

Ground-Water Data for the Warm Springs Indian Reservation and Contiguous Areas, North-Central Oregon

U.S. Geological Survey
Open-File Report 96-598

Prepared in cooperation with
CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION



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By DONALD B. ANDERSON

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Portland, Oregon
1996

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To Obtain
Length		
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
Area		
acre	4,047	square meter (m ²)
square foot (ft ²)	0.09294	square meter (m ²)
square mile (mi ²)	2.590	square kilometer (km ²)
Volume		
gallon (gal)	3.785	liter (L)
cubic foot (ft ³)	0.02832	cubic meter (m ³)
Flow		
gallon per minute (gal/min)	0.06308	liter per second (L/s)

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.

Ground-Water Data for the Warm Springs Indian Reservation and Contiguous Areas, North-Central Oregon

By Donald B. Anderson

ABSTRACT

This report presents well data that were collected and compiled during 1985–86 by the U.S. Geological Survey and used to determine the amount of ground water discharging to the Deschutes River on and near the Warm Springs Indian Reservation. The report contains well-construction data from 171 wells, information from drillers' logs for 66 wells, water-level data for 29 wells, and a map showing well locations.

INTRODUCTION

The Warm Springs Indian Reservation is located in Wasco and Jefferson Counties, Oregon, and covers approximately 1,000 square miles. The boundaries of the area for which data are presented in this report include about 2,400 square miles and are shown in figure 1. Two previous studies by the U.S. Geological Survey on and near the Warm Springs Indian Reservation include reports by Robison and Laenen (1976) and Bolke and Laenen (1989). Robison and Laenen (1976) determined the flow of the major streams, the yield of water to wells and springs, and quality of water on the reservation. Bolke and Laenen (1989) identified total gains and losses in the Deschutes and Metolius Rivers and separated total ground-water discharge into flow components from each side of the Deschutes River. The purpose of this report is to present well data collected during the period 1985–86

and to include relevant data on subsequently drilled wells completed from 1986 to 1991. This report was prepared in cooperation with the Confederated Tribes of the Warm Springs Reservation.

Acknowledgments

The cooperation of the officials of the U.S. Bureau of Indian Affairs, the Portland General Electric Company, the City of Madras, and the Deschutes Club is gratefully acknowledged. Special thanks are given to Deepak Sehgal and Satish Puri of the Confederated Tribes of the Warm Springs Reservation who willingly gave of their time and resources, to residents and landowners who granted access to their wells for data collection, and to several well drillers who shared information in addition to that contained in well-reports.

EXPLANATION OF DATA

Well-Numbering System

The local well numbers used in the three tables in the report are based on the rectangular system for subdivision of public land (fig. 2). Each number-letter combination identifies the location of a well with respect to the township, range, and section. For example, 07S/11E-30BAC01 indicates a well is in township 07 that is south of the Willamette Baseline, is in range 11 east of the Willamette Meridian, and is in section 30. The letters indicate the well location within the section

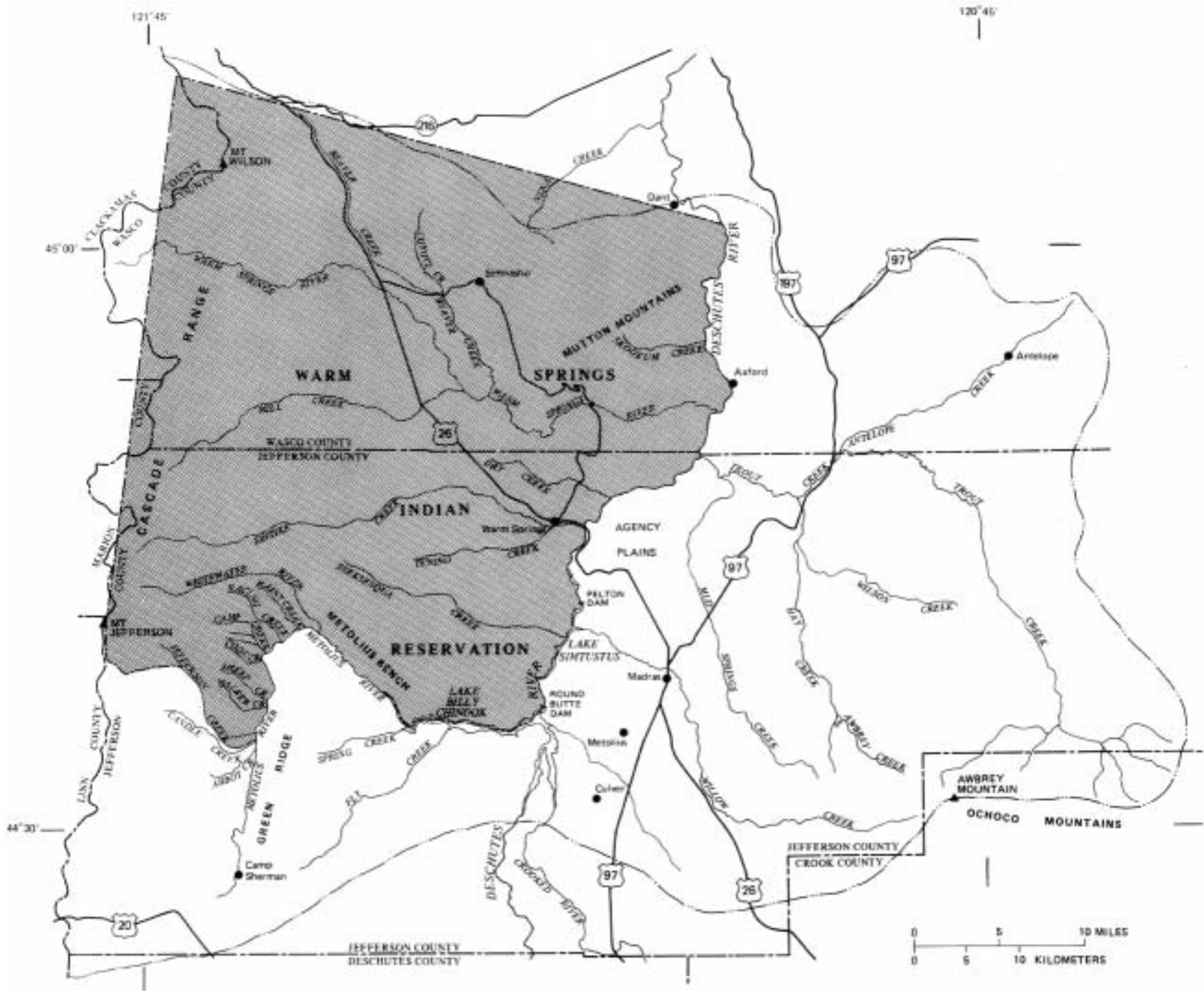


Figure 1. Location of the Warm Springs Indian Reservation area, Oregon.

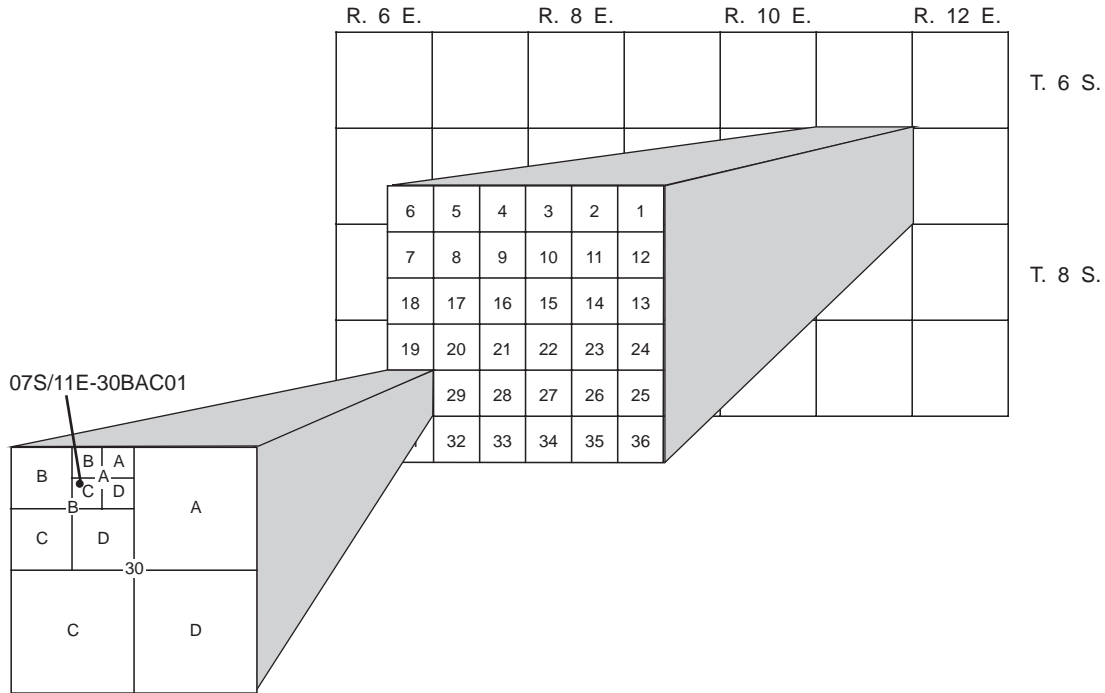


Figure 2. Site-identification system for wells.

(fig. 2). In the local well number 07S/11E-30BAC01, the left letter B designates the section quarter (160 acres), the center letter A the quarter-quarter section (40 acres), and the right letter C the quarter-quarter-quarter section (10 acres). The following number indicates the sequence of scheduling the wells. Therefore well 7S/11E-30BAC01 was the first well scheduled in the NW quarter of the NE quarter of the SW quarter of section 30.

On the well-location map (pl. 1), each well is identified with a sequential number that

is included with the above explained well numbers in the tables.

Well Data

The locations of 171 wells are described in table 1. A compilation of 66 drillers logs is described in table 2. Water levels for 29 wells that were measured periodically for about 1 year during 1985–86 are listed in table 3. Water levels for two Portland General Electric Company monitoring wells that were drilled in 1955 and measured over an extended period of time also are shown in table 3.

Table 1. Records of selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Site identification	Owner	Depth of well (feet)	Diameter of casing (inches)	Date well constructed	Top of casing (feet below datum)	Bottom of casing (feet below datum)	Top of open interval (feet below datum)	Bottom of open interval (feet below datum)	Water level (feet below datum)	Date water level measured	Altitude of land surface (feet above sea level)	Yield (gpm)	Draw-down (feet)	Test period (hours)	Test method	Specific conductance (microsiemens per cm)	Remarks
WASCO COUNTY--Continued																			
69	08S/13E-33CAB01	444952121112101	FRANK, DELBERT	385	6	02-11-72	0	252	25	30	19	02-11-72	1820	11	182	4	P	--	R,W3
					5	--	247	385	75	80	--	--	--	--	--	--	--	--	--
				--	--	--	--	--	175	180	--	--	--	--	--	--	--	--	--
				--	--	--	--	--	225	230	--	--	--	--	--	--	--	--	--
				--	--	--	--	--	247	252	--	--	--	--	--	--	--	--	--
				--	--	--	--	--	283	288	--	--	--	--	--	--	--	--	--
				--	--	--	--	--	333	338	--	--	--	--	--	--	--	--	--
				--	--	--	--	--	380	385	--	--	--	--	--	--	--	--	--
70	08S/14E-17DCD01	445209121043901	MEANUS, CLARENCE	162	6	11-06-65	247	385	100	162	30	11-06-65	1300	3	110	1	B	275	R,W
71	08S/14E-20BDA01	445152121050101	SANDERS, HEATH	125	6	12-17-71	0	125	55	60	25.6	01-03-72	1290	4	40	4	P	536	R,W
				--	--	--	--	--	120	125	--	--	--	--	--	--	--	--	--
72	08S/14E-20DAC01	445134121043501	HEATH, NATHAN	34	6	09-10-58	0	33	33	34	27	09-10-58	1280	12	3	2	--	606	R,C,W
73	08S/14E-21ACB01	445152121033501	MOODY, CLARA	22	6	11-08-65	0	20	20	22	5	11-08-65	1270	12	14	1	B	164	R
JEFFERSON COUNTY																			
74	09S/08E-11AAB01	444851121472101	U.S. FOREST SERVICE	254	6	10-10-62	-1.0	26	240	253	226	10-10-62	4965	7	28	1	B	--	----C
				--	5	--	--	--	234	254	--	--	--	--	--	--	--	--	--
75	09S/08E-12CCA01	444810121465401	U.S. FOREST SERVICE	242	6	09-11-62	-1.0	22	225	240	217	09-11-62	4945	15	25	1	B	--	L,W
				--	--	--	--	--	--	190	242	--	--	--	--	--	--	--	--
				--	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
76	09S/11E-01BAB01	444928121222301	POITRA, PEGGY	340	6	05-25-84	-1.0	340	300	340	310	05-25-84	2640	15	4	1	B	207	R
77	09S/11E-01BBA01	444927121222901	SMITH, LEPHA	360	6	08-07-86	-1.0	359	339	359	319	08-07-86	2645	16	41	1	A	--	R,L
78	09S/11E-02BAA01	444927121232301	WILLIAMS, P.	375	6	02-04-72	0	370	370	375	350	02-04-72	2680	18	6	4	--	--	R,W
79	09S/12E-07DBB01	444808121205201	FUENTES, WM.	360	6	07-23-88	-1.5	358	338.5	358.5	284	07-23-88	2625	6	76	1.0	A	--	R
				--	--	--	--	--	358.5	360	--	--	--	--	--	--	--	--	--
80	09S/12E-07DBB02	444806121204701	MITCHELL, ISAAC	344	6	05-26-87	-1.5	340	320	340	281	05-27-87	2624	7	39	1.0	A	--	R,L
				--	--	--	--	--	340	344	--	--	--	--	--	--	--	--	--
81	09S/12E-10CAB01	444812121172601	SCOTT, EUGENE	78	6	01-31-75	0	70	70	75	36	01-31-75	1600	18	30	4.0	P	345	R,W
				--	--	--	--	--	75	78	--	--	--	--	--	--	--	--	--
82	09S/12E-14DAC01	444711121153301	MACY, DAN	102	8	10-04-71	0	20	24	40	24	10-04-71	1665	160	--	1.0	B	--	R,W3
				--	--	--	--	--	--	--	6	--	--	0	40	40	102	--	-----
83	09S/12E-20ACD01	444634121192701	WALLULATUM, NELSON	40	6	01-22-82	-1.0	40	18	40	10	01-22-82	1680	30	5	1.0	B	75	R,AB,W
84	09S/12E-20ACD02	444634121192601	WALLULATUM, NELSON	40	--	10-09-87	--	--	18	38	10	10-09-87	1677	10	--	1.0	A	--	R,L
85	09S/12E-21DBD01	444621121180901	THOMPSON, GLADYS	40	6	05-06-82	-1.0	40	18	40	10	05-05-82	1600	14	2	3.0	P	229	R,AB
86	09S/12E-21DBD02	444621121180902	THOMPSON, GLADYS	40	6	11-02-87	-2.0	38	18	38	10	11-02-87	1695	10	30	1.0	A	--	R
				--	--	--	--	--	38	40	--	--	--	--	--	--	--	--	----
87	09S/12E-31CAD01	444437121205601	PERTHINA, GEORGE	415	6	12-15-75	-2.0	27	27	415	20	12-15-75	1940	.5	395	.5	B	--	R,L,W3
88	09S/12E-32CDA01	444426121194301	SWITZLER, DELTON	132	6	09-28-66	0	21	21	132	56	09-28-66	1840	12.5	26	1.0	B	--	R,AB,C,W
89	09S/12E-32CDD01	444422121194301	HISATAKE, MARY	175	6	09-17-75	0	175	110	175	85	09-17-75	1880	10	16	4.0	P	--	R,W
90	09S/12E-33CCC01	444424121185401	MACY, DAN	150	8	10-07-71	0	20	20	150	38	10-07-71	1730	4	--	1.0	B	--	R
91	09S/12E-34BCD01	444443121173201	CLEMENTS, BART	82	6	11-17-65	0	64	64	82	8	11-17-65	1620	2	57	1.0	B	--	R,W3

Table 1. Records of selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Site identification	Owner	Depth of well (feet)	Diameter of casing (inches)	Date well constructed	Top of casing (feet below datum)	Bottom of casing (feet below datum)	Top of open interval (feet below datum)	Bottom of open interval (feet below datum)	Water level (feet below datum)	Date water level measured	Altitude of land surface (feet above sea level)	Yield (gpm)	Draw-down (feet)	Test period (hours)	Test method	Specific conductance (microsiemens per cm)	Remarks
JEFFERSON COUNTY--Continued																			
92	09S/12E-34BCD02	444448121173501	MANION, ED	84	6	02-17-67	0	63	63	84	5	02-17-67	1620	10	48	1.0	B	397	R,W
93	09S/12E-36DDA01	444425121141401	SMITH, STANLEY JR	32	6	12-10-71	0	25	25	30	9	12-10-71	1380	15	4.50	3.5	P	418	R,W
94	09S/13E-05AAA01	444930121114801	JOHNSON, RUTH	425	8	01-13-78	0	30	30	425	40	01-13-78	1850	2	200	1.0	B	--	R,L
95	09S/13E-05ABB01	444928121121301	HENRY, THURMAN	130	6	01-05-78	0	130	120	130	80	01-05-78	1930	15	5	1.0	B	145	R,W
96	09S/13E-06CBA01	444859121135001	TUCKA, LUCILLE	265	8	06-27-76	0	27	27	265	D	06-27-76	1750	--	--	--	--	--	R,AB
97	09S/13E-17DAD01	444710121114101	CONF. TRIBES OF WARM SPRINGS	19	6	02-05-64	0	19	19	19	8	02-05-64	1360	5	4	1.0	B	--	R,W3
98	09S/13E-17DCD01	444653121120001	DAVID, ANDREW	20	6	10-29-65	0	19	19	20	15	10-29-65	1360	8	--	--	--	--	R,W
99	09S/13E-30BDD01	444537121133601	MCINTURF FAMILY	511	6	10-26-66	2.0	40	40	511	45	10-26-66	1400	5	402	2.0	B	--	D,L
100	09S/13E-31CBC01	444431121134201	HARDING, DAVID	80	6	12-06-86	-1.0	80	20	30	20	12-06-86	1380	10	60	1.5	B	--	L
				--	--	--	--	--	70	80	--	--	--	--	--	--	--	--	--
101	09S/13E-31CCB01	444428121140101	SMITH, KENNETH	25	6	08-15-77	0	12	12	25	5	08-15-77	1380	12	7	4.0	P	516	R,W
102	09S/13E-31CDA01	444428121131101	HARDING, DAVID	650	6	08-16-86	-1.0	23	23	650	200	08-16-86	1480	4	--	1.5	B	--	AB,L
103	09S/13E-31CDB01	444429121133901	MORRISON, DUKE	142	6	07-06-64	0	20	20	142	90	07-06-64	1400	10	40	1.0	B	--	P
104	09S/14E-19AAA01	444643121052901	VIBBERT, BRYCE	385	6	1910	0	--	--	--	--	--	1940	--	--	--	--	242	W
105	09S/14E-20ABC01	444639121045001	AUSTIN, JOE	216	6	1981	-1.0	--	--	--	--	--	1810	--	--	--	--	--	W
106	09S/14E-20CAA01	444622121045301	DUNLOP, CHUCK L	27	8	10-05-65	0	27	18	27	10	10-05-65	1795	120	1	.5	B	--	L
107	09S/14E-20CAA02	444618121045301	MADSEN, WALTER JR	200	8	06-24-74	0	19	19	200	70	06-24-74	1800	25	100	1.0	B	--	L
108	09S/14E-20DDA01	444608121042901	VIBBERT, J R	230	12	05-08-84	-1.5	20	20	230	62	05-08-84	--	70	3	2.0	B	--	I,L,W3
109	09S/14E-30CDA01	444515121061201	VIBBERT, BRYCE	605	16	06-16-83	-1.0	20	20	605	22	06-16-83	1880	105	8	1.5	B	--	I,L,W3
110	09S/14E-32DAB01	444436121043101	FEIGNER, KURT	172	8	08-01-88	-1.0	19	115	155	93	08-01-88	2262	30	79	1.0	A	--	L
				--	6	--	4.0	155	155	172	--	--	--	--	--	--	--	--	--
111	10S/12E-15BDB01	444220121172701	SMITH, ZELMA	288	6	1935	0	--	--	--	203	03-26-73	2145	7	--	--	--	223	R,C,W3
112	10S/12E-17AAC01	444223121191201	SMITH, EMERSON	240	6	07-27-83	-1.7	240	200	240	215	07-27-83	2265	20	10	1.0	B	219	R,W3
113	10S/12E-17BAB01	444228121195301	SMITH, EMERSON	420	6	09-15-76	-2.7	420	360	420	350	09-15-76	2435	12	30	5.0	P	211	R,L,W
114	10S/12E-28BDB01	444033121183401	KALAMA, NICK	62	6	11-15-65	-2.0	24	24	62	20	11-15-65	1920	6	28	1.0	B	247	R,W
115	10S/12E-29ACA01	444031121192501	JOHNSON, THERON	90	6	03-25-83	-1.0	90	50	90	50	03-25-83	1985	30	10	1.0	B	287	R,W
116	10S/12E-29ADB01	444032121191101	HENRY, LEAH	110	6	08-14-86	-1.5	110	90	110	55	08-14-86	1990	50	55	1.0	A	--	R,L
117	10S/12E-29ADD01	444026121190801	JOHNSON, ORIN	52	6	11-15-65	-0.7	24	24	52	6	11-15-65	1940	10	10	1.0	B	230	R,C,W
118	10S/12E-29BDD01	444028121193801	JOHNSON, RAY	47	6	01-08-71	-0.6	18	42	47	21	01-08-71	1950	9	11	2.0	B	248	R,W
				--	5	--	0	25	--	--	--	--	--	--	--	--	--	--	--
				--	4	--	0	42	--	--	--	--	--	--	--	--	--	--	--
119	10S/12E-30ABC01	444039121204801	WALLULATUM, KAREN	42	6	11-16-65	-0.2	24	24	42	16	11-16-65	2020	7	8	1.0	B	--	R,W
120	10S/12E-30BAA01	444044121205201	JOHNSON, DELFORD	115	6	06-30-77	-2.5	115	75	115	65	06-30-77	2060	15	15	1.0	B	348	R,L,C,W
121	10S/12E-30BAD01	444041121205201	JOHNSON, DELFORD	120	6	07-21-88	--	--	59	79	20	07-21-88	2025	75	105	1.0	A	--	R
122	10S/12E-30BBA01	444045121211401	MILLER, AVEX	62	6	11-16-65	-1.0	23	23	62	20	11-16-65	2050	4.50	--	1.0	B	259	R,C
123	10S/12E-31BCA01	443945121211101	CONF. TRIBES OF WARM SPRINGS	402	8	1935	0	--	--	--	355	00-00-75	2320	15	10	--	--	--	R,W3

c

Table 1. Records of selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Site identification	Owner	Depth of well (feet)	Diameter of casing (inches)	Date well constructed	Top of casing (feet below datum)	Bottom of casing (feet below datum)	Top of open interval (feet below datum)	Bottom of open interval (feet below datum)	Water level (feet below datum)	Date water level measured	Altitude of land surface (feet above sea level)	Yield (gpm)	Draw-down (feet)	Test period (hours)	Test method	Specific conductance (microsiemens per cm)	Remarks
JEFFERSON COUNTY--Continued																			
124	10S/12E-34CCB01	443912121174101	MUNIZ, CAROL	220	6	05-10-78	-0.9	220	200	220	190	05-10-78	2080	25	5	1.0	B	246	R,W
125	10S/12E-34CCC01	443907121174701	CONF. TRIBES OF WARM SPRINGS	616	6	1935	0	--	--	--	345	00-00-48	2090	3	55	--	--	--	R,AB
126	10S/12E-34DBC01	443923121170501	JOHNSON, LEE	360	6	07-13-88	-1.5	358	338.5	358.50	287	07-13-88	2138	6	--	1.0	A	--	R,L
				--	--	--	--	--	358.5	360	--	--	--	--	--	--	--	--	--
127	10S/12E-34DBD01	443920121170001	WEWA, WILSON SR.	360	6	07-20-88	-1.5	358	338.5	358.50	290	07-20-88	2132	15	70	1.0	A	--	R
128	10S/13E-28AAA01	444041121102301	BUCKNER, ROBT.-CASCADE FARMS	915	8	02-20-88	-2.0	19	19	915	435	02-20-88	2394	5	--	1.0	B	--	AB,L
129	10S/14E-19DCC01	444051121060601	GREEN, TOM	670	6	10-22-70	0	292	292	670	345	10-22-70	2335	25	150	2.0	B	--	L
130	11S/10E-13ADB01	443713121282801	EYERLEY, JACK	230	8	11-30-72	-1.0	19	75	230	17	11-30-72	1970	20	12	1.0	B	160	L
				--	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--
131	11S/11E-20CCB01	443557121270601	HALL, JOE	101	8	01-05-74	-1.0	20	21	101	16	01-05-74	1945	20	1	1.0	B	--	L
				--	6	--	-1.0	101	--	--	--	--	--	--	--	--	--	--	--
132	11S/11E-29CCB01	443505121265701	U.S. FOREST SERVICE	117	8	09-19-83	-2.8	18	87	117	47	09-19-83	2000	14	4	1.0	B	134	W
				--	6	--	--	0	117	--	--	--	--	--	--	--	--	--	--
133	11S/11E-29CDB01	443507121264401	U.S. FOREST SERVICE	100	8	09-15-83	-2.0	18	70	100	--	--	1955	18	6	2.0	B	139	W
				--	6	--	--	0	100	--	--	--	--	--	--	--	--	--	--
134	11S/11E-30DDA01	443504121271601	U.S. FOREST SERVICE	117	8	09-20-83	-2.0	18	87	117	48	09-20-83	2060	14	6	2.0	B	142	L
				--	6	--	18.0	117	--	--	--	--	--	--	--	--	--	--	--
135	11S/12E-02CCC01	443829121160201	SIMTUSTUS PARK	68	6	08-17-62	-0.6	67	--	--	53	08-17-62	1640	15	--	1.5	B	212	R,C,W
136	11S/12E-04ADD01	443855121172601	ALLEN, FRANCES	315	6	01-15-80	-1.0	70	275	315	275	01-15-80	2090	15	10	5.0	P	226	R,W,L
				--	5	--	--	--	65.0	315	--	--	--	--	--	--	--	--	--
137	11S/12E-04BDB01	443858121181401	SMITH, VICTOR	585	6	02-11-80	-1.5	40	40	585	325	02-11-80	2120	3	260	2.5	B	236	R,W,L
138	11S/12E-17BCA01	443715121193101	TOM, LEE	375	6	06-28-85	-1.0	145	180	275	328.4	06-28-85	2525	2.5	55	--	P	--	R,W,L
				--	5	--	--	135	275	--	--	--	--	--	--	--	--	--	--
139	11S/12E-18DCC01	443642121202001	ESTABROOK, JOE	370	6	07-00-58	--	--	--	--	152	07-00-58	2575	20	--	--	--	--	253R,D,C
140	11S/12E-21ABB01	443637121175401	PORTLAND GENL. ELEC. CO.	642	--	08-01-58	--	--	--	--	348.3	12-30-78	2217	--	--	--	--	--	R,L,W3
141	11S/12E-26AAC01	443532121151102	PORTLAND GENL. ELEC. CO.	983	--	10-00-58	--	--	--	--	709.5	12-30-78	2566	--	--	--	--	--	L,W3
142	11S/13E-01BAC01	443849121072501	CITY OF MADRAS	418	--	1910	0	--	--	--	--	--	--	--	--	--	--	--	--
143	11S/13E-01BCA01	443849121072401	CITY OF MADRAS	800	16	01-11-79	-2.0	207	361	375	340	01-11-79	2275	85	60	7.0	--	--	P,AB,L,W3
				--	12	--	170	437	440	460	--	--	--	--	--	--	--	--	--
				--	10	--	412	480	480	800	--	--	--	--	--	--	--	--	--
144	11S/13E-01BCA02	443848121072801	CITY OF MADRAS	451	16	02-11-66	0	195	424	440	326	01-31-66	2278	470	47	12.0	P	--	P,L,W3
				--	12	--	164	451	--	--	--	--	--	--	--	--	--	--	--
145	11S/13E-02DDC01	443812121080001	CITY OF MADRAS	477	16	09-22-72	0	165	404	408	216	09-13-72	2222	329	130	12.0	P	406	P,L,C,W3
				--	12	--	155	477	421	471	--	--	--	--	--	--	--	--	--
146	11S/13E-05CBD01	443826121121901	MCCOOL, JERRY	800	--	--	--	--	--	--	750	08-22-25	2420	--	--	--	--	--	AB

Table 1. Records of selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number Remarks	Local well number	Site identification	Owner	Depth of well (feet)	Diameter of casing (inches)	Date well constructed	Top of casing (feet below datum)	Bottom of casing (feet below datum)	Top of open interval (feet below datum)	Bottom of open interval (feet below datum)	Water level (feet below datum)	Date water level measured	Altitude of land surface (feet above sea level)	Yield (gpm)	Draw-down (feet)	Test period (hours)	Test method	Specific conductance (micro-siemens per cm)
JEFFERSON COUNTY--Continued																		
147	11S/13E-06BAC01	443854121132201	WILKINSON, JERRY	520	8	09-29-79	-1.0	19	19	520	--	--	2370	--	--	--	--	AB
148	11S/13E-06BBD01	443850121133201	DAHLGREN, DARRELL	267	8	03-29-82	-2.0	19	19	267	176	03-29-82	2365	0.5	91	1.0	B	-- AB
149	11S/13E-07CCD01	443721121133401	BELLE, JENNE	835	6	06-10-82	-2.5	20	20	835	768	06-10-82	2680	3.5	67	1.0	B	-- D,L,W3
150	11S/13E-07CCD02	443724121133501	BELLE, JENNE	600	8	08-15-83	-2.0	18	18	600	--	--	2670	--	--	--	--	--
				--	--	--	--	--	181	186	--	--	--	--	--	--	--	--
151	11S/13E-24ABD01	443619121065301	Schnider, E.	1000	10	04-22-68	0	20	20	1000	310	04-22-68	2370	95	440	--	--	D,L
152	11S/13E-24BCB01	443608121073901	AITKEN, DONALD J.	503	6	08-16-78	-1.0	29	29	503	433	08-16-78	2465	10	30	1.5	B	370 L,W
153	11S/13E-24BCC01	443603121073701	SHERER, KEITH R.	590	6	04-29-63	-0.3	21	21	590	526	04-29-63	2490	11	34	1.0	B	-- W3
154	11S/13E-28CDA01	443454121110301	BURLINGTON NORTHERN R.R.	878	--	--	--	--	--	--	645	08-22-25	2535	--	--	--	--	AB
155	11S/13E-30CCD01	443446121133601	DITMORE, DALE	1300	--	--	0	1077	--	--	750	08-22-25	2575	--	--	--	--	AB,L
156	12S/11E-02CDA01	443318121225101	STILLS, DOUG	600	10	05-06-70	-0.2	20	520	600	445	05-06-70	2540	20	--	2.0	B	-- L,W3
				--	8	--	0	600	--	--	--	--	--	--	--	--	--	--
157	12S/11E-04ABD01	443354121250601	BEEBE AND BONSAI	324	6	08-12-64	0	14	14.5	324	288	08-12-64	2418	20	27	1.0	B	-- AB
158	12S/11E-11ABC01	443300121224801	KING, JAMES	850	8	03-11-80	-1.5	18	18.5	850	750	03-11-80	2850	5	--	1.0	B	269 L
159	12S/12E-04BDD01	443339121180501	WHEELER, ROBT	650	8	04-09-70	0	20	570	650	566	04-09-70	2600	10	--	2.0	B	-- L,W3
				--	6	--	20.0	650	--	--	--	--	--	--	--	--	--	--
160	12S/12E-06ABD01	443355121201001	LEWIS, BOB	725	8	04-15-80	-1.0	18	18.5	725	625	04-15-80	2640	4	--	1.0	B	261 L
161	12S/12E-17DCA01	443134121185701	GOODNIGHT, ROY	680	6	08-05-78	-1.0	19	19	680	617	08-05-78	2662	6	--	1.0	B	243 W
162	12S/12E-20ABC01	443116121191101	HISCOE, BILL	735	8	08-05-80	-1.5	18	18.5	735	675	08-05-80	2695	5	--	1.0	A	-- L
163	12S/12E-20ABD01	443114121185801	HINCHEY, MRS. JOHN	704	8	03-13-67	0	20	604	704	665	03-13-67	2685	10	--	2.0	B	255 --
				--	5	--	0	704	--	--	--	--	--	--	--	--	--	--
164	12S/12E-20ACB01	443108121191301	LIHS, JAMES	755	8	06-10-85	-2.0	18	735	755	706	06-10-85	2695	10	--	2.0	A	-- --
				--	6	--	-1.0	755	--	--	--	--	--	--	--	--	--	--
165	12S/12E-20ACC01	443100121191201	MOORE, ELMER C.	715	8	08-02-80	-0.8	19	19	715	702	08-02-80	2690	8.5	--	2.5	P	205 W
166	12S/12E-23AAB01	443126121222901	DEMONTE, BEEB, AND BONSAI	651	6	09-14-62	-0.2	--	--	--	601	09-12-62	2779	3	45	1.0	B	-- D,AB
167	12S/13E-06BCA01	443336121133601	DEGNER, FRED	695	--	1925	--	--	--	--	690	08-22-25	2592	--	--	--	--	AB,W3
168	12S/13E-11DBB01	443232121081301	MCBEE, ROBT I.	383	6	07-31-81	-1.0	184	184	383	339	07-31-81	2750	8	--	1.0	A	329 L
169	12S/13E-16ABB01	443200121104001	CORWIN, THAYNE	630	--	--	--	--	--	--	540	08-21-25	2740	--	--	--	--	L
170	12S/13E-18DAC01	443131121124501	ROBERTS, CHARLES	774	--	--	--	--	--	--	700	08-20-25	2630	--	--	--	--	AB
171	12S/13E-26ABA01	443016121080601	HAYERFIELD, BERT	850	8	06-27-74	-1.5	18	18.5	850	375	06-27-74	2955	1.5	10	1.0	B	389 L,W

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon
 [--, unknown]

Well identi- fication number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
WASCO COUNTY								
1	05S/08-1/2E-11DAA01	U.S. Forest Service	Keller Well Drilling Co.	6/3/70	Topsoil	1	1	--
					Clay, brown	16	17	--
					Clay, blue	23	40	--
					Rock, broken	10	50	+1
2	05S/10E-18CAD01	Oregon State Dept. of Transportation	Crawford Drilling	12/4/73	Soil, brown sandy	1	1	--
					Sandstone, brown course	10	11	--
					Clay, brown, and sandstone, course	9	20	--
					Clay, tan	3	23	--
					Conglomerate, brown clay	23	46	--
					Rock, hard black	28	74	--
					Rock, black broken, and clay, tan	6	80	--
					Boulders, black, and rock, brown	20	100	--
					Rock, brown, and clay, tan	20	120	--
					Rock, hard black	100	220	--
					Rock, hard brown medium	30	250	--
					Rock, hard gray and brown medium (water)	112	362	240
					Rock, hard gray	230	592	--
					Rock, gray and brown, and clay, tan	20	612	--
					Rock, brown and red, medium hard	13	625	--
					Rock, hard brown	12	637	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
WASCO COUNTY—Continued								
5	05S/11E-25BDC01	Pine Grove Tavern	Stasser Drilling Co.	1968	Soil	1	1	--
					Alluvium:			
					Clay and gravel	3	4	--
					Clay	4	8	--
					Olivine basalt:			
					Rock, gray soft	22	30	--
					Conglomerate	18	48	--
					Rock, gray soft	27	75	--
					Rock, black	40	115	--
					Cinders, red	69	184	--
					Columbia River Group:			
					Basalt, black, very hard	106	290	--
					Basalt, black, medium hard (crevices)	21	311	--
					Rock, black broken	20	336	--
					Rock, brown soft	20	356	--
					Rock, brown porous	21	377	--
					Rock, brown, medium hard	5	382	--
					Rock, brown porous	14	396	--
					Rock, brown, medium hard	28	424	--
					Rock, black and red	55	479	--
					Rock, black with crevices	13	492	--
					Rock, brown, medium hard	43	535	--
					Rock, black, medium hard	23	558	--
					Rock, brown, and pumice	32	590	--
					Rock, black	49	639	--
					Rock, red soft	4	643	--
					Rock, black, medium hard	29	672	--
					John Day Formation:			
					Sandstone	28	700	--
					Sandstone, brown medium	44	744	557

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
WASCO COUNTY—Continued								
8	05S/11E-26ACC01	Ray Kimmel	M-K Drilling Co.	1982	Topsoil	0	11	--
					Basalt, red and gray, hard	26	37	--
					Basalt, red and gray, fractured, caving	30	67	--
					Basalt, gray, medium hard	78	145	--
					Rhyolite, gray and red	88	233	--
					Rhyolite, red and white	50	283	--
					Basalt, brown medium	22	305	--
					Basalt, gray and brown, porous	103	408	--
					Cinders, soft	20	428	--
					Basalt, gray and red, medium	98	526	--
					Basalt, gray, porous	232	758	--
					Sandstone, brown	43	801	--
					Basalt, gray and red, porous	71	872	--
					Sandstone, white, caving	26	898	Dry
10	06S/11E-11CAA01	F.R. Garner (Rainbow Rock)	Marinelli Drilling Co.	9/31/79	Clay, gray	4	4	--
					Clay, brown	36	40	--
					Sandstone, brown medium water-bearing	4	44	43
					Basalt, brown hard	12	56	--
					Basalt, gray hard	9	65	--
					Basalt, brown fractured, hard water-bearing	18	83	--
					Claystone, gray medium	2	85	--
					Basalt, brown hard	38	123	--
					Basalt, gray fractured, hard water-bearing	8	131	--
					Cinder with clay, red	9	140	--
					Basalt, gray hard	21	161	--
					Cinder, brown soft	46	207	--
					Basalt, gray fractured, hard water-bearing	33	240	28

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
WASCO COUNTY—Continued								
11	06S/12E-03AAD01	Al Blakeand James Abbott	Murray Well Drilling, Inc.	2/24/78	Soil	1	1	--
					Basalt, broken, and boulders	17	18	--
					Clay, gray	13	31	--
					Boulders	21	52	--
					Clay, brown	11	63	--
					Boulders water-bearing	87	150	--
					Basalt, gray, water-bearing	55	205	--
					Rock, tan vesicular	13	218	--
					Basalt, gray	14	232	--
					Clay, tan	11	243	--
					Conglomerate, water-bearing	42	285	--
					Basalt, gray	40	325	--
					Basalt, black vesicular	65	390	--
					Claystone, green, water-bearing	17	407	--
					Basalt, gray	58	465	--
					Basalt, black	7	472	--
					Claystone, blue	33	505	--
					Basalt, black	17	522	--
					Basalt, gray hard	66	588	--
					Basalt, black,water-bearing	22	610	--
					Basalt, gray	15	625	--
					Basalt, black	30	655	25
15	06S/14E-28DAB01	Frates Seeligson	Marinelli and Austin Drilling Co.	11/19/82	Sand and gravel	3	3	--
					Sand	3	6	--
					Sandstone	12	18	--
					Sandstone and gravel, water-bearing	2	20	--
					Clay, brown	11	31	--
					Gravel, medium cemented	10	41	--
					Boulders	5	46	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)					
WASCO COUNTY—Continued													
15	06S/14E-28DAB01	Frates Seeligson	Marinelli and Austin Drilling Co.	11/19/82	Sandstone, medium	5	51	--					
					Cinder, red	2	53	--					
					Clay, gray hard	6	59	--					
					Basalt, black, some fractures	26	85	--					
					Basalt, black, med. fractures, clay seam	14	99	--					
					Claystone, reddish brown, hard	53	152	--					
					Claystone, green hard	19	171	--					
					Basalt, black fractured	16	187	--					
					Claystone, gray	7	194	--					
					Claystone, brown	10	204	--					
					Gravel, water-bearing	5	209	--					
					Claystone, reddish brown	38	247	72					
					18	07S/10E-25DAD01	Levi Greene	Clauson Well Drilling	10/15/81	Topsoil	4	4	--
										Gravel and clay	4	8	--
Rock, broken	2	10	--										
Rock, broken, and clay	35	45	--										
Gravel, water-bearing													
4 gallons per minute	13	58	50										
Rock, hard	23	81	50										
Rock, broken, and clay	39	120	50										
Clay, sandy	55	175	50										
Sand, coarse, water-bearing	20	195	50										
Clay, tan	5	200	50										
21	07S/11E-14BDC02	Simnasho Water District	Archie Fox Well	3/3/78	Clay and broken rock	4	4	--					
					Sandstone	21	25	--					
					Sand, coarse, water-bearing	10	35	10					
					Sandstone	68	103	10					
					Clay	7	110	10					

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
WASCO COUNTY—Continued								
24	07S/11E-15DCC01	Confederate Tribes of Warm Springs (New Island Well)	Clauson Well Drilling	1/3/83	Topsoil	3	3	--
					Clay and boulders	25	28	--
					Rock, lava	117	145	--
					Sandstone, brown	44	189	--
					Sandstone, tan	51	240	--
					Sandstone, brown	135	375	350
					Sand, coarse	4	379	350
Sandstone, tan	41	420	350					
29	07S/11E-30CDB01	George Danzuka	Clauson Well Drilling	12/8/79	Topsoil	2	2	--
					Gravel and clay	8	10	--
					Clay, tan	5	15	--
					Gravel and clay	18	33	--
					Clay, tan	27	60	--
					Clay, gray	12	72	--
					Clay, tan	24	96	--
					Sand, black fine	9	105	--
					Sand, coarse	28	133	105
34	07S/12E-02DDB01	Subrina Rabion	Orvail Buckner Well Drilling	10/6/80	Clay, brown	3	3	--
					Cinders, red	13	16	--
					Lava	132	148	--
					Lava, broken and clay, red, water-bearing	22	170	148
41	08S/10E-12DDB01	Confederated Tribes of Warm Springs (Sidwalter well No. 2)	Maphet Well Drilling Co.	2/19/85	Boulders and clay	10	10	--
					Lava, light gray	65	75	--
					Clay, red and gravel, pea	20	95	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
WASCO COUNTY—Continued								
41	08S/10E-12DDB01	Confederated Tribes of Warm Springs (Sidwalter well)	Maphet Well Drilling Co.		Sandstone, brown and gravel, pea	69	164	--
					Lava, black porous	44	208	--
					Sandstone	4	212	--
					Lava, black porous with clay seams	154	366	--
					"Cinderstone", red soft	3	369	--
					Lava, broken, "start into water"	11	380	--
					"Cinderstone", red	2	382	--
					Lava, porous	21	403	--
					Sandstone, reddish-brown	32	435	--
					Pumice	2	437	20
42	08S/10E-13DDA01	Carl Kalama Drilling Co.	Archie Fox Well	2/1/78	Topsoil	3	3	--
					Rock, broken and clay	97	100	--
					Clay, sandy	25	125	--
					Rock, broken	10	135	--
					Rock	85	220	--
					Rock, broken, water-bearing	20	240	210
48	08S/11E-19ACB01	Sam Danzuka Drilling Co.	Archie Fox Well	6/27/77	Topsoil	2	2	--
					Boulders and clay, red brown	18	20	--
					Rock, broken and clay	77	97	--
					Rock, broken and "air"	63	160	--
					Rock, broken and clay	12	172	--
					Sand, water-bearing	16	188	172
					Rock	7	195	172

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
WASCO COUNTY—Continued								
50	08S/11E-26BCC01	Confederated Tribes of Warm Springs	Maphet Well Drilling Co.	5/31/79	Topsoil, sandy	1	1	--
					Clay, yellow and gravel	14	15	--
					Basalt, gray hard	65	80	--
					Basalt, medium-gray	50	130	--
					Basalt, gray hard	20	150	--
					Rock, red soft	20	170	--
					Basalt, gray	20	190	--
					Sandstone, brown	30	210	--
					Basalt, gray	20	230	--
					Basalt, gray broken with yellow clay seams	40	270	--
					Basalt, gray hard	30	300	--
					Rock, red soft	5	305	--
					Sandstone, brown with pea gravel, water-bearing	40	345	305
					51	08S/11E-33DAC01	Tom Eldon Well Drilling	Orvail Buckner
Lava, hard	121	130	--					
Clay, red	5	135	--					
Lava, black	33	168	--					
Sandstone, red, water-bearing	122	290	256					
Sand, black fine, and gravel, water-bearing	25	315	--					
57	08S/11E-35DCD01	Dorris Miller	Maphet Well Drilling	10/7/87	Topsoil	1	1	--
					Clay, brown	5	6	--
					Basalt, gray hard	24	30	--
					Basalt, porous with red clay seams	5	35	--
					Basalt, gray	11	46	--
					Basalt, red porous	11	57	--
					Basalt, gray	9	66	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
WASCO COUNTY—Continued								
57	08S/11E-35DCD01	Dorris Miller	Maphet Well Drilling	10/7/87	Basalt, red porous with red clay seams	12	78	--
					Basalt, gray porous	1	79	--
					Basalt, gray	15	94	--
					"Unknown, lost return"	166	260	--
					Sandstone, red	11	271	--
					Sandstone, brown with pea gravel	126	397	340
62	08S/12E-12DDD01	Olney Patt	Clauson Well Drilling	9/19/80	Topsoil	2	2	--
					Clay, red, water-bearing	308	310	30
					Clay, reddish gray	30	340	30
					Claystone, tan	25	365	30
					Rock, blue medium-hard, water-bearing	10	375	30
					Rock, blue-gray hard			
					First water, 1/2 gpm at 30 feet. Second water, 15+ gpm at 365 feet	50	425	30
63	08S/12E-24CAA01	Warm Springs Fish Hatchery	Orvail Buckner Well Drilling, Inc.	8/5/81	Clay, tan hard	2	2	--
					Sand, brown fine	2	4	--
					Boulders	10	14	--
					Lava	16	30	--
					Sand, gravel, and rock	15	45	--
					Cinders, gravel, and clay, red	10	55	--
					Cinders and clay, red, water-bearing	10	65	--
					Cinders and clay, red	15	80	--
					Cinders and clay, red, water-bearing	5	85	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
WASCO COUNTY—Continued								
63	08S/12E-24CAA01	Warm Springs Fish Hatchery	Orvail Buckner Well Drilling, Inc.	8/5/81	Cinders and clay, red	10	95	--
					Cinders and clay, red, water-bearing	10	105	--
					Cinders and clay, red	65	170	--
					Cinders and clay, red, water-bearing	30	200	--
					Cinders and clay, red	11	211	30
64	08S/13E-09DBC01	Evan Spieno	Clausen Well Drilling	12/11/81	Topsoil	2	2	--
					Gravel and clay	6	8	--
					Clay, red, water-bearing	40	48	40
					Gravel	18	58	40
					Clay, red	92	150	40
					Clay, red dark	10	160	40
68	08S/13E-33BAD01	Beulah Switzler	Archie Fox Well Drilling	11/28/77	Gravel and clay	17	18	--
					Clay, brown light	22	40	--
					Sand, water-bearing	1	41	40
					Clay, brown	99	140	40
					Clay, red	40	180	40
					Clay, brown	50	230	40
					Clay, red	70	300	--
JEFFERSON COUNTY								
75	09S/08E-12CCA01	U.S. Forest Service	Steinman Bros. Drilling	9/11/62	Clay, brown sandy and rock, broken	3	3	--
					Rock, gray medium-hard	7	10	--
					Rock, gray broken	3	13	--
					Rock, gray medium-soft	22	35	--
					Rock, gray hard	13	48	--
					Rock, brown hard	20	68	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
75	09S/08E-12CCA01	U.S. Forest Service	Steinman Bros. Drilling	9/11/62	Rock, gray hard	49	117	--
					Rock, brown hard	3	120	--
					Rock, gray hard	37	157	--
					Rock, brown hard	5	162	--
					Rock, gray hard	32	194	--
					Rock, cinders red loose	8	202	--
					Rock and clay, red decomposed	34	236	--
					Rock, red decomposed, water-bearing	6	242	217
77	09S/11E-01BBA01	Lepha Smith	Maphet Well Drilling	8/7/86	Topsoil	1	1	--
					Rock, broken with clay seams	3	4	--
					Basalt, gray hard	19	23	--
					Basalt, reddish-gray	9	32	--
					Basalt, gray coarse-grained	12	44	--
					Basalt, red and gray, porous	1	45	--
					Basalt, gray coarse-grained	4	49	--
					Sandstone, reddish-brown	21	60	--
					Rock, porous with red sandstone seams	3	63	--
					Basalt, gray coarse-grained	2	65	--
					Basalt, gray porous with yellow clay seams	5	70	--
					Basalt, gray coarse-grained	4	74	--
					Basalt, gray broken	6	80	--
					Basalt, gray and red, broken	20	100	--
					Basalt, red-gray porous with yellow clay seams	5	105	--
					Basalt, gray porous with yellow clay seams	10	115	--
					Basalt, red porous with yellow clay seams	5	120	--
					Basalt, gray coarse-grained	6	126	--
					with yellow clay seams	4	130	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
77	09S/11E-01BBA01	Lepha Smith	Maphet Well Drilling	8/7/86	Basalt, red porous with yellow clay seams	3	133	--
					Basalt, gray coarse	22	155	--
					Sandstone, brown	1	156	--
					Basalt, gray porous	9	165	--
					Sandstone, brown and basalt, gray	8	173	--
					Clay, brown and basalt, gray	3	176	--
					Basalt, gray with seams of "crystal"	14	190	--
					Basalt, gray porous with yellow clay seams	2	192	--
					Rock, broken brown	4	196	--
					Sandstone, brown with gravel	24	220	--
					Gravel, cemented pea	5	225	--
					Gravel, cemented pea with pumice	5	230	--
					Sandstone, brown	55	285	--
					Gravel, cemented pea	75	360	319
80	09S/12E-07DBB02	Isaac Mitchell	Maphet Well Drilling	5/26/87	Topsoil, sandy	1	1	--
					Clay, brown	2	3	--
					Basalt, gray with brown clay seams	35	38	--
					Basalt, light-red, porous, with tan clay seams	37	75	--
					Basalt, gray	14	89	--
					Basalt, gray porous with yellow clay seams	26	115	--
					Basalt, red porous	17	132	--
					Basalt, gray hard	11	143	--
					Sandstone, reddish-brown	30	173	--
					Basalt, gray with brown clay seams	11	184	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
80	09S/12E-07DBB02	Isaac Mitchell	Maphet Well Drilling	5/26/87	Basalt, gray hard	22	206	--
					Basalt, gray porous with yellow clay seams	3	209	--
					Sandstone, brown	55	264	--
					Sandstone, brown with tan clay seams	12	276	--
					Sandstone, brown with pea gravel and white clay, water-bearing	68	344	281
84	09S/12E-20ACD02	Nelson Wallulatum	Maphet Well Drilling	10/9/87	Sand, brown and gravel	20	20	--
					Clay, orange	3	23	--
					Clay, yellow	13	36	--
					Clay, gray	4	40	10
87	09S/12E-31CAD01	George Perthina	Orvail Buckner Well Drilling	12/15/75	Topsoil	6	6	--
					Sandstone	154	160	--
					Clay, blue	20	180	--
					Sandstone	75	255	--
					Clay, blue	45	300	--
					Clay, reddish-brown	115	415	200
94	09S/13E-05AAA01	Ruth Johnson	Archie Fox Well Drilling	1/13/78	Topsoil	2	2	--
					Sandstone	68	70	--
					Clay, brown, water-bearing	80	150	40
					Clay, red	80	230	40
					Clay, blue	10	240	40
					Clay, brown	8	248	40
					Clay, red	32	280	40
					Clay, gray	45	325	40
					Clay, red	27	352	40
					Clay, gray	8	360	40
					Clay, red	65	425	40

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
99	09S/13E-30BDD01	McInturf family	Lawrence Kowaleski	10/26/66	Boulders	15	15	--
			Deepened from 250 to 427 feet in July 1961 and from 427 feet to 511 feet in October 1966 by Kowaleski		Clay and boulders	16	31	--
					Clay, yellow	37	68	--
					Clay, tan	10	78	--
					Clay, red	42	120	--
					Clay, blue	89	209	--
					Clay, brown	20	229	--
					Clay, gray	21	250	--
					Clay, gray	88	338	--
					Clay, gray with shale	72	410	--
					Clay, red with some gravel and sand	17	427	--
					Clay, red with thin layers of sand, pieces of shale and some sandstone	84	511	45
100	09S/13E-31CBC	David Harding and Pump	Big Three Drilling	12/6/86	Topsoil, sandy loam	3	3	--
					Claystone, tan	17	20	--
					Cobbles, large with gravel and sand, water-bearing	14	34	20
					Clay, tan and pumice	45	80	20
102	09S/13E-31CDA	David Harding	Brochett Drilling	8/16/86	Topsoil	4	4	--
					Boulders and clay	9	13	--
					Clay, brown	60	73	--
					Clay, white	62	135	--
					Sandstone	88	223	--
					Clay, green, water-bearing	166	389	--
					Sandstone	12	401	--
					Claystone	38	439	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
102	09S/13E-31CDA	David Harding	Brockett Drilling	8/16/86	Clay, green, water-bearing	53	492	--
					Clay, brown	68	560	--
					Sandstone	37	597	--
					Clay and "sediments"	24	621	--
					Clay, green, water-bearing	11	632	--
					Basalt, broken	23	655	200
106	09S/14E-20CAA01	Chuck L. Dunlap	Jackson Drilling Co.	10/5/65	Overburden	3	3	--
					Sand, brown and gravel	7	10	--
					Sandstone, black and sand, water-bearing	17	27	10
107	09S/14E-20CAA02	Walter Madsen Jr.	Crawford Well Drilling	6/24/74	Conglomerate, brown clay	10	12	--
					Clay, brown hard	17	29	--
					Rock, black hard	153	182	--
					Clay, black medium-hard, water-bearing	18	200	70
108	09S/14E-20DDA01	J.R. Vibbert	Kowaleski Drilling	5/8/84	Soil, brown sandy	2	2	--
					Loam" with gravel	5	5	--
					Clay, yellow	51	56	--
					Clay, tan	36	92	--
					Conglomerate, "solidified"	6	98	--
					Clay, brown with sand	5	103	--
					Basalt, black	25	128	--
Basalt, gray fractured	102	230	62					
109	09S/14E-30CDA01	Bryce Vibbert	Lawrence Kowaleski	6/16/83	Soil, sandy	1	1	--
					Gravel, loose	7	8	--
					Sandstone, tan	49	57	--
					Basalt, black	5	62	--
					Tuffa	15	77	--
					Clay, tan	71	148	--
					Clay, gray with sand	9	157	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
109	09S/14E-30CDA01	Bryce Vibbert	Lawrence Kowaleski	6/16/83	Clay, blue	55	212	--
					Basalt, black	16	228	--
					Clay, blue hard	9	237	--
					Clay, gray	12	249	--
					Clay, brown	90	339	--
					Claystone, yellow	19	358	--
					Clay, red	9	367	--
					Basalt, very hard	25	392	--
					Basalt, gray, very hard	114	506	--
					Clay, black and boulders	17	523	--
					Basalt, black hard	12	535	--
					Lava, black	9	543	--
					Clay, gray	12	555	--
					Basalt, black hard	49	604	--
					Gravel	1	605	22
110	09S/14E-32DAB01	Kurt Feigner	Johnson Well Drilling	8/1/88	Soil, sandy	2	2	--
					Conglomerate, light-tan medium	9	11	--
					Conglomerate, clayey, with sandstone	17	28	--
					Claystone, brown	37	65	--
					Conglomerate, dark-brown medium	16	81	--
					Sandstone, brown and multicolored, with gravel, water-bearing	27	108	93
					Basalt, gray broken, water bearing	22	130	--
					Conglomerate, tan, water-bearing	8	138	--
					Sand, medium-brown with gravel, water-bearing	24	162	--
					Conglomerate, brown fine	10	172	93

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
113	10S/12E-17BAB01	Emerson Smith	Archie Fox Well Drilling	9/15/76	Topsoil	2	2	--
					Clay, brown and boulders	18	20	--
					Sandstone, gray	50	70	--
					Sandstone, gray soft	30	100	--
					Sandstone, gray	150	250	--
					Sandstone, red	20	270	--
					Sandstone, gray	80	350	--
					Sandstone, gray coarse	20	370	--
					Gravel, water-bearing	5	375	350
					Sandstone, brown	22	397	350
					Sand, coarse, water-bearing	5	402	350
					Sandstone, gray	18	420	350
					116	10S/12E-29ADB	Leah Henry	Maphet Well Drilling
Sandstone and gravel	20	21	--					
Sandstone, brown	30	51	--					
Rock and sandstone, with gravel	1	52	--					
Claystone, light-tan	13	65	--					
Sandstone, brown, water-bearing	5	70	--					
Sandstone, gray	20	90	--					
Sandstone, brown	9	99	--					
Rocks, multicolored small, water-bearing	7	106	--					
Sandstone, brown	4	110	66					
Claystone, light-tan at 110								
120	10S/12E-30BAA01	Delford Johnson	Archie Fox Well Drilling	6/30/77	Topsoil and rock	17	17	--
					Gravel, medium	18	35	--
					Clay, sandy	30	65	--
					Sand, coarse layered, water-bearing	50	115	65

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
126	10S/12E-34DBC	Lee Johnson	Maphet Well Drilling	7/13/88	Topsoil	1	1	--
					Sandstone, brown	27	28	--
					Lava, reddish-brown with cinder pockets	111	139	--
					Sandstone, brown	3	142	--
					Gravel, cemented with sandstone layers	209	351	--
					Basalt, hard-brown	9	360	287
128	10S/13E-28AAA	Cascade Farms (Robert Buckner)	Orvail Buckner Well Drilling	2/20/88	Topsoil	1	1	--
					Basalt, hard-gray	30	31	--
					Conglomerate, brown solid	15	46	--
					Lava, black fractured	15	61	--
					Basalt, gray hard	15	76	--
					Conglomerate, brown	4	80	--
					Sandstone, brown	214	294	--
					Sandstone, light-brown	101	395	--
					Lava, black mild	30	425	--
					Lava, brown mild	46	471	--
					Lava, gray mild	74	545	--
					Sandstone, water-bearing	30	575	--
					Sandstone, brown	140	715	--
					Gravel and clay conglomerate	200	915	435
129	10S/14E-19DCC01	Tom Green	Bert Abrams Drilling	10/22/70	Soil	3	3	--
					Sandstone, hard	163	166	--
					Basalt, vesicular	102	268	--
					Clay, red soft	16	284	--
					Sandstone, hard	326	610	--
					Sandstone, soft	60	670	345

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
130	11S/10E-13ADB01	Jack Eyerly	Crawford Well Drilling	11/30/72	Soil, brown sandy	1	1	--
					Clay, brown conglomerate and large boulders	34	35	--
					Rock, hard gray	40	75	--
					Clay, red and multicolored rock	130	205	--
					Rock, brown broken, medium-hard, water-bearing	25	230	17
131	11S/11E-20CCB01	Joe Hall	Crawford Well Drilling	1/5/74	Conglomerate and boulders, large	5	5	--
					Conglomerate, brown clay	16	21	--
					Sand, black coarse	25	46	--
					Sand, coarse and gravel	9	55	--
					Rock, gray hard	6	61	--
					Conglomerate, brown, and boulders	23	84	--
					Gravel, coarse	11	95	--
					Sandstone, brown fine, water-bearing	6	101	16
134	11S/11E-30DDA01	U.S. Forest Service	Crawford Well Drilling	9/20/83	Sandstone, brown coarse, water-bearing	54	54	48
					Rock, gray hard	35	89	--
					Rock, gray broken and sand, fine and gravel, water-bearing	28	117	48
					Topsoil	1	1	--
136	11S/12E-04ADD01	Frances Allen	Clauson Well Drilling	1/15/80	Clay and rock	5	6	--
					Clay, brown	26	32	--
					Gravel and clay	16	48	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)					
JEFFERSON COUNTY—Continued													
136	11S/12E-04ADD01	Frances Allen	Clauson Well Drilling	1/15/80	Gravel, loose and clay	20	68	--					
					Clay, tan	37	105	--					
					Clay, tan sandy	80	185	--					
					Sandstone, tan	25	210	--					
					Gravel and clay	20	230	--					
					Sandstone, water-bearing	60	290	275					
					Lava rock, broken, water-bearing	2	292	275					
					Clay, brown	5	297	275					
					Lava rock, broken, water-bearing	3	300	275					
					Claystone, brown	15	315	275					
					137	11S/12E-04BDB01	Victor Smith	Clauson Well Drilling	2/11/80	Topsoil	4	4	--
										Gravel and clay	9	13	--
										Clay, brown sandy	45	58	--
Claystone, tan	47	105	--										
Gravel and clay	47	152	--										
Lava rock, hard	58	210	--										
Clay, tan	50	260	--										
Sandstone, tan	50	310	--										
Claystone, tan, water-bearing	55	365	325										
Claystone, brown	55	420	325										
Sandstone, tan	110	530	325										
Claystone, brown	55	585	325										
138	11S/12E-17BCA01	Tom Lee	Clauson Well Drilling	1985						Topsoil	3	3	--
					Sandstone, brown	19	22	--					
					Sandstone, gray	42	64	--					
					Sandstone and boulders	18	82	--					
					Lava rock	50	132	--					
					Gravel	9	141	--					
					Sandstone, hard	21	162	--					

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
138	11S/12E-17BCA01	Tom Lee	Clauson Well Drilling	1985	Sandstone, brown	14	176	--
					Lava rock, water-bearing	14	190	180
					Sandstone, brown	33	223	--
					Sandstone, gray	42	265	--
					Sandstone, brown	10	275	--
140	11S/12E-21ABB01	Portland General Electric Company	Lynch Brothers Drilling Company	8/58	Alluvial silt, sand, and gravel	10	10	--
					Sandstone, soft to firm	50	60	--
					Basalt, hard dense olivine	13	73	--
					Basalt, less dense	8	81	--
					Basalt, with fine grained sandstone	41	122	--
					Basalt, hard fine-grained, with voids	4	126	--
					Basalt, dark gray, hard fine grained	59	185	--
					Basalt, light gray with green clay	38	223	--
					Siltstone and sandstone, brown to gray, soft with thin pebble conglomerate layers	49	272	--
					Sandstone, cemented	5	277	--
					Sandstone, medium soft	100	377	--
					Conglomerate, hard	15	392	--
					Sandstone and siltstone, brown to gray, medium hard	38	430	--
					Sandstone, brown hard, cemented	30	460	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
140	11S/12E-21ABB01	Portland General Electric Company	Lynch Brothers Drilling Company	8/58	Conglomerate, firm to hard, sandstone at base	62	522	--
					Basalt, olivine	35	557	--
					Basalt, red	22	579	--
					Basalt, vesicular, with clay	3	582	--
					Basalt, with green clay	4	586	--
					Basalt, dense	13	599	--
					Basalt, reddish, with clay	13.5	612.5	--
					Basalt, greenish dense, with green clay	4	616.5	--
					Clay fault gouge, dark green	18	634.5	--
					Clay, montmorillonite	8	642.5	--
141	11S/12E-26AAC01	Portland General Electric Company	Lynch Brothers Drilling Company	10/55	Basalt, vesicular	107	107	--
					Sand, cemented (interflow zone)	8	115	--
					Basalt, dense vesicular with olivine phenocrysts	17	132	--
					Clay interflow zone	11	143	--
					Basalt, quite dense, some clay	30	173	--
					Basalt, very hard	29	202	--
					Basalt	53	255	--
					Sediments, including conglomerate, sandstone, and some siltstone	287	542	--
					Basalt	89	631	--
					Sediments, mostly sandstone and conglomerate	211	842	--
					Basalt	131	973	--
					Clay	1	974	--
					Basalt, vesicular	6	980	--
					Clay	2	982	--
					Basalt, vesicular	1	983	800.5

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
143	11S/13E-01BAC01	City of Madras	Unknown	1910	Sand and silt	112	112	--
					Gravel, fine	9	121	--
					Lava (basalt)	16	137	--
					Ash, volcanic	11	148	--
					Lava (basalt)	39	187	--
					Pumice	11	198	--
					Basalt, red	8	206	--
					Basalt, dense "trap rock"	14	220	--
					Ash, volcanic	8	228	--
					Ash, white or diatomite and lava	37	265	--
					Ash, white or diatomite	28	293	--
					Ash, volcanic	7	300	--
					Lava and ash, volcanic	30	330	--
					Ash, volcanic	25	355	--
					Rock, mixed and gravel	35	390	--
					Gravel, water-bearing	25	415	343
143	11S/13E-01BCA01	City of Madras	R.J. Strasser Drilling Company	1/11/79	Topsoil	3	3	--
					Sand, dry and gravel	6	9	--
					Sandstone	22	31	--
					Sandstone and broken rock	24	55	--
					Sandstone, brown	56	111	--
					Rock, broken and clay	4	115	--
					Rock, black broken	5	120	--
					Rock, black lava	21	141	--
					Basalt, black hard	6	147	--
					Lava, red and black	8	155	--
					Lava, red porous	2	157	--
					Lava, red and black	38	195	--
					Basalt, black	15	210	--
					Lava, black and silt	8	218	--
					Lava, black porous	7	225	--
					Lava, black and red	28	253	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)					
JEFFERSON COUNTY—Continued													
143	11S/13E-01BCA01	City of Madras	R.J. Strasser Drilling Company	1/11/79	Lava, black and red, with clay	17	270	--					
					Basalt, black, water-bearing	106	376	--					
					Conglomerate	54	430	--					
					Lava, red and black	7	437	--					
					Gravel, slightly cemented	31	468	--					
					Rock, gray	12	480	--					
					Rock, broken and clay	34	514	--					
					Sand, brown dry	30	544	--					
					Shale, tan sticky	10	554	--					
					Shale, brown	221	775	--					
					Rock, brown broken, with clay	25	800	340					
					144	11S/13E-01BCA02	City of Madras	R.J. Strasser Drilling Company	2/11/66	Sand, brown	31	31	--
										Sandstone	78	109	--
										Clay, sandy	12	121	--
Ash	17	138	--										
Lava, black	18	156	--										
Lava, broken	5	161	--										
Lava, red and black	11	172	--										
Lava, black hard	5	177	--										
Pumice	6	183	--										
Lava, red	4	187	--										
Lava, black	3	190	--										
Lava, black hard	17	207	--										
Lava, red	32	239	--										
Lava, black hard	11	250	--										
Lava, red and black	38	288	--										
Lava, black	34	322	--										
Lava, black hard	41	363	--										
Conglomerate	8	371	--										
Rock, red and brown	27	398	--										
Sand and gravel	22	420	--										
Sand and gravel, water-bearing	31	451	326										

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
145	11S/13E-02DDC01	City of Madras Drilling Company	R.J. Strasser	9/22/72	Fill	5	5	--
					Sand, gravel, and clay	9	14	--
					Clay, brown	4	18	--
					Sand, gravel, and clay	23	41	--
					Silt, brown sandy	22	63	--
					Clay, brown sandy and rock	24	87	--
					Sandstone, gray	21	108	--
					Basalt, black	5	113	--
					Basalt, black broken	19	132	--
					Basalt, black	11	143	--
					Basalt, black broken	8	151	--
					Basalt, black	26	177	--
					Basalt, brown and black	79	256	--
					Basalt, dark-brown	8	264	--
					Basalt, black porous	24	288	--
					Basalt, dark-gray porous	5	293	--
					Basalt, black porous	20	313	--
					Basalt, dark-gray and gray clay	16	329	--
					Basalt, black	6	335	--
					Basalt, black porous and tan clay	23	358	--
					Clay, brown sticky and broken rock	8	366	--
					Rock, brown and red with clay layers	38	404	--
					Sand, gravel and clay, water-bearing	4	408	--
					Clay, brown sticky	9	417	--
					Clay and gravel	6	423	--
					Sand, gravel, and brown silt	38	461	--
					Sand, brown dirty, and some gravel	6	467	--
					Ash, brown	10	477	216

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
149	11S/13E-07CCD01	Jenne Bell	Rods Well Drilling, Inc. to 630 feet, deepened by Orvail Buckner Well Drilling, Inc. from 625 feet to 835 feet	6/10/82	Old well filled with cement grout Rock, gray Rock, dark-gray hard Cinders, black Cavern Rock, hard Cinders, black and red, water-bearing Rock, gray hard Gravel and sand, gray cemented Sandstone, brown and gray, with gravel Deepening Lava, black muddy Lava, black broken Lava, black solid Sand, brown, Gravels, black Clay and gravels Sandstone and clay, water-bearing Sandstone and clay	90 5 15 10 3 37 142 278 30 20 32 15 43 20 10 10 55 20	90 95 110 120 123 160 302 580 610 630 662 677 720 740 750 760 815 835	-- -- -- -- -- -- 300 -- -- -- -- -- -- -- -- -- -- 768 768
151	11S/13E-24ABD01	E. Schnider	Jackson Drilling Service to 632 feet deepened to 1,000 feet in April 1968 by Haakon Bottner Drilling Company	8/5/67	Lava rock, hard Sandstone, brown Lava, soft Sandstone Cinders, red Sandstone, hard Sand, black, water-bearing Boulders, conglomerate, and rocks, with ash at bottom Deepening Rock, red broken	19 109 103 9 8 112 60 212 4	19 128 231 240 248 360 420 632 636	-- -- -- -- -- -- -- -- --

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
151	11S/13E-24ABD01	E. Schnider	Jackson Drilling Service to 632 feet mosaic & deepened from 623 feet to 1,000 feet in April 1968 by Haakon Bottner Drilling Co.		Open "cave"	14	650	--
					Clay, brown	93	743	--
					Clay, light gray	22	765	--
					Sandrock, gray	28	793	--
					Lavarock, brown soft	82	875	--
					Sandrock, light-brown	15	890	--
					Sandrock, brown with brown clay streaks	30	920	--
					Sandrock, brown	18	938	--
					Clay, brown	6	944	--
					Sandrock, light-gray coarse, water-bearing, bailed 50 gpm for 2 hours, 80 feet drawdown	22	966	310
					Clay, brown	8	974	--
					Lavarock, coarse	11	985	--
					Clay, brown	11	996	--
					Clay, brown, "real sticky"	4	1,000	310
152	11S/13E-24BCB01	Donald J. Aitken	Lawrence Kowaleski	8/16/78	Sandstone, brown	117	117	--
					Lava, gray	55	172	--
					Lava, red	3	175	--
					Sandstone, red	7	182	--
					Sandstone, tan	15	197	--
					Gravel	5	202	--
					Sandstone, tan	31	233	--
					Gravel	21	254	--
					Sandstone, tan	77	331	--
					Lava, gray	15	346	--
					Sandstone, tan	12	358	--
					Lava, gray	5	363	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
152	11S/13E-24BCB01	Donald J. Aitken	Lawrence Kowaleski	8/16/78	Lava, blue	8	371	--
					Sandstone, tan	6	377	--
					Lava, blue	21	398	--
					Lava, red	24	422	--
					Lava, gray	43	465	--
					Lava, red	6	471	--
					Lava, blue	32	503	433
155	11S/13E-30CCD01	Dale Ditmore	unknown	--	Old well now abandoned. 1,300 feet well drilled through alternating beds of sand, clay, gravel, and tuff with one bed of basalt 100 feet thick - encountered black shale at 1,295 feet			
158	12S/11E-02CDA01	Three Rivers Recreation Association Doug Stills	Woerner Drilling and Pump Service	5/6/70	Overburden	7	7	--
					Sandstone, brown	61	68	--
					Sandstone conglomerate, gray	11	79	--
					Lava, mild	7	86	--
					Sandstone, brown	14	100	--
					Pumice, gray	10	110	--
					Sandstone, brown	35	145	--
					Sandstone, gray	30	175	--
					Sandstone and conglomerate, gray	28	203	--
					Sandstone, brown	14	217	--
					Lava, mild	30	247	--
					Sandstone, brown	104	351	--
					Sandstone, gray	28	379	--
					Lava, mild	25	404	--
					Sandstone and clay, red	13	417	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
158	12S/11E-02CDA01	Three Rivers Recreation Association Doug Stills	Woerner Drilling and Pump Service	5/6/70	Sandstone, brown, water-bearing	57	474	445
					Sandstone and clay, red	81	555	--
					Conglomerate and ash	45	600	445
158	12S/11E-11ABC01	James King	Orvail Buckner Well	3/11/80	Topsoil	2	2	--
					Lava	31	33	--
					Sandstone conglomerate, brown	135	168	--
					Sandstone conglomerate, gray	72	240	--
					Lava	100	340	--
					Sandstone, tan	25	365	--
					Lava	2	367	--
					Sandstone conglomerate, gray	17	384	--
					Lava	1	385	--
					Sandstone conglomerate, gray	25	410	--
					Sandstone, brown	240	650	--
					Sandstone, gray	36	686	--
					Lava	9	695	--
					Sandstone conglomerate, brown	1	696	--
					Lava	49	745	--
Sandstone, brown	65	810	--					
Sandstone, brown, water-bearing	50	860	750					
159	12S/12E-04BDD01	Robert Wheeler	Woerner Drilling Service	4/9/70	Overburden	4	4	--
					Lava, hard	31	35	--
					Lava, mild	21	56	--
					Lava, hard	38	94	--

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)						
JEFFERSON COUNTY—Continued														
40	159	12S/12E-04BDD01	Robert Wheeler	Woerner Drilling Service	4/9/70	Sandstone conglomerate, brown	12	106	--					
						Lava, hard	15	121	--					
						Lava, mild	5	126	--					
						Sandstone and conglomerate, gray	6	132	--					
						Sandstone, brown	135	267	--					
						Sandstone and conglomerate, gray	65	332	--					
						Lava, mild	44	376	--					
						Sandstone and conglomerate, gray	95	471	--					
						Sandstone, brown	38	509	--					
						Sandstone and conglomerate, gray, water-bearing	57	566	--					
						Sandstone, brown	84	650	566					
						160	12S/12E-06ABD01	Bob Lewis Drilling, Inc.	Orvail Buckner Well	4/15/80	Overburden	2	2	--
											Lava	28	30	--
											Sandstone conglomerate, brown	238	268	--
Sandstone conglomerate, gray	32	300	--											
Lava	120	420	--											
Sandstone conglomerate, gray	41	461	--											
Lava	109	570	--											
Sandstone, brown	120	690	--											
Sandstone conglomerate, brown, water-bearing	50	740	625											
162	12S/12E-20ABC01	Bill Hiscoe	Orvail Buckner Well Drilling, Inc.	8/5/80	Overburden						2	2	--	
					Lava	60	62	--						
					Cinders, red	11	73	--						

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)					
JEFFERSON COUNTY—Continued													
162	12S/12E-20ABC01	Bill Hiscoe	Orvail Buckner Well Drilling, Inc.	8/5/80	Sandstone conglomerate, brown	157	230	--					
					Lava	80	310	--					
					Sandstone conglomerate, dark-brown	31	341	--					
					Lava	87	428	--					
					Sandstone conglomerate, brown	40	468	--					
					Lava	28	496	--					
					Sandstone conglomerate, brown	27	523	--					
					Lava	86	609	--					
					Sandstone conglomerate, brown	62	671	--					
					Sandstone, brown and sand, black, water-bearing	79	750	665					
					168	12S/13E-11DBB01	Robert I. McBee	Reed's Well Drilling	7/31/81	Clay, sand, and gravel	4	4	--
										Sand and gravel	11	15	--
										Sand and pumice	3	18	--
Gravel	27	45	--										
Sandstone	77	122	--										
Pumice, white and sediments	6	128	--										
Sandstone	48	176	--										
Claystone, brown	9	185	--										
Claystone, tan	45	230	--										
Rock, brown sedimentary	78	308	--										
Rock, brown fractured	4	312	--										
Rock, brown sedimentary, water-bearing	71	383	339										
169	12S/13E-16ABB01	Thayne Corwin	Unknown	--						Old well still existing in 1986. Sandstone 0-210 feet, lava 210-520 feet, soft red rock, probably tuff, 520-620 feet. Struck water at 560 feet; water rose to 20 feet.			

Table 2. Information from well drillers' logs for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Driller	Date completed	Formation	Thickness (feet)	Depth to base of formation below datum (feet)	Water level below datum (feet)
JEFFERSON COUNTY—Continued								
171	12S/13E-26ABA01	Bert Haverfield	Crawford Well Drilling	6/27/74	Soil, brown	2	2	--
					Clay conglomerate, brown	10	12	--
					Clay conglomerate, boulders	12	24	--
					Clay conglomerate, brown	56	80	--
					Conglomerate, red	20	100	--
					Conglomerate, tan and brown	171	271	--
					Sandstone, tan	24	295	--
					Conglomerate, multi-colored, water-bearing	15	310	--
					Sandstone, brown	35	345	--
					Rock, green and brown, gray clay	120	465	--
					Clay conglomerate, green and gray	60	525	--
					Rock, green and brown	130	655	--
					Rock, brown and gray clay	30	685	--
					Basalt and gray clay	26	711	--
					Rock, brown and green, and gray clay, water-bearing	139	850	375

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon

WATER LEVEL: Original water levels reported by the driller are given where available; subsequent levels were measured by the U.S. Geological Survey, except City of Madras and Portland General Electric (PGE) wells which were reported by the Oregon Water Resources Department or City of Madras or PGE representatives.

WATER-LEVEL STATUS: D, dry; P, pumping; R, recently pumped or recovering; S, nearby well pumping; T, nearby well recently pumped; X, affected by surface water at site; Z, static or recovering extremely slowly.

WATER-LEVEL METHOD: A, airline; E, estimated; R, reported by driller or other sources; S, steel tape; T, electric tape. -, unknown.

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
WASCO COUNTY							
17	07S/10E-25DAA01	WALLY, DOROTHY	140.00	04-07-73	118.00	Z	R
				06-26-85	117.52	Z	S
				10-10-85	117.53	Z	S
				11-06-85	117.65	Z	S
				12-18-85	117.77	Z	S
				02-19-86	118.28	Z	S
				04-24-86	117.27	Z	S
				09-24-86	116.85	Z	-
22	07S/11E-14CAB01	SIMNASHO WATER DISTRICT	145.00	10-04-77	6.00	Z	R
				10-11-85	9.98	Z	S
				11-06-85	9.34	Z	S
				12-18-85	10.01	Z	S
				02-19-86	8.19	Z	S
				04-24-86	9.02	Z	S
				09-24-86	11.92	Z	S
24	07S/11E-15DCC01	CONF. TRIBES OF WARM SPRINGS (New Island Well)	420.00	01-03-83	350.00	Z	R
				06-27-85	337.54	Z	T
				10-11-85	340.46	Z	T
				11-06-85	340.50	Z	T
				12-18-85	341.52	Z	T
				02-19-86	340.22	Z	T
				04-24-86	340.65	Z	T
				09-24-86	340.18	Z	T
38	07S/12E-29CDD01	CONF. TRIBES OF WARM SPRINGS (Schoolie Flat test well)	400.00	08-08-74	320.00	Z	R
				10-07-85	305.54	Z	T
				11-06-85	306.46	Z	T
				12-19-85	307.85	Z	T
				02-19-86	307.18	Z	T
				04-24-86	306.48	Z	T
				09-24-86	306.49	Z	T
44	08S/11E-06DBD01	SMITH JR., ALFRED	196.00	04-12-83	70.00	Z	R
				08-01-85	64.09	R	S
				10-11-85	64.76	Z	S
				11-06-85	65.21	Z	S
				12-18-85	65.83	Z	S
				02-19-86	64.35	Z	S
				04-24-86	61.62	Z	S
				09-24-86	62.58	Z	S

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
WASCO COUNTY—Continued							
47	08S/11E-19ABB01	SURFACE, ESTHER K	200.00	09-17-75	180.00	Z	R
				07-24-85	188.53	Z	S
				10-11-85	187.32	Z	S
				11-06-85	187.43	Z	S
				12-18-85	188.14	Z	S
				02-19-86	188.44	Z	S
				04-24-86	176.42	Z	S
				09-24-86	182.07	Z	S
59	08S/12E-03ACD01	PETERS, VELMA	308.00	05-07-74	14.60	Z	R
				08-07-85	10.03	Z	S
				10-11-85	10.55	Z	S
				11-06-85	9.98	Z	S
				12-19-85	9.67	Z	S
				02-20-86	8.02	Z	S
				04-24-86	8.99	Z	S
				09-24-86	9.02	Z	S
60	08S/12E-03CAB01	WOLFE, ELLA	380.00	05-20-73	150.00	Z	R
				05-15-74	133.50	Z	-
				08-07-85	111.75	Z	S
				10-11-85	110.15	Z	S
				11-06-85	110.80	Z	S
				12-19-85	111.36	Z	S
				02-20-86	111.56	Z	S
				04-24-86	108.87	Z	S
				09-24-86	106.04	Z	S
				69	08S/13E-33CAB01	FRANK, DELBERT	252.00
02-11-72	19.00	Z	-				
07-26-85	33.78	Z	S				
10-11-85	29.98	Z	S				
11-07-85	28.52	Z	S				
12-19-85	26.41	Z	S				
02-20-86	22.33	Z	S				
04-24-86	19.87	Z	S				
09-24-86	18.49	Z	S				
JEFFERSON COUNTY							
82	09S/12E-14DAC01	MACY, DAN	102.00	10-04-71	24.00	Z	R
				04-11-73	19.00	Z	-
				07-31-85	7.71	Z	S
				10-11-85	8.08	Z	S
				11-07-85	8.24	Z	S
				12-19-85	8.56	Z	S
				02-20-86	1.91	X	S
				04-24-86	3.75	Z	S
09-24-86	6.88	Z	S				

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
87	09S/12E-31CAD01	PERTHINA, GEORGE	415.00	12-15-75	20.00	Z	R
				08-01-85	8.70	Z	S
				10-11-85	9.33	Z	S
				11-07-85	9.17	Z	S
				12-19-85	8.92	Z	S
				02-20-86	7.07	Z	S
				04-24-86	6.42	Z	S
09-24-86	8.72	Z	S				
91	09S/12E-34BCD01	CLEMENTS, BART	82.00	11-17-65	8.00	Z	R
				01-23-74	5.10	Z	-
				08-02-85	7.36	Z	S
				10-11-85	7.67	Z	S
				11-07-85	6.67	Z	S
				12-19-85	5.34	Z	S
				02-20-86	2.95	X	S
04-24-86	3.72	Z	S				
09-24-86	6.95	Z	S				
97	09S/13E-17DAD01	CONF. TRIBES OF WARM SPRINGS (Dry Creek campground)	19.50	02-05-64	8.00	Z	R
				04-11-73	9.50	Z	-
				08-02-85	6.56	Z	S
				10-11-85	6.70	Z	S
				11-07-85	6.32	Z	S
				12-19-85	6.40	Z	S
				02-20-86	2.67	X	S
04-24-86	6.10	Z	S				
09-24-86	6.40	Z	S				
108	09S/14E-20DDA01	VIBBERT, J.R.	230.00	05-08-84	62.00	Z	R
				10-09-85	63.65	Z	T
				11-07-85	63.50	Z	T
				12-20-85	63.65	Z	T
				02-20-86	63.45	Z	T
				04-25-86	62.90	Z	T
				09-25-86	62.54	Z	T
109	09S/14E-30CDA01	VIBBERT, BRYCE	605.00	06-16-83	22.00	Z	R
				08-23-85	16.30	Z	S
				10-09-85	16.32	Z	S
				11-07-85	16.35	Z	S
				12-20-85	17.07	Z	S
				02-20-86	16.47	Z	S
				04-25-86	16.20	Z	S
09-25-86	14.80	Z	S				
111	10S/12E-15BDB01	SMITH, ZELMA	288.00	03-26-73	203.00	Z	R
				07-08-85	202.47	R	T
				10-10-85	201.24	Z	T
				11-08-85	202.21	Z	T
				12-19-85	200.42	Z	T
				02-20-86	200.37	Z	S
				04-25-86	200.27	Z	S
09-24-86	203.31	Z	S				

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
112	10S/12E-17AAC01	SMITH, EMERSON	240.00	07-27-83	215.00	Z	R
				07-08-85	212.33	Z	S
				10-10-85	212.38	Z	S
				11-08-85	212.01	Z	S
				12-19-85	212.25	Z	S
				02-20-86	212.52	Z	S
				04-25-86	213.15	Z	S
			09-24-86	211.84	Z	S	
123	10S/12E-31BCA01	CONF. TRIBES OF WARM SPRINGS (Johnson Well No. 2)	402.00	00-00-35	355.00	Z	R
				10-10-85	354.70	Z	T
				11-08-85	354.50	Z	T
				12-19-85	356.95	Z	T
				02-20-86	357.45	Z	T
				04-25-86	354.49	Z	T
			09-24-86	352.85	Z	T	
140	11S/12E-21ABB01	PORTLAND GENERAL ELECTRIC CO.	642	04-03-62	472.10	Z	-
				06-20-62	472.30	Z	-
				07-02-62	472.50	Z	-
				09-17-62	471.90	Z	-
				10-08-62	471.80	Z	-
				10-29-62	472.00	Z	-
				12-03-62	472.00	Z	-
				01-07-63	471.80	Z	-
				02-04-63	471.70	Z	-
				03-04-63	471.10	Z	-
				04-23-63	471.50	Z	-
				05-18-63	472.10	Z	-
				06-10-63	472.60	Z	-
				07-08-63	472.10	Z	-
				08-06-63	472.10	Z	-
				09-03-63	472.20	Z	-
				10-02-63	472.20	Z	-
				11-01-63	472.30	Z	-
				12-02-63	474.40	Z	-
				01-17-64	472.30	Z	-
				02-14-64	472.10	Z	-
03-13-64	470.50	Z	-				
04-14-64	467.10	Z	-				
05-19-64	463.20	Z	-				
06-16-64	461.20	Z	-				
07-10-64	459.50	Z	-				
08-07-64	458.20	Z	-				
09-01-64	454.90	Z	-				
10-06-64	451.70	Z	-				
11-05-64	449.50	Z	-				
12-09-64	447.10	Z	-				
01-04-65	444.40	Z	-				
01-26-65	440.90	Z	-				
02-15-65	440.90	Z	-				

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
140	11S/12E-21ABB01	PORTLAND GENERAL ELECTRIC CO.	642	03-08-65	439.40	Z	-
				04-05-65	438.90	Z	-
				05-03-65	434.90	Z	-
				06-01-65	434.90	Z	-
				07-14-65	426.90	Z	-
				08-02-65	430.90	Z	-
				09-04-65	429.90	Z	-
				10-05-65	427.90	Z	-
				11-01-65	424.90	Z	-
				12-07-65	420.90	Z	-
				01-03-66	417.60	Z	-
				02-07-66	413.31	Z	-
				03-01-66	412.06	Z	-
				04-01-66	408.82	Z	-
				05-02-66	405.65	Z	-
				06-01-66	402.67	Z	-
				07-05-66	398.31	Z	-
				08-01-66	395.52	Z	-
				09-06-66	392.28	Z	-
				10-03-66	390.25	Z	-
				11-02-66	388.27	Z	-
				12-05-66	386.25	Z	-
				01-04-67	385.00	Z	-
				02-01-67	383.72	Z	-
				03-01-67	382.60	Z	-
				04-01-67	381.60	Z	-
				05-01-67	380.35	Z	-
				06-02-67	379.40	Z	-
				06-30-67	378.15	Z	-
				07-28-67	377.20	Z	-
				09-07-67	375.70	Z	-
				10-02-67	374.45	Z	-
				11-02-67	373.80	Z	-
				12-01-67	372.68	Z	-
				01-02-68	372.15	Z	-
				02-02-68	371.45	Z	-
				03-01-68	370.60	Z	-
				04-02-68	369.80	Z	-
				05-01-68	369.70	Z	-
				06-03-68	367.80	Z	-
				06-28-68	367.67	Z	-
				08-02-68	366.40	Z	-
				09-03-68	365.40	Z	-
				10-01-68	364.80	Z	-
				11-04-68	364.20	Z	-
				12-02-68	363.60	Z	-
				01-02-69	363.10	Z	-
				02-03-69	363.20	Z	-
				03-03-69	363.50	Z	-
				04-02-69	363.30	Z	-
				05-01-69	362.50	Z	-
				06-04-69	361.00	Z	-
				07-02-69	360.90	Z	-

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
140	11S/12E-21ABB01	PORTLAND GENERAL ELECTRIC CO.	642	08-04-69	360.10	Z	-
				09-03-69	359.50	Z	-
				10-02-69	358.85	Z	-
				11-04-69	357.20	Z	-
				12-02-69	358.10	Z	-
				01-05-70	357.85	Z	-
				02-03-70	357.75	Z	-
				03-02-70	357.00	Z	-
				04-01-70	357.10	Z	-
				05-01-70	357.50	Z	-
				07-02-70	355.10	Z	-
				08-04-70	354.80	Z	-
				09-02-70	356.70	Z	-
				10-01-70	354.35	Z	-
				11-04-70	354.00	Z	-
				12-01-70	353.70	Z	-
				01-05-71	353.70	Z	-
				02-04-71	353.85	Z	-
				03-02-71	354.50	Z	-
				04-01-71	354.25	Z	-
				05-04-71	353.70	Z	-
				06-02-71	353.40	Z	-
				07-01-71	353.50	Z	-
				08-03-71	352.40	Z	-
				10-06-71	351.65	Z	-
				11-01-71	351.15	Z	-
				12-02-71	350.08	Z	-
				01-06-72	350.65	Z	-
				01-31-72	350.80	Z	-
				03-02-72	351.40	Z	-
				04-04-72	352.50	Z	-
				05-01-72	352.30	Z	-
				06-01-72	352.10	Z	-
				07-03-72	351.60	Z	-
				08-01-72	351.50	Z	-
				09-06-72	350.70	Z	-
				10-03-72	350.50	Z	-
				11-01-72	350.30	Z	-
				12-04-72	350.00	Z	-
				01-18-73	350.50	Z	-
				02-01-73	350.75	Z	-
				03-01-73	351.00	Z	-
				04-03-73	351.45	Z	-
				05-01-73	351.80	Z	-
				05-30-73	351.20	Z	-
				07-02-73	350.70	Z	-
				08-01-73	350.30	Z	-
				09-05-73	349.90	Z	-
				10-01-73	349.60	Z	-
				10-31-73	349.50	Z	-
				12-03-73	349.40	Z	-
				01-30-74	349.00	Z	-

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
140	11S/12E-21ABB01	PORTLAND GENERAL ELECTRIC CO.	642	02-27-74	349.70	Z	-
				04-01-74	349.80	Z	-
				04-29-74	349.75	Z	-
				05-28-74	349.85	Z	-
				07-02-74	349.70	Z	-
				08-05-74	349.30	Z	-
				09-02-74	349.45	Z	-
				09-30-74	349.20	Z	-
				10-30-74	349.15	Z	-
				12-03-74	349.00	Z	-
				01-02-75	349.20	Z	-
				01-30-75	348.90	Z	-
				03-05-75	348.80	Z	-
				03-31-75	348.90	Z	-
				05-01-75	348.90	Z	-
				06-03-75	347.70	Z	-
				07-02-75	348.80	Z	-
				07-31-75	348.80	Z	-
				09-03-75	348.70	Z	-
				10-01-75	348.90	Z	-
				10-30-75	348.50	Z	-
				12-02-75	353.60	Z	-
				12-29-75	353.20	Z	-
				01-29-76	353.50	Z	-
				02-27-76	348.50	Z	-
				04-01-76	348.50	Z	-
				04-29-76	347.80	Z	-
				06-07-76	348.30	Z	-
				06-29-76	348.70	Z	-
				07-29-76	348.60	Z	-
				08-31-76	348.20	Z	-
				09-29-76	348.50	Z	-
				11-01-76	348.10	Z	-
				11-29-76	348.00	Z	-
				12-28-76	349.50	Z	-
				01-31-77	348.60	Z	-
				02-28-77	348.70	Z	-
				04-01-77	348.80	Z	-
				04-27-77	348.80	Z	-
				05-25-77	348.80	Z	-
				06-30-77	348.70	Z	-
				07-27-77	348.80	Z	-
				08-29-77	348.65	Z	-
				09-28-77	348.45	Z	-
				11-01-77	348.75	Z	-
				11-29-77	348.30	Z	-
				12-30-77	348.30	Z	-
				01-31-78	348.00	Z	A
				02-28-78	348.40	Z	A
				03-31-78	348.30	Z	A
				05-03-78	348.30	Z	A
				05-30-78	349.10	Z	A

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
140	11S/12E-21ABB01	PORTLAND GENERAL ELECTRIC CO.	642	06-27-78	349.00	Z	A
				08-01-78	349.20	Z	A
				08-31-78	349.50	Z	A
				09-27-78	349.80	Z	A
				10-30-78	348.60	Z	A
				11-29-78	348.40	Z	A
				01-02-79	348.40	Z	A
				02-01-79	348.50	Z	A
				02-26-79	348.90	Z	A
				03-30-79	348.90	Z	A
				05-01-79	348.90	Z	A
				06-04-79	348.90	Z	A
				06-27-79	349.00	Z	A
				07-31-79	349.00	Z	A
				08-31-79	348.70	Z	A
				09-26-79	348.50	Z	A
				10-30-79	348.20	Z	A
				11-29-79	348.10	Z	A
				12-27-79	347.90	Z	A
				01-31-80	348.05	Z	A
				02-28-80	348.10	Z	A
				04-01-80	348.10	Z	A
				04-30-80	348.30	Z	A
				06-04-80	348.10	Z	A
				07-09-80	348.20	Z	A
				08-01-80	348.00	Z	A
				09-09-80	347.90	Z	A
				10-07-80	347.65	Z	A
				11-05-80	347.80	Z	A
				12-02-80	347.50	Z	A
				01-06-81	347.20	Z	A
				01-29-81	347.60	Z	A
				02-26-81	347.40	Z	A
				03-31-81	347.60	Z	A
				04-29-81	347.80	Z	A
				06-01-81	347.80	Z	A
				07-29-81	347.60	Z	A
				09-01-81	347.50	Z	A
				09-29-81	347.30	Z	A
				10-30-81	347.20	Z	A
				12-02-81	347.20	Z	A
				12-29-81	347.20	Z	A
				02-01-82	347.20	Z	-
				02-26-82	347.20	Z	-
				04-01-82	347.40	Z	-
				05-06-82	347.35	Z	-
				06-02-82	347.50	Z	-
				06-30-82	347.50	Z	-
				07-29-82	347.40	Z	-
				08-31-82	347.30	Z	-
				10-06-82	347.40	Z	-
				11-29-82	347.35	Z	-

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
140	11S/12E-21ABB01	PORTLAND GENERAL ELECTRIC CO.	642	01-05-83	347.30	Z	-
				02-02-83	347.4	Z	-
				03-02-83	346.6	Z	-
				04-04-83	347.0	Z	-
				04-26-83	347.3	Z	-
				06-01-83	347.4	Z	-
				06-28-83	347.5	Z	-
				07-28-83	347.5	Z	-
				09-01-83	347.6	Z	-
				09-29-83	348.1	Z	-
				10-27-83	347.1	Z	-
				11-29-83	347.6	Z	-
				12-20-83	347.4	Z	-
				01-30-84	347.8	Z	-
				02-20-84	347.9	Z	-
				03-29-84	347.2	Z	-
				04-30-84	348.55	Z	-
				05-30-84	348.45	Z	-
				06-28-84	348.2	Z	-
				07-02-84	348.1	Z	-
				08-01-84	348.2	Z	-
				08-31-84	348.1	Z	-
				10-10-84	347.9	Z	-
				10-29-84	347.8	Z	-
				11-29-84	347.9	Z	-
				01-03-85	347.8	Z	-
				01-29-85	347.8	Z	-
				02-27-85	347.8	Z	-
				03-27-85	347.1	Z	-
				04-30-85	347.9	Z	-
				05-29-85	348.0	Z	-
				07-30-85	348.1	Z	-
				09-05-85	347.2	Z	-
				10-08-85	347.82	Z	T
				12-09-85	347.6	Z	-
				12-26-85	348.0	Z	-
				01-28-86	347.7	Z	-
				02-25-86	348.0	Z	-
				03-31-86	348.2	Z	-
				05-06-86	348.1	Z	-
				05-29-86	348.2	Z	-
				06-24-86	348.1	Z	-
				07-29-86	348.1	Z	-
				08-26-86	348.1	Z	-
				09-30-86	347.9	Z	-
				10-29-86	347.8	Z	-
				11-25-86	346.9	Z	-
				12-31-86	347.95	Z	-
				01-29-87	348.4	Z	-
				03-04-87	347.8	Z	-
				03-31-87	348.3	Z	-
				05-04-87	348.4	Z	-
				05-27-87	348.2	Z	-

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
140	11S/12E-21ABB01	PORTLAND GENERAL ELECTRIC CO.	642	06-30-87	343.4	Z	-
				07-29-87	348.2	Z	-
				08-27-87	347.8	Z	-
				09-29-87	347.0	Z	-
				11-03-87	347.9	Z	-
				11-30-87	347.5	Z	-
				12-30-87	347.8	Z	-
				01-28-88	348.2	Z	-
				02-25-88	348.35	Z	-
				03-31-88	348.4	Z	-
				05-03-88	348.5	Z	-
				05-26-88	348.4	Z	-
				06-30-88	348.6	Z	-
				07-29-88	349.6	Z	-
				08-30-88	348.1	Z	-
				09-28-88	349.3	Z	-
				11-02-88	347.9	Z	-
				11-30-88	348.8	Z	-
				12-30-88	349.2	Z	-
				01-31-89	349.6	Z	-
				02-28-89	348.5	Z	-
				03-30-89	348.9	Z	-
				04-27-89	348.9	Z	-
				06-01-89	349.9	Z	-
				06-28-89	348.9	Z	-
				07-28-89	348.9	Z	-
				08-31-89	348.5	Z	-
				10-03-89	348.2	Z	-
				10-31-89	349.3	Z	-
				11-30-89	348.0	Z	-
				12-28-89	348.0	Z	-
				01-31-90	349.0	Z	-
				03-01-90	349.0	Z	-
				03-30-90	347.0	Z	-
04-30-90	347.0	Z	-				
05-31-90	346.0	Z	-				
06-26-90	348.6	Z	-				
07-30-90	348.0	Z	-				
08-30-90	348.1	Z	-				
09-28-90	348.2	Z	-				
10-30-90	348.0	Z	-				
11-30-90	348.5	Z	-				
12-28-90	348.2	Z	-				
01-31-91	348.4	Z	-				
02-28-91	348.6	Z	-				
03-29-91	348.4	Z	-				
04-30-91	347.9	Z	-				
05-31-91	348.4	Z	-				
06-28-91	348.2	Z	-				
07-31-91	347.9	Z	-				
08-30-91	347.8	Z	-				
09-30-91	347.0	Z	-				
10-31-91	348.2	-	-				
11-27-91	348.2	Z	-				

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identi- fication number	Local well number	Owner	Depth of well (feet)	Water- level date	Water level (feet below datum)	Water- level status	Water- level method
JEFFERSON COUNTY—Continued							
141	11S/12E-26AAC01	PORTLAND GENERAL ELECTRIC CO.	983	04-03-62	812.10	Z	-
				05-04-62	811.70	Z	-
				06-05-62	811.10	Z	-
				07-02-62	811.30	Z	-
				07-27-62	811.90	Z	-
				09-17-62	811.20	Z	-
				10-08-62	810.10	Z	-
				10-29-62	812.40	Z	-
				12-03-62	811.70	Z	-
				01-07-63	811.90	Z	-
				02-18-63	810.90	Z	-
				03-04-63	812.60	Z	-
				04-23-63	812.50	Z	-
				05-18-63	812.00	Z	-
				06-10-63	812.00	Z	-
				07-08-63	813.00	Z	-
				08-06-63	812.20	Z	-
				09-03-63	812.50	Z	-
				10-02-63	812.40	Z	-
				11-01-63	812.00	Z	-
				12-02-63	814.10	Z	-
				01-03-64	813.50	Z	-
				02-06-64	807.00	Z	-
				03-06-64	798.50	Z	-
				04-02-64	794.40	Z	-
				05-05-64	790.30	Z	-
				06-02-64	787.70	Z	-
				07-10-64	780.90	Z	-
				08-07-64	772.70	Z	-
				09-01-64	765.10	Z	-
				10-06-64	757.20	Z	-
				11-05-64	751.70	Z	-
				12-02-64	746.60	Z	-
				01-04-65	736.00	Z	-
				02-15-65	729.00	Z	-
				03-15-65	731.00	Z	-
				04-05-65	729.50	Z	-
				05-03-65	729.00	Z	-
				06-01-65	727.00	Z	-
				07-14-65	724.00	Z	-
				08-02-65	725.00	Z	-
				09-04-65	723.50	Z	-
				10-05-65	723.50	Z	-
				11-01-65	721.00	Z	-
				07-05-66	722.21	Z	-
				08-01-66	722.55	Z	-
				09-06-66	722.00	Z	-
				10-03-66	722.00	Z	-
				11-02-66	721.98	Z	-
				12-05-66	721.06	Z	-
				01-04-67	721.60	Z	-
				02-01-67	723.40	Z	-

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
141	11S/12E-26AAC01	PORTLAND GENERAL ELECTRIC CO.	983	03-01-67	723.10	Z	-
				04-01-67	724.60	Z	-
				05-01-67	723.60	Z	-
				06-02-67	722.45	Z	-
				06-30-67	721.85	Z	-
				07-28-67	721.95	Z	-
				09-07-67	721.60	Z	-
				10-02-67	721.00	Z	-
				11-02-67	721.15	Z	-
				12-01-67	721.00	Z	-
				01-02-68	722.20	Z	-
				03-01-68	719.00	Z	-
				04-02-68	718.10	Z	-
				05-01-68	717.75	Z	-
				06-03-68	716.35	Z	-
				06-28-68	716.25	Z	-
				08-02-68	716.15	Z	-
				09-03-68	716.00	Z	-
				10-01-68	716.70	Z	-
				11-04-68	716.15	Z	-
				12-02-68	716.55	Z	-
				01-02-69	734.00	Z	-
				03-03-69	717.80	Z	-
				04-02-69	715.70	Z	-
				05-01-69	715.90	Z	-
				06-04-69	715.20	Z	-
				07-02-69	715.50	Z	-
				08-04-69	714.75	Z	-
				10-02-69	714.15	Z	-
				11-04-69	714.90	Z	-
				12-02-69	716.35	Z	-
				01-05-70	715.43	Z	-
				02-03-70	715.25	Z	-
				03-02-70	715.25	Z	-
				04-01-70	714.45	Z	-
				05-01-70	714.30	Z	-
				07-02-70	712.50	Z	-
				08-04-70	713.20	Z	-
				09-02-70	713.45	Z	-
				10-01-70	714.00	Z	-
				11-04-70	713.20	Z	-
				12-01-70	714.05	Z	-
				01-05-71	715.55	Z	-
				02-04-71	715.70	Z	-
				03-02-71	715.30	Z	-
				04-01-71	713.50	Z	-
				05-04-71	713.50	Z	-
				06-02-71	712.55	Z	-
				07-01-71	712.00	Z	-
				09-09-71	712.10	Z	-
				10-06-71	712.05	Z	-
				11-01-71	712.75	Z	-

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
141	11S/12E-26AAC01	PORTLAND GENERAL ELECTRIC CO.	983	2-02-71	712.00	Z	-
				01-06-72	712.40	Z	-
				01-31-72	716.75	Z	-
				03-02-72	715.70	Z	-
				04-04-72	713.55	Z	-
				05-01-72	713.10	Z	-
				06-01-72	711.90	Z	-
				07-03-72	707.00	Z	-
				08-01-72	707.00	Z	-
				10-03-72	712.00	Z	-
				11-01-72	712.15	Z	-
				12-04-72	713.10	Z	-
				01-18-73	715.55	Z	-
				02-01-73	718.25	Z	-
				03-01-73	713.00	Z	-
				04-03-73	711.50	Z	-
				05-01-73	710.11	Z	-
				05-30-73	710.50	Z	-
				07-02-73	712.10	Z	-
				08-01-73	711.70	Z	-
				09-05-73	711.20	Z	-
				10-01-73	711.70	Z	-
				10-31-73	711.70	Z	-
				12-03-73	711.70	Z	-
				01-30-74	712.30	Z	-
				02-27-74	712.20	Z	-
				04-01-74	712.00	Z	-
				04-29-74	711.55	Z	-
				05-28-74	711.20	Z	-
				07-02-74	711.30	Z	-
				08-05-74	711.40	Z	-
				09-02-74	711.40	Z	-
				09-30-74	711.40	Z	-
				10-30-74	711.30	Z	-
				12-03-74	710.90	Z	-
				01-02-75	710.90	Z	-
				01-30-75	710.50	Z	-
				03-05-75	710.70	Z	-
				03-31-75	712.05	Z	-
				05-01-75	711.40	Z	-
				06-03-75	710.60	Z	-
				07-02-75	710.10	Z	-
				07-31-75	710.20	Z	-
				09-03-75	710.30	Z	-
				10-01-75	710.20	Z	-
				10-30-75	710.10	Z	-
				12-02-75	713.85	Z	-
				12-29-75	715.00	Z	-
				01-29-76	716.50	Z	-
				02-27-76	710.60	Z	-
				04-01-76	710.60	Z	-
				04-29-76	710.30	Z	-
				06-07-76	709.10	Z	-
				06-29-76	708.90	Z	-

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
141	11S/12E-26AAC01	PORTLAND GENERAL ELECTRIC CO.	983	07-29-76	709.00	Z	-
				08-31-76	708.50	Z	-
				09-29-76	709.20	Z	-
				11-01-76	709.50	Z	-
				11-29-76	710.70	Z	-
				12-28-76	709.70	Z	-
				01-31-77	711.80	Z	-
				02-28-77	709.35	Z	-
				04-01-77	709.40	Z	-
				04-27-77	709.50	Z	-
				05-25-77	709.50	Z	-
				06-30-77	708.90	Z	-
				07-27-77	709.15	Z	-
				08-29-77	709.20	Z	-
				09-28-77	709.45	Z	-
				11-01-77	709.30	Z	-
				11-29-77	709.50	Z	-
				12-30-77	709.50	Z	-
				01-31-78	709.20	Z	A
				02-28-78	713.20	Z	A
				03-31-78	710.50	Z	A
				05-03-78	710.50	Z	A
				05-30-78	709.70	Z	A
				06-27-78	709.70	Z	A
				08-01-78	709.50	Z	A
				08-31-78	709.10	Z	A
				09-27-78	709.90	Z	A
				10-30-78	709.00	Z	A
				11-29-78	710.30	Z	A
				01-02-79	712.95	Z	A
				02-01-79	717.45	Z	A
				02-26-79	712.50	Z	A
				03-30-79	711.50	Z	A
				05-01-79	711.80	Z	A
				06-04-79	709.50	Z	A
				06-27-79	708.80	Z	A
				07-31-79	708.40	Z	A
				08-31-79	708.30	Z	A
				10-30-79	708.40	Z	A
				11-29-79	708.25	Z	A
				12-27-79	709.20	Z	A
				01-31-80	710.25	Z	A
				02-28-80	708.45	Z	A
				04-01-80	709.20	Z	A
				04-30-80	709.65	Z	A
				06-04-80	709.65	Z	A
				07-09-80	708.00	Z	A
				08-01-80	708.90	Z	A
				09-09-80	708.00	Z	A
				10-07-80	708.35	Z	A
				11-05-80	708.10	Z	A
				12-02-80	707.50	Z	A
				01-06-81	708.40	Z	A

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
141	11S/12E-26AAC01	PORTLAND GENERAL ELECTRIC CO.	983	01-29-81	708.70	Z	A
				02-26-81	709.00	Z	A
				03-31-81	708.50	Z	A
				04-29-81	708.20	Z	A
				06-01-81	708.10	Z	A
				07-29-81	708.00	Z	A
				09-01-81	708.20	Z	A
				09-29-81	708.20	Z	A
				10-30-81	708.20	Z	A
				12-02-81	708.10	Z	A
				12-29-81	708.10	Z	A
				02-01-82	708.90	Z	-
				02-26-82	708.00	Z	-
				04-01-82	706.00	Z	-
				05-06-82	708.00	Z	-
				06-02-82	708.25	Z	-
				06-30-82	707.70	Z	-
				07-29-82	708.10	Z	-
				08-31-82	708.20	Z	-
				10-06-82	708.40	Z	-
				11-29-82	708.50	Z	-
				01-05-83	708.50	Z	-
				02-02-83	708.7	Z	-
				03-02-83	707.1	Z	-
				04-04-83	709.2	Z	-
				04-26-83	708.9	Z	-
				06-01-83	708.6	Z	-
				06-28-83	708.5	Z	-
				07-28-83	708.8	Z	-
				09-01-83	708.6	Z	-
				09-29-83	709.6	Z	-
				10-27-83	709.8	Z	-
				11-29-83	710.0	Z	-
				12-20-83	710.8	Z	-
				01-30-84	710.8	Z	-
				02-29-84	710.9	Z	-
				03-29-84	709.9	Z	-
				04-30-84	710.7	Z	-
				05-30-84	709.6	Z	-
				06-28-84	709.2	Z	-
				08-01-84	708.9	Z	-
				08-31-84	709.1	Z	-
				08-31-84	709.1	Z	-
				10-10-84	711.75	Z	-
				10-29-84	709	Z	-
				11-29-84	708.6	Z	-
				01-03-85	709	Z	-
				02-27-85	710.2	Z	-
				03-27-85	709.0	Z	-
				04-30-85	708.1	Z	-
				05-29-85	707.8	Z	-
				07-02-85	707.8	Z	-

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
141	11S/12E-26AAC01	PORTLAND GENERAL ELECTRIC CO.	983	07-30-85	707.4	Z	-
				09-05-85	707.3	Z	-
				10-03-85	707.5	Z	-
				12-09-85	707.4	Z	-
				12-26-85	707.8	Z	-
				01-28-86	707.5	Z	-
				02-25-86	706.6	Z	-
				03-31-86	706.9	Z	-
				05-06-86	705.4	Z	-
				05-29-86	706.3	Z	-
				06-24-86	706.0	Z	-
				07-29-86	706.4	Z	-
				08-26-86	706.1	Z	-
				09-30-86	706.2	Z	-
				10-29-86	705.9	Z	-
				11-25-86	705.8	Z	-
				12-31-86	706.05	Z	-
				01-29-87	706.2	Z	-
				03-04-87	705.3	Z	-
				03-31-87	705.2	Z	-
				05-04-87	704.15	Z	-
				05-27-87	704.5	Z	-
				06-30-87	704.25	Z	-
				07-29-87	704.2	Z	-
				08-27-87	704.2	Z	-
				09-29-87	704.0	Z	-
				11-03-87	704.1	Z	-
				11-30-87	703.2	Z	-
				12-30-87	704.5	Z	-
				01-28-88	704.1	Z	-
				02-25-88	703.4	Z	-
				03-31-88	703.7	Z	-
				05-03-88	703.2	Z	-
				05-26-88	703.4	Z	-
				06-30-88	703.7	Z	-
				07-29-88	704.0	Z	-
				08-30-88	703.5	Z	-
				09-28-88	704.1	Z	-
				11-02-88	699.2	Z	-
				11-30-88	704.7	Z	-
				12-30-88	704.2	Z	-
				01-31-89	703.9	Z	-
				02-28-89	703.1	Z	-
				03-30-89	702.6	Z	-
				04-27-89	702.5	Z	-
				06-01-89	702.3	Z	-
				06-28-89	702.0	Z	-
				07-27-89	701.0	Z	-
				08-31-89	701.7	Z	-
				10-03-89	701.7	Z	-
				10-31-89	701.1	Z	-
				11-30-89	701.8	Z	-

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
141	11S/12E-26AAC01	PORTLAND GENERAL ELECTRIC CO.	983	12-28-89	701.2	Z	-
				01-31-90	701.8	Z	-
				03-01-90	703.0	Z	-
				03-30-90	701.4	Z	-
				04-30-90	701.0	Z	-
				05-31-90	701.4	Z	-
				06-26-90	700.7	Z	-
				07-30-90	701.8	Z	-
				08-30-90	701.0	Z	-
				09-28-90	701.0	Z	-
				10-30-90	700.8	Z	-
				11-30-90	702.00	Z	-
				12-28-90	701.2	Z	-
				01-30-91	699.5	Z	-
				03-21-91	699.8	Z	-
				05-31-91	699.7	Z	-
				06-28-91	699.8	Z	-
				07-31-91	699.8	Z	-
				10-31-91	699.8	Z	-
142	11S/13E-01BAC01	CITY OF MADRAS	418.00	00-00-10	317	Z	R
				00-00-53	343	Z	R
				04-18-58	357	Z	R
				03-12-64	342	Z	A
				03-25-64	349	Z	A
				04-28-64	334	Z	A
				05-25-64	333	Z	A
				06-30-64	333	Z	A
				07-24-64	332	Z	A
				08-19-64	332	Z	A
				09-02-64	330.5	Z	A
				09-30-64	330	Z	A
				10-23-64	330	Z	A
				11-24-64	335	Z	A
				02-19-65	332	Z	A
				03-12-65	334	Z	A
				04-09-65	335	Z	A
				05-07-65	330.5	Z	A
				06-23-65	329	Z	A
				07-15-65	329	Z	A
				08-23-65	328	Z	A
				09-21-65	328	Z	A
				11-10-65	326	Z	A
12-03-65	335	Z	A				
01-07-66	328	Z	A				
02-04-66	328	Z	A				
03-08-66	327	Z	A				
04-07-66	328.5	Z	A				
05-20-66	327	Z	A				
06-06-66	326	Z	A				
07-08-66	325	Z	A				
10-07-66	333	Z	A				
11-15-66	332	Z	A				

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
142	11S/13E-01BAC01	CITY OF MADRAS	418.00	12-08-66	332	Z	A
				01-13-67	357	T	A
				02-02-67	332	Z	A
				03-02-67	337	T	A
				04-07-67	330.5	Z	A
				05-03-67	330	Z	A
				06-30-67	339	Z	A
				07-14-67	329.5	Z	A
				08-11-67	330	Z	A
				09-12-67	343	Z	A
				10-05-67	330	Z	A
				11-07-67	330	Z	A
				12-07-67	333	Z	A
				01-11-68	333	Z	A
				02-19-68	334	Z	A
				03-22-68	329	Z	A
				04-09-68	352	T	A
				05-22-68	330	Z	A
				06-10-68	328	Z	A
				07-10-68	327	Z	A
				08-05-68	339	Z	A
				09-03-68	343	Z	A
				10-04-68	332	Z	A
				11-04-68	337	Z	A
				01-09-69	335	Z	A
				12-09-68	335	Z	A
				02-14-69	328	Z	A
				03-05-69	335	Z	A
				04-04-69	345	Z	A
				05-05-69	339	Z	A
				06-16-69	336	Z	A
				07-30-69	329	Z	A
				08-21-69	338	Z	A
				09-22-69	340	Z	A
				10-07-69	338	Z	A
				11-10-69	338	Z	A
				12-11-69	331	Z	A
				01-26-70	338	Z	A
				02-11-70	337	Z	A
				03-06-70	340	Z	A
				04-07-70	340	Z	A
				05-15-70	337	Z	A
				06-17-70	337	Z	A
				07-13-70	345	Z	A
				08-26-70	346	Z	A
				09-18-70	349	Z	A
				10-19-70	344	Z	A
				11-16-70	348	Z	A
				12-10-70	336	Z	A
				01-12-71	331	Z	A
				02-01-71	330	Z	A
				03-30-71	331	Z	A
				04-20-71	352	Z	A

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
142	11S/13E-01BAC01	CITY OF MADRAS	418.00	05-01-71	354	Z	A
				06-01-71	340	Z	A
				07-22-71	348	Z	A
				08-31-71	345	Z	A
				09-24-71	339	Z	A
				10-18-71	342	Z	A
				11-22-71	333	Z	A
				12-15-71	332	Z	A
				01-11-72	340	Z	A
				02-10-72	335	Z	A
				03-03-72	342	Z	A
				05-15-72	341	Z	A
				06-09-72	340	Z	A
				07-31-72	352	Z	A
				05-15-72	341	Z	A
				06-09-72	340	Z	A
				07-31-72	352	Z	A
				08-14-72	348	Z	A
				09-24-72	346	Z	A
				10-11-72	344	Z	A
				11-13-72	335	Z	A
				12-15-72	351	Z	A
				01-16-73	343	Z	A
				02-20-73	343	Z	A
				03-07-73	339	Z	A
				04-18-73	342	Z	A
				05-08-73	345	Z	A
				06-07-73	345	Z	A
				07-20-73	347	Z	A
				08-02-73	348	Z	A
				09-12-73	340	Z	A
				10-03-73	338	Z	A
				11-13-73	335	Z	A
				12-19-73	338	Z	A
				01-16-74	336	Z	A
				02-28-74	335	Z	A
				03-25-74	330	Z	A
				04-18-74	332	Z	A
				05-16-74	336	Z	A
				06-11-74	343	Z	A
				07-19-74	346	Z	A
				08-21-74	345	Z	A
				09-27-74	347	Z	A
				10-07-74	347	Z	A
				11-13-74	337	Z	A
				12-06-74	340	Z	A
				01-17-75	334	Z	A
				03-17-75	331	Z	A
				04-21-75	334	Z	A
				05-12-75	332	Z	A
				06-27-75	341	Z	A
				07-27-75	343	Z	A
				08-20-75	343	Z	A

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
142	11S/13E-01BAC01	CITY OF MADRAS	418.00	09-10-75	341	Z	A
				10-06-75	336	Z	A
				11-27-75	335	Z	A
				12-23-75	335	Z	A
				01-12-76	337	Z	A
				02-20-76	334	Z	A
				03-16-76	336	Z	A
				04-11-76	333	Z	A
				05-18-76	332	Z	A
				06-16-76	336	Z	A
				07-21-76	339	Z	A
				08-20-76	337	Z	A
				09-09-76	341	Z	A
				10-27-76	344	Z	A
				11-06-76	338	Z	A
				12-11-76	338	Z	A
				01-25-77	330	Z	A
				02-18-77	332	Z	A
				03-09-77	333	Z	A
				04-04-77	339	Z	A
				05-12-77	335	Z	A
				06-24-77	353	Z	A
				07-25-77	350	Z	A
				08-23-77	352	Z	A
				09-14-77	343	Z	A
				10-12-77	341	Z	A
				11-04-77	336	Z	A
				12-12-77	339	Z	A
				01-18-78	331	Z	A
				02-22-78	332	Z	A
				03-07-78	330	Z	A
				04-06-78	331	Z	A
				05-24-78	331	Z	A
				06-19-78	357	Z	A
				08-14-78	357	Z	A
				09-07-78	352	Z	A
				10-20-78	343	Z	A
				11-08-78	339	Z	A
				12-21-78	334	Z	A
				01-09-79	334	Z	A
				02-13-79	337	Z	A
				03-07-79	339	Z	A
				04-19-79	341	Z	A
				05-16-79	344	Z	A
				06-08-79	354	Z	A
				07-24-79	356	Z	A
				08-22-79	346	Z	A
				09-12-79	345	Z	A
				10-18-79	339	Z	A
				11-20-79	342	Z	A
				12-27-79	341	Z	A
				01-15-80	343	Z	A
				02-00-80	341	Z	A

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
142	11S/13E-01BAC01	CITY OF MADRAS	418.00	03-00-80	338	Z	A
				04-14-80	340	Z	A
				05-06-80	342	Z	A
				06-01-80	345	S	A
				07-01-80	348	S	A
				08-29-80	351	S	A
				09-11-80	350	S	A
				10-21-80	340	S	A
				11-00-80	338	Z	A
				12-03-80	338	Z	A
				01-28-81	332	Z	A
				02-11-81	331	Z	A
				03-20-81	330	Z	A
				04-16-81	336	Z	A
				05-19-81	338	Z	A
				06-00-81	343	Z	A
				07-15-81	354	Z	A
				08-20-81	362	S	A
				09-23-81	357	Z	A
				10-09-81	347	Z	A
				11-10-81	345	Z	A
				12-17-81	341	Z	A
				01-12-82	337	Z	A
				02-16-82	335	Z	A
				03-16-82	342	T	A
				04-17-82	335	Z	A
				05-11-82	346	T	A
				06-08-82	349	S	A
				07-07-82	352	S	A
				08-32-82	358	S	A
				09-14-82	348	S	A
				10-05-82	345	S	A
				11-01-82	341	S	A
				12-01-82	338	S	A
				01-05-83	339	S	A
				02-03-83	338	S	A
				03-03-83	336	S	A
				04-05-83	335	S	A
				05-03-83	336	S	A
				06-10-83	353	S	A
				07-19-83	350	S	A
				08-26-83	351	S	A
				09-06-83	345	S	A
				10-05-83	345	S	A
				11-02-83	341	S	A
				12-14-83	338	S	A
				01-17-84	339	S	A
				02-16-84	336	S	A
				03-15-84	335	S	A
				04-04-84	335	S	A
				05-17-84	338	S	A
				06-16-84	343	S	A
				07-25-84	362	S	A

Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identification number	Local well number	Owner	Depth of well (feet)	Water-level date	Water level (feet below datum)	Water-level status	Water-level method
JEFFERSON COUNTY—Continued							
142	11S/13E-01BAC01	CITY OF MADRAS	418.00	08-30-84	367	S	A
				09-17-84	370	S	A
				10-10-84	348	S	A
				11-02-84	343	S	A
				12-31-84	340	S	A
				01-07-85	339	S	A
				02-14-85	342	S	A
				06-11-85	362	S	A
				08-23-85	362.77	S	S
				10-02-85	349	S	A
				11-16-85	346	S	A
				12-04-85	341	S	A
				01-08-87	338	S	A
				03-08-87	338	S	A
				04-20-87	341	S	A
				05-05-87	342	S	A
				07-20-87	335	S	A
				08-27-87	338	S	A
				09-15-87	332	S	A
				10-16-87	330	S	A
11-04-87	328	S	A				
12-04-87	326	S	A				
04-01-88	308.1	S	A				
143	11S/13E-01BCA01	CITY OF MADRAS	800.00	01-11-79	340.00	Z	R
				10-10-85	302.75	S	T
				11-07-85	301.05	Z	T
				12-20-85	300.25	Z	S
				02-20-86	292.22	Z	T
				02-21-86	292.4	Z	T
				04-25-86	302.88	Z	S
				09-25-86	300.43	Z	S
144	11S/13E-01BCA02	CITY OF MADRAS	451.00	02-11-66	326.00	Z	R
				08-23-85	370.00	P	E
145	11S/13E-02DDC01	CITY OF MADRAS	477.00	09-22-72	216.00	Z	R
				08-23-85	389.00	P	-
149	11S/13E-07CCD01	BELLE, JENNE	835	06-10-82	768	Z	R
				11-08-85	770.50	Z	T
				12-20-85	770.54	Z	T
				02-21-86	770.27	Z	T
				04-25-86	771.01	Z	T
				09-25-86	770.29	Z	T
153	11S/13E-24BCC01	SHERER, KEITH R	590.00	04-29-63	526.00	Z	R
				07-10-85	470.42	Z	T
				10-09-85	470.10	Z	T
				11-07-85	470.01	Z	T
				12-20-85	470.46	Z	T
				02-20-86	470.08	Z	T
				04-25-86	469.91	Z	T
				09-25-86	469.46	Z	T

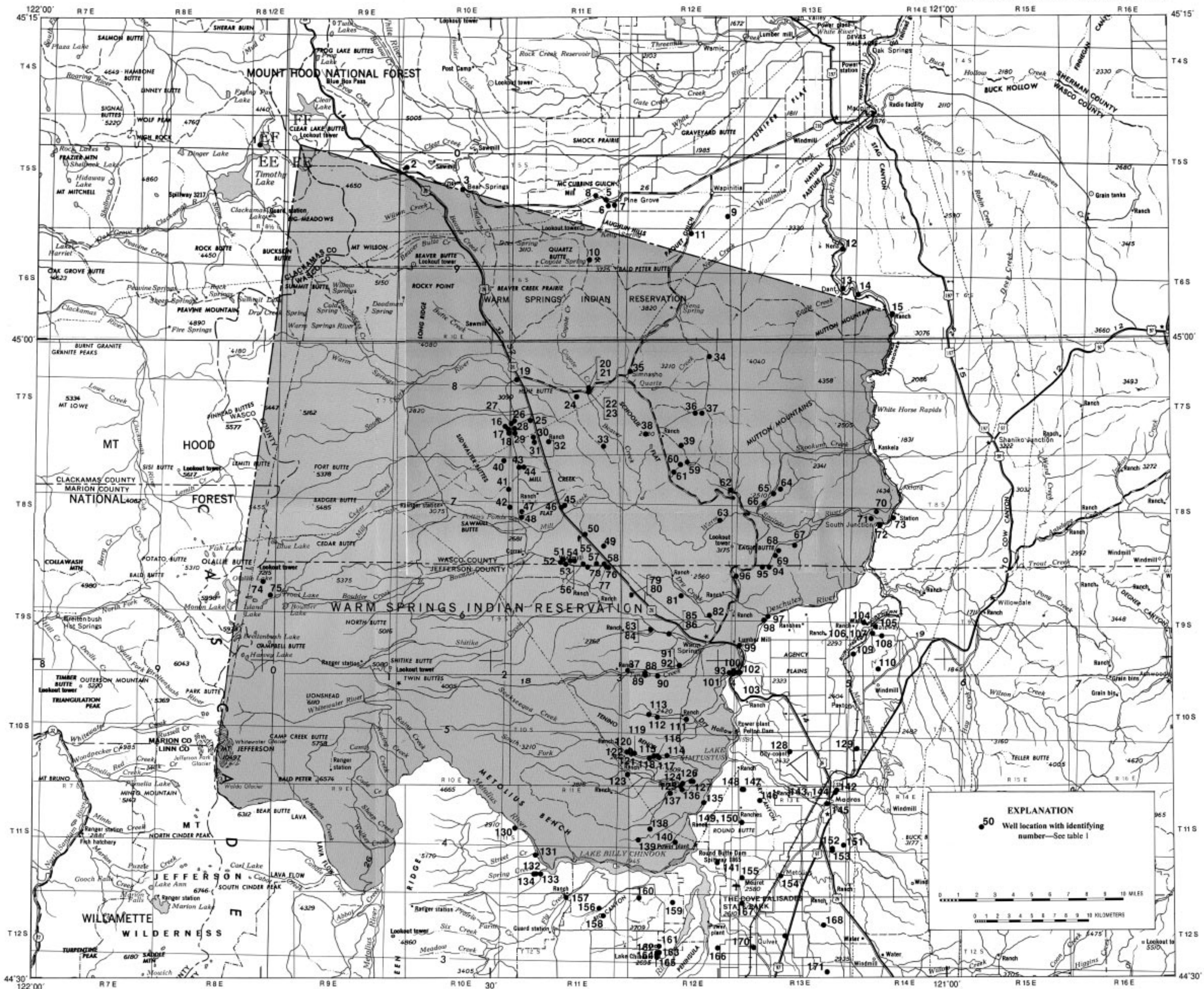
Table 3. Water-level measurements for selected wells in the Warm Springs Indian Reservation area, Oregon—Continued

Well identi- fication number	Local well number	Owner	Depth of well (feet)	Water- level date	Water level (feet below datum)	Water- level status	Water- level method
JEFFERSON COUNTY—Continued							
156	12S/11E-02CDA01	STILLS, DOUG	600.00	05-06-70	445.00	Z	R
				08-22-85	420.51	Z	T
				10-09-85	421.40	Z	T
				11-07-85	420.10	Z	T
				12-20-85	420.05	Z	T
				04-25-86	419.97	Z	T
159	12S/12E-04BDD01	WHEELER, ROBT	650.00	04-09-70	566.00	Z	R
				10-09-85	555.74	Z	T
				11-07-85	555.60	Z	T
				12-20-85	556.23	Z	T
				02-21-86	556.40	Z	T
				04-25-86	556.73	Z	T
167	12S/13E-06BCA01	DEGNER, FRED	695	08-22-25	695	Z	R
				06-00-58	-	D	R
				11-07-85	173.11	Z	T
				12-20-85	185.64	Z	T
				02-21-86	176.44	Z	T
				04-25-86	173.31	Z	T
				09-25-86	166.34	Z	T

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Base modified from U.S. Geological Survey
1:250,000 topographic quadrangles

LOCATION OF WELLS IN THE WARM SPRINGS INDIAN RESERVATION AREA, OREGON

By
Donald B. Anderson
1996

