-18-84 | 0940 | -- | -- | 18 | -- | -- |
| 08N/29E-17G02 | 06-25-82 | 1030 | 10 | 5 | 45 | <1 | <10 |
| 09N/27E-07D01 | 06-25-82 | 0820 | <10 | 7 | 49 | <1 | <10 |
| 09N/28E-17A01 | 06-24-82 | 1455 | <10 | <1 | 98 | <1 | <10 |
| 10N/28E-14C02 | 04-19-82 | 1010 | -- | 3 | -- | -- | -- |
| <u>Columbia County, Wash.</u> | | | | | | | |
| 10N/39E-32F01 | 08-13-83 | 0935 | <1 | 1 | 18 | <1 | <10 |

Table 3.--Concentrations of dissolved trace elements in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Copper, dis-solved (µg/L as Cu) | Lead, dis-solved (µg/L as Pb) | Mercury, dis-solved (µg/L as Hg) | Selenium, dis-solved (µg/L as Se) | Silver, dis-solved (µg/L as Ag) | Zinc, dis-solved (µg/L as Zn) |
|-------------------------------|----------|---------------------------------|-------------------------------|----------------------------------|-----------------------------------|---------------------------------|-------------------------------|
| <u>Adams County, Wash.</u> | | | | | | | |
| 17N/33E-12F02 | 03-17-83 | <1 | <1 | <0.1 | 1 | <1 | 9 |
| 17N/34E-23F01 | 05-24-83 | 1 | <1 | <.1 | 3 | <1 | 18 |
| 18N/31E-33D01 | 05-19-83 | <1 | <1 | <.1 | <1 | <1 | 4 |
| 19N/36E-20H01D1 | 05-20-83 | <1 | <1 | <.1 | <1 | <1 | 18 |
| <u>Asotin County, Wash.</u> | | | | | | | |
| 10N/46E-20A02 | 06-21-82 | <7 | 2 | <.1 | 3 | <1 | 190 |
| 11N/46E-32E01 | 08-10-83 | 3 | 1 | <.1 | 1 | <1 | 11 |
| <u>Benton County, Wash.</u> | | | | | | | |
| 05N/26E-05N01D1 | 03-30-82 | <1 | -- | <.1 | <1 | <1 | <12 |
| | 04-18-84 | -- | -- | -- | -- | -- | -- |
| 07N/25E-36N06 | 03-31-82 | <1 | -- | <.1 | <1 | <1 | 20 |
| | 04-18-84 | -- | -- | -- | -- | -- | -- |
| 08N/29E-17G02 | 06-25-82 | 46 | 2 | <.1 | <1 | <1 | 99 |
| 09N/27E-07D01 | 06-25-82 | 1 | <1 | .1 | 1 | <1 | 5 |
| 09N/28E-17A01 | 06-24-82 | <1 | 2 | <.1 | <1 | 1 | <3 |
| 10N/28E-14C02 | 04-19-82 | -- | -- | <.1 | -- | <1 | -- |
| <u>Columbia County, Wash.</u> | | | | | | | |
| 10N/39E-32F01 | 08-13-83 | 4 | <1 | | <.1 | <1 | 11 |

Table 3.--Concentrations of dissolved trace elements in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Aluminum, dissolved (µg/L as Al) | Arsenic, dissolved (µg/L as As) | Barium, dissolved (µg/L as Ba) | Cadmium, dissolved (µg/L as Cd) | Chromium, dissolved (µg/L as Cr) |
|-------------------------------|----------|------|----------------------------------|---------------------------------|--------------------------------|---------------------------------|----------------------------------|
| <u>Douglas County, Wash.</u> | | | | | | | |
| 24N/25E-18E01 | 06-07-83 | 1035 | <10 | <1 | 31 | <1 | <10 |
| 24N/26E-06H01 | 06-07-83 | 1345 | <10 | 1 | 24 | <1 | <10 |
| <u>Franklin County, Wash.</u> | | | | | | | |
| 09N/30E-02R01 | 03-08-83 | 1430 | <10 | 4 | 40 | <1 | <10 |
| 13N/29E-08H01 | 03-10-83 | 1000 | 10 | 2 | 110 | <1 | <10 |
| 13N/31E-01E01 | 03-10-83 | 1430 | 10 | 2 | 28 | <1 | <10 |
| 13N/32E-07E02 | 03-10-83 | 1230 | 10 | 2 | 12 | <1 | <10 |
| <u>Garfield County, Wash.</u> | | | | | | | |
| 11N/42E-05C01 | 08-11-83 | 1400 | -- | 1 | 15 | <1 | <10 |
| <u>Grant County, Wash.</u> | | | | | | | |
| 16N/25E-04N01 | 03-15-83 | 1530 | 10 | 4 | 170 | <1 | <10 |
| 18N/25E-08C01 | 05-18-83 | 1615 | -- | 13 | 57 | <1 | <10 |
| 18N/26E-32C01 | 05-20-83 | 1545 | <10 | 2 | 16 | <1 | <10 |
| 18N/26E-34K01 | 05-18-83 | 1345 | -- | <1 | 130 | <1 | <10 |
| 18N/29E-02A01 | 03-17-83 | 0920 | 10 | 17 | 8 | <1 | <10 |
| 21N/26E-15H01 | 03-18-83 | 1415 | <10 | 1 | 31 | <1 | <10 |
| 21N/26E-28A01 | 03-17-83 | 1330 | 10 | 1 | 15 | <1 | <10 |
| 21N/30E-03E02 | 05-18-83 | 1430 | 20 | <1 | 34 | <1 | <10 |
| | 09-01-83 | 1145 | 10 | <1 | 43 | <1 | <10 |

Table 3.--Concentrations of dissolved trace elements in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Copper, dissolved (µg/L as Cu) | Lead, dissolved (µg/L as Pb) | Mercury, dissolved (µg/L as Hg) | Selenium, dissolved (µg/L as Se) | Silver, dissolved (µg/L as Ag) | Zinc, dissolved (µg/L as Zn) |
|-------------------------------|----------|--------------------------------|------------------------------|---------------------------------|----------------------------------|--------------------------------|------------------------------|
| <u>Douglas County, Wash.</u> | | | | | | | |
| 24N/25E-18E01 | 06-07-83 | 2 | 2 | <0.1 | 1 | <1 | 560 |
| 24N/26E-06H01 | 06-07-83 | 2 | 3 | <.1 | 1 | <1 | 600 |
| <u>Franklin County, Wash.</u> | | | | | | | |
| 09N/30E-02R01 | 03-08-83 | 1 | <1 | <.1 | 1 | <1 | 52 |
| 13N/29E-08H01 | 03-10-83 | <1 | <1 | <.1 | <1 | <1 | 19 |
| 13N/31E-01E01 | 03-10-83 | <1 | 2 | <.1 | 1 | <1 | 4 |
| 13N/32E-07E02 | 03-10-83 | <1 | <1 | <.1 | 1 | <1 | 120 |
| <u>Garfield County, Wash.</u> | | | | | | | |
| 11N/42E-05C01 | 08-11-83 | 2 | <1 | <.1 | 1 | <1 | 10 |
| <u>Grant County, Wash</u> | | | | | | | |
| 16N/25E-04N01 | 03-15-83 | 4 | 1 | <.1 | 3 | <1 | 240 |
| 18N/25E-08C01 | 05-18-83 | <1 | <1 | <.1 | 3 | <1 | 7 |
| 18N/26E-32C01 | 05-20-83 | <1 | <1 | <.1 | 1 | <1 | 3 |
| 18N/26E-34K01 | 05-18-83 | <1 | <1 | <.1 | <1 | <1 | 6 |
| 18N/29E-02A01 | 03-17-83 | 1 | <1 | <.1 | 1 | <1 | 29 |
| 21N/26E-15H01 | 03-18-83 | 1 | <1 | <.1 | <1 | <1 | 10 |
| 21N/26E-28A01 | 03-17-83 | 1 | 1 | <.1 | 1 | <1 | 36 |
| 21N/30E-03E02 | 05-18-83 | <1 | <1 | <.1 | <1 | <1 | <3 |
| | 09-01-83 | <1 | 2 | <.1 | <1 | <1 | 5 |

Table 3.--Concentrations of dissolved trace elements in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Aluminum, dissolved (µg/L as Al) | Arsenic, dissolved (µg/L as As) | Barium, dissolved (µg/L as Ba) | Cadmium, dissolved (µg/L as Cd) | Chromium, dissolved (µg/L as Cr) |
|--------------------------------|----------|------|----------------------------------|---------------------------------|--------------------------------|---------------------------------|----------------------------------|
| <u>Kittitas County, Wash.</u> | | | | | | | |
| 17N/19E-05M01 | 06-08-82 | 1100 | 10 | <1 | 32 | <1 | <10 |
| 20N/13E-11C01 | 06-07-82 | 1000 | <10 | <1 | 4 | <1 | <10 |
| <u>Klickitat County, Wash.</u> | | | | | | | |
| 03N/15E-11N01 | 07-14-82 | 1530 | 10 | 1 | 3 | <1 | <10 |
| 03N/21E-09N01D1 | 04-19-84 | 1500 | -- | -- | 30 | -- | -- |
| 05N/23E-30D01 | 03-29-82 | 1150 | 10 | <1 | 32 | <3 | <10 |
| 06N/20E-30P01 | 04-20-84 | 1000 | -- | -- | 18 | -- | -- |
| 06N/23E-24B01 | 04-19-84 | 1100 | -- | -- | 22 | -- | -- |
| <u>Lincoln County, Wash</u> | | | | | | | |
| 22N/35E-23E01D1 | 06-01-83 | 1205 | <10 | 2 | 36 | <1 | <10 |
| 23N/31E-33E01 | 06-02-83 | 1140 | <10 | <1 | 9 | <1 | <10 |
| 24N/36E-16A03 | 07-16-83 | 2030 | -- | -- | -- | -- | -- |
| 24N/36E-16A07 | 07-17-83 | 2000 | -- | -- | -- | -- | -- |
| <u>Morrow County, Oreg.</u> | | | | | | | |
| 03S/28E-07CAD | 07-28-83 | 0950 | -- | 1 | 21 | <1 | <10 |
| 04N/24E-14DAC | 08-10-83 | 1500 | -- | 1 | 30 | <1 | <10 |

Table 3.--Concentrations of dissolved trace elements in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Copper, dis-solved (µg/L as Cu) | Lead, dis-solved (µg/L as Pb) | Mercury, dis-solved (µg/L as Hg) | Selenium, dis-solved (µg/L as Se) | Silver, dis-solved (µg/L as Ag) | Zinc, dis-solved (µg/L as Zn) |
|--------------------------------|----------|---------------------------------|-------------------------------|----------------------------------|-----------------------------------|---------------------------------|-------------------------------|
| <u>Kittitas County, Wash</u> | | | | | | | |
| 17N/19E-05M01 | 06-08-82 | 39 | <1 | <0.1 | <1 | <1 | 18 |
| 20N/13E-11C01 | 06-07-82 | 3 | 2 | <.1 | <1 | <1 | 36 |
| <u>Klickitat County, Wash.</u> | | | | | | | |
| 03N/15E-11N01 | 07-14-82 | 4 | <1 | <.1 | <1 | <1 | 47 |
| 03N/21E-09N01D1 | 04-19-84 | -- | -- | -- | -- | -- | -- |
| 05N/23E-30D01 | 03-29-82 | <1 | <1 | <.1 | <1 | <1 | <12 |
| 06N/20E-30P01 | 04-20-84 | -- | -- | -- | -- | -- | -- |
| 06N/23E-24B01 | 04-19-84 | -- | -- | -- | -- | -- | -- |
| <u>Lincoln County, Wash.</u> | | | | | | | |
| 22N/35E-23E01D1 | 06-01-83 | 1 | 1 | <.1 | 1 | 1 | 300 |
| 23N/31E-33E01 | 06-02-83 | <1 | <1 | <.1 | <1 | <1 | <3 |
| 24N/36E-16A03 | 07-16-83 | -- | -- | -- | -- | -- | 82 |
| 24N/36E-16A07 | 07-17-83 | -- | -- | -- | -- | -- | 34 |
| <u>Morrow County, Oreg</u> | | | | | | | |
| 03S/28E-07CAD | 07-28-83 | 1 | <1 | <.1 | 1 | 1 | 130 |
| 04N/24E-14DAC | 08-10-83 | 1 | <1 | <.1 | <1 | 1 | 5 |

Table 3.--Concentrations of dissolved trace elements in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | Aluminum, dissolved (µg/L as Al) | Arsenic, dissolved (µg/L as As) | Barium, dissolved (µg/L as Ba) | Cadmium, dissolved (µg/L as Cd) | Chromium, dissolved (µg/L as Cr) |
|----------------------------------|----------|------|----------------------------------|---------------------------------|--------------------------------|---------------------------------|----------------------------------|
| <u>Umatilla County, Oreg.</u> | | | | | | | |
| 01S/32E-09BBA | 08-03-83 | 1900 | -- | 2 | 26 | <1 | <10 |
| 05N/28E-16ADD | 07-21-83 | 1230 | -- | 1 | 14 | <1 | <10 |
| <u>Walla Walla County, Wash.</u> | | | | | | | |
| 06N/33E-08P01 | 07-13-82 | 1200 | <10 | <1 | 11 | <1 | <10 |
| 07N/33E-35G01 | 06-23-82 | 1330 | 20 | 5 | 300 | <1 | <10 |
| 07N/35E-35C01 | 06-23-82 | 1130 | 10 | <1 | 57 | <1 | <10 |
| 08N/30E-01N01 | 06-24-82 | 1330 | 10 | 4 | 76 | <1 | <10 |
| <u>Whitman County, Wash.</u> | | | | | | | |
| 14N/44E-14P02 | 06-21-82 | 1355 | <10 | <1 | 37 | <1 | <10 |
| 14N/45E-05D03 | 06-22-82 | 0800 | <10 | <1 | 88 | <1 | <10 |
| <u>Yakima County, Wash.</u> | | | | | | | |
| 07N/22E-09E01 | 04-19-84 | 0930 | -- | -- | 19 | -- | -- |
| 08N/22E-12N01 | 06-10-82 | 1530 | <10 | 5 | 100 | <1 | <10 |
| 10N/21E-34L01 | 06-11-82 | 0815 | <10 | 1 | 15 | <1 | <10 |
| 11N/20E-02H01 | 06-10-82 | 1030 | <10 | <1 | 3 | <1 | <10 |
| 12N/18E-06B02 | 06-08-82 | 1740 | <10 | <1 | 63 | <1 | <10 |
| 12N/19E-01E01 | 06-08-82 | 1100 | <10 | 4 | 94 | <1 | <10 |

Table 3.--Concentrations of dissolved trace elements in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Copper, dis-solved (µg/L as Cu) | Lead, dis-solved (µg/L as Pb) | Mercury, dis-solved (µg/L as Hg) | Selenium, dis-solved (µg/L as Se) | Silver, dis-solved (µg/L as Ag) | Zinc, dis-solved (µg/L as Zn) |
|----------------------------------|----------|---------------------------------|-------------------------------|----------------------------------|-----------------------------------|---------------------------------|-------------------------------|
| <u>Umatilla County, Oreg.</u> | | | | | | | |
| 01S/32E-09BBA | 08-03-83 | <1 | <1 | <0.1 | 1 | 1 | 3 |
| 05N/28E-16ADD | 07-21-83 | 1 | <1 | .4 | <1 | <1 | <3 |
| <u>Walla Walla County, Wash.</u> | | | | | | | |
| 06N/33E-08P01 | 07-13-82 | 2 | <1 | <.1 | <1 | <1 | 21 |
| 07N/33E-35G01 | 06-23-82 | 26 | 2 | <.1 | <1 | <1 | 60 |
| 07N/35E-35C01 | 06-23-82 | 2 | <1 | <.1 | <1 | <1 | <3 |
| 08N/30E-01N01 | 06-24-82 | 18 | 4 | <.1 | <1 | <1 | 100 |
| <u>Whitman County, Wash.</u> | | | | | | | |
| 14N/44E-14P02 | 06-21-82 | 1 | <1 | .1 | <1 | <1 | 79 |
| 14N/45E-05D03 | 06-22-82 | 1 | <1 | .4 | <1 | <1 | 3 |
| <u>Yakima County, Wash.</u> | | | | | | | |
| 07N/22E-09E01 | 04-19-84 | -- | -- | -- | -- | -- | -- |
| 08N/22E-12N01 | 06-10-82 | 1 | 1 | .1 | 18 | <1 | 37 |
| 10N/21E-34L01 | 06-11-82 | 10 | <1 | <.1 | <1 | <1 | 34 |
| 11N/20E-02H01 | 06-10-82 | 1 | <1 | <.1 | <1 | <1 | 6 |
| 12N/18E-06B02 | 06-08-82 | 19 | 2 | <.1 | <1 | <1 | 27 |
| 12N/19E-01E01 | 06-08-82 | 1 | 1 | .1 | <1 | <1 | 14 |

Table 4.--Concentrations of stable isotopes and tritium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985

[C-13, carbon-13; C-12, carbon-12; H-2, deuterium; H-1, hydrogen-1; O-18, oxygen-18; O-16, oxygen-16; per mil, per thousand; pCi/L, picoCuries per liter; <, less than; --, no data]

| Local number | Date | Time | C-13 /C-12 stable isotope ratio (per mil) | Carbon-14 (percent modern) | H-2 /H-1 stable isotope ratio (per mil) | O-18 /O-16 stable isotope ratio (per mil) | Tritium total (pCi/L) |
|-----------------------------|----------|------|---|-------------------------------|---|---|-----------------------------|
| <u>Adams County, Wash.</u> | | | | | | | |
| 15N/29E-04A02 | 03-15-83 | 1355 | -11.8 | 5.8 | -147 | -18.0 | -- |
| 16N/31E-14K01 | 09-09-82 | 1345 | -13.0 | 26.8 | -- | -17.9 | -- |
| | 05-24-83 | 0910 | -11.7 | 30.2 | -142 | -18.0 | -- |
| 16N/31E-33P01 | 09-08-82 | 1555 | -11.7 | 13.5 | -- | -18.4 | -- |
| | 03-15-83 | 1115 | -10.9 | 11.6 | -148 | -19.0 | -- |
| 16N/33E-17B02 | 03-17-83 | 1250 | -10.4 | 33.6 | -137 | -18.0 | -- |
| 16N/36E-11H01D1 | 08-05-82 | 1155 | -12.0 | 85.0 | -- | -15.8 | -- |
| | 05-25-83 | 1245 | -11.2 | 89.0 | -126 | -15.9 | -- |
| 17N/31E-07E01 | 08-11-82 | 1600 | -13.1 | 110.0 | -- | -16.5 | -- |
| | 03-17-83 | 0855 | -10.0 | 95.4 | -132 | -17.0 | -- |
| 17N/31E-12D01 | 08-10-82 | 1300 | -14.6 | 16.0 | -- | -18.0 | -- |
| | 05-24-83 | 1125 | -13.5 | 11.8 | -- | -- | -- |
| | 08-20-85 | 1000 | -- | -- | -- | -- | <1 |
| 17N/33E-12F02 | 03-17-83 | 1445 | -14.8 | 16.0 | -142 | -18.0 | -- |
| 18N/31E-33D01 | 05-19-83 | 1905 | -12.5 | 3.4 | -144 | -18.5 | -- |
| | 08-20-85 | 1700 | -- | -- | -- | -- | 7 |
| 19N/31E-24H01 | 05-19-83 | 1130 | -12.1 | 11.6 | -- | -- | -- |
| 19N/33E-08Q02 | 05-25-83 | 1430 | -13.9 | 3.9 | -144 | -18.3 | -- |
| 20N/32E-15D02 | 03-18-83 | 0930 | -11.6 | 25.8 | -133 | -17.0 | -- |
| 20N/34E-13R01 | 05-24-83 | 1030 | -9.4 | 53.7 | -141 | -18.2 | -- |
| <u>Asotin County, Wash.</u> | | | | | | | |
| 11N/46E-32E01 | 08-10-83 | 1000 | -- | -- | -131 | -16.6 | -- |

Table 4.--Concentrations of stable isotopes and tritium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | C-13 /C-12 stable isotope ratio (per mil) | Carbon-14 (percent modern) | H-2 /H-1 stable isotope ratio (per mil) | O-18 /O-16 stable isotope ratio (per mil) | Tritium total (pCi/L) |
|-------------------------------|----------|------|---|-------------------------------|---|---|-----------------------------|
| <u>Benton County, Wash.</u> | | | | | | | |
| 05N/24E-28G01 | 03-29-82 | 0935 | -13.2 | 44.7 | -- | -- | -- |
| 05N/25E-22M01 | 08-25-82 | 1605 | -15.3 | 16.6 | -- | -16.0 | -- |
| | 03-02-83 | 1130 | -15.4 | 18.0 | -129 | -16.0 | -- |
| 05N/26E-05N01D1 | 03-30-82 | 1545 | -19.5 | 4.6 | -- | -- | -- |
| 06N/24E-23N01 | 08-25-82 | 1510 | -12.1 | 49.5 | -- | -15.8 | -- |
| | 03-07-83 | 1100 | -10.7 | 51.3 | -129 | -16.0 | -- |
| 06N/26E-19K01 | 08-26-82 | 1100 | -11.3 | 35.0 | -- | -16.8 | -- |
| | 03-02-83 | 1000 | -11.4 | 37.4 | -135 | -17.0 | -- |
| 07N/25E-36N06 | 09-14-82 | 1100 | -16.2 | 1.6 | -- | -- | -- |
| | 03-31-82 | 1355 | -15.8 | 7.1 | -- | -- | -- |
| 07N/26E-04E01 | 08-26-82 | 1305 | -11.4 | 32.3 | -- | -16.6 | -- |
| 07N/26E-05B02D1 | 08-26-82 | 1135 | -11.5 | 5.8 | -- | -18.4 | -- |
| 07N/27E-29Q01 | 09-14-82 | 1200 | -11.8 | 69.6 | -- | -- | -- |
| 10N/28E-14C02 | 04-19-82 | 1010 | -- | -- | -- | -- | 300 |
| <u>Columbia County, Wash.</u> | | | | | | | |
| 10N/39E-32F01 | 08-13-83 | 0935 | -- | -- | -107 | -13.6 | -- |
| <u>Douglas County, Wash.</u> | | | | | | | |
| 24N/26E-06H01 | 07-27-82 | 1515 | -13.7 | 75.4 | -- | -- | -- |
| 25N/22E-21H01D1 | 07-29-82 | 0930 | -13.4 | 67.8 | -- | -17.7 | -- |

Table 4.--Concentrations of stable isotopes and tritium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | C-13 /C-12 stable isotope ratio (per mil) | Carbon-14 (percent modern) | H-2 /H-1 stable isotope ratio (per mil) | O-18 /O-16 stable isotope ratio (per mil) | Tritium total (pCi/L) |
|-------------------------------|----------|------|---|-------------------------------|---|---|-----------------------------|
| <u>Franklin County, Wash.</u> | | | | | | | |
| 10N/30E-03J01 | 03-11-83 | 0900 | -10.2 | 79.1 | -112 | -13.0 | -- |
| 12N/30E-05B01 | 09-01-82 | 1615 | -11.2 | 53.9 | -- | -16.6 | -- |
| | 03-10-83 | 1430 | -10.4 | 53.9 | -135 | -17.0 | -- |
| 13N/29E-08H01 | 03-10-83 | 1000 | -14.1 | 6.7 | -151 | -19.0 | -- |
| 13N/31E-01E01 | 08-31-82 | 1130 | -16.2 | 85.1 | -- | -16.8 | -- |
| | 03-10-83 | 1430 | -14.2 | 83.2 | -134 | -17.0 | -- |
| 13N/32E-03C01 | 08-31-82 | 1300 | -12.9 | 54.8 | -- | -17.6 | -- |
| | 05-18-83 | 1500 | -12.8 | 66.9 | -137 | -18.0 | -- |
| 14N/29E-05A01 | 03-15-83 | 0900 | -9.9 | 40.2 | -144 | -18.0 | -- |
| <u>Garfield County, Wash.</u> | | | | | | | |
| 11N/42E-05C01 | 08-11-83 | 1400 | -- | -- | -114 | -14.7 | -- |
| 13N/40E-14C01 | 09-03-82 | 0830 | -12.8 | 81.5 | -- | -13.0 | -- |
| 4N/41E-34K01 | 09-03-82 | 1100 | -12.9 | 95.2 | -- | -13.3 | -- |
| <u>Grant County, Wash.</u> | | | | | | | |
| 17N/23E-02B01 | 08-19-82 | 1000 | -10.0 | 37.6 | -- | -17.2 | -- |
| 17N/23E-23A01D1 | 08-19-82 | 1400 | -19.4 | 8.4 | -- | -18.7 | -- |
| 18N/23E-36H01 | 08-19-82 | 1225 | -19.4 | 8.4 | -- | -- | -- |
| 18N/28E-26F01 | 05-17-83 | 1745 | -11.5 | 19.2 | -145 | -18.0 | -- |
| 18N/30E-16R01 | 03-18-83 | 1320 | -7.7 | 54.7 | -133 | -17.0 | -- |
| 20N/29E-01A01 | 07-25-85 | 0900 | -- | -- | -- | -- | 4 |
| 21N/26E-15H01 | 07-27-82 | 0930 | -13.8 | 17.7 | -- | -17.2 | -- |

Table 4.--Concentrations of stable isotopes and tritium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | C-13 /C-12 stable isotope ratio (per mil) | Carbon-14 (percent modern) | H-2 /H-1 stable isotope ratio (per mil) | O-18 /O-16 stable isotope ratio (per mil) | Tritium total (pCi/L) |
|---------------------------------------|----------|------|---|-------------------------------|---|---|-----------------------------|
| <u>Grant County, Wash.--Continued</u> | | | | | | | |
| 21N/28E-19F02 | 07-26-82 | 1040 | -12.4 | 103.0 | -- | -15.6 | -- |
| 21N/30E-23J01D1 | 05-18-83 | 1200 | -10.7 | 4.0 | -147 | -19.0 | -- |
| <u>Kititas County, Wash.</u> | | | | | | | |
| 17N/20E-05K01 | 09-01-82 | 0930 | -16.1 | 87.4 | -- | -- | -- |
| <u>Klickitat County, Wash.</u> | | | | | | | |
| 03N/21E-09N01D1 | 04-19-84 | 1500 | -14.9 | -- | -- | -- | -- |
| 05N/23E-13R02D1 | 03-31-82 | 1010 | -16.7 | 2.2 | -- | -- | -- |
| 05N/23E-30D01 | 03-29-82 | 1150 | -20.7 | 19.4 | -- | -- | -- |
| | 08-25-82 | 1600 | -25.3 | 17.5 | -- | -- | -- |
| 06N/20E-30P01 | 04-20-84 | 1000 | -15.2 | -- | -- | -- | -- |
| 06N/23E-24B01 | 03-29-82 | 1435 | -17.3 | 6.2 | -- | -- | -- |
| | 08-25-82 | 1355 | -16.7 | 11.8 | -- | -16.2 | -- |
| | 03-07-83 | 1530 | -14.8 | 7.0 | -131 | -16.0 | -- |
| | 04-19-84 | 1100 | -15.6 | -- | -- | -- | -- |
| <u>Lincoln County, Wash.</u> | | | | | | | |
| 21N/38E-14J01 | 07-21-82 | 1440 | -15.3 | 45.4 | -- | -16.0 | -- |
| | 06-02-83 | 1050 | -13.0 | 43.0 | -128 | -16.0 | -- |
| 21N/38E-23L01 | 07-21-82 | 1210 | -13.8 | 13.1 | -- | -17.0 | -- |
| | 06-20-83 | 1200 | -12.8 | 12.6 | -136 | -17.0 | -- |
| 22N/35E-23E01D1 | 06-01-83 | 1205 | -13.0 | 77.5 | -131 | -16.0 | -- |
| 23N/31E-33E01 | 06-02-83 | 1140 | -13.8 | 21.3 | -139 | -17.5 | -- |
| 24N/31E-14E01 | 06-03-83 | 0930 | -12.7 | 35.8 | -135 | -17.6 | -- |
| | 07-23-82 | 1445 | -12.8 | 35.5 | -- | -17.5 | -- |

Table 4.--Concentrations of stable isotopes and tritium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | C-13 /C-12 stable isotope ratio (per mil) | Carbon-14 (percent modern) | H-2 /H-1 stable isotope ratio (per mil) | O-18 /O-16 stable isotope ratio (per mil) | Tritium total (pCi/L) |
|---|----------|------|---|-------------------------------|---|---|-----------------------------|
| <u>Lincoln County, Wash.--Continued</u> | | | | | | | |
| 25N/32E-35P01 | 09-09-82 | 0800 | -12.8 | 8.0 | -- | -17.8 | -- |
| | 06-04-83 | 1100 | -11.6 | 5.8 | -144 | -17.9 | -- |
| 25N/33E-27A01 | 06-03-83 | 1100 | -- | -- | -134 | -17.0 | -- |
| 25N/35E-03E01D1 | 06-02-83 | 1525 | -17.7 | 51.5 | -121 | -15.4 | -- |
| 25N/37E-21L04 | 06-01-83 | 1500 | -13.0 | 5.0 | -144 | -18.6 | -- |
| 25N/37E-27E01 | 05-31-83 | 1730 | -- | -- | -127 | -16.3 | -- |
| 26N/32E-26D01 | 07-23-82 | 1100 | -14.4 | 38.0 | -- | -16.6 | -- |
| | 06-04-83 | 0840 | -14.4 | 39.0 | -130 | -16.8 | -- |
| <u>Morrow County, Oreg.</u> | | | | | | | |
| 03S/28E-07CAD | 08-17-84 | 1200 | -- | -- | -- | -- | <24 |
| 04N/25E-10BDC | 09-19-84 | 1600 | -- | -- | -- | -- | <24 |
| <u>Umatilla County, Oreg.</u> | | | | | | | |
| 01S/32E-09BBA | 08-16-84 | 1200 | -- | -- | -- | -- | <24 |
| 04N/28E-11BAB | 08-16-84 | 1200 | -- | -- | -- | -- | 25 |
| 05N/28E-16ADD | 09-19-84 | 1700 | -- | -- | -- | -- | <24 |
| <u>Whitman County, Wash.</u> | | | | | | | |
| 19N/42E-15B01 | 08-04-82 | 1400 | -26.7 | 119 | -- | -15.0 | -- |
| 20N/43E-10R01 | 08-03-82 | 1220 | -16.0 | 33.6 | -- | -16.7 | -- |
| <u>Yakima County, Wash.</u> | | | | | | | |
| 07N/22E-09E01 | 03-29-82 | 1715 | -13.1 | 71.9 | -- | -- | -- |
| | 04-19-84 | 0930 | -13.2 | -- | -- | -- | -- |

Table 4.--Concentrations of stable isotopes and tritium in samples from selected wells in the Columbia Plateau RASA project area from 1982 through 1985--Continued

| Local number | Date | Time | C-13 /C-12 stable isotope ratio (per mil) | Carbon-14 (percent modern) | H-2 /H-1 stable isotope ratio (per mil) | O-18 /O-16 stable isotope ratio (per mil) | Tritium total (pCi/L) |
|--|----------|------|--|----------------------------------|--|--|-----------------------------|
| <u>Yakima County, Wash.--Continued</u> | | | | | | | |
| 14N/19E-11L01 | 08-17-82 | 0910 | -15.5 | 42.1 | -- | -- | -- |
| 14N/19E-15M01 | 08-17-82 | 1149 | -17.2 | 29.7 | -- | -16.8 | -- |
| 14N/20E-20N02D1 | 08-20-82 | 1100 | -16.5 | 35.4 | -- | -16.3 | -- |