UTAH BASIC-DATA RELEASE NO. 11
(Open-File Release)

HYDROLOGIC AND CLIMATOLOGIC DATA

COLLECTED THROUGH 1964

SALT LAKE COUNTY, UTAH

by

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Introduction

An investigation of the water resources of Salt Lake County, Utah, was undertaken by the Water Resources Division of the U.S. Geological Survey in July 1963. This investigation is a cooperative project financed equally by the State of Utah and the Federal Government in accordance with an agreement between the State Engineer and the Geological Survey. The Utah Water and Power Board, Utah Fish and Game Commission, Salt Lake County Water Conservancy District, Metropolitan Water District of Salt Lake City, Salt Lake County, Kennecott Copper Corporation, Utah Power and Light Company, and Salt Lake City Chamber of Commerce contributed funds to the State Engineer's office toward support of the project.

The investigation encompasses the collection and interpretation of a large variety of climatologic, hydrologic, and geologic data in and near Salt Lake County. This basic-data report sets forth climatologic and surface-water data collected by project personnel and others during the water year beginning October 1, 1963, and ending September 30, 1964, and ground-water data collected by project personnel and others for the period July 1, 1963, through December 31, 1964. Included also are some earlier ground-water data not previously published. Organizations that furnished data are acknowledged in station descriptions and footnotes to tables. Data collected during the period of investigation will be published in annual basic-data releases and an interpretative report will be published at the completion of the investigation.

In addition to the Water-Supply Papers of the U.S. Geological Survey containing previously published data that are noted in the heading of each table or records-available section of station descriptions, the following reports contain data and information on the water resources of Salt Lake County:

Arnow, Ted, and others, 1964, Ground-water conditions in Utah, spring of 1964: Utah Water and Power Board Coop. Inves. Rept. 2, 104 p.

_____1966, Ground-water conditions in Utah, spring of 1965: Utah Water and Power Board Coop. Inves. Rept. 3, 99 p.

Berger Associates, 1964, Future requirements for water, reservoirs, and aqueducts in the Salt Lake metropolitan area: Metropolitan Water District of Salt Lake City, Utah, 118 p.

Connor, J. G., Mitchell, C. G., and others, 1958, A compilation of chemical-quality data for ground and surface waters in Utah: Utah State Engr. Tech. Pub. 10, 276 p.

Gardner, D. I., (Published annually) Utah Lake and Jordan River distribution: Water Commissioner's Reports to Utah State Engineer.

Lofgren, B. E., 1952, Jordan Valley, Salt Lake County, in Status of development of selected ground-water basins in Utah: Utah State Engr. Tech. Pub. 7, p. 76-83.

Marine, I. W., and Price, Don, 1963, Selected hydrologic data, Jordan Valley, Salt Lake County, Utah: U.S. Geol. Survey open-file rept. (duplicated as Utah Basic-Data Report No. 4) 30 p.

_____1964, Geology and ground-water resources of Jordan Valley, Utah: Utah Geol. and Mineralog. Survey Water Resources Bull. 7, 68 p.

Richardson, G. B., 1906, Underground water in the valleys of Utah Lake and Jordan River, Utah: U.S. Geol. Survey Water-Supply Paper 157, 81 p.

Taylor, G. H., and Leggette, R. M., 1949, Ground water in the Jordan Valley, Utah: U.S. Geol. Survey Water-Supply Paper 1029, 357 p.

Ward, J. A., Skoubye, C. M., and Ward, G. A., 1957, Flow characteristics and chemical quality of the Jordan River, Salt Lake County, Utah, for the year 1957: Utah State Water Pollution Control Board, 51 p.

Station-numbering system

Climatologic stations listed in this report have been assigned numbers preceded by the letter "W" (table 1). The station sites are plotted on plate 1 with the individual station number near each location.

Records of streamflow at gaging stations are listed in downstream order and are keyed by station or site numbers to plate 1. Station numbers not followed by a letter are the station identification numbers adopted by the Water Resources Division of the U.S. Geological Survey for regular streamflow stations. Chemical-quality and sediment stations operated at the streamflow gaging stations are assigned the same number. For this release, station numbers followed by a letter have been adopted for canals and miscellaneous streamsites. These numbers are used as site identification numbers on plate 1 and in the tables of surface-water, chemical-quality, and sediment data.

Station locations are described by reference to well known landmarks, the cadastral land-survey system, or the Salt Lake County coordinate system, which indicates direction and distance from the intersection of Main and South Temple Streets in Salt Lake City. Twenty-seventh East Street, for example, is 27 blocks east of Main Street and may be designated as 2700 East. Similarly, 21st South Street is 21 blocks south of South Temple Street and may be designated 2100 South. However, west and north of Main and South Temple Streets the hundred West and North designations are 100 higher than the street names indicate due to the inclusion of West Temple Street between Main Street and 1st West Street and North Temple Street between South Temple Street and 1st North Street.

Well-numbering system

The system of numbering wells in Utah is based on the cadastral land-survey system of the U.S. Government. The well number, in addition to designating the well, locates its position to the nearest 10-acre tract in the land net. By this system the State is divided into four quadrants by the Salt Lake base line and meridian, and these quadrants are designated by the uppercase letters A, B, C, and D, thus: A, for the northeast quadrant; B, for the northwest; C, for the southwest; and D, for the southeast quadrant. Numbers designating the township and range, respectively, follow the quadrant letter, and the three are enclosed in parentheses. The number after the parentheses designates the section, and the lowercase letters give the location of the well within the section. The first letter indicates the quarter section, which is generally a tract of 160 acres, the second letter indicates the 40-acre tract, and the third letter indicates the 10-acre tract. The numbers that follow the letters indicate the serial number of the well within the 10-acre tract. Thus, well (C-2-1)24adc-1, in Salt Lake County, is in the SW¼SE¼NE¼ sec. 24, T. 2 S., R. 1 W., and is the first well constructed or visited in that tract. (See fig. 1.)

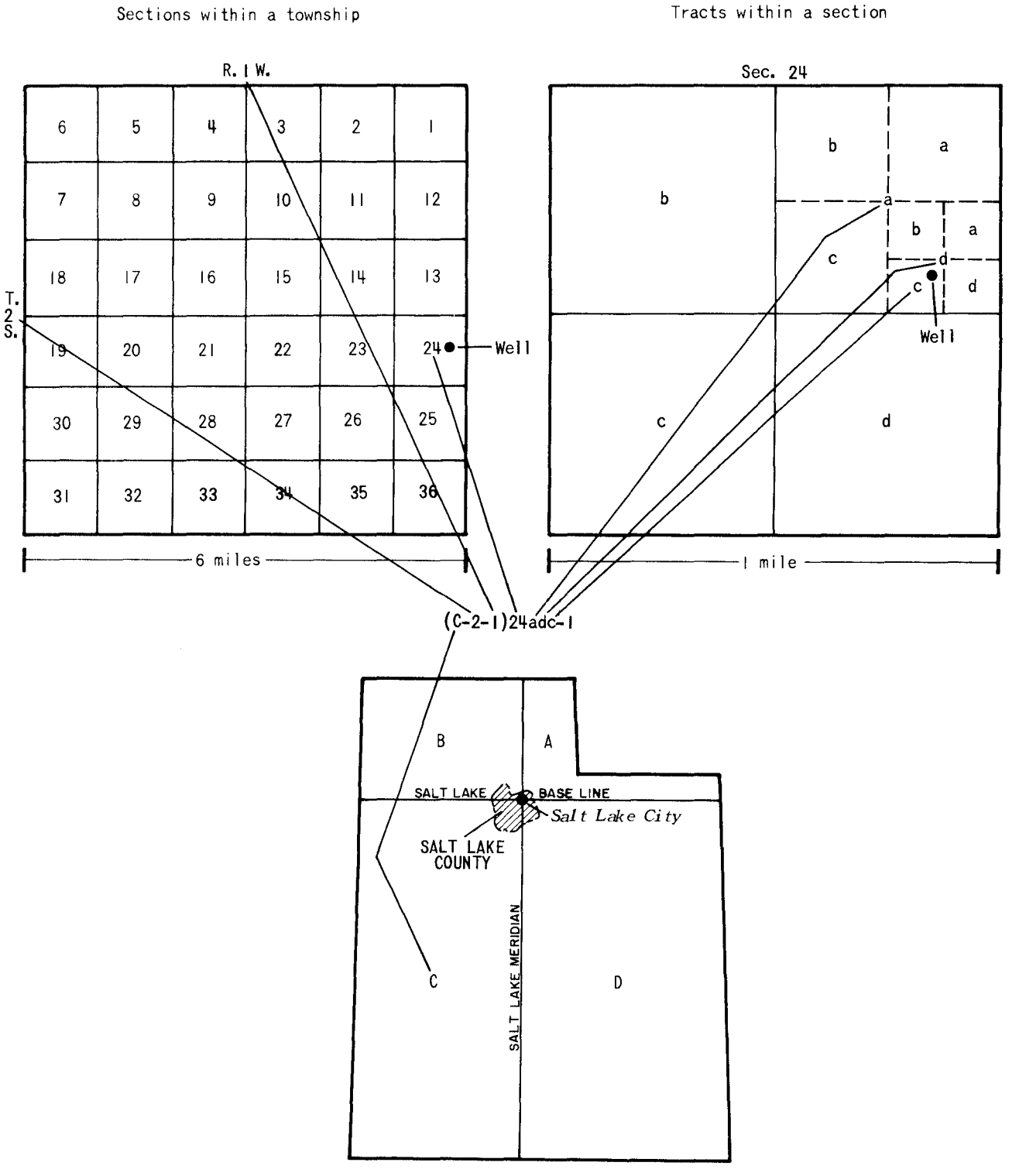


Figure 1.—Well-numbering system.

Table 1.--Climatologic stations

Station	Map number	WB index number	Latitude		Longitude		Section	Township	Range	Elevation	Data					
			°	'	°	'					Air temperature	Precipitation	Evaporation	Relative humidity	Solar radiation	Soil temperature
Alta	W-1	0072	40	36	111	38	5	3 S	3 E	8,760	D	D				
Antelope Island	W-2	0194	40	55	112	10	10	2 N	3 W	4,225	D	D				
A S R Research Lab	W-3	0302	40	42	111	55	35	1 S	1 W	4,246	D	D	D	X		X
Barneys Canyon	W-4		40	36	112	08	36	2 S	3 W	6,400		M				
Bingham Canyon	W-5	0699	40	32	112	09	26	3 S	3 W	6,280	D	D				
Butlerville	W-6		40	37	111	48	26	2 S	1 E	5,060		D				
Camp Williams	W-7		40	27	111	56	22	4 S	1 W	4,600	D	D				
City Creek Water Plant	W-8	1446	40	49	111	50	15	1 N	1 E	5,335		D				
Cottonwood Weir	W-9	1759	40	37	111	47	25	2 S	1 E	4,961	D	D				
Crescent	W-10		40	34	111	54	13	3 S	1 W	4,380		D				
Draper	W-11	2283	40	32	111	50	28	3 S	1 E	4,630	D	D			X	
Farmington Bay Refuge	W-12		40	57	111	55	35	3 N	1 W	4,210	D	D		D		
Garfield	W-13	3097	40	43	112	12	21	1 S	3 W	4,310	D	D				
Herriman 1/	W-14	3867	40	31	112	02	35	3 S	2 W	5,000	D	D	D	X		
Holladay	W-15		40	41	111	49	3	2 S	1 E	4,630		D				
Hog Hollow	W-16		40	29	111	50	10	4 S	1 E	5,860		M				
Hogum Fork	W-17		40	34	111	43	9	3 S	2 E	6,450		M				
Kearns	W-18		40	40	112	00	1	2 S	2 W	4,460	D	D	D	X		
Lambs Canyon	W-19	4903	40	43	111	39	19	1 S	3 E	6,840		M				
Little Cottonwood Water Plant	W-20		40	35	111	48	2	3 S	1 E	5,040		D				
Lower Mill Creek	W-21	5229	40	42	111	47	26	1 S	1 E	4,960		M				
Mill Creek Canyon	W-22		40	42	111	40	25	1 S	2 E	6,880		M				
Midvale	W-23	5610	40	36	111	53	26	2 S	1 W	4,342		D				
Mountain Dell Dam	W-24	5892	40	45	111	43	9	1 S	2 E	5,500	D	D				
Parleys Summit	W-25	6669	40	46	111	37	4	1 S	3 E	7,590		M				
Red Butte Creek No. 1	W-26		40	46	111	50	3	1 S	1 E	4,860		M				
Red Butte Creek No. 2	W-27		40	47	111	48	5	1 N	1 E	5,425		M				
Red Butte Creek No. 4	W-28		40	48	111	46	19	1 N	2 E	6,200		M				
Red Butte Creek No. 6	W-29	7210	40	49	111	45	17	1 N	2 E	7,180		M				
Riverton 2/	W-30	7343	40	31	111	59	31	3 S	1 W	4,655	D	D	D	X	X	
Saltair Salt Plant	W-31	7578	40	46	112	06	5	1 S	2 W	4,210	D	D	D			
Salt Lake City WB AP	W-32	7598	40	46	111	58	33	1 N	1 W	4,220	D	D			X	
Silver Lake Brighton	W-33	7846	40	36	111	35	36	2 S	3 E	8,700	D	D				
Sixty-second South pump	W-34	7852	40	38	111	50	22	2 S	1 E	4,440	D	D	D	X		
West Jordan	W-35		40	36	111	58	32	2 S	1 W	4,530		D				

D - Daily values available in publications of the U.S. Weather Bureau or in files of the U.S. Geological Survey.
M - Monthly values.
X - Data available in publications of the U.S. Weather Bureau or in files of the U.S. Geological Survey.
1/ Discontinued July 1965.
2/ Established August 1965.

Table 2.--Monthly precipitation, in inches

Water year October 1963 to September 1964

Station	Map No.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Total
Alta	W-1	-	-	3.84	7.54	-	-	-	-	-	0.06	0.15	-	-
Antelope Island	W-2	1.02	2.54	.81	.79	0.52	1.93	2.70	4.25	3.01			0.27	18.05
A S R Research Lab	W-3	1.06	1.45	.82	1.75	.85	3.70	4.19	3.06	5.25	.23	.35	.37	23.08
Barneys Canyon	W-4	1.20	2.05	1.00	2.45	.85	2.30	4.60	2.80	2.90	.05	.25	.45	20.90
Bingham Canyon	W-5	1.06	1.45	.82	1.75	.85	3.70	4.19	3.06	5.25	.23	.35	.37	23.08
Butlerville	W-6	1.66	2.67	1.09	1.54	.75	3.23	4.45	3.53	4.19	.32	.75	.30	24.48
Camp Williams	W-7	-	1.17	.69	.99	.22	1.65	3.93	2.25	2.90	.31	.38	.27	-
City Creek Water Plant	W-8	1.80	2.20	1.45	2.53	.92	4.57	5.93	6.05	5.04	.35	.20	.17	31.21
Cottonwood Weir	W-9	1.50	2.70	1.19	1.65	.87	3.50	4.52	3.63	3.93	.33	.66	.36	24.84
Crescent	W-10	1.60	2.03	.22	.51	.19	1.73	2.97	1.65	2.88	.29	.56	.31	14.94
Draper	W-11	-	-	-	-	-	2.75	-	-	-	-	-	-	-
Farmington Bay Refuge	W-12	1.60	2.19	.65	.74	.48	2.13	3.79	3.87	3.44	0	.32	.06	19.87
Garfield	W-13	1.47	1.38	.74	.95	.36	2.27	2.92	2.64	4.47	0	.04	.85	18.09
Herriman	W-14	-	-	.28	.54	.04	1.91	1.67	1.76	2.91	.37	.42	.53	-
Holladay	W-15	1.51	2.27	.89	1.47	.49	2.60	3.84	3.61	3.34	.30	.63	.17	21.12
Hog Hollow	W-16	2.05	3.10	1.60	2.25	1.90	2.85	5.25	-	3.90	.15	.45	.60	-
Hogum Fork	W-17	2.40	4.20	1.75	3.90	1.75	2.50	6.10	4.65	6.90	.70	.85	1.05	36.75
Kearns	W-18	-	1.07	.77	.62	.26	1.74	2.91	2.47	3.14	.08	1.00	.28	-
Lambs Canyon	W-19	1.80	2.60	3.30	2.30	1.20	6.00	6.45	5.00	-	-	.40	.55	-
Little Cottonwood Water Plant	W-20	1.69	2.79	1.08	1.41	.70	2.91	4.26	2.89	4.83	.39	.50	.33	23.78
Lower Mill Creek	W-21	1.20	3.10	1.10	1.72	.55	3.93	4.05	3.95	4.05	.30	.40	.20	24.55
Mill Creek Canyon	W-22	2.45	2.95	1.40	5.05	1.46	6.09	7.30	4.40	2.05	-	.30	-	-
Midvale	W-23	1.50	1.98	2,89	.79	.46	2.33	3.38	2.19	3.04	.31	1.26	.30	20.43
Mountain Dell Dam	W-24	1.78	2.31	1.12	3.24	.43	3.78	4.79	4.56	5.03	.20	.28	.19	27.71
Parleys Summit	W-25	1.78	2.85	1.45	5.26	1.56	7.14	8.15	2.71	3.72	.20	.24	.20	35.26
Red Butte No. 1	W-26	1.25	1.75	.95	2.45	.31	2.85	3.65	3.80	3.00	.20	.20	.14	20.55
Red Butte No. 2	W-27	1.35	1.85	1.00	2.60	.35	3.00	3.85	4.05	3.40	.20	.20	.15	22.00
Red Butte No. 4	W-28	2.15	2.80	1.65	3.70	.73	4.90	6.30	6.55	4.45	.25	.25	.17	33.90
Red Butte No. 6	W-29	2.35	2.80	1.60	4.25	.85	5.60	7.20	7.50	7.65	.45	-	-	-
Saltair Salt Plant	W-31	1.32	1.34	.56	.50	.19	1.11	2.11	2.57	2.78	T	.11	.28	12.87
Salt Lake City WB AP	W-32	1.05	1.56	.79	.94	.35	2.84	2.69	2.77	2.61	.26	.17	.13	16.16
Silver Lake Brighton	W-33	2.32	3.74	1.41	6.73	1.53	7.36	6.55	4.16	4.47	.99	1.01	.60	40.87
Sixty-second South pump	W-34	-	1.57	.60	.88	.55	2.86	4.38	2.68	3.74	.19	1.49	.37	-
West Jordan	W-35	1.33	1.41	.31	.73	.15	1.63	2.51	1.50	2.81	.28	.85	.36	13.87

Table 3.--Monthly air temperature, in degrees Fahrenheit

Water year October 1963 to September 1964

[Maximum (minimum) is the average of the daily maximums (minimums)]

Station	Map No.	Data	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
Alta	W-1	Max.	-	-	34.2	28.3	-	-	-	-	-	-	-	-	-
		Min.	-	-	15.6	9.2	-	-	-	-	-	-	-	-	-
		Mean	-	-	24.9	18.8	-	-	-	-	-	-	-	-	-
Antelope Island	W-2	Max.	74.3	50.5	34.2	33.6	36.4	45.5	59.5	72.8	78.0	-	-	83.5	-
		Min.	42.6	27.8	16.5	11.2	12.5	22.2	32.1	41.8	44.8	-	-	38.9	-
		Mean	58.5	39.2	25.4	22.4	24.5	33.9	45.8	57.3	61.4	75.7	71.8	61.2	48.1
A S R Research Lab	W-3	Max.	72.2	51.8	33.3	32.8	34.4	41.6	57.7	68.9	75.2	92.0	86.3	77.5	60.6
		Min.	45.6	29.3	17.4	11.4	14.2	21.7	36.0	41.9	49.8	59.4	55.0	42.3	35.3
		Mean	58.9	40.6	25.4	22.1	24.3	31.7	46.9	55.4	62.5	75.7	70.7	59.9	47.8
Bingham Canyon	W-5	Max.	67.9	46.2	33.9	33.3	32.1	38.2	51.1	64.6	71.1	88.5	82.9	74.9	57.0
		Min.	39.4	31.2	20.0	16.1	15.4	17.9	30.2	42.4	49.0	64.9	58.4	49.0	36.2
		Mean	53.7	38.7	27.0	24.7	23.8	28.1	40.7	53.5	60.1	76.7	70.7	62.0	46.62
Camp Williams	W-7	Max.	-	-	32.7	31.3	34.1	42.0	58.9	70.5	76.1	93.7	87.4	79.1	-
		Min.	-	-	18.7	12.9	13.1	21.5	35.1	44.1	49.8	61.9	57.8	48.2	-
		Mean	-	-	25.7	22.1	23.6	31.8	47.0	57.3	63.0	77.8	72.6	63.6	-
Cottonwood Weir	W-9	Max.	74.5	51.6	35.4	36.9	-	-	58.8	72.3	77.4	95.2	88.9	82.2	-
		Min.	50.8	32.4	20.3	17.0	-	-	36.1	47.2	52.3	68.0	61.9	53.6	-
		Mean	62.7	42.0	27.9	27.0	27.2	35.2	47.5	59.8	64.9	81.6	75.4	67.9	51.6
Draper	W-11	Max.	-	-	-	-	-	45.1	-	-	-	-	-	-	-
		Min.	-	-	-	-	-	9.4	-	-	-	-	-	-	-
		Mean	-	-	-	-	-	27.3	-	-	-	-	-	-	-
Farmington Bay Refuge	W-12	Max.	74.1	48.8	32.3	31.6	35.8	42.8	56.1	67.8	74.2	94.2	87.0	78.7	60.3
		Min.	42.0	27.4	19.4	7.2	11.1	19.6	35.7	43.4	51.2	57.6	54.6	44.5	34.5
		Mean	58.0	38.1	25.8	19.4	23.4	31.2	45.9	55.6	62.7	75.9	70.8	61.6	47.4
Garfield	W-13	Max.	71.0	49.3	31.9	34.1	34.4	42.3	56.2	68.0	74.9	93.2	86.9	76.1	59.9
		Min.	49.4	33.2	21.4	18.0	20.3	26.2	39.7	49.8	57.2	70.3	64.7	52.3	41.9
		Mean	60.2	41.3	26.7	26.1	27.4	34.3	48.0	58.9	66.1	81.8	75.8	64.2	50.9
Herriman	W-14	Max.	-	-	37.1	35.6	35.6	42.8	57.3	68.4	74.0	-	-	79.1	-
		Min.	-	-	18.6	11.3	11.1	20.1	34.5	42.8	44.8	-	-	46.8	-
		Mean	-	-	27.9	23.5	23.4	31.5	45.9	55.6	59.4	76.7	71.9	63.0	-
Kearns	W-18	Max.	-	-	33.2	32.8	34.7	41.0	58.2	70.0	73.9	94.3	88.4	80.3	-
		Min.	-	-	18.7	14.2	14.0	21.2	36.0	44.0	50.6	63.0	59.0	48.4	-
		Mean	-	-	26.0	23.5	24.4	31.1	47.1	57.0	62.2	78.6	73.7	64.4	-
Mountain Dell Dam	W-24	Max.	70.9	49.8	38.1	35.4	38.6	41.8	55.0	-	-	93.0	86.9	78.7	-
		Min.	35.4	23.7	11.8	6.4	5.2	13.3	29.7	-	-	48.6	44.6	36.0	-
		Mean	53.2	36.8	25.0	20.9	21.9	27.6	42.4	52.3	-	70.8	65.8	57.4	-
Saltair Salt Plant	W-31	Max.	72.1	48.7	32.9	32.2	34.1	42.3	53.5	63.1	-	92.5	87.0	76.4	-
		Min.	45.4	30.4	18.3	13.8	15.4	24.7	37.9	45.6	53.0	65.2	60.0	47.2	38.1
		Mean	58.8	39.6	25.6	23.0	24.8	33.5	45.7	54.4	-	78.9	73.5	61.8	-
Salt Lake City WB AP	W-32	Max.	71.4	48.9	32.0	31.8	35.6	41.7	56.8	69.2	76.4	94.9	88.2	79.2	60.5
		Min.	44.2	28.8	16.7	11.9	15.9	22.2	34.3	42.4	50.0	60.1	55.6	43.8	35.5
		Mean	57.8	38.9	24.4	21.9	25.8	32.0	45.6	55.8	63.2	77.5	71.9	61.5	48.0
Silver Lake Brighton	W-33	Max.	56.5	41.8	34.1	28.4	27.3	30.7	42.6	52.1	60.8	74.5	70.0	63.1	48.5
		Min.	31.0	17.0	7.8	3.0	-1.3	5.6	19.5	27.9	34.2	45.3	40.6	34.2	22.1
		Mean	43.8	29.4	21.0	15.7	13.0	18.2	31.1	40.0	47.5	59.9	55.3	48.7	35.3
Sixty-second South pump	W-34	Max.	-	-	35.1	35.6	38.3	46.7	58.4	72.2	77.5	94.4	88.3	80.8	-
		Min.	-	-	18.5	15.0	14.3	22.2	34.2	41.1	48.3	56.3	51.6	42.2	-
		Mean	-	-	26.8	25.3	26.3	34.4	46.3	56.6	62.9	75.4	70.0	66.5	-

Table 4.--Monthly pan evaporation and wind movement

Water year October 1963 to September 1964

[Evaporation, in inches; wind movement, in miles per month. The maximum (minimum) is the average of the daily maximum (minimum) water temperature in pan, in °F]

Station	Map No.	Data	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
A S R Research Lab	W-3	Evap.	-	-	-	-	-	-	-	5.61	5.69	9.17	7.30	5.04
		Wind	-	-	-	1,701	1,278	1,719	1,923	1,117	482	703	795	808
		Max.	-	-	-	-	-	-	-	72.2	82.3	91.4	86.0	74.1
		Min.	-	-	-	-	-	-	-	46.3	55.3	61.7	57.7	47.1
Farmington Bay Refuge	W-12	Evap.	-	-	-	-	-	-	-	6.01	6.65	9.77	10.54	8.07
		Wind	1,077	841	386	1,294	765	1,323	2,090	1,380	909	-	-	1,430
		Max.	-	-	-	-	-	-	-	-	79.4	91.4	87.0	77.2
		Min.	-	-	-	-	-	-	-	-	56.2	63.0	58.4	50.3
Herriman	W-14	Evap.	-	-	-	-	-	-	-	-	-	-	8.02	-
		Wind	-	-	-	-	-	-	2,365	2,200	-	-	1,249	-
		Max.	-	-	-	-	-	-	-	79.6	-	-	64.8	-
		Min.	-	-	-	-	-	-	-	45.3	-	-	35.7	-
Kearns	W-18	Evap.	-	-	-	-	-	-	-	8.22	7.81	14.45	11.59	9.22
		Wind	-	-	2,145	3,644	2,854	3,714	3,264	2,801	1,781	2,184	2,094	2,286
		Max.	-	-	-	-	-	-	-	72.8	81.0	90.6	86.5	74.6
		Min.	-	-	-	-	-	-	-	49.7	60.9	75.3	68.5	50.2
Saltair Salt Plant	W-31	Evap.	6.61	-	-	-	-	-	-	9.12	9.58	15.85	13.10	9.97
		Wind	3,384	1,083	-	-	-	-	4,694	4,410	4,317	4,213	4,022	3,635
		Max.	68.3	-	-	-	-	-	-	70.0	77.7	87.8	84.9	74.2
		Min.	46.0	-	-	-	-	-	-	46.0	52.9	60.5	57.3	46.6
Sixty-second South pump	W-34	Evap.	-	-	-	-	-	-	-	6.49	7.40	11.81	8.86	6.03
		Wind	-	-	490	1,172	592	1,165	1,391	1,331	903	928	728	669
		Max.	-	-	-	-	-	-	-	76.0	82.2	92.0	88.4	75.2
		Min.	-	-	-	-	-	-	-	49.2	56.5	64.5	61.1	50.8

Table 5.--Surface-water records

1590 A. Salt Lake City Aqueduct

Water is imported into Salt Lake County from Deer Creek Reservoir through a 69-inch reinforced precast concrete pipeline that terminates at the Little Cottonwood Creek treatment plant near the mouth of Little Cottonwood Canyon. Between the County line and the treatment plant water is delivered to several users. The following tabulation, furnished by the Metropolitan Water District, shows the distribution of the imported water. Leakage from the pipeline and water spilled to Cottonwood Creek (not included in the tabulation) was about 1,100 acre-feet.

Discharge, in acre-feet, October 1963 to September 1964

Month	To Users between County line and treatment plant	To treatment plant	Total
Oct. 1963	22	1,050	1,072
Nov.	1	232	233
Dec.	4	1,062	1,066
Jan. 1964	8	612	620
Feb.	7	1,339	1,346
Mar.	9	1,371	1,380
Apr.	1	916	917
May	53	302	355
June	27	119	146
July	248	1,748	1,996
Aug.	518	2,527	3,045
Sept.	339	1,908	2,247
Total	1,237	13,186	14,423

1670 A,B. North Branches of Provo Reservoir and Utah Lake Distributing canals

The Provo Reservoir canal and the Utah Lake Distributing canal deliver Deer Creek Reservoir water to Salt Lake County for irrigation. Also, water is pumped from the Jordan River into the Utah Lake Distributing canal about a quarter of a mile upstream from the Jordan River at narrows gaging station. The Utah Lake and Jordan River Water Commissioner furnished records of pumpage from the Jordan River. The Provo River Water Users Association furnished records of the quantity of Deer Creek Reservoir water delivered to the two canals.

The head of the Provo Reservoir canal (1670 A) (North Branch) is at the siphon outlet in the NE¼SW¼ sec. 26, T. 4 S., R. 1 W. A 6-foot Parshall flume is located about 100 ft downstream from the siphon outlet.

The Jordan River pumping plant (1670 B) for the Utah Lake Distributing canal is located on the left bank of Jordan River in the NE¼SW¼ sec. 26, T. 4 S., R. 1 W. Water is pumped into the canal at a point about 400 ft southeast of the plant. Deer Creek Reservoir water also is delivered to the canal at this point.

Discharge, in acre-feet, May to September 1964

Month	Provo Reservoir canal (North Branch)	Utah Lake Distributing canal (North Branch)	
		Jordan River water	Deer Creek Reservoir water
May	2,500	926	889
June	4,500	3,338	457
July	6,480	3,927	1,188
August	3,650	3,745	1,370
September	2,400	3,852	1.098
Total	19,500	15,788	5,002

Table 5.--Surface-water records--Continued

1670. Jordan River at narrows, near Lehi, Utah

Location.--Lat 40°26'40", long 111°55'15", in SE¼NW¼ sec. 26, T. 4 S., R. 1 W., at narrows 5½ miles northwest of Lehi and 7½ miles downstream from Utah Lake.

Drainage area.--3,000 sq mi, approximately, including 255 sq mi in closed basin in Cedar Valley.

Records available.--May to December 1904, July 1913 to September 1964. May to December 1904, July 1913 to September 1960 in annual series of Water-Supply Papers of the U.S. Geological Survey, with monthly summaries in WSP 1314 and 1734. October 1960 to September 1963 in Surface Water Records of Utah, published annually.

Gage.--Water-stage recorder. Altitude of gage is 4,470 ft (by barometer). Prior to May 16, 1920, staff gage and May 16,1920, to Sept. 30, 1934, water-stage recorder, at outlet of Utah Lake 7½ miles upstream at different datum.

Average discharge--51 years (1913-64), 354 cfs (256,300 acre-ft per year).

Extremes.--1904, 1913-64: Maximum daily discharge, 1,410 cfs June 10, 1952; no flow at times when gates were closed.

Remarks.--Records good except those for period of no gage-height record, which are fair. Figures given herein represent combined flow of Jordan River, Utah and Salt Lake Canal, and East Jordan Canal. Flow may be regulated by gates and pumps at outlet of Utah Lake, pumps at Pelican Point, and diversion dam at narrows. Records of chemical analyses and water temperatures are given in table 7.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	386	17	17					2.2	532	607	701	620
2	347	17	17					2.5	561	635	680	604
3	381	17	18					3.6	578	635	673	618
4	399	16	19		23			4.2	593	644	663	606
5	380	16	19					3.9	590	628	677	619
6	369	17	21					3.4	584	647	687	611
7	377	17	21		8.9			2.8	420	690	702	611
8	378	17	24	23			2.0	2.2	46	729	700	618
9	380	17	24					2.2	37	741	694	597
10	311	17	24					2.0	32	753	689	589
11	379	17	24					1.7	32	767	696	570
12	336	17	24					29	46	763	693	528
13	226	17	24					105	115	726	680	533
14	286	17	24					106	215	718	662	539
15	165	18	24					209	397	720	657	524
16	74	18	24			2.0	2.2	219	419	718	639	503
17	69	18	24				2.2	227	367	721	655	492
18	75	18	24		2.9		2.2	312	307	721	670	489
19	80	18	24				2.2	379	185	739	630	475
20	80	18	24				2.2	524	117	721	632	471
21	47	18	24	22			2.5	604	79	736	640	411
22	20	17	24				2.2	636	63	755	649	427
23	20	17	24				2.2	635	52	749	647	423
24	20	17	24				2.2	644	65	745	638	423
25	20	17	24				2.2	614	132	754	648	401
26	20	17	24				2.0	631	296	752	646	379
27	20	17	24				2.0	614	439	752	635	382
28	19	17	24	23			2.0	590	453	753	615	380
29	18	17	24				2.0	540	509	748	585	378
30	17	17	24		----------		2.0	506	565	750	653	378
31	17	----------	24		----------		----------	509	----------	739	655	----------
Total	5,716	515	708	703	210.7	62.0	62.3	3,663.7	3,826	22,256	20,491	15,199
Mean	184	17.2	22.8	22.7	7.27	2.0	2.08	279	294	718	661	507
Ac-ft	11,340	1,020	1,400	1,390	418	123	124	17,180	17,510	44,140	40,640	30,150

Calendar year 1963: Max 758 Min - Mean 230 Ac-ft 166,700
Water year 1963-64: Max 767 Min 1.7 Mean 228 Ac-ft 165,400

Note.--No gage-height record Dec. 6 to Apr. 15.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1670 C-K, 1673 B. Diversions from Jordan River between Jordan Narrows and gaging station at 2100 South

There are ten diversions for irrigation and industrial use between Jordan Narrows and the gaging station at 2100 South. Regulation of the nine upper diversions is under the direction of the Water Commissioner for Utah Lake and Jordan River. Daily records of discharge of these diversions are contained in the annual reports of the Water Commissioner. Daily records were not obtained on the Brighton canal but sufficient discharge measurements were obtained to provide a fairly accurate estimate of the daily discharge. Names and locations of the diversions are given in the following list.

East Jordan canal (1670 C) diverts from the right bank and Utah and Salt Lake canal (1670 D) diverts from the left bank in SE¼NW¼ sec. 26, T. 4 S., R. 1 W.

South Jordan canal (1670 E) diverts from the left bank and Jordan and Salt Lake City canal (1670 F) diverts from the right bank in NE¼NE¼ sec. 22, T. 4 S., R. 1 W. These two canals have a common heading about 0.25 mile upstream.

Mousley canal (1670 G) diverts from the right bank in NE¼NE¼ sec. 15, T. 4 S., R. 1 W.

Galena canal (1670 H) diverts from the right bank in SE¼NE¼ sec. 2, T. 4 S., R. 1 W.

Beckstead ditch (1670 I) diverts from the left bank in SE¼SW¼ sec. 26, T. 3 S., R. 1 W.

North Jordan canal (1670 K) diverts from the left bank in NE¼NW¼ sec. 11, T. 3 S., R. 1 W., and Gardner millrace (1670 J) diverts from this canal above the weir in NE¼NW¼ sec. 35, T. 2 S., R. 1 W.

Brighton canal (1673 B) diverts from the left bank in NW¼SW¼ sec. 1, T. 2 S., R. 1 W.

The following table gives the combined diversions for the water year.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	472	60	49	33	43	33	38	34	640	726	823	756
2	431	54	49	33	42	33	38	35	660	750	825	745
3	385	51	49	33	41	34	36	36	680	753	821	763
4	407	50	48	33	42	34	36	37	693	761	814	749
5	377	49	48	33	42	34	36	36	694	748	828	759
6	361	50	48	33	41	35	36	38	678	765	837	756
7	367	55	45	33	40	36	36	36	518	815	852	756
8	370	53	45	33	40	34	35	40	132	830	851	762
9	372	52	45	33	40	33	40	39	112	858	842	739
10	306	50	45	33	36	33	36	37	117	860	837	739
11	372	49	45	32	36	31	37	36	127	884	843	713
12	329	48	44	32	36	37	37	34	136	868	841	667
13	224	47	43	32	36	40	37	108	176	850	830	672
14	305	49	41	32	36	40	34	133	277	842	809	679
15	218	48	41	32	36	50	35	160	481	853	803	667
16	125	55	43	32	36	49	35	220	529	851	786	645
17	119	57	43	32	36	45	35	236	466	850	803	635
18	111	54	43	33	36	45	36	325	407	855	816	628
19	89	54	42	33	36	40	36	395	240	873	778	616
20	112	55	42	34	36	40	37	560	167	860	781	615
21	80	55	41	33	35	40	37	668	173	873	790	555
22	61	54	40	33	34	40	37	702	154	897	801	572
23	62	53	40	33	34	40	33	714	143	889	794	568
24	66	52	39	33	34	40	34	724	147	885	787	567
25	62	52	39	33	34	40	35	705	225	889	793	543
26	59	52	38	33	34	40	35	721	380	885	799	520
27	58	52	36	35	34	40	35	702	533	883	787	523
28	60	53	36	36	34	40	35	683	548	886	763	521
29	58	53	36	37	33	40	35	659	608	886	751	518
30	59	51	36	39	----------	39	36	617	657	877	808	534
31	59	----------	36	41	----------	37	----------	612	----------	879	810	----------
Total	5,536	1,567	1,315	1,040	1,073	1,192	1,078	10,082	11,498	26,181	25,103	19,482
Mean	211	52.2	42.4	33.5	37.0	38.5	35.9	325	383	845	810	649
Ac-ft	12,960	3,110	2,610	2,060	2,130	2,360	2,140	20,000	22,810	51,930	49,790	38,640

Calendar year	:	Max		Min		Mean		Ac-ft
Water year 1963-64:		Max	897	Min	31	Mean	290	Ac-ft 210, 500

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1675. Little Cottonwood Creek near Salt Lake City, Utah

Location.--Lat 40°34'40", long 111°47'50", in NE¼NE¼ sec. 11, T. 3 S., R. 1 E., at mouth of canyon, 100 ft west of Wasatch Drive, 2 miles downstream from Wasatch Resort, and 14 miles southeast of Salt Lake City.

Drainage area.--27.4 sq mi.

Records available.--October 1898 to September 1964. Monthly discharge only for October 1898 to September 1960 published in WSP 1314 and 1734. Records for October 1960 to September 1963 in files of Salt Lake City Water Department.

Gage.--Water-stage recorder and Parshall flume on creek and separate weirs on Murray City powerplant pipeline, Beaver Pond Springs pipeline, and irrigation ditches.

Average discharge.--11 years (1912-23), 67.1 cfs (48,580 acre-ft per year); 41 years (1923-64), 58.5 cfs (42,370 acre-ft per year).

Extremes.--Maximum daily discharge during year, 505 cfs June 6; minimum daily, 10 cfs Jan. 25, Feb. 3, 5, Apr. 2.
1912-13, 1915-64: Maximum daily discharge, 762 cfs June 11, 1921; minimum daily, 4.2 cfs Jan. 10, 1934.

Remarks.--Some storage and regulation in several small lakes and reservoirs. Two diversions for irrigation above station one of which carries water past the station. Diversions above station for powerplant and municipal water supply. Discharge is combined discharge of Murray City powerplant pipeline, irrigation diversions above station, Little Cottonwood Creek (1675 D), and Beaver Pond Springs pipeline. (see pages 13-16).

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	17	17	14	12	14	16	35	222	351	58	24
2	21	18	15	15	13	14	10	33	322	301	58	28
3	20	18	15	13	10	15	12	26	402	261	64	32
4	21	18	15	13	11	14	12	27	409	277	62	32
5	22	17	14	14	11	15	14	32	405	277	60	31
6	16	18	15	14	15	13	16	31	505	243	54	30
7	22	18	15	14	12	12	16	31	497	221	60	29
8	20	19	16	14	12	12	16	29	359	222	62	30
9	18	20	16	14	11	14	16	30	259	226	56	28
10	19	19	16	14	13	12	16	34	173	219	46	28
11	19	20	14	13	14	12	16	38	161	210	44	28
12	18	19	15	13	12	14	16	42	179	188	46	27
13	20	18	16	13	12	12	16	62	264	177	46	26
14	20	18	16	14	12	12	16	105	298	178	48	26
15	20	19	15	14	10	12	16	142	321	181	46	25
16	21	20	15	14	12	12	18	181	388	149	44	23
17	20	20	15	14	16	14	20	216	395	127	43	31
18	20	20	15	13	13	14	18	240	313	118	38	25
19	20	18	15	13	13	14	19	279	268	116	36	24
20	20	19	15	12	12	14	17	321	224	112	33	24
21	20	17	15	14	12	13	18	362	271	110	30	23
22	19	16	15	14	12	13	19	381	263	108	29	23
23	20	18	14	13	12	12	19	379	253	108	31	23
24	20	18	15	13	14	13	20	381	263	104	29	23
25	19	18	15	10	14	13	21	404	291	92	27	23
26	20	17	14	14	12	13	21	402	343	87	25	22
27	20	18	15	14	14	13	21	406	390	76	23	22
28	18	16	15	14	14	13	25	320	424	68	22	22
29	18	16	15	13	14	14	33	260	410	62	21	23
30	18	17	13	14	----------	14	37	209	376	60	21	23
31	18	----------	15	13	----------	16	----------	190	----------	56	22	----------
Total	608	544	466	418	364	412	550	5,628	9,648	5,085	1,284	778
Mean	19.6	18.1	15.0	13.5	12.6	13.3	18.3	182	322	164	41.4	25.9
Ac-ft	1,210	1,080	924	829	722	817	1,090	11,160	19,140	10,090	2,550	1,540

Calendar year	: Max	Min	Mean	Ac-ft
Water year 1963-64:	Max 505	Min 10	Mean 70.5	Ac-ft 51,150

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1675 A. Murray City powerplant pipeline above Little Cottonwood Creek treatment plant, near Salt Lake City, Utah

Location.--In NE¼SW¼ sec. 2, T. 3 S., R. 1 E., immediately below the Murray City powerplant, and 13.5 miles southeast of Salt Lake City.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Gage.--Twelve-foot Cipolletti weir on water delivered to Little Cottonwood Creek water treatment plant, 4-foot Lyman weir on Sandy siphon, and 24-inch rated gate on Farmers pipeline.

Extremes.--Maximum daily discharge during year, 34 cfs on many days during period of high runoff (estimated maximum flow through turbines); minimum daily, 7 cfs Jan. 7 and Feb. 3.

Remarks.--Water diverted from Little Cottonwood Creek in NE¼SW¼ sec. 8, T. 3 S., R. 2 E. (unsurveyed), about 3.5 miles upstream. Most of the flow is delivered to the treatment plant through a 12-foot Cipolletti weir, but at times part of the flow is diverted into the Sandy siphon and (or) the Farmers pipeline.

Cooperation.--Record of discharges furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	14	13	14	11	9	11	15	27			26	15
2	17	14	12	12	10	11	9	23			25	19
3	16	14	12	10	7	12	10	16			27	23
4	17	14	12	10	8	11	11	19			27	23
5	18	13	11	11	8	12	12	23			27	22
6	12	14	12	11	12	10	14	23			19	22
7	18	14	12	11	9	9	14	24			26	21
8	16	15	13	11	9	9	14	22			22	22
9	14	16	13	11	8	11	14	23			21	20
10	15	15	13	11	10	10	14	26			20	20
11	15	16	11	10	11	10	14	28			17	20
12	14	15	12	10	9	11	14	28			17	19
13	16	14	13	10	9	10	14	28			19	18
14	16	14	13	11	9	9	14	28		e 34	19	18
15	16	15	12	11	7	10	14	33			19	17
16	17	17	12	11	9	10	17	32	e 32		18	15
17	16	17	12	11	13	11	19	29			18	23
18	16	17	12	10	10	11	17	31			15	17
19	16	15	12	10	10	11	17	34			14	16
20	16	16	12	10	10	11	15	30			12	16
21	16	13	12	11	10	11	16	30			10	15
22	15	13	12	11	10	11	17	31			11	15
23	16	15	11	10	9	10	17	32			14	15
24	16	15	12	10	12	11	17	32			13	15
25	15	15	12	7	12	11	17	32			13	15
26	16	14	11	11	10	11	17	31			13	14
27	16	15	12	11	11	11	17	32		31	12	14
28	14	13	12	11	11	11	21	32		28	12	14
29	14	13	12	10	11	12	27	32		26	11	15
30	14	14	10	11	----------	12	29	32		24	11	15
31	14	----------	12	10	----------	14	----------	32	----------	22	13	----------
Total	481	438	373	326	283	335	477	875	960	1,015	541	533
Mean	15.5	14.6	12.0	10.5	9.8	10.8	15.9	28.2	32.0	32.7	17.5	17.8
Ac-ft	954	869	740	647	561	664	946	1,740	1,900	2,010	1,070	1,060

Calendar year : Max Min Mean Ac-ft
Water year 1963-64: Max - Min 7 Mean 18.1 Ac-ft 13,160

e Estimated.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1675 B, C. Irrigation diversions from Little Cottonwood Creek above the gage (1675 D)

There are two irrigation diversions from Little Cottonwood Creek above the gage (1675 D). The regulation of these diversions is under the direction of the Little Cottonwood Creek Water Commissioner. Records of discharge were furnished by the Salt Lake City Water Department. Names and locations of the diversions are as follows:

South Despain ditch (1675 B) diverts from the left bank in NE¼SE¼ sec. 12, T. 3 S., R. 1 E.

North Despain ditch (1675 C) diverts from the right bank in SW¼NE¼ sec. 12, T. 3 S., R. 1 E.

The combined diversion for the water year is given in the following table.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	11	14	2.3	2.3
2	.2	.2	.2	.2	.2	.2	.2	.2	13	14	2.3	2.3
3	.2	.2	.2	.2	.2	.2	.2	.2	13	14	2.3	2.3
4	.2	.2	.2	.2	.2	.2	.2	.2	14	15	2.3	2.3
5	.2	.2	.2	.2	.2	.2	.2	.2	16	15	2.3	2.3
6	.2	.2	.2	.2	.2	.2	.2	.2	14	14	2.3	2.3
7	.2	.2	.2	.2	.2	.2	.2	.2	12	12	2.3	2.3
8	.2	.2	.2	.2	.2	.2	.2	.2	12	12	2.3	2.3
9	.2	.2	.2	.2	.2	.2	.2	.2	7.8	14	2.3	2.2
10	.2	.2	.2	.2	.2	.2	.2	.2	7.4	13	2.3	2.2
11	.2	.2	.2	.2	.2	.2	.2	.2	7.4	12	2.3	2.2
12	.2	.2	.2	.2	.2	.2	.2	1.7	8.0	11	2.3	2.3
13	.2	.2	.2	.2	.2	.2	.2	4.5	12	11	2.3	2.3
14	.2	.2	.2	.2	.2	.2	.2	4.5	12	6.7	2.3	2.2
15	.2	.2	.2	.2	.2	.2	.2	4.3	12	7.8	2.2	2.2
16	.2	.2	.2	.2	.2	.2	.2	5.4	13	4.6	2.2	2.1
17	.2	.2	.2	.2	.2	.2	.2	5.4	13	4.6	2.2	2.1
18	.2	.2	.2	.2	.2	.2	.2	7.9	6.7	4.3	2.3	2.1
19	.2	.2	.2	.2	.2	.2	.2	9.1	3.7	4.3	2.3	2.3
20	.2	.2	.2	.2	.2	.2	.2	11	3.6	5.1	2.0	2.3
21	.2	.2	.2	.2	.2	.2	.2	11	3.4	5.1	1.9	2.3
22	.2	.2	.2	.2	.2	.2	.5	13	2.9	4.7	1.8	2.3
23	.2	.2	.2	.2	.2	.2	.5	10	9.6	4.7	1.8	2.3
24	.2	.2	.2	.2	.2	.2	.6	11	12	3.2	2.0	2.2
25	.2	.2	.2	.2	.2	.2	.6	12	13	3.2	2.2	2.2
26	.2	.2	.2	.2	.2	.2	.6	13	13	3.2	2.1	2.3
27	.2	.2	.2	.2	.2	.2	.6	12	13	2.9	2.1	2.2
28	.2	.2	.2	.2	.2	.2	.6	12	14	2.6	2.1	2.2
29	.2	.2	.2	.2	.2	.2	1.6	12	15	1.8	2.2	2.2
30	.2	.2	.2	.2	----------	.2	1.6	13	14	2.1	2.2	2.3
31	.2	----------	.2	.2	----------	.2	----------	11	----------	1.8	2.2	----------
Total	6.2	6.0	6.2	6.2	5.8	6.2	11.4	186.1	321.5	243.7	68.0	67.4
Mean	0.20	0.20	0.20	0.20	0.20	0.20	0.38	6.00	10.7	7.86	2.19	2.25
Ac-ft	12	12	12	12	12	12	23	369	638	483	135	134

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64:	Max 16	Min 0.2	Mean 2.55	Ac-ft 1,850

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1675 D. Little Cottonwood Creek (channel only) near Salt Lake City, Utah

Location.--Lat 40°34'40", long 111°47'50", in NE¼NE¼ sec. 11, T. 3 S., R. 1 E., at mouth of canyon 100 ft west of Wasatch Drive, 2 miles downstream from Wasatch Resort, and 14 miles southeast of Salt Lake City.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Gage.--Water-stage recorder and Parshall flume. Altitude of gage is 5,080 ft (from topographic map).

Extremes.--Maximum daily discharge during year, 455 cfs June 5; no flow on many days.

Remarks.--Diversions to Murray City powerplant pipeline and two irrigation ditches above gage. Water in the pipeline and one of the irrigation ditches bypasses this station. Water in the Beaver Pond Springs pipeline also bypasses this station. Records of chemical analyses and water temperatures are given in table 7.

Cooperation.--Gage-height record furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.1	0.5	0.2					5.2	175	299	25	2.5
2	.3	.7	.2					6.7	273	249	26	2.5
3	.3	.7	.2					6.3	353	209	30	2.5
4	.3	.7	.2					5.2	359	224	28	2.5
5	.3	.5	.2					5.5	353	224	27	2.2
6	.3	.3	.2					4.8	455	191	28	2.0
7	.3	.5	.2					4.1	449	171	28	1.7
8	.3	.3	.2					3.7	311	172	34	1.7
9	.3	.3	.2					3.4	215	174	29	1.7
10	.5	.3	.2					4.4	130	168	20	1.7
11	.3	.3	.2				0	7.2	118	160	20	1.5
12	.3	1.1	.2					9.4	135	139	22	1.5
13	.5	.2	.2					26	216	128	21	1.5
14	.5	.2	.2					69	250	133	23	1.5
15	.5	1.1	.2					101	273	135	21	1.5
16	.7	.3	.2					140	339	106	20	1.3
17	.7	.2	.2					178	346	84	19	1.3
18	.7	.2	.2					198	270	76	17	1.3
19	.7	.2	.2					233	228	73	16	1.3
20	.7	.1	.2					277	184	69	15	1.3
21	.7	.7	.2				.5	318	232	66	14	1.3
22	.7	.2	.2				.7	334	224	65	12	1.3
23	.7	.2	.2				.7	334	207	65	11	1.1
24	.7	.2	.2				1.1	335	215	62	9.4	1.1
25	.7	.2	.2				.9	357	242	50	7.6	.9
26	.7	.2	.2				.7	355	294	45	5.9	.9
27	.7	.1	.2				.7	359	341	38	4.8	.9
28	.7	.1	.2				.7	273	374	33	4.1	.9
29	.3	.1	.2				1.1	213	359	30	3.7	.9
30	.5	.1	.2		----------		3.7	161	326	29	3.4	.9
31	.5	----------	.2		----------		----------	144	----------	28	2.7	----------
Total	18.5	10.8	6.2	0	0	0	10.8	4,470.9	8,246	3,695	547.6	45.2
Mean	0.60	0.36	0.2	0	0	0	0.36	144	275	119	17.7	1.51
Ac-ft	37	21	12	0	0	0	21	8,870	16,360	7,330	1,090	90

Calendar year : Max Min Mean Ac-ft
Water year 1963-64: Max 455 Min 0 Mean 46.6 Ac-ft 33,830

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1675 E. Beaver Pond Springs pipeline near Salt Lake City, Utah

Location.--In NE¼NE¼ sec. 11, T. 3 S., R. 1 E., about 100 feet south of gage on Little Cottonwood Creek (1675 D) and 100 ft west of Wasatch Drive.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Gage.--Thirty-inch Cipolletti weir.

Extremes.--Maximum daily discharge during year, 4.7 cfs Sept. 14-24; minimum daily, 1.2 cfs Apr. 22.

Remarks.--Flow includes water collected in a pipeline system from area of Beaver Pond Springs and pumped from four wells (D-3-1)12acd-1, 12adc-1, 12bdc-1, and 12cab-1. Water in the pipeline bypasses the Little Cottonwood Creek gage.

Cooperation.--Record of discharge furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.3	3.1	2.6	2.6	2.4	2.4	1.3	2.9	3.7	4.2	4.2	4.2
2	3.3	3.1	2.6	2.6	2.4	2.4	1.3	3.0	3.8	4.2	4.2	4.2
3	3.3	3.1	2.6	2.6	2.4	2.4	1.3	3.0	3.8	4.3	4.2	4.2
4	3.3	3.1	2.6	2.6	2.4	2.4	1.3	3.0	3.8	4.3	4.2	4.2
5	3.3	3.1	2.6	2.6	2.4	2.4	1.3	3.0	3.8	4.3	4.2	4.2
6	3.3	3.1	2.6	2.6	2.4	2.4	1.3	3.0	3.8	4.3	4.2	4.2
7	3.3	3.1	2.6	2.6	2.4	2.3	1.3	3.0	3.8	4.3	4.2	4.2
8	3.3	3.1	2.6	2.6	2.4	2.3	1.3	3.1	3.8	4.3	4.2	4.2
9	3.3	3.1	2.6	2.6	2.4	2.3	1.3	3.1	3.9	4.3	4.2	4.2
10	3.3	3.1	2.6	2.6	2.4	2.3	1.3	3.1	3.9	4.3	4.2	4.2
11	3.3	3.1	2.6	2.6	2.4	2.3	1.3	3.1	3.9	4.2	4.2	4.2
12	3.3	3.1	2.6	2.6	2.4	2.3	1.4	3.1	3.9	4.2	4.2	4.5
13	3.3	3.1	2.6	2.6	2.4	2.3	1.4	3.1	3.9	4.2	4.2	4.6
14	3.3	3.1	2.6	2.6	2.4	2.3	1.4	3.1	4.0	4.2	4.2	4.7
15	3.3	3.0	2.6	2.6	2.4	2.3	1.4	3.3	4.0	4.2	4.2	4.7
16	3.3	3.0	2.6	2.6	2.4	2.3	1.3	3.3	4.0	4.2	4.2	4.7
17	3.3	3.0	2.6	2.6	2.4	2.3	1.3	3.3	4.0	4.2	4.2	4.7
18	3.3	3.0	2.6	2.6	2.4	2.3	1.3	3.3	4.0	4.2	4.2	4.7
19	3.2	3.0	2.5	2.6	2.4	2.3	1.5	3.3	4.0	4.3	4.2	4.7
20	3.2	3.0	2.5	1.5	2.3	2.3	1.5	3.3	4.0	4.4	4.2	4.7
21	3.2	3.0	2.5	2.5	2.3	2.2	1.5	3.3	4.0	4.4	4.2	4.7
22	3.2	3.0	2.5	2.5	2.3	2.2	1.2	3.3	4.0	4.4	4.2	4.7
23	3.2	3.0	2.5	2.5	2.3	2.2	1.5	3.4	4.0	4.5	4.2	4.7
24	3.2	3.1	2.5	2.5	2.3	2.2	1.5	3.4	4.0	4.5	4.2	4.7
25	3.2	3.1	2.5	2.5	2.3	2.2	2.9	3.4	4.0	4.5	4.2	4.5
26	3.2	3.0	2.5	2.5	2.3	2.2	2.9	3.4	4.0	4.5	4.2	4.5
27	3.2	3.0	2.5	2.5	2.3	2.2	2.9	3.4	4.0	4.6	4.2	4.5
28	3.2	2.6	2.5	2.5	2.3	2.2	2.9	3.4	4.0	4.6	4.2	4.5
29	3.2	2.6	2.5	2.5	2.3	2.2	2.9	3.4	4.0	4.6	4.2	4.5
30	3.1	2.6	2.5	2.5	----------	2.2	2.9	3.4	4.0	4.6	4.2	4.5
31	3.1	----------	2.5	2.5	----------	2.2	----------	3.4	----------	4.6	4.2	----------
Total	100.8	90.4	79.3	78.4	68.6	70.8	49.9	99.6	117.8	134.9	130.2	134.0
Mean	3.25	3.01	2.56	2.53	2.37	2.28	1.66	3.21	3.93	4.35	4.20	4.47
Ac-ft	200	179	157	156	136	140	99	198	234	268	258	266

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64:	Max 4.7	Min 1.2	Mean 3.15	Ac-ft 2,290

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1675 F. Diversion to Little Cottonwood Creek treatment plant, near Salt Lake City, Utah

Location.--In NW¼SE¼ sec. 2, T. 3 S., R. 1 E., at water treatment plant of the Metropolitan Water District of Salt Lake City, immediately below Murray City powerplant and 13.5 miles southeast of Salt Lake City.

Records available.--October 1963 to September 1964.

Gage.--Twelve-foot Cipolletti weir.

Extremes.--Maximum daily discharge during year, 74 cfs July 3, no flow Apr. 2-13, May 2, 18.

Remarks.--Discharge includes water diverted from Little Cottonwood Creek through the Murray City powerplant pipeline and from the creek about 400 ft downstream from the gage on Little Cottonwood Creek (1675 D).

Cooperation.--Record of discharge furnished by Metropolitan Water District of Salt Lake City.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7.9	11	11	8.9	6.9	8.8	7.1	11	41	65	23	8.7
2	11	8.3	9.5	9.1	8.1	9.4	0	7.0	43	68	23	13
3	11	8.6	9.5	8.0	5.4	10	0	0	37	74	24	15
4	12	8.8	9.1	7.6	6.1	8.8	0	4.1	69	63	25	17
5	13	11	8.9	8.4	6.3	9.5	0	8.7	54	53	24	15
6	5.8	12	9.5	8.4	9.5	7.6	0	8.7	9.8	70	16	15
7	11	12	9.4	8.1	7.0	7.3	0	9.0	10	68	23	14
8	10	12	10	8.6	7.3	7.2	0	7.4	13	63	20	15
9	9.1	13	10	8.4	5.6	8.8	0	5.5	8.1	49	18	14
10	9.3	12	10	8.9	8.3	8.5	0	7.0	7.8	45	18	13
11	9.2	12	8.5	7.2	8.8	8.3	0	9.0	7.4	54	15	13
12	9.1	7.4	7.0	7.4	6.6	9.3	0	9.1	13	54	14	12
13	11	12	10	7.9	6.7	7.9	0	8.6	20	49	16	12
14	10	12	10	8.4	7.2	6.9	0	8.9	24	40	17	11
15	11	12	9.8	8.5	5.2	8.3	0	16	23	29	16	10
16	14	14	9.6	8.6	7.4	8.2	0	30	19	39	9.2	8.0
17	13	12	9.7	8.4	11	9.2	0	44	4.5	43	15	10
18	13	12	9.6	8.2	7.4	8.8	0	41	0	42	13	12
19	13	12	9.7	8.2	7.5	8.8	0	43	2.6	39	3.1	8.9
20	13	13	9.7	8.1	7.5	9.0	0	68	5.2	44	2.1	9.4
21	13	10	10	8.4	7.5	9.0	0	70	5.6	41	1.4	8.8
22	12	11	9.2	8.5	10	8.7	0	54	7.4	45	6.8	8.9
23	14	12	8.9	7.6	9.6	8.4	0	29	10	50	12	9.3
24	13	13	9.4	7.3	10	9.3	0	37	11	43	11	8.9
25	12	12	9.4	4.4	10	9.3	0	32	19	43	10	8.3
26	13	11	8.9	8.6	8.4	8.8	0	50	52	41	10	8.0
27	13	12	9.3	8.3	9.0	8.7	0	25	43	43	8.5	7.4
28	12	11	9.4	8.4	9.0	8.8	4.1	12	21	38	8.4	7.7
29	12	11	9.1	8.2	9.2	9.5	9.9	12	39	31	7.4	8.8
30	12	11	8.0	8.3	----------	10	12	12	59	31	8.0	8.8
31	11	----------	9.1	8.0	----------	11	----------	15	----------	31	9.6	----------
Total	353.4	341.1	291.2	251.3	228.5	272.1	33.1	694.0	678.4	1,488	427.5	330.9
Mean	11.4	11.4	9.39	8.11	7.88	8.78	1.10	22.4	22.6	48.0	13.8	11.0
Ac-ft	701	677	578	498	453	540	66	1,380	1,350	2,950	848	656

Calendar year	: Max	Min	Mean	Ac-ft	
Water year 63-64	: Max 74	Min 0	Mean 14.7	Ac-ft	10,700

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1675 G-N. Irrigation diversions from Little Cottonwood Creek between gaging stations 1675 D and 1677.

Between gaging stations 1675 D and 1677 there are eight irrigation diversions. Regulation of the diversions is under the direction of the Little Cottonwood Creek Water Commissioner who furnished records of discharge. Names and locations of the diversions are given in the following list.

Sandy ditch (1675 G) diverts from the left bank in NE¼NE¼ sec. 11, T. 3 S., R. 1 E.

Sandy siphon (1675 H) diverts from the Murray City powerplant tailrace in NE¼SE¼ sec. 2, T. 3 S., R. 1 E.

Thompson (1675 I) and Lym (1675 J) ditches divert from the left bank in SW¼SW¼ sec. 2, T. 3 S., R. 1 E.

Nichols and Last Chance ditch (1675 K) diverts from Little Cottonwood Creek cutoff ditch (1675 T) in SE¼NW¼ sec. 2, T. 3 S., R. 1 E.

Johnson ditch (1675 L) diverts from Little Cottonwood Creek cutoff ditch in NE¼SE¼ sec. 34, T. 2 S., R. 1 E.

Richards ditch (1675 M) diverts from the left bank in SW¼NE¼ sec. 34, T. 2 S., R. 1 E.

Greenwood ditch (1675 N) diverts from the right bank in NE¼NW¼ sec. 34, T. 2 S., R. 1 E.

The combined diversion for the water year is given in the following table.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	3	78	96	14	7
2			2.7				0	3	97	95	11	9
3							0	4	109	99	11	8
4		2.5					0	4	108	98	10	7
5							0	4	111	92	10	7
6							0	4	121	87	10	7
7				2.5			0	3	94	80	11	7
8							0	4	80	80	11	7
9							0	4	73	80	11	7
10							0	4	90	77	10	7
11							0	3	81	81	8	7
12							0	5	86	80	8	7
13							0	5	94	68	9	7
14							0	16	104	73	8	7
15	2.7						0	32	99	74	10	7
					2.0	2.0						
16							2	62	125	45	12	7
17			2.5				2	84	110	38	8	12
18							2	82	93	39	8	5
19		2.7					2	97	70	26	8	7
20							2	104	69	24	8	7
21							4	98	69	18	8	7
22				2.3			3	110	69	16	7	6
23							4	111	69	16	7	6
24							3	118	72	15	6	6
25							3	121	68	16	6	6
26							2	121	66	14	6	6
27							3	113	66	13	7	6
28							2	107	80	10	7	6
29	2.5						2	111	78	9	7	6
30					----------		4	105	93	8	7	6
31		----------			----------		----------	83	----------	8	7	----------
Total	82.9	79.8	78.1	73.9	58.0	62.0	40	1.725	2.622	1.575	271	207
Mean	2.67	2.66	2.52	2.38	2.00	2.00	1.33	55.6	87.4	50.8	8.74	6.90
Ac-ft	164	158	155	147	115	123	79	3.420	5.200	3.120	538	411

Calendar year : Max Min Mean Ac-ft
Water year 1963-64 : Max 125 Min 0 Mean 18.8 Ac-ft 13,620

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1677. Little Cottonwood Creek at 2050 East, near Salt Lake City, Utah

Location.--Lat 40°36'29", long 111°49'51", in NW¼NW¼ sec. 34, T. 2 S., R. 1 E., 100 ft upstream from bridge on State Highway 210, and 11 miles southeast of Salt Lake City.

Drainage area.--33.8 sq mi.

Records available.--October 1963 to September 1964.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 578 cfs June 7 (gage height 3.56 ft); no flow on many days.

Remarks.--Record good Oct. 1 to May 22 and July 6 to Sept. 30 and poor May 23 to July 5. Many diversions for irrigation and municipal water supply above station. During 29 days in September 201 acre-ft of exchange water for irrigation was pumped from well (D-2-1)34bbb into the creek 50 ft below the station.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0	0	0			0	1.5	21	119	95	12	6.0
2	0	1.0	0			0	2.0	27	167	70	13	2.5
3	0	1.3	0			0	2.8	29	262	38	* 12	0
4	0	.1	.2			0	2.1	25	* 224	53	11	0
5	0	0	.6			0	2.8	23	254	69	10	0
6	0	.5	.5			0	* 1.8	22	362	* 40	10	0
7	0	0	.2			0	.5	22	486	38	10	0
8	0	0	1.0			0	0	22	* 278	34	8.8	0
9	0	.9	.2			0	0	22	143	35	10	0
10	0	1.5	.2			0	1.3	24	95	29	10	0
11	0	1.5	0			0	1.5	27	77	24	10	0
12	0	1.7	0			0	1.6	29	71	* 20	10	0
13	0	0	0			0	* 1.8	45	95	20	10	0
14	0	0	0			0	1.9	* 94	108	23	6.0	0
15	0	0	0			0	7.8	100	149	32	5.6	0
16	0	.6	0			0	16	83	200	18	6.8	1.6
17	0	0	0			0	* 19	90	200	18	3.2	0
18	0	0	0			0	19	106	* 180	16	6.4	0
19	0	0	0			0	14	* 126	164	20	12	0
20	0	0	0			0	10	146	143	18	14	0
21	0	.3	0			0	12	191	184	16	14	0
22	0	0	0			0	10	* 212	184	18	10	0
23	0	0	0			0	10	210	167	* 15	6.4	0
24	0	0	0			0	11	215	180	23	5.9	0
25	* 3.0	0	0			0	11	226	207	20	* 6.4	0
26	0	.2	0			0	11	186	210	13	6.0	0
27	0	6.6	0			0	11	225	262	10	6.0	0
28	0	.4	0			0	8.4	174	254	10	6.0	0
29	0	0	0			0	14	155	221	13	6.0	0
30	0	0	0		----------	.5	19	126	155	10	6.0	0
31	0	----------	0		----------	1.0	----------	119	----------	10	6.0	----------
Total	3.0	16.6	2.9	0	0	1.5	224.8	3,122	5,801	868	269.5	10.1
Mean	0.10	0.55	0.09	0	0	0.05	7.49	101	193	28.0	8.69	0.34
Ac-ft	6	33	6	0	0	3	446	6,190	11,510	1,720	535	20

Calendar year : Max Min Mean Ac-ft
Water year 1963-64 : Max 486 Min 0 Mean 28.2 Ac-ft 20,470

* Discharge measurement made on this day.
Note.--No gage-height record Mar. 30 to April 2, June 30 to July 5.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1677 A-D. Irrigation diversions from Little Cottonwood Creek below gaging station at 2050 East

There are three diversions for irrigation from Little Cottonwood Creek about a mile below the gaging station at 2050 East and one diversion at Murray. The upper three diversions are under the direction of the Little Cottonwood Creek Water Commissioner, who furnished records of the diversions. These diversions are supplemented by Utah Lake exchange water from the East Jordan and Jordan and Salt Lake City canals. Names and locations of the diversions are given in the following list:

Tanner ditch (1677 A) diverts from the right bank in the NW¼NW¼ sec. 28, T. 2 S., R. 1 E.

Cahoon and Maxfield (1677 B) and Walker (1677 C) ditches divert from the left bank in SE¼NE¼ sec. 29, T. 2 S., R. 1 E.

The combined diversion from Little Cottonwood Creek by the three ditches during the period April to December is given in the table below.

An unnamed ditch (1677 D) diverts from the right bank of Little Cottonwood Creek at Murray in NE¼NE¼ sec. 12, T. 2 S., R. 1 W. No records were obtained on this ditch but it probably diverts 5 to 10 cfs during the irrigation season.

Discharge, in cubic feet per second, April to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	11	50	50	4	2
2							0	12	61	48	4	2
3							0	11	58	39	3	2
4							0	13	58	37	2	2
5							0	15	50	32	2	2
6							1	14	45	26	3	2
7							1	13	30	18	3	3
8							1	14	25	12	3	3
9							1	14	22	12	3	2
10							1	15	20	10	3	2
11							1	16	38	8	3	2
12							1	19	47	7	2	2
13							1	20	44	7	2	3
14							1	22	44	6	2	3
15							1	22	50	10	2	3
16							1	35	46	6	2	3
17							1	35	33	5	1	3
18							1	29	21	4	2	3
19							1	40	17	5	3	2
20							2	39	16	6	3	3
21							4	41	21	5	3	3
22							3	44	24	5	3	2
23							3	42	23	5	3	2
24							3	42	27	6	3	2
25							3	56	31	5	3	3
26							3	65	33	5	3	3
27							3	66	26	4	2	3
28							3	61	62	3	2	3
29							3	53	47	4	2	3
30					----------		4	46	51	4	2	3
31		----------			----------		----------	43	----------	3	2	----------
Total							48	968	1,120	397	80	76
Mean							1.6	31.2	37.3	12.8	2.6	2.5
Ac-ft							95	1,920	2,220	787	159	151

Calendar year	: Max	Min	Mean	Ac-ft
The period	: Max 66	Min 0	Mean 14.7	Ac-ft 5,330

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1685. Big Cottonwood Creek near Salt Lake City, Utah

Location.--Lat 40°37'7", long 111°46'52", in SW¼NE¼ sec. 25, T. 2 S., R. 1 E., at Big Cottonwood Creek water treatment plant, at mouth of canyon, and 12 miles southeast of Salt Lake City.

Drainage area.--50 sq mi.

Records available.--October 1898 to September 1964. Monthly discharge only for October 1898 to September 1960 published in WSP 1314 and 1734. Records for October 1960 to September 1963 in files of Salt Lake City Water Department.

Average discharge.--66 years (1898-1960), 72.9 cfs (52,760 acre-ft per year).

Extremes.--Maximum daily discharge during year, 451 cfs May 26; minimum daily, 12 cfs Jan. 13-15 and Feb. 25.
1898-1964: Maximum daily discharge, 835 cfs June 6, 1909; minimum daily, 4.5 cfs Jan. 10, 1937.

Remarks.--Record for October 1963 to September 1964 is combined discharge of Big Cottonwood Creek flume at water treatment plant, Utah Power and Light Company tailrace above water treatment plant, and Butler ditch (see pages 22-24). Record not adjusted for storage of municipal water in Lake Mary (capacity, 742 acre-ft) and Twin Lakes (capacity, 937 acre-ft).

Cooperation.--See records for Butler ditch, Utah Power and Light Company's tailrace, and Big Cottonwood Creek flume for cooperation with Salt Lake City and Big Cottonwood Creek Water Commissioner.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	20	21	19	17	16	14	17	105	218	235	59	58
2	23	20	20	17	16	14	18	98	294	223	57	59
3	24	21	17	16	15	14	21	77	355	201	55	57
4	23	20	19	16	15	14	21	69	314	191	55	58
5	22	21	19	16	16	15	22	67	346	182	55	59
6	22	21	18	17	14	14	23	65	417	169	51	56
7	21	23	20	16	16	13	23	64	429	166	51	56
8	20	21	18	14	16	14	21	66	298	161	48	57
9	20	22	19	15	15	14	25	67	244	133	47	56
10	20	23	18	16	14	14	29	76	202	135	48	59
11	16	22	16	17	14	15	30	106	176	134	44	59
12	21	22	17	14	15	14	31	114	178	131	46	56
13	24	22	18	12	14	14	29	202	196	124	44	57
14	22	21	17	12	13	13	32	221	220	140	42	56
15	22	21	17	12	14	14	41	290	247	116	45	58
16	21	24	17	16	14	14	54	309	256	105	44	56
17	21	21	18	17	14	14	55	311	310	88	39	56
18	21	22	18	15	14	14	52	325	262	84	38	57
19	21	23	17	16	14	14	49	364	250	80	42	56
20	20	24	17	15	14	14	48	418	213	78	42	54
21	21	21	18	17	14	14	47	449	284	75	38	56
22	21	21	18	16	14	14	45	447	253	77	36	46
23	22	21	16	17	14	14	46	442	240	73	36	45
24	23	21	17	16	14	15	47	411	240	67	36	42
25	22	21	16	17	12	14	45	408	250	74	36	44
26	21	21	16	17	13	15	44	451	277	70	35	35
27	21	20	18	17	13	15	45	417	261	68	40	32
28	20	20	17	17	13	14	53	359	265	65	56	31
29	21	20	17	17	14	16	65	307	263	63	56	29
30	22	19	17	17	----------	17	93	229	260	61	58	26
31	21	----------	17	17	----------	18	----------	188	----------	61	58	----------
Total	659	640	546	491	414	446	1,171	7,522	8,018	3,630	1,437	1,526
Mean	21.3	21.3	17.6	15.8	14.3	14.4	39.0	243	267	117	46.4	50.9
Ac-ft	1,310	1,270	1,080	974	821	885	2,320	14,920	15,900	7,200	2,850	3,030

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64:	Max 451	Min 12	Mean 72.4	Ac-ft 52,500

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1685 A. Utah Power and Light Company tailrace above Big Cottonwood Creek treatment plant, near Salt Lake City, Utah

Location.--In SW¼NE¼ sec. 25, T. 2 S., R. 1 E., immediately above Big Cottonwood Creek treatment plant, at mouth of canyon, and 12 miles southeast of Salt Lake City.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Gage.--48-inch Sparling meter and 4-foot Parshall flume.

Extremes.--Maximum daily discharge during year, 60 cfs May 2; minimum daily, 8 cfs several days in January, February, and March.

Remarks.--Water diverted from right bank of Big Cottonwood Creek below the Stairs powerplant in SE¼SW¼ sec. 20, T. 2 S., R. 2 E., 1.5 miles upstream. Part of the flow is delivered to the water treatment plant through a 48-inch Sparling meter and the balance is returned to the creek 600 ft downstream after passing through a 4-foot Parshall flume.

Cooperation.--Record of discharges, 8 a.m. to 8 a.m., furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	21	16	15	12	12	10	9	57	57	54	53	52
2	19	16	16	12	12	9	12	60	53	55	51	53
3	20	17	13	12	11	9	15	55	54	53	50	50
4	19	16	15	11	11	9	15	53	54	53	49	52
5	18	16	15	11	12	10	14	54	53	53	49	50
6	18	16	14	12	10	9	17	53	55	28	46	50
7	17	18	16	11	12	9	16	54	40	25	46	51
8	16	16	14	9	12	10	15	56	46	26	43	51
9	16	18	15	11	11	9	18	56	54	43	42	50
10	16	19	14	12	10	9	21	57	55	54	43	52
11	14	18	12	12	10	10	22	59	55	53	39	52
12	17	18	12	10	11	10	23	57	55	53	41	50
13	20	18	13	8	10	9	22	35	47	53	39	51
14	18	17	12	8	9	8	24	34	58	57	37	50
15	18	16	12	8	10	9	31	50	54	53	40	52
16	17	19	12	12	10	9	42	50	56	54	39	50
17	17	17	13	13	10	9	47	49	56	54	34	50
18	17	18	13	10	10	9	45	49	55	54	34	51
19	17	17	12	11	10	9	42	50	55	54	37	50
20	16	18	12	10	10	9	41	50	55	54	37	48
21	17	17	13	12	10	9	40	54	57	52	33	47
22	17	17	13	11	10	9	38	48	55	55	32	40
23	18	17	11	12	10	9	39	51	55	55	31	39
24	19	17	12	11	10	10	40	51	55	53	31	36
25	18	17	11	12	8	9	38	50	55	54	32	38
26	17	17	11	12	9	10	37	54	61	54	31	29
27	17	16	13	12	9	10	38	51	56	54	35	26
28	16	16	12	12	9	9	45	52	56	53	50	25
29	17	16	12	12	9	11	40	53	54	54	50	23
30	18	15	12	12	----------	12	56	52	55	54	52	21
31	16	----------	12	12	----------	12	----------	54	----------	54	52	----------
Total	541	509	402	345	297	294	902	1,608	1,626	1,575	1,278	1,339
Mean	17.5	17.0	13.0	11.1	10.2	9.5	30.1	51.9	54.2	50.8	41.2	44.6
Ac-ft	1,070	1,010	797	684	589	583	1,790	3,190	3,230	3,120	2,530	2,660

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64 :	Max 60	Min 8	Mean 29.3	Ac-ft 21,250

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1685 B. Butler ditch near Salt Lake City, Utah

Location.--In SE¼NW¼ sec. 25, T. 2 S., R. 1 E., about 1.4 miles below point of diversion from Big Cottonwood Creek and 0.4 mile southwest of Big Cottonwood Creek treatment plant.

Records available.--April 1964 to September 1964.

Gage.--Rectangular weir.

Extremes.--April to September 1964: Maximum daily discharge, 2.3 cfs June 4-7; minimum daily, 0.3 cfs on many days.

Remarks.--Water diverted from left bank of Big Cottonwood Creek in SE¼SW¼ sec. 19, T. 2 S., R. 2 E. (unsurveyed).

Cooperation.--Record of discharge furnished by Big Cottonwood Creek Water Commissioner.

Discharge, in cubic feet per second, April to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0.3	1.7	1.8	2.2	0.8	0.7
2							.3	1.7	1.8	2.2	.8	.7
3							.3	1.7	1.8	2.2	.8	.7
4							.3	1.7	2.3	2.2	.8	.7
5							.3	1.7	2.3	2.2	.8	.7
6							.3	1.7	2.3	2.2	.8	.7
7							1.1	1.1	2.3	2.2	.8	.7
8							1.1	1.1	1.5	1.8	.8	.7
9							1.1	1.1	1.5	1.8	.8	.7
10							1.1	1.1	1.5	1.8	.8	.7
11							1.1	1.1	1.5	1.8	.4	.7
12							1.1	.8	.3	1.8	.4	.7
13							1.1	.8	.3	1.0	.3	.7
14							1.1	.8	.3	1.0	.3	.7
15							1.1	.9	.3	1.0	.3	.7
16							1.1	.9	.3	1.0	.3	.7
17							1.1	.9	.3	.3	.3	.7
18							1.1	.4	.3	.3	.3	.9
19							1.1	.4	2.2	.3	.3	.9
20							1.4	.4	2.2	.3	.3	.9
21							1.4	.4	2.2	.3	.3	.9
22							1.4	.4	2.2	.3	.3	.9
23							1.4	.4	2.2	.3	.3	.9
24							1.4	.4	2.2	.3	.3	.9
25							1.4	1.8	2.2	.3	.3	.9
26							1.4	1.8	2.2	.3	.3	.9
27							1.2	1.8	2.2	.3	.3	.9
28							1.2	1.0	2.2	.3	.3	.9
29							1.2	1.0	2.2	.3	.3	.9
30					----------		1.2	1.0	2.2	.8	.3	.9
31		----------			----------		----------	1.0	----------	.8	.7	----------
Total							30.7	33.0	49.1	33.9	14.9	23.6
Mean							1.02	1.06	1.64	1.09	0.48	0.79
Ac-ft							61	65	97	67	30	47

Calendar year	: Max	Min	Mean	Ac-ft
The period	: Max 2.3	Min 0.3	Mean 1.01	Ac-ft 367

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1685 C. Big Cottonwood Creek flume at water treatment plant, near Salt Lake City, Utah

Location.--In SW¼NE¼ sec. 25, T. 2 S., R 1 E., at Big Cottonwood Creek water treatment plant, at mouth of canyon, and 12 miles southeast of Salt Lake City.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Gage.--Water-stage recorder, staff, and hook gages in concrete well and a 14-foot concrete flume.

Extremes.--Maximum daily discharge during year, 399 cfs May 22; minimum daily, 3.7 cfs Oct. 16, 17.

Remarks.--Diversions to Utah Power and Light Co. powerplant, about 2 miles upstream, and to Butler ditch, about three-quarters of a mile upstream, bypass this station. Records of chemical analyses and water temperatures are given in table 7.

Cooperation.--Average 24-hour gage heights based on readings every 2 hours, 8 a.m. to 8 a.m., furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.9	4.6	4.2	4.6	4.2	4.4	7.9	46	159	179	4.9	5.3
2	3.9	4.4	4.2	4.6	4.0	4.6	6.1	36	239	166	4.8	5.5
3	4.0	4.2	4.2	4.4	3.9	4.6	5.5	22	299	146	* 4.6	5.9
4	3.9	4.4	4.2	4.8	4.2	4.6	5.5	*14	258	136	4.8	5.5
5	4.0	4.6	4.2	4.6	4.0	4.6	8.2	*11	291	127	4.8	8.2
6	3.9	4.8	4.2	4.6	4.0	4.6	5.7	10	360	139	4.6	5.5
7	3.9	4.9	4.2	4.6	4.0	4.4	5.3	8.8	387	139	4.6	5.3
8	3.9	4.8	4.4	4.6	4.0	4.4	5.3	9.2	250	133	4.6	5.7
9	4.0	4.8	4.2	4.4	4.0	4.6	5.5	10	189	88	4.6	5.3
10	3.9	4.4	4.2	4.4	4.4	4.6	6.8	18	146	79	4.6	5.9
11	4.2	4.2	4.4	4.6	4.4	4.6	7.1	46	120	79	4.8	5.9
12	4.4	4.0	4.6	4.4	4.4	4.4	6.6	56	123	76	4.6	5.7
13	4.4	4.0	4.6	4.2	4.4	4.6	6.1	166	149	70	4.6	5.5
14	4.2	4.4	4.6	4.2	4.4	4.8	6.4	*186	162	82	4.4	* 5.7
15	4.0	4.9	4.6	4.2	4.4	4.6	8.8	239	193	* 62	4.4	5.7
16	3.7	4.6	4.8	4.2	4.4	4.6	11	258	*200	50	4.6	5.3
17	3.7	4.4	4.6	4.2	4.4	4.6	6.8	261	254	34	4.8	5.3
18	3.9	4.4	4.6	4.9	4.4	4.8	6.1	276	207	30	4.2	5.3
19	3.9	4.2	4.8	4.8	4.4	4.8	5.9	314	*193	26	4.6	5.3
20	3.9	4.2	4.6	4.9	4.4	4.8	5.9	368	156	24	4.4	5.3
21	4.0	4.4	4.6	4.9	4.4	4.8	5.9	395	225	23	4.2	7.9
22	4.0	4.2	4.6	4.9	4.4	4.8	5.5	399	196	22	4.2	4.9
23	4.4	4.2	4.8	4.9	4.4	4.8	5.7	391	183	18	4.2	4.9
24	4.2	4.2	4.8	4.9	4.4	4.6	5.7	360	183	13	4.2	4.8
25	4.2	4.2	4.8	4.9	4.4	4.8	5.7	356	193	20	4.2	4.8
26	4.0	4.4	4.9	4.8	4.2	4.6	5.9	395	*214	a 16	4.0	4.8
27	4.0	4.2	4.6	4.6	4.4	4.6	5.9	364	203	a 14	4.6	4.6
28	4.0	4.2	4.6	4.6	4.4	4.8	6.6	306	207	a 12	5.5	4.8
29	4.0	4.2	4.6	4.6	4.6	4.9	24	254	207	a 9	5.9	4.8
30	4.4	4.2	4.6	4.6	----------	5.3	36	176	203	a 7	5.3	4.6
31	4.8	----------	4.6	4.6	----------	6.1	----------	133	----------	a 7	5.1	----------
Total	125.6	131.6	139.9	142.5	124.3	146.1	239.4	5.884.0	6.349	2.026	143.7	164.0
Mean	4.05	4.39	4.51	4.60	4.29	4.72	7.98	190	212	65.4	4.64	5.47
Ac-ft	249	261	277	282	247	290	475	11.670	12.590	4.020	285	325

Calendar year	: Max	Min	Mean	Ac-ft
Water year 1963-64:	Max 399	Min 3.7	Mean 42.7	Ac-ft 30,970

* Discharge measurement made on this day.
a No gage-height record.

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1685 D. Salt Lake City conduit from Big Cottonwood Creek treatment plant, near Salt Lake City, Utah

Location.--In SW¼NE¼ sec. 25, T. 2 S., R. 1 E., at Big Cottonwood Creek water treatment plant, at mouth of canyon, and 12 miles southeast of Salt Lake City.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Gage.--Five-foot Parshall flume.

Extremes.--Maximum daily discharge during year, 59 cfs June 5; minimum daily, 4 cfs Feb. 5.

Remarks.--Except for a small amount of wash water (0.2 to 0.5 cfs on most days) the record shows the amount of water delivered to the Salt Lake City water system from the water treatment plant.

Cooperation.--Record of discharges, 8 a.m. to 8 a.m., furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	24	22	20	18	16	16	23	12	57	51	32	50
2	23	21	20	18	16	15	28	12	52	52	32	53
3	22	22	18	17	14	15	26	13	56	49	29	51
4	22	21	19	18	15	15	25	16	58	42	32	52
5	21	22	19	17	4	15	27	15	59	43	34	51
6	22	22	18	18	13	15	26	16	42	49	33	52
7	20	26	20	17	15	14	25	15	16	50	28	52
8	20	22	19	14	15	15	25	15	16	54	21	51
9	19	24	20	16	15	15	26	14	15	48	19	49
10	19	21	18	17	15	20	34	16	15	55	38	53
11	17	22	16	18	15	15	36	15	15	52	44	54
12	21	22	18	15	15	16	35	16	26	51	41	54
13	24	21	19	13	15	15	33	34	18	52	37	56
14	23	21	18	12	14	14	30	34	19	45	35	52
15	22	24	18	13	15	15	29	56	21	51	30	41
16	20	25	19	16	15	15	20	55	19	50	28	52
17	20	22	19	18	14	15	15	58	16	51	39	53
18	20	22	19	18	15	16	13	56	17	52	37	52
19	20	22	19	18	15	16	14	58	20	47	29	53
20	19	18	19	18	14	16	14	57	18	46	30	49
21	21	17	19	19	14	16	15	57	18	37	28	45
22	20	21	19	19	15	16	15	48	18	45	28	42
23	23	21	18	20	15	16	15	50	18	44	36	43
24	23	21	18	19	15	16	16	51	24	46	36	42
25	21	21	18	19	13	16	16	48	34	46	29	39
26	20	21	18	18	13	16	15	48	51	47	28	30
27	20	21	18	18	14	16	15	37	46	45	33	26
28	20	20	18	18	14	16	15	37	46	37	50	26
29	20	20	18	18	15	19	15	24	50	42	52	26
30	22	20	18	18	----------	21	16	32	51	41	54	27
31	22	----------	18	18	----------	28	----------	48	----------	33	49	----------
Total	650	645	575	533	413	504	657	1,063	931	1,453	1,071	1,376
Mean	21.0	21.5	18.5	17.2	14.2	16.3	21.9	34.3	31.0	46.9	34.5	45.9
Ac-ft	1,290	1,280	1,140	1,060	819	1,000	1,300	2,110	1,850	2,880	2,120	2,730

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64 :	Max 59	Min 4	Mean 27.0	Ac-ft 19,580

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1685 E-O. Diversions from Big Cottonwood Creek between Big Cottonwood Creek flume and gaging station at Cottonwood Lane

There are ten diversions for irrigation and culinary use from Big Cottonwood Creek between the flume at the water treatment plant and the gaging station at Cottonwood Lane. Regulation of the diversions is under the direction of the Big Cottonwood Creek Water Commissioner who furnished records of discharge. Names and locations of the diversions are given in the following list:

Brown-Sanford ditch (1685 E) diverts from the right bank in SW¼NE¼ sec. 25, T. 2 S., R. 1 E.

Upper Canal (1685 F) diverts from the right bank and Newman ditch (1685 G) diverts from the left bank in SE¼NW¼ sec. 23, T. 2 S., R. 1 E.

Tanner (1685 H) and Bagley-Knudson (1685 I) ditches divert from the left bank and Park Box ditch (1685 J) diverts from the right bank in NW¼NW¼ sec. 23, T. 2 S., R. 1 E.

Severson ditch (1685 K) diverts from the left bank in SW¼SW¼ sec. 14, T. 2 S., R. 1 E.

Bagley ditch (1685 L) diverts from the left bank in NW¼SW¼ sec. 14, T. 2 S., R. 1 E.

Green (1685 M), Wallace (1685 N), and Walker (1685 O) ditches divert from the left bank in SE¼NE¼ sec. 15, T. 2 S., R. 1 E.

Prior to July 21 all water diverted was from Big Cottonwood Creek. Beginning on July 21 part of the water supply for these ditches was pumped from the East Jordan Canal (water from Utah Lake) and from the Dyres Inn well (D-2-1)14ccd-1. Little or no water was diverted from the creek during the period October 1 to April 15. The combined discharge of the ditches for the period April 16 to September 30 is given in the following table.

Discharge, in cubic feet per second, April 16 to September 30, 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								13	43	57	48	39
2								11	63	58	45	40
3								10	61	59	45	35
4								10	56	59	43	42
5								12	64	56	41	29
6								13	67	54	43	30
7								13	37	53	42	32
8								13	20	59	44	30
9								12	20	66	47	32
10								12	24	60	43	34
11								32	33	52	33	30
12								26	40	51	34	28
13								21	61	54	38	28
14								17	61	53	38	30
15								34	57	54	36	33
16							1	29	58	43	39	32
17							10	26	39	40	34	31
18							8	33	23	36	32	31
19							10	45	20	35	39	27
20							9	50	22	33	42	31
21							9	51	22	38	41	32
22							11	55	22	46	38	39
23							11	47	25	46	34	30
24							9	43	27	44	30	25
25							8	49	32	48	35	27
26							8	52	46	47	37	29
27							8	56	59	45	38	29
28							10	50	58	46	40	30
29							11	40	55	41	40	28
30					----------		11	38	59	39	36	26
31		----------			----------		----------	35	----------	48	37	----------
Total							134	948	1,274	1,520	1,212	939
Mean							8.9	30.6	42.5	49.0	39.1	31.3
Ac-ft							266	1,880	2,530	3,010	2,400	1,860

Calendar year	: Max	Min	Mean	Ac-ft	
The period	: Max 67	Min 1	Mean 35.9	Ac-ft	11,950

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1688. Big Cottonwood Creek at Cottonwood Lane, near Salt Lake City, Utah

Location.--Lat 40°39'00", long 111°48'47", in NW¼NW¼ sec. 14, T. 2 S., R. 1 E., at 5550 South about 500 ft west of Holladay Boulevard, half a mile upstream from Cottonwood Lane, and 8 miles southeast of Salt Lake City.

Drainage area.--57.4 sq mi.

Records available.--April to July 1964.

Gage.--Water-stage recorder. Altitude of gage is 4,455 ft (from topographic map).

Extremes.--April to July 1964: Maximum daily discharge during period, 317 cfs May 22; minimum, 0.2 cfs Apr. 5.

Remarks.--Records fair Apr. 1 to May 28, June 20 to July 31, and poor May 29 to June 19. Discharge Oct. 1 to March 31 mostly less than 0.5 cfs, consisting of small amount of ground-water inflow entering immediately above station and small spills from water treatment plant and gravel plant settling ponds. Discharge Aug. 1 to Sept. 30 mostly less than 0.5 cfs from ground-water inflow immediately above station and small spills resulting from regulation of irrigation diversions. Two determinations of specific conductance and two of water temperature are given in table 8.

Discharge, in cubic feet per second, April to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							*8.0	32	152	106		
2							3.2	31	190	98		
3							2.3	39	210	72		
4							.3	39	*208	72		
5							.2	*37	222	65		
6							.9	30	260	*60		
7							.7	30	302	50		
8							1.2	33	*276	24		
9							.8	35	240	17		
10							1.7	41	212	13		
11							1.2	48	192	18		
12							.9	56	166	15		
13							.6	126	179	9.5		
14							5.0	*180	185	13		
15							8.8	169	200	*12		
16							24	206	207	4.0		
17							25	214	242	2.4		
18							24	212	243	1.8		
19							24	*234	*210	1.8		
20							21	279	179	.8		
21							19	306	207	3.1		
22							16	*317	189	1.2		
23							18	306	174	*2.4		
24							19	298	168	1.5		
25							18	283	154	.6		
26							16	291	146	.2		
27							17	293	132	.2		
28							13	233	132	.6		
29							*33	209	130	1.2		
30					----------		47	129	122	.9		
31		----------			----------		----------	157	----------	.3		----------
Total							369.8	4,893	5,829	667.5		
Mean							12.3	158	194	21.5		
Ac-ft							733	9,710	11,560	1,320		

Calendar year	: Max	Min	Mean	Ac-ft
The period	: Max 317	Min 0.2	Mean 94.9	Ac-ft 23,320

* Discharge measurement made on this day.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1688 A-D. Diversions from Big Cottonwood Creek below gaging station at Cottonwood Lane

There are four irrigation diversions from Big Cottonwood Creek below the gaging station at Cottonwood Lane. Regulation of the diversions is under the direction of the Big Cottonwood Creek Water Commissioner, who furnished the records of discharge. Names and locations of the diversions are given in the following list:

Farr and Harper ditch (1688 A) diverts from the right bank in the NE¼NE¼ sec. 15, T. 2 S., R. 1 E.

Lower Canal (1688 B) diverts from the right bank in the NE¼SW¼ sec. 10, T. 2 S., R. 1 E.

Big Canal (1688 C) diverts from the right bank in SE¼NE¼ sec. 9, T. 2 S., R. 1 E.

Hill ditch (1688 D) diverts from the right bank in NW¼NW¼ sec. 9, T. 2 S., R. 1 E.

After August 7 most of the water diverted by these ditches and canals was Utah Lake exchange water spilled into Big Cottonwood Creek from the Jordan and Salt Lake Canal in the NE¼SW¼ sec. 10, T. 2 S., R. 1 E.

The combined diversion for the period April 1 to September 30 is given in the following table. Little or no water was diverted during the period October 1 to March 30.

Discharge, in cubic feet per second, April to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							2	2	13	23	28	20
2							1	2	20	23	28	20
3							1	1	20	25	28	16
4							1	0	21	26	29	17
5							1	0	21	26	29	17
6							1	0	24	26	30	16
7							1	0	27	25	29	16
8							0	0	26	26	30	15
9							0	0	27	26	29	16
10							0	0	23	31	28	17
11							0	0	18	30	28	17
12							0	0	13	31	28	18
13							0	0	14	32	28	17
14							0	0	17	31	28	16
15							0	0	17	35	29	16
16							0	0	19	34	31	16
17							0	1	27	16	32	8
18							0	9	19	13	31	15
19							0	15	19	19	29	14
20							0	17	18	24	23	14
21							0	17	18	29	21	14
22							0	18	17	23	22	14
23							0	19	13	34	24	14
24							0	19	0	35	25	14
25							0	19	22	26	25	14
26							0	20	26	22	25	14
27							0	20	26	21	26	15
28							0	19	25	22	26	17
29							0	19	24	26	26	17
30					----------		0	18	24	29	26	18
31		----------			----------		----------	17	----------	30	26	----------
Total							8	252	598	819	847	472
Mean							0.3	8.1	19.9	26.4	27.3	15.7
Ac-ft							16	500	1,190	1,620	1,680	936

Calendar year : Max Min Mean Ac-ft
The period : Max 35 Min 0 Mean 16.4 Ac-ft 5,940

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1698. Mill Creek above Elbow Fork, near Salt Lake City, Utah

Location.--Lat 40°42'23", long 111°41'22", in SW¼NE¼ sec. 28, T. 1 S., R. 2 E., on left bank 100 ft upstream from Elbow Fork, 1.8 miles upstream from Mill Creek guard station, and 12 miles southeast of Salt Lake City.

Drainage area.--7.7 sq mi.

Records available.--May 1963 to September 1964. Prior to April 21, 1964, infrequent staff gage readings only.

Gage.--Water-stage recorder. Altitude of gage is 6,630 ft (from topographic map).

Extremes.--Maximum discharge during year, 42.5 cfs June 7 (gage height 1.48 ft); minimum observed, 1.8 cfs Mar. 3.

Remarks.--Records good after April 21. No diversions above station. One determination of specific conductance and one of water temperature are given in table 8.

Cooperation.--Gage-height records and three discharge measurements furnished by Salt Lake City Water Department.

Partial record May to September 1963

May		June		July		August		September	
Day	cfs	Day	cfs	Day	cfs	Day	cfs	Day	cfs
19	9.4	4	13	2	5.6	1	4.1	3	4.5
23	18	6	9.8	11	4.8	8	4.5	5	4.1
28	18	8	5.6	18	3.7	9	4.8	9	4.1
		11	9.8	22	4.1	12	4.5	12	3.7
		18	8.4	29	3.7	15	4.5	19	4.4
		20	6.5			20	4.1		
		25	6.1			23	4.1		
		27	6.1			29	4.1		

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								4.6	22	14	7.8	6.4
2								4.6	23	14	7.8	6.4
3								4.5	* 30	13	7.8	6.4
4								4.3	34	13	7.8	6.4
5								4.3	34	12	7.8	6.4
6								4.2	38	*12	7.8	6.1
7								4.1	40	11	7.8	6.1
8							2.5	4.2	*32	11	7.8	6.1
9								4.1	26	10	7.4	6.1
10								4.3	22	10	7.0	5.8
11								4.8	21	9.5	6.4	* 5.8
12								5.4	21	9.1	6.4	5.8
13								7.0	21	8.6	6.4	5.8
14								8.9	21	8.6	6.1	* 5.8
15								10	*20	9.1	6.1	5.6
16	3.2	3.2	2.5	2.1	2.3	2.1	3.3	12	20	8.2	6.4	5.6
17							3.2	14	22	8.2	6.4	5.6
18							3.2	16	21	7.8	6.4	5.6
19							3.2	*16	*20	7.0	6.7	5.6
20							3.2	*16	18	7.0	* 6.7	5.6
21							3.2	18	21	7.0	6.7	5.6
22							3.2	21	20	7.0	6.7	5.6
23							3.3	25	19	7.0	6.7	5.6
24							3.5	28	19	7.0	6.7	5.6
25							3.5	32	18	7.4	6.4	5.6
26							3.5	32	*18	7.4	6.4	5.6
27							3.6	34	18	7.8	6.7	5.6
28							3.8	32	17	8.2	6.7	5.6
29							4.2	30	16	8.2	6.4	5.6
30					----------		4.5	25	15	*7.8	6.4	5.6
31		----------			----------		----------	22	----------	7.8	6.4	----------
Total	99.2	96.0	77.5	65.1	66.7	65.1	89.9	452.3	687	285.7	213.0	175.0
Mean	3.2	3.2	2.5	2.1	2.3	2.1	3.0	14.6	22.9	9.22	6.87	5.83
Ac-ft	198	190	154	129	132	129	178	897	1,360	567	422	347

Calendar year : Max Min Mean Ac-ft
Water year 1963-64: Max 40 Min - Mean 6.48 Ac-ft 4,700

* Discharge measurement made on this day.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface water records--Continued

1700. Mill Creek near Salt Lake City, Utah

Location.--Lat 40°41'20", long 111°46'55", in NW¼SE¼ sec. 36, T. 1 S., R. 1 E., 1,000 ft upstream from bridge at mouth of canyon, 0.7 mile east of Wasatch Blvd., and 7 miles southeast of Salt Lake City.

Drainage area.--21.7 sq mi.

Records available.--October 1898 to September 1964. October 1898 to September 1960, monthly discharge only for some periods published in WSP 1314 and 1734. October 1960 to September 1963 in files of Salt Lake City Water Department.

Extremes.--Maximum daily discharge during year, 50 cfs June 7; minimum daily, 3.4 cfs Nov. 29 to Dec. 1.
1898-1910, 1912-19, 1920-22, 1923-60: Maximum daily discharge, 152 cfs May 20, 1949; minimum not determined but about 1 cfs or less.

Remarks.--No regulation. Discharge shown below is combined discharge of Mill Creek and pipelines from Boundary Springs (see pages 31, 32).

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.0	4.8	3.4	5.4	5.1	5.8	6.7	12	37	26	14	10
2	5.7	4.8	3.6	5.8	5.8	6.0	6.5	12	39	26	13	10
3	5.7	4.8	3.8	5.4	5.1	6.0	6.4	12	42	22	13	9.8
4	5.5	5.0	3.9	4.4	4.5	5.7	6.6	11	46	24	13	9.8
5	5.3	5.0	3.8	4.8	4.5	5.9	6.9	12	46	22	13	9.5
6	5.3	4.8	3.8	5.1	5.0	5.2	6.5	11	48	22	13	8.6
7	5.2	5.1	4.0	5.8	5.1	4.5	6.9	10	50	22	13	9.1
8	5.3	5.1	4.2	4.4	5.1	4.1	7.2	11	46	20	12	9.1
9	4.9	5.0	4.0	4.2	5.8	5.6	7.4	11	43	20	12	9.1
10	4.9	5.0	4.1	4.2	6.3	5.8	8.4	12	38	18	12	9.4
11	4.9	5.0	4.1	4.4	6.3	5.3	8.2	16	37	18	12	9.1
12	4.8	4.8	3.9	4.4	6.3	5.8	7.9	20	34	18	12	9.2
13	5.3	4.8	3.9	4.3	6.3	5.6	7.9	24	34	18	12	9.2
14	4.8	4.8	4.3	4.3	5.0	5.3	8.0	30	32	18	12	9.2
15	4.5	4.8	5.0	4.3	4.5	5.8	8.5	32	32	18	12	9.8
16	4.4	5.0	5.0	4.3	5.6	5.8	9.6	33	33	16	12	9.2
17	4.4	4.8	5.1	4.2	6.3	5.7	9.3	35	39	17	11	9.2
18	4.3	4.4	5.0	4.3	6.3	5.7	9.3	36	33	17	11	9.2
19	4.1	4.6	5.0	4.6	6.1	5.7	9.1	37	35	17	11	9.2
20	4.1	4.9	5.1	5.9	6.1	5.4	9.3	40	33	17	11	9.2
21	4.3	5.0	5.2	6.0	5.7	5.6	9.1	41	37	16	11	9.5
22	4.3	4.1	4.9	5.9	6.0	5.7	9.1	41	36	16	11	9.6
23	4.4	3.8	4.1	5.0	5.7	6.0	9.6	41	35	15	11	9.3
24	4.7	3.8	4.2	5.2	6.0	5.7	9.8	42	33	14	11	9.1
25	4.4	3.6	5.0	6.1	6.2	5.7	9.7	44	33	14	11	8.8
26	4.4	3.6	5.3	6.0	4.2	5.5	9.9	46	32	14	11	8.9
27	4.4	3.6	5.5	5.8	4.9	5.6	9.4	46	32	14	11	8.9
28	4.7	3.6	5.6	5.9	5.2	5.6	8.1	46	30	15	11	8.9
29	4.5	3.4	5.1	5.8	5.8	5.6	7.4	46	30	14	11	8.8
30	4.8	3.4	4.4	5.7	----------	6.1	7.4	41	28	14	10	8.8
31	4.8	----------	4.7	5.3	----------	6.1	----------	38	----------	14	10	----------
Total	149.1	135.2	139.0	157.2	160.8	173.9	246.1	889	1,103	556	363	277.5
Mean	4.81	4.51	4.48	5.07	5.54	5.61	8.20	28.7	36.8	17.9	11.7	9.25
Ac-ft	296	268	276	312	319	345	488	1,760	2,190	1,100	720	550

Calendar year	:	Max		Min		Mean		Ac-ft	
Water year	1963-64	Max	50	Min	3.4	Mean	11.9	Ac-ft	8,620

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1700 A. Boundary Springs near Salt Lake City, Utah

Location.--In SE¼NE¼ sec. 36, T. 1 S., R. 3 E., at Forest Boundary, about 1,500 ft upstream from Mill Creek gage (1700 B), and about 7 miles southeast of Salt Lake City.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Gage.--Propeller-type totalizing meters.

Extremes.--Maximum daily discharge during year, 2.7 cfs Aug. 2-14; minimum daily, 1.2 cfs Mar. 27-31.

Remarks.--Total flow of Upper and Lower Boundary Springs diverted into pipelines for domestic use. At times surplus flow from the springs is wasted into Mill Creek above the meters.

Cooperation.--Record furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.0	1.8	1.5	2.1	2.1	1.8	1.4	1.9	1.7	2.5	2.6	2.5
2	2.0	1.8	1.5	2.1	2.1	1.8	1.4	1.9	1.7	2.5	2.7	2.5
3	2.0	1.8	1.5	2.1	2.1	1.8	1.5	1.9	1.7	2.5	2.7	2.4
4	2.0	1.8	1.5	2.1	2.1	1.7	1.5	1.9	1.9	2.5	2.7	2.4
5	2.0	1.8	1.5	2.1	2.1	1.7	1.6	1.9	1.9	2.5	2.7	2.4
6	2.0	1.8	1.6	2.1	2.1	1.7	1.6	1.8	1.9	2.5	2.7	2.3
7	2.0	1.8	1.6	2.1	2.1	1.6	1.6	1.8	2.0	2.5	2.7	2.3
8	2.0	1.8	1.6	2.1	2.1	1.6	1.6	1.8	2.0	2.5	2.7	2.3
9	1.9	1.8	1.6	2.0	2.1	1.6	1.6	1.7	2.0	2.5	2.7	2.3
10	1.9	1.8	1.7	2.0	2.1	1.6	1.6	1.7	2.0	2.5	2.7	2.3
11	1.9	1.8	1.7	2.0	2.1	1.6	1.6	1.7	2.0	2.5	2.7	2.3
12	1.8	1.8	1.7	2.0	2.1	1.6	1.6	1.7	2.0	2.5	2.7	2.4
13	1.8	1.8	1.7	2.0	2.1	1.6	1.6	1.7	2.1	2.5	2.7	2.4
14	1.8	1.8	1.7	2.0	2.1	1.6	1.7	1.6	2.1	2.5	2.7	2.4
15	1.8	1.8	1.7	2.0	2.1	1.6	1.7	1.5	2.1	2.5	2.6	2.4
16	1.8	1.8	1.7	2.0	2.1	1.6	1.7	1.4	2.1	2.5	2.6	2.4
17	1.8	1.8	1.8	1.9	2.1	1.5	1.7	1.3	2.1	2.6	2.6	2.4
18	1.7	1.7	1.8	1.9	2.1	1.5	1.7	1.3	2.1	2.6	2.6	2.4
19	1.7	1.7	1.8	1.9	2.1	1.5	1.7	1.6	2.1	2.6	2.6	2.4
20	1.7	1.7	1.9	1.9	2.1	1.4	1.7	1.7	2.1	2.6	2.6	2.4
21	1.7	1.7	1.9	2.0	2.0	1.4	1.7	1.9	2.1	2.6	2.5	2.4
22	1.7	1.7	2.0	2.0	2.0	1.3	1.7	2.0	2.1	2.6	2.5	2.5
23	1.7	1.7	2.0	2.0	2.0	1.3	1.7	2.0	2.1	2.6	2.5	2.5
24	1.7	1.7	2.0	2.1	2.0	1.3	1.7	2.1	2.1	2.5	2.5	2.5
25	1.7	1.5	2.0	2.1	2.0	1.3	1.8	2.2	2.3	2.5	2.5	2.5
26	1.7	1.5	2.0	2.1	1.9	1.3	1.8	2.1	2.4	2.5	2.5	2.6
27	1.7	1.5	2.0	2.1	1.9	1.2	1.8	2.1	2.5	2.5	2.5	2.6
28	1.8	1.5	2.1	2.1	1.9	1.2	1.8	2.0	2.5	2.6	2.6	2.6
29	1.8	1.5	2.1	2.1	1.8	1.2	1.8	2.0	2.6	2.6	2.6	2.5
30	1.8	1.5	2.1	2.1	----------	1.2	1.8	1.8	2.6	2.6	2.6	2.5
31	1.8	----------	2.1	2.1	----------	1.2	----------	1.8	----------	2.6	2.6	----------
Total	56.7	51.5	55.4	63.2	59.5	46.3	49.7	55.8	62.9	78.6	81.2	72.8
Mean	1.83	1.72	1.79	2.04	2.05	1.49	1.66	1.80	2.10	2.54	2.62	2.43
Ac-ft	112	102	110	125	118	92	99	111	125	156	161	144

Calendar year : Max Min Mean Ac-ft
Water year 1963-64: Max 2.7 Min 1.2 Mean 2.00 Ac-ft 1,460

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1700 B. Mill Creek (channel only) near Salt Lake City, Utah

Location.--Lat 40°41'20", long 111°46'55", in NW¼SE¼ sec. 36, T. 1 S., R. 1 E., 1,000 feet upstream from bridge at mouth of canyon, 0.7 mile east of Wasatch Boulevard, and 7 miles southeast of Salt Lake City.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Gage.--Water-stage recorder and rating flume. Altitude of gage is 5,050 feet (from topographic map).

Extremes.--Maximum daily discharge during year, 48 cfs June 7; minimum daily, 1.9 cfs Nov. 29-Dec. 1.

Remarks.--No regulation. Diversion about 1,500 feet upstream from Boundary Springs into pipelines that bypass gage. Chemical analyses and water temperatures are given in table 7.

Cooperation.--Gage-height record furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4.0	3.0	1.9	3.3	3.0	4.0	5.3	10	35	23	11	7.6
2	3.7	3.0	2.1	3.7	3.7	4.2	5.1	10	37	23	10	7.6
3	3.7	3.0	2.3	3.3	3.0	4.2	4.9	9.9	* 40	20	10	7.4
4	3.5	3.2	2.4	2.3	2.4	4.0	5.1	9.0	44	21	9.9	7.4
5	3.3	3.2	2.3	2.7	2.4	4.2	5.3	9.6	44	20	10	7.1
6	3.3	3.0	2.2	3.0	2.9	3.5	4.9	9.0	46	*19	10	6.3
7	3.2	3.3	2.4	3.7	3.0	* 2.9	5.3	8.7	48	20	9.9	6.8
8	3.3	3.3	2.6	2.3	3.0	* 2.5	5.6	9.6	44	18	9.6	6.8
9	3.0	3.2	2.4	2.2	3.7	* 4.0	5.8	9.6	41	17	9.6	6.8
10	3.0	3.2	2.4	2.2	4.2	4.2	6.8	10	36	16	9.3	7.1
11	3.0	3.2	2.4	2.4	4.2	3.7	6.6	14	35	16	9.0	* 6.8
12	3.0	3.0	2.2	2.4	4.2	4.2	6.3	18	32	16	9.3	6.8
13	3.5	3.0	2.2	2.3	4.2	4.0	6.3	22	32	15	9.3	6.8
14	3.0	* 3.0	2.6	2.3	2.9	3.7	6.3	28	30	15	9.0	6.8
15	2.7	3.0	3.3	2.3	2.4	4.2	6.8	30	* 30	15	9.0	7.4
16	2.6	3.2	3.3	2.3	3.5	4.2	7.9	32	31	14	9.0	6.8
17	2.6	3.0	3.3	2.3	4.2	4.2	7.6	34	37	14	8.7	6.8
18	2.6	2.7	3.2	2.4	4.2	4.2	7.6	35	31	14	8.7	6.8
19	2.4	2.9	3.2	2.7	4.0	4.2	7.4	35	33	14	8.7	6.8
20	2.4	3.2	3.2	4.0	4.0	4.0	7.6	*38	31	14	* 8.7	6.8
21	2.6	3.3	3.3	4.0	3.7	4.2	7.4	39	35	13	8.7	7.1
22	2.6	2.4	2.9	3.9	4.0	4.4	7.4	39	34	13	8.7	7.1
23	2.7	2.1	2.1	3.0	3.7	4.7	7.9	39	33	12	8.4	6.8
24	3.0	2.1	2.2	3.1	4.0	4.4	8.1	40	31	12	8.1	6.6
25	2.7	2.1	3.0	4.0	4.2	4.4	7.9	42	31	12	8.1	6.3
26	2.7	2.1	3.3	3.9	2.3	4.2	8.1	44	30	12	8.1	6.3
27	2.7	2.1	3.5	3.7	3.0	4.4	7.6	44	30	12	8.1	6.3
28	2.9	2.1	3.5	3.8	3.3	4.4	6.3	44	28	12	8.1	6.3
29	2.7	1.9	3.0	3.7	4.0	4.4	5.6	44	27	11	8.1	6.3
30	3.0	1.9	2.3	3.6	----------	4.9	5.6	39	25	* 11	7.9	6.3
31	3.0	----------	2.6	3.2	----------	4.9	----------	36	----------	11	7.6	----------
Total	92.4	83.7	83.6	94.0	101.3	127.6	196.4	831.4	1,041	475	278.6	204.9
Mean	2.98	2.79	2.70	3.03	3.49	4.12	6.55	26.8	34.7	15.3	8.99	6.83
Ac-ft	183	166	166	186	201	253	390	1,650	2,060	942	553	406

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64:	Max 48	Min 1.9	Mean 9.86	Ac-ft 7,160

* Discharge measurement made on this day.
a No gage-height record.
Note.--Stage-discharge relation affected by ice Dec. 9-10, Jan. 22-28, Jan. 30 to Feb. 2.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1700 C-M. Diversions from Mill Creek between gaging stations at 1700 B and 1702

There are 11 diversions for irrigation and cullinary use from Mill Creek between gaging stations 1700 B and 1702. Regulation of these diversions is under the direction of the Mill Creek Water Commissioner who furnished records of discharge. Names and locations of the diversions are given in the following list:

Chamberlain ditch (1700 C) diverts from the left bank in the NW¼SE¼ sec. 36, T. 1 S., R. 1 E.

Stillman-Hussy ditch (1700 D) diverts from the left bank and Osguthorpe (1700 E) ditch diverts from the right bank in the NE¼SW¼ sec. 36, T. 1 S., R. 1 E.

Stillman-Russell (1700 F) and James Russel (1700 G) ditches divert from the left bank in SW¼NW¼ sec. 36, T. 1 S., R. 1 E.

Tripp ditch (1700 H) diverts from the right bank in NE¼NE¼ sec. 35, T. 1 S., R. 1 E.

John and Franklin Neff ditch (1700 I) diverts from the left bank in NE¼NW¼ sec. 35, T. 1 S., R. 1 E.

Amos Neff ditch (1700 J) diverts from the left bank and Brigham Young ditch (1700 K) diverts from the right bank in NW¼NW¼ sec. 35, T. 1 S., R. 1 E.

Keller ditch (1700 L) diverts from the left bank in NW¼NW¼ sec. 34, T. 1 S., R. 1 E.

White ditch (1700 M) diverts from the right bank in NE¼NW¼ sec. 34, T. 1 S., R. 1 E.

The combined diversion is given in the following table.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2					0	1	0	5	8	7	5
2	1					0	1	0	8	8	6	5
3	1					0	1	0	11	7	6	5
4	1					0	1	0	13	9	6	5
5	1					0	1	0	12	10	6	5
6	1					0	1	0	13	11	8	4
7	1					0	1	0	9	13	7	4
8	1					0	2	0	6	12	6	4
9	1					0	2	0	8	10	6	4
10	1					0	2	0	7	10	6	5
11	1					0	2	0	7	9	6	4
12	1					0	2	0	6	9	6	4
13	1					0	2	0	7	9	6	4
14	0					0	3	0	6	9	6	4
15	0					0	3	3	8	10	6	5
16	0					0	3	4	9	10	6	4
17	0					0	3	5	8	10	5	4
18	0					0	3	8	3	11	5	4
19	0					0	3	7	6	9	6	4
20	0					0	3	10	6	9	5	4
21	0					0	3	10	5	8	5	5
22	0					0	3	8	5	8	5	4
23	0					0	3	8	5	6	5	4
24	0					0	3	7	6	8	5	4
25	0					0	3	8	9	7	5	4
26	0					0	3	9	7	7	5	4
27	0					0	3	8	8	7	5	4
28	0					0	2	9	7	8	5	4
29	0					0	1	7	8	7	5	4
30	0				----------	1	1	6	9	7	5	4
31	0	----------			----------	1	----------	6	----------	7	5	----------
Total	14	0	0	0	0	2	65	123	227	273	176	128
Mean	0.45	0	0	0	0	0.06	2.2	4.1	7.6	8.8	5.7	4.3
Ac-ft	28	0	0	0	0	4	129	244	450	541	349	254

Calendar year : Max Min Mean Ac-ft
Water year 1963-64: Max 13 Min 0 Mean 2.8 Ac-ft 2,000

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1702. Mill Creek at 2200 East, near Salt Lake City, Utah

Location.--Lat 20°41'44", long 111°49'40", in NE¼NW¼ sec. 34, T. 1 S., R. 1 E., about 2.5 miles downstream from mouth of canyon and 5.7 miles southeast of Salt Lake City.

Drainage area.--22.6 sq mi.

Records available.--October 1963 to September 1964.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 40 cfs June 7 (gage height, 1.63 ft); minimum daily, 0.2 cfs on many days.

Remarks.--Records good. Two determinations of specific conductance and two of water temperature are given in table 8.

Discharge, in cubic feet per second, water year October 1963 to September 1964.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a 0.3	a 1.0	0.4	1.5	1.0	2.6	2.1	8.5	27	12	1.2	0.5
2	a .3	a 1.1	.4	1.8	1.7	2.5	2.1	11	26	12	1.2	.5
3	.3	1.1	.5	1.4	1.0	2.6	2.0	11	* 26	10	1.1	.5
4	a .3	a 1.2	.5	1.0	.6	2.1	2.0	9.4	28	9.1	1.0	.6
5	a .3	a 1.0	.5	1.2	.9	2.1	2.5	11	29	7.0	1.1	.4
6	a .3	1.0	.3	1.5	.9	1.8	2.3	9.4	30	5.1	1.0	.4
7	.2	1.3	.3	1.5	1.0	.9	2.0	9.4	36	4.3	.7	.5
8	.4	1.0	.4		1.0	1.3	1.7	* 9.7	* 35	3.5	.7	.5
9	.5	1.0	.4		1.7	2.0	1.7	8.5	30	3.9	.9	.5
10	.4	1.0	.4		2.2	2.3	2.8	8.8	26	3.2	.8	.5
11	.3	1.1	.5		2.2	2.0	2.2	13	25	2.9	.9	.5
12	.3	1.1	.2	.3	2.0	* 2.3	2.0	19	23	3.1	1.0	.6
13	.9	1.0	.2		1.8	2.0	1.9	19	22	2.9	1.0	.9
14	.5	* 1.1	.7		* 1.2	2.0	2.0	25	21	2.3	.8	.7
15	.3	1.4	1.4		1.3	2.2	2.2	24	19	2.9	.9	.5
16	.2	1.4	1.4		2.3	* 2.4	2.8	25	19	2.8	1.0	.4
17	.2	1.1	1.2		2.3	2.3	2.8	26	26	2.1	.8	.4
18	.2	.8	1.2	.5	2.0	2.2	2.1	24	25	1.8	.8	.8
19	.2	1.0	1.2	.7	2.0	2.1	2.8	25	24	1.8	.7	.9
20	.2	1.2	1.3	2.0	1.9	2.1	2.5	* 25	22	1.9	.8	.5
21	.3	1.3	1.2	2.0	2.1	2.2	2.2	26	27	2.2	.8	.4
22	.3	.8	1.1	1.9	2.7	2.3	2.2	28	26	2.2	.9	.5
23	.5	.6	.5	1.0	1.7	2.4	2.8	28	25	1.7	1.4	.5
24	.5	1.1	.3	1.1	2.0	2.3	3.9	30	22	1.5	.9	.5
25	.4	1.1	1.0	2.0	2.2	2.3	3.0	31	19	1.6	.7	.5
26	.4	1.2	1.5	1.9	.3	2.3	3.6	32	20	1.8	.6	.5
27	.4	1.2	1.5	1.7	1.0	2.3	2.8	33	19	1.8	.6	.5
28	.5	.9	1.5	1.8	1.3	2.2	2.7	32	18	1.5	.6	.4
29	.4	.4	1.0	2.0	2.3	2.2	2.9	34	16	1.2	.7	.4
30	.9	.3	.3	1.6	----------	2.1	4.9	30	13	1.2	.6	.4
31	a .9	----------	.6	1.2	----------	2.1	----------	27	----------	1.3	.5	----------
Total	12.1	30.8	23.9	34.3	46.6	66.5	75.5	652.7	724	112.6	26.7	15.7
Mean	0.39	1.03	0.77	1.11	1.61	2.15	2.52	21.1	24.1	3.63	0.86	0.52
Ac-ft	24	61	47	68	92	132	150	1,290	1,440	223	53	31

Calendar year : Max Min Mean Ac-ft
Water year 1963-64 : Max 36 Min - Mean 4.98 Ac-ft 3,610

* Discharge measurement made on this day.
a No gage-height record.
Note.--Stage-discharge relation affected by ice Dec. 4, 9 to 15, 21 to 31, Jan. 8 to 20, Feb. 3, 6 to 11, 23 to 28.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1705. Surplus Canal at Salt Lake City, Utah

Location.--Lat 40°43'40", long 111°55'35", in SW¼SW¼ sec. 14, T. 1 S., R. 1 W., on right bank 400 ft downstream from diversion dam at head of canal, and an eighth of a mile downstream from highway bridge over Jordan River on 21st South Street; auxiliary gage at diversion dam.

Records available.--December 1942 to September 1964. December 1942 to September 1960 in annual series of Water-Supply Papers of the U.S. Geological Survey, with monthly summaries in WSP 1314 and 1734. October 1960 to September 1963 in Surface Water Records of Utah, published annually.

Gage.--Water-stage recorder. Datum of gage is 4,219.02 ft above mean sea level, datum of 1929. Prior to Oct. 22, 1952, at site 50 ft upstream at present datum.

Average discharge.--21 years (1943-64), 176 cfs (127,400 acre-ft per year).

Extremes.--Maximum discharge during year, 1,320 cfs June 7; minimum, 36 cfs Mar. 5.
1942-64: Maximum discharge, 1,700 cfs June 7, 1952; maximum gage height, 8.84 ft May 7, 1952; no flow Jan. 21 to Feb. 28, 1963.

Remarks.--Records good except those for period of no gage-height record, which are fair. Flow regulated at diversion structure 400 ft above station. Canal was built to bypass floodwater of Jordan River around Salt Lake City residential and industrial area (see p. 39 for records of combined flow of Jordan River and canal). Several diversions for irrigation and waterfowl ponds below station.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	144	122	106	84	79	48	61	176	466	* 299	173	162
2	151	118	* 106	84	82	52	106	347	407	259	183	168
3	148	118	103	79	79	45	59	311	518	226	166	196
4	148	118	100	75	75	* 45	56	183	528	176	159	* 241
5	186	115	100	77	67	46	63	234	461	180	170	241
6	193	122	100	75	70	48	63	264	653	166	215	204
7	197	182	100	77	70	45	54	194	1,070	156	219	179
8	200	136	97	70	70	45	54	222	* 1,050	a147	215	186
9	208	129	97	65	65	46	51	230	705	a138	197	204
10	179	126	97	70	65	48	67	219	499	a126	187	189
11	175	123	95	75	63	48	65	226	385	a121	176	193
12	197	117	92	72	57	52	70	245	295	a116	183	186
13	204	109	92	70	57	54	73	276	276	*118	*176	172
14	179	106	92	70	* 54	52	* 82	420	331	105	180	175
15	*175	139	92	* 70	52	63	78	* 485	* 351	144	183	* 189
16	144	168	* 95	67	57	84	82	494	425	141	249	207
17	125	142	92	67	56	* 87	96	523	518	129	249	193
18	125	*168	89	67	50	82	103	571	650	110	234	241
19	141	142	87	67	50	84	110	571	* 644	103	230	207
20	151	117	84	72	50	103	163	547	533	113	230	193
21	131	132	87	92	50	63	108	662	571	113	230	189
22	106	142	87	92	50	70	108	* 744	686	118	219	196
23	122	120	82	84	50	70	98	691	609	132	230	179
24	128	120	82	82	48	61	126	744	537	159	201	175
25	112	132	87	82	46	56	116	696	499	183	176	162
26	122	136	84	84	45	57	132	677	428	190	145	142
27	128	126	87	79	45	67	153	* 782	452	194	*138	136
28	125	114	87	77	46	70	*129	720	475	141	189	139
29	112	111	87	77	46	72	126	768	447	147	179	136
30	122	106	87	79	---------	70	156	629	377	*156	158	136
31	128	---------	*84	* 77	---------	* 63	---------	537	---------	159	165	---------
Total	4,706	3,856	2,857	2,358	1,694	1,896	2,808	14,388	15,846	4,765	5,004	5,516
Mean	152	129	92.2	76.1	58.4	61.2	93.6	464	528	154	194	184
Ac-ft	9,330	7,650	5,670	4,680	3,360	3,760	5,570	28,540	31,430	9,450	11,910	10,940

Calendar year 1963 : Max 435 Min 0 Mean 122 Ac-ft 88,700
Water year 1963-64: Max 1,070 Min 45 Mean 182 Ac-ft 132,300

* Discharge measurement made on this day.
a No gage-height record.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1707. North Point Consolidated Canal below Goss Flume, at Salt Lake City, Utah

Location.--Lat 40°46'22", long 111°58'43", in SE¼SW¼ sec. 32, T. 1 N., R. 1 W., on right bank at downstream end of Goss flume over Surplus Canal, about 350 feet north of U.S. Highway 40, and 4.7 miles northwest of Salt Lake City.

Records available.--October 1963 to September 1964.

Gage.--Water-stage recorder.

Extremes.--Maximum daily discharge during year, 75 cfs July 30; no flow on many days.

Remarks.--Records fair, except during periods of no gage-height record and periods of indefinite stage-discharge relation which are poor.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	40						0	6	45	60	60	60
2	40						0	6	34	66	55	60
3	40						0	5	46	67	50	58
4	40						0	4	57	66	45	58
5	40						0	4	65	70	45	58
6	40						0	5	69	69	45	54
7	40						0	4	66	68	40	46
8	40						0	4	58	66	40	46
9	40						0	4	21	* 69	40	50
10	40						0	5	0	71	40	50
11	40						0	5	0	66	40	51
12	40						0	4	0	50	35	52
13	40						9	2	0	50	30	51
14	20						9	0	0	50	30	52
15	10						9	0	0	40	30	52
16	10						* 9	0	0	30	30	* 51
17	10						7	0	0	30	15	19
18	10						4	0	0	30	0	0
19	10						4	0	0	30	0	0
20	10						5	0	0	10	0	0
21	10						5	* 32	0	0	0	0
22	10						4	68	0	0	0	0
23	10						4	70	0	0	0	0
24	10						5	70	0	0	0	24
25	10						5	70	0	0	31	45
26	10						5	* 68	0	0	57	* 45
27	10						6	66	0	0	58	43
28	10						5	65	1	38	59	40
29	10						6	63	2	73	* 59	40
30	10				----------		6	66	* 16	* 75	59	38
31	5	----------			----------		----------	67	----------	75	61	----------
Total	705	0	0	0	0	0	107	763	480	1,319	1,054	1,143
Mean	22.7	0	0	0	0	0	3.6	24.6	16.0	42.5	34.0	38.1
Ac-ft	1,400	0	0	0	0	0	212	1,510	952	2,600	2,090	2,270

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64:	Max 75	Min 0	Mean 15.2	Ac-ft 11,030

* Discharge measurement made on this day.
Note.--No gage-height record or stage-discharge relation doubtful Oct. 1-31, April 13-15, 17, July 11-20, Aug. 1-17.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1708. Surplus Canal at Cohen flume, near Salt Lake City, Utah

Location.--Lat 40°47'54", long 112°00'51", in SW¼SE¼ sec. 24, T. 1 N., R. 2 W., 0.3 mile downstream from spillway to Goggin Drain, 3.2 miles downstream from bridge on U.S. Highway 40, and 6.9 miles northwest of Salt Lake City.

Records available.--October 1963 to September 30, 1964.

Gage.--Water-stage recorder.

Extremes.--Maximum daily discharge during year, 600 cfs June 7 and 8, estimated as recorder not operating; minimum, 12 cfs Aug. 25.

Remarks.--Records fair. Records of chemical analyses and water temperatures are given in table 7.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	100	176	105	80	77	49	59	147	241	66	98	43
2	110	127	105	82	84	58	100	239	193	88	118	62
3	110	115	103	79	83	50	76	280	287	121	99	64
4	110	118	102	76	78	46	52	184	298	55	100	86
5	150	120	102	77	67	44	58	187	235	47	112	50
6	150	111	102	77	67	*49	67	201	300	80	153	90
7	160	158	102	76	70	45	53	124	600	49	162	93
8	160	146	102	73	65	43	50	118	600	33	164	88
9	170	145	102	67	65	44	46	135	400	20	148	104
10	140	140	103	69	66	47	58	126	316	38	119	113
11	140	131	100	74	67	44	76	129	217	55	51	130
12	160	125	98	74	59	44	79	139	139	56	42	* 128
13	160	117	*98	71	56	52	63	173	117	67	38	119
14	160	112	98	68	53	48	44	244	145	67	46	122
15	*174	103	96	69	49	54	51	337	170	82	46	122
16	168	143	97	68	53	77	61	307	200	*105	74	144
17	149	143	95	64	56	80	82	305	247	96	113	179
18	136	160	94	64	49	*88	92	* 329	294	82	83	241
19	141	* 181	93	66	47	81	99	335	277	72	78	206
20	151	136	92	68	47	127	143	* 337	218	190	83	174
21	139	125	93	97	49	63	119	318	258	197	55	173
22	118	141	94	97	47	60	103	375	331	150	67	190
23	109	128	90	87	49	69	81	359	276	151	80	137
24	131	127	90	82	49	57	104	375	256	159	* 51	* 118
25	109	132	93	78	48	* 53	105	369	*214	174	16	130
26	118	132	91	81	43	51	111	* 380	149	175	26	116
27	131	128	93	82	42	63	145	402	110	136	35	96
28	127	119	94	79	43	68	118	393	148	85	70	97
29	114	115	98	76	43	75	109	353	200	* 98	65	90
30	115	109	84	79	---------	70	130	345	113	97	34	87
31	184	---------	79	74	---------	64	---------	275	---------	90	59	---------
Total	4,294	3,963	2,988	2,354	1,671	1,863	2,534	8,320	7,549	2,981	2,485	3,592
Mean	139	132	96.4	75.9	57.6	60.0	84.5	268	252	96.2	80.2	120
Ac-ft	8,520	7,860	5,930	4,670	3,310	3,700	5,030	16,500	14,970	5,910	4,930	7,120

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64:	Max 600	Min 16	Mean 122	Ac-ft 88,450

* Discharge measurement made on this day.

Note.--No gage-height record Oct. 1-14, June 7-9.

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1710. Jordan River at Salt Lake City, Utah

Location.--Lat 40°43'40", long 111°55'25", in SW¼SW¼ sec. 14, T. 1 S., R. 1 W., on left bank 800 ft downstream from diversion structure at head of Surplus Canal, a quarter of a mile downstream from highway bridge on 21st South Street, Salt Lake City, and 2 miles downstream from Mill Creek.

Drainage area.--3,420 sq mi; approximately (including 255 sq mi in closed basin in Cedar Valley, Utah).

Records available.--December 1942 to September 1964. December 1942 to September 1960 in annual series of Water-Supply Papers of the U.S. Geological Survey, with monthly summaries in WSP 1314 and 1734. October 1960 to September 1963 in Surface Water Records of Utah, published annually.

Gage.--Water-stage recorder. Datum of gage is 4,220.73 ft above mean sea level, datum of 1929.

Average discharge.--21 years (1943-64), 140 cfs (101,400 acre-ft per year).

Extremes.--Maximum discharge during year, 160 cfs Apr. 10; no flow May 14 to June 1. Maximum combined discharge during year (Jordan River and Surplus Canal), 1,330 cfs June 7; minimum daily, 143 cfs Nov. 14.
1942-64: Maximum discharge, 384 cfs June 3, 1944; maximum gage height, 5.75 ft June 26, 1952; no flow May 10, 24, 1952, May 21, 22, 1962, Sept. 21, 1963, May 14 to June 1, 1964 (entire flow diverted to Surplus Canal). Maximum combined discharge (Jordan River and Surplus Canal), 1,820 cfs June 7, 1952; minimum daily, 89 cfs June 23, 1961.

Remarks.--Records good except those for period of no gage-height record, which are fair. Flow completely regulated since reconstruction in May 1952 of Surplus Canal diversion dam 800 ft upstream. Flow affected by gates and pumps at outlet of Utah Lake. Many diversions above station for irrigation and industrial and municipal water supplies. For records for Surplus Canal see station 1705. For records of combined flow see following page. Records of chemical analyses and water temperatures are given in table 7.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	76	89	93	89	110	126	140	113	0	*114	81	128
2	*73	86	94	*91	112	129	98	87	68	104	83	125
3	74	85	96	92	112	124	139	99	115	98	78	72
4	75	83	*97	92	111	125	139	119	97	88	76	*45
5	85	83	98	94	111	*128	141	44	100	89	78	33
6	86	80	96	94	114	130	143	8.8	92	87	86	81
7	89	47	96	96	117	129	142	80	88	89	94	135
8	92	51	94	94	119	129	141	57	23	87	94	135
9	94	45	94	92	120	132	141	38	13	88	91	139
10	89	44	93	95	124	132	150	39	41	95	87	134
11	90	43	92	98	125	131	148	40	78	103	83	131
12	97	34	91	99	125	133	139	43	96	101	66	125
13	75	40	89	98	125	135	121	24	116	*100	*77	119
14	77	57	88	99	*124	134	97	0	119	96	78	116
15	*66	34	89	99	124	139	97	*0	*123	104	79	*119
16	76	20	*89	*99	125	146	99	0	133	102	92	123
17	78	30	88	98	126	*147	103	0	83	98	92	122
18	77	*32	88	98	124	145	102	0	67	94	89	39
19	80	68	90	97	124	138	105	0	81	92	87	91
20	81	103	88	99	125	84	108	0	110	92	84	119
21	79	86	88	104	125	141	102	0	104	90	83	124
22	76	81	89	104	124	143	101	0	74	89	80	98
23	61	97	87	107	125	144	97	0	51	91	80	123
24	a 72	96	86	106	125	139	108	0	45	97	72	122
25	a 68	71	88	107	123	138	100	0	66	99	65	120
26	a 68	55	89	107	123	139	108	0	119	97	84	116
27	a 72	60	89	106	123	142	111	0	119	97	*98	116
28	a 75	89	89	106	124	142	105	0	121	81	114	116
29	a 68	88	90	106	125	143	*105	0	119	80	117	116
30	a 78	91	90	108	----------	142	113	0	119	*79	117	117
31	*93	----------	89	*106	----------	*140	----------	0	----------	80	124	----------
Total	2,440	1,948	2,817	3,080	3,514	4,169	3,543	791.8	2,580	2,901	2,709	3,299
Mean	78.7	64.9	90.9	99.4	121	134	118	25.5	86.0	93.6	87.4	110
Ac-ft	4,840	3,860	5,590	6,110	6,970	8,270	7,030	1,570	5,120	5,750	5,370	6,540

Calendar year 1963: Max 213 Min 10 Mean 95.7 Ac-ft 69,290
Water year 1963-64: Max 150 Min 0 Mean 92.3 Ac-ft 67,020

* Discharge measurement made on this day.
a No gage-height record.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1710. Jordan River at Salt Lake City, Utah--continued

Combined discharge, in cubic feet per second, of Jordan River and Surplus Canal at Salt Lake City, Utah, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	220	211	199	173	189	174	201	289	466	413	254	290
2	224	204	200	175	194	181	204	434	475	363	266	293
3	222	203	199	171	191	169	198	410	633	324	244	268
4	223	201	197	167	186	170	195	302	625	264	235	286
5	271	198	198	171	178	174	204	278	561	269	248	274
6	279	202	196	169	184	178	206	273	745	253	301	285
7	286	229	196	173	187	174	196	274	1,160	245	313	314
8	292	187	191	164	189	174	195	279	1,070	234	309	321
9	302	174	191	157	185	178	192	268	718	226	288	343
10	268	170	190	165	189	180	217	258	540	221	274	323
11	265	166	187	173	188	179	213	266	463	224	259	324
12	294	151	183	171	182	185	209	288	391	217	249	311
13	279	149	181	168	182	189	194	300	392	218	253	291
14	256	143	180	169	178	186	179	420	450	201	258	291
15	241	173	181	169	176	202	175	485	474	248	262	308
16	220	188	184	166	182	230	181	494	558	243	341	330
17	203	172	180	165	182	234	199	523	601	227	341	315
18	202	200	177	165	174	227	205	571	717	204	323	280
19	221	210	177	164	174	222	215	571	725	195	317	298
20	232	220	172	171	175	187	271	547	643	205	314	312
21	210	218	175	196	175	204	210	652	675	203	313	313
22	182	223	176	196	174	213	209	744	760	207	299	294
23	183	217	169	191	175	214	195	691	660	223	310	302
24	200	216	168	188	173	200	234	744	582	256	273	297
25	180	203	175	189	169	194	216	696	565	282	241	282
26	190	191	173	191	168	196	240	677	547	287	229	258
27	200	186	176	185	168	209	264	782	571	291	236	252
28	200	203	176	183	170	212	234	720	596	222	303	255
29	180	199	177	183	171	215	231	768	566	227	296	252
30	200	197	177	187	----------	212	269	629	496	235	275	253
31	221	----------	173	183	----------	203	----------	537	----------	239	289	----------
Total	7,146	5,804	5,674	5,438	5,208	6,065	6,351	15,180	18,425	7,666	8,713	8,815
Mean	231	193	183	175	180	196	212	490	614	247	281	294
Ac-ft	14,170	11,510	11,250	10,790	10,330	12,030	12,600	30,110	36,550	15,210	17,280	17,480

Calendar year 1963: Max 511 Min 123 Mean 218 Ac-ft 158,000
Water year 1963-64: Max 1,160 Min 143 Mean 275 Ac-ft 199,300

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1715 F. Diversion to Salt Lake City water supply from Mountain Dell Reservoir, near Salt Lake City, Utah

Location.--In SE¼NE¼ sec. 9, T. 1 S., R. 2 E., at Mountain Dell Dam, and 9 miles east of Salt Lake City.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Gage.--Weir at intake to pipeline.

Extremes.--Maximum daily discharge during year, 53.5 cfs July 19; no flow on many days.

Remarks.--Record shows the amount of water diverted to the Salt Lake City water supply system from the Mountain Dell Reservoir on Parleys Creek.

Cooperation.--Record of discharge furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	19.7	8.2	0	20.2	4.8		0	18.6	0	36.4	46.0	9.6
2	9.8	19.4	0	11.8	4.8		0	15.5	0	34.9	47.4	20.2
3	8.1	14.6	0	13.6	4.8		0	11.2	0	32.1	43.4	13.3
4	15.8	21.4	0	13.5	4.7		0	11.2	0	31.9	45.7	3.1
5	5.9	15.5	0	19.8	4.8		0	14.6	11.3	37.4	43.9	0
6	18.6	21.1	0	13.8	4.8		0	18.1	2.6	38.0	41.5	0
7	26.0	9.5	0	13.3	0		0	23.1	0	36.9	45.0	0
8	28.2	15.0	0	18.1	0		0	15.0	11.9	36.7	45.9	0
9	34.9	14.7	0	24.3	0		0	14.7	24.1	23.4	45.9	0
10	43.1	1.1	0	16.3	0		0	14.9	28.6	29.9	45.0	0
11	37.1	23.7	0	6.8	0		0	23.6	30.1	35.0	45.6	0
12	22.0	11.8	0	14.9	0		0	21.2	41.8	23.6	45.7	0
13	6.4	6.7	.2	24.8	0		0	6.8	32.9	35.1	45.9	0
14	0	13.0	0	18.3	0		3.1	25.9	40.3	24.3	45.4	0
15	8.2	15.0	0	20.5	0		8.5	2.4	45.0	34.9	42.9	0
16	18.1	4.5	13.6	16.0	0		19.2	0	41.4	42.6	37.4	0
17	18.1	7.4	16.3	18.8	0		19.8	0	11.6	45.3	44.6	0
18	21.7	14.4	15.8	18.3	0		19.5	0	7.8	45.4	45.0	0
19	15.7	16.4	13.0	9.0	0		19.5	0	13.3	53.5	42.8	0
20	3.6	13.8	14.1	18.6	0		17.1	0	13.5	37.7	42.6	0
21	18.8	13.6	15.2	18.9	0		25.9	0	0	40.0	45.4	0
22	14.7	13.3	6.8	14.7	0		26.2	0	17.4	46.3	46.2	0
23	5.4	9.9	15.2	11.8	0		21.4	0	20.6	45.9	23.7	0
24	0	8.4	15.2	12.2	0		15.4	0	32.6	45.1	27.0	0
25	0	8.4	12.1	13.8	0		16.4	0	30.5	40.3	22.3	0
26	12.2	11.8	12.1	10.9	0		17.4	0	35.2	42.5	15.3	0
27	7.1	8.8	15.2	21.1	0		22.0	0	22.8	45.0	15.3	0
28	0	7.0	13.2	17.1	0		19.2	0	29.9	47.0	14.7	0
29	11.2	1.6	11.9	12.9	0		21.9	0	34.1	46.0	14.4	0
30	7.6	0	11.6	13.2	----------		18.8	0	33.5	45.7	16.0	0
31	14.6	----------	14.6	3.9	----------		----------	0	----------	45.3	15.3	----------
Total	452.6	350.0	216.1	481.2	28.7	0	311.3	236.8	612.8	1,204.1	1,143.2	46.2
Mean	14.6	11.7	6.97	15.5	0.99	0	10.4	7.64	20.4	38.8	36.9	1.54
Ac-ft	898	694	429	954	57	0	617	470	1,220	2,390	2,270	92

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64 :	Max 53.5	Min 0	Mean 13.9	Ac-ft 10,090

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1716. Parleys Creek at Suicide Rock, near Salt Lake City, Utah

Location.--Lat 40°42'25", long 111°45'20", in NE¼NE¼ sec. 26, T. 1 S., R. 1 E., at mouth of canyon about 0.1 mile upstream from Wasatch Boulevard, and 6 miles southeast of Salt Lake City.

Records available.--October 1963 to September 1964.

Gage.--Water-stage recorder. Altitude of gage is 4,710 ft (from topographic map).

Extremes.--Maximum discharge during year, 238 cfs May 18 (gage height, 2.07 ft); no flow on Oct. 27, 29, 31, Nov. 1, 2.

Remarks.--Records good. Records of chemical analyses and water temperatures are given in table 7. Adjusted record of total flow of Parleys Creek is given on the following page.

Cooperation.--Records for Mountain Dell Reservoir and diversion to Salt Lake City water supply furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.3	0	0.8	6.7	6.9	1.3	1.4	17	79	11	4.1	3.3
2	1.3	0	.9	6.7	6.9	1.3	2.2	20	24	10	a 4.1	23
3	1.3	.2	1.0	6.5	6.5	1.3	2.3	18	*20	9.2	a 4.1	84
4	1.3	1.3	1.0	6.1	6.5	1.3	2.2	*16	22	14	a 4.1	108
5	1.3	1.4	.9	6.5	6.9	1.3	2.6	16	15	9.6	a 4.0	92
6	1.5	1.6	1.0	6.5	6.9	1.3	2.6	17	14	9.2	a 4.0	20
7	1.5	1.6	1.1	6.5	6.5	1.3	2.4	17	16	8.8	a 4.0	16
8	1.5	1.5	1.2	6.1	6.5	1.3	2.6	20	*34	a 8.0	a 3.9	14
9	1.2	1.5	1.3	6.1	4.6	1.4	2.4	23	89	a 7.5	a 3.9	10
10	.2	1.5	1.3	6.5	1.7	1.4	3.5	24	84	a 7.0	a 3.9	5.4
11	.3	1.5	1.3	6.5	1.6	1.4	3.5	26	17	a 6.5	a 3.9	4.1
12	.4	1.5	1.4	6.5	*1.5	*1.5	2.9	46	19	a 6.0	a 3.8	3.7
13	.9	1.5	1.3	6.1	1.5	1.4	2.8	100	15	a 5.5	a 3.8	3.5
14	.7	1.5	.7	6.1	1.4	1.4	3.3	137	15	5.0	a 3.8	3.3
15	.8	*1.6	.6	6.1	1.2	1.4	3.7	16,2	*18	5.4	a 3.8	3.2
16	.9	1.6	.6	6.1	1.2	*1.4	3.7	198	17	5.0	a 3.7	2.9
17	.9	1.4	.6	6.5	1.2	1.5	3.7	208	28	5.0	a 3.7	2.8
18	1.0	1.4	.7	6.5	1.2	1.6	3.7	217	16	5.0	a 3.7	2.8
19	1.2	1.3	.7	6.5	1.2	1.6	3.9	*219	14	5.0	3.7	2.8
20	1.3	1.5	.7	6.5	1.2	1.6	4.4	215	16	5.0	3.7	2.6
21	1.3	1.5	.7	6.5	1.2	1.7	4.6	212	41	4.6	3.5	2.6
22	1.3	1.5	.7	6.5	1.2	1.8	*5.0	189	53	4.6	3.5	2.6
23	1.4	1.5	.7	6.5	1.2	1.8	5.4	175	42	4.4	3.5	2.4
24	1.3	1.4	.7	6.7	1.2	1.9	6.5	170	38	a 4.3	3.9	2.4
25	1.2	1.4	.7	6.7	1.3	1.2	7.3	154	21	a 4.2	6.7	2.4
26	.8	1.3	3.6	6.7	1.2	.9	8.4	125	23	a 4.1	3.7	2.3
27	0	1.1	6.1	6.7	1.3	.8	9.6	102	17	4.1	3.5	2.3
28	.1	.7	6.1	6.5	1.3	.8	10	95	17	4.1	3.5	2.3
29	0	.7	6.5	6.5	1.3	.7	*11	95	16	4.1	3.5	2.3
30	.1	.7	6.1	6.7	----------	.7	15	96	16	4.6	3.3	2.3
31	0	----------	6.5	6.7	----------	.8	----------	93	----------	4.1	3.3	----------
Total	28.3	37.2	57.5	200.3	84.3	41.1	142.6	3,222	856	194.9	119.6	431.3
Mean	0.91	1.24	1.85	6.46	2.91	1.33	4.75	104	28.5	6.29	3.86	14.4
Ac-ft	56	74	114	397	167	82	283	6,390	1,700	386	237	855

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64:	Max 219	Min 0	Mean 14.7	Ac-ft 10,740

* Discharge measurement made on this day.
a No gage-height record.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1716. Parleys Creek at Suicide Rock, near Salt Lake City, Utah--Continued

Monthly summary, water year October 1963 to September 1964, of contents of Mountain Dell Reservoir, diversion to Salt Lake City water supply (1715 F), Parleys Creek at Suicide Rock (1716), and adjusted total flow of Parleys Creek

Month	Mountain Dell Reservoir		Diversion to Salt Lake City water supply	Parleys Creek at Suicide Rock	Adjusted total flow
	Contents 1st of month	Increase in storage			
	acre-ft	acre-ft	acre-ft	acre-ft	acre-ft
Oct.	1,913	-546	898	56	408
Nov.	1,367	-370	694	74	398
Dec.	997	-175.4	429	114	368
Jan.	821.6	-705.8	954	397	645
Feb.	115.8	237.3	57	167	461
Mar.	353.1	318.7	0	82	401
Apr.	671.8	598.2	617	283	1,500
May	1,270.0	1,058.6	470	6,390	7,920
June	2,328.6	757.1	1,220	1,700	3,680
July	3,085.7	- 872.3	2,390	386	1,900
Aug.	2,213.4	-1,470.4	2,270	237	1,040
Sept.	743.0	- 361.7	92	855	585
Oct.	381.3				
Water year		-1,530	10,090	10,740	19,310

Table 5.--Surface-water records--Continued

1719. Emigration Creek below Burr Fork, near Salt Lake City, Utah

Location.--Lat 40°47'14", long 111°42'44", in SE¼SW¼ sec. 27, T. 1 N., R. 2 E., on left bank 200 ft upstream from culvert on State Highway 65, about 0.3 mile below Burr Fork, and 10 miles northeast of Salt Lake City.

Drainage area.--5.9 sq mi.

Records available.--May 1963 to September 1964. Prior to May 7, 1964, infrequent readings only.

Gage.--Water-stage recorder. Altitude of gage is 5,820 ft (from topographic map). Prior to May 7, 1964, staff gage at site about 0.25 mile upstream at different datum.

Extremes.--Maximum daily discharge during period, 40 cfs May 14, 19, 1964; minimum daily recorded, 0.2 cfs Aug. 30, Sept. 12, 1963.

Remarks.--Records good after May 7 and poor prior to that date. No diversions above station except for local domestic use. One determination of specific conductance and one of water temperature are given in table 8.

Cooperation.--Gage-height record and 10 discharge measurements furnished by Salt Lake City Water Department.

Partial record, May to September 1963

May		June		July		August		September	
Day	cfs	Day	cfs	Day	cfs	Day	cfs	Day	cfs
13	7.0	4	3.3	2	1.3	1	0.4	3	0.3
14	6.5	6	2.9	7	.8	6	.4	10	.3
15	5.9	14	2.6	11	.9	11	.3	12	.2
16	5.9	18	2.2	16	.7	15	.3		
23	4.5	20	1.8	17	.5	20	.3		
28	5.3	27	1.4	22	.5	23	.3		
				29	.4	26	.3		
						30	.2		

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1								20	11	5.8	1.3	0.4
2								20	* 9.8	5.5	1.4	.5
3								16	* 8.5	5.0	1.2	.5
4								15	8.2	4.8	1.1	.4
5							1	16	8.2	4.1	1.3	.4
6								12	8.2	* 4.1	1.2	.4
7								14	8.8	4.1	1.1	.3
8								* 15	* 9.8	3.4	1.0	.3
9								17	8.5	3.4	1.0	.3
10							2	22	* 8.2	3.2	.9	.4
11							2	27	8.2	2.9	.9	.4
12							3	29	7.7	2.7	.9	.4
13							3	* 36	7.4	2.6	.9	.4
14							4	40	7.4	2.6	.8	* .4
15	0.4	0.5	0.5	0.4	0.4	0.5	5	33	7.1	2.4	.7	.5
16							8	33	* 7.1	2.4	.7	.5
17							6	34	8.0	2.3	.7	.5
18								* 39	7.4	2.2	.7	.5
19								40	* 7.7	2.0	.7	.5
20								* 38	6.8	2.0	* .8	.5
21								* 37	8.5	1.8	.8	.5
22							5	34	8.2	1.8	.7	.5
23								30	7.1	1.8	.6	.5
24								27	6.8	1.8	.6	.5
25								24	6.6	1.6	.5	.4
26								22	6.3	1.5	.4	.4
27								* 21	6.0	1.4	.5	.5
28							8	18	6.0	1.4	.6	.5
29							12	19	5.8	1.4	.6	.5
30					----------		15	15	5.5	1.4	.6	.4
31		----------			----------		----------	13	----------	1.3	.4	----------
Total	12.4	15.0	15.5	12.4	11.6	15.5	127	776	230.8	84.7	25.6	13.2
Mean	0.4	0.5	0.5	0.4	0.4	0.5	4.2	25.3	7.69	2.73	0.83	0.44
Ac-ft	25	30	31	25	23	31	252	1,540	458	168	51	26

Calendar year	: Max	Min	Mean	Ac-ft
Water year 1963-64	: Max 40	Min -	Mean 3.66	Ac-ft 2,660

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 1 to May 6.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1719 A. Diversion from Emigration Tunnel Springs to Salt Lake City water supply

Location.--In NE¼NE¼ sec. 11, T. 1 S., R. 1 E., on left bank of Emigration Creek 0.8 mile upstream from east boundary of Hogle Garden Zoo, and about 5 miles southeast of Salt Lake City.

Records available.--July 1906 to September 1964. Monthly discharge only for July 1906 to September 1960 in WSP 1314 and 1734. Records for October 1960 to September 1963 in files of Salt Lake City Water Department.

Gage.--Two-foot Cipolletti weir.

Extremes.--Maximum daily discharge during year, 3.2 cfs May 11-17; minimum daily, 1.2 cfs Jan. 1 to Feb. 3.

Remarks.--The following tabulation gives the diversion from Emigration tunnel above the weir to Emigration Creek.

Month	Acre-ft	Month	Acre-ft
October	0	April	2
November	0	May	83
December	0	June	77
January	0	July	78
February	0	August	74
March	0	September	44

Total for water year 358 acre-ft.

Cooperation.--Record furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1.5	1.3	1.3	1.2	1.2	1.3	1.5	2.4	2.8	2.7	2.7	2.7
2	1.5	1.3	1.3	1.2	1.2	1.3	1.5	2.4	2.8	2.7	2.7	2.7
3	1.5	1.3	1.3	1.2	1.2	1.3	1.5	2.4	2.8	2.7	2.7	2.7
4	1.5	1.3	1.3	1.2	1.3	1.3	1.5	2.7	2.8	2.7	2.7	2.7
5	1.5	1.3	1.3	1.2	1.3	1.3	1.5	2.7	2.8	2.7	2.7	2.7
6	1.5	1.3	1.3	1.2	1.3	1.3	1.8	2.7	2.8	2.7	2.7	2.7
7	1.5	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.8	2.7	2.7	2.7
8	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.8	2.7	2.7	2.5
9	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.8	2.7	2.7	2.5
10	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.8	2.7	2.7	2.5
11	1.4	1.3	1.3	1.2	1.3	1.3	2.1	3.2	2.8	2.7	2.7	2.5
12	1.4	1.3	1.3	1.2	1.3	1.3	2.1	3.2	2.8	2.7	2.7	2.5
13	1.4	1.3	1.3	1.2	1.3	1.3	2.1	3.2	2.8	2.7	2.7	2.5
14	1.4	1.3	1.3	1.2	1.3	1.3	2.1	3.2	2.8	2.7	2.7	2.5
15	1.4	1.3	1.3	1.2	1.3	1.3	2.1	3.2	2.8	2.7	2.7	2.5
16	1.4	1.3	1.3	1.2	1.3	1.3	2.1	3.2	2.8	2.7	2.7	2.5
17	1.4	1.3	1.3	1.2	1.3	1.3	2.1	3.2	2.8	2.7	2.7	2.6
18	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.8	2.7	2.7	2.6
19	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.8	2.7	2.7	2.6
20	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.8	2.7	2.7	2.6
21	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.8	2.7	2.7	2.6
22	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.7	2.7	2.7	2.6
23	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.7	2.7	2.7	2.5
24	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.7	2.7	2.7	2.5
25	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.7	2.7	2.7	2.5
26	1.4	1.3	1.3	1.2	1.3	1.3	2.1	2.7	2.7	2.7	2.7	2.5
27	1.4	1.3	1.3	1.2	1.3	1.3	2.4	2.7	2.7	2.7	2.7	2.5
28	1.3	1.3	1.3	1.2	1.3	1.3	2.4	2.7	2.7	2.7	2.7	2.5
29	1.3	1.3	1.3	1.2	1.3	1.3	2.4	2.7	2.7	2.7	2.7	2.5
30	1.3	1.3	1.3	1.2	----------	1.3	2.4	2.7	2.7	2.7	2.7	2.5
31	1.3	----------	1.3	1.2	----------	1.3	----------	2.7	----------	2.7	2.7	----------
Total	43.7	39.0	40.3	37.2	37.4	40.3	60.9	86.3	83.1	83.7	83.7	77.0
Mean	1.40	1.30	1.30	1.20	1.29	1.30	2.03	2.78	2.77	2.70	2.70	2.57
Ac-ft	87	77	80	74	74	80	121	171	165	166	166	153

Calendar year	: Max	Min	Mean	Ac-ft
Water year 1963-64	: Max 3.2	Min 1.2	Mean 1.95	Ac-ft 1,410

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1720. Emigration Creek near Salt Lake City, Utah

Location.--Lat 40°45'00", long 111°48'45", in SW¼NW¼ sec. 11, T. 1 S., R. 1 E., at east boundary of Hogle Garden Zoo near mouth of canyon, 4 miles southeast of Salt Lake City.

Drainage area.--18 sq mi, approximately.

Records available.--June 1900 to September 1964. Monthly discharge only for October 1898 to September 1960, published in WSP 1314 and 1734. Records for October 1960 to September 1963 in files of Salt Lake City Water Department.

Average discharge.--64 years (1900 to 1964), 5.94 cfs (4,300 acre-ft per year).

Extremes.--Maximum daily discharge during year, 87 cfs May 15, 16; minimum daily, 0.4 cfs many days in October.
1900-1964: Maximum daily discharge, 156 cfs Apr. 26, 1952; minimum not determined.

Remarks.--Records good. No regulation or diversions above station except diversion by pipeline from Emigration tunnel spring upstream from station for Salt Lake City water supply. Records of chemical analyses and water temperatures are given in table 7 and sediment concentration is given in table 11.

Cooperation.--Gage-height record furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	0.8	0.5	0.5	0.5	0.6	0.8	39	21	11	5.0	2.0
2	a .4	a .8	.5	a .5	a .5	a .6	1.0	41	* 19	15	5.0	1.3
3	a .4	.8	.5	.5	a .5	a .6	a 1.0	33	19	10	5.0	2.0
4	.4	a .8	.5	a .5	.5	.6	1.0	* 29	18	9.4	4.8	2.0
5	.5	.8	.6	.5	a .5	a .6	a 1.2	33	21	9.4	4.5	1.3
6	a .5	.8	.6	a .5	a .5	a .6	1.3	24	26	* 9.1	4.5	1.6
7	a .5	1.0	.6	.5	a .5	.6	1.6	27	35	8.8	4.5	1.3
8	a .5	1.0	.5	a .5	.5	a .6	1.6	33	25	8.4	4.5	1.1
9	.5	.6	.5	a .5	a .5	a .6	2.0	33	19	8.2	4.5	1.3
10	.4	.6	.5	.5	a .5	.6	5.3	41	19	8.2	4.5	1.3
11	a .4	.6	.5	a .5	a .5	a .6	5.3	45	17	7.9	3.8	1.3
12	a .4	.5	.6	a .5	.5	a .6	6.6	47	17	7.6	3.2	1.3
13	a .4	.5	.6	.5	a .5	a .6	5.8	56	17	7.6	3.2	1.6
14	a .4	.5	.6	.5	a .5	.6	* 7.9	78	16	7.6	3.2	* 1.6
15	a .4	.5	.6	a .5	.5	a .6	11	87	14	7.6	3.2	1.3
16	.4	.8	.5	.5	a .5	a .6	16	87	* 14	7.4	3.2	1.1
17	a .4	.8	.5	a .5	a .5	.6	13	80	16	6.8	3.2	1.1
18	a .4	.8	.5	.5	.5	a .6	11	72	16	6.8	3.0	1.1
19	a .4	.6	.6	a .5	a .5	a .6	11	59	17	6.6	3.0	1.1
20	a .4	.5	.6	a .5	a .5	.6	11	* 52	16	6.3	* 3.0	1.1
21	a .4	.5	.5	.5	.5	a .6	11	50	16	6.6	3.0	1.1
22	.4	.5	.5	a .5	a .5	a .6	10	46	16	6.6	3.0	1.1
23	a .4	.6	.5	a .5	a .5	.6	11	41	15	6.6	3.0	1.6
24	a .4	.6	.6	a .5	.5	a .6	12	37	14	6.0	3.0	1.6
25	a .4	.5	.6	.6	a .5	.6	12	33	13	5.8	2.5	1.6
26	a .4	.5	.6	a .6	a .5	.8	11	29	13	5.8	2.0	1.8
27	a .4	.5	.5	a .6	.5	a .8	12	29	13	5.8	2.0	1.8
28	.4	.5	.5	.6	a .5	.8	16	27	13	5.3	2.0	1.8
29	.5	.5	.5	.5	.5	a .8	* 25	26	13	5.0	a 2.0	1.6
30	.8	.5	.6	a .5	----------	a .8	30	26	11	5.0	a 2.0	1.1
31	.8	----------	.6	.5	----------	.8	----------	23	----------	4.8	2.0	----------
Total	13.8	19.3	16.9	15.9	14.5	19.8	265.4	1,363	519	233.0	105.3	42.9
Mean	0.45	0.64	0.55	0.51	0.50	0.64	8.85	44.0	17.3	7.5	3.40	1.43
Ac-ft	27	38	34	32	29	39	526	2,700	1,030	462	209	85

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64 :	Max 87	Min 0.4	Mean 7.18	Ac-ft 5,210

* Discharge measurement made on this day.
a No gage-height record.
Note.--Doubtful gage-height record May 1-5, 16-18, June 1-14.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1721. Emigration Creek below 1300 East, at Salt Lake City, Utah

Location.--Lat 40°43'49", long 111°51'18", in NE¼SE¼ sec. 17, T. 1 S., R. 1 E., about 500 ft downstream from 1300 East Street in Salt Lake City.

Drainage area.--19 sq mi, approximately.

Records available.--October 1963 to September 1964.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 70 cfs (estimated) May 16; minimum,no flow on many days.

Remarks.--Records good April 1 to May 15 and fair May 16 to Aug. 19. Two determinations of specific conductance and water temperature are given in table 8.

Discharge, in cubic feet per second, water year October1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0.3	32	18	8.5	3.0	
2							.3	32	* 16	8.0	3.0	
3							.1	22	16	8.0	3.0	
4							.2	*20	15	7.5	2.5	
5							2.3	26	18	7.5	2.5	
6							*1.2	20	16	7.0	2.5	
7							.6	21	29	6.5	2.5	
8							.9	30	21	6.5	2.5	
9							1.6	26	16	6.0	2.0	
10							7.8	32	16	6.0	2.0	
11							3.8	37	14	6.0	2.0	
12							5.2	37	14	5.5	1.5	
13							4.0	38	14	5.5	1.5	
14							*6.0	55	13	5.0	1.5	
15							9.3	*59	* 12	5.0	1.5	
16							14	70	12	5.0	1.5	
17							11	65	15	5.0	1.5	
18							8.6	60	16	4.5	1.0	
19							8.9	52	15	4.5	1.0	
20							12	48	14	4.5	0	
21							10	*45	16	4.5	0	
22							10	40	17	4.5	0	
23							13	34	15	4.0	0	
24							14	30	13	4.0	0	
25							11	28	12	4.0	0	
26							17	26	11	4.0	0	
27							11	25	11	3.5	0	
28							13	23	11	3.5	0	
29							*20	26	10	3.0	0	
30							25	22	9	3.0	0	
31								19		3.0	0	
Total	0	0	0	0	0	0	242.1	1,100	445	163.0	38.5	0
Mean	0	0	0	0	0	0	8.07	35.5	14.8	5.26	1.24	0
Ac-ft	0	0	0	0	0	0	480	2,180	883	323	76	0

Calendar year : Max Min Mean Ac-ft
Water year1963-64 : Max 70 Min 0 Mean 5.43 Ac-ft 3,940

* Discharge measurement made on this day.
Note.--No gage-height record May 16-20, June 16 to Aug. 19.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1722. Red Butte Creek at Fort Douglas, near Salt Lake City, Utah

Location.--Lat 40°46'50", long 111°48'20", in NW¼ sec. 35, T. 1 N., R. 1 E., on right bank 0.35 mile upstream from dam forming Red Butte Reservoir, 1.5 miles northeast of Fort Douglas, and 5 miles east of Salt Lake City Post Office.

Drainage area.--7.25 sq mi.

Records available.--October 1963 to September 1964. Figures of monthly discharge for January 1942 to September 1963, collected by Corps of Engineers, U.S. Army, available in files of Salt Lake City District office, Geological Survey.

Gage.--Water-stage recorder and concrete Parshall flume. Altitude of gage is 5,400 ft (from topographic map).

Extremes.--Maximum discharge during year, 31 cfs May 13 (gage height, 2.43 ft); minimum, 0.5 cfs Oct. 7, 12.

Remarks.--Records good except those for periods of no gage-height record, which are fair. No regulation or diversion above station. Most of flow is collected in reservoir below station and used for water supply of Fort Douglas. This drainage basin has been designated as a hydrologic bench mark. Chemical analyses of water are given in table 7 and maximum and minimum daily temperatures of water are given in table 10.

Rating table (gage height, in feet, and discharge, in cubic feet per second)

0.1	0.3	1.0	8.0
.2	.7	1.5	15
.3	1.2	2.0	23
.5	2.7	2.3	29
.7	4.6		

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	a0.6	0.8	1.0	0.9			3.5	10	10	6.6	2.3	1.5
2	a .6	.8	1.0	.9			3.0	11	a 9.8	a 6.2	2.4	* 1.6
3	.6	.8	1.0	.9		* 1.1	2.7	8.9	9.5	a 5.7	2.3	1.6
4	.6	.9	* 1.0	.8	(*)		2.9	8.2	9.1	a 5.4	2.4	1.6
5	.6	.9	1.0	.9			2.9	8.5	8.9	a 5.1	* 2.4	1.5
					a0.8							
6	.6	.9	.9	.9			2.6	8.0	8.6	a 4.9	2.4	1.4
7	.6	1.1	.9	.9			2.3	8.9	9.5	a 4.7	2.4	1.4
8	* .6	1.0	.9	.8			2.4	11	9.5	a 4.6	2.4	1.4
9	.6	1.0	1.0	.8			2.7	12	8.6	4.5	2.3	1.4
10	.6	1.0	.9	.9			3.5	15	8.1	4.4	2.2	1.4
11	.6	1.0	.9	.9			3.5	17	7.9	4.2	2.2	1.4
12	.6	1.0	.9	.9			3.5	17	7.6	a 4.1	2.2	1.4
13	.8	1.0	.9			(*)	3.3	20	7.5	a 4.0	* 2.2	1.4
14	.7	.9	.9		(*)		a 3.7	25	7.6	3.9	2.2	1.4
15	.7	1.0	.9				4.3	27	7.6	* 3.8	2.1	1.4
16	.7	1.1	* .9	(*)		a .9	4.8	28	7.5	3.7	2.2	* 1.4
17	.7	1.0	.9				4.6	27	a 7.5	3.6	2.1	1.3
18	.7	1.0	.8				4.3	a 25	a 7.5	3.5	2.0	1.4
19	.7	* 1.0	.8				4.2	23	* 7.6	3.4	1.9	1.5
20	.7	1.0	.9		1.1		4.5	22	7.2	3.4	2.0	1.4
21	.7	1.0	.9	a .8			4.7	a 21	8.1	3.4	1.9	1.5
22	.7	1.0	.9				4.6	18	8.0	3.3	1.9	1.5
23	.9	1.1	.8				4.7	16	7.6	3.3	1.8	1.5
24	.9	1.1	.9				4.9	15	7.6	3.3	1.7	1.6
25	.8	1.1	.9				4.6	a 13	7.5	3.2	1.7	1.5
26	.8	1.1	.9		(*)		4.9	13	7.3	3.1	1.6	1.5
27	.8	1.1	.9			a 1.0	5.2	13	7.2	3.0	1.6	1.6
28	.8	1.1	.9			a 1.2	a 8.4	12	7.2	2.9	1.7	1.6
29	.8	1.0	.9			1.7	9.3	13	* 6.9	2.6	1.7	1.6
30	.8	1.0	.9		----------	2.0	10	12	6.7	2.3	1.7	1.6
31	* .8	----------	* .9		----------	a 2.5	----------	11	----------	2.3	1.5	----------
Total	21.7	29.8	28.2	25.7	28.9	32.8	130.5	489.5	241.2	122.4	63.4	44.3
Mean	0.70	0.99	0.91	0.83	1.00	1.06	4.35	15.8	8.04	3.95	2.05	1.48
Ac-ft	43	59	56	51	57	65	259	971	478	243	126	88

Calendar year 1963: Max - Min - Mean - Ac-ft -
Water year 1963-64 Max 28 Min 0.6 Mean 3.44 Ac-ft 2,500

* Discharge measurement made on this day.
a No gage-height record.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1722 A. Diversion from Red Butte Creek to Fort Douglas water supply

Location.--SW¼NW¼ sec. 35, T. 1 N., R. 1 E., at dam forming Red Butte Reservoir at Fort Douglas and 4 miles northeast of Salt Lake City.

Records available.--October 1963 to September 1964. Records for 1942 to 1963 in files of Post Engineer, Corps of Engineers, Fort Douglas.

Remarks.--Water diverted from Red Butte Reservoir. Record includes about 0.1 cfs of seepage below the dam.

Cooperation.--Record furnished by Post Engineer, Corps of Engineers, Fort Douglas.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1		0.4								0.9		
2					0.4					1.7		
3	1.7	1.3								1.7		
4										.9	2.6	
5										.9		1.8
6										.9		
7												
8	.7	.4			.9							
9									1.5			
10								0.5				
11												
12	1.3											
13												2.2
14											2.2	
15		.8	0.4	0.4		0.5	0.5					
16												
17										2.0		
18												
19												
20												
21					.5				.9			
22												
23	.6							1.0			1.9	1.6
24												
25		.4										
26												
27												
28									1.6		2.2	
29								1.3		2.6		1.2
30					----------				.9			1.1
31		----------			----------		----------		----------			----------
Total	29.7	17.5	12.4	12.4	16.9	15.5	15.0	24.0	38.7	59.4	69.7	54.1
Mean	0.96	0.58	0.40	0.40	0.58	0.50	0.50	0.77	1.29	1.92	2.28	1.80
Ac-ft	59	35	25	25	34	31	30	48	77	118	138	107

Calendar year : Max Min Mean Ac-ft
Water year 1963-64 : Max - Min - Mean 1.00 Ac-ft 727

Table 5.--Surface-water records--Continued

1722.2 Red Butte Creek below Red Butte Reservoir, near Salt Lake City, Utah

Location.--Lat 40°46'30", long 111°47'25", in NE¼SW¼ sec. 34, T. 1 N., R. 1 E., about 0.3 mile below spillway of reservoir at Fort Douglas, and 4 miles northeast of Salt Lake City.

Drainage area.--7.95 sq mi.

Records available.--October 1963 to September 1964. Records for 1942 to 1963 in files of Post Engineer, Corps of Engineers, Fort Douglas.

Gage.--Water-stage recorder and concrete Parshall flume.

Extremes.--Maximum daily discharge during year, 28 cfs May 16 and 17; no flow on many days.

Remarks.--Diversion to Fort Douglas water supply from reservoir upstream. Flow regulated by storage in reservoir.

Cooperation.--Record furnished by Post Engineer, Corps of Engineers, Fort Douglas.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	11	9.4	5.2		
2							0	11	9.1	4.2		
3							0	9.3	8.9	4.1		
4							0	8.8	8.9	4.7		
5							0	9.1	8.5	4.6		
6							0	9.3	8.8	*4.5		
7							0	10	8.8	3.3		
8							0	12	8.0	3.2		
9							0	14	7.8	3.1		
10							0	17	7.2	3.0		
11							.7	18	6.9	2.9		
12							3.6	18	6.7	2.8		
13							3.4	21	6.4	2.7		
14							3.4	24	6.2	2.6		
15							3.5	25	*5.9	2.6		
16							3.6	28	5.7	2.5		
17							3.9	28	6.3	2.4		
18							4.3	24	7.8	2.3		
19							4.6	22	8.4	2.2		
20							4.5	21	9.7	2.1		
21							4.6	20	8.4	2.0		
22							4.6	19	7.6	1.9		
23							4.7	18	7.0	1.9		
24							4.8	14	6.7	1.8		
25							4.9	14	6.6	1.7		
26							5.4	*12	6.6	1.6		
27							6.0	12	5.4	1.6		
28							6.9	12	5.0	.7		
29							8.0	12	4.6	0		
30					----------		11	11	5.3	0		
31		----------			----------		----------	10	----------	0		----------
Total	0	0	0	0	0	0	96.4	494.5	218.6	78.2	0	0
Mean	0	0	0	0	0	0	3.21	16.0	7.29	2.52	0	0
Ac-ft	0	0	0	0	0	0	191	981	434	155	0	0

Calendar year : Max Min Mean Ac-ft
Water year 1963-64: Max 28 Min 0 Mean 2.43 Ac-ft 1,760

* Discharge measurement made on this day.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1723. Red Butte Creek at 1600 East, at Salt Lake City, Utah

Location.--Lat 44°44'50", long 111°51'22", in NE¼SW¼ sec. 9, T. 1 S., R. 1 E., in Miller Park, at 1050 South and 1600 East.

Drainage area.--8.9 sq mi.

Records available.--October 1963 to September 1964.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 38 cfs June 7 (gage height 0.85 ft); minimum, no flow on many days.

Remarks.--Records fair. Three determinations of water temperature and three of specific conductance are given in table 8.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1							0	8.0	8.1	4.2		
2							0	6.0	*7.6	3.6		
3							0	6.8	6.8	3.3		
4							0	*6.4	7.9	3.3		
5							0	6.0	7.5	4.2		
6							0	6.2	7.8	3.6		
7							0	7.0	7.8	2.8		
8							0	8.5	*7.0	2.8		
9							0	9.6	8.5	2.4		
10							.7	12	6.0	*2.0		
11							1.5	14	6.4	2.2		
12							1.9	14	6.0	2.0		
13							1.2	16	5.6	2.0		
14							*1.2	19	5.6	1.6		
15							1.4	23	*5.2	1.6		
16							1.9	21	4.5	1.7		
17							1.9	22	5.3	1.6		
18							1.9	21	6.8	0		
19							1.9	16	7.4	0		
20							1.9	17	8.7	0		
21							1.9	*17	7.4	0		
22							2.0	15	6.6	0		
23							1.9	15	6.0	0		
24							2.0	12	6.4	0		
25							2.9	12	6.4	0		
26							3.4	*12	4.8	0		
27							4.1	12	3.9	0		
28							5.0	10	4.5	0		
29							*7.6	10	4.2	0		
30					----------		8.1	9.4	4.5	0		
31		----------			----------		----------	9.5	----------	0		----------
Total	0	0	0	0	0	0	56.3	393.4	191.5	44.9	0	0
Mean	0	0	0	0	0	0	1.88	12.7	6.38	1.45	0	0
Ac-ft	0	0	0	0	0	0	112	780	380	89	0	0

Calendar year : Max Min Mean Ac-ft
Water year 1963-64 : Max 23 Min 0 Mean 1.87 Ac-ft 1,360

* Discharge measurement made on this day.
Note.--No gage-height record April 25-28; May 1, 5-14, 17, 20, 22-25, 31; June 4-8, 17-23; July 10.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1724. City Creek above Wasatch Drive, near Salt Lake City, Utah

Location.--Lat 40°47'33", long 111°52'35", in SW¼NE¼ sec. 30, T. 1 N., R. 1 E., about 0.2 mile upstream from Wasatch Drive and 1.2 miles northeast of Utah State Capitol Building.

Drainage area.--18.5 sq mi.

Records available.--October 1963 to September 1964.

Gage.--Water-stage recorder and weir.

Extremes.--Maximum discharge during year, 86 cfs May 23 (gage-height, 1.46 ft); minimum 0.4 cfs Sept. 1 and 15-17.

Remarks.--Records good. Water is diverted 2.9 miles upstream from gage to the City Creek treatment plant. The treated water is stored in the Pleasant Valley reservoir 1.4 miles upstream from gage and carried past the gage in pipelines. Records of chemical analyses and water temperatures are given in table. 7.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.5	0.9	1.2	1.4			1.9	2.7	39	15	1.4	0.4
2	.5	.9	1.2	1.5			1.9	7.8	* 37	13	1.2	.5
3	.6	.9	1.2	1.4		1.1	2.1	8.8	37	11	1.0	.5
4	.8	.9	1.2	1.4			2.1	7.3	* 39	10	.8	.5
5	.9	.9	1.2	1.4			2.2	10	45	11	1.0	.4
6	.9	.9	1.2	1.4		1.1	2.2	7.4	48	11	1.2	.4
7	.8	1.1	1.1	1.5		1.1	2.9	7.4	50	8.0	1.0	.4
8	.8	1.1	1.1	1.5		1.6	2.2	8.2	* 50	4.1	1.0	.4
9	.8	1.1		b1.5		*1.1	2.4	8.5	49	* 3.2	1.0	.4
10	.8	.9		1.5		1.1	2.8	10	45	5.0	.8	.4
11	.8	1.1	(*)	1.5	1.1	1.2	2.4	19	41	4.3		.4
12	.6	1.1		b1.3		1.2	2.2	19	37	3.9		.4
13	.6	1.1		b1.3		*1.1	2.1	19	35	3.2		.4
14	.6	.9		b1.3		1.1	2.1	25	31	3.5	.6	.4
15	.6	1.1		b1.3		1.2	1.9	27	* 30	2.8		.4
16	* .8	1.1	1.1			1.1	1.9	26	30	1.6		.4
17	.8	1.1				1.1	1.9	30	31	1.4		.4
18	.8	1.1				*1.1	1.8	34	33	1.2	.6	.5
19	.8	1.1			1.1	1.1	1.8	39	32	1.5	.9	.6
20	.8	1.2			1.1	1.1	2.1	47	31	1.1	.8	.6
21	.8	1.4			1.1	1.2	1.9	58	30	1.1	.8	.6
22	.8	1.2			1.2	1.2	1.8	65	30	1.1	.8	1.1
23	.9	1.2	1.2	1.2	1.2	1.2	2.1	74	29	1.5	.8	1.5
24	.9	1.2	1.2		1.2	1.2	2.1	71	* 27	1.5	.6	1.2
25	.9	1.2	1.2		1.2	1.2	*2.1	67	25	1.4	* .8	1.2
26	.9	1.2	1.2		b 1.1	1.2	2.2	68	21	1.4	.9	1.1
27	.9	1.1	1.2		1.1	1.2	2.4	71	19	1.2	2.1	1.1
28	.9	1.1	1.4		1.1	1.4	2.4	70	21	.9	1.6	1.2
29	.9	1.2	1.4		1.1	1.5	2.2	68	18	.9	.8	1.2
30	.9	1.2	1.4		----------	1.6	2.4	60	1.5	.9	.8	1.1
31	.9	----------	1.4		----------	1.8	----------	50	----------	.9	.5	----------
Total	24.3	32.5	36.4	40.4	32.3	37.5	64.5	1085.1	1005	128.6	27.4	20.1
Mean	0.78	1.08	1.17	1.30	1.11	1.21	2.15	35.0	33.5	4.15	0.88	0.67
Ac-ft	48	64	72	80	64	74	128	2150	1990	255	54	40

Calendar year	: Max	Min	Mean	Ac-ft	
Water year 1963-64:	Max 74	Min -	Mean 6.92	Ac-ft 5,020	

* Discharge measurement made on this day.
b Stage-discharge relation affected by ice.
Note.--No gage-height record Dec. 9-22, Jan. 16 to Feb. 18, Mar. 1-5, Aug. 11-17.
Underlined figures are maximum and minimum discharges for month.

1724 A. Diversion to City Creek treatment plant from City Creek, near Salt Lake City, Utah

Location.--Lat 40°49'54", long 111°49'50", in the SW¼SW¼ sec. 15, T. 1 N., R. 1 E., at City Creek treatment plant and 4 miles northeast of Utah State Capitol Building.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Remarks.--Except for small infrequent spills from the Pleasant Valley reservoir the record shows the amount of water delivered to the Salt Lake City water system from the water treatment plant.

Cooperation.--Record of discharge furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.9	5.7	5.4	5.1	4.8	4.6	7.0	18	24	22	16	11
2	5.9	5.7	5.2	4.9	4.8	4.6	6.5	9.3	21	22	16	11
3	5.9	5.7	5.2	4.9	4.7	4.6	6.2	10	23	24	16	10
4	5.7	5.6	5.4	4.9	5.0	4.6	6.2	10	22	22	15	10
5	5.7	5.7	5.2	4.9	4.8	4.6	6.5	9.7	20	21	15	10
6	5.7	5.8	5.3	5.1	4.7	4.6	6.2	9.6	19	21	15	9.9
7	5.7	5.7	5.3	5.1	4.6	4.6	5.9	9.6	14	23	14	9.8
8	5.7	5.7	5.3	4.7	4.6	4.6	5.7	9.6	13	25	14	9.8
9	5.7	5.6	5.3	5.3	4.6	4.6	6.4	9.6	14	22	14	9.6
10	5.7	5.6	5.3	4.9	4.8	4.6	7.1	9.6	14	22	14	9.3
11	5.7	5.6	5.3	4.9	4.8	4.6	7.1	9.9	14	21	14	9.3
12	5.6	5.6	5.3	4.8	4.8	4.6	7.1	9.6	15	22	14	9.3
13	6.1	5.6	5.3	4.8	4.7	4.6	7.0	18	16	22	13	9.1
14	5.7	5.4	5.1	4.9	4.8	4.6	7.7	16	19	22	13	9.1
15	5.9	5.7	5.1	4.9	5.0	4.6	8.8	22	19	22	13	9.3
16	5.7	5.6	5.1	4.9	4.7	4.5	9.7	22	19	21	13	9.0
17	5.6	5.6	5.1	4.8	4.6	4.7	9.3	22	14	21	13	9.0
18	5.7	5.6	5.1	4.8	4.6	4.7	9.0	22	14	21	12	9.0
19	5.6	5.6	5.1	5.0	4.6	4.7	8.7	22	14	20	12	8.7
20	5.7	5.6	5.1	4.8	4.6	4.7	8.4	23	14	20	12	8.5
21	5.7	5.6	5.3	5.0	4.6	4.7	8.2	23	12	19	12	8.5
22	5.7	5.6	5.1	5.0	4.6	4.8	8.2	20	12	19	12	8.7
23	6.2	5.6	5.1	5.0	4.6	4.7	8.5	23	14	18	12	8.5
24	5.9	5.4	5.1	5.0	4.6	4.7	8.7	22	17	18	11	8.3
25	5.8	5.4	5.3	5.0	4.3	4.7	8.5	24	19	17	11	8.3
26	5.9	5.4	5.1	4.8	4.5	4.7	8.5	24	24	17	11	8.2
27	5.9	5.4	5.1	4.8	4.7	4.7	8.5	20	21	17	11	8.2
28	5.7	5.4	5.1	4.8	4.7	4.8	11	17	21	17	11	8.0
29	5.7	5.4	5.1	4.8	4.5	5.3	14	16	24	17	11	8.0
30	6.1	5.4	5.1	4.8	----------	6.2	16	16	23	16	11	8.4
31	5.7	----------	5.1	4.8	----------	6.5	----------	16	----------	17	10	----------
Total	179.2	167.3	161.0	152.2	135.7	148.1	246.6	512.5	529	628	401	273.8
Mean	5.78	5.58	5.19	4.91	4.68	4.78	8.22	16.5	17.6	20.3	12.9	9.13
Ac-ft	355	332	319	302	269	294	489	1,020	1,050	1,250	795	543

Calendar year : Max Min Mean Ac-ft
Water year 1963-64: Max 25 Min 4.3 Mean 9.66 Ac-ft 7,020

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1725. City Creek near Salt Lake City, Utah

Location.--Lat 40°47'05", long 111°53'00", in SE¼SE¼ sec. 30, T. 1 N., R. 1 E., near mouth of canyon and 0.6 mile northeast of Utah State Capitol Building.

Records available.--October 1898 to September 1960, monthly discharge only published in WSP 1314 and 1734. October 1960 to September 1963 in files of Salt Lake City Water Department.

Average discharge.--66 years (1898-1964), 15.9 cfs (11,550 acre-ft per year).

Extremes.--Maximum daily discharge during year, 94 cfs May 28; minimum daily, 5.6 cfs, Feb. 17-20, 25.

Remarks.--Record is combined discharge of City Creek (1725 A, p. 54) and the diversion to City Creek treatment plant (1724 A, p. 52), which is carried in pipelines past the gage.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	6.6	6.7	6.4	6.3	6.0	6.0	9.1	21	60	36	18	12
2	6.6	6.7	6.2	6.1	6.0	6.0	8.9	16	55	34	18	12
3	6.6	6.7	6.3	6.1	5.9	5.9	8.6	18	59	34	18	11
4	6.4	6.6	6.6	6.1	6.2	5.9	8.4	16	60	32	16	11
5	6.3	6.8	6.4	6.1	6.0	5.9	8.9	19	62	31	16	11
6	6.3	7.0	6.5	6.3	5.9	6.0	8.4	16	66	30	17	11
7	6.4	6.9	6.4	6.3	5.8	5.8	8.7	16	62	30	15	11
8	6.3	6.8	6.4	5.9	5.8	6.0	7.9	17	61	29	15	11
9	6.3	6.7	6.6	6.5	5.8	6.0	8.6	17	61	25	15	10
10	6.3	6.7	6.6	6.1	6.0	6.0	9.7	19	56	27	15	10
11	6.3	6.7	6.5	6.1	5.8	6.0	9.5	27	52	25	15	10
12	6.3	6.7	6.4	6.0	5.8	6.0	9.2	27	50	25	15	10
13	6.9	6.6	6.4	6.0	5.7	5.9	9.0	35	48	25	14	10
14	6.5	6.4	6.2	6.1	5.8	6.0	9.7	39	47	25	14	10
15	6.7	6.9	6.2	6.1	6.0	6.0	11	47	46	25	14	10
16	6.5	7.0	6.2	5.9	5.7	5.9	12	46	46	23	14	10
17	6.4	6.9	6.2	5.8	5.6	6.2	11	49	46	22	14	10
18	6.5	6.9	6.2	5.8	5.6	6.1	11	54	46	22	13	10
19	6.4	6.8	6.2	6.0	5.6	6.1	11	58	45	22	14	10
20	6.5	6.8	6.2	5.8	5.6	6.1	11	67	44	21	13	10
21	6.5	7.0	6.4	6.0	5.7	6.2	10	78	43	20	13	9.4
22	6.5	6.9	6.2	6.1	5.8	6.4	10	82	42	20	13	9.6
23	7.2	6.8	6.2	6.1	5.8	6.3	10	94	42	20	13	9.8
24	6.9	6.8	6.2	6.1	5.8	6.2	11	90	42	19	12	9.4
25	6.7	6.8	6.5	6.1	5.6	6.2	10	88	42	19	12	9.4
26	6.8	6.4	6.3	5.9	6.0	6.2	11	92	43	18	12	9.4
27	6.8	6.2	6.3	6.0	6.0	6.3	11	91	38	18	13	9.3
28	6.6	6.2	6.3	6.0	6.0	6.4	13	84	40	18	13	9.0
29	6.6	6.4	6.3	6.0	5.8	7.0	16	81	40	18	12	9.1
30	7.3	6.4	6.3	6.0	----------	8.0	19	73	36	17	13	9.5
31	6.7	----------	6.3	6.0	----------	8.5	----------	63	----------	18	11	----------
Total	203.7	201.2	196.4	187.7	169.1	193.5	312.6	1,540	1,480	748	440	303.9
Mean	6.57	6.71	6.34	6.05	5.83	6.24	10.4	49.7	49.3	24.1	14.2	10.1
Ac-ft	404	399	390	372	335	384	620	3,050	2,940	1,480	873	603

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64 :	Max 94	Min 5.6	Mean 16.3	Ac-ft 11,850

Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1725 A. City Creek (channel only) near Salt Lake City, Utah

Location.--Lat 40°47'05", long 111°53'00", in SE¼SW¼ sec. 30, T. 1 N., R. 1 E., near mouth of canyon and 0.6 mile northeast of Utah State Capitol Building.

Records available.--October 1963 to September 1964. Records for previous years in files of Salt Lake City Water Department.

Gage.--Water-state recorder and concrete rating flume. Altitude of gage is 4,540 ft (from topographic map). Prior to 1924, two Cipolletti weirs 3.5 miles upstream, above all diversions; inflow between gage and mouth of canyon estimated and added.

Extremes.--Maximum daily discharge during year, 71 cfs June 23, 27; minimum daily, 0.5 cfs Sept. 16, 17.

Remarks.--Records good except those during periods of missing or doubtful gage-height record, which are fair. Water is diverted 3.9 miles upstream from gage to the City Creek treatment plant. The treated water is stored in the Pleasant Valley reservoir 2.4 miles upstream from gage and carried past the gage in pipelines.

Cooperation.--Gage-height record furnished by Salt Lake City Water Department.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.7	1.0	1.0	1.2	1.2	1.4	2.1	3.4	36	14	1.8	0.9
2	.7	1.0	1.0	1.2	a 1.2	1.4	2.4	7.2	*34	12	1.7	1.2
3	.7	1.0	1.1	1.2	a 1.2	1.3	2.4	7.8	36	10	1.5	1.2
4	.7	1.0	1.2	1.2	1.2	1.3	2.2	6.3	38	9.6	1.0	1.0
5	.6	1.1	1.2	1.2	a 1.2	1.3	2.4	9.0	*42	10	1.2	1.0
6	.6	1.2	1.2	1.2	a 1.2	1.4	2.2	6.4	47	9.0	1.6	1.0
7	.7	1.2	1.1	1.2	1.2	1.2	2.8	6.4	48	6.9	1.4	.9
8	.6	1.1	1.1	1.2	a 1.2	1.4	2.2	7.2	*48	4.3	1.4	.9
9	.6	1.1	1.3	1.2	a 1.2	1.4	2.2	7.5	47	*3.4	1.4	.7
10	.6	1.1	1.3	1.2	a 1.2	1.4	2.6	9.0	42	4.5	1.2	.8
11	.6	1.1	1.2	1.2	1.0	1.4	2.4	17	38	3.8	1.1	.9
12	.7	1.1	1.1	1.2	a 1.0	1.4	2.1	17	*35	3.4	1.0	1.0
13	.8	1.0	1.1	1.2	a 1.0	1.3	2.0	17	32	2.6	.9	.9
14	.8	1.0	1.1	1.2	1.0	1.4	2.0	23	28	3.4	.8	1.0
15	.8	1.2	1.1	1.2	a 1.0	1.4	1.9	25	*27	2.8	1.0	.8
16	* .8	1.4	1.1	1.0	a 1.0	1.4	1.9	24	27	1.8	1.1	.5
17	.8	1.3	1.1	1.0	a 1.0	1.5	1.9	27	32	1.4	1.1	.5
18	.8	1.3	1.1	a1.0	1.0	1.4	1.9	32	32	1.3	1.0	.6
19	.8	1.2	a1.1	1.0	a 1.0	1.4	1.9	36	31	1.9	1.5	.8
20	.8	1.2	a1.1	a1.0	1.0	1.4	2.2	44	30	1.2	1.0	1.0
21	.8	1.4	1.1	1.0	1.1	1.5	2.0	55	31	1.1	1.2	.9
22	.8	1.3	a1.1	1.1	1.2	1.6	1.9	62	30	1.4	1.3	.9
23	1.0	1.2	a1.1	a1.1	1.2	1.6	1.9	71	28	1.7	1.4	1.3
24	1.0	1.4	1.1	a1.1	1.2	1.5	2.1	68	*25	1.4	1.3	1.1
25	.9	1.4	1.2	a1.1	1.3	1.5	2.0	*64	23	2.2	* .8	1.1
26	.9	1.0	a1.2	1.1	1.5	1.5	2.4	68	19	1.4	1.0	1.2
27	.9	.8	1.2	1.2	1.3	1.6	2.4	71	17	1.2	1.9	1.1
28	.9	.8	a1.2	1.2	1.3	1.6	2.1	67	19	1.0	2.1	1.0
29	.9	1.0	1.2	a1.2	1.3	1.7	2.2	65	16	1.0	1.0	1.1
30	1.2	1.0	a1.2	a1.2	----------	1.8	3.1	57	13	1.0	1.5	1.1
31	1.0	----------	1.2	1.2	----------	2.0	----------	47	----------	1.2	1.2	----------
Total	24.5	33.9	35.4	35.5	33.4	45.4	65.8	1,027.2	951	121.9	39.4	28.4
Mean	.79	1.13	1.14	1.15	1.15	1.46	2.19	33.1	31.7	3.93	1.27	0.95
Ac-ft	49	67	70	70	66	90	131	2,040	1,890	242	78	56

Calendar year : Max Min Mean Ac-ft
Water year 1963-64: Max 71 Min 0.5 Mean 6.67 Ac-ft 4,850

* Discharge measurement made on this day.
a No gage-height record.
Note.--Doubtful gage-height record Jan. 1-16, May 3-19, 21-25, 28, 29, 31, June 1, 8, 26-29, July 10-13.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1726. Jordan River below Cudahy Lane, near Salt Lake City, Utah

Location.--Lat 40°50'41", long 111°56'59", in SE¼ sec. 4, T. 1 N., R. 1 W., about 0.2 mile downstream from county bridge on Cudahy Lane, and 6.5 miles northwest of Salt Lake City.

Drainage area.--3,490 sq mi, approximately, including 255 sq mi in closed basin in Cedar Valley, Utah.

Records available.--October 1963 to September 1964.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 316 cfs June 10 (gage height, 4.32 ft); minimum, 22 cfs Nov. 19.

Remarks.--Records fair. Records of chemical analyses and water temperatures are given in table 7 and those of daily mean specific conductance are given in table 9.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	96	93	90	108	117	134	* 174	160	157	98	110
2	76	93	93	88	108	133	123	240	126	146	90	112
3	77	90	96	90	104	123	120	198	192	140	88	132
4	78	90	96	88	103	119	136	192	196	132	85	142
5	88	98	96	88	106	122	144	214	188	130	85	145
6	89	99	97	89	108	131	144	173	202	126	94	110
7	92	121	96	91	108	128	140	139	266	120	* 96	110
8	95	107	97	92	107	123	140	* 174	239	118	95	116
9	97	93	98	93	107	125	139	145	188	110	98	* 123
10	92	90	100	95	109	132	164	146	206	* 117	92	119
11	100	90	98	97	111	* 128	159	158	174	118	89	120
12	115	91	98	98	107	125	156	168	174	117	88	119
13	95	88	* 97	99	108	134	140	194	186	116	81	119
14	87	88	91	102	109	131	116	225	183	114	87	120
15	77	92	88	103	109	132	112	243	186	116	82	128
16	81	123	88	103	112	134	117	260	190	116	82	129
17	81	100	88	103	113	* 134	* 119	268	230	108	90	129
18	80	90	88	103	113	132	120	* 274	206	106	83	119
19	83	* 39	88	102	117	134	124	289	170	103	90	87
20	84	80	87	104	117	104	162	288	178	104	87	119
21	82	94	91	113	117	126	131	* 285	192	100	88	131
22	91	84	91	109	120	141	128	294	220	99	88	125
23	76	90	89	107	120	147	119	281	174	98	84	126
24	80	93	89	106	120	* 138	* 158	274	160	95	90	* 132
25	77	90	89	104	123	135	133	262	144	97	81	130
26	87	75	89	106	124	134	161	234	172	103	* 86	128
27	81	* 71	90	104	122	139	168	232	170	* 107	102	129
28	84	82	91	104	117	135	142	* 216	172	85	108	131
29	94	88	93	104	117	136	145	268	167	85	114	131
30	95	93	91	108	----------	136	157	209	*156	82	109	131
31	106	----------	90	109	----------	135	----------	174	----------	89	110	----------
Total	2,699	2,718	2,866	3,092	3,264	4,043	4,151	6,891	5,567	3,454	2,840	3,702
Mean	87.1	90.6	92.5	99.7	113	130	138	222	186	111	91.6	123
Ac-ft	5,350	5,390	5,680	6,130	6,470	8,020	8,230	13,670	11,040	6,850	5,630	7,340

Calendar year	: Max	Min	Mean	Ac-ft
Water year 1963-64	: Max 294	Min 39	Mean 124	Ac-ft 89,800

* Discharge measurement made on this day.
Note.--No gage-height record Oct. 1-22.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1726.3 Goggin drain near Magna, Utah

Location.--Lat 40°49'00", long 112°06'04", in NE¼SE¼ sec. 18, T. 1 N., R. 2 W., about 7 miles downstream from Surplus Canal wasteway, 3.3 miles north of Saltair, and 7.2 miles north of Magna.

Records available.--October 1963 to September 1964.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 412 cfs June 7 (gage height 4.03 ft), no flow Jan. 15-19, result of freeze-up.

Remarks.--Records good except those less than 1 cfs which are fair. Records of chemical analyses and water temperatures are given in table 7.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2.4	11	1.2	0.8	0.6	0.9	2.6	22	260	188	11	69
2	3.5	2.2	1.2	.8	.7	1.0	2.1	31	220	90	8.9	58
3	5.7	1.9	1.1	.7	.8	1.1	3.2	33	202	47	8.2	57
4	6.0	1.7	1.1	.6	.8	1.0	1.5	26	272	43	8.9	67
5	7.9	1.9	1.0	.6	.8	.8	2.1	56	275	33	9.3	113
6	9.7	1.7	.9	.6	.8	1.0	1.7	* 132	303	7.3	12	39
7	7.3	2.1	.9	.6	.6	1.0	2.1	128	374	5.4	14	32
8	4.8	1.9	.8	.5	.6	1.1	1.5	117	398	5.1	11	29
9	1.7	1.7	1.2	.4	.5	1.2	1.5	126	* 349	11	12	29
10	6.2	1.9	.9	.2	.6	1.1	1.7	119	331	8.9	37	* 28
11	7.6	2.6	.6	.3	.7	1.1	1.5	117	262	8.9	92	12
12	6.8	1.4	.6	.6	.9	1.2	2.1	119	229	10	92	15
13	4.8	1.3	* .6	1.1	1.1	1.2	1.9	134	193	* 9.3	90	14
14	4.0	1.3	.8	.2	1.0	1.3	* 1.9	193	179	7.3	92	17
15	* 2.4	1.3	1.0	0	1.3	1.2	1.5	238	188	8.5	98	10
16	2.2	1.7	1.0	0	.8	1.7	1.4	236	223	8.5	96	7.3
17	2.1	2.2	1.2	0	.7	6.2	5.8	232	305	7.0	142	11
18	1.4	1.7	.8	0	* .5	7.0	7.0	232	398	6.5	234	17
19	1.4	1.7	.9	0	.6	4.0	7.6	236	396	5.4	153	7.0
20	1.4	* 1.4	.9	.2	.6	3.5	9.3	240	351	6.2	157	7.0
21	1.4	1.3	.6	1.5	.6	2.9	8.5	* 240	296	5.4	149	8.9
22	1.3	1.4	.9	1.0	.7	2.9	12	270	341	4.5	136	10
23	1.9	1.3	.6	.7	.8	3.2	18	288	334	2.6	123	6.8
24	3.5	1.3	.6	1.1	.7	3.8	20	282	316	3.8	* 104	5.4
25	3.5	1.3	.6	1.3	.8	5.1	20	282	324	2.9	67	8.5
26	3.5	1.3	.6	1.0	.7	5.7	25	291	294	1.9	67	* 7.9
27	2.6	1.3	.7	.8	.7	4.5	28	316	255	6.2	47	9.3
28	1.0	1.2	.7	.9	.6	4.3	24	326	255	7.0	40	17
29	.8	1.2	.7	1.0	.7	4.3	22	314	243	4.5	77	10
30	1.3	1.2	.9	.6	----------	4.0	21	306	238	7.9	75	14
31	5.0	----------	.8	.6	----------	3.5	----------	282	----------	10	58	----------
Total	115.1	57.4	26.4	18.7	21.3	82.8	258.5	5.964	8.604	573.0	2321.3	736.1
Mean	3.71	1.91	0.85	0.60	0.73	2.67	8.62	192	286	18.5	74.9	24.5
Ac-ft	228	114	52	37	42	164	513	11,830	17,070	1,140	4,600	1,460

Calendar year : Max Min Mean Ac-ft
Water year 1963-64: Max 398 Min 0 Mean 51.3 Ac-ft 37,250

* Discharge measurement made on this day.
Underlined figures are maximum and minimum discharges for month.

Table 5.--Surface-water records--Continued

1726.5 Kennecott drain near Magna, Utah

Location.--Lat 40°45'28", long 112°10'04", in SE¼SW¼ sec. 3, T. 1 N., R. 3 W., about 300 feet downstream from bridge on U.S. Highway 40, and 4.5 miles west of Magna.

Records available.--October 1963 to September 1964.

Gage.--Water-stage recorder.

Extremes.--Maximum discharge during year, 389 cfs March 18 (gage height, 5.50 ft) result of break in dike of Kennecott tailings pond; minimum, 40 cfs May 19.

Remarks.--Records good except those during periods of no gage-height record, which are poor. Records of chemical analyses and water temperatures are given in table 7.

Discharge, in cubic feet per second, water year October 1963 to September 1964

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	79	76	68	79	73	70	59	67	101	71	85	88
2	79	74	70	80	69	81	67	97	84	81	76	85
3	74	74	70	72	66	81	71	90	94	89	*74	93
4	84	78	71	71	61	80	62	77	77	82	78	101
5	81	76	70	70	65	82	67	80	78	81	78	88
6	73	74	69	66	63	83	77	101	73	84	*89	93
7	71	98	68	65	65	77	73	94	177	82	96	89
8	72	85	68	61	66	69	71	87	197	82	95	77
9	71	74	70	60	68	76	70	76	96	81	85	84
10	75	71	74	60	78	75	74	66	82	85	91	*97
11	70	73	68	56	86	*75	74	60	76	77	95	108
12	79	76	67	58	76	86	71	58	66	72	94	111
13	100	76	71	58	68	88	67	62	59	94	94	88
14	108	77	70	56	63	78	67	48	63	72	90	92
15	*119	76	71	53	64	84	65	46	72	64	79	93
16	110	115	76	52	63	88	*65	44	90	66	91	89
17	98	120	83	52	67	105	53	43	125	72	96	95
18	96	95	87	54	77	297	*53	41	147	70	82	90
19	90	*76	84	57	86	*197	60	*40	120	69	82	77
20	85	78	81	58	77	*125	75	42	65	74	77	100
21	80	85	80	64	72	101	74	49	83	80	76	119
22	74	100	76	64	73	108	87	55	146	74	77	*110
23	80	86	71	66	73	117	65	58	122	77	75	98
24	100	86	68	68	82	97	79	63	89	69	75	91
25	95	82	80	65	74	116	77	84	79	65	*78	93
26	88	74	81	75	71	123	88	82	83	64	82	84
27	86	78	65	76	66	109	97	100	82	73	80	81
28	84	73	72	71	72	58	78	100	89	66	76	81
29	82	73	71	71	76	57	66	129	89	81	62	73
30	80	65	76	70	----------	56	60	149	74	79	67	69
31	78	----------	77	71	----------	54	----------	116	----------	78	84	----------
Total	2,641	2,444	2,273	1,999	2,060	2,993	2,112	2,304	2,878	2,354	2,559	2,737
Mean	85.2	81.5	73.3	64.5	71.0	96.5	70.4	74.3	95.9	75.9	82.5	91.2
Ac-ft	5,240	4,850	4,510	3,960	4,090	5,940	4,190	4,570	5,710	4,670	5,080	5,430

Calendar year :	Max	Min	Mean	Ac-ft
Water year 1963-64:	Max 297	Min 42	Mean 80.2	Ac-ft 58,240

* Discharge measurement made on this day.
Note: No gage-height record Oct. 16 to Nov. 5; May 15-18.
Underlined figures are maximum and minimum discharges for month.

Table 6.--Discharge measurements at miscellaneous sites

Station No.	Stream	Location	Drainage area (sq mi)	Measurements	
				Date	Discharge (cfs)
1670 L	Jordan River	NE¼NE¼ sec. 15, T. 4 S., R. 1 W., at dam, 2.9 miles downstream from gage at Jordan Narrows and 1 mile southeast of Bluffdale	-	11-26-63	2.1
				7- 9-64	20.4
				8-27-64	2.4
1670 M	Rose Creek	NW¼NW¼ sec. 10, T. 4 S., R. 2 W., above diversion intake 2 miles southwest of Herriman	-	4- 3-64	1.2
				4-15-64	.9
				5- 6-64	1.6
				5-14-64	1.6
				5-22-64	1.1
				6-26-64	.8
				7-31-64	.5
				9-30-64	.5
1670 N	Corner Creek	NE¼SE¼ sec. 4, T. 4 S., R. 1 E., 2.4 miles southeast of Draper	-	4-15-64	8.1
				5-14-64	16.2
				5-22-64	8.3
				5-29-64	4.2
				6-26-64	2.2
				7-31-64	.8
				9- 3-64	.6
1670 P	Draper Irrigation Company ditch	NE¼SW¼ sec. 28, T. 3 S., R. 1 E., at 12300 South, 1 mile east of Draper	-	4- 3-64	.7
				5-14-64	7.6
				5-22-64	21.2
				5-29-64	27.6
				6-26-64	28.0
				7-31-64	2.9
				9-30-64	.9
1670 Q	Butterfield Creek	SE¼SW¼ sec. 31, T. 3 S., R. 2 W., 0.7 mile upstream from Utah Highway 111 and 3.6 miles southwest of Herriman	-	4- 3-64	1.9
				4-15-64	2.0
				5- 6-64	2.1
				5-14-64	3.4
				5-22-64	6.0
				5-29-64	5.1
				6-26-64	1.9
				7-31-64	1.5
				9-30-64	1.4
1670 R	Keystone Gulch	NE¼SE¼ sec. 29, T. 3 S., R. 2 W., at Utah Highway 111, 0.5 mile east of Lark	-	4- 3-64	1.8
				4-15-64	3.0
				5- 6-64	1.9
				5-22-64	1.2
				5-29-64	1.2
				6-26-64	.8
				7-30-64	1.7
				9-30-64	1.9
1670 S	Jordan River	NW¼SW¼ sec. 13, T. 3 S., R. 1 W., at bridge at 10600 South 2.5 miles southwest of Sandy City	-	11-27-63	53.1
				7- 9-64	96.9
1670 T	Bells Canyon Irrigation Company ditch	NE¼NW¼ sec. 14, T. 3 S., R. 1 E., at Parshall flume in ditch near Granite	-	10- 2-63	.8
				4- 3-64	.1
				4-15-64	.1
				5- 4-64	.1
				5-22-64	13.0
				5-29-64	16.8
				6-26-64	15.2
				7-31-64	4.5
1672 B	Bingham Creek	SW¼NW¼ sec. 15, T. 3 S., R. 2 W., at bridge on Utah Highway 111, 2 miles east of Copperton	-	4-15-64	.1
				5- 6-64	6.6
				5-22-64	11.2
				5-29-64	9.2
				6-26-64	4.6
				9-30-64	1.8
1672 C	Bingham canal	NE¼NE¼ sec. 16, T. 3 S., R. 2 W., at bridge on Utah Highway 111, 2 miles east of Copperton	-	5- 6-64	.4
				5-22-64	1.5
				5-29-64	.3
1672 D	Barneys Creek	NW¼NW¼ sec. 3, T. 3 S., R. 2 W., at bridge on Utah Highway 111, 2.8 miles northeast of Copperton	-	4- 3-64	.2

Table 6.--Discharge measurements at miscellaneous sites--Continued

Station No.	Stream	Location	Drainage area (sq mi)	Measurements	
				Date	Discharge (cfs)
1672 E	Jordan River	NW¼SW¼ sec. 23, T. 2 S., R. 1 W., at bridge at 6400 South, 1.5 miles northwest of Midvale	-	11-27-63	98.6
1673 A	Jordan River	NW¼NW¼ sec. 12, T. 2 S., R. 1 W., at bridge at 4800 South, 1 mile west of Murray	-	11-27-63	148
1673 B	Brighton canal	NW¼SW¼ sec. 1, T. 2 S., R. 1 W., at staff gage about 150 ft downstream from diversion structure on Jordan River, 1.2 miles northwest of Murray	-	5-25-64 7-10-64 7-16-64 7-27-64 8- 7-64 8-26-64 9-26-64	12.1 35.3 32.6 27.3 33.4 27.5 28.0
1673 C	Jordan River	SW¼SW¼ sec. 26, T. 1 S., R. 1 W., at bridge at 3300 South, 4.6 miles southwest of Salt Lake City	-	8-28-64	258
1673 D	Suburban Sanitary District sewer outfall	SW¼NE¼ sec. 26, T. 1 S., R. 1 W., at culvert on 8th West, 4.5 miles southwest of Salt Lake City	-	8-28-64	19.6
1675 O	Willow Creek	NE¼NW¼ sec. 1, T. 3 S., R. 1 E., above upper diversion above Wasatch Boulevard and near Little Cottonwood Creek treatment plant	-	4-17-64	4.6
1675 Q	Willow Creek	NW¼NW¼ sec. 1, T. 3 S., R. 1 E., at culvert on Wasatch Boulevard and near Little Cottonwood Creek treatment plant	-	4-15-64 5-14-64 5-22-64 5-29-64 6-19-64	4.2 10.3 27.1 18.5 17.0
1675 R	Willow Creek	SE¼NE¼ sec. 2, T. 3 S., R. 1 E., at bridge on Danish Road near Little Cottonwood Creek treatment plant	-	5-14-64 5-22-64	13.3 20.0
1675 T	Little Cottonwood Creek	NE¼SW¼ sec. 2, T. 3 S., R. 1 E., cutoff ditch at head about 0.2 mile below treatment plant	-	4-17-64	18.0
1685 P	Hughes Creek	NE¼NE¼ sec. 23, T. 2 S., R. 1 E., above culvert on Wasatch Boulevard 2.5 miles southeast of Holladay	-	4-14-64 5- 5-64 5-14-64 5-22-64 5-29-64 6-26-64	2.3 3.8 13.8 12.2 3.7 2.6
1700 N	Neffs Creek	NE¼NE¼ sec. 3, T. 2 S., R. 1 E., at culvert at 2700 East Lincoln Lane, Salt Lake City	-	5-22-64	6.3
1702 C	Mill Creek	SE¼NW¼ sec. 33, T. 1 S., R. 1 E., above culvert on Highland Drive, Salt Lake City	-	11-14-63	1.0
1702 D	Mill Creek	SW¼SW¼ sec. 30, T. 1 S., R. 1 E., at weir below State Street at about 3030 South, Salt Lake City	-	8-28-64	12.0
1715	Parleys Creek	SE¼SW¼ sec. 24, T. 1 S., R. 1 E., at site of old City weir, and 6.5 miles southeast of Salt Lake City	50	11-15-63 4-29-64 5- 4-64 6- 3-64 6-15-64 7-10-64 9- 3-64	.5 10.0 13.4 16.0 19.1 5.3 75.4
1715 E	Springs	NW¼NW¼ sec. 25, T. 1 S., R. 1 E., on north side of Parleys Creek about 0.2 mile above Suicide Rock	-	11-15-63 7-23-64	.3 .6
1716 C	Parleys Creek	NW¼NE¼ sec. 26, T. 1 S., R. 1 E., below tunnel from Terminal Reservoir, and below Wasatch Boulevard	-	11-15-63	3.6
1716 F	Parleys Creek	SE¼SE¼ sec. 22, T. 1 S., R. 1 E., at upper fence of Salt Lake Country Club and 0.8 mile downstream from Wasatch Boulevard	-	11-15-63	3.2

Table 6.--Discharge measurements at miscellaneous sites--Continued

Station No.	Stream	Location	Drainage area (sq.mi.)	Measurements	
				Date	Discharge (cfs)
1717	Parleys Creek	NE¼NE¼ sec. 20, T. 1 S., R. 1 E., in Sugar House Park about 100 ft upstream from 13th East Street Salt Lake City	56.7	11-15-63	3.1
				3- 9-64	.7
				3-13-64	1.2
				3-16-64	1.1
				4-14-64	3.4
				4-29-64	10.0
				5- 4-64	15.6
				5-19-64	215
				6- 3-64	14.3
				6- 8-64	58.5
				6-15-64	16.5
1720 A	Mt. Olivet ditch	NW¼NE¼ sec. 10, T. 1 S., R. 1 E., below culvert on road to This Is The Place Monument	-	8-20-64	1.6
1725 B	City Creek	NE¼SW¼ sec. 31, T. 1 N., R. 1 E., in Memory Park above storm sewer intake, Salt Lake City	-	10-16-63	.5
1726 A	Farmington Bay Bird Refuge	Total discharge through 21 outlet structures in outer dike	-	12- 6-63	92.0
1726.4	Lee Creek	At bridge on section line between sec. 35 and 36, T. 1 N., R. 3 W.	-	10-15-63	5.6
				11-19-63	3.6
				12-13-63	1.0
				2-20-64	8.3
				3-19-64	29.4
				3-20-64	28.8
				4-17-64	1.4
				6-22-64	19.5
				8-17-64	14.0
				9-26-64	6.0
1726.5A	Coon Creek	NW¼NE¼ sec. 8, T. 2 S., R. 2 W., at culvert on Utah Highway 111, and 3.3 miles southeast of Magna	-	5- 6-64	.2
1726.5B	Harkers Creek	SW¼NE¼ sec. 8, T. 2 S., R. 2 W., at culvert on Utah Highway 111, and 3.4 miles southeast of Magna	-	5-29-64	.1
1726.6	Garfield drain	NE¼SW¼ sec. 17, T. 1 S., R. 3 W., at bridge on U.S. Highway 40 about 0.5 mile southeast of Salt Lake County Boat Harbor, and 5.8 miles northwest of Magna	-	10-15-63	.6
				12-13-63	1.0
				1-15-64	1.1
				2-20-64	.8
				3-20-64	10.8
				4-18-64	.7
				5- 6-64	1.0
				5-29-64	2.2
				8-17-64	.6
				9-11-64	12.2

Table 7.--Chemical analyses of water from streams at or near gaging stations

(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

Date of collection	Temperature (°F)	Discharge (cfs)	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Parts per million	Dissolved solids: Tons per acre-foot	Dissolved solids: Tons per day	Hardness as $CaCO_3$: Calcium, Magnesium	Hardness as $CaCO_3$: Noncarbonate	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
1670. Jordan River at narrows, near Lehi, Utah																							
RECORDS AVAILABLE.--Chemical analyses: March 1956 to July 1960; November 1963 to August 1964.																							
Nov. 26, 1963	37	16	21	--	115	85	a 256		279	0	477	330	--	3.7	--	b 1,420	1.93	61.3	636	407	4.4	2,180	7.7
July 13, 1964	76	197	13	--	57	53	a 168		223	0	247	203	--	.3	--	b 851	1.16	452	360	177	3.9	1,370	7.7
Aug. 27	62	136	14	--	63	59	a 206		233	0	281	256	--	.9	--	b 995	1.35	367	398	207	4.5	1,610	7.9
1675. Little Cottonwood Creek near Salt Lake City, Utah																							
RECORDS AVAILABLE.--Chemical analyses: November 1948 to August 1948; March 1949 to September 1949; February 1955; February 1956 to July 1961; November 1963 to September 1964.																							
Nov. 22, 1963	37	0.2	9.2	--	34	7.8	a 10		109	0	31	12	--	1.3	--	c 150	0.20	0.08	118	29	0.4	257	7.4
May 4, 1964	43	4.4	7.7	--	26	5.8	a 12		75	0	30	17	--	.2	--	c 131	.18	1.56	90	28	.6	221	7.3
June 19	--	222	5.3	--	16	4.4	a 3.8		50	0	18	4.5	--	.1	--	c 77	.10	46.2	58	17	.2	126	7.6
July 15	56	114	4.5	--	17	2.9	a 3.5		48	0	14	5.0	--	.9	--	c 74	.10	22.8	54	15	.2	118	7.6
Aug. 19	58	16	10	--	26	7.1	a 4.7		82	0	23	9.0	--	1.7	--	c 119	.16	5.14	95	28	.2	199	7.6
Sept. 11	--	1.5	11	--	34	7.8	a 9.0		109	0	27	9.9	--	5.1	--	c 171	.23	.69	116	27	.4	265	7.6
1685. Big Cottonwood Creek near Salt Lake City, Utah																							
RECORDS AVAILABLE.--Chemical analyses: November 1947 to August 1948; March 1959 to September 1949; February 1956 to July 1961; November 1963 to September 1964.																							
Nov. 22, 1963	41	3.9	6.6	--	34	8.8	a 15		122		32	14	--	0.1	--	c 156	0.21	1.64	120	20	0.6	277	7.6
May 5, 1964	43	18	6.3	--	25	11	a 13		79		30	29	--	.7	--	c 147	.20	7.14	110	45	.5	259	7.7
June 16	49	175	5.0	--	19	7.8	a 3.3		80		15	4.2	--	.2	--	c 95	.13	44.9	80	14	.2	164	7.6
July 15	55	59	4.8	--	26	7.3	a 4.9		93		19	7.5	--	.1	--	c 120	.16	19.1	96	20	.2	202	8.1
Aug. 19	55	4.2	9.2	--	30	10	a 5.0		109		22	12	--	.8	--	c 140	.19	1.59	119	30	.2	242	7.9
Sept. 11	53	5.7	6.4	--	31	10	a 8.0		117		24	11	--	.0	--	c 150	.20	2.31	119	23	.3	249	8.2

See footnotes at end of table.

Table 7.--Chemical analyses of water from streams at or near gaging stations--Continued

(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

Date of collection	Temperature (°F)	Discharge (cfs)	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Parts per million	Dissolved solids: Tons per acre-foot	Dissolved solids: Tons per day	Hardness as $CaCO_3$: Calcium, Magnesium	Hardness as $CaCO_3$: Noncarbonate	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
1700. Mill Creek near Salt Lake City, Utah																							
RECORDS AVAILABLE.--Chemical analyses: November 1947 to August 1948; March 1949 to September 1949; May 1956 to July 1961; November 1963 to September 1964.																							
Nov. 14, 1963	45	3.0	8.4	--	91	29	a 5.3		240	0	142	10	--	0.1	--	c 423	0.58	3.43	347	150	0.1	612	7.7
June 15, 1964	46	32	7.7	--	66	20	a 14		212	0	80	13	--	.0	--	c 298	.41	25.7	245	71	.4	470	8.2
July 15	52	16	8.1	--	78	23	a 12		235	0	101	12	--	1.0	--	c 357	.49	15.4	290	97	.3	545	8.2
Aug. 19	53	8.7	11	--	79	28	a 5.1		206	14	114	8.5	--	.3	--	c 379	.52	8.90	312	120	.1	556	8.4
Sept. 11	51	6.8	8.5	--	83	27	a 7.4		209	12	123	9.5	--	.0	--	c 394	.54	7.23	317	126	.2	557	8.5
1708. Surplus Canal at Cohen flume, near Salt Lake City, Utah																							
RECORDS AVAILABLE.--Chemical analyses: October 1963 to September 1964.																							
Oct. 14, 1963	59	160																				2,030	
Nov. 19	45	193																				2,170	
Dec. 13	38	98																				2,090	
Jan. 15, 1964	33	67																				2,140	
Feb. 20	36	47																				1,990	
Mar. 25	45	48																				2,030	
Apr. 17	56	80																				1,990	
May 19	55	354																				893	
May 26	55	393																				603	
June 22	52	337	10	--	63	25	a 80		154	0	152	105	--	3.0	--	b 515	0.72	469	260	134	2.2	854	7.6
June 25	63	213																				887	
July 16	76	105																				1,870	
July 29	74	98																				1,940	
Aug. 24	74	26																				1,920	
Sept. 23	60	53	5.1	--	92	75	a 208		200	0	385	302	--	.6	--	b1,170	1.59	167	540	376	3.9	1,830	7.6

Table 7.--Chemical analyses of water from streams at or near gaging stations--Continued

(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

Date of collection	Temperature (°F)	Discharge (cfs)	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Parts per million	Dissolved solids: Tons per acre-foot	Dissolved solids: Tons per day	Hardness as $CaCO_3$: Calcium, Magnesium	Hardness as $CaCO_3$: Noncarbonate	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
1710. Jordan River at Salt Lake City, Utah																							
LOCATION.--At highway bridge on Twenty-first South Street, Salt Lake City, Salt Lake County, 0.2 mile upstream from gaging station, about 200 feet upstream from diversion structure at head of Surplus Canal, and about 2 miles downstream from Mill Creek.																							
DRAINAGE AREA.--3,420 square miles, approximately, including 255 square miles in closed basin in Cedar Valley.																							
RECORDS AVAILABLE.--Chemical analyses: May 1948 to August 1948; June 1957 to January 1959; November 1963 to August 1964.																							
Nov. 5, 1963	53	197	18	--	152	75	a 209		184	0	515	320	--	6.1	--	b 1,390	1.89	739	690	539	3.5	2,100	6.8
Dec. 12	42	181	20	--	143	76	a 204		218	13	458	305	--	8.6	--	b 1,350	1.82	660	670	470	3.4	2,010	8.5
Jan. 15, 1964	36	170	22	--	150	80	a 199		248	0	477	305	--	6.6	--	b 1,360	1.85	624	702	499	3.3	2,030	7.5
Feb. 20	45	179	21	--	139	66	a 197		294	0	381	285	--	11	--	b 1,240	1.69	599	620	379	3.4	1,860	7.5
Mar. 20	50	199	23	--	143	77	a 209		304	0	413	310	--	11	--	b 1,340	1.81	720	672	423	3.5	2,050	7.6
Apr. 18	49	200	17	--	120	56	a 179		262	0	320	260	--	7.6	--	b 1,090	1.48	589	530	315	3.4	1,630	7.5
June 18	52	763	11	--	64	31	a 88		165	0	166	117	--	4.2	--	b 567	.77	1,170	286	151	2.3	921	7.4
July 14	62	205	18	--	127	65	a 197		285	0	361	278	--	11	--	b 1,200	1.63	664	582	348	3.6	1,870	7.5
Aug. 17	64	354	20	--	124	64	a 216		296	0	380	285	--	6.4	--	b 1,240	1.69	1,180	575	332	3.9	1,890	7.8
Aug. 28	60	529	18	--	141	72	a 220		302	0	395	326	--	10	--	b 1,330	1.81	1,900	648	400	3.8	2,100	8.2
1716. Parleys Creek at Suicide Rock, near Salt Lake City, Utah																							
RECORDS AVAILABLE.--Chemical analyses: November 1947 to August 1948; March 1949 to September 1949; February 1955; November 1963 to September 1964.																							
REMARKS.--Highway construction in area.																							
Nov. 15, 1963	49	1.5	13	--	97	27	a 25		292	0	116	31	--	1.8	--	c 468	0.64	1.90	352	113	0.6	725	7.5
June 15, 1964	46	15	10	--	73	17	a 24		253	0	52	32	--	.3	--	c 335	.46	13.6	254	46	.7	547	8.0
July 16	63	6.1	11	--	73	19	a 25		244	0	70	30	--	.1	--	c 360	.49	5.93	262	62	.7	568	7.7
Aug. 19	58	3.7	13	--	86	23	a 33		257	13	93	36	--	2.5	--	c 424	.58	4.24	310	78	.8	648	8.5
Sept. 14	55	4.1	13	--	74	25	a 21		220	14	78	34	--	1.4	--	c 388	.53	4.30	288	85	.5	647	8.5

See footnotes at end of table.

Table 7.--Chemical analyses of water from streams at or near gaging stations--Continued

(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

Date of collection	Temperature (°F)	Discharge (cfs)	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Parts per million	Dissolved solids: Tons per acre-foot	Dissolved solids: Tons per day	Hardness as $CaCO_3$: Calcium, Magnesium	Hardness as $CaCO_3$: Noncarbonate	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
1720. Emigration Creek near Salt Lake City, Utah																							
RECORDS AVAILABLE.--Chemical analyses: November 1947 to August 1948; March 1949 to September 1949; February 1956; November 1963 to September 1964.																							
Nov. 29, 1963	45	0.6	13	--	107	32	a 29		288	0	173	30	--	1.7	--	c 526	0.72	0.85	398	162	0.6	809	7.5
June 16, 1964	52	14	12	--	91	20	a 24		298	0	77	26	--	.5	--	c 398	.54	15.0	308	64	.6	630	7.8
July 16	58	7.9	13	--	92	23	a 26		295	0	97	27	--	.8	--	c 439	.60	9.36	324	82	.6	665	7.9
Aug. 19	56	3.2	17	--	95	27	a 28		270	12	119	30	--	1.2	--	c 471	.64	4.07	348	107	.7	701	8.4
Sept. 14	56	1.8	13	--	101	34	a 16		292	0	141	28	--	1.4	--	c 516	.70	2.51	392	153	.4	751	8.0
1722. Red Butte Creek at Fort Douglas, near Salt Lake City, Utah																							
RECORDS AVAILABLE.--Chemical analyses: April to September 1964.																							
Apr. 23, 1964	44	4.7	9.7	--	80	20	a 19		250	0	94	15	--	1.2	--	c 363	0.49	4.61	284	79	0.5	603	7.7
May 6	43	7.9	9.2	.00	76	22	12	0.8	242	0	81	15	0.2	2.5	0.04	c 357	.48	7.61	282	84	.3	600	8.2
June 15	47	7.6	11	--	73	21	a 20		247	10	66	18	--	.1	--	c 330	.45	6.77	269	50	.5	523	8.4
July 16	56	3.7	10	--	70	23	a 15		255	0	67	16	--	.1	--	c 333	.45	3.33	269	60	.4	531	8.2
Aug. 20	54	2.0	15	--	80	29	a 17		244	18	94	20	--	.3	--	c 406	.55	2.19	318	88	.4	605	8.4
Sept. 14	59	1.4	12	--	68	29	a 10		218	12	86	16	--	.0	--	c 354	.48	1.34	288	90	.3	621	8.4
1724. City Creek above Wasatch Drive, near Salt Lake City, Utah																							
RECORDS AVAILABLE.--Chemical analyses: November 1947 to August 1948; March 1949; November 1963 to September 1964.																							
Nov. 29, 1963	42	1.2	13	--	67	20	a 23		286	0	19	31	--	0.4	--	c 302	0.41	1.00	248	13	0.6	536	7.6
June 15, 1964	47	29	6.1	--	55	13	a 11		220	0	15	12	--	.1	--	c 210	.29	16.4	190	10	.3	363	8.2
July 16	52	1.8	11	--	64	17	a 18		268	0	17	23	--	.1	--	c 280	.38	1.36	230	10	.5	483	8.1
Aug. 20	52	1.1	16	--	67	21	a 18		258	18	14	28	--	.4	--	c 309	.42	.92	256	15	.5	511	8.5
Sept. 14	56	.4	14	--	60	21	a 26		280	0	20	29	--	.2	--	c 306	.42	.33	236	6	.7	504	8.0

Table 7.--Chemical analyses of water from streams at or near gaging stations--Continued

(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

Date of collection	Temperature (°F)	Discharge (cfs)	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Parts per million	Dissolved solids: Tons per acre-foot	Dissolved solids: Tons per day	Hardness as $CaCO_3$: Calcium, Magnesium	Hardness as $CaCO_3$: Noncarbonate	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
1725.8 Jordan River at Cudahy Lane, near Salt Lake City, Utah																							
LOCATION.--At highway bridge on Cudahy Lane, about 0.2 mile upstream from gaging station, and 6.3 miles northwest of Salt Lake City, Salt Lake County. DRAINAGE AREA.--3,490 square miles approximately including 255 square miles in closed basin in Cedar Valley. RECORDS AVAILABLE.-- Chemical analyses: June 1957 to January 1959; November 1963 to September 1964.																							
Nov. 19, 1963	42	44	21	--	140	71	a 203		234	0	445	295	--	13	--	b 1,300	1.77	154	640	448	3.5	2,010	7.0
Dec. 13	38	97	21	--	147	70	a 215		229	0	455	320	--	13	--	b 1,350	1.84	354	656	468	3.6	2,050	7.2
Jan. 15, 1964	36	105	20	--	141	78	a 196		226	0	491	280	--	8.5	--	b 1,330	1.81	377	672	487	3.3	2,010	7.8
Feb. 20	40	117	21	--	135	69	a 182		286	0	362	280	--	10	--	b 1,200	1.63	379	618	383	3.2	1,900	7.6
Mar. 20	48	78	21	--	136	69	a 202		301	0	372	300	--	8.0	--	b 1,260	1.71	265	624	377	3.5	1,960	7.4
Apr. 17	52	119	17	--	112	50	a 153		252	0	293	210	--	11	--	b 970	1.36	312	484	277	3.0	1,490	7.4
May 6	48	132	12	0.0	89	34	75	6.2	242	0	146	120	0.3	3.8	0.15	b 605	.88	216	362	164	1.7	1,020	7.5
June 18	55	197	9.5	--	61	22	a 50		179	0	99	71	--	2.5	--	b 403	.55	214	242	95	1.4	682	7.6
July 23	77	97	18	--	109	61	a 186		268	0	332	250	--	12	--	b 1,100	1.50	288	522	302	3.6	1,680	7.4
Aug. 17	72	93	19	--	112	61	a 192		287	0	349	242	--	7.8	--	b 1,120	1.52	281	530	295	3.6	1,730	7.8
Sept. 14	68	120	17	--	119	69	a 194		276	0	355	282	--	10	--	b 1,180	1.60	382	580	354	3.5	1,850	8.1
1726.3 Goggin drain near Magna, Utah																							
RECORDS AVAILABLE.--Chemical analyses: April to July 1961; November 1963 to September 1964.																							
Nov. 20, 1963	37	1.5	6.9	--	128	272	a 3,080		416	0	1,460	4,450	--	4.8	--	b 9,610	13.1	38.9	1,440	1,100	35	14,600	7.4
Dec. 13	32	.6	11	--	194	561	a 6,110		627	0	2,730	9,010	--	5.2	--	b 18,900	25.7	30.6	2,790	2,280	50	27,100	7.9
Feb. 18, 1964	33	.4	2.4	--	143	356	a 4,540		387	0	1,810	6,720	--	2.7	--	b 13,800	18.8	14.9	1,820	1,500	46	20,800	7.8
April 17	59	7.3	14	--	140	158	a 1,600		361	0	920	2,280	--	10	--	b 5,300	7.21	104	1,000	704	22	8,280	7.4
June 11	55	262	9.8	--	75	36	a 140		185	0	210	190	--	3.6	--	b 755	1.03	534	336	184	3.3	1,230	7.3
Aug. 17	68	107	19	--	130	66	a 258		300	0	402	345	--	4.8	--	b 1,370	1.86	396	595	349	4.6	2,090	7.9
Sept. 11	61	25	6.5	--	124	136	a 971		300	0	660	1,450	--	2.8	--	b 3,500	4.76	236	870	624	14	5,570	7.9

See footnotes at end of table.

Table 7.--Chemical analyses of water from streams at or near gaging stations--Continued

(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

Date of collection	Temperature (°F)	Discharge (cfs)	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids: Parts per million	Dissolved solids: Tons per acre-foot	Dissolved solids: Tons per day	Hardness as $CaCO_3$: Calcium, Magnesium	Hardness as $CaCO_3$: Noncarbonate	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
1726.5 Kennecott drain near Magna, Utah																							
LOCATION.--At gaging station about 300 feet downstream from bridge on U.S. Highway 40, 4.5 miles northwest of Magna, Salt Lake County. RECORDS AVAILABLE.--Chemical analyses: June 1959 to July 1961; November 1963 to September 1964.																							
Nov. 19, 1963	49	85	72	--	277	109	a 923		142	0	736	1,600	--	7.4	--	b 3,790	5.15	870	1,140	1,020	12	6,190	6.5
Dec. 13	41	81	31	--	265	92	a 883		270	0	701	1,420	--	7.4	--	b 3,530	4.80	772	1,040	819	12	5,540	8.0
Jan. 15, 1964	38	55	48	--	299	119	a 1,070		67	0	807	1,880	--	14	--	b 4,270	5.81	634	1,240	1,180	13	6,940	6.6
Feb. 20	42	82	32	--	285	117	a 836		152	0	797	1,450	--	11	--	b 3,600	4.90	797	1,190	1,070	11	5,770	7.7
Mar. 11	48	82	--	--	--	--	a 1,040		56	0	1,040	1,790	--	--	--	c 4,810	6.54	1,064	1,400	1,350	12	6,810	6.0
Mar. 19	39	213	20	--	339	107	a 1,370		151	0	859	2,300	--	5.3	--	b 5,070	6.90	2,920	1,280	1,160	17	8,020	7.1
Mar. 19	43	204	23	--	339	118	a 1,420		127	0	907	2,380	--	5.3	--	b 5,250	7.14	2,890	1,330	1,230	17	8,250	6.6
Mar. 20	47	156	15	--	335	202	a 2,320		138	0	932	3,980	--	4.7	--	b 7,860	10.7	3,310	1,660	1,550	25	12,400	7.1
Mar. 21	43	100	--	--	--	--	a 5,980		123	0	1,550	10,000	--	--	--	c19,600	26.7	5,290	2,820	2,720	49	27,700	6.7
Mar. 24	46	134	--	--	--	--	a 1,800		73	0	838	3,020	--	--	--	c 6,630	9.02	2,400	1,280	1,220	22	9,850	6.6
April 9	35	78	42	--	261	102	a 930		45	0	731	1,620	--	11	--	b 3,720	5.06	783	1,070	1,030	12	6,470	6.0
April 18	55	51	57	--	212	107	a 1,140		d		793	1,860	--	10	--	b 4,180	5.68	576	970		16	6,610	4.4
June 18	62	124	23	--	240	77	a 889		142	0	612	1,480	--	7.6	--	b 3,400	4.62	1,140	915	799	13	5,510	6.9
July 23	76	91	26	--	216	117	a 902		301	0	605	1,490	--	4.3	--	b 3,510	4.77	862	1,020	773	12	5,550	7.7
Aug. 17	71	98	22	--	168	96	a 711		304	0	507	1,120	--	4.7	--	b 2,780	3.78	736	815	566	11	4,440	8.0
Sept. 11	63	101	17	--	136	97	a 496		304	0	471	763	--	3.6	--	b 2,130	2.90	581	740	491	7.9	3,390	7.8

a Calculated Na plus K, reported as Na.
b Calculated.
c Residue on evaporation at 180°C.
d Acidity as H_2SO_4, 1.0 ppm.

Table 8.--Chemical analyses of water from streams at miscellaneous sites

(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

Station No.	Sampling site	Date of collection	Temperature (°F)	Discharge (cfs)	Silica (SiO_2)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Dissolved solids: Parts per million	Dissolved solids: Tons per acre-foot	Dissolved solids: Tons per day	Hardness as $CaCO_3$: Calcium, Magnesium	Hardness as $CaCO_3$: Noncarbonate	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
1670 A	PROVO RESERVOIR CANAL 1/	7- 9-64	53																		341	
		8-27-64	55	125	0.7	38	9.2	a 7.0		138	0	28	3.4	0.3	b 152	0.21	51.3	132	19	2.7	279	7.8
1670 B	UTAH LAKE DISTRIBUTING CANAL 1/	7- 9-64	71																		1,090	
		8-27-64	59		11	60	48	a 159		220	0	227	196	.7	b 834	1.13		348	168	3.7	1,310	7.8
1670 E	SOUTH JORDAN CANAL 1/	11-26-63	42	c 2																	2,100	
1670 F	JORDAN AND SALT LAKE CITY CANAL 1/	7-13-64	74	c 36																	1,380	
1670 H	GALENA CANAL 1/	11-27-63	43	c 12																	2,360	
		7-13-64	69	c 6																	1,860	
		8-27-64	67	c 6	21	122	79	a 242		284	0	379	374	2.2	e 1,360	1.85	22.0	630	397	4.2	2,220	8.1
1670 I	BECKSTEAD DITCH 1/	7-13-64	68	c 5																	1,990	
		8-27-64	65	c 5	29	125	86	a 268		248	0	436	416	3.4	e 1,490	2.03	20.1	664	461	4.5	2,450	8.2
1670 K	NORTH JORDAN CANAL 1/	11-27-63	46	c 41																	2,810	
		7-13-64	67	c 99																	2,350	
		8-27-64	64	c 95	24	143	90	a 293		232	0	544	430	2.2	e 1,640	2.23	421	728	538	4.7	2,570	8.1
1670 L	JORDAN RIVER 2/	11-26-63	45	2.1	32	101	64	a 213		268	0	333	290	4.8	e 1,170	1.59	6.63	516	296	4.1	1,840	7.6
		7- 9-64	75	20.4	16	67	52	a 168		239	0	245	210	.2	b 970	1.25	53.4	382	186	3.7	1,440	7.7
		8-27-64	64	2.4	19	74	59	a 215		236	8	293	270	.4	e 1,050	1.43	6.80	426	219	4.5	1,720	8.4
1670 M	ROSE CREEK 2/	4- 3-64	53	1.2																	692	
		4-15-64	68	.9																	736	
		5- 6-64	51	1.6																	753	
		5-22-64	75	1.1																	732	
		6-26-64	80	.8																	668	
		7-31-64	59	.5																	685	
1670 N	CORNER CREEK 2/	4-15-64	52	8.1																	161	
		5-14-64	53	16.2																	159	
		5-22-64	54	8.3																	150	
		5-29-64	47	4.2																	192	
		6-26-64	65	2.2																	212	
		7-31-64	59	.8																	329	
1670 O	CORNER CREEK AT U.S. HIGHWAY 89-91, near 13600 South	7-13-64	68	d 4																	1,880	
1670 P	DRAPER IRRIGATION COMPANY DITCH 2/	5-22-64	49	21.2																	88	
		5-29-64	44	27.6																	81	
		6-26-64	55	28.0																	74	
		7-31-64	66	2.9																	87	
1670 Q	BUTTERFIELD CREEK 2/	4- 3-64	50	1.9																	1,190	
		4-15-64	58	2.0																	1,210	
		5- 6-64	52	2.1																	1,090	
		5-22-64	62	6.0																	835	
		5-29-64	49	5.1																	1,010	
		6-26-64	60	1.9																	1,340	
		7-30-64	57	1.5																	1,450	
1670 R	KEYSTONE GULCH 2/	4- 3-64	65	1.8																	1,320	
		4-15-64	69	3.0																	1,330	

See footnotes at end of table.

Table 8.--Chemical analyses of water from streams at miscellaneous sites--Continued

(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

Station No.	Sampling site	Date of collection	Temperature (°F)	Discharge (cfs)	Silica (SiO_2)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Dissolved solids: Parts per million	Dissolved solids: Tons per acre-foot	Dissolved solids: Tons per day	Hardness as $CaCO_3$: Calcium, Magnesium	Hardness as $CaCO_3$: Noncarbonate	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
1670 R	KEYSTONE GULCH - Continued	5- 6-64	62	1.9																	1,460	
		5-22-64	70	1.5																	1,750	
		5-29-64		1.2																	1,810	
		6-26-64	74	.8																	1,530	
		7-30-64	65	1.7																	2,290	
1670 S	JORDAN RIVER 2/	11-27-63	46	53.1	36	216	95	a 293		360	0	570	478	9.6	e 1,870	2.54	268	932	637	4.2	2,810	7.6
		7- 9-64	65	96.9	25	158	85	a 256		324	0	477	380	3.6	e 1,540	2.09	403	745	479	4.1	2,370	7.7
1670 T	BELLS CANYON IRRIGATION COMPANY DITCH 2/	5-22-64	49	13.0																	75	
		5-29-64	46	16.8																	57	
		7-31-64	61	4.5																	56	
1672 A	DRY CREEK at mouth	7-13-64	84	d 1																	2,180	
1672 B	BINGHAM CREEK 2/	4-15-64	70	.1																	8,840	
		5- 6-64	59	6.6																	20,300	
		5-22-64	75	11.2																	20,600	
		5-29-64	56	9.2																	15,600	
		6-26-64	70	4.6																	19.300	
1672 E	JORDAN RIVER 2/	11-27-63	51	98.6	27	180	80	a 252		342	0	479	384	4.5	e 1,570	2.14	418	776	495	3.9	2,390	7.0
1673 A	JORDAN RIVER 2/	11-27-63	51	148	25	175	75	a 242		330	0	461	364	8.8	e 1,510	2.05	603	744	473	3.9	2,310	7.0
1673 B	BRIGHTON CANAL 2/	7-13-64	71	34																	2,050	
		8-27-64	64	34	20	139	78	a 231		274	0	431	348	5.2	e 1,390	1.89	128	666	441	3.9	2,080	8.0
1673 C	JORDAN RIVER 2/	8-28-64	59	258	1.9	102	92	a 225		272	18	379	338	.5	e 1,290	1.75	897	635	382	3.9	2,060	8.6
1673 D	SEWER OUTFALL 2/	8-28-64	61	19.6	1.5	55	26	a 144		56	24	218	172	1.7	b 712	.97	37.7	245	160	4.0	1,410	9.5
1675 Q	WILLOW CREEK 2/	4-15-64	47	4.2																	117	
		5-14-64	47	10.3																	114	
		5-22-64	45	27.1																	70	
		5-29-64	43	18.5																	70	
1680	LITTLE COTTONWOOD CREEK at 300 West, at Murray	11-27-63	44	d 4																	1,240	
		8-27-64	66	d 15	11	62	52	a 164		226	0	237	206	1.3	b 870	1.18	35.2	367	182	3.7	1,440	8.0
1685 P	HUGHES CREEK 2/	4-14-64	48	2.3																	117	
		5-14-64	47	13.8																	105	
		5-22-64	47	12.2																	85	
		5-29-64	45	3.7																	87	
		6-26-64	56	2.6																	108	
1688	BIG COTTONWOOD CREEK 1/	8-25-64	61	1.2																	522	
1688 E	BIG COTTONWOOD CREEK at Highland Drive	6- 4-64	47	194																	167	
1695	BIG COTTONWOOD CREEK at 300 West, at Murray	11-27-63	47																		991	
		7-13-64	68																		971	
		8-27-64	63	d 25	1.5	64	49	a 144		240	0	222	176	.9	b 798	1.09	53.9	362	165	3.3	1,270	7.8
1698	MILL CREEK 1/	6- 3-64	50	31																	338	
1700 N	NEFFS CREEK 2/	5-22-64	43	6.3																	160	

Table 8.--Chemical analyses of water from streams at miscellaneous sites--Continued

(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

Station No.	Sampling site	Date of collection	Temperature (°F)	Discharge (cfs)	Silica (SiO_2)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Dissolved solids: Parts per million	Dissolved solids: Tons per acre-foot	Dissolved solids: Tons per day	Hardness as $CaCO_3$: Calcium, Magnesium	Hardness as $CaCO_3$: Noncarbonate	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
1702	MILL CREEK 1/	6- 3-64	51	28																	458	
		11-14-64	48	1.1																	636	
1702 C	MILL CREEK 2/	11-14-64	48	1.0																	641	
1702 D	MILL CREEK 2/	5- 6-64	52		3.3	62	28	43	4.2	194	0	110	67	2.8	b 435	.59		268	109	1.1	694	
		8-28-64	59	12.0	11	105	46	a 99		306	0	229	118	9.7	b 793	1.08	25.7	449	198	2.0	1,210	7.8
1702 E	MILL CREEK at 8th West Street (900 West)	7-14-64	60																		1,060	
		8-28-64	61		9.4	107	39	a 117		293	0	237	132	8.7	b 809	1.10		425	185	2.5	1,250	8.1
1715	PARLEYS CREEK 2/	11-15-63	44	.5																	635	
		6- 3-64	54	16.0																	565	
1715 A	LAMBS CANYON CREEK at U.S. Highway 40	7-14-64	51	16																	433	
1715 B	PARLEYS CREEK at George Washington Cove	7-14-64	53	c 14																	437	
1715 C	MOUNTAIN DELL CREEK above Mountain Dell Reservoir	7-14-64	56	8																	501	
1715 D	PARLEYS CREEK below Mountain Dell Reservoir	7-16-64	71																		461	
1715 E	SPRINGS 2/	11-15-63	52	.3																	f 755	
		7-23-64	48	.6																	f 711	
1716 A	SPRINGS at gage on Parleys Creek at Suicide Rock	7-23-64	52																		651	
1716 B	SPRINGS 200 feet below gage on Parleys Creek at Suicide Rock	11-15-63	46	d .1																	288	
1716 C	PARLEYS CREEK 2/	11-15-63	47	3.6																	460	
1716 D	SPRINGS at old mill site on north side of Parleys Creek below Wasatch Boulevard	11-15-63	57	d .1																	460	
1716 E	SPRINGS by dugway on south side of Parleys Creek at 27th East Street (2700 East)	11-15-63	50	d .1																	700	
1716 F	PARLEYS CREEK 2/	11-15-63	47	3.2																	460	
1717	PARLEYS CREEK 2/	11-15-63	46	3.1																	454	
		6- 3-64	54	14.3																	574	
		6-15-64	60	16.5																	528	
1719	EMIGRATION CREEK 1/	6- 2-64	52	11																	480	
1721	EMIGRATION CREEK 1/	6- 2-64	54	19																	600	
		6-15-64	55	12																	594	
1723	RED BUTTE CREEK 1/	4-14-64	42	1.2																	640	
		6- 2-64	57	8.4																	521	
		6-15-64	60	4.8																	514	

See footnotes at end of table.

Table 8.--Chemical analyses of water from streams at miscellaneous sites--Continued

(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

	Sampling site	Date of collection	Temperature (°F)	Discharge (cfs)	Silica (SiO_2)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Dissolved solids: Parts per million	Dissolved solids: Tons per acre-foot	Dissolved solids: Tons per day	Hardness as $CaCO_3$: Calcium, Magnesium	Hardness as $CaCO_3$: Noncarbonate	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH
1726 A	FARMINGTON BAY BIRD REFUGE, composite of water from 16 outlet structures in outer dike 2/	12- 6-63	34	92.0	15	109	95	a 470		294	0	448	690	3.7	e 1,980	2.69	472	664	423	7.9	g 3,230	7.5
1726.2	SALT LAKE CITY SEWAGE CANAL at Cudahy Lane	1-15-64	50	c 44																	2,680	
		2-20-64	52	c 50																	4,620	
		3-20-64	58	c 55	--	--	--	551	25	--	--	--	765	5.3	b 2,000	2.72	297	--	--	--	3,370	
		6-22-64	65	c 67	16	134	64	a 548		402		497	668	2.5	e 2,130	2.90	385	600	270	9.7	3,210	7.4
		7-23-64	76	c 66																	2,650	
		8-27-64	76	c 52	22	112	41	290		216	0	217	480	1.9	e 1,270	1.73	178	450	273	6.0	2,460	7.3
1726.4	LEE CREEK 2/	10- 5-63	69	5.6																	45,500	
		11-19-63	47	3.6																	15,400	
		12-13-63	36	1.0	--	--	--	--		--	--	--	--	--	b137,000	204	370	--	--	--	139,000	--
		1-15-64	24																		106,000	
		2-20-64	38	8.3																	37,300	
		3-19-64	42	29.4																	28,800	
		3-20-64	43	28.8																	19,900	
		4- 9-64	61	1.7																	103,000	
		4-17-64	64	1.7																	113,000	
		5-14-64	53	2.1																	136,000	
		6-22-64	57	19.5	9.6	189	1,930	a 28,500		208	0	4,890	46,100	32	b 81,800	111	3,750	8,430	8,260	135	96,000	8.2
		7-23-64	85	4.2																	158,000	
		8-17-64	76	14.0																	163,000	
		9-11-64	68	3.2	18	114	4,400	a 22,300		365	0	9,780	39,900	12	b 76,700	104	663	18,400	18,000	71	85,300	7.8
1726.5A	COON CREEK 2/	5- 6-64	52	.2																	512	
1726.6	GARFIELD DRAIN 2/	10-15-63	71	.6																	25,500	
		11- 5-63	67	1.9	71	277	97	1,330		h	--	2,760	2,430	16	e 7,030	9.56	36.1	1,090	--	18	18,200	1.7
		12-13-63	58	1.0																	18,600	1.7
		1-15-64	52	1.1																	19,300	1.7
		2-20-64	59	.8																	18,400	1.8
		3-20-64	75	10.8																	7,360	3.7
		4-18-64	61	.7																	19,800	
		5- 6-64	66	1.0																	17,700	
		5-29-64	65	2.2																	10,400	
		6-18-64	81	d 2	36	427	94	1,340		i	--	1,800	2,250	3.0	e 5,960	8.11	32.2	1,450	--	15	11,100	2.0
		7-23-64	83	.4																	9,170	7.2
		8-17-64	80	.6																	8,960	8.2
		9-11-64	90	12.2	16	332	100	1,440		236	0	441	2,450	7.4	e 4,800	6.53	158	990	796	20	7,950	7.6

1/ See table 5 for location.
2/ See table 6 for location.
a Calculated Na plus K, reported as Na.
b Residue on evaporation at 180°C.
c Mean discharge.
d Estimated discharge.
e Calculated.
f Average specific conductance of 2 springs discharging onto roadway.
g Contains 0.8 ppm of fluoride and 0.48 ppm of boron.
h Acidity as H_2SO_4, 2,290 ppm.
i Acidity as H_2SO_4, 681 ppm.

Table 9. Daily mean specific conductance of Jordan River at Cudahy Lane, near Salt Lake City, Utah (1725.8)

REMARKS. --Specific conductance recorder installed Apr. 8, 1964; out of service June 19-29, July 11-16, and Aug. 14 to Sept. 7, 1964.

Daily mean specific conductance (micromhos per cm. at 25°C), April to September 1964.

	October	November	December	January	February	March	April	May	June	July	August	September
1								1,180	480	750	1,550	--
2								1,150	560	750	1,620	--
3								1,150	660	720	1,650	--
4								1,150	510	740	1,650	--
5		a 2,030						1,150	560	750	1,650	--
6								1,150	550	760	1,650	--
7								1,150	460	760	1,650	--
8								1,190	440	800	1,650	1,700
9							1,980	1,200	400	880	1,650	1,730
10							1,690	1,190	310	880	1,650	1,690
11						a 2,050	1,660	1,090	410	--	1,650	1,700
12							1,710	990	440	---	1,650	1,730
13			a 2,050				1,750	870	470	--	1,650	1,750
14	a 1,700						1,770	610	470	--	--	1,800
15				a 2,010			1,770	520	480	--	--	1,780
16							1,620	500	480	--	--	1,800
17						a 1,900	1,510	490	540	1,600	a 1,730	1,800
18							1,440	480	680	1,600	--	1,750
19		a 2,010					1,440	460	--	1,620	--	1,790
20					a 1,900	a 1,960	1,110	460	--	1,650	--	1,790
21							1,340	460	--	1,620	--	1,750
22							1,450	450	--	1,620	--	1,800
23							1,530	450	--	1,670	--	1,810
24					a 1,920		1,220	410	--	1,680	--	1,850
25							1,340	450	--	1,660	--	1,810
26							1,290	460	--	1,620	a 1,640	1,810
27		a 2,100					1,180	480	--	1,640	--	1,800
28							1,550	460	--	1,700	--	1,760
29							1,500	440	--	1,640	--	1,750
30							1,410	450	760	1,680	--	1,750
31								470		1,670	--	

a Specific conductance of water determined in laboratory.

Table 10. Daily maximum and minimum temperature of Red Butte Creek at Fort Douglas, near Salt Lake City, Utah (1722)

REMARKS.--Thermograph not operating Oct. 1, 1963 to Apr. 13, 1964, July 2-9, 1964. Records of discharge for water year October 1963 to September 1964 and of chemical analyses are given in tables 5 and 7, respectively.

Temperature (°F) of water, April to September 1964

Month	Day																															Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
October																																
Maximum.....																																
Minimum.....																																
November																																
Maximum.....																																
Minimum.....																																
December																																
Maximum.....																																
Minimum.....																																
January																																
Maximum.....																																
Minimum.....																																
February																																
Maximum.....																																
Minimum.....																																
March																																
Maximum.....																																
Minimum.....																																
April																																
Maximum.....	--	--	--	--	--	--	--	--	--	--	--	--	--	47	49	43	45	42	41	47	45	49	46	45	43	40	49	50	52	47		--
Minimum.....	--	--	--	--	--	--	--	--	--	--	--	--	--	38	39	41	39	41	40	39	41	40	42	40	39	38	40	42	42	44		--
May																																
Maximum.....	48	43	43	47	45	47	49	44	50	52	51	51	54	53	54	54	53	53	54	54	55	54	56	52	56	60	56	57	54	58	62	52
Minimum.....	43	37	39	40	40	40	43	43	42	43	44	42	46	43	43	44	43	43	43	44	45	46	47	48	50	51	52	50	50	51	53	45
June																																
Maximum.....	64	63	66	64	64	62	60	56	57	56	58	62	61	60	57	60	56	53	56	51	48	44	47	53	57	60	56	63	68	64		58
Minimum.....	55	57	57	55	57	57	55	52	53	51	52	52	54	52	54	54	50	50	49	47	44	40	38	42	45	50	54	56	57	56		52
July																																
Maximum.....	--	--	--	--	--	--	--	--	--	66	67	68	69	67	69	67	69	68	67	62	67	68	68	66	65	65	65	67	67	65	64	--
Minimum.....	--	--	--	--	--	--	--	--	--	56	58	60	60	59	58	59	59	59	57	58	58	60	60	56	55	55	56	59	59	56	59	--
August																																
Maximum.....	64	64	66	69	64	66	66	67	68	67	62	64	67	65	63	64	64	64	62	58	58	60	62	62	63	61	58	53	56	57	61	63
Minimum.....	59	56	56	57	59	58	58	59	60	60	59	58	58	57	57	57	56	56	56	51	49	51	53	54	55	55	52	52	48	49	54	55
September																																
Maximum.....	57	60	59	60	61	59	60	59	61	58	59	58	59	58	58	57	57	56	52	52	51	53	54	55	56	54	53	55	56	56		57
Minimum.....	53	52	51	52	52	53	53	53	55	51	52	51	52	52	54	51	51	52	48	47	49	48	49	50	51	50	48	51	52	52		51

Table 11.--Suspended sediment in streams at gaging stations

[Methods of analysis: V, visual accumulation tube; S, sieve; P, pipet; W, in distilled water; C, chemically dispersed.]

Date	Time	Water temperature (°F)	Discharge (cfs)	Suspended sediment: Mean concentration (ppm)	Suspended sediment: Discharge (tons per day)	Percent finer than indicated size, in millimeters: 0.002	0.004	0.008	0.016	0.031	0.062	0.125	0.250	0.500	1.000	2.000	Methods of analysis
1700 B. Mill Creek near Salt Lake City, Utah																	
June 16, 1964	1100	46	34	146	13												
1715. Parleys Creek about three-quarters of a mile above Suicide Rock gage (1716)																	
Apr. 30, 1964	1205	44	15	174	7.0												
June 15	1315	47	19	4	.2												
1720. Emigration Creek near Salt Lake City, Utah																	
June 16, 1964	1230	52	14	178	6.7												
Aug. 19	1500	56	3.2	5	0												
1722. Red Butte Creek at Fort Douglas, near Salt Lake City, Utah																	
Apr. 23, 1964	1200	44	4.7	4	0												
June 15	1545	47	7.6	0	0												
1726.5. Kennecott drain near Magna, Utah																	
Mar. 19, 1964	1030	39	165	2,190	976												
	1050	39	165			30	47		91		97	98	99	100			VPWC
	1525	43	156			24	41		91		98	99	100				VPWC
	1550	43	156	2,580	1,090	30	50		96		99	100					VPWC
Mar. 20	1505	45	112			26	45		92		99	99	100				VPWC
	1730	47	122			28	45		96		100						SPWC
Mar. 21	1055	43	82			30	50		98		100						SPWC
24	1550	46	107			32	46		95		100						SPWC
26	1410	41	118	2,920	930	28	43		95		100						SPWC
Apr. 18	1055	--	65	134	24												

Table 12.--Records of selected wells

Well number: See text for description of numbering system.
Casing: Finish - F, gravel pack with perforations; O, open end; P, perforated, upper and lower limits of perforations given in feet below the land surface if known and questioned (?) if extent of perforation is unknown; S, screen, length of screen given in feet if known.
Altitude of land-surface datum: Surveyed altitudes are given in feet and tenths; altitudes interpolated from topographic maps are given in feet.
Water level: Measured distances to water levels are given in feet and tenths; reported and estimated distances are given in feet.
Method of lift: A, airlift; C, centrifugal pump; F, flowing well; J, jet pump; N, no pump and well does not flow; P, piston pump; S, submersible turbine pump; T, turbine pump.
Yield (gpm, gallons per minute): F, natural flow; P, pumped; e, estimated; m, measured; r, reported.
Principal use of water or well in 1964: A, air conditioning and heating, C, commercial; H, domestic; I, irrigation; N, industrial; O, water-level observation; P, public supply; S, stock; T, institution; U, unused.
Other data available: C, chemical analysis (table 16); D, driller's log (table 14); G, sample log (table 14); J, gamma-ray log, and temperature and fluid resistivity logs available for most of these wells (these logs are available in files of the U.S. Geol. Survey); W, water-level measurements (table 13).

Well number	Owner or user	Year drilled	Depth of well (feet)	Casing			Altitude of land-surface datum (feet)	Water level		Method of lift	Yield		Use of water	Temperature (°F)	Other data available
				Diameter (inches)	Depth (feet)	Finish		Above (+) or below (-) land-surface datum (feet)	Date of measurement		Rate (gpm)	Date of measurement			
(A-1-1)															
31cca-1	Salt Lake City	1934	186	16	186	P	4,374.5	-151.1	1-11-64	N	-	-	O	-	W.
(B-1-1)															
33cda-1	do	1908	650	2	-	-	4,220.7	+8.0	2-11-64	F	-	-	O	-	W.
36abc-1	American Oil Co.	1920	-	2	-	-	4,237.9	-15.6	2-11-64	N	-	-	O	-	W.
36acb-1	22nd Ward, Latter-day Saints Church	-	-	4	-	-	4,242	-20.3	5-25-64	N	-	-	O	-	W.
(B-1-2)															
2dac-2	R. L. Irvine	1945	541	3	540	O	4,212	+23.7	2-26-64	F	-	-	H	79	C,D.
3bdc-1	do	1951	540	10	540	O	4,220	-	-	F	5Fe	2-26-64	S	-	C.
8abd-1	C. F. Gillmore	1920	300	2	300	O	4,210	+10.0	7-14-64	F	5.0Fm	7-14-64	S	66	C.
15bcb-2	do	1920	300	2	300	O	4,213.0	+7.9	2-26-64	F	5.2Fm	2-26-64	S	66	C.
33cca-1	Hogle Investment Co.	1943	450	2	449	O	4,217	+10.0	2-26-64	F	20Fm	2-26-64	S	66	D,J.
36baa-1	E. J. Jeremy	-	464	2	-	-	4,223.6	+10.8	2-26-64	F	4.3Fm	7- 7-64	S	81	C,W.
(C-1-1)															
9aab-1	R. Skola	1914	350	2	-	-	4,223.5	+4.8	2-26-64	F	-	-	H	56	W.
15bdd-11	Souvall Brothers Wholesalers and Distributors	1940	445	2	-	-	4,230	+10.6	2-20-64	F	-	-	O	56	W.
18ddd-2	S. A. Sudbury	1912	577	2	-	-	4,239.2	+6.8	2- 1-64	F	1.8Fm	7- 7-64	O	70	C,W.
19caa-1	Kennecott Copper Corp.	1962	1,200	12	1,200	P452-838	4,242	+5.3	7-14-64	F	-	-	U	76	C,D,J.W.
25ccb-2	Western Auto Wrecking Co.	1955	345	2	0	345	4,240	+14.8	3-14-64	F	8.0Fm	9- 3-64	C	56	W.
29daa-3	Granger-Hunter Improvement Dist.	1962	910	16	871	P563-863	4,250	(+)	-	T	200Pr	1-23-62	P	-	D.
33abb-1	W. D. Hill	1925	425	2	425	O	4,250.4	+9.1	2-26-64	F	2.6Fm	7- 7-64	H	59	C,W.
33ddd-1	Granger-Hunter Improvement Dist.	1960	886	16	886	P638-886	4,273	(+)	-	T	791Pr	8- 60	P	-	D.
35aaa-4	F. E. Hitchens	1907	381	2	381	O	4,249.2	+9.3	3-14-64	F	1.1Fm	7- 8-64	H	55	C.
35caa-2	Salt Lake County Water Conservancy Dist.	1958	750	20	750	P641-745	4,254.4	-17.5	2-25-64	T	390Pm	10-14-64	P	73	C.
(C-1-2)															
17adc-1	Kennecott Copper Corp.	1960	854	20	847	P401-843	4,222	(+)	-	T	350Fr	12-15-60	N	-	D.
17ddc-1	do	1962	1,000	20	1,000	P571-998	4,225	(+)	-	T	2,200Pr	3- 62	N	-	D.
21acc-5	do	1960	420	16	414	P368-412	4,227	(+)	-	T	400Fr	12-15-60	N	-	D.
22bdd-4	do	1885	35	1	-	-	4,233.4	+5.9	4-13-64	F	-	-	O	56	W.
22cbb-1	F. E. Fowler	-	110	2	-	-	4,229.7	+8.2	2-26-64	F	8.6Fm	9-3-64	S	60	W.
24dba-1	Kennecott Copper Corp.	1964	840	20	829	P307-608	4,250	+6.6	9-16-64	N	3,120Pm	8-19-64	U	73	C,D,J.
25aad-1	do	1964	1,000	20	1,000	P300-968	4,250	(+)	-	N	340Fm	9-16-64	N	59	C,D,J.
(C-1-3)															
15bca-2	do	1964	886	20	886	P546-845	4,220	-3.3	9- 9-64	T	3,550Pm	8-15-64	N	82	C,D,J.
(C-2-1)															
1dbb-3	Salt Lake County Water Conservancy Dist.	1960	772	16	747	P615-738	4,252.3	-10.0	2-13-64	T	560Pm	8- 7-64	P	56	C.
9dcc-1	Namba and Sons	1961	376	16	376	P120-188	4,400	-	-	T	-	-	I	-	D.
12bac-1	K. Waki	1932	157	4	157	-	4,256.6	+4.8	2-28-64	F	24Fm	7- 8-64	I	55	C,W.
24adc-1	J. D. Blain	1895	160	3	-	-	4,344.0	-31.0	2-28-64	N	-	-	U	-	W.
31bdd-1	Steadman Ditch Assoc.	1962	530	16	510	P 84-505	4,640	-41	3-16-62	S	130Pm	7-16-64	I	56	C.
(C-3-1)															
6cac-1	W. Harkness	1960	90	4	90	-	4,706	-76.3	11-20-64	S	-	-	H	-	W.
9bcc-1	J. G. Schmidt	1961	350	16	346	P218-344	4,569	-	-	T	3,135Pr	4- 61	I	67	D.
9ccc-1	M. and J. Tateoka	1955	472	12	472	P190-471	4,593	-	-	T	1,580Pm	7-16-64	I	57	C
12ccb-1	A. W. Harrison	1900	118(?)	3	-	-	4,321.5	+24.6	3-14-64	F	8.6Fm	9- 2-64	S	69	C,W.
15dda-1	J. Jensen	-	-	3	-	-	4,394.0	+10.4	4-13-64	F	2.9Fm	9- 3-64	U	54	C,W.
20ddb-1	F. K. Akita	1963	346	12	346	P170-320	4,570	-146.0	2-27-64	T	880Pm	7- 8-64	I	56	D,W.
21daa-1	G. Murphy	1932	240	-	-	-	4,474.2	-76.7	5- 8-62	N	-	-	U	-	W.
25aba-1	Jenson Brothers	1963	269	12	269	P170-269	4,455	-	-	T	-	-	I	-	D.

Table 12.--Records of selected wells--Continued

Well number	Owner or user	Year drilled	Depth of well (feet)	Casing: Diameter (inches)	Casing: Depth (feet)	Casing: Finish	Altitude of land-surface datum (feet)	Water level: Above (+) or below (-) land-surface datum (feet)	Water level: Date of measurement	Method of lift	Yield: Rate (gpm)	Yield: Date of measurement	Use of water	Temperature (°F)	Other data available
(C-3-1)															
27cdd-1	J. R. Dansie	1921	220	3	220	O	4,434.2	-16.8	2-27-64	N	-	-	U	-	J,W.
28bac-1	T. M. Tateoka	1963	348	12	348	P160-336	4,522	-98.8	2-24-64	T	1,400Pr	3-22-63	I	-	W.
29bbc-1	I. E. Freeman	1914	87	6	87	O	4,644.9	-48.1	2-24-64	N	-	-	U	-	J,W.
30aba-1	Provo Reservoir Water Users Co.	1956	700	20	536	P80-500	4,683	-79.4	2-24-64	T	630Pm	7-16-64	I	57	C,W.
30acd-1	do	1957	420	16	384	P50-384	4,687	-30.0	2-27-64	T	400Pm	7-16-64	I	54	C,W.
31aaa-1	Town of Riverton	1963	700	12	700	P140-604	4,658	-	-	T	750Pr	3- 63	P	54	D,J.
31cbb-1	Hamilton Brothers	1959	400	16	400	P98-(?)	4,765	-99.6	2-27-64	T	1,220Pm	9- 3-64	I	57	C,W.
31ccb-1	do	1959	480	16	445	P100-(?)	4,765	-105.7	2-27-64	T	860Pm	9- 3-64	I	56	C,W.
31dcd-3	do	1954	625	16	625	P138-615	4,692	-127.8	2-27-64	T	578Pm	8-12-58	I	55	W.
32cad-2	Murray Stake, Latter-day Saints Church	1921	218	4	218	-	4,599.9	-141.4	2-27-64	N	-	-	U	54	J,W.
32cdc-1	Town of Riverton	1954	670	12	-	P530-633	4,612	-149.5	2-27-64	T	-	-	P	-	W.
32dcc-1	E. L. Maynard	1954	447	12	447	P155-447	4,598	-145.7	2-24-64	T	670Pm	7- 8-64	I	55	C,W.
33aab-1	J. H. Hansen	1960	219	12	219	P95-212	4,493	-69.3	9-2-64	T	-	-	I	-	W.
(C-3-2)															
4adb-1	Kennecott Copper Corp.	1944	1,200	20	-	-	5,130	-152.3	2-25-64	N	-	-	O	-	J,W.
12dbc-1	Salt Lake County	1964	360	4	280	P200-280	4,862	-	-	S	-	-	N	-	D.
14bcd-1	Kennecott Copper Corp.	1962	1,000	12	1,000	P430 645	5,006.3	-324.4	2-25-64	N	-	-	U	-	W
26ccc-1	J. S. Butterfield	1954	300	12	300	P200 295	4,990	-200	12- 54	T	450Pm	7-16-64	I	54	C.
28dbb-1	U.S. Smelting, Refining, and Mining Co.	1937	230	8	-	-	5,260	-142.6	2-27-64	N	-	-	O	-	J,W.
33cac-1	J. H. Dansie	1961	350	12	350	P80-350	5,262	-28.2	2-27-64	T	440Pm	7-9-63	I	58	C,D,W.
35abc-1	H. K. Bodell	1961	391	12	391	P250-380	4,928	-196	6-25-61	T	700Pm	7- 8-64	I	56	C.
35bdc-1	R. I. Bowles	1954	269	8	269	P230-265	4,980	-158	4- 54	T	340Pm	7-16-64	I	54	C
(C-4-1)															
5abb-1	East Mill Creek Stake, Latter-day Saints Church	1961	330	16	293	P175-285	4,598	-149.2	2-27-64	T	1,150Pm	7- 8-64	I	54	C.
5acb-1	E. L. Maynard	1963	345	12	328	P180 320	4,597	-156.5	2-27-64	T	1,110Pm	8-27-63	I	55	W.
8abc-1	L. R. Hatch	1954	500	12	500	P190-500	4,662	-123.6	5- 3-63	T	-	-	I	-	W.
14abd-1	T. A. Stewart	1963	218	16	196	P65-200	4,502	-81.9	2-28-64	N	-	-	O	-	D,J,W.
15bdc-1	W. M. Webb	1961	505	16	505	P198-425	4,590	-164.3	2-28-64	T	320Pm	8- 6-64	I	64	C,D.
15bdc-2	do	1963	607	12	607	P180 522	4,590	-163.5	2-28-64	T	560Pm	8- 6-64	I	64	C,D.
22dbd-1	K. A. Schroeder	1963	188	6	188	P102-188	4,600	-72.4	2-29-64	S	-	-	H	-	D,W.
23dbd-1	U.S. Geological Survey	1964	152	6	150	P74-119	4,494.7	-49.5	2-25-64	N	-	-	O	57	C,G,J,W.
(D-1-1)															
4cac-1	Salt Lake City	1934	385	16	384	P225-384	4,670.6	-212.4	2-14-64	N	-	-	O	-	J,W.
5aaa-1	do	1934	440	16	437	P134-437	4,583.6	-128.4	2-14-64	S	-	-	P	-	W.
6cad-1	Salt Lake City and Salt Lake County	1963	581	12	581	P140-477	4,261	-	-	-	-	-	A	-	G.
7abd-6	Salt Lake City	1890	130	2	130	-	4,258.9	+6.3	7- 9-64	F	2.1Fm	7- 9-64	P	56	C.
10cac-1	do	1934	240	16	238	P156-238	4,694.9	-146.3	2-14-64	N	-	-	O	-	W.
19cdb-17	M. Thompson	1922	500	2	500	-	4,251.5	+12.0	2-26-64	N	1.4Fm	7- 8-64	H	58	C,W.
21acc-2	Metropolitan Water Dist.	1962	576	20	576	P175-560	4,445	-	-	T	-	-	U	-	D.
23ccc-1	Salt Lake City	1934	534	8	406	O	4,595	-76.7	7-23-63	N	-	-	O	-	W.
26ddc-4	County Water System	1953	600	10	257	P190-257	4,880	-253.7	4-25-64	N	-	-	O	-	J,W.
30aca-23	C. R. Coles	1946	400	3	400	P395-400	4,561	+8.8	2-26-64	C	-	-	H	54	W.
30cda-10	Salt Lake County Water Conservancy Dist.	1956	855	20	850	P611-850	4,263	-35.7	2-25-64	T	240Pr	10- 56	P	-	W.
35cdc-1	County Water System	1958	530	20	530	P368-530	4,730	-337	8-20-58	T	800Pr	8-20-58	P	-	D.

Table 12.--Records of selected wells--Continued

Well number	Owner or user	Year drilled	Depth of well (feet)	Casing			Altitude of land-surface datum (feet)	Water level		Method of lift	Yield		Use of water	Temperature (°F)	Other data available
				Diameter (inches)	Depth (feet)	Finish		Above (+) or below (-) land-surface datum (feet)	Date of measurement		Rate (gpm)	Date of measurement			
(D-2-1)															
3ada-2	County Water System	1961	470	16	470	P310-467	4,652	-248.5	4- 7-64	S	1,530Pr	5- 61	P	-	W.
4dbd-4	A. C. Robbins	-	118	3	-	-	4,332.4	-24.2	5-15-64	N	-	-	O	-	W.
5aaa-1		1915	390	3	390	-	4,322.1	-11.9	3- 9-64	-	-	-	O	-	W.
5aba-2	N. Nelson	1950	247	2	247	O	4,310	+5.4	6- 2-64	F	-	-	H	51	W.
6dbb-10	Salt Lake County Water Conservancy Dist.	1960	865	16	865	P518-852	4,262.2	-29.0	2-13-64	T	250Pm	10- 8-64	P	63	C.
7cbd-4	City of Murray	1916	217	2	217	O	4,291.7	+13.1	2-28-64	F	1.5Fm	7- 8-64	P	58	C,W.
7dda-1	L. D. Wayman	1929	460	3	460	O	4,323.1	+13.3	4-28-64	C	-	-	H	53	W.
8ccd-19	Salt Lake City	1929	440	3	440	O	4,317.5	+20.5	2-28-64	F	-	-	P	53	C,W.
16dbc-1	Metropolitan Water Dist.	1961	-	-	-	P	4,400	-42.8	2- 5-64	T	-	-	P	-	W.
21dbc-1	do	1961	740	20	740	P210-728	4,453	-85.8	2-14-64	T	2,500Pr	9- 61	P	-	D,W.
22daa-1	Utah Sand and Gravel Co.	1964	455	16	453	P256-451	4,620	-251	12- 5-64	T	1,980Pr	8- 64	N	-	D,J.
28abc-2	D. Nunley	1949	220	8	220	P205-218	4,530	-163.1	2-28-64	N	-	-	O	55	J,W.
28ccc-3	Salt Lake County Water Conservancy Dist.	1956	691	12	691	P515-678	4,560	-196.6	2-25-64	S	1,000Pr	8-22-56	P	53	C,W.
28ddb-1	G. B. Austin	1917	42	36	-	O	4,555	-12.8	2-14-64	P	-	-	-	-	W.
29cdd-1	Salt Lake County Water Conservancy Dist.	1960	900	20	900	P470-896	4,497.1	-139.1	2-25-64	S	900Pm	9-15-64	P	56	C.
30dda-1	do	1960	1,002	20	987	P560-990	4,456.1	-106.3	2-25-64	T	1,575Pm	10- 7-64	P	57	C.
32bbb-1	J. L. Johnson	1953	285	6	285	P140-285	4,475	-104.7	2-25-64	T	35Pm	5-25-64	I	-	W.
32caa-1	Salt Lake County Water Conservancy Dist.	1960	881	20	881	P475-877	4,516.9	-161.2	2-17-64	S	825Pm	10-14-64	P	58	C.
32cbb-2	do	1960	1,007	20	1,007	P475-996	4,488.1	-137.8	2-25-64	S	900Pm	9-15-64	P	64	C.
33abd-2	do	1960	904	20	904	P405-904	4,580	-215.9	2-25-64	S	2,085Pr	64	P	52	C.
33add-2	West Side Water Co.	1946	275	8	275	P242-274	4,640	-261.2	5-15-64	N	-	-	O	-	W.
34dba-1	Salt Lake County Water Conservancy Dist.	1958	706	16	689	P275-680	4,666	-297.2	2-25-64	T	2,950Pr	4-16-58	P	53	C.
(D-3-1)															
2ccc-1	Metropolitan Water Dist.	1955	1,007	24	1,007	P	5,000	-536.6	2-25-64	N	-	-	O	-	J,W.
8aba-1	Salt Lake County Water Conservancy Dist.	1954	575	16	575	P243-531	4,615	-251.8	2-25-64	S	425Pr	5- 54	P	54	C.
12cab-1	Cities of Sandy and Midvale	1962	190	16	171	P65-168	5,250	-	-	T	2,350Pr	8- 62	P	47	D.
17bcc-1	L. A. Christensen	1953	168	3	168	P164-168	4,540	-135.1	2-28-64	N	-	-	O	-	J,W.
18cba-1	City of Sandy	1959	1,150	16	315	P252-315	4,414	-75.0	7- 8-64	N	1,000Pr	1-14-59	O	-	D,W.
29cbc-1	Draper Irrigation Co.	1964	277	12	277	P173-275	4,465	-58.4	12- 8-64	N	350Pr	12- 64	O	78	C,D,J,W.
(D-4-1)															
6bbc-1	D. Lloyd	1963	190	6	190	P150-190	4,426	-55.1	2-28-64	S	-	-	S	-	D,W.

Table 13.--Water levels in selected observation wells

Water levels in feet below land-surface datum are designated by a minus (-) sign immediately before the first entry in each column 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 Office of the Utah State Engineer, a dagger (†) immediately after a measurement indicates that the measurement was made by the Salt Lake City Water Department; unless stated otherwise, all other measurements were made by the U.S. Geological Survey. Records available are those measurements that have been published in the following Water-Supply Papers or are reported below.

Year	Number	Year	Number	Year	Number	Year	Number	Year	Number	Year	Number	Year	Number	Year	Number
1936	817	1940	910	1943	990	1946	1075	1949	1029	1951	1195	1954	1325		
1937	840	1941	940	1944	1020	1947	1100	1949	1160	1952	1225	1955	1408		
1938	845	1942	948	1945	1027	1948	1130	1950	1169	1953	1269	1960	1760		
1939	886														

In the day column, end of the month is designated by "eom."

(A-1-1)31cca-1. Records available 1934-64

July	16, 1935	-116.2†	May	3, 1938	-112.5†	Feb.	3, 1943 -115.4†
Sept.	28	126.1†		23	111.8†	Mar.	15 114.6†
Oct.	30	123.0†	June	1	111.4†	Apr.	19 113.8†
Nov.	6	122.7†		27	111.6†	May	12 114.2†
	27	122.0†	July	5	112.0†		27 113.0†
Dec.	14	121.2†		11	112.1†	June	26 112.8†
	27	121.0†	Aug.	9	114.3†	Aug.	20 125.0†
Jan.	3, 1936	121.0†		29	114.8†	Sept.	10 131.1†
	29	120.4†	Sept.	12	115.1†	Oct.	4 134.5†
Feb.	28	120.0†		26	115.5†		22 129.1†
Mar.	5	119.9†	Oct.	4	115.6†	Nov.	15 126.2†
	19	119.7†		24	116.0†	Dec.	1 124.9†
	27	119.5†	Nov.	7	116.2†		30 123.2†
Apr.	3	119.4†		21	116.0†	Jan.	5, 1944 123.0†
	10	119.4†	Dec.	19	116.3†		19 122.6†
	24	118.9†	Jan.	3, 1939	116.4†	Feb.	1 122.0†
	30	118.7†		25	116.8†		26 121.4†
May	9	118.2†	Feb.	14	116.9†	Mar.	4 121.8†
	14	117.8†	Mar.	14	117.1†		11 122.6†
	15	117.6†		29	117.0†		14 126.4†
	21	118.3†	Apr.	17	117.0†		23 124.6†
	28	117.4†	May	3	116.9†		31 123.2†
June	9	116.6†		24	117.0†	Apr.	8 122.4†
	19	116.1†	June	28	117.4†		27 121.4†
July	3	115.7†	Sept.	11	123.8†	May	6 121.2†
	17	115.7†		27	122.6†		31 124.9†
	28	115.9†	Oct.	5	122.4†	June	3 124.2†
Aug.	6	116.1†		16	122.2†		29 121.6†
	21	116.5†	Dec.	12	120.8†	July	6 121.6†
	28	116.7†		22	120.4†		28 122.9†
Sept.	10	117.0†	Jan.	10, 1940	120.0†	Aug.	12 132.0†
	29	117.5†		30	119.8†		29 137.9†
Oct.	8	117.6†	Feb.	29	119.4†	Sept.	5 139.4†
	31	117.8†	Mar.	15	119.2†		23 140.4†
Nov.	9	117.7†	Apr.	19	118.6†	Oct.	2 141.2†
	23	117.6†	May	2	118.4†		26 134.2†
Dec.	3	117.4†		28	117.6†	Nov.	4 133.3†
	17	117.4†	June	6	117.5†		24 130.4†
Jan.	15, 1937	116.8†		28	117.7†	Dec.	2 129.6†
	22	116.5†	Sept.	5	129.0†		16 129.0†
Feb.	2	116.0†		27	125.7†	Jan.	23, 1945 126.0†
	16	115.6†	Oct.	29	124.7†	Feb.	17 124.8†
	23	115.4†	Nov.	29	123.9†	Mar.	1 124.3†
Mar.	2	115.4†	Dec.	20	123.2†	Apr.	3 123.4†
	16	115.0†	Jan.	9, 1941	122.7†		10 126.4†
	23	114.9†	Feb.	28	121.4†	May	17 125.1†
	30	114.8†	Mar.	29	120.8†	June	9 123.5†
Apr.	14	114.5†	Apr.	21	120.4†	July	11 122.4†
	27	114.0†	May	1	120.2†	Aug.	22 129.4†
May	11	114.1†		23	119.4†	Sept.	17 138.9†
	25	113.4†	June	26	118.1†	Oct.	16 146.7†
June	8	112.4†	July	1	118.2†	Dec.	3 126.6†
	22	112.0†		10	118.1†	Feb.	18, 1946 122.4†
	29	112.1†	Aug.	27	121.4†	Apr.	4 122.4†
July	6	112.2†	Sept.	2	120.6†	May	31 125.6†
	19	112.5†		24	120.4†	July	9 125.4†
	27	113.1†	Oct.	31	120.0†		25 129.8†
Aug.	2	113.2†	Nov.	26	120.0†	Sept.	6 152.2†
	17	113.7†	Dec.	10	119.1†	Oct.	10 152.7†
	31	114.1†		27	118.9†	Nov.	29 135.0†
Sept.	14	114.5†	Jan.	9, 1942	118.8†	Feb.	5, 1947 130.2†
	28	115.2†		23	118.6†	Mar.	20 128.2†
Oct.	13	115.4†	Feb.	25	118.2†	May	15 130.6†
	26	115.3†	Mar.	31	117.7†	June	3 127.3†
Nov.	8	115.2†	Apr.	7	117.4†		24 125.4†
	29	115.0†		27	117.2†	Aug.	1 134.6†
Dec.	17	114.8†	May	26	115.7†		24 134.4†
	27	114.8†	June	2	115.5†	Oct.	28 129.1†
Jan.	6, 1938	114.6†		23	114.0†	Dec.	1 135.9†
	31	114.4†	July	31	115.6†	Jan.	6, 1948 132.7†
Feb.	14	114.3†	Sept.	30	118.4†	Feb.	26 128.6†
	28	114.2†	Oct.	30	117.1†	Apr.	27 126.2†
Mar.	8	114.2†	Nov.	28	116.6†	May	18 126.6†
	29	113.8†	Dec.	11	116.4†	June	8 130.6†
Apr.	11	113.3†	Jan.	7, 1943	116.0†	July	6 125.5†
	26	112.8†					

(A-1-1)31cca-1 - Continued. Recorder operated by Salt Lake City during Aug. 5, 1948 to July 22, 1955. Water level at noon on date, in feet below land surface from recorder graph.

1948

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5								139.8	148.3	151.8	141.8	137.5
10								140.3	149.6	148.8	140.8	137.0
15								142.5	150.6	146.8	140.6	136.5

(A-1-1)31cca-1 1948 - Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
20								144.0	150.3	145.2	140.3	135.8
25								145.0	151.2	-	138.8	135.6
eom								146.8	151.6	142.6	138.2	134.9
1949												
5	134.5	139.7	142.7	136.4	133.8	-	129.0	139.2	149.0	154.0	143.8	138.9
10	133.9	141.9	140.9	135.8	132.8	-	128.8	140.5	-	152.1	142.6	138.2
15	133.4	143.8	139.6	135.2	133.3	130.6	130.0	143.2	150.9	149.5	141.9	137.8
20	132.8	145.5	138.6	134.5	-	129.9	131.9	145.3	152.5	147.8	141.1	137.1
25	-	147.1	137.8	133.9	131.5	129.5	133.5	144.8	153.5	146.4	140.3	136.7
eom	136.9	145.4	137.0	135.2	-	129.5	136.1	147.2	154.0	-	139.6	136.0
1950												
5	135.7	133.2	131.4	129.4	128.2	134.6	137.6	-	150.2	141.6	-	133.4
10	135.2	132.8	131.0	129.2	127.8	132.9	136.3	141.5	-	140.9	136.8	-
15	134.8	132.6	130.8	128.9	127.5	133.4	-	143.7	148.0	140.0	136.1	132.2
20	134.4	132.2	130.6	129.2	130.4	134.3	137.3	-	145.8	139.3	135.3	131.8
25	134.0	132.0	-	128.5	134.0	134.7	137.9	147.2	144.2	138.6	134.7	-
eom	133.5	131.8	129.8	128.4	136.6	137.4	-	-	142.8	138.5	133.9	-
1951												
5	130.0	127.4	-	124.4	123.2	120.8	124.2	132.4	137.3	143.6	136.4	133.2
10	129.5	127.2	125.7	124.3	123.9	120.6	126.2	130.7	138.7	142.6	135.6	-
15	129.0	126.8	125.4	125.0	123.5	-	129.8	133.0	141.9	-	135.2	-
20	128.8	126.5	125.2	124.2	123.1	-	131.8	134.8	143.5	-	134.5	132.2
25	128.4	126.2	125.0	124.0	121.8	120.1	-	133.3	145.0	138.1	134.1	131.7
eom	127.9	126.1	124.6	123.5	121.2	120.1	132.9	135.2	146.4	137.1	-	131.6
1952												
5	-	129.9	128.2	129.8	132.6	135.4	139.6	-	-	-	158.1	-
10	132.1	129.6	127.8	128.8	134.0	138.4	-	-	-	-	-	145.0
15	131.2	129.2	127.7	128.4	135.4	139.0	141.0	-	-	155.3	-	143.6
20	130.7	128.9	127.2	-	133.6	139.9	-	-	-	-	-	-
25	130.4	128.8	-	127.4	131.8	139.2	-	146.2	-	-	-	-
eom	130.2	128.4	129.2	131.4	132.7	136.8	142.6	-	-	-	-	-
1953												
5	-	-	133.0	130.6	128.1	129.0	-	138.7	-	148.9	146.2	-
10	-	-	132.5	130.2	130.2	129.4	137.1	139.5	150.1	146.7	143.6	145.8
15	-	-	132.3	-	130.6	133.6	137.4	141.5	151.2	-	142.4	147.6
20	-	-	131.5	129.2	129.3	135.0	137.8	143.4	152.4	149.7	142.0	149.1
25	-	133.8	131.3	128.9	128.4	-	138.9	-	-	-	141.2	146.6
eom	-	133.5	131.0	128.4	127.8	137.4	139.0	147.4	151.6	-	140.2	147.3
1954												
5	146.3	-	138.1	134.6	135.0	142.0	144.9	152.5	155.6	-	154.6	149.1
10	-	141.6	137.2	134.2	140.2	139.8	147.0	153.4	-	158.1	154.6	147.3
15	-	140.6	136.8	133.6	140.2	140.7	149.2	154.9	158.8	159.0	153.4	146.8
20	148.6	139.9	136.4	133.2	142.0	142.3	149.4	156.0	159.4	160.4	153.1	146.3
25	-	139.1	135.8	133.0	-	144.8	149.8	156.6	144.9	159.2	-	145.5
eom	145.1	138.6	135.0	133.9	140.4	143.6	152.1	-	157.9	-	-	145.0
1955												
5	144.4	141.0	139.5	136.0	133.1	132.2	136.5					
10	143.8	140.7	-	135.4	132.8	132.0	-					
15	143.2	140.2	-	135.0	133.1	131.8	143.3					
20	142.6	140.6	-	134.6	132.9	131.8						
25	142.2	140.2	136.8	134.3	132.8	133.4						
eom	141.6	139.9	136.5	134.0	132.5	134.7						

(A-1-1)31cca-1 - Continued

Aug.	1, 1955	-148.4†	Feb.	28, 1956	-144.1†	Apr.	8, 1959 -130.6†
	10	148.6†	Mar.	27	136.8†	June	10 133.6†
	17	157.4†	Apr.	23	141.2†	Aug.	5 146.6†
	24	156.8†	May	17	136.6†	Sept.	23 151.8†
	31	158.6†	June	6	133.2†	Feb.	24, 1960 136.6†
Sept.	7	159.0†	July	17	146.0†	Aug.	26 153.8†
	14	158.4†	Sept.	28	158.8†	Oct.	19 154.4†
	21	157.0†	Nov.	28	155.2†	Dec.	14 146.6†
Oct.	5	157.8†	Dec.	31	147.8†	Mar.	7, 1961 157.4†
	12	158.0†	Mar.	24, 1957	142.3†		22 151.6†
	19	159.2†	May	7	138.5†	Apr.	10 150.2†
	26	157.2†	June	18	136.4†		20 151.5†
Nov.	2	156.4†	Aug.	2	141.6†	May	4 150.8†
	9	155.2†	Sept.	3	144.8†		15 138.7†
	22	151.8†		19	150.6†	June	1 145.7†
	30	153.8†	Nov.	7	144.6†		12 149.3†
Dec.	2	147.2†	Feb.	19, 1958	132.9†		22 151.7†
	7	147.6†	Apr.	10	130.2†		29 153.9†
	14	148.0†	June	19	127.2†	July	6 154.7†
	28	146.8†	Aug.	21	139.8†		13 156.8†
Jan.	11, 1956	145.8†	Oct.	8	148.8†		18 166.0†
	18	144.4†	Dec.	5	141.2†		26 160.0†
Feb.	1	144.1†	Feb.	19, 1959	134.4†	Aug.	3 161.1†

Table 13.--Water levels in selected observation wells - Continued

(A-1-1)31cca-1 - Continued

Aug.	9, 1961	-171.1†	May	18, 1962	-143.3†	July	18, 1963	-156.3†
	17	164.4†	June	4	139.0†	Aug.	14	158.9†
	23	163.7†	July	3	141.6†	Sept.	10	161.6†
	30	176.4†	Aug.	13	151.6†	Oct.	17	154.6†
Sept.	6	163.7†		29	156.9†	Nov.	13	152.1†
	20	161.9†	Sept.	13	166.9†	Dec.	9	150.4†
	28	159.2†		28	159.3†	Jan.	11, 1964	151.1†
Oct.	2	158.0†	Nov.	8	151.8†	Mar.	31	2/130.9†
	18	155.4†	Dec.	4	148.0†	May	25	146.4†
	26	154.2†	Jan.	2, 1963	146.4†	June	26	138.0†
Nov.	5	152.1†		29	144.5†	July	31	144.9†
Dec.	12	149.5†	Mar.	5	142.6†	Aug.	18	151.4†
Jan.	4, 1962	147.7†		29	141.4†	Sept.	15	158.6†
Feb.	7	145.2†	Apr.	23	140.4†	Oct.	15	159.5†
	26	144.0†	May	28	142.7†	Nov.	24	151.6†
Apr.	3	142.2†	June	26	137.9†	Dec.	2	150.4†
	30	140.8†						

(B-1-1)33cda-1. Records available 1935-64

Feb.	26, 1951	+14.2†	Sept.	3, 1957	+12.5†	Jan.	4, 1962	+8.5†
May	22	12.8†	Nov.	7	12.7†	Apr.	3	8.6†
Aug.	11	13.0†	Feb.	19, 1958	13.1†		30	8.6†
Oct.	4	12.9†	Apr.	10	13.3†	May	23	8.6†
Mar.	14, 1952	14.0†	June	19	12.7†	June	4	8.5†
May	27	13.9†	Aug.	21	11.9†	July	10	8.2†
Sept.	25	13.1†	Oct.	8	12.1†	Aug.	13	8.1†
Nov.	21	12.6†	Dec.	17	12.2†		29	8.0†
Dec.	16	13.1†	Feb.	19, 1959	12.7†	Sept.	28	8.4†
Mar.	5, 1953	12.7†	Apr.	21	12.7†	Nov.	8	8.5†
June	9	12.7†	May	29	13.3†	Dec.	4	8.7†
July	13	13.1†	Aug.	5	11.9†	Jan.	2, 1963	8.7†
Aug.	18	13.3†	Sept.	30	11.6†	Mar.	5	8.7†
Sept.	28	13.4†	Aug.	26, 1960	9.8†	Apr.	9	9.1†
Dec.	18	13.1†	Oct.	19	9.9†		23	8.2†
Mar.	4, 1954	13.0†	Dec.	14	10.2†	May	28	9.0†
May	21	12.2†	Mar.	2, 1961	10.0†	June	26	9.0†
July	27	11.6†		22	9.9†	July	18	8.6†
Aug.	25	11.3†	Apr.	10	10.0†	Aug.	14	8.6†
Nov.	12	12.1†		27	9.7†	Sept.	10	8.3†
Feb.	25	12.2†	May	15	9.6†	Oct.	17	8.4†
May	26	12.6†		29	9.8†	Nov.	13	7.4†
July	25	10.7†	June	19	9.4†	Dec.	9	7.5†
Oct.	6	12.0†	July	3	9.1†	Feb.	11, 1964	8.0†
Nov.	22	13.0†		18	8.9†	Mar.	31	7.7†
Feb.	28, 1956	12.2†	Aug.	2	8.6†	May	25	9.1†
May	8	12.3†		9	8.6†	June	26	8.9†
July	19	11.7†		23	8.5†	July	31	8.5†
Sept.	20	12.4†	Sept.	6	8.6†	Aug.	14	8.0†
Dec.	13	13.1†		20	8.3†	Sept.	18	7.4†
Mar.	24, 1957	12.6†	Oct.	3	8.1†	Oct.	21	7.8†
May	6	12.2†		17	8.3†	Nov.	24	8.2†
June	19	12.5†	Nov.	15	8.3†	Dec.	2	7.5†
July	19	11.8†	Dec.	12	8.4†			

(B-1-1)36abc-1. Records available 1931-64

Feb.	26, 1951	-9.4†	Nov.	7, 1957	-13.2†	Feb.	7, 1962	-16.3†
May	15	8.5†	Feb.	19, 1958	4.0†		26	17.0†
Aug.	9	9.3†	Apr.	10	2.1†	Apr.	3	12.9†
Oct.	4	16.0†	June	19	.5†		30	13.1†
Mar.	14, 1952	9.3†	Aug.	21	5.5†	May	23	12.3†
May	27	9.6†	Oct.	8	12.2†	June	4	12.8†
Sept.	12	19.1†	Dec.	5	10.6†	July	10	13.1†
Nov.	21	21.0†	Feb.	19, 1959	5.9†	Aug.	13	18.7†
Dec.	15	19.0†	Apr.	8	5.1†		29	21.6†
Mar.	6, 1953	13.0†	June	10	6.7†	Sept.	28	24.8†
June	9	9.4†	Aug.	5	15.0†	Nov.	8	22.1†
July	13	15.1†	Sept.	30	21.0†	Dec.	4	20.6†
Aug.	18	14.8†	Feb.	24, 1960	12.0†	Jan.	2, 1963	19.1†
Dec.	18	15.8†	Aug.	26	20.5†		29	18.1†
Mar.	4, 1954	11.7†	Oct.	19	23.3†	Mar.	5	15.7†
May	21	11.8†	Dec.	14	18.5†	Apr.	9	13.2†
July	27	17.5†	Mar.	2, 1961	13.2†		23	11.7†
Aug.	25	20.8†		22	11.6†	May	28	11.7†
Oct.	8	22.7†	Apr.	10	11.4†	June	26	11.8†
Nov.	18	21.5†		27	11.0†	July	18	17.9†
Feb.	25, 1955	11.4†	May	15	10.3†	Aug.	14	26.0†
May	31	7.3†		29	11.4†	Sept.	10	29.1†
June	13	6.8†	June	19	17.2†	Oct.	17	26.7†
July	25	10.8†	July	3	18.4†	Nov.	13	24.7†
Sept.	26	19.2†		18	22.9†	Dec.	9	21.0†
Nov.	11	18.7†	Aug.	2	23.6†	Feb.	11, 1964	15.8†
Feb.	16, 1956	10.3†		9	24.4†	Mar.	31	12.3†
Apr.	23	6.5†		23	25.7†	May	25	13.6†
July	17	9.2†	Sept.	6	26.9†	June	26	14.6†
Sept.	20	20.2†		20	26.6†	July	31	17.6†
Dec.	13	18.4†	Oct.	2	25.5†	Aug.	19	22.4†
Mar.	24, 1957	10.4†		17	24.9†	Sept.	18	24.7†
May	6	8.6†	Nov.	15	22.3†	Oct.	21	24.1†
June	19	7.6†	Dec.	12	20.0†	Nov.	24	21.9†
July	19	6.6†	Jan.	4, 1962	18.4†	Dec.	2	20.7†
Sept.	3	13.2†						

(B-1-1)36acb-1. Records available 1934-64

Oct.	27, 1934	-9.1†	July	1, 1935	-8.9†	Mar.	24, 1936	-9.4†
Nov.	8	8.8†	Aug.	5	10.0†	Apr.	13	9.4†
Dec.	3	8.4†	Sept.	24	12.2†	May	11	10.2†
Jan.	7, 1935	8.3†	Oct.	11	12.1†	June	8	10.3†
Feb.	4	8.0†	Dec.	30	9.5†	July	20	10.5†
Mar.	4	7.8†	Jan.	20, 1936	8.8†	Aug.	3	10.8†
Apr.	16	7.6†	Feb.	10	9.0†	Sept.	2	11.3†
June	3	7.9†	Mar.	3	8.7†	Oct.	6	11.6†

See footnotes at end of table.

(B-1-1)36acb-1 - Continued

Nov.	3, 1936	-10.3†	Apr.	3, 1946	-11.0†	Apr.	1, 1957	-16.6
Dec.	8	9.5†	May	31	15.1†		30	15.7
Jan.	4, 1937	8.5†	July	9	15.0†	May	6	15.2†
Feb.	1	8.3†	July	25	15.7†	June	11	14.1
Mar.	1	7.8†	Sept.	6	21.2†		19	14.2†
Apr.	5	7.3†	Oct.	4	24.0†	July	19	13.4†
May	3	6.4†	Feb.	5, 1947	17.8†	Aug.	23	18.8
July	6	7.4†	Mar.	20	16.0†	Sept.	3	20.0†
Sept.	7	8.3†	May	15	16.6†	Oct.	18	22.0
Oct.	25	6.7†	June	24	16.0†	Nov.	7	20.0†
Dec.	22	6.1†	Aug.	1	18.0†	Dec.	10	16.1
Feb.	1, 1938	6.2†		24	18.6†	Feb.	19, 1958	10.8†
Mar.	23	5.7†	Sept.	27	23.8†	Mar.	12	9.8
May	4	5.5†	Oct.	9	26.3†	Apr.	10	8.9†
June	1	7.6†	Nov.	22	25.0†	June	5	6.8
July	12	9.2†	Jan.	8, 1948	21.7†		19	7.3†
Oct.	4	11.3†	Feb.	26	18.6†	July	25	8.2
Dec.	12	11.6†	Apr.	27	16.6†	Aug.	21	2/12.1†
Feb.	27, 1939	12.0†	May	24	17.1†	Sept.	5	14.4
Apr.	11	12.6†	June	18	18.4†	Oct.	30	21.5
July	7	15.2†	July	29	20.0†	Dec.	5	17.4†
Sept.	5	17.8†	Aug.	12	18.4†		17	16.3
Oct.	3	17.8†	Sept.	20	19.5†	Feb.	19, 1959	12.6†
Dec.	6	14.2†	Dec.	3	21.0†	Mar.	10	12.6
Mar.	6, 1940	13.0†	Mar.	8, 1949	19.5†	Apr.	8	11.8†
May	7	12.8†	May	7	19.4†	May	22	12.2
July	2	15.2†	Aug.	22	25.8†	June	10	13.4†
Aug.	20	18.8†	Dec.	7	25.3†	July	29	20.6
Oct.	1	21.2†	May	29, 1950	20.0†	Aug.	5	21.8†
Dec.	27	17.0†	July	18	21.9†	Oct.	1	26.8
Feb.	9, 1941	16.3†	Aug.	15	21.4†	Feb.	24, 1960	18.1†
May	2	12.9†	Sept.	26	24.5†	May	10	17.1
June	6	14.4†	Dec.	11	19.8†	Aug.	26	27.3†
Aug.	1	16.4†	Feb.	26, 1951	16.2†	Sept.	5	27.6
Sept.	5	18.6†	May	15	14.5†	Oct.	19	27.3†
Nov.	6	16.3†	Aug.	9	16.0†	Dec.	5	26.3
Dec.	22	14.7†	Oct.	4	22.7†		14	25.4
Feb.	5, 1942	13.6†	Mar.	14, 1952	16.0†	Mar.	2, 1961	20.0†
Apr.	1	12.2†	May	27	16.3†		20	18.5
June	10	11.7†	Nov.	21	27.7†	Apr.	10	18.1†
Sept.	3	13.3†	Dec.	15	26.0†		27	17.4†
Dec.	11	11.0†	Mar.	5, 1953	19.8†	May	15	17.1†
Feb.	3, 1943	8.4†	June	9	16.2†	June	1	18.7†
Apr.	14,	5.5†	July	13	18.9†		19	22.1†
June	11	8.1†	Aug.	18	21.5†	July	3	25.3†
Aug.	2	10.4†	Dec.	18	22.5†	Dec.	13	26.6
Sept.	7	15.4†	Mar.	4, 1954	18.6†	Jan.	4, 1962	25.2†
Oct.	4	19.3†	May	21	18.2†	Feb.	7	23.2†
	20	20.8†	July	27	25.3†		26	22.1†
Dec.	22	18.2†	Aug.	26	27.7†	Mar.	15	21.1
Jan.	5, 1944	16.5†	Oct.	8	30.6†	Apr.	30	19.9†
Feb.	7	18.1†	Nov.	18	28.3†	May	23	19.1†
Mar.	3	16.2†	Feb.	25, 1955	18.2†	June	4	19.6†
May	6	15.6†	May	31	14.0†	July	10	19.7†
July	7	14.0†	June	13	13.6†	Aug.	13	26.5†
Aug.	1	15.0†	July	25	17.6†	Dec.	4	27.5†
Aug.	29	20.4†	Sept.	21	26.1†	Jan.	2, 1963	25.0†
Oct.	2	23.9†	Nov.	22	25.6†	Feb.	28	22.7
Dec.	16	18.4†	Feb.	16, 1956	16.1†	Mar.	5	22.5†
Feb.	21, 1945	15.0†	Apr.	23	13.3†	Apr.	9	20.0†
Apr.	3	15.0†	July	19	16.0†	Apr.	23	18.5†
July	11	18.4†	Sept.	20	26.8†	May	28	18.5†
Sept.	17	22.4†	Dec.	13	24.4†	June	26	18.6†
Dec.	4	18.4†	Feb.	20, 1957	18.9	May	25, 1964	20.3†
Feb.	18, 1946	14.1†	Mar.	24	17.1†	June	26	21.4†

(B-1-2)36baa-1. Records available 1931-33, 1941-53, 1955-64

Mar.	20, 1961	1/+11.3	Apr.	13, 1964	1/+10.4	Aug.	19, 1964	1/+10.4
May	23	1/10.8		27	1/10.4		31	1/2/ 8.7
Dec.	13	1/10.6	May	11	1/10.4	Sept.	15	1/10.7
Mar.	14, 1962	1/10.4	June	11	1/ 9.8	Oct.	1	1/10.6
Dec.	11	1/11.1		23	1/ 9.7		27	1/11.0
Feb.	28, 1963	1/10.7	July	7	1/10.5	Nov.	18	1/10.8
Aug.	5	1/10.3		21	1/10.7	Dec.	3	1/11.0
Oct.	23	1/10.6	Aug.	4	1/2/ 9.1		23	1/11.0
Feb.	26, 1964	1/10.8						

(C-1-1)9aab-1. Records available 1956-61, 1964

Dec.	27, 1956	1/+5.7	Mar.	10, 1958	1/+5.0	July	27, 1959	1/+4.8
Feb.	14, 1957	1/6.0	June	2	1/6.2	Sept.	29	1/5.4
Mar.	26	1/4.7	July	21	1/5.3	Jan.	14, 1960	1/5.5
May	1	1/6.1	Aug.	18	1/5.3	May	10	1/5.9
June	3	1/5.8	Oct.	22	1/5.7	Sept.	6	1/4.2
July	18	1/5.4	Dec.	16	1/6.1	Dec.	5	1/4.9
Aug.	21	1/4.6	Mar.	10, 1959	1/6.4	Mar.	20, 1961	1/5.1
Oct.	7	1/5.2	May	21	1/6.1	Feb.	26, 1964	4.8
Dec.	4	1/5.6						

(C-1-1)15bdd-11. Records available 1956-64

Dec.	27, 1956	1/+14.7	June	2, 1958	1/+12.6	May	10, 1960	+13.0
Feb.	14, 1957	1/13.5	July	21	1/11.7	Sept.	6	1/10.9
Mar.	27	1/13.9	Aug.	18	1/11.8	Dec.	5	1/12.4
Apr.	30	1/14.4	Oct.	22	1/12.4	Mar.	20, 1961	1/12.5
June	3	1/13.5	Dec.	16	1/13.4	May	24	1/10.4
July	17	1/12.5	Mar.	10, 1959	1/13.5	Dec.	19	1/10.2
Aug.	21	1/12.1	May	21	1/13.1	Mar.	24, 1962	1/ 9.5
Oct.	7	1/11.6	July	27	1/10.2	Feb.	28, 1963	1/10.5
Dec.	4	1/13.5	Sept.	29	1/10.4	Aug.	5	9.0

(C-1-1)15bdd-11 - Continued. Recorder installed Oct. 22, 1963. Highest water level on date, in feet above land surface from recorder graph.

Table 13.--Water levels in selected observation wells - Continued

(C-1-1)15bdd-11 - Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						1963						
5											10.4	9.8
10											10.2	10.0
15											10.7	-
20											10.3	-
25										9.5	10.2	-
eom										9.6	9.8	-
						1964						
5	10.7	10.5	-	10.6	10.5	10.9	10.1	9.1	8.7	8.3	8.6	8.6
10	10.4	10.7	10.2	10.2	11.1	10.7	10.0	9.0	8.7	8.3	8.5	8.5
15	-	-	10.5	10.8	11.0	10.4	10.0	8.9	8.8	8.6	8.3	8.9
20	10.4	10.6	10.4	10.8	11.0	10.3	9.5	8.7	8.0	8.4	8.6	8.8
25	10.4	-	10.5	10.4	10.6	10.5	9.5	8.8	8.5	8.4	8.7	8.9
eom	10.1	-	10.8	11.2	10.6	10.6	9.2	8.7	8.5	8.2	8.4	9.2

(C-1-1)18ddd-2. Records available 1957-64

Feb.	14, 1957	1/+10.9	July	28, 1959	1/+10.2	Apr.	13, 1964	1/+6.2
Mar.	26	1/10.3	Sept.	29	1/11.2		27	1/6.3
Apr.	30	1/13.3	Jan.	14, 1960	1/11.1	May	11	1/6.3
June	3	1/10.5	Mar.	20, 1961	1/9.1		25	1/6.1
July	18	1/10.1	May	24	1/6.8	June	9	1/6.4
Aug.	21	1/10.7	Dec.	19	1/5.6		23	1/6.2
Oct.	7	1/11.1	Mar.	29, 1962	1/3.2	July	7	1/6.2
Dec.	4	1/11.1	Dec.	11	1/4.2		21	1/6.1
Mar.	10, 1958	1/11.3	Mar.	1, 1963	1/5.1	Aug.	4	1/6.0
June	2	1/10.3	Aug.	5	1/5.5		19	1/6.1
July	21	1/10.6	Oct.	23	1/6.7	Sept.	1	1/6.3
Aug.	4	1/10.5	Nov.	16	1/5.8		16	1/6.6
	20	1/10.2	Jan.	4, 1964	1/6.9	Oct.	1	1/6.7
Oct.	27	1/11.4		20	1/7.0		27	1/6.9
Dec.	16	1/11.7	Feb.	1	1/6.8	Nov.	18	1/7.1
Mar.	10, 1959	1/10.9		24	1/6.8	Dec.	3	1/6.9
May	21	1/10.7	Mar.	14	1/6.5		28	1/7.2

(C-1-1)19caa-1. Records available 1964

July	14, 1964	+5.3	Sept.	1, 1964	+7.5	Nov.	18, 1964	+5.8
Aug.	6	6.1		16	5.8	Dec.	23	5.5
	18	5.8						

(C-1-1)25ccb-2. Records available 1956-64

Oct.	4, 1956	1/+13.4	May	22, 1959	1/+14.3	Jan.	21, 1964	1/+14.6
	26	1/15.0	Dec.	1	1/15.6	Feb.	27	1/15.5
Feb.	18, 1957	1/14.4	Jan.	19, 1960	1/17.5	Mar.	14	1/14.8
Mar.	27	1/18.3	May	17	1/12.8	Apr.	28	1/15.3
May	2	1/17.1	Sept.	12	1/11.4	May	12	1/16.6
June	10	1/15.0	Dec.	15	1/15.4	June	10	1/15.4
July	22	1/12.6	Apr.	4, 1961	1/15.0		22	1/14.3
Aug.	22	1/12.2	Dec.	20	1/14.9	July	22	1/10.3
Dec.	11	1/18.5	Mar.	15, 1962	1/13.7	Aug.	5	1/ 9.7
Mar.	13, 1958	1/17.0	Dec.	12	1/15.4		20	1/ 9.1
Apr.	25	1/17.6	Jan.	3, 1963	1/14.5	Sept.	3	1/12.3
Oct.	24	1/14.6	Aug.	6	1/10.1		17	1/11.5
Dec.	17	1/17.1	Dec.	23	1/14.4	Oct.	2	1/12.7
Mar.	19, 1959	1/18.4	Jan.	4, 1964	1/15.0		30	1/13.0

(C-1-1)33abb-1. Records available 1931, 1935-64

Mar.	21, 1961	+14.4	Jan.	4, 1964	+10.1	July	7, 1964	1/+5.8
Dec.	19	9.9		20	9.5		21	1/5.4
Mar.	14, 1962	8.6	Feb.	26	9.1	Aug.	4	1/6.2
Dec.	11	10.3	Mar.	14	9.1		19	1/6.2
Feb.	28, 1963	9.7	Apr.	13	9.4	Sept.	3	1/6.8
Aug.	5	6.3		27	9.5		16	9.1
Oct.	23	10.0	May	11	8.8	Oct.	1	1/8.8
Nov.	16	10.8	June	10	7.3		27	1/10.3
Dec.	23	10.3		23	7.7			

(C-1-2)22bdd-4. Records available 1956-61, 1963-64

Oct.	15, 1956	1/+7.6	June	2, 1958	1/+5.2	Jan.	14, 1960	1/+5.6
Feb.	14, 1957	1/5.1	July	21	1/5.7	May	10	1/5.0
Mar.	26	1/4.8	Aug.	4	1/4.8	Sept.	6	1/5.0
Apr.	30	1/4.0		20	1/5.5	Mar.	20, 1961	1/4.8
June	3	1/4.7	Oct.	27	1/6.2	May	24	1/3.5
July	18	1/4.7	Dec.	16	1/5.2	Nov.	1, 1963	1/5.4
Aug.	20	1/5.2	Mar.	10, 1959	1/5.2	Apr.	13, 1964	5.9
Oct.	8	1/6.0	May	20	1/5.0	Sept.	9	7.8
Dec.	4	1/5.4	July	22	1/5.8	Nov.	24	9.9
Mar.	10, 1958	1/4.1	Sept.	29	1/6.0			

(C-1-2)22cbb-1. Records available 1931-32, 1934-64

Mar.	20, 1961	+10.6	Jan.	20, 1964	+8.4	July	7, 1964	1/+9.6
Dec.	19	9.0	Feb.	26	8.2		21	1/9.5
Mar.	14, 1962	7.6	Apr.	13	8.3	Aug.	4	9.9
Dec.	11	10.4		27	1/8.2		19	11.0
Feb.	28, 1963	1/7.4	May	11	8.2	Sept.	3	1/11.9
Aug.	5	8.9		25	8.3		16	12.4
Oct.	23	1/10.0	June	9	8.4	Oct.	1	13.1
Dec.	23	9.9		23	8.8		27	1/12.2
Jan.	4, 1964	9.2						

(C-2-1)12bac-1. Records available 1931-64

Oct.	19, 1931	+4.7†	Nov.	28, 1932	+8.9†	Sept.	22, 1933	+6.6†
Mar.	8, 1932	6.8†	Jan.	6, 1933	8.6†	Nov.	1	8.1†
Apr.	29	7.6†	Feb.	2	7.8†		16	7.0†
June	1	6.6†	Mar.	8	8.5†	Jan.	2, 1934	6.3†
July	21	7.2†	Apr.	7	8.6†	Feb.	6	8.2†
Aug.	16	6.3†		28	6.8†	Apr.	23	7.2†
Sept.	8	6.9†	June	5	7.2†	May	22	6.8†
Oct.	13	8.5†	Aug.	7	6.8†	Dec.	17	7.8†

(C-2-1)12bac-1 - Continued

Jan.	23, 1935	+7.5†	Aug.	13	+10.1†	May	23, 1952	+11.2†
Feb.	26	8.8†	Sept.	3	9.6†	Aug.	11	8.8†
Mar.	29	8.2†	Oct.	2	11.1†	Nov.	18	11.4†
May	15	8.2†	Nov.	7	11.8†	Apr.	14, 1953	9.0†
June	18	7.2†	Dec.	11	11.5†	May	21	8.8†
July	10	6.5†	Jan.	9, 1942	11.2†	Sept.	22	7.9†
Aug.	24	7.4†	Feb.	5	11.6†	Mar.	9, 1954	9.0†
Oct.	2	6.4†	Mar.	3	11.0†	May	24	8.6†
Nov.	12	8.6†	M	23	9.9†	Aug.	26	7.2†
Jan.	22, 1936	9.0†	Apr.	23	10.7†	Oct.	28	9.7†
Feb.	17	9.4†	May	6	11.6†	Nov.	12	9.8†
Mar.	18	9.3†	June	4	8.7†	Mar.	1, 1955	9.2†
Apr.	27	7.4†		29	9.5†	May	19	7.4†
May	26	7.6†	July	6	9.4†	June	30	5.6†
July	1	8.1†	Aug.	7	11.0†	Aug.	23	6.5
Aug.	5	8.3†	Aug.	30	9.6†	Oct.	14	8.5
Sept.	2	8.7†	Oct.	5	10.0†	Nov.	25	8.3
Oct.	2	8.9†	Nov.	5	11.2†	Jan.	4, 1956	8.8
Nov.	19	10.1†	Dec.	9	11.0†	Feb.	22	8.6
Dec.	17	10.2†	Jan.	7, 1943	11.4†	Mar.	1	8.5†
Jan.	4, 1937	9.8†		30	11.6†	Apr.	18	9.1
Feb.	11	9.9†	Feb.	26	11.2†	May	8	7.6†
Mar.	2	10.0†	Apr.	5	9.4†	June	6	7.2
Apr.	5	10.2†	May	3	9.9†	July	18	5.9
	29	10.2†	June	4	10.9†	Aug.	9	6.1†
June	7	9.6†	July	21	9.5†		14	6.2
July	6	8.7†	Aug.	20	8.6†	Sept.	14	6.4
	19	8.5†	Sept.	17	9.8†	Oct.	22	7.3
Aug.	4	9.2†	Nov.	26	10.7†	Nov.	27	8.0
	18	9.6†	Dec.	23	11.0†	Dec.	18	8.2
Sept.	2	9.3†	Jan.	7, 1944	10.8†	Jan.	15, 1957	8.0
	16	9.1†	Feb.	3	10.3†	Feb.	20	7.9
Oct.	6	10.5†	Mar.	2	9.0†	Mar.	27	8.4
	21	11.0†	Apr.	14	10.9†	Apr.	23	8.4†
Nov.	3	11.0†		27	11.3†	May	2	7.9
Dec.	3	12.0†	May	11	10.1†	June	10	6.7
	20	11.6†	June	9	10.6†	July	22	5.8
Jan.	4, 1938	11.5†		30	9.8†	Aug.	22	6.2
	31	11.4†	July	10	8.8†	Oct.	16	7.8
Feb.	18	11.4†		19	7.8†	Nov.	14	9.2†
	28	11.4†	Aug.	24	9.2†	Dec.	4	8.5
Mar.	16	11.6†	Sept.	5	9.1†	Feb.	6, 1958	9.2†
	24	11.4†		29	8.8†	Mar.	13	8.6
Apr.	13	11.2†	Oct.	6	11.4†	Apr.	4	9.2†
	26	8.7†		27	8.3†	June	4	6.0
May	3	10.8†	Nov.	18	9.2†	Aug.	12	5.6†
	13	9.2†	Dec.	4	9.0†	Sept.	4	6.0
	25	9.9†		21	9.6†		26	6.9†
June	15	9.8†	Jan.	22, 1945	8.3†	Oct.	27	7.0
	28	9.0†	Mar.	5	10.2†	Dec.	16	8.6
July	11	9.8†	Apr.	3	9.7†	Feb.	19, 1959	8.7†
	20	9.2†	June	19	10.2†	Mar.	19	8.9
Aug.	9	9.8†	July	18	6.8†	Apr.	16	7.8†
	26	8.8†	Aug.	8	8.8†	May	22	6.3
Sept.	30	8.9†	Sept.	12	7.6†	July	29	4.8
Oct.	25	11.2†	Oct.	16	11.2†	Sept.	24	7.4†
Nov.	7	11.5†	Dec.	3	10.8†	Oct.	1	7.6
Dec.	7	11.6†	Jan.	19, 1946	9.6†	Jan.	19, 1960	7.7
Jan.	6, 1939	11.5†	Mar.	20	10.8†	Mar.	3	8.4†
Mar.	7	11.0†	May	24	8.6†	May	13	5.8
	16	11.6†	June	25	8.4†	Aug.	26	5.0†
Apr.	11	11.1†	July	19	8.3†	Sept.	12	4.8
	20	9.2†	Aug.	24	7.8†	Oct.	21	7.0†
May	16	10.0†	Oct.	5	9.6†	Dec.	15	6.8
	31	10.2†	Nov.	30	11.1†	Feb.	20, 1961	7.1†
June	9	9.8†	Feb.	17, 1947	11.4†	Mar.	6	7.1†
	28	9.5†	Mar.	25	11.3†		20	6.8†
July	7	8.8†	Apr.	16	11.2†		27	6.8†
	21	7.2†	May	19	10.3†	Apr.	3	6.4†
Aug.	7	9.2†	June	17	10.4†		4	6.4
	24	8.8†	July	14	8.3†		10	6.3†
Sept.	11	10.2†	Aug.	21	8.5†		17	6.0†
Oct.	9	10.7†	Sept.	23	11.1†		24	5.4†
	23	9.3†	Oct.	6	9.2†	May	1	4.6†
Nov.	6	12.7†	Nov.	24	11.6†		8	4.8†
	27	11.4†	Jan.	9, 1948	11.1†		16	5.0†
Dec.	5	11.4†	Feb.	13	10.9†		22	4.6†
	26	11.0†	Mar.	26	11.0†		29	4.0†
Jan.	12, 1940	11.1†	Apr.	13	11.6†	June	12	3.8†
Feb.	23	11.4†	May	20	9.4†		19	3.6†
Mar.	29	11.1†	June	8	9.8†		26	3.0†
Apr.	29	10.5†	July	20	9.1†	July	3	3.2†
May	27	9.4†	Aug.	6	9.5†		10	3.4†
June	25	7.7†	Sept.	13	9.2†		19	3.0†
July	30	7.4†	Nov.	13	11.2†		26	2.7†
Aug.	28	7.5†	May	13, 1949	7.9†		31	2.8†
Sept.	10	9.4†	June	21	8.6†	Aug.	7	3.7†
	28	10.0†	Aug.	1	7.0†		14	2.7†
Oct.	10	11.0†	Aug.	22	6.4†		21	3.1†
	31	11.0†	Oct.	1	8.2†		28	3.1†
Nov.	23	11.0†	Dec.	3	10.8†	Sept.	5	3.7†
Dec.	23	11.1†	May	25, 1950	8.3†		11	3.0†
Jan.	8, 1941	11.2†	July	7	7.8†		19	3.8†
Feb.	13	11.4†	Aug.	21	8.3†		25	4.4†
Mar.	17	11.6†	Sept.	18	10.4†	Oct.	3	3.2†
Apr.	17	12.0†	Dec.	19	10.7†		17	4.1†
	30	11.3†	Feb.	26, 1951	9.0†		23	4.2†
May	14	8.2†	May	15	10.0†		30	4.7†
June	4	8.0†	Aug.	3	9.4†	Nov.	15	5.0†
July	9	8.8†	Oct.	10	9.6†	Dec.	5	5.2†
	28	10.4†	Mar.	6, 1952	11.5†		19	4.5

See footnotes at end of table.

Table 13.--Water levels in selected observation wells - Continued

(C-2-1)12bac-1 - Continued

Jan.	2, 1962	+5.2†	Mar.	25, 1963	+5.1†	May	21, 1964	+3.6†
	30	4.7†	Apr.	22	5.4†	June	10	5.3
Feb.	26	5.4†	May	22	3.2†		22	4.9
Mar.	15	5.5	June	17	5.3†		24	5.2†
	29	5.2†	July	17	2.0†	July	8	2.7
Apr.	20	5.2†	Aug.	6	1.7		22	2.0
May	22	4.5†		12	2.0†		27	2.0†
June	1	4.1†	Sept.	9	2.8†	Aug.	5	1.8
	18	3.8†	Oct.	4	2.5†		14	2.0†
July	9	3.1†		24	4.4		26	2.3
	31	2.9†	Nov.	6	4.7†	Sept.	2	2.4
Aug.	20	2.2†	Dec.	4	4.8†		14	2.0†
Sept.	4	3.4†		23	4.8		16	2.6
	17	3.2†	Jan.	4, 1964	4.8	Oct.	2	1/2.9
Oct.	2	4.4†		20	5.4		17	3.2†
	31	4.5†	Feb.	5	4.6†		30	3.6
Nov.	27	5.2†		28	4.8	Nov.	9	3.9†
Dec.	17	5.7	Mar.	9	4.5†		22	4.2
Jan.	22, 1963	4.8†	Apr.	5	4.6†		30	4.5†
Feb.	26	4.8†		28	5.9	Dec.	8	5.1
Mar.	1	5.2	May	12	6.5		29	5.5

(C-2-1)24adc-1. Records available 1931-64

Mar.	23, 1961	-26.5	Feb.	1, 1964	-30.7	July	22, 1964	-34.8
Dec.	19	28.7		28	31.0	Aug.	5	35.3
Mar.	14, 1962	29.5	Mar.	14	31.3		20	34.2
Dec.	17	29.5	Apr.	13	31.5	Sept.	2	34.7
Mar.	1, 1963	30.0		28	31.5		15	35.2
Aug.	5	35.6	May	12	31.4	Oct.	2	33.9
Oct.	24	31.7		25	31.9		28	32.4
Dec.	21	30.4	June	10	32.4	Nov.	22	30.9
Jan.	4, 1964	30.4		22	31.9	Dec.	8	30.3
	20	30.5	July	8	34.0		29	29.9

(C-3-1)6cac-1. Records available 1964

Nov.	20, 1964	-76.3	Dec.	5, 1964	-76.2	Dec.	28, 1964	-75.1

(C-3-1)12ccb-1. Records available 1931-35, 1955-64

Aug.	16,1955	1/9/+28.8	May	1, 1957	1/+28.5	Dec.	12, 1962	1/+26.0
Oct.	8	1/29.4	June	6	1/28.2	Feb.	28, 1963	1/25.1
Nov.	25	1/29.2	July	18	1/28.1	Aug.	5	1/21.6
Jan.	4, 1956	1/28.8	Aug.	20	1/28.8	Oct.	24	1/24.2
Feb.	22	1/28.7	Oct.	11	1/29.2	Dec.	21	1/24.7
Mar.	31	1/28.7	Dec.	5	1/29.1	Jan.	4, 1964	1/24.8
May	9	1/28.3	Mar.	10, 1958	1/28.0		20	1/24.8
June	6	1/28.1	June	3	1/28.5	Feb.	28	1/24.6
July	18	1/29.0	July	22	1/28.0	Mar.	14	1/24.6
Aug.	13	1/29.1	Sept.	3	1/29.3	Apr.	13	1/25.3
	15	1/28.3	Oct.	22	1/29.4		28	1/24.7
	16	1/27.9	Dec.	8	1/29.5	May	11	1/24.8
	22	1/28.3	Mar.	16, 1959	1/28.8		25	1/2/22.8
	23	1/29.5	May	20	1/28.4	June	10	1/2/22.2
	29	1/29.6	July	27	1/28.4		22	1/24.2
	30	1/28.5	Sept.	29	1/28.7	July	8	1/2/23.0
Sept.	4	1/29.1	Jan.	18, 1960	1/28.1		22	1/23.8
	12	1/29.3	May	18	1/27.8	Aug.	5	1/2/22.8
Oct.	19	1/29.5	Sept.	8	1/27.5		20	1/23.6
Nov.	27	1/28.7	Dec.	13	1/27.6	Sept.	2	1/23.3
Dec.	18	1/29.1	Mar.	21, 1961	1/27.0		15	1/23.6
Jan.	15, 1957	1/28.4	Dec.	19	1/26.2	Oct.	2	1/23.0
Feb.	15	1/28.3	Mar.	15, 1962	1/24.9		28	1/24.0
Mar.	25	1/28.4						

(C-3-1)15dda-1. Records available 1955-64

Aug.	17, 1955	+14.9	Aug.	20, 1957	+17.1	Dec.	12, 1962	+11.6
Oct.	8	1/16.3	Oct.	10	19.1	Feb.	28, 1963	9.6
Nov.	25	1/15.7	Dec.	5	17.3	Aug.	5	11.0
Jan.	4, 1956	1/14.8	Mar.	10, 1958	14.9	Oct.	23	13.2
Feb.	22	1/13.0	June	3	15.6	Nov.	16	12.6
Mar.	31	1/13.1	July	22	18.4	Dec.	21	12.8
May	9	1/12.4	Aug.	20	19.0	Apr.	13, 1964	10.4
June	6	1/13.4	Oct.	22	20.3		27	9.7
July	17	1/15.6	Dec.	8	19.3	May	11	9.6
Aug.	13	16.3	Mar.	16, 1959	15.6		25	9.2
Sept.	12	1/17.9	May	20	15.5	June	10	7.4
Oct.	15	1/18.6	July	27	15.2		22	6.2
Nov.	26	18.3	Sept.	29	17.7	July	7	9.6
Dec.	17	17.7	May	18, 1960	12.8		21	9.3
Jan.	14, 1957	16.6	Sept.	8	16.5	Aug.	4	8.2
Feb.	15	14.0	Dec.	13	15.7		19	10.2
Mar.	26	14.9	Mar.	21, 1961	12.6	Sept.	3	10.2
May	1	12.7	Dec.	19	8.3	Oct.	1	13.2
June	6	13.0	Apr.	4, 1962	5.5		28	13.3
July	18	15.2						

(C-3-1)20ddb-1. Records available 1963-64

May	3, 1963	-151.4*	Feb.	27, 1964	-146.0	Sept.	3, 1964	-145.9
July	9	148.9						

(C-3-1)21daa-1 Records available 1962-63

May	8, 1962	-76.7*	Aug.	8, 1962	-59.8*	Nov.	2, 1962	-56.0*
June	15	64.5*		27	58.0*	Jan.	8, 1963	57.6*
	28	63.3*	Sept.	10	57.2*	Apr.	11	61.3*
July	12	61.9*		24	56.5*	May	3	62.0*
	26	60.9*	Oct.	14	56.0*			

(C-3-1)27cdd-1. Records available 1931-64

Jan.	4, 1956	-9.0	June	6, 1956	-15.0	Oct.	15, 1956	-2.1
Feb.	22	12.4	July	17	8.2	Nov.	26	5.0
Mar.	31	14.8	Aug.	13	5.2	Dec.	17	6.5
May	9	16.0	Sept.	12	2.4	Jan.	14, 1957	8.6

See footnotes at end of table.

(C-3-1)27cdd-1 - Continued

Feb.	15, 1957	-11.0	Dec.	13, 1960	-10.0	Aug.	5, 1963	-15.0
Mar.	26	14.6		19, 1961	23.6	Oct.	23	9.6
May	6	16.0	Apr.	2, 1962	27.6	Dec.	21	13.7
June	6	15.2	May	3	28.9*	Jan.	4, 1964	12.6
July	19	9.5		21	28.4*		20	14.4
Aug.	20	5.7	June	12	26.2*	Feb.	1	15.2
Oct.	10	2.0		28	24.7*		27	16.8
Dec.	5	4.7	July	12	22.4*	Mar.	14	17.8
Mar.	11, 1958	11.8		26	20.8*	Apr.	13	19.4
June	3	11.5	Aug.	8	19.1*	June	22	20.0
July	22	6.2		27	16.8*	July	21	18.8
Aug.	20	3.6	Sept.	10	15.4*	Aug.	4	17.0
Oct.	22	1.3		24	14.4*	Aug.	20	15.3
Dec.	8	4.8	Oct.	14	13.6*	Sept.	3	13.7
Mar.	16, 1959	12.2	Nov.	2	13.8*		21	11.5
May	20	12.5	Dec.	17	15.6	Oct.	1	11.6
July	27	6.2	Jan.	8, 1963	16.8*		20	10.9
Sept.	29	2.5	Feb.	28	19.8		28	10.8
Jan.	18, 1960	8.5	Apr.	11	21.9*	Nov.	18	11.8
May	10,	15.8	May	3	22.9*	Dec.	7	13.0
Sept.	8	6.0						

(C-3-1)28bac-1. Records available 1963-64

Apr.	11, 1963	-102.6*	Feb.	24, 1964	9/-98.8	Sept.	3, 1964	-98.4
May	3	103.6*						

(C-3-1)29bbc-1. Records available 1964

Feb.	24, 1964	-48.1	Sept.	3, 1964	-42.6

(C-3-1)30aba-1. Records available 1956-64

Oct.	25, 1956	-74.8	Mar.	18, 1959	-76.2	Apr.	11, 1963	-78.9*
Dec.	17	76.4	May	10, 1960	77.0	May	3	79.3*
Jan.	14, 1957	76.8	Dec.	13	80.1	Feb.	24, 1964	79.4
Feb.	15	77.3	Mar.	21, 1961	77.8	Apr.	27	79.5
Mar.	21	77.5	Dec.	19	79.3	May	11	79.6
May	1	77.5	Mar.	14, 1962	80.0		25	79.9
	6	77.6	May	3	78.8*	June	10	4/77.3
	7	77.8	June	15	73.4*		22	75.7
June	6	74.2		28	72.4*	July	7	4/73.4
July	18	67.8	July	12	71.4*	Oct.	1	4/79.3
Oct.	10	73.9		26	70.9*		28	77.4
Dec.	5	74.6	Oct.	14	75.8*	Nov.	18	78.1
Mar.	10, 1958	75.8	Nov.	2	76.3*		20	78.2
June	3	74.0	Dec.	17	77.7	Dec.	7	78.6
Oct.	22	73.9	Jan.	8, 1963	78.1*		28	78.8
Dec.	8	74.7	Feb.	28	78.7			

(C-3-1)30acd-1. Records available 1957-64

June	6, 1957	-21.0	Mar.	14, 1962	-29.6	Apr.	11, 1963	-29.5*
July	18	20.8	May	2	26.9*	May	3	4/24.7*
Oct.	10	31.4	June	12	21.8*	Feb.	27, 1964	30.0
Dec.	5	27.8		28	22.9*	Apr.	27	29.6
Mar.	10, 1958	27.9	July	12	23.8*	May	11	32.6
June	3	23.0		26	25.0*		25	4/28.5
Oct.	22	29.5	Aug.	8	12.5	June	10	4/25.6
Dec.	8	27.7		27	12.8		23	4/25.1
Mar.	18, 1959	28.1	Sept.	10	13.0	July	7	4/24.9
May	21	12.9		24	13.5	Oct.	1	4/37.0
July	27	13.0	Oct.	14	29.0*		28	30.6
May	10, 1960	26.3	Nov.	2	28.9*	Nov.	18	30.3
Dec.	13	29.6	Jan.	8, 1963	29.7*	Dec.	7	30.3
Mar.	21, 1961	29.4	Feb.	28	29.7		28	30.1
May	26	32.7						

(C-3-1)31cbb-1. Records available 1959, 1964

May	20, 1959	-91.6	Feb.	27, 1964	-99.6			

(C-3-1)31ccb-1. Records available 1962, 1964

May	21, 1962	-104.5*	June	12, 1962	-104.7*	Feb.	27, 1964	105.7

(C-3-1)31dcd-3. Records available 1962-64

May	3, 1962	-135.4*	July	26, 1962	-121.5*	Nov.	2, 1962	-124.3*
	21	133.9*	Aug.	8	121.4*	Jan.	8, 1963	125.8*
June	12	127.7*		27	122.7*	Apr.	11	128.8*
	15	127.0*	Sept.	10	123.4*	May	3	129.4*
	28	127.0*		24	123.9*	Feb.	27, 1964	9/127.8
July	12	122.3*	Oct.	14	124.3*	Sept.	3	121.8

(C-3-1)32cad-2. Records available 1931-35, 1955-64

Aug.	17, 1955	2/-134.9	Aug.	20, 1957	6/-132.7	Feb.	28, 1963	-144.2
Jan.	4, 1956	131.9	Oct.	10	125.6	May	3	150.1*
Feb.	22	137.2	Dec.	5,	125.1	Aug.	5	145.1
Mar.	31	141.2	Mar.	11, 1958	136.9	Oct.	23	134.9
May	9	2/146.0	June	2	145.7		31	134.4
June	6	149.1	July	22	142.6	Nov.	7	133.8
July	17	140.6	Oct.	22	129.3		19	133.4
Aug.	13	134.5	Dec.	8	129.0	Dec.	10	133.8
Sept.	12	130.0	Mar.	16, 1959	139.1		30	135.6
Oct.	15	2/137.8	May	20	145.2	Jan.	27, 1964	138.2
Nov.	26	127.4	July	27	143.3	Feb.	27	141.4
Dec.	17	130.9	Sept.	30	135.2	Mar.	26	144.1
Jan.	14, 1957	132.3	Jan.	18, 1960	137.5	Apr.	27	147.2
Feb.	15	136.0	May	10	148.6	May	25	150.2
Mar.	26	140.4	Sept.	8	143.8	June	22	153.1
May	1	142.8	Dec.	13	138.3	July	2	153.6
June	6	6/146.7	Mar.	22, 1961	146.3		21	155.9
July	18	141.1	Dec.	17, 1962	138.1	Dec.	28	136.9

(C-3-1)32cdc-1. Records available 1964

Feb.	27, 1964	-149.5	Sept.	3, 1964	-156.7

Table 13.--Water levels in selected observation wells - Continued

(C-3-1)32dcc-1. Records available 1964

Feb.	24, 1964	-145.7	Sept. 3, 1964	-156.0	

(C-3-1)33aab-1. Records available 1962-64

May	2, 1962	-85.1*	Aug.	8, 1962	-74.8*	Nov.	2, 1962	-68.4*
	21	84.3*		27	72.2*	Jan.	8, 1963	71.7*
June	12	82.2*	Sept.	10	70.9*	Apr.	11	77.3*
	28	81.1*		24	69.4*	May	3	80.9*
July	12	81.4*	Oct.	14	68.1*	Sept.	2, 1964	69.3*
	26	80.9*						

(C-3-2)4adb-1. Records available 1958-64

Oct.	29, 1958	-147.6	Mar.	10, 1959	-147.9	Jan.	18, 1960	-148.6
Dec.	8	147.5	May	20	148.1	May	10	148.9

(C-3-2)4adb-1 - Continued. Recorder installed June 29, 1960. Water level at noon on date to Jan. 1, 1962, after which highest water level on date, in feet below land surface from recorder graph.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1960												
5							149.1	149.1	149.2	149.3	149.4	149.4
10							149.1	149.2	149.2	149.2	149.4	149.4
15							149.1	149.1	149.2	149.3	149.5	149.4
20							149.1	149.1	149.2	149.3	149.4	149.6
25							149.1	149.2	149.3	149.3	149.3	149.5
eom						149.1	149.1	149.2	149.2	149.3	149.4	149.4
1961												
5	149.5	149.6	-	-	149.8	149.9	150.1	150.0	150.0	150.2	150.4	150.4
10	149.6	149.6	-	-	149.7	149.9	150.1	150.0	149.9	150.3	150.3	150.3
15	149.5	149.6	-	-	149.8	150.0	150.1	150.0	149.9	150.3	150.3	-
20	149.5	149.7	-	-	149.8	150.0	150.1	150.0	150.0	150.3	150.3	-
25	149.6	149.6	-	-	149.9	150.0	150.0	150.0	150.1	150.4	150.4	-
eom	149.6	149.7	-	-	149.9	150.0	150.0	150.0	150.1	150.3	153.4	-
1962												
5	-	-	-	-	-	-	150.9	151.0	151.1	151.1	-	-
10	-	-	-	-	-	-	150.9	151.0	151.1	151.2	-	-
15	-	-	-	-	-	150.8	150.9	151.0	151.2	-	-	-
20	-	-	-	-	-	150.8	151.0	151.0	151.1	-	-	-
25	-	-	-	-	-	150.8	151.0	151.0	151.2	-	-	-
eom	-	-	150.6	-	-	150.9	151.0	151.1	151.2	-	-	-
1963												
5	-	-	151.5	151.5	151.6	151.7	151.8	151.9	152.0	151.9	152.1	152.2
10	-	-	151.4	151.5	151.6	151.7	151.8	151.9	152.0	151.9	152.1	152.0
15	-	151.5	151.3	151.5	151.7	151.8	151.8	151.9	152.0	152.0	152.0	152.2
20	-	151.5	151.5	151.5	151.7	151.7	151.9	151.9	152.0	152.1	152.0	152.1
25	-	151.6	151.5	151.5	151.7	151.8	151.9	151.9	151.9	152.1	152.2	152.1
eom	-	151.5	151.4	151.6	151.7	151.8	151.9	152.0	151.9	152.2	152.1	152.2
1964												
5	152.2	152.2	152.2	152.2	152.2	152.4	152.5	152.6	152.6	152.7	152.8	152.8
10	152.1	152.2	152.3	152.2	152.3	152.4	152.6	152.6	152.7	152.7	152.6	152.7
15	152.3	152.2	152.3	152.4	152.4	152.4	152.5	152.6	152.7	152.7	152.7	152.7
20	152.1	152.3	152.2	152.3	152.4	152.4	152.5	152.6	152.6	152.8	152.7	-
25	152.2	152.3	152.4	152.3	152.4	152.5	152.6	152.6	152.6	152.7	152.6	-
eom	152.4	152.2	152.2	152.3	152.4	152.5	152.6	152.6	152.7	152.7	152.6	-

(C-3-2)14bcd-1. Highest water on date, in feet below land surface from recorder graph. Records available 1963-64.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1963												
5											324.0	324.1
10											324.1	324.3
15											323.9	324.3
20											324.1	-
25											324.2	-
eom											324.2	-
1964												
5	-	324.3	324.1	324.2	324.1	324.2	324.1	324.2	324.1	324.4	324.6	-
10	-	324.3	324.4	324.2	324.2	323.2	324.2	324.2	324.3	-	324.6	-
15	324.4	324.4	324.3	324.2	324.3	324.1	324.1	324.2	324.3	324.4	324.6	-
20	324.1	324.4	324.2	324.3	324.2	324.1	324.1	324.3	324.1	324.6	324.7	-
25	-	324.4	324.4	324.3	324.3	324.1	324.1	324.2	324.2	324.6	-	-
eom	324.4	324.2	324.2	324.3	324.2	324.1	324.1	324.1	324.3	324.5	-	-

(C-3-2)28dbb-1. Records available 1960-64

July	19, 1960	-136.7	Aug.	30, 1962	-140.9	Apr.	1, 1964	-142.1
Aug.	4	136.8	Dec.	14	141.7		27	141.7
Sept.	8	137.9	Feb.	15, 1963	142.2	May	25	141.0
Nov.	9	137.7		28	142.2	June	23	140.6
Jan.	25, 1961	138.8	May	23	141.8	July	21	140.2
May	3	134.5	July	31	141.4	Aug.	19	140.1
July	13	133.5	Oct.	24	141.9	Sept.	21	140.2
Oct.	4	136.9	Nov.	5	142.0	Oct.	28	140.4
Dec.	19	137.3	Jan.	30, 1964	142.5	Nov.	19	140.7
Mar.	29, 1962	139.1	Feb.	27	142.6	Dec.	5	140.8
June	21	140.3						

(C-3-2)33cac-1. Records available 1962, 1964

May	3, 1962	-30.4	June	22, 1964	-25.3	Oct.	1, 1964	-36.9
Feb.	27, 1964	28.2	July	7	25.2		28	32.8
Apr.	13	28.2	Aug.	4	132.9	Nov.	18	30.5
	27	28.1		19	163.4	Dec.	7	28.2
May	11	27.6	Sept.	3	57.7		28	27.3
June	10	25.9		21	44.0			

See footnotes at end of table.

(C-4-1)5acb-1. Records available 1964

Feb.	27, 1964	-156.5	Sept. 3, 1964	-167.0	

(C-4-1)8abc-1. Records available 1956-58, 1962-63

Oct.	15, 1956	-115.5	Dec.	8, 1958	-114.8	July	12, 1962	-121.2*
Dec.	17	118.4	May	8, 1962	130.6*	Sept.	24	114.2*
Jan.	14, 1957	119.9		21	129.5*	Nov.	2	114.3*
Feb.	15	120.6	June	12	131.4*	Apr.	11, 1963	123.1*
Mar.	11, 1958	121.2		28	127.1*	May	3	123.6*

(C-4-1)14abd-1. Records available 1964

Feb.	28, 1964	-81.9	July	21, 1964	-77.9	Oct.	28, 1964	-78.3
May	11	84.9	Aug.	20	77.4	Nov.	20	81.2
June	22	80.3	Sept.	2	76.7	Dec.	7	78.3
July	7	79.1	Oct.	1	76.7		28	80.4

(C-4-1)22dbd-1. Records available 1964

Feb.	29, 1964	-72.4	June	10, 1964	-74.0	Sept.	3, 1964	-77.6
Apr.	13	73.2	July	7	74.8	Oct.	30	74.7
	28	73.8	Aug.	4	77.0	Dec.	7	75.3
May	11	73.5						

(C-4-1)23dbd-1. Highest water level on date, in feet below land surface from recorder graph. Records available 1964

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1964												
5	-	49.2	49.6	49.9	50.0	48.4	-	47.3	47.5	-	48.3	48.6
10	49.0	49.3	49.7	49.9	50.1	48.5	-	47.3	47.6	-	48.3	48.7
15	49.0	49.4	49.7	50.0	50.0	48.7	-	47.3	47.6	-	48.4	48.7
20	49.1	49.4	49.8	50.0	49.7	48.6	-	47.4	47.6	-	48.5	48.8
25	49.1	49.5	49.8	50.0	48.8	48.8	47.3	47.4	47.7	-	48.5	48.8
eom	49.2	49.5	49.8	50.0	48.5	48.7	47.2	47.4	47.7	48.2	48.6	48.8

(D-1-1)4cac-1. Records available 1934-64

July	3, 1935	-197.4†	Jan.	23, 1941	-193.6†	Dec.	1, 1947	-190.9†
	22	197.1†	Feb.	28	193.5†	Jan.	6, 1948	190.4†
Aug.	27	198.0†	Mar.	29	193.4†	Feb.	26	189.9†
Sept.	28	199.5†	Apr.	21	193.0†	Apr.	7	189.5†
Oct.	30	199.8†	May	23	192.3†	Aug.	31	8/229.4†
Nov.	25	199.6†	June	26	190.5†	Sept.	21	196.3†
Dec.	26	199.5†	Aug.	8	189.0†	Dec.	3	192.2†
Jan.	29, 1936	199.4†	Sept.	2	189.6†	May	31, 1949	190.4†
Feb.	28	199.3†	Oct.	10	189.0†	July	22	190.3†
Mar.	19	199.1†	Nov.	26	189.2†	Dec.	27	189.3†
Apr.	30	198.2†	Dec.	27	189.4†	Apr.	26, 1950	189.1†
May	28	195.9†	Jan.	23, 1942	189.6†	May	11	189.2†
June	19	194.4†	Feb.	25	189.6†	July	31	190.4†
July	28	192.8†	Mar.	31	189.6†	Sept.	28	191.3†
Aug.	28	191.8†	Apr.	28	189.8†	Dec.	11	189.4†
Sept.	29	191.5†	May	26	188.8†	Feb.	27, 1951	189.1†
Oct.	31	190.0†	June	23	187.9†	May	15	189.6†
Nov.	23	191.0†	July	31	187.8†	Aug.	9	191.4†
Dec.	17	191.2†	Aug.	27	186.9†	Oct.	4	193.7†
Jan.	22, 1937	191.2†	Sept.	29	186.9†	Mar.	14, 1952	191.1†
Feb.	23	191.4†	Nov.	2	186.3†	June	25	190.1†
Mar.	30	191.5†		28	186.2†	Oct.	2	189.8†
Apr.	27	191.6†	Jan.	8, 1943	186.4†	Nov.	24	186.6†
May	25	191.3†	Feb.	23	185.4†	Apr.	24, 1953	186.8†
June	26	190.3†	Mar.	16	186.9†	Aug.	5	191.4†
July	19	189.1†	Apr.	20	187.1†	Dec.	18	191.0†
Aug.	31	188.2†	May	30	186.8†	Mar.	19, 1954	189.7†
Sept.	28	188.2†	June	26	187.3†	May	17	190.1†
Oct.	26	188.5†	July	27	187.9†	July	19	194.4†
Nov.	29	189.0†	Sept.	10	189.9†	Nov.	19	196.9†
Dec.	27	189.4†	Oct.	11	189.7†	Dec.	6	197.1†
Jan.	31, 1938	189.8†	Dec.	8	190.0†	May	26, 1955	195.6†
Feb.	28	190.1†	Jan.	27, 1944	190.9†	Mar.	6, 1956	197.8
Mar.	29	190.3†	Feb.	21	190.2†	May	8	197.3
Apr.	26	190.6†	Mar.	20	190.0†	Mar.	24, 1957	198.0†
June	1	189.5†	Apr.	13	189.8†	May	8	199.9†
	27	188.7†	May	9	189.4†	June	25	196.3†
Aug.	9	188.4†	June	5	189.4†	Aug.	2	202.3†
	29	188.2†	July	28	189.2†	Sept.	10	210.2†
Sept.	26	188.4†	Aug.	25	189.8†		19	206.6†
Oct.	24	188.6†	Sept.	21	189.0†	Nov.	18	200.7†
Dec.	7	188.8†	Oct.	3	190.0†	Feb.	19, 1958	195.8†
	20	189.3†	Nov.	15	189.5†	Apr.	10	194.1†
Jan.	25, 1939	189.9†	Dec.	19	188.8†	June	25	200.6†
Feb.	15	190.0†	Jan.	25, 1945	188.3†	Aug.	21	212.2†
Mar.	29	190.4†	Mar.	3	188.5†	Oct.	8	214.3†
May	3	190.5†	Apr.	5	189.7†	Dec.	5	208.6†
	24	189.8†	June	12	190.4†	Feb.	19, 1959	201.9†
July	5	188.5†	July	17	191.0†	Apr.	8	199.9†
Sept.	11	192.6†	Aug.	22	191.4†	June	11	208.6†
	27	192.3†	Sept.	26	192.0†	Aug.	13	216.4†
Nov.	8	191.8†	Oct.	15	191.7†	Sept.	23	219.3†
Dec.	22	191.8†	Dec.	31	190.5†	Feb.	24, 1960	211.5†
Jan.	30, 1940	191.9†	Feb.	18, 1946	190.6†	Aug.	29	236.4†
Feb.	8	192.0†	Apr.	4	191.0†	Oct.	27	251.4†
Mar.	1	192.0†	June	3	191.5†	Dec.	1	249.4†
Apr.	2	192.0†	July	10	193.2†	Feb.	21, 1961	246.2†
May	2	192.0†	Oct.	17	196.9†	Mar.	17	215.0†
	28	191.2†	Dec.	6	194.8†		23	216.9†
June	28	191.1†	Feb.	5, 1947	193.6†		31	218.7†
July	19	8/221.0†	Mar.	24	193.0†	Apr.	12	225.3†
Sept.	5	197.4†	Apr.	23	192.6†		20	243.7†
Oct.	2	195.7†	June	7	190.6†	May	3	221.1†
	29	195.0†	Aug.	1	194.2†	May	16	227.7†
Nov.	29	194.3†	Sept.	25	192.4†		25	237.0†
Dec.	20	194.0†	Oct.	30	191.5†	June	1	232.2†

Table 13.--Water levels in selected observation wells - Continued

(D-1-1)4cac-1 - Continued

June	15, 1961	-257.9†	Sept.	28, 1962	-227.1†	Oct. 11, 1963	-224.2†
Aug.	9	258.8†	Oct.	9	232.1†	Dec. 9	227.0†
Jan.	8, 1962	225.0†	Nov.	20	246.3†	Feb. 14, 1964	212.4†
Feb.	13	237.3†	Jan.	3, 1963	220.1†	Mar. 24	210.9†
Mar.	6	220.7†		29	218.0†	May 8	209.9†
Apr.	13	218.8†	Feb.	26	216.9†	May 25	211.4†
May	14	223.0†	Apr.	1	215.7†	July 8	212.4†
	23	218.6†		22	216.4†	31	214.6†
June	8	218.6†	June	14	214.9†	Aug. 18	214.7†
	26	224.2†		27	215.9†	Sept. 16	214.0†
Aug.	15	268.2†	July	23	224.6†	Oct. 6	217.2†
	27	241.8†	Aug.	15	227.6†	Nov. 17	219.8†
Sept.	13	241.8†	Sept.	11	230.4†	30	221.6†

(D-1-1)5aaa-1. Records available 1934-64

June	12, 1935	-117.0†	Mar.	31, 1942	-111.1†	May	26, 1955	-116.8†
	19	117.0†	Apr.	28	110.9†	Nov.	22	124.5†
	26	117.0†	May	26	110.9†	Feb.	27, 1956	118.1†
July	22	116.8†	June	23	110.7†	May	8	116.7†
Aug.	27	8/280 †	July	31	109.5†	Dec.	13	122.5†
Sept.	28	131.4†	Aug.	27	108.9†	Mar.	24, 1957	120.9†
Oct.	30	121.4†	Sept.	17	111.4†	May	8	117.1†
Nov.	20	119.5†	Oct.	30	108.0†	June	25	116.3†
Dec.	19	118.4†	Nov.	28	107.6†	Sept.	10	121.7†
Jan.	29, 1936	117.8†	Dec.	17	107.5†		18	119.9†
Feb.	28	117.6†	Jan.	8, 1943	107.8†	Feb.	19, 1958	116.2†
Mar.	27	117.3†	Feb.	10	107.3†	Apr.	10	115.5†
Apr.	30	117.1†	Mar.	23	108.2†	June	25	116.4†
May	28	116.6†	Apr.	19	108.3†	Dec.	5	125.7†
June	19	115.8†	May	30	108.7†	Feb.	19, 1959	120.0†
July	28	114.4†	June	26	108.9†	Apr.	8	117.9†
Aug.	28	114.1†	Sept.	10	110.4†	Sept.	23	137.1†
Sept.	29	113.5†	Oct.	11	110.1†	Feb.	24, 1960	122.6†
Oct.	31	113.1†	Nov.	15	110.1†	Aug.	29	139.5†
Nov.	23	112.6†	Dec.	22	109.9†	Oct.	31	136.0†
Dec.	17	112.5†	Jan.	27, 1944	110.5†	Dec.	1	151.9†
Jan.	22, 1937	112.3†	Feb.	21	110.5†	Feb.	8, 1961	128.8†
Feb.	23	112.3†	Apr.	13	110.6†	Mar.	17	126.9†
Mar.	30	111.5†	May	6	110.8†		23	126.9†
Apr.	27	112.3†	June	26	110.5†		31	127.3†
May	25	114.2†	July	28	110.0†	Apr.	11	127.7†
June	29	112.4†	Aug.	25	109.6†		15	127.5†
July	24	111.4†	Sept.	21	109.5†		25	128.0†
Aug.	31	110.8†	Oct.	3	109.5†	May	2	150.2†
Sept.	28	111.0†	Nov.	24	109.8†		9	134.0†
Oct.	28	111.0†	Dec.	19	108.5†		16	132.2†
Nov.	29	111.0†	Jan.	25, 1945	108.4†		23	8/254 †
Dec.	27	111.1†	Feb.	21	106.8†		30	8/254 †
Jan.	31, 1938	111.0†	Mar.	3	108.8†	June	13	8/254.9†
Feb.	28	111.3†	Apr.	13	108.3†	Aug.	25	150.0†
Mar.	29	111.5†	June	12	109.5†		29	149.2†
Apr.	26	111.8†	July	17	110.9†	Sept.	5	148.0†
May	23	112.0†	Aug.	22	111.1†		12	147.2†
June	27	111.4†	Sept.	26	111.2†		19	146.5†
July	11	111.1†	Oct.	25	111.3†		26	145.8†
Aug.	29	110.6†	Dec.	31	111.3†	Oct.	3	145.4†
Sept.	26	110.6†	Feb.	18, 1946	111.5†		17	152.1†
Oct.	24	110.7†	Apr.	4	111.7†		24	144.6†
Nov.	21	110.9†	May	27	112.0†		31	143.6†
Dec.	19	110.9†	June	20	112.2†	Nov.	14	143.3†
Jan.	25, 1939	111.2†	July	15	8/190.4†	Dec.	5	141.6†
Feb.	14	111.3†	Oct.	17	123.5†	Jan.	8, 1962	139.2†
Mar.	29	111.6†	Feb.	5, 1947	114.3†	Feb.	6	136.4†
Apr.	17	111.8†	June	7	112.8†	Mar.	6,	134.6†
May	24	111.9†	June	26	111.4†	Apr.	13	132.8†
June	21	111.6†	Aug.	1	122.6†	May	8	131.9†
July	12	111.2†	Aug.	29	113.4†		25	134.5†
Aug.	8	8/139 †	Sept.	25	112.3†	June	12	131.0†
Sept.	27	116.2†	Oct.	30	112.1†	July	3	129.7†
Oct.	30	113.3†	Dec.	1	111.7†	Aug.	15	130.9†
Nov.	20	112.6†	Jan.	6, 1948	111.6†		27	131.3†
Dec.	22	112.1†	Feb.	27	111.4†	Sept.	13	131.9†
Jan.	30, 1940	112.0†	July	6	112.2†		28	132.5†
Feb.	29	111.8†	Sept.	21	127.6†	Oct.	9	132.0†
Mar.	15	111.9†	Dec.	3	114.0†		30	133.6†
Apr.	19	112.3†	May	31, 1949	112.3†	Nov.	20	134.2†
May	28	112.5†	July	22	116.6†	Jan.	3, 1963	137.2†
June	28	112.4†	Dec.	27	111.6†		22	132.4†
Aug.	26	8/129.6†	July	31, 1950	113.9†	May	7	128.1†
Sept.	18	121.6†	Sept.	28	115.1†	June	14	127.7†
Oct.	23	116.4†	Dec.	11	112.3†		27	127.3†
Nov.	29	113.8†	Feb.	27, 1951	111.3†	July	23	127.8†
Dec.	20	113.9†	May	15	110.2†	Aug.	15	129.3†
Jan.	23, 1941	113.5†	Aug.	9	113.4†	Sept.	11	132.0†
Feb.	28	113.5†	Oct.	4	115.2†	Oct.	11	132.5†
Mar.	29	113.4†	Mar.	14, 1952	112.5†	Dec.	9	130.7†
Apr.	21	113.6†	June	3	111.3†	Feb.	14, 1964	128.4†
May	23	113.4†	Oct.	2	107.8†	Mar.	24	127.0†
June	26	113.0†	Nov.	24	108.8†	May	25	127.3†
July	31	112.6†	Apr.	24, 1953	107.0†	July	8	125.5†
Aug.	27	111.7†	June	9	108.1†		31	126.0†
Sept.	24	111.5†	July	30	113.5†	Aug.	18	126.3†
Oct.	31	111.2†	Dec.	18	114.9†	Sept.	15	126.6†
Nov.	26	111.3†	May	17, 1954	122.7†	Oct.	6	126.4†
Dec.	27	111.2†	July	19	118.2†	Nov.	17	128.7†
Jan.	23, 1942	111.0†	Nov.	19	117.0†		30	128.7†
Feb.	25	111.2†						

(D-1-1)10cac-1. Records available 1934-64

Aug.	2, 1935	-151.4†	Sept.	28, 1935	-151.5†	Nov.	25, 1935	-152.2†
	27	151.4†	Oct.	30	152.0†	Dec.	26	152.5†

See footnotes at end of table.

(D-1-1)10cac-1 - Continued

Jan.	2, 1936	-152.6†	May	16, 1939	-140.7†	Feb.	10, 1943	-139.1†			
	29	152.9†	June	13	139.8†		25	139.0†			
Feb.	26	152.8†		21	140.0†	Mar.	16	138.6†			
Mar.	27	153.2†	July	5	140.8†	Apr.	20	137.6†			
Apr.	28	150.2†		12	140.0†	May	12	137.3†			
May	28	148.7†	Aug.	8	140.5†		30	136.1†			
July	3	146.6†		16	140.8†	June	17	136.9†			
	28	145.8†		23	141.0†	July	13	137.0†			
Aug.	28	145.5†	Sept.	12	141.7†	Aug.	10	137.3†			
Sept.	29	146.0†		19	142.1†	Sept.	14	139.0†			
Oct.	31	146.9†		27	142.2†	Oct.	11	140.2†			
Dec.	1	146.6†	Oct.	9	142.9†		20	140.1†			
	17	145.9†		16	143.0†	Nov.	15	141.6†			
Jan.	13, 1937	144.3†	Nov.	8	143.6†	Dec.	8	142.2†			
	22	144.6†		20	144.1†		22	142.7†			
Feb.	2	144.0†	Dec.	12	144.8†	Jan.	27, 1944	143.4†			
	10	143.6†		22	144.8†	Feb.	21	143.2†			
	16	143.1†	Jan.	10, 1940	145.4†	Mar.	20	144.4†			
	23	143.1†		19	145.6†	Apr.	13	142.6†			
Mar.	2	143.2†		31	145.8†	May	23	143.0†			
	9	143.2†	Feb.	8	146.1†	June	5	143.1†			
	16	143.1†	Mar.	1	146.5†		26	142.8†			
	23	143.3†		15	146.2†	July	6	142.7†			
	30	143.4†	Apr.	2	145.6†		28	141.7†			
Apr.	6	143.3†		19	145.1†	Sept.	16	141.2†			
	14	143.7†	May	2	144.8†	Oct.	3	141.3†			
	20	143.6†		15	144.0†	Nov.	15	141.9†			
	27	143.3†		28	143.2†	Dec.	20	141.6†			
May	4	143.6†	June	6	142.2†	Jan.	25, 1945	140.6†			
	11	143.8†		24	142.5†	Mar.	19	140.8†			
	18	143.4†		28	142.5†	Apr.	27	142.0†			
	25	143.4†	Aug.	7	142.9†	June	12	142.7†			
June	2	143.4†		15	143.0†	July	17	142.9†			
	8	142.7†		20	143.2†	Aug.	22	143.4†			
	15	142.5†		26	143.4†	Sept.	26	144.1†			
	22	142.0†	Sept.	3	143.6†	Oct.	15	144.3†			
	29	141.6†		9	143.7†	Feb.	28, 1946	146.4†			
July	6	141.2†		18	143.9†	Apr.	4	146.9†			
	13	140.8†	Oct.	2	144.2†	May	27	146.9†			
	19	140.8†		23	145.0†	July	9	147.2†			
	27	140.5†		29	145.2†	Aug.	5	147.0†			
Aug.	2	140.4†	Nov.	8	145.4†	Sept.	16	146.8†			
	10	140.2†		29	146.0†	Oct.	17	146.0†			
	17	140.0†	Dec.	20	146.6†	Dec.	9	147.2†			
	24	139.9†	Jan.	9, 1941	146.9†	Feb.	28, 1947	146.4†			
	31	139.9†		23	146.8†	Mar.	20	146.4†			
Sept.	28	140.4†	Feb.	17	147.0†	Apr.	23	146.5†			
Oct.	28	141.6†		28	147.0†	June	7	145.7†			
Nov.	29	141.3†	Mar.	10	147.5†	Aug.	1	144.2†			
Dec.	27	141.4†		29	145.4†	Sept.	25	143.6†			
Jan.	11, 1938	141.0†	Apr.	12	145.0†	Oct.	30	143.6†			
	19	140.9†		21	144.8†	Dec.	2	143.2†			
	25	141.3†	May	1	144.3†	Jan.	6, 1948	143.3†			
Feb.	1	140.7†		12	143.7†	Feb.	27	144.0†			
	7	140.4†		23	143.4†	Apr.	14	144.4†			
	14	140.4†	June	5	142.8†	May	18	144.0†			
	21	140.2†		16	142.0†	July	6	143.7†			
Mar.	9	139.8†		26	141.4†	Aug.	23	142.9†			
	15	139.8†	July	1	141.4†	Sept.	21	142.1†			
	21	139.6†		10	141.0†	Dec.	3	142.9†			
	29	139.7†		22	140.8†	May	31, 1949	142.6†			
Apr.	4	139.9†		31	140.6†	July	22	141.8†			
	11	140.3†	Aug.	8	140.6†	Aug.	25	141.6†			
	18	140.6†		14	140.6†	Dec.	27	142.1†			
	29	140.7†		27	140.6†	June	12, 1950	141.9†			
May	3	140.9†	Sept.	2	140.4†	July	1	141.7†			
	10	140.9†		23	141.3†	Aug.	31	142.0†			
	16	140.7†	Oct.	15	141.9†	Oct.	3	142.2†			
	23	140.7†		24	142.0†	Dec.	11	142.1†			
June	1	140.3†		31	142.1†	Feb.	27, 1951	142.6†			
	7	140.0†	Nov.	14	142.6†	June	7	139.1†			
	17	139.5†		26	142.7†	Aug.	7	141.9†			
	21	139.6†	Dec.	10	142.5†	Oct.	4	142.4†			
	27	139.1†		23	142.0†	Mar.	14, 1952	142.6†			
July	5	138.8†	Jan.	6, 1942	142.2†	June	3	139.6†			
	11	138.6†		20	142.2†	Nov.	24	137.6†			
Aug.	9	138.8†	Feb.	10	142.0†	Dec.	15	137.4†			
	15	138.9†		25	141.8†	Apr.	24, 1953	138.6†			
	22	139.0†	Mar.	10	141.8†	June	9	139.4†			
	29	139.2†		17	141.9†	July	30	139.8†			
Sept.	6	139.3†		24	141.6†	Dec.	18	138.1†			
	12	139.6†		31	141.9†	Mar.	19, 1954	141.4†			
	19	139.8†	Apr.	7	141.8†	May	17	141.6†			
	26	139.9†		14	141.5†	July	19	143.0†			
Oct.	3	140.3†		21	141.3†	Aug.	23	144.4†			
	10	140.5†		28	141.2†	Sept.	10	147.1†			
	24	141.0†	May	5	141.2†	Mar.	7, 1955	146.0†			
Nov.	7	141.5†		12	140.7†	May	26	145.4†			
	21	141.3†		19	140.6†	July	19	144.6†			
Dec.	7	140.5†		26	139.9†	Sept.	12	146.1†			
	20	140.0†	June	2	139.6†	Dec.	5	144.7†			
Jan.	3, 1939	139.8†		9	139.3†	Mar.	6, 1956	146.6†			
	13	140.1†		16	139.1†	May	8	146.0†			
	30	140.2†		23	139.0†	Aug.	21	145.5†			
Feb.	15	140.9†	July	14	137.8†	Sept.	28	143.6†			
Mar.	8	141.5†	Aug.	11	137.1†	Dec.	31	146.1†			
	14	141.8†	Sept.	3	137.2†	May	8, 1957	145.1†			
	29	141.4†		29	137.4†	June	25	144.2†			
Apr.	10	141.2†	Oct.	20	136.8†	Aug.	2	143.2†			
	17	141.3†	Nov.	2	137.5†	Sept.	10	144.0†			
May	3	141.1†	Jan.	8, 1943	138.4†	Nov.	18	144.7†			

Table 13.--Water levels in selected observation wells - Continued

(D-1-1)10cac-1 - Continued

Feb.	19, 1958	-144.9†	June	22, 1961	-145.2†	Aug. 31, 1962	-146.0†
Apr.	10	144.6†		29	145.7†	Sept. 13	145.9†
June	25	143.7†	July	5	145.8†	Oct. 4	145.6†
Aug.	21	141.7†		13	146.0†	Nov. 29	144.8†
Oct.	8	142.0†		20	146.1†	Jan. 3, 1963	144.2†
Dec.	5	141.0†	Aug.	3	146.3†	Mar. 5	145.0†
Feb.	19, 1959	141.6†		9	146.5†	Apr. 1	144.8†
Apr.	8	142.1†		17	146.6†	May 9	145.1†
June	11	142.3†		24	146.7†	June 14	146.6†
Aug.	13	143.0†		31	146.7†	July 1	145.2†
Sept.	23	143.6†	Sept.	7	146.9†	23	146.8†
Feb.	24, 1960	143.2†		14	147.2†	Aug. 15	145.9†
Aug.	29	144.8†		28	147.2†	Sept. 11	146.1†
Oct.	19	144.3†	Oct.	18	147.3†	Oct. 23	146.0†
Dec.	1	143.4†		26	147.5†	Nov. 15	145.8†
Mar.	2	143.4†	Nov.	16	147.8†	Dec. 9	145.5†
	17	143.8†	Dec.	13	147.8†	Feb. 14, 1964	146.3†
	23	143.9†	Jan.	8, 1962	147.2†	Mar. 24	145.7†
	31	144.2†	Feb.	14	147.9†	May 25	145.4†
Apr.	12	144.1†	Mar.	9	147.8†	June 25	144.7†
	20	144.4	Apr.	13	148.0†	July 31	144.2†
May	4	144.8	May	14	148.4†	Aug. 18	144.1†
	16	144.2		25	147.2†	Sept. 17	143.2†
	25	145.2	June	11	146.8†	Oct. 7	142.7†
June	1	145.2†	July	3	146.6†	Nov. 30	141.8†
	15	145.4†	Aug.	15	147.0†		

(D-1-1)19cdb-17. Records available 1956-64

May	29, 1956	+10.2	Dec.	17, 1958	+12.5	Jan. 4, 1964	+12.2
June	27	4.6	Mar.	19, 1959	13.6	21	11.8
July	30	5.6	May	22	10.1	Feb. 26	12.0
Aug.	29	6.7	July	29	6.7	Mar. 14	12.8
Oct.	25	10.7	Oct.	1	12.1	Apr. 27	13.8
Feb.	18, 1957	13.3	Jan.	19, 1960	13.2	May 12	12.5
Mar.	28	15.1	May	17	1/ 9.0	25	1/ 7.7
May	1	13.3	Sept.	12	1/ 7.8	June 11	1/10.4
June	11	10.5	Dec.	16	1/12.5	22	1/10.6
July	22	6.9	Apr.	4, 1961	1/11.5	July 8	1/ 7.4
Aug.	23	7.7	Dec.	20	12.3	22	1/ 6.3
Nov.	17	11.0	Mar.	14, 1962	12.3	Aug. 5	1/ 6.0
Dec.	11	13.5	Dec.	12	12.8	20	1/ 7.5
Mar.	13, 1958	13.5	Mar.	1, 1963	12.3	Sept. 2	1/ 7.2
June	5	7.6	May	9	11.2	17	9.2
July	25	6.7	Aug.	6	6.3	Oct. 2	9.2
Sept.	5	8.2	Oct.	24	10.5	30	10.3
Oct.	27	9.7	Dec.	23	12.3		

(D-1-1)23ccc-1. Records available 1938-63

Mar.	4, 1938	-79.7†	Jan.	25, 1945	-78.3†	Apr. 25, 1952	- 61.6†
	31	74.2†	Mar.	14	79.0†	June 3	54.8†
Apr.	30	69.6†	Apr.	11	79.2†	Oct. 2	74.6†
May	31	72.6†	June	6	74.6†	Nov. 24	76.4†
Sept.	8	78.1†	Aug.	9	78.0†	Dec. 11	78.8†
Oct.	31	76.5†	Sept.	20	77.6†	Apr. 24, 1953	75.0†
Nov.	30	78.2†	Nov.	1	79.6†	June 16	62.6†
Jan.	1, 1939	78.8†	Dec.	22	79.5†	Aug. 5	75.4†
Feb.	1	79.1†	Jan.	30, 1946	80.2†	Mar. 19, 1954	76.8†
Mar.	1	79.6†	Apr.	17	67.2†	June 10	77.1†
Apr.	1	78.6†	May	27	73.5†	Aug. 27	79.0†
May	1	77.0†	June	19	77.1†	Sept. 25	80.5†
July	1	79.0†	Aug.	5	79.7†	Nov. 19	79.4†
Sept.	1	80.6†	Sept.	15	80.2†	Apr. 5, 1955	80.8†
Nov.	1	81.0†	Dec.	9	79.6†	May 26	79.1†
Jan.	1, 1940	80.7†	Jan.	21, 1947	79.5†	July 15	79.9†
Apr.	15	80.3†	Feb.	4	80.4†	Sept. 30	80.4†
May	15	75.8†		8	76.0†	Mar. 8, 1956	83.7†
June	30	80.2†		28	80.5†	May 15	82.3†
Sept.	21	81.0†	Mar.	4,	80.5†	Aug. 21	83.2†
Nov.	1	80.6†		11	80.2†	Sept. 28	83.4†
Jan.	1, 1941	80.8†	Apr.	10	74.6†	Dec. 31	83.0†
Feb.	1	81.2†	May	6	74.9†	Mar. 11, 1957	82.9†
Mar.	21	80.2†		21	73.5†	Apr. 4	82.8†
May	8	63.7†	June	4	74.0†	18	82.2†
July	31	77.1†		28	76.4†	May 9	81.9†
Sept.	1	78.1†	July	16	75.0†	23	81.2†
Nov.	19	78.5†		30	77.0†	Aug. 15	80.0†
Dec.	30	78.0†	Aug.	20	78.3†	Sept. 10	81.7†
Feb.	1, 1942	78.6†	Sept.	3	77.4†	Nov. 15	79.8†
Mar.	1	79.4†		26	77.4†	Feb. 19, 1958	81.4†
Apr.	15	60.1†	Oct.	23	77.6†	Apr. 10	80.7†
May	24	71.2†	Dec.	2	78.0†	July 11	75.6†
June	23	72.6†	Jan.	6, 1948	78.4†	Aug. 21	77.6†
Aug.	4	75.6†	Feb.	27	79.5†	Oct. 9	79.4†
Oct.	6	76.1†	May	12	72.6†	Dec. 5	78.3†
Dec.	22	77.2†	June	9	70.2†	Feb. 25, 1959	78.6†
Feb.	2, 1943	77.9†	July	6	75.0†	Apr. 8	78.0†
Mar.	16	72.8†	Aug.	23	74.7†	June 3	77.4†
Apr.	6	68.7†	Sept.	21	75.4†	July 29	79.6†
May	17	63.8†	Oct.	11	76.1†	Sept. 23	80.0†
June	1	70.8†	June	17, 1949	72.6†	Aug. 29, 1960	81.5†
July	13	76.6†	Aug.	16	76.2†	Oct. 19	82.0†
Sept.	7	77.6†		25	76.1†	Jan. 5, 1961	81.1†
Oct.	5	78.1†	Oct.	13	76.6†	Feb. 16	81.2†
Nov.	23	79.6†	June	12, 1950	65.0†	Mar. 7	80.9†
Dec.	28	77.2†	Aug.	31	77.5†	17	81.0†
Feb.	1, 1944	79.2†	Oct.	3	77.8†	23	80.6†
Apr.	11	79.2†	Dec.	11	78.8†	31	80.5†
June	14	60.3†	Feb.	27, 1951	75.5†	Apr. 13	80.1†
Aug.	30	76.5†	July	28	74.9†	20	80.2†
Nov.	1	77.2†	Aug.	7	77.0†	27	80.4†
Dec.	27	77.1†	Oct.	4	81.1†	May. 4	80.1†

See footnotes at end of table.

(D-1-1)23ccc-1 - Continued

May	16, 1961	-80.2†	Sept.	7, 1961	-82.3†	June 11, 1962	-76.5†
	25	80.4†		14	82.4†	July 3	77.9†
June	1	80.5†		21	82.5†	Aug. 15	77.4†
	15	80.8†		28	82.4†	31	80.8†
	22	80.1†	Oct.	5	82.4†	Sept. 13	81.3†
	29	81.2†		18	82.6†	Oct. 4	81.7†
July	6	81.1†		26	82.4†	Nov. 29	82.4†
	13	81.4†	Nov.	6	79.1†	Jan. 3, 1963	82.3†
	20	81.6†	Dec.	13	78.8†	Mar. 5	82.0†
	28	81.5†	Jan.	8, 1962	72.6†	Apr. 1	81.5†
Aug.	3	81.4†	Feb.	7	70.2†	May 9	80.3†
	9	81.2†	Mar.	9	65.1†	June 11	75.2†
	17	81.6†	Apr.	13	74.2†	July 1	70.7†
	24	82.1†	May	14	72.6†	23	76.7†
	31	82.2†		25	73.6†		10/

(D-1-1)26ddc-4. Highest water level on date, in feet below land surface from recorder graph. Records available 1964

1964											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5					253.4	251.5	257.2	275.6	-	251.8	252.9	254.1
10					-	249.8	258.5	275.9	254.1	251.6	253.0	253.9
15					253.0	249.0	256.6	276.8	254.7	257.0	253.4	254.0
20					254.2	249.2	258.6	265.8	251.1	250.8	253.8	251.6
25				253.7	-	249.2	-	265.6	250.5	250.9	253.6	251.6
com				253.6	-	251.4	-	-	251.6	252.8	253.6	251.4

(D-1-1)30aca-23. Records available 1956-64

May	29, 1956	+12.6	June	5, 1958	+9.1	Dec. 12, 1962	+10.2
June	12	10.1	July	25	7.9	Mar. 1, 1963	10.1
	27	8.2	Sept.	5	9.1	May 9	11.6
July	30	8.7	Oct.	27	10.8	Aug. 6	5.8
Aug.	29	9.6	Dec.	17	13.2	Oct. 24	4.9
Oct.	10	11.4	Mar.	19, 1959	14.6	Dec. 23	7.6
	25	12.8	May	22	11.6	Jan. 4, 1964	7.8
Feb.	18, 1957	14.6	July	29	8.7	21	8.0
Mar.	28	16.3	Oct.	1	12.7	Feb. 26	8.8
May	3	14.3	Jan.	19, 1960	13.6	Mar. 14	9.0
June	11	13.0	May	18	10.6	Apr. 15	9.2
July	22	9.6	Sept.	13	7.3	28	9.7
Aug.	23	10.1	Dec.	16	11.5	May 12	4.7
Oct.	17	13.0	Apr.	4, 1961	10.7	June 11	5.3
Dec.	11	14.4	Dec.	20	9.8	22	6.5
Mar.	12, 1958	11.2	Mar.	14, 1962	10.4		

(D-1-1)30cda-10. Records available 1956-57, 1964

Oct.	26, 1956	-7.0	Feb.	25, 1964	-35.7	Sept. 3, 1964	-57.2
Feb.	18, 1957	5.9					

(D-2-1)3ada-2. Records available 1964

Apr.	7, 1964	-248.5	Apr.	23, 1964	-243.2	May 12, 1964	-243.1
	13	243.5					

(D-2-1)4dbd-4. Records available 1931-64

Jan.	31, 1961	-9.2	Oct.	31, 1961	-22.0	Aug. 26, 1963	-17.8
Feb.	28	10.2	Nov.	16	23.3†	Sept. 10	17.6†
Mar.	16	10.7†		28	23.7†	24	19.1†
	31	10.5	Dec.	13	24.8†	Oct. 23	21.3
Apr.	12	11.4†		19	24.8	Nov. 15	21.9†
	20	11.8†		31	25.5	27	23.1
	26	11.9†	Jan.	2, 1962	25.3†	Dec. 9	23.8†
May	2	12.3		31	26.1	21	23.9
	18	13.0†	Feb.	28	26.5	24	24.2
	30	12.8	Mar.	31	26.6	May 15, 1964	24.2†
June	18	14.4†	May	1	25.6	June 11	17.8
	21	14.9†		14	22.5†	22	13.4
	29	15.7		28	17.4†	July 8	16.4
July	5	15.7†	June	1	17.3	22	13.7
	12	16.6†	July	2	13.8	28	13.1†
	20	17.0†		31	16.0	Aug. 5	14.1
	26	17.5†	Aug.	24	16.9†	20	14.8
	31	17.7		30	16.1	25	14.3†
Aug.	9	18.0†	Sept.	10	16.3†	Sept. 2	16.2
	16	18.4†		27	18.1	16	14.5
	22	18.7†	Oct.	30	21.0	21	16.1†
	30	19.5	Nov.	29	22.6†	Oct. 2	16.4
Sept.	7	19.9†	Dec.	28	23.9†	25	19.0†
	19	19.3†	June	5, 1963	17.0	30	20.0
	30	19.2		26	17.7†	Nov. 22	20.5
Oct.	3	19.2†	July	22	17.4	Dec. 8	22.1
	17	20.7†	Aug.	6	16.6	21	22.4†
	24	21.2†		13	15.9†	29	22.0

(D-2-1)5aaa-1. Records available 1931-64

Feb.	26, 1951	+2.2†	Nov.	15, 1954	-1.7†	Sept. 13, 1956	-7.2
July	21	-3.3†	Feb.	28, 1955	3.2†	Oct. 22	4.4
Oct.	2	-1.6†	May	23	4.8†	Nov. 29	3.2
Mar.	13, 1952	+ .8†	Aug.	23	6.5	Dec. 18	3.3
Sept.	25	-1.0†	Oct.	14	4.0	Jan. 15, 1957	3.2
Nov.	17	+ .8†	Nov.	25	2.4	Feb. 15	3.3
Dec.	17	+1.0†		28	2.8†	Mar. 28	2.6
Apr.	17, 1953	- .0†	Jan.	7, 1956	2.3	May 3	3.5
May	25	.2†	Feb.	25	2.1	June 7	5.9
July	21	3.8†	Mar.	5	2.7†	27	6.6†
Sept.	22	3.2†	Apr.	10	3.0	July 29	6.2†
Mar.	5, 1954	.6†	May	2	4.4†	Aug. 22	7.0
May	21	1.0†		10	4.9	27	6.6†
July	23	4.5†	June	8	6.3	Oct. 16	3.3
Aug.	24	4.7†	July	18	7.4	Nov. 14	3.1†
	26	5.4†	Aug.	14	7.4	Dec. 10	2.7

Table 13.--Water levels in selected observation wells - Continued

(D-2-1)5aaa-1 - Continued

Feb.	5, 1958	-7.5†	May	1, 1961	-11.4†	June	1, 1962	-15.8†
Mar.	12	2.2		8	11.4†		22	18.3†
Apr.	11	3.0†		16	11.4†	July	12	19.5†
June	4	7.3		21	11.8†	Aug.	20	17.3†
	13	7.6†		29	13.0†	Sept.	11	17.1†
July	23	7.7	June	12	13.8†		27	15.5†
Aug.	26	7.4†		19	17.8†	Oct.	9	13.7†
Sept.	4	7.8		26	15.4†	Nov.	1	12.8†
Oct.	2	7.0†	July	3	15.9†		27	10.8†
	24	6.8		10	19.1†	Dec.	18	11.2†
Dec.	16	4.8		17	19.3†	Jan.	22, 1963	11.0†
Feb.	17, 1959	4.0†		28	16.9†	Feb.	25	10.5†
Mar.	18	3.4	Aug.	7	14.5†	Mar.	25	10.6†
Apr.	9	4.3†		14	15.2†	Apr.	22	10.5†
May	22	6.8		21	15.5†	May	23	13.0†
Aug.	4	8.8†		28	14.8†	July	1	16.3†
Sept.	30	6.0	Sept.	6	15.6†		22	19.0†
Jan.	19, 1960	4.3		11	15.5†	Aug.	12	19.6†
Mar.	2	4.5†		20	15.6†	Sept.	10	17.2†
May	13	6.8		25	14.5†	Oct.	8	17.3†
Aug.	24	10.3†	Oct.	4	15.4†	Nov.	12	11.7†
Sept.	9	10.0		16	14.2†	Dec.	5	10.8†
Oct.	17	7.4†		23	13.8†	Mar.	9, 1964	11.9†
Dec.	15	6.3		30	11.9†	Apr.	5	12.1†
Feb.	24, 1961	7.8†	Nov.	16	10.5†	May	21	15.3†
Mar.	13	7.8†	Dec.	13	9.9†	July	1	16.5†
	20	8.1†	Jan.	4, 1962	9.5†	Aug.	17	17.1†
	27	8.2†		30	11.8†	Sept.	17	16.5†
Apr.	3	9.6†	Feb.	26	9.6†	Oct.	12	16.0†
	10	8.6†	Apr.	12	9.2†	Nov.	9	13.0†
	17	9.5†	May	11	12.2†	Dec.	2	9.8†
	24	9.9†		21	10.4†			

(D-2-1)5aba-2. Records available 1964

June	2, 1964	+5.4	Aug.	5, 1964	+1.0	Sept.	16, 1964	+3.4
July	2	3.2		20	2.9	Oct.	2	3.0
	22	1.9	Sept.	2	2.3		30	6.2

(D-2-1)7cbd-4. Records available 1957-60, 1963-64

May	7, 1957	1/+16.8	Jan.	19, 1960	1/+28.0	May	12, 1964	1/+13.4
June	10	1/16.2	May	13	1/26.5		25	1/10.6
July	22	1/15.9	Sept.	12	1/26.7	June	10	1/12.0
Aug.	22	1/16.3	Mar.	12, 1963	1/13.7		22	1/11.9
Oct.	16	1/17.9	Aug.	5	1/11.2	July	8	1/10.2
Dec.	10	1/17.7	Oct.	24	1/12.6		22	1/11.2
Mar.	13, 1958	1/16.5	Dec.	21	1/13.3	Aug.	5	1/11.5
June	3	1/16.1	Jan.	4, 1964	1/13.2		20	1/10.8
July	23	1/16.8		20	1/13.1	Sept.	2	1/11.2
Sept.	4	1/16.7	Feb.	28	1/13.1		16	1/11.2
Mar.	19, 1959	1/16.2	Mar.	14	1/13.0	Oct.	2	1/11.4
July	29	1/27.4	Apr.	13	1/13.2		30	1/11.3
Oct.	1	1/29.0		28	1/13.4			

(D-2-1)7dda-1. Records available 1956-64

Aug.	2, 1956	+20.4	Oct.	16, 1957	+44.3	Dec.	14, 1960	+29.8
	5	23.4	Mar.	12, 1958	48.5	Mar.	24, 1961	31.2
	9	27.2	June	3	27.9	Dec.	19	23.2
	15	28.2	July	23	25.8	Mar.	14, 1962	16.8
Sept.	4	29.6	Sept.	4	26.5	Dec.	17	13.6
Nov.	9	48.9	Oct.	24	43.4	Mar.	1, 1963	13.3
Feb.	13, 1957	49.0	Dec.	15	1/2/35.5	Oct.	24	3.6
Mar.	28	49.2	Mar.	18, 1959	36.0	Apr.	28, 1964	13.3
May	3	47.6	May	22	30.2	May	12	13.5
June	7	31.7	May	13, 1960	25.8	June	11	2.2
July	19	29.7	Sept.	9	25.0	Dec.	8	2.9
Aug.	21	30.2						

(D-2-1)8ccd-19. Records available 1931-52, 56-64

May	7, 1931	+58.7†	Jan.	31, 1936	+42.5†	Mar.	21, 1939	+ 48.4†
Jan.	14, 1932	2/63.3†	Feb.	27	42.2†	Apr.	28	47.2†
Mar.	14	46.5†	Mar.	13	42.4†	June	12	48.2†
June	10	49.5†	Apr.	17	42.2†	July	5	47.4†
July	12	48.8†	May	27	42.0†	Aug.	2	48.2†
Aug.	24	49.6†	June	24	42.7†	Sept.	29	49.1†
Sept.	23	46.9†	July	29	42.8†	Oct.	23	49.8†
Apr.	26, 1933	47.9†	Aug.	21	43.4†	Nov.	24	49.3†
July	15	48.2†	Sept.	11	43.9†	Dec.	28	49.1†
Aug.	23	48.8†	Oct.	23	44.6†	Jan.	29, 1940	48.8†
Oct.	14	47.6†	Nov.	20	44.5†	Aug.	22	46.5†
Dec.	21	48.2†	Dec.	23	44.6†	Sept.	23	50.3†
Jan.	17, 1934	48.4†	Jan.	6, 1937	44.6†	Oct.	29	47.4†
Apr.	6	47.3†	Feb.	3	44.1†	Nov.	28	47.0†
May	11	46.5†	Mar.	17	44.2†	Dec.	28	47.4†
	31	46.8†	Apr.	27	44.0†	Jan.	27, 1941	47.5†
June	28	46.7†	May	26	44.0†	Feb.	15	47.3†
July	30	45.8†	June	25	44.1†	Mar.	6	47.3†
Aug.	31	45.3†	July	27	44.1†	Mar.	22	47.4†
Sept.	27	43.3†	Aug.	11	45.0†	Apr.	17	47.3†
Oct.	26	43.4†	Sept.	24	45.8†	May	26	47.0†
Nov.	23	43.4†	Oct.	20	46.2†	June	23	46.4†
Dec.	29	44.4†	Nov.	22	46.1†	July	9	46.4†
Jan.	26, 1935	43.2†	Dec.	28	46.0†	Aug.	20	47.4†
Feb.	27	43.6†	Feb.	24, 1938	45.6†	Sept.	18	48.8†
Mar.	28	42.7†	May	26	45.7†	Oct.	30	49.3†
Apr.	24	43.4†	June	3	45.7†	Nov.	21	49.2†
May	31	43.3†	July	26	43.8†	Dec.	30	48.7†
June	27	42.8†	Aug.	29	47.2†	Jan.	27, 1942	52.0†
July	31	42.9†	Sept.	19	47.6†	Feb.	20	51.6†
Aug.	28	42.4†	Oct.	24	48.3†	Mar.	20	48.5†
Sept.	26	42.1†	Nov.	7	48.4†	Apr.	24	48.5†
Oct.	22	42.5†	Dec.	21	48.9†	May	20	48.2†
Dec.	24	43.2†	Jan.	17, 1939	48.5†	June	5	48.6†

(D-2-1)8ccd-19 - Continued

June	24, 1942	+48.6†	Mar.	28, 1947	+51.0†	Sept.	18, 1952	+52.6†
July	6	48.6†	Apr.	30	50.5†	Nov.	6	53.4†
Aug.	7	49.2†	May	22	50.1†	Aug.	2, 1956	26.9
Sept.	4	49.7†	June	19	50.7†		10	35.4
Oct.	15	51.6†	July	26	50.2†		15	35.1
Nov.	6	51.4†	Aug.	28	51.4†	Sept.	4	37.8
Dec.	10	51.3†	Sept.	22	51.2†	Nov.	9	2/45.8
Jan.	6, 1943	50.8†	Oct.	10	51.6†	Jan.	28, 1957	43.7
Feb.	3	50.2†	Nov.	18	52.4†	Feb.	13	42.6
Mar.	3	50.6†	Jan.	31, 1948	51.6†	Mar.	28	42.7
Apr.	7	50.4†	Feb.	28	51.6†	May	3	41.4
May	3	50.2†	Mar.	31	51.4†	June	3	38.6
June	4	50.2†	Apr.	30	51.9†	July	19	35.9
July	22	49.8†	May	30	51.2†	Aug.	21	36.4
Aug.	19	50.9†	June	30	51.0†	Dec.	15, 1958	40.8
Sept.	11	50.6†	July	31	51.0†	Mar.	18, 1959	43.3
Nov.	22	51.7†	Aug.	30	51.5†	May	22	38.2
Dec.	20	51.1†	Sept.	29	52.0†	July	28	28.8
Jan.	17, 1944	50.7†	Oct.	30	57.5†	Sept.	30	36.1
Feb.	7	51.1†	Nov.	30	53.5†	May	13, 1960	32.9
Mar.	31	50.1†	Dec.	31	54.5†	Sept.	9	32.3
May	11	49.8†	Jan.	31, 1949	54.0†	Dec.	14	36.4
June	10	50.6†	Feb.	28	55.5†	Mar.	24, 1961	38.3
Sept.	6	51.7†	Mar.	31	50.5†	Dec.	20	26.4
Oct.	10	52.4†	Apr.	30	50.0†	Mar.	15, 1962	25.9
Dec.	8	52.0†	May	31	51.0†	Dec.	17	23.6
	29, 1945	52.0†	June	30	49.5†	Mar.	1, 1963	22.6
Mar.	7	50.7†	July	30	51.8†	Aug.	6	0.2
Apr.	3	50.4†	Aug.	31	52.5†	Oct.	24	11.7
May	29	49.6†	Sept.	30	52.5†	Feb.	28, 1964	20.5
June	26	50.7†	Oct.	30	53.3†	Apr.	13	20.4
Aug.	13	50.4†	Nov.	29	53.5†		28	23.2
Sept.	24	52.3†	Dec.	29	53.1†	May	12	22.8
Oct.	16	52.4†	Nov.	6, 1950	53.0†		25	7.6
Nov.	24	51.2†	June	28, 1951	50.0†	June	10	12.9
Mar.	1, 1946	51.9†	July	13	49.5†		22	13.0
Apr.	4	51.1†	Sept.	6	51.6†	July	8	1/5.0
May	28	52.2†	Oct.	10	52.4†		22	2.3
July	2	50.2†	May	29, 1952	51.0†	Aug.	5	1.6
	29	50.7†						

(D-2-1)8ccd-19 - Continued. Recorder installed by Salt Lake City Aug. 7, 1964. Highest water level, on date in feet above land surface from recorder graph.

	1964											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5									-	5.8	14.8	24.1
10								4.4	-	2.2	19.0	24.5
15								3.8	-	2.9	19.0	25.0
20								1.0	-	8.0	21.3	24.7
25								2.3	4.5	12.9	22.7	24.9
eom								4.5	2.5	16.4	23.8	-

(D-2-1)16dbc-1. Records available 1962-64

Jan.	4, 1962	-38.8†	Sept.	28, 1962	-48.2†	Dec.	4, 1963	43.4†
Feb.	7	39.3†	Nov.	1	43.4†	Feb.	5, 1964	42.8†
Mar.	5	38.5†		29	41.6†	Mar.	9	42.2†
Apr.	13	39.2†	Jan.	3, 1963	40.9†	Apr.	15	42.7†
May	11	41.3†	Feb.	27	40.7†	May	21	46.3†
	24	39.6†	Apr.	1	41.0†	June	24	44.3†
June	6	39.9†		22	41.2†	July	27	49.5†
	28	42.8†	June	6	42.1†	Sept.	17	51.5†
Aug.	9	48.7†	Aug.	14	54.1†	Oct.	8	8/81 †
	23	49.2†	Sept.	6	52.1†	Nov.	16	44.1†
	27	50.2†		11	8/89.5†	Dec.	7	42.3†
Sept.	11	50.5†	Nov.	14	44.3†			

(D-2-1)21dbc-1. Records available 1961-64

Dec.	13, 1961	-82.3†	Aug.	29, 1962	-97.5†	Mar.	17, 1964	-85.7†
Jan.	8, 1962	81.7†	Sept.	13	98.5†	Apr.	17	85.7†
Feb.	7	81.9†		28	96.4†	June	2	6/123 †
Mar.	5	82.1†	Oct.	16	92.0†		26	6/134 †
Apr.	13	82.5†	Nov.	1	88.2†	July	31	103 †
May	3	83.1†	Sept.	11, 1963	102.4†	Aug.	18	105 †
	24	82.4†	Oct.	10	103.6†	Sept.	18	112.0†
June	8	82.2†	Nov.	14	88.7†	Oct.	2	110.5†
	26	85.6†	Dec.	3	89.6†	Nov.	24	90.8†
July	12	90.9†	Feb.	14, 1964	85.8†	Dec.	7	89.0†
Aug.	13	98.4†						

(D-2-1)28abc-2. Records available 1955-64

Aug.	1, 1955	-143.6	Nov.	27, 1956	-143.0	May	13, 1960	-149.0
Oct.	15	142.6	Dec.	18	144.1	Sept.	9	150.1
Nov.	25	141.8	Jan.	15, 1957	145.6	Dec.	14	151.3
Jan.	4, 1956	142.5	Feb.	15	145.4	Mar.	23, 1961	152.1
Feb.	22	143.0	Mar.	25	145.0	Dec.	19	159.6
Mar.	31	143.0	May	6	146.2	Mar.	15, 1962	158.7
May	10	144.2	June	6	146.4	Dec.	17	162.0
June	7	146.1	July	19	146.1	Mar.	1, 1963	160.8
Aug.	8	145.3	Aug.	21	145.4	Aug.	5	168.0
	14	145.4	Oct.	11	1/148.0	Oct.	24	167.5
	15	145.8	Dec.	5	144.0	Dec.	21	164.0
	16	145.6	Mar.	12, 1958	144.2	Jan.	4, 1964	163.6
	22	145.3	June	3	145.8		20	163.0
	23	145.1	July	22	146.2	Feb.	1	163.4
	29	145.0	Dec.	8	144.1		28	163.1
	30	145.3	Mar.	18, 1959	145.1	Mar.	14	163.2
	31	145.8	May	21	146.9	Apr.	13	163.1
Sept.	4	145.2	July	28	147.6		28	162.5
	13	145.4	Sept.	30	146.6	May	11	162.8
Oct.	22	144.4	Jan.	18, 1960	148.2	June	10	163.2

See footnotes at end of table.

Table 13.--Water levels in selected observation wells - Continued

(D-2-1)28abc-2 - Continued

June 22, 1964	-163.3	Sept. 2, 1964	-166.9	Oct. 28, 1964	-166.9
July 8	163.4	15	167.5	Nov. 22	165.1
22	164.8	Oct. 2	167.9	Dec. 8	165.2
Aug. 5	165.5	20	167.3	29	163.1
20	165.9				

(D-2-1)28ccc-3. Records available 1956, 1958, 1964

Sept. 11, 1956	-184.9	Apr. 16, 1958	-184.0	Feb. 25, 1964	-196.6
Apr. 1, 1958	183.5				

(D-2-1)28ddb-1. Records available 1934-64

Apr. 25, 1934	-9.8†	Apr. 30	-10.0†	Aug. 30, 1955	-9.4†
May 11	4.6†	May 28	7.2†	Nov. 23	10.5†
June 28	10.0†	June 15	6.5†	Mar. 1, 1956	11.2†
Aug. 10	11.2†	July 6	4.5†	Apr. 19	11.4†
Oct. 29	5/12.6†	Aug. 6	8.6†	Aug. 15	8.8†
Nov. 28	12.1†	Sept. 10	10.3†	Sept. 12	9.3†
Dec. 28	13.2†	Oct. 7	10.3†	Dec. 3	10.3†
Jan. 25, 1935	13.0†	Nov. 5	10.1†	Feb. 18, 1957	11.6
Feb. 21	13.2†	Dec. 16	10.7†	Mar. 6	11.8†
Mar. 29	13.2†	Jan. 6, 1943	11.0†	27	10.4
Apr. 26	12.7†	Feb. 4	10.4†	Apr. 24	10.2†
May 24	8.8†	Mar. 4	10.8†	May 6	10.6
June 28	6.7†	Apr. 19	10.8†	June 5	7.0†
July 19	6.4†	May 17	6.9†	July 16	7.0†
Aug. 29	10.9†	June 18	8.3†	Aug. 26	9.2†
Sept. 27	11.7†	July 26	8.2†	Nov. 7	9.5†
Oct. 31	11.7†	Aug. 27	8.4†	Dec. 15	9.9†
Nov. 26	12.0†	Sept. 23	10.3†	Feb. 3, 1958	11.7†
Dec. 28	12.8†	Oct. 28	9.6†	Mar. 12	10.4
Jan. 31, 1936	13.0†	Dec. 4	10.4†	26	10.8†
Feb. 28	11.6†	Feb. 24, 1944	12.0†	June 2	6.4
Mar. 26	11.7†	Mar. 18	11.8†	12	4.2†
Apr. 22	10.2†	Apr. 28	9.5†	July 22	6.6
May 22	6.3†	June 30	6.5†	30	9.0†
June 19	6.2†	July 31	9.0†	Sept. 3	9.6
July 31	8.2†	Aug. 31	9.4†	26	9.4†
Aug. 28	10.4†	Sept. 18	10.3†	Oct. 23	10.1
Sept. 25	11.3†	Oct. 17	9.9†	Dec. 8	1/11.5
Oct. 6	11.6†	Nov. 14	9.5†	Feb. 6, 1959	12.1†
Nov. 9	11.8†	Dec. 14	10.4†	Mar. 18	11.7
Dec. 12	12.4†	Mar. 23, 1945	11.2†	Apr. 14	11.8†
Mar. 23, 1937	11.4†	Apr. 17	11.4†	May 21	9.7
Apr. 30	7.8†	June 11	6.6†	June 4	5.3†
May 13	7.7†	July 29	6.8†	27	6.7
June 29	6.1†	Aug. 29	6.0†	Sept. 30	10.0
July 26	8.3†	Sept. 29	9.0†	Jan. 18, 1960	12.0
Aug. 24	10.0†	Oct. 19	9.2†	Feb. 24	12.6†
Sept. 30	11.7†	Dec. 22	9.2†	May 13	9.3
Oct. 23	11.8†	Feb. 15, 1946	11.1†	Aug. 24	9.3†
Nov. 23	11.9†	Mar. 26	10.2†	Sept. 9	10.1
Dec. 21	12.0†	May 25	7.1†	Oct. 14	10.6†
Jan. 27, 1938	11.7†	July 5	7.0†	Dec. 14	11.9
Feb. 28	11.6†	Aug. 30	10.2†	Feb. 20, 1961	12.8†
Mar. 24	10.5†	Sept. 27	9.4†	Mar. 16	12.7†
Apr. 21	10.6†	Feb. 24, 1947	10.1†	22	12.9†
May 26	7.2†	Mar. 29	12.0†	31	13.1†
June 21	7.2†	Apr. 17	8.3†	Apr. 6	13.2†
July 29	9.0†	May 31	7.4†	12	12.7†
Aug. 30	10.6†	June 23	7.3†	20	11.9†
Sept. 12	10.9†	July 22	7.5†	Apr. 26	13.1†
Oct. 31	11.3†	Aug. 25	9.2†	May 3	13.6†
Nov. 14	11.1†	Sept. 23	7.9†	10	13.4†
Dec. 9,	11.1†	Oct. 28	9.9†	17	12.5†
Jan. 3, 1939	11.5†	Nov. 28	9.3†	24	11.1†
Mar. 21	10.7†	Jan. 31, 1948	10.7†	June 1	9.2†
Apr. 15	11.1†	Feb. 20	11.2†	15	7.8†
May 13	6.5†	Mar. 13	11.4†	21	8.5†
June 19	5.3†	May 6	9.7†	26	9.2†
July 8	7.8†	June 7	5.7†	July 3	9.7†
Aug. 22	10.3†	July 20	6.8†	10	10.7†
Sept. 18	11.2†	Aug. 18	10.0†	19	11.0†
Oct. 21	10.8†	Oct. 11	10.4†	28	11.4†
Nov. 27	10.9†	Nov. 16	9.6†	Aug. 2	11.2†
Dec. 7	10.9†	May 26, 1949	6.6†	9	11.9†
Jan. 27, 1940	11.8†	July 26	7.3†	16	11.5†
Mar. 16	12.0†	Sept. 16	10.3†	23	12.1†
Apr. 10	11.9†	Dec. 8,	10.0†	29	11.7†
May 22	4.9†	July 13, 1950	4.3†	Sept. 7	11.8†
June 21	8.3†	Aug. 27	10.0†	14	11.8†
July 29	11.2†	Sept. 19	9.8†	21	11.8†
Aug. 28	11.7†	Dec. 19	10.4†	27	11.7†
Sept. 26	11.7†	Feb. 26, 1951	11.1†	Oct. 5	11.7†
Oct. 17	11.4†	May 10	8.7†	18	11.6†
Nov. 7	11.2†	July 31	6.5†	22	11.4†
Dec. 27	12.2†	Sept. 27	8.9†	Nov. 15	11.6†
Jan. 27, 1941	12.7†	May 20, 1952	6.4†	Dec. 13	12.4†
Feb. 13	12.9†	Aug. 7	7.2†	Jan. 8, 1962	12.9†
Mar. 20	11.9†	Nov. 18	10.3†	Feb. 7	13.2†
Apr. 24	10.1†	Mar. 12, 1953	10.7†	Mar. 5	12.8†
May 21	7.4†	May 19	10.1†	Apr. 12	12.4†
June 14	6.6†	June 30	7.4†	May 3	10.6†
July 28	8.8†	Sept. 21	9.6†	24	6.4†
Aug. 14	9.5†	Feb. 15, 1954	11.0†	June 8	5.0†
Sept. 26	11.8†	Mar. 5	9.6†	26	6.5†
Oct. 22	10.6†	July 20	7.1†	July 12	5.4†
Nov. 19	11.0†	Aug. 24	9.3†	Aug. 13	9.3†
Dec. 29	9.9†	Oct. 28	9.6†	29	9.9†
Jan. 12, 1942	10.2†	Feb. 28, 1955	12.0†	Sept. 13	10.1†
Feb. 24	10.7†	May 17	5.8†	28	10.3†
Mar. 26	9.2†	June 20	6.2†	Nov. 1	10.2†

(D-2-1)28ddb-1 - Continued

Nov. 29, 1962	-10.8†	Aug. 13, 1963	-10.1†	June 9, 1964	-2.6†
Jan. 2, 1963	12.5†	Sept. 9	10.8†	26	8.0†
24	12.7†	Oct. 10	11.8†	July 31	8.1†
Feb. 27	13.9†	Nov. 14	11.2†	Aug. 19	9.6†
Apr. 1	13.8†	Dec. 3	10.4†	Sept. 18	10.2†
30	12.5†	Feb. 14, 1964	12.8†	Oct. 5	10.3†
June 6	7.0†	Mar. 17	13.6†	Nov. 24	12.7†
26	3.6†	Apr. 17	11.2†	Dec. 7	11.0†
July 23	8.4†				

(D-2-1)32bbb-1. Records available 1955-64

Aug. 1, 1955	-88.0	May 6, 1957	1/-91.5	Mar. 22, 1961	-94.6
Oct. 8	75.7	June 6	91.0	Dec. 19	100.3
Nov. 25	85.0	July 18	87.1	Mar. 14, 1962	97.4
Jan. 4, 1956	87.3	Aug. 21	89.7	Dec. 17	103.9
Feb. 22	88.0	Oct. 10	88.0	Mar. 1, 1963	103.7
Mar. 31	89.2	Dec. 5	85.0	Aug. 6	107.1
May 10	89.2	Mar. 12, 1958	88.8	Oct. 24	106.8
June 7	91.8	June 3	89.1	Feb. 25, 1964	104.7
July 18	89.5	July 22	85.8	Apr. 13	105.1
Aug. 15	89.2	Oct. 24	2/86.6	May 11	105.7
31	88.7	Dec. 8	88.2	June 10	106.5
Sept. 4	88.4	Mar. 18, 1959	90.1	22	106.1
Oct. 15	88.0	May 21	91.4	Oct. 2	108.8
Nov. 26	85.5	July 27	91.6	28	106.6
Dec. 18	88.6	Sept. 30	90.7	Nov. 22	106.8
Jan. 14, 1957	88.9	Jan. 18, 1960	91.8	Dec. 8	105.0
Feb. 15	89.6	Sept. 8	94.2	29	104.6
Mar. 25	90.1	Dec. 13	93.3		

(D-2-1)33add-2. Records available 1964

May 15, 1964	6/-261.2	June 22, 1964	6/-265.0	Dec. 8, 1964	6/-265.4
25	6/264.6	July 8	6/264.4	29	6/263.7
June 10	6/265.2	Nov. 22	6/266.8		

(D-3-1)2ccc-1. Water level at noon on date to Jan. 1, 1962, after which highest water level on date, in feet below land surface from recorder graph. Records available 1956-64

1956

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5				518.4	518.9	518.9	519.4	517.5	516.1	516.7	517.9	518.2
10				518.3	519.0	519.1	519.2	517.1	515.8	516.7	518.2	518.8
15				518.8	519.4	518.9	519.2	516.7	516.0	517.1	518.3	519.1
20				519.0	518.9	519.1	518.8	516.4	515.8	517.4	518.6	519.1
25				518.8	518.9	519.4	518.3	516.1	516.2	517.5	518.7	519.5
eom			517.9	518.9	519.0	519.3	517.7	516.1	516.3	517.5	518.7	519.1

1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	519.2	520.1	520.4	520.7	521.7	522.3	523.0	521.8	520.6	520.0	519.3	518.2
10	519.5	520.2	520.4	521.3	521.7	522.3	523.0	521.5	520.4	520.1	519.2	518.8
15	519.6	520.3	520.6	521.5	521.9	522.4	523.0	521.3	520.3	520.0	518.9	518.4
20	519.1	520.1	520.6	521.4	521.8	522.4	522.9	521.0	520.3	519.6	519.1	518.5
25	519.6	520.6	520.9	521.8	522.4	522.7	522.7	520.6	520.1	519.8	518.8	518.8
eom	519.9	520.5	521.1	521.7	522.3	522.8	522.2	520.6	520.2	519.2	519.0	518.9

1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	519.0	518.9	519.2	520.2	520.9	522.2	523.0	520.4	519.1	517.1	516.2	515.8
10	518.5	519.0	519.5	520.4	521.0	522.3	523.8	520.3	518.6	517.2	516.0	516.0
15	518.9	519.1	519.4	520.4	521.4	522.7	522.1	520.1	518.5	517.1	515.7	515.9
20	518.6	519.9	519.6	520.5	521.4	522.7	521.7	519.8	518.1	516.7	516.1	515.8
25	518.6	518.7	519.7	520.6	521.6	522.9	521.2	519.6	518.1	516.5	515.7	516.0
eom	519.1	519.3	519.8	520.7	521.9	522.9	520.8	519.4	517.6	516.3	516.1	515.7

1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	515.9	516.7	517.8	519.3	520.5	521.7	523.2	524.2	523.9	523.4	-	522.8
10	516.4	516.8	518.2	518.9	520.5	522.3	523.7	524.1	524.2	523.3	522.5	522.4
15	516.4	517.0	518.4	518.8	520.8	522.5	523.7	524.1	523.9	523.1	522.6	522.8
20	516.6	517.2	518.2	519.7	-	522.9	523.8	524.0	523.8	522.8	522.8	522.6
25	516.7	517.5	518.4	519.7	521.3	522.9	524.1	523.9	523.6	522.6	522.5	522.0
eom	516.8	517.7	519.0	519.6	521.6	522.4	524.4	523.8	523.3	522.9	522.7	522.2

1960

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	-	-	-	-	-	526.9	528.5	528.8	527.9	527.3	526.5	525.8
10	522.8	-	-	-	-	527.2	528.7	528.8	527.8	527.1	526.2	525.7
15	-	-	-	524.8	525.8	527.4	528.9	528.4	527.6	527.1	526.1	525.9
20	-	-	-	525.0	526.3	527.7	529.0	528.4	527.4	527.8	525.9	526.2
25	-	-	-	525.3	526.6	527.8	528.9	528.4	527.4	527.6	525.5	525.8
eom	-	-	-	-	526.7	528.3	529.0	528.0	527.2	526.4	525.8	526.4

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	526.0	-	-	-	529.2	531.2	-	-	-	-	537.2	-
10	525.9	-	-	-	529.5	531.6	-	-	-	-	536.5	-
15	525.8	-	-	-	529.8	532.2	534.7	-	-	-	536.2	-
20	525.8	-	-	-	529.9	532.6	535.1	-	-	538.0	-	535.4
25	526.0	-	-	-	530.2	-	535.6	-	-	537.9	-	535.1
eom	526.0	-	-	-	530.7	-	-	-	-	537.3	-	535.4

1962

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	-	-	-	535.3	535.7	536.6	538.3	540.4	540.4	-	-	-
10	-	-	-	535.4	535.8	536.6	538.7	540.6	540.4	-	-	-
15	-	-	-	535.3	536.1	536.7	539.4	540.7	-	-	-	-
20	-	-	-	535.4	536.2	537.4	539.7	540.6	-	-	-	535.7
25	-	-	-	535.5	536.4	537.6	540.0	540.4	-	-	-	-
eom	-	-	535.2	535.8	536.6	538.0	540.3	540.3	-	-	-	-

1963

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	-	534.2	-	534.3	535.3	537.7	539.3	542.3	-	-	-	-
10	-	533.8	-	534.3	535.4	537.6	539.9	542.6	-	-	-	-
15	-	534.2	-	534.4	535.9	537.9	540.4	-	-	-	-	-
20	-	534.1	534.2	534.5	536.2	537.6	541.0	-	-	-	-	-

See footnotes at end of table.

Table 13.--Water levels in selected observation wells - Continued

(D-3-1)2ccc-1 - Continued

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1963 - Continued												
25	-	534.1	534.2	534.8	536.8	538.4	541.4	-	-	-	-	-
eom	534.0	534.1	533.9	535.0	537.5	538.7	542.0	-	-	-	--	-
1964												
5	-	536.8	-	-	537.4	540.0	-	-	543.3	544.0	541.9	538.9
10	-	536.6	-	536.8	537.9	540.1	-	-	543.8	543.8	541.0	538.1
15	537.3	536.6	-	536.7	538.0	540.3	-	-	544.0	543.6	-	537.6
20	537.0	537.0	-	536.9	538.5	-	-	543.1	543.9	543.5	540.2	-
25	537.1	536.6	-	537.0	539.2	-	-	543.1	543.9	542.8	539.2	-
eom	537.1	536.4	-	537.3	539.7	-	-	543.0	543.9	542.3	539.0	-

(D-3-1)17bcc-1. Records available 1955-64

Aug.	5, 1955	-119.1	Aug.	30, 1956	-120.1	Sept. 3, 1958	-122.1
Oct.	8	118.9		31	120.4	Oct. 23	121.5
Nov.	25	2/121.5	Sept.	4	120.1	Dec. 8	121.8
Jan.	4, 1956	119.2		12	119.8	Mar. 16, 1959	122.9
Feb.	22	119.6	Feb.	20, 1957	120.6	May 21	123.0
Mar.	31	119.5	Mar.	25	121.2	Sept. 30	122.6
May	9	122.3	May	6	121.5	Jan. 18, 1960	123.2
June	6	120.8	June	6	121.8	May 13	124.4
July	17	120.5	July	18	121.9	Sept. 8	124.6
Aug.	13	120.5	Aug.	21	120.7	Dec. 13	125.1
	15	120.3	Oct.	10	121.6	Mar. 22, 1961	125.7
	16	120.2	Dec.	5	121.2	Dec. 19	128.5
	22	120.3	Mar.	11, 1958	122.0	Mar. 15, 1962	129.8
	23	120.3	June	3	122.6	Dec. 17	129.8
	29	120.1	July	22	122.6	Mar. 1, 1963	132.8

(D-3-1)17bcc-1 - Continued

Aug.	5, 1963	-134.2	Apr.	28, 1964	-135.7	Aug.	20, 1964	-136.5
Oct.	24	134.5	May	11	136.0	Sept.	2	136.7
Dec.	23	134.5		25	135.9		15	136.6
Jan.	4, 1964	134.8	June	10	135.9	Oct.	2	136.8
	20	134.6		22	136.4		28	136.8
Feb.	1	135.0	July	8	136.1	Nov.	22	136.7
	28	135.1		22	136.3	Dec.	8	136.9
Mar.	14	135.6	Aug.	5	136.6		29	136.7
Apr.	13	135.8						

(D-3-1)18cba-1. Records available 1964

July	8, 1964	-75.0	Sept.	2, 1964	-75.1	Nov.	22, 1964	-73.3
	22	74.9		15	75.0	Dec.	8	73.1
Aug.	4	75.4	Oct.	2	74.7		29	72.5
	20	74.5		28	74.1			

(D-3-1)29cbc-1. Records available 1964

Dec.	8, 1964	-58.4	Dec.	29, 1964	-57.6			

(D-4-1)6bbc-1. Records available 1963-64

June	28, 1963	-55.7	Apr.	13, 1964	-55.8	Aug.	20, 1964	-54.5
Aug.	5	54.7		28	56.0	Sept.	2	55.2
Oct.	24	53.5	May	11	56.1		16	53.9
Dec.	21	55.0		26	56.1	Oct.	1	53.8
Jan.	4, 1964	55.4	June	10	56.1		28	53.7
	20	54.5		22	56.1	Nov.	20	53.8
Feb.	1	54.8	July	8	56.9	Dec.	7	54.0
	28	55.1		22	55.9		29	54.0
Mar.	14	55.4	Aug.	4	55.2			

1/ Well pumped or flowed recently. Flowing wells usually closed for 10 minutes prior to measurement.
2/ Measurement uncertain.
3/ Well leaking during measurement.
4/ Water in nearby canal.
5/ Well deepened or cleaned since last measurement.
6/ Nearby well pumping or flowing during measurement.
7/ Tape measurement.
8/ Water level measured while well was being pumped.
9/ Possible discrepancy of a few tenths of a foot between present and previous land-surface datum.
10/ Measurements discontinued.

Table 14.--Selected sample and drillers' logs of wells

Altitude of land surface at the well: surveyed altitudes are given in feet and tenths; altitudes interpolated from topographic maps are given in feet.

Thickness in feet. Depth in feet below land surface.

	Thickness	Depth
(B-1-2)2dac-2. Log by Sylvester Kilpack. Alt. 4,212 ft.		
Clay	80	80
Sand	6	86
Clay	70	156
Sand	11	167
Clay	60	227
Sand, hard	15	242
Clay	90	332
Sand, hard	35	367
Clay	50	417
Sand, fine	6	423
Clay	45	468
Sand, hard	12	480
Clay	35	515
Sand, fine	10	525
Clay	6	531
Sand, fine	10	541
(B-1-2)33cca-1. Log by V. P. Larsen. Alt. 4,217 ft.		
Clay	40	40
Sand	6	46
Clay	45	91
Sand	9	100
Clay	33	133
Sand	12	145
Clay	56	201
Sand	5	206
Clay	14	220
Sand	12	232
Clay	35	267
Sand	18	285
Clay	60	345
Sand	8	353
Clay	18	371
Sand	12	383
Clay	40	423
Sand	10	433
Clay	8	441
Sand	9	450
(C-1-1)19caa-1. Log by J. S. Lee and Sons. Alt. 4,242 ft.		
Clay, tan, and sand	22	22
Clay, blue, and sand	42	64
Clay and gravel	22	86
Clay, blue, and sand	8	94
Clay, brown, and sand	41	135
Clay, blue, and sand	40	175
Clay, brown, and sand	30	205
Clay, gray, and sand	15	220
Clay, blue, and sand	15	235
Clay, brown, and sand	18	253
Clay, sticky	12	265
Clay, tan, and sand	57	322
Clay and gravel	38	360
Clay, tan, and sand	37	397
Clay, blue	4	401
Clay, tan, and sand	51	452
Clay and gravel	104	556
Gravel; water	5	561
Clay and gravel	4	565
Clay, sticky, and gravel	16	581
Clay, hard, and gravel	52	633
Conglomerate	7	640
Clay, sand, and gravel	80	720
Clay, sticky	105	825
Clay, sticky, and gravel	13	838
Clay, blue, and sand	35	873
Clay, brown, sticky	5	878
Clay, blue, and sand	12	890
Clay, brown, sticky	12	902
Clay, blue, sticky	11	913
Clay, brown, sticky	7	920
Clay, blue, sticky	110	1,030
Shale, gray	120	1,150
Shale, brown	20	1,170
Clay, brown, sandy	15	1,185
Clay, blue, sticky	5	1,190
Clay, blue, sandy	10	1,200
(C-1-1)29daa-3. Log by Robinson Drilling Co. Alt. 4,250 ft.		
Clay and silt	3	3
Clay, yellow	17	20
Sand	3	23
Clay, yellow	11	34
Clay, blue, and sand	28	62
Clay, blue	7	69
Sand	37	106
Clay, blue	13	119
Clay and sand	15	134
Clay, yellow	9	143
Clay and sand	4	147
Clay, blue	36	183
(C-1-1)29daa-3 - Continued		
Clay, yellow	27	210
Clay, blue	32	242
Clay and gravel	83	325
Clay and sand	47	372
Clay	18	390
Clay, yellow, and sand	93	483
Clay, yellow	39	522
Clay, yellow, and sand	28	550
Clay	13	563
Clay and boulders	12	575
Clay and sand	55	630
Clay and gravel	93	723
Sand	3	726
Clay and gravel	30	756
Conglomerate, hard	8	764
Clay and gravel	6	770
Clay	5	775
Conglomerate, hard	9	784
Clay, yellow	21	805
Clay, yellow, and gravel	40	845
Clay, blue	7	852
Clay, blue, and gravel	58	910
(C-1-1)33ddd-1. Log by J. S. Lee and Sons. Alt. 4,273 ft.		
Soil	2	2
Clay, brown, and gravel	18	20
Clay, gray, sand, and gravel	55	75
Clay, brown, sand, and gravel	17	92
Sand and gravel	18	110
Clay, gray, and sand	75	185
Clay, brown, and gravel	55	240
Clay, gray	50	290
Sand and gravel	5	295
Clay, brown, and gravel	60	355
Clay, tan, sand, and gravel	105	460
Clay, red, and gravel	30	490
Clay, red, and sand	55	545
Clay, tan, and gravel	15	560
Clay, tan, and sand	78	638
Gravel	7	645
Clay, red	19	664
Sand	25	689
Sand and gravel	11	700
Clay, red	30	730
Conglomerate	16	746
Gravel	9	755
Clay, tan, and gravel	57	812
Clay, tan, and sand	8	820
Clay, sticky	8	828
Clay and gravel	12	840
Conglomerate	7	847
Clay	8	855
Clay, tan	20	875
Gravel	11	886
(C-1-2)17adc-1. Log by B. B. Gardner. Alt. 4,222 ft.		
Soil	5	5
Clay, red	15	20
Clay, gray, sandy; water	20	40
Sand, gray	50	90
Clay, light-colored	15	105
Clay, gray	10	115
Sand, gray; water	23	138
Clay, light-colored	42	180
Clay, gray, sandy; water	39	219
Clay, brown	4	223
Gravel	5	228
Clay	2	230
Gravel and clay, in lenses	20	250
Clay, brown	32	282
Gravel	5	287
Clay and gravel, in lenses	15	302
Clay, brown, and gravel	48	350
Clay and sand, in lenses; water	58	408
Gravel, fine	12	420
Clay and thin lenses of sand	38	458
Gravel, cemented	2	460
Hardpan	5	465
Clay, brown, sticky	20	485
Clay, brown, and gravel	105	590
Conglomerate	15	605
Conglomerate, very hard	7	612
Clay and hardpan	8	620
Conglomerate	12	632
Clay, brown, and gravel	23	655
Conglomerate	5	660
Clay, brown, sticky	15	675
Clay, brown, and lenses of gravel	70	745
Conglomerate	15	760
Clay, brown, and lenses of gravel	20	780
(C-1-2)17adc-1 - Continued		
Conglomerate	5	785
Clay, brown, and gravel	10	795
Conglomerate	25	820
Clay and coarse gravel	7	827
Clay, brown, sticky	8	835
Conglomerate	15	850
Gravel	4	854
(C-1-2)17ddc-1. Log by J. S. Lee and Sons. Alt. 4,225 ft.		
Clay, brown	12	12
Clay, blue	40	52
Clay, brown, sandy	8	60
Clay, brown, sandy, and gravel	8	68
Clay, brown, sandy	17	85
Clay, brown, sandy, and gravel	25	110
Clay, blue, sandy	13	123
Clay, brown, sandy, and gravel	124	247
Clay and gravel, hard	16	263
Clay, brown, and gravel	112	375
Clay and gravel, hard	5	380
Clay, brown, and gravel	7	387
Clay and gravel, hard	3	390
Clay, brown, and gravel	5	395
Clay and gravel, hard	3	398
Conglomerate, hard	11	409
Clay, brown, sandy, and gravel	12	421
Clay and gravel, hard	9	430
Clay, sticky, and gravel	26	456
Clay and gravel, hard	32	488
Clay, sticky, and gravel	10	498
Clay and gravel, hard	4	502
Clay, brown, sticky, and gravel	32	534
Clay, sandy, and gravel, hard	11	545
Clay, brown, sticky, and gravel	28	573
Clay and gravel, hard	17	590
Clay, brown, sticky, and gravel	5	595
Clay, sandy, and gravel, hard	9	604
Clay, brown, sticky, and gravel	39	643
Clay and gravel, hard	118	761
Clay and gravel	31	792
Clay, brown, sticky, and gravel	27	819
Clay, hard, and gravel	5	824
Clay, brown, sticky	8	832
Clay, hard, and gravel	12	844
Clay and gravel	1	845
Clay, hard, and gravel	155	1,000
(C-1-2)21acc-5. Log by B. B. Gardner. Alt. 4,227 ft.		
Soil	5	5
Clay, blue	13	18
Sand, black; water	8	26
Clay, brown	54	80
Gravel; water	11	91
Clay, brown	43	134
Gravel; water	3	137
Clay, brown	13	150
Conglomerate, hard	4	154
Sand and gravel; water	24	178
Clay, brown, sandy	42	220
Gravel; water	23	243
Clay, brown	5	248
Conglomerate, hard	43	291
Clay and gravel	9	300
Conglomerate, very hard	45	345
Clay, light-colored	4	349
Conglomerate, hard	19	368
Clay and gravel	28	396
Conglomerate	16	412
Gravel; water	8	420
(C-1-2)24dba-1. Log by J. G. Lee Drilling Co. Alt. 4,250 ft.		
Soil	1	1
Clay	3	4
Sand	1	5
Clay, blue, sandy	36	41
Clay, blue, sandy, and gravel	8	49
Clay, brown, and gravel	22	71
Clay, sandy, and gravel	12	83
Clay, brown, and gravel	7	90
Clay, brown, sandy	28	118
Clay, blue, sandy	9	127
Sand	8	135
Sand, gravel, and clay	7	142
Clay, brown, and gravel	16	158
Clay, brown, sandy	40	198
Clay, brown, and gravel	109	307
Gravel and clay	18	325
Clay, brown, and gravel	11	336
Gravel and clay	66	402
Clay, brown, and gravel	15	417
Gravel and clay	17	434
Clay, brown, and gravel	78	512

Table 14.--Selected sample and drillers' logs of wells--Continued

	Thickness	Depth
(C-1-2)24dba-1 - Continued		
Clay, gray, sticky	60	572
Clay, gray, and gravel	19	591
Clay, brown, sticky	7	598
Gravel and clay	10	608
Clay, brown, sticky	14	622
Sand, fine	30	652
Clay, tan	4	656
Clay, blue, sticky	184	840
(C-1-2)25aad-1. Log by J. S. Lee and Sons. Alt. 4,250 ft.		
Soil	1	1
Clay, brown	14	15
Clay, blue	10	25
Clay, brown, and gravel	45	70
Clay, brown, sandy	60	130
Clay, brown, sandy, and gravel	204	334
Gravel; water	17	351
Clay, brown, and gravel	74	425
Clay, brown	11	436
Clay, red, sandy	14	450
Clay, brown, and gravel	6	456
Clay, brown, sandy	19	475
Clay, brown, and gravel	13	488
Clay, brown, sandy	52	540
Clay, blue	5	545
Clay, blue, sandy	5	550
Clay, blue	92	642
Clay, black	5	647
Clay, blue	23	670
Clay, brown	33	703
Clay, brown, very sandy	28	731
Clay, brown	9	740
Clay, gray, very sandy	15	755
Clay, brown, very sandy	25	780
Clay, brown, sticky, and gravel lenses	22	802
Clay, gray, sticky	83	885
Clay, gray, sticky, and gravel lenses	28	913
Clay, brown, and gravel lenses	55	968
Clay, brown, sticky	32	1,000
(C-1-3)15bca-2. Log by J. S. Lee and Sons. Alt. 4,220 ft.		
Soil	7	7
Clay, blue	128	135
Clay, brown	63	198
Clay, blue, and sand	37	235
Clay, brown	30	265
Clay, blue, and sand	205	470
Clay, brown, and gravel	76	546
Conglomerate	104	650
Clay and gravel	8	658
Conglomerate	27	685
Clay and gravel	23	708
Conglomerate	54	762
Clay and gravel	54	816
Conglomerate	27	843
Clay, red, and gravel	32	875
Clay, brown, and gravel	7	882
Limestone, black	4	886
(C-2-1)9dcc-1. Log by J. G. Lee Drilling Co. Alt. 4,400 ft.		
Clay, tan	65	65
Gravel	26	91
Clay	29	120
Gravel; water	9	129
Clay	29	158
Gravel; water	4	162
Clay	2	164
Gravel; water	8	172
Clay	12	184
Gravel; water	4	188
Clay	144	332
Sand	5	337
Clay	5	342
Sand	5	347
Clay	29	376
(C-3-1)9bcc-1. Log by Eldon Comer. Alt. 4,569 ft.		
Soil	3	3
Clay, gravel, and cobbles	42	45
Clay and gravel	75	120
Gravel and cobbles; water	6	126
Clay	11	137
Clay and gravel	39	176
Gravel	4	180
Clay and gravel	35	215
Gravel	105	320
Clay and gravel	8	328
Clay and sand	8	336
Clay and gravel	14	350
(C-3-1)20ddb-1. Log by J. S. Lee and Sons. Alt. 4,570 ft.		
Soil	3	3
Clay and gravel	32	35
(C-3-1)20ddb-1 - Continued		
Clay	12	47
Gravel	95	142
Clay	8	150
Gravel	33	183
Clay	7	190
Gravel	130	320
Clay and gravel	26	346
(C-3-1)25aba-1. Log by Robinson Drilling Co. Alt. 4,455 ft.		
Soil, clay, and silt	8	8
Gravel	13	21
Sand	53	74
Sand; water	39	113
Clay, blue, and sand	31	144
Clay, blue	23	167
Gravel	2	169
Conglomerate	45	214
Clay, brown	9	223
Clay and gravel	41	264
Clay, brown	5	269
(C-3-1)31aaa-1. Log by J. G. Lee Drilling Co. Alt. 4,658 ft		
Soil	1	1
Gravel	2	3
Clay	1	4
Clay, gravel, and boulders	44	48
Clay, tan, and boulders	29	77
Gravel, with some clay	8	85
Gravel and clay	19	104
Gravel; water	12	116
Clay and gravel	40	156
Gravel; water	3	159
Clay, red, sandy, and gravel lenses	63	222
Gravel; water	5	227
Clay and gravel	133	360
Clay, sandy, and gravel	48	408
Clay, brown, and gravel	47	455
Clay, brown and white, and gravel	27	482
Clay, brown, sandy, and gravel lenses	14	496
Clay, brown, and gravel	35	531
Clay, brown, sandy, and gravel	65	596
Clay, brown, sticky, and gravel	67	663
Clay, brown, sticky, and gravel and sand lenses	37	700
(C-3-2)12dbc-1. Log by Osborne Drilling Co. Alt. 4,862 ft.		
Gravel	28	28
Clay	9	37
Clay, sand, and gravel	42	79
Clay and sand	4	83
Sand and gravel	9	92
Gravel, coarse	3	95
Sand and gravel	38	133
Gravel, coarse	4	137
Clay and sand	4	141
Sand and gravel, coarse	19	160
Sand and gravel	31	191
Clay and sand	12	203
Clay, sand, and gravel	7	210
Sand and gravel, coarse	11	221
Clay, sand, and gravel	8	229
Sand and gravel, coarse	21	250
Clay, sand, and gravel, fine to medium	13	263
Gravel, fine, sand, and clay	18	281
Clay and sand	9	290
Gravel, coarse	70	360
(C-3-2)33cac-1. Log by Robinson Drilling Co. Alt. 5,262 ft.		
Soil, sand, and gravel	8	8
Sand and gravel	4	12
Boulders	8	20
Gravel and boulders	13	33
Silt, sand, and gravel	7	40
Clay and gravel	20	60
Clay, brown to red	20	80
Clay, red, and gravel	30	110
Flakestone, gray and red	25	135
Clay, gray, sand, and gravel	15	150
Clay, gray, and sand	10	160
Clay, gray, sand, and gravel	13	173
Clay, red, sand, and gravel	17	190
Clay, red, and medium gravel	7	197
Clay, sandy, sticky	8	205
Clay, gray, sand, and gravel	10	215
Sand, gray; water	12	227
Clay, sand, and gravel	23	250
Sand and gravel, cemented	10	260
Conglomerate, hard	25	285
(C-3-2)33cac-1 - Continued		
Sand and gravel; water	13	298
Sand, black to gray	10	308
Sand, hard	8	316
Clay, gray, sand, and gravel	20	336
Limestone, black	14	350
(C-4-1)14abd-1. Log by Intermountain Drilling Co. Alt. 4,502 ft.		
Soil	1	1
Clay, sandy	9	10
Not determined	30	40
Clay and gravel	5	45
Gravel	5	50
Clay, tan	10	60
Not reported	5	65
Gravel; water	5	70
Clay, tan	12	82
Clay, blue	63	145
Gravel; water	6	151
Clay, blue	6	157
Clay, sandy	11	168
Clay and gravel; water	4	172
Clay, blue	3	175
Sand	2	177
Sand and gravel	17	194
Clay	24	218
(C-4-1)15bdc-1. Log by Melvin Church. Alt. 4,590 ft.		
Soil and clay	4	4
Sand	15	19
Conglomerate	29	48
Clay, tan	26	74
Conglomerate	28	102
Clay	16	118
Conglomerate	42	160
Clay and sand	15	175
Gravel; water	5	180
Conglomerate	18	198
Clay and gravel, alternating beds	82	280
Clay, tan	133	413
Gravel; water	12	425
Clay, tan	5	430
Clay, gray	75	505
(C-4-1)15bdc-2. Log by Eldon Comer. Alt. 4,590 ft.		
Gravel, cobbles, and boulders	5	5
Clay, tan, gravel, and boulders	10	15
Clay, tan	5	20
Clay, tan, gravel, and cobbles	9	29
Clay, tan	7	36
Clay and gravel	21	57
Clay, tan, sand, and gravel	13	70
Clay, tan	5	75
Clay and gravel	10	85
Clay, tan	52	137
Clay and gravel	30	167
Clay, tan	3	170
Clay, sand, and gravel; water	55	225
Clay, tan	4	229
Clay, tan, sand, and gravel	34	263
Sand and gravel; water	19	282
Clay and gravel	79	361
Clay, tan, and sand	106	467
Clay, tan	32	499
Sand and gravel, with layers of hardpan	23	522
Clay, blue	11	533
Shale, red	9	542
Clay, blue	65	607
(C-4-1)22dbd-1. Log by Eldon Comer. Alt. 4,600 ft.		
Soil	2	2
Clay, tan, and gravel	14	16
Sand and boulders	86	102
Sand and gravel; water	36	138
Clay, tan, and boulders	18	156
Sand and gravel; water	32	188
(C-4-1)23dbd-1. Log by R. D. Feltis, U.S. Geol. Survey, from well samples. Alt. 4,494.7 ft.		
Colluvium composed of small cobbles, gravel, sand, silt, and clay	27	27
Gravel, very fine to very coarse, and very fine to very coarse sand; some small cobbles	59	86
Silt, brown; contains sand and fine to medium gravel	7	93
Gravel, very fine to very coarse and very fine to very coarse sand	13	106

Table 14.--Selected sample and drillers' logs of wells--Continued

	Thickness	Depth
(C-4-1)23dbd-1 - Continued		
Silt, brown and blue-gray, clayey; contains brown sand and fine gravel	4	110
Gravel, very fine to very coarse, and blue-gray sand, very fine to very coarse, and small cobbles	12	122
Silt, brown and blue-gray, clayey and sandy; contains very fine to very coarse gravel	4	126
Silt, dark gray, and very fine to very coarse sand	16	142
Sand, very fine to very coarse, and very fine to medium gravel	2	144
Gravel, very fine to very coarse, in a matrix of sand, silt, and clay; hard drilling	6	150
Quartzite	2.5	152.5
(D-1-1)6cad-1. Log by Utah Geol. and Mineralog. Survey from well samples. Alt. 4,261 ft.		
Gravel, fine, in a silt and clay matrix	40	40
Clay, gray, silty, and fine gravel	20	60
Clay, brown, silty	5	65
Clay, brown and gray, silty, and sand	15	80
Clay, brown and gray, silty, and fine gravel	30	110
Sand, very fine, clay, and gravel	15	125
Clay, brown, and fine gravel	35	160
Clay, gray-green, and intermixed buff clay and fine sand	30	190
Clay, gray-green, silty	10	200
Clay, dark gray-green, silty, and fine gravel	35	235
Sand, brown and gray, silty clay, and fine gravel	30	265
Gravel, fine to medium, in a red-brown clay matrix	5	270
Clay, buff, and fine gravel	25	295
Gravel, fine, in a red-brown clay matrix	10	305
Clay, gray	30	335
Clay, brown and gray	15	350
Gravel, fine, in a buff clay matrix	10	360
Clay, buff, and fine gravel	35	395
Clay, gray-green, and gravel	25	420
Clay, red, silty, and gravel	5	425
Gravel, fine to medium, in a red clay matrix	15	440
Clay, red, silty, and fine gravel	10	450
Gravel, in a red clay matrix	5	455
Clay, brown and gray, and gravel	25	480
Gravel and brown, silty clay	5	485
Clay, buff, silty	5	490
Clay, gray and buff, and fine gravel	40	530
Clay, gray, silty, and gravel	20	550
Gravel, in a gray, silty clay matrix	5	555
Clay, gray, silty	5	560
Gravel, in a silty clay matrix	10	570
Clay, buff to gray, silty	10	580
No record	1	581
(D-1-1)21acc-2. Log by Roscoe Moss Drilling Co. Alt. 4,445 ft.		
Soil	5	5
Gravel and boulders	30	35
Clay, gravel, and boulders	10	45
Clay, red	20	65
Clay, gravel, and boulders	15	80
Clay, sandy	10	90
Clay; gravel, and boulders	25	115
Clay, yellow, and embedded gravel	10	125
Gravel and boulders	30	155
Clay, yellow	10	165
Gravel and boulders	25	190
Clay, red	10	200
Gravel and boulders	10	210
Clay, red	10	220
Gravel and boulders	25	245
Clay, red	30	275
Gravel and boulders	15	290
Gravel, cemented, and boulders	20	310
Clay, red	35	345
Sand, silty, fine	5	350
Gravel, cemented, and boulders	35	385
(D-1-1)21acc-2 - Continued		
Clay and embedded gravel	20	405
Gravel, cemented and boulders	25	430
Clay, red	20	450
Gravel and boulders	80	530
Clay, gravel, and boulders	46	576
(D-1-1)35cdc-1. Log by J. S. Lee and Sons. Alt. 4,730 ft.		
Boulders	55	55
Clay and coarse gravel	8	63
Boulders	19	82
Clay and gravel	34	116
Boulders	19	135
Boulders and clay	25	160
Conglomerate	20	180
Clay, red, and gravel	13	193
Boulders and clay	12	205
Clay and gravel	71	276
Clay, brown	7	283
Gravel and clay	71	354
Clay, brown, sandy	14	368
Gravel; water	22	390
Sand, fine	24	414
Gravel; water	21	435
Conglomerate	15	450
Gravel; water	30	480
Sand, fine	5	485
Gravel, coarse; water	5	490
Sand and gravel	40	530
(D-2-1)21dbc-1. Log by Roscoe Moss Drilling Co. Alt. 4,453 ft.		
Soil	4	4
Clay, sandy	41	45
Clay, gravel, and boulders	35	80
Clay, blue, and gravel	25	105
Clay, yellow	14	119
Gravel, with lenses of yellow clay	9	128
Clay, yellow, and cemented gravel	55	183
Clay, sand, and gravel	61	244
Clay, brown	12	256
Sand and gravel	6	262
Clay, yellow and gray	50	312
Sand and gravel	32	344
Clay, brown	19	363
Sand and gravel	23	386
Clay, blue	44	430
Clay, brown, hard, and gravel	14	444
Sand and gravel	18	462
Clay and cemented sand and gravel	122	584
Clay, blue, tough; and gravel	47	631
Clay, gravel, and boulders	70	701
Clay, brown	4	705
Clay, sand, and gravel	35	740
(D-2-1)22daa-1. Log by Robinson Drilling Co. Alt. 4,620 ft.		
Sand and gravel	6	6
Sand, gravel, and boulders	29	35
Clay, sand, gravel, and boulders	10	45
Clay, blue, and sand	38	83
Clay, blue	69	152
Conglomerate	50	202
Gravel and boulders	32	234
Clay, brown, sand, and gravel	31	265
Sand and gravel	17	282
Clay, yellow, and sand; water	16	298
Sand	12	310
Clay, brown	2	312
Conglomerate	15	327
Clay	10	337
Conglomerate	15	352
Clay, yellow	4	356
Conglomerate	2	358
Sand and gravel	10	368
Gravel	7	375
Sand and gravel	5	380
Boulders	10	390
Conglomerate	1	391
Gravel	4	395
Sand and gravel	2	397
Gravel and boulders	21	418
Conglomerate	8	426
Gravel	12	438
Gravel and boulders	10	448
Clay, gravel, and conglomerate	2	450
Clay, gravel, and cobbles	5	455
(D-3-1)12cab-1. Log by Eldon Comer. Alt. 5,250 ft.		
Soil	2	2
Clay, tan	6	8
Sand and boulders	57	65
Sand and gravel; water	66	131
Sand, gravel, and cobbles	22	153
(D-3-1)12cab-1 - Continued		
Boulders	4	157
Sand, gravel, and boulders	5	162
Conglomerate	25	187
Bedrock	3	190
(D-3-1)18cba-1. Log by Robinson Drilling Co. Alt. 4,414 ft.		
Soil	2	2
Clay, blue, sandy, soft	16	18
Clay, firm	4	22
Clay, sandy, soft	21	43
Clay	5	48
Clay, sandy	12	60
Clay, blue	24	84
Sand	22	106
Sand and granite boulders	19	125
Sand, clay, and gravel	15	140
Sand	32	172
Clay, yellow	16	188
Sand, coarse, and gravel	12	200
Sand, coarse, and fine gravel	18	218
Clay, yellow	4	222
Sand and gravel	26	248
Clay, yellow	2	250
Sand and gravel	20	270
Sand and gravel, with clay lenses	15	285
Gravel	20	305
Sand and gravel	17	322
Clay, yellow	8	330
Gravel	6	336
Clay	6	342
Gravel	10	352
Clay	2	354
Gravel	16	370
Gravel, coarse, cemented	103	473
Clay, yellow	2	475
Clay, yellow, and gravel	70	545
Gravel, cemented	35	580
Clay, yellow	5	585
Gravel, cemented	18	603
Clay, gray	7	610
Clay, yellow, and gravel	20	630
Gravel, cemented	10	640
Clay, yellow, and gravel	112	752
Gravel, cemented	15	767
Clay	8	775
Clay, yellow, and gravel	5	780
Gravel, cemented	30	810
Clay, yellow, and gravel	10	820
Clay, yellow, and medium gravel	40	860
Gravel, cemented	8	868
Clay and gravel	2	870
Clay, yellow and gray, and gravel	71	941
Gravel, cemented	17	958
Clay, yellow	2	960
Clay, yellow, and gravel	18	978
Gravel, cemented	5	983
Clay and gravel	29	1,012
Gravel, cemented	8	1,020
Clay, yellow	3	1,023
Gravel, cemented	7	1,030
Clay, yellow	15	1,045
Gravel, cemented	23	1,068
Clay, yellow	2	1,070
Clay, yellow, and gravel	65	1,135
Gravel, cemented	15	1,150
(D-3-1)29cbc-1. Log by J. C. Lee Drilling Co. Alt. 4,465 ft.		
Soil	1	1
Clay	5	6
Sand	52	58
Clay	22	80
Clay and sand	22	102
Clay	45	147
Sand	18	165
Sand and gravel; water	18	183
Clay	30	213
Gravel; water	17	230
Clay	22	252
Sand and gravel	7	259
Clay	2	261
Sand and gravel	9	270
Clay	7	277
(D-4-1)6bbc-1. Log by J. F. O'Brien. Alt. 4,426 ft.		
Clay and silt	12	12
Gravel	3	15
Clay	33	48
Gravel and boulders	12	60
Clay	93	153
Gravel	5	158
Clay and sand	14	172
Sand and gravel	18	190

Table 15.--Summary of estimated well discharge in 1964[1/]

(acre-feet)

Use of water	East Bench district	East Lake Plain district	Cotton-woods district	South-east district	West slope district	North-west Lake Plain district	Total (rounded)
Industry	800	3,850	1,500	90	75	27,000	33,300
Public supply[2/]	5,200	3,700	19,500	300	1,400	2,400	32,500
Irrigation	140	0	1,300	85	4,500	0	6,000
Air conditioning	200	600	0	20	0	10	800
Domestic, stock, fish, and fur culture	100	10,000	12,000	100	5,000	10,000	37,200
Total (rounded)	6,400	18,200	34,300	600	11,000	39,400	110,000

1/ See plate 1 for location of districts.
2/ Includes water used by municipalities, public water supply companies, schools, hospitals, and hotels.

Table 16.--Chemical analyses of water from selected wells and trenches

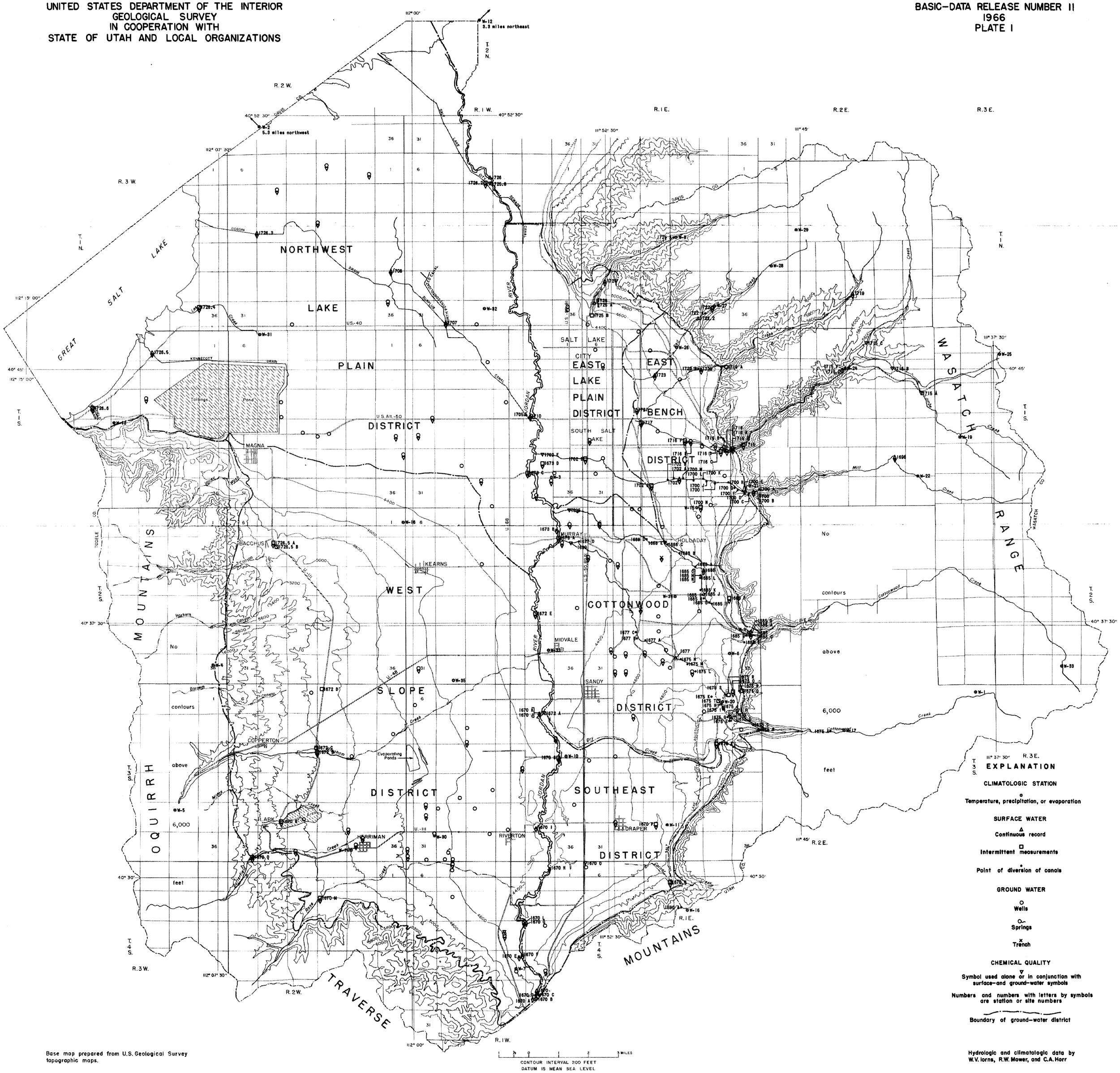
(Concentration of dissolved constituents, dissolved solids, and hardness given in parts per million)

Well location number	Date of collection	Temperature (°F)	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio	Specific conductance (micromhos/cm at 25°C)	pH
(B-1-2)2dac-2	2-26-64	79	--	--	--	--	--	a 166		261	0	1.9	144	--	--	--	485	58	0	86	9.5	830	7.9
	7- 7-64	80	--	--	--	--	--	a 169		260	0	12	138	--	0.1	--	478	52	0	88	10	836	7.9
3bdc-1	2-26-64	--	--	--	--	--	--	a 582		122	0	13	1,140	--	--	--	2,370	456	356	74	12	3,600	7.6
8abd-1	7-14-64	66	24	--	--	27	17	a 291		190	0	1.9	435	--	.5	--	906	139	0	82	11	1,670	7.5
15bcb-2	7- 7-64	66	22	--	--	11	7.3	168	1.8	298	0	7.4	131	2.0	.1	--	482	58	0	86	9.6	849	7.8
36baa-1	2-26-64	81	--	--	--	--	--	a1,070		168	0	53	2,050	--	7.2	--	3,320	770	632	75	17	6,160	7.3
	7- 7-64	81	--	--	--	--	--	a1,120		172	0	36	2,150	--	5.1	--	4,110	790	649	75	17	6,220	7.4
(C-1-1)18ddd-2	7- 7-64	69	--	--	--	--	--	a 169		144	0	75	288	--	.7	--	766	236	118	61	4.8	1,260	8.1
19caa-1	6-16-64	--	--	0.37	--	42	13	--		162	2	--	254	--	--	--	790	160	24	--	--	1,290	8.3
	7-14-64	76	41	--	--	43	17	a 252		164	0	150	308	--	.5	--	906	177	42	76	8.2	1,500	7.7
33abb-1	7- 7-64	59	--	--	--	--	--	a 62		202	0	461	83	--	.3	--	401	196	30	41	1.9	655	7.3
35aaa-4	7- 8-64	55	14	--	--	59	20	a 11		196	0	71	13	--	.6	--	305	230	69	9	.3	458	7.8
35caa-2	9-18-64	73	24	--	--	35	15	a 57		182	0	72	50	--	.5	--	372	172	23	42	1.9	554	7.4
(C-1-2)24cba-1	8-18-64	73	53	--	--	72	29	a 450		168	0	205	658	--	.1	--	1,550	300	162	77	11	2,630	7.8
25aad-1	9-18-64	59	42	--	--	86	77	a 384		356	0	431	435	--	14	--	1,620	530	238	61	7.3	2,490	7.8
(C-1-3)15bca-2	8-15-64	82	18	--	--	435	195	a4,330		273	0	254	7,650	--	16	--	13,800	1,880	1,660	83	43	20,600	7.5
(C-2-1)1dbb-3	8- 7-64	56	22	--	--	57	17	a 49		160	0	140	30	--	.1	--	392	212	81	34	1.5	594	7.9
12bac-1	7- 8-64	55	11	--	--	29	8.0	a 10		114	0	20	9	--	.3	--	140	105	11	17	.4	232	7.5
31bdd-1	7-16-64	56	24	--	--	75	29	a 92		212	0	74	180	--	5.3	--	604	308	134	39	2.3	986	7.6
(C-3-1)9ccc-1	7-16-64	57	32	--	--	489	165	a 58		662	0	1,110	230	--	5.3	--	2,890	1,900	1,360	6	.6	3,120	7.2
12ccb-1	7- 8-64	59	32	--	--	62	32	a 86		234	0	106	120	--	.3	--	578	284	92	40	2.2	905	7.7
15dda-1	7- 7-64	54	2.5	--	--	32	28	55	2.9	46	0	51	164	.1	1.2	0.03	417	196	158	37	1.7	694	7.8
30aba-1	7-16-64	57	27	--	--	205	62	a 66		323	0	349	200	--	2.7	--	1,170	768	503	16	1.0	1,590	7.4
30acd-1	7-16-64	54	24	--	--	164	43	a 46		240	0	221	180	--	3.2	--	890	584	387	14	.8	1,270	7.6
31cbb-1	9- 3-64	57	43	--	--	107	35	a 46		244	0	49	184	--	1.1	--	675	412	212	19	1.0	990	7.8
31ccb-1	9- 3-64	56	46	--	--	130	34	a 57		288	0	50	212	--	1.0	--	792	464	228	21	1.1	1,150	7.9
32dcc-1	8- 4-64	55	33	--	--	189	48	a 80		340	0	186	258	--	7.4	--	1,130	668	389	21	1.3	1,560	7.6
(C-3-2)26ccc-1	7-16-64	54	31	--	--	204	71	a 78		364	0	290	225	--	15	--	1,210	760	461	18	1.2	1,650	7.5
33cac-1	7-21-64	58	33	--	--	148	41	a 44		308	0	242	92	--	2.5	--	798	540	287	15	.8	1,110	7.4
35abc-1	7-16-64	56	31	--	--	228	49	a 77		328	0	171	340	--	13	--	1,410	770	501	18	1.2	1,730	7.4
35bdc-1	7-16-64	54	30	--	--	204	56	a 87		326	0	152	350	--	13	--	1,330	740	473	20	1.4	1,710	7.8
(C-4-1)5abb-1	7-16-64	54	40	--	--	125	30	a 99		380	0	91	170	--	7.1	--	752	436	124	33	2.1	1,150	7.7
15bdc-1	8- 6-64	64	62	--	--	114	49	a 112		184	0	127	310	--	7.4	--	1,060	484	333	33	2.2	1,470	7.8
15bdc-2	8- 6-64	64	64	--	--	99	38	a 101		176	0	72	280	--	12	--	902	404	260	35	2.2	1,280	7.6
23dbd-1 1/	1- 7-64	57	31	--	--	70	38	a 119		302	0	121	148	--	.8	--	677	324	76	44	2.9	1,110	8.0
2/	1- 7-64	57	33	--	--	71	42	a 147		304	0	135	192	--	.3	--	776	350	91	48	3.4	1,250	8.4
3/	1- 7-64	57	22	--	--	67	30	a 98		277	0	109	114	--	.9	--	582	290	63	42	2.5	938	7.7
(D-1-1)7abd-6	7- 9-64	56	17	--	--	108	42	a 39		325	0	162	54	--	21	--	646	444	177	16	.8	935	7.9
19cdb-17	7- 8-64	58	16	--	--	115	35	a 44		280	0	235	32	--	8.6	--	668	430	200	18	.9	915	7.6
(D-2-1)6dbb-10	9-18-64	63	22	--	--	44	16	a 32		156	0	90	17	--	.1	--	315	176	48	28	1.1	469	7.7
7cbd-4	7- 8-64	58	11	--	--	38	10	a 8.9		132	0	27	12	--	3.9	--	183	137	29	12	.3	287	7.5
8ccd-19	7- 8-64	53	9.4	--	--	24	9.7	a 12		108	0	17	14	--	.5	--	140	100	11	21	.5	235	7.9
9dbd 4/	8-26-64	60	--	--	--	--	--	a 86		261	0	128	116	--	--	--	658	333	111	36	2.0	1,020	8.3
20add 4/	8-13-64	--	--	--	--	--	--	197	6.0	476	0	305	272	--	.4	--	1,330	668	278	39	3.3	2,040	7.1
28ccc-3	8- 7-64	53	12	--	--	22	8.3	a 11		90	0	17	13	--	1.9	--	121	88	14	21	.5	213	7.8
29cdd-1	9-18-64	56	11	--	--	24	8.3	a 12		104	0	20	10	--	.0	--	140	94	9	22	.5	224	7.7
30dda-1	9-18-64	57	12	--	--	28	9.7	a 11		111	0	20	15	--	.8	--	163	110	19	18	.4	264	7.8
32caa-1	8- 7-64	58	11	--	--	23	8.8	a 12		108	0	14	12	--	.5	--	145	94	5	22	.5	282	7.4
32cbb-2	9-18-64	64	11	--	--	21	9.2	a 14		100	0	20	11	--	1.7	--	152	90	8	25	.6	236	7.6
33abd-2	9-18-64	52	12	--	--	37	9.7	a 7.5		142	0	20	7.2	--	1.3	--	179	132	16	11	.3	291	7.7
34dba-1	8- 7-64	53	5.4	--	--	35	6.6	a 11		97	0	40	12	--	.3	--	151	114	34	18	.5	257	7.7
(D-3-1)8aba-1	8- 7-64	54	15	--	--	23	5.8	a 13		107	0	6.2	12	--	.1	--	117	82	0	26	.6	206	7.8
29cbc-1	11-25-64	78	27	--	--	51	11	105	15	226	0	68	107	.7	6.0	.13	486	172	0	54	3.5	810	7.6

1/ Sample taken from perforations at 97-102 and 112-119 feet.
2/ Sample taken from perforations at 112-119 feet.
3/ Sample taken from perforations at 74-83, 97-102, and 112-119 feet.
4/ Sample taken from open trench.
a Na plus K, reported as Na.

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
IN COOPERATION WITH
STATE OF UTAH AND LOCAL ORGANIZATIONS

BASIC-DATA RELEASE NUMBER 11
1966
PLATE 1



Base map prepared from U.S. Geological Survey topographic maps.

Hydrologic and climatologic data by W.V. Iorns, R.W. Mower, and C.A. Horr

MAP OF SALT LAKE COUNTY, UTAH, SHOWING LOCATION OF HYDROLOGIC AND CLIMATOLOGIC DATA-COLLECTION SITES 1964