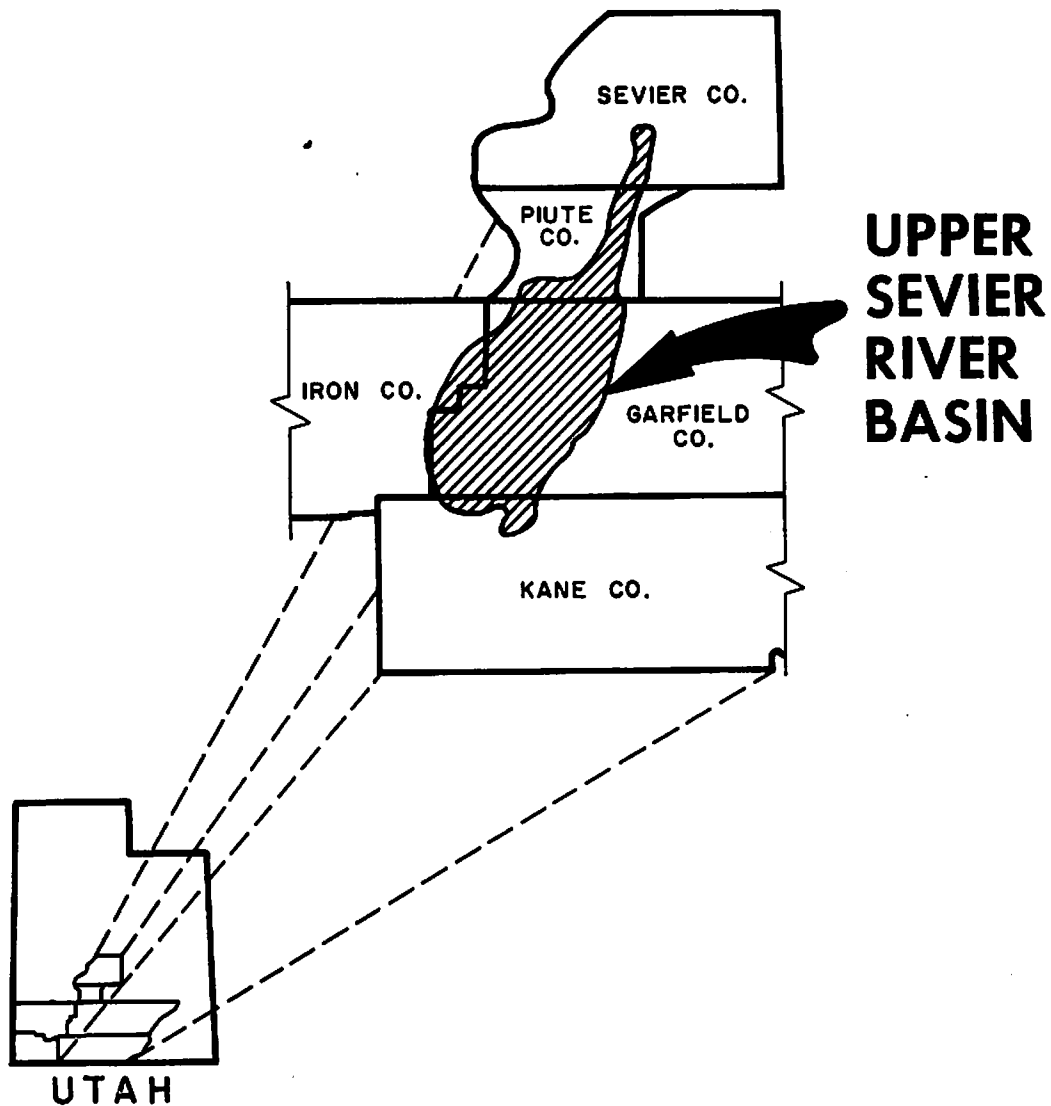


BASIC-DATA REPORT NO. 8

SELECTED HYDROLOGIC DATA

UPPER SEVIER RIVER BASIN, UTAH



FOR
REFERENCE
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1964

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By

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Gerald B. Robinson, Jr., Geologist

Louis J. Bjorklund, Hydraulic Engineer

U.S. Geological Survey

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Prepared by

The United States Geological Survey

in cooperation with

The Utah State Engineer

Salt Lake City, Utah

1964

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Introduction

This report is intended to serve two purposes: (1) to make available to the public basic ground-water data useful in planning and studying development of water resources, and (2) to supplement an interpretive report that will be published later.

Records were collected during 1961-63 by the U.S. Geological Survey in cooperation with the Utah State Engineer as a part of the investigation of ground-water conditions in the upper Sevier River basin, in parts of Garfield, Iron, Kane, Piute, and Sevier Counties, Utah. The interpretive material will be published in a companion report by Carl H. Carpenter, Gerald B. Robinson, Jr., and Louis J. Bjorklund.

This report is most useful in predicting conditions likely to be found in areas that are being considered as well sites. The person considering the new well can spot the proposed site on plate 1 and examine the records of nearby wells and springs as shown in the tables. From table 1 he can find information on wells, including depth, diameter, water level, yield, drawdown, use of water, temperature of water, and depth of perforations. Table 2 gives information on springs such as yield, use of water, temperature, and improvements. From tables 1 and 2 he can note the type of material that yields water in the vicinity. Table 3 shows the historic fluctuations and trends of water levels. Table 4 shows the type of material penetrated by wells. From table 5 he can note the chemical quality of water from wells and springs, and from table 6, the chemical quality of surface water. If the reader decides from his examination that conditions are favorable, he can place an application to drill a well with the State Engineer. If the State Engineer believes unappropriated water is available, the application may be approved after minimum statutory requirements have been satisfied.

The report is also useful when planning large-scale developments of water supply. This and other uses of the report will be helped by use of the interpretive report upon its release.

The well numbers used in this report indicate the well location by land subdivision according to a numbering system that was devised cooperatively by the Utah State Engineer and G. H. Taylor of the Geological Survey about 1935. The system is illustrated in figure 1. The complete well number comprises letters and numbers that designate consecutively the quadrant and township (shown together in parentheses by a capital letter designating the quadrant in relation to the base point of the Salt Lake Base and Meridian, and numbers designating the township and range); the number of the section; the quarter section (designated by a letter); the quarter of the quarter section; the quarter of the quarter-quarter section; and, finally, the particular well within the 10-acre tract (designated by a number). By this system the letters A, B, C, and D designate, respectively, the northeast, northwest, southwest, and southeast quadrants of the standard base and meridian system of the Bureau of Land Management, and the letters a, b, c, and d designate,

respectively, the northeast, northwest, southwest, and southeast quarters of the section, of the quarter section, and of the quarter-quarter section. Thus, the number (B-2-2)12dcd-2 designates well 2 in the $SE\frac{1}{4}SW\frac{1}{4}SE\frac{1}{4}$ sec. 12, T. 2 N., R. 2 W., the letter B showing that the township is north of the Salt Lake base line and the range is west of the Salt Lake meridian; and the number (D-3-2)34bca-1 designates well 1 in the $NE\frac{1}{4}SW\frac{1}{4}NW\frac{1}{4}$ sec. 34, T. 3 S., R. 2 E. Springs and sampling sites are also numbered using this system, but the designation number within a 10-acre tract is omitted.

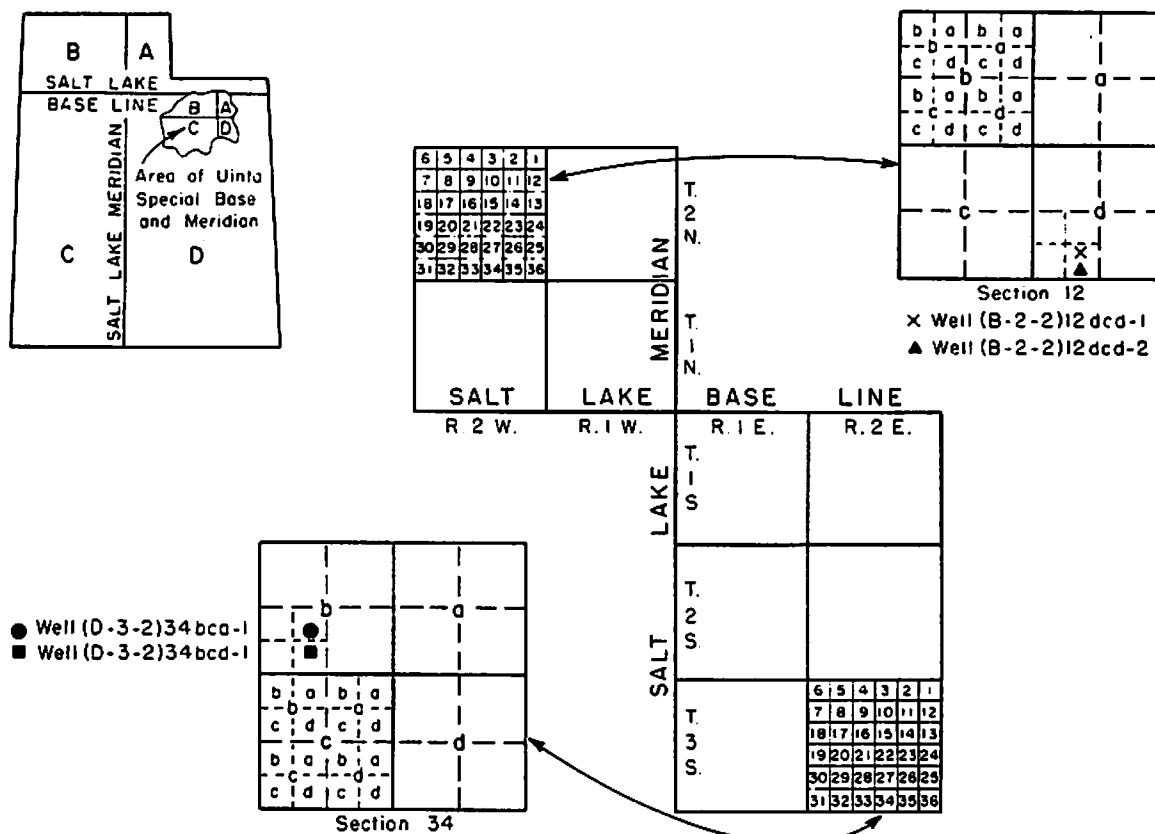


Figure 1. — Well-numbering system used in Utah.

Table 1.--Records of selected wells and test holes in the upper Sevier River basin

Well number: See text for description of numbering system.

Type of well: Dr, drilled; Du, dug; J, jetted.

Depth of well: Measured depths given in feet and tenths; reported depths given in feet.

Character of material: C, clay; G, gravel; Ls, limestone; S, sand; Sh, shale; Ss, sandstone; V, volcanic rock.

Water level: Measured distances given in tenths of feet; reported distances given in feet.

Method of lift: C, centrifugal pump; Cy, cylinder pump; F, flowing well; J, jet pump; N, none; T, turbine pump; Ts, submersible turbine pump.

Yield (gpm, gallons per minute): E, estimated; M, measured; R, reported.

Drawdown: Amount water level or artesian pressure is lowered during discharge of well.

Use of water: D, domestic; I, irrigation; Ind, industrial; N, none; O, observation; P, public supply; S, stock.

Remarks and other data available: C, chemical analysis in table 3; L, log in table 4; perf., casing perforated; TH, test hole; W, water-level measurements in table 3.

Well number	Owner or user	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Principal aquifer			Altitude of land-surface datum (feet)	Water level		Method of lift	Yield (gpm)	Drawdown (feet)	Date of measurement	Use of water	Temperature (°F)	Remarks and other data available
						Depth to top (feet)	Thickness (feet)	Character of material		Above (+) or below (-) land-surface datum (feet)	Date of measurement							
Panguitch Valley																		
(C-32-5)																		
26aca-1	Dan Perkins	1905	Du	20	54	-	-	G	6,360	-13.1	8-1-51	N	-	-	-	O	-	W.
26aca-2	do	1947	Dr	88	6	18	27	S	6,360	-11.0	6-14-47	J	20R	11	6-47	D,I,S	57	C, L.
35bab-1	U.S. Geol. Survey	1962	Dr	456.0	6	72	16	S,G	6,370	+3.0	7-23-62	P	6M	-	7-62	O	59	TH 1. 1-inch casing; perf. 9-18 ft. C,L, W.
						5	57	S,G										
						75	8	G										
						173	9	G										
(C-33-5)																		
3bda-1	E. V. Goff	1942	Dr	66	4	60	6	G	6,409	-15.1	10-23-61	N	5R	1	6-42	H	60	L.
4ddd-1	R. J. Barrett	1950	Dr	83	6	73	10	S,G	6,470	-60.0	7-12-50	J	20R	5	7-50	D,I,S	-	C, L.
9adb-1	Clifford LeFevre	1930	Du	8.0	36	-	-	S,G	6,440	-8	8-1-51	N	-	-	-	O,S	-	W.
10cdd-1	Horace LeFevre	1952	Dr	111	6	55	38	S	6,435	-28.5	10-23-61	N	25R	41	4-52	O	-	L, W.
13bdd-1	U.S. Geol. Survey	1962	Dr	833.0	6	93	13	G	6,660	-	-	N	-	-	-	N	-	TH 16. L.
14cbd-1	do	1962	Dr	637.0	6	477	90	S,G	6,555	-27.2	6-30-62	N	-	-	-	N	-	TH 4. L.
15cab-1	Joel Webster	1947	Dr	458	6.4	579	254	S,G	6,470	-15.0	7-47	J	-	-	-	D,S	55	L.
16add-1	U.S. Geol. Survey	1962	Dr	510.0	6	23	35	S,G	6,442	-5.4	6-29-62	N	-	-	-	N	-	TH 3. L.
16bca-1	do	1962	Dr	545.0	6	61	16	S,G	6,505	-56.4	7-18-62	N	-	-	-	N	-	TH 2. L.
28acb-2	James LeFevre	1936	Dr	44	8	79	59	S,G	6,480	-11.0	10-4-36	J	75R	9	10-36	D,I,S	-	L.
28bcd-1	L. V. Henrie	1936	Dr	190	6.3	102	12	G	6,508	-47.5	3-20-56	J	40R	6	8-36	D,I,S	55	Perf. 183-190 ft. C,L,W.
29bdd-1	F. H. Henrie	1946	Dr	114	5	65	15	G	6,570	-60.0	7-20-46	Cy	20R	2	7-46	D,I,S	52	L.
(C-34-5)																		
2cbc-1	Archie Alexander	1947	Dr	171	6	75	35	G	6,617	-89.4	10-16-61	J	12R	15	8-47	D,I,S	50	C,L,W.
2cdc-1	U.S. Geol. Survey	1962	Dr	755.0	6	151	15	S	6,640	-85.0	6-15-62	N	-	-	-	N	-	TH 7. L.
3ddb-1	W. B. Proctor	1947	Dr	169	6	166	5	G	6,595	-65.0	8-7-47	J	15R	5	8-47	D,S	50	L.
4abd-1	J. E. Haywood	1931	Dr	72	4	81	15	S,G	6,510	-13.2	10-16-61	N	-	-	-	N	53	W.
4add-1	John Yardley	-	Du	21.0	36	224	16	S,G	6,543	-10.2	8-1-51	J	-	-	-	O,S	56	W.
5ddc-2	Kenneth Lynn	1947	Dr	122	6	50	112	S,G	6,545	-23	6-10-47	J	25R	8	6-47	D,I,S	52	L.
						162	7	G										
						83	3	S										
						94	21	S										
						113	7	G										
7aaa-1	U.S. Geol. Survey	1962	Dr	390.0	6	6	13	S,G	6,620	-14.6	6-15-62	N	-	-	-	N	-	TH 3. L.
8abd-1	E. J. Allen	1900	Du	78.0	24.5	38	2	G	6,550	-26.9	10-16-61	J	-	-	-	D,S	50	Well dug 40 ft, drilled 38 ft.
8adb-1	D. W. Woodard	1935	Dr	93	5	44	15	S,G	6,540	-17.3	9-9-35	J	-	-	-	D,I	56	Perf. 77-93 ft.
8adb-2	do	1935	Dr	166	4	20	70	S	6,540	-18.6	3-20-56	N	50R	10	9-36	O	56	L,W.
8ded-1	Sims Duggins	1950	Dr	55	4	84	12	S,G	6,533	-8.0	11-3-50	C	15R	2	11-50	S	55	L.
9bab-1	U.S. Geol. Survey	1962	Dr	713.0	6	138	8	S,G	6,505	-4.0	6-15-62	N	-	-	-	N	-	TH 8. L.
						153	13	G										
9ddd-1	J. V. Proctor	1925	Du	45	36	-	-	S,G	6,580	-35.1	10-9-61	N	-	-	-	N	47	
10bdc-1	J. P. Yardley	-	Du	42.0	36	-	-	S,G	6,586	-37.8	10-9-61	N	-	-	-	N	47	
16adc-1	D. V. Worthen	1961	Dr	59.0	4	-	-	S,G	6,584	-43.5	10-10-61	J	-	-	-	S	-	
16dca-1	LaMar Worthen	1947	Dr	197	6	37	48	S	6,582	-50.0	7-1-47	J	15R	15	7-47	D,I,S	52	L.
						192	5	G										
16ddc-1	W. D. Miller	1955	Dr	80	4	-	-	S,G	6,588	-46.8	10-10-61	J	-	-	-	S	54	
17dbd-1	J. H. Clark	1895	Du	22	36	-	-	S,G	6,540	-6.1	10-3-61	N	-	-	-	N	48	
20dbd-1	W. H. Hughes	1895	Du	22.0	48	-	-	S,G	6,570	-18.6	8-1-51	N	-	-	-	O	57	W.
21adc-1	James Excell	-	Du	30.0	24	-	-	S,G	6,573	-24.0	10-3-61	J	-	-	-	D,O,S	-	W.
(C-35-5)																		
2bce-1	Frank Orton	1959	Dr	175	6	-	-	S,G	6,650	-10.7	8-14-61	J	-	-	-	O,S	52	W.

Table 1.--Records of selected wells and test holes in the upper Sevier River basin - Continued

Well number	Owner or user	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Principal aquifer			Altitude of land-surface datum (feet)	Water level		Method of lift	Yield (gpm)	Drawdown (feet)	Date of measurement	Use of water	Temperature (°F)	Remarks and other data available
						Depth to top (feet)	Thickness (feet)	Character of material		Above (+) or below (-) land-surface datum (feet)	Date of measurement							
Panguitch Valley - Continued																		
(C-35-5) 24ccb-1	V. J. Myers	1953	Dr	350	6,5,4	201 258 280 345	5 6 16 5	S S,G S,G S	6,740	-30.0	5-25-53	H	20R	-	5-53	N	-	Perf. 201-206, 238-264, 280-287 ft. C,L.
24dbd-1 35ddb-2	E. E. Brewer Lindau Foremaster	1959	Dr Du	110 27.0	5 36	- -	- -	S S,G	6,780 6,785	-22.0 -24.0	8-21-61 7-31-51	J H	1.7R -	- -	8-61 -	D O	53 50	One of 2 wells. W.
(C-36-4b) 7ccb-1	Calvin Wilson	1949	Dr	-	6	-	-	S,G	7,900	-	-	Cy	5M	-	8-61	D,S	60	
(C-36-5) 28bdc-1	U.S. Geol. Survey	1962	Dr	377.0	6	21 95	11 35	S,G S,G	6,870	-5.4	7-31-62	N	-	-	-	O	-	TH 8. 1-inch casing; perf. 18-117 ft. L,W.
29dcd-1	Hatch Farmstead Water Association	1948	Dr	216	10	105	35	G	6,940	-46.5	9-25-61	T	40R 65R	32 65	9-48 4-51	O,P	55	Perf. at 105 ft. C,L,W.
Circle Valley																		
(C-30-3) 15bba-1 16bab-1	C. L. Jessen U.S. Geol. Survey	1920 1960	Du Dr	30.0 374.0	28 6	- 4 62 14	- 17 14 7	S,G S,G G G	6,006 5,997	-15.7 -2.0	9-11-56 5- 60	N H	- -	- -	- H	- -	- -	W. L.
16bbb-1 19daa-1 19dca-1 20bab-1	P. J. Jensen Weldon Simpkins do C. A. Whittaker	1948 1896 1900 -	Dr Dr Dr Du	407 98 50 13.5	6 2 1.5 12	400 - - -	7 - - -	G S,G S,G S	6,000 6,030 6,040 6,015	-15.5 +4.9 -11.6 -1.6	11-28-56 11-28-56 11-28-56 12- 4-61	C F C C	50R 2M - -	10 - - -	5-48 11-56 - -	D,O S - O,S	55 53 - -	C,L,W. - - W.
29bad-1 29bbb-1 30baa-1 30caa-1	S. B. Smith Earl Smith Harold Gottfredson U.S. Geol. Survey	1900 1956 1948 1960	Dr Du Dr Dr	163.2 22 193 563.0	2 4 5 6	- 14 167 128 387	- 8 26 125 11	S,G G G G	6,040 6,040 6,038 6,055	+2.5 -6.0 -10.4 -20.9	11-28-56 11-28-56 11-28-56 6- 4-60	F C C H	2M - - -	- - - -	11-56 - 2-48 -	S S O,S O	56 - 58 -	L. L,W. 4-inch casing; perf. 200-340, 380-400 ft. L,W.
32bbb-1	do	1962	Dr	680.0	6	125 247 398	114 145 152	S,G S,G S,G	6,100	-67.5	10- 1-62	N	-	-	-	O	-	TH 20. 1-inch casing; perf. 27-414 ft. L,W.
(C-30-4) 14abd-1 14dca-1 25aad-1	Harold Pearson T. Thomas Pluto County Potato Growers Association	- 1935 1948	Dr Dr Dr	29.0 - 54	6 4 8	5 - 30	24 - 24	S,G S,G G	6,040 6,030 6,048	-7.4 - -15.0	1-16-62 - 1- 48	C F J	12M 1E 75R	7 - 10	9-62 1-62 1-48	O,S S Ind	50 59 54	L,W. C. L.
25bcc-1 26dcb-1	Circleville-Loss Creek Irrigation Company Town of Circleville	1934 1956	Dr Dr	133 325	12 10	40 78 104 223 240 321	10 55 53 4 70 4	S S,G S,G G S,G S,G	6,065 6,080	-23.0 -31.5	10-25-60 11-27-56	T T	1,475M 30QM	28 36	9-62 10-56	I,O O,P	54 59	Perf. 38-127 ft. C,L,W. Perf. 250-310 ft. C,L,W.
34ddc-2 35dab-1	Cannon Livestock Company U.S. Geol. Survey	1934 1962	Dr Dr	80 510.0	5 6	75 13 75	5 58 90	S S,G S,G	6,110 6,086	-68.5 -47.3	12- 4-61 10- 1-62	J H	7.5R -	- -	11-34 -	D,O, S O	- -	L,W. TH 21. 1-inch casing; perf. 18-207 ft. L,W.
East Fork Valley																		
(C-30-2) 28cab-1 34bcc-1	Otter Creek Reservoir Company Van Hyley	1935 -	Dr Du	42 20.0	4 24	- -	- -	S,G S,G	6,377 6,370	-36.1 -12.6	9-20-61 9-24-57	J N	- -	- -	- -	D,O, S O	52 -	W. W.
(C-31-2) 3ebc-1	U.S. Geol. Survey	1962	Dr	210.0	6	3	55	S,G	6,360	-1	8-29-62	N	-	-	-	O	54	TH 13. 1-inch casing; perf. 9-45 ft. L,W.
14ccc-1 23bcd-1	Phil Allen Antimony Lions Club	1948 1952	Dr Dr	102 90	6 6	33 77	5 13	S,G G	6,460 6,510	-26.0 -55.3	1- 5-48 9-24-57	J J	15R 25R	19 15	1-48 4-52	D,S D, O	55 58	L. C,L,W.
23cca-1 23ccd-1	Burns Black Herman Black	1934 1942	Dr Dr	75 59.3	6 4	- 59	- .5	G G	6,480 6,496	-11.2 -25.6	9-20-61 9-20-61	C J	- 5R	- 0	- 8-42	D,S D,O, S	51 51	C,L,W.
23cda-1 24cbc-1	C. A. Riddle Erwin Gleave	1942 1952	Dr Dr	98 114	4 6	97 85	1 18	G G	6,530 -	-42.0 -75.0	11-25-42 6- 4-52	J Te	10R 23R	0 10	11-42 6-52	D,S D, S	51 52	L. L.
24cdb-1 24dac-1	Dean Crabb Augustus Twitchell	1957 1952	Dr Dr	153 180	4 6	105 160	48 20	G v	- -	-88.4 -155.0	9-20-61 5-24-52	Te Te	4R 15R	1 1	4-57 5-52	D,I, D, S	53 50	L. L.

Table 1.--Records of selected wells and test holes in the upper Sevier River basin - Continued

Well number	Owner or user	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Principal aquifer			Altitude of land-surface datum (feet)	Water level		Method of lift	Yield (gpm)	Drawdown (feet)	Date of measurement	Use of water	Temperature (°F)	Remarks and other data available
						Depth to top (feet)	Thickness (feet)	Character of material		Above (+) or below (-) land-surface datum (feet)	Date of measurement							
East Fork Valley - Continued																		
(C-31-2) 25aab-1	W. R. Young	1942	Dr	125	4.5	124	1	Cg	-	-98.0	9- 3-42	Ts	SR	2	9-42	D,S	51	Perf. 110-125 ft. L.
25aba-1	Erwin Gleave	1942	Dr	134	4	38	96	Cg	6,600	-106.6	9-27-61	Ts	25R	0	8-42	D,I, O,S	51	Perf. 104-134 ft. L,W.
26cdd-1	Chaater Allen	1942	Dr	54	4	41	13	Ss	6,500	-18.0	9- 8-42	C	SR	2	9-42	D,S	54	L.
35bda-1	Charles Wiley	1942	Dr	63	4	62	1	Cg	6,510	-34.0	8- 7-42	Cy	SR	0	8-42	D,I, S	51	L.
(C-32-2) 24da-1	K. E. Waggener	1954	Dr	66	6	31 63	6 3	S,G G	6,590	-14.0	4-28-54	J	20R	4	4-54	D,I, S	56	L.
(C-33-2) 22aab-1	U.S. Geol. Survey	1962	Dr	290.0	6	12	173	S,G	7,225	-10.6	8-29-62	N	-	-	-	O	-	TH 12. 1-inch casing; perf. 18-117 ft. L, W.
33ccc-1	do	1962	Dr	550.0	6	28	37	S,G	7,293	-56.0	8-29-62	N	-	-	-	N	50	TH 9. L.
33ddd-1	do	1962	Dr	536.0	6	83	57	S,G	7,300	-95.9	8-29-62	N	-	-	-	N	-	TH 17. L.
(C-34-2) 22dab-1 29ccd-1 30ccc-1	State of Utah U.S. Geol. Survey do	1934 1962 1962	Dr Dr Dr	339 480.0 520.0	6 6 6	278 125 45	61 94 30	Ss S,G S,G	7,620 7,430 7,405	-205.8 -150.0 -82.4	3-19-56 8-29-62 8- 6-62	N N N	30R - -	- - -	12-34 - O	O N O	- - -	L,W. TH 11. L. TH 10. 1-inch casing; perf. 18-117 ft. L,W.
(C-35-2) 22dbb-1	The California Company	-	Dr	330+	4	-	-	Ss	7,500	-29.9	8- 6-62	N	-	-	-	N	52	
(C-35-4) 34dca-1 34dcd-1	M. U. Rich do	1933 1952	Du Dr	14.0 170	48 6	- 10	- 160	S,G Ss	- -	-12.8 -14.0	8-21-61 8-21-61	C J	- .3R	- 3	- -	D,S D,S	- 50	L.
(C-36-3) 6dba-1 7aac-1 7aac-2 7abd-1 7bbc-1	Civil Aeronautics Administration Jerry Bartlett do do Civil Aeronautics Administration	1945 1934 1962 1951 1952	Dr Du Dr Dr Dr	83 15.0 260 208 230	6 6 6 6 6.5	- - 75 91	- - 30 139	S,G S,G Ss Sh,Ss	7,580 7,600 7,600 7,600 7,606	-46.2 -8.0 -6.9 -27.0 -48.0	3-19-56 3-19-56 11- 5-62 6-19-51 9-11-61	Cy C Ts N T	- - 8.5M 2.8R 6R	- - 43 53 43	- - 10-62 6-51 7-52	D,O D,O D,S N P	53 50 48 48 48	C,W. C,W. Perf. 10-200 ft. L. N Perf. 45-230 ft. C,L.
7bdd-1	do	1946	Dr	131	6	80 100	5 2	Sh,Ss Ss	7,604	-49.7	9-11-61	T	10R	15	10-46	P	48	Perf. 50-130 ft. L.
18acc-1 18bdc-1	C. H. Syrett do	1936 1930	Dr Du, Dr	60 45	- 60,6	3 7	57 38	C S,G	7,640 7,650	-1.0 -2.6	8-28-61 8-28-61	N C, Cy	10R -	0 -	8-36 -	N D,O, S	- 50	L. One of 2 wells. Well dug 7 ft, drilled 38 ft. W.
18bdd-1 18bdd-2	do do	1936 1960	Dr Dr	210 100	48,12 12	- 5	- 10	C G	7,650 7,650	-73.0 -1.8	8-28-61 8-28-61	N N	1R 10R	175 0	7-36 10-60	N N	- -	L. Gravel packed 95-100 ft. Perf. 5-100 ft. L.
18caa-1	do	1935	Dr	150	10,8	-	-	La	7,660	-12.8	8-28-61	N	-	-	-	N	-	
(C-36-4) 24ca-1 109bd-1	Robert Ott Layton Ott	1950 1956	Dr Dr	310 136	6 6	60 70 116 130	6 6 6 6	G Ss Ss S,G	7,620 7,650 7,650 7,650	-41.8 -59.8 -59.8 -59.8	9- 4-61 12-20-57 12-20-57 12-20-57	N N N N	40R 10R 10R 10R	14 - - -	7-50 9-56 9-56 9-56	O O O O	49 - - -	L,W. Perf. 70-76, 116-122, 130-136 ft. L,W. Perf. 35-122 ft. L.
15adb-1	U.S. Forest Service	1957	Dr	207	6	0	20	G,S,G	-	-15.0	8- 3-57	Cy	1.5R	-	8-57	D,S	53	Perf. 35-122 ft. L.
34bda-1	Utah Parks Company	1955	Dr	80	16,12	12	12	G	7,772	-	-	T	180R	-	7-55	P	-	Perf. 12-24 ft. C,L.
34bda-2	do	1956	Dr	30+	12	6	4	S,G	7,768	-4.0	9- 4-56	T	90R	17	9-56	P	-	Perf. 6-10, 18-26 ft. L.
34bda-3 36acc-1	do U.S. National Park Service	- 1948	Dr Du, Dr	34.0 80	16,12 48,12, 8	18 12 40	8 12 60	S,G S,G La	7,773 7,773 7,900	-6.5 -6.5 -30.0	3- 2-57 9-11-61 9-11-61	H J J	- 25R 30R	- 4.7 4	- 3-50 1957	O P P	- 41 -	W. Well dug 30 ft, drilled 50 ft. L.
(C-37-4) 11ddd-1	do	1960	Dr	2,000	16,14, 12,10	313 452 860 1,268 1,873	35 26 30 14 47	La Gg S,Sh Sh S	8,050	-652.0	8- 5-60	Ts	200R	134	9-60	P	55	Perf. 313-348, 452-478, 860-890, 1,268-1,282, 1,873-1,920, 1,962-1,970 ft. C.

Table 1.--Records of selected wells and test holes in the upper Sevier River basin - Continued

Well number	Owner or user	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Principal aquifer			Altitude of land-surface datum (feet)	Water level		Method of lift	Yield (gpm)	Direction (feet)	Date of measurement	Use of water	Temperature (°F)	Remarks and other data available
						Depth to top (feet)	Thickness (feet)	Character of material		Above (+) or below (-) land-surface datum (feet)	Date of measurement							
Grass Valley																		
(C-26-1)																		
12abd-1	Ellison Hansen	-	J	110.0	2	-	-	S,G	-	-13.4	9-13-61	U	-	-	-	O	-	W.
12dbc-1	Elmer Christensen	1950	J	11.0	2	-	-	S,G	-	+3.1	9-13-61	F	2M	-	9-61	I,O	47	W.
12dcb-1	do	1950	J	73.0	2	-	-	S,G	-	+5.0	9-13-61	F	2.6M	-	9-61	S	46	
13baa-1	M. L. Burr	-	J	150	2	-	-	S,G	6,899	+3.1	9-13-61	F	1M	-	9-61	S	47	
13aab-1	Frands Peterson	-	J	-	2	-	-	S,G	6,883	+2.5	10-18-61	F	.8M	-	10-61	S	54	
13add-1	A. E. DeLange	1900	J	116.0	2	-	-	S,G	6,853	+30.7	10-18-61	F	.5E	-	10-61	I	57	
23dab-1	do	-	J	100.0	2	-	-	S,G	6,853	+31.6	10-18-61	F	1E	-	10-61	S	54	
23ddb-1	do	1898	J	200	2	-	-	S,G	6,870	+12.4	3-11-58	F	3M	-	1-61	O,S	53	C,W.
24acb-1	Oliver Anderson	1934	J	140	2	-	-	S,G	6,877	+3.5	7-12-62	F	1M	-	7-62	S	51	
24aba-1	do	1956	Dr	221	4	15	41	S	-	+19.9	7-12-62	F	120M	-	7-62	I,S	52	L.
24bcc-1	A. E. DeLange	1900	J	200	2	-	-	S,G	6,855	+15.8	10-18-61	F	25M	-	10-61	I	51	
24cbb-1	do	1900	J	29.0	2	-	-	S,G	6,852	+7.2	10-18-61	F	.5E	-	10-61	I,S	54	
24ccc-1	E. R. Jensen	1935	J	200	2	-	-	S,G	6,846	+18.0	7-12-62	F	30M	-	7-62	I,S	49	
25acc-1	A. R. Brown	1905	J	127	2	-	-	S,G	6,863	+17.1	3-11-58	F	2M	-	3-58	D,O	50	W.
25bba-1	E. R. Jensen	1910	J	100	2	-	-	S,G	6,843	+11.2	7-12-62	F	6M	-	7-62	S	49	
25bdb-1	W. B. Brown	1918	J	125	2	-	-	S,G	6,858	+9.9	7-13-62	F	.5M	-	7-62	S	52	
26aab-1	E. L. Christensen	1905	J	200	2	-	-	S,G	6,852	+9.0	7-13-62	F	1M	-	7-62	I	50	One of 4 wells.
26dab-1	J. M. Bagley	1935	J	150	2	-	-	S,G	6,876	+3.0	8-14-62	F	1M	-	8-62	S	55	
34ddb-1	Rufus Hatch	1918	J	230	2	-	-	S,G	6,871	+7	8-15-62	F	.1M	-	8-62	I,S	-	
34ddd-1	Grant Brown	1910	J	150	3	-	-	S,G	6,866	+6.1	8-15-62	F	10M	-	8-62	I,S	58	
35acd-1	Orson Bagley	1903	J	145	2	-	-	S,G	6,856	+6.7	8-14-62	F	.5M	-	8-62	D,S	53	
35ecd-1	R. M. Torgersen	1937	J	120	2	-	-	S,G	-	-	-	C,F	3M	-	8-62	D,I	54	
35cdd-1	Lagrande Anderson	1911	J	-	2	-	-	S,G	6,847	+4.7	8-15-62	F	1E	-	8-62	S	53	
35dba-1	R. L. Anderson	1905	J	60	2	-	-	S,G	6,846	+15.4	8-14-62	F	.3M	-	8-62	D,S	53	
35dcb-2	Charles Helquist	1945	Dr	225	10	140	8	G	6,835	+17.6	8-31-62	F	10M	-	8-62	I,O	54	One of 2 wells. Perf. below 140 ft. C,L,W.
36bbb-1	Jerry Payne	1910	J	140	2	-	-	S,G	6,840	+9.3	8-14-62	F	3M	-	8-62	I,S	51	
36cbb-1	Koosharen Grazing and Pasture Company	1923	J	200	2	-	-	S,G	6,830	+17.8	8-14-62	F	4M	-	8-62	I,S	50	
(C-27-1)																		
1bab-1	Joseph Rickenbach	1920	J	250	2	-	-	S,G	6,811	+6.5	8-22-62	F	53M	-	8-62	I	55	One of 16 wells.
1bcb-1	do	1920	J	250	2	-	-	S,G	6,803	+20.9	8-22-62	F	6M	-	8-62	I	50	
1cbb-1	do	1920	J	250	2	-	-	S,G	6,810	+8.4	12-28-61	F	.5E	-	12-61	I,O	52	One of 3 wells. C,W.
1cbc-1	do	1945	Dr	399	8	145	5	S	6,809	+17.5	8-22-62	F	80M	-	8-62	I	52	Perf. below 145 ft. L.
2abb-3	R. D. and Lagrande Anderson	1945	Dr	283	10	163	6	S	-	-	-	-	-	-	8-62	I	54	One of 3 wells. Perf. below 100 ft. L.
2bad-4	V. A. Hatch	1936	Dr	320	6	270	36	S	-	-	-	-	-	-	9-62	I	57	One of 4 wells. L.
2bbb-1	Pauline Bagley	1910	J	130	2	-	-	S,G	6,841	+10.8	9-5-62	F	4M	-	9-62	I,S	54	
2bca-1	E. C. Bagley	1904	J	125	2	-	-	S,G	6,827	+8.8	5-8-58	F	12M	-	4-61	O,S	53	W.
2bdb-1	do	1901	J	125	2	-	-	S,G	6,825	+7.1	7-3-61	F	1M	-	8-62	I,O	53	One of 2 wells. W.
2caa-2	U.S. Geol. Survey	1962	Dr	506.0	6	70	21	S	6,816	-	-	F	35E	-	9-62	H	-	TH 14. L.
2cab-4	Rulon Torgersen	1945	Dr	435	6	351	6	G	6,825	+6.4	9-5-62	F	20M	-	9-62	I	58	One of 3 wells. Perf. below 266 ft. L.
3aaa-1	Clifton Schougaard	1915	J	150	2	-	-	S,G	6,852	+9.8	8-15-62	F	5.5M	-	8-62	S	57	
3bca-1	Estella Anderson	1910	J	75	2	-	-	S,G	6,867	+3.7	9-11-62	F	2M	-	9-62	S	56	One of 3 wells.
3ddb-1	Lamont Payne	1941	J	102	2	51	1	S	6,810	+1.8	9-11-62	F	1M	-	9-62	D,S	49	L.
10aaa-1	Carl Pearson	-	J	265	2	55	6	S	6,806	+2	9-11-62	C,F	2R	-	7-41	S	-	L.
10ada-1	Blaine Brown	1934	J	250	2	-	-	S,G	6,796	+4.9	9-11-62	F	1.5M	-	9-62	D,I	49	
11aaa-1	Joseph Rickenbach	1920	J	250	2	-	-	S,G	6,806	+12.5	9-5-62	F	3M	-	9-62	I,S	55	One of 2 wells.
11bab-1	Clifton and Donald Schougaard	1915	J	100	2	-	-	S,G	6,789	+5.7	9-11-62	F	6.3M	-	9-62	S	49	
11cbc-1	L. L. Dasturp	1900	J	75	2	-	-	S,G	6,783	+3.5	9-11-62	F	.7M	-	9-62	S	49	
14cbb-1	S. J. Hatch	1907	J	125	2	-	-	S,G	6,768	+5.1	9-14-62	F	.4M	-	9-62	D,S	50	
15adc-1	E. C. Bagley	1903	J	140	2	-	-	S,G	6,772	+6.0	9-14-62	F	35M	-	9-62	I,S	49	
15cba-1	U.S. Geol. Survey	1962	Dr	525.0	6	98	6	S	6,796	-2.5	9-8-62	C	-	-	-	S	-	TH 19. L.
15cbb-1	Talmage Bagley	1900	Du	22	36	235	21	S	6,803	-10.7	9-14-62	C	8.5R	-	9-62	D,O	-	W.

Table 1.--Records of selected wells and test holes in the upper Sevier River basin - Continued

Well number	Owner or user	Year drilled	Type of well	Depth of well (feet)	Diameter of well (inches)	Principal aquifer			Altitude of land-surface datum (feet)	Water level		Method of lift	Yield (gpm)	Drawdown (feet)	Date of measurement	Use of water	Temperature (°F)	Remarks and other data available
						Depth to top (feet)	Thickness (feet)	Character of material		Above (+) or below (-) land-surface datum (feet)	Date of measurement							
Grass Valley - Continued																		
(C-27-1)																		
15dba-1	M. C. Bell	1918	J	235	2	-	-	S,G	6,778	-4.1	9-14-62	N	-	-	-	N	-	
16dcc-1	do	1949	Dr	98	3	18	5	G	-	-27.0	3- 5-49	J	18R	7	3-49	D,I,S	53	L.
20dca-1	R. B. Sorensen	1952	Dr	150	6	92	6	S,G	-	-114.0	1-21-52	J	20R	21	1-52	D,I,S	50	L.
21baa-1	M. J. Brindley	1949	Dr	519	6	370	10	G	-	-8.0	4-29-49	J	120R	6	4-49	D,S	52	L.
21cab-2	A. and E. V. Sorensen	1943	Dr	79	5	515	4	G	-	-30.0	1-11-43	C	5R	1	1-43	D,I,S	60	One of 2 wells.
22daa-1	H. S. Cleave	1910	J	260	1.5	-	-	S,G	-	+4.5	9-14-62	F	1M	-	9-62	I,S	50	
27abc-2	do	1910	J	260	2	-	-	S,G	6,741	+2.6	3-11-58	F	1M	-	8-62	D,I,S	51	One of 2 wells. C.W.
27bac-1	U.S. Geol. Survey	1962	Dr	770.0	6	260	109	S,G	6,755	-8.5	8-30-62	N	-	-	-	N	51	TH 15. L.
28ccb-1	Newell Nielsen	-	Du	21.0	20	376	14	G	6,820	-14.0	9-18-62	J	-	-	-	D,O,S	51	W.
29dba-1	Dean and G. A. Bagley and Lynn Wingot	1943	Dr	155	5	128	27	G	6,850	-120.0	2- 5-43	Cy	5R	0	2-43	D,S	60	Perf. 128-155 ft. L.
29ddd-1	K. B. Brown	1951	Dr	149	6	43	2	G	6,827	-80.0	6- 1-51	J	5R	10	6-51	D,I,S	-	L.
(C-28-1)																		
4acb-1	Victor and Grant Magelby	1914	J	215	2	-	-	S,G	6,710	+6.5	9-18-62	F	4M	-	9-62	O,S	52	W.
(C-29-2)																		
25cac-1	Mosiel Jolley	1942	Dr	66	4	54	12	S,G	6,415	-23.0	10-27-42	Cy	5R	1	10-42	D,S	53	L.
26dac-1	U.S. Geol. Survey	1962	Dr	496.0	6	15	70	G	6,410	-21.5	8-29-62	N	-	-	-	N	56	TH 18. L.
35bad-1	G. D. Moore	1952	Dr	197	6	101	99	G	6,405	-21.1	9-14-61	J	10R	25	7-52	D,I,O,S	54	C,L,W.
35bdb-1	Don Childs	1942	Dr	95	4	150	47	S,G	6,410	-21.6	9-14-61	J	5R	0	11-42	D,S	55	L.
36cab-1	George Bridges	1955	Du	25	24	20	5	G	6,395	-21	9-14-61	C	-	-	-	D,S	56	
(D-25-1)																		
8ccd-1	King Brothers, Inc.	1949	Dr	310	6	35	12	S,G	-	-15.4	8-18-61	C	50R	2	5-49	O,S	54	L,W.
17ddc-1	Cecil King	-	J	52.0	1	108	48	S	-	-	-	F	.5M	-	8-61	D,S	58	C.
19add-1	Don McMillan	1898	J	12.0	2	280	30	G	7,012	+4.6	8-18-61	F	20M	-	8-61	I,O,S	51	One of 2 wells. W.
31cbd-1	Charles Burr	-	J	38.0	2	-	-	S,G	-	+3.2	3-11-58	F	1M	-	7-58	O,S	51	W.
31ddb-1	Hellie Dastrup	1960	J	112	2	11	101	G	-	+5.3	7- 60	F	.5M	-	8-61	S	53	L.

- 1/ Test hole 21 of central Sevier Valley drilling program, see Carpenter, C. H. and Young, R. A., 1963, Ground-water data, central Sevier Valley, parts of Sanpete, Sevier, and Piute Counties, Utah: U.S. Geol. Survey open-file rept. (duplicated as Basic-Data Rept. No. 3), p. 32.
- 2/ Test hole 22 of central Sevier Valley drilling program, see Young, R. A., 1960, Ground-water areas and well logs, central Sevier Valley, Utah: U.S. Geol. Survey open-file rept., p. 6.

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Table 2.--Records of selected springs in the upper Sevier River basin

Geologic source: Qal, Quaternary alluvium; QTer, Sevier River Formation (lower Pleistocene or upper Pliocene); Tbw, Brian Head and Wasatch Formations (undifferentiated) (Miocene? and Eocene); Tv, Tertiary volcanic rock; Ksu, Cretaceous sandstone (undifferentiated). Yield (gpm, gallons per minute): E, estimated; M, measured; R, reported. Use of water: D, domestic; I, irrigation; P, public supply; S, stock. Improvements, other data available, and remarks: C, chemical analysis in table 3.

Location	Owner or user	Name	Altitude of land-surface datum (feet)	Geologic source			Yield (gpm)	Date of measurement	Use of water	Temperature (°F)	Improvements, other data available, and remarks
				Type of rock	Formation	Nature of openings					
Panguitch Valley											
(C-32-5) 23baa	Ted Perkins	Hawkin Spring	6,350	Alluvium	Qal	Formation contact with underlying igneous intrusive	110M	8-62	I, S	51	Collecting chamber, pipeline, ditches, and small reservoir. Ditches. Part of spring area also in (C-32-5) 26a and 26d. C.
35abb	Marshall Ditch Company	Marshall Slough	6,355	do	Qal	Seepage area in valley fill	1,350M	8-55	I, S	44-57	
35d	do	Vester Slough	6,370	do	Qal	Seepage area at toe of alluvial fan	450E	10-62	I, S	54	
(C-33-5) 9dac	Peter LeFevre	North LeFevre Spring	6,440	do	Qal	Formation contact of thin Qal with underlying Tbw sandstone	30E	1-62	I, S	43	Small reservoir.
9dcc	do	South LeFevre Spring	6,450	do	Qal	do	10R	10-61	D, S	-	Collecting chamber and pipeline.
16cdc	Stanley Tebbes	Tebbes Spring	6,460	do	Qal	do	280M	5-62	I, S	50-68	Small reservoir. C.
17ac	Peter and George LeFevre	-	-	Sandstone and conglomerate	Tbw	Fault zone	15M	7-62	D, I, S	79-90	Collecting chamber and pipeline. Part of spring area also in (C-33-5) 17da.
(C-33-6) 5ccb	Various water users	Bear Creek Spring	7,400	Volcanic	Tv	Fractures and joints	10E	6-62	D, S	64	C.
(C-34-5) 34aac	Jack Riggs	Riggs Spring	6,610	Alluvium	Qal	Formation contact with underlying QTer sandstone and agglomerate	5E	1-62	I, S	43-52	Small reservoir. C.
(C-34-6) 18c	City of Panguitch	Panguitch Springs	8,200	Volcanic	Tv	Fractures and joints	475R	12-61	P	51	Collecting chambers, pipeline, and 500,000 gallon capacity headhouse. C.
21aca	Various water users	Five Mile Trough Spring	7,800	Sandstone	Tbw	do	.5M	5-62	D, S	47	Collecting chamber and water tank.
(C-35-4) 19cbc	Margaret Haycock	Red Canyon Spring	6,820	Alluvium	Qal	Formation contact with underlying QTer	450M	11-62	I, S	53	Ditch and small reservoir.
(C-35-5) 14ac	do	Casto Springs	6,790	do	QTer	Seepage from gravel	50M	11-62	I, S	48-50	Do.
24dc	J. W. Myers	Watercress Springs	6,800	do	QTer	do	5E	9-62	I, S	48	C.
25ab	do	Myers Springs	6,800	do	QTer	do	450M	11-62	I, S	47-50	Headhouse, several ditches, and several small reservoirs.
(C-36-5) 16c	C. A. Henton	Johnson Creek Springs	6,920	do	Qal	Seepage at toe of dissected old alluvial fan	200R	-	I, S	48-51	Ditches and small reservoir.
22a	Jay and Dudley Proctor	Proctor Springs	6,960	do	Qal	do	10E	10-62	I, S	48-51	Do.
28c	H. S. Barnhurst and A. D. Wilson	Hatch Springs	6,980	do	Qal	do	Wet spots	10-62	I, S	48	Ditches. Part of spring area also in (C-36-5) 28d.
(C-36-7) 18acb 31dac	Various water users do	Blue Spring Mammoth Spring	8,480 8,200	Limestone do	Tbw Tbw	Solution channels do	4,500E 900M 121,000M	8-62 4-57 6-57	I, S I, S	43 40-41	Ditches. C.
(C-37-6) 32dac	do	Upper Asay Spring	7,120	do	Tbw	do	3,600M	10-62	I, S	47	Ditches. C.
33bc	do	Lower Asay Spring	7,100	do	Tbw	do	13,000M	8-54	I, S	50-51	C.
33ddc	do	Cub Spring	7,240	do	Tbw	do	25M	10-62	I, S	48	Small reservoir.
(C-38-8) 12cd	do	Duck Creek Spring	8,535	do	Tbw	do	4,200-11,200M	8-54	I, S	45-50	Small reservoir. C.

Table 2.--Records of selected springs in the upper Sevier River basin - Continued

Location	Owner or user	Name	Altitude of land-surface datum (feet)	Geologic source			Yield (gpm)	Date of measurement	Use of water	Temperature (°F)	Improvements, other data available, and remarks
				Type of rock	Formation	Nature of openings					
Circle Valley											
(C-30-3) 17cba	Junction Irrigation Company	Mitchell Slough	6,020	Alluvium	Qal	Seepage area in valley fill	3,670M	8-60	I,S	50-59	Ditches and concrete-lined canal. Part of spring area also in (C-30-3) 18a and (C-30-4) 13abd. C.
(C-30-4) 3b	Harold Pearson	Oak Basin Spring	6,500	Volcanic	Tv	Fractures and joints	15M	5-62	I,S	64	
16ab	Town of Circleville	Circleville Spring	7,000	do	Tv	do	60M	12-62	P	44	Collecting chamber, pipeline, and 80,000 gallon capacity head-house. C.
21c	do	Wades Canyon Spring	7,000	do	Tv	do	-	-	S	-	C.
East Fork Valley											
(C-30-24) 17d	Town of Kingston	-	-	Volcanic	Tv	Fractures and joints	-	-	S	-	C.
(C-30-3) 24aab	do	Kingston Spring	6,300	do	Tv	do	15M	12-62	P	53	Collecting chamber, pipeline, and 20,000 gallon capacity head-house. C.
(C-31-2) 19bb	Town of Antimony	Antimony Spring	7,100	do	Tv	do	220R	7-62	P	53	Collecting chamber, pipeline, and 80,000 gallon capacity head-house. C.
27ca	R. F. Hall	Clark or Clear Spring	6,330	do	Tbw	Contact of basalt over conglomerate	50R	-	I,S	53	
(C-32-2) 2acd	Various water users	-	6,390	do	Tbw	do	450E	6-62	I	50	Ditches. C.
11ba	K. E. Wegman	Ant Creek Spring	6,700	do	Tbw	do	340M	8-62	I,S	60	Ditches and small reservoir. Part of spring area also in (C-32-2) 11bd.
11cd	H. S. Gleeve	Gleeve Spring	6,700	do	Tbw	do	300M	8-62	D,I,S	60	Do.
23adb	Various water users	Deer Creek Spring	7,114	do	Tbw	Fractures and joints	1,640M	8-62	I,S	50	C.
(C-34-3) 27ddc	do	Tom Best Spring	7,600	Limestone	Tbw	Fractures and solution channels	500E	7-62	I,S	50	Collecting chamber and ditch. C.
(C-35-2) 19aa	do	Dipping Vat Spring	7,600	do	Tbw	Fractures and solution channels near fault contact with Kau sandstone	5M	11-62	D,S	45	Water trough.
(C-36-3) 4cba	V. Hatch	King Spring	7,580	Alluvium	Qal	Formation contact with underlying Kau sandstone	1M	11-62	S	52	Ditch.
(C-37-4) 17bba	Various water users	Cold Spring	7,850	Sandstone	Kau	Fractures and joints near contact with Tbw	10M	6-62	D,S	44	C.
Grass Valley											
(C-25-1) 26bc	Burrville Irrigation Company and Town of Burrville	Burr Springs	7,500	Volcanic	Tv	Fractures and joints	1,440M	7-62	I,P,S	50	Collecting chamber, pipeline, and 1,700 gallon capacity head-house. C.
(C-26-1) 13c	Frands Peterson and Soren Sorenson	Red Cedar Grove Springs	6,880	do	Tv	do	340M	12-62	I,S	53-58	Ditches. Part of spring area also in (C-26-1) 14d and 23a.
(C-27-1) 1ab	Joseph Rickenbach	Koosharem or School Section Springs	6,830	do	Tv	do	120M	8-62	I,S	53	Collecting ditch.
8adb	James Brindley	Brindley Spring	7,400	do	Tv	do	50E	10-63	D,S	58	Pipeline and collecting chambers.
35a	Various water users	Parker Mountain Springs	7,500	do	Tv	do	50E	6-61	S	54-57	Part of spring area also in (C-27-1) 35d.
(C-29-2) 15cbb	Gerald Allen	Pole Canyon Spring	6,600	do	Tv	do	270M	7-62	I	53	Small reservoir and pipeline. C.
(C-30-1) 5b	George Bridges	Pete's Spring No. 1	7,500	do	Tv	do	223E	10-63	I,S	61	Ditch.
(D-26-1) 30ab	Town of Koosharem	Brown Spring	7,000	do	Tv	Fractures near fault zone	200E	8-62	P	53	Collecting chamber, pipeline, and 4,500 gallon capacity head-house. C.

Table 3.--Water levels in observation wells in the upper Sevier River basin

Water levels in feet below land-surface datum are designated by a minus (-) sign immediately before the first entry in the table, those above land-surface datum are designated similarly by a plus (+) sign. Where some measurements are above and others below land-surface datum, the readings between plus signs are above the plane of reference, those between minus signs are below the plane of reference.

An asterisk (*) immediately after a measurement indicates that the measurement was made by the U.S. National Park Service; all other measurements were made by the U.S. Geological Survey. Measurements preceding the first listed measurement for some of the wells have been published in the following Water-Supply Papers of the Geological Survey:

Year	Number	Year	Number	Year	Number	Year	Number	Year	Number	Year	Number	Year	Number
1936	817	1939	886	1942	948	1945	1027	1948	1130	1951	1195	1954	1325
1937	840	1940	910	1943	990	1946	1075	1949	1160	1952	1225	1955	1408
1938	845	1941	940	1944	1020	1947	1100	1950	1169	1953	1269		

Panguitch Valley

(C-32-5)26aca-1. Equipped with automatic water-level recording gage, July 31, 1961 to Jan. 4, 1963. Water levels reported between these dates are at noon, from recorder graphs. Records available 1951-63.

Aug. 1, 1951	-13.1	Jan. 6, 1961	-13.8	May 31, 1962	-10.9
Dec. 9	13.8	Feb. 28	15.0	June 30	11.5
Apr. 6, 1952	13.9	Mar. 22	16.6	July 31	11.0
Dec. 7	13.5	Apr. 25	16.4	Aug. 31	11.3
Mar. 16, 1953	14.1	May 24	11.2	Sept. 30	11.6
Dec. 10	13.5	July 5	11.2	Oct. 31	13.6
Dec. 23, 1954	14.1	July 27	10.9	Nov. 30	13.4
Aug. 2	14.4	Aug. 31	11.5	Dec. 26	14.1
Dec. 4, 1955	13.4	Aug. 31	12.4	Jan. 28, 1963	14.4
Mar. 20, 1956	15.2	Sept. 30	13.2	Feb. 27	14.2
Dec. 22	14.0	Oct. 31	13.8	Mar. 25	14.0
Mar. 30, 1957	14.6	Nov. 30	14.1	Apr. 29	13.4
Dec. 20	14.3	Dec. 31	14.3	May 29	10.6
Apr. 3, 1958	13.5	Jan. 31, 1962	14.4	July 2	10.9
Dec. 23	13.9	Feb. 28	14.0	July 30	11.6
Apr. 11, 1959	14.1	Mar. 31	13.7	Aug. 28	11.5
Dec. 23	15.0	Apr. 30	10.7	Sept. 23	12.1
Apr. 9, 1960	14.8				

(C-32-5)35bab-1. Records available 1962-63.	
July 23, 1962	+3.0
Dec. 3, 1962	+2.9
May 29, 1963	+3.0
July 31	2.8
Jan. 28, 1963	2.5
July 2	3.0
Aug. 28	2.9
Feb. 27	2.5
July 30	3.1
Sept. 24	2.9
Mar. 25	2.7
Aug. 28	2.9
Oct. 29	2.8
Apr. 29	3.0

(C-33-5)9adb-1. Records available 1951-63					
Aug. 1, 1951	-0.8	Feb. 28, 1961	-2.3	July 3, 1962	-0.9
Dec. 9	2.5	Mar. 22	1.9	July 31	1.9
Apr. 6, 1952	.9	Apr. 25	2.2	Aug. 28	2.6
Mar. 16, 1953	.4	May 24	1.5	Sept. 24	3.1
Mar. 25, 1954	.5	July 5	2.1	Oct. 29	2.9
Dec. 2	.2	July 27	2.9	Dec. 3	2.4
Dec. 4, 1955	2.3	Aug. 23	3.3	Dec. 26	2.4
Mar. 20, 1956	1.9	Sept. 25	3.1	Jan. 28, 1963	2.1
Dec. 22	3.0	Oct. 30	2.9	Feb. 27	1.7
Mar. 30, 1957	2.0	Nov. 27	2.6	Mar. 25	.2
Sept. 23	.8	Dec. 27	2.3	Apr. 29	1.2
Dec. 20	.3	Feb. 1, 1962	2.3	July 2	2.2
Apr. 3, 1958	1.1	Mar. 5	2.1	July 30	2.2
Apr. 11, 1959	1.1	Apr. 2	1.6	Aug. 28	2.8
Apr. 9, 1960	1.3	Apr. 30	.4	Sept. 23	2.6
Jan. 6, 1961	2.3	May 28	.1		

(C-33-5)10cdd-1. Records available 1961-63					
Oct. 23, 1961	-28.5	July 3, 1962	-25.4	Feb. 27, 1963	-29.1
Oct. 30	28.3	July 31	25.8	Mar. 25	29.3
Nov. 27	28.3	Aug. 28	26.6	Apr. 29	29.5
Dec. 27	28.8	Sept. 24	26.7	May 29	27.7
Feb. 1, 1962	29.3	Oct. 29	27.8	July 2	28.0
Mar. 5	29.4	Dec. 3	28.2	July 30	28.3
Apr. 2	29.0	Dec. 26	28.6	Aug. 28	28.0
Apr. 30	28.8	Jan. 28, 1963	28.7	Sept. 23	27.4
May 28	24.6				

(C-33-5)28bcd-1. Records available 1937-63					
Mar. 20, 1956	-47.5	July 27, 1961	-49.8	Sept. 24, 1962	-46.8
Dec. 21	49.5	Aug. 23	48.6	Oct. 29	47.9
Mar. 30, 1957	51.1	Sept. 25	48.6	Dec. 3	47.5
Dec. 20	47.7	Oct. 30	49.0	Dec. 26	48.5
Apr. 3, 1958	49.8	Nov. 27	49.0	Jan. 28, 1963	49.2
Apr. 11, 1959	47.3	Dec. 27	49.6	Feb. 27	49.4
Dec. 23	48.3	Feb. 1, 1962	50.6	Mar. 25	50.1
Apr. 9, 1960	50.3	Mar. 5	50.3	Apr. 29	49.4
Jan. 16, 1961	53.0	Apr. 2	50.1	May 29	48.5
Feb. 28	50.4	Apr. 30	50.6	July 2	48.5
Mar. 22	50.3	May 28	50.1	July 30	48.7
Apr. 25	51.3	July 31	47.1	Aug. 28	48.0
May 24	51.5	July 31	48.0	Sept. 23	48.2
July 5	50.2	Aug. 28	46.7		

(C-34-5)2ebc-1. Records available 1961-63					
Oct. 16, 1961	-89.4	July 3, 1962	-87.7	Feb. 27, 1963	-84.0
Oct. 30	88.5	July 31	87.0	Mar. 25	84.8
Nov. 27	86.8	Aug. 28	86.4	Apr. 29	85.3
Dec. 27	87.2	Sept. 24	85.9	May 29	84.4
Feb. 1, 1962	88.5	Oct. 29	82.7	July 1	84.4
Mar. 5	90.0	Dec. 3	80.7	July 30	84.3
Apr. 2	90.4	Dec. 26	81.0	Aug. 28	84.6
Apr. 30	90.2	Jan. 28, 1963	82.7	Sept. 23	84.1
May 28	88.9				

(C-34-5)4add-1.		Records available 1951-54, 1956-63			
Aug. 1, 1951	-10.2	Apr. 9, 1960	-15.7	May 28, 1962	-12.6
Dec. 9	9.0	Feb. 28, 1961	17.5	July 3	9.8
Dec. 7, 1952	7.8	Mar. 22	16.9	July 31	8.4
Mar. 16, 1953	14.6	Apr. 25	12.6	Aug. 28	9.1
Dec. 10	9.6	May 24	12.4	Sept. 24	9.2
Mar. 25, 1954	16.4	July 5	15.1	Oct. 29	6.9
Dec. 2	6.1	July 27	16.0	Dec. 3	8.7
Mar. 20, 1956	17.7	Aug. 23	15.9	Jan. 28, 1963	13.0
Dec. 22	15.9	Sept. 25	12.9	Feb. 27	16.0
Mar. 30, 1957	13.7	Oct. 30	6.6	Mar. 25	15.4
Sept. 23	3.2	Nov. 27	8.6	Apr. 29	13.3
Dec. 20	9.9	Dec. 27	13.4	May 29	11.2
Apr. 3, 1958	14.8	Feb. 1, 1962	16.0	July 1	12.0
Dec. 23	8.6	Mar. 5	17.5	July 30	12.6
Apr. 11, 1959	10.3	Apr. 2	17.3	Aug. 28	11.4
Dec. 23	11.4	Apr. 30	16.8	Sept. 23	10.3

(C-34-5)8adb-2. Records available 1955-63					
Mar. 20, 1956	-18.6	July 5, 1961	-18.9	Aug. 28, 1962	-13.2
Dec. 21	19.7	July 27	18.9	Sept. 24	15.3
Mar. 30, 1957	20.1	Aug. 23	18.6	Oct. 29	16.3
Dec. 20	17.1	Sept. 25	18.3	Dec. 3	17.3
Apr. 3, 1958	17.6	Oct. 30	18.8	Dec. 26	18.3
Dec. 23	16.2	Nov. 27	19.2	Jan. 28, 1963	19.0
Apr. 11, 1959	18.3	Dec. 27	19.7	Feb. 27	19.3
Dec. 23	18.1	Feb. 1, 1962	20.2	Mar. 25	19.5
Apr. 9, 1960	19.2	Mar. 5	20.2	Apr. 29	19.6
Jan. 6, 1961	19.7	Apr. 2	20.2	May 29	19.3
Feb. 28	20.1	Apr. 30	19.5	July 2	18.6
Mar. 22	19.8	May 28	18.2	July 30	18.0
Apr. 25	19.6	July 3	16.2	Aug. 28	17.9
May 24	19.0	July 31	15.6	Sept. 23	18.2

(C-34-5)20dbd-1. Equipped with automatic water-level recording gage, July 31, 1961 to Jan. 9, 1963. Water levels reported between these dates are at noon, from recorder graphs. Records available 1951-63.					
Aug. 1, 1951	-18.6	Apr. 9, 1960	-15.7	May 31, 1962	-12.8
Dec. 9	19.4	Feb. 28, 1961	13.2	June 30	8
Apr. 6, 1952	12.8	Mar. 22	17.5	July 31	4
Dec. 7	14.3	Apr. 25	18.2	Aug. 31	6
Mar. 16, 1953	14.0	May 24	21.0	Sept. 30	7
Dec. 10	16.4	July 5	6.7	Oct. 31	10
Mar. 25, 1954	19.5	July 27	12.8	Nov. 30	13
Dec. 2	18.6	July 31	11.0	Dec. 31	16
Dec. 4, 1955	18.0	Aug. 31	9.8	Jan. 28, 1963	17
Mar. 20, 1956	19.8	Sept. 30	12.0	Feb. 27	17
Mar. 30, 1957	21.0	Oct. 31	16.1	Mar. 25	18
Sept. 23	9.3	Nov. 30	18.1	Apr. 29	18
Dec. 20	18.0	Dec. 31	19.4	May 29	15
Apr. 3, 1958	13.0	Jan. 31, 1962	20.5	July 1	13
Dec. 23	17.4	Feb. 28	20.5	July 30	13
Apr. 11, 1959	16.2	Mar. 31	8.9	Aug. 28	14
Dec. 23	18.2	Apr. 30	11.1	Sept. 23	13

(C-34-5)21adc-1. Records available 1961-63					
Oct. 3, 1961	-24.0	July 3, 1962	-14.1	Feb. 27, 1963	-25.7
Oct. 30	22.4	July 31	13.4	Mar. 25	26.4
Nov. 27	23.0	Aug. 28	13.9	Apr. 29	25.5
Dec. 27	24.5	Sept. 24	17.5	May 29	23.5
Feb. 1, 1962	25.9	Oct. 29	20.2	July 1	22.4
Mar. 5	26.8	Dec. 3	22.4	July 30	22.1
Apr. 2	27.2	Dec. 26	23.5	Aug. 28	21.7
Apr. 30	26.9	Jan. 28, 1963	24.7	Sept. 23	22.9
May 28	23.3				

(C-35-5)2bcc-1. Records available 1961-62					
Aug. 14, 1961	-10.7	May 28, 1962	-8.1	Feb. 27, 1963	-11.7
Sept. 25	10.7	July 3	7.8	Mar. 25	11.9
Oct. 30	10.6	July 31	8.8	Apr. 29	10.6
Nov. 27	11.6	Aug. 28	10.1	May 28	8.3
Dec. 27	12.5	Sept. 24	8.3	July 1	9.4
Feb. 1, 1962	12.2	Oct. 29	9.9	July 30	10.7
Mar. 5	12.4	Dec. 3	10.6	Aug. 28	9.2
Apr. 2	12.0	Dec. 26	11.2	Sept. 23	10.4
Apr. 30	11.2	Jan. 28, 1963	10.9		

(C-35-5)35adb-2. Records available 1951-63					
July 31, 1951	-24.0	Mar. 24, 1954	-25.4	Sept. 23, 1957	-23.6
Dec. 8	24.9	Dec. 2	25.4	Dec. 30	26.2
Apr. 5, 1952	24.6	Dec. 3, 1955	24.5	Apr. 3, 1958	25.1
Dec. 6	24.6	Mar. 19, 1956	25.4	Dec. 23	24.9
Mar. 15, 1953	25.2	Dec. 21	25.1	Apr. 11, 1959	25.8
Dec. 8	24.9	Mar. 29, 1957	26.3	Dec. 23	25.4

Table 3.--Water levels in observation wells in the upper Sevier River basin - Continued

Panguitch Valley - Continued															
(C-35-5)35ddb-2 - Continued						(C-36-5)28bdc-1. Records available 1962-63									
Apr. 9, 1960	-25.3	Dec. 27, 1961	-24.8	Dec. 3, 1962	-25.2	July 31, 1962	-5.4	Dec. 26, 1962	-5.3	May 28, 1963	-5.1				
Jan. 6, 1961	24.9	Feb. 1, 1962	24.8	Dec. 26	24.7	Aug. 28	5.6	Jan. 28, 1963	5.9	July 1	5.5				
Feb. 28	25.3	Mar. 5	25.1	Jan. 28, 1963	24.5	Sept. 24	5.5	Feb. 27	6.1	July 30	5.9				
Mar. 22	25.6	Apr. 2	24.3	Feb. 27	25.2	Oct. 29	5.2	Mar. 25	6.0	Aug. 28	5.6				
Apr. 25	25.8	Apr. 30	24.0	Mar. 25	25.4	Dec. 3	5.3	Apr. 29	5.9	Sept. 23	5.6				
May 24	23.5	May 28	23.6	Apr. 29	23.7	(C-36-5)29dcd-1. Records available 1961-62									
July 5	24.0	July 3	23.5	May 28	23.0	Sept. 25, 1961	-46.3	Oct. 29, 1962	-46.0	Dec. 3, 1962	-44.0				
July 27	24.3	July 31	23.1	July 1	23.3	May 28, 1962	49.0								
Aug. 23	23.8	Aug. 28	23.4	July 30	23.9										
Sept. 25	24.7	Sept. 24	23.1	Aug. 28	23.9										
Oct. 30	24.6	Oct. 29	24.3	Sept. 23	24.0										
Nov. 27	24.9														
Circle Valley															
(C-30-3)15bba-1. Equipped with automatic water-level recording gage, Oct. 26, 1956 to May 11, 1960. Water levels reported between these dates are at noon, from recorder graphs. Records available 1955-63						(C-30-3)30bas-1 - Continued									
Sept. 11, 1956	-15.7	Feb. 28, 1959	-23.7	July 3, 1961	-15.2	May 28, 1962	-8.6	Dec. 3, 1962	-9.1	May 29, 1963	-9.2				
Oct. 31	19.8	Mar. 31	23.9	July 25	12.4	July 1	7.9	Dec. 26	9.6	July 2	10.1				
Nov. 30	22.7	Apr. 30	18.8	Aug. 22	13.8	Aug. 1	9.1	Jan. 28, 1963	10.0	July 30	11.0				
Dec. 31	24.8	May 31	16.0	Sept. 25	13.2	Aug. 28	9.8	Feb. 27	10.4	Aug. 28	11.1				
Jan. 31, 1957	26.3	June 30	15.1	Oct. 30	18.5	Sept. 24	10.0	Mar. 25	10.6	Sept. 23	10.5				
Feb. 28	27.3	July 31	14.8	Nov. 27	21.5	Oct. 29	9.0	Apr. 29	10.2						
Mar. 17	27.4	Aug. 31	14.5	Dec. 27	23.6	(C-30-3)30caa-1. Equipped with automatic water-level recording gage, Feb. 8, 1961. Water levels reported after this date are at noon, from recorder graphs. Records available 1960-63									
Apr. 28	24.3	Sept. 30	13.1	Feb. 1, 1962	25.4	June 4, 1960	-20.9	Aug. 31, 1961	-23.7	Sept. 30, 1962	-21.9				
May 31	19.0	Oct. 31	18.8	Mar. 5	26.6	June 20	21.7	Sept. 30	23.0	Oct. 31	21.0				
June 30	16.0	Nov. 30	20.5	Mar. 30	27.6	July 25	23.4	Oct. 31	23.0	Nov. 30	21.0				
July 31	14.5	Dec. 31	22.5	Apr. 30	22.4	Aug. 30	24.1	Nov. 30	23.1	Dec. 26	21.6				
Aug. 31	13.8	Jan. 31, 1960	24.5	May 28	16.1	Sept. 26	24.2	Dec. 31	23.6	Jan. 31, 1963	22.0				
Sept. 30	14.7	Feb. 29	25.6	July 3	13.4	Oct. 25	23.5	Jan. 31, 1962	23.5	Feb. 28	22.5				
Oct. 31	19.1	Mar. 31	26.8	Aug. 1	12.3	Nov. 25	22.8	Feb. 28	24.0	Mar. 31	22.5				
Nov. 30	21.9	Apr. 30	22.0	Aug. 28	12.8	Dec. 29	23.3	Mar. 31	24.1	Apr. 30	22.2				
Dec. 31	24.1	May 23	16.5	Sept. 24	12.4	Jan. 26, 1961	23.5	Apr. 30	23.0	May 31	21.2				
Jan. 31, 1958	25.7	June 20	15.1	Oct. 29	17.2	Feb. 28	23.8	May 31	20.8	July 2	22.0				
Feb. 28	26.6	July 25	13.8	Dec. 3	20.6	Mar. 31	23.8	June 30	19.7	July 30	22.9				
Mar. 31	27.2	Aug. 30	14.7	Dec. 26	22.2	Apr. 25	22.7	July 31	20.8	Aug. 28	23.0				
Apr. 30	25.6	Sept. 26	14.7	Jan. 28, 1963	23.9	May 22	21.9	Aug. 31	21.7	Sept. 23	22.5				
May 31	14.3	Oct. 25	18.7	Feb. 27	25.1	July 31	23.5								
June 30	12.6	Nov. 25	20.6	Mar. 25	25.8	(C-30-3)32bbb-1. Records available 1962-63									
July 31	11.6	Dec. 29	23.8	Apr. 29	20.8	Oct. 1, 1962	-67.5	Feb. 27, 1963	-73.6	July 2, 1963	-73.9				
Aug. 31	11.0	Jan. 26, 1961	25.7	May 28	15.8	Oct. 29	73.8	Mar. 25	73.7	July 30	74.0				
Sept. 30	12.8	Feb. 23	27.7	July 1	13.9	Dec. 3	73.2	Apr. 29	73.8	Aug. 28	74.1				
Oct. 31	17.0	Mar. 20	28.1	July 30	12.5	Dec. 26	73.1	May 29	73.9	Sept. 23	74.1				
Nov. 30	18.1	Apr. 21	25.9	Aug. 28	12.0	Jan. 28, 1963	73.4								
Dec. 31	20.9	May 22	17.6	Sept. 23	11.2	(C-30-4)14abd-1. Records available 1962-63									
Jan. 31, 1959	22.7														
(C-30-3)16bbb-1. Records available 1956, 1959-63						Jan. 16, 1962	-7.4	Aug. 28, 1962	-9.3	Mar. 25, 1963	-9.9				
Nov. 28, 1956	-15.5	Oct. 25, 1960	-24.5	Apr. 30, 1962	-25.7	Feb. 1	8.2	Sept. 24	10.3	Apr. 29	7.3				
May 13, 1959	29.9	Nov. 25	24.8	May 28	23.5	Mar. 5	7.9	Oct. 29	7.6	May 29	7.1				
May 25	23.7	Dec. 29	25.9	July 3	22.8	Mar. 30	7.7	Dec. 3	7.2	July 2	7.3				
June 25	23.3	Jan. 26, 1961	26.6	Aug. 1	22.5	Apr. 30	6.6	Dec. 26	7.4	July 30	11.3				
July 27	23.9	Feb. 23	27.0	Aug. 28	22.3	May 28	5.0	Jan. 28, 1963	8.7	Aug. 28	12.0				
Aug. 24	23.1	Mar. 20	26.9	Sept. 24	22.4	July 3	5.2	Feb. 27	8.2	Sept. 23	13.6				
Sept. 28	22.8	Apr. 21	27.2	Oct. 29	23.5	Aug. 1	7.4								
Oct. 26	24.0	May 22	25.3	Dec. 3	24.8	(C-30-4)25bcc-1. Records available 1938-50, 1960-63									
Nov. 23	24.6	July 3	24.5	Dec. 26	25.5	Oct. 23, 1960	-23.0	Nov. 27, 1961	-23.5	Oct. 29, 1962	-20.1				
Dec. 28	23.4	July 25	23.8	Jan. 28, 1963	26.3	Nov. 25	22.0	Dec. 27	24.0	Dec. 3	20.9				
Jan. 25, 1960	26.0	Aug. 22	23.4	Feb. 27	26.5	Dec. 29	23.0	Feb. 1, 1962	23.5	Dec. 26	21.5				
Feb. 25	26.4	Sept. 25	23.6	Mar. 25	26.8	Jan. 26, 1961	24.0	Mar. 5	24.5	Jan. 28, 1963	21.9				
Mar. 29	26.7	Oct. 30	24.6	Apr. 29	26.0	Feb. 23	24.5	Mar. 30	24.5	Feb. 27	22.4				
Apr. 26	26.2	Nov. 27	25.5	May 28	25.0	Mar. 22	24.0	Apr. 30	23.1	Mar. 25	22.7				
May 23	24.8	Dec. 27	26.4	July 1	23.9	Sept. 25	22.5	May 28	18.7	Sept. 23	21.7				
June 20	24.1	Feb. 1, 1962	27.2	July 30	23.7	Oct. 30	22.5	July 3	17.5						
July 25	24.3	Mar. 5	27.3	Aug. 28	23.5	(C-30-4)26dcb-1. Records available 1956, 1961-63									
Aug. 30	23.9	Mar. 30	27.3	Sept. 23	22.9	Nov. 27, 1956	-31.5	Mar. 30, 1962	-36.9	Dec. 26, 1962	-34.6				
Sept. 26	23.8														
(C-30-3)20bab-1. Records available 1961-63						Oct. 30, 1961	38.4	Apr. 30	36.5	Jan. 28, 1963	35.4				
Dec. 4, 1961	-1.6	Aug. 1, 1962	-2.7	Mar. 25, 1963	-1.6	Nov. 27	38.4	May 28	32.4	Feb. 27	35.4				
Dec. 27	1.7	Aug. 28	3.0	Apr. 29	2.0	Dec. 27	38.4	May 28	32.4	Feb. 27	35.4				
Feb. 1, 1962	1.7	Sept. 24	2.9	May 29	2.4	Dec. 27	38.9	Oct. 29	33.4	Mar. 25	35.9				
Mar. 5	1.7	Oct. 29	1.5	July 2	2.9	Feb. 1, 1962	38.9	Dec. 3	33.7	Apr. 29	35.4				
Mar. 30	1.1	Dec. 3	1.5	July 30	3.1	Mar. 5	37.9								
Apr. 30	.6	Dec. 26	1.5	Aug. 28	2.8	(C-30-4)34dce-2. Records available 1961-63									
May 28	.8	Jan. 28, 1963	1.3	Sept. 23	2.3	Dec. 4, 1961	-68.5	July 31, 1962	-63.0	Mar. 25, 1963	-65.2				
July 3	1.8	Feb. 27	1.3												
(C-30-3)30baa-1. Records available 1956, 1959-63						Dec. 27	67.0	Aug. 28	62.1	Apr. 29	64.7				
Nov. 28, 1956	-10.4	Feb. 25, 1960	-10.5	Apr. 25, 1961	-10.4	Feb. 1, 1962	67.1	Sept. 24	63.4	May 29	60.5				
Mar. 2, 1959	9.1	Mar. 29	10.8	May 22	9.9	Mar. 5	67.3	Oct. 29	62.1	July 2	62.8				
Mar. 25	9.5	Apr. 26	10.0	July 3	10.8	Mar. 30	67.3	Dec. 3	64.1	July 30	64.2				
May 1	8.7	May 23	9.6	July 25	11.2	Apr. 30	64.5	Dec. 26	64.7	Aug. 28	64.2				
May 25	9.1	June 20	10.1	Aug. 22	11.7	May 28	62.1	Jan. 28, 1963	64.2	Sept. 23	63.3				
June 25	9.8	July 25	11.2	Sept. 25	10.8	July 3	61.8	Feb. 27	64.8						
July 27	10.4	Aug. 30	11.8	Oct. 30	10.8	(C-30-4)35dab-1. Records available 1962-63									
Aug. 24	10.4	Sept. 26	11.8	Nov. 27	10.9	Oct. 1, 1962	-47.3	Feb. 27, 1963	-48.7	July 2, 1963	-47.0				
Sept. 28	10.4	Oct. 25	11.0	Dec. 27	11.3	Oct. 29	46.2	Mar. 25	49.0	July 30	48.3				
Oct. 26	9.6	Nov. 25	10.4	Feb. 1, 1962	11.2	Dec. 3	46.9	Apr. 29	47.9	Aug. 28	48.5				
Nov. 23	9.2	Dec. 29	10.9	Mar. 5	11.8	Dec. 26	47.7	May 29	45.9	Sept. 23	48.3				
Dec. 28	9.7	Feb. 23, 1961	11.6	Mar. 30	11.8	Jan. 28, 1963	48.2								
Jan. 25, 1960	10.2	Mar. 22	11.6	Apr. 30	10.6										

Table 3.--Water levels in observation wells in the upper Sevier River basin - Continued

East Fork Valley

(C-30-2)28cab-1. Records available 1961-62

Sept. 20, 1961	-36.1	Feb. 1, 1962	-30.9	June 7, 1962	-23.6
Sept. 27	35.2	Mar. 6	28.3	July 5	25.8
Oct. 31	34.5	Mar. 30	26.5	July 31	29.0
Nov. 28	33.6	Apr. 30	21.3	Aug. 29	31.7
Dec. 27	32.5				

(C-30-2)34bcc-1. Records available 1938-50, 1957, 1960-63

Sept. 24, 1957	-12.6	Nov. 28, 1961	-13.3	Dec. 4, 1962	-13.1
Dec. 20	13.4	Dec. 27	13.4	Dec. 27	13.5
Apr. 9, 1960	14.5	Feb. 1, 1962	13.6	Jan. 29, 1963	13.7
Feb. 28, 1961	14.0	Mar. 6	14.7	Feb. 28	13.4
Mar. 20	13.9	Mar. 30	14.0	Mar. 26	13.8
Apr. 21	13.9	Apr. 30	12.9	Apr. 30	13.4
May 24	11.5	June 7	11.5	May 27	11.9
July 5	12.5	July 5	11.2	July 1	12.5
July 27	11.1	July 31	10.7	July 31	12.0
Aug. 23	12.6	Aug. 29	11.7	Aug. 28	12.4
Sept. 27	13.7	Sept. 25	12.3	Sept. 24	12.9
Oct. 31	13.2	Oct. 30	12.7		

(C-31-2)3cbe-1. Records available 1962-63

Aug. 29, 1962	- 0.1	Jan. 29, 1963	- 0.2	July 1, 1963	+ 0.3
Sept. 25	+ .4	Feb. 28	.0	July 31	- .4
Oct. 30	.4	Mar. 26	.2	Aug. 28	+ .3
Dec. 4	+ .2	Apr. 30	- .4	Sept. 24	.1
Dec. 27	- .2	May 27	+ .4		

(C-31-2)23bed-1. Records available 1957, 1960-63

Sept. 24, 1957	-55.3	Nov. 28, 1961	-57.1	Dec. 4, 1962	-57.1
Dec. 20	60.4	Dec. 27	59.4	Dec. 27	57.9
Apr. 7, 1960	63.1	Feb. 1, 1962	60.7	Jan. 29, 1963	58.2
Feb. 28, 1961	63.5	Mar. 6	61.8	Feb. 28	58.8
Mar. 20	64.1	Mar. 30	62.4	Mar. 26	59.3
Apr. 21	64.3	Apr. 30	60.1	Apr. 30	58.6
May 23	55.7	June 7	54.7	May 27	54.7
July 5	55.5	July 5	55.8	July 1	55.1
July 27	55.8	July 31	54.3	July 31	56.1
Aug. 23	54.9	Aug. 29	56.3	Aug. 28	55.4
Sept. 27	52.3	Sept. 25	56.6	Sept. 24	51.8
Oct. 31	54.7	Oct. 30	51.1		

(C-31-2)23ced-1. Records available 1961-63

Sept. 20, 1961	-25.6	Mar. 6, 1962	-32.4	Aug. 29, 1962	-28.3
Sept. 27	26.0	Mar. 30	33.6	Sept. 25	25.6
Oct. 31	29.3	Apr. 30	29.1	Oct. 30	29.6
Nov. 28	30.8	June 7	21.6	Dec. 27	26.5
Dec. 27	29.2	July 5	24.2	Jan. 29, 1963	25.4
Feb. 1, 1962	29.7	July 31	25.2		

(C-31-2)25aba-1. Records available 1961-63

Sept. 27, 1961	-106.6	July 3, 1962	-110.3	Feb. 28, 1963	-102.1
Oct. 31	108.0	July 31	108.3	Mar. 26	103.6
Nov. 28	109.1	Aug. 29	108.6	Apr. 30	104.4
Dec. 27	110.0	Sept. 25	108.4	May 27	103.1
Feb. 1, 1962	110.6	Oct. 30	108.5	July 1	104.9
Mar. 6	112.1	Dec. 4	108.5	July 31	106.4
Mar. 30	113.3	Dec. 27	106.2	Aug. 28	106.2
Apr. 30	114.1	Jan. 29, 1963	102.3	Sept. 24	105.6
June 7	110.6				

(C-33-2)22aab-1. Records available 1962-63

Aug. 29, 1962	-10.6	Feb. 28, 1963	-10.1	July 1, 1963	-10.8
Sept. 25	10.7	Mar. 25	10.6	July 31	11.2
Oct. 30	10.8	Apr. 25	10.7	Aug. 28	11.2
Dec. 4	10.8	May 28	9.9	Sept. 24	11.3
Jan. 31, 1963	11.0				

(C-34-2)22dab-1. Records available 1947-63

Mar. 19, 1956	-205.8	July 27, 1961	-207.9	Sept. 25, 1962	-201.3
Dec. 21	212.9	Aug. 23	206.5	Oct. 30	201.6
Mar. 30, 1957	217.0	Sept. 25	205.5	Dec. 4	199.6
Dec. 20	222.1	Oct. 30	205.1	Dec. 27	199.7
Dec. 23, 1958	192.4	Nov. 28	205.2	Jan. 31, 1963	200.0
Apr. 11, 1959	190.7	Dec. 27	205.2	Feb. 28	200.7
Dec. 23	203.1	Feb. 1, 1962	205.7	Mar. 25	201.5
Apr. 9, 1960	204.9	Mar. 5	206.0	Apr. 25	202.3
Jan. 6, 1961	211.8	Apr. 2	206.0	May 28	203.2
Feb. 28	212.9	Apr. 30	204.8	July 1	203.8
Mar. 22	213.3	June 7	206.1	July 31	204.8
Apr. 25	212.7	July 6	201.2	Aug. 28	205.4
May 24	212.4	July 31	200.2	Sept. 24	206.1
July 5	209.6	Aug. 29	199.3		

(C-34-2)30ccc-1. Records available 1962-63

Aug. 6, 1962	-82.4	Dec. 27, 1962	-83.6	July 1, 1963	-79.2
Aug. 29	81.8	Feb. 28, 1963	84.6	July 31	80.0
Sept. 25	82.1	Mar. 25	84.8	Aug. 28	80.6
Oct. 30	82.5	Apr. 25	83.3	Sept. 24	81.7
Dec. 4	83.2	May 28	78.8		

(C-36-3)6dba-1. Records available 1946-63

Mar. 19, 1956	-46.2	July 27, 1961	-52.4	Sept. 25, 1962	-45.9
Dec. 21	38.7	Aug. 23	43.2	Oct. 30	45.0
Mar. 30, 1957	42.0	Sept. 25	42.2	Dec. 4	42.7
Dec. 20	39.2	Oct. 30	41.4	Dec. 27	41.3
Apr. 3, 1958	37.2	Nov. 28	41.2	Jan. 31, 1963	45.4
Dec. 23	45.6	Dec. 27	41.0	Feb. 28	42.1
Apr. 11, 1959	39.4	Feb. 1, 1962	42.2	Mar. 25	42.9
Dec. 23	38.6	Mar. 5	46.9	Apr. 25	42.1
Apr. 9, 1960	39.3	Apr. 2	43.1	May 28	44.1
Jan. 6, 1961	43.6	Apr. 30	41.8	July 1	49.1
Feb. 28	46.5	May 28	43.1	July 31	50.6
Mar. 22	44.3	July 6	55.6	Aug. 28	44.7
May 24	43.1	July 31	54.4	Sept. 24	41.8
July 5	51.1	Aug. 29	50.2		

(C-36-3)7aac-1. Records available 1938-63

Mar. 19, 1956	- 8.0	July 5, 1961	-10.6	Aug. 29, 1962	- 7.9
Dec. 22	8.5	July 27	10.8	Sept. 25	8.3
Mar. 30, 1957	7.7	Aug. 23	11.0	Oct. 30	7.9
Dec. 21	6.6	Sept. 25	7.3	Dec. 4	7.6
Apr. 3, 1958	2.6	Oct. 30	8.3	Dec. 27	7.5
Dec. 23	6.8	Nov. 28	9.3	Jan. 31, 1963	7.5
Apr. 11, 1959	6.3	Dec. 27	8.4	Feb. 28	8.7
Dec. 23	8.1	Feb. 1, 1962	8.1	Mar. 25	8.9
Apr. 9, 1960	5.9	Mar. 5	4.4	Apr. 25	8.9
Jan. 6, 1961	9.3	Apr. 2	1.1	May 28	8.8
Feb. 28	9.1	Apr. 30	1.4	July 1	9.5
Mar. 22	8.8	May 28	3.9	July 31	9.9
Apr. 25	9.8	July 6	5.9	Aug. 28	10.0
May 24	10.1	July 31	7.9	Sept. 24	8.3

(C-36-3)18bdc-1. Records available 1939, 1961-62

Aug. 28, 1961	- 2.6	Nov. 28, 1961	- 1.7	Mar. 5, 1962	- 2.1
Sept. 25	1.3	Dec. 27	2.3	Apr. 2	.7
Oct. 30	1.1	Feb. 1, 1962	2.9		

(C-36-4)2dca-1. Records available 1961-63

Sept. 4, 1961	-41.8	May 28, 1962	-35.0	Feb. 28, 1963	-32.7
Sept. 25	40.3	July 6	34.7	Mar. 25	31.3
Oct. 30	41.5	July 31	35.3	Apr. 30	30.5
Nov. 28	42.3	Aug. 29	36.6	May 28	30.2
Dec. 27	42.9	Sept. 25	37.8	July 1	32.0
Feb. 1, 1962	43.3	Oct. 30	36.4	July 31	33.8
Mar. 5	42.8	Dec. 4	35.2	Aug. 28	35.6
Apr. 2	39.5	Dec. 27	34.5	Sept. 24	37.6
Apr. 30	36.6	Jan. 31, 1963	34.4		

(C-36-4)10bdd-1. Records available 1957, 1959-63

Dec. 20, 1957	-59.8	May 24, 1961	-61.7	May 28, 1962	-62.2
Apr. 11, 1959	60.2	July 5	61.7	July 6	62.4
Dec. 23	60.9	July 27	61.8	July 31	62.5
Apr. 9, 1960	60.8	Aug. 23	61.7	Aug. 29	62.3
Jan. 6, 1961	61.3	Sept. 25	61.9	Sept. 25	62.5
Feb. 28	61.7	Oct. 30	61.8	Oct. 30	62.7
Mar. 22	61.7	Nov. 28	62.1	Dec. 4	62.7
Apr. 25	61.7	Apr. 30, 1962	62.4		

(C-36-4)34bda-3. Equipped with automatic water-level recording gage, March 2, 1957. Water levels reported after this date are at noon, from recorder graphs. Records available 1957-63

Mar. 2, 1957	- 6.5	Mar. 31, 1959	- 3.3	July 28, 1961	- 6.5*
Mar. 12	6.7	Apr. 23	3.4	Aug. 28	6.7
Apr. 29	6.1	May 31	3.2	Sept. 26	5.1*
May 27	6.6*	June 30	2.8	Oct. 12	5.0*
June 30	9.6	July 31	2.5	Nov. 24	4.8*
July 31	12.5	Aug. 31	2.0	Jan. 3, 1962	4.7*
Aug. 31	13.4	Sept. 30	2.3	Apr. 18	2.0*
Sept. 30	13.8	Apr. 27, 1960	4.0	May 4	3.2*
Oct. 29	11.7	May 31	4.2	June 5	3.5*
Nov. 27	9.1	June 30	4.3	June 30	2.5*
Dec. 5	8.4	July 31	4.3	Aug. 2	2.7*
Jan. 3, 1958	7.3	Aug. 31	4.3	Aug. 31	2.8*
Mar. 3	7.1*	Sept. 30	4.2	Dec. 3	2.7*
Apr. 22	1.3*	Oct. 31	4.2	Mar. 3, 1963	3.8*
June 30	2.5	Nov. 30	4.3	Apr. 2	3.5*
July 31	2.6	Dec. 31	4.3	Apr. 25	3.8
Aug. 31	2.5	Jan. 31, 1961	4.4	May 31	4.4
Sept. 30	2.4	Feb. 28	4.4	June 30	4.9
Oct. 31	2.6	Mar. 31	4.3	July 31	5.5
Nov. 30	2.5	Apr. 30	4.3	Aug. 31	3.4
Dec. 9	2.9*	May 31	4.5	Sept. 24	3.2
Mar. 12, 1959	2.9*	June 28	6.4*		

Table 3.--Water levels in observation wells in the upper Soviet River basin - Continued

Grass Valley

(C-26-1)12abd-1. Records available 1961-63									
Sept. 13, 1961	-13.4	June 1, 1962	-9.7	Mar. 1, 1963	-13.9				
Sept. 27	14.1	July 5	13.4	Mar. 26	17.3				
Oct. 31	13.6	July 26	14.3	Apr. 30	12.3				
Nov. 28	14.8	Aug. 31	15.2	May 27	13.7				
Dec. 28	16.3	Sept. 26	16.2	June 28	15.6				
Feb. 2, 1962	17.6	Oct. 31	16.2	July 29	17.0				
Mar. 6	17.3	Dec. 5	12.7	Aug. 29	15.7				
Mar. 30	17.2	Dec. 27	15.5	Sept. 23	16.9				
May 1	13.2	Jan. 29, 1963	17.2						
(C-26-1)12dbc-1. Records available 1961-63									
Sept. 13, 1961	+3.1	June 1, 1962	+3.0	Mar. 1, 1963	+2.2				
Sept. 27	3.3	July 5	2.7	Mar. 26	2.3				
Oct. 31	2.8	July 26	2.4	Apr. 30	2.6				
Nov. 28	2.8	Aug. 31	2.3	May 27	2.1				
Dec. 28	2.5	Sept. 26	2.0	June 28	2.0				
Feb. 2, 1962	2.3	Oct. 31	2.2	July 29	1.5				
Mar. 6	2.7	Dec. 5	2.4	Aug. 29	1.9				
Mar. 30	2.5	Dec. 27	2.2	Sept. 23	2.1				
May 1	2.8	Jan. 29, 1963	1.9						
(C-26-1)23ddb-1. Records available 1936-50, 1958-63									
Mar. 11, 1938	+12.4	Nov. 1, 1960	+12.2	June 1, 1962	+11.9				
May 8	12.3	Jan. 6, 1961	11.8	July 5	13.5				
July 7	13.8	Feb. 24	11.3	July 26	14.2				
Sept. 5	11.8	Mar. 20	12.2	Aug. 31	13.0				
Nov. 7	12.2	Apr. 21	12.4	Sept. 26	12.2				
Jan. 5, 1959	10.5	May 23	12.0	Oct. 31	12.1				
Mar. 2	11.1	July 3	13.1	Dec. 5	11.1				
May 1	11.2	July 27	12.8	Dec. 27	11.5				
May 13	11.5	Aug. 25	12.7	Jan. 29, 1963	11.4				
July 2	15.1	Sept. 27	12.6	Mar. 1	11.1				
Sept. 2	14.0	Oct. 31	12.6	Mar. 26	11.1				
Nov. 2	13.8	Nov. 28	12.1	Apr. 30	10.6				
Jan. 6, 1960	12.4	Dec. 28	12.4	May 27	10.8				
Mar. 24	11.6	Feb. 2, 1962	12.3	June 28	11.1				
May 11	11.5	Mar. 6	12.2	July 29	10.8				
July 12	13.2	Mar. 30	12.1	Aug. 29	10.5				
Sept. 16	12.9	May 1	11.8	Sept. 23	10.5				
(C-26-1)25acc-1. Records available 1935-55, 1958-63									
Mar. 11, 1938	+17.1	Jan. 6, 1961	+16.5	July 5, 1962	+16.1				
May 8	16.5	Feb. 24	16.4	July 26	16.1				
July 7	16.0	Mar. 20	16.8	Aug. 31	16.1				
Sept. 5	16.0	Apr. 21	16.9	Sept. 26	15.3				
Nov. 7	15.5	May 23	15.9	Oct. 31	15.7				
Jan. 5, 1959	14.5	July 3	16.2	Dec. 5	15.4				
Mar. 2	16.0	July 27	15.9	Dec. 27	15.6				
May 1	16.2	Aug. 25	16.2	Jan. 29, 1963	15.6				
July 2	17.7	Sept. 27	16.4	Mar. 1	15.1				
Sept. 2	18.0	Oct. 31	16.4	Mar. 26	15.4				
Nov. 2	17.8	Nov. 28	16.4	Apr. 30	15.2				
Jan. 6, 1960	16.6	Dec. 28	16.4	May 27	15.2				
Mar. 24	16.5	Feb. 2, 1962	16.6	June 28	15.3				
May 11	15.5	Mar. 6	16.2	July 29	15.0				
July 12	16.2	Mar. 30	15.9	Aug. 29	15.3				
Sept. 16	16.5	May 1	15.9	Sept. 23	14.9				
Nov. 1	16.5	June 1	16.4						
(C-26-1)35dcb-2. Records available 1962-63									
Aug. 31, 1962	+17.6	Dec. 5, 1962	+16.4	Mar. 1, 1963	+15.7				
Sept. 25	16.8	Dec. 27	16.5	Mar. 26	15.3				
Oct. 31	17.1	Jan. 29, 1963	16.2						
(C-27-1)1cbb-1. Records available 1961-63									
Dec. 28, 1961	+8.4	Aug. 31, 1962	+11.0	Mar. 26, 1963	+10.5				
Feb. 2, 1962	9.1	Sept. 25	10.4	Apr. 30	10.0				
Mar. 6	8.9	Oct. 31	10.6	May 27	9.6				
Mar. 30	8.9	Dec. 5	11.7	June 28	8.4				
May 1	8.6	Dec. 27	10.1	July 29	8.7				
June 1	8.6	Jan. 29, 1963	10.3	Aug. 29	9.2				
July 5	11.8	Mar. 1	10.2	Sept. 23	9.5				
July 26	12.5								
(C-27-1)2bca-1. Records available 1958-62									
May 8, 1958	+8.8	July 12, 1960	+8.2	Oct. 31, 1961	+10.7				
July 7	8.8	Sept. 16	8.4	Nov. 28	10.4				
Sept. 5	6.6	Nov. 1	8.7	Dec. 28	10.9				
Nov. 7	13.0	Apr. 21, 1961	9.1	Feb. 2, 1962	11.0				
May 1, 1959	7.7	May 23	8.1	Mar. 6	10.7				
July 2	9.6	July 3	8.5	Mar. 30	8.6				
Sept. 2	9.6	July 27	9.0	May 1	8.3				
Nov. 2	9.6	Aug. 25	8.9	June 1	9.0				
May 11, 1960	7.5	Sept. 27	10.7						
(C-27-1)2bdb-1. Records available 1961-63									
July 3, 1961	+7.1	Nov. 28, 1961	+9.6	May 1, 1962	+7.3				
July 27	7.9	Dec. 28	9.6	June 1	7.4				
Aug. 25	7.7	Feb. 2, 1962	9.7	July 5	9.4				
Sept. 27	9.0	Mar. 6	9.6	July 26	8.3				
Oct. 31	9.4	Mar. 30	7.4	Aug. 31	7.4				
(C-27-1)2bdb-1 - Continued									
Sept. 25, 1962	+7.2	Mar. 1, 1963	+7.3	June 28, 1963	+7.2				
Oct. 31	7.1	Mar. 26	7.6	July 29	7.7				
Dec. 5	7.1	Apr. 30	7.3	Aug. 29	7.4				
Dec. 27	7.2	May 27	7.4	Sept. 23	7.4				
Jan. 29, 1963	7.1								
(C-27-1)15cbb-1. Records available 1938-42, 1962-63									
Sept. 16, 1962	-10.7	Jan. 29, 1963	-13.7	May 27, 1963	-12.4				
Oct. 31	10.5	Mar. 1	12.6	June 28	13.2				
Dec. 4	12.6	Mar. 26	12.5	July 29	14.2				
Dec. 27	12.8	Apr. 30	11.6						
(C-27-1)27abc-2. Records available 1937-53, 1955, 1958-63									
Mar. 11, 1938	+2.6	Jan. 6, 1961	+1.4	July 5, 1962	+2.0				
May 8	2.5	Feb. 24	1.6	July 26	2.0				
July 7	2.7	Mar. 20	1.7	Aug. 29	2.0				
Sept. 5	3.1	Apr. 21	1.8	Sept. 25	2.2				
Nov. 7	3.2	May 23	1.7	Oct. 31	2.2				
Jan. 5, 1959	3.4	July 3	1.4	Dec. 4	2.3				
Mar. 2	3.2	July 27	1.4	Dec. 27	2.3				
May 1	3.2	Aug. 25	1.5	Jan. 29, 1963	2.3				
July 2	2.7	Sept. 27	1.7	Mar. 1	2.3				
Sept. 2	2.2	Oct. 31	1.8	Mar. 26	2.2				
Nov. 2	2.4	Nov. 28	1.8	Apr. 30	2.3				
Jan. 6, 1960	1.7	Dec. 28	1.8	May 27	2.0				
Mar. 24	1.8	Feb. 2, 1962	1.8	June 28	1.8				
May 11	1.6	Mar. 6	1.8	July 29	1.6				
July 12	1.2	Mar. 30	1.7	Aug. 29	1.6				
Sept. 16	1.5	May 1	1.7	Sept. 23	1.6				
Nov. 1	1.5	June 1	1.9						
(C-27-1)28ccb-1. Records available 1962-63									
Sept. 18, 1962	-14.0	Feb. 28, 1963	-15.1	June 28, 1963	-11.2				
Oct. 31	15.3	Mar. 26	14.7	July 29	17.8				
Dec. 4	16.8	Apr. 30	12.5	Aug. 29	18.3				
Dec. 27	16.3	May 27	12.6	Sept. 23	20.4				
Jan. 29, 1963	16.1								
(C-28-1)4acb-1. Records available 1962-63									
Sept. 18, 1962	+6.5	Feb. 28, 1963	+7.7	June 28, 1963	+5.9				
Oct. 31	6.3	Mar. 26	7.8	July 29	8.2				
Dec. 4	7.6	Apr. 30	7.2	Aug. 29	8.2				
Dec. 27	7.5	May 27	6.8	Sept. 23	8.2				
Jan. 29, 1963	7.2								
(C-29-2)35bad-1. Records available 1961-63									
Sept. 16, 1961	-21.1	June 7, 1962	-17.5	Feb. 28, 1963	-20.0				
Sept. 27	20.8	July 5	17.8	Mar. 26	20.2				
Oct. 31	19.2	July 26	18.3	Apr. 30	18.5				
Nov. 28	19.1	Aug. 29	19.1	May 27	18.3				
Dec. 28	19.8	Sept. 25	19.6	June 28	19.0				
Feb. 2, 1962	20.4	Oct. 31	19.8	July 29	19.9				
Mar. 6	20.8	Dec. 4	18.9	Aug. 28	20.3				
Mar. 30	21.2	Dec. 27	19.1	Sept. 23	20.5				
Apr. 30	19.5	Jan. 29, 1963	19.7						
(D-25-1)8ccd-1. Records available 1961-62									
Aug. 18, 1961	-15.4	Dec. 28, 1961	-15.5	May 1, 1962	-14.7				
Sept. 27	15.5	Feb. 2, 1962	15.5	June 1	15.3				
Oct. 31	15.3	Mar. 6	15.5	July 5	15.2				
Nov. 28	15.4	Mar. 30	14.8	July 26	15.2				
(D-25-1)19add-1. Records available 1961-62									
Aug. 18, 1961	+4.6	Mar. 6, 1962	+4.6	July 26, 1962	+4.9				
Sept. 27	4.7	Mar. 30	4.4	Aug. 31	4.6				
Oct. 31	4.2	May 1	4.9	Sept. 26	4.5				
Nov. 28	4.6	June 1	4.9	Oct. 31	4.4				
Dec. 28	4.5	July 5	4.7	Dec. 5	4.4				
Feb. 2, 1962	4.8								
(D-25-1)31cbd-1. Records available 1936-50, 1958-63									
Mar. 11, 1938	+3.2	Jan. 6, 1961	+1.7	July 5, 1962	+2.9				
May 8	3.0	Feb. 24	2.1	July 26	2.4				
July 7	2.7	Mar. 20	2.2	Aug. 31	1.3				
Sept. 5	1.9	Apr. 21	2.7	Sept. 26	1.8				
Nov. 7	2.1	May 23	2.8	Oct. 31	1.9				
Jan. 5, 1959	2.2	July 3	2.7	Dec. 5	2.1				
Mar. 2	2.5	July 27	1.2	Dec. 27	2.0				
May 1	2.8	Aug. 25	1.6	Jan. 29, 1963	1.6				
July 2	1.3	Sept. 27	2.1	Mar. 1	2.2				
Sept. 2	.9	Oct. 31	2.0	Mar. 26	2.2				
Nov. 2	1.6	Nov. 28	2.2	Apr. 30	2.5				
Jan. 6, 1960	1.9	Dec. 28	2.4	May 27	2.2				
Mar. 24	2.7	Feb. 2, 1962	2.3	June 28	1.7				
May 11	3.2	Mar. 6	2.7	July 29	1.2				

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Circle Valley - Continued

[illegible]

Table 4.--Logs of selected wells and test holes in the upper Sevier River basin - Continued

Test-hole logs (U.S. Geological Survey) (Log by U.S. Geological Survey)			
Fangutch Valley			
	Thickness	Depth	Thickness Depth
(C-32-5)35bab-1 (TH 1). Alt. 6,370 ft.			
Recent and Pleistocene deposits:			
Silt, gray, sandy and clayey.	5	5	
Gravel, very fine to very coarse, and very fine to very coarse sand; gravel, angular to rounded, volcanic-rock fragments; very coarse and coarse sand, respectively 90 and 50 percent angular volcanic-rock fragments, 10 and 50 percent angular to rounded quartz and feldspar; medium sand, angular to rounded, 75 percent quartz and feldspar, 25 percent volcanic-rock fragments; fine and very fine sand, respectively angular to rounded and angular to subrounded, 75 and 60 percent quartz and feldspar, 25 and 40 percent dark minerals.	57	62	
Silt, brown, sandy; contains very fine to fine, angular to rounded gravel.	13	75	
Gravel, very fine to very coarse, angular to rounded, volcanic-rock fragments.	8	83	
Silt, tan and brown, sandy and clayey; contains very coarse gravel and small cobbles of angular to subrounded volcanic-rock fragments between 92-94 ft. .	12	95	
Gravel, very fine to coarse, and silt in 6 to 12 in. thick beds at 2- to 4-ft intervals; gravel, angular to rounded, volcanic-rock fragments; silt, tan, yellow-tan, and light-brown, sandy and clayey.	36	131	
Silt, tan to light-brown, sandy and clayey; contains interspersed very fine to fine gravel, and beds of very fine to fine gravel, 3 to 4 ft thick, at 136, 148, 160, and 173 ft; also contains occasional zones of caliche(?).	42	173	
Gravel, very fine to coarse, angular to subrounded, 90 percent volcanic-rock fragments, and 10 percent sandstone and limestone fragments.	9	182	
Silt, tan and brown, sandy and clayey; contains interspersed very fine to fine gravel.	8	190	
Brim Head(?) and Wasatch(?) Formations:			
Interbedded very fine to medium-grained sandstone, 2 to 3 ft thick, silty sand and very fine to fine gravel, 1 to 3 ft thick; sandstone and sand angular to subrounded, 80 percent quartz and plagioclase, 20 percent volcanic-rock fragments and dark minerals, poorly cemented by silica and calcium carbonate; gravel, angular to rounded, volcanic-rock fragments. .	50	240	
Gravel, very fine to very coarse, with sandy, brown silt as matrix in intervals 240-248 and 252-256 ft; gravel, angular to subrounded, volcanic-rock fragments	16	256	
Interbedded very fine to medium-grained sandstone, 2 to 3 ft thick, sand, and very fine to medium gravel, 1 to 4 ft thick; sandstone contains thin beds of light-gray to white clay and sandy clay between 380-405 and 420-430 ft; sandstone, black, angular to rounded, 75-90 percent dark minerals, 10-25 percent quartz and plagioclase, poorly to well cemented by silica and calcium carbonate; gravel, angular to subrounded, volcanic-rock fragments.	199	455	
Volcanic rock (tuff).	1	456	
(C-33-5)13bdd-1 (TH 16). Alt. 6,660 ft.			
Recent and Pleistocene deposits:			
Sand, very fine to medium, and silt, light-tan, calcareous; sand, angular to subrounded, 95 percent quartz, 5 percent dark minerals and volcanic-rock fragments.	4	4	
Gravel, very fine to very coarse; contains very fine to very coarse sand between 4-120 ft, and cobbles between 16-17 ft, 90-100 ft, and 110-122 ft; gravel, subrounded, 90-100 percent volcanic-rock fragments, 0-10 percent limestone, and quartzite fragments; very coarse, coarse, and medium sand, subrounded, 75-99 percent volcanic-rock fragments, 1-25 percent quartz; fine and very fine sand, crystalline and angular to subrounded, 60-80 percent quartz, 10 percent dark minerals, and 10-30 percent volcanic-rock fragments. .	121	125	
Gravel, coarse, and cobbles, composed of volcanic-rock fragments; contains very fine to very coarse sand	15	140	
Gravel, very fine, and coarse to very coarse sand with some very fine to medium; predominantly coarse to very coarse gravel between 168-170 ft; contains several 1-ft thick beds of clayey silt between 175-180 ft; gravel and sand of approximately same description as in interval 4-125 ft above.	45	185	
Gravel, coarse to very coarse, with some fine; subangular to subrounded, volcanic-rock fragments. . .	7	192	
Sand, mainly coarse to very coarse, but some fine and medium; contains much silt in infrequent intervals, and some interspersed fine, subrounded gravel; also contains some coarse gravel interbeds at 212 ft, and between 260-275 ft; sand, angular to subrounded, 20-75 percent volcanic-rock fragments, 20-75 percent quartz grains, and about 5 percent other igneous-mineral grains.	132	324	
Gravel, very fine to fine, and medium to coarse sand, with some very fine and fine; contains few interbeds of pink-tan silty clay between 320-330 ft, and coarse gravel between 340-380 ft; gravel, subangular to			
(C-33-5)13bdd-1 (TH 16) - Continued.			
Recent and Pleistocene deposits - Continued:			
subrounded, 90-100 percent volcanic-rock fragments, 0-10 percent sedimentary-rock fragments; medium and coarse sand, angular to subrounded, 90 percent volcanic-rock fragments, 10 percent quartz grains and other igneous-mineral fragments; fine to very fine sand, respectively 60 and 90 percent quartz, 40 and 10 percent volcanic-rock fragments and other igneous minerals.	56	380	
Gravel, coarse, silty and sandy, volcanic-rock fragments.	25	403	
Sand, coarse to very coarse, and very fine gravel; contains some fine to medium sand, and interspersed coarse gravel; gravel, subangular to subrounded, volcanic-rock fragments; sand, 75 percent volcanic-rock fragments, 25 percent sedimentary-rock fragments, quartz, and other igneous minerals.	14	419	
Gravel, very fine to coarse, with fine to very coarse sand; contains few interbeds of pink-tan calcareous, clayey silt between 420-430 ft; approximately same lithologic description as in preceding intervals. . .	53	472	
Clay, pink to pink-tan, silty, partly sandy, non-calcareous.	5	477	
Gravel, fine to coarse 480-499 ft, coarse and contains cobbles 499-519 ft, very fine to fine 519-567 ft; contains yellow-tan to pink-tan silt and clayey silt to very fine sand, which increases in amount with depth and becomes interbeds between 529-567 ft; gravel subangular to subrounded, 95 percent volcanic-rock fragments, 5 percent chert and quartzite fragments. .	90	567	
Silt to very fine sand, light pink-tan, slightly clayey; contains interspersed very coarse sand to very fine gravel composed of volcanic-rock fragments. . .	12	579	
Gravel, very fine to coarse, with few interbeds of yellow-tan, clayey silt to fine sand; gravel, angular to subrounded 95-100 percent volcanic-rock fragments, 0-5 percent chert, quartzite, and other sedimentary-rock fragments.	39	618	
Sand, mainly coarse to very coarse, but some fine and medium; contains interbed of coarse gravel at 634 ft, and silt interbeds between 640-658 ft; very coarse and coarse sand, subangular to subrounded, 95 percent volcanic-rock fragments, 5 percent sedimentary-rock fragments; fine to medium sand, subangular to subrounded, 75 percent volcanic-rock fragments, 24 percent quartz grains, and about 1 percent dark minerals.	40	658	
Gravel, coarse, and cobbles, composed of volcanic-rock fragments; contains coarse to very coarse sand-sized volcanic-rock fragments as described above. . .	24	682	
Sand, coarse to very coarse, and very fine gravel of same description as in interval 618-658 ft above; contains several interbeds of yellow-tan to pink-tan silt to fine sand which become predominant between 738-752 and between 758-767 ft; also contains some coarse gravel interbeds between 682-698 and between 718-738 ft.	96	778	
Gravel, very fine to coarse, interbedded with yellow-tan to pink-tan silt to fine sand; gravel predominates below 798 ft and has approximately the same description as in all intervals above.	53	833	
(C-33-5)14cbdd-1 (TH 6). Alt. 6,555 ft.			
Recent and Pleistocene deposits:			
Gravel, very fine to very coarse, small cobbles, and very fine to very coarse sand; gravel, angular to rounded, volcanic-rock fragments; very coarse and coarse sand, respectively angular to rounded, and angular to subangular, 90 and 75 percent volcanic-rock fragments, 10 and 25 percent quartz; medium sand, angular to subangular, 60 percent quartz, 40 percent volcanic-rock fragments; fine and very fine sand, angular, 75 percent quartz, 25 percent dark minerals and volcanic-rock fragments.	11	11	
Silt, brown, sandy; contains very fine to medium, angular to subangular gravel.	12	23	
Gravel, very fine to very coarse, and very fine to very coarse sand; contains small cobbles at 26 ft and clayey silt between 29-30 and 52-53 ft; gravel, angular to subrounded, volcanic-rock fragments; very coarse and coarse sand, angular to subangular, volcanic-rock fragments; medium sand, angular to subangular, 75 percent volcanic-rock fragments, 25 percent quartz; fine and very fine sand, respectively angular, 60 and 50 percent quartz, 40 and 50 percent volcanic-rock fragments and dark minerals.	35	58	
Clay, dark-brown, silty and sandy.	3	61	
Gravel, very fine to very coarse, and coarse to very coarse sand; gravel and sand, angular to subrounded volcanic-rock fragments.	16	77	
Clay, brown, silty.	2	79	
Gravel, very fine to medium, and coarse to very coarse sand; contains brown, sandy silt in 1-ft beds at			

Table 4.--Logs of selected wells and test holes in the upper Sevier River basin - Continued

Test-hole logs - Continued		Panguitch Valley - Continued	
Thickness	Depth	Thickness	Depth
(C-33-5)14ebd-1 (TH 4) - Continued.		(C-33-5)16add-1 (TH 3) - Continued.	
Recent and Pleistocene deposits - Continued:		Brian Head(?) and Wasatch(?) Formations - Continued:	
4- to 5-ft intervals; contains very coarse gravel with small cobbles between 93-94 ft; gravel, angular to subrounded, volcanic-rock fragments; sand, angular to subangular volcanic-rock fragments		sandstone, very fine to medium-grained, angular to rounded, 30 percent quartz and plagioclase, 50 percent dark minerals, occurs in beds 3 to 6 in. thick at 3- to 10-ft intervals	
37	116	75	245
Gravel, very fine to very coarse, in matrix of dark-brown sandy silt; gravel, angular to subangular, volcanic-rock fragments		Silt, brown, clayey; contains very fine to medium gravel	
22	138	27	272
Clay, dark-brown, silty and sandy		Gravel, very fine to very coarse, angular to subrounded, volcanic-rock fragments with brown, sandy silt	
4	142	28	300
Gravel, very fine to very coarse, and medium to very coarse sand; gravel, angular to subrounded volcanic-rock fragments; sand, angular to subangular volcanic-rock fragments		Silt, light-brown, sandy and clayey, and interspersed very fine to very coarse gravel; gravel, angular to subrounded limestone and volcanic-rock fragments	
19	161	80	380
Clay, brown, silty and sandy		Gravel, very fine to very coarse, small cobbles, very fine to very coarse sand, and brown silt; gravel and cobbles, angular to subrounded, 95 percent volcanic-rock fragments, 5 percent limestone fragments; very coarse and coarse sand, angular to subangular, volcanic-rock fragments; medium sand, 75 percent angular to subangular volcanic-rock fragments, 25 percent angular to rounded quartz; fine and very fine sand, angular, 50 percent quartz, 50 percent dark minerals	
24	185	42	422
Gravel, very fine to very coarse; contains brown, sandy silt; gravel, angular to subangular volcanic-rock fragments		Silt, light-tan, tan, clayey and sandy; contains interspersed very fine to very coarse gravel	
20	205	28	450
Clay, brown, silty; contains interspersed very fine to coarse, angular to subrounded gravel		Gravel, very fine to very coarse, small cobbles, and very fine to very coarse sand; gravel and cobbles, angular to subrounded, 90 percent volcanic-rock fragments, 10 percent quartzite and red limestone fragments; very coarse and coarse sand, 75 percent angular quartz and volcanic-rock fragments, 25 percent rounded quartz and limestone fragments; medium sand, angular to rounded, 50 percent quartz, 50 percent volcanic-rock fragments; fine and very fine sand, angular, 75 percent quartz, 25 percent volcanic-rock fragments	
25	230	11	461
Gravel, very fine to very coarse, in brown, sandy silt matrix; gravel angular to subrounded, volcanic-rock fragments		Silt, light-tan, clayey; contains interspersed, very fine to coarse, angular to subrounded gravel	
20	250	13	474
Clay, brown, silty and sandy; contains interspersed very fine to medium gravel		Gravel, very fine to very coarse, and small cobbles, in light-tan silt matrix; gravel and cobbles angular to subrounded, 95 percent volcanic-rock fragments, 5 percent limestone fragments	
43	293	9	483
Gravel, very fine to medium, angular to rounded volcanic-rock fragments		Volcanic rock (tuff)	
17	310	27	510
Silt, brown, sandy and clayey; contains interspersed very fine to medium gravel; between 330-350 ft silt is light-tan and clayey; sand and gravel increase in amount between 350-389 ft		(C-33-5)16bca-1 (TH 2). Alt. 6,505 ft.	
79	389	Recent and Pleistocene deposits:	
Sand, very fine to very coarse, and very fine to fine gravel; very coarse and coarse sand, angular to subangular, volcanic-rock fragments; medium sand, angular to subangular, 90 percent volcanic-rock fragments, 10 percent quartz; fine and very fine sand, angular, 50 percent volcanic-rock fragments and dark minerals; 50 percent quartz		Gravel, very fine to very coarse, small cobbles, and very fine to very coarse sand; gravel and cobbles, angular to rounded, sandstone and volcanic-rock fragments; very coarse and coarse sand, respectively angular to subrounded and angular to rounded, 50 percent sandstone fragments, 50 percent volcanic-rock fragments; medium sand, angular to rounded, 50 percent sandstone and quartz fragments, 50 percent volcanic-rock fragments; fine and very fine sand, respectively angular to rounded and angular, 75 and 90 percent quartz and sandstone fragments, 25 and 10 percent dark minerals	
16	405	22	22
Silt, brown, sandy and clayey; contains 6- to 12-in. thick beds of sand and very fine gravel at 5- to 10-ft intervals		Brian Head(?) and Wasatch(?) Formations:	
89	494	Conglomerate; pebbles, very fine to very coarse, angular to rounded, sandstone and volcanic-rock fragments, loosely consolidated in matrix of semi-consolidated, brown, sandy silt	
Sand, very fine to very coarse, and very fine gravel; very coarse and coarse sand, respectively angular to subrounded, and angular to subangular, volcanic-rock fragments, medium sand, angular to subangular, 75 percent volcanic-rock fragments, 25 percent quartz; fine and very fine sand, angular, 50 percent quartz, 50 percent volcanic-rock fragments; gravel, angular to subrounded, volcanic-rock fragments		Conglomerate; pebbles, very fine to coarse, angular to subangular, 90 percent volcanic-rock fragments, 10 percent sandstone fragments, loosely cemented in sandy silt; contains brown sandy silt between 84-88 ft	
16	510	51	103
Silt, light-brown, sandy; contains interspersed very fine to fine gravel		Silt, to siltstone, light-brown, clayey; contains very fine to medium gravel between 103-115 ft	
41	551	37	140
Gravel, very fine to very coarse, angular to subrounded, volcanic-rock fragments		Conglomerate; very fine to medium pebbles in very fine to very coarse sand, and gray silt; pebbles, angular to subangular, sandstone and volcanic-rock fragments, poorly cemented with silt and sand; very coarse and coarse sand, angular to subrounded, volcanic-rock fragments; medium sand, angular to rounded 75 percent sandstone and volcanic-rock fragments, 25 percent quartz and dark minerals; fine and very fine sand, angular to rounded, respectively 50 and 60 percent quartz, 50 and 40 percent dark minerals and volcanic-rock fragments	
3	554	41	181
Silt, tan, light-brown and brown, sandy and clayey; contains interspersed very fine to fine gravel; coarse to very coarse gravel at 573, 585, 590, 596-599, 621, and 632 ft; interval more consolidated than material above		Siltstone, gray to dark gray, and very fine to very coarse sandstone; loosely consolidated; sand composition same as interval 140-181 ft	
83	637	27	208
(C-33-5)16add-1 (TH 3). Alt. 6,442 ft.		Siltstone, brown, sandy and clayey, loosely consolidated, contains very fine to coarse gravel; gravel interspersed in siltstone and occurs in beds 1 to 2 ft thick at 2- to 3-ft intervals	
Recent and Pleistocene deposits:		30	238
Silt, dark-brown, sandy		Clay, orange to red-orange; contains fine silt	
3	3	3	241
Gravel, very fine to very coarse, small cobbles, and very fine to very coarse sand; gravel and cobbles, subangular to rounded volcanic-rock fragments, and between 30-93 ft contains about 1 percent limestone, quartzite, and sandstone fragments; very coarse and coarse sand, respectively angular to rounded, 100 and 90 percent volcanic-rock fragments, 0 and 10 percent quartz; medium sand, angular to rounded, 50 percent quartz, 50 percent volcanic-rock fragments; fine and very fine sand, respectively angular, 75 and 60 percent quartz, 25 and 40 percent volcanic-rock fragments		Siltstone, brown, sandy and clayey; contains very fine to coarse gravel in 1-ft beds at 1- to 2-ft intervals	
90	93	29	270
Silt, light-brown, clayey and sandy		Conglomerate, loosely consolidated in clayey silt matrix; pebbles very fine to very coarse, angular to subrounded, sandstone, red limestone, and volcanic-rock fragments; silt, light gray, tan, brown, orange, red-orange, and pink	
7	100	18	288
Silt, light-brown, clayey and sandy; contains 1- to 6-in. beds of silty sand with very fine gravel at 3- to 5-ft intervals			
55	155		
Silt, brown, sandy; contains interspersed very fine to fine gravel, and 6- to 12-in. beds of very fine to medium gravel at 2- to 4-ft intervals; sand, medium to very coarse, angular to subangular volcanic-rock fragments			
15	170		
Brian Head(?) and Wasatch(?) Formations:			
Silt, light-brown, gravel, and sandstone; silt, sandy and clayey and contains interspersed very fine to fine gravel, and thin interbeds of gravel and sandstone; gravel, very fine to coarse, angular to rounded volcanic-rock fragments, occurs in beds 6 to 12 in. thick at 10-ft intervals, increasing in frequency to 4- to 5-ft intervals from 200 to 245 ft;			

Table 4.--Logs of selected wells and test holes in the upper Sevier River basin - Continued

Test-hole logs - Continued		Panguitch Valley - Continued	
		Thickness	Depth
(C-33-5)16bca-1 (TH 2) - Continued.			
Brian Head(?) and Wasatch(?) Formations - Continued:			
Conglomerate, of very fine to very coarse gravel, small cobbles, and sandy and clayey silt, loosely consolidated; gravel and cobbles, angular to subrounded, sandstone, red limestone, and volcanic-rock fragments; silt, light-gray and tan with orange streaks, beds 1 to 4 ft thick at 2- to 6-ft intervals.		26	314
Silt, light-gray, tan, orange, red-orange, light-purple, sandy and clayey; contains very fine to fine gravel.		18	332
Siltstone, gray to black, calcareous; grades from clayey to sandy; contains light-gray, tan, light-brown and olive-green claystone in 1-in. laminations; about one-half the interval between 335-345 ft is light-gray claystone.		213	345
(C-34-5)2cdc-1 (TH 7). Alt. 6,640 ft.			
Recent and Pleistocene deposits:			
Silt, light-brown; contains very fine to coarse, quartz sand.		14	14
Gravel, very fine to very coarse, and very fine to very coarse sand; contains thin beds of tan, sandy silt; gravel, angular to subrounded volcanic-rock fragments; very coarse and coarse sand, angular to rounded, 75 percent volcanic-rock fragments, 25 percent quartz; medium, fine, and very fine sand, angular to rounded, 75 percent quartz, 25 percent volcanic-rock fragments.		6	20
Sand, very fine to very coarse, angular to rounded; contains some very fine to very coarse gravel; very coarse and coarse sand, volcanic-rock fragments; medium, fine, and very fine sand, 75 percent quartz, 25 percent volcanic-rock fragments.		12	32
Gravel, very fine to very coarse, angular to subrounded volcanic-rock fragments; contains small cobbles and very fine to very coarse sand.		13	45
Sand, very fine to coarse, angular to rounded; medium sand predominates and is 50 percent quartz, 50 percent volcanic-rock fragments.		6	51
Gravel, very fine to very coarse, angular to subrounded, volcanic-rock fragments; contains small cobbles and brown, sandy silt.		4	55
Cobbles, small, and very coarse gravel; volcanic-rock fragments.		2	57
Gravel, very fine to very coarse, angular to subrounded volcanic-rock fragments; contains very fine to medium sand, and tan and gray, clayey silt.		4	61
Sand, very fine to very coarse, angular to rounded; contains thin beds of tan and light-brown sandy silt; very coarse and coarse sand, volcanic-rock fragments; medium sand, 50 percent quartz, 50 percent volcanic-rock fragments; fine and very fine sand, 75 percent quartz, 25 percent volcanic-rock fragments.		11	72
Sand, very fine to very coarse, angular to rounded; 50 percent of sand is medium to coarse; very coarse sand, 90 percent volcanic-rock fragments, 10 percent quartz; coarse and medium sand, 50 percent quartz, 50 percent volcanic-rock fragments; fine and very fine sand, 75 percent quartz, 25 percent volcanic-rock fragments.		9	81
Cobbles, small to large, subangular to rounded, volcanic-rock fragments.		2	83
Sand, very fine to very coarse, angular to rounded; 75 percent of sand is fine to medium; very coarse and coarse sand, 75 percent volcanic-rock fragments, 25 percent quartz; medium sand, 50 percent quartz, 50 percent volcanic-rock fragments; fine and very fine sand, 75 percent quartz, 25 percent volcanic-rock fragments.		4	87
Gravel, very coarse, and small cobbles, subangular to rounded, volcanic-rock fragments.		1	88
Gravel, very fine to fine, and very fine to very coarse sand; gravel, angular to subrounded volcanic-rock fragments; very coarse to medium sand, 75 percent volcanic-rock fragments, 25 percent quartz; fine to very fine sand, 50 percent quartz, 50 percent volcanic-rock fragments.		8	96
Sevier River(?) Formation:			
Clay, brown, sandy and silty; contains very fine to very coarse gravel interspersed, but occasionally in beds 1 to 3 ft thick; contains silty sand from 153-156 ft.		66	162
Clay, brown, light-green, light greenish-gray, sandy, and silty; color repetition in intervals 1 in. to 2 ft thick.		32	194
Silt, tan to light-brown, sandy and clayey.		18	212
Silt, light blue-gray, sandy and clayey.		12	224
Gravel, very fine to very coarse, and very fine to very coarse sand; contains brown, sandy silt; gravel, angular to rounded, volcanic-rock fragments; sand, angular to rounded, quartz and volcanic-rock fragments.		16	240
Silt, light-brown, sandy and clayey; contains interspersed coarse to very coarse sand and very fine to medium gravel.		25	265
(C-34-5)2cdc-1 (TH 7) - Continued:			
Sevier River(?) Formation - Continued:			
Gravel, very fine to very coarse, in sandy and clayey silt matrix; gravel, angular to rounded, volcanic-rock fragments.		10	275
Silt, brown and blue-gray, sandy, and clayey; contains very fine to very coarse gravel; blue-gray silt occurs in beds 1 to 6 in. thick at 3- to 5-ft intervals.		35	310
Silt, brown, sandy and clayey; contains very fine to fine, angular to subangular gravel, with some very coarse gravel.		35	345
Gravel, very fine to very coarse, in brown, sandy silt matrix; gravel, angular to rounded, volcanic-rock fragments.		39	384
Gravel, very fine to very coarse, and coarse to very coarse sand; gravel and sand, angular to rounded volcanic-rock fragments.		11	395
Gravel, very fine to medium, in brown, sandy silt matrix; gravel, angular to subrounded volcanic-rock fragments.		9	404
Gravel, very fine to very coarse, in brown, sandy and clayey silt matrix; gravel, angular to rounded, volcanic-rock fragments.		13	417
Gravel, very fine to medium, in brown, sandy and clayey silt matrix; gravel, angular to rounded, volcanic-rock fragments.		3	420
Gravel, very fine to very coarse, in brown, sandy and clayey silt matrix; contains occasional small cobble; gravel, angular to rounded volcanic-rock fragments.		18	438
Silt, tan and brown, sandy and clayey.		5	443
Interbedded, very fine to very coarse gravel, 4 to 5 ft thick, and brown, sandy and clayey silt, 6 to 12 in. thick; gravel, angular to rounded volcanic-rock fragments.		42	485
Silt, brown, clayey.		3	488
Interbedded, very fine to very coarse gravel, 3 to 4 ft thick, and brown, sandy silt, 6 to 12 in. thick; gravel, angular to rounded, volcanic-rock fragments.		15	503
Silt, brown, clayey.		5	508
Gravel, very fine to very coarse, in brown, sandy silt matrix; gravel, angular to rounded volcanic-rock fragments.		20	528
Silt, light-yellow, orange-brown, and brown, sandy and clayey; contains very fine to very coarse gravel.		12	540
Silt, brown, sandy, with interspersed very fine to medium gravel; contains 1- to 6-in. beds of light-tan, brown, and light blue-gray siltstone at about 5-ft intervals.		55	595
Brian Head(?) and Wasatch(?) Formations:			
Clay, light-gray, gray, and blue-gray; clay varies from nearly pure to silty and sandy clay; silt and sand grains composed of fragments of quartz and dark minerals.		160	755
(C-34-5)7aaa-1 (TH 5). Alt. 6,620 ft.			
Recent and Pleistocene deposits:			
Silt, dark-brown, sandy.		6	6
Gravel, very fine to very coarse, small cobbles, and very fine to very coarse sand; gravel and cobbles, angular to rounded, sandstone and volcanic-rock fragments; very coarse and coarse sand, composes 75 percent of total sand, angular to subrounded, sandstone and volcanic-rock fragments; medium sand angular to rounded, quartz and volcanic-rock fragments; fine and very fine sand, angular quartz and volcanic-rock fragments, and subangular to rounded quartz and dark minerals.		13	19
Sevier River(?) Formation:			
Silt, brown, sandy; contains interspersed, very fine to medium gravel of sandstone and volcanic-rock fragments.		19	38
Cobbles, small, volcanic-rock fragments.		2	40
Silt, dark-brown, clayey; contains interspersed, very fine to fine gravel of sandstone and volcanic-rock fragments.		4	44
Gravel, very fine to very coarse in brown, sandy and clayey silt matrix; gravel, angular to subrounded, sandstone and volcanic-rock fragments.		15	59
Silt, brown, sandy and clayey; contains very fine to fine, angular to subangular gravel composed of sandstone and volcanic-rock fragments.		15	74
Gravel, very fine to very coarse, and very fine to very coarse sand; gravel, angular to subrounded, sandstone and volcanic-rock fragments; very coarse and coarse sand, angular to subangular, sandstone and volcanic-rock fragments; medium and fine sand, 90 percent angular volcanic-rock fragments, 10 percent angular to rounded quartz; very fine sand, angular, 50 percent quartz, 50 percent dark minerals and volcanic-rock fragments.		4	78
Silt, brown, sandy and clayey; contains interspersed very fine to fine, angular to subangular gravel of volcanic-rock fragments.		18	96

Table 4.--Logs of selected wells and test holes in the upper Sevier River basin - Continued

Test-hole logs - Continued		Fangutch Valley - Continued	
Thickness	Depth	Thickness	Depth
(C-34-5)9aaa-1 (TH 5) - Continued.		(C-34-5)9bab-1 (TH 6) - Continued.	
Sevier River(?) Formation - Continued:		Recent and Pleistocene deposits - Continued:	
Sand, very fine to very coarse; very coarse to coarse sand, angular to subrounded, sandstone and volcanic-rock fragments; medium sand, 90 percent angular volcanic-rock fragments, 10 percent angular to rounded, quartz; fine sand, 50 percent angular volcanic-rock fragments, 50 percent angular to rounded quartz; very fine sand, angular, 50 percent quartz, 50 percent dark minerals and volcanic-rock fragments		Cobbles, small, and coarse to very coarse gravel; cobbles and gravel, angular to subrounded, sandstone, limestone, and volcanic-rock fragments	
3	99	5	78
Gravel, very fine to coarse, and very fine to very coarse sand; contains thin beds of brown, sandy silt; gravel, angular to subrounded, sandstone and volcanic-rock fragments; very coarse sand, angular, 90 percent volcanic-rock fragments, 10 percent sandstone fragments; coarse sand, 90 percent angular to subrounded volcanic-rock fragments, 10 percent angular to rounded quartz; medium and fine sand, angular to rounded, 50 percent quartz, 50 percent volcanic-rock fragments and dark minerals; very fine sand, 50 percent angular to rounded quartz, 50 percent angular volcanic-rock fragments and angular to rounded dark minerals		5	83
44	143	Silt, light-tan, sandy and clayey	
Gravel, very fine to very coarse, in matrix of light-tan, clayey silt; gravel, angular to subrounded, volcanic-rock fragments		14	97
4	147	Sevier River(?) Formation:	
Gravel, coarse to very coarse, and small to large cobbles; partially cemented by caliche; subangular to subrounded, volcanic-rock fragments		Gravel, very fine to medium, in matrix of dark-brown, sandy silt; gravel, angular to rounded, sandstone and volcanic-rock fragments	
25	172	18	115
Gravel, very fine to very coarse, and very fine to very coarse sand; gravel, subrounded to rounded, 60 percent volcanic-rock fragments and 40 percent sandstone; very coarse sand and coarse sand, 90 percent angular to subangular sandstone and volcanic-rock fragments, 10 percent angular quartz and feldspar; medium sand, 60 percent angular to subrounded volcanic-rock fragments, 40 percent angular to rounded quartz; fine and very fine sand, respectively angular and angular to subangular, 50 and 90 percent quartz, 50 and 10 percent volcanic-rock fragments and dark minerals		Silt, brown, sandy and clayey; contains 6- to 12-in. beds of very coarse sand and very fine to fine gravel at 5- to 15-ft intervals	
8	180	75	190
Gravel, very fine to very coarse, and small cobbles, angular to subrounded, sandstone and volcanic-rock fragments		Silt, light-gray, gray, and blue-gray, clayey and sandy; contains interspersed very coarse sand and very fine gravel of angular to rounded sandstone and volcanic-rock fragments; interval predominantly silt, but varies from very fine silty and sandy clay to clayey or silty sand; individual beds range in thickness from 1 in. to 3 ft; contains ostracods	
12	192	105	295
Gravel, very fine to very coarse, in matrix of light-tan, tan, and orange-tan, sandy and clayey silt; contains small cobbles from 215-217 ft; gravel, angular to subrounded, sandstone and volcanic-rock fragments		Silt, brown, sandy and clayey; contains interspersed very coarse sand and very fine gravel of angular to subrounded sandstone and volcanic-rock fragments	
31	223	29	324
Gravel, very fine to very coarse, and very fine to very coarse sand; gravel, angular to subrounded, sandstone and volcanic-rock fragments; very coarse and coarse sand, angular to subangular, volcanic-rock fragments; medium sand, angular to rounded, 75 percent volcanic-rock fragments and dark minerals, 25 percent quartz; fine and very fine sand, angular to rounded, 50 percent volcanic-rock fragments and dark minerals, 50 percent quartz		Gravel, very fine to very coarse, in matrix of brown, sandy silt; gravel, angular to rounded, sandstone and volcanic-rock fragments	
4	227	26	350
Gravel, very fine to very coarse, in matrix of tan, sandy and partly clayey silt; gravel, angular to subrounded, sandstone and volcanic-rock fragments		Gravel, very fine to very coarse, small cobbles, and very fine to very coarse sand; contains 1- to 3-ft beds of brown, sandy silt at 4- to 8-ft intervals; gravel and cobbles, angular to rounded, sandstone and volcanic-rock fragments; very coarse sand, angular to subrounded, 90 percent volcanic-rock fragments, 10 percent quartz, sandstone, and limestone fragments; coarse and medium sand, angular to rounded, respectively 90 and 50 percent volcanic-rock fragments, 10 and 50 percent quartz; fine and very fine sand, respectively angular to rounded and angular, 60 and 50 percent quartz, 40 and 50 percent dark minerals	
46	275	65	415
Clay, white to light-gray, sandy and silty, and interspersed very fine to fine gravel; gravel, angular to subangular, volcanic-rock fragments		5	420
20	295	Silt, gray-brown, clayey	
Brian Head(?) and Wasatch(?) Formations:		Gravel, very fine to very coarse, and small cobbles, in matrix of brown, clayey silt; gravel and cobbles, angular to subrounded, volcanic-rock fragments	
Interbedded, light-gray to white, light-pink, light-orange, yellow, and lavender clay, sandy and silty clay, white siltstone, white sandstone, and white to light-pink and light-orange limestone; the formation is light-gray to white between 295-356 ft, contains intervals of pink and orange between 356-388 ft, and contains minor intervals of lavender and yellow clay between 388-398 ft; pink limestone 388-390 ft.		25	445
95	390	Gravel, very fine to coarse, in matrix of very fine to fine sand and sandy silt; partly cemented by silica; gravel composed of limestone, sandstone, and volcanic-rock fragments	
(C-34-5)9bab-1 (TH 6). Alt. 6,505 ft.		36	481
Recent and Pleistocene deposits:		Gravel, very fine to very coarse and small cobbles, in matrix of brown, sandy silt; gravel and cobbles also occur in beds 6 to 12 in. thick at 4- to 8-ft intervals, and are composed of angular to rounded sandstone, limestone, and volcanic-rock fragments	
Silt, light-tan and brown, sandy		55	536
14	14	Silt, white and light-gray to gray, sandy and clayey; very clayey between 544-551 ft	
Gravel, very fine to very coarse, small cobbles, and very fine to very coarse sand; gravel and cobbles, subangular to rounded, 90 percent volcanic-rock fragments, 10 percent sandstone, quartzite, chert, and limestone fragments; very coarse and coarse sand, respectively angular to rounded and angular to subrounded, 90 percent volcanic-rock fragments, 10 percent sandstone, quartzite, chert and limestone fragments; medium sand, angular to rounded, 50 percent volcanic-rock fragments, 50 percent quartz; fine and very fine sand, respectively angular to rounded and angular to subrounded, 75 and 60 percent quartz, 25 and 40 percent dark minerals and volcanic-rock fragments		24	560
48	62	Brian Head(?) and Wasatch(?) Formations:	
Gravel, very fine to very coarse, in matrix of light-gray, sandy silt; gravel, angular to rounded, sandstone, limestone, and volcanic-rock fragments		Sandstone, black and dark brown, and brown, sandy silt; sandstone, very fine to medium-grained, composed of angular to rounded quartz and dark minerals, occurs in beds 6 to 12 in. thick, interbedded with silt at 6- to 12-in. intervals	
11	73	6	566
		Clay, white, light-gray, pink, yellow, orange, and red; contains thin beds of white, orange, pink and red, sandy limestone	
		147	713
		(C-36-5)28bdc-1 (TH 8). Alt. 6,670 ft.	
		Recent and Pleistocene deposits:	
		Clay, light yellow-orange to tan, silty and sandy, calcareous	
		8	8
		Silt, light-gray, clayey, sandy; contains very fine to fine, subangular to rounded gravel	
		13	21
		Sand, very fine to very coarse, and very fine to coarse gravel; sand, subangular to rounded, 60 percent quartz, 20 percent chert, limestone, and other rock fragments; gravel, subangular to rounded, 80 percent limestone, sandstone, quartzite, and chert fragments, 20 percent volcanic-rock fragments	
		11	32
		Sevier River(?) Formation, or Brian Head(?) and Wasatch(?) Formations:	
		Silt to fine sand, interbedded with very fine to fine-grained sandstone; contains medium to very coarse sand and very fine to fine gravel between 46-50 ft and 65-80 ft; gravel and sand consist mostly of volcanic-rock fragments; silt and fine sand, light pink-tan to brown, clayey and sandy; sandstone, brown to green and yellow-brown, composed of subangular to subrounded quartz and rock fragments, loosely cemented by silica or clay	
		63	95
		Gravel, very fine to very coarse, and very fine to very coarse sand, interspersed and interbedded with pink-tan and orange-tan to brown, clayey and sandy silt; gravel, subangular to rounded, 90 percent volcanic-rock fragments, 10 percent chert and sandstone fragments; very coarse and coarse sand, ...	

Table 4.--Logs of selected wells and test holes in the upper Sevier River basin - Continued

Test-hole logs - Continued			
Panguitch Valley - Continued			
Thickness		Depth	
(C-36-5)28bdc-1 (TH 8) - Continued.			
Sevier River(?) Formation, or Brian Head(?) and Wasatch(?) Formations - Continued:			
subangular to subrounded, volcanic-rock fragments; fine and very fine sand, subangular to subrounded quartz	35	130	
Silt, to very fine sand, light pink-tan, orange-tan, and yellow-gray to white; contains much medium to coarse sand and some very fine to medium gravel between 145-182 ft; contains few interbeds of white, clayey silt to silty clay between 170-180 ft	52	182	
Sandstone, red-brown and black, very fine to fine-grained, subangular, loosely to moderately cemented with clay and calcite	3	185	
Silt to fine sand, light yellow-gray to tan and white, clayey; contains few yellow clay interbeds; also contains some medium to coarse quartz sand, subangular to subrounded	30	215	
Sandstone, very fine to medium-grained with few thin interbeds of white, well-consolidated tuff, composed of glass shards; sandstone, light-yellow, yellow-gray, yellow-green, tan, and brown, subangular to subrounded quartz and volcanic-rock fragments, loosely to moderately cemented with clay, calcite, and silica(?)	30	245	
Silt to fine sand, light-yellow, yellow-tan, and tan to white, partly clayey; contains a few interbeds of white, clayey tuff, which becomes predominant between 265-270 ft	25	270	
Gravel, very fine to fine, dark-brown to black, angular to subrounded, volcanic-rock fragments	6	276	
Sandstone, interbedded with tan to yellow-gray, sandy silt to fine sand; also contains thin interbeds of siltstone to claystone; sandstone, very fine to medium-grained, light gray to gray, composed of subangular to subrounded quartz with some volcanic-rock fragments, loosely cemented by clay and calcite	17	293	
Siltstone, light-tan, moderately to well cemented by silica and clay; becomes interbedded with and grades into light-brown to gray sandstone; sandstone, fine to medium-grained, composed mostly of angular quartz, feldspar, and obsidian(?) grains	12	305	
Sandstone, very fine to medium-grained, light tan-gray to gray-brown; contains interbeds of fine gravel and tan sandy silt between 305-320 ft, and tan, sandy silt to siltstone between 320-340 ft; becomes interbedded with pink-tan siltstone, sandy silt, and yellow-white clay to claystone between 340-360 ft; sandstone composed mostly of quartz and feldspar with some dark minerals and obsidian(?) rock fragments, cemented by clay(?) and calcite	55	360	
Silt to fine sand, white to light yellow-tan and pink-tan, partly clayey, resembles weathered volcanic tuff; contains interbeds of sandstone as described in intervals 293-305 and 305-360 ft above	19	379	
(C-36-5)28bdc-1 (TH 8) - Continued.			
Sevier River(?) Formation, or Brian Head(?) and Wasatch(?) Formations - Continued:			
Sandstone, very fine to medium-grained, tan to black; contains interbeds of sandy silt and tan to brown claystone; black sandstone composed of subangular to subrounded grains of dark minerals and volcanic-rock fragments loosely cemented by silica; tan sandstone, buffaceous, clayey, and composed mostly of angular to subangular feldspar grains, cemented by clay and silica	22	401	
Silt, sandy, partly clayey and calcareous, and very fine to medium sand, light yellow-tan to yellow-white; contains interbeds of gray to black sandstone between 401-419 ft; contains very fine to medium, subangular to subrounded gravel between 419-439 ft; also contains interbeds of white, silty clay to claystone between 400-419 and 439-439 ft	64	465	
Volcanic tuff, white to tan-pink, composed mostly of glass shards with some angular quartz and feldspar fragments, moderately to well cemented by silica	8	473	
Sandstone, light yellow-brown to light-gray, fine- to medium-grained, subangular to subrounded; yellow-brown sandstone, clayey, 90 percent quartz, 10 percent calcite and rock fragments, calcite-cemented; gray sandstone, 90 percent quartz, 10 percent biotite, silica-cemented	5	478	
Silt and clay, pink-tan, light-yellow to yellow-gray, and yellow-green, sandy, partly calcareous; contains interbeds of light yellow-green, loosely consolidated claystone between 487-500 ft, and very fine to fine, subangular to subrounded gravel of volcanic-rock fragments between 500-518 ft; also contains few interbeds of light yellow-white, fine-grained sandstone between 520-530 ft	52	530	
Volcanic tuff, white, weathered, interbedded with white to yellow-white, calcareous claystone; contains some interbedded and interbedded, very fine to medium gravel of 75 percent volcanic-rock fragments, 25 percent limestone and quartzite fragments; tuff, composed of glass shards, clay, quartz, feldspar, other mineral fragments; claystone grades into sandy silt with depth	24	554	
Silt and clay, to very fine sand, white to light-tan, orange-pink, calcareous; contains few interbeds of siltstone to claystone as described above; also contains interbeds of very fine to coarse sand, and very fine to medium gravel; gravel, 50 percent volcanic-rock fragments, 50 percent quartzite and limestone fragments; sand, subangular to subrounded, 90 percent quartz grains, 10 percent volcanic-rock fragments	23	577	
Circle Valley			
(C-30-3)16hab-1. TH 21, central Sevier Valley drilling program/. Alt. 5,997 ft.			
Recent and Pleistocene deposits:			
Silt, dark-gray, sandy; contains peat	4	4	
Sand, coarse, to medium gravel; composed of volcanic-rock and sandstone fragments; water-bearing	17	21	
Clay, light-gray to light-brown; some fine gravel	5	26	
Cobbles and sand	4	30	
Silt, tan to light-gray, alternating with thin layers of fine sand	32	62	
Gravel, coarse, composed of volcanic-rock fragments; water-bearing	14	76	
Silt and sand, gray	7	83	
Tertiary volcanic rocks:			
Clay, light-green, brown, and white, buffaceous; intermittently silty and sandy; contains glass shards; few thin layers of fine volcanic gravel below 310 ft; contains plant material 360-362 ft	279	362	
Gravel, medium, composed of volcanic-rock fragments	3	365	
Tuff, welded	9	374	
(C-30-3)30caa-1 - Continued.			
Recent and Pleistocene deposits - Continued:			
Silt, light-brown, clayey	6	387	
Gravel, coarse to medium	11	398	
Clay, dark-brown, silty, sandy	18	416	
Gravel, fine	8	424	
Clay, dark-brown, silty, sandy	8	432	
Gravel, medium to coarse	14	446	
Clay, dark-brown, silty, sandy	24	470	
Gravel, coarse	4	474	
Clay, sandy, silty	6	480	
Gravel	8	488	
Clay, sandy, silty; with gravel lenses	32	520	
Gravel	10	530	
Clay, sandy, silty	8	538	
Gravel	8	546	
Clay, sandy, silty	6	552	
Gravel	6	558	
Clay, dark-brown, sandy, silty	5	563	
(C-30-3)32bbb-1 (TH 20). Alt. 6,100 ft.			
Recent and Pleistocene deposits:			
Silt and fine sand, tan to light-brown, calcareous; contains interspersed fine to medium gravel; contains 1-ft interbed of gravel between 3-4 ft	16	16	
Gravel, very fine to very coarse; contains light-brown, clayey silt to fine and medium sand both as matrix and as 6- to 12-in. interbeds; gravel, angular to subrounded, well-compacted, volcanic-rock fragments	20	36	
Silt and very fine to medium sand in 3- to 5-ft beds, interbedded with 6-in. to 4-ft beds of very fine to coarse gravel; interbeds of gravel between 77-110 ft are well-sorted and rounded; gravel, subangular to rounded, volcanic-rock fragments; medium sand, subangular to rounded, 85-95 percent volcanic-rock fragments, 5-15 percent quartz and sedimentary-rock fragments; fine and very fine sand, 75-85 percent			

Table 4.--Logs of selected wells and test holes in the Upper Sevier River basin - Continued

Test-hole logs - Continued		Circle Valley - Continued	
Thickness	Depth	Thickness	Depth
(C-30-3)32bbb-1 (TH 20) - Continued.		(C-30-4)35dab-1 (TH 21) - Continued.	
Recent and Pleistocene deposits - Continued:		Recent and Pleistocene deposits - Continued:	
quartz and feldspar fragments, 10-15 percent rock fragments, 5-10 percent dark minerals.		rounded, 75-90 percent volcanic-rock fragments, 10-25 percent chert, quartzite, limestone, and sandstone fragments; coarse and medium sand, 75 percent volcanic-rock fragments, 25 percent crystalline and rounded quartz and feldspar; fine and very fine sand, 75 percent quartz and feldspar, 25 percent dark minerals and rock fragments.	
89	125	58	71
Gravel, very fine to very coarse, and cobbles; gravel predominates, except between 150-187 ft; contains few thin interbeds of yellow-tan to light-brown, sandy and clayey silt, and very fine to coarse sand between 125-140 and 215-239 ft; gravel, angular to subrounded, volcanic-rock fragments, except in interval 160-175 ft, where subrounded to rounded gravel predominates.		Silt to fine sand, light yellow-tan, clayey, sandy, calcareous, contains 1-ft interbed of fine to medium gravel at 72 ft.	
114	239	4	75
Sand, very fine to medium, and silt, yellow-tan to brown, clayey and partly calcareous; contains interspersed very fine to very coarse gravel.		Gravel, very fine to very coarse, angular to subrounded, rounded between 98-105 ft; very coarse gravel with cobbles predominates from 110-165 ft; contains small amount of yellow-tan to tan silt between 102-140 ft; also contains several zones of gravel in a light-orange clay matrix between 130-140 ft.	
8	247	90	165
Gravel, very fine to very coarse, and cobbles, in matrix of tan to light-brown, sandy silt; silt in interbeds 1 to 4 ft thick between 275-290 ft; gravel, angular to subrounded, except rounded between 303-360 ft, volcanic-rock fragments.		Gravel, very fine to medium, in matrix of yellow-tan, orange-tan, and pink to brown clayey silt and fine sand; contains interbeds of very fine to very coarse sand, and coarse gravel and cobbles; clayey silt changes to light gray-green color at 225 ft; gravel, angular to subrounded, 95-100 percent volcanic-rock fragments, 0-5 percent sandstone, chert, and quartzite fragments; very coarse, coarse, and medium sand, 95-98 percent volcanic-rock fragments, 2-5 percent quartz feldspar, and other mineral fragments; fine and very fine sand, 50-60 percent quartz and feldspar fragments, 40-50 percent dark mineral fragments.	
145	392	66	231
6	398	Silt to medium sand, pink-tan, orange, yellow to yellow-tan, light-gray, clayey; contains interspersed, fine volcanic gravel and very coarse sand; interval 300-305 ft contains light-orange, silty clay.	
Gravel, very fine to very coarse, and cobbles, in matrix of tan to light-brown, sandy silt to fine and medium sand; contains interbeds 1 to 2 ft thick of sandy silt containing light-gray to pink clay between 420-436 and 470-472 ft; also contains an interbed of very fine to very coarse sand between 437-440 ft; gravel and cobbles, subangular to subrounded, volcanic-rock fragments.		74	303
152	550	Gravel, very fine to very coarse, some cobbles; tan, clayey silt in interval 305-320 ft, then diminishes in amount until present only in 1- to 2-ft interbeds at 5- to 7-ft intervals of gravel; contains medium to coarse sand between 350-360 ft.	
Sand, very fine to very coarse, and silt; contains interspersed fine to coarse gravel and cobbles.		135	440
23	573	Gravel, coarse to very coarse, small cobbles; in part contains matrix of very fine to coarse sand and yellow-tan to pink-gray and white, clayey silt; this matrix increases in amount with depth; gravel, subangular to subrounded, volcanic-rock fragments; sand description same as above.	
Gravel and cobbles in matrix of sandy silt to fine sand; contains interbeds of light pink-gray, silty clay between 590-610 ft; also contains several interbeds of tan, calcareous, poorly consolidated, clayey siltstone between 620-630 ft; gravel in interval 616-639 ft is well rounded and is interspersed in very fine to very coarse sand.		70	510
107	680		
(C-30-4)35dab-1 (TH 21). Alt. 6,086 ft.			
Recent and Pleistocene deposits:			
Silt, tan to light-brown, partly clayey, sandy.			
13	13		
Gravel, very fine to medium, very coarse between 35-50 ft; contains tan to yellow-tan calcareous silt and very fine to coarse sand as both matrix and 1-ft interbeds between 18-50 ft; gravel, subangular to			
East Fork Valley			
(C-31-2)3cbe-1 (TH 13). Alt. 6,360 ft.		(C-31-2)3cbe-1 (TH 13) - Continued.	
Recent and Pleistocene deposits:		Recent and Pleistocene deposits - Continued:	
Silt, light- to dark-gray, contains very fine to medium sand.		75 percent volcanic-rock fragments, 25 percent quartz and dark mineral fragments; fine and very fine sand, respectively angular to subrounded and angular, 75 percent quartz fragments, 25 percent volcanic-rock fragments and dark minerals.	
3	3	23	189
Sand, very fine to very coarse, and gray silt; contains minor amount of very fine to medium gravel of angular to rounded, volcanic-rock fragments; very coarse and coarse sand, angular to subrounded, respectively 90 and 75 percent volcanic-rock fragments, 10 and 25 percent quartz fragments; medium sand, angular to rounded, 75 percent quartz, 25 percent volcanic-rock fragments and dark minerals; fine and very fine sand, angular to rounded, 90 percent quartz, 10 percent dark minerals.		Silt and clay, partly sandy; contains thin beds of very fine to fine gravel and coarse to very coarse gravel; silt, light-tan to pink, yellow-tan, and light-gray to gray, contains some clay and very fine sand; clay, yellow-tan to bright yellow-orange, contains some very fine sand.	
27	30	12	201
Gravel, very fine to coarse, small cobbles, and sand; gravel, angular to rounded, 75 percent volcanic-rock fragments, 25 percent chert and limestone fragments; cobbles, volcanic-rock fragments; sand same description as 3-30 ft interval above.		9	210
26	58	(C-31-2)22aab-1 (TH 13). Alt. 7,225 ft.	
Silt, tan, clayey; contains very fine to medium gravel between 65-70 ft.		Recent and Pleistocene deposits:	
17	75	Silt, dark-brown to brown-gray 1-3 ft, light-tan to brown 3-12 ft, clayey, sandy.	
Gravel, very fine to very coarse, angular to rounded, volcanic-rock fragments; contains thin beds of light-tan to pink-tan, clayey silt; also contains cobbles of volcanic-rock fragments between 85-86 ft.		12	12
11	86	Gravel, very fine to medium, and medium to coarse sand, very clean and well-sorted; gravel, subrounded to rounded, 50 percent limestone, quartzite and chert fragments, 50 percent volcanic-rock fragments; coarse sand, subangular to rounded, same composition as gravel; medium sand, subangular to rounded, 95 percent quartz, 5 percent volcanic-rock fragments.	
Gravel, very fine to very coarse; contains a few thin beds of light-tan silt; gravel, angular to rounded, 75 percent volcanic-rock fragments, 25 percent white and light-red limestone fragments.		53	65
12	98	Gravel, very fine to coarse, and very coarse sand; contains interbedded and interspersed yellow-tan to pink-white, clayey and sandy silt to silty clay; gravel, same description as interval 12-65 ft above; sand, subangular to subrounded, 75 percent volcanic-rock fragments, 25 percent limestone, chert, and quartzite fragments.	
Silt, light-tan, pink-tan, and light- to dark-gray; contains few very thin interbeds of light-tan to light-orange clay, and occasional thin lenses of sand, with very fine to fine gravel.		50	115
25	123	Gravel, very fine to medium with some coarse, and coarse to very coarse sand, clean and well-sorted; interval 170-185 ft contains interbedded very fine to medium gravel in 2- to 4-ft beds, and coarse gravel in 1-ft beds; gravel, subangular to rounded, 60 percent limestone, quartzite, and chert fragments, 40 percent volcanic-rock fragments; sand, subangular to rounded, 50-80 percent volcanic-rock fragments, 20-30 percent limestone and quartzite fragments; limestone and quartzite fragments in sand and gravel increase in amount with depth.	
Gravel, very fine to coarse; contains light-tan and light- to dark-gray silt and some clayey silt in beds about 2 ft thick at 5- to 6-ft intervals; gravel, angular to rounded, volcanic-rock fragments.		70	185
43	166	Gravel, very fine to coarse, and very coarse sand;	
Gravel, very fine to very coarse, and very fine to very coarse sand; gravel, angular to rounded, 90 percent volcanic-rock fragments, 10 percent limestone, sandstone, and chert fragments; very coarse and coarse sand, angular to subrounded, respectively 90 and 75 percent volcanic-rock fragments, 10 and 25 percent quartz, limestone, chert, sandstone, and dark mineral fragments; medium sand, angular to rounded,			

Table 4.--Logs of selected wells and test holes in the upper Sevier River basin - Continued

Test-hole logs - Continued			
East Fork Valley - Continued			
	Thickness	Depth	Thickness Depth
(C-33-2)22aab-1 (TH 12) - Continued.			
Recent and Pleistocene deposits - Continued:			
contains interbeds of light-tan to light-gray and white, clayey, sandy silt.	85	270	
Gravel and cobbles, in matrix of light-gray, yellow-tan, and white, clayey, sandy silt; gravel, same description as above	20	290	
(C-33-2)33ccc-1 (TH 9). Alt. 7,293 ft.			
Recent and Pleistocene deposits:			
Clay, light pink-tan, very calcareous, contains fine to medium, rounded quartz grains	2	2	
Silt and clay, tan to light-brown in beds 4 to 5 ft thick, interbedded with 6- to 12-in. beds of gray, sandy, and calcareous clay	26	28	
Gravel, very fine to coarse, and very fine to very coarse sand; contains interbeds of yellow-tan to white, clayey silt; gravel, subangular to subrounded, 50 percent limestone, quartzite, and chert fragments, 50 percent volcanic-rock fragments; sand, subrounded to rounded quartz, and subrounded calcite fragments.	37	65	
Gravel and sand, interbedded with tan to light-brown sandy and clayey silt; part of gravel and sand relatively free of silt; gravel, 75 percent volcanic-rock fragments, 25 percent limestone and quartzite fragments; sand, subangular to subrounded, 75 percent quartz, feldspar, and calcite fragments, 25 percent volcanic-rock fragments and dark minerals.	65	130	
Silt, light yellow-tan to pink-tan, clayey, sandy	5	135	
Gravel, medium to coarse, and cobbles, composed of volcanic-rock fragments.	10	145	
Gravel, fine, in matrix of brown, clayey silt; gravel, subangular to subrounded, 90 percent volcanic-rock fragments, 10 percent chert and limestone fragments.	10	155	
Gravel and sand, in yellow-tan to tan, clayey silt as described in interval 65-130 ft above	18	173	
Silt, yellow-tan to tan, clayey, sandy, calcareous; contains small amount of interspersed very fine gravel and very coarse sand, which increase in amount between 195-205 ft	45	218	
Gravel, very fine to very coarse, and cobbles, in yellow-tan to tan, sandy silt; gravel, subangular to rounded, volcanic-rock fragments	8	226	
Silt, yellow-tan to tan, calcareous, clayey and sandy; clay increases in amount near bottom of interval	4	230	
Silt, orange-tan to yellow-tan, interbedded with very fine to coarse gravel in 1- to 2-ft intervals; silt, clayey and sandy; gravel, as described above	7	237	
Silt, clayey, to fine sand, light yellow-tan to orange-tan, calcareous; contains very coarse sand and very fine gravel; also contains cobbles at 281 ft; gravel, subangular to rounded, 75 percent volcanic-rock fragments, 25 percent limestone and calcite fragments above 285 ft, 60 percent limestone and chert fragments, and 40 percent volcanic-rock fragments below 285 ft	53	290	
Gravel, very fine to very coarse, and coarse sand, in matrix of light yellow-tan to white, calcareous, silty clay to clayey silt; gravel, subangular to subrounded, 60 percent limestone and chert fragments, 40 percent volcanic-rock fragments; silt and clay become red-brown at 312 ft.	25	315	
Brian Head and Wasatch Formations:			
Silt, clayey, to silty clay, calcareous and sandy; contains interbeds of yellow-tan to red-brown, fine-grained sandstone to siltstone between 340-360 ft; also contains interspersed coarse sand to gravel in interval 315-372 ft; silt and clay, mostly yellow to yellow-gray and white, except some 1- to 3-ft intervals of orange-brown to orange-yellow, light-pink to light-purple, and red-brown.	57	372	
Silt, orange-tan to orange-red, sandy, clayey; contains maroon-red, fine-grained sandstone between 374-376 ft; sandstone composed mostly of calcite and quartz grains cemented by calcium carbonate and stained by iron-oxide.	6	378	
Silt, clayey, and silty clay, calcareous; contains interbeds of light-tan to yellow-brown, sandy shale and siltstone to fine-grained sandstone, which is loosely cemented with calcareous clay; also contains some interspersed, very coarse sand to fine gravel, composed of volcanic-rock fragments, between 400-440 ft; silt and clay, yellow-white to white, with some yellow-orange, pink, and yellow-tan.	92	470	
Silt and clay, as described in interval 378-470 ft above, except light orange-tan in color; contains an interbed of red-brown, ferruginous, fine-grained sandstone, composed of subangular quartz and calcite grains cemented by calcium carbonate	5	475	
Silt, clayey to silty clay; contains interbeds of yellow-tan to red-brown, calcareous sandstone, and angular, very coarse, sand-sized volcanic-rock fragments from 518-530 ft; silt and clay, calcareous, sandy, light yellow-tan to yellow-white between 473-503 ft, orange-tan to red-tan between 508-516 ft, yellow-white between 516-540 ft, light-gray to pink and red between 540-550 ft	75	550	
(C-33-2)33ddd-1 (TH 17). Alt. 7,300 ft.			
Recent and Pleistocene deposits:			
Silt, light pink-tan, clayey, slightly sandy, calcareous; small amount of interspersed fine gravel between 17-20 ft	20	20	
Gravel, very fine to coarse; contains very coarse sand which increases in amount between 45-57 ft; also contains interbeds of pink-tan, sandy silt between 20-25 ft and 40-50 ft; gravel subangular to subrounded, 60 percent quartzite and chert fragments, 40 percent limestone fragments; sand, subangular to subrounded, 75 percent limestone and quartzite fragments, 25 percent chert, quartz, and other rock fragments.	37	57	
Silt, light pink-tan, clayey and sandy; contains coarse and very coarse sand, and very fine to medium gravel, as described in interval 20-57 ft above.	8	65	
Gravel, very fine to medium, and very coarse sand, in matrix of pink-tan, clayey and sandy silt	7	72	
Silt, light pink-tan, clayey and sandy, contains very coarse sand and very fine to medium gravel as described in interval 20-57 ft above	11	83	
Gravel, very fine to very coarse, and occasional cobbles; well-sorted and silt-free between 87-96 ft, otherwise dispersed in matrix of yellow-tan, pink-tan, and white, clayey silt; contains coarse to very coarse sand between 83-90 ft; gravel, approximately same composition as described in interval 20-57 ft above.	37	140	
Clay, silty, to clayey silt, light orange-tan, very plastic; contains fine to coarse, subangular to subrounded gravel of quartzite, chert, and limestone fragments.	30	170	
Gravel, coarse, with some fine to medium, in matrix of pink-tan to white, silty and sandy clay to clayey silt; contains some cobbles; gravel, subangular to subrounded, of approximately same description as interval 140-170 ft above.	40	210	
Clay, silty to clayey and sandy silt, light-tan to white, calcareous; contains interspersed very fine to very coarse gravel and cobbles	27	237	
Gravel, very fine to very coarse, in matrix of light pink-tan to white clay and silt, and interbedded with pink-tan to light-brown, sandy silt in intervals 237-240, 247-254, and 256-257 ft; contains very fine to very coarse sand from 250-270 ft; gravel, subangular to subrounded, 60 percent limestone fragments, 40 percent chert, and quartzite fragments	36	273	
Silt, light orange-tan, in beds 1 to 4 ft thick, interbedded with 1-ft intervals of very fine gravel interspersed in silt; silt contains clay and fine sand composed of quartz and calcite.	17	290	
Gravel, very fine to very coarse, in matrix of tan, yellow-tan, and yellow-white, clayey and sandy silt; contains interbed of pink-tan, clayey silt at 298-302 ft; gravel, subangular to subrounded, limestone, quartzite, and chert fragments	22	312	
Silt, 4- to 5-ft intervals, interbedded with clay in 6- to 12-in. intervals; becomes gravelly at 340-345 ft; silt, pink to orange-tan, clayey and sandy; clay, yellow-gray to white, sandy.	33	345	
Gravel, very fine to very coarse, and cobbles; gravel, subangular to subrounded, 75 percent limestone, quartzite, and chert fragments, 25 percent volcanic-rock fragments; cobbles, volcanic-rock fragments	11	356	
Clay, light yellow-tan to white, sandy, plastic	4	360	
Upper Cretaceous rocks:			
Shale, moderately to well-consolidated, and clayey silt, gray to dark-gray, partly calcareous, contains small, black, organic particles; contains few interbeds of light-gray silt, thin interbeds of white, moderately-consolidated clay, and stringers of calcite in interval 400-410 ft; fragment of oyster(?) shell in interval 400-410 ft	56	416	
Silt, and fine sand, to loosely-consolidated siltstone and sandstone, dark-gray to black; contains organic material which increases in occurrence with depth, appears in micro-laminations, and gives "sooty" appearance to silt; also contains light-gray silt interbeds, with occasional interbed of quartz sandstone cemented with calcite	4	420	
Coal, black, mostly lignite(?), but some subbituminous(?) which increases in amount with depth; contains interbeds of white, sandy silt to clay in interval 440-450 ft; some lignite shows relic, organic-plant structure, some contains pyrite growths.	30	450	
Silt, white, clayey and sandy, and very fine to fine sand; contains interbeds of coal as described above; also contains interbeds of white to tan, fine-grained quartz sandstone cemented by calcite; some pyrite stringers; coal becomes harder and of higher rank in interval 460-470 ft; sand, subangular to subrounded quartz	20	470	
Silt, white to light-gray, some tan and pale-orange, clayey, sandy; contains interbeds of calcareous, white to gray siltstone and fine-grained sandstone,			

Table 4.--Logs of selected wells and test holes in the upper Sevier River basin - Continued

Test-hole logs - Continued		East Fork Valley - Continued		
	Thickness	Depth	Thickness	Depth
(G-33-2)336dd-1 (TH 17) - Continued.				
Upper Cretaceous rocks - Continued:				
gray calcareous shale, and white limestone; contains coal interbed in interval 480-485 ft.	63	333		
Siltstone, clayey, to shale, gray to dark-gray and gray-black, slightly calcareous, poorly consolidated, contains pyrite.	3	336		
(G-34-2)29ced-1 (TH 11). Alt. 7,430 ft.				
Recent and Pleistocene deposits:				
Sand, very fine to very coarse, and very fine to very coarse gravel; contains interbed of tan, calcareous, sandy clay at 12-15 ft; very coarse, coarse, and medium sand, subangular to rounded, 75 percent limestone fragments, 25 percent quartzite and chert fragments; fine and very fine sand, 90 percent quartz, 10 percent dark minerals and sedimentary-rock fragments; gravel, subangular to rounded, 90 percent limestone fragments, 10 percent chert and quartzite fragments.	43	43		
Gravel, very fine to very coarse, in matrix of light-tan, sandy silt to sandy clay; gravel, subangular to subrounded, 75 percent limestone fragments, 25 percent chert, sandstone, and volcanic-rock fragments.	10	53		
Silt and clay, sandy, contains interspersed very fine to fine gravel, and very coarse sand; silt and clay, light-tan to yellow-tan, calcareous; gravel, subrounded to rounded, same composition as described in interval 45-55 ft above.	39	94		
Gravel, very fine to very coarse, and very coarse sand, interspersed in matrix of light yellow-tan to brown, calcareous, silt and clay; contains occasional interspersed cobbles, and interbeds of yellow-tan, clayey, sandy silt between 94-99- and 113-118 ft; gravel and sand, subrounded to rounded, 75 percent limestone fragments, 25 percent chert and sandstone fragments.	31	125		
Gravel, very fine to medium, and sand; gravel, angular to subangular, 90 percent limestone fragments, 10 percent chert and sandstone fragments; contains interbeds of yellow-tan, clayey, sandy silt; gravel, mostly silt-free between 125-180 ft, becomes more silty and clayey between 180-219 ft.	94	219		
Gravel, fine to coarse, and cobbles, in yellow-tan sandy silt.	4	223		
Upper Cretaceous rocks:				
Silt, and very fine to fine sand, in matrix of calcareous, yellow-tan, to yellow-green clay; contains interbeds of poorly cemented siltstone and sandstone; sand, rounded, quartz, calcite fragments, and other minerals.	29	252		
Sandstone, fine- to medium-grained, white to yellow-tan, poorly cemented with calcite; medium sand grains, 75 percent clear subrounded quartz, 15 percent subangular calcite, less than 1 percent dark minerals; fine sand grains, 90 percent quartz and feldspar, 10 percent calcite and other minerals or rock fragments.	44	296		
Limestone, argillaceous and partly silty, to calcareous mudstone, light-gray to gray; contains interbeds of fine-grained, yellow to red-brown sandstone between 299-302 ft and between 312-314 ft; sand grains, quartz, subangular to subrounded, calcite cemented.	22	318		
Silt, clayey to silty clay, light-gray to gray, slightly sandy, calcareous.	34	352		
Silt, clayey and sandy, to sandy clay, light-gray to brown, calcareous; contains interbeds of light-gray sandstone throughout interval, and dark-brown to black coal between 354-355, 365-368, 388-390, and 394-396 ft; coal beds underlain by brown, clayey silt to silty clay; interval also contains interbeds of light-tan, loosely cemented quartz sandstone between 384-385 and 391-393 ft; coal, brown, dull-luster lignite, and hard, black, shiny subbituminous(?)	48	400		
Silt, light-gray to brown; contains coal as described in interval 352-400 ft above; coal occurs between 404-405, 411-412, 437-438, and 473-474 ft; also contains interbeds of loosely consolidated, white to yellow-brown sandstone in interval 400-420 and 433-436 ft, light-tan to white and pink, silty limestone in interval 400-420 ft, and very fine gravel of limestone and chert fragments in interval 440-460 ft.	80	480		
(G-34-2)30ccc-1 (TH 10). Alt. 7,405 ft.				
Recent and Pleistocene deposits:				
Clay and silt, light yellow-tan, changes to light gray-brown at 8 ft; contains very fine gravel and fine to coarse sand.	12	12		
Sand, very fine to very coarse, and very fine to coarse gravel; amount of sand diminishes with depth; contains some cobbles below 35 ft; sand, subangular to subrounded, mostly quartz and other mineral fragments; gravel, subangular to subrounded, 90 percent volcanic-rock fragments, 10 percent chert, quartzite, and sandstone fragments.	33	45		
Gravel, very fine to medium, and coarse sand; contains interbeds of light, yellow-tan, clayey and sandy silt; gravel and sand, subangular to subrounded, volcanic-rock fragments.	30	75		
Silt, light-gray to yellow and pink, sandy and clayey; contains interbeds of coarse sand, and fine to medium gravel; gravel, subangular to subrounded, volcanic-rock fragments.	25	100		
Brim Head and Wasatch Formations:				
Silt, clayey and sandy, to silty clay, light-yellow to pink, slightly calcareous; contains few interbeds of very fine-grained, light yellow-brown to orange-brown, quartz sandstone; sandstone grains clear, subrounded, iron-oxide stained, loosely cemented with calcium carbonate.	63	163		
Clay, silty to clayey silt, light-yellow and pink to maroon, calcareous; contains interbeds of pink and yellow, poorly consolidated, calcareous claystone, siltstone and limestone; also contains interspersed fine to coarse gravel and cobbles of volcanic-rock fragments.	20	183		
Clay, silty, to clayey silt, interbedded with loosely consolidated claystone and siltstone, light-gray to lavender-gray, changing to gray, calcareous; contains some carbonaceous material.	17	200		
Clay and claystone, interbedded with silt, siltstone, and limestone, light-yellow and maroon to pink, changes to yellow-tan at 240 ft; contains gravel between 203-204 ft.	30	230		
Clay and silt, light-yellow to yellow-tan, changes to maroon and pink at 279 ft, calcareous; contains interspersed very fine to fine, subangular to subrounded quartz sand; also contains several interbeds of yellow and maroon, silty claystone below 280 ft, and very fine to fine volcanic gravel between 278-279 and 290-292 ft.	68	298		
Clay and silt, light gray to gray, calcareous, organic; contains very coarse sand to very fine gravel, of subangular to subrounded volcanic-rock fragments.	22	320		
Silt, light yellow-tan to yellow and pink, and light-gray, streaked with red-brown, clayey, sandy, calcareous; contains coarse sand to fine gravel of volcanic-rock fragments which increase in amount below 340 ft; also contains several interbeds of poorly consolidated, maroon siltstone.	40	360		
Sand, very fine, in calcareous, yellow-tan clay; sand, clear, subangular to subrounded quartz; contains fine gravel as described from 230-298 ft.	35	395		
Silt, red-pink to light-gray, clayey; contains interbeds of red-pink, sandy siltstone and limestone.	5	400		
Clay, light gray to gray, calcareous, silty; contains very fine, grained quartz sand, and medium to coarse sand of volcanic-rock fragments; also contains several interbeds of calcareous, pink to orange-red, sandy claystone.	12	412		
Sand, very fine to fine, in matrix of calcareous clay and silt; contains interbeds of maroon to red, sandy, claystone and siltstone; and coarse sand to very fine gravel composed of volcanic-rock fragments; sand composed of clear, subrounded quartz grains; clay and silt, gray to white between 412-418 ft, gray between 418-420 ft, pinkish-red and orange-red to yellow between 420-438 ft, and bright pink-red to orange-red between 438-460 ft.	48	460		
Sand, very fine to fine, and silt, in calcareous clay, light orange-red to orange-tan, with intervals of light gray to gray, carbonaceous clay; contains interbeds of maroon-red and gray, calcareous claystone and siltstone; also contains volcanic-rock fragments as above, which increase in amount and angularity.	40	500		
Silt and clay, interbedded with siltstone and claystone, yellow, yellow-tan, maroon, and white to gray, partly calcareous, sandy; gray clay is calcareous and carbonaceous.	20	520		

Table 4.--Logs of selected wells and test holes in the upper Sevier River basin - Continued

Grass Valley			
Test-hole Logs - Continued			
	Thickness	Depth	
(C-27-1)2caa-2 (TH 18). Alt. 6,816 ft.			
Recent and Pleistocene deposits:			
Silt, brown, and very fine to very coarse sand; silt, sandy and clayey; sand, occurs as stringers, angular to subrounded quartz and volcanic-rock fragments . . .	9	9	
Silt, brown, and sand and gravel; silt, sandy and clayey, matrix for gravel; sand occurs as stringers in silt; gravel, very fine to medium, angular to subrounded, volcanic-rock fragments . . .	27	36	
Silt, light-tan and brown, sandy and clayey; contains very fine to medium gravel of volcanic-rock fragments.	16	52	
Silt, gray, blue-gray, light-tan, light-brown, sandy and clayey; contains microfossils.	18	70	
Sand, very fine to very coarse, and tan and brown silt; sand, angular to subrounded, quartz and volcanic-rock fragments; silt, sandy and clayey. . . .	21	91	
Silt, light-gray, gray, and light-brown, sandy and clayey; contains microfossils.	49	140	
Silt, light blue-gray, light-gray, and brown, sandy and clayey, and very fine to very coarse sand in 6- to 12-in. beds at 6-in. to 2-ft intervals; silt, mostly light blue-gray and gray from 195-265 ft; sand, angular to subrounded quartz and volcanic-rock fragments.	125	265	
Sand, very fine to very coarse, and very fine to fine gravel; sand, angular to rounded, quartz and volcanic-rock fragments; gravel, angular to rounded, volcanic-rock fragments.	5	270	
Silt, 3-ft thick beds, interbedded with 1- to 3-ft beds of very fine to very coarse sand, and very fine to fine gravel; silt, blue-gray and gray, sandy, light-gray, clayey	40	310	
Peat, interbedded with light-gray to gray, clayey and sandy silt	5	315	
Silt, clayey and sandy, with interbeds of very fine to very coarse sand and very fine to fine gravel between 328-332 and 336-339 ft; silt, light-gray and clayey, blue-gray to gray and sandy, light-tan interval between 340-344 ft.	35	350	
Sand, very fine to very coarse, and very fine to fine gravel, in beds 1 to 2 ft thick interbedded with gray to dark-gray, sandy silt; sand, quartz and volcanic-rock fragments; gravel, volcanic-rock fragments. . . .	20	370	
Silt, brown to dark gray-brown, sandy and clayey; contains very fine to medium gravel.	54	424	
Sand, very fine to very coarse, and very fine to medium gravel; sand and gravel, angular to rounded, volcanic-rock fragments.	4	428	
Silt, light-gray to gray, contains dark-brown carbonaceous material.	2	430	
Silt, light-gray to gray, sandy; contains sand, and very fine to fine gravel in beds 6 to 12 in. thick at 3- to 5-ft intervals	33	463	
Silt, light-gray to gray, clayey; contains sand and very fine to fine gravel in beds 6 to 12 in. thick at 3- to 5-ft intervals	12	475	
Gravel, very fine to fine, and very fine to very coarse sand of quartz and volcanic-rock fragments. . .	5	480	
Silt, light-gray to gray and blue-gray, clayey and sandy; contains sand and very fine to medium gravel in 6- to 12-in. interbeds at 3- to 5-ft intervals; also contains an interbed of brown, carbonaceous material between 496-497 ft.	17	497	
Gravel, very fine to very coarse, in matrix of brown, clayey silt; gravel, angular to subrounded, volcanic-rock fragments.	6	503	
Tertiary volcanic rock	3	506	
(C-27-1)15cbs-1 (TH 19). Alt. 6,796 ft.			
Recent and Pleistocene deposits:			
Gravel, very fine to very coarse, sand, and small cobbles; gravel, angular to rounded, volcanic-rock fragments; sand, very fine to very coarse, angular to subrounded quartz and volcanic-rock fragments; cobbles, subangular to rounded, volcanic-rock fragments.	38	38	
Silt, light-gray to gray, partly light yellow-green, sandy, and silty; contains interbeds of sand, and very fine to fine gravel between 60-63, 72-77, and 91-94 ft	60	98	
Gravel, very fine to coarse, and sand; gravel, angular to rounded volcanic-rock fragments; sand, very fine to very coarse, angular to subrounded quartz and volcanic-rock fragments.	6	104	
Silt, light-gray, gray, blue-gray and tan, sandy and clayey; contains sand and very fine to fine gravel interbeds 6 in. to 2 ft thick at 3- to 5-ft intervals.	39	143	
Silt, light-tan, tan, light-gray, gray, and blue-gray, sandy and clayey; the varicolored silts are interbedded at intervals of 1 to 3 ft	18	161	
Silt, light-gray, gray, and blue-gray, sandy and silty; contains interbeds of sand and very fine to fine gravel 6 to 12 in. thick at 3- to 5-ft intervals; also contains gray, very hard clay in layers 1 to 3 in. thick.	64	205	
(C-27-1)15cbs-1 (TH 19) - Continued.			
Recent and Pleistocene deposits - Continued:			
Silt, light-tan to tan, sandy and clayey; contains interspersed very fine to fine gravel and interbeds of fine gravel 6 to 12 in. thick	30	235	
Gravel, very fine to medium, and coarse to very coarse sand, in matrix of tan, sandy silt; gravel and sand, angular to rounded, volcanic-rock fragments. . .	21	256	
Silt, gray and blue-gray, sandy and clayey; contains interbeds of sand and very fine to fine gravel 6 to 12 in. thick at 3- to 5-ft intervals; also contains very hard, gray clay in beds 1 to 3 in. thick. . . .	29	285	
Gravel, very fine to coarse, and very fine to very coarse sand in matrix of brown, sandy silt; gravel and sand, angular to rounded, volcanic-rock fragments. . .	9	294	
Silt, light-brown to brown, sandy; contains 1-ft interbed of white to very light-brown silt	4	298	
Gravel, very fine to coarse, and very fine to very coarse sand; contains very sandy, brown silt; gravel and sand, angular to rounded, volcanic-rock fragments. .	9	307	
Silt, light-brown, sandy.	5	312	
Gravel, very fine to very coarse, and very fine to very coarse sand; contains interbeds of light-tan, sandy and clayey silt, 3 to 5 ft thick at 10- to 15-ft intervals; sand and gravel, angular to rounded, volcanic-rock fragments.	79	391	
Silt, brown, clayey and sandy; contains interspersed coarse to very coarse sand and very fine to fine gravel; also contains coarse to very coarse gravel between 396-398 and 409-411 ft; interval 420-441 ft contains light-tan, tan, light-brown, and brown silt .	50	441	
Gravel, very fine to very coarse, and small cobbles, in matrix of light-brown, sandy silt; contains thin beds of light-tan, sandy clay; gravel and cobbles, angular to rounded, volcanic-rock fragments.	12	453	
Silt, tan, light-brown and brown, sandy, clayey; contains some interspersed very fine to coarse gravel	7	460	
Gravel, very fine to very coarse, and small cobbles, in matrix of tan and brown sandy silt; gravel and cobbles, angular to rounded volcanic-rock fragments. . .	5	465	
Silt, light-tan, tan, orange-brown and dark-brown, sandy and clayey	9	474	
Gravel, very fine to very coarse, and small cobbles, in matrix of tan, brown, and dark-brown, sandy and clayey silt; gravel and cobbles, angular to rounded, volcanic-rock fragments.	9	483	
Silt, light-tan, tan, brown, dark-brown, sandy and clayey; contains interspersed very fine to fine gravel	22	503	
Tertiary volcanic rock	20	525	
(C-27-1)27bas-1 (TH 15). Alt. 6,755 ft.			
Recent and Pleistocene deposits:			
Gravel, very fine to very coarse, with sand and brown, sandy silt; gravel, angular to rounded, volcanic-rock fragments.	29	29	
Clay, light-gray to gray, silty; contains brown, sandy silt between 46-52 and 54-58 ft.	29	58	
Clay, light-gray to gray, silty and sandy	7	65	
Clay, light to dark-gray and light blue-gray, silty and sandy; contains very fine to very coarse, angular to rounded sand and very fine gravel, in thin beds between 66-68, 82-84, 87-89, 98-102, 105-107, 133-134, and 140-142 ft; light to dark-gray clay contains silt; light blue-gray clay contains silt and very fine sand composed of angular volcanic-rock fragments, angular to rounded quartz, and darker clay fragments.	80	145	
Clay, gray to blue-gray, silty; contains thin interbeds 6 to 12 in. thick of very fine to very coarse sand and very fine gravel at 2- to 3-ft intervals; sand and gravel, angular to subrounded, volcanic-rock fragments and quartz	63	208	
Clay, light to dark-gray, silty, with interbeds 2 to 4 ft thick of very fine to very coarse sand and very fine gravel at 6- to 8-ft intervals; sand and gravel, volcanic-rock fragments.	52	260	
Sand and gravel in beds 2 to 10 ft thick, interbedded with light-yellow to light-brown sandy and clayey silt in beds 2 to 5 ft thick; sand, very fine to very coarse, angular to rounded, volcanic-rock fragments; gravel, very fine to medium, angular to rounded, volcanic-rock fragments; contains coarse to very coarse gravel from 330-369 ft	109	369	
Silt, tan to brown, sandy	7	376	
Gravel, very fine to medium, in matrix of light to dark-brown sandy silt; gravel, angular to rounded, volcanic-rock fragments.	14	390	
Silt, light to dark-brown, sandy.	14	404	
Gravel, very fine to coarse, and very fine to very coarse sand, interbedded with silt and clay in 8-ft intervals; gravel, angular to rounded, volcanic-rock fragments; sand, volcanic-rock fragments and quartz; silt, light to dark-brown, sandy and clayey; clay, gray and silty	76	460	

Table 4.--Logs of selected wells and test holes in the upper Sevier River basin - Continued

Test-hole logs - Continued		Grass Valley - Continued	
Thickness	Depth	Thickness	Depth
(C-27-1)27bac-1 (TH 15) - Continued.		(C-29-2)26dac-1 (TH 18) - Continued.	
Recent and Pleistocene deposits - Continued:		Recent and Pleistocene deposits - Continued:	
Gravel, very fine to coarse, in matrix of brown and gray silt; gravel, angular to rounded, volcanic-rock fragments.	24 504	Gravel, very fine to very coarse, and small cobbles, angular to rounded, volcanic-rock fragments.	9 110
Gravel, coarse to very coarse, and small cobbles, in matrix of brown, clayey silt; gravel and cobbles, angular to rounded, volcanic-rock fragments.	13 517	Gravel, very fine to coarse, in matrix of tan to light-brown, sandy and clayey silt; contains 1- to 2-ft beds of light-brown to light pink-tan, sandy silt at 3- to 6-ft intervals; gravel, angular to rounded, volcanic-rock fragments.	30 140
Silt, tan, light-brown, and gray, sandy to clayey; contains interspersed very fine to very coarse gravel and small cobbles.	72 589	Gravel, very fine to very coarse, small to large cobbles, in matrix of light to dark-brown, sandy and clayey silt; contains few 1-ft interbeds of sandy and clayey silt; gravel and cobbles, angular to rounded, volcanic-rock fragments.	45 185
Gravel, very fine to very coarse, and small cobbles, in matrix of red-brown clayey silt; gravel and cobbles, angular to rounded, volcanic-rock fragments.	6 595	Gravel, very fine to coarse, in matrix of light to dark-brown, sandy silt; gravel, angular to rounded, volcanic-rock fragments.	15 200
Silt, orange-red, red-brown, sandy; contains very fine to fine, angular to subrounded gravel.	5 600	Silt, light-tan, light to dark-brown, and red-brown, sandy and clayey; contains some very fine to coarse gravel.	45 245
Gravel, very fine to very coarse, and small cobbles, in matrix of red-brown silty clay; contains 6- to 12-in. beds of tan and brown, sandy silt; gravel and cobbles, angular to subrounded, volcanic-rock fragments.	36 636	Gravel, very fine to medium, in matrix of light to dark-brown sandy silt; gravel, angular to subrounded, volcanic-rock fragments.	42 287
Cobbles, small, and very fine to very coarse gravel, in matrix of light-tan and gray clayey silt; cobbles and gravel, angular to subangular, volcanic-rock fragments.	10 646	Silt, light to dark-tan and light-brown, sandy and clayey; contains interspersed very fine gravel, and interbeds of very fine to very coarse gravel and small cobbles 6 to 12 in. thick at 3- to 5-ft intervals.	23 310
Gravel, very fine to very coarse, and small cobbles, in matrix of white, light-gray, tan, and brown, sandy and clayey silt; gravel, angular to subangular, volcanic-rock fragments.	74 720	Gravel, very fine to very coarse, angular to rounded, and small cobbles, volcanic-rock fragments.	15 325
Silt, orange-tan, tan, brown, and light-gray, clayey and sandy; contains very fine to fine gravel.	35 755	Silt, white, light-tan, tan, yellow-tan, and pink-tan, sandy and clayey; contains interspersed very fine to medium gravel; also contains coarse gravel between 345-346 ft.	45 370
Gravel, very fine to fine, in matrix of light-gray, light-tan, and brown clayey silt; gravel, angular to subrounded, volcanic-rock fragments.	12 767	Gravel, very fine to very coarse, and small cobbles, in matrix of tan to brown sandy silt; gravel and cobbles, angular to rounded, volcanic-rock fragments.	25 395
Cobbles, small, and very coarse gravel in matrix of brown, clayey silt; volcanic-rock fragments.	3 770	Cobbles, small to large, and very fine to very coarse gravel; cobbles and gravel, angular to rounded, volcanic-rock fragments; contains minor amount of silt.	15 410
(C-29-2)26dac-1 (TH 18). Alt. 6,410 ft.		Gravel, very fine to very coarse, in matrix of light-tan and light-brown to brown, sandy silt; contains dark rusty-brown silt with streaks of white clay between 430-490 ft; gravel, angular to rounded, volcanic-rock fragments.	
Recent and Pleistocene deposits:		Tertiary volcanic rock.	
Silt and clay, light-brown to brown.	3 3		6 496
Gravel, very fine to very coarse, angular to rounded, volcanic-rock fragments.	5 8		
Silt, light-tan to light-brown; contains very fine sand	7 15		
Gravel, very fine to very coarse, silt-free to silty and clayey; contains 1- to 2-ft beds of sandy silt and clay between 35-50 ft; gravel, angular to rounded, volcanic-rock fragments.	35 50		
Gravel, very fine to very coarse, angular to rounded volcanic-rock fragments; contains sandy silt.	35 85		
Silt, tan to light-brown; contains clay, very fine sand, and very fine to fine gravel.	16 101		

- 1/ Test hole 21 of central Sevier Valley drilling program, see Carpenter, C. H. and Young, R. A., 1963, Ground-water data, central Sevier Valley, parts of Sanpete, Sevier, and Piute Counties, Utah: U.S. Geol. Survey open-file rept. (duplicated as Basic-Data Rept. No. 3), p. 32.
- 2/ Test hole 22 of central Sevier Valley drilling program, see Young, R. A., 1960, Ground-water areas and well logs, central Sevier Valley, Utah: U.S. Geol. Survey open-file rept., p. 6.

Table 5.--Chemical analyses of water from selected wells and springs in the upper Sevier River basin

Well or spring number	Depth of well/ (feet)	Date of collection	Temperature (°F)	Parts per million																	Dissolved solids/	Hardness as CaCO ₃	Noncarbonate hardness as CaCO ₃	Percent sodium	Sodium adsorption ratio (SAR)	Specific conductance (microhm/cm at 25°C)	pH	Analysis by/
				Silica (SiO ₂)	Iron/ (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Na + K		Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)													
									Sodium (Na)	Potassium (K)																		
Panguitch Valley																												
(C-32-5)																												
26aca-2	88	5-14-62	57	25	-	-	31	5.6	16	140	0	8.0	8.0	-	0.7	0.04	185	100	0	26	0.7	245	7.5	GS				
33abb	S	5-14-62	57	46	-	-	72	22	26	361	0	10	12	-	3.0	.06	351	270	0	17	.7	568	7.8	GS				
33bab-13/	456	7-16-62	59	48	0.01	-	36	7.1	14	159	0	4.5	8.5	0.5	.6	.04	206	119	0	20	.5	282	7.3	GS				
(C-33-5)																												
44dd-16/	83	4- 1-55	-	40	1/.2	-	34	25	62	400	-	10	22	1.1	1.2	-	429	238	0	36	1.7	-	-	DH				
164dc	S	5- 3-62	68	50	.00	-	35	6.3	35	186	0	14	16	.3	.9	.06	218	114	0	40	1.4	346	8.2	GS				
28bcd-1	190	5-24-61	55	25	.01	0.00	36	2.4	23	11.4	164	0	3.3	8.0	.6	2.9	.06	176	100	0	32	1.0	287	7.7	GS			
		5- 3-62	55	-	-	-	-	-	31	282	0	26	7.0	-	-	-	300	200	0	25	1.0	483	7.7	GS				
		9-23-63	55	-	-	-	-	-	28	245	0	6.2	11	-	-	-	259	161	0	28	1.0	399	7.7	GS				
(C-33-6)																												
5ccb	S	6-28-62	64	31	-	-	17	3.6	27	1.8	116	0	4.5	11	.2	.6	.02	154	57	0	50	1.6	221	7.8	GS			
(C-34-3)																												
2cbe-1	171	5- 3-62	50	35	.00	-	80	24	48	454	0	16	5.5	.1	8.0	.04	402	300	0	26	1.2	690	7.7	GS				
34aac	S	5- 3-62	52	46	.08	-	80	26	17	380	0	14	10	.5	1.8	.06	350	306	0	11	.4	603	7.7	GS				
(C-34-6)																												
18cd	S	12- 7-40	-	17	.1	-	22	2.2	10	98	-	4.8	7.0	0	0	-	131	65	0	36	.6	-	7.5	DH				
		6-27-50	-	28	.01	-	22	4.5	7.8	4.2	100	0	3.5	3.3	.4	.2	.00	118	73	0	18	.4	167	7.7	GS			
		8- 6-55	-	27	1/.3	-	26	.2	14	93	-	15	3.0	.6	1.5	-	118	66	0	32	.8	-	7.2	DH				
		5-14-62	51	28	1/.28	-	24	4.6	7.4	4	107	0	4.3	4.0	.1	.1	.02	129	80	0	17	.4	180	7.5	GS			
(C-35-3)																												
24ccb-12/	350	1-24-55	-	48	2/.0	-	97	34	86	584	-	69	12	.0	0.0	-	613	382	0	33	1.9	-	7.5	DH				
24cd10/	S	3- 3-55	-	9.2	2/.00	-	68	24	22	324	-	34	8.0	.3	1.2	-	294	268	2	15	.6	-	-	DH				
(C-36-5)																												
29dcd-111/	216	4-10-48	-	36	0	-	45	8.1	6.9	177	-	6.2	7.0	.1	0	-	211	145	1	9	.2	-	-	DH				
		6- 7-49	-	44	-	-	50	10	6.1	191	0	8.6	7.0	.1	4.5	.00	224	166	9	7	.2	333	-	GS				
		1-26-50	-	39	.3	-	47	10	4.4	188	-	5.2	6.7	.2	2.2	-	226	157	4	6	.2	-	8.3	DH				
		5- 3-62	55	45	.00	-	57	7.3	6.1	198	0	8.6	7.5	.1	3.9	.02	216	172	10	7	.2	343	7.9	GS				
(C-36-7)																												
31dac	S	7-14-54	40	-	-	-	-	-	-	92	0	-	2.5	-	-	-	-	70	0	-	-	152	7.3	GS				
		8- 6-54	40	20	-	-	20	4.7	6.4	92	0	3.6	2.5	-	1.0	-	12/103	70	0	17	.3	152	7.9	GS				
(C-37-6)																												
32dac	S	7-13-54	47	-	-	-	-	-	-	271	0	3.0	-	-	-	-	-	221	0	-	-	410	7.5	GS				
		8- 3-54	48	9.0	-	-	54	22	3.7	271	0	7.4	20	-	.7	-	12/210	224	2	3	.1	408	7.6	GS				
		8-11-54	47	9.2	-	-	52	23	3.0	259	6	4.0	2.5	-	.7	-	12/227	223	1	3	.1	406	8.3	GS				
		7-13-54	51	-	-	-	-	-	-	182	-	-	2.5	-	-	-	-	169	0	-	-	282	7.4	GS				
		8- 3-54	50	11	-	-	41	13	8.0	193	0	11	2.5	-	.7	-	12/182	156	0	10	.3	294	7.7	GS				
		8-11-54	50	10	-	-	38	12	5.8	182	0	3.6	2.5	-	.7	-	12/163	146	0	8	.2	280	7.8	GS				
(C-38-8)																												
12cd	S	7-16-54	50	-	-	-	-	-	-	130	-	-	2.5	-	-	-	-	104	0	-	-	207	7.4	GS				
		8- 2-54	45	12	-	-	33	8.1	5.5	145	0	4.1	2.5	-	1.0	-	12/137	116	0	9	.2	226	7.7	GS				
		8- 4-54	45	9.1	-	-	27	3.3	7.6	115	0	6.8	3.0	-	1.0	-	12/117	90	0	16	.3	181	7.6	GS				
		8-21-54	-	13	-	-	-	-	-	128	0	3.7	-	-	-	-	-	104	0	-	-	203	8.2	GS				
Circle Valley																												
(C-30-3)																												
16bbb-113/	407	7-22-57	55	52	1/0.10	26.16	42	8.5	28	6.4	106	0	103	14	3.1	0.5	-	314	138	33	28	1.0	434	8.0	GS			
		5-13-59	60	113	-	-	38	8.5	36	113	0	93	14	-	0	-	12/358	131	38	37	1.4	409	7.8	GS				
		5- 9-60	58	74	-	-	39	7.3	33	108	0	89	13	-	.7	-	12/309	128	39	36	1.3	394	7.9	GS				
		5-22-61	57	54	.32	-	39	8.3	30	13.7	106	6.0	90	12	.2	1.7	0.14	296	132	35	32	1.1	399	8.5	GS			
		5-14-62	59	51	-	-	52	6.1	30	184	0	51	9.0	-	2.8	.06	291	154	3	30	1.0	418	7.6	GS				
(C-30-4)																												
14dac-1	-	6-28-62	59	54	.00	-	58	6.1	29	6.3	114	0	132	9.5	.2	1.6	.04	360	170	77	26	1.0	481	7.6	GS			
16ab	S	12- 3-62	44	35	-	-	9.6	2.7	6.0	52	0	1.9	2.5	-	0	-	86	35	0	27	.4	85	7.2	GS				
21c	S	10-24-51	-	50	1/.24	-	26	1.4	35	142	-	14	9.7	.5	.4	-	179	70	0	52	1.8	-	7.8	DH				
25bcc-1	133	5-13-59	54	107	-	-	90	20	36	387	0	40	11	-	12	-	12/506	306	0	20	.9	700	7.5	GS				
26deb-124/	325	7-22-57	59	41	1/2.6	1/.03	40	9.8	16	3.6	149	0	52	4.9	2.9	.3	-	249	140	18	18	.6	355	7.8	GS			
		5-13-59	60	117	-	-	39	10	25	155	0	55	7.5	-	.4	-	12/330	140	13	28	.9	360	7.9	GS				
		5- 9-60	60	76	-	-	41	9.5	23	154	0	53	6.0	-	.7	-	12/285	141	15	26	.8	380	7.7	GS				
		5-22-61	59	47	1.6	-	40	11	20	158	0	58	5.0	.2	1.5	.10	260	146	16	22	.7	362	7.6	GS				
East Fork Valley																												
(C-30-24)																												
17d	S	5-14-53	-	18	0.82	-	44	5.8	32	206	-	5.9	18	0.4	4.4	-	232	134	0	34	1.2	-	7.5	DH				
(C-30-3)																												
24aab-13/	S	7-21-57	55	41	1/.04	2/0.02	25	1.4	20	2.1	123	0	4.6	7.9	3.2	.6	-	159	68	0	35	1.1	230	7.4	GS			
(C-31-2)																												
19bb-16/	S	1-25-50	-	34	.8	-	36	8.1	15	135	-	5.0	5.7	.4	.9	-	12/173	124	13	21	.6	-	8.0	DH				
		7- 3-62	55	43	.00	-	43	4.4	15	1.5	174	0	7.0	8.0	.3	.6	0.08	203	126	0	20	.6	294	7.5	GS			

Table 5.--Chemical analyses of water from selected wells and springs in the upper Sevier River basin - Continued

Well or spring number	Depth of well/ (feet)	Date of collection	Temperature (°F)	Parts per million																	Dissolved solids/ Hardness as CaCO ₃	Hardness as CaCO ₃	Noncarbonate hardness as CaCO ₃	Percent sodium	Sodium adsorption ratio (SAR)	Specific conductance (microhm/cm at 25°C)	pH	Analysis by ^{1/}
				Silica (SiO ₂)	Iron ²⁺ (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Na + K		Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Boron (B)											
									Sodium (Na)	Potassium (K)																		
East Fork Valley - Continued																												
(C-31-2)																												
23bed-1	90	5-23-61	58	32	-	-	84	6.3	1.5	2.5	292	0	20	6.5	0.2	8.2	0.05	316	235	0	12	0.4	498	7.6	GS			
		5-28-62	60	34	-	-	85	8.5	17	288	0	31	8.0	-	-	8.4	-	332	247	11	13	.5	509	7.6	GS			
23ced-1	59.5	7- 5-62	51	32	0.01	-	75	11		7.6	284	0	9.9	1.0	.3	7.5	.03	300	235	2	7	.2	473	7.5	GS			
(G-32-2)																												
2acd	8	6- 7-62	50	34	.01	-	51	16	13		234	0	12	12	.1	2.3	.05	259	194	2	13	.4	420	7.8	GS			
23adb	8	6-26-62	50	25	.00	-	74	18	14	1.8	318	0	16	10	.2	2.6	.06	299	258	0	10	.4	519	7.9	GS			
(G-34-3)																												
27ddc	8	7-31-62	50	30	-	-	53	14	18		246	0	17	6.0	.2	.9	.04	246	191	0	17	.6	408	7.8	GS			
(C-36-3)																												
6dba-1	83	7-11-52	-	12	2/1.6	-	24	23	9.1		184	-	12	4.8	.1	.8	-	168	153	4	11	.3	-	8.1	DH			
		5-28-62	53	8.8	2/.99	-	54	21	13		258	0	21	12	-	.2	-	238	223	11	11	.4	439	8.1	GS			
		9-24-63	59	-	2/.30	-	-	-	11		254	0	13	13	-	-	-	226	217	9	10	.3	426	7.7	GS			
7aac-1	15	3-30-39	-	4.8	.1	-	76	77	14		381	-	22	142	-	5.2	-	778	506	194	6	.3	-	-	DH			
7bbc-1	230	5-21-57	-	9.5	-	-	42	18	5.3		207	0	11	6.0	-	.2	-	12/194	178	8	6	.2	350	7.9	GS			
(G-36-6)																												
34bda-1	80	5-19-57	-	6.1	.00	.03	45	32	2.4	.5	299	0	3.4	4.8	.4	1.5	.03	244	246	1	2	.1	442	7.3	GS			
(C-37-4)																												
11ddd-112/	2,000	9- 59	-	1.7	-	-	40	36	9.4		310	0	6.6	5.5	-	.5	-	12/252	249	0	8	.3	464	7.9	GS			
17bba	8	6-26-62	44	6.4	-	-	39	31	3.3	.6	271	0	5.6	4.0	.1	.1	.02	220	225	3	3	.1	413	8.1	GS			
Grass Valley																												
(C-25-1)																												
26bc	8	7- 6-62	50	33	2/0.02	-	23	3.9	4.9	1.2	92	0	2.5	5.0	0.3	0.1	0.02	120	74	0	12	0.2	158	7.5	GS			
(C-26-1)																												
23adb-1	200	5-13-59	53	46	-	-	24	3.2	10		100	0	1.9	7.0	-	.4	-	12/142	72	0	23	.5	180	7.4	GS			
		5-11-60	54	46	-	-	24	3.9	14		100	0	9.9	9.0	-	.6	-	12/156	76	0	28	.1	189	7.8	GS			
		5-23-61	53	41	-	-	26	2.9	10	2.4	100	0	11	6.0	.2	1.0	-	160	76	0	22	.5	188	7.3	GS			
35adb-2	225	8-15-62	54	34	-	-	25	6.1	9.5		111	0	6.6	7.0	.3	.2	.06	146	88	0	19	.4	205	7.2	GS			
(G-27-1)																												
1cbb-1	250	7- 5-62	52	39	2/.00	-	18	4.9	10		91	0	4.1	5.5	.3	.3	.05	131	65	0	26	.6	158	7.5	GS			
27abc-2	260	7- 5-62	51	53	.01	-	30	5.4	14		133	0	5.8	7.0	.4	.5	.05	189	96	0	24	.6	238	7.5	GS			
(G-29-2)																												
15adb	8	7- 6-62	55	42	.01	-	32	8.0	11		143	0	5.4	9.0	.3	.4	.04	180	113	0	17	.4	256	7.6	GS			
35bad-1	197	7- 5-62	54	43	.00	-	61	14	18		211	0	24	35	.2	2.0	.04	318	210	37	16	.5	487	7.5	GS			
(D-25-1)																												
17ddc-118/	52	9- 4-57	58	40	2/.03	2/0.00	19	3.8	11	3.7	79	2.0	3.4	11	.3	2.5	-	129	63	0	26	.6	183	8.4	GS			
(D-26-1)																												
30ab	8	8-22-62	55	29	2/.02	-	16	1.5	7.5		67	0	2.3	4.0	.1	.1	-	97	47	0	26	.5	116	7.6	GS			

1/ S, spring.

2/ In solution at time of analysis.

3/ Residue on evaporation.

4/ DH, Utah State Department of Health; GS, U.S. Geological Survey.

5/ Sample collected while drilling test hole at depth of 238 feet.

6/ Numbered (G-33-5)3cb in Utah State Engineer Tech. Pub. 10.

7/ In solution at time of collection.

8/ Analysis of 6-27-50 numbered (C-34-5) in Utah State Engineer Tech. Pub. 10.

9/ Sample collected while drilling well at depth of 285 feet.

10/ Numbered (G-35-5)26cb in Utah State Engineer Tech. Pub. 10.

11/ Sample collected while drilling well at depth of 150 feet.

12/ Calculated from determined constituents.

13/ Contains 2.0 ppm lithium.

14/ Contains 1.9 ppm lithium.

15/ Contains 1.6 ppm lithium.

16/ Numbered (C-31-2)11 in Utah State Engineer Tech. Pub. 10.

17/ Sample collected while drilling well at 270 feet. For additional analyses of samples collected while drilling and completing the well, see Marine, I. W., 1963, Ground-water resources of the Bryce Canyon National Park area, Utah; U.S. Geol. Survey Water-Supply Paper 1475-M, p. 482.

18/ Contains 0.2 ppm lithium.

Table 6.--Chemical analyses of surface water in the upper Sevier River basin

Source and location	Date of collection	Temperature (°F) ¹	Parts per million																Percent sodium	Sodium adsorption ratio (SAR)	Specific conductance (micromhos/cm at 25°C)	pH	Mean discharge (cfs) ²	Analysis by ³						
			Silica (SiO ₂)	Iron/ (Fe)	Calcium (Ca)	Magnesium (Mg)	Na + K		Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Dissolved solids ⁴	Hardness as CaCO ₃	Noncarbonate hardness as CaCO ₃														
							Sodium (Na)	Potassium (K)																						
Navajo Lake surface ⁵	7-14-54	73	-	-	-	-	-	-	87	-	-	1.3	-	-	69	0	-	-	139	7.9	-	-	-	GS						
Navajo Lake outlet	8- 2-54	70	6.6	-	10	6.2	-	3.2	64	0	3.1	1.5	0.3	5/63	51	0	12	0.2	100	7.5	-	-	-	GS						
Asay Creek near Hatch	6- 5-49	-	-	-	39	9.0	2.1	1.2	202	-	3.8	1.1	.2	-	134	0	3	.1	310	-	-	-	-	SU						
	4-21-50	-	11	-	42	16	-	3.0	204	-	7.2	1	1.8	5/182	171	4	4	.1	316	-	-	-	-	GS						
Asay Creek (West Fork) near Hatch	8-28-54	-	-	-	-	-	-	-	196	0	9.3	-	-	-	161	0	-	-	312	7.7	-	-	-	-	GS					
Asay Creek at mouth	9-30-55	-	-	-	38	16	-	5.3	193	-	6.6	3.5	.8	-	162	1	7	.2	308	-	-	-	-	-	GS					
	1-17-61	41	14	0.00	45	17	-	5.2	224	0	4.9	2.0	1.1	191	181	0	6	.2	335	7.5	30	-	-	-	GS					
Mammoth Creek near Hatch	5- 6-49	-	-	-	19	7.1	2.1	2.0	91	-	4.3	3.2	.2	-	76	2	5	.1	170	-	-	-	-	-	SU					
	6- 5-49	-	-	-	20	7.1	2.1	1.2	121	-	1.9	-	.1	-	79	0	5	.1	190	-	-	-	-	-	SU					
	4-21-50	-	21	-	32	12	-	3.7	158	0	6.0	1	.7	5/154	130	0	6	.1	247	-	-	-	-	-	GS					
Mammoth Creek at mouth	9-30-55	60	25	-	40	15	7.6	-	184	9	7.4	4.5	1.9	5/201	164	0	9	.3	322	8.2	10	-	-	-	GS					
	1-17-61	41	23	.00	44	16	-	5.6	220	0	4.9	1.5	2.2	210	177	0	6	.2	338	7.4	5	-	-	-	GS					
Sevier River near Red Canyon	4-21-50	-	14	-	42	18	-	3.2	214	0	8.2	1	.7	5/192	179	4	4	.1	338	-	-	-	-	-	GS					
	9-30-55	-	20	-	44	19	6.2	-	230	-	8.2	4.0	.6	5/215	188	0	7	.2	366	7.5	-	-	-	-	GS					
Sevier River at Panguitch	5- 6-49	-	-	-	31	9.0	4.1	3.9	160	-	7.2	2.1	-	-	114	0	7	.2	280	-	-	-	-	-	SU					
Panguitch Creek near Panguitch	1-17-61	35	37	.00	29	6.3	-	9.0	134	0	2.5	3.5	1.6	163	99	0	17	.4	216	7.1	5	-	-	-	GS					
Sevier River near Circleville	12-29-60	33	32	.01	55	18	-	23	295	0	8.6	5.0	2.2	286	210	0	19	.7	452	7.8	88	-	-	-	GS					
Sevier River at Kington	5- 6-49	-	-	-	33	12	14	3.9	188	-	14	3.9	.4	-	132	0	18	.5	340	-	-	-	385	-	SU					
	12-29-60	36	38	.01	57	17	-	25	290	0	15	6.5	2.9	307	211	0	20	.7	477	7.7	94	-	-	-	GS					
Deer or Mitchell Creek at mouth near Antimony	1-17-61	49	31	.00	63	21	-	18	310	0	12	9.0	3.0	307	242	0	14	.5	494	7.7	4	-	-	-	GS					
East Fork Sevier River above Deep Creek near Antimony	12-29-60	40	34	.00	55	20	-	14	269	0	11	9.5	2.8	276	217	0	12	.4	439	7.7	18	-	-	-	GS					
Otter Creek near Koosharem	12-29-60	33	45	.01	40	9.2	-	17	189	0	4.5	10	.9	221	138	0	21	.6	317	7.3	8	-	-	-	GS					
Otter Creek at Angle above Otter Creek Reservoir	12-29-60	33	44	.01	40	10	-	24	204	0	9.9	12	.9	5/241	142	0	27	.9	357	7.5	5	-	-	-	GS					
East Fork Sevier River near Kington	5- 6-49	-	-	-	44	25	21	3.9	229	-	41	12	.4	-	213	26	17	.6	490	-	-	-	-	-	SU					
	12-29-60	33	47	.01	85	23	-	18	320	0	60	15	2.9	420	308	46	11	.5	618	7.9	-	-	8.5	-	GS					

¹ In solution at time of analysis.² Residue on evaporation.³ Cfs, cubic feet per second.⁴ GS, U.S. Geological Survey; SU, Agricultural Experiment Station, Utah State University, Logan, Utah.⁵ Average of 5 samples.⁶ Calculated from determined constituents.