CUMENTATION PAGE

Form Approved
OMB No. 0704-0188

AD-A286 147

2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
00/00/64	

4. TITLE AND SUBTITLE
HYDROGEOLOGIC DATA OF THE DENVER BASIN, COLORADO, (COLORADO WATER CONSERVATION BOARD BASIC DATA REPORT NUMBER 15)

5. FUNDING NUMBERS

6. AUTHOR(S)
MCCONAGHY, J.; CHASE, G.; BOETTCHER, A.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
GEOLOGICAL SURVEY (U.S.)

8. PERFORMING ORGANIZATION REPORT NUMBER
84338R02

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

94-35029

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT
APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*
THIS REPORT IS INTENDED TO SERVE TWO PURPOSES: 1. TO MAKE AVAILABLE BASIC GROUND WATER DATA USEFUL IN PLANNING AND STUDYING WATER RESOURCES DEVELOPMENT AND 2. TO SUPPLEMENT AN INTERPRETIVE REPORT THAT WILL BE PUBLISHED LATER. THE RECORDS WERE COLLECTED DURING THE INVESTIGATION OF THE GEOLOGY AND GROUND WATER RESOURCES OF THE DENVER BASIN MADE BY THE USGS FROM 1956-1963. THIS REPORT SHOULD BE MOST USEFUL IN PREDICTING CONDITIONS LIKELY TO BE ENCOUNTERED WHEN DRILLING A NEW WELL. THE PROPOSED DRILLING SITE CAN BE LOCATED ON PLATES 1 OR 2, AND THE RECORDS OF NEARBY WELLS CAN BE EXAMINED. OTHER SIGNIFICANT FACTORS CAN BE DETERMINED FROM TABLE 1-9 AS FOLLOWS: WHETHER IT IS PRACTICAL TO DRILL DEEPER IN SEARCH OF WATER; THE SUCCESS OR FAILURE OF NEARBY WELLS; TYPE OF MATERIALS LIKELY TO BE PENETRATED BY THE PROPOSED WELL; PHYSICAL PROPERTIES OF FORMATION MATERIALS; FLUCTUATIONS AND TRENDS OF THE WATER TABLE; AND QUALITY OF WATER IN RELATION TO THE INTENDED USE. THESE AND OTHER USES OF THE REPORT WILL BE FACILITATED UPON

14. SUBJECT TERMS
CHEMICAL ANALYSIS, WELLS

15. NUMBER OF PAGES

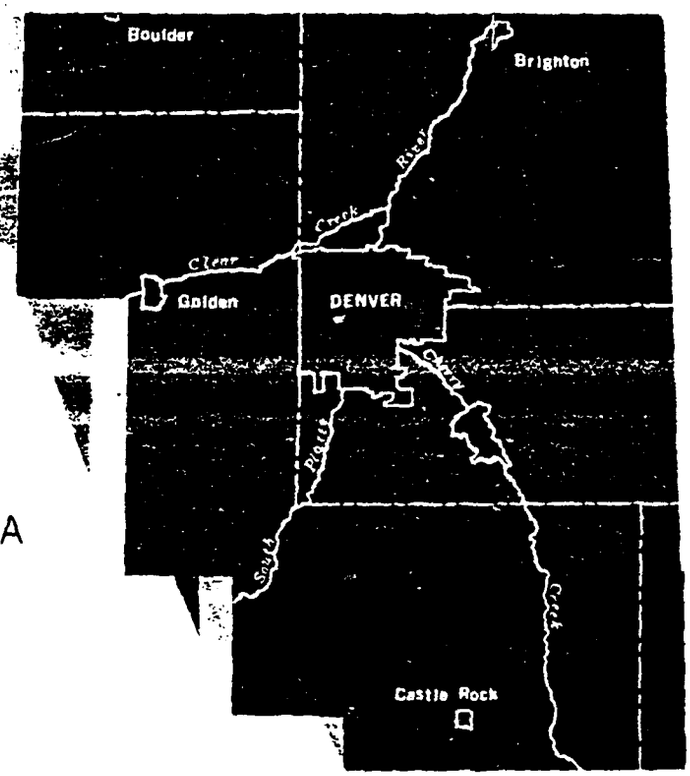
16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNCLASSIFIED			

Colorado

GROUND WATER

BASIC DATA REPORT NO. 15



HYDROGEOLOGIC DATA
OF THE DENVER
BASIN, COLORADO

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COLORADO WATER CONSERVATION BOARD
BASIC-DATA REPORT NO. 15

HYDROGEOLOGIC DATA OF THE DENVER BASIN, COLORADO

BY

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U.S. GEOLOGICAL SURVEY

PREPARED BY
THE UNITED STATES GEOLOGICAL SURVEY
IN COOPERATION WITH
THE DENVER BOARD OF WATER COMMISSIONERS
AND
THE COLORADO WATER CONSERVATION BOARD
DENVER, COLORADO
1964

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Introduction

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

The records were collected during the investigation of the geology and ground-water resources of the Denver Basin, Colo., made by the U.S. Geological Survey, 1956-63, in cooperation with the Denver Board of Water Commissioners and the Colorado Water Conservation Board. The interpretive report written by George H. Chase, James A. McConaghy, Edward D. Jenkins, and Robert Brennan, will be published later.

The well and test-hole numbers in the tables indicate their locations, as shown on plates 1 or 2. The numbering system is based on the U.S. Bureau of Land Management's system of land subdivision. The number shows the location of the well or test hole by quadrant, township, range, section, and position within the section. A graphic illustration of this method of well location is given in figure 1. The capital letter at the beginning of the location number indicates the quadrant in which the well is located. Four quadrants are formed by the intersection of the base line and the principal meridian--A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. The first numeral indicates the township, the second the range, and the third the section in which the well is located. Lowercase letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section, the third the quarter-quarter-quarter section, and the fourth the quarter-quarter-quarter-quarter section. The letters are assigned within the section in a counterclockwise direction, beginning with (a) in the northeast quarter of the section. Letters are assigned within each quarter section, quarter-quarter section, and quarter-quarter-quarter section in the same manner. Where two or more locations are within the smallest subdivision, consecutive numbers beginning with 2 are added to the letters in the order in which the wells or test holes were inventoried. For example, C4-68-15daaa2 indicates a well in the northeast quarter of the northeast quarter of the northeast quarter of the southeast quarter of sec. 15, T. 4 S., R. 68 W., and shows that this is the second well inventoried in the quarter-quarter-quarter-quarter section. The capital letter C indicates the township is south of the base line and that the range is west of the principal meridian.

This report should be most useful in predicting conditions likely to be encountered when drilling a new well. The proposed drilling site can be located on plates 1 or 2, and the records of nearby wells can be examined. Other significant factors can be determined from tables 1 through 9 as follows: whether it is practical to drill deeper in search of water; the success or failure of nearby wells; type of materials likely to be penetrated by the proposed well; physical properties of formation materials; fluctuations and trends of the water table; and quality of water in relation to the intended use. These and other uses of the report will be facilitated upon release of the interpretive report.

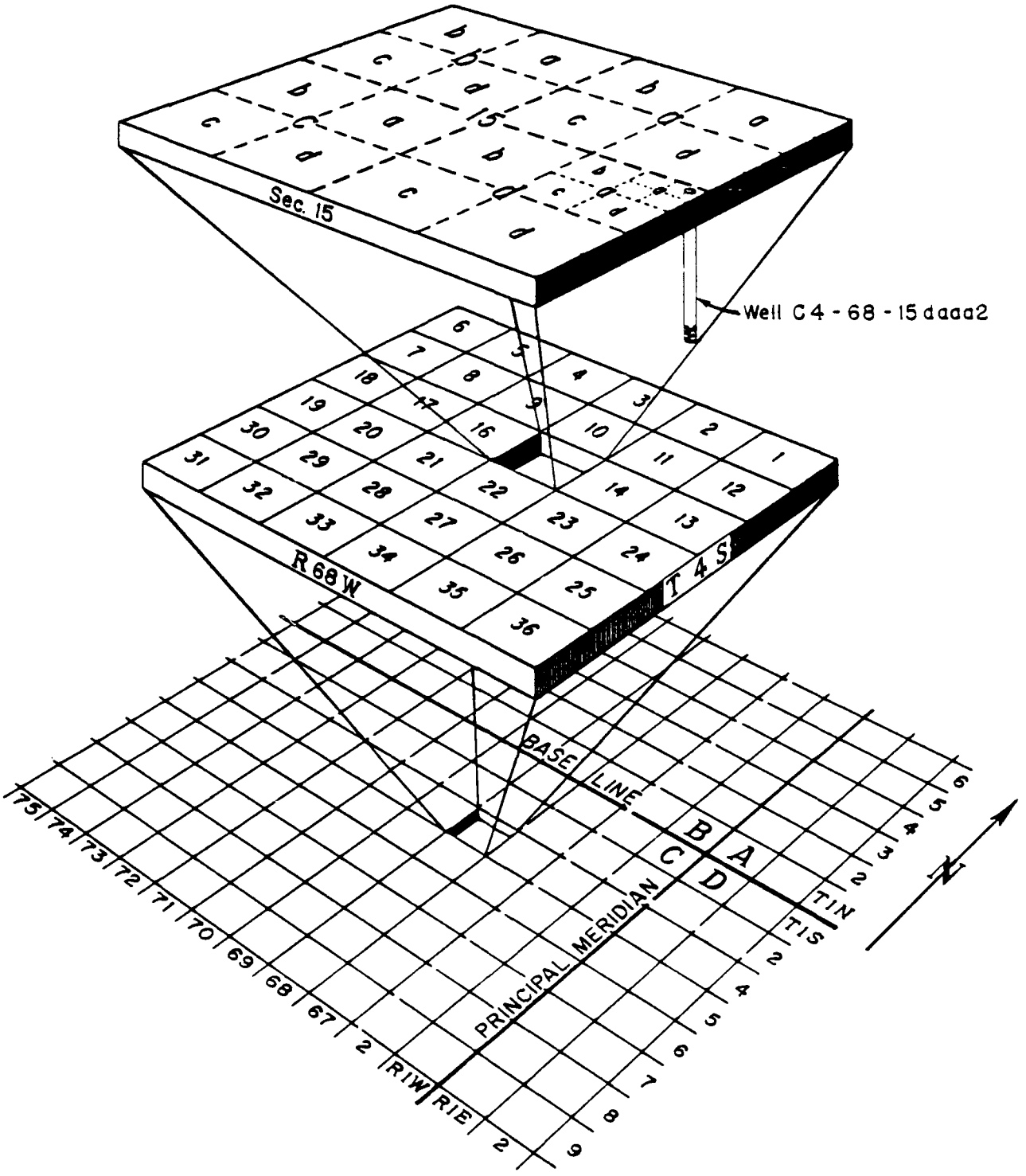


Figure 1.— System of numbering wells and test holes in Colorado.

Table 1.--Generalized section of the geologic units

Era	System or Period	Series	Geologic unit	Representative thickness (feet)	Physical character	Water supply
Cenozoic	Quaternary	Recent	Post-Piney Creek alluvium	0-10	Mostly reworked fairly clean sand and gravel in modern flood plains. Overlain in places by a few feet of dark humus-rich sandy silt	Yields small to moderate quantities of water in the principal valleys. Partly drained in upland valleys. Provides catchment for recharge to underlying gravel.
			Colluvium	0-5	Mixed sand, silt, pebbles, and cobbles. Forms veneer on most slopes. Includes fan deposits thicker than 5 feet in places along the west side of the basin	Thin deposit generally above water table. Locally yields small quantities of water.
			Piney Creek Alluvium	0-20	Well-stratified clay, silt, and sand; contains thin lenses of sand and fine gravel. Forms low terraces about 10 to 25 feet above present stream beds and fills shallow upland valleys. Locally very calcareous	Yields very small to moderate quantities of water. Quality differs, depending upon the sources of recharge. Generally rather mineralized.
			Eolian sand	0-40	Very fine to coarse poorly sorted sand and silt. Forms extensive sand hills, which are generally stabilized.	Generally lies above water table; locally yields small quantities of water. Important as catchment and infiltration medium for recharge to underlying aquifers.
			Pre-Piney Creek alluvium	0-10	Silty to cobbly stratified alluvium lying unconformably on older terrace deposits	Mostly above the water table; yields little water.
		Pleistocene	Broadway Alluvium	0-20	Pebbly well-bedded well-sorted granitic gravel. Forms terraces about 25 to 40 feet above stream beds. Pebbles mostly less than 1 inch in diameter	Yields large quantities of water where enough of it is saturated. Quality controlled principally by sources of recharge.
			Younger loess	0-20	Windblown massive, compact silt with some sand lenses. In part reworked by water. Forms vertical cut banks	Yields little or no water; hinders recharge to underlying sediments.
			Louviers Alluvium	0-60	Granitic coarse gravel; contains abundant cobbles, which form thick beds along the principal valleys. Pebbly alluvium with cobble layers near base and deformed silt layers in upper part. In many places stained with iron and manganese	Yields large quantities of water, where saturated thickness is sufficient, and small to moderate quantities from dissected remnants, especially where these overlie bedrock. Quality controlled principally by sources of recharge.
			Slocum Alluvium	0-30	Generally moderate reddish-brown silty clay and silty sand with lenticular beds of pebbles and silt. Contains much caliche, reworked loess, and reworked materials from older formations	Yields only very small quantities of water. Quality is generally poor.
			Older loess	0-5	Clayey silt, which forms vertical cut banks. Reddish-brown soil of Sangamon(?) age developed in upper part	Yields little or no water. Hinders recharge to underlying sediments.
			Verdos Alluvium	0-20	Coarse gravel and sand underlying high terrace remnants. Contains cobbles in sandy matrix, caliche, and volcanic ash	Yields moderate to large quantities of water in Beebe Draw. Elsewhere, generally partly drained. Water may contain excessive fluoride. Volcanic ash and silt below water table locally reduce yields.

Table 1.--Generalized section of the geologic units--Continued

Era	System or Period	Series	Geologic unit		Relative thickness (feet)	Physical character	Water supply
Cenozoic	Quaternary	Pleistocene	Rocky Flats Alluvium		0-50	Very coarse gravel, cobbles and bouldars; covers Rocky Flats northwest of Denver and highest terrace remnants elsewhere. Many cobbles and boulders deeply weathered; even quartz has weathered "rinds." Locally has reddish-brown clay matrix and sand lenses. Many particles are lime-coated	In most places partly or wholly drained. Locally yields small quantities of water.
	Tertiary	Oligocene	Castle Rock Conglomerate		30-50	Firmly cemented coarse-grained conglomerate and sandstone. Maximum thickness about 300 feet	Generally well drained and poorly permeable but may yield very small quantities of water.
Cenozoic and Mesozoic	Tertiary and Cretaceous	Paleocene - - ? - -	Dawson Formation	Upper part	300-1,100	Gray, brown, dusky-yellow, and greenish-gray shale, clay, silt, shale, and siltstone; contains many lenticular beds of light-colored conglomerate, sand, gravel, and sandstone in most of the Denver basin. In many places a conglomerate zone lies from 200 to 400 feet above the base of this part; this zone is called the upper conglomerate in this report. The upper conglomeratic zone contains much andesitic material west of Denver but contains predominantly arkose or quartzose sediments elsewhere in the basin. Lenticular beds of coarse arkosic gravel also lie from 200 to 400 feet above the upper conglomerate, especially south of T. 5 S. Beds of coarse materials in a similar stratigraphic position on Green Mountain are largely drained. Andesitic material is common in the vicinity of Green Mountain and the Table Mountains, southwest of Denver, and in isolated lenses elsewhere in the basin. Beds of very sandy limestone, lignite, coal, carbonaceous clay, carbonaceous silt, and carbonaceous shale are common. Toward the top of this unit south of Denver are beds of rhyolitic tuff and lava. In the Green Mountain-Table Mountains area, it contains beds of more basic lava and tuff	Yields very small to moderate quantities of water. Locally water is moderately high in iron and radioactive constituents. Upland beds drained in places. Locally moderately high concentrations of dissolved solids and objectionable odors from carbonaceous beds. Poor test quality of water from the andesitic and lignitic beds. The permeability of the upper conglomerate is greatest south of T. 5 S. but also is considerable locally east of R. 67W. The upper conglomerate generally yields the greatest quantities obtained from this part of the formation, but the lenticular gravel beds from 200 to 400 feet above the upper conglomerate zone locally yield moderate amounts of water.
		Upper Cretaceous		Lower part	400-1,400	White to yellow arkosic sand, gravel, and conglomerate interbedded with gray and green and red shale and clay. Sand, gravel, and conglomerate beds are thicker, more numerous, and more persistent than in the upper part. The thickest and most extensive zones of coarse sediments are in the upper 700 feet of this part of the formation. The beds of coarse sediments become progressively thicker and more numerous toward the southwest part of the basin. In the Denver area two persistent zones of coarse materials are recognized; in this report these are referred to as the middle conglomerate and the lower conglomerate. Each of these conglomerate zones ranges in average thickness from 50 to 200 feet. The two conglomerate zones are separated by 50 to 200 feet of shale, siltstone, and silty sandstone	Yields moderate quantities of water except near outcrops or where affected by local faulting or folding. Water is generally of good quality, is fairly soft, and has fairly low concentrations of dissolved solids.

Table 1.--Generalized section of the geologic units--Continued

Era	System or Period	Series	Geologic unit		Representative thickness (feet)	Physical character	Water supply
Mesozoic	Cretaceous	Upper Cretaceous	Laramie Formation		400-600	Blue-gray silty shale; contains thin silty sandstone, limestone, and lignite beds. Sandstone beds generally lenticular except near bottom of the unit. Coal beds scattered throughout the formation, but the thickest and most persistent coal beds are in the lower half	Yields very small quantities of water of poor quality. Contains much hydrogen sulfide, iron, and methane.
				B sandstone[1/]	60-80	Salt and pepper sandstone, mostly medium grained, massive, very extensive. Well cemented along the west side of the basin, weakly cemented to merely compacted elsewhere. Coalesces with A sandstone and Milliken Sandstone Member locally, especially in the Louisville-Niwot area	Yields moderate quantities of water, usually of good quality except in areas of local geologic structure, where it may have troublesome amounts of methane, hydrogen sulfide, iron, or fluoride.
				A sandstone[1/]	30-100	Sandstone beds similar to those of the B sandstone but generally finer grained. Yellowish on weathered surfaces. In most places consists of thin sandstone beds interbedded with siltstone and shale but locally massive. Locally contains a little coal, especially on the west side of the basin	Yields very small to moderate quantities of water, depending upon whether the unit consists chiefly of shale and silt or of sandstone. May have troublesome amounts of methane, hydrogen sulfide, iron or fluoride, especially in areas of local geologic structure.
			Fox Hills Sandstone	Milliken Sandstone Member	60-120	Fine-grained quartzose, locally silty sandstone, siltstone, and shale; contains biotite and muscovite and a few large calcareous sandstone concretions. Weathered exposures characteristically yellow to yellowish green. Locally contains a little coal. Generally soft, friable. Lower part locally interbedded with silt and shale	Yields very small to moderate quantities of water, depending upon whether the unit consists chiefly of sandstone or of shale, silt, and silty sandstone. Iron and fluoride locally troublesome.
			Transition zone		900-1,100	Interbedded very silty fine-grained sandstone and soft fine-grained sandstone and shale, becoming more shaly toward the bottom of the interval	Not developed as a separate aquifer. Yields very small quantities of water of poor to unpotable quality.
			Pierre Shale		5,000-7,500	Gray, blue, and black shale, sandy shale, and locally silty sandstone, with thin limestone lenses and bentonitic seams	Generally yields no water except for very small quantities of highly mineralized water near outcrops. In some places potable water obtained from fractured or weathered zones or from sandstone lenses near their outcrops.
			Niobrara Formation		300	Black to gray calcareous shale, gray to greenish-white limestone and white chalky marl	Fractured limestone locally will yield very small quantities of rather highly mineralized water.
			Benton Shale		500	Black brittle shale, persistent bentonite seams, chalky limestone, and thin sandstone near top	Fractured shale near outcrop yields very small to small quantities of highly mineralized water.

See footnote at end of table.

Table 1.--Generalized section of the geologic units--Continued

Era	System or Period	Series	Geologic unit		Representative thickness (feet)	Physical character	Water supply
Mesozoic	Cretaceous	Lower Cretaceous	Dakota Group	South Platte Formation	100	Gray-white fine- to medium-grained friable to firm sandstone; thin bedded to massive, ripple marked; forms hogbacks	Yields small to moderate quantities of water near outcrop areas. Water locally contains excessive iron.
					150	Dark-gray silty carbonaceous shale; locally fossiliferous; contains fire clay	Yields no water.
				Lytle Formation	60	Gray coarse-grained sandstone; locally conglomeratic and crossbedded	Yields small to moderate quantities of water in and near outcrop.
	Jurassic	Upper Jurassic	Morrison Formation		300	Varicolored silty sandstone, marlstone, limestone, red silty mudstone, and local gypsum beds. Purple, red, gray, greenish gray, green, and yellow colors common	Not developed as an aquifer. Sandstone beds might yield small quantities of rather highly mineralized water close to outcrops.
			Ralston Creek Formation		120	Principally varicolored claystone, limestone, and calcareous siltstone, commonly gray, grayish red, or grayish orange. At the base is a 5-foot bed of fine- to medium-grained calcareous sandstone	Not developed as an aquifer. Basal sandstone bed might yield small quantities of water close to outcrops.
	Triassic(?) and Permian(?)		Lykins Formation		400	Interbedded soft sandstone and sandy shale with thin limestone beds	Not developed as an aquifer.
	Permian		Lyons Sandstone		200	Friable crossbedded quartzose sandstone	Yields small to moderate quantities of water near outcrop.
Paleozoic	Carboniferous - Pennsylvanian		Fountain Formation		1,100	Crossbedded very arkosic conglomeratic sandstone, interbedded with mudstone and siltstone. Forms Red Rocks Park and amphitheater and Roxborough Park	Yields small quantities of water near outcrop. Water may contain excessive iron and fluoride; may be excessively mineralized in faulted areas and may be contaminated with dead oil, especially near the base.
Precambrian			Crystalline rocks			Granite, gneiss, schist, quartzite, pegmatites, quartz veins, and intrusive igneous rocks	Yields very small to small quantities of water from fractured and weathered zones. Water generally of fair to good quality; locally, however, may contain excessive amounts of iron and be somewhat hard.

1/ Emmons, S. F., Cross, Whitman, and Eldridge, G. H., 1896, p. 73.

Table 2.--Records of selected wells and springs

Plate number: Number indicates plate on which well location is shown. Dash indicates well is outside project area and is not shown on plate.

Location number: See text for well-numbering system.

Map distance: Feet north and feet west, respectively, from the SE section corner.

Depth of well: Measured depths of wells less than 100 feet are given in feet and tenths below land-surface datum. R, reported depth.

Geologic source: 1/ pC, Precambrian, Pf, Fountain Formation; Pl, Lyons Sandstone; TrPl, Lykins Formation; Kly, Lytle Formation of the Dakota Group; Ks, South Platte Formation of the Dakota Group; Kd, Dakota Group; Kb, Benton Shale; Kp, Pierre Shale; Kt, transition zone; Kfm, Milliken Sandstone Member of the Fox Hills Sandstone; Kla, a sandstone of the Laramie Formation; Klb, b sandstone of the Laramie Formation; Klu, upper part of the Laramie Formation; Kl, Laramie Formation; Kdll, lower part of the lower conglomerate of the Dawson Formation; Kdlu, upper part of the lower conglomerate of the Dawson Formation; Kdlc, lower conglomerate of the Dawson Formation; Kdml, lower part of the middle conglomerate of the Dawson Formation; Kdmu, upper part of the middle conglomerate of the Dawson Formation; Kdmc, middle conglomerate of the Dawson Formation; Kdl, lower part of the Dawson Formation; TKdc, upper conglomerate of the Dawson Formation; TKdu, upper part of the Dawson Formation; TKd, Dawson Formation; Qr, Rocky Flats Alluvium; Qv, Verdos Alluvium; Qo, older loess; Qs, Slocum Alluvium; Ql, Louviers Alluvium; Qy, younger loess; Qb, Broadway Alluvium; Qpa, pre-Piney Creek alluvium; Qes, eolian sand; Qp, Piney Creek Alluvium; Qc, colluvium; Qpp, post-Piney Creek alluvium.

Method of lift and type of power: A, airlift; C, centrifugal; Cyl, cylinder; J, jet; N, none; P, piston; Pch, pitcher pump; Port, portable pump; S, submersible; T, turbine; E, electric motor; G, gasoline engine; H, hand; St, steam engine; Tr, tractor; W, wind.

Use of water: AC, air conditioning; B, boiler; C, cooling; Com, commercial; Cons, construction; D, domestic; Dr, drainage; Dy, dairy; E, emergency or standby; F, fish culture; Fire, fire fighting; G, greenhouse; Hosp, hospital; I, injection or recirculation; Ice, ice manufacture; Ind, industrial; Inst, institution; Irr, irrigation; IrrL, lawn irrigation; N, none; O, observation, records on file; Oil, oil-test hole from which information on aquifers was obtained; Ot, observation, water-level measurements given in table 4; Pond, for aquatic and wild life; Pr, processing; PS, public supply; S, stock; San, sanitation; Sch, school; SS, service station; Sw, swimming pool; TW, test well; WD, waste disposal. Major use is listed first.

Yield: B, bailer test; E, estimated; F, flowing; M, measured; R, reported; <, less than.

Drawdown: The drawdown in a well is the amount the water level (or artesian pressure) is lowered during discharge, after an indicated length of time; Ry, recovery from level prevailing at the moment discharge ceased.

Depth to water level: Measured depths to water are given in feet and tenths below or above (+) land surface; reported depths are given in feet below or above (+) land surface. P, pumping level.

Land-surface altitude: Altitudes determined by alidade are given in feet and tenths; altitudes estimated from topographic maps are given in feet above mean sea level.

Remarks: A160(1956), irrigating 160 acres (or number shown) in 1956 (or date shown); AT, aquifer test made at well; B, bedrock at depth shown; By2, battery of two wells (or number shown); C, carbonaceous shale or clay, lignite, or coal in section; Core, corehole; D, dug well; DD, dug and drilled well; DL, driller's log on file; Dn, driven well; Dr, drilled well, EL, electric log on file; F, flood irrigation; FD, field determination of water quality given in table 6; FZ, fault zone; G, gneiss; GE, gravel envelope; Gr, granite; GRL, gamma-ray log on file; Gun, gun perforation with interval shown; Gy300, gallery 300 feet long (or length shown); H19, drill-hole diameter 19 inches (or figure shown); L, log of well given in table 3; Lo, louvered casing with interval shown; NL, neutron log on file; OH, open hole with interval shown; Pf, perforated casing (type not specified) with interval or total length of perforated casing shown; PP, physical properties of water-bearing materials given in table 9; QW, chemical analysis of water on file; Re, recirculating; S, schist; Sa, samples of drill cuttings collected; Sc, screen with interval shown; SG, schist and gneiss; Si, siphon; SL, sample log on file; Su, supplementary to surface water; T65, temperature 65°F (or degrees shown) at discharge; Tch, torch-cut perforations with interval or intervals shown; TW, data collected from nearby test holes; U(1956), unused in 1956 (or date or dates shown); WL(6-57)77 or WL(6-57)+77, water level in June was 77 feet below or above (+) land surface (or date and figure shown); WLR, automatic water-level recorder installed; WS, chemical analysis of water given in table 5; WSp, laboratory determination of specific conductance and chloride concentration given in table 7; WSr, radiochemical analysis given in table 8.

1/ For the description of the physical character of the water-bearing formations see generalized section of the geologic units (table 1).

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
-	B1-66-31cddd	50	2,890	V. Hornbuckle		31.8	120	Qb,Ql	T,E	Irr,Ot	210M	7.8	5	22.0	4,969.9	4-11-62	D; F; FD; WS
-	B1-67-19dddd	75	30	E. Glarden	1950	697	7 to 5	Klb	S,E	D,S	9R			172	5,102	5- -50	DL; Dr; FD; WSp
-	36cddd	90	2,790	G. Milliken	1955	21.1	48	Qb,Ql	T,E	Irr	400E	15.2	1	1.9	4,940	4-11-62	A160; D; FD; Pf12-24; WL(8-3-56)2.5
-	B1-68-25bcbc	3,450	5,150	J. Snider	1950	720R	4	Klb	S,E	D,S	9R			100	5,150	5- -50	DL; Dr; FD; WSp
1	C1-65-2dcdd	20	1,370	H. Genereux	1955	64R	18	Qb,Ql	T,E	Irr	660M	19	2	14.5	5,087.0	8- 8-57	A10C; B46; DL; Dr; GE; Lo28-58; T54; WS(2-55)20
2	7cbba	2,500	4,650	J. Green	1956	186R	6 to 4	Kdmc		D	14R	64	3	36	5,052	12-15-56	B33; Dr; L; Pf143-186
1	7dbdc	1,560	1,900	do.	1947	26R	6	Qv	Cyl	S				2.0	5,058.7	4-11-62	Dr; WL(10-28-57)2.7
1	11adbc	3,550	1,310	D. Patton	1955	61.4	18	Ql		Irr				19.2	5,010	8- 1-57	A320; Dr; F
1	11cddc	40	3,160	do.	1946	40.9	30	Ql	N	Irr				21.9	5,110.5	10-19-62	D; U(1957); WL(10-28-47)15.1; WL(11-4-57)19.7; WL(7-30-57)19.2

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C1-65-																
1	11dbaa	2,580	1,330	D. Patton	1942	63R	18	Ql	T,E	Irr	..	..	..	17.9	5,105	8- 1-57	A160; Dr; F
1	11dbcc	1,580	2,630	.. do.	1943	40.9	18	Ql	T,E	Irr	..	..	..	17.3	5,093.0	8- 1-57	A40; Dr; F; Pf20
1	11dcdd	50	1,360	.. do.	1955	62.5	18	Ql	T,E	Irr	1,095M	18.6	1/4	27.1	5,115.0	8- 1-57	A100; B56; Dr; F; T50
1	11ddbb	1,310	1,310	.. do.	1948	62.4	18	Ql	T,E	Irr	755M	16.0	10	31.5	5,115	7-30-57	A160; Dr; F; T54
1	14bacd	4,000	3,600	.. do.	1943	43R	30	Ql	N	Irr	..	..	..	18.3	5,118.0	8- 1-57	D; Pf20; U(1951)
1	14badd	4,150	2,680	.. do.	1955	62.2	18	Ql	T,E	Irr	345M	10.7Ry	1/4	34	5,120	8- 1-57	A40; Dr; F
1	14bdcc	2,750	3,650	.. do.	1940	43R	24	Ql	N	Irr	..	..	..	20.5	5,123.0	8- 1-57	Dr; Pf20; U(1957)
1	14dbcd	1,450	2,240	E. Madigan.	1950	70.0	18	Ql	T,E	Irr	745M	13.4	3/4	38.8	5,142.0	7-31-57	A120; Dr; F; T54
2	15baab	5,140	2,770	P. Wagner, Sr.	1960	228R	4	TKdu	S,E	D	12R	24	..	116	5,219	11-30-60	Dr; L; Tch162-228
1	23caaa	2,420	2,720	R. Uyehara.	1956	57R	6	Qv	..	D	B10R	2	1-1/2	30	5,148	3-22-56	B54; Dr; L; Pf39-57
1	23cdaa	1,070	2,680	.. do.	1956	58.5	18	Qv	T,E	Irr	..	..	..	28.3	5,157	7-29-57	A80; Dr; GE; Lo30-60
1	23cddd	10	2,680	.. do.	1955	58.8	18	Qv	T,E	Irr	835M	22.5Ry	1/4	29.3	5,162.9	11- 4-57	A80; B60; DL; Dr; F; Lo30-60; T54
1	26abdd	4,100	1,620	J. Martin	1954	63.2	18	Qv	T,E	Irr	650M	11.9	1/4	35.7	5,172.0	7-29-57	A110; Dr; T55
1	26bdaa	3,650	2,700	J. Sutton	1949	63.9	18	Qv	T,E	Irr	365M	27.0Ry	1/4	34.8	5,168	7-30-57	A160; Dr; F; T54
1	26bddd	2,820	2,780	.. do.	1955	68R	6	Qv	..	D	B20R	2	1-1/2	30	5,172	8-24-55	B67; Dr; L; Pf48-68
1	26caaa	2,600	2,650	.. do.	1951	62.9	18	Qv	N	Irr	..	..	..	33.5	5,175.0	7-30-57	Dr; U(1953-57)
1	26cadd	1,450	2,650	.. do.	1956	66R	18	Qv	T,E	Irr	600R	12	1/4	35	5,180	9-26-56	A160; B63; DL; Dr; GE; Lo36-66
1	26dbdd	1,320	1,320	J. Martin	1951	64.8	18	Qv	T,E	Irr	389M	10.1	1/4	36.0	5,186.0	7-29-57	A110; Dr; T55
1	26dcdc	30	1,850	.. do.	1950	63.9	18	Qv	T,E	Irr	1,045M	15.6	5	31.1	5,188.5	7-29-57	A110; B66; Dr; F; WL(11-4-57)29.5
2	27dddd	75	110	Box Elder Farms	1956	166R	6 to 4	TKdu	..	D	B15R	45	3	35	5,184	12-11-56	Dr; L; Pf123-166
2	31baba	5,200	3,480	.. do.	1953	380R	6 to 4	TKdu, Kdmc	..	D	..	..	..	..	..	....	DL; Dr; Pf42
	C1-66-																
1	1baac	4,650	3,050	F. Diamond.	1944	70R	18	Qv	T,E	Irr	..	..	..	23.2	4,960	12- 5-57	A135; Dr; Su; WS
1	1cbbc	2,220	5,150	D. and J. Kilker.	1953	65R	18	Qv	T,E	Irr	1,520M	17.8	1/4	17.0	5,042	4-11-62	A160(with 1ccccb); Dr; GE; Lo45-65; Su; WL(12-11-57)23.7
1	1cccbc	710	5,270	F. Dryer.	..	56.9	18	Qv	T,E	Irr	..	..	..	13.7	5,035.0	4-11-62	A60; Dr; WL(11-7-57)11.9
1	1ccccb	400	5,080	D. and J. Kilker.	1956	65R	16	Qv	T,E	Irr	..	..	..	..	5,042	....	A160; Dr; Pf49-65; Su
2	4cdcd	120	3,350	J. Deventhal, Jr.	1955	360R	6 to 4	Kdlc	S,E	D	B20R	85	3	127.1	5,075	10- 9-59	B15; Dr; L; Tch320-360; WL(8-55)100
2	4dcad	900	1,650	Papas Rexall Drug	1955	188R	6 to 4	Kdmc	..	D	B15R	10	1	60	5,110	6-20-55	B42; Dr; L; Tch148-188
2	4dccd	300	2,300	E. Shidler.	1958	720R	6 to 4	Kdmc,Kdlc	S,E	D	15R	..	..	49	5,105	9 30-58	B30; Dr; FD; L; Pf160-180,360-390. Well plugged back to 420 feet
2	5abba	5,200	2,250	W. Gettle	1954	257R	6 to 4	Kdmc	..	D	5R	..	..	180P	5,005	3- 8-54	Dr; L; Tch216-256
1	5bbbc	4,700	5,100	R. Mayeda	1954	33.2	48	Qb,Ql	T,E	Irr	800R	15	1	19.0	4,972	10-12-55	A60; B35; D; F; GE; L; Pf17-35
1	5cddd	30	2,750	J. Thimming	1954	11R	48	Qb	C,E	Irr	..	..	..	7.3	4,982.7	10-30-57	A10; Su
1	6aaad	4,800	300	J. Corsentino	1940	30.3	48	Qb,Ql	T,E	Irr	485M	..	..	29.6P	4,972	9-22-57	A50; D; F; Pf18-30
1	6abbc	4,700	2,550	Great Western Sugar Co.	1956	47R	40	Qb,Ql	T,E	Ind,C,Pr	500R	12	24	30.0P	4,969	10- 6-60	AT; B36; D; L; Pf20-35
2	6acac	1,350	1,950	L. Scepurek	1954	739R	6 to 4	Klu	S,E	D	B20R	73	4	37	4,975	9-24-54	B38; Dr; L; Pf678-739
1	6acdd	2,700	1,450	G. Van Houten	1953	41.3	48	Ql	T,E	Irr	480M	7.5	1/6	20.3	4,976	10-12-55	A40; D; F; Pf28-40; T57
1	6adcc	2,700	1,250	.. do.	1955	38.5	48	Ql	N	Irr	200R	..	..	23.0	4,975.8	4-11-62	U(1955-57); WL(10-12-55)20.3
1	6baad	4,680	2,750	Great Western Sugar Co.	1948	35R	60	Qb,Ql	T,E	Ind,C,Pr	300R	15	..	28.6P	4,971	10- 6-60	Dr; Pf10
1	6bada	4,500	2,750	.. do.	1948	34R	12	Qb,Ql	T,E	D	100R	2	..	..	4,971	....	Dr; Pf10
1	6cbaa	2,500	4,220	Kuner-Empson Co.	1940	16.7	180	Qb,Ql	C,E	C,Pr	100E	..	..	11.1	4,971	1-23-61	D; Su
1	6cbab	2,600	4,300	.. do.	1940	21.1	18	Qb,Ql	C,E	C,Pr	100E	..	..	10.9	4,968	1-23-61	By2; Dr; Su
1	6cbab2	2,630	4,500	.. do.	1940	17.0	96	Qb,Ql	C,St	C,Pr	200E	..	..	9.6	4,960	1-23-61	By2; Dr; Su
1	6cbdc	1,450	4,300	J. Wells	1950	25R	30 to 14	Qb,Ql	J,E	Irr	50E	.9	1/2	2.5	4,953.1	11- 4-57	A3; D; S; WL(9-27-56)5.1

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C1-66-																
1	6cbdd	1,560	4,230	City of Brighton. . .	1955	35R	18	Qb,Ql	T,E	PS	600R	17	2	10	4,961	12- -59	B28; Dr; L; Lo16-31
1	6dacd	1,360	830	. . do.	1947	50R	18	Ql	T,E	PS	500R	3	. .	17	4,977	12- -59	Dr; GE
1	6dbbc	2,040	2,450	. . do.	1956	42R	18	Ql	T,E	PS	400R	14	2	23	4,976	12- 59	B41; Dr; GE; L; Lo27-42; WS
1	6dcbc	850	2,410	L. Lindsey.	1956	40R	6	Qb,Ql	. .	D	10R	1	1	25	4,977	6-19-56	B19; Dr; L; Pf22-40
1	7abac	4,830	1,890	City of Brighton. . .	1928	40R	144	Qb,Ql	C,E	PS	1,000R	6	. .	21	4,984	12- -59	By3; D; WS. Pumped in battery with 7abbd and 7abbd2
1	7abac2	4,950	1,910	. . do.	1933	31R	48	Qb,Ql	C,E	PS	600R	6	. .	21	4,984	12- -59	DD; WS
1	7abba	5,175	2,050	Gaylor's Store. . . .	1959	60R	5	Qb,Ql	J,E	AC	16R	17	. .	18	4,982	4-20-59	Dr; L; Pf20-60
1	7abbd	4,800	2,050	City of Brighton. . .	1910	50R	144	Qb,Ql	C,E	PS	1,000R	6	. .	21	4,984	12- -59	By; D; WS
1	7abbd2	4,940	2,040	. . do.	1918	40R	144	Qb,Ql	C,E	PS	1,000R	6	. .	21	4,984	12- -59	D
1	7adbc	3,480	1,020	. . do.	1950	62R	48	Qb,Ql	N	PS	350R	42	1/4	20	4,985	12- 9-60	B31; D; Pf15-31; U(1960). Pumped dry in 15 minutes
1	7adbd	3,450	850	. . do.	1950	65R	18	Qb,Ql	N	PS	. .	. .	. .	18.8	4,985	12- 9-60	Dr. Pumped dry in 15 minutes
1	7bcbd	3,480	4,830	. . do.	1958	65R	18	Qb,Ql	N	PS,E	1,300R	. .	. .	18	4,972	12- 9-60	DL; Dr; U(1960)
1	7cabc	2,170	3,640	. . do.	1956	65.6	18	Qb,Ql	T,E	PS	1,600R	. .	. .	23.3	4,988	8-11-56	Dr; WL(12-59)24
1	7cbba	2,600	4,700	J. Sanders.	1955	60R	6	Qb,Ql	. .	D	B10R	20	2	20	4,983	10-12-55	B57; Dr; L
1	7ccba	1,150	4,700	C. Hose	1910	30R	72	Qb,Ql	T,E	Irr	175M	2.8	1/4	22.9	4,990	9-18-56	A1; D; T55
1	7ccdd	50	4,020	W. Stewart.	. .	24.7	96	Qb,Ql	T,E	Irr	500R	3.5	1/4	21.1	4,994	10-14-55	A10; F
1	7dacc	1,400	1,080	R. Sakata	. .	31.3	96	Qb,Ql	T,E	Irr	295M	. .	. .	20.1	4,989.6	4-15-62	A40; D; F; Pf15; WL(10-19-55)18.5
1	7dacd	1,320	940	. . do.	1951	32.4	48	Qb,Ql	T,E	Irr	430M	10.2	336	19.0	4,988	10-19-55	A40; D; F; Pf20; T55
1	7dbba	2,570	2,150	Sakata Bros.	1955	32R	6	Qb,Ql	. .	D	B25R	5	2	20	4,987	2-17-55	B30; Dr; L; Pf13-32
1	7dbcb	1,950	2,550	City of Brighton. . .	1951	55.9	18	Qb,Ql	T,E	PS	680M	2.3	6	21.8	4,988	8-11-56	AT; WL(12-59)16; WS
1	7dccb	520	2,350	. . do.	1957	61R	18	Qb,Ql	T,E	PS	1,400R	10	6	22	4,992	2-16-57	B61; Dr; L; GE; Pf42-62; TW; WS
1	7ddcc	30	1,080	R. Mayeda	1951	34.1	48	Qb,Ql	T,E	Irr	480M	4.9	1/4	16.9	4,992	10-12-55	A23; F; Pf18; T54
2	8ddcc	50	1,300	J. Mattive.	1955	280R	6	Kdmc	S,E	D,S	10E	. .	. .	. .	5,031	. . . .	
2	9cccc	75	5,000	E. Tepe	1955	167R	6 to 4	Kdmc	. .	D	B10R	50	1	50	5,050	7-25-55	B26; L; Tch125-167
1	11cdcc	75	3,920	L. Baker.	1955	64R	6	Qv,TKdu	. .	D	B10R	20	2	40	5,080	3-24-55	B40; Dr; L; Pf43-63
1	11dcaa	1,150	1,550	J. Ball	1923	55R	72 to 36	Qv	T,E	Irr	650R	. .	. .	25.2	5,051	12- 9-57	A50; D; F
1	11ddbd	750	800	K. Furuta	1947	55.5	16	Qv	T,E	Irr	460M	3.7	10	16.0	5,051	8-28-57	A27; AT; F; T52
2	12abdc	4,280	1,850	L. Tracy.	1955	160R	6 to 4	Kdmc	S,E	D	B20R	40	2	10.3	5,020	3-22-55	B44; Dr; L; Pf130-160
1	12bbcb	4,520	5,250	J. McMorrow	1924	28.1	60 to 24	Qv	N	Irr	. .	. .	. .	19.9	5,042	10-12-55	D
2	12bbcb2	4,500	5,200	. . do.	1938	137R	5 to 3	Kdmc	J,E	D	. .	. .	. .	. .	5,035	. . . .	B65; Dr; L; Pf60
1	12bbcb3	4,550	5,250	. . do.	1954	62.8	18	Qv	T,E	Irr	985M	5.7	1/4	15.7	5,042.0	4-11-62	A70; B63; Dr; L; Lo33-63; T56; WL(10-12-55)20.3
1	12cbba	2,600	4,880	Mile High Duck Club .	1954	70R	18	Qv	T,E	Irr	1,200R	. .	. .	27.3	5,041	12- 9-57	A120; B63; Dr; F; L; Lo41-71
1	12dbdb	1,800	1,800	K. Green.	1954	40R	18	Qv	T,E	Irr	800R	. .	. .	4.7	5,035	4-11-62	A75; B40; DL; Dr; Lo24.5-39.5; WL(12-9-57)4.9
1	12dccc	20	2,620	J. Green.	1956	57R	18	Qv	T,E	Irr	1,500R	. .	. .	4.7	5,038.0	12- 9-57	A250; Dr; F
1	12dddd	150	150	K. Green.	1954	52R	18	Qv	N	Irr	120R	34	2	12	5,052	6-14-54	B50; Dr; GE; L; Lo39-54; U(1954-57)
1	13bbcd	4,100	4,940	S. Milliken	1954	64R	18	Qv	T,E	Irr	1,300R	21	2	3.7	5,041.5	4-11-62	A200; B62; Dr; F; L; Lo-39-69; WL(10-28-57)3.9
1	14abbb	5,100	2,585	N. Flitner.	1946	63R	18	Qv	T,E	Irr	1,200R	. .	. .	23.5	5,059	12-10-57	A80; Dr; F; Pf40
1	14dccc	40	2,320	A. Green.	1956	74R	18	Qv	T,E	Irr	. .	. .	. .	16.0	5,058.0	4-11-62	A130(with 2 wells); B71, By2; Dr; F; L; Lo41-71; Su; WL(10-28-57)17.0
1	14ddcd	40	930	. . do.	1950	55R	18	Qv	T,E	Irr	. .	. .	. .	15.8	5,062	12- 9-57	Dr; F; Su

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C1-66-																
2	15dcba	1,270	2,220	Hood-Shaw Estate. . .	1954	105R	6	Kdmc	. .	D	10R	12	1	48	5,090	12- 1-54	Dr; L; Pf85-105
2	17aabb	5,150	1,220	J. Case	1958	300R	6 to 4	Kdmc,Kdlc	S,E	D	15R	135	. .	115	5,035	11-22-58	B42; Dr; L; Pf244-290
1	17cbcc	1,620	5,000	L. Darras	1955	43R	6	Ql	. .	D	5R	16	2	24	5,028	3- 8-55	B39; Dr; L; Pf23-43
1	17cbdc	1,450	4,450	. . do.	1947	27.7	36	Ql	T,E	Irr	. .	. .	. .	23.8	5,026.7	4-15-62	A110; By3, D; F; Pf8; WL(10-19-55)23.6
1	17cbdd	1,350	4,050	. . do.	1956	34R	18	Ql	T,E	Irr	60M	7	24	23	5,029.0	7-23-56	DL; Dr; F
1	17cccd	90	4,700	. . do.	1945	34.5	48	Ql	T,E	Irr	60M	. .	. .	25.2	5,027.7	10-19-55	By; D; F; Pf8
1	17ddcd	330	930	S. Kuster	1954	38R	5	Ql	. .	D	B5R	23	1	14	5,035	8-11-54	B32, DL; Dr; Pf22-38
1	18aaac	4,900	650	A. Kildow	1955	42R	18	Qb,Ql	T,E	Irr	350R	. .	. .	30.7	4,993.4	10-14-55	A40; B30; Dr; GE; L; Pf20; Su
1	18accc	2,650	2,380	T. Palizzi.	1936	42.1	48	Qb,Ql	T,E	Irr	1,460M	. .	. .	18.0	4,988.0	10-14-55	D; F; Pf15; T55
1	18babb	5,100	3,900	C. Montandon. . . .	1956	43R	6	Qb,Ql	. .	D	B20R	1	1-1/2	27	4,994	3- 5-56	B41; DL; Dr; Pf25-43
1	18bcab	3,950	4,600	. . do.	1955	62.2	48	Qb,Ql	T,E	Irr	1,040M	9.1	1/4	21.9	4,997.8	10-18-55	B62; D; DL; F; GE; Pf40-62; T55
1	18bccd	2,650	4,800	. . do.	. .	39.3	48	Qb,Ql	T,E	Irr	640M	8	. .	21.1	5,000.0	10-17-55	A67; D; F; Pf20; Su
1	18bcdd	2,650	4,000	A. Hattendorf . . .	1923	35.0	96	Qb,Ql	C,E	Irr	. .	. .	. .	20.0	5,000	10- 7-55	B35; D; Pf9
1	18bdbb	3,950	3,800	R. Sakata	. .	41.9	48	Qb,Ql	T,E	Irr	770M	4.2	1/4	22.6	4,997.1	4-15-62	D; F; Pf20; T55; WL(10-18-55)21.3
1	18cacc	1,350	3,950	A. Hattendorf	1921	32.6	96 to 48	Qb,Ql	T,E	Irr	645R	. .	. .	20.4	5,002.0	10- 7-55	D; FD; WSp
1	18cccc	50	5,050	. . do.	1920	46.0	96 to 48	Qb,Ql	T,E	Irr	365M	. .	. .	20.8	5,006	10- 7-55	A160; D; T55
1	18ccdd	50	4,150	. . do.	1954	35.3	48	Qb,Ql	T,E	Irr	662M	. .	. .	20.4	5,005	10- 7-55	D; Pf14; T55
1	18cdcc	50	3,850	. . do.	1949	39.5	48	Qb,Ql	Cyl,H	D,Ot	. .	. .	. .	21.5	5,008.8	4-15-62	B41; D; WS
1	18dbcc	1,320	2,600	J. Schloo	1955	45R	18	Qb,Ql	N	Irr	775R	15	2	21	5,005	8- 4-55	B45; GE; L; Lo30-45
1	18dbcc2	1,350	2,350	. . do.	1940	34.5	48	Qb,Ql	T,E	Irr	600R	15	1/4	18.2	5,002	9-29-55	A100(with 2 wells); D; F; Pf15
1	18dccc	50	2,550	. . do.	1918	27.7	. .	Qb,Ql	C,Tr	Irr	550R	. .	. .	19.2	5,006	9-29-55	B28; D; F; Pf15
1	19bbcc	3,980	5,250	G. Morimitsu. . . .	1955	51.9	48	Qb,Ql	T,E	Irr	830M	10.0	1/4	23.7	5,00°	10-17-55	D; DL; Pf16
1	19bcaa	3,950	4,150	. . do.	1934	36.9	48	Qb,Ql	T,E	Irr	480M	9.2	1/4	22.6	5,011.0	10- 7-55	A75; D; F; Pf16; T55
1	19bccc	2,650	5,150	C. Burnett.	1954	37.4	48	Qb,Ql	T,E	Irr	. .	. .	. .	20.5	5,017.0	12-11-57	D; F; Su
1	19bdcb	3,000	3,880	. . do.	1948	. .	18	Qb,Ql	T,E	Irr	. .	. .	. .	17.3	5,014.0	12-11-57	A80(with 2 wells); Dr; F; Su
1	19cccb	550	5,175	H. Wellenkotter . . .	1955	35.1	48	Qb,Ql	T,E	Irr	250R	4.8	1/4	27.6	5,028	10-20-55	A40; D; F; Pf15; T54
1	19cccc	50	5,100	. . do.	1934	37.0	. .	Qb,Ql	T,E	Irr	455M	4.8	1/4	27.9	5,028.4	10-19-55	A40; D; F; Pf18; T55
1	19ccda	400	4,100	. . do.	. .	43.8	. .	Ql	T,E	Irr	. .	7.4	1/4	34.1	5,031	10-18-55	A.25; D; F
1	19dcdc	150	1,800	M. Davis.	. .	43.2	48	Ql	T,E	Irr	230E	. .	. .	36.4	5,049.8	10-23-55	By3; D
1	20bbbc	4,900	5,200	J. Robbins.	1946	35.0	18	Ql	T,G	Irr	. .	. .	. .	26.8	5,031	10-20-55	D; Pf19. Pumps dry in 15 minutes
1	20bcaa	3,950	4,200	Layton.	1949	36R	60 to 20	Ql	T,E	Irr	. .	. .	. .	. .	5,032	. . . .	A20; D; Pf20; Su
1	20bcab	3,930	4,300	G. Kirby.	1950	36R	48	Ql	T,E	Irr	. .	. .	. .	22.6	5,032	10-20-55	A17; D; F; Pf10; Su
1	20bdcd	2,650	3,600	M. Davis.	1949	27.0	72	Ql	T,E	Irr	. .	. .	. .	19.9	5,035.0	10-19-55	A5; By3; D; F
1	20bddc	2,650	3,150	. . do.	. .	32.0	. .	Ql	T,E	Irr	. .	. .	. .	26.5	5,042	10-20-55	D; U(1957)
1	20ccdd	50	4,250	. . do.	. .	34.4	48	Ql	T,E	Irr	175M	. .	. .	25.1	5,053.1	4-15-62	By3; D; F; WL(10-20-55) 28.7; WL(11-5-57)18.1
2	20cddd	280	2,700	G. Bailey	1946	183R	. .	Kdmc	. .	D	8R	34	. .	16	5,050	3-18-46	B24; Dr; L
2	21caaa	2,450	3,850	P. Schweger	1959	219R	6	Kdmc	S,E	D,S	12R	. .	. .	116.6P	5,090	10- 9-59	B11; Dr; L; Pf179-219
2	21cddc	250	3,150	Barr Lake School. . .	1946	230R	. .	Kdmc	. .	Sch	8R	19	. .	57	5,098	12-16-46	B15; Dr; L
2	21dcbb	1,050	2,450	D. Barile	1946	170R	. .	Kdmc	. .	D	. .	. .	. .	. .	5,088	. . . .	DL; Dr
1	23abba	5,050	2,000	R. Bergman.	1954	66R	18	Qv	T,E	Irr	. .	. .	. .	11.3	5,068.0	12- 9-57	A200; Dr
1	23cacb	1,700	3,750	C. Lambert.	1954	86R	18	Qv	T,E	Irr	1,000R	26	2	14.1	5,101.0	12-13-57	A225; B80; Dr; L; Lo30-80
1	29cac	. .	. .	Not known	. .	45R	. .	Ql	. .	Irr,S	. .	. .	. .	. .	. .	. . . .	Dr; WS
1	29dddd	50	100	E. Mower.	1957	30R	. .	Qy	T,E	Irr	. .	. .	. .	6.2	5,092.4	10-28-57	A60; Dr
1	30aacc	4,260	1,280	B. Hillyer.	1948	43.6	36	Ql	T,E	Irr	430M	5.6	1/2	32.6	5,052	10-24-55	A80; By3; D; F; Pf10
1	30addd	2,700	80	B. Broyles.	1955	38.8	48	Ql	T,E	Irr	. .	. .	. .	28.0	5,059.4	10-23-55	A31; D; F; pf15, Su. Pumps dry in 25 minutes
1	30cdcd	300	3,400	L. Amend.	1935	30.6	48 to 20	Ql	N	Irr,Ot	60R	. .	. .	23.3	5,068.3	4-15-62	D; Pf15; U(1955-57)

Table 2.-- Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C1-66-																
1	30cddc	200	3,050	L. Amend.	1945	40R	24	Ql	T,E	Irr	350R	. .	. .	28.4	5,068	9-25-55	A70(with 2 wells); Dr; F; Pf30-40
1	30cddd	20	2,900	. . do.	1954	48.8	16	Ql	T,E	Irr	45M	18	1/4	24.8	5,055	9-29-55	B52; Dr; L; F GE; Pf19-49
1	30dacb	1,800	1,150	J. Knowlton	1946	41.3	48	Ql	T,E	Irr	270M	16.7	1/4	22.1	5,056.0	10-25-55	A180; D; F; Pf10; T56. Surges
1	30dbcd	1,500	2,150	. . do.	1954	35.2	48	Ql	T,E	Irr	140M	12.3	9	20.3	5,053	8-10-56	AT; B42; D; DL; Lo21-36; T54
1	32aadd	4,250	150	M. Dahlinger.	. .	16.0	7	Qv	N	S	. .	. .	. .	9.9	5,090	10- 8-62	WS
1	32cdaa	1,170	2,830	G. Reasoner	1954	19.2	12	Qv	N	N	. .	. .	. .	13.8	5,100.1	4-11-62	Dr; WL(10-11-55)16.3; WL(11-5-57)15.5
1	32cdaa2	1,000	2,650	. . do.	. .	30.0	18	Qv	N	Irr	. .	. .	. .	26.1	5,099.0	10-11-55	Dr
1	32dcda	500	1,570	Brown Bros.	1955	45.6	18	Qv	T,E	N	800R	. .	. .	22.7	5,100	10-10-55	B45; Dr; L; Pf25-46
1	32dddc	80	400	. . do.	1924	42.9	94	Qv	N	N	. .	. .	. .	29.7	5,110	10-10-55	D
1	33bcaa	3,680	4,240	E. Dahlinger.	. .	25.0	48 to 6	Qv	J,E	S	. .	. .	. .	21.0	5,095	10- 6-55	D
1	33cbaa	2,550	4,000	. . do.	1913	31.5	120	Qv	T,E	Irr	635M	. .	. .	17.0	5,102.5	11- 5-57	D; T53; WL(10-6-55)23.6
1	3 cbaa2	2,525	4,000	M. Dahlinger.	1941	36.2	43	Qv	T,E	Irr	380M	. .	. .	13.3	5,102	4-11-62	A40; D; F; T53; WL(10-11-55)22.8
	C1-67-																
1	1ccaa	1,250	4,080	Carlson Estate and Selzer.	1956	30R	18	Qpp,Ql	N	Irr	400R	24	4	3.3	4,960	6-11-61	B25; Dr; GE; L; WL(7-16-56)6
1	1cdcd	280	3,560	O. Haake.	1938	28R	36	Qpp,Ql	C,E	Irr	600R	. .	. .	4.6	4,963	6-11-61	D
2	1cddc	300	3,130	. . do.	1961	693R	6 to 4	Klu	S,F	D,Dy,S	18R	. .	. .	15	4,960	1961	B31;Dr; FD; H9-5; L; Tch625-693
1	1cddc2	300	3,150	. . do.	. .	25R	2	Qpp,Ql	C,E	Dy	25R	. .	. .	5	4,960	6-11-61	Dn; FD
1	1dcbb	1,100	2,600	Not known	. .	. .	18	Qpp,Ql	T,E	Irr	. .	. .	. .	. .	4,960	. . . .	Dr; FD; WSp
2	3ccdd	100	4,040	A. Ehrlick.	1954	823R	6 to 4	Klb	. .	D	810R	25	1	95	5,175	7- 9-54	Dr; L; Pf782-823; WS
2	4ccca	350	4,750	Mountain View Water Users Assoc.. . . .	1961	1,054R	8 to 6	Klb,Kla,Kfm	S,E	PS	115R	304	. .	292.4	5,225	6- 3-61	Dr; EL; H11-7; L; Pf812-1,020; Ba
2	5dcdd	20	1,370	W. Degenhart.	1956	126R	6	Kdmc	. .	S	88R	35	2	65	5,170	10-11-56	Dr; L; Pf66-126
2	6ccba	1,030	4,940	G. Brown.	1954	765R	6 to 4	Klb	. .	D	815R	120	10	150	5,100	5-26-54	B35; Dr; L; Pf685-756
2	7ccac	750	4,500	C. Miller	1955	37R	6	Kdmc	. .	D	810R	1	1	19	5,165	8-25-55	B34; Dr; L; Pf17-37
2	8bddd	2,750	2,750	E. Edstrom.	1956	112R	6	Kdlc	. .	D,S	85R	78	2	18	4,955	10-31-56	Dr; L; Pf40-52, 64-112
2	8dbcc	1,600	2,380	Pappenheim and Zickler	1958	1,005R	6 to 4	Klb,Kla,Kfm	S,E	D,S	16R	. .	. .	218.5	5,162	6- 3-61	B22; Dr; H9-6; L; WL(1960)202. Yielded 12 gpm at depth of 400 feet
2	9abab	5,000	1,830	H. Ehler.	1955	86R	6	TKdu	. .	D	86R	35	1	50	5,148	6-28-55	Dr; L; Pf66-86
2	10bbcb	4,440	5,200	. . do.	1955	70R	6	TKdu	. .	D	84R	28	1	40	5,100	6-29-55	DL; Dr; Pf50-70
2	11bbab	5,100	4,450	O. Haake.	1958	127R	6	Kdmc	J,E	D,S	20R	40	. .	. .	5,062	. . . .	Dr; GE; L; Pf37-79, 97-127
1	12addd	2,660	125	J. Delventhal	1926	26.2	72	Ql	T,E	Irr	640M	9.3	1/4	14.2	4,973.5	4-15-62	D; F; T58; WL(9-19-56) 14.2; WL(11-5-57)12.5
2	12addd2	2,700	50	C. Miller	1956	156R	6 to 4	Kdlc	S,E	D	815R	67	2-1/2	33	4,977	10-31-56	B40; Dr; H9-5; L; Pf46
1	12cbcc	1,350	5,270	. . do.	1933	24.6	48	Ql	C,E	Irr,S	. .	. .	. .	13.2	4,980	9-15-56	A200; D; U(1956)
1	12ccdb	600	4,400	A. Krogh.	1955	30R	18	Qb,Ql	T,E	Irr	700M	7.6	1/4	3.6	4,969.0	4-15-62	Dr; GE; L; Pf15-30; WL(11-5-57)3.6
1	12dcdd	30	1,340	. . do.	1918	12.9	120	Qpp,Qb	T,E	Irr	450R	2.5	2	9.8	4,980	9-19-56	D; F. Surges
1	12ddaa	1,160	10	C. Miller	1910	40R	120 to 6	Qb,Ql	T,E	Irr,S	375E	3.0Ry	1/4	17.4P	4,980	9-17-56	A200; D; F; Su; T58
1	12dddd	100	20	F. Cline.	. .	29.0	90	Qb,Ql	T,E	Irr	. .	. .	. .	21.1	4,990	9-26-56	A5.5; D
1	12dddd2	180	280	C. Miller	1941	41R	48 to 6	Qb,Ql	T,E	Irr	. .	5.2Ry	1/4	25.9P	4,990	9-17-56	D; F; Pf31-41; T56
1	13aaaa	5,100	250	D. Holston.	. .	28.9	72	Qb,Ql	T,E	Irr	. .	. .	. .	23.2	4,990	10-28-55	D; F. Pumps dry in 30 minutes
2	13aaad	4,880	20	Phillips Petroleum Co.	1956	156R	6 to 4	Kdmc	. .	SS	815R	67	2-1/2	33	4,992	10- 4-56	B40; DL; Dr; Pf110-156
1	13aaca	4,450	680	O. Hose	1932	35.6	48	Qb,Ql	T,E	Irr	330M	5.8	1/4	25.1	4,992	9-19-56	A23; D; F; Pf7.5; T55
1	13aadc	4,030	470	L. Neff	1923	27.8	60	Qb,Ql	C,G	Irr,D	350R	. .	. .	22.2	4,993	10-28-55	A3; D; F; Pf6
1	13acdd	2,900	1,400	G. Quick.	. .	35R	48	Qb,Ql	. .	D	. .	. .	. .	22	5,000	8- 5-62	D; WS
1	13adca	3,125	850	O. Hose	1930	31.2	60	Qb,Ql	T,E	Irr	330M	10.3	1/2	20.7	4,999	9-26-56	D; F; Pf15; T57

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C1-67-																
1	13badc	4,070	3,220	A. Krogh	1956	24R	48	Qb,Ql	T,E	Irr	. .	. .	. .	3.0	4,970	9-18-56	D; F
1	13badc2	4,220	3,050	H. Krogh	1956	25R	6	Qpp,Ql	. .	S	B6R	4	1	14	4,970	2- 6-56	B21; Dr; I; Pf13-25
1	13caaa	2,600	2,750	S. Corsentino	. .	31.7	120 to 60	Qb,Ql	T,E	Irr	290M	. .	. .	31.2P	4,996	9-27-56	D; F; FD; Pf12; WSp
1	13cada	1,800	2,750	. . do.	1950	30.6	60	Qb,Ql	T,E	Irr	695M	8.0	1/4	21.8	5,000.0	9-27-56	A60; B36; F; Pf12; T55
1	13cdac	900	3,100	R. Copple	1956	29R	. .	Qb,Ql	. .	D	B20R	1	1	15	4,995	5-11-56	B26; DL
1	13dabd	2,180	900	City of Brighton Cemetery	. .	31.6	48	Qb,Ql	T,E	Irr	425M	.8Ry	1/4	25.1P	5,003	10- 9-56	A7; D
1	13daca	1,660	770	E. Schnute	1955	40.1	48	Qb,Ql	T,E	Irr	325M	5.3Ry	1/4	28.6P	5,003.0	10- 3-56	A30(with 2 wells); D; F; Pf12; T57
1	13dbdb	1,670	1,920	. . do.	. .	37.5	96	Qb,Ql	C,E	Irr	255M	6.8	1/4	26.4	5,003	10- 4-56	D; F; Pf3; T55
1	13dccc	20	2,620	F. Aichelman	1954	36.1	36	Qb,Ql	T,E	Irr	460M	8.2	1/4	20.3	5,000	9-17-56	A40; D; Pf16
2	20bacd	4,200	3,400	B. Ginther	. .	780R	. .	Kdmc,Kdlc Klu	Cyl,E	N		. .	. .	200	5,278	11-19-60	U(1930-60)
2	20bdcb	3,000	3,650	High Plains Water Users Assoc.	1960	1,200	8 to 6	Klb,Kla	S,E	PS	50R	315	. .	295	5,321	5-27-60	Dr; EL; H16-11; L; Sa; SL; Tch1,032-1,200
2	22badd	4,080	2,800	F. Carte	1960	200R	. .	Kdlc	Cyl,W	S	10R	70	. .	38	5,060	6-11-61	Dr; H8-6; L; Pf30-200
1	23bcab	3,820	4,300	T. Moir	. .	17.0	8	Qb	Cyl,E	S	. .	. .	. .	9.3	4,995.6	4-15-62	Dr; WL(10-10-55)8.9; WL(11-7-57)8.9
1	23dddd	20	70	Tashiro	. .	. .	18	Qb	T,E	Irr	. .	. .	. .	. .	5,018	. . . .	FD
1	24aadc	4,000	520	W. Letterly	1954	49R	18	Qb,Ql	T,E	Irr	. .	. .	. .	21.2	5,014.0	12-11-57	A80; Dr; F; Pf30
1	24abcc	3,990	2,620	S. Brand	1910	39.0	72	Qb,Ql	T,E	Irr	490M	7.6	1/4	21.9	5,008.8	11- 6-55	A30; By2; D; F; FD; Pf10
1	24abcc2	3,900	2,520	J. Warner	194.	39.4	36	Qb,Ql	T,E	Irr	430M	8.4	1/4	21.9	5,008	9-17-56	A40; D; F
1	24addd	2,650	90	Wall and Letterly	1918	34.8	120	Qb,Ql	T,E	Irr	. .	. .	. .	20.5	5,017.0	12-11-57	A40; D; F; Su
1	24bbdc	3,900	4,480	S. Brand	1921	35.0	120 to 36	Qb,Ql	T,G	Irr	670M	7.8	1/4	22.8	5,008.4	4-15-62	D; WL(9-7-56)23.1; WL(11-5-57)19.9
1	24cccc	80	5,150	E. Sharp	1957	38R	5	Qb,Ql	. .	D	B12R	1	3	23	5,018	2- 7-57	B36; Dr; L; Pf20-40
1	24ccdd	20	4,050	. . do.	1950	41.9	24	Qb,Ql	T,E	Irr	. .	. .	. .	22.9	5,019.0	10- 5-55	Dr
1	24ccdd2	30	4,100	. . do.	. .	29.5	1.0	Qb,Ql	N	N	. .	. .	. .	22.7	5,019	10- 5-55	D
1	24cdcc	30	3,700	. . do.	1955	41.5	18	Qb,Ql	T,E	Irr	665M	12	2	21.4	5,020	10- 5-55	B42; DL; Dr; Lo20.5-41.5; T55
1	24daac	1,340	510	J. Harding	1934	39R	48	Qb,Ql	T,E	Irr	. .	. .	. .	20.1	5,022	12-10-57	A40; D; F; Pf33-39; Su
1	24dcdc	50	1,650	E. Schaefer	1934	46.0	. .	Qb,Ql	T,E	Irr	635M	13.4	1/2	17.8	5,024.7	11- 5-57	A50; D; F; Pf16; Su; T55; WL(10-20-55)24.7
1	24ddcc	40	1,300	Whitebread and Johnson	1957	44R	48	Qb,Ql	T,E	Irr	. .	. .	. .	19.2	5,024.0	12-10-57	A32; D; Pf29.5-44; Su
1	25abbb	5,050	2,420	L. Ehlen	1956	46R	6	Qb,Ql	. .	S	B20R	2	2	26	5,022	2- 7-56	B45; Dr; L; Pf26-46
1	25accc	2,900	2,370	M. Tashiro	. .	37.2	48	Qb,Ql	T,E	Irr	280M	. .	. .	23.5	5,031	10- 4-55	A100; By2; D. Siphone from 25accc2
1	25accc2	2,900	2,350	. . do.	. .	36.7	48	Qb,Ql	N	Irr	. .	. .	. .	24.5	5,031	10- 4-55	D; Si
1	25addc	2,950	350	E. Ehlen	1938	47.9	48	Ql	T,E	Irr	. .	. .	. .	42.5	5,046.0	10-25-55	D; F; T54
1	25addd	2,900	280	. . do.	. .	36.6	48	Qb,Ql	T,E	Irr	. .	. .	. .	29.9	5,029	10-25-55	A90(with 2 wells); D; F
1	25bbdc	3,980	4,450	C. Wall	1934	36.6	48	Qb,Ql	T,E	Irr	370M	. .	. .	25.7	5,022	10- 4-55	A40; D; T55
1	25bdad	3,520	2,700	L. Ehlen	1942	29.8	6 to 5	Qb,Ql	Cyl,W	S	. .	. .	. .	24.2	5,030	10-10-55	Dr
1	25bdad2	3,450	2,700	. . do.	1944	54.1	48	Qb,Ql	T,E	Irr	675M	. .	. .	29.4	5,030	10-10-55	A88; D; Pf12; T56
1	25bddb	3,000	3,200	K. Sakaguchi	1954	35.2	48	Qb,Ql	T,E	Irr	375R	13	3	26.7	5,030	10- 5-55	A25; D; DL; FD; GE; Pf20
1	25cbcc	1,350	5,180	. . do.	1955	56.3	48	Qb,Ql	T,E	Irr	600R	. .	. .	25.6	5,034.4	10- 5-55	A60; D; DL; GE; Pf19
1	25cbcd	1,600	4,700	L. Smith	1911	33.0	72	Qb,Ql	T,N	Irr	75R	. .	. .	24.7	5,030	10-12-55	A40; D; F; Pf6; U(1955)
1	25cddd	20	2,650	. . do.	1910	38.8	72	Qb,Ql	T,E	Irr	75R	16	1/2	33.6	5,043.0	10- 5-55	A40; D; F; Pf20
1	25cddd2	100	2,680	. . do.	1948	40.6	48	Qb,Ql	T,E	Irr	. .	. .	. .	14.8	5,043	10-12-55	A40; D; F; Pf20
1	25dabc	2,200	1,270	E. Ehlen	1955	39R	6	Ql	. .	D	B10R	5	1	33	5,039	8- 6-55	B38; DL; Pf19-39
1	25dcac	700	1,900	O. Bapst	. .	53R	12	Ql	T,E	Irr	. .	. .	. .	. . .	5,051	. . . .	Dr; Pf20
1	25ddcb	400	1,300	. . do.	. .	52.2	36	Ql	T,E	Irr	. .	4.8	1/4	44.4	5,059	10-26-55	A60; By2; D; F; Pf20; T54
1	25dddc	60	550	E. Ehlen	1930	47.3	48 to 24	Ql	T,E	Irr	. .	. .	. .	41.0	5,059	10-24-55	A20;By3; D; F; Pf15; T54

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C1-67-																
1	26aadd	4,000	20	L. Heldt.	1935	41.1	48	Qb,Ql	T,E	Irr	607M	. .	. .	23.2	5,022.5	10- 4-55	D; FD; WSp
1	26addd	2,820	20	M. Tashiro	. .	36.5	96	Qb,Ql	T,E	Irr	900M	. .	. .	24.1	5,025	10- 4-55	A80; D
1	26bdab	3,700	2,980	J. Worthing	1956	25R	6	Qpp,Ql	. .	D	20R	6	1	14	5,010	3-24-56	B20; DL; Pf5-21
1	26caad	2,100	2,720	C. Richie	1945	27.2	48	Qb,Ql	C,E	Irr	. .	. .	. .	16.2	5,019.4	11- 5-57	D; WL(9-1-55)19.3
2	26dbbb	2,540	2,540	B. Rice	1952	660R	. .	Kdmc,Kdlc	. .	D	. .	. .	. .	. .	5,011	. . . .	B20; L
1	26ddbd	850	700	L. Smith.	1954	56.2	48	Ql	T,E	Irr	450M	. .	. .	24.8	5,030	10- 5-55	A40; F; Pf20; T56
2	32bbca	4,350	4,930	E. Cunning.	1960	435R	. .	Kdmc,Kdlc	S,E	D,S	B15R	10		150	5,172	9- 1-60	H7-5; L; Tch259-305, 391-415
2	33bcba	3,880	4,820	A. Stepura.	1960	230R	5 to 4	Kdmc	. .	D,IrrL	18R	100	. .	52	5,104	2- 9-60	H7-4; L; Tch185-230
1	34adca	2,980	850	J. Masunaga	. .	26.0	48	Qpp,Ql	T,E	Irr	. .	. .	. .	7.6	5,010	8- 9-56	D
1	34addc	2,770	450	J. Johnson	. .	13.3	72	Qpp,Ql	C,M	Ot	. .	. .	. .	11.5	5,020.3	4-10-62	D; U(1955-62)
2	34dadb	1,970	620	L. Cain	. .	280R	. .	Kdmc	. .	D	. .	. .	. .	. .	5,021	. . . .	Dr; WSp
1	34ddcd	30	700	A. Adams.	1938	9.6	62 to 46	Qb	C,G	Irr,Ot	. .	. .	. .	3.6	5,021.2	4-10-62	A6; D; F; Pf7
1	34dddb	450	600	R. Hilliard	. .	17.2	90 to 48	Qb	C,E	Irr	. .	. .	. .	11.5	5,022	10-13-55	A21; D
1	35acca	3,050	2,050	N. Sandlin	1955	29.4	44	Qb,Ql	N	Irr,E	. .	. .	. .	21.9	5,038.5	4-15-62	D; Pf27-30; WL(8-22-55) 24.6; WL(11-5-57)17.5
1	35acca2	3,220	1,980	. . do.	1955	33.6	46	Qb,Ql	C,E	Irr	425M	5	1/4	23.4	5,034	10-12-55	D; Pf9; T57
1	35accd	2,700	2,200	E. Winfry	. .	28.0	48	Qb,Ql	C,E	Irr	165M	5.2	1/4	22.1	5,038	10-12-55	D
1	35acdc	2,800	1,750	N. Sandlin.	1937	34.5	46	Qb,Ql	C,E	Irr	485M	5.5	1/4	21.3	5,035	10-12-55	A58; D; Pf9
1	35acdd	2,900	1,400	Royal Chemical Co. .	1955	40R	18	Qb,Ql	. .	Ind,Irr	80R	6	2	20	5,036	. . . .	B27; Dr; L; Pf15-27
1	35addb	3,120	620	J. Imatani.	1955	38.9	48	Qb,Ql	T,E	Irr	. .	. .	. .	22.2	5,034.5	10- 6-55	A40; D; Pf10
1	35addb2	3,100	550	. . do.	. .	38.7	48	Qb,Ql	T,E	Irr	360M	11	10	20.1	5,034	10- 6-55	AT; D; T55
1	35babc	4,700	3,700	P. Haselbush.	1924	25.7	28	Qb,Ql	T,E	Irr	350M	6.5	1/6	15.1	5,020	10- 9-56	A10; B28; D; F; Pf16
1	35bacc	4,180	3,900	S. Karpinski.	1929	23.9	48	Qb,Ql	C,E	Irr	235M	5.9	1/4	15.8	5,031	10- 9-56	A7; D; F; Pf15; T57
1	35bddd	2,900	2,920	J. Stewart.	1949	36.5	48	Qb,Ql	T,E	Irr	535M	7.0	1/4	24.1	5,035	10-12-55	D; Pf9
1	35cbcc	1,350	5,250	E. Rucker	1935	24.9	36	Qb,Ql	T,E	Irr	. .	. .	. .	17.2	5,030	10-13-55	A50; D; Pf12; Su
1	35cbdd	1,360	3,960	. . do.	1925	28.7	72 to 48	Qb,Ql	C,E	Irr	. .	. .	. .	17.8	5,039	10-13-55	D; Pf12
2	35daaa	2,600	150	Henderson School. . .	. .	750R	. .	Kdmc	. .	. .	. .	. .	. .	. .	5,042	. . . .	QW
1	35dbbb	2,620	2,250	W. Fagan.	1933	27.9	48 to 36	Qb,Ql	J,E	Irr	. .	. .	. .	24.3	5,035	10-13-55	A.7; D
1	35dcad	840	1,330	L. Morris	1940	40.0	48	Qb,Ql	T,E	Irr	80M	. .	. .	30.8	5,051	11-15-55	A35; D; F; Pf12
1	35dcbb	1,150	2,420	Carlson	1933	32.3	46	Qb,Ql	C,E	Irr	115M	5	1/4	25.8	5,038	11- 7-55	D; FD; Pf9
1	35dcdc	20	1,650	L. Morris	1936	39.9	72 to 48	Qb,Ql	T,E	Irr	240M	. .	. .	30.0	5,051	11-15-55	D; F; Pf15
1	35ddbb	1,260	1,280	. . do.	1935	35R	72 to 48	Qb,Ql	T,E	Irr,D,S	. .	. .	. .	. .	5,049	. . . .	D; Pf12
1	35ddcc	30	1,050	A. Stadler.	1945	41.8	30	Qb,Ql	T,E	Irr,D	150M	2.7	1/4	37.6	5,058.6	8-19-55	A7.5; D
1	36adcd	2,680	850	H. Chapman.	1954	42R	5	Ql	. .	D	B0R	24	1	16	5,060	3-23-54	B30; DL; Dr; Pf27-42
1	36bdbc	3,390	3,740	F. Dryer.	. .	65.8	18	Ql	T,E	Irr,Ot	150M	12.1	1/2	53.4	5,068.6	11- 4-57	AT; Dr
2	36bdcb	3,100	3,700	. . do.	1954	165R	6 to 4	Kdmc	. .	D	B15R	54	2	46	5,062	2- -54	B56; Dr; L; Tch129-165
1	36cbda	1,750	4,000	F. Madden	1937	50R	72 to 48	Ql	C,E	Irr	. .	. .	. .	41.8	5,056.0	4-11-62	A20; U(1952-55)
	C1-68-																
2	4bcac	3,600	4,400	S. Osher	1951	5,630R	. .	. .	. .	Oil	. .	. .	. .	. .	5,268	. . . .	EL
2	5dcdd	200	1,400	P. Nordstrom.	1958	855R	4	Klb	S,E	D	13R	30	. .	325	5,320	11-20-58	Dr; H6; L; Pf625-750. Hole plugged at 780 feet
2	9bbaa	5,100	4,200	G. Nordstrom.	1958	832R	8 to 6	Klb,Kla	S,E	D	15R	40	. .	260	5,288	10- 6-58	Dr; FD; H10-8; L; Tch700-832
2	10cbbc	2,280	5,200	C. Nordstrom.	1959	809R	4	Klb	S,E	D	12R	65	. .	235	5,268	2-17-59	Dr; EL; FD; H6-5; L; Pf695-780; WS
1	10cbbc2	2,100	5,240	. . do.	. .	48R	5	Qp	J,E	D	. .	. .	. .	12.6	5,181	2-11-59	Dr; FD; WS
2	10ddda	400	120	N. Washington Water Users Assn.	1958	1,006R	8 to 6	Klb,Kla, Kfm	S,E	PS	40R	60	. .	300	5,170	8-13-58	Dr; EL; L; Tch728-997

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C1-68-																
2	12abaa	5,180	1,500	P. Elms.	1958	875R	6 to 4	Klb	. .	D	10R	225	. .	100	5,071.6	6-17-58	Dr; EL; MB-5; L; Pf600-656, 666-742. Plugged at 742 feet
1	12abaa2	5,220	1,500	. . do	. . .	15.0	36	Qp	N	N	2E	. .	. .	6.5	5,072	4-10-62	D; WL(1-23-61)6.9
2	18ddad	700	50	W. Vogler.	1955	410R	8 to 6	Kdlc,Klu	S,E	D	B30R	30	6	30	5,320	5-12-55	Dr; L; Tch150-410
2	19baba	5,230	3,600	Ivy Bros.	1958	865R	6 to 4	Klb	S,E	D,Dy,S	10R	145	. .	220	5,363	1- 6-58	Dr; FD; L; Pf730-865; WS
2	22cbcb	1,900	5,170	C. Foster.	1932	24.4	60	Kdmc	T,E	Irr	400R	. .	. .	8.6	5,186	4-22-61	By5; D; F; Su
2	22ccaa	1,000	4,150	. . do	1956	22.3	48 to 12	Kdmc	T,E	Irr	350R	. .	. .	8.3	5,176	4-22-61	D; F; Su
2	22ccbb	1,280	5,160	. . do	1950	35.5	48	Kdmc	T,E	Irr	290R	. .	. .	10.3	5,183	4-22-61	D; F; Su
2	22cccb	400	5,100	. . do	1916	510R	5 to 4	Klb	Cyl,E	D	P5R	. .	. .	. .	5,181	4-22-61	Dr
2	25bbab	5,050	4,600	K. Nelson.	1959	530R	6 to 4	Qs,Kdlc,Klu	S,E	D	. .	. .	. .	45	5,225	12- -59	Dr; WS
2	30aaad	4,730	320	Sunny Slopes Estates Mutual Water Corp.	1956	280R	6	Kdlc	S,E	PS	11R	65	12	125	5,289	6-27-60	Dr; FD; Pf100-240; WS
2	30aaad2	4,750	320	. . do.	1959	1,045	8 to 6	Klb,Kla,Kfm	S,E	PS	120R	336	. .	125	5,290	4-21-59	Dr; EL; FD; B11-7; L; Pf667-1,045
2	30bbdd	4,250	4,100	E. Miller.	. .	710R	5	Kl	N	N	. .	. .	. .	113.9	5,345	4- 4-57	Core; U(1957)
2	30bbdd2	4,250	4,200	. . do.	. .	820R	6 to 4	Klb	S,E	D	8R	120	16	335	5,345	10- 4-54	DL; Dr; Tch720-820
2	31ccdd	280	4,000	R. Barber.	1958	1,099R	7	Klb,Kla,Kfm	S,E	Pr	75R	305	. .	140	5,278	3-21-58	DL; Dr; Tch732-1,093
2	31cdbc	900	3,880	. . do	1956	1,100R	6 to 4	Klb,Kla,Kfm	S,E	Pr	B20R	161	16	154	5,282	7-16-56	B22; Dr; L
2	31cdcb	550	3,880	. . do	1954	900R	6	Klb,Kla	S,E	Pr	25R	120	2	330	5,278	10- 6-60	Dr; Pf700-900
2	34acca	3,100	2,200	W. Koch.	1954	9,963R	. .	Pl	. .	Oil	. .	. .	. .	. .	5,303	. . . .	EL; QW; SL
2	35adac	3,570	460	T. Branson	1900	486R	6 to 3	Kdmc,Kdlc	Cyl,E	PS	10R	. .	. .	208	5,263	9-19-60	Dr
2	35adac2	3,540	380	. . do	1946	525R	10 to 6	Kdmc,Kdlc	Cyl,E	PS	10M	. .	. .	200	5,262	9-21-60	Dr; FD; WS
	C1-69-																
2	5caac	2,150	3,000	Borra	1939	9,309R	9	Kp	. .	Oil	. .	. .	. .	. .	. . .	. . . .	EL
2	7ccbd	970	4,920	Paclamar Farms . . .	1960	. . .	6 to 4	Klb	N	D	. .	. .	. .	94.5	5,530	9-22-60	Dr
2	7ccca	500	4,860	. . do	1960	709R	8 to 4	Klb,Kla,Kfm	N	D,Dy,S	B25R	200	. .	108.9	5,545	9-22-60	Dr; L; Pf371-709; Sa
2	10dabb	2,430	1,100	E. Swinburg.	1958	469R	. .	Klb,Kla,Kfm	S,E	D	9R	100	. .	160	5,193	6- 5-58	B15; Dr; FD; L
1	10dccc	50	2,400	E. Dangreau.	1959	31R	6	Qp	. .	D	10R	. .	. .	14	5,245	6-20-59	DL; FD; Pf14-30;
2	11bcbd	3,350	4,900	G. Waneka.	1954	1,525R	8 to 6	Klb,Kla,Kfm, Kt	. .	IrrL	. .	. .	. .	80	5,191	11- -54	B14; DL; Dr
1	11bcca	3,220	4,900	. . do	. .	14R	. .	Qp	. .	. .	. .	. .	. .	. .	5,190	. . . .	D; FD; WS. Well dry 1954 to 1956
2	11bccb	3,250	5,050	. . do	1952	480R	8	Klb	J,E	D	. .	. .	. .	. .	5,191	. . . .	Dr; FD; WS
2	22daba	2,620	880	B. Swan	1958	650R	. .	Klb,Kla,Kfm	S,E	D,S	20R	175	. .	150	5,240	9-19-58	FD; L; Pf400-650
2	26cccd	100	4,800	A. Mitchum	1957	1,011	6	Klb,Kla,Kfm	N	Irr	. .	. .	. .	259.0	5,425	3- 5-57	Dr; GRL; L
2	26ccdc	200	4,500	. . do	1957	1,201	6	Klb,Kla,Kfm	N	D,Irr	. .	. .	. .	220.4	5,422	3- 6-57	DL; Dr; GRL; H7
2	35bbab	5,200	4,350	Broomfield Heights Mutual Water District	1958	1,022R	6	Klb,Kla,Kfm	S,E	PS	91M	244	24	380.5	5,416	10- 3-60	AT; FD; Tch725-965; WS
2	35ddda	450	100	. . do	1955	1,053	8 to 6	Klb,Kla,Kfm	S,E	PS	75R	325	. .	168	5,348	3-12-55	Dr; EL; FD; L; WS
	C1-70-																
2	16bbca	4,550	4,650	T. Shanahan.	1924	1,000R	. .	Kt,Kp	N	N	<1	. .	. .	3.6	5,438	3- 7-57	GRL
2	21bdac	3,600	3,100	J. Kane.	1957	150	5	Klb,Kla	. .	D	. .	. .	. .	79.8	5,560	4-19-57	B10; Dr; EL; FD; GRL; L; OH(67-150); WSp
2	28cbaa	2,350	4,150	F. Quintana.	1957	260	6	Klu	S,E	D	B2R	. .	. .	97.7	5,953	4-18-57	B24; Dr; EL; FD; GRL; L
	C2-65-																
1	2bddd	2,650	2,950	Box Elder Farms. . .	1932	33.7	24	Qb,Ql	N	Irr	. .	. .	. .	23.3	5,220.7	11- 4-57	Dr; U(1957); WL(7-19-33) 22.2
-	11ddcd	30	900	. . do	1938	54.7	24	Qb,Ql	N	Irr	. .	. .	. .	36.5	5,265	7-25-57	Dr; U(1957)
2	14cddc	150	3,180	. . do	1956	166R	6 to 4	TKdu	. .	D	B15R	26	2	36	5,282	1-28-56	B26; Dr; L; Tch120-166
1	14dbab	2,420	1,950	. . do	1930	33.8	48	Qb,Ql	T,E	Irr	75R	7.5	1/4	24.7	5,271.0	7-25-57	A15; Dr; T52
1	14dcad	780	1,380	. . do	1930	60.7	18	Qb,Ql	T,E	Irr	105M	11.0	1/4	57.3P	5,290	7-23-57	A25; Dr; F; T54
1	14dcdc	50	1,850	. . do	1930	60R	18	. . .	T,E	Irr	200M	. .	. .	. .	5,291	. . . .	A40; Dr; F; T53
2	16ccca	550	4,650	Anderson-State . . .	1957	8,377	. .	. . .	. .	Oil	. .	. .	. .	. .	5,381	. . . .	EL
2	17dddb	550	550	Union Pacific Railroad-Austin . . .	1957	9,477	. .	. . .	. .	Oil	. .	. .	. .	. .	5,381	. . . .	EL

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2-65-																
2	21dddb	350	400	J. and N. Monaghan .	1953	900	6 to 4	TKdu,Kdmc, Kdlc	T,E	D,S	B16R	50	9	250	5,419	7- 2-53	FD; L; Pf660-880
1	23abac	4,650	1,950	Box Elder Farms . .	1930	45.7	18	Qb,Ql	T,E	Irr	154M	10.3Ry	1/4	28.2	5,285.0	11- 4-57	A25; Dr; F; T54
1	23accd	2,660	2,060	. . do	1930	57.6	18	Qb,Ql	T,E	Irr	245M	15.1	1/4	36.5	5,295.0	7-18-57	A40; Dr; F; T54
1	23acdd	2,660	1,640	. . do	1930	52.4	18	Qb,Ql	T,E	Irr	136M	7.5Ry	1/4	47.6P	5,295	7-22-57	A40; Dr; F; T54
1	23dcbd	750	2,020	. . do	1946	64.6	18	Qb,Ql	T,E	Irr	150M	14.9Ry	1/2	62.5P	5,314.0	7-15-57	A30; Dr; F; T54
1	23dcdd	50	1,380	. . do	1955	62.3	18	Qb,Ql	T,E	Irr	380M	11.9Ry	1/4	52.6P	5,310	7-15-57	A60; B61; Dr; F; Lo32-62; T53
1	23dcdd2	60	1,410	. . do	1930	47.7	24	Qb,Ql	N	Irr	. .	. .	. .	42.6	. . .	7-25-57	Dr; U(1957)
1	23ddbc	680	1,060	. . do	1946	87.6	18	Qb,Ql	T,E	Irr	250M	15.5Ry	1/4	57.0P	5,205	7-16-57	A80; Dr; F; T53
1	26acab	3,900	1,700	. . do	1952	65.9	18	Qb,Ql	T,E	Irr	. .	. .	. .	. .	5,210	. . . .	Dr; T54
1	26acdc	2,650	1,950	. . do	1951	55.3	18	Qb,Ql	T,E	Irr	200M	. .	. .	. .	5,328.0	. . . .	A180(with 26acdd and 26adcc); Dr; T55
1	26acdd	2,650	1,550	. . do	1952	59.6	18	Qb,Ql	T,E	Irr	270M	. .	. .	. .	5,328	. . . .	Dr; T55
1	26adcc	2,650	1,150	. . do	1932	68.3	18	Qb,Ql	T,E	Irr	215M	. .	. .	. .	5,324	. . . .	Dr; F; T55
1	35abaa	5,200	1,620	. . do	1932	62.8	18	Qb,Ql	T,E	Irr	160M	. .	. .	39.0	5,341.0	11- 4-57	A225; Dr; F; T55
1	35abaa2	5,200	1,500	. . do	1931	58.0	30 to 18	Qb,Ql	T,E	Irr	100E	9.0Ry	1/4	55.0P	. . .	8-16-56	
1	35abdd	4,100	1,600	. . do	1930	63.6	18	Qb,Ql	T,E	Irr	220M	. .	. .	56.2P	. . .	8-16-56	Dr; F
1	35acdc	2,900	1,850	. . do	. .	49.1	18	Qb,Ql	T,E	Irr	120M	4.5Ry	1/4	42.5P	5,348	8-15-56	Dr; F
2	35cdcd	110	3,400	. . do	1953	248R	6 to 4	TKdu	. .	D	B20R	12	2	80	5,358	11-24-53	B16; Dr; L; Tch214-240; WS
1	35dabb	2,520	1,150	. . do	1952	62.2	18	Qb,Ql	T,E	Irr	490M	12.2Ry	1/4	54.2P	5,350	8-10-56	Dr; T55
1	35dbbb	2,640	1,700	. . do	1933	. .	48	Qb,Ql	T,E	Irr	490E	. .	. .	18.8	. . .	10-12-33	D
1	35dcda	650	1,350	. . do	1953	61.1	18	Qb,Ql	T,E	Irr	. .	16.3Ry	1/4	34	5,362	8-10-56	Dr; T55
1	35dcda2	470	1,580	. . do	1930	50R	18	Qb,Ql	T,E	Irr	. .	. .	. .	. .	5,365	. . . .	Dr; T55
1	35dcdc	50	1,980	. . do	1930	42.5	36	Qb,Ql	T,E	Irr	. .	. .	. .	20.9	5,360.6	11- 4-57	D; F; Pf33
1	35dcdc2	120	1,750	. . do	1955	47.3	18	Qb,Ql	T,E	Irr	450R	15	2	46.7P	5,362	8- 7-56	B45; Dr; F; GE; L; Lo33-48; T54
	C2-66-																
1	3cbbb	2,500	5,150	E. Dahlinger	. .	21.9	36 to 5	Qp	N	N	. .	. .	. .	12.9	5,127.1	4-11-62	D; U(1955-57); WL(10-11-55)11.7; WL(11- 5-57)12.6
1	5bdca	3,100	3,500	E. Kallsen	1940	51.0	18	Qp,Qv	T,E	Irr	660M	. .	. .	30.9	5,119.8	4-11-62	A50; Dr; T56; WL(10-10-55)35.5; WL(11- 5-57)33.7
1	6bbcd	4,250	4,700	C. Cotton	. .	42.2	48 to 24	Ql	T,E	Irr	. .	. .	. .	31.1	5,099.5	4-11-62	D; WL(10-11-55)30.1
2	6cccb	550	5,150	H. Mumford	1915	500R	6 to 4	Kdmc,Kdlc	Cyl,W	S	. .	. .	. .	80.3	5,130	8-18-55	Dr
1	6dddd	80	60	M. Rhodus	1945	59.4	36	Qv	T,E	Irr	245M	2.5	1/4	46.3	5,138.7	4-11-62	D; T55; WL(10-11-55)51.1 WL(11-5-57)50.1
2	7cccd	100	4,900	A. Land.	. .	865R	4	Kdmc,Kdlc	T,E	D	20E	. .	. .	77.2	5,160	8-17-55	Dr
1	7dcdc	1,800	300	B. Hendrix	1950	55R	6	Qp	J,E	D	. .	. .	. .	43.1	5,155.4	8-17-55	Dr
2	8bbbd	4,850	4,950	Box Elder Farms. . .	1956	248R	6 to 4	Kdmc	. .	D	B20R	113	2	72	5,145	1- 4-56	B66; Dr; L; Pf208-248
2	10acab	3,950	1,970	J. Martin.	1953	288R	6 to 4	Kdmc	. .	D	B20R	56	2	40	5,190	9- 6-53	B25; Dr; L; Tch247-288
2	17ddcc	150	950	L. Crawford.	1918	455R	5	TKdu,Kdmc	Cyl,W	D,S	. .	. .	. .	22.3	5,170	8-16-55	Dr; WS
2	18adad	3,400	150	G. Routzan	. .	300R	6	TKdu	Cyl,E	D	. .	. .	. .	58.0	5,185	8-17-55	Dr; WS
2	18ddbc	950	1,180	C. Brandenberg . . .	1955	760R	. .	Kdmc,Kdlc, Klu	N	TW	25R	. .	. .	. .	5,193	. . . .	B40; Dr; L. Plugged
1	19ccdc	120	4,550	Rocky Mountain Arsenal.	. .	14.5	6	Qp	N	D	. .	. .	. .	11.7	5,179.1	11- 6-57	Dr; U(1955-60); WL(9-2-55)13.5; WL(4-3-56)12.2; WS
2	20aabb	5,130	1,000	. . do	1918	350R	4	Kdmc	N	D	. .	. .	. .	37.4	5,170	9- 2-55	Dr; OH(100-350); U(1955)
1	20adaa	3,900	250	. . do	1957	22.0	4	Qas	N	TW	. .	. .	. .	. .	5,166	. . . .	B17; Core; L; Sa
1	20adad	3,620	150	. . do	1958	22.3	4	Qas	N	TW	<1	. .	. .	7.4	5,166.7	4-14-62	B18; Core, L; Sa; Sc10.4-18.6; WL(3-6-58)7.5
2	20bbbc	4,850	4,970	. . do	. .	173	3	TKdu	N	D	. .	. .	. .	64.1	5,200	9- 2-55	Dr; U(1955-60); WS

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2-66-																
2	21ccca	350	4,880	Halverson Bros.		700R		Kdmc,Kdlc		D,S							Dr; WS
2	28cccc	100	5,080	Fullenwider			5	TKdu	Cyl,M	M				18.2	5,272.1	9-14-55	Dr
1	30bbac	4,810	4,460	Rocky Mountain Arsenal	1960	48.0	4	Qp	M	O				8.5	5,179.2	4-14-62	B16.8, Core; GE; Sc23.0-43.5; SL; WL(9-13-60)11.5
1	30bbac2	4,800	4,460	do	1960	20.0	4	Qp	M	O				9.0	5,179.7	4-14-62	B19.0; Core; GE; Sc10.0-16.5; SL
1	30cbbc	2,100	4,920	do	1957	43.0	4	Qp,TKdu	M	TW,O				4.8	5,190.1	4-14-62	B16.0; Core; L; Sa; Sc11.5-13.5, 32.4-40.6; WL(10-1-57)6.7
1	30ccbb	1,200	5,050	do		12.1	6	Qp	M	M				10.1	5,199.5	9- 2-55	Dr; WS
1	31bbac	4,800	4,600	do		28.7	12	Qes	M	M,O				21.7	5,223.6	11- 6-57	Dr; WL(9-1-55)22.7; WS
1	31bdaa	3,900	2,750	do	1957	28.0	4	Qes	M	TW,O	4R			2.5	5,232	10-17-57	B19.3; Core; L; Sa; Sc17.1-19.3
1	31dacd	1,640	670	do		41.2	30	Qp	M	M				16.5	5,252.8	9- 1-55	D; WS. Destroyed 1956
1	32adbc	3,370	1,000	do	1957	30.0	4	Qes	M	TW,O				29.1	5,278	4-14-62	B22.1; Core; L; Sa; Sc19.5-21.6
1	32dcdd	50	1,450	do		49.2	24	Qp	M	M,O				32.7	5,295.1	4-14-62	D; WL(9-1-55)31.2; WL(11-6-57)34.3; WS
2	35dddb	600	600	J. Rouse						Oil					5,334		EL
	C2-67-																
1	1aada	4,440	50	F. Nakata	1940	28.4	48	Ql	T,E	Irr	235M	10	1/4	11.5	5,084.0	11- 5-57	By2; D; WSp
1	1aada2	4,440	50	do	1940	30.7	36	Ql	M	Irr				18.0	5,084	9-29-55	By; D; Sl
2	1abab	5,180	1,680	O. Foley	1954	370R	6 to 4	TKdu,Kdmc		D	B10R	117	2	59	5,075	6-24-54	B38; Dr; L; Tch330-370
1	1adaa	3,900	30	F. Nakata	1955	29.0	18	Ql	T,E	Irr	85M	13.1	1/4	9.5	5,087	9-30-55	Dr; Pf14; T56
1	1adba	3,650	800	do		31.7	36	Ql	T,E	Irr				16.9	5,087.0	9-29-55	By3; D; Pf8; T56
1	1adba2	3,650	780	do	1936	26.5	36	Ql	M	Irr				17.6	5,087	9-29-55	D; Sl; Pf8
1	1adba3	3,650	800	do		29.9	36	Ql	M	Irr				17.3	5,087	9-30-55	D; Sl
1	1adbb	3,920	1,220	G. Squires	1944	33.9	32	Ql	T,E	Irr				30.9	5,080	9-29-55	A43(with 1bdbb); D; Pf12; Su
2	1baba	5,200	3,550	J. Erger	1954	372R	6 to 4	TKdu,Kdmc		D	B10R	20	1	20	5,058	3-31-54	B34; Dr; L; Tch288-372
1	1baba2	5,200	3,620	do	1957	43R	6	Ql		D	B7R	1	1	30	5,060	2-14-57	DL; Dr; Pf23-43
1	1bbdc	4,250	4,600	L. Cammack		41.4	56 to 48	Ql	T,E	Irr				35.7	5,061	9-27-55	D; U(1955)
1	1bdbb	3,920	3,920	G. Squires	1954	39.9	18	Ql	T,E	Irr				30.7	5,063.0	9-29-55	Dr; Pf18
1	1bdbb2	3,920	3,900	C. and J. Erger	1954	40.0	18	Ql	T,E	Irr	245M			33.7	5,066.8	4-11-62	A120; Dr; Pf10; Su; T53; WL(9-29-55)31.6; WL(11-5-57)21.8
1	1cccc	50	5,250	H. Rucker	1954	42.5	18	Ql	T,E	Irr				31.9	5,092.3	4-11-62	A70(with 1cccc2 and 1cccc3); B38; L; WL(8-23-55)33.6; WL(11-5-57)25.6; WS
1	1cccc2	20	5,060	do		42.8	72	Ql	T,E	Irr				36.1	5,092	9-27-55	D; Su
1	1cccc3	20	5,000	do		42.8	48	Ql	T,E	Irr				35.8	5,092	9-27-55	D; Pf7
1	2aaad	4,950	300	F. Sweany	1930	42.1	60 to 48	Ql	T,E	Irr				35.2	5,060	9-29-55	D; Pf9
1	2abaa	5,000	1,350	O. Riggs	1941	44.7	36	Ql	T,E	Irr	150M			37.4	5,060	9-28-55	D; T55
1	2acaa	3,900	1,500	M. Daniels	1937	40.9	48	Ql	T,E	Irr	165M			34.2	5,061	1-28-55	A40; D; F
1	2adab	3,920	650	F. Sweany	1955	40.0	48	Ql	T,E	Irr				31.1	5,059.0	9-29-55	A20; D; F; Pf9
1	2adbb	3,950	1,120	O. Riggs	1945	42.5	36	Ql	T,E	Irr	150M			33.6	5,060	9-28-55	
1	2bacc	4,020	3,920	J. Miura	1955	41.0	48	Qb,Ql	T,E	Irr	300M	3.4	1/2	22.5	5,045.0	10-13-55	A20; D; F; Pf16; WSp
1	2badb	4,380	3,180	R. Fisher		35.6	48	Qb,Ql	T,E	Irr	800R			27.5	5,050	8-23-55	D; U(1955)
1	2cadc	1,480	3,280	L. Hopkins	1919	43.2	48	Ql	T,E	Irr	115M			35.0	5,061	9-16-55	A40; D
1	2cddc	50	3,250	B. Murray	1954	48.6	48	Ql	T,E	Irr	205M	4.8	1/4	31.3	5,076.7	11- 4-57	A240; D; F; Pf18; Su; WL(9-15-55)46.1; WSp
1	2cddd	50	2,800	do	1954	83R	48 to 5	Ql	J,E	S				44.6	5,080	9-28-55	B51; Dr; L; Pf30
2	2ddaa	1,220	150	P. Erger	1947	555R		Kdmc,Kdlc		D	5R	75			5,080		Dr
1	2ddbb	1,300	1,200	do		42.9	18	Ql	T,E	Irr	250R			32.6	5,078	9-26-55	Dr; Pf9
1	2dddb	350	450	do	1945	38.4	48	Ql	M	Irr				34.1	5,090	9-26-55	D; Pf9; Sl(to dddc)
1	2dddc	330	500	do	1944	42.0	36	Ql	T,E	Irr				35.1	5,090	9-26-55	By; D; Pf6
1	2dddc2	50	450	do	1941	39.1	48	Ql	T,E	Irr	155M			34.0	5,093	9-26-55	D; Pf6; WSp

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2-67-																
2	3aabb	5,100	1,150	O. Sherwood.	1958	284R	6 to 4	TKdu	J,E	PS	10E	50	. .	10	5,020	11-16-58	B45; Dr; L; Pf75-95, 140-160, 240-280
1	3adcb	3,200	1,120	Mann and Garrison. . . .		25.1	48	Qb,Ql	T,H	Irr	. .	. .	. .	15.2	5,026.8	8-19-55	D; U(1955)
1	3bbcc	3,980	5,000	J. Himes	1953	30R	36	Qpp,Ql	Port,G	Irr	300R	6	. .	6.8	5,021	11-22-55	A35
1	3bcdc	2,700	4,500	L. Wolpert	1943	19.3	34	Qpp,Ql	C,Tr	Irr	285R	8	1/6	5.5	5,025	11-23-55	A22; D; F
1	3bdbd	3,320	3,450	J. Himes	1952	31.0	36	Qpp,Ql	Port,G	Irr	300R	4	. .	4.9	5,022	11-22-55	A60(with 3bdda); D; Pf10
1	3bdda	3,280	2,750	. . do	1952	20.5	36	Qpp,Ql	Port,G	Irr	300R	6	17	8.5	5,025.5	11-22-55	D; Pf10
1	3cbab	2,350	4,300	H. Ayers	. .	12R	36	Qpp	. .	Irr	. .	. .	. .	. .	5,027	. . . .	D; WS
1	3cccd	50	4,680	G. Ferguson.	1944	18R	48	Qpp,Ql	C,E	Irr	. .	. .	. .	4.9	5,032.6	11-10-55	D
1	3cccd2	100	4,680	. . do	. .	10.8	48	Qpp,Ql	C,E	Irr	. .	. .	. .	5.6	5,034	11-10-55	D; WS
1	3cddb	530	3,000	. . do	. .	46R	. .	Qb,Ql	. .	Irr	. .	. .	. .	. .	. . . .	. . . .	WSp
1	3dbda	1,840	1,370	M and G Feed Lot . .	1955	60R	8	Qb,Ql	. .	S	B60R	10	3	40	5,060	10-25-55	B60; Dr; L; Pf48-60
1	4adbc	3,380	1,000	L. Wolpert	1955	18.9	34	Qpp,Ql	N	Irr	275M	7.8	1	4.7	5,023.6	4-10-62	A50; AT; D; WL(11-23-55) 4.9; WL(11-5-57)4.1
1	7daac	2,030	350	J. Fukaye.	1954	41.5	48	Qpp,Ql	T,E	Irr	. .	. .	. .	32.0	5,092	8- 8-56	D; Su
1	7ddbc	970	1,140	. . do	1944	34.0	36	Qpp,Ql	T,E	Irr	250R	. .	. .	28.3	5,095	8- 8-56	By; Su
1	8bcca	3,290	4,640	W. Eppinger.	. .	33R	. .	Qpp,Ql	. .	Irr	. .	. .	. .	. .	5,081	. . . .	WS
1	8cccc	300	5,120	J. Fukaye	1954	30.9	48	Qpp,Ql	T,E	Irr	370M	3.0	1/4	22.2	5,084	8- 8-56	By; D; Pf6; Su. Drawdown measured in siphon well
1	9addb	3,100	550	D. Howe.	1947	13.1	36	Qpp	C,E	Irr	. .	. .	. .	5.0	5,042.7	4-10-62	A7; D; Pf; WL(10-25-55) 5.4; WL(11-5-57)4.5; WS
2	9addd	2,850	50	E. Aden.	1956	340R	6 to 4	TKdu,Kdmu	. .	D	. .	. .	. .	14	5,050	8-17-56	B40; Dr; L; Pf294-340
1	9bdba	3,790	3,470	Rocky Mountain Arsenal.	1960	30.0	4	Qpp,Ql	. .	O	20R	.3	. .	2.4	5,035.0	4-10-62	B27.4; Core; L; Sc4.0-13.0, 22.0-26.0
1	9caab	2,630	3,300	D. Howe.	1945	23R	36	Qpp,Ql	N	Irr	. .	. .	. .	2.3	5,037.0	11- 7-57	D; Pf10-15; WL(11-21-55) 2.4
1	9cdca	600	3,340	P. Latorra	1930	12R	24	Qpp	. .	Irr,S	. .	. .	. .	. .	5,040	. . . .	D; WS
1	9daaa	2,380	330	E. Aden	. .	24.1	48	Qb,Ql	T,E	Irr	194M	3.8	1-1/2	14.8	5,055	9- 3-60	AT
1	9daac	2,280	400	H. Miller	1955	23R	48	Qb,Ql	C,E	Irr	500R	5	4	13	5,055	1-16-56	B23; D; DL; WS
1	9daac2	2,200	410	. . do	. .	50R	. .	Qb,Ql	. .	D	. .	. .	. .	. .	. . . .	. . . .	WSp
1	9daba	2,600	850	G. Elledge	1945	17.5	48	Qb,Ql	C,G	Irr,S	. .	. .	. .	13.5	5,050	11-21-55	A1; D; Pf5
1	9dadb	1,770	350	W. Weare	1948	45R	8	Qb,Ql	J,E	D	. .	. .	. .	. .	5,080	. . . .	Dr; U(1955); WS
1	9dadc	1,340	450	H. Miller.	1940	50R	48	Qb,Ql	T,E	Irr	555M	6.0	1/2	32.1	5,077.0	10-26-55	DD; F; WS
1	9dcac	680	1,900	C. Mueller	1959	54R	. .	Qb,Ql	J,E	N	. .	. .	. .	. .	5,070	. . . .	D; WSp
1	9dcdb	520	1,900	E. Richardson. . . .	1954	53R	5	Qb,Ql	. .	D	B20R	2	2	30	. . . .	1- 3-54	B47; Dr; L; Pf38-53
1	9dcdb2	650	1,940	J. Lambert	1953	68R	4	Qb,Ql	J,E	D	. .	. .	. .	. .	5,080	. . . .	Dr; WS; WSp
1	9dcdc	300	1,860	A. Ling, Jr.	1955	49R	6	Qb,Ql	. .	D	B20R	1	2	36	5,081	10- 1-55	B44; Dr; L; Pf28-48
2	9dcdc2	150	1,780	Hazeltine Heights Water District . .	1959	732R	8 to 7	Kdmc,Kdlc	S,E	PS	100R	226	. .	36	5,081	3-14-59	B43; Dr; EL; FD; L; Pf424-727; WS
1	9dcdc3	60	1,660	R. Wintjen	1954	50R	6	Ql	. .	D	B20R	37	1-1/2	. .	. . . .	. . . .	DL; GE; WSp
1	9dcdd	50	1,640	Fargo Oil Co. . . .	1955	49R	6	Qb,Ql	. .	D	B20R	1	1-1/2	37	. . .	10- 1-55	B44; DL; Dr; Pf29-49; OW
1	9ddab	1,220	490	W. Weare	1950	40R	. .	Qb,Ql	N	D	. .	. .	. .	. .	. . . .	. . . .	U(1959)
1	9ddba	1,000	810	C. Dobbs	1943	46.3	96	Qb,Ql	C,E	Irr	. .	. .	. .	33.9	5,074.8	12- 1-55	AT; D; WS
1	9dddd	150	180	R. Tipsword.	1954	49R	5	Qb,Ql	. .	D	B10R	10	2	30	. . .	2-22-54	B37; DL; Dr; Pf33-49
1	10aacb	4,350	1,250	G. and W. Myers. . .	1955	41.9	48	Ql	C,E	Irr	. .	. .	. .	34.4	5,070	10-25-55	A12(with 10acab); B42; D; L; Pf32-42; WS
1	10abaa	5,100	1,480	R. Roop.	1946	47R	18	Qb,Ql	T,E	Irr	. .	. .	. .	37.3	5,071.2	4-11-62	Dr; F; Pf15; WL(11-17-55)37.7; WL(11- 5-57)38.4 Pumps dry in 10 minutes
1	10abdb	4,500	1,700	. . do	1953	38.7	18	Qb,Ql	T,E	Irr	. .	7.8	1/4	28.0	5,069.0	11-17-55	A40(with 2 wells); Dr; Pf15
1	10acab	3,700	1,950	G. and W. Myers. . .	1955	44.1	48	Qb,Ql	T,E	Irr	. .	. .	. .	37.0	5,073.4	10-25-55	D

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2-67-																
1	10addd	2,650	20	J. Jacabucci		49.4	60 to 18	Qb,Ql	T,E	Irr				47.5	5,082	9-17-55	By; D; WS
1	10addd2	2,650	50	do			48 to 12	Qb,Ql	T,E	Irr				47.2	5,082	9-16-55	By; D
1	10bacc	4,050	3,880	R. Tanabe	1955	25R	48	Qpp,Ql	C,E	Irr	200R	3.5	1/2		5,055.0		A40; B25; D; DL; F; Pf11-25
2	10bbac	4,680	4,600	Brighton Public Schools	1930	200R		TKdu	N	N							Dr. Hazeltine school
1	10bbac2	4,680	4,600	do	1944	40R		Qpp,Ql									QW
1	10bdbc	3,600	3,900	R. Tanabe	1935	32.8		Qb,Ql	T,E	Irr	100R			25.5	5,058.8	11-21-55	A40; B32; By4; D; F; Pf6; WS
1	10bdbc2	3,440	3,820	do	1951	35.5		Qb,Ql	T,E	Irr	30R			26.7		11-21-55	A40; B32; D; F; Pf7; Su
1	10bddc	2,650	3,250	G. Meyers		41.1	48	Qb,Ql	N	Irr				36.9	5,070	8-22-55	D; U(1955)
1	10bddc2	2,650	3,300	do		39.7	48	Qb,Ql	T,E	Irr				38.0	5,070	9- 9-55	AT; D
1	10ccca	350	4,920	M. Nelson		59R		Qb,Ql		D							FD; WS
1	10ccdd	100	4,100	Latter Day Saints Church		34.4	60 to 24	Qb,Ql	C,Tr	Irr,Ot				24.5	5,076.4	4-11-62	D; U(1955-62); WS
1	10cddd	50	2,900	J. Mascnaga	1955	39.8	18	Qb,Ql	T,E	Irr				25.8	5,079.5	11-30-55	B41; Dr; L; Lo26-41; WS
1	10dccc	50	2,400	do	1954	41R	48	Qb,Ql	T,E	Irr				38.5	5,082	9- 8-55	A60; D; F; WSp
1	10dccd	40	2,080	do	1932	39.5	48	Qb,Ql	T,E	Irr	65M	8.9	1/4	30.2	5,084	11-18-55	A60; AT; By; D; F; WS
1	10dcdc			C. Wall	1935	41.0	48	Qb,Ql	C,Tr	Irr				29.6		4-30-37	L
1	10ddbb	1,300	1,300	A. Letterly	1955	44.8	18	Qb,Ql	N	Irr	100R	8	2	32.8	5,081.5	8-19-55	B43; Dr; GE; L
1	10ddbb2	1,270	1,190	do	1960	55R	60	Qb,Ql	T,E	Irr					5,082		A80; D; WS
1	11aaba	5,080	820	J. Fry, Sr.		45R	6	Ql	J,E	D				35	5,091	3- 9-54	B39; L; Pf24-44
1	11aada	4,540	20	do	1940	42.9	48 to 16	Ql	T,E	Irr	355M			38.8	5,102	9-23-55	D; Pf18; WSp
1	11aada2	4,540	70	do	1957	53R	48	Ql	T,E	Irr							A100; B53; Su
1	11adbd	3,350	680	do	1934	41.1	48 to 16	Ql	T,E	Irr				25.2	5,093.0	9-26-55	D; Pf18; WSp
1	11baca	4,450	3,510	B. Murray	1935	51.9	66 to 36	Ql	T,E	Irr	150R			45.2	5,084.0	9-15-55	D; Pf18; WSp
1	11baca2	4,450	3,520	do	1937	51.9	48	Ql	T,E	Irr	150R			48.2	5,084.0	9-15-55	D; Pf18; TS4
1	11bccd	2,680	4,650	do	1934	41.1	48	Ql	N	Irr				36.7	5,082.7	4- 3-56	D; U(1955); WL(8-23-55) 37.3
1	11bcdc	2,680	4,600	do	1932	40.9	60	Ql	T,E	Irr				37.0	5,083	8-23-55	D; U(1955)
1	11bdad	3,300	2,650	do		56.3	48	Ql		Irr				49.8	5,087.0	9-16-56	D; WS
1	11bdda	3,280	2,680	do	1947	63R	24	Ql	T,E	Irr	225M			48.1	5,087.0	9-16-55	Dr; Pf18; WSp
1	11cadb	1,820	3,300	J. Fry, Jr.	1947	54.0	48	Ql	N	Irr,O	100R			48.9	5,095	9-27-55	D; Pf9
1	11cdcb	520	3,880	do	1955	44.9	18	Ql	N	Irr,Ot	50R	2	2	37.4	5,097.0	4-11-62	B38; Dr; GE; L; Lo28-43
1	11dbac	2,040	1,940	P. Erger			6	Ql	J,E	N				32.7		8-19-55	
1	11dbdd	1,400	1,550	do		49.3	34	Ql	N	Irr				45.3	5,115.0	9-26-55	D; Si(to dbdd2)
1	11dbdd2	1,470	1,350	do	1950	50.0	48	Ql	T,E	Irr				46.3	5,115.3	9-26-55	By2; D; Pf9; WS
1	12abdd	4,280	1,550	Box Elder Farms	1936	30.8	48	Qv	N	Irr				18.7	5,123.9	8-18-55	D; WS
1	12bcba	3,750	4,820	D. M. H. Cattle Co.	1960	53R	12	Qv	T,E	S	200R			35	5,110	6-15-60	B49; Dr; L; Pf40-52
1	12bdad	3,580	2,720	do	1958	43R	12	Qv	T,E	S	40R			26.7	5,123	10- 7-60	B35; Dr; L; Lo20-43
1	12cbac	2,000	4,500	do	1955	46R	12	Qv	T,E	S	100R	4	2	29.3	5,118	9-31-55	B46; DL; Dr; Pf32.5-47.5
1	12cbba	2,600	4,700	do		44.6	12	Qv	T,E	S				44.3	5,112	9-30-55	B46; DL; Dr
1	12cbca	1,680	4,780	do		42.9	12	Qv	T,E	S					5,112		Dr
1	13bddd	2,650	2,700	Rocky Mountain Arsenal	1960	40.0	4	Qv	N	O	2M	11.5	1/2	24.1	5,135.5	4-14-62	B33.4; Core; GE; Sc24.0-28.0, 30.5-33.0; SL
1	13cadd	1,650	2,950	J. Stohr	1935	40.5	24	Qv	N	N				26.9	5,147.8	4-11-62	Dr; Pf8; U(1936-57); WL(8-16-55)30.0; WL(11-5-57)28.3; WS
1	14aaaa	5,040	110	T. Gaye		26.0		Qv	Cyl,H					22.9	5,127	8-18-55	Dr; WS
1	14bbab	5,100	4,500	J. Fry, Jr.	1950	51.1	24	Ql	T,E	Irr	193M	1.7	113	38.0	5,102.0	9- 9-55	Dr; WS
1	14bbba	5,250	4,780	do	1947	52.4	48	Ql	T,E	Irr	224M	1.8	1/4	47.6	5,102	9- 9-55	D
1	14bbba2	5,240	4,660	do	1948			Ql	T,E	Irr	160M	3.6	1/4	48.3	5,102	9- 9-55	AJ0; D; WS
2	14ccdb	660	4,420	E. Tiedeman		450R		Kdmc		D					5,125		Dr; WS

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2 57-																
2	14daaa	2,500	250	O. Maul.	. .	843R		Kdmc,Kdlc	. .	D	. .		. .	. .	5,139	. . . .	Dr; WS
2	14ddab	1,150	600	. . do	1949	2,024R		Klb,Kla,Kfm	. .	Oil	. .		. .	. .	5,122	. . . .	Plugged; flowed at land surface at depth of 1,100 feet
1	15abca	4,500	2,000	Rocky Mountain Arsenal.	1960	58.0	4	Ql	N	O	7M	. .	. .	30.6	5,082.0	4-12-62	B43.6; Core; GE; Sc30.0-50.0; SL; WL(9-30-60)28.5
1	15adbc	3,450	1,010	W. Murphy.	1939	46.6	60	Ql	T,E	Irr	255M	2.8	1/4	43.0	5,100	9-12-55	D; DL; WS
1	15bacc	4,150	3,850	Rocky Mountain Arsenal.	1960	40.0	4	Qb,Ql	N	O	7M	.8	1/2	19.6	5,071.5	4-12-62	B33.7; Core; GE; L; Sc20.1-33.0
1	15badd	4,250	2,670	J. Monson.	1950	50R	48	Qb,Ql	T,E	Irr	270M	7	1/4	37.3	5,088	9- 8-55	D; WS
1	15badd2	4,000	2,850	Rocky Mountain Arsenal.	1960	43.0	4	Qb,Ql	N	O	7M	. .	. .	23.4	5,075.3	4-12-62	B36.5; Core; GE; Sc26.0-36.5; SL; WL(9-29-60)21.0
1	15bcba	3,850	4,850	. . do	1960	35.0	4	Qb,Ql	N	O	14M	.6	1/2	15.4	5,074.1	3-15-62	B28.5; Core; GE; Sc19.0-30.0; SL; WL(9-28-60)13.9
1	15bdaa	3,950	2,650	J. Monson.	1930	50R	48	Qb,Ql	T,E	Irr	512M	7.3	1/4	36.4	5,089	9- 8-55	A137(with 3 wells); WS
1	15bdbb	3,920	3,820	W. Murphy.	1955	47.8	48	Qb,Ql	T,E	Irr	473M	3.4	1/4	38.7	5,078	9-12-55	A40; D; WS
1	15bdcc	2,650	3,800	J. Monson.	1955	34.5	18	Qb	T,E	Irr	200R	. .	. .	32.0	5,084	9- 8-55	B30; Dr; GE; L; WS
1	15cbcd	1,460	4,650	J. Powers.	1950	29.6	36	Qb,Ql	T,E	Irr	. .	. .	. .	23.3	5,086	9-12-55	A25; D; U(1955); WS
1	15ccdd	50	4,200	. . do	1945	38.8	48	Qb,Ql	T,E	Irr	264M	3.5	1/4	10.7	5,100	9-19-60	AT; By2; D; WS
1	15ccdd2	50	4,180	. . do	1945	38.8	36	Qb,Ql	Cyl,H	Irr	. .	. .	. .	30.8	5,100	8-17-55	D; Si
1	15cdcc	40	3,820	. . do	1950	40R	24	Qb,Ql	J,E	S	. .	. .	. .	39.3	5,102	9-12-55	Dr; WS
2	15cdcd	320	3,580	. . do	. .	535R	. .	Kdmc	. .	D,S	. .	. .	. .	. .	5,100	. . . .	Dr; WS
1	15dcbc	660	2,620	D. Heinz	1954	40R	48	Qb,Ql	T,E	Irr	330M	6.8	. .	34.4	5,100.0	8-19-55	A54; B40; D; DL; Pf10; WS
1	16acbb	3,870	2,590	M. Tashiro	. .	22.1	24	Qb,Ql	Cyl,H	D	. .	. .	. .	21.0	5,075	8-22-55	D; U(1955)
1	16acbd	3,600	2,280	. . do	. .	40.3	24	Qb,Ql	T,E	Irr	171M	3.0	1/4	33.5	5,080	11-10-55	A100; WS
1	16acda	3,200	1,550	Rocky Mountain Arsenal.	1960	40.0	4	Qb,Ql	N	O	7M	.5	1/2	18.6	5,074.7	3-15-62	B33.5; Core; GE; Sc16.6-32.5; SL; WL(9-60)19
1	16adac	3,500	600	. . do	1960	32.0	4	Qb,Ql	N	O	13M	.8	1/2	19.4	5,073.4	3-15-62	B26.3; Core; GE; Sc20.0-27.0; SL; WL(10-3-60)18.1
1	16bdda	3,220	2,650	M. Tashiro	1951	43R	18	Qb,Ql	T,E	Irr	235M	7	1/4	28.3	5,082.2	4-10-62	Dr; WL(11-10-55)29.9; WL(11-5-57)21.0; WS
1	16bddc	2,670	3,250	J. Sanger.	1956	42.5	36	Qb,Ql	T,E	Irr	300M	11	1/4	29.1	5,090	11-21-55	A60; By2; D; Pf7.5; WS
1	16bddd	2,750	2,780	M. Tashiro	. .	. .	48	Qb,Ql	T,E	Irr	560M	8.6	1/2	28.9	5,085	11-10-55	A100; By; D
1	16bddd2	2,720	2,750	. . do	. .	39.0	48	Qb,Ql	N	Irr	. .	. .	. .	30.0	5,085	11-10-55	By; D
1	16cacc	1,360	3,650	J. Priola.	1956	44R	48	Qb,Ql	T,E	Irr	. .	. .	. .	30.2	5,093	12-16-57	A55; D; Pf16; Su
1	16ccca	480	4,680	W. Starbird.	1944	47.4	36	Qb,Ql	T,E	Irr	255M	6.8	1/4	38.4	5,097	9-26-55	A7; D
1	16ccdb	580	4,300	J. Priola.	1953	48.6	48	Qb,Ql	T,E	Irr	405M	. .	. .	45.3P	5,095	9-14-55	D
1	16ccdb2	450	4,320	. . do	. .	47.6	48	Qb,Ql	. .	Irr	. .	. .	. .	44.5P	5,095	9-14-55	B48; D
1	16ccdc	30	4,310	. . do	. .	49.3	60 to 36	Qb,Ql	T,E	Irr	. .	. .	. .	37.0	5,097	4- 3-56	By2; D; WL(9-13-55)44.6; WSp
1	16ccdc2	50	4,350	. . do	. .	44.2	60	Qb,Ql	. .	Irr	. .	. .	. .	36	5,097	9-14-55	D; Si; WS
1	16cdcd	50	3,500	. . do	1940	44.2	48	Qb,Ql	T,E	Irr	. .	. .	. .	40.2P	5,095	9-13-55	D; T55
2	16daab	2,350	350	Midwest Refining Co.	1902	887R	. .	Kdmc,Kdlc	N	Oil	P	. .	. .	. .	5,077	1950	DL; Dr. Plugged 1950
2	16dabc	2,050	1,200	Gardner-Denver Co. .	1957	716	10 to 8	Kdmc,Kdlc	T,E	Ind,S	8110R	60	. .	15	5,078	12-31-57	Dr; EL; L; Sa; Tch363-512, 580-713; WS
1	16dbcc	1,360	2,630	J. Priola.	1956	42R	48	Qb,Ql	T,E	Irr	. .	. .	. .	25.6	5,086	12-16-57	A55; D; DL; Pf16; Su
1	16ddcc	40	1,200	J. Matsumato	1956	35R	48	Qb,Ql	. .	Irr	384M	4.8	1	24	5,091	6-21-56	AT; B35; D; DL
1	16dddc	40	370	. . do	. .	36.6	48	Qb,Ql	T,E	Irr	336M	6.9	1	22.8	5,094.3	4-11-62	A43; AT; D; WL(11-5-57) 19.5; WSp
1	16dddd	40	270	. . do	1954	38.8	48	Qb,Ql	T,E	Irr	380M	. .	. .	32.9P	5,098	9-14-55	A43; D; WS

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2-67-																
1	17aabd	4,820	850	H. Jeffry	1954	9.5		Qpp	C,G	Irr				2.7	5,047	8- 8-56	S
1	17bacb	4,530	3,930	A. Ford	1937	14.5	96	Qp,Ql	C,E	S,Irr,Ot	175R		1/4	11.1	5,067.5	4-10-62	D; DL; Pf4
1	17cbcd	1,340	4,640	E. Honnen	1956	28R	48	Qp,Ql	T,E	Irr				3.9	5,059	12-19-57	A80; D; DL; Pf9-28
1	20aaab	5,0a0	600	E. Paterson	1951	7.8		Qb	C,E	F				6 8	5,091	11-23-55	D
2	20abab	4,950	1,700	do	1955	384R	6 to 3	Kdmc		D	10R			35	5,073	9-16-55	B20; Dr; L; Tch185-205, 324-384. Flowing July 1955
1	20abbd	4,850	2,050	do	1940	17R	48	Qb,Ql	T,E	F	400M	0.4	1/4	3.3	5,060	9-16-55	D
1	20abda	4,600	1,450	do		10.6	36	Qb	C,E	F				4.6	5,065	11-23-55	D
1	20acab	3,680	1,900	A. Brantner	1954	35R	24	Qb,Ql		Irr	300R			20	5,090	8-15-54	D; DL
1	20adbc	3,450	1,200	do		43.8	48	Qb,Ql		Irr				30.6P	5,100	8-17-55	A15; D; Pf12; Su
1	20adca	3,220	700	Hastie		41.6	72	Qb,Ql	C,G	Irr				33.0	5,101	9-20-55	A4; D; F
1	20adcc	2,820	1,250	R. Leasing	1951	42.7	48	Qb,Ql	T,E	Irr		6.1	1/4	39.3P	5,103	9- 7-55	D
1	20addd	2,650	20	G. Dunning	1952	46.8	48	Qb,Ql	T,E	Irr	750R			33.9	5,105	9-19-55	A10; D; F; Pf18; T56
1	20bbcb	4,520	5,250	E. Honnen	1954	29.3	48	Qpp,Ql	T,E	Irr	1,000R			4.6	5,060	9-23-55	A50; B31; D; DL; F; Pf15-31; T62
1	20bcbb	3,750	5,000	do	1932	26.1	48 to 36	Qpp,Ql	T,E	Irr	450R	15	1/6	5.1	5,061.2	4-10-62	A44; D; F; Pf1.; T61; WL(9-23-55)4.7; WL(11-5-57)6.4
1	20bccc	2,900	5,180	do	1932	27R	48 to 36	Qpp,Ql	C,E	Irr	600R	13		3.6	5,065	9-23-55	A62; D; F; Pf15; T56
1	20bdad	3,600	2,750	F. Riser	1955	21.6	48	Qpp,Ql	C,E	Irr				4.6	5,069	8-19-55	B21; D; DL; Pf6-21; U(1955)
1	20bdad2	3,300	2,830	do	1950	21.1	48	Qpp,Ql	C,E	F				9 8P	5,062	8-19-55	D
1	20bdbc	3,400	4,000	E. Honnen	1932	26.9	48 to 36	Qpp,Ql	T,E	Irr	600R	15	1/6	5.5	5,060	9-23-55	A29; D; F; Pf15
1	20cbdc	1,400	4,420	Colo. State Game and Fish Dept.		20.5	48	Qb,Ql	C,E	F	350R			5.1P	5,108	11-21-55	D; Pf17; T56
1	20cbdd	1,400	4,150	do		14R	72	Qb,Ql	T,E	F	157M			9.0	5,107	11-21-55	D; WS
1	20ccaa	1,020	4,100	do		12.8	48	Qpp	T,E	F				1.6	5,068	8-16-55	D; U(1955). Water unfit for trout
2	20cdda	400	2,700	Colo. State Hwy. Dept.	1900	600R	4	Kdmc,Kdlu	Cyl,H		F				5,113	1930	Dr; U(1960). Ceased flowing about 1930
1	20cddc	100	3,180	L. West	1949	38.5	36	Qb,Ql	Cyl,E	Ot				26.8	5,105.8	4-10-62	D; Pf34-40; T59; U(1956)
2	20cddd	100	2,850	K. Faden	1925	550R		Kdmc,Kdlu		D					5,116		Dr
1	20daad	2,300	30	D. Ledvetter	1944	46.1	36	Qb,Ql	T,E	Irr				30.9	5,106	9-20-55	A20; D; Pf18; WSp
1	20dabb	2,400	1,200	B. Moore	1905	39R	10 to 8	Qb,Ql	J,E	D					5,106		Dr; QW
1	20dabb2	2,400	1,250	Amidon Cash Nursery		18.2	60 to 20	Qb,Ql		Irr				12.4	5,103	9-15-55	D; Pf7.5
1	20dadd	1,620	20	T. Sonoda	1948	50R	60	Qb,Ql	J,E	Irr	680R			33.6	5,105	9-19-55	A23; D; F; Pf10; T55
1	20dbda	1,700	1,600	do	1949	50R	48	Qb,Ql	J,E	D							D; WSp
1	20dcbc	950	2,620	M. Wylie	1949	41.2	48	Qb,Ql	T,E	Irr	380M	6.2	1/4	30.6	5,109	9-15-55	A25; B43; D; F; WSp
1	20dddc	40	600	K. Faden		37.9	120	Qb,Ql	T,E	Irr				28.8	5,110	8- 5-55	D; WSp
2	21aada	4,500	200	A. Marty	1955	535R	6 to 4	Kdmc	S,E	D,S	25R	80		40	5,103	12- 1-55	B47; Dr; L; WS
1	21adda	3,050	300	do	1928	52.7	60 to 48	Ql	T,E	Irr	765M	10.9	1-1/4	31.5	5,114.2	4-11-62	A130(with 21adda2 and 21bddc); AT; WL(9-12-55)33.8; WL(4- 3-56)31.7; WS
2	21bbbd	4,750	4,680	R. Gress		500R	5	Kdmc	J,E	D							Dr; QW; WSp
1	21bccc	2,650	5,100	do		47.1	48	Qb,Ql	T,E	Irr				35.7	5,105	9 19-55	By2; D; WSp
1	21bccc2	2,650	5,100	do		45.1	60	Qb,Ql	N	Irr				35.7	5,105	9-19-55	D; St
1	21bdcb	3,100	3,950	M. Priola	1944	50R	48 to 18	Qb,Ql	T,E	Irr	366M	11	36	32.7	5,108.3	4-11-62	A80(with 21bdcd and 21bdcd2); D; Pf16; WL(8-17-55)34.1; WL(11-5-57)31.2; WSp
1	21bdcd	2,900	3 580	do	1954	49.4	48	Qb,Ql	T,E	Irr	400R	12	4	34..	5,109	8-17-55	D; Pf16; WSp
1	21bdcd2	2,900	3,600	do	1954	93R	18	Qb,Ql	T,E	Irr	1,100R	37	2	56.6P	5,109	9- 1-55	B95; DL; Dr; Pf48-93; WSp
1	21bddc	2,690	3,190	A. Marty	1954	97.0	48	Qb,Ql	T,E	Irr	1,640M			34.2	5,107.4	9-12-55	B97; Dr; L; Pf79-97; WS
2	22aaab	5,070	480	D. Wolpert		400R		Kdmc		D					5,129		Dr; WS
2	22aabb	5,150	1,050	J. Haas	1956	1^0R	6 to 4	TKdu	S,E	D	816R	85	1	65	5,125	5-12-56	DL; Dr; Pf134-170
2	22acac	3,450	1,740	H. Nasom				TKd		D,S							WS

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2-67-																
2	22acbd	3,410	2,130	Hanks and Anderson		350R		Kdmc	S,E	D,S	25R				5,141		Dr
2	22acbd2	3,370	2,130	do	1958	660R	8 to 4	Kdmc,Kdlc	S,E	D,S	100R	300		130	5,141	6-10-58	B75; Dr; HS-6-4; L; Pf440-480, 528-550, 572-616; WL(5-62)150
2	22acdc	2,750	1,850	Rocky Mountain Arsenal	1958	178	8 to 6	TKdu	Port,N	O				73.2	5,148.2	2-22-58	B40; Core; GE; L; Sa; Sc74.5-76.7, 138.4-147.0; WSp
2	22acdd	2,660	1,600	do		500R	4	Kdmc	N	O				86.3	5,146	8-31-55	Dr
1	22baba	5,100	3,560	W. Munson		45R		Ql		D,S					5,102		WS
1	22bcbb	3,900	5,250	do	1936	47.1	48	Ql	T,E	Irr	690M	8.4	1/2	28.7	5,102	9-13-55	A79; By2; D; WS
1	22bcbb2	3,890	5,240	do	1924	37.7	68	Ql	N	Irr				37.0P	5,102	9-13-55	D; Si; T55
1	22bccc	2,910	5,100	H. Nesom	1953	38.3	18	Ql	T,E	Irr				28.7	5,110	9-13-55	B39; DL; Dr; GE
1	22bccc2	2,950	5,170	do	1952	45.7	18	Ql	T,E	Irr		8	1/2	27.9	5,110	11- 7-55	DL; Dr; WS
1	22bccc3	2,670	5,250	do	1950	47.6	18	Ql	T,E	Irr	305M	5	27	32.9	5,109	9-13-55	A130; AT; Pf12; Wb
1	22bdbb	3,650	3,900	Rocky Mountain Arsenal	1960	45.0	4	Qes,Ql	Port,N	O	13M			29.8	5,108.8	9-21-60	B39.7; Core; L; Sc33.0-44.0
1	22caad	2,260	2,860	H. Yamamoto		50.7	36	Qes,Qv	T,E	Irr	294M	13.6	1/4	33.7	5,132.6	11-23-55	Al; D; F; FD; WS
1	22cadc	1,350	3,200	Rocky Mountain Arsenal	1960	48.0	4	Qes,Qv	N	O	15M			38.6	5,131.3	4- 3-62	B43.5; Core; GE; Sc37.0-43.5; SL
1	22cbcc	1,350	5,080	Not known		36.5	10	Qes,Qv	Cyl,W	O				33.4	5,117	8-18-55	Dr; WS
1	22ccaa	1,200	4,150	Mrs Reynolds		42.1	30	Qes,Qv	C,M	Irr				31.0	5,123.9	4-11-62	D; WL(8-17-55)22.3; WL(11- 5-57)22.4; WSp
1	22cdcc	200	3,700	Rocky Mountain Arsenal	1960	65.0	4	Qes,Qv	N	O	6M			31.0	5,127.6	4-14-62	B59.5; Core; GE; Sc50.0-59.0; SL
1	22dbab	2,400	1,680	do	1957	40.0	4	Qes,Qv	Port,N	O				37.3	5,146.3	9- 4-57	B37.7; Core; L; Sa; Sc36.5-38.5
1	22dbbc	2,200	2,550	do	1960	49.0	4	Qes,Qv	N	O	2M			27.4	5,139.1	4-14-62	B47.6; Core; GE; Sc43.0-45.0; SL
1	22ddad	800	100	do		32.3	36	Qes,Qv	N	O				26.2	5,176.1	11- 6-57	D
1	22ddba	1,250	950	do		49.0	4	Qes,Qv	Port,N	O	2R			39.0	5,152.7	8-29-57	B47.6; Core; L; Sa; Sc43.0-45.0; SL
1	23abdb	4,550	1,950	do	1957	20.0	4	Qes,Qv	Port,N	O	15R	3		6.2	5,150.1	10- 8-57	B11.9; Core; L; Sa; Sc8.0-12.0
1	23addd	2,850	120	do		30.6	42	Qes,Qv	N	O				21.5	5,166.1	9- 6-55	D
1	23addd2	2,900	300	do	1960	37.0	4	Qes,Qv	N	O	6M	.4	1/2	16.3	5,161.0	4-12-62	B29.7; Core; GE; Sc15.0-18.0; SL
2	23badc	4,000	3,200	do		520R	5	Kdmc	Cly,W	S					5,155		Dr; WS
1	23bddd	2,690	2,820	do		47.0	48	Qes,Qv		O				38.5	5,186.4	11- 6-57	D; WL(9-6-55)38.2
1	23ccaa	1,250	4,400	do	1960	56.0	4	Qes,Qv	N	O	15M	2.6	1/2	43.2	5,191.5	4- 3-62	B51.4; Core; GE; Sc38.0-41.0, 44.0-52.0; SL
1	23cdbb	1,000	3,880	do		63.0	24	Qes,Qv	C,N	O				43.6	5,196.3	9- 6-55	D
1	23cdac	250	3,200	do	1960	61.0	4	Qes,Qv	N	O	2M	.5	1/2	42.8	5,190.4	4-12-62	B49.1; Core; GE; Sc41.0-53.0; SL
1	23ddac	750	400	do	1960	40.0	4	Qes,Qv	N	O	15M	2.0	1/2	26.4	5,173.2	4-14-62	B36.5; Core; GE; Sc20.6-34.6; SL
1	24abba	5,050	2,050	do	1960	33.0	4	Qes,Qv	N	O	7M	4.3	1/2	5.1	5,140.5	4-14-62	B26.8; Core; GE; Sc9.0-14.0, 18.0-22.0; SL
1	24accc	2,930	2,420	do	1942	22R	8	Qes,Qp	Cyl,G					11	5,160	12- -42	Dr; Pf9; WS
1	24baac	4,750	3,250	do	1958	20 0	4	Qes,Qp	N	O	10M	5.4		2.4	5,140.4	3- 4-58	B13.2; Core; Sc5.8-11.2; SL
1	24bcdc	2,650	4,380	do		48.5	48	Qes,Qv	N	Irr,O				25.3	5,167	9-22-55	D, TH. Bedrock 42 feet in adjacent test hole
1	24bddc	2,690	3,200	do		33.3		Qes,Qv		O				19.5	5,165.8	7- 6-57	D; WS
1	24cccc	150	5,200	do	1960	25.0		Qes,Qv	N	O	6M	8	1/2	12.8	5,198.3	4-14-62	B19.2; Core; GE; Sc12.8-18.8; SL
1	24dadb	1,700	400	do	1960	40.0		Qes,Qv	N	O	12M	5.3	1/2	9.4	5,167.1	4-14-62	B30.1; Core; GE; Sc9.0-12.0, 20.4-25.6; SL

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2 67-																
1	25bdad	3,350	2,700	Rocky Mountain Arsenal.	. .	39.0	. .	. . .	. .	. .	. .	. .	. .	. .	5,224.0	10-17-57	B34.7; Core; Sa; Sc32.4-34.5. Dry
1	25dcca	600	2,200	. . do	1957	56.0	. .	Qes,TKdu	. .	O	. .	. .	. .	41.0	5,229.6	9-30-57	B51.2; Core; L; Sa; Sc49.1-51.2
2	26abac	4,670	1,960	. . do	1961	12,045	18 to 8	Pf	. .	WD,I	. .	. .	. .	. .	5,187.3	. . . .	EL; GRL; L; NL; Sa; WS. Temperature log; injecting 200 gpm continuously in 1962
1	26acab	3,700	1,900	. . do	1960	61.0	. .	Qes,Qv	N	O	. .	. .	. .	49.0	5,201.5	3- 6-62	B51.7; Core; GE; Sc47.0-53.0; SL
1	26adda	250	3,050	. . do	1957	56.0	. .	Qes,Qv	. .	O	. .	. .	. .	41	5,220.0	10-11-57	B46.2; Core; L; Sa; Sc41.5-46.0
1	26baba	5,120	3,300	. . do	. .	39.4	28	Qv	N	O	. .	. .	. .	38.5	5,190	8-31-55	D
1	26babb	5,050	3,850	. . do	1960	51.0	4	Qv	N	O	. .	. .	. .	42.9	5,190.7	4-14-62	B46.2; Core; GE; SL
1	26babb2	5,000	3,850	. . do	19.7	53.2	4	Qv	N	O	. .	. .	. .	40.0	5,189.9	9- 6-57	B46.2; Core; Sc44.0-46.3 SL
1	26bada	4,550	2,700	. . do	1960	53.0	4	Qes,Qv	N	O	6M	0.2	1/2	13.5	5,207.6	4-14-62	B47.6; Core; GE; Sc40.0-48.0; SL
1	26bbad	4,700	4,200	. . do	1960	32.0	4	Qes,Qv	N	O	14M	2.0	1/2	13.5	5,207.6	4-14-62	B29.4; Core; GE; Sc16.0-20.0, 25.0-28.0; SL
1	26bcdd	2,650	4,100	. . do	1958	35.0	4	Qv	. .	O	3R	. .	. .	28.0	5,193.3	2-25-58	B35.0; Core; Sa; Sc32.2-33.2; SL
1	26bdcc	2,700	3,790	. . do	1957	44.0	4	Qv	. .	O	. .	. .	. .	21.4	5,193.3	9- 9-57	B39.1; Core; Sc36.2-38.2; SL
1	26cabb	2,550	3,950	. . do	1958	36.0	4	Qv	. .	O	1R	. .	. .	28.0	5,193.3	2-25-58	B36.0; Core; Sa; Sc28.0-30.2; SL
1	26cdbb	1,200	3,850	. . do	1960	20.0	4	Qv	N	O	5M	.6	1/2	32.7	5,249.0	4-12-62	Core; GE; SL
1	26dbbd	2,250	2,050	. . do	1960	49.0	4	Qv	N	O	5M	. .	. .	39.9	5,204.4	3- 6-62	
1	27acca	3,200	2,050	. . do	1960	50.0	4	Qv	N	O	4.5M	. .	. .	42.6	5,154.6	3-13-62	
1	27addc	2,700	1,050	. . do	1960	44.4	4	Qv	N	O	. .	. .	. .	31.5	5,157.9	. . . .	
1	27baab	5,100	3,220	. . do	1958	64.8	4	Qes,Ql	N	O	16R	1.3	. .	37.5	5,134.0	2-27-58	B63.2; Core; Sa; Sc45.0-50.2, 58.3-63.3; SL
1	27bacd	4,050	3,350	. . do	1960	72.0	4	. . .	N	O	8M	.3	1/2	38.7	5,135.9	3-13-62	B69.7; Core; GE; Sc37.0-63.5; SL
1	27bbac	4,900	4,440	. . do	. .	45R	7	Qes,Ql	N	O	. .	. .	. .	42.7	5,120	9- 6-55	Dr; WS
1	27bbbd	4,850	4,700	. . do	1960	55.0	4	. . .	N	O	6M	.2	1/2	34.6	5,132.3	4-14-62	B48.6; Core; GE; Sc39.4-46.1; SL
1	27bccd	2,850	4,700	. . do	1957	63.0	4	Qes,Ql	N	O	21R	.7	. .	46.5	5,145.8	10- 7-57	B60.3; Core; PP; Sa; Sc48.8-50.8, 51.8-59.6; SL
1	27bdca	3,110	3,500	. . do	1956	87R	3	Qes,Ql	N	O	. .	. .	. .	38.9	5,136.0	6- 9-56	B64; DL; Dr. Destroyed
1	27ddbd	900	900	. . do	1960	50.0	4	. . .	N	O	83R	. .	. .	39.6	5,168.2	3- 8-62	B43.8; Core; Sc40.1-43.8; SL
1	27ddda	550	250	. . do	. .	57.8	3	Qes,Qv	N	O	. .	. .	. .	50.8	5,189.9	9- 6-55	Dr; WS
1	28aaaa	5,120	190	. . B. Cochran . . .	1943	51R	46	Qes,Ql	J,E	PS	. .	. .	. .	39.9	5,111	11-21-55	D; WSp
1	28aabd	4,830	900	H. Nelson.	1956	82R	6 to 5	Qes,Ql	. .	D	88R	30	4	20	5,120	5-18-56	B77; Dr; L; Pf25-82
1	28abcc	4,290	2,400	F. Eby	. .	50R	. .	Qes,Ql	. .	D	. .	. .	. .	. .	5,125	. . . .	WSp
1	28acdb	3,100	1,950	A. Perez	1949	44.9	48 to 24	Qes,Ql	T,E	Irr	. .	. .	. .	40.7	5,131	9-14-55	A4; F; T57. Well pumped dry in 1955
1	28acdd	2,800	1,420	Rocky Mountain Arsenal.	. .	53.2	44	Qes,Ql	N	O	. .	. .	. .	42.7	5,140.6	9- 6-55	D; WS
1	28baab	5,160	3,280	Mrs. Bollers	1955	70R	5	Qb,Ql	. .	D	88R	25	1	45	. . .	8-23-55	B55; DL; Dr; Pf24-55, 67-70; WSp
1	28baca	4,430	3,620	G. Wickman	. .	56.5	36 to 12	Qb,Ql	T,E	Irr	. .	. .	. .	47.3	. . .	11-23-55	A20; D; FD
1	28bbca	4,600	4,700	M. Agazio	1926	44.1	42 to 24	Qb,Ql	C,E	Irr	. .	. .	. .	36.4	5,120	9-14-55	A8; D; WSp
2	28bbda	4,340	4,030	Adams City Water and Sanitation District	1951	745R	6 to 4	Kdmc,Kdlc	. .	Sch	B20R	. .	. .	120	5,128	3- -56	B55; DL; Dr; WSp
1	28bccc	2,900	5,260	A. Singh	. .	55.5	48	Qb,Ql	T,E	Irr	305M	2.3	1/6	42.4	5,135	8- 8-55	A25; D; F; FD
1	28bdcb	3,000	3,900	F. Polombo	1940	60R	48	Qb,Ql	T,E	Irr	390M	4.3	1/4	47.3	5,135	8- 8-55	A80(with 3 wells); D; Pf45-60

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
1	C2-67-28bddd	2,900	2,680	T. Palizzi	1944	50.0	48	Qb,Ql	T,E	Irr	320M	. .	. .	36.7	5,133.8	4-11-62	A20; D; WL(8-8-55)36.4; WL(11-5-57)37.1; WSp
1	28cacb	1,900	3,800	F. Palombo	1937	60R	48	Qb,Ql	C,E	Irr,D	350R	12	1/2	46.5	5,139	8- 8-55	A20; D; FD; Pf45-60
1	28cbac	4,620	2,060	C. Sharpless	1956	95R	5	Qb,Ql	. .	D	B15R	40	1	10	5,128	5-25-56	B70; DL; Dr; Pf10-70
1	28cbbd	2,080	4,650	A. O'Kally	1954	60R	5	Qb,Ql	. .	D	B15R	4	2	53	5,128	1- 6-54	B58; DL; Dr; Pf45-60
1	28ccda	420	4,120	J. Vada	1944	67.6	48	Qes,Ql	T,E	Irr	350R	. .	. .	51.7P	5,160	8- 8-55	A5; D; F; Pf12; T57
1	28cdbb	1,100	3,900	M. Amman	1928	50.2	40 to 10	Qes,Ql	T,E	Irr,D	. .	. .	. .	40.4	5,160	8-17-55	D
1	28dbbc	2,260	2,350	E. Ullaberri	1952	30R	46 to 6	Qes,Ql	T,E	Irr	. .	. .	. .	. .	5,135	. . . .	A5; D; WS
1	29aaac	4,640	350	E. Donovan	. .	37.6	48	Qb,Ql	T,G	Irr	. .	. .	. .	27.7	5,115	9- 7-55	D
1	29abcc	4,250	2,350	J. Kramer	1935	43.0	120 to 10	Qb,Ql	T,E	Irr	. .	. .	. .	28.6	5,110	9- 7-55	A40; D; F
1	29bcdd	2,650	4,040	. . do	1935	49R	48	Qb,Ql	T,E	Irr	. .	. .	. .	31.0	5,118.5	4-11-62	D; WL(9-7-55)33.5; WL(11-5-57)29.3
1	29bdaa	3,850	2,950	. . do	. .	46.1	60	Qb,Ql	T,G	Irr	. .	. .	. .	30.6	5,112	8-16-55	D
2	29ccdd	100	4,020	South Adams Water and Sanitation District	1953	790R	10 to 8	Kdmc,Kdlc	T,E	PS	200R	219	11	58	5,123.5	6-24-53	B25; EL; L; SL; Tch298-324, 348-362, 385-400, 426-444, 468-480, 488-500, 540-565, 656-668, 680-697, 760-790
1	29dccb	600	2,550	Sterling Tank and Steel Co.	1959	37R	5	Qb,Ql	J,E	D	10R	. .	. .	28	5,125	1- -59	B37; DL; Dr; Pf34-37
1	29dcdc	180	1,860	F. Mikaido	1950	36.5	48	Qb,Ql	T,E	Irr	. .	. .	. .	. .	5,131	. . . .	A5; Pf10; T55
1	29dcdd	30	1,370	P. Palombo	1955	63.3	48	Qb,Ql	T,E	Irr	366M	. .	. .	37.0	5,135	4-11-62	A10; B62; D; DL; Pf43-62; WL(7-11-56)40.8; WSp
1	29ddaa	1,250	50	B. Aragon	1960	61.0	18	Qes,Ql	T,E	Irr	200R	3	. .	41.2	5,143	10-13-60	A5; B61; DL; Dr; Pf46.5-61.5
2	30abaa	5,150	1,370	H. Priola	1953	420R	6 to 4	Kdmc	. .	D	B30R	60	4	20	5,071	11-13-53	B30; Dr; L; Pf345-362, 390-410
1	30bccb	3,050	5,050	Northfield Co.	1955	30R	48	Qpp,Ql	. .	PS	1,018M	12.1	4	1.8	5,083.8	10-10-55	AT; D
1	30cadb	1,700	3,150	E. Lambuth	1933	27.5	48	Qpp,Ql	C,G	Irr	1,300R	25	. .	6.4	5,080	8-23-56	D
1	30cadc	1,550	2,980	Demott	1953	30R	36	Qpp,Ql	T,E	Irr	400M	11.1	1/4	6.8	5,181	8-23-56	B30; D; Pf10; Su
1	30cdca	350	3,450	B. Sato	. .	30.0	36	Qpp,Ql	T,E	Irr	550M	6.8	1/2	6.7	5,085.7	4-10-62	A120; Su; T57; WL(10-10-55)6.5; WL(11- 5-57)7.1
1	31aadc	4,020	630	G. Melchior	1956	66R	6	Qpp,Ql	. .	Irr	. .	. .	. .	27	5,022	. . . .	B50; DL; Dr; Pf10-66
1	31bbdc	4,150	4,500	B. Sato	. .	26.7	48	Qpp,Ql	C,E	Irr	. .	. .	. .	3.0	5,088	10-10-55	D
2	31cacb	1,750	3,950	Adams City Greenhouses	1957	773R	8 to 4	Kdmc,Kdlc	S,E	Irr,S	25R	. .	. .	. .	5,130	. . . .	B48; DL; Dr; Pf238-308, 391-529, 619-754
1	31cacc	1,380	3,700	. . do	1952	52R	48	Qb,Ql	C,E	AC	220R	14	1-1/2	38	5,132	6-26-56	B52; D; DL; Pf42-52
1	31cbbc	2,300	5,280	R. Tani	1950	21.5	36	Qpp,Ql	T,E	Irr	. .	. .	. .	5.7	5,095	8-22-56	D; F
1	31cdaa	1,010	2,740	Not known	. .	31R	6	Qb,Ql	Cyl,H	D	. .	. .	. .	27.0	5,131.8	4-10-62	Dr; WL(11-6-57)27.1
2	31dccd	150	2,150	Skelly Oil Co.	1954	751R	8 to 6	Kdmc,Kdlc	S,E	Ind	60R	. .	. .	287.3	5,155	7-11-57	B47; Dr; L
2	31ddcb	600	1,100	Rainbo	1955	806R	8	Kdmc,Kdlc	T,E	Ind	B40R	35	. .	221.2	5,130	11- 4-59	B60; DL; Dr; EL; Tch300-425, 490-535, 600-760
1	32aaac	4,700	630	F. Polumbo	. .	64R	. .	Ql	. .	D,S	. .	. .	. .	. .	. . .	. . . .	WS
2	32aadd	4,000	50	South Adams Water and Sanitation District	1958	782	10	Kdmc,Kdlc	T,E	PS	178M	130	. .	205.0	5,150.0	3-25-58	B100; Dr; EL; GE; H22; L; Sa; Tch270-420, 520-782
1	32aadd2	4,000	80	. . do	1958	100R	16	Qb,Ql	T,E	PS	1,000R	12	. .	38.0	5,150	3-25-58	B100; DL; Dr; GE; H30; Tch50-100
1	32dbdc	1,450	1,800	T. Hunt	. .	71.2	48 to 14	Qb,Ql	J,E	IrrL	. .	. .	. .	62.6	5,155	7-11-56	DD
2	32dbdc2	1,400	1,800	. . do	1889	900R	6 to 4	Kdmc,Kdlc	Cyl,E	D	. .	. .	. .	255.8	5,160	7-11-56	Dr; T42
1	32dddd	60	80	Bay Petroleum Co.	. .	64.1	12	Ql	T,G	N	300R	. .	. .	49.4	5,170	7-11-56	Dr
1	33addc	2,650	500	Rocky Mountain Arsenal	1958	82.0	4	Ql	Port,N	O	15R	.2	. .	52.1	5,170.3	2- 7-58	B81.2; Core; L; Sa; Sc60.3-68.7, 70.2-78.6
1	33bcbc	3,630	5,170	. . do	. .	47.6	6	Qb,Ql	N	N	. .	. .	. .	41.7	5,150.5	11- 6-57	Dr; WL(9-6-55)44.5; WS

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
1	C2-67-33ccca	600	4,650	Rocky Mountain Arsenal	1958	114	4	Qb,Qj	N	O	18R	..	..	40.2	5,164.0	3-18-58	B112.1; Core; Sa; Sc103.9-111.5; SL
1	34ddad	900	250	.. do	1942	31.6	10	Qes,Ql	N	Ind	..	..	..	26.5	5,189	9- 8-55	Dr; Pf22-31; WS
1	35abaa	5,150	1,500	.. do	1957	55.0	4	Qes,Ql	N	O	..	..	..	5.8	5,209.5	9-12-57	B52.2; Core; Sc40.3-42.3; SL
1	35adac	3,600	150	.. do	1957	42.0	4	Qes,Qv	N	O	..	..	..	12.2	5,236.4	9-13-57	B39.3; Core; L; Sc24.0-26.0
1	35bbda	4,380	3,980	.. do	..	40.3	30 to 8	Qes,Qv	N	O	..	..	..	35.3	5,215.5	9- 6-55	D
1	35bbdd	4,250	4,150	.. do	1957	45.0	4	Qes,Qv	N	O	..	..	..	31.4	5,210.0	9-10-57	B13.4; Core; L; Sc34.2-36.2, 37.0-39.0
2	35bdbd	3,450	3,600	.. do	..	126	3	TKdu	N	N	..	..	..	88.4	5,220	9- 6-55	Dr; WS
1	35cdbb	1,200	3,850	.. do	1957	48.0	4	Qes,Qv	N	O	..	..	..	40.8	5,232.3	10- 3-57	B41.2; Core; Sa; Sc39.2-41.2; SL
1	36bbda	4,420	4,250	.. do	1957	30.0	4	Qes	N	O	..	..	..	20.0	5,238.9	9-26-57	B22.9; Core; L; Sa; Sc13.2-15.2, 18.6-20.6
1	36bdcd	2,680	3,600	. do	1958	42.0	4	Qes	N	O	2R	..	..	3.9	5,234.5	2-21-58	B38.0; Core; Sc15.2-23.8; SL
1	36cbdd	1,420	4,200	.. do	1958	36.0	4	Qes	N	O	<1/4R	..	..	7.0	5,243.9	2-10-58	B27; Core; Sc16.0-24.6; SL
1	36cccd	100	4,700	.. do	1960	31.0	4	Qes	N	O	4M	12	1/2	12.3	5,263.9	3- 6-62	B23.1; Core; GE; Sc12.0-15.0, 18.0-27.0; SL
2	C2-68-4aaba	5,000	850	E. Whytal	1948	4,600R	..	..	..	Oil	..	..	..	..	..	....	Thick coal at 400 feet; reported water under high pressure at about 400 feet
2	4badc	4,050	3,150	W. Vogler	1948	1,330R	5	Klb,Kla,Kfm	T,E	D,S,Sw	18R	..	..	260	5,403	4-23-57	Dr; FD; OH(1,185-1,330) WSp
2	4bdad	3,750	3,100	.. do	1948	1,300R	6	Klb,Kla,Kfm	T,E	N	21R	235	..	265	5,400	4-23-57	Dr; U(1957)
2	4bdba	3,750	3,300	.. do	..	1,800R	6	Klb,Kla,Kfm	Cyl,E	D,S,Sw,E	20R	250	..	250	5,400	4-23-57	Dr; Pf1,300-1,750
2	4caad	2,030	2,750	P. Marion	1959	600R	6 to 4	Kdmc,Kdlc,Klu	Cyl,E	D,S	8R	50	..	250	5,360	6-26-59	Dr; L; Pf380-393, 416-462, 484-508
2	10bbaa	5,180	4,050	T. Wolfkill	1957	700R	6 to 4	Kdmc,Kdlc,Klu	S,E	D	20R	100	..	..	5,450	....	Dr; L; Pf500-700; T54; WSp
2	14adcc	2,750	1,050	A Hill	1954	560R	6 to 4	Kdmc	Cyl,E	D	3R	75	16	260	5,315	10-14-54	DL; Dr; Tch440-460, 480-500, 520-540
2	15abab	5,220	1,850	Highland Memory Gardens	1954	825R	8 to 6	Kdmc,Kdlc	S,E	Irr	16R	35	12	345.2	5,383	10-21-59	Dr; L; Pf355-615
2	16daaa	2,480	320	Deza Estates	1956	800R	6 to 5	Kdmc,Kdlc	T,E	PS	..	..	..	441.6	5,483	3-15-57	Dr; EL; GRL; Pf340-380, 448-470, 513-537, 558-580, 600-620, 692-714, 735-756, 778-800; Sa; SL
2	17acbc	3,500	2,420	Ruston Heights Airport	1946	1,023R	6	Kdmc,Kdlc,Klu	Cyl,E	Ind	10R	..	..	..	5,550	....	Dr; L
2	19ccbb	1,250	5,150	Northwest Water Corp.	1955	1,591R	8 to 6	Klb,Kla,Kfm	..	PS	50R	235	..	350	5,500	6-30-55	DL; Dr; EL; Tch1,240-1,330, 1,380-1,580
2	19ccbb2	1,250	5,150	.. do	1955	716R	10 to 8	Kdmc,Kdlc	S,E	PS	85R	160	24	184	5,500	8-30-55	DL; Dr; EL
2	19ddbd	700	750	.. do	1956	740R	10 to 8	Kdmc,Kdlc	S,E	PS	100R	61	24	450	5,528	3- 6-56	DL; Dr; EL; Tch460-740
2	19ddca	650	750	.. do	1956	1,630R	8 to 6	Klb,Kla,Kfm	S,E	PS	41M	..	..	506.0P	5,528	5- 6-57	Dr; EL; L; Tch1,300-1,630
2	20accd	2,870	2,070	Federal Heights	1954	750R	8	Kdmc,Kdlc	T,E	PS	40R	..	..	515	5,525	8- -60	Dr; WL(1954)385
2	20cddd	30	2,900	Northwest Water Corp.	1955	750R	10 to 8	Kdmc,Kdlc	..	PS	100R	170	..	358	5,515	6- 9-55	DL; Dr; EL; Tch185-385, 495-725
2	20cddd2	30	2,900	.. do	1955	1,656R	8 to 6	Klb,Kla,Kfm	S,E	PS	100R	198	24	379	5,515	6-12-55	DL; Dr; EL; Tch1,325-1,640

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
2	C2-68-20dbcc	1,450	2,400	Federal Heights. . .	1959	780R	8 to 6	Kdmc,Kdlc	T,E	PS	40R	. .	. .	505	5,514	5- 8-59	DL; Dr; FD; Tch510-714, 736-758; WS
2	20dbcc2	1,400	2,380	. . do	1940	2,200R	8 to 4	Klb,Kla,Kfm	T,E	PS,Ot	50R	. .	. .	482.4	5,514	11-10-60	Dr; GRL. Plugged back to 1,760 feet
2	20dcda	600	1,460	. . do	1959	792R	7	Kdmc,Kdlc	N	PS	40R	. .	. .	494.5	5,475	11-10-60	Dr; L; Tch506-660, 682-704, 770-792; WL(7-59)510
2	21cdcb	650	3,650	E. Camenisch . . .	1910	640R	6	Kdmc,Kdlc	Cyl,E	D	3R	. .	. .	190	5,440	1954	DL; Dr
2	23cbbb	2,620	5,000	Northwest Utilities Co.	1953	710R	8 to 6	Kdmc,Kdlc	T,E	PS	94M	75.2	48	217.4	5,283.2	1-10-58	AT; DL; Dr; FD; WL(9-13-53)238.8; WS; WSr
2	23cbbb2	2,600	5,000	. . do	1954	1,446R	8 to 6	Klb,Kla	S,E	PS	44M	262.9	48	117.9	5,284.5	1-10-58	AT; Dr; FD; L; WL(3-25-54)83.2; WS; WSr
2	25aada	4,300	100	. . do	1954	750R	12 to 6	Kdmc,Kdlc	S,E	PS	74M	150.6	48	109.1	5,097	1-10-58	AT; DL; Dr; EL; Pf316-415, 472-486, 620-630, 678-688, 726-736; WL(8-7-54)62.4
1	25aadc	3,980	350	Dickers.	. .	45R	48	Ql	N	Irr	500R	. .	. .	23	5,097.6	1-19-55	B33; D; DL
1	25aadd	4,050	100	Northwest Utilities Co.	. .	. .	. .	Qb,Ql	N	PS,E	. .	. .	. .	. .	5,096	. . . .	U(1958)
1	25aadd2	4,100	50	. . do	. .	35.7	48	Qb,Ql	T,E	PS	. .	. .	. .	21.7	5,095	4-10-62	D; WL(11-6-57)21.0; WL(1-10-58)21.7
1	25adda	3,100	150	. . do	1954	30R	48	Qpp,Ql	N	PS	750M	21	. .	5	5,080	. . . .	D
1	25addd	2,950	150	. . do	. .	26R	48	Qpp,Ql	N	PS	1,040M	17.5	7	7.0	5,080	4- 1-58	AT; D; WL(8-30-54)4.2
1	25addd2	2,800	150	. . do	1954	30R	48	Qpp,Ql	T,E	PS	650M	4	. .	8	5,080	. . . .	D; FD; WS; WSr
1	25addd3	2,650	150	. . do	. .	30R	48	Qpp,Ql	N	PS	750R	. .	. .	7.2	5,085	4- 1-58	D
2	25bddc	2,950	3,220	Western Concrete Pipe	1956	240R	4	TKdu	S,E	Ind	10E	. .	. .	. .	. . .	. . . .	Dr
1	25daaa	2,500	150	Northwest Utilities Co.	1954	26R	48	Qpp,Ql	T,E	PS	500R	. .	. .	7.3	5,085	4- 1-58	D
1	25dbac	2,100	1,770	A. Yantorno.	. .	24.0	24	Qp,Qb,Ql	C,N	Irr	. .	. .	. .	13.5	5,094.4	4-30-58	A20; D; Pf18; Su
2	25dccc	300	2,400	B. Yamashita	. .	250R	4	TKdu	. .	D,G	. .	. .	. .	. .	. . .	. . . .	Dr
2	27adaa	3,750	110	L. Fabrizio.	1953	105R	5	TKdu	. .	D	85R	25	2	75	5,270	10-14-57	DL; Dr
2	27ddbb	1,250	1,000	W. Weingarten. . . .	1959	605R	6 to 4	Kdmc,Kdlc	Cyl,E	D,S	50R	. .	. .	315	5,240	2- 5-59	DL; Dr; Tch421-444, 467-490, 536-582
2	28bccb	3,080	5,240	Baker Metropolitan Water and Sanitation District	1959	770R	9	Kdmc,Kdlc	S,E	PS	80M	30	. .	510	5,503	7-20-59	B11; Dr; EL; L; Tch497-770
2	29cbbc	2,050	5,060	Belleview College. .	1961	735R	8	Kdmc,Kdlc	S,E	Sch	825R	15	. .	520	5,540	1-14-61	DL; Dr; H12; Pf522-692, 706-735
2	29cbbd	2,150	4,800	. . do	1930	1,626R	20 to 8	Klb,Kla,Kfm	T,E	Sch	100R	. .	. .	250	5,541	11-14-56	B10; Dr; L; OH(1,372-1,626); U(1961
2	30caac	2,120	2,980	Northwest Water Corp.	1955	660R	10 to 8	Kdmc,Kdlc	S,E	PS	120R	138	. .	330	5,410	4-23-55	DL; Dr; EL; GE; Tch 120-300, 355-500, 555-575, 605-660
2	30caac2	2,120	3,000	. . do	1955	1,601R	8 to 6	Klb,Kla,Kfm	S,E	PS	100R	310	. .	221	5,410	4-20-55	DL; Dr; EL; Pf1,160-1,49(
2	31acab	3,900	1,700	City of Westminster.	1947	703R	12 to 10	Kdmc,Kdlc	. .	PS	212R	68	24	. .	5,350	. . . .	Dr; EL; L; SL; WS. Well destroyed, 1960
2	31caab	2,550	3,250	. . do	1953	700R	10 to 8	Kdmc,Kdlc	T,E	PS	130M	50	24	295	5,333	8- -53	DL; Dr; EL; FD; WS; WSr
2	31caab2	2,500	3,250	. . do	1954	1,546R	8 to 6	Klb,Kla,Kfm	T,E	PS	150M	. .	. .	20	5,333	1960	Dr; EL; FD; L; WS; WSr
2	31dcda	500	1,350	. . do	1936	542R	. .	Kdmc,Kdlc TKdu	T,E	PS	90R	28	8	212	5,304	10- -36	DL; Dr; WS. Well deepened from 369 feet
2	31ddcb	350	1,200	. . do	1929	495R	12 to 8	Kdmc,Kdlc	N	PS	75R	. .	. .	150	5,300	1929	DL; Dr; OH(474-495). Destroyed
2	32abbb	5,250	2,520	Fairview Construction Co.	1954	. .	. .	Kdmc,Kdlc	. .	PS	75R	45	48	382.0	5,414	6-21-54	AT; Dr
2	32acdb	3,250	1,950	City of Westminster.	1952	606R	10 to 8	Kdmc,Kdlc	T,E	PS	120M	. .	. .	300	5,370	2- -52	DL; Dr; WS
2	32bddd	2,800	2,750	W. Walden.	1957	508R	6 to 4	Kdmc	S,E	PS	10R	. .	. .	223.5	5,365	10-21-59	DL; Dr; Pf410-508
2	32cacc	1,600	3,800	City of Westminster.	1955	1,548	. .	Klb,Kla,Kfm	T,E	PS,E	145R	. .	. .	42	5,328	11-14-56	DL; Dr; EL; U(1960); WS

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2-68-																
2	32cacc2	1,580	3,800	City of Westminster	1954	624R	10 to 8	Kdmc,Kdlc	T,E	PS	160R	300	24	250	5,328	10-12-60	DL; Dr
2	32dcbb	1,180	2,500	. . do	1953	620R	10 to 8	Kdmc,Kdlc	T,E	PS	150M	. .	. .	300	5,333	12- -53	DL; Dr
2	33abdb	4,480	1,710	General Water Works	1954	692R	10 to 8	Kdmc,Kdlc	T,E	PS	65M	114	24	469.0P	5,305	9-19-60	AT; DL; Dr; EL; FD; Pf340-358, 427-452, 464-476, 494-530, 566-623; WL(10-54)317; WS
2	33abdb2	4,610	1,730	. . do	1957	1,560	8 to 6	Klb,Kla,Kfm	T,E	PS	99M	436	24	178.0	5,370	4-27-57	DL; Dr; EL; FD; Pf320; WS
2	33dccc	60	2,370	Baker Water District	1958	651	9	Kdlc	T,E	PS	75M	300	. .	314	5,250	7-11-58	DL; Dr; EL; Tch396-650
2	34adda	3,100	200	Zefer Food Products Co.	1954	445R	6 to 4	Kdmc	S,E	E	10R	. .	. .	160	5,192	1954	D; DL; Dr; Pf385-445; Su
1	34dadd	1,625	150	J. Saccomano	1930	35.5	18	Qp,Ql	T,E	Irr	. .	. .	. .	18.7	5,149.8	4- 1-58	
1	34ddca	480	930	M. Larson.	. . .	30.7	18	Qp,Ql	T,Tr	Irr	. .	. .	. .	19.3	5,155.2	4-30-58	Dr
1	34ddcd	280	900	J. Saccomano	1946	31.5	48 to 24	Qp,Ql	T,E	Irr	. .	. .	. .	15.5	5,149.7	4- 1-58	A14; D; Su
2	35aaca	4,420	800	A. Croce	1933	415R	6 to 4	Kdmc	S,E	Irr	150R	. .	. .	. .	5,150	. . . .	Dr
1	35baac	4,680	3,290	L. Marchese.	1926	22.2	14	Qp	C,G	Irr	. .	. .	. .	8.2	5,134.9	8- 7-56	A5; D; Su
2	35bcab	3,860	4,520	South Adams Water and Sanitation District	1956	500R	8 to 6	Kdmc	S,E	Sch	12R	100	18	150	5,188	8-25-56	DL; Dr; Pf430-480
1	35caab	2,350	3,250	C. Larusso	. . .	14.5	12	Qp	C,E	Irr,Pr	. .	. .	. .	9.5	5,134.3	3-25-58	Dr
2	35caac	2,200	3,250	. . do	1920	500R	6	Kdmc	Cyl,E	D	. .	. .	. .	120	5,135	1957	Dr
1	35caac2	2,050	3,250	. . do	1954	32.0	18	Ql	T,E	Irr	200E	4	3/4	9.7	5,133.3	3-25-58	A10(with 2 wells); D; Pf15; Su
1	35cacd	1,340	3,610	N. Pedotto	. .	42.1	24	Qp,Ql	T,E	Irr	260M	6.2	1/6	13.2	5,140.5	4-30-58	A4.5; D; Su
2	35cbcb	1,900	5,250	F. Adducci	. . .	26.0	16	Qp,Ql	T,G	Irr	150E	. .	. .	16.1	5,149	3-25-58	A5; Dr; Su
2	35cbcb2	1,900	5,240	. . do	1920	500R	3	Kdmc	Cyl,E	D	. .	. .	. .	120	5,148	3-25-58	Dr
1	35ccaa	1,300	3,980	A. Marrone	1954	27R	12	Qp,Ql	T,E	Irr	. .	. .	. .	15	5,138	8- 7-56	A5; D; Su
1	35ccad	670	4,280	F. Gaccetta	1955	40R	18	Qp,Ql	T,E	Irr	150M	. .	. .	12.4	5,140.5	4-28-58	A5; D; Pf15; Su
2	35ccbd	700	4,850	V. Pedotto	. .	500R	6	Kdmc	. .	D	. .	. .	. .	. .	5,145	. . . .	Dr
1	35ccbd2	700	4,850	. . do	. .	17.0	48	Qp,Ql	J,E	Irr	185M	. .	. .	15.5	5,144.5	3-25-58	D; T53
2	35cccc	250	5,200	V. Albanese.	. . .	279R	6 to 4	TKdu	Cyl,E	D	. .	. .	. .	. .	5,145	. . . .	Dr
1	35cccc2	15	5,060	. . do	1925	35R	36 to 18	Qp,Ql	T,E	Irr	. .	. .	. .	16.3	5,140.8	4- 1-58	D
2	35cccc3	. .	. . .	A. Yantorno.	1959	616R	6 to 4	Kdmc,Kdlc	. .	D,G	824R	60	. .	157	5,140	8-12-59	B39; Dr; L; Tch416-616
1	35ccdc	20	4,480	D. Albanese.	1933	26.7	18	Qp,Ql	T,E	Irr	. .	. .	. .	15.7	5,141	8- 7-56	A5; D; F; Su
1	35cdac	700	3,100	V. Pedotto	. .	31.5	18	Qp,Ql	C,E	Irr	. .	. .	. .	16.5	5,141.5	3-25-58	Dr
1	35cdad	680	2,800	J. Pedotto	. .	40R	18	Qp,Ql	T,E	Irr	. .	. .	. .	18.0	5,132	3-31-58	B40; D; GE; Pf15
1	35cdbc	680	3,910	. . do	. . .	40R	18	Qp,Ql	T,E	Irr,Pr	175M	11	. .	13.1	5,141.7	4-28-58	D; GE; Pf15; Su
1	35cdcd	10	3,550	A. Yantorno.	1948	43.0	24	Qp,Ql	T,E	Irr	. .	. .	. .	19.6	5,145.7	3-25-58	A10; WL(8-6-56)17.4
1	35cdda	400	2,900	. . do	. . .	45.0	24	Qp,Ql	J,E	G	. .	. .	. .	18.0	5,140.5	3-25-58	DD
1	35daad	2,000	150	J. Rotella	1956	35R	6	Qp,Ql	J,E	D	10R	. .	. .	10	5,120.7	9- -56	B30; Dr; L
1	35daba	2,600	750	G. Rande	1954	38R	18	Qp,Ql	Port,Tr	Irr	500R	. .	. .	18.7	5,129	4-30-58	Dr; U(1958)
1	35dabb	2,610	1,130	L. Rotello	1940	38R	16	Qp,Ql	T,G	Irr	. .	. .	. .	15.9	5,124.0	4-30-58	A22; B38; Dr; F
1	35dacb	1,850	1,300	A. Mazzone	1936	30.0	. .	Qp,Ql	T,Tr	Irr	. .	. .	. .	9.0	5,125	8- 6-56	A15; D; Su
1	35dbaa	2,630	1,450	E. Graves.	1940	34R	16	Qp,Ql	T,N	Irr	. .	. .	. .	14.1	5,125.5	4-28-58	A15; D; F; Su; WL(8-1-56)11.9
1	35dbbc	2,220	2,630	J. Mazzotti.	1942	31.6	21 to 18	Qp,Ql	T,E	Irr	230M	. .	. .	7.8	5,131.5	7-30-56	A10; D; F; GE; Pf20; Su; T53
1	35dbdb	1,950	1,900	R. Molinaro.	. . .	40R	16	Qp,Ql	T,E	Irr	180M	4.7	1/6	12.6	5,133.0	4-30-58	A10; D; F; Su; WL(8-6-56)10.4
1	35dcac	910	1,960	T. Milano.	1930	30.1	12	Qp,Ql	C,E	Irr	. .	. .	. .	12.8	5,129.3	4-30-58	A10; D; F; Pf25; Su; T53; WL(7-30-56)10.7
1	35dcbc	800	2,350	J. Mazzotti.	1940	26.8	37 to 16	Qp,Ql	T,E	Irr	250R	6.6	1/4	14.1	5,135.3	4-30-58	A5; D; F; GE; Pf15; WL(7-30-56)12.2
1	35dccb	560	2,480	J. Perry	1935	40R	24	Qp,Ql	T,E	Irr	. .	. .	. .	14.3	5,134.3	4-30-58	D; WL(8-1-56)12.4
1	35dcdc	300	1,970	J. Mazzotti.	1926	32R	39 to 10	Qp,Ql	T,N	Irr	. .	. .	. .	11.3	5,123	7-30-56	A5; D; F; GE; Pf15; Su
1	36abbc	4,800	2,390	B. Yamashita	. .	15.4	36	Qpp,Ql	C,G	Irr	. .	. .	. .	3.6	5,099	8- 1-56	A20; By2; D; Su
1	36acda	3,240	1,430	Inland Sand and Gravel Co.	1957	29R	48	Qpp,Ql	T,E	Ind	. .	. .	. .	23	5,095	3-27-57	D; DL; Pf6
1	36acda2	3,220	1,450	. . do	. .	25R	36	Qpp,Ql	T,E	Ind	. .	. .	. .	. .	5,095	. . . .	

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2-68-																
1	36badd	4,010	2,860	T. Cosmi	1951	21.7	48	Qpp,Ql	M	Irr	400R	. .	. .	11.3	5,099.2	8- 1-56	D
1	36bccc	2,690	5,050	G. Lorenzo	1954	32.5	16	Qp,Ql	C,E	Irr,Ot	125R	. .	. .	21.8	5,126	4-10-62	A10; D
1	36bdaa	3,820	2,820	North Washington Water and Sanitation District	1956	18R	24	Qp,Ql	T,E	PS	450R	. .	. .	7.0	5,100.1	6-15-56	AT; B18; D; Gy325; L
1	36bdaa2	3,670	2,650	. . do	1959	25R	24	Qpp,Ql	T,E	PS	1,000M	3	7	13.0	5,093	9- -60	AT; D; DL; FD; Gy925; WS
1	36cacb	1,660	3,930	A. Gerace	1945	29.7	18	Qp,Ql	T,E	Irr	. .	. .	. .	13.7	5,110	4-10-62	A17; D; WL(1954)14; WL(8-7-56)11.4
1	36cbba	2,600	4,730	G. Mazzucca	1921	33.9	38 to 18	Qp,Ql	T,G	Irr,Ot	. .	6	5	18.7	5,120.5	11- 5-57	A7; B34; D
1	36daca	1,850	850	Prossard	1953	32.4	48	Qpp,Ql	T,E	Irr	730M	5.8	1/4	5.6	5,097	8-21-56	D; Pf15; T56
1	36dacd	1,510	670	. . do	1956	34.0	36	Qpp,Ql	T,E	Irr	. .	. .	. .	8.8	5,097	8-21-56	D; Pf15
1	36ddcc	10	1,300	B. Bromley	. . .	32.1	24	Qpp,Ql	T,E	Irr	. .	. .	. .	7.0	5,100	8-21-56	
1	36dddb	600	500	. . do	1956	46R	6	Qpp,Ql	. .	D	B20R	9	1	11	5,100	4- 6-56	B38; DL; Dr
1	36dddd	140	20	. . do	1936	20R	36	Qpp,Ql	T,E	Irr	. .	. .	. .	7.7	5,099	8-22-56	AB; D
	C2-69-																
2	1cbcb	1,750	5,150	Broomfield Water and Sanitation District	1959	1,007R	8 to 6	Klb,Kla,Kfm	S,E	PS,E	20R	. .	. .	236.0	5,325	10- 8-59	Dr; EL; L; Pf777-1,007; WL(10-3-60)251.9
2	2bbab	5,150	4,400	. . do	1952	1,140R	8 to 6	Klb,Kla,Kfm	S,E	PS	35R	235	48	200	5,435	1- -52	Dr; L; Pf120; WS
2	5ccda	600	4,250	T. Nies	1949	2,919R	. .	. .	. .	Oil	. .	. .	. .	. .	5,533	. . . .	DL; Dr
2	14bbcc	4,230	5,320	Wallace School	1956	1,032R	6 to 4	Klb,Kla,Kfm	S,E	Sch	32R	130	. .	200	5,379	11-24-56	Dr; EL; L; Sa; Tch103
2	18cccc	150	5,000	K. Church	1957	1,030R	6 to 4	Klb,Kla,Kfm	. .	D	B20R	202	. .	215	5,600	5- 2-57	DL; Dr; EL; Sa; Tch824-1,030
1	19acba	4,020	2,150	A. Ludwig	1960	42R	6	Ql,Kdl	J,E	D	10R	5	6	10	5,552	9-12-60	B32; Dr; L; Pf21-42
2	25daaa	2,480	250	E. Parr	1958	596R	6	Kdlc	T,E	PS	B38R	20	. .	314	5,390	10-20-59	B39; Dr; EL; L; Pf284-596; U(1960)
2	25dcdd	120	1,600	. . do	1958	575R	6	Kdl	M	PS	B32R	18	. .	296	5,368	11- 5-58	DL; Dr; EL; Tch295-575; U(1960)
1	26baab	5,190	3,100	A. Craig	1956	61R	6	Qs	J,E	D	4R	43	1	10.3	5,473.4	10-28-58	B14; Dr; L; Pf15-61; WL(10-56)12
2	26baab2	5,220	3,050	C. Taylor	1957	603	4	Kdlc	S,E	PS	B17R	35	2	150	5,470	5-22-57	B15; Dr; EL; GE; L; Tch180-210, 230-240, 267-403, 540-585
1	26baab3	5,200	3,240	B. Adams	1957	55R	5	Qs	J,E	D	7R	. .	. .	9.8	5,473.6	4- 9-62	Dr; L; Tch40-50; WL(10-28-58)9.4
2	27aaaa	5,180	70	E. Parr	1958	400R	6	Kdmc,Kdlc	M	PS	B43R	70	. .	192	5,500	10- 7-58	Dr; EL; L; Tch120-400
2	29baaa	5,100	2,670	R. Jackson	1956	375R	6 to 4	Kdlc	S,E	D,S,Pr	5R	10	. .	110	5,588	11- -56	B5; Dr; EL; L; Pf144-167, 214-239
2	30dbcc	1,580	2,400	J. Ferch	1956	196R	6	Kdlu	Cyl,E	D,IrrL	10R	46	2-1/2	150	5,650	. . . .	Dr; FD; L; WS
2	30dbdc	1,600	1,800	. . do	1956	193	5	Kdlu	M	D	. .	. .	. .	116.8	5,650	8-22-58	DL; Dr
1	31cbcd	1,350	4,830	Ralston Presbyterian Church	1956	32R	6	Qs	J,E	D	40R	2	2	11.1	5,566.7	4- 9-62	Dr; GE; L; Tch17-32; WL(10-15-58)13.5
2	31ccdb	470	4,300	F. Luckey	1940	300R	6	Kdmc,Kdlc	Cyl,E	D,IrrL	18R	. .	. .	. .	5,564	. . . .	Dr; WS
1	31ccdd	220	4,060	L. Nelson	1956	55R	6	Qp,Ql	J,E	D,IrrL	B9R	19	3	26.4	5,559.3	8-23-58	B55; DL; Dr; FD;Pf35-55
2	32adcc	2,880	1,150	N. Krupicka	1957	125R	7 to 5	Kdmc	J,E	D	B30R	63	. .	6.7	5,545	8-21-58	B15; Dr; L; Pf60-120
2	32bcbc	3,410	5,100	E. Jensen	1958	90R	6 to 5	Kdmc	J,E	D	. .	. .	. .	4.6	5,480	8-21-58	DL; Dr; Pf50-90
1	32bccc	2,900	5,100	W. Finley	1960	23R	18	Qp,Ql	J,E	Irr,G	28	20	. .	.9	5,498	4- 9-62	B16; Dr; FD; GE; L; Pf11-23; WL(12-15-60)1.8
2	32bdab	3,940	3,000	E. Jensen	1958	100R	6 to 5	Kdmc	J,E	N	7M	. .	. .	45.1	5,560	8-21-58	DL; Dr; FD; Pf41-100
2	32daad	2,080	140	C. Strohmeyer	1957	117R	6	Kdmc	S,E	D,IrrL	8R	. .	. .	86.0	5,500	8-21-58	DL; Dr; FD
2	32dacb	1,850	1,100	E. Bohling	1956	100R	4	Kdmc	J,E	D,IrrL	7R	29	3	33.7	5,490	8-21-58	DL; Dr; FD; Pf60-100
2	33dddd	200	80	City of Arvada	1958	500R	6	Kdmc,Kdlc	S,E	PS	97M	178	. .	322	5,546	10-14-58	B6; Dr; EL; L; Pf273-500
2	34bbab	5,280	4,450	Oberon Acres	1955	760R	8	Kdmc,Kdlc	S,E	PS	50R	. .	. .	282.9	5,555	11- 5-59	DL; Dr; EL
2	35dbbb	2,400	2,500	D. Schneider	1958	545R	. .	Kdmc,Kdlc	S,E	D	12R	. .	. .	372	5,475	11- -58	B30; Dr; L; T60
2	36ddda	500	300	Shoenberg Farms	1949	520R	8 to 6	Kdmc,Kdlc	S,E	D,Ind	75R	. .	. .	274	5,331	6-12-61	Dr

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C2-70-																
1	13dddd	180	120	Church Ranch	. .	5.7	36	Qp	N	N		. .	. .	3.5	5,600	4-9-62	D; T47; WL(4-9-60)3.6
2	21abbb	5,150	2,600	M. Church	1959	430R	5 to 4	Klb,Kla	S,E	D	15R	240	. .	90	6,183	4-22-59	B30; Dr; EL; L; Pf207-248, 262-412
1	22aada	4,350	120	Not known	. .	. .	48	Qp	J,E	N	. .	. .	. .	.0	5,920	4- 2-60	D
2	22cdcb	580	3,650	Public Service Co. of Colo.	. .	1,073	. .	Klb,Kla	T,E	Ind	. .	. .	. .	398	6,059	1959	DL; EL; Sa
2	22dcca	650	2,000	Leyden Core Hole	. .	919R	. .	. .	. .	. .	. .	. .	. .	. .	5,873.4	. . . .	DL
2	25acad	3,550	1,400	E. Stringer	1961	1,220R	8	Klb,Kla	. .	D	30R	535	. .	365	5,760	4-29-61	DL; Dr; OH(1,051-1,220)
2	25cdbb	1,180	3,740	Public Service Co. of Colo.	1961	812R	9 to 7	Klu,Klb	S,E	D	20R	500	. .	230	5,680	3-21-61	B28; Dr; EL; GE; H9-7; L; Pf753-795; Sa. Originally drilled to 1,252 feet
2	26cdac	900	3,120	. . do	1961	715R	18 to 10	Klu,Klb	T,E	Dr	550R	400	. .	260	5,715	2-11-61	Dr; H24-17-12; L; Pf695-715
1	26cdcc	3,730	100	Leyden Water District	1928	Spring	. .	Qr	. .	PS	F6E	. .	. .	. . .	6,128.3	12-15-58	FD; WS
1	26ddad	840	240	. . do	1957	35R	6	Qp,Qb	J,E	PS	10R	20	. .	10.3	5,633.2	10-17-58	B14; Dr; FD; L; WS
2	27dbdc	1,650	1,650	Pattridge	. .	791	. .	Klu,Klb	N	N	. .	. .	. .	678.6	5,764.7	10-14-58	L; TH; WL(7-15-57)698.6
2	27dbdc2	1,650	1,650	Public Service Co. of Colo.	1961	784R	18 to 13	Klu,Klb	S,E	Dr	600R	400	. .	300	5.765	2-20-61	DL; Dr
2	28cdad	850	2,640	G. Lindsay	. .	180	. .	Kl	N	N	. .	. .	. .	34.7	5,906.4	10-14-58	Mine shaft
1	28dada	1,740	100	. . do	1945	24.0	. .	Qp,Qb	J,E	D,S	. .	. .	. .	7.7	5,814.4	4- 9-62	WL(10-14-58)7.9
	C2-71-																
2	29accb	3,000	2,500	S. Strang	. .	Spring	. .	pC	. .	D	F	. .	. .	. .	7,725	12- 7-60	FD; FZ; SG
	C3-65-																
1	2dccd	30	2,120	J. Drohan	1952	70R	18	Qb,Ql	N	Irr,Ot	. .	. .	. .	20.1	5,388.6	11- 4-57	Dr; U(1956)
2	7aabd	4,700	700	Union Pacific Railroad Co.	1956	8,375R	. .	. .	. .	Oil	. .	. .	. .	. .	5,375	. . . .	Dr; EL
2	8bbbd	4,650	4,750	Monaghan	1956	8,438R	. .	. .	. .	Oil	. .	. .	. .	. .	5,389	. . . .	Dr; EL; Sa
2	10bbca	4,450	4,750	Box Elder	1956	8,400R	. .	. .	. .	Oil	. .	. .	. .	. .	5,436	. . . .	Dr; EL
1	11acdd	2,650	1,480	J. Drohan	. .	65.0	18	Qb,Ql	N	Irr	. .	. .	. .	19.0	5,392	7-19-57	Dr; U(1957)
1	11adcc	2,650	1,300	. . do	. .	64.6	18	Qb,Ql	N	Irr	. .	. .	. .	21.0	5,392	7-19-57	Dr; U(1957)
1	11adcd	2,660	780	. . do	1947	71.0	18	Qb,Ql	T,E	Irr	642M	18.9	1/4	30.6	5,395	7-19-57	A80; B71; F; T54
1	14abdd	3,920	1,580	. . do	1950	42R	18	Qb,Ql	T,E	Irr	345M	. .	. .	. .	5,420	. . . .	A60; B42; Dr; F; T53
1	14dbaa	2,520	1,330	J. Stewart	. .	55.3	18	Qb,Ql	T,E	Irr	345M	20.1Ry	1/4	34	5,418	7-12-57	A60; B50; Dr; F; T54
1	14dbaa2	2,540	1,450	C. Vick	1953	60R	6	Qb,Ql	. .	D	. .	. .	. .	. .	5,418	. . . .	B55; Dr; L
1	14dcdd	20	1,320	J. Stewart	1956	60R	18	Qb,Ql	T,E	Irr	147M	12.7Ry	1/4	36	5,435	7-16-57	A36; B60; Dr; F; T54
-	14ddcc	20	1,020	. . do	1952	50R	18	Qb,Ql	T,E	Irr	120M	11.8Ry	1/2	28.1	5,439.7	11- 4-57	A36; F
-	14dddc	20	630	. . do	. .	60R	18	Qb,Ql	T,E	Irr	160M	. .	. .	. .	. . .	. . . .	A36; F; T54
2	21dcca	500	2,200	D. King	1918	900R	6	Tkdu,Kdmc	Cyl,E	D	10E	. .	. .	170	5,658	1-22-59	Dr; FD; WS
2	32dcca	600	2,150	H. Grimm	1917	897R	6	TKdu,Kdmc	. .	D,S	25R	. .	. .	190	5,291	9-11-59	Dr
-	36daca	1,750	730	E. Epperson	1955	785R	6 to 3	TKdu,Kdmc	S,E	D	20R	170	14	150	5,524	5- 7-55	DL; Dr; FD; WSp
-	36dada	1,800	200	L. Stuart	1959	690R	6	TKdu,TKdc	S,E	PS	25E	. .	. .	134.8	5,525.9	9-16-60	B16; Dr; EL; FD; L; Pf365-400, 430-470, 500-530, 575-600, 620-670; WS
	C3-66-																
2	1dddb	450	500	J. Rouse	1957	8,640	. .	. .	. .	Oil	. .	. .	. .	. .	5,401	. . . .	EL
2	2caac	2,290	3,200	C. Baxter	1939	4,704R	. .	. .	. .	Oil	. .	. .	. .	. .	5,425	. . . .	Dr; SL
2	2cdbb	1,250	3,800	. . do	. .	2,171R	. .	. .	. .	Oil	. .	. .	. .	. .	5,430	. . . .	DL; Dr
1	4bccb	3,260	5,080	H. Hendler	1946	39.0	6	Qes,Qb	J,E	D,S	. .	. .	. .	33.6	5,305.0	12- 1-55	Dr; Pf20
1	4bccb2	3,250	5,000	. . do	1955	42.6	18	Qes,Qb	T,E	Irr	400R	. .	. .	30.1	5,305.0	4-15-62	Dr; GE; L; Pf18-42; WL(12-1-55)33.8; WS
1	4cdad	700	2,650	J. Reither	1954	53R	6	Qes,Qb	. .	D	B20R	. .	. .	32	5,330	9-29-54	B51; DL; Dr; Pf33-53
2	5acac	3,350	1,750	Rocky Mountain Arsenal	1957	36.0	4	TKdu	N	O	. .	. .	. .	22.5	5,297.0	10-23-57	B4.7; Core; L; Sc22.8-28.8
1	5cccc	250	5,030	. . do	. .	19.0	36	Qp	N	O	. .	. .	. .	18.2	5,284.8	9- 2-55	D; WS
2	5ddad	930	130	. . do	. .	700R	3	Kdmc	N	N	. .	. .	. .	129.3	5,303	9- 2-55	Dr
1	6adaa	3,650	150	. . do	. .	15.9	7	Qp	N	O	. .	. .	. .	5.9	5,253.7	9- 2-55	Dr
2	6adda	3,080	250	. . do	1942	140R	6	TKdu	J,E	Ind,O	15R	. .	. .	17.3	5,259	9- 9-55	B18; Dr; L; WS

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-66-																
1	6babd	4,920	3,400	Rocky Mountain Arsenal.	1957	30.0	4	Qes	N	O	. .	. .	. .	9.0	5,247.5	10-18-57	B24.3; Core; L; Sc16.3-21.3
1	6cccb	500	5,040	. . do	. .	45.5	. .	Qp,Qes	. .	N	. .	. .	. .	. .	5,282	. . . .	WS
2	7dbcb	1,750	2,630	. . do	1957	30.0	4	TKdu	N	O	<1R	. .	. .	16.4	5,296.7	10-28-57	B23.9; Core; L; Sc16.8-21.8
1	8bbad	4,630	4,180	. . do	1957	30.0	4	Qes	N	O	8R	10	. .	12.2	5,284.1	10-24-57	B24.4; Core; L; Sc14.9-20.4, 22.4-24.4
1	8daaa	2,400	170	. . do	. .	14.5	30	Qp	Cyl,N	O	. .	. .	. .	11.2	5,302	9- 2-55	D; WS
1	8ddba	1,000	850	. . do	1957	35.0	4	Qes	N	O	<1R	. .	. .	23.4	5,320.4	3-19-58	B28.7; Core; Sc21.9-28.2; SL
1	9bbcc	3,980	5,250	Jeremiassen and Moffitt.	1953	32R	18	Qes,Qb	T,E	Irr,S	250R	. .	. .	14.1	5,304.1	4-15-62	A40; B29; L; WL(12-1-55)16.2; WL(4-3-56)15.8 WL(11-6-57)15.5; WS
1	10badd	4,720	3,400	E. Matschke.	1954	70.7	16	Qes	T,E	Irr	. .	. .	. .	41.1	5,359.2	11- 6-57	A40; Dr; S
2	10bbab	5,150	4,510	. . do	1955	320R	6 to 4	TKdu	S,E	D	14R	130	4	20	5,350	9-31-55	B53; Dr; FD; L; Pf200-320; WSp
1	10bbdd	4,020	4,220	. . do	1961	56R	18	Qes	T,E	Irr	200R	17	. .	29.4	5,340	4-15-62	A60(with 3 wells); B54; Dr; L; WL(3-19-61)37
1	10bdaa	3,700	2,800	. . do	1953	60R	18	Qes	T,E	Irr	75R	18	. .	40	5,358	1953	A20; Dr; Su
1	10bdab	3,900	3,100	. . do	1954	60R	18	Qes	T,E	Irr	75R	18	. .	37.2	5,355	6- 5-57	A60; Dr; Su; WL(6-5-57)49.5
1	16cacc	1,330	3,800	S. Custy	1956	54R	18	Qes,Qb,Ql	T,E	Irr	525R	19	3	28.2	5,355	4-15-62	A33; B50; Dr; L; Lo22.5-52.5; WL(4-56)24; WL(4-30-58)26.4
2	17aaad	4,900	100	B. Bollers	1955	269R	6 to 4	TKdu	. .	D	B10R	2	1-1/2	100	5,380	6-17-55	B34; Dr; L; Tch229-269; WS
1	17bdcd	2,960	3,420	. . do	1954	70R	18	Qes,Qb,Ql	T,E	Irr	*800R*	27	2	29.7	5,325.9	4-15-62	A80; B48; Dr; L; Pf22-52; WL(12-1-55)18.6; WL(11-6-57)17.4; WS
1	18bcba	3,830	4,850	Miller and Co. . . .	1955	76R	6	Qes	Cyl,W	S	. .	. .	. .	13.1	5,290.6	4-15-62	Dr; WL912-1-55)12.3; WL(11-6-57)13.0
2	19dbbb	2,400	2,400	J. Miller.	1948	5,702R	. .	. .	. .	Oil	. .	. .	. .	. .	5,358	. . . .	EL; L
2	22abbc	4,800	2,450	O. Inman	1955	150R	8 to 6	TKdu	S,E	D,S,IrrL	15R	. .	. .	45	5,398	10- -55	Dr; FD; WSp
2	22cccc	150	5,130	W. Horkanz	1952	965R	6 to 4	Kdmc,Kdlc	S,E	D,IrrL	25M	40	. .	240	5,440	8-29-56	A2; Dr; FD; WS
1	23adda	3,160	120	E. Hoyt.	. .	17.3	48 to 8	Qp,Qes	C,E	D	10E	. .	. .	11.5	5,419	2-11-61	DD
2	25cccc	200	5,130	37th School District	1954	723R	6 to 4	Kdmc	S,E	Sch,IrrL	12E	. .	. .	. .	5,477	. . . .	First Creek School
2	26ccad	680	4,060	L. W. Mack	1944	1,450R	. .	Kdmc,Kdlc	T,E	PS,Fire	125R	. .	. .	250	5,500	7- -61	Sky Ranch Airport
1	28cdda	350	2,700	W. Hopkins	. .	44.5	24	Qb,Ql	T,E	Irr	250E	. .	. .	22.0	5,411.0	3-28-60	A50; Dr; Su; WL(5-13-58)19.8
1	28cdda2	450	2,700	. . do	. .	45.6	18	Qb,Ql	T,E	Irr	. .	. .	. .	21.4	5,409.0	3-28-60	Dr; U(1957-60); Su; WL(5-13-58)19.6 Interferes with cdda
1	29cdad	730	2,700	Well Completions Inc.	1957	60R	7	Qb,Ql	. .	D	B30R	. .	. .	18	5,383	11-24-57	B48; Dr; HB-6; L; Pf33-48
2	30dadc	1,640	490	Colo. Interstate Gas Co.	1956	410R	6 to 5	TKdu	S,E	D,IrrL	15R	65	3	90	5,363	10-15-56	A1; B21; Dr; EL; FD; L; Pf362-410; WSp
2	31abca	4,600	2,100	C. Baessler, Jr. . .	1957	170R	6 to 4	TKdu	Cyl,E	D,IrrL	3E	. .	. .	55.3	5,385	6-13-57	B45; Dr; FD; L; Pf142-170; WSp
2	31cbdb	1,850	4,550	E. Chavers	1957	605R	5	TKdu	S,E	PS	8R	. .	. .	321.8	5,350	11- 3-59	B22; Dr; EL; Pf306-309, 373-384, 432-443, 565-574
2	31cbdb2	1,800	4,400	. . do	1957	1,069R	5	Kdmc,Kdlc	S,E	PS	B25R	80	4	296.6	5,350	11- 3-59	Dr; EL; L; Pf735-835, 990-1,069

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-66-																
1	31ccca	500	4,630	D. Harvey	1951	11.0	48	Qp,Qb	C,E	D,IrrL	15R	. .	. .	8.0	5,365.0	4-30-58	D
2	31cccd	50	4,850	B. Fowler	1957	900R	6 to 4	Kdmc	S,E	PS	20R	335	. .	30	5,381	8- 5-57	DL; Dr; Pf658-680, 790-856
1	31ccdb	450	4,400	D. Harvey	1957	30R	6	Qp,Qb	J,E	D,IrrL	15R	20	. .	10	5,369.0	8- 6-57	B19; DL; Dr; FD; Pf17-25; WSp
2	31cdba	1,100	3,500	Green Acres Trailer Court	1959	1,110R	6	Kdmc,Kdlc	S,E	PS	40R	. .	. .	300	5,355	6- 8-59	DL; Dr; Pf740-850, 982-1,095
2	31cdcb	600	3,900	. . do	1957	1,160R	6 to 5	Kdmc,Kdlc	S,E	PS	30R	245	8	300	5,365	12- 9-57	B26; Dr; EL; L; Pf389-518, 658-688, 718-768, 805-870, 1,018-1,035, 1,084-1,110
1	31dcdc	250	1,850	H. Traubert	1932	21.3	30 to 16	Qp,Qb	C,E	PS,E	. .	. .	. .	12.4	5,385	4-27-62	B21; D; WL(8-5-57)11.1
1	31dcdc2	260	1,910	. . do	. .	26.6	48	Qp,Qb	C,E	PS,E	350R	13	. .	11.0	5,385	8- 5-57	B18; D; DL; Pf8
2	31dcdc3	250	1,850	. . do	1945	160R	6	TKdu	J,E	PS	8R	. .	. .	19.9	5,385	4-22-62	Dr; WL(8-5-57)80
1	31dcdd	200	1,640	. . do	1930	17.3	5	Qp,Qb	J,E	D	. .	. .	. .	12.3	5,390	8- 5-57	Dr
1	32acad	3,320	1,330	V. Stark	1941	28.9	40	Qb,Ql	T,E	Irr	162M	5.9	1/4	15.1	5,398	9-20-60	A75(with 3 wells); D; F; FD
1	32acad2	3,550	1,330	. . do	1941	28.4	42	Qb,Ql	T,E	Irr	236M	8.0	1/4	14.3	5,397	4-15-62	D; F; FD; WL(9-20-60) 14.4; WS
1	32acda	3,030	1,330	. . do	1941	27.7	58	Qb,Ql	T,E	Irr	228M	7.5	1/4	15.8	5,397	9-20-60	D; F; FD
2	32bccc	3,000	4,930	Baker	1954	913R	6 to 4	Kdmc	S,E	D	18E	. .	. .	. .	5,554	. . . .	DL; Dr
2	32ccca	600	4,650	M. Jones	1956	1,003R	6 to 5	Kdmc	S,E	D	B15R	10	6	370	5,422	7-26-56	Dr; FD; Pf894-914, 936-979; WSp
2	*32ccdd*	*100*	*4,050*	*B. Glenn*	*1957*	*1,085R*	4	*Kdmc,Kdlu*	*Cyl,E*	*Ind*	*25R*	80	. .	200	5,425	12-24-57	DL; Dr; EL; Pf784-919, 1,045-1,073
1	32dadc	1,470	600	E. Perrott	1954	. .	. .	Qb	C,E	Irr	100M	1	. .	3.1	5,398	9-15-60	A20. Sump; in winter water rises to near land surface
2	32ddbd	950	820	. . do	1941	500R	6	TKdu	Cyl,E	D	. .	. .	. .	184.1	5,445	9-15-60	Dr; FD; WS
1	33aaab	4,960	600	C. Headrick	. .	6.5	48	Qb	C,G	Irr	. .	. .	. .	3.6	5,432.0	4-15-62	A200(with 5 wells); D; WL(5-13-58)3.6
1	33abad	4,800	1,400	. . do	1942	45.1	48	Qb,Ql	T,E	D,S,Irr	450E	5	. .	20.0	5,420.1	5-13-58	D; Su
1	33adbb	3,680	1,300	. . do	1944	42.0	48	Qb,Ql	T,E	Irr	450E	. .	. .	20.5	5,422.2	5-13-58	D; Su
1	33adda	3,070	280	. . do	1942	44.5	24	Qb,Ql	T,E	Irr	250E	. .	. .	23.1	5,435.2	5-13-58	D; Su
1	33adda2	3,030	70	. . do	1942	44.5	24	Qb,Ql	T,E	Irr	250E	. .	. .	24.7	5,437.3	5-13-58	D; Su
1	33bcac	3,580	4,320	E. Perrott	1939	41.5	24	Qb,Ql	T,E	Irr	123M	10.1	. .	13.9	5,419	9-18-60	A160(with 2 wells); B41; D; FD; GE; Pf8; WSp
1	33bcbc	3,350	5,200	. . do	1939	45.3	24	Qb,Ql	T,E	Irr	447M	12.5	. .	16.5	5,413	9-18-60	B46; D; FD; WS
1	33cacd	1,500	3,480	E. Honnen	. .	32.0	24	Qb,Ql	T,E	Irr	300E	. .	. .	10.5	5,418	9-13-60	A20; Dr; Su
1	33cbdd	1,620	4,070	R. Cowherd	1940	30.6	24	Qb,Ql	T,E	Irr	100E	. .	. .	7.7	5,437	9-14-60	A60(with 2 wells); Dr; Su
1	33cbdd2	1,400	4,050	. . do	1940	27.0	48	Qb,Ql	T,E	Irr	100E	. .	. .	7.1	5,436	9-14-60	D; Su
1	33daab	2,400	530	E. Honnen	. .	35.5	48	Qb,Ql	T,E	Irr	300E	. .	. .	15.8	5,431	9-13-60	A160(with 7 wells)
1	33dadc	1,470	450	. . do	. .	44.1	56	Qb,Ql	T,E	Irr	300E	16.9	. .	15.9	5,431	9-18-60	
1	33dccc	100	2,590	. . do	. .	34.6	58	Qb,Ql	T,E	Irr	400R	. .	. .	11.3	5,427	4-15-62	A20(with dccd); Su; WL(9-13-60)11.0
1	33dccd	120	2,220	. . do	1960	33.4	56	Qb,Ql	T,E	Irr	300R	. .	. .	12.8	5,430	9-13-60	
1	33ddaa	1,010	270	. . do	. .	38.1	24	Qb,Ql	T,E	Irr	300R	. .	. .	15.2	5,430	9-18-60	
1	33ddaa2	1,050	60	. . do	. .	33.3	56	Qb,Ql	T,E	Irr	300E	11.9	. .	15.2	5,430	9-18-60	
1	33ddad	960	270	. . do	. .	27.9	12	Qb,Ql	T,E	Irr	300E	. .	. .	19.7	5,429	9-13-60	
1	33ddcd	120	700	. . do	. .	36.1	18	Qb,Ql	T,E	Irr	300E	10.5	. .	14.9	5,432	9-18-60	FD; GE; WS
1	33ddda	400	30	. . do	. .	29.1	56	Qb,Ql	T,E	Irr	300E	9.2	. .	11.5	5,433	4-15-62	D; WL(9-18-60)14.8
2	34babc	4,650	3,700	R. Kramer	. .	555R	6 to 4	TKdu	S,E	D	B20R	. .	. .	135.3	5,460	7-17-56	DL; Dr
2	34bbbc	4,740	5,050	H. Wells	1956	340R	6 to 4	TKdu	S,E	D	B7R	125	3	25	5,435	5-10-56	DL; Dr. Measured yield of 14 gpm
2	34bbbd	4,630	4,650	I. Urban	1956	360R	6 to 3	TKdu	. .	D	B7R	125	3	25	5,443	4-26-56	DL; Dr; Pf212-360
2	34bbcd	4,250	4,700	W. Silence	1954	525R	6 to 4	TKdu	Cyl,E	D	B12R	65	6	114.6	5,445	3-11-57	DL; Dr; FD; Pf270-315, 485-515; WSp
2	34cbab	2,500	4,550	Mills Addition	1956	946R	8	Kdmc	T,E	PS	75R	190	24	279.9	5,440	11- 4-59	Dr; EL; GRL; L

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-66-																
1	34cbdd	1,450	4,150	H. Crisman	1956	60R	6	Qb,Ql	. .	IrrL	B10R	. .	1	17	5,441	5-12-56	Dr; L; Pf45-60
2	35accc	2,650	2,600	W. Jameson Co. . . .	1915	1,010R	. .	. . .	. .	Oil	. .	. .	. .	. .	. . .	. . . .	Dr; SL
2	35bbab	5,000	4,520	E. Dyer.	1959	1,230	7	Kdmc,Kdlc	S,E	D,Irr, E,PS	75R	100	. .	300	5,492	12-10-59	A20; DL; EL; Pf798-987, 1,127-1,197
2	35bccb	2,980	5,190	Eastlawn Memorial Gardens	1959	1,222	7 to 6	Kdmc,Kdlc	S,E	Irr	B35R	80	8	320	5,512	5-20-59	B2; EL; L; Pf846-862, 888-996, 1,099-1,204
	C3-67-																
1	1acac	3,450	1,850	Rocky Mountain Arsenal.	1957	22.0	4	Qes	N	O	. .	. .	. .	5.2	5,261.5	9-19-57	B18.6; Core; PP; Sa; Sc10.5-12.5; SL
1	1baab	5,150	3,180	. . do	1957	35.0	4	Qes	N	O	. .	. .	. .	6.9	5,264.9	11-20-57	B29.4; Core; Sa; SL
1	1cbac	2,050	4,600	. . do	1957	20.0	4	Qes	N	O	<1R	. .	. .	. .	5,262.2	. . . .	B8.9; Core; Sa; Sc13.7-15.7; SL
1	1dddd	200	50	. . do	1957	77.0	4	Qes	N	O	. .	. .	. .	30.3	5,276.2	9-25-57	B75.2; Core; L; PP; Sa; Sc69.3-71.3, 72.1-74.1
1	2acbc	3,500	2,380	. . do	1957	30.0	4	Qes	N	O	<1R	. .	. .	18.7	5,254.0	10-18-57	B25.3; Core; Sa; Sc19.9-22.9; SL
1	3cbab	2,350	4,560	. . do	1957	110	4	Qv	N	O	. .	. .	. .	76.1	5,209	11- 7-57	B109.7; Core; Sc76.1-78.3, 79.8-89.5, 90.0-98.1; SL
1	3cbac	2,300	4,580	. . do	1958	112	4	Qv	N	O	14R	12	. .	76.1	5,209.0	2- 5-58	B110.1; Core; L; Sc101.8-110.2
1	3ddbb	1,060	1,280	. . do	. .	48.0	6	Qv	Cyl,H	N	. .	. .	. .	35.6	5,221.1	11- 6-57	Dr; WL(9-1-55)37.8
1	4babc	4,220	3,720	. . do	1954	85R	16	Qv	T,E	Ind	650E	12.4	1/4	46.5	5,175	.8-20-54	Dr
1	4bbbb	4,950	5,000	. . do	. .	62.3	16	Qv	N	Ot	. .	. .	. .	44.7	5,169.3	4-11-62	Dr
1	4bcaa	3,650	4,080	. . do	1938	97R	24	Qv	T,E	Ind	500M	8	64	50.5	5,180	7-16-53	AT; B96; Dr; L
1	4bcad	3,450	4,010	. . do	. .	61.8	2	Qv	N	N	. .	. .	. .	58.8	5,180	9- 1-55	
1	4cabb	2,620	3,950	. . do	1955	108R	16	Qv	T,E	Ind	650R	. .	. .	77.1P	5,219	9-26-55	Dr; T58
1	4cdcb	350	1,900	. . do	. .	72.5	6	Qv	N	N	. .	. .	. .	44.1	5,200	9- 1-55	
2	5abbb	5,000	2,470	Derby School District	1949	510R	6 to 4	Kdmc	S,E	Sch	50R	122	49	96	5,168	7- -49	AT; DL; Dr; Pf364-504; U(1960)
2	5abcd	4,020	2,250	South Adams County Water and Sanitation District	1953	800R	10 to 8	Kdmc,Kdlc	T,E	PS	200R	. .	. .	270.6	5,167	11-28-56	DL; Dr; EL; FD; Pf315-350, 380-410, 570-630, 670-675, 760-800; WS
1	5abcd2	4,000	2,280	. . do	1955	61R	48	Ql	T,E	PS	400R	. .	. .	45	5,165	6-25-55	B61; D; PD; GE; L; Pf48-61; WS
2	5abcd3	4,100	2,300	. . do	1953	1,525R	8 to 6	Klb,Kla,Kfm	S,E	PS,E	F10R	. .	. .	46	5,167.3	4- 5-53	Dr; EL; L; Pf1,280-1,380, 1,458-1,482, 1,510-1,525. Bailed 70 gpm with 230 feet drawdown
2	5bccb	3,100	5,200	A. Seimer.	1955	420R	6 to 4	Kdmc	. .	D	B12R	30	6	195	5,147	4-19-55	DL; Dr; Tch365-485
1	5dddd	70	280	South Adams County Water and Sanitation District	1955	80R	48	Ql	T,E	PS	500M	. .	. .	54	5,191	6-23-55	B80; Dr; GE; L; Pf67-80
2	5dddd2	70	300	. . do	1953	800R	10 to 8	Kdmc,Kdlc	T,E	PS	174M	157	18	184	5,189.0	5-18-53	B82; Dr; EL; SL; Tch320-345, 415-450, 630-650; 670-790
1	6abcb	4,330	2,550	D. Reams	. .	25R	48 to 24	Qb,Ql	C,E	Irr	100R	8	2	12	5,135	6-17-56	A5; D; DL
1	6bbcc	4,070	5,050	C. Jefferis.	1956	40R	12 to 6	Qpa,Qb,Ql	J,E	D	B2R	. .	. .	14	5,129	10- 7-56	DL; Dr; Pf27-40
1	6ccdb	600	4,600	South Adams County Water and Sanitation District	1955	45R	48	Qpa,Qb,Ql	T,E	PS	500M	7.4	24	30.2	5,147	9-22-60	D; DL; Pf22-35; WL(6-55)28
1	6ccdc	220	4,480	. . do	1956	44R	48	Qpa,Qb,Ql	T,E	PS	500M	7	4	30	5,144	6-29-56	B44; D; DL; GE; Pf34-44
2	6ccdc2	250	4,480	. . do	1955	754R	8	Kdmc,Kdlc	T,E	PS	103M	. .	. .	220	5,147	10- -55	AT; DL; Dr

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-67-																
2	6cdab	1,070	3,000	Denver Flour Mills	1937	550R	. .	Kdmc	T,E	B,Ind, Fire,Pr,	50R	. .	. .	. .	5,145	. . . .	Dr
1	6ddac	900	550	H. Wilson.	1957	16.0	6	Qb,Ql	C,E	IrrL	10R	6	11	9.3	5,151	4-30-58	DL; Dr; FD; GE; Pf10-16
1	7aadd	4,200	100	Mile High Kennel Club	1949	37R	18	Qes,Ql	T,E	Irr, Sani	1,300M	22	. .	10	5,165	6-20-49	B36; DL; Dr; FD; Pf12-37
2	7abca	4,500	2,200	. . do	1949	705R	8 to 6	Kdmc,Kdlc	T,E	D	15	24	12	191	5,153	6-23-49	Dr; L
1	7acaa	3,920	1,400	Town and Country Mutual Water Co. .	1959	22R	48	Qp,Ql	T,E	PS	265R	. .	. .	9	5,158	1959	B20; D; FD; L; Pf8-20; WS
1	7acda	2,980	1,420	Commerce Town. . . .	1956	32R	80	Qp,Ql	T,E	Irr,Sw	185R	. .	. .	12	5,164	1956	D; FD
1	7addd	2,700	120	Town and Country Mutual Water Co. .	1947	43R	48	Qes,Ql	T,E	PS	300R	. .	. .	20	5,169	9-21-60	D
1	7daba	2,480	790	Lundgren	1910	31.5	48 to 6	Qes,Ql	Cyl,E	S	. .	. .	. .	22.0	5,169.6	4-10-62	DD; WL(11-6-57)21.2
1	8bbab	5,200	4,380	A. Thompson.	1959	50R	5	Ql	J,E	D	10R	. .	. .	35	5,169	7- -59	B50; Dr; L; Pf44-50; U(1960)
1	8bbbd	4,900	4,880	W. Goltl	1955	60R	5	Ql	J,E	IrrL	. .	. .	. .	25.4	5,160	4-10-62	B47; DL; Dr; WL(7-10-56)20.3
2	8bdbb	3,800	3,750	Kearney Junior High School . . .	1952	690R	8 to 6	Kdmc,Kdlc	S,E	Sch	B20R	154	.. .	62	5,175	9-10-52	DL; Dr; Pf422-463, 587-690
2	8cccc	100	5,100	C. Conter.	1950	870R	6 to 4	Kdmc,Kdlc	S,E	D	. .	. .	. .	. .	5,185	7-10-56	DL; Dr. Deepened. Yield 10 gpm at 607 feet
1	9baab	5,180	3,190	Rocky Mountain Arsenal.	. .	71.0	5	Qv	N	N	. .	. .	. .	64.3	5,200.1	11- 6-57	Dr; WL(9-11-55)65.6
1	9bbcd	4,100	4,800	. . do	1958	64.0	4	Qv	N	O	10R	8.4	. .	48.2	5,194.0	3-12-58	B61.1; Core; Sc55.0-61.6; SL
1	9cbca	1,910	4,920	. . do	. .	60.3	6	Qv	. .	N	. .	. .	. .	57.5	5,210.3	11- 6-57	Dr; WL(9-1-55)56.8
1	9ccad	950	4,180	. . do	1958	75.0	4	Qv	N	O	16R	.8	. .	56.1	5,212.3	3-10-58	B70.4; Core; L; Sc55.4-63.3, 64.7-70.6
2	10abba	5,030	2,060	. . do	. .	580R	5	Kdmc	N	O	. .	. .	. .	51.0	5,220	8-30-55	Dr; WS
1	10addc	2,800	550	. . do	1957	62.2	4	Qes,Qv	N	O	5R	25	. .	28.7	5,241	11- 5-57	B56.5; Core; L; Sc31.3-33.4, 34.6-39.3, 55.2-57.3
1	11ddda	400	80	. . do	1957	85.5	4	Qes,Qv	N	O	20R	5.5	. .	32.9	5,279	11- 4-57	B81.3; Core; L; Sc30.9-32.9, 51.3-57.8, 60.2-62.4, 74.9-77.0
1	12bbab	4,980	4,380	. . do	. .	23.0	42	Qp,Qv	N	N	. .	. .	. .	20.2	5,248	9- 9-55	D; WSp
1	12dcda	450	1,400	. . do	1957	60.0	4	Qes,Qv	N	O	20R	.8	. .	15.7	5,283	9-30-57	B53.9; Core; L; Sc18.6-27.7, 29.1-37.8, 39.2-48.2, 49.6-53.2
1	13bbbb	5,050	5,150	F. Bostic.	1952	75R	6	Qes,Qv	. .	D	. .	. .	. .	. .	5,280	. . . .	Dr; WS
1	14acaa	3,730	1,350	B. Bollers	1952	51R	18	Qp,Qes, Qb,Ql	T,E	Irr	450R	21	. .	27.1	5,270.5	11- 6-57	A100; B45; Dr; L; WL(12-1-55)26.3; WS
2	17abba	5,170	2,050	South Adams County Water and Sanitation District	1956	730R	32 to 16	Kdmc,Kdlc	T,E	PS	550R	290	32	310	5,204	8-30-56	B32; Dr; L; Pf430-730
1	17abbc	4,700	2,350	D. Chaffin	1953	58.8	6	Ql	J,E	D	. .	. .	. .	40.3	5,205	7-16-56	DL; Dr
1	17adaa	3,750	120	R. Vivens.	1954	72R	5	Ql	. .	D	18R	2	2	58	5,221	9- -54	DL; Dr; Pf60-72
1	17bdab	3,650	3,000	L. Barbere	1954	50.5	5	Ql	J,E	D	. .	. .	. .	38.1	5,210	7-13-56	B52; Dr; L; WL(9-54)11
1	17cdab	1,050	3,100	Blanding Investment Co.	. .	38.5	36	Qpp,Qb,Ql	T,E	Irr,Cons	500E	. .	. .	16.1	5,207	4-10-62	A4(1959); D
1	17ddba	1,300	950	Mack Sand Co. . . .	. .	16.0	48	Qpp	N	Ot	. .	. .	. .	12.5	5,212	10-23-56	D
1	18abba	5,000	2,180	Colo. Interstate Gas Co.	1948	38R	8	Ql	. .	Irr	90R	1.5	3/4	16.0	5,175	7-10-56	DL; Dr. Adjacent 645-foot well flowed in 1947
1	18abcc	4,150	2,400	Jones Sand and Gravel Co.	1956	28R	12	Qpp,Qb,Ql	T,E	Ind	27M	13.9	24	5.4	5,173	3-17-58	AT; B28; DD; DL; GE; T61

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-67-																
1	18abcd	4,100	2,220	Jones Sand and Gravel Co.	1950	31.5	12	Qpp,Qb,Ql	N	Ot				7.1	5,176	4-10-62	DL; GE
1	18acac	3,440	1,750	H. and H. Nelson	1937	38.0	30 to 10	Qb,Ql	J,E	S,IrrL				16.2	5,180	2-19-58	DD
2	18acad	3,380	1,600	do		600R	4 to 3	Kdmc	N	Ot				311.5	5,180	8-13-59	Dr
2	18acad2	3,440	1,600	do	1956	670R	6 to 4	Kdmc,Kdlc	S,E	S,D,Ind, Pr	B20R	35	2	300	5,180	4-18-56	B54; Dr; FD; L; WS
2	18bdcd	2,900	3,600	Oriental Refining Co.	1961	916R	8 to 6	Kdmc,Kdlc	S,E	S,Ind	30M	370	6	174	5,219	11-15-61	AT; DL; Dr; GRL; Gun 652-662, 676-704, 728-736; H10-8; NL; OH(750-916); QW; Sa
1	18bdda	3,150	2,700	do	1955	42R	18	Qb,Ql	T,E	Ind,C	600R	21	2	15	5,180	9- 2-55	B37; Dr; L; Pf27-42
1	18bdda2	3,180	2,900	do	1947	45R		Qb,Ql	T,E	Ind,C	250R				5,185		Dr; WS
2	18bddc	2,720	3,220	do	1940	726R	6	Kdmc,Kdlc	S,E	Ind,S,C	45R			300	5,221	12- -57	Dr; Pf310-317, 368-386, 426-438; OH(685-710); WS. Yield 85 gpm 1940; 60 gpm 1960; 45 gpm 1962
1	19cdaa	1,160	2,920	Park Hill Golf Club	1957	80R		Qb,Ql	T,E	Irr	150M			37.0	5,260.0	4-23-62	B90; Dr; GE; WL(4-29-58) 36.9
1	19cdad	800	2,700	do	1957	95R	18	Qb,Ql	T,E	Irr	850M			40.9	5,265.7	7- 9-57	B92; Dr; FD; GE; L; Pf55-85; Su
1	19dbaa	2,500	1,500	J. Canton	1959	82R	6	Qb,Ql	S,E	D	20R	34		35.5	5,258	7-30-59	B80; DL; Dr; GE; Pf38-80; WL(10-25-60) 37.9
1	23cbcb	1,900	5,080	Miller Interprises		30.8	36	Qas	Cyl,W	S,Ot	6M	.3Ry	1/6	21.6	5,279.0	4-15-62	D
2	24bdda	3,200	2,700	Mid-Colo. Oil		3,790R				Oil					5,330		Dr; L
1	29caaa	2,450	2,750	E. Hildebrand and R. Austin	1956	95R	6	Ql	S,E	IrrL	35R	0	10	49.5	5,316.2	4-25-62	B80; Dr; FD; L; Pf10-95; WL(5-5-58)62.5; WSp
1	34dbba	2,500	2,200	T. Murphy	1956	77.9	6 to 5	Qb,Ql	N	N	B10R	42	3	9.6	5,324	7-17-56	B54; Dr; L; Pf10-80
1	34dbbd	2,200	2,200	do	1956	78.0	6 to 5	Qb,Ql	N	N	B10R	35	4	8.7	5,323	7-17-56	DL; Dr; Pf12-80
2	35adda	3,290	100	Aurora Public Schools	1959	1,100R	6 to 4	Kdmc,Kdlc	S,E	Irr	40R	55		320	5,363	1-19-59	A10; B18; Dr; EL; L; Tch725-833, 880-944; 1,012-1,059
2	36acdb	3,000	1,850	Fitzsimons Hospital	1919	927R	12 to 5	Kdmc	A	B,Ind	26M	96.8	18	280.2	5,370	7- 6-57	AT; B40; Dr; FD; L; WS
	C3-68-																
2	1aaad	4,850	160	B. Fernald	1956	525R	6 to 4	Kdmc		D	B25R	90	2	110	5,103	1-12-57	B33; Dr; L; Pf360-380, 460-525
1	1abdd	4,040	1,400	do	1941	34R	48	Qpp,Ql	T,E	Irr	1,200M	6.1	1/4	6.9	5,104.0	4-10-62	A30; D; WL(8-21-56)6.7
1	1bbbc	4,890	5,230	T. Fukui		17.3	36	Qpp,Ql	C,Tr	Irr				7.1	5,110.8	8- 7-56	B17.5; D; Su
1	1dadb	1,760	420	A. Brink	1929	35.7		Ql	T,E	Irr	400M	4.1	1/4	28.2	5,138.6	8-21-56	A10
1	1dadd	1,360	30	C. Juhl	1930	38.0	24	Ql	T,E	Irr				22.4	5,139.0	4-10-62	A4; B32; D; GE; WL(8-16-56)28.9
1	1dbcb	1,920	2,370	C. Miller	1944	32R	36	Ql	T,E	Irr	620M	12.0	1/6		5,107.0		A53; D; Pf10; Su
1	1dcaa	1,000	1,400	C. Juhl		20.1	72	Qpa,Qb,Ql	T,E	Irr	250M	4.9	1/6	14.2	5,125.1	8-16-56	A2.5; D
1	1dcdc	40	1,980	A. Pompey	1924	13.2	72 x 72	Qpp,Ql	C,E	Irr	100E			9.2	5,135	9-28-59	A1; B14; D
1	1dcdd	20	1,400	P. Tito	1940	14R	48	Qpp	T,E	Irr					5,130		A9; U(1959)
1	1ddcc	30	1,000	H. Krough		34R	36	Qpp,Qpa,Ql		S					5,142		D
1	1ddcd	30	700	do	1934	38R	48	Qpa,Ql	C,E	S					5,140		D
1	1ddcd2	20	700	do		39.8	48	Qpa,Ql	T,E	Irr	600R			23.5	5,143.4	11- 5-57	A25; D; WL(8-21-56)31.2
1	2accc	2,670	2,610	L. Ficco		48R	48	Qes,Ql	N	Irr				10.8	5,160.8	11- 6-57	D
1	2babb	5,230	3,950	J. DeCarlo	1952	37.0	18	Qp,Qb,Ql	T,E	Irr	175M	12.3	1/4	15.5	5,140	8- 6-56	A9; DL; Pf25; Su
1	2bbab	4,940	4,620	E. Marrone	1954	36.4	18	Qpp,Qb,Ql	T,E	Irr				20.2	5,144.7	4-10-62	A10; D; Pf18-21; Su; WL(8-6-56)15.0
1	2bbbc	4,850	5,000	A. Gaccetta	1955	26.8	16	Qp,Qb,Ql	C,E	Irr				8.6	5,142	8- 6-56	A11; D; Su
1	2bbca	4,580	4,730	J. Gacetta	1953	38R	18	Qpp,Qb,Ql		Irr					5,131.8		A5; B38; D; Su
1	2bbcb	4,510	5,230	D. Albenez	1925	33R		Qpp,Qb,Ql		Irr					5,139.5		A5; D; Su
1	3aaca	4,610	760	T. Jiuliano		21.0	38 to 18	Qpp,Qb,Ql	C,G	Irr				11.6	5,145	4-10-62	D; U(1956); WL(8-10-56) 5.8
1	3aacb	4,520	1,300	F. Serratore	1952	33.4	18	Qpp,Qb,Ql	T,G	Irr				7.6	5,148	8-10-56	D; Su

Table 2.--Records of selected wells and springs--Continued

Plate numbe	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year com-pleted	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of mea sure-ment	Remarks
2	C3-68-3bccc	2,790	5,040	Baker Metropolitan Water and Sanitation District. .	1959	610R	9	Kdlc	T,E	PS	151M	. .	. .	200	5,180	9- 9-59	B19; Dr; EL; L; Tch310-610
1	3cadc	1,400	3,180	D. Pedotto	. .	. .	18	Qp,Qb	T,E	Irr	. .	. .	. .	13.7	5,155	5- 6-58	Dr
1	3cadd	1,400	2,800	. . do	1956	33R	6	Qpp,Qb,Ql	. .	D,IrrL	30R	10	2	10	. . .	11-10-56	DL; Dr
1	3cdcd	300	3,550	P. Filippone	1938	32R	24	Qpp,Qb,Ql	T,G	Irr	. .	. .	. .	3	5,165	1938	A6; B33; Dr
1	3cddc	250	3,150	. . do	1958	33R	6	Qpp,Qb,Ql	C,E	D	20R	14	. .	11	5,165	1-25-58	B33; Dr; L
1	3dbcc	1,380	2,630	D. Pedotto	. .	30R	20 to 6	Qb,Ql	J,E	Irr	20R	. .	.	18	5,155	1-27-58	B33; DL; Dr
1	3dbdc	1,400	1,950	. . do	. .	32R	18	Qb,Ql	C,G	IrrL	. .	. .	. .	11.6	5,155	4-10-62	B28; DL; Dr; WL(5-6-58)18.4
4	3ddca	350	900	Mapleton School . .	1954	615R	8 to 6	Kdl	. .	Sch	35R	. .	. .	. .	5,180	. . . .	DL; Dr; Pf512-615
1	4acbb	3,800	2,320	H. Kelsevic.	. .	52R	48	Qb,Ql	T,E	Irr	50M	2.0	24	42.4	5,244.1	9- 8-59	AT; D; U(1959)
1	4acbd	3,520	2,100	D. Gomez	1958	60R	6 to 5	Qp,Ql	Cyl,E	D	30R	2	. .	44	5,239	5-15-58	B50; DL; Dr; Pf42-60
1	4acdb	3,000	1,730	V. Sadowski.	1957	70R	6 to 4	Qy,Ql	J,E	D	15R	. .	. .	33.3	5,232.6	12- 1-58	B55; Dr; L; Pf40-70
1	4bccc	2,750	5,230	P. Davis	1956	44.0	8	Qy,Ql	S,E	D	30R	. .	. .	31.5	5,246.0	4-10-62	B30; Dr; L; Pf18-28; WL(5-56)15; WL(12-1-58)31.4
1	4bdda	3,050	2,750	R. Abbott.	1959	48R	24	Qy,Ql	S,E	E,Irr	90R	3	. .	35.2	5,239.3	9- 8-59	A10; B48; D; DL; Pf36-48
1	4cdca	350	3,600	F. Nordon.	1959	25R	6	Qb,Ql	J,E	IrrL	30R	2	. .	8	5,187.5	3-30-59	B18; DL; Dr; Pf10-21
1	4dcbc	950	2,560	Fairview Construction	. .	10.7	48	Qb	. .	PS	147M	6.7	48	1.7	5,180	4-22-55	AT; By5
2	5addd	2,700	50	Sundstrand Aviation.	1955	1,513R	8 to 6	Klb,Kla, Kfm	T,E	Ind	165R	. .	. .	242	5,245	10-26-60	DL; Dr; EL; WL(1955)15
1	5ccbb	1,220	5,150	J. Garramsites . . .	1957	50R	6	Qs	J,E	D	12R	0	1	34.2	5,275.5	4-10-62	B49; Dr; L; Pf27-50; WL(2-57)20; WL(12-1-58)33.3
2	5daaa	2,580	50	Sundstrand Aviation	1959	640R	9	Kdlc	S,E	Ind	B66R	22	. .	490	5,245	10-26-60	B43; Dr; EL; L; Tch340-640; WL(8-59)345
2	5dcab	1,060	1,700	F. Stephens.	1956	125R	6 to 4	TKdu	S,E	D,IrrL	15R	. .	. .	42.6	5,254	12- 9-58	B35; Dr; L
2	5dddd	150	230	Baker Metropolitan Water and Sanitation District. .	1956	601R	9	Kdmc,Kdlc	T,E	PS	160M	. .	. .	250	5,198	7- 8-58	DL; Dr; EL; FD; Tch300-600; WS
2	6cadd	1,350	2,940	City of Arvada . . .	1959	614R	9	Kdlc	T,E	PS	91M	. .	. .	580P	5,303	10- 6-60	B17; Dr; EL; L; Tch340-600
2	6dccb	600	2,550	J. Luttrell.	1957	105R	6 to 5	Kdmc	J,E	D	30R	54	1	42.5	5,297.9	11- 7-58	B30; Dr; L; Pf30-75
1	7abaa	5,180	1,450	O. Cain.	1957	33R	6	Qp,Ql	J,E	D,IrrL	10R	5	1	20.4	5,212.0	11- 7-58	B30; DL; Dr; Pf21-33; WL(3-57)20
2	7cabb	2,480	3,880	City of Arvada . . .	1958	616R	9	Kdlc	T,E	PS	154M	. .	. .	355.7P	5,271	10- 6-60	B14; Dr; EL; L; Tch310-557; WL(6-13-58)25;
1	7cbdc	1,550	4,300	Animal Foods Co. . .	1957	27.5	8	Qpp,Qb,Ql	N	Ind	58M	3.3	1-1/2	4.6	5,233.6	11-10-58	AT; DL; Dr; Pf13-28; U(1958); WL(6-57)6
2	7dccb	550	2,600	P. Kiklas.	. .	250R	4	Kdmc	N	Ot	. .	. .	. .	161.3	5,238	4-10-62	Dr
1	7dccb2	450	2,550	. . do	1956	20.2	6	Qpp,Qb,Ql	. .	D,Ot	. .	. .	. .	1.5	5,236.2	4-10-62	
1	8dcbb	1,000	2,500	Whitten.	. .	25.2	8	Qpp,Qb,Ql	N	N	28M	15.7	1-1/2	6.0	5,210	4-10-62	AT; Dr; U(1959); WL(8-20-59)4.5
2	9bada	4,600	2,900	Gordon Construction Co. . .		284R	4	Kdmc	. .	D	. .	. .	. .	. .	5,184	. . . .	DL; Dr
1	9caaa	2,350	2,950	Vibrated Concrete Co.	1959	60R	6	Qb,Ql	. .	Ind	60R	. .	. .	. .	5,223	. . . .	Dr
1	9cadc	1,580	2,980	. . do	1956	20R	48	Qb,Ql	. .	Ind	6R	10	3	10	5,228	1- 4-56	DL; Dr; Pf11-20
2	9cadd	1,620	2,900	. . do	1952	280R	6	Kdmc	Cyl,E	Ind	60R	. .	. .	. .	5,228	. . . .	Dr
2	9cadd2	1,320	2,800	Brickrete Inc. . . .	1958	708R	6	Kdmc,Kdlc	S,E	B,Ind	B20R	151	. .	99	5,232	5-28-58	B12; Dr; GRL; L; Tch150-708
1	9cbba	2,500	4,630	J. Disner.	1957	31R	48	Qb,Ql	. .	Irr	300R	. .	. .	16	5,199.3	3- 5-57	B31; DL; Dr; Pf18-31
1	9dcbc	800	2,530	Smaldone Sheet Metal Works.	1957	40R	5	Ql	J,E	Ind	B15R	26	4	11.5	5,239.2	4-10-62	DL; Dr; Sc21-27; WL(2-57)14; WL(11-14-58)11.6

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
2	C3-68-10accc	2,950	2,420	Lumber Dealers Inc.	1956	715R	8 to 7	Kdmc,Kdlc	S,E	D,B, Fire	F75R	. .	. .	. .	5,200	7- -56	EL; FD; WS. Flowed after lower conglomerate was tapped
2	10ccdb	600	4,550	Koppers.	1928	603R	12 to 6	Kdmc,Kdlc	S,E	N	125R	. .	. .	. .	5,220	. . . .	B16; L; U(1948-60)
2	10ccdc	300	4,550	. . do	1948	600R	8	Kdmc,Kdlc	T,E	Ind,B	30R	10	4	368.0	5,225	10-26-60	Dr
1	10cdcc	200	3,800	S. Lucy.	1958	25R	6	Qes,Ql	J,E	D	30R	10	. .	6	5,221	10-10-59	DL; Dr; Pf12-25
2	10dadc	1,420	400	Broderick Wood Products	1959	765R	8 to 6	Kdlc,Kl	S,E	Ind	60R	. .	. .	400	5,220	10-29-60	B18; Dr; L; Pf480-610, 655-677, 721-743
2	11aacd	4,100	920	Public Service Co. of Colo.	1958	630R	10	Kdmc,Kdlc	T,E	Ind	150R	102	27	422.9	5,158.5	4-10-62	DL; Dr; EL; Sc265-285, 440-620; WL(2-58)315; WL(8-59)38.5; WS
1	11aadd	4,290	210	. . do	1955	29R	26	Qb,Ql	T,E	Ind,E	600R	. .	. .	9.4	5,117.5	4-10-62	B30; DL; Dr
2	11acda	3,180	1,440	. . do	1955	943R	10	Kdmc,Kdlc	T,E	Ind	120M	87	48	248.2	5,131.0	12-15-60	AT; B74; Dr; EL; L; Sc74-94, 122-172, 196-266, 380-580; WL(6-22-55)269.0
1	11adbb	3,780	1,240	. . do	1947	109R	5	Qb,Ql	S,E	D	3R	. .	. .	. .	5,130.5	. . . .	DL; Dr
2	11adda	3,290	320	. . do	1945	285R	5	Kdmc	S,E	Ind	13R	. .	. .	. .	5,121.0	. . . .	Dr
1	11adda2	3,290	220	. . do	1955	30.0	26	Ql	T,E	E,Ind	700M	12	48	9.4	5,118.5	4-10-62	AT; B30; Dr; L; Pf15-30; WL(6-6-55)6.9
2	11bccb	3,100	5,000	Thompson Pipe and Steel Co.	1958	804R	8 to 6	Kdlc	S,E	D	150R	362	8	255	5,182	3-27-58	B12; Dr; EL; L; Pf450-620, 710-800
2	11cdbb	1,180	3,650	Daffin Corp.	1957	505R	6 to 4	Kdmc,Kdlc	S,E	D	20R	. .	. .	285	5,180	3- 7-57	DL; Dr; Pf300-320, 460-505
1	11cdcd	200	3,600	F. Trujillo.	1958	30R	6	Qb,Ql	J,E	D	25R	4	. .	12	5,135	9- 3-59	B28; DL; Dr; Pf25-30
1	11daac	1,980	390	Public Service Co. of Colo.	1955	29R	26	Qb,Ql	T,E	E,Ind	. .	. .	. .	. .	5,121.7	. . . .	B29; DL; Dr
1	11dada	1,950	200	F. Miller.	1957	29R	48	Qb,Ql	C,Tr	Irr,S	. .	. .	. .	22	5,125	5-19-57	DL; Dr; Pf16
2	11dbba	2,500	2,280	Public Service Co. of Colo.	1959	681R	10	Kdlc	T,E	Ind	140R	130	. .	375	5,145.0	3-24-59	DL; Dr; Sc481-681
2	11ddab	1,250	450	National Food Stores	1950	640R	8 to 5	Kdlc	T,E	Ind	50R	36	. .	315	5,122	6-11-57	DL; Dr; FD; Pf416-620. Destroyed in 1960
2	11ddab2	1,050	480	. . do	. .	. .	. .	Kdlc	T,E	Ind	35R	. .	. .	315	5,122	6-11-57	Dr; QW. Destroyed in 1960
2	11ddab3	1,150	350	. . do	1957	580R	10	Tkdu,Kdmc Kdlc	T,E	Ind	152R	137	8	311	5,122	2-27-57	DL; Dr; GE; Pf312-580; WS
1	11ddab4	1,080	350	. . do	1959	38R	21	Qpp,Ql	T,E	Ind	125R	. .	. .	. . .	5,122	. . . .	B34; DL; Dr; GE; Pf10-38
1	11ddbd	680	680	Capitol Rendering Co.	1946	20R	48	Qpp,Ql	C,E	Ind	30R	. .	. .	. .	5,128.2	. . . .	D
1	11ddca	580	750	. . do	1946	32R	48	Qpp,Ql	T,E	Ind	100R	. .	. .	18.0P	5,128.0	10-27-60	B32; D
1	11ddcb	600	1,300	Miller Bros.	1936	31R	48	Qpp,Ql	C,G	S,Dy,Irr	. .	. .	. .	8	5,118.9	11- -59	All.5; D; WL(5-58)10
2	11dddb	600	650	Capitol Rendering Co.	1957	590R	8	Kdmc,Kdlc	S,E	B,Ind	168R	112	24	410.0	5,128	12-20-60	DL; Dr; GE; Tch115-134, 239-309, 385-422, 457-495, 519-560; WL(10-57)312
1	12aaca	4,580	990	L. Jorgensen	1945	43R	48	Qpa,Qb,Ql	T,E	Irr	80M	10.9Ry	1/4	17.4	5,150	4-10-62	A3; D; Pf12
1	12aadb	4,300	650	A. Krough.	. .	40R	48	Qpa,Qb,Ql	. .	Irr	. .	. .	. .	. .	5,139.7	. . . .	A15; D
1	12abaa	5,250	1,480	C. Jorgensen	1948	20R	12	Qpp,Qb	C,E	D,S	. .	. .	. .	. .	5,133	. . . .	Dr
1	12abaa2	4,980	1,520	. . do	1951	17R	12	Qpp,Qb	C,E	S	. .	. .	. .	. .	5,140	. . . .	Dr
1	12acda	3,020	1,550	Continental Oil Co..	1951	42R	60	Qb,Ql	T,E	Ind	300R	. .	. .	16.0	5,145.4	10-25-60	D
1	12adba	3,950	750	C. Power	1956	27R	48	Qb,Ql	C,E	S	250E	. .	. .	20	5,139	6-12-56	B27; D; DL; Pf17-27
1	12bacd	4,020	3,620	G. Amato	1940	36.5	48	Qb,Ql	T,E	Irr,Pr	. .	. .	. .	16.7	5,122	10- 5-59	D
1	12bbbb	5,150	5,240	Public Service Co. of Colo.	1955	31R	26	Qpp,Qb,Ql	T,E	Ind,E, Fire	500M	7.5	120	11	5,117.0	10- 5-55	AT; Dr

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	CJ-68-																
	12bccb	3,000	5,280	Litvak Packing Co. .	1959	804R	8	Kdmc,Kdlc	T,E	Ind,Pr	150R	270	24	248.2	5,134	11-14-60	Dr; EL; Pf231-321, 472-672; WS
1	12bdab	3,950	3,250	G. Amato	1950	26.2	48	Qb,Ql	T,E	Irr	. .	. .	. .	17.4	5,125	4-10-62	A4; WL(10-5-60)17.0
1	12bdad	3,350	2,820	A. Elliot.	1950	15.5	48	Qpp,Qb	C,E	Irr,D	250E	. .	. .	5.0	5,129	10- 5-59	A3; D
1	12bdbd	3,620	3,620	. . do	1949	25R	48	Qp,Qb	C,E	Irr,G,AC	250E	. .	. .	. .	5,125	. . . .	D
1	12bddd	2,660	2,720	J. and J. Spano . .	1943	21.0	48	Qp,Qb	C,E	Irr	. .	. .	. .	12.7	5,135	4-10-62	A3; B24; D; WL(10-5-59)10.5
1	12cbab	2,500	4,550	Packaging Corp. of America.	1957	32R	48	Qpp,Ql	T,E	Ind	925R	23	. .	10.0	5,119	12-23-59	B32; D; DL; GE; H70; Pf13-32; WS
1	12cbac	2,200	4,500	. . do	1958	32.0	48	Qpp,Ql	T,E	Ind	565R	17	. .	11	5,120	1-29-58	B34.5; D; GE; L; Pf19-34
2	12cbbc	2,180	5,000	Litvak Packing Co. .	1958	592R	8	Kdmc,Kdlc	T,E	D,Ind, B,Pr	150R	320	. .	220	5,125	3-16-58	Dr; GE; H20-16; Pf284-441, 447-507, 570-592; WS
2	12cbbc2	2,200	5,100	. . do	. .	850R	. .	Kdmc,Kdlc, Kl	T,E	Ind	25R	350	22	300	5,135	1954	B33; DL; Dr; FD; QW; Tch569-600, 620-640, 660-680, 700-720, 740-780, 800-820; U(1960); WSp
1	12cbbc3	2,200	5,080	. . do	1949	32R	48	Qpp,Ql	C,E	Ind	100R	. .	. .	13.3	5,121.0	10-27-60	D; WS
1	12cbcb	1,880	5,120	Dorffler Horse Packing Co.	1943	14R	24	Qpp	C,E	Ind	. .	. .	. .	. .	5,123.3	. . . .	
1	12ccaa	1,200	4,250	Packaging Corp. of America.	1954	32R	36	Qb,Ql	T,E	Ind	600R	. .	. .	. .	5,136.2	. . . .	By2; Dr; WS
1	12cccb	500	5,180	F. Rossi	1942	60R	48	Qb,Ql	T,E	Irr	. .	. .	. .	. .	5,132	. . . .	A16; D
1	12cccc	100	5,080	. . do	1959	30.0	48	Qb,Ql	T,E	Irr	. .	. .	. .	10.3	5,135	4-10-62	D; WL(10-5-59)12.2
2	12cdba	1,250	3,350	Packaging Corp. of America.	1952	975R	8 to 6	Kdlc,Kl	T,E	Ind,Pr	100R	20	. .	350	5,145	12-10-52	B30; Dr; L; Pf570-750, 790-830; WS
1	12cdbb	1,200	3,750	. . do	1940	19.3	48	Qb,Ql	T,E	Ind,Pr, Fire	200R	. .	. .	9.6	5,134.7	10-13-60	D; WS
2	12cdbd	900	3,500	. . do	1947	870R	8 to 5	Kdlc	S,E	Ind,B,D	100R	135	. .	415	5,145	10-13-60	Dr
1	12cdca	650	3,600	. . do	1945	20.5	48	Qb,Ql	T,E	Ind,Pr	1,100R	. .	. .	11.7	5,145	10-13-60	D; WS
1	12daac	2,300	500	Bay Petroleum Co...	1951	40R	48	Qb,Ql	T,E	Fire	300R	. .	. .	22.1	5,159.1	10-13-60	Dr; WS
1	12dabc	2,120	1,200	Continental Oil Co..	1956	45R	48	Qb,Ql	T,E	Ind	500R	. .	. .	32	5,162.5	10-11-56	D; DL; Pf32-45
2	12dabd	2,000	700	Bay Petroleum Co...	1941	688	6 to 3	Kdmc,Kdlc	S,E	Ind	20R	. .	. .	535	5,153	11- -62	Dr; GRL; WL(10-60)325; WL(1-29-57)332.2
2	12dacd	1,600	920	. . do	1951	800R	8	Kdmc,Kdlc	T,E	Ind,C	80R	. .	. .	275	5,157	1951	DL; Dr; WS
1	12dada	1,750	180	Empire Petroleum Co.	1949	47R	18	Qb,Ql	T,E	Ind,C	1,200R	. .	. .	17.7	5,150	10-25-60	Dr; U(1960)
1	12dada2	1,680	180	. . do	1955	47R	. .	Qb,Ql	T,E	Ind,C	475R	16	. .	27	5,150	2-23-55	B44; DL; Dr; Pf15
1	12dadb	1,750	400	. . do	1956	47R	18	Qb,Ql	T,E	Ind,C,B	150R	14	2	27	5,150	4-11-56	B43; Dr; GE; L; Lo30-45
1	12dadd	1,600	180	. . do	1948	48R	18	Qb,Ql	T,E	Ind,C	1,200R	. .	. .	30	5,150	7- 2-56	Dr; Pf15; WS
1	12dbad	2,220	1,620	Continental Oil Co..	1956	42R	48	Qb,Ql	T,E	Ind	500R	8	2	32	5,161.8	10-12-56	D; DL; Pf29-42
1	12dbbc	2,300	2,640	. . do	1956	31R	60	Qb	T,E	Ind	82R	. .	. .	9.8	5,140.4	10-25-60	D, Pf7
1	12dbcb	1,980	2,620	. . do	1956	23R	48	Qb	T,E	Ind	100R	. .	. .	18	5,144.1	7-26-56	D; DL; Pf16-23
2	12dbdb	1,980	1,980	. . do	1937	695R	8 to 6	Kdmc,Kdlu	T,E	Ind,B	5R	. .	. .	365	5,159.6	10-25-60	Dr
2	12dcaa	1,050	1,330	Bay Petroleum Co...	1956	1,626R	8 to 6	Klb,Kla,Kfm	T,E	Ind	875R	110	. .	.0	5,158	5- -56	B44; Dr; EL; L; Tch450; WS
2	12dcab	1,000	1,880	. . do	1958	800R	8	Kdmc,Kdlc	T,E	Ind	94R	. .	. .	. .	5,160	2-11-58	DL; Dr; Tch476-739; WS
2	12dcba	1,050	2,300	Continental Oil Co..	1958	633R	. .	Kdmc,Kdlc	. .	B,Ind,D, Irr	. .	. .	. .	150	5,158	8-11-58	DL; Dr; Tch489-633
1	12dcdb	400	1,750	Bay Petroleum Co. .	. .	46R	48	Qb,Ql	T,E	Ind	130R	. .	. .	. .	5,163	. . . .	Dr; WS
1	13aaaa	5,230	80	J. Jacobson.	. .	27.5	24	Qb,Ql	C,E	S,C,IrrL	12R	. .	. .	21.9	5,167.9	4-10-62	B28.5; WL(10-5-59)19.5
1	13aaba	4,980	800	P. Jacobson.	. .	14R	24	Qp,Qb	C,E	S,IrrL	. .	. .	. .	. .	5,163.0	. . . .	
1	13abbb	4,980	2,600	Mountain States Mixed Feed Co.	1958	47R	8	Qb,Ql	T,E	S,B	10R	1	. .	. .	5,165	. . . .	B45; Dr; L; Pf33-47
1	13acbc	3,450	2,500	J. Shockley.	1946	30.5	8	Qb,Ql	J,E	Irr	12R	. .	. .	26.9	5,175	8-24-56	

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-68-																
1	13adaa	3,650	100	Denver Dairy Co.		38R	72 to 10	Qb,Ql	J,E	N	130R				5,174.0		D; U(1958)
1	13adac	3,520	400	J. Stone		40R	48 to 36	Qb,Ql	C,E	Irr	100R			15.2	5,170	10- 5-59	D; U(1959)
1	13baaa	5,120	2,800	Mountain States Mixed Feed Co.	1951	37R	9	Qb	J,E	S	35E				5,164.1		Dr
1	13bddd	2,700	2,950	J. Perry	1936	33R	60 to 48	Qb,Ql	C,E	Irr,Ot	62M	1		24.3	5,173.2	4-10-62	A2; FD; WSp
1	13dcab	1,100	1,900	W. Bryan		31.8	48	Qb,Ql	C,E	Irr				26.4	5,171.7	8-24-56	A5; D. Destroyed in 1959
1	14abca	4,550	2,280	Denver Live Stock Feeding Co.		18R	48	Qb	C,E	S				13	5,134	9-28-59	D; WS
2	14acbc	3,500	2,520	United Fryer and Stillman	1958	616R	9	Kdmc,Kdlc	T,E	Ind	200R			416.0P	5,135	11-16-60	B33; Dr; EL; L; Tch256-616
1	14acbc2	3,400	2,480	do	1959	34R	48	Qb,Ql	T,E	Ind,C	750R	16		14	5,135	3-13-59	D; DL; Pf13-34
1	14accb	3,200	2,500	do	1949	32R	48	Qb,Ql	T,E	Ind,C				19.7	5,141.2	11-16-60	D; U(1960)
2	14adbc	3,350	1,070	Riverside Cemetery	1885	525R	4	Kdmc,Kdlc	N	N	P350R			+81	5,155	1885	Dr. Stopped flowing in Dec. 1890
1	14baac	4,620	3,200	Denver Live Stock Feeding Co.		18R	48	Qb	C,E	S				13	5,135	9-15-59	D; WS
1	14bada	4,520	2,850	do	1956	16.8	48	Qb	C,E	S,D	300R	3	2	13.7	5,135	9-28-59	D; Pf12-22; WS
1	14bbda	4,600	4,125	P. Montour	1958	40R	6	Qb,Ql		D	30R	10		15	5,136	1- 6-58	B38; DL; Dr; Pf20-32
2	14bcca	3,050	4,800	Belco Corp.	1946	700R	6 to 5	Kdmc,Kdlc	S,E	D,Ind	17R			500	5,138	6- -59	Dr
1	14bcca2	3,000	4,800	do	1955	33R	16	Qb,Ql	T,E	Ind,C	200R				5,138		Dr
1	14bccd	2,800	4,900	Western Paving and Construction Co.	1957	33R	48	Ql	T,E	Ind	150R	0	2	17.0P	5,138	11-16-60	D; GE; L; Pf16-33; WL(2-57)14
1	14bdad	3,350	2,720	V. Talarico	1946	32R	48	Qb,Ql	C,E	Irr	455R				5,138		A12; B32; D; Pf0-32
1	14bddd	2,720	2,900	City and County of Denver		19.0	48	Qb,Ql	C,E	Irr	700R			11.3	5,139.8	10- 6-59	A15; D; Pf0-19
1	14cbcL	1,700	5,100	Imperial Meat Co.	1957	26R	48	Qb,Ql	T,E	Ind,C				16.8	5,138	11-16-60	B26; D; DL; Pf11-26
1	14cbcd	1,600	4,700	J. Hoffman Packing Co.		31R	6	Qb,Ql		Ind,C	10R				5,137		D
1	14ccab	1,200	4,500	Capitol Packing Co.	1959	29R	48	Qb,Ql	N	Ind	175R			13.3	5,140	11-14-60	DL; Pg17-29
1	14ccba	1,250	4,700	do	1948	28R	48	Qb,Ql	T,E	Ind,C	250R				5,141.9		D
1	14ccba2	1,250	4,850	do	1956	32R	48	Qb,Ql	T,E	Ind,C	300R			14	5,140	6-30-56	DL; Dr; GE; Pf16-32
2	14ccba3	1,200	4,820	do	1958	616R	9	Kdmc,Kdlc	S,E	Ind	200R			397.5P	5,140	11-16-60	DL; Dr; EL; Tch294-616; WL(9-58)272. Pilot hole to 750 feet
1	14ccbc	880	5,100	Wilson Packing Co.	1947	21.0	48	Qb,Ql	C,E	Ind,C,S	200R	6		9.3	5,142.2	11-16-60	D; Pf16
1	14ccbc2	950	5,080	Plat Packing Co.		24.5	48	Qb,Ql	C,E	Ind,C	80R			15.1	5,138.0	11-16-60	D
1	14ccbc3	700	4,980	Adams Packing Co.	1951	30.R	48	Qb,Ql	C,E	Ind	105R			22	5,142.2	11-16-60	D
2	14ccdd	300	4,250	Swift & Co.	1930	1,470R	20 to 10	Klb,Kla	T,E	Ind,B,Pr	150R				5,149	1930	DL; Dr; SL. Well flowed 30 gpm at 1,310 feet and 60 gpm at 1,470 feet in 1930
1	14ccdd2	20	4,200	do		36R	18	Qb,Ql	T,E	Ind,C	100R				5,149		Dr
1	14cdab	1,270	3,170	K. & B. Packing Co.		30.0	16	Qb,Ql	N	Ind,Ot	200R			11.5	5,147	1- 4-62	Dr; GE; U(1960)
2	14cdba	1,000	3,600	do	1916	567	16 to 8	Kdmc,Kdlc	T,E	Ind,Ot	175R			510.0	5,146	1- 4-62	Dr; U(1960)
1	14cdba2	1,100	3,520	do		28R	60	Qb,Ql	T,E	Ind	100R				5,145		B34; D; DL
2	14daba	2,370	770	Riverside Cemetery	1936	608R	6	Kdmc,Kdlc	Cyl,E	D,B,G	10R			252	5,159	4- 1-53	Dr; Pf300; WL(9-36)200
1	15dcdd	150	1,320	Yorker Mfg. Co.	1955	52R	7 to 5	Qb,Ql	J,E	Ind				11	5,145	3- 1-55	Dr
1	15dcdd2	80	1,420	P. Christenson	1957	30R	6	Qb,Ql	N	IrrL				17	5,145	4-20-57	DL; Pf10
2	16dcac	950	1,800	Bowman Biscuit Co.	1959	659R	10	Kdlc	T,E	Irr,Ind,C	100R	71	24	364	5,242.0	11-15-59	Dr; EL; GE; H20; L; Pf468-653; WS
1	17acaa	3,950	1,350	D. Showalter	1960	15.6	54	Qa	N	IrrL	2E			12.9	5,335	5-16-60	D
2	17acda	3,120	1,650	Sisters of St. Francis	1956	810R	8 to 6	Kdml,Kdlc	S,E	Inst,IrrL	80R			360	5,355	9-25-56	B40; Dr; L; Pf370-393, 540-755
2	17acdc	2,750	1,850	do	1956	820R	8 to 6	Kdml,Kdlc	S,E	Irr	80R				5,365		DL; Dr; Pf380-400, 520-710

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-68-																
2	17adba	3,700	750	C. McChesney	1957	100R	8	TKdu	J,E	D	20R	2	1	7.5	5,341	12- 2-58	B15; Dr; L; Pf18-100; WL(2-57)28
1	17adcc	2,750	1,050	T. McMillan.	1957	75R	6	Qs,TKdu	J,E	D	15R	1	2	13.6	5,358.0	4-10-62	B35; Dr; L; Pf27-75; WL(12-1-58)13.0
1	18abcc	4,200	2,500	F. Coppel.	1958	12.2	15	Qpp,Qb	C,E	D	. .	. .	. .	5.4	5,240.9	12- 2-58	Dr; U(1958)
1	22aaba	5,120	800	M. Soroco.	1955	27R	6	Qb,Ql	J,E	D,IrrL	. .	. .	. .	. .	5,150	. . . .	Dr; Pf14-27
1	22aabb	5,150	1,250	E. Hamilton.	1955	25.8	6	Qb,Ql	J,E	IrrL	. .	. .	. .	12.2	5,144.8	4-10-62	DL; Dr; FD; Pf0-27; WL(8-16-56)12.4; WSp
2	23bbad	4,650	4,200	Swift & Co..	1945	1,538R	10	Klb,Kla,Kfm	T,E	Ind,B,Pr	100R	166	18	117.4	5,155	7-25-56	DL; Dr; EL; QW; SL. Flowed 25 gpm in 1945
2	23bbba	5,050	4,950	K. & B. Packing Co..	1936	650R	12 to 6	Kdmc,Kdlc	S,E	Ind,S	65R	. .	. .	150	5,144	1-26-36	B31; Dr; L
1	23bbba2	5,020	4,980	. . do	1952	30R	24	Qb,Ql	T,E	Ind,C	300R	. .	. .	. .	5,143.8	. . . .	Dr
1	23bbbb	5,100	5,000	. . do	1955	31R	18	Qb,Ql	T,E	Ind	150R	. .	. .	12	5,144	9-12-55	Dr; Pf16-31
1	23bbcd	4,080	4,880	Pepper Packing Co. .	1955	30R	48	Qb,Ql	T,E	S	. .	. .	. .	. .	5,142	. . . .	D
1	23bdac	3,700	3,100	City and County of Denver Coliseum. .	. .	43.6	. .	Qb,Ql	T,E	C,AC,Ot	. .	. .	. .	28.7	5,179.0	4-10-62	Dr
1	23bdad	3,750	3,100	. . do	. .	64R	. .	Qb,Ql	T,E	C,AC	640R	. .	. .	31.4	5,179.0	9-17-57	Dr
1	23bdba	3,750	3,310	. . do	. .	64R	. .	Qb,Ql	T,E	C,AC	640R	. .	. .	14.6	5,165.5	4-10-62	Dr; WL(9-17-57)15.8
1	23bdbd	3,450	3,310	. . do	. .	64R	. .	Qb,Ql	T,E	C,AC	640R	. .	. .	14.6	5,165.7	9-17-57	Dr; FD; WS
1	23bddd	2,850	2,850	National Food Stores Inc.	1949	38R	36	Qb,Ql	T,E	C	150R	. .	. .	. .	5,186.8	. . . .	Dr
1	23caaa	2,450	2,800	Miller's Super Markets Inc. . . .	1947	39R	36	Qb,Ql	T,E	C	225R	. .	. .	. .	5,186.4	. . . .	Dr
1	23caca	1,900	3,400	. . do	1957	68R	36	Qb,Ql	T,E	C	400R	1	72	. .	5,188	. . . .	Dr
2	23cbda	1,850	4,250	Pepsi-Cola Co. . . .	1955	747R	10 to 8	Kdmc,Kdlc	T,E	Ind,Pr	125R	265	. .	150	5,183	1- -55	DL; Dr; Pf170
1	23ccac	850	4,350	Denver Flour Mills .	1935	50R	12	Qb,Ql	T,E	Ind,Pr	60E	. .	. .	20	5,187	11-18-60	Dr
1	23dbbb	2,620	2,600	Miller's Super Markets Inc. . . .	1950	43.0	36	Qb,Ql	T,E	C	150R	. .	. .	29.0	5,186.7	11-14-60	Dr
1	24bbdd	4,220	4,200	S. Troiano	1955	47R	47	Qb,Ql	T,E	IrrL	150R	. .	3	30	5,189	4-20-55	A.5; Dr; L; Pf25-47
2	27bcdb	3,050	4,600	Chicago Burlington & Quincy Railroad. .	1937	700R	. .	Kdmc,Kdlc	T,E	Ind	250R	. .	. .	400	5,170	6-16-57	Dr; FD
2	27cadd	1,440	2,700	Silver State Laundry	1907	771R	10 to 3	Kdmc,Kdlc	T,E	Ind	120R	. .	. .	393	5,190	1956	DL; Dr; FD; WSp
2	27cbba	2,600	4,750	Chicago Burlington & Quincy Railroad. .	. . .	700R	20	Kdmc,Kdlc	T,E	Ind	160R	. .	. .	400	5,173	6-14-55	Dr; FD; WSp
2	27dcdd	320	1,450	Ideal Laundry. . . .	1926	800R	12 to 6	Kdmc,Kdlc	T,E	Ind	100R	. .	. .	400	5,205	6-12-57	B52; Dr; L; Pf115; T55; WL(1926)23; WL(8-55)345
2	27ddcb	550	1,120	. . do	1910	400R	. .	Kdmc	Cyl,E	N	10R	. .	. .	. .	5,203	. . . .	Original depth 735 feet; caved in 1940
1	28dcba	1,000	2,200	C. Wright.	1955	42.9	8	Qb,Ql	C,E	Sani	. .	. .	. .	18.8	5,178.2	8-17-56	Dr
1	28dccb	450	2,600	Denver Water Board .	1955	45.0	6	Qb,Ql	T,G	TW	40M	7.1	4	18.5	5,182.1	1-15-55	AT; DL
1	31acaa	3,830	1,600	J. Garramone	1957	58R	6 to 4	Qs,TKdu	J,E	D,IrrL	5R	. .	. .	7.4	5,324.5	4- 9-62	B40; Dr; L; Pf40-58; WL(3-57)20; WL(12-3-58)7.4
1	33aacd	3,970	900	Monarch Foods. . . .	1955	35R	24	Qb,Ql	T,E	Ind	100R	3	140	21.7	5,185	12-14-60	D
1	33aadc	4,050	450	Oxford Hotel	. . .	31.0	12	Qb,Ql	C,E	AC	50R	. .	. .	21.5	5,188	4-20-62	Dr; WL(12-14-60)22.3
1	33aadd	4,060	270	. . do	1940	35R	12 to 10	Qb,Ql	C,E	AC,C	40R	. .	. .	24.5	5,189	12-14-60	Dr
1	33adba	3,860	940	Monarch Foods. . . .	1955	40.0	36	Qb,Ql	T,E	C	. .	. .	. .	21.0	5,185	12-14-60	Dr; U(1960)
1	33adbb	3,920	1,050	. . do	1955	36.0	24	Qb,Ql	T,E	Pr	75E	. .	. .	20.2	5,185	4-19-62	Dr; WL(12-14-60)20.8
2	33bccc	2,800	4,980	Colorado & Southern Railroad	1931	702R	10 to 8	Kdmc,Kdlc	T,E	Ind	450R	. .	. .	500	5,185	6-19-57	B15; Dr; L
2	33caca	1,950	3,360	Denver Flour Mills .	1883	387R	5	Kdmc	. .	Ind,B	. .	. .	. .	12	5,189	12- 1890	Flowed in 1883; destroyed in 1952
1	33cadb	1,850	3,220	. . do	1953	40R	48	Ql	T,E	Ind,C	550R	. .	. .	15	5,189	1957	D; L
2	33cadb2	1,880	3,220	. . do	1952	730R	8 to 6	Kdmc,Kdlc	T,E	Ind,B	25R	50	. .	300	5,189	1- 8-52	Dr; WS
1	33cadb3	1,700	3,230	. . do	1958	40R	30	Ql	T,E	Ind,B	600R	15	. .	17.0	5,189	11- 3-58	DL; Dr; GE; Pf20-40
2	33dbcb	1,960	2,440	Tivoli Brewing Co. .	1942	1,400R	8 to 6	Klu,Klb,Kla	T,E	B	40E	. .	. .	210	5,191	1957	Dr
2	33dbcb2	1,840	2,400	. . do	1883	354R	4	Kdmc	N	Ind	F50R	. .	. .	+27	5,191	9- 1883	Dr; WL(1889)+3; WL(1896)6. Destroyed in 1940
1	33dbcb3	1,850	2,500	. . do	1900	22.2	96	Ql	C,E	Ind,C	100E	. .	. .	20.3	5,191	4-20-62	D; Re; WL(12-14-60)20.3

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-68-																
2	34aaaa	5,230	150	Deep Rock Water Co..	1935	801R	8 to 3	Kdmc,Kdlc	T,E	Com	50R	. .	. .	250	5,226	1935	DL; Dr; WS
2	34aaaa2	5,280	140	. . do	1895	750R	. .	Kdmc,Kdlc	N	N	31R	. .	. .	. .	5,226	. . . .	Dr; WS. Destroyed in 1935
1	34bccd	2,860	4,920	Federal Reserve Bank of Kansas.	1940	39.9	24	Qb,Ql	T,E	AC	150R	2	. .	25.6	5,211	10-23-59	B39.9; Dr; Pf15.5-25.5; Re
2	34bccd2	2,930	4,930	Tower Merchandise Mart	1884	669R	6	Kdmc,Kdlc	T,E	Ind,B	28R	. .	. .	318.6	5,210	11-17-60	Dr; WL(1884)+84; WL(1896)-50
1	34bccd3	2,960	4,800	Federal Reserve Bank of Kansas.	1955	47R	24	Qb,Ql	T,E	AC,E	750R	10	. .	25.8	5,212	4-19-62	B44; Dr; GE; H60; L; Lo32-47; WL(10-23-60) 26.5. Log from adjacent core hole
2	34bdda	3,100	2,950	New Customs House. .	1928	700R	. .	Kdmc,Kdlc	N	N	60R	. .	. .	. .	5,221	. . . .	Flowed until 1929
2	34caba	2,350	3,620	Albany Hotel.. . . .	1885	720R	6	Kdmc,Kdlc	T,E	AC,D,B	250R	. .	. .	150	5,222	1904	Dr; OH(700-720); OW; WL(1885)+50; WL(1893) 90; WL(1899)120. Flowed 35 gpm in 1885, stopped flowing in 1887
2	34cabc	2,170	3,880	Equitable Bldg. . .	1890	610R	6 to 3	Kdmc,Kdlc	S,E	AC	55R	. .	. .	50	5,222	1890	B34; Dr; L; WL(1893)100; WL(1902)140
2	34cacd	1,540	3,450	Kittridge Bldg. . .	1889	695R	6	Kdmc,Kdlc	N	N	2R	. .	. .	20	5,226	12 -1890	Dr; U(1945-62); WL(1924)270
1	34cadd	1,530	2,650	Brown Palace Hotel . .		40R	36	Qb,Ql	T,E	AC,C	100R	5	. .	31.5P	5,228	11-15-60	Dr
2	34cadd2	1,550	2,690	. . do	1937	700R	8 to 6	Kdmc,Kdlc	T,E	D,B,AC	125R	. .	. .	400	5,228	11-15-60	Dr
2	34cadd3	1,330	2,650	. . do	1937	700R	8 to 6	Kdmc,Kdlc	S,E	D,AC	75R	. .	. .	398.3	5,229	11-15-60	Dr; WS
2	34cbba	2,500	4,700	Tabor Bldg.	1883	390R	4	Kdmc	A	N	F50R	. .	. .	+83	5,214	1883	Dr; U(1900-60); WL(1896) 12
2	34cbba2	2,500	4,700	. . do	1902	734R	. .	Kdmc	Cyl,E	N	. .	. .	. .	150	5,215	1902	Dr; WS. Used until July 1946
2	34cbcb	1,930	4,970	Public Service Co. of Colo.	1910	749	10 to 4	Kdmc,Kdlc	A	AC,D	38R	. .	. .	300	5,216	12- 4-59	B38; Dr; L; WL(1910)210; WL(1947)315
2	34cbda	1,700	4,220	Denver Dry Goods Co.	1906	723R	8 to 4	Kdmc,Kdlc	A	N	100R	. .	. .	342.6	5,222	11-16-60	DL; Dr; Pf380-723; U(1949-60); WL(1933) 285
1	34cdad	700	2,880	Webb and Knapp . . .	1956	62.5	24	Qb,Ql	T,N	Dr	75R	. .	. .	42	5,234	8-28-56	B61; L; Dr
2	34cdda	400	2,700	Petroleum Club . . .	1955	1,615R	12 to 6	Klb,Kla,Kfm	N	N,Ot	155R	234	36	212.2	5,237	4- 2-62	Dr; EL; L; Pf1,472-1,582
1	34cdda2	430	2,710	. . do	1955	35R	24	Qb,Ql	N	N,Ot	. .	. .	. .	33.8	5,237	4- 2-62	Dr; GE
1	34dbcd	1,350	2,100	Denver National Bank	1960	73R	. .	Qp,Qb,Ql	. .	TW	40R	16	. .	45.6	5,250	9-30-60	
2	34dcbc	880	2,400	Shirley Savoy Hotel.	1911	700R	4	Kdmc,Kdlc	A	D,B	40R	. .	. .	387.8	5,238	11-15-60	Dr; U(1959-60); WL(1933) 297. Yielded 65 gpm when drilled
2	35acbb	3,700	2,400	F. Harris.	1956	816R	8 to 6	Kdmc,Kdlc	N	D	B20R	10	. .	420	5,270	10-20-56	B69; Dr; EL; L
2	35acdc	2,800	1,980	Presbyterian Hospital	1926	800R	12 to 5	Kdmc,Kdlc	S,E	Hosp	92R	. .	. .	350P	5,285	5-31-57	Dr; FD; L; Pf398-410, 532-544, 579-728; WSp
2	35bccc	2,700	5,080	Buehler Transfer Co.	1929	765R	10 to 4	Kdmc,Kdlc	N	N	. .	. .	. .	276	5,257	1929	L; Pf450-755. Plugged
2	35bccc2	2,700	5,100	. . do	1936	765R	6 to 5	Kdmc,Kdlc	N	N	. .	112	. .	282	5,250	1937	B48; DL; Pf120. Plugged
	C3-69-																
2	1aaaa	5,025	220	Shoenberg Farms. . .	1959	520R	9	Kdlc	S,E	D	B65R	47	. .	290	5,331	2- 2-59	DL; Dr; EL; Tch280-520; WL(6-61)274. Pilot hole to 599 feet
2	1adbd	3,350	850	R. Westcott.	1956	610R	. .	Kdlc	Cyl,E	D,S,IrrL	4R	. .	. .	264	5,304	11-28-56	Dr; EL
2	1dcad	850	1,430	City of Arvada . . .	1959	696R	9	Kdlc	T,E	PS	68M	156.0	. .	550.0P	5,418	10- 6-60	Dr; EL; H16; L; Tch396-696; WL(2-19-59)394
2	2bcad	3,440	3,970	J. Smith	1956	543R	6	Kdlc	T,N	Irr	75R	. .	. .	412	5,534	1956	Dr; U(1959-62)
2	2bddd	2,810	2,870	. . do	1956	1,100R	8	Klu,Klb	T,E	D,S	. .	. .	. .	. .	5,480	. . . .	Dr; U(1959-62)
1	2bddd2	2,750	2,800	. . do	1954	21.5	36	Qs	J,E	S,IrrL	7E	. .	. .	8.4	5,479	3-16-62	D
1	2bddd3	2,670	2,950	. . do	1954	28.0	60	Qs	N	. .	. .	. .	. .	8.6	5,480	3-16-62	D; U(1959-62)

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-69-																
2	2ddab	1,230	330	City of Arvada	1960	676R	9	Kdlc	T,E	PS	136M	203	. .	553.0P	5,409	10- 6-60	DL; Dr; Tch300-675; WL(6-28-60)350
2	3adcb	3,220	1,250	. . do	1953	800R	8 to 6	Kdlc,Klu	S,E	PS	60M	103	48	496.5	5,631	6- 6-57	DL; Dr; EL; FD; Pf375-380, 425-525, 545-655, 675-680, 745-765, 785-791; WL(7-53)300
2	3adcb2	3,250	1,250	. . do	1955	1,740R	10 to 6	Klb,Kla,Kfm	S,E	PS	45R	550	. .	330.9	5,631	1-24-57	DL; Dr; EL; FD; GRL; WL(9-55)100; WS; WSR
1	3bbbb	5,200	5,140	R. Malara.	1958	52R	6	Qs	J,E	D	30R	22	. .	6.4	5,536.4	4-10-62	B20; Dr; L; Pf10-52; WL(10-29-58)4.6
2	3dcbd	850	2,080	City of Arvada . . .	1957	647R	6	Kdl	S,E	PS	69M	. .	. .	370	5,486	2- 2-57	DL; Dr; EL; Tch296-647
1	4acbb	3,750	2,450	G. Johnson	1956	32R	6	Qpp,Qb	J,E	D,G	40R	9	1	3	5,421.3	2-23-56	B28; DL; Dr; Pf6-32
2	5cbba	2,450	4,800	A. Buerger	1955	285R	6	Kdmc	S,E	D	15E	. .	. .	185.1	5,535	8-12-58	Dr; FD
2	6cbab	2,550	4,400	E. Kistler	1935	1,220R	10 to 6	Klb,Kla,Kfm	S,E	D	50R	. .	. .	57	5,545	8- 4-35	B10; Dr; L; WS
2	6cbbc	2,200	5,000	G. Herring	1957	431	8 to 4	Kdmc,Kdlc	S,E	. .	B18R	20	. .	27.8	5,550	6- 7-57	DL; Dr; EL; Pf88-431
2	7baad	4,870	2,780	E. Lewis	1957	95.6	6	Kdl	J,E	D,S	6R	51	. .	24.0	5,565	8-25-58	B51; Dr; FD; L; Pf34-95
2	7bddd	2,900	2,900	Farmer's Highline Canal.	. .	9,446R	. .	. .	N	N	. .	. .	. .	1.8	5,544	11-23-56	DL; Dr; EL; L
2	7cbdd	1,550	4,200	Car-O-Mor Heights. .	1957	497	. .	Kdl	N	PS	. .	. .	. .	149.1	5,595	11-21-60	DL; Dr; EL; U(1960)
2	7dbcb	1,690	2,480	C. Weber	1957	430R	6 to 4	Kdl	Cyl,E	D,IrrL	8R	22	2	265	5,575	2-26-57	DL; Dr; FD; Pf295-358
2	8bbbb	5,120	5,240	L. Newman.	1955	260R	6	Kdl	J,E	D	8E	. .	. .	33	5,549	8-12-58	B20; Dr; FD; L
2	8caaa	2,430	2,860	F. Schiemann	1955	352R	6 to 4	Kdl	S,E	D,IrrL	30R	. .	. .	221.8	5,490	8-15-58	DL; Dr; FD; Pf300-352
1	8cdcd	100	3,600	J. Price	. .	26.5	24	Qp	T,G	Irr	100R	18	2	7.1	5,445.5	8-27-59	A3.5; B22; Dr; L; Pf9-21
2	8dbbb	2,380	2,490	T. Roberts	1954	350R	6 to 4	Kdl	S,E	D,IrrL	B15R	70	4	32.4	5,485	8-12-58	DL; Dr; Pf290-350
2	8dbdd	1,480	1,400	A. Strerke	1956	375R	6 to 4	Kdl	S,E	Dy,D,S, IrrL	18R	. .	. .	235	5,448	3-22-56	DL; Dr; Pf290-365
1	8dcbb	1,100	2,600	H. Taylor.	1958	80R	5	Qs,Kdl	J,E	D	30R	0	. .	24	5,459.7	10- 9-58	B24; Dr; L; Pf22-80
1	10dacb	1,750	1,000	W. Geddes.	1956	50R	6 to 5	Qs,Kdl	J,E	D	20R	24	1-1/2	17.4	5,352.4	4- 9-62	B23; Dr; L; Pf10-50; WL(11-14-58)17.1
1	10dbbc	2,030	2,520	City of Arvada . . .	. .	25R	96	Qpp	T,E	Irr	250E	. .	. .	15	5,340	12-15-60	A8; D; GE; Gy300+
2	11bbad	4,830	4,200	. . do	1956	822R	8	Kdmc,Kdlc, Klu	T,E	PS	127M	. .	. .	490.0P	5,442	10- 6-60	Dr. Inclination survey
2	11bdbd	3,400	3,500	. . do	. .	484R	6	Kdlc	S,E	PS	125R	80	. .	362.0P	5,348	10- 6-60	Dr; WL(10-60)282
1	11caac	2,030	3,020	K. Goetz	1956	25R	6	Qpp	J,E	D,IrrL	5R	2	1	7.9	5,320	11-12-58	DL; Dr; Tch15-25
1	11ccaa	1,050	4,150	C. Roten	1956	32R	6	Qs,Kdmc	J,E	D,IrrL	40R	6	2	11.9	5,344.4	11-10-58	B12; DL; Dr; Pf20-32
1	11ccad	750	4,150	N. Skinner	1958	32R	6	Qs,TKdu	J,E	D,IrrL	20R	3	. .	16	5,344.9	4- 5-58	B5; Dr; L; Pf20-32
1	11cdba	1,200	3,330	M. Masters	1956	32R	6	Qs,Kdmc	N	D,IrrL	50R	4	2	15.7	5,338.9	4- 9-62	B10; DL; Dr; Pf20-32; WL(12-22-58)14.4
2	11cddd	50	2,850	City of Arvada . . .	1923	425R	8 to 6	Kdlc	T,E	PS	66M	. .	. .	203	5,340	1933	Dr; WL(1947)204; WS
2	11dcad	760	1,460	. . do	1948	615R	6	Kdlc	T,E	PS	204M	46	12	245	5,300	11- -48	DL; Dr; EL; Pf310-355, 375-438, 484-525; WS
1	12dabb	2,440	1,250	M. Smee.	1955	60R	6	Qs	J,E	IrrL	7R	. .	. .	12	5,394	1959	QW
2	12dbda	1,940	1,600	City of Arvada . . .	1958	616R	9	Kdlc	T,E	PS	200M	. .	. .	275	5,290	5-28-58	B28; Dr; EL; L; Tch275-616
1	12dcbb	1,150	2,500	J. Pachello.	. .	11.0	. .	Qpp,Qb	Pch,H	D	. .	. .	. .	7.2	5,274.4	11-29-57	D; FD
1	12dcdc	170	1,900	Shields and Paulley.	1956	21R	6	Qpp,Ql	J,E	D,Com	50R	6	2	6.5	5,265.8	10-22-58	B20; Dr; L; Pf12-21
1	13abcc	4,100	2,450	R. Doas.	1957	22R	8	Qpp,Qb,Ql	J,E	PS,IrrL	22R	13	2	4.4	5,267.2	11- 3-58	B21; DL; Dr; Pf14-22
2	13adab	3,650	580	Simmons and Brooks .	1956	596	8 to 6	Kdlc	S,E	PS	B35R	45	. .	308.0	5,265	11- 6-59	B21; Dr; EL; L; Tch190
2	13addc	2,950	600	. . do	1958	527R	8	Kdlc	T,E	PS	B30R	12	. .	309.8	5,268	11- 6-59	DL; Dr; H9-7; Tch402-527
1	13babb	5,100	3,750	J. Joseph.	. .	20R	. .	Qpp,Qb,Ql	J,E	G	50R	12	. .	4.3	5,274..	9- 8-59	DL; Dr
1	13bbcc	4,180	5,100	T. Jefferys.	. .	21R	6	Qpp,Qb,Ql	. .	IrrL	45R	6	1-1/2	6	5,285	4-21-56	B21; DL; Dr
2	13bdac	3,600	3,000	Sigman Meat Co. . . .	. .	. .	. .	Kdl	T,E	Ind,Pr,E	85R	. .	. .	. .	5,272	. . . .	Dr
2	13bdad	3,400	2,680	. . do	1958	655R	6	Kdl	S,E	Ind,Pr	85R	165	. .	285	5,270	9-19-58	DL; Dr; Pf390-635
2	13bdbd	3,600	3,450	. . do	1960	. .	. .	Kdl	. .	Ind,Pr	85R	. .	. .	. .	5,280	. . . .	Dr
1	13cbaa	2,500	4,200	S. Spano	. .	7.4	24 to 12	Qpp	. .	D,Ot	. .	. .	. .	5.3	5,283.0	4- 9-62	D
2	13dbbb	2,430	2,640	City of Arvada . . .	1955	645R	10 to 8	Kdlc	T,E	PS	145M	65	. .	270	5,275	2-25-59	Dr
1	14aadd	4,200	130	A. Warner.	1956	21R	6	Qpp,Ql	J,E	IrrL,Ot	45R	6	2	5.2	5,284.8	4- 9-62	B21; DL; Dr; Pf11-19
1	14abdb	4,320	1,850	E. Jones	1956	8.0	48	Qpp	C,N	IrrL	12R	. .	. .	4.8	5,297.0	10-27-58	DL; Dr; Pf4-8

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-69-																
1	14accb	3,150	2,500	A. Swanstrom	1958	18R	6	Qpp,Ql	J,E	D,Com	11R	10	. .	6	5,304.6	3-31-58	Dr; L; Pf12-18
1	14accb2	3,150	2,470	A. Spallone.	1958	34R	7	Qpp,Ql	. .	D	30R	. .	. .	. .	5,305	. . . .	B29; DL; Dr; Pf17-27
1	14accc	2,700	2,350	W. Lee	1956	23R	6	Qpp,Ql	J,E	D,Com	20	1	2	9.3	5,305	7-25-56	B22; DL; Dr; GE; Pf14-23
1	14baad	4,630	2,840	H. Warner.	1956	21R	6	Qp,Ql	J,E	Ind	50R	6	2	4.7	5,301.8	10-22-58	B20; DL; Dr; Pf11-20; WL(6-56)4
2	14baba	4,980	3,500	City of Arvada . . .	1943	399R	5	Kdmc	. .	PS	. .	. .	. .	255	5,340	3- 6-54	Destroyed in 1960, inadequate
2	14baba2	5,000	3,460	. . do	1943	360R	6 to 5	Kdmc	T,E	PS	. .	. .	. .	270	5,334	. . . .	U(1960). Inadequate
2	14babd	4,950	3,500	. . do	1959	616	9	Kdlc,Kl	T,E	PS	124M	. .	. .	570.0P	5,331	10- 6-60	B26, Dr; EL; L; Tch301-608; WL(5-29)250; WL(10-60)280
1	14bbcb	4,480	5,130	R. Bailey.	1957	22.6	36 to 18	Qs	J,E	G	15R	. .	. .	14.0	5,353.5	10-24-58	B24; DD; DL; Pf7
1	14bccb	3,050	5,220	D. Tourney	1955	13.3	36	Qpp	C,E	Irr	20M	. .	. .	11.9P	5,321.8	8-27-59	A1; D
1	14bdcd	2,740	3,550	A. Burd.	1956	28R	6	Qpp,Ql	J,E	D	10R	4	1	5.6	5,310.0	10-22-58	B28; DL; Dr; GE; Pf14-23
1	14caab	2,550	3,100	T. Bovis	1956	20R	5	Qpp,Ql	. .	D	50R	10	2	4	5,307.8	9- 1-56	B19; DL; Dr; Pf12-19
1	14cadc	1,580	3,200	P. Terry	1956	21R	6	Qpp,Ql	J,E	D	30R	10	2	4	5,309.3	8-28-56	B18; DL; Dr; Pf12-21
1	14cadd	1,620	2,720	Standard Oil Co. . .	1958	22R	6	Qpp,Ql	J,E	D,Com	30R	7	. .	5	5,309.0	7-10-58	B19; DL; Dr; Pf12-22
1	14cbba	2,500	4,680	A. Peterson.	1958	22R	6	Qpp,Ql	J,E	D	30R	7	. .	6	5,319	4-15-58	B21; DL; Dr; Pf11-22
1	14cbca	1,900	4,750	A. Stout	1957	19R	6	Qpp,Ql	J,E	D	12R	3	2	6	5,319.4	5- 2-57	DL; Dr; Pf13-19
1	14cbdb	1,730	4,300	L. Cramer.	1956	22R	48 to 6	Qpp,Ql	J,E	D,IrrL	36R	12	8	6.7	5,316.4	10-23-58	DL; Dr; Pf12-22
1	14cdcc	150	3,800	J. Miller.	. .	8.5	18 to 24	Qpp,Ql	C,E	D,IrrL,Ot	. .	. .	. .	6.3	5,312.2	4- 9-62	D; FD
1	14dabc	2,000	1,100	S. Spano	1957	25R	6	Qpp,Ql	N	D	30R	6	2	6	5,296.4	2-23-57	B22; DL; Dr; Pf10-25
2	14dacc	1,390	1,180	City of Arvada . . .	1955	633	10 to 8	Kdlc	T,E	PS	143M	. .	. .	250	5,300	10- 5-60	EL
1	15aaab	5,060	640	J. Smith	1956	30R	6	Qp,Qs	J,E	D,IrrL	20R	7	2	18.3	5,362.6	10-24-58	B30; DL; Dr; Pf18-30
1	15abcd	4,150	2,000	J. Barns	. .	25R	6	Qp,Qs	J,E	D,IrrL	. .	. .	. .	17.3	5,371.6	11- 5-58	DL; Dr
1	15abdb	4,380	1,780	F. Maugle.	. .	29R	. .	Qp	J,E	D	20R	. .	. .	. .	5,370.5	. . . .	DL; Dr
1	15adcd	2,780	750	R. Goetz	1957	29R	6	Qp,Qs	J,E	D,IrrL	5R	3	. .	8.3	5,327.3	11- 3-58	B29; DL; Dr; Tch10-20
1	15adda	3,100	150	I. Wren.	1956	16.5	6	Qpp	P,E	Irr	45R	12	2	8.7	5,323.0	8-27-59	A1.25; B21; DL; Dr; GE; Su; WL(7-24-56)5.7
2	15addd	2,900	150	City of Arvada . . .	1942	550R	8	Kdlc	T,E	PS	134M	165	. .	250	5,324	1942	Dr; WL(1949)350; WS; WSr
2	15addd2	2,900	200	. . do	1951	1,558R	10	Klu,Klb, Kla,Kfm	N	PS,Ot	125M	. .	. .	142.7	5,324	4- 9-62	Dr; EL; L; PP; U(1958-62); WS
2	15addd3	2,900	170	. . do	1946	150R	. .	Kdmc	T,E	PS	80M	. .	. .	. .	5,324	. . . .	Dr
2	15addd4	2,900	200	. . do	1947	600R	10	Kdmc,Kdlc	N	PS	190R	110	24	245	5,290	8- -47	Dr; EL; Pf210-415; OH(415-600); U(1960)
2	15bbaa	5,080	3,980	. . do	1946	618R	10	Kdlc	T,E	PS	90M	. .	. .	.	5,430	. . . .	Dr; L; WS. Pilot hole to 835 feet
2	15ccaa	1,040	4,080	. . do	1955	606R	10 to 8	Kdlc	T,E	PS	64M	300	. .	300	5,352	10- 6-60	DL; Dr; EL
1	15dabb	2,450	950	M. Santerano	. .	24R	. .	Qpp,Ql	. .	. .	40R	. .	. .	. .	5,330	. . . .	DL; Dr
1	15daca	1,830	820	J. Piper	1956	14R	6	Qpp,Ql	C,E	D	20R	6	2	5.0	5,329	7-24-56	DL; Dr; GE; Pf6-14
1	15dada	1,700	120	O. Cody.	1955	25.6	6	Qpp	J,E	PS	30R	. .	. .	6.6	5,322.2	10-23-58	B27; DL; Dr; Pf15-28; WL(7-25-56)606
1	15dbbc	2,050	2,500	W. Bluemel	. .	10.4	48	Qpp	N	Irr,Ot	35M	1.7	1-1/2	7.8	5,338.3	4- 9-62	AT; D
1	15dbcd	1,350	2,180	G. Burghardt	1959	25R	6	Qpp,Ql	J,E	IrrL	50R	4	. .	6.4	5,339.1	8-28-59	Dr; L; Pf14-24
1	16cadb	1,800	3,150	P. Poas.	1956	24R	6	Qpp,Qb,Ql	J,E	D	20R	6	1	9.6	5,427.1	11-12-58	B20; DL; Dr; Pf10-24; WL(8-56)9
1	16ccca	500	4,650	A. Young	. .	26.0	6	Qpp,Ql	N	Irr,Ot	43M	10.3	1-1/2	6.6	5,393.8	4- 9-62	AT; Dr
2	16daad	2,300	140	Ridge Home and Training School. .	1937	1,403R	8	Klb,Kla,Kfm	T,E	Irr,E,B	65E	. .	. .	420	5,390	10-23-61	A3; T72. Flowed in 1937
1	16dada	1,970	150	. . do	. .	. .	. .	Qpp,Ql	C,E	Irr	F500E	. .	. .	. .	5,370	10-23-61	A12
1	16ddaa	1,100	200	C. Millard	1956	25R	6 to 5	Qpp,Ql	J,E	D	12R	7	4	3.4	5,362.6	10-31-58	B17; Dr; L
1	16ddcb	650	1,300	J. James	.	9.0	14	Qpp	C,E	IrrL,Ot	. .	. .	. .	6.1	5,371.2	4- 9-62	Dr
1	17addc	2,740	420	G. Reiss	1958	53R	6	Qs,TKdu	J,E	D,IrrL	20R	25	. .	19.1	5,475	8-20-58	B8; Dr; FD; L; Pf23-53
1	17bccc	2,830	5,170	R. Young	1957	80R	6	Qs,Kdmc	J,E	D	10R	40	. .	13.3	5,225.3	4- 9-62	B15; DL; Dr; FD; GE; Pf15-20, 68-73; WL(4-29-58)12.5; WSp
1	17cbaa	2,500	4,020	W. Brocklund.	1956	72R	6	Qs	C,E	D,IrrL	84R	27	3	3.4	5,513.2	8-23-58	B21; DL; Dr; FD; Pf12-50

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-69-																
1	18acdc	2,670	1,770	Collier and Mountain Realty Co.	1956	45R	24	Qs	C,E	. .	20R	0	2	14.1	5,543.8	8-25-58	B22; Dr; FD; L; Pf10-29
2	18baca	4,600	3,420	W. Williams	1955	100R	5	Kdmc	S,E	D,IrrL	13R	. .	. .	27.4	5,545	4- 9-62	Dr; WL(8-15-58)27.6
2	18bacc	4,280	3,800	B. Blair	1957	125R	6	Kdmc	J,E	D	10E	. .	. .	46.4	5,555	8-15-58	DL; Dr; Pf4-125
2	18badd	4,100	2,900	F. Koopman	1952	130R	4	Kdmc	J,E	D	1E	. .	. .	75.5	5,585	10-30-56	Dr; WS
2	18bcaa	3,700	4,050	H. Maddox	1956	450	4	Kdlc	S,E	D	7R	. .	. .	284.1	5,570	10- 8-59	Dr; EL; Tch254-277, 301-380
1	18bcca	3,100	4,700	C. Clark	1957	46R	6	Qs,Ql	J,E	D,IrrL	24R	4	2	4	5,562	5-28-57	B18; DL; Dr; Pf36-46
1	18cacd	1,550	3,400	S. Thompson	1959	14R	24	Qb,Ql	N	D,IrrL	. .	. .	. .	5.5	5,541	8-18-59	B14; D; DL
1	18cccc	180	5,000	E. Johann	1956	32R	6	Qs,TKdu	J,E	D,IrrL	B40R	5	2	8	5,560	3- 2-56	B17; Dr; L; Pf15-30
2	18cddb	500	3,280	H. Poertner	1957	520R	6 to 4	Kdlc	S,E	D	25R	. .	. .	271.6	5,535	8-20-58	B25; Dr; FD; L; Pf360-450
1	18dbaa	2,350	1,350	G. Conzett	1956	35R	24	Qb,Ql	J,E	D,IrrL	4R	. .	. .	12.3	5,535	8-18-59	B18; Dr; FD; L; Pf14-31
1	19baab	5,100	3,050	L. Hutchens	1955	31R	6	Ql	. .	D,IrrL	25R	4	1-1/2	14	5,524	4-16-55	B28; DL; Dr; Pf14-31
1	19bdbc	3,350	3,900	D. Trexler	1956	32R	6	Ql	J,E	D,IrrL	50R	5	2	6	5,528	9-18-56	B28; DL; Dr; Pf15-30
2	19caaa	2,400	2,850	Mobile Concrete Inc.	1960	466R	9 to 6	Kdlc	S,E	Ind	30R	20	. .	169.0	5,515	11-21-60	B28; DL; Dr; Pf280-466
2	19ddcb	600	1,300	Knowles	. .	3,000R	. .	. .	. .	Oil	. .	. .	. .	. .	5,520	. . . .	DL; L
1	20aaab	5,150	550	L. Pantano	. .	8.5	48	Qp,Qb	C,G	Irr	100E	. .	. .	4.9	5,404	8-20-59	A4.5; D
1	20aaad	4,650	100	Valley Water District	1957	36R	18	Qpp,Qb,Ql	T,E	PS	210R	28	. .	4	5,401.6	8-21-57	B36.5; DL; Dr; GE; Pf10-36; WS
1	20aadb	4,580	420	. . do.	1957	34.5	18	Qpp,Qb,Ql	T,E	PS	160R	25	. .	4	5,403.7	11- 5-57	B34.5; DL; Dr; GE; Pf10-34; WS
1	20acac	3,450	1,800	C. Welan	. .	10.8	48	Qpp,Qb	C,G	Irr	. .	. .	. .	3.9	5,418.7	8-27-59	D; Su
1	20acca	3,080	2,050	G. Jensen	1955	32R	6	Qpp,Qb,Ql	J,E	D,G	30R	14	1/2	8	5,421.6	1-29-55	B30; Dr; L; Pf24-32
1	20accd	2,780	2,280	C. Fleharty	1956	37.2	6	Qpp,Qb,Ql	C,E	D	B20R	11	2	6.2	5,425	7-24-56	DL; Dr; Pf30-34
1	20acda	3,100	1,400	G. Winslow	1959	25R	6	Qpp,Qb,Ql	J,E	D	40R	16	. .	7	5,415	3- 6-59	B24; DL; Dr; Pf15-25
2	20badc	4,280	3,240	E. Purnell	1953	130R	6 to 4	Kdmc	Cyl,E	D	2R	. .	. .	40	5,440	6-14-53	DL; Dr
1	20cbad	2,180	4,180	Jefferson County	. .	17.5	36	Qpp,Qb	N	Irr	. .	. .	. .	12.0	5,440.0	4- 9-62	D; WL(8-26-59)8.0
1	20ccab	1,020	4,400	. . do.	1959	50R	6	Qpp,Qb,Ql TKdu	J,E	S	30R	24	. .	9	5,443.1	3-18-59	B40; DL; Dr; Pf40-50
1	20ccbb	1,100	5,050	Asphalt Paving Co.	1957	32R	6	Qb,Ql	. .	Ind,B	20R	0	1	16	5,450	2-18-57	B31; DL; Dr; Pf22-32
1	20cdba	1,220	3,550	Jefferson County Transit Mix	1955	40R	6	Qb,Ql	. .	Ind	30R	4	2	24	5,436.9	3-21-55	B38; DL; Dr; Pf30-40
1	21abbd	4,700	2,120	R. Dyer	1956	21R	6	Qpp,Qb	J,E	D	B15R	8	2	9	5,379	2-27-56	DL; Dr; Pf15-24
1	21abcc	4,250	2,360	E. Sorensen	1956	32R	6	Qpp,Qb,Ql	J,E	D	20R	6	1	6	5,380.5	5-29-56	B30; Dr; L; Pf20-32
1	21abcc2	4,080	2,580	M. Clime	1958	28R	6	Qpp,Qb,Ql	J,E	D	25R	14	. .	8	5,382.7	6-30-58	B26; DL; Dr; Pf17-27
1	21abda	4,400	1,450	K.Rehfeld	1957	29R	6	Qpp,Qb,Ql	J,E	D	15R	. .	. .	20	5,380.0	11- 5-57	B28; DL; Dr; Pf19-28; WL(9-57)20
2	21accc	2,650	2,450	Valley Water District	1957	596R	20 to 6	Kdlc,Kl	S,E	PS	65R	259	24	282	5,381	8-13-57	B10; Dr; GE; H20-13; L; Tch271-596; WS
1	21ccca	550	4,920	L. Fletcher	1958	120R	6 to 4	Qp,Qs,Kdmc	J,E	D	B8R	14	. .	8.5	5,435	8-20-58	B38; DL; Dr; FD; Pf20-21, 25-26, 30-31, 70-80, 105-120
2	21cccd	250	4,900	H. Whitlock	1956	75R	6 to 5	Kdmc	J,E	D	B6R	15	. .	55	5,425	3-30-56	B25; DL; Dr
1	21cdad	900	2,960	Empire Development Co.	1956	42R	. .	Qp,Qs	J,E	D	6R	20	2	10	5,400.9	6-26-56	B35; DL; Dr; Pf13-29
1	21cddd	150	2,700	R. Shepard	1956	40R	6 to 5	Qp,Qs	J,E	D	14R	. .	. .	8.4	5,396.6	10-27-58	B35; Dr; L; Pf24-35
1	21daac	2,000	400	J. McMillan	. .	7.3	4	Qc,Qp	C,E	S,Ot	. .	. .	. .	4.9	5,363.5	5-20-58	Rust-colored water
1	21dbca	1,750	2,020	Wheatridge Mutual Water Co.	1957	8.9	48	Qpp,Ql	C,F	PS,Ot	. .	. .	. .	5.4	5,384.7	11-10-58	B10; By4; D; L; Pf4-10; T48
1	21ddcb	450	1,220	L. Morton	1958	18.8	36	Qpp,Qb,Ql	C,E	IrrL	80R	10	. .	.9	5,381.9	4- 9-62	D; DL; Pr14-20; WL(8-28-59)1.6
1	22aaab	4,960	550	G. Calvert	1956	21R	6	Qpp,Qb,Ql	J,E	D,IrrL	30R	11	2	6.7	5,326.7	10-27-58	B18; DL; Dr; Pf12-21; WL(9-56)5
1	22aabb	5,000	1,100	O. Becktell	1958	25R	6	Qpp,Qb,Ql	J,E	IrrL	25R	4	. .	6	5,330	9-23-58	B18; DL; Dr; Pf12-25
1	22aabc	4,820	1,300	J. Redmond	1958	25R	6	Qpp,Qb,Ql	J,E	IrrL	25R	4		2.9	5,331.2	8-28-59	B18; DL; Dr; Pf12-25
1	22aacc	4,230	1,100	J. Lindsay	1957	24.8	5	Qpp,Qb,Ql	N	D	20R	10	. .	5.0	5,330.8	10-28-58	B14; DL; Dr; Pf12-26
2	22aadd	4,270	80	City of Arvada	1955	626R	10 to 8	Kdlc	T,E	PS	104M	300	. .	300	5,323	10- 6-60	Dr; EL
1	22ccab	1,100	4,350	Not known	. .	Spring	. .	Qes	N	N	<1E	. .	. .	. .	5,410	. . . .	WSp. Contact spring
2	22cdad	700	2,850	L. Wothaft	1957	593	4	Kdlc	S,E	IrrL	B20R	20	12	345.7	5,405	11- 6-59	Dr; EL; L; Pf320-380, 400-450, 460-525, 555-575

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-69-																
1	22dacc	1,650	1,050	Not known	. .	Spring	. .	Qc,Qp	N	N	<1E	. .	. .	. .	5,394.5	. . . .	WSp
1	22dbdc	1,580	1,900	G. Hallenbeck	1956	6.1	24	Qpp,TKdu	N	IrrL	50R	. .	. .	2.6	5,333.0	11- 3-58	B8; DL; Dr; Pf5-10; U(1958)
2	22dbdd	1,330	1,350	W. Junge	1957	575	4	Kdl	S,E	D,IrrL	B10R	23	. .	367	5,421	3- 1-57	DL; Dr; EL; Tch370-574
2	22dcca	500	2,200	J. Meredith	1956	551	6	Kdl	S,E	D	15R	. .	. .	350	5,420	12- 8-56	DL; Dr; EL; Pf380-530
2	22ddbc	750	1,100	F. Linneman	1956	633	4	Kdl	S,E	IrrL	35R	. .	. .	. .	5,450	. . . .	Dr; EL
1	23aaca	4,350	860	H. Platt	1957	18R	6	Qp,Ql	J,E	D,IrrL	5R	4	1	6.7	5,377.8	11-10-58	DL; Dr; Pf9-18; WL(2-57)10
1	23acda	3,200	1,420	E. Hajek	1957	28R	6	Qp	J,E	D	12R	. .	. .	13.4	5,390.6	11-19-58	DL; Dr; Pf18-28; WL(1-57)16
1	23adba	3,920	720	C. Commillo	1955	13.9	6	Qes	J,E	D	. .	. .	. .	9.0	5,386.1	12- 3-58	DL; Dr
1	23baad	4,680	2,900	W. Mumford	1956	33R	6	Qes,Qs	J,E	D	B10R	5	1-1/2	22.8	5,372.0	11-19-58	B32; DL; Dr; Pf23-33; WL(7-56)24
1	23bcdc	2,950	4,360	B. Ogden	1956	42R	5	Qes,Qs	J,E	D	B10R	5	2	8.6	5,392.4	11-24-58	B36; DL; Dr; Pf18-42
1	23bdcd	2,850	3,400	C. Morehouse	1956	43R	6	Qes,Qs, TKdu	J,E	D	B10R	30	3	9.0	5,402.4	11-19-58	B10; Dr; L; Pf12-43; WL(7-56)8
1	23cbdd	1,450	4,150	W. Vaudrey	. .	17.0	22	Qes,Qs	C,E	IrrL,Ot	4M	1	1/2	12.5	5,436.5	4- 9-62	D; FD; WS
1	23ccad	880	4,140	J. Minshall	1956	54R	6	Qes,Qs	J,E	D	30R	6	3	15.9	5,453.1	11-21-58	B49; DL; Dr; Pf15-54
1	23ccda	450	4,200	A. Lassaso	1957	67R	6	Qes,Qs	J,E	D	10R	. .	. .	15.3	5,453.8	11-24-58	B64; DL; Dr; Pf24-67; WL(1-57)18
1	23daab	2,440	420	C. Ingersoll	1957	25R	6	Qes,Qs	J,E	D	10R	6	5	11.4	5,394.8	11-21-58	DL; Dr; Pf16-25; WL(4-57)14
1	23dacd	1,500	730	E. Sullivan	1956	37R	6	Qes,Qs	J,E	D	B20R	3	1-1/2	16.0	5,415.6	11-19-58	B35; DL; Dr; Pf18-37; WL(9-56)15
1	23ddad	800	250	H. Head	1956	36R	6	Qes,Qs	J,E	D	B20R	2	2-1/4	17.5	5,426.7	12- 3-58	B35; DL; Dr; Pf18-37; WL(9-56)18
1	24cadb	1,650	3,150	G. Vonesh	1955	26R	10	Qes,Qs	. .	. .	. .	. .	. .	. .	5,400.6	. . . .	WS
1	24cbbc	2,200	4,950	H. Eisenhuth	. .	21.7	6	Qes,Qs	. .	IrrL,Ot	4M	9	1/2	4.9	5,393.0	4- 9-62	Dr; FD; WS
1	24cdba	1,250	3,450	R. Bowlen	1953	31.1	48	Qes,Qs	T,E	IrrL	14M	4	1/4	17.2	5,412.7	4-29-58	D; FD; WS
1	24cdbd	960	3,620	G. Wilson	1955	20R	8	Qes,Qs	. .	IrrL	. .	. .	. .	. .	5,412	. . . .	Dr; WS
1	24cddc	250	3,280	J. Mahoney	1957	40R	6 to 5	Qes,Qs	J,E	D	B8R	14	1	7.9	5,413.0	12- 9-58	B30; Dr; L; Pf10-40; WL(4-57)16
1	25bbbd	4,780	4,850	K. Gray	1956	54R	6	Qes,Qs	J,E	D,IrrL	10R	12	2	9.7	5,429.7	11-10-58	B42; Dr; L; Pf12-54; WL(8-56)8
1	25bcbc	3,320	5,030	M. Greenwald	1957	50R	6	Qes,Qy,Qs	J,E	D	10R	35	. .	9.2	5,441.7	12-22-58	DL; Dr; Pf18-50; WL(6-57)12
2	25bdad	3,350	2,800	G. Schlaepfer	1956	718R	6 to 4	Kdlc	S,E	IrrL	18R	. .	. .	400	5,455	10-19-56	Dr; EL; Tch580-718
1	26aaad	4,630	180	C. Rohler	1958	23R	8	Qes,Qs	J,E	D,IrrL	60R	. .	. .	10.1	5,434.3	4- 9-62	DL; Dr; Pf14-21; WL(12-22-58)10.9
1	26acaa	3,850	1,620	W. Preston	1957	31R	6	Qp,Qs	J,E	D	5R	16	1	8.9	5,449.2	11-20-58	B27; Dr; L; Pf18-31; WL(2-57)14
1	26acba	3,860	2,130	L. Reid	1957	25R	5	Qp,Qs	J,E	D	5R	6	. .	8.0	5,456.1	11-20-58	DL; Dr; Pf12-25; WL(6-57)20
1	26acca	3,080	2,280	J. Price	1955	40R	8	Qy,Qs	. .	. .	15R	. .	. .	26	5,483.2	4-23-56	Dr; WS
1	26adaa	3,650	250	R. Hess	. .	27.0	24	Qy,Qs,Qo(?)	J,E	IrrL	30R	13	2	13.4	5,444.2	9- 8-59	A.5; B30; DL; Dr; FD; Pf10-21
1	26dbbd	2,050	2,260	H. Williams	1956	32R	6	Qes,Qs	J,E	D	7R	4	2	16.0	5,480.7	11-20-58	B28; DL; Dr; Pf12-32; WL(8-56)18
1	26dbdd	1,380	1,580	L. Brown	1958	46.6	6	Qy,Qs	N	D	20M	8	. .	15.0	5,464.0	11-20-58	AT; B41; Dr; L; Pf10-50
1	26ddcb	380	1,020	J. Feely	1957	43R	6	Qes,Qs	J,E	D	4R	28	1	12.8	5,437.0	4- 9-62	B39; DL; Dr; Pf10-43; WL(11-21-58)13.6
1	27adcb	3,230	1,100	J. Colasanti	1956	82R	8	Qy,Qs,TKdu	J,E	D,IrrL	B46R	3	5	21.5	5,530.1	12- 9-58	B47; Dr; L; Pf27-82
1	27adcd	2,840	720	J. Gold	1956	43R	8	Qy,Qs	J,E	D,IrrL	22R	7	3	13.1	5,530.3	10-31-58	DL; Dr; Pf10-23
2	28addd	2,050	150	H. Eastman	1957	698R	9 to 7	Kdmc,Kdlc	S,E	D	. .	. .	. .	. .	5,560	. . . .	Dr, GRL
2	29bbdc	4,150	4,300	Consolidated Mutual Water Co.	1929	571R	. .	Kdmc,Kdlc	N	PS	. .	. .	. .	. .	5,510	. . . .	DL. Destroyed
1	29cbaa	2,440	4,190	S. Schumann	1954	62R	6	Ql	J,E	G	B18R	10	4	42.3	5,528.0	8-21-58	B62; DL; Dr; Tch56-62
2	30abab	5,220	1,830	Rolling Hills Country Club	1928	100R	6	TKdu	J,E	D	5E	. .	. .	. .	5,472.3	. . . .	Dr
1	30abcb	4,400	2,350	. . do	1957	18R	60	Qpp,Qb,Ql	. .	Sw	. .	. .	. .	5	5,477	8- 3-57	D; FD; WS
1	30adaa	3,750	260	F. Miller	1940	28R	. .	. .	Cyl,H	D	. .	. .	. .	. .	5,511.0	. . . .	Dry
1	30adad	3,390	20	F. Johnson	1956	40.2	48	Ql	J,E	IrrL	. .	. .	. .	36.0	5,519.0	4- 9-62	D; WL(8-5-58)32.7
1	30adcb	2,980	1,230	R. DeVoe	1956	52R	6	Ql	J,E	D,IrrL	. .	. .	. .	. .	5,516.6	. . . .	Dr
2	30adcb2	3,100	1,150	F. Spillane	1961	485R	5 to 4	TKdu,Kdmc, Kdlc	S,E	D,IrrL	10R	50	. .	350	5,510	4- 1-61	B22; Dr; FD; H6-5; L; Tch335-485

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-69-																
1	30adcd	2,950	930	E. Newton	1954	95R	6 to 4	Ql	. .	D,IrrL	. .	. .	. .	11	5,507.8	7- -54	DL; Dr; OW
1	30addb	3,040	420	T. Muckle	1955	45R	6 to 4	Ql	J,E	IrrL	20R	2	. .	. .	5,519.1	. . . .	B42; Dr; FD; L; WS
1	30addc	2,880	420	. . do.	1955	74R	6 to 4	Ql	J,E	D,IrrL	15R	2	. .	54	5,519.1	5- 8-55	B54; DL; Dr; Pf38-48
1	30addc2	2,720	420	. . do.	1950	50R	6	Ql	J,E	D	. .	. .	. .	29	5,521.1	1- -58	Dr; WL(9-58)35
1	30addd	2,820	20	F. Johnson	1940	50R	24	Ql	. .	D,IrrL	. .	. .	. .	. .	5,526	. . . .	D. Dry during the spring
1	30addd2	2,780	200	F. Miller	1956	54R	6	Ql	J,E	D	5E	. .	. .	. .	5,525.7	. . . .	DL; Dr
1	30bcdc	2,800	4,430	E. Ehlers	1955	57R	6	Ql	J,E	IrrL	B12R	8	2	44	5,527.3	6-18-58	DL; Dr
2	30bdda	3,000	2,800	Rolling Hills Country Club	1928	3,000R	15 to 8	. .	N	Oil,Ot	. .	. .	. .	95.1	5,519	11-23-56	B18; Dr; L; SL. During drilling in 1928, depth to water was 200 feet when hole was 820 feet deep; the water level was above land surface when the hole was 1,225 feet deep
2	30bdda2	3,050	2,900	. . do.	1959	600R	6	Kdmc,Kdlc	. .	Sw	30R	200	. .	300	5,480	5-30-59	B25; DL; Dr
2	30bddd	2,750	2,850	. . do.	1956	256R	. .	Kdmc	. .	. .	. .	. .	. .	. .	. .	. . . .	GRL
2	30caaa	2,460	2,950	D. Braden	1953	630R	6 to 4	Kdlc	J,E	D,IrrL	B10R	. .	20	. .	5,523	. . . .	B24; DL; Dr; Pf360-610
2	30caaa2	2,360	2,740	G. Wardle	1951	250R	6 to 4	TKdu	P,E	D	3E	. .	. .	. .	5,526	. . . .	Dr. Pumps dry in 30 minutes
1	30caab	2,450	3,180	R. Schwartz	1955	28R	36	Ql	. .	D	. .	. .	. .	15	5,622.4	8- -58	D
1	30caab2	2,450	3,060	E. Deatherage	1938	90R	. .	Ql	. .	D	. .	. .	. .	. .	5,524.1	. . . .	Dr
2	30caad	2,080	2,840	W. Stovall	1952	325R	6	Kdmc	Cyl,E	D	. .	. .	. .	. .	5,531	. . . .	Dr. Pumps dry in 15 minutes
1	30caba	2,400	3,360	W. Duppman	1900	45R	36	Ql	. .	D,S	60R	. .	. .	43	5,524.8	8- -58	D; WL(4-58)11
1	30cbab	2,540	4,540	A. Potter	1950	. .	6	Ql	T,E	D	. .	. .	. .	. .	5,538.7	. . . .	Dr
1	30cbbc	2,150	5,020	Applewood Utilities Co.	1955	73R	30 to 6	Ql	J,E	PS	35R	. .	. .	37.6	5,554.8	8-26-58	B42; DD; DL; OH(49-73)
1	30cbca	1,810	4,770	A. Hayden	1948	73R	8 to 4	Ql	J,E	D	8E	. .	. .	44	5,558.2	8- 1-58	Dr
1	30dacb	1,710	1,000	L. Kailey	1954	90R	6	Ql	. .	D,IrrL	. .	. .	. .	45	5,540.2	6- -58	Dr
1	30dacc	1,600	1,020	C. Hollenbaugh	1953	90R	6	Ql	. .	D,IrrL	. .	. .	. .	55	5,540.7	8- 5-58	Dr
1	30dacd	1,410	980	C. Darrigrand	1953	84R	6	Ql	J,E	D	8E	. .	. .	40	5,544.5	6- -58	Dr
2	30dcca	600	2,200	S. Stenzel	1959	380R	4	Kdmc	S,E	. .	20E	. .	. .	226.2	5,566	7-22-60	Dr
1	30ddbc	960	1,310	H. Vayo	1952	68R	5	Ql	J,E	D,IrrL	8E	. .	. .	48.2	5,545.2	8- 6-58	Dr
1	30ddbd	830	980	R. Elfline	1955	42.0	5	Ql	J,E	IrrL	5E	. .	. .	15.3	5,559.9	8- 6-58	Dr
1	30ddbd2	820	830	E. Kunz	1958	94R	6	Ql	S,E	IrrL	20E	7.5	. .	20.6P	5,557.0	8-12-58	
2	30ddca	580	730	H. Thompson	1957	149	5	TKdu	N	N	. .	. .	. .	54.5	5,568	6-27-57	Dr; GRL; Pf75-149; U(1958)
2	30ddcc	250	1,050	Applewood Utilities Co.	1955	637R	8 to 6	TKdu,Kdlc	T,E	PS	47R	186	18	400	5,577	3- 8-55	B20; Dr; EL; FD; L; Tch320-399, 450-637; WS
1	30ddcc2	230	1,050	. . do.	1955	42R	24	Ql	J,E	PS	30R	23	2	16.1	5,572.4	7- 6-60	B29; D; DL; FD; Pf10-35
1	30ddcc3	100	1,000	. . do.	1955	202R	6	Ql,TKdu	N	N	B9R	12	1	12.9	5,580	8-26-58	B30; DL; Dr; Tch16-115; WL(11-55)28
1	30dddc	100	530	W. Johnson	1955	45.1	6	Ql	N	N	. .	. .	. .	14.1	5,567.1	8-12-58	Dr
2	30dddd	100	300	. . do.	1960	650R	6 to 4	Kdlc	S,E	D,IrrL	15R	30	. .	438.0	5,574	7-22-60	A.75; DL; Dr; Tch430-650
1	31aaaa	4,960	20	H. Duston	. .	30R	36	Ql	C,E	D	20E	. .	. .	4	5,574.3	8- 6-58	D
1	31aaaa2	5,060	150	. . do.	. .	17.3	24	Ql	. .	D	. .	. .	. .	9.7	5,574.0	8- 6-58	D
2	31abdc	3,980	1,730	J. Creighton	1953	584R	6 to 4	Kdmc,Kdlc	Cyl,E	D	10R	. .	. .	490P	5,611	6-27-53	DL; Dr; Pf364-368, 500-522, 542-584
1	32bbaa	5,040	4,010	H. Duston	1908	25R	36	Ql	. .	D	. .	. .	. .	. .	5,557.7	. . . .	D
2	32caad	2,150	2,680	G. Turre	1957	80R	5	TKdu	. .	. .	12R	48	. .	27	5,555	3-27-57	B17; DL; Dr
1	32cdba	1,300	3,530	M. Bunger	1954	40R	24	Qp,Ql	J,E	IrrL	30R	. .	. .	. .	5,579.3	. . . .	Dr; WS
2	32dccc	100	2,500	Horton	1956	701R	. .	Kdlc	. .	. .	B12R	22	. .	550	5,626	7-16-56	B16; EL; L
1	33aabb	5,160	1,160	G. Robertson	1957	27R	6	Qc,Qs	J,E	D,S	10E	. .	. .	11.0	5,577.7	10-31-58	DL; Dr; Pf16-27; WL(2-57)16
1	33abdd	4,000	1,580	H. Lienert	1956	70R	6 to 5	Qp,Qs	N	D	B10R	26	1	9.8	5,587.6	4- 9-62	B22; DL; Dr; Pf15-70; WL(5-56)14; WL(11-7-58)10.0

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-69-																
1	33acaa	3,720	1,580	W. Rosensohn	1956	30R	5	Qp,Qs	J,E	D	B15R	4	1	9.8	5,589.6	10-31-58	B20; DL; Dr; Pf12-30
1	33adaa	3,900	120	D. Giddings	1954	80R	5	Qy,TKdc	. .	IrrL	B10R	35	1-1/2	17.9	5,585.4	4- 9-62	B15; Dr; GE; L; Pf15-80; WL(1954)25; WS
2	33cdac	980	3,050	Wickstrand and Wadley	1951	594R	6	Kdlc	. .	PS	B20R	35	. .	435	5,600	11-28-51	B3; Dr; FD; L; WS
2	33dddc	150	350	Consolidated Mutual Water Co.	1947	680R	. .	Kdlc	T,E	PS,E	70R	. .	. .	520	5,558	3-20-56	Dr; WL(3-47)390; WL(4-54)495
2	33dddc2	80	400	. . do.	1947	1,635R	13 to 8	Klb,Kla,Kfm	T,E	PS,E	85R	. .	. .	417.0	5,556	2-12-56	Dr; EL; L; WL(1-47)85
2	34caaa	2,350	2,600	. . do.	1927	650R	. .	Kdlc	. .	PS,E	. .	. .	. .	. .	5,545	. . . .	DL; U(1960)
2	34dbbc	2,300	2,550	. . do.	1955	1,745R	10	Klb,Kla,Kfm	T,E	PS	100M	159	24	446.9	5,555	2-12-57	AT; Dr; EL; WL(3-27-55) 385.0; WS
2	35aacd	4,150	820	E. Young	. .	760R	6 to 2	Kdlc	. .	D	. .	. .	. .	. .	5,412	. . . .	Dr; WS
1	35dddc	300	400	D. Runyon	. .	25R	24	Qp	. .	IrrL	20E	. .	. .	6	5,400	5-17-55	Dr
1	36aadd	4,000	100	L. Kurth	1955	65R	6 to 5	Qp	J,E	D	10R	. .	. .	5	5,313	11-24-55	B21; Dr; L; Pf29-62
2	36cbdd	1,400	4,200	Jewish Consumptive Relief Society.	. .	704R	. .	Kdmc,Kdlc	. .	N	. .	. .	. .	. .	5,410	. . . .	DL; Dr; U(1961)
2	36ccaa	1,250	4,200	. . do.	1939	820R	16 to 8	Kdmc,Kdlc	T,E	PS,B,Irr	. .	. .	. .	375	5,410	7- 5-39	B20; DL; Dr; FD; Pf425-448, 519-610, 675-699, 742-788; WS
	C3-70-																
2	1aabb	5,000	1,200	W. Forbes	1957	120R	6	Kdmc	J,E	G	12R	. .	. .	32.5	5,580	8-11-58	Dr; FD
2	1abab	5,010	1,730	R. Dunwoody	1956	122R	6	TKdu,Kdl	J,E	D	20R	20	3	22.6	5,590	4- 9-62	B43; Dr; FD; L; Pf50-74, 98-122; WL(8-11-58) 21.7; WL(9-8-60)20.6 WSp
2	1bbad	4,810	4,180	R. Newman	1957	1,035R	4	Klb,Kla,Kfm	S,E	D,S	B15R	150	. .	280	5,625	10- 1-57	DL; Dr; EL; OH(876-1,015)
2	1bccb	2,980	5,110	G. Brayfield	1943	100R	6	Kdlu	S,E	D,IrrL	25E	. .	. .	36.0	5,602	8-25-58	Dr; FD
1																	
1	1cbbb	2,620	5,200	Jury Estate	1953	12.5	. .	Qb	C,E	D	. .	. .	. .	7.7	5,601.1	4- 9-62	D; FD; WL(8-26-58)6.0
1	1cbbb2	1,420	5,120	. . do.	1940	14R	48	Qb	T,E	IrrL	15E	.	. .	9.1	5,623.6	8-26-58	D; FD
1	4addc	2,810	600	P. Pattridge	. .	12.2	60	Qs	J,E	D,S,E	5E	. .	. .	3.8	5,873.7	4- 9-62	D; U(1958); WL(10-29-58) 8.4
1	4daaa	2,480	50	. . do.	. .	12.5	60	Qs	J,E	D,S	. .	. .	. .	7.8	5,884.6	10-29-58	D; U(1958)
2	8daca	1,880	700	E. Ramstetter	. .	Spring	. .	Ks	. .	S	F25E	. .	. .	. .	6,015	4- -59	FD; WS
1	9dadb	1,950	370	R. Churches	1955	25R	24	Qp,Ql	C,E	S	25E	. .	. .	7.6	5,864.8	8-22-58	DL; Dr; FD
1	10dcbb	1,220	2,590	R. Sears	1940	17.3	36	Qb	J,E	D	. .	. .	. .	10.9	5,803.4	4- 9-62	D; FD; WL(11-20-58)10.6; WS
1	11bccc	2,940	5,070	Denver Water Board.	. .	14.3	42x54	Qb	J,E	S	5E	. .	. .	2.7	5,738.9	4- 9-62	D; WL(11-13-58)8.6
2	11dbbb	2,560	2,480	A. Baker	1946	243R	6 to 4	Kdlc,Klu	Cyl,E	D,Dy	3E	. .	. .	222	5,695	1946	Dr; FD
1	11dbcc	2,180	2,600	. . do.	. .	16.2	48	Qp,Qb	T,E	S	. .	. .	. .	6.0	5,688.5	4- 9-62	D; WL(8-26-58)6.6
2	12bcdc	2,920	4,450	C. Ryan and Sons.	1957	536	6	Kdlc,Klu	S,E	D,Ind,IrrL	5R	. .	. .	193.6	5,670	11- 7-58	EL; FD; Pf120-285; 495-536; WS
2	12bcdc2	2,780	4,300	. . do.	1960	1,260R	6	Klb,Kla	S,E	D,IrrL, Fire	15R	215	. .	335	5,690	4-23-60	B28; Dr; EL; L; Sa
2	12dbbc	2,100	2,390	Kerr-McGee	1957	497	8 to 6	Kdlc,Klu	S,E	D,Ind	12R	260	8	190	5,653	2-16-57	DL; Dr; EL; FD; Pf180-300; 350-380, 440-495; WS
2	13acbc	3,600	2,500	W. Scott	1958	450R	6 to 4	Kdmc,Kdlc	S,E	D,IrrL	10R	300	. .	80	5,603	6-15-58	B22; Dr; EL; FD; H6-4; L; OH(360-450); Pf76-99, 258-281, 314-360; Sa; SL
1	13adcd	2,900	860	Newton Bros. Construction Co.	1956	46R	6 to 4	Qs	J,E	D	B5R	21	1	7.5	5,573.3	8-25-58	B16; Dr; FD; L; Pf15-46
1	13adcd2	2,890	800	. . do.	. .	12R	48	Qs	. .	S	. .	. .	. .	7.5	5,574.4	8-25-58	D
1	13adcd3	2,800	850	. . do.	. .	25R	6	Qs	N	N	. .	. .	. .	6.5	5,576.0	4- 9-62	Dr; WL(8-25-58)6.4
2	13bacc	4,180	3,850	W. Everitt	1956	475R	6 to 4	Kdlc	S,E	D	7R	65	3	228.6	5,620	9- 4-56	DL; Dr; Pf314-360, 406-429; Sa; SL
2	13bbab	5,130	4,470	D. McClelland	1956	85R	6 to 5	Kdmc	J,E	D,IrrL	B2R	55	1-1/2	25	5,635	8-29-56	DL; Dr; FD; Pf30-85
2	13bdac	3,310	3,000	F. Rees	1956	400R	6 to 4	Kdmc,Kdlc	S,E	D	15R	40	1	80	5,605	3-27-56	B20; DL; Dr; FD; WS
2	13bdad	3,380	2,900	C. Robinson	. .	130R	4	Kdmc	Cyl,E	D,IrrL	5R	40	3/4	75	5,606.6	1957	Dr; FD; WSp
1	13bdad2	3,400	2,720	. . do.	. .	33R	48	Qs	C,E	D,IrrL	5R	. .	. .	10.2	5,601.0	4- 9-62	B30; FD; WL(5-13-58)9.2; WS

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-70-																
2	13bddb	3,110	3,030	H. Dahl, Jr.	1956	490R	6 to 4	Kdlc	S,E	D,S,IrrL	10R	45	2	261.1	5,605	8-12-58	B25; DL; Dr; FD; Pf330-420; WSp
2	13cadc	1,580	3,100	Jefferson County School Dist. R-1.	1960	555	6 to 4	Kdlc	S,E	Sch	24M	75	3	252	5,588	11- -60	B13; Dr; EL; H7-5; L; Sa; SL; Tch300-409. Fairmont Elementary School
2	13cddd	1,360	2,780	W. Grandjean.	1904	425R	. .	Kdl	Cyl,E	D	5E	. .	. .	125	5,589	1940	Dr; FD
1	13dcdc	150	1,800	F. Taylor	1958	23.4	56	Qs	J,E	D,IrrL	10E	. .	. .	20.1	5,587.9	8-20-58	B40; DL; Dr
2	13ddcd	300	920	S. Oakes.	1962	398	6	Tkdu,Kdmc	. .	D,S	B10R	22	. .	294.5	5,580	2-21-62	DL. Bailed 1 gpm at 100 feet, 6 gpm at 300 feet
2	14aabb	5,220	1,230	M. Keener	1957	93R	6	Kdmc	J,E	D,IrrL	5E	. .	. .	13.9	5,671	8-20-58	B57; Dr; FD; Pf43-93
1	14dbda	1,800	1,480	G. Hammer	1958	59R	6	Qc	J,E	N	1R	. .	. .	43.3	5,671.5	4- 9-62	B30; Dr; L; Pf30-59; WL(8-20-58)28.9
1	14dbda2	1,930	1,490	H. Hays	1958	100R	6 to 5	Qc,TKdu	J,E	N	2R	. .	. .	36.6	5,688	8-20-58	B36; DL; Dr; Pf30-100
1	15bbbb	5,240	5,180	E. Ramstetter	1953	94.1	6	Qc,Qs	N	D	10M	16	2-1/4	20.7	5,875	11-24-58	B32; DL; Dr; FD; WSp
2	17ddac	750	500	J. Walker	1956	158R	5	TKPl	S,E	D,S,IrrL	20R	. .	. .	60	6,210	7-31-61	DL
2	17dddb	550	400	. . do.	. .	90R	. .	. .	N	. .	. .	. .	. .	. .	. .	. .	Dry hole, 300 foot well nearby also dry
2	23cddb	610	3,220	L. Vogel.	1956	100R	6	TKdc	J,E	D	B10R	61	2	51.0	5,658	8-23-58	B35; DL; Dr; FD; Tch35-97
2	23dcba	1,080	2,050	Richardson Railroad Museum and Motel.	1958	595R	6 to 4	Kdmc,Kdlc	S,E	D	B15R	102	. .	360	5,630	11- 3-58	B43; Dr; EL; L; Sa; SL; Tch364-564
1	24aaab	5,000	520	T. New.	1956	30R	6	Qs	. .	D,IrrL	40R	12	2	8	5,568	6-20-56	B27; Dr; L; Pf18-27
1	24aaba	4,950	900	Rocky Mountain Bible Institute	1959	24R	6	Qs	J,E	D	10R	2	. .	14.8	5,575	4- 9-62	B23; DL; Dr; Pf10-24; WL(4-59)12; WL(11-21-60)11.1
2	24bdad	3,560	2,850	Boise Cascade Container Corp.	1960	500R	12 to 8	Kdmc,Kdlc	S,E	D,Ind,S,C	24M	94	. .	281	5,590	8-18-60	B40; Dr; H16-10; L; Pf250-500
1	25aadb	4,400	600	K. Mauz	1955	50R	6	Qpp,Qb,Ql	. .	D	. .	. .	. .	. .	5,511	. . . .	Dr
1	25adab	3,820	600	H. Inman.	. .	93R	6	Ql	. .	D,IrrL	. .	. .	. .	. .	5,517	. . . .	Dr
2	25adcd	2,680	950	Applewood Greenhouses	1960	637R	6	Kdmc,Kdlc	S,E	G	25R	45	. .	340	5,510	4-14-60	B22; DL; Dr; EL; H8; Pf382-542, 574-606
2	25addc	2,840	350	I. Flore.	1955	260R	6 to 4	TKdc	. .	D	4R	. .	. .	. .	5,550	. . . .	B33; DL; Dr
1	25badc	4,100	3,280	G. Leslie	1894	10.5	36	Ql	Cyl,H	D	. .	. .	. .	3.6	5,584.9	8-15-58	D. Dry in 1962
1	25bbcc	4,280	5,150	Wade Estate	1948	35R	48	Ql	D	. .	. .	. .	. .	27	5,600	7-24-58	D
1	25bcbd	3,350	4,660	L. Pyle	. .	Spring	. .	Qc,TKdc(?)	D,S	F	. .	. .	. .	. .	5,620	7-24-58	
1	25bcdd	2,810	3,970	J. Greenfield	1918	33R	30	Qc,Ql	D	. .	. .	. .	. .	31	5,620	8- 1-58	
1	25bcdd2	2,760	4,070	. . do.	1953	44R	. .	Qc,Ql,TKdc	. .	Irr	20E	21	4	19	5,620	8- 1-58	B42; D; DL
1	25bcdd3	2,780	4,070	N. Braning.	1948	25.3	36	Qc,Ql,TKdc	. .	D	. .	. .	. .	19.3	5,625.5	7-25-58	D
1	25bcdd4	2,750	4,050	L. Pyle	. .	Spring	. .	Qc,Ql,TKdc	. .	D,IrrL	F	. .	. .	. .	5,630	7-24-58	
1	25bdcd	2,700	3,500	C. McCauley	. .	98R	6	Qc,Ql,TKdc	J,E	D,IrrL,S	3R	. .	. .	24.0	5,580	4-10-62	FD
1	25bdcd2	2,650	3,460	Not known	. .	14.1	. .	Qc,Ql	N	N	. .	. .	. .	6.3	5,607.9	7-29-58	D
1	25bddb	3,250	3,100	W. Vaughn	1955	65R	6	Qc,Ql	. .	D,S	20R	. .	. .	30	5,560	1955	Dr
1	25caab	2,570	3,270	Not known	. .	7.0	36	Qc,Ql	N	N	. .	. .	. .	3	5,612	7-29-58	D; U(1958)
1	25cbaa	2,460	4,270	R. Walton	. .	31.3	. .	Qc,Ql	. .	D	. .	. .	. .	22.5	5,641.5	8-15-58	D
1	25daaa	2,350	30	L. Warner	1949	76.2	6	Qc	. .	D	5R	. .	. .	29.2	5,556.4	8- 1-58	Dr
2	25daab	2,460	630	G. Roberts.	1951	99R	6	TKdc	J,E	D	3E	. .	. .	47.9	5,565	7-30-58	Dr; Pf69-99
1	25daab2	2,420	450	V. Carr	1954	63R	8	Ql	. .	D	30R	. .	. .	. .	5,550	. . . .	DL. Drilled 2 dry holes nearby to 103 and 105 feet
1	25daad	2,050	20	H. Schmidt.	1955	50R	6	Qc,Ql	. .	D,IrrL	. .	. .	. .	. .	5,562	. . . .	Dr
2	25daba	2,520	680	J. Taylor	. .	82R	6	TKdc	. .	D	. .	. .	. .	37.1	5,560	8- 1-58	Dr
1	25dbba	2,470	2,180	E. Wilcox	1951	14R	. .	Qc,Ql	. .	D	. .	. .	. .	6	5,568	1958	D
2	25ddbb	1,150	1,300	A. Izlett	1951	110R	6	TKdc	J,E	D	1R	90	. .	4.2	5,605	8-21-58	B3; DL; Dr; FD
1	26bacd	4,050	3,550	Coors and Claar Development Co.	1959	26R	48	Qc	T,E	PS,Ind	163R	22	7	4	5,605	7-13-59	DL; Pf14-26; WS

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C3-70-																
1	26badd	4,030	2,870	G. Hockstra	1916	27.7	48	Qc,Ql	. .	D	. .	. .	. .	21.5	5,598.6	8-15-58	D. Dry in 1962
1	26bbcd	4,200	4,870	H. Blatter.	1948	13R	36	Ql	. .	D	. .	. .	. .	3	5,600	6- -58	D; FD
1	26bbda	4,480	4,030	W. Mateer	1948	8R	48	Qpp,Ql	N	N	. .	. .	. .	.2	5,582.1	7-24-58	D; DL; U(1958). Dry in 1962
1	26bbdc	4,120	4,600	V. Blatter.	1861	28R	. .	Ql	. .	D	. .	. .	. .	16	5,602	7- -58	D; T50; WL(4-58)7
1	26bbdc2	4,120	4,370	C. Kinman	1956	34R	6	Ql	. .	D	. .	. .	. .	15	5,605.6	9-17-56	DL
1	26bbdd	4,270	4,030	W. Mateer	1952	30R	48 to 30	Qc,Ql	. .	D	50E	. .	. .	16.5	5,601.2	8-15-58	D; WL(4-58)20. Dry in 1962
2	26bcbc	3,430	4,980	H. Mick	1955	56R	6	TKdc	. .	D	. .	. .	. .	36.8	5,632.0	8-15-58	Dr
1	26bdba	3,860	3,620	G. Claar.	1956	56R	6	Qc	. .	D	B10R	10	2	41	5,625.7	8- 3-58	L
1	27aadd	4,000	100	J. Githens.	1958	48R	6	Ql	J,E	D	20R	. .	. .	25	5,611.0	2-10-58	DL
1	27accb	3,200	2,400	A. Coors.	1958	110R	48	Qc,Qs	T,E	Ind,Pr	30R	. .	. .	40.6	5,643.6	7-21-59	B60; D; DL; Pf0-110
2	27adad	3,500	20	A. Frauenfelder . . .	1954	100R	6	TKdc	. .	D,IrrL	. .	. .	. .	. .	5,640	. . . .	Dr
1	27adbb	3,950	1,050	A. Coors.	1959	46R	60	Qc,Ql	N	Ind,Pr	80R	3	. .	41	5,608	6- -59	B46; D; DL; Gy256. Collector perforated 6-46 feet
1	27bddd	2,810	2,920	. . do.	1933	12R	120x240	Ql	T,E	Ind,Pr	70R	. .	. .	11.2	5,625.3	7-28-58	D; WS
1	27caac	2,240	3,220	. . do.	1917	12R	120x120	Qc,Ql	C,E	Ind,Pr	70R	. .	. .	8.4	5,631.2	7-28-58	D; WF
1	27cabd	2,210	3,420	. . do.	1917	12R	144x144	Ql	C,E	Ind,Pr	70R	. .	. .	11.2	5,636.5	7-28-58	D; QW
1	27cabd2	2,150	3,590	. . do.	1936	23R	48	Qc,Ql	C,E	Ind,Pr	70R	. .	. .	12.6	5,635.2	7-28-58	D; QW
1	27ccbd	850	4,880	R-1 School Dist. . .	1938	12R	. .	Qb	C,E	IrrL	90R	. .	. .	6.2	5,654.8	4- 9-62	D; WL(7-22-58)6.5
1	28dadb	1,820	500	Coors Porcelain Co. .	1957	69R	64	Qc	S,E	Ind,C	12R	37	. .	20	5,690	10-15-57	B57; D; DL; Re
1	28dddd	300	20	C. Schoech.	1942	32R	36	Ql,Qs	C,E	C	10E	. .	. .	27.0P	5,675	7-22-58	D. Static water level near land surface
1	28dddd2	90	120	F. Bonnell.	1920	34.9	24	Ql,Qs	Cyl,E	IrrL	5E	. .	. .	31.3	5,689.1	4- 9-62	D; WL(7-21-58)29.4
1	33aaab	5,080	470	C. McNutt	1934	41R	. .	Ql,Qs	N	N	. .	. .	. .	27	5,695	1955	D
2	33aaac	4,710	550	F. Robinson	1930	108	6	Kdmc	T,E	IrrL	. .	. .	. .	95.0	5,720	8-21-58	DL; FD
1	34bacb	4,570	3,820	L. Holland.	1920	15.8	. .	Qc,Qp,Ql	N	N	. .	. .	. .	14.3	5,680.6	8-22-58	D; U(1958)
1	34bbaa	5,260	4,060	L. Campbell	. .	20R	. .	Qc,Qp,Ql	. .	IrrL	. .	. .	. .	15	. . . .	8-22-58	D
1	34bdab	3,810	3,200	R. Kreamelmeyer . . .	1954	8R	. .	Qc,Qp,Ql	. .	IrrL	. .	. .	. .	2	. . . .	1958	D
	C3-71-																
-	7bbac	4,800	4,350	S. Karvis	. .	Spring	36	pC	N	D	F5R	. .	. .	. .	8,365	12- 7-60	FD; SG. Ten other springs on ranch used for stock
2	13cabb	2,400	3,650	V. Nelson	1956	150R	6	pC	S,E	D	2R	. .	. .	40	7,140	10- -56	Dr; FZ; L; OH(20-150); SG
2	14cccd	. .	4,780	Guy Hill School . . .	. .	18.5	. .	pC	Pch,H	. .	10E	. .	. .	12.5	7,325	12- 2-60	Dr; FD; SG
2	19cbbb	2,400	5,080	W. Mays	1960	597	6	TKdu	S,E	D,IrrL	15R	215	8	115	5,600	8-28-60	B50; Dr; L; Pf385-450, 475-510, 525-585
2	31bbda	4,500	4,220	H. McCluskey.	1958	850R	6 to 4	TKdu,Kdmc	S,E	PS	15R	110	. .	240	5,655	11-21-58	Dr; L; Pf390-413, 597-620, 643-666, 712-735, 781-827
2	34abbc	4,900	2,450	Degen Bros.	1938	925R	2	Kdmc	N	D	. .	. .	. .	. .	5,715	. . . .	L
	C4-66-																
1	3aacb	4,420	1,120	Air National Guard. .	1944	33.7	48	Qb,Ql	T,E	Inst,E	300R	. .	. .	18.3	5,456.0	4-15-62	By2; D; GE; Pf23.5-36.5; TH; WL(1942)11; WL(7-13-56)21.3; WS
1	3aacb2	4,450	1,120	. . do.	1942	23R	48	Qb,Ql	T,E	Inst,E	. .	. .	. .	19.5	5,457	4-15-62	D; GE; Pf13.5-23.5; Si; TH; WL(1942)6; WL(2-20-61)20.1
1	3aadb	4,600	500	. . do.	1942	35.0	48	Qb,Ql	T,E	Inst,E	62R	. .	. .	20.0	5,458	4-15-62	D; GE; TH; WL(7-13-56) 21.7; WL(2-20-61)20.6
1	3aadd	3,970	60	. . do.	1942	36.7	48	Qb,Ql	T,E	Inst,E	62R	. .	. .	23.0	5,470	4-15-62	D; GE; TH; WL(7-13-56) 25.0; WL(2-20-61)23.7
1	3abda	4,480	1,550	Ackard Land Co. . . .	1945	43.9	40	Qb,Ql	T,E	Irr	400E	. .	. .	11.5	5,450	9-20-60	A70(with 3bada and 3badbb); D
1	3adaa	3,740	40	Air National Guard. .	1942	35.5	48	Qb,Ql	T,E	Inst,E	52R	. .	. .	22.8	5,468	4-15-62	D; GE; TH; WL(7-13-56) 25.0; WL(1-20-61)10.6
1	3bada	4,350	2,840	Ackard Land Co. . . .	1945	31.2	40	Qb,Ql	T,E	Irr	365R	16	3	13.7	5,447	9-20-60	B29; Pf41; Dr; L
1	3badb	4,350	3,020	. . do.	1945	32.1	24	Qb,Ql	C,E	Irr,S	50E	. .	. .	14.4	5,447	9-20-60	Si
1	3bcbb	3,730	5,160	L. Jones.	1955	37R	24	Qb,Ql	T,E	Ind	325R	11	3	13.5	5,438	1-23-61	B29; Dr, GE; L; Pf14-32
1	3daab	2,560	620	Air National Guard. .	1942	23.3	48	Qb,Ql	T,E	PS,E	52R	. .	. .	19.9	5,458	4-15-62	GE; WL(7-13-56)11.8; WL(2-20-61)23.1

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-66																
1	3dabc	2,080	1,150	Air National Guard	1942	24R	36	Qb,Ql	T,E	PS,E,O	175R	. .	. .	14.4	5,457.0	4-19-62	AT; Dr; GE; Pf16-24; TH; WL(2-20-61)13.6; WS. Yield dropped to 15 gpm in 1945
1	3ddbb	1,250	1,250	. . do.	1942	23.8	48	Qb,Ql	. .	PS,E	150R	. .	. .	13.7	5,460	4-15-62	Dr; GE; Pf14-24; TH; WL(7-42)8; WL(2-20-61) 14.5; WS. Yield dropped to 15 gpm in 1945
2	3ddcb	640	1,150	. . do.	1942	2,186R	10 to 7	Kdmc,Kdlc, Klb,Kla,Kfm	T,E	PS	220R	. .	. .	242.7	5,478	2-22-61	DL; Dr; Pf890-930; 975-1,015, 1,138-1,153, 1,594-1624, 1,689-1,737, 1,908-1923, 2,027-2,155, WL(4-42)263; WS
2	4bbcc	4,250	5,150	E. Peterson	1956	545R	6	TKdu	S,E	D	20R	. .	. .	233.1	5,460	11- 9-59	C; Dr; EL
1	4bdaa	3,950	2,750	L. Helland.	1956	32R	. .	Qp	N	D	. .	. .	. .	15	5,443	1956	B14; D; L. Destroyed in 1959, inadequate
2	4bdaa2	3,930	2,730	. . do.	1958	444R	6 to 4	TKdu	. .	D	9R	120	12	150	5,443	1958	B10; C; Dr; L
2	5acda	3,050	1,480	A. Kirkegaard	1957	560	6	TKdu	S,E	D	20R	. .	. .	245.8	5,455	11- 9-59	C; Dr; EL
2	5acdb	3,050	1,720	Bock	1956	543	. .	TKdu	. .	. .	. .	. .	. .	. .	5,455	. . . .	EL
2	5bbba	5,050	4,750	Altura Drugs.	1959	1,175R	. .	Kdmc,Kdlc	S,E	Com	25E	. .	. .	320	5,425	4- 4-59	Dr; El. Yielded 13 gpm at 950 feet
1	5bcab	3,750	4,610	C. Dickinson.	1956	72R	18	Qy,Qs	T,E	D,S,Irr	35R	6	5	53.2	5,444.0	4-28-58	A14; B72; Dr; FD; GE; H40; L; Pf40-72; Su; WL(6-56)61; WSp
2	5bcba	3,920	4,780	. . do.	1952	961R	5 to 4	Kdmc	. .	D	15R	100	. .	260	5,438	9- 2-52	Dr; L; Pf780-800, 840-920
2	5bdba	3,880	3,300	A. Kremus	1956	602	6	TKdu	S,E	D	13R	. .	. .	295.3	5,440	11-10-59	Dr; EL
2	5cabc	2,120	3,700	L. Morse.	1956	250R	6 to 4	TKdu	. .	D	2R	. .	. .	55.3	5,445	7-17-56	B16; Dr; L; WL(3-56)50
2	5cccc	200	5,120	J. Callaway	1955	1,060	. .	Kdmc	. .	D	. .	. .	. .	. .	5,452	. . . .	B36; Dr; EL; L
2	7bbcb	4,500	4,950	A. Allison.	1956	686	5 to 4	TKdu	S,E	D	7R	25	12	202.0	5,425	11-10-59	Dr; EL; Pf284-521, 546-570
2	7ddda	450	200	C. Bresnahan.	1933	6,050	. .	Kdmc,Kdlc, Klb,Kla,Kfm	S,E	D	F10R	. .	. .	. .	5,450	7- 6-61	Dr; L. Oil test; plugged back to 2,860
2	8cccc	50	5,220	. . do.	1957	1,399	8 to 6	Kdmc,Kdlc	N	Com	88R	57	. .	51.8	5,450	12- 9-57	B16; Dr; EL; H9-7; L; Pf860-1,390; WL(9-57)64
2	10abca	4,400	2,150	Air National Guard. .	1942	2,038	10 to 7	Kdlc,Klb, Kla,Kfm	T,E	Inst	157M	. .	. .	306.7	5,533.6	8-12-57	B13; Dr; GRL; L; Pf1,311-1,368, 1,783-1910, 2,034-2,161; WS. Yielded 300 gpm in 1942
2	10cabd	2,200	3,600	. . do.	1942	2,100R	10 to 7	Kdlc,Klb, Kla,Kfm	T,E	Inst	112M	. .	. .	305.5	5,560.4	2-20-61	AT; Dr; WS
2	10ddba	1,100	700	. . do.	1942	2,196R	10 to 7	Kdlc,Klb, Kla,Kfm	N	N	F187R	. .	. .	. .	5,570.3	1942	Dr; U(1953); WS. Reported caved in 1957
1	11bbad	4,630	3,940	. . do.	. .	42.6	48	Qb,Ql	.	TW	150R	19.4	50	15.3	5,481.7	1942	AT; DL; GE
2	14bdca	3,200	3,500	. . do.	1942	2,100R	10 to 7	Kdlc,Klb, Kla,Kfm	T,E	Inst	220R	. .	. .	290.8	5,592.0	2-15-61	Dr
2	18cbcb	1,840	5,030	M. Barr	1960	1,063R	6	Kdmc	Cyl,E	D	20R	163	. .	320	5,568	6-10-60	Dr; L; Pf923-1,029
2	20bcbb	3,800	5,180	O. Corbin	1958	960R	4	TKdu,Kdmc	. .	D	15R	60	. .	200	5,569	5-20-58	Dr; EL; H6-5; L; Pf519-578, 848-906, 926-943
2	24adac	3,600	480	F. Setchell	1956	424R	5	TKdu	J,E	D	B12R	86	8	64	5,600	9- 6-56	B21; Dr; L; Tch250-271, 380-424; U(1961)
	C4-67-																
2	1abbd	4,850	2,250	J. Debber	1956	920R	6 to 4	Kdmc	S,E	D	20R	100	3	370	5,391	5-12-56	B56; Dr; L; Pf780-890
2	1abdb	4,550	1,750	Trailer Haven Inc. .	1948	900R	. .	Kdmc	S,E	PS	30E	. .	. .	. .	5,390	. . . .	Dr
2	1abdc	4,100	1,850	. . do.	1959	962R	6	TKdu,Kdmc	S,E	PS	30R	40	. .	320	5,394	5- 4-59	B32; Dr; H9-8; L; Pf695-910
1	1adca	3,250	850	E. Burke.	1956	29.0	8 to 6	Qp,Qy	N	Irr	. .	. .	. .	19.4	5,395	6- 4-57	Dr; Pf20
2	1caab	2,600	3,150	R. Bolt	1956	102R	5	TKdu	. .	IrrL	1R	. .	. .	30	5,415	1-13-56	B56; DL; Dr; Pf12-53
2	2ccaa	1,200	4,000	K. Burks.	1956	86R	6	TKdu	. .	IrrL	18R	0	11	17	5,402	9-15-56	B45; DL; Dr; GE; Pf10-80
2	2daaa	2,380	320	Aurora Public Schools	1955	990R	6 to 4	TKdu,Kdmc	S,E	Irr	B23R	60	7	260	5,42[illegible]	1- 1-56	B15; Dr; L; Tch690-990

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-67-																
2	3bdbb	3,800	3,850	R. Henderson.	1956	250R	6 to 5	TKdu	J,E	Irr	5R	133	6	21.3	5,362	6- 5-57	B38; Dr; L; Pf132-250
2	3caad	2,000	2,750	U.S. Air Force . . .	1955	2,023R	8 to 6	Kdlc,Klb Kla,Kfm	T,E	Irr,Sch	112M	360	. .	70	5,370	6- -55	B26; Dr; EL; L; Pf1,215-1,240, 1,400-1,440, 1,580-1,670, 1,740-1,810, 1860-1,940; SL
2	6bdcc	2,900	3,920	V. A. Hospital. . . .	1955	1,840R	10 to 8	Kdlc,Klb Kla,Kfm	T,E	Irr	133M	445	24	138.2	5,309	4-26-57	AT; Dr; EL; H9; L; Pf1,116-1,146, 1,367-1,760, 1,780-1,800; WL(7-1955)+42; WS
2	6cbdd	1,550	4,050	Colo. General Hospital.	1936	1,116R	12 to 8	Kdmc,Kdlc	T,E	Irr	130R	300	. .	600	5,335	3- -56	B10; DL; Dr; Pf640-660, 664-670, 908-920, 990-1,016; WL(12-1936) 170; WS
2	6ddcc	120	1,150	G. Martin	1955	825R	6 to 4	Kdmc	. .	D	6R	. .	. .	407P	5,355	1955	B14; DL; Dr; Pf719-825
1	7ccdc	300	4,500	Denver Water Board. .	1954	53R	6	Qp,Ql	. .	TW	55R	23	2	20.8	5,345	12-22-54	AT; B45; Dr; L
1	8dcbb	1,200	2,500	Monaco Sports Center.	1960	100R	5	Qs	J,E	D,IrrL	20R	8	. .	39.9	5,390	4-11-62	A2; B84; Dr; L; Pf55-91; WL(6-60)45; WL(11-25-60) 40.7
2	9aadb	4,500	600	U.S. Air Force. . . .	1956	1,984R	8 to 6	Klb,Kla,Kfm	T,E	Irr,Sch	118M	377	23	73	5,369	10- 4-56	B53; DL; Dr; EL; Sa; SL; Tch1,570-1,926
2	10adab	3,880	550	Eastland Shopping Center.	1961	1,240R	8 to 6	Kdmc,Kdlc	S,E	AC,C,D, Com	75R	269	16	343	5,423	6-21-61	Dr; EL; H7-11; L; Sa; SL; Tch730-900; 1,024-1,075, 1,130-1,180
2	14caba	2,350	3,550	A. Christensen. . . .	1956	1,055	4	TKdu,Kdmc	S,E	D	. .	. .	. .	. .	5,471	. . . .	D; EL
2	14caba2	2,450	3,400	. . do.	1956	1,075	4	TKdu,Kdmc	S,E	D	B12R	452	10	22	5,471	4- 7-56	DL; Dr; EL; GE; Pf833-992 1,027-1,072
1	14cddd	250	4,050	W. Davis.	1956	45.7	6	Qp,Qy,Qs	J,E	IrrL	15R	7	3	14.4	5,486	7-23-56	B48; Dr; GE; L; Tch14-50
1	15dddb	550	450	W. Brame.	1956	43R	6	Qp,Qy,Qs	J,E	D	7	17	3	19	5,473	3-27-56	B39; Dr; L; Tch12-43
2	16ccbb	1,000	5,050	Wishing Well Corp. .	1959	1,005R	4	Kdmc	S,E	PS	25R	173	. .	99	5,424	7- 1-59	B42; DL; Dr; H8-5; Pf798-1,005
2	16cdbd	800	3,500	Fairmount Cemetery. . Assn.	1956	1,150R	6 to .	TKdu,Kdmc, Kdlu	T,E	PS	23R	125	. .	205	5,471	10-12-56	B60; Dr; EL; L; Tch684-1,150
2	16cdca	500	3,500	R. Udesen	1956	945R	6 to 4	TKdu,Kdmc	S,E	D	11R	220	8	140	5,468	8-15-56	B52; DL; Dr; Pf733-945
1	17cddd	250	2,840	O. Johnson.	1954	46R	8	Qb,Ql	J,E	AC,Irr,B,G	. .	. .	. .	. .	5,384	. . . .	Dr
1	17cddd2	100	2,800	. . do.	1938	46R	8	Qb,Ql	J,E	G	. .	. .	. .	12.2	5,384	4-21-62	Dr; WL(3-29-60)19.1
1	17dbac	2,300	1,800	B. Teets.	1948	75R	48	Qb,Ql	N	Irr	225R	. .	. .	50	5,425	1958	A20; B75
2	17dbbc	2,280	2,500	C. Thurmon.	1957	748	6 to 4	Kdmc	S,E	SS	12R	5	. .	420	5,400	9- 6-57	B15; Dr; EL; H7-5; Pf643-748; QW
2	17dbdc	1,600	1,700	Johnny's Monaco Lanes	1959	1,030R	6 to 4	Kdmc	S,E	Com	42R	200	. .	340	5,400	6-20-59	B30; DL; Dr; H6-4; Pf740-854, 946-1,020
1	17dcdd	50	1,620	F. Johnson.	1955	41.3	6	Qp,Qb,Ql	J,E	D	20R	10	2	21.9	5,396.7	10-26-59	DL; Dr; WL(7-23-56)25.9
1	17ddbc	900	1,050	Bradford Nursery. . .	1954	34R	12	Qp,Qb,Ql	C,E	Irr,Ot	21M	4.5	1/2	9.3	5,388.1	4-11-62	D; FD; WS
1	17ddbc2	750	1,200	. . do.	1959	49R	48	Qp,Qb,Ql	T,E	Irr	421R	34	. .	15	5,389.8	4-23-59	B49; D; DL; GE; Pf34-49
2	17ddbd	850	870	Twilight Golf Club. .	1959	1,020R	8 to 4	Kdmc	T,E	Irr,D,Com	100R	. .	. .	231.5	5,389.0	4- 1-60	B33; Dr; H10-7.5; L; Tch667-1,000
1	17ddbd2	730	950	Bradford Nursery. . .	1959	32.9	48	Qp,Qb,Ql	T,E	Irr	421R	. .	. .	16.0	5,390.3	3-23-59	B49; D; DL; GE; Pf34-49
1	17ddca	530	720	Fairmount Cemetery Assn.	1940	31R	48	Qp,Qb,Ql	. .	Irr,E	. .	. .	. .	17	5,391.6	9- 9-54	D
1	17ddca2	330	940	. . do.	1940	29R	48	Qp,Qb,Ql	. .	Irr,E	. .	. .	. .	20	5,391.7	9- 9-54	D
1	17ddca3	400	870	. . do.	1940	26R	48	Qp,Qb,Ql	. .	Irr,E	. .	. .	. .	19	5,391.6	9- 9-54	D
1	17ddca4	460	790	. . do.	1940	28R	48	Qp,Qb,Ql	. .	Irr,E	. .	. .	. .	18	5,390.7	9- 9-54	D
1	17ddcc	270	1,020	. . do.	1940	36R	48	Qp,Qb,Ql	. .	Irr,E	. .	. .	. .	21	5,392.4	9- 9-54	D
1	17ddcc2	170	1,240	. . do.	1940	40R	48	Qp,Qb,Ql	. .	Irr,E	. .	. .	. .	21	5,392.7	9- 9-54	D
1	17ddcc3	140	1,170	. . do.	1940	39R	48	Qp,Qb,Ql	. .	Irr,E	. .	. .	. .	22	5,392.8	9- 9-54	D
1	18abcc	4,000	2,500	C. Felton	1955	36R	8	Qp,Qb,Ql	J,E	D	150R	5	1	25	5,353	3- 3-55	DL; Pf16
1	18abcd	4,000	2,280	L. Thiel.	1944	32R	60 to 14	Qb,Ql	T,E	Irr	100E	3	. .	17.0	5,352.5	4-11-62	A1.5; D; WL(1944)6; WL(2-12-59)20.4

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-67-																
1	18acaa	3,690	1,520	L. Ruehle	1955	40.0	60 to 14	Qb,Ql	C,E	Irr,G	22R			18.8	5,356.5	2-12-59	D; L; WL(6-53)13; WL(4-56)14; WL(5-57)14; WL(5-58)10
1	18acac	3,350	1,730	P. and W. Leonard	1900	60R	60 to 14	Qb,Ql	T,E	Irr,G	250M	1.6	1	19.8	5,347.4	2-13-59	DD; FD; WS
1	18acbb	3,700	2,450	J. Singleton	1923	23.5	56 to 8	Qb,Ql	C,E	Irr	200E			17.6	5,353.1	4-11-62	DD; U(1932-59); WL(1923)9; WL(2-12-59)21.7. Deepened in 1930
1	18acbc	3,430	2,620	C. Felton	1947	50R	60 to 10	Qb,Ql	T,E	Irr	170E			22.3	5,353.5	2-12-59	A1.5; B50; Dr; U(1956-59)
1	18acca	3,170	2,100	W. Glanville		23.9	72 to 10	Qb,Ql	C,E	IrrL,Ot	25E			18.2	5,354.4	4-11-62	DD
1	18acca2	3,250	2,240	O. Wadow		29.9	48	Qb,Ql	C,G	Irr				24.6	5,355.5	4-11-62	A1.5; D; U(1959); WL(2-12-59)21.9
1	18accd	2,980	2,450	E. Sinnamon	1958	49R	6	Qb,Ql	S,E	D	30R	20		20	5,351	12-17-58	B41; DL; Dr; Pf28-49
1	18accd2	2,830	2,100	Town of Glendale	1959	42.5	24	Qb,Ql	T,E	PS,O	760M	14.2	48	17.7	5,352.0	1-29-59	AT; B43; Dr; FD; GE; H40; L; Lo12-42; PP; Sa, SL; TH; WS
1	18accd3	2,830	2,030	do.	1959	46R	24	Qb,Ql	T,E	PS	800R	25		20.2	5,355.1	6-24-59	B46; DL; Dr; GE; Lo22-46
1	18accd4	2,950	2,250	do.		26.0	72 to 12	Qb,Ql	C,E	Irr,Ot	200M	3.4	1	17.2	5,351.1	1-28-59	A1; DD; WSp
1	18addc	2,900	600	Bogue Realty Co.	1950	32.4	24	Qb,Ql	N	Irr,PS	250R			16.3	5,361.1	2-13-59	D, Pf0-32
1	18bacb	4,450	3,700	Stearns Dairy	1944	22R	48	Qb,Ql	C,E	D,IrrL, Dy,C	400E			20	5,348	3- 7-55	D; WS
1	18bacc	4,140	3,790	G. Garson	1935	43R	48	Qb,Ql	J,E	PS	1,000R			22	5,345	10- -60	D; WS
1	18bdbc	3,470	3,640	Denver Mortar and Materials Co.	1952	38R	10	Qpp,Qb,Ql	C,E	Ind	250R			11.5	5,339.5	4-21-62	Dr; WL(1952-53)5; WL(2-13-59)14.3
1	18cabb	2,400	3,680	F. Kirschner	1959	51R	48	Qp,Qb,Ql	T,E	AC	596R	30		20	5,349.5	2-26-59	B37; D; L; Pf30-51
1	18cabb2	2,450	3,630	do.		55R		Qp,Qb,Ql	S,E	G,B	50R			20	5,349.5	12-16-60	Dr
1	18cabb3	2,450	3,680	do.		55R		Qp,Qb,Ql	S,E	G,B	50R			20	5,349.5	12-16-60	Dr
2	18cbcd	1,450	4,825	Aqua-Bowl-Motel	1960	950R	12 to 8	Kdmc	S,E	E	B55R	230		180	5,370	9- 2-60	B28; Dr; EL; L; Tch700-875
1	18daac	2,050	620	Bogue Realty Co.	1950	49R	48	Qp,Qb,Ql	C,E	Irr,Cons, PS	550R	1.5		15.3	5,367.9	2-13-59	D; WL(1950)15; WL(1951)17; WL(1952)19; WL(1953)21
1	18dbaa	2,320	1,400	G. Boulton	1950	43R	12	Qb,Ql	T,E	Irr,D,G	150E			13.3	5,362.1	4-21-62	A9; Dr; GE; WL(1950)21; WL(2-12-59)20.9
1	18dbbb	2,300	2,350	Blue Bird Plumbing Co.	1960	60R	6 to 4	Qb,Ql	J,E	D	20R	7		18	5,351	5-20-60	B59; Dr; L; Pf28-60
2	19bcab	3,790	4,400	Colo. State Hwy. Dept.	1956	1,063R	14 to 8	Kdmc	T,E	Irr	85M	120	24	412.8	5,457.8	11-16-59	AT; Dr; EL; Pf710-1,025; WL(8-1956)250
2	19bdab	3,750	3,050	W. Berry	1955	1,005R	6 to 4	Kdmc	S,E	D	B25R	50	4	100	5,415	1- 1-56	B30; Dr; L; Tch700-1,005
1	20aabb	5,150	1,020	Fairmount Cemetery Assn.	1954	48R	48	Qb,Ql	T,E	Irr	1,050R	5	2	24	5,394.9	4-14-54	B47; D; L; Pf10-40; TH
1	20aabb2	5,160	1,270	do.	1935	49R	48	Qb,Ql		Irr,E				20	5,393.5	9- 9-54	D; TH
1	20aabb3	5,250	1,270	do.	1935	50R	48	Qb,Ql		Irr,E				21	5,393.3	9- 9-54	D; TH
1	20aabb4	4,950	1,250	do.	1954	47R	48	Qb,Ql	T,E	Irr	375R	10		24	5,393.9	4-14-54	B45; D; DL; Pf12-40
1	20aabb5	5,000	1,270	do.	1935	46R	48	Qb,Ql		Irr,E				21	5,394	9- 9-54	D
1	20aabc	4,630	1,020	do.	1954	44R	48	Qb,Ql	T,E	Irr	1,040R	6	2	28	5,395.5	4-20-54	B44; D; DL; Pf14-44
1	20aacb	4,450	1,070	do.	1954	48R	18	Qb,Ql	T,E	Irr	1,350R	29		19	5,395.7	9- 8-54	B47; DL; Dr; GE; Pf18-48
1	20aacc	4,100	1,200	do.	1954	71R	18	Qb,Ql	T,E	Irr	1,250R	49		20	5,399.3	9- 9-59	B71; DL; Dr; GE; Lo19-71
1	20aacd	4,150	830	do.	1954	57R	18	Qb,Ql	T,E	Irr	1,250R	33.6	4	20	5,398.7	9-11-54	B54; D; Dr; GE; L; Pf24-54; TH
2	20cddd	200	2,650	Skyline Acres	1956	1,116R	8 to 6	Kdmc,Kdlu	S,E	Sw	100R	388	19	101.0	5,415	8- 2-56	AT; B13; Dr; EL; L; T73; Tch300
1	20ddab	1,050	430	M. Jordan	1960	46R	18	Qp,Qb,Ql	T,E	Irr	500R	12.5		21.6	5,411	4-11-62	A24; B45; Dr; GE; L; Pf33-45; WL(11-3-60)24.3
1	20ddad	930	300	do.	1956	50R	48 to 6	Qp,Qb,Ql	J,E	D	12R	14	3	26	5,411	4-21-56	B50; DL; Dr; Pf25-50
2	21babb	5,150	3,750	R. Murdock	1957	945R	6 to 4	TKdu,Kdmc	S,E	D	B24R	30		250	5,460	2-26-57	B11; Dr; EL; L; Tch601-945
1	21bcba	3,950	4,750	Fairmount Cemetery Assn.		30.4	48	Qp,Qb,Ql	T,E	N				19.5	5,404	4-11-62	D; U(1960); WL(3-29-60)21.3
1	21bcda	3,200	4,000	Denver Water Board	1955	56.1	18	Qp,Qb,Ql	T,E	PS	452M	16.8	5	17.0	5,408.9	4-11-62	B45; Dr; FD; GE; H46; L; Pf30-45; WL(2-1955)21; WS; WSr
2	21bdab	3,750	3,150	G. Newberry	1959	1,025R	6 to 4	TKdu,Kdmc	S,E	G	30R			220	5,425	9- 5-59	B32; DL; Dr; H8-5; Tch749-1,025
1	21bdcc	2,700	3,750	M. Latimer		38.1	48	Qp,Qb,Ql	T,E	Irr	370M	6	24	22.5	5,411.2	4-11-62	A25; B42; D; FD; WL(3-23-60)24.0; WSp

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-67-																
1	21ccad	820	4,120	E. Carey	1954	40R	48	Qp,Qb,Ql	T,E	Irr	526M	8	24	24.6	5,418.1	3-23-60	A130(with 3 wells); D; FD
1	21cddd	40	4,700	. . do.	1954	45.8	48	Qp,Qb,Ql	T,E	Irr	899M	15	24	14.6	5,428.5	4-11-62	D; FD; WL(3-23-60)25.3; WSp
2	21daab	1,650	1,150	D. McCoy	1955	1,020R	6 to 4	Kdmc,Kdlu	S,E	D	20R	40	4	60	5,502	11- 1-55	B28; DL; Dr; Tch840-1,020
1	21dcdd	30	1,600	E. Carey	1954	46.9	48	Qp,Qb,Ql	T,E	Irr	300E	. .	. .	15.0	5,433.2	4-11-62	D; WL(3-23-60)24.7
2	22bada	4,350	2,720	B. Parker, Jr.	1953	90R	. .	TKdu	J,E	D	6R	. .	. .	. .	5,485	. . . .	B32; Dr; L
2	22cbda	1,780	4,080	W. Zimmerman	1957	950R	4	Kdmc	. .	D	15R	150	8	150	5,505	3-30-57	Dr; GE; L
2	27accc	2,720	2,350	E. Miles	1950	1,004R	6 to 4	Kdmc,Kdlu	J,E	D	F3R	. .	. .	+6	5,540	1950	B13; DL; Dr
2	27adad	3,550	300	F. Higel	1958	1,093R	. .	Kdmc,Kdlu	. .	D,S	B15R	10	. .	85	5,568	9-22-58	B5; DL; Dr; EL; H7-5; Pf983-1,093
2	27bccd	2,840	4,880	J. Huntington	1950	992R	6 to 4	Kdmc	T,E	D,S,Irr	F100R	. .	. .	+19.0	5,450	1959	A10; B32; DL; Dr; T73; WL(1950)+40; WL(1958)+18.5
1	27cbac	2,200	4,610	G. Lindsay	1954	52.4	18	Qp,Qb,Ql	T,E	S,Irr	385M	10.1	1/4	19.0	5,452	4-11-62	A33; Dr; FD; Su; WL(3-30-60)24.1; WSp
1	27cbac2	2,300	4,580	. . do.	1956	44R	6	Qp,Qb,Ql	J,E	D	B15R	19	2	20	5,454	6-19-56	B42; Dr; L; Pf30-44
1	27cddb	540	3,200	. . do.	1954	36.8	36	Qp,Qb,Ql	T,E	S,Irr	. .	. .	. .	20.3	5,460.0	4-11-62	D; WL(4-1-60)23.1
2	27dbaa	2,320	1,400	. . do.	. .	285R	6	TKdu	Cyl,W	S	. .	. .	. .	67.5	5,562.4	4-26-60	Dr
1	28aadc	4,000	650	R. Graves	. .	50R	18	Qp,Qb,Ql	T,E	Irr	635M	2	. .	27.8	5,440.7	4-11-62	A80; Dr; WL(10-27-59)31.6 WSp
1	28acba	3,800	2,150	R. Brown	1952	45.1	26 to 10	Qp,Qb,Ql	C,E	D,Ind,Ot	146M	3.9	1-3/4	15.7	5,415.3	5-15-58	B43; DD; FD; GE
1	28acda	3,200	1,450	Twin Lakes Tropical Aquarium	1958	48R	8	Qp,Qb,Ql	J,E	F	B33R	2	. .	20	5,441	12-15-58	B48; DL; Dr; Pf38-48
1	28acdc	2,730	1,680	Layne-Western Co.	1958	47R	6	Qp,Qb,Ql	S,E	D	50R	. .	. .	13	5,439	7- -58	B46; DL; Dr; GE; Pf18
1	28adaa	3,850	120	H. Alsum	1958	61R	4	Qp,Qb,Ql	J,E	D	27R	. .	. .	. .	5,453	. . . .	B61; DL; Dr; H8-6; Pf0-61
1	28baab	5,250	3,200	Denver Water Board	1890	16R	30	Qp,Qb,Ql	N	PS	. .	. .	. .	7.1	5,427	4-11-62	Gy(2)188; WL(7-21-59)11.7. First collector installed 1886; yielded 4 million gpd in 1890
1	28baab2	5,010	3,160	. . do.	1955	49R	24	Qp,Qb,Ql	T,E	PS,Ot	1,000R	10.3	5	13.4	5,426.7	4-11-62	AT; B49; DL; Dr; GE; Pf11-40
1	28baab3	5,050	3,170	. . do.	1955	36.0	6	Qp,Qb,Ql	N	Ot	. .	. .	. .	11.7	5,427.3	4-11-62	Dr
1	28baad	4,750	2,830	. . do.	1955	45R	24	Qp,Qb,Ql	T,E	PS,Ot	1,200R	10.8	6	13.0	5,424.5	4-11-62	AT; B45; DL; Dr; GE; Pf10-36
1	28baba	5,250	3,380	. . do.	1955	39R	24	Qp,Qb,Ql	T,E	PS,Ot	365M	10.6	4	10.3	5,421.6	4-11-62	AT; B39; DL; Dr; GE
1	28baba2	5,240	3,360	U.S. Geological Survey	1959	48.5	10	Qp,Qb,Ql	N	Ot	. .	. .	. .	6.9	5,421.2	4-11-62	B44; Dr; GE; L; PP; Sa; SL
1	28baba3	5,240	3,330	. . do.	1959	48.5	10	Qp,Qb,Ql	N	Ot	. .	. .	. .	10.2	5,420.9	4-11-62	B43; DL; Dr; GE; Sa; SL
1	28baba4	5,260	3,370	. . do.	1959	48.5	10	Qp,Qb,Ql	N	Ot	. .	. .	. .	24.3	5,421.5	7-29-59	B45; Dr; GE; L; Sa; SL
1	28baba5	5,210	3,410	. . do.	1959	48.5	10	Qp,Qb,Ql	N	Ot	. .	. .	. .	22.0	5,421.9	10-27-59	B45.5; DL; Dr; GE; Sa; SL
1	28baba6	5,210	3,400	Denver Water Board	1959	39.6	6	Qp,Qb,Ql	N	Ot	. .	. .	. .	22.1	5,421.3	10-27-59	Dr; WL(1955)20
1	28bada	4,300	2,750	U.S. Geological Survey	1955	44R	24	Qp,Qb,Ql	T,E	PS,Ot	900R	9.4	5	12.0	5,426.6	4-11-62	AT; Dr; GE; L; Pf10-36
1	28bada2	4,290	2,800	. . do.	1955	37.8	6	Qp,Qb,Ql	N	Ot	. .	. .	. .	12.7	5,429.5	4-11-62	Dr
1	28bdca	3,080	3,560	Peter Kiewit and Sons	1955	63R	6	Qp,Qb,Ql	N	. .	20R	. .	. .	. .	5,428	. . . .	B53; Dr; L
1	28bdca2	3,080	3,550	. . do.	1960	30R	16	Qp,Qb	S,E	D	100R	5	. .	17	5,428	6-24-60	DL; Dr; FD; GE; H24; Pf12-18, 24-30; WS
2	28caba	2,360	3,320	L. Hudson	. .	1,008R	. .	TKdu,Kdmc	. .	D	F	. .	. .	. .	5,436	1930	Dr
1	28cabc	2,200	3,780	. . do.	1955	70R	6	Qy,Ql	J,E	D	30R	8	1/2	25	5,449	6-20-61	B65; DL; Dr; Pf30-50; WL(4-55)20
2	28cbad	2,200	4,220	G. Jacobs	1956	1,010	5	TKdu,Kdmc	S,E	D,IrrL	20E	35	. .	29.1	5,463	6-20-61	Dr; EL; L; Tch672-712, 858-898; WL(9-56)25
1	28dacb	1,650	1,200	Sullivan School	1945	32.2	6	Qp,Qb,Ql	J,E	Sch,E,Ot	. .	. .	. .	15.9	5,447.2	4-12-62	Dr
2	28dacc	1,600	1,150	. . do.	1954	990R	6 to 4	Kdmc	S,E	Sch	F50R	. .	. .	. .	5,445	8- -54	B71; DL; Dr
1	28ddac	970	650	H. Perrin	1954	35R	18	Qp,Qb,Ql	T,E	Ind	100E	. .	. .	9.3	5,442	4-12-62	Dr; TH
1	28ddac2	800	450	. . do.	. .	35R	. .	Qp,Qb,Ql	C,E	Ind	250E	. .	. .	. .	5,435	. . . .	D; Re
2	29abab	4,980	1,760	Panorama Park Water System	1951	1,060R	6 to 4	Kdmc,Kdlu	S,E	PS,E	40R	. .	. .	380.9	5,443	7- 7-60	B27; Dr; FD; L; WS
2	30caab	2,320	3,000	P. Hay	1954	900R	6 to 4	Kdmc	S,E	. .	20R	48	. .	54	5,442	9-27-54	B16; Dr; L; Pf752-900
2	31bbcb	4,430	5,050	C. Ensign	1956	220R	. .	TKdu	N	N	. .	. .	. .	. .	5,425	. . . .	B16; Dr; L. Dry
1	31bbcb2	4,440	5,050	. . do.	1956	59R	. .	Qy	N	N	. .	. .	. .	18.4	5,425	8-13-56	B16; DL; Dr. Inadequate

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-67-																
2	32babb	5,100	3,800	Cresthaven Country Club.	1931	1,270R	4	Kdmc,Kdlc	S,E	D	F70R	. .	. .	+21	5,502	1951	B18; Dr; L. Flowed 48 gpm in 1931
2	33babl	5,100	3,850	Public Service Co. of Colo.	1958	915R	3	TKdu,Kdmc	S,E	D	25R	50	. .	150	5,510	6- 5-58	Dr; L; Pf717-915. Old well deepened from 600 feet
1	34aacc	4,150	1,300	Lindsay, Holland, and Marcus.	1954	27.9	48	Qb,Ql	Cyl,G	S	5E	. .	. .	19.1	5,478.0	4-26-60	D. Formerly used for irrigation
2	34aadb	4,450	420	C. L. Hubner Co. . .	1957	1,024R	6 to 4	TKdu,Kdmc	J,E	D	B70R	60	. .	+10	5,507	12- 4-57	B39; Dr; L; Tch792-1,024
1	34ddcb	400	1,100	W. Canary	1955	97R	18	Ql	T,E	Irr	770M	. .	192	25	5,493.8	7-15-59	B96; Dr; FD; GE; B32; L; Pf26-96; WS
1	34dddb	550	500	. . do.	1953	95R	18	Ql	T,E	Irr	1,050M	7.1	72	20.1	5,494.9	4-12-62	Dr; WL(10-12-59)29.6; WS
1	34dddd	250	250	City and County of Denver	1942	72.9	24	Ql	N	Irr	700M	43.8	8	21.6	5,499.8	9-27-49	AT; B83; DL; Dr; GE; Pf44-74
1	34dddd2	240	250	. . do.	1942	37.5	3	Ql	N	Ot	. .	. .	. .	29.0	5,500.0	7-15-59	DL
1	35bccb	3,060	5,150	H. Wislander. . . .	1938	20R	60	Qes	C,E	G	45R	3.8	. .	13.0	5,476.6	3-29-60	A4.3; B22; D; WL(1938)5; WL(7-48)5; WL(3-55)7 with 5 wells
1	35bccb2	2,980	5,170	. . do.	1948	24R	60	Qes	C,E	G	45R	4.3	. .	16.3	5,485.4	5-30-59	B26; D; WL(7-48)13; WL(7-51)15; WL(3-55)16
1	35bccb3	3,000	5,080	. . do.	1938	22R	60	Qes	N	I,Dr,E	125R	4.9	. .	12.3	5,483.1	4-12-62	B26; D; WL(1938)5; WL(7-48)12; WL(7-51)13; WL(3-55)13; WL(5-55)12; WL(4-1-60)12.9
2	35bccb4	3,080	5,080	. . do.	1952	1,044R	6 to 4	Kdmc	T,E	D,AC,G,B	50R	16.0	1/4	83.8	5,483.1	3-29-60	B19; Dr; L; WL(10-56)0. Flowed 60 gpm in 1952
1	35bccc	2,900	5,090	. . do.	1938	25R	60	Qes	C,E	G	45R	5.9	. .	11.5	5,481.2	3-29-60	B25; D; WL(1938)5; WL(7-48)9; WL(7-51)10; WL(3-55)11; WL(5-59)10
1	35bccc2	2,960	5,250	. . do.	1948	23R	60	Qes	C,E	G	45R	3.8	. .	9.0	5,482.1	4-12-62	B25; D; WL(7-48)10; WL(7-51)12; WL(3-55)13; WL(5-59)13
2	36cacd	1,460	3,420	U.S. Corps of Engineers	1950	970R	6	Kdmu	N	Ot	2R	150	. .	108.9	5,612.4	4- 6-62	Dr; GRL; WLR
2	36cacd2	1,460	3,440	. . do.	1954	1,198	8 to 6	Kdmc	S,E	D,Irr	32M	139	8	105.4	5,609.2	9-19-57	AT; B48; Dr; FD; WS
	C4-68-																
2	3abac	4,850	1,760	State of Colorado . .	1907	782R	10 to 4	Kdmc,Kdlc	N	N	35R	. .	. .	. .	5,273	. . . . .	B98; Dr; L; WS
1	3bcbd	3,300	4,920	Continental Baking Co.	1954	46R	6	Qb,Ql	S,E	C	30R	4.5	4	17	5,225	6-10-60	DL; Dr; Pf43-46; WL(3-54)18
1	3cbdc	1,650	4,550	Hod Carriers Bldg. and Construction and Laborer's Union . .	1957	55.7	18	Qb,Ql	T,E	AC,IrrL	120R	. .	. .	32.5	5,236	4-12-62	B51; Dr; GE; H36; L; Pf22-54; WL(10-23-59) 24.3
2	4babc	4,750	3,750	Carb-Ice Corp. . . .	1944	1,820	. .	Klb,Kla,Kfm	T,E	C,Com	100E	. .	. .	160	5,195	11-13-57	B46; Dr; L
1	4babd	4,580	3,600	. . do.	. . .	50R	. .	Qpp,Qb,Ql	C,E	C	500R	. .	. .	. .	5,195	. . . . .	D
1	4ccaa	1,080	4,200	J. O'Keefe.	1925	6.4	48	Qpp	C,G	Irr	100E	. .	. .	4.4	5,215	8-28-56	A1; D
1	5aaca	4,460	750	Public Service Co. of Colo.	1941	38R	48 to 18	Qpp,Qb,Ql	T,E	C	250R	6.2	. .	23.2P	5,196	1- 5-61	Dr; Pf21.8
1	5aacb	4,450	1,040	. . do.	1941	29.0	48 to 18	Qpp,Qb,Ql	T,E	C	250R	. .	. .	17.3	5,196	1- 5-61	DL; Dr
1	5aacc	4,250	1,070	. . do.	1956	40R	48 to 18	Qpp,Qb,Ql	N	N	300R	. .	. .	15	5,195	1956	U(1960). Formation becoming clogged, no production in 1960
1	5aacd	3,930	820	. . do.	1948	35R	48 to 18	Qpp,Qb,Ql	T,E	C	250R	. .	. .	19	5,196	1- 5-61	DL; T54
1	5adaa	3,700	250	. . do.	1952	42R	18 to 16	Qpp,Qb,Ql	T,E	C,E	247R	18	24	16	5,199.9	1-19-53	B42; DL; Dr; WS
1	5adab	3,540	560	. . do.	1953	40.1	18	Qpp,Qb,Ql	T,E	C,B	750R	21	6	21.2	5,196.7	7-30-56	AT; DL; Dr; GE; Lo17-37; WS. Clogged
1	5adac	3,420	470	. . do.	1953	36R	18	Qpp,Qb,Ql	T,E	C,E	425R	20	30	12	5,197.1	. . . .	DL; Dr; GE; Lo-21-36. Clogged
1	5adad	3,270	120	. . do.	1953	36R	36 to 14	Qpp,Qb,Ql	N	N	190R	15.5	24	9	5,193.9	8-21-53	B34; D; L; Pf13-35; WS. Clogged

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or use	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-68-																
1	5adbd	3,620	920	Public Service Co. of Colo.	1961	40R	18	Qpp,Qb,Ql	T,E	C	375R	22	..	16	5,198	3- 1-61	B37; Dr; L- Lo25-40
1	5adbd2	3,360	850	.. do.	1961	43R	18	Qpp,Qb,Ql	T,E	C	600R	22	..	21	5,198	2-23-61	B41; DL; Dr; Lo28-43
1	5adca	2,960	750	.. do.	1953	36R	18	Qpp,Qb,Ql	T,E	C,B,E	560R	23	6	10	5,197.6	8-28-53	AT; B34; DL; Dr; GE; Lo21-36; WS
1	5addb	3,080	460	.. do.	1953	39.6	18	Qpp,Qb,Ql	T,E	C,B,E	310R	27	24	19.2	5,197.6	7-30-56	B.6; DL; Dr; GE; Lo25-40; WS. Clogged
1	5dcdb	620	1,680	T. Garramone.	..	38R	36	Qpp,Qb,Ql	T,E	Irr	..	..	..	20	5,207.6	1954	A2.5; D; F
1	5ddac	825	350	Maddox Ice Co.	1952	25.2	48	Qpp,Qb,Ql	N	N	..	..	..	13.3	5,200	4- 9-62	U(1960); WL(12-14-60)14.8
1	5ddac2	720	300	.. do.	1952	26R	48	Qpp,Qb,Ql	C,E	N	..	..	..	..	5,200	....	D; U(1960)
1	5ddad	720	250	.. do.	1952	26R	48	Qpp,Qb,Ql	C,E	C	50R	..	..	..	5,200	....	D
1	5ddad2	700	150	.. do.	1948	36R	48	Qpp,Qb,Ql	C,E	C	50R	..	..	..	5,200	....	B26; D
1	5ddad3	700	100	.. do.	1952	18R	48	Qpp,Qb,Ql	C,E	C	250R	..	..	..	5,200	....	D; U(1960)
1	5dddc	150	600	F. Bryant	1947	14R	36	Qpp,Qb,Ql	C,E	Irr	..	..	..	..	5,204.1	....	A1
1	5dddd	240	120	United Dairies,Inc.	..	22.5	..	Qpp,Qb,Ql	C,E	Ind	200R	..	..	..	5,215	....	Dr; Re
1	5dddd2	220	180	.. do.	..	25.4	48	Qpp,Qb,Ql	C,E	Ind	200R	..	..	14.7p	5,215	8-28-56	Dr; Re
2	7aaac	4,880	650	R. Plummer.	1957	491	4	TKdu,Kdmc	S,E	IrrL	86R	50	6	342.8	5,342	7-18-61	B20; Dr; EL; GE; H7-6; L; Tch491
1	8abad	4,750	1,500	D. Margetello	1953	36R	36	Qpp,Qb,Ql	T,E	Irr	..	..	..	20	5,209.4	....	A11; D
1	8adad	3,600	320	J. Garramone.	..	12.1	36	Qpp,Qb,Ql	T,E	Irr	..	..	..	9.4	5,215	8-24-56	D
1	8adad2	3,400	10	M. Garramone.	1952	29.0	36	Qpp,Qb,Ql	T,E	Irr,Ot	500R	..	..	11.0	5,215	4- 9-62	D
1	8addd	2,880	80	T. Capra.	..	29.0	36	Qpp,Qb,Ql	C,E	Irr	200E	..	..	9.9	5,215	8-24-56	D
1	8addd2	2,850	280	J. Marchese	..	28.4	42	Qpp,Qb,Ql	T,E	Irr	500E	..	..	11.3	5,210	7-26-62	A9; D; WL(8-23-56)11.8
1	8daaa	2,580	280	.. do.	..	31.5	42	Qpp,Qb,Ql	N	Irr	..	..	..	14.7	5,210	4- 9-62	D; U(1961-62)
1	9baca	4,330	3,350	Dixon and Co.	1960	31R	8	Qpp,Qb,Ql	..	I	55R	..	..	7	5,210	3-26-60	B25; DL; Dr. Return water from air conditioning
1	9badb	4,400	3,270	.. do.	1960	40R	8	Qpp,Qb,Ql	S,E	AC,IrrL	75R	..	..	7	5,210	3-26-60	B24; Dr; L; Re
1	9bbdd	4,250	4,150	Colo. State Hwy. Dept.	..		48 to 1½	Qpp,Qb,Ql	N	Ot	..	..	..	9.9	5,198	11- 2-59	D; GE
2	9bcad	3,020	4,160	Denver Terra Cotta Co.	1914	779R	..	Kdmc,Kdlc	Cyl,E	N	..	..	..	250	5,210	1948	B26; Dr; L
1	9bcbb	3,850	5,260	Palmero Construction Co.	..	19.4	24	Qpp,Qb,Ql	N	Ot	..	..	..	11.7	5,205	10-14-58	B28; DL; Dr
1	9bcbc	3,480	5,250	H. Covello.	1950	28.5	48	Qpp,Qb,Ql	N	Ot	..	..	..	9.1	5,210	8-19-59	Destroyed in 1960
1	9bccd	2,800	4,850	Lorraco	..	28.9	36	Qpp,Qb	C,E	Irr	..	..	..	8.5	5,205	8-28-56	D
1	9dcac	700	1,950	Denver Water Board.	..	30.5	48	Qpp,Qb,Ql	T,E	PS,E,O	840R	..	..	..	...	....	AT; B30; DL; Dr; GE; Pf2-32; U(1960)
1	9dcad	700	1,510	.. do.	1954	32.2	6	Qpp,Qb,Ql	N	Ot	100R	..	..	8.9	5,215.7	4- 9-62	B30; Dr; FD; L; WS; WSr
1	9dcad2	700	1,500	.. do.	..	..	48	Qpp,Qb,Ql	T,E	PS,E	840R	..	..	..	5,215.9	....	AT; DL; Dr; U(1960)
1	11acaa	3,720	1,450	University of Denver.	1956	25R	8	Qp,Qb	S,E	Irr	860R	..	3	14.8	5,287	4-12-62	DL; Dr; Pf14-25; WL(4-1-61)15.2
1	11acac	3,400	1,900	D. Chalmers	1955	40R	5	Qp,Qb,Ql	S,E	Irr	50E	..	..	..	5,290.0	....	B40; DL; Dr; Pf11-40
1	11addd	2,930	300	E. McComb	1955	47.4	12 to 6	Qpp,Qb,Ql	S,E	Irr	50R	5	4	23.5	5,303.4	10-26-59	B48; Dr; L; Pf36-48
1	11bdcb	3,050	3,750	Denver Water Board.	1954	35.4	6	Qpp,Qb,Ql	N	TW,O	54M	7.9	..	20.9	5,272.8	1- 3-55	B29; Dr; L
1	11bdcd	2,770	3,350	W. Young.	..	36R	6	Qpp,Qb,Ql	S,E	Irr	90M	8.7	1	13.6	5,275.7	4-12-62	B36; DL; Dr; Pf20-35; WL(10-26-59)12.8
1	11caaa	2,500	2,760	Denver Country Club	..	32.0	48	Qpp,Qb,Ql	T,E	Irr	350R	..	..	11.1	5,278.9	10-20-59	A106(with 9 wells); B35; D; L; WL(1-1957)13
1	11daab	2,470	320	.. do.	..	49.2	48	Qpp,Qb,Ql	T,E	Irr	500R	..	..	24.3	5,305.4	10-20-59	D
1	11daad	2,220	50	.. do.	1932	36.0	48	Qpp,Qb,Ql	C,E	Irr,O	390E	8	..	15.2	5,296.9	10-20-59	By3; D; Pf12-36
1	11daad2	2,140	230	.. do.	1955	37.6	48	Qpp,Qb,Ql	C,E	Irr,Ot	600	19	2	11.3	5,294.4	4-12-62	By3; D; Pf23-38
1	11daad3	2,050	50	.. do.	1932	32.8	48	Qpp,Qb,Ql	C,E	Irr,O	390E	..	..	13.1	5,295.1	10-20-59	By3; D; Pf24
1	11dada	1,900	50	.. do.	1932	31.8	48	Qpp,Qb,Ql	C,E	Irr,Ot	390E	..	..	12.7	5,294.7	10-20-59	By3; D; Pf27
1	11dbaa	2,450	1,500	.. do.	1948	32.7	48	Qpp,Qb,Ql	C,E	Irr,O	350R	..	..	11.2	5,285.1	10-20-59	B52; D; L; Pf3-33
1	11dbbb	2,480	2,480	.. do.	1955	40.1	48	Qpp,Qb,Ql	T,E	Irr,Ice	750M	12	2	11.0	5,279.4	10-20-59	B41; D; DL; Pf23-41; WL(8-10-56)8.6
2	11dcbb	1,350	2,200	E. Weckbaugh.	1933	1,828R	8 to 6	Klb,Kla,Kfm	T,E	Sw	F136R	..	..	+169	5,290	1933	Dr
2	11dcbb2	1,300	2,400	.. do.	1955	825R	8 to 6	Kdmc,Kdlc	T,E	D,Irr	B30R	60	3	240	5,310	7-11-55	DL; Dr; Tch663-686, 732-825
1	11ddaa	1,050	320	Denver Country Club	1957	35.0	48	Qp,Qb,Ql	T,E	Irr	50R	12	2	13.0	5,301.6	10-21-59	B46.5; D; L
1	12acca	3,220	2,300	W. Richmond	1955	61R	6	Qb,Ql	S,E	IrrL	24R	..	1/2	32.8	5,327.0	10-26-59	B60; DL; Dr; Pf40-60; WL(8-10-56)37.2; WSp
1	12accb	3,050	2,380	D. Richmond	1955	70R	6	Qb,Ql	S,E	IrrL,AC	35R	15	1	41.2	5,327.9	4-12-62	B60; Dr; L; Pf46-69; WL(8-13-56)38.3; WL(10-26-59)28.3

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-68-																
1	12caab	2,460	3,250	T. Buell.	1957	35.6	21	Qp,Qb,Ql	N	Irr,Ot	175R	4	3	23.8	5,313.8	4-12-62	DL; Dr; GE; Pf19-39
1	12cabb	2,460	3,820	. . do.	1957	35.4	21	Qp,Qb,Ql	J,E	Irr	175R	6	5	22.4	5,309.6	10-15-59	DL; Dr; GE; Pf20-40; WL(2-57)24
1	12cacb	1,830	3,800	. . do.	1957	29.7	30 to 21	Qp,Qb,Ql	N	Irr	150R	10	4	18.1	5,306.7	10-15-59	DL; Dr; GE; Pf11-30; WL(2-57)18
1	12cada	1,930	2,660	. . do.	1957	40R	21	Qp,Qb,Ql	N	Irr	120R	14	2-1/2	24	5,314.6	2-27-57	DL; Dr; GE; Pf20-40; WL(2-57)24
1	12cadc	1,550	3,250	. . do.	1957	28.5	21	Qp,Qb,Ql	N	Irr	160R	8	3	17.5	5,305.9	4-12-62	DL; Dr; GE; Pf11-30; WL(2-57)18; WL(10-15-59)17.3
1	12cbab	2,500	4,500	. . do.	1955	42.8	18	Qp,Qb,Ql	T,E	Irr	580R	9	3	22.3	5,306.4	10-15-69	DL; Dr; GE; Pf14-44; WL(4-55)21
1	12cbdb	1,900	4,420	. . do.	1955	42R	18	Qp,Qb,Ql	T,E	Irr	390R	13	3	18.8	5,303.6	10-15-59	DL; Dr; GE; Pf20-42; WL(4-55)24
1	12ccba	1,050	4,670	. . do.	1957	49R	36 to 18	Qp,Qb,Ql	C,E	Irr	50R	. .	. .	16.2	5,301.5	10-16-59	B48; Dr; GE; L; Pf10-49
1	12ccca	620	4,900	Hughes Bros.	1929	46.1	48	Qp,Qb,Ql	N	Irr	. .	. .	. .	24.3	5,311.1	4-12-62	D; U(1955); WL(10-19-59)21.5
1	12cccb	600	5,120	Calvary Temple. . . .	1956	50R	21	Qp,Qb,Ql	T,E	Irr	100E	5.3	1/2	22.9	5,308.3	10-16-59	A1.8; Dr; FD; GE; L; Pf15-35; WS
1	12cccd	200	4,900	. . do.	1956	28R	21	Qp,Qb	N	N	8R	14	2	14	5,309.7	7- 9-56	B15; Dr; GE; L; Pf9-19; U(1959)
1	12cdda	550	2,660	M. Denton	1958	55.8	18	Qp,Qb,Ql	N	AC	800R	18	. .	17.8	5,318.6	10-20-59	B56; Dr; GE; L; Pf30; Re
1	12cdda2	560	2,710	. . do.	1958	20.6	2	Qp,Qb,Ql	N	O	. .	. .	. .	17.4	5,317.8	10-20-59	Dr
1	12cdda3	500	2,930	. . do.	1958	48.5	18	Qp,Qb,Ql	N	AC	450R	28	. .	14.0	5,313.6	10-20-59	B49; DL; Dr; GE; Pf30; Re
1	12cdda4	340	2,920	. . do.	1958	56.0	18	Qp,Qb,Ql	N	AC	410	40	. .	16.4	5,316.7	10-20-59	DL; Dr; GE; Pf30; Re
1	12cdda5	480	2,670	. . do.	1958	20.5	2	Qp,Qb,Ql	N	O	. .	. .	. .	16.8	5,317.6	10-20-59	Dr
1	12dccb	550	2,580	Hughes Bros.	1947	43.7	60 to 48	Qp,Qb,Ql	T,E	Irr	500R	. .	. .	16.2	5,316.8	10-19-59	A64; By16
1	12dccb2	500	2,580	. . do.	. .	42R	60 to 8	Qp,Qb,Ql	N	Irr	. .	. .	. .	16.8	5,318.6	10-19-59	By
1	12dccb3	400	2,580	. . do.	. .	42R	60 to 8	Qp,Qb,Ql	N	Irr	. .	. .	. .	16.9	5,319.7	10-19-59	By
1	12dccb4	340	2,580	. . do.	. .	42R	60 to 8	Qp,Qb,Ql	. .	Irr	. .	. .	. .	. .	5,318.6	. . . .	By
1	12dccb5	350	2,440	. . do.	. .	45.6	48	Qp,Qb,Ql	T,E	Irr	500R	19	. .	16.4	5,317.4	10-19-59	By
1	12dccc	300	2,350	. . do.	. .	42R	48	Qpp,Qb,Ql	T,E	Irr	500R	13	. .	14.3	5,318.0	10-19-59	By
1	12dccc2	250	2,580	. . do.	. .	42R	60 to 8	Qpp,Qb,Ql	N	Irr	. .	. .	. .	15.2	5,317.2	10-20-59	By
1	12dccc3	180	2,580	. . do.	. .	42R	60 to 8	Qpp,Qb,Ql	N	Irr	. .	. .	. .	. .	5,318.1	. . . .	By
1	13abad	4,800	1,600	. . do.	1954	38R	48	Qpp,Qb,Ql	. .	Irr	. .	. .	. .	. .	5,322.7	. . . .	U(1959)
1	13abdb	4,520	1,720	. . do.	1954	48R	48	Qpp,Qb,Ql	T,E	Irr	500R	. .	. .	15.6	5,325.9	10-19-59	By;D
1	13abdb2	4,490	1,750	. . do.	1954	58R	48 to 8	Qpp,Qb,Ql	. .	Irr	. .	. .	. .	15.6	5,326.8	10-19-59	By
1	13abdb3	4,550	1,770	. . do.	1954	43.9	48	Qpp,Qb,Ql	. .	Irr	. .	. .	. .	16.3	5,326.4	10-19-59	By
1	13abdb4	4,570	1,750	. . do.	1929	45R	48	Qpp,Qb,Ql	C,E	Irr	. .	. .	. .	. .	5,325	. . . .	By
1	13abdb5	4,540	1,950	. . do.	. .	44.1	48	Qpp,Qb,Ql	T,E	Irr	500R	20	. .	18.1	5,326.8	4-12-62	D; WL(10-19-59)16.8
1	13abdb6	4,610	1,800	. . do.	1929	45R	48	Qpp,Qb,Ql	C,E	Irr	. .	. .	. .	. .	5,326.1	. . . .	D
1	13abdb7	4,590	1,970	. . do.	1929	45R	48	Qpp,Qb,Ql	C,E	Irr	. .	. .	. .	. .	5,326.3	. . . .	D
2	13acac	3,550	1,780	G. Gaer	1955	80R	5	TKdu	N	Irr,Ot	B2R	. .	. .	13.9	5,335.3	10- 9-59	B12; Dr; L; Pf60-80
1	13acad	3,600	1,400	F. Beeson	1955	80R	6 to 4	Ql	S,E	Irr,Ot	B25R	55	2	18.0	5,334.7	4-12-62	B80; Dr; L; Pf50-80; WSp
1	13acda	2,980	1,400	R. Williams	1955	32.5	6	Ql	C,E	IrrL	40R	. .	. .	23.4	5,352.4	4-21-62	B33; Dr; L; Pf10; WL(8-13-56)22.9; WL(10-22-59)15.6; WSp
1	13addc	2,800	350	C. Wilmore.	1958	70R	8 to 6	Qb,Ql	S,E	Irr	60R	. .	. .	30	5,345	3-13-58	B47; Dr; B12-7; L; Pf35-70
1	15bbcd	4,000	4,780	Denver Tramway Corp..	1955	23.6	48 to 24	Qp	C,E	Com,E	20R	. .	. .	20.0	5,235	4- 9-62	D; L; WL(11-18-60)18.2
1	15bbcd2	4,250	4,900	. . do.	1955	26.5	48	Qp,Qb	C,E	Com	150M	1.4	1/4	10.6	5,230	11-18-60	B20; DL; Dr; GE; Pf8-13
1	15bbcd3	4,000	4,850	Robinson Brick and Tile Co.	1955	32.6	16	Qp,Qb	C,E	Ind,C	100R	12	2	16	5,230	6-13-55	B25; Dr; L; Pf8-28; T40
1	15bdab	3,850	3,260	Montgomery Ward & Co.	1956	45R	7 to 6	Qb,Ql	N	Com	8R	5B	1	25	5,254	4-12-56	B45; Dr; GE; L; Pf15-45
1	15cacd	1,550	3,310	Gates Rubber Co. . .	1960	83R	. .	Qe(?),TKdu	. .	TW	2R	. .	. .	30	5,250	. . . .	B30; Dr; L
1	15cbda	1,850	4,200	Denver Water Board. .	1955	35.8	24	Qpp,Qb,Ql	T,E	PS,E,D	1,100R	. .	. .	18.1	5,233.6	6-27-59	AT; DL; GE; Pf12-28
1	15cbda2	1,855	4,210	. . do.	1954	42.8	6	Qpp,Qb,Ql	N	Ot,TW	43R	14	1-1/2	15.3	5,233.6	4- 9-62	B36.5; DL; Dr
1	15cbdd	1,600	4,080	. . do.	1955	36.1	24	Qpp,Qb,Ql	T,E	PS,E,O	1,150M	6	5	18.3	5,234.8	10-26-55	AT; DL; GE; Pf12-28
1	15cbdd2	1,600	4,070	. . do.	1954	34.0	6	Qpp,Qb,Ql	N	Ot,TW	51R	12	2	14.4	5,234.8	4- 9-62	B34;O; DL; Dr

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-68-																
1	15ccab	1,270	4,420	Gates Rubber Co. . .	. .	32R	48	Qpp,Qb,Ql	. .	Ind,C, Pr	200R	8	. .	20	5,230	2- 2-53	B32; By8; U(1960)
1	15ccab2	1,140	4,340	. . do.	. .	31R	48	Qpp,Qb,Ql	. .	Ind,C, Pr	400R	8	. .	19	5,230	2- 2-53	By8; D; Si
1	15ccac	870	4,370	. . do.	. .	. .	48	Qpp,Qb,Ql	. .	Ind,C, Pr	100R	8	. .	20	5,230	2- 2-53	By8; D
1	15ccac2	830	4,420	. . do.	. .	32R	48	Qpp,Qb,Ql	. .	Ind,C, Pr	100R	8	. .	20	5,230	2- 2-53	B32; By8; D; Si
1	15ccac3	680	4,430	. . do.	. .	31R	48	Qpp,Qb,Ql	. .	Ind,C, Pr	100R	8	. .	. .	5,230	. . . .	By8; D
1	15ccad	970	4,030	. . do.	. .	32R	48	Qpp,Qb,Ql	. .	Ind,C, Pr	100R	8	. .	. .	5,230	2- 2-53	B32; By8; D; Si
1	15ccad2	850	4,230	. . do.	. .	35R	48	Qpp,Qb,Ql	. .	Ind,C, Pr	400R	8	. .	23	5,230	2- 2-53	B35; By8; D. Reported yield of 100 gpm in 1960
1	15ccad3	680	4,200	. . do.	. .	31R	48	Qpp,Qb,Ql	. .	Ind,C, Pr	400R	8	. .	19	5,230	2- 2-53	By8; U(1960)
1	15cdab	1,300	3,200	. . do.	. .	. .	. .	Qpp,Qb,Ql	. .	N	250R	. .	. .	. .	. . . .	. . . .	Dry, abandoned in 1940
1	15dcbb	1,100	2,330	. . do.	1961	52R	6	Qb,Ql	N	TW	96M	15	4	21	5,268	9-25-61	B47; DL; Dr; Sa; SL
1	15dcbc	840	2,370	. . do.	1960	60R	4	Qb,Ql	N	O	. .	. .	. .	21	5,264	10- -60	B42; L
1	15dcbc2	700	2,360	. . do.	1960	42.0	18	Qb,Ql	T,E	Ind,C, Pr,O	412M	. .	24	18.6	5,264	10- -60	AT; B47; DL; Dr
1	15dcbc3	660	2,310	. . do.	1960	67R	6	Qb,Ql	. .	TW,O	35R	. .	. .	22.5	5,264	10- -60	DL
1	15dcbd	700	2,050	. . do.	1961	67R	36	Qb,Ql	T,E	C,O,Pr	750M	12.6	122	24.3	5,268	6- 5-61	AT; B47; DL; Dr; Lo31-46
1	15dcdb	430	1,850	. . do.	1960	46R	4	Qb,Ql	. .	O	. .	. .	. .	32.3	5,264	4- 9-62	B46; DL; Dr
1	15dcdb2	400	1,920	Shwayder Bros., Inc..	1955	50R	18	Qb,Ql	T,E	AC,C,Pr, Ind,Ot	850M	9.6	1/6	26.1	5,266	12-16-60	B49; Dr; GE; L
1	16dabb	2,550	1,100	H. Holberg.	1910	18R	48	Qpp,Qb,Ql	C,E	Irr,G	. .	. .	. .	13	5,227.8	1954	D
1	16dabb2	2,350	1,000	F. Kirschner.	. .	33.5	48	Qpp,Qb,Ql	C,E	Irr,AC, G	. .	. .	. .	14.3	5,230	4- 9-62	D; WL(8-22-56)15.0
1	16dadc	1,600	400	H. Peterson	. .	19.2	24	Qb,Ql	C,E	G	100E	. .	. .	9.5	5,230	8-22-56	Dr; U(1959)
1	16dadc2	1,620	400	. . do.	1957	35R	. .	Qb,Ql	C,E	G	100R	. .	. .	15	5,235	10- -59	B33; Dr; GE; L; Pf9-35
1	16ddad	750	300	R. Stinnett	1956	39R	6	Qb,Ql	C,E	Irr	30E	. .	. .	22	5,235	4-11-56	B36; DL; Dr
1	19cddd	150	2,700	E. Stone.	1955	54R	6	Qp	S,E	IrrL,Ot	20R	. .	. .	21.6	5,420	4- 9-62	B30; DL; Dr; Pf30-54; WSp
1	20aaba	5,050	670	A. Horton, Jr. . . .	1955	79.0	6 to 5	Qp,TKdu	J,E	IrrL	15R	. .	. .	18.0	5,345	8-16-56	B38; Dr; L; Pf60-79
1	21adbd	3,350	750	Koether-Cox	1960	35R	6	Ql	S,E	D	20R	5	. .	15	5,241	8-13-60	DL; Dr; Pf20-35
2	21bbdd	4,180	4,250	J. Hazlett.	1885	310	6 to 3	TKdu,Kdmc	N	Ot	. .	. .	. .	132.9	5,320	4-16-62	Dr; GRL. Flowed in 1890
1	21bbdd2	4,180	4,250	. . do.	. .	25.1	. .	Qp,Qy	N	N	. .	. .	. .	20.6	5,320	8-13-56	Destroyed in 1957
2	21cddb	370	3,000	Radio Station KDEN. .	1948	890R	6 to 4	Kdmc,Kdlc	S,E	AC,D,IrrL	30R	. .	. .	375	5,390.5	1958	Dr; L; WL(7-48)310
1	22bbac	4,830	4,330	GO-LO	1957	50R	6	Qb,Ql	N	Irr	B25R	12	2	15	5,232	2-27-57	B44; Dr; GE; L; Tch15-50; U(1959)
1	22bbbd	4,900	4,900	Gates Rubber Co. . .	. .	. .	48	Qb,Ql	. .	Ind,O	748R	13.6	49	22	5,262.8	12-16-52	B36; D. Abandoned for new construction
1	22bbbd2	. .	. .	. . do.	. .	. .	. .	. . .	. .	TW	. .	. .	. .	22	5,202.8	12-16-52	B36; Dn
1	22bbbd3	. .	. .	. . do.	. .	. .	. .	. . .	. .	TW,O	. .	. .	. .	22	5,262.8	12-16-52	B36; Dn
1	22bcdb	3,050	4,300	Ready Mix Concrete Co.	. .	15.3	48	Qb	C,E	Ind	50E	. .	. .	14.2	5,244.2	8-22-56	D
2	22bdbc	3,600	3,850	Wright Engineering Co.	1955	466R	6	Kdmc	S,E	Ind	B20R	40	6	260	5,258	4-28-55	Dr; EL; L; Tch28-350, 372-394, 416-460
1	22ccab	1,150	4,380	Overland Golf Course.	1947	27.8	48	Qpp,Qb,Ql	C,E	Irr	50R	13	12	9.7	5,250	4- 9-62	Dr; WL(8-23-56)9.9
2	24adac	3,500	370	Good Shepard Home . .	1912	879R	. .	Kdmc,Kdlc	T,E	Ind	61R	230	. .	369	5,435	1945	Dr; L; WL(1912)12
2	24adac2	3,500	520	. . do.	1912	1,010R	. .	Kdmc,Kdlc	T,E	Ind	39R	. .	. .	369	5,435	1945	DL; Dr
1	26cbda	1,920	4,200	E. See.	1956	28R	. .	Qp	J,E	D	5R	0	48	18	5,325	9- 1-55	Dr; WS
2	26ccac	720	4,420	Porter Sanitarium . .	. .	1,000R	. .	Kdmc,Kdlc	T,E	Hosp	30R	75	. .	200	5,338	6-20-57	Dr
2	26ccad	700	4,100	. . do.	. .	1,020R	. .	Kdmc,Kdlc	T,E	Hosp	41M	. .	. .	200	5,339	6-20-57	Dr
2	26ccbd	750	4,650	. . do.	1932	1,020R	. .	Kdmc,Kdlc	T,E	Hosp	40	. .	. .	200	5,332	6-20-57	B35; DL; Dr
2	26ccca	450	4,650	. . do.	1955	1,747R	8 to 6	Klb,Kla,Kfm	T,E	Hosp	F300R	. .	. .	. .	5,329	5- -56	Dr; EL; L
1	27acbc	3,350	2,420	W. McKinney	1955	43R	6	Qp,Ql	J,E	IrrL	B25R	2	2	10	5,272	5- -55	DL; Dr; Tch30-43
2	27cdca	350	3,500	S. W. Shattuck Chemical Co. . .	1955	410R	6	Kdmc	S,E	N	. .	. .	. .	37.3	5,263	10- 5-59	EL; Tch325-410
1	27dcbb	1,220	2,450	W. Dowdle	1956	96.2	6	Qp,Ql	N	N	. .	. .	. .	25.6	5,305	7-27-56	B34; Dr; L

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-68-																
1	28aacb	4,450	1,180	J. Scheffer	. .	12R	48	Qpp	. .	Irr	. .		. .	9	5,247.3	. . . .	D
1	28aacc	4,230	1,060	. . do.	. .	17R	48	Qpp	. .	Irr	. .	. .	. .	8	5,229.1	. . . .	D
1	28aadd	4,050	50	Denver Water Board. .	1954	33R	6	Qpp,Qb,Ql	. .	TW,O	81M	11.1	2-1/4	9.8	5,248.9	1955	AT; B32; Dr; L
1	28abdd	4,000	1,550	F. Dardano.	1934	18.0	48	Qpp,Qb,Ql	C,E	Irr,Ot	727M	. .	. .	7.5	5,250	4- 9-62	A5; D; WS
1	28acdd	2,650	1,420	. . do.	1900	30.7	. .	Qpp,Qb,Ql	C,E	Irr,Ot	888M	. .	. .	10.6	5,254	4- 9-62	D; WSp
1	28adbc	3,340	1,250	O. Smith.	. .	36R	48	Qpp,Qb,Ql	C,E	Irr	300E	. .	. .	15.5	5,251	8-21-56	A1.25; D
1	28adcd	2,850	880	J. Buck, Sr. . . .	1937	16.0	48	Qpp,Qb	C,E	Irr,O	300E	. .	. .	10.6	5,254	8-21-56	A7(with dabc and dabd); D
2	28bacd	4,050	3,450	Gulf Petroleum Co.. .	1957	509R	6 to 4	Kdmc	S,E	Com	12R	146	. .	150	5,320	10- 5-57	DL; Dr; EL; Pf446-509
2	28bdba	3,800	3,450	Jones Precast Co. . .	1957	512	4	TKdu,Kdmc	S,E	Ind	. .	. .	. .	. .	5,318	. . . .	DL; Dr; EL; Pf372-432, 452-512
2	28ccbb	1,080	4,980	C. Morton	1954	102	6	TKdu	J,E	D	8R	5	1/2	20.2	5,358	8-28-56	Dr; WSp
1	28dabc	2,000	1,180	J. Buck	1921	15.8	48	Qpp,Qb	C,E	Irr,Ot	. .	. .	. .	12.3	5,259	4- 9-62	D
1	28dabd	2,200	900	. . do.	1922	17.1	66 to 48	Qpp,Qb	C,E	Irr,Ot	309M	1.4	1/6	11.4	5,259	4- 9-62	D; FD; WSp
1	28dacd	1,520	730	Public Service Co. of Colo.	1953	35R	24	Qpp,Qb,Ql	T,E	Ind,C	1,220M	7.8	1/4	10.5	5,257.5	5- 2-58	DL; Dr; FD; WS
1	28dbac	2,000	1,720	J. Buck	1930	26.2	48	Qpp,Qb	C,E	Irr,Ot	. .	. .	. .	11.4	5,259	4- 9-62	D
1	28dbad	2,000	1,480	F. Durando.	1939	21.7	48	Qpp,Qb	C,E	Irr,Ot	. .	. .	. .	12.2	5,260	4- 9-62	A3.5; D
2	28dcad	720	1,330	Public Service Co. of Colo.	1948	680R	12	TKdu,Kdmc, Kdlc	N	Ot	83R	140	7	73.9	5,258.9	4- 3-62	DL; Dr; EL; GE; Pf140-155, 180-208, 225-270, 300-330, 335-350, 395-460, 470-505, 520-660; WS
2	28dcad2	700	1,350	. . do.	1948	1,720R	10 to 6	Klu,Klb,Kla, Kfm	N	Ot	P50M	142.8	3	+20.9	5,258.2	4- 3-62	AT; B47; D; EL; L; Pf900-915, 975-990, 1,031-1,046, 1,087-1,097, 1,177-1,201, 1,246-1,412, 1,422-1,701; WS. Original static water level +145.5
1	28dcdd	100	1,370	. . do.	1950	32R	48	Qb,Ql	T,E	C	225R	. .	. .	15	5,262	5- -50	D
1	28ddbd	950	780	. . do.	1947	44R	16	Qb,Ql	T,E	C,E	778M	4.7	1/4	9.8	5,257.5	5- 2-58	B35.5; DL; Dr; WS
1	28ddcb	460	1,240	. . do.	1947	45R	16	Qb,Ql	T,E	C,E	506M	9.9	1/2	12.6	5,256.9	5- 2-58	B36.8; Dr; L; WS
1	28ddcc	100	1,270	. . do.	1950	32R	48	Qb,Ql	T,E	C	225R	. .	. .	15	5,262	. . . .	D
1	29adac	3,400	500	J. Garlick.	1955	37.8	24	Qp	J,E	IrrL	2R	. .	. .	24.4	5,380	8-20-56	B12; DL; Dr; GE; Pf12-28
1	29adbb	3,880	1,100	E. Martin	1955	31.9	24	Qy,TKdu	J,E	IrrL	3R	. .	. .	24.9	5,422	8-17-56	B8; Dr; GE; L; Pf6-29
1	29cadc	1,500	3,100	All Saints Church . .	1955	45.7	5	Qp,Qy	J,E	IrrL	B10R	4	1-1/2	10.0	5,410	8-17-56	B21; DL; Dr; Pf36-51
1	29cadd	1,500	2,750	. . do.	1955	43.4	5	Qp,Qy	J,E	IrrL	B10R	7	1-1/2	8.4	5,405	4- 9-62	DL; Dr; Pf39-50; WL(8-17-56)13.2
2	29daaa	2,500	150	L. McGuffin	1957	551	5 to 4	Kdmc	Cyl,E	D,IrrL	7R	370	. .	120	5,400	7- -57	B18; Dr; EL; L; Sa; SL
2	29dbbb	2,450	2,450	W. Bosewell	1957	557R	4	Kdmc	S,E	IrrL	10R	111	13	64	5,415	10- 1-57	A.3; DL; Dr; Pf437-557
1	29dccb	350	2,580	Arapahoe Bldg. Co. .	1959	60R	6 to 5	Qp	S,E	Com	15R	20	. .	10	5,415	11-23-59	B40; DL; Dr; Pf19-60
2	30cdca	470	3,580	H. Carter	1945	600R	6 to 3	Kdmc	T,E	D	. .	. .	. .	445	5,520	1955	Dr; U(1957)
2	30cdda	350	2,930	N. Isenhart	1953	955R	8 to 6	Kdmc,Kdlc	S,E	D,IrrL	15R	100	. .	350	5,515	7- -53	B33; Dr; L
2	30cddb	540	3,210	F. Meyer.	1957	652R	8	Kdmc	. .	. .	75R	151	. .	73	5,515	2- 9-57	Dr
1	31cdcb	350	3,680	Denver Water Board. .	1957	41.7	6	Qpp,Ql	N	TW	40M	3.7	1-1/2	6.5	5,335.6	1-14-55	AT; B36.5; Dr; L
2	32acdc	2,940	1,800	C. Shiver	1961	585R	5	Kdmc	S,E	D	B10R	150	1-1/2	170	5,415	8-10-61	DL; Dr. Bailed 5 gpm at 305 feet
2	32bdcd	2,880	3,580	Loretto Heights College	1922	783R	. .	Kdmc,Kdlc	S,E	Inst,Sw	20R	56	. .	400	5,470	12-14-60	B37; DL; Su
2	32bdcd2	2,750	3,500	. . do.	1905	798R	10 to 6	Kdmc,Kdlc	S,E	Inst,Sw	15R	. .	. .	372	5,470	1957	L; Pf584-798; Su; WL(1905)341; WL(7-1934) 320
2	33ccbc	800	5,160	University of Denver.	1959	100R	6 to 4	TKdu	S,E	C,Ind	10R	30	. .	60	5,298	5-30-59	B5; L; Pf60-100. Oil-shale pilot plant
1	33ccdc	180	4,400	I. Hiler.	1954	25R	5	Qpp,Ql	J,E	D	. .	. .	. .	14.6	5,280	8-19-56	DL
1	33ccdd	180	4,280	R. Lakin.	1954	26R	5	Qpp,Ql	J,E	D	. .	. .	. .	15	5,275	8-20-56	DL
1	33cdca	500	3,620	F. Hornbuckle.. . .	1942	19.5	1-1/4	Qpp,Qb	N	Ot	. .	. .	. .	14.2	5,272.1	4- 9-62	Dr

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-68-																
1	33cdca2	500	3,620	F. Hornbuckle	1960	45.0	1-1/4	Qpp,Qb,Ql	M	Ot	15M	. .	. .	14.1	5,272.1	4- 9-62	B43; Dr; SL; Tch10-34
1	33cdcb	540	3,700	. . do.	1959	40R	6	Qpp,Qb,Ql	J,E	D	20R	8	. .	15	5,273	7- 2-59	DL; Dr; Pf23-36
1	33cdcc	20	3,820	C. Kealiner	1954	65R	5	Qpp,Qb,Ql	J,E	D	8R	10	1/2	17.0	5,275	8-14-56	Dr
1	33cdcc2	20	3,640	Herbertson Sand and Gravel Co.	1957	25R	6	Qpp,Qb,Ql	J,E	Ind	B25R	17	3	8	5,274	2-13-57	DL; Dr; Pf14-25
1	33cddb	500	3,000	R. Roberts.	1958	50R	6	Qpp,Qb,Ql	Cyl,E	D	30R	. .	. .	18	5,325	9- 9-58	B38; DL; Dr; Pf32-50
1	33dcbd	800	2,180	R. Roy	1956	49.3	6	Qpp,Qb,Ql	N	Ot	. .	. .	. .	19.6	5,269	4- 9-62	DL; Dr; GRL; WSp
2	33dcbd2	820	2,180	. . do.	1940	501R	6	Kdmc	. .	PS,Sw	B30R	77	1/2	25	5,269	7-25-56	DL; Dr; Sa; SL; Tch250
1	34ccdb	600	4,350	City of Englewood . .	. .	. .	18	Qp,Qb	T,E	Irr,Sw	100E	. .	. .	18.9	5,312	11- 8-59	A5(with cdbb); Dr
1	34cdbb	1,000	3,700	. . do.	. .	16.7	18	Qp,Qb	T,E	Irr	200E	. .	. .	13.9	5,305	11- 8-59	Dr
2	35cddd	200	2,900	Radio Station KLZ . .	1935	1,900R	6 to 5	Klb,Kla,Kfm	T,E	D	225R	. .	. .	+92	5,405	1935	DL; Dr; Pf1,500-1,900; WL(1956)+16
2	36dddb	320	460	Wellshire Golf Course	1956	2,012	10 to 8	Klb,Kla,Kfm	T,E	Irr,Ot	260M	170	17	149.4	5,480	4- 3-62	AT; B19; Dr; EL; FD; L; Su; Tch1,680-2,012; WS
	C4-69-																
1	1bdad	3,500	2,850	A. Wolfe.	1956	95R	6	Qs,TKdu	S,E	Ind	B8R	55	1-1/2	30	5,360	10-24-56	B20; Dr; L; Pf30-95; WSp
2	2babc	4,630	3,940	H. Camp	1922	640R	6 to 5	Kdmc,Kdlu	M	Ot	15R	. .	. .	441.5	5,451	4- 2-62	Dr
2	2babc2	4,630	3,880	. . do.	1947	685R	6 to 4	Kdmc,Kdlc	M	D	5R	. .	. .	439.0	5,451	5-17-60	B23; Dr; L; Pf555-642
2	2bacc	4,060	3,930	Consolidated Mutual Water Co.	1955	700R	9	Kdmc,Kdlc	T,E	PS,E	125R	. .	244	365.0	5,440	12- 4-55	Dr; GE; Pf385-425, 505-620, 660-700
2	2bacc2	4,050	3,930	. . do.	1955	1,635R	9 to 7	Klb,Kla,Kfm	T,E	PS,E	80R	500	. .	200	5,440	11-18-55	Dr; EL; Pf385
1	2bccd	2,800	4,650	W. Crase.	1935	30R	. .	Qs	P,E	D	4R	. .	. .	9	5,462	2- 2-57	WS
1	3bddd	2,820	2,820	S. Rose	. .	57R	6	Qs	. .	D,IrrL	5R	. .	. .	46	5,510	7- -54	B55; Dr
1	3bddd2	2,800	2,800	. . do.	. .	137R	6	Qs,TKdu(?)	S,E	D,IrrL	B14R	60	. .	21	5,510	4-27-55	Dr; Pf27-117
2	3dbcc	1,350	2,450	Consolidated Mutual Water Co.	1957	650R	9	Kdmc,Kdlc	T,E	PS,E	96M	156.0	24	376.3	5,470	4- 1-57	AT; B19; Dr; EL; GRL; L; Pf300-640
2	3dcbb	1,310	2,450	. . do.	1952	1,700R	8 to 6	Klb,Kla,Kfm	T,E	PS,E	90R	. .	. .	345	5,465	3-30-57	EL; Pf302
2	4bcbb	3,720	5,120	C. Miller	1960	100R	4	TKdc	J,E	Com	7R	67	. .	18	5,600	4-27-60	B18; Dr; L; Pf66-87
2	5dbbd	2,200	2,180	R. Morrow	1957	200R	6	TKdc	Cyl,E	D	. .	. .	. .	8	5,645	8-20-58	B11; DL; Dr; FD; OH(13-200); WSp
1	6adaa	3,800	300	C. Ross	1957	30R	. .	Qs	. .	TW	. .	. .	. .	. .	5,720	. . . .	Dr; WS. Insufficient for lawn irrigation
2	6dadc	1,450	500	W. Denton	1961	713	. .	Kdmc	S,E	D	10R	. .	. .	544.9	5,760	3- 6-63	B20; DL; Dr; EL; H7-5; Pf488-713; WL(5-6)550
2	9acab	3,950	1,950	U.S. Government . . .	1959	91.4	.3	TKdc	M	Ot	7M	20.3	3	1.5	5,595	4-13-62	B11; Dr; EL; GRL; L; Pf0-91.4
1	10cadd	1,350	2,730	H. Scheid	1958	64R	6	Qs	J,E	IrrL	2E	. .	. .	8	5,541	1958	Dr; WS
1	10daaa	2,620	100	K. Jackson.	1955	60R	5	Qs	J,E	IrrL	12R	. .	. .	25	5,490	1959	Dr; WS
1	10daac	2,450	400	J. Bondurant.	. .	55R	5	Qs	J,E	IrrL	10E	. .	. .	20	5,493	1955	Dr; WL(5-2-62)20.8; WS
2	10dcab	1,050	1,850	H. Reynolds	1953	1,660R	6 to 4	Klu,Klb,Kla Kfm	S,E	D,IrrL	B26R	120	. .	140	5,532	9- -53	B11; Dr; FD; L; Tch966-1,660; WS
2	10dcbd	950	2,250	L. Smith.	. .	400R	6	TKdu,Kdmu	M	M	. .	. .	. .	276.4	5,542	5- 8-57	Dr. Inadequate for domestic use
2	10dcbd2	950	2,150	. . do.	1950	500R	6 to 4	Kdmc	Cyl,E	D	7R	. .	. .	372	5,541	10- -50	B7; DL; Dr; FD; WS
2	10ddcd	300	850	. . do.	1946	168R	6	TKdu	Cyl,E	D	2R	. .	. .	67	5,538	1957	B12; Dr; L; Pf70-74, 133-151
1	10ddcd2	150	920	. . do.	. .	59R	6	Qs	Cyl,E	IrrL	2R	22	1/2	37	5,540	1954	Dr; Su
1	11bbdc	4,220	4,430	T. McLaughlin	. .	71R	6	Qs,TKdu(?)	M	M	2M	53.3	. .	12.1	5,474	5- 3-52	AT; Dr
1	11bbdc2	4,200	4,540	G. Manninger.	. .	94R	. .	Qs,TKdu(?)	. .	IrrL	. .	. .	. .	12	5,476	6- 4-55	Dr
2	11bdaa	3,830	2,740	C. Overgard	1954	435R	6 to 4	Kdmc	. .	D	8R	30	. .	350	5,443	1954	B43; DL; Dr; Pf385-426
1	12cdaa	1,250	2,850	C. Brown.	1957	100R	6	Qp,TKdu	J,E	IrrL	11M	32.6	3/4	9.8	5,419	4-30-62	Dr; FD; WL(8-8-60)11.4; WS
1	12cdaa2	1,080	2,700	L. Hopkins.	. .	65.7	5	Qp,TKdu	J,E	IrrL	. .	. .	. .	12.9	5,421	8- 8-60	Dr; FD; WS
1	12dacb	1,750	1,180	M. Smee	1955	60R	6	Qs	J,E	IrrL	6R	. .	. .	11.0	5,405	5- 1-62	WL(2-2-57)12; WS
1	12ddca	450	920	A. Stimac	1951	115R	. .	Qs,TKdu	J,E	IrrL	3E	. .	. .	40	5,416	1958	Dr
2	14dbcd	1,440	2,180	Bancroft Water and Sanitation District	1956	200R	6	TKdu	T,E	PS	20R	. .	. .	. .	5,460	. . . .	Dr
1	14dbcd2	1,300	2,080	. . do.	1956	30R	36	Qp	S,E	PS	35R	. .	. .	. .	5,460	. . . .	D; GE; Gyl00
2	14dcbb	1,320	2,450	. . do.	1955	635R	8	Kdmc,Kdlu	T,E	PS	62R	170	24	342.0	5,473	7- 9-60	DL; Dr; EL; GE; H16; SL; Tch100-635. Pilot hole drilled to 754 feet

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
2	C4-69-14dcbb2	1,320	2,470	Bancroft Water and Sanitation District	1956	1,801	8 to 6	Klb,Kla,Kfm	T,E	PS	65R	197	24	565.0	5,473	7- 9-60	Dr; EL; GE; L; Tch1,380-1,450, 1,480-1,700, 1,780-1,800
1	15dbdd	1,500	1,600	G. Brewton.	1952	105R	6	Qs,TKdu	J,E	IrrL	15R	. .	. .	20	5,550	2- 2-57	Dr; WS
2	15dddb	350	380	N. King	1957	298R	5	TKdu,TKdc	S,E	D	B12R	65	4	220	5,555	2-23-57	DL; Dr; FD; Tch282-297; WS. Well deepened; see dddb2
2	15dddb2	350	380	. . do.	1957	384R	5	Kdmu	S,E	D	8M	130	1	200	5,555	12- -57	GRL; L; Tch306-330, 345-360; WS
2	16bbba	5,100	4,700	Glennon Heights Inc..	1947	400R	4	TKdu,TKdc	N	N	. .	. .	. .	. .	5,680	. . . .	DL; Dr. Bailed dry
2	16bddd	2,700	2,700	. . do.	1947	610R	10 to 7	Kdmc	N	N	6R	200	. .	285	5,690	1947	Dr; SL. Inadequate for public supply
2	17dadd	1,500	200	Westcraft-Alameda . .	1954	1,997R	8 to 6	Klb,Kla,Kfm	N	Ot	35R	355	2	309.1	5,785	4- 6-62	Dr; EL; GRL; L
2	22acbc	3,400	2,580	L. Smith.	1950	480R	60 to 4	Kdmu	Cyl,E	D	10R	. .	. .	107	5,545	10- -50	DL; Dr
2	23abbd	4,870	2,300	J. Richters	1950	1,900R	10	Kld,Klb,Kla Kfm	N	Oil,Ot	. .	. .	. .	303.6	5,530	4-21-62	Dr; EL; GRL. Drilled to 6,064 feet. Plugged at 1,900 feet.
2	23ccac	980	4,410	R. Pershing	1956	217R	5	TKdu	S,E	D	5R	160	1/4	40	5,561	12-14-60	B17; Dr; FD
2	23ccac2	920	4,480	. . do.	1955	580R	4 to 3	TKdu,Kdmc, Kdlc	N	D	2R	. .	. .	380	5,560	1956	Dr; EL; L; Pf352-370, 390-580; WS
2	23ccac3	980	4,460	. . do.	1956	180R	6	TKdu	J,E	IrrL	. .	. .	. .	40	5,561	12-14-60	Dr
1	23cccc	200	5,200	J. Beer	1959	83R	6	Qs,TKdu	J,E	D	B0R	65	. .	10.6	5,550	5-17-62	DL; Dr; FD; Pf30-40; 50-83. Well deepened from 38 feet
2	23ccdc	300	4,430	G. Buehler.	. .	445R	4	TKdu,Kdmc	S,E	D	20R	220	. .	160	5,540	1956	DL; Dr; Tch284-307, 345-376, 384-407
2	24addc	2,800	540	Braden.	1941	4,814R	20 to 6	. . .	. .	Oil	F	. .	. .	. .	5,445	1934	B21; Dr; L
2	24dddd	100	150	Bit'O Sea Park Inc. .	1959	490R	6 to 4	Kdmc	S,N	D	10R	20	. .	350	5,436	9- 3-59	Dr; L; Tch300-450
2	25aaaa	5,150	150	Central Tire and Oil Co.	1957	125R	6 to 4	TKdu	. .	SS	15R	60	. .	20	5,438	12-11-57	Dr; L; Tch58-70, 80-103, 110-125
2	25aada	4,450	150	Carter Oil Co. . . .	1959	506R	4	Kdmc	S,E	SS	10R	30	. .	300	5,458	8-14-59	B38; DL; Dr; EL; Tch453-506; WS
2	25aadd	4,200	150	Socony Mobile Oil Co.	1957	500R	6 to 4	TKdu,Kdmc	S,E	SS,AC	5R	75	. .	150	5,485	12-20-57	B42; DL; Dr; Tch265-285, 450-478
2	25adda	3,200	200	M. Fredricks.	1957	335R	6 to 4	Kdmu	S,E	Com	8R	15	. .	260	5,485	12-20-57	DL; Dr; EL; Tch287-323
1	25bbbc	4,780	5,270	Green Gables Country Club.	1960	13.5	. .	Qp	N	O	. .	. .	. .	3.2	5,462.4	11-21-60	B6.5; DL; Dr
1	25bbbc2	4,760	5,270	. . do.	1960	18.5	1-1/2	Qp	N	O	. .	. .	. .	3.2	5,461.7	11- 8-60	B12.5; Dr; L
1	25bbbc3	4,740	5,270	. . do.	1960	13.5	1-1/2	Qp	N	O	. .	. .	. .	1.9	5,461.6	11-21-60	B9.5; DL; Dr
1	25bbbc4	4,730	5,270	. . do.	1960	18.5	1-1/2	Qp	N	O	. .	. .	. .	2.7	5,461.6	11- 8-60	B13.0; DL; Dr
1	25bbbc5	4,700	5,270	. . do.	1960	13.5	1-1/2	Qp	N	O	. .	. .	. .	2.2	5,461.8	11- 8-60	B11.0; DL; Dr
1	25bbbc6	4,690	5,270	. . do.	1960	13.5	1-1/2	Qp	N	O	. .	. .	. .	2.3	5,461.9	11- 8-60	B9.5; DL; Dr
1	25bbbc7	4,680	5,270	. . do.	1960	13.5	. .	Qp	N	O	. .	. .	. .	2.8	5,461.7	11- 8-60	B8.0; DL; Dr
1	25bbbc8	4,740	5,230	. . do.	1960	13.5	1-1/2	Qp	N	O	. .	. .	. .	2.5	5,459.1	11- 8-60	B6.5; DL; Dr
2	25bcbc	3,380	5,060	. . do.	1951	700R	8 to 4	Kdmc,Kdlc	S,E	D	25R	. .	. .	370	5,470	4- -51	B5; Dr; L
2	25ccba	1,120	4,770	H. Swan	1935	1,962R	6	Kdmc,Kdlc	S,E	D,IrrL	20E	. .	. .	296	5,550	1957	B2; Dr; Gun552, 555, 636, 656, 825; L; SL; WS. Plugged at 985 feet
1	26aaad	4,750	280	Green Gables Country Club.	. .	27.0	18	Qp	T,E	Sani	45M	5.6	24	.7	5,463.6	11- 2-60	AT; DD; FD; GE
1	26a[illegible]	4,670	290	. . do.	1960	13.5	1-1/2	Qp	N	O	. .	. .	. .	1.6	5,464.3	11- 8-60	B10.0; DL; Dr
1	26c[illegible]	300	4,220	Hiawan Ranch.	. .	7.9	1-1/4	Qpp	N	Ot	. .	. .	. .	1.0	5,400	4-17-59	Dr
1	27bccd	2,850	4,630	Olson and Marica. . .	. .	73R	. .	Qs	. .	. .	2R	39	1/4	30	5,649	9-21-56	
2	27bccd2	2,740	4,710	. . do.	. .	284	6	TKdu	N	Ot	. .	. .	. .	187.8	5,647	1- 2-57	Dr; GRL
2	27cbab	2,360	4,480	H. Parsons.	. .	275R	6	TKdu	N	D	<1R	. .	. .	138.6	5,596	5- 7-57	Dr; GRL; U(1957)
2	27cbab2	2,360	4,460	. . do.	1956	157	. .	TKdu	. .	D	<1R	. .	. .	49.0	5,596	5- 7-57	Dr; EL. Drilled to 300 feet; hole caved at 157 feet

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-69-																
2	27cbba	2,620	4,710	A. Olson.	1957	694R	. .	Kdmc,Kdlc	. .	D	17R	68	. .	300	5,680	9-24-57	DL; Dr; EL; GE; H8; Tch398-500, 632-694
2	27cbbb	2,460	5,220	L. Strohm	1958	666R	6	Kdmc,Kdlu	S,E	D	B12R	40	. .	290	5,600	3- 7-58	Dr; EL; L; Pf557-579, 623-666
2	28accc	2,800	2,400	C. Morse.	1956	645R	. .	Kdmc,Kdlu	S,E	D	. .	. .	. .	. .	5,620	. . . .	DL; Dr
2	28adcd	2,750	880	T. Exler.	1956	655R	6 to 4	Kdlc	. .	. .	B7R	50	4	460	5,650	8- -56	Dr; DL; Sa; Tch561-631
1	31cddc	20	3,240	Freedman and Wilson .	1958	55R	7 to 6	Qs	J,E	PS	20R	. .	. .	18	5,610	3-17-59	Dr; FD
1	31dcdc	50	1,850	. . do.	1961	13R	48	Qs	E	Sw,PS	17R	8	. .	5	5,580	6- 7-61	B13; Gyl30; L
1	31dcdd	150	1,500	. . do.	1960	46.7	6 to 5	Qs	J,E	PS	6R	. .	. .	9.3	5,580	11-15-60	B20; Dr; L; Pf20-50
1	31dcdd2	150	1,400	. . do.	1960	36.6	6	Qs	S,E	PS	50R	. .	. .	10.3	5,580	11-15-60	B20; DL; Dr; Pf20-38; WSp
1	34aabc	4,750	1,000	D. Buchanan	. .	25.0	24	Qpp,Ql	N	Irr,Ot	54M	15.3	3	5.1	5,405	4-12-62	AT; B25; Dr
1	34abaa	4,960	1,550	A. Lago	1955	15.1	16	Qpp,Ql	N	Irr,Ot	1,000R	4	2	2.7	5,405	4-12-62	A80; Dr; L; Pf7-16. Adjacent to sump
1	35babb	4,970	3,900	D. Buchanan	. .	5.9	48	Qpp,Ql	N	Irr,Ot	. .	. .	. .	4.5	5,393	4-12-62	B13; D. Collector and sump
1	35babb2	5,000	3,900	. . do.	. .	5.6	6	Qpp,Ql	N	TW,Ot	. .	. .	. .	3.0	5,390	4-17-59	Dr
2	35ddac	750	500	E. Cavalier	1957	685R	6	Kdmc,Kdlc	S,E	D,IrrL	50R	. .	. .	58.6	5,430	6-28-57	DL; Dr; EL; GRL
1	36cbba	2,500	4,900	Bear Creek Swim and Country Club. . . .	1959	58R	6	Qpp,Ql	. .	Sw	30R	4	. .	22	5,365	4-28-59	B39; Dr; L; Pf23-58
1	36cbbd	2,300	4,900	. . do.	1959	40R	8	Qpp,Ql	J,E	Sw	50R	7	. .	9	5,360	6-20-59	DL; Dr; Pf10-25
2	36dcad	740	1,500	A. Nielsen.	1957	719R	8	Kdmc,Kdlc	N	PS	B60R	128	. .	40	5,340	1-18-57	B24; Dr; EL; L; Tch200-630
	C4-70-																
2	1adac	3,450	470	Colo. National Guard.	1932	1,786R	15 to 3	Kdmc,Kdlc, Klb,Kla,Kfm	S,E	Inst,Irr	45M	. .	. .	120	5,733	1953	B25; Dr; FZ; GRL; Gun1,421-1,424, 1,443-1,445; L; Pf498-517, 524-580, 742-800; WS. Pumping level below 475 feet in 1957
2	4cbbc	2,100	5,000	City and County of Denver.	1928	90R	6	pC	J,E	Inst	. .	. .	. .	50	7,310	12- 1-60	B12; DL; Dr; FD; SG. Buffalo Bill Museum
2	4daab	2,400	450	H. Shelton.	1956	98R	8 to 6	pC	J,E	D	15R	. .	60	30.3	6,075	5- 1-61	B21; Dr; FD; FZ; L; Pf75-95; SG; Ws. Water from fractures between 89 and 91 feet
-	8bbcd	4,050	4,900	R. Van Horn	. .	18.0	24	pC	P,E	D	6M	4.7	2	6.7	7,370	7-10-61	AT; D; SG; WS
1	10adad	3,320	120	East Tin Cup, Inc.. .	1959	90R	5	Qp,Kl	S,E	Com	30R	. .	. .	25	6,040	12-23-59	B25; Dr; L; Pf48-60, 70-90. WL(1961)15
2	10dbac	2,180	1,970	Magic Mountain. . . .	1957	622R	8 to 6	TRPl	S,E	Com	63M	214	8	. .	6,160	8-21-57	AT; B9; Dr; EL; L; OH(50-622). Yields maximum of 177 gpm; flows when not pumped
2	11aacd	4,200	750	Williams-Woodward Engineering Co. . .	1955	1,968R	9 to 6	Kdlc,Klb, Kla,Kfm	S,E	Com,Cons	50R	. .	8	654.1	6,009	7-26-60	B2; Dr; EL; L; Pf946-1,077, 1,679-1,700, 1,742-1,851; WS
1	11bcbc	3,400	5,200	East Tin Cup, Inc.. .	. .	42.5	6	Qp	S,E	Com	. .	. .	. .	5.3	6,030	6-27-60	Dr; FD
2	15addb	. .	. .	J. Bumpus	1957	485	6	Pf	. .	D	B1R	. .	. .	46	6,300	8- 6-57	DL; Dr; EL; OH(23-483). Water-entry log
2	16bdda	3,080	2,870	Mother Cabrini Shrine	. .	Spring	. .	pC	. .	Inst	F2E	. .	. .	. .	7,095	7-26-57	FD; SG. Flow from fractures
2	23dbbc	2,000	2,540	A. Rooney	1954	275R	4	Ks	N	D	F2M	. .	. .	+11.7	5,985	5-11-55	AT; Dr; FD; H8; L; Pf207-225; WS; WSr
2	23dcba	1,180	2,220	. . do.	. .	48.5	6	Kb	C,E	D	9M	1	1/4	3.6	5,950	7-22-60	Dr; FD; WSp; WS. Flows in winter
2	23dcba2	1,070	2,210	B. Gleich	1953	52R	6	Kb,Ks	J,E	D,IrrL	25R	. .	. .	2.5	5,950	7-22-60	A.75; B5; Dr; FD; L; Pf35-52; WS. Flows in winter
1	26bdbc	3,350	3,670	E. Nelson	. .	Spring	. .	Qc	. .	D,Pond	F3R	. .	. .	. .	6,052	7-18-56	FD

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C4-70-																
1	26cdaa	1,180	2,800	Denver Water Board. .	1957	32R	10	Qp,Ql	T,E	PS,E	10R	10	. .	10.8	6,011	5- 6-58	Dr; GE; L; Pf21-31
2	26dcbb	1,300	2,600	City and County of Denver.	. .	Spring	. .	Pf	. .	N	F5R	. .	. .	. .	5,980	7-18-56	FD
2	27dbaa	2,410	1,550	. . do.	. .	Spring	. .	Pf	. .	Inst	15E	. .	. .	. .	6,840	5-13-59	FD; WS
2	27dcad	840	1,460	. . do.	. .	Spring	. .	Pf	. .	N	6M	. .	. .	. .	6,560	5-12-59	FD; WS
2	27ddbc	850	1,100	. . do.	. .	91.1	6	Pf	N	TW	<1R	. .	. .	9.3	5,995	7-21-56	EL; FD; GRL
1	29abd	4,000	1,400	Idledale Water and Sanitation District	1940	Spring	. .	Qpp,pC	N	PS	. .	. .	. .	. .	6,860	5- 5-61	WS
1	29acaa	3,730	1,370	. . do.	1940	12R	48	Qpp	C,E	PS	. .	. .	. .	1.0	6,820	5- 5-61	D
2	29acac	3,400	1,700	V. Kline.	1953	20R	30	pC	Cyl,E	D	<1R	. .	. .	5	6,890	6- 6-61	D; SG. Dry 1955 to 1957
2	29acda	3,100	1,600	R. Dysart	1957	48R	6	pC	. .	D	3	37	3	18	6,840	2-25-57	B15; Dr; L; SG
2	29adcb	3,050	1,300	E. Marley	1959	88R	6	pC	S,E	D	<1R	. .	. .	23.0	6,790	1-17-61	B12; Dr; FD; L; SG
1	32abac	4,700	1,960	Idledale Water and Sanitation District	1949	30R	48	Qpp,Ql	Cyl,E	PS	20E	. .	. .	2	6,440	5- 5-61	D; FD; Gy
1	33bcab	3,650	4,300	W. Ballard.	1957	29R	5	Ql,pC	J,E	D	4R	. .	. .	10	6,395	9- 3-57	B28; Dr; L; Pf17-29; SG
2	34abaa	5,230	1,450	City and County of Denver.	. .	Spring	. .	pC	N	N	F15E	. .	. .	. .	6,485	5-12-59	FD; SG; WS
	C4-71-																
-	12cada	1,820	2,920	Mount Vernon Country Club.	. .	92R	. .	Ql,pC	. .	PS	21	. .	. .	. .	7,640	. . . .	Dr; SG; WS. Thirteen wells and 1 spring supply a total of about 68 gpm
-	13cadc	1,450	3,250	Girl Scouts of Denver	1957	202R	6	pC	. .	D	<1R	. .	. .	34	7,960	6-17-57	DL; Dr; OH(47-202); Pf20-47; SG
-	24aacc	4,050	1,200	Hastings.	. .	200R	. .	pC	. .	D	<1R	. .	. .	. .	7,300	. . . .	DL; Dr; SG
	C5-65-																
2	5bdab	3,690	3,250	U.S. Air Force. . . .	1959	1,574R	16 to 12	Kdmc,Kdlc	N	D	150R	86	16	251.4	5,812	10-28-60	AT; EL; Sa; SL
2	5bdab2	3,690	3,170	. . do.	1959	2,102R	. .	Kdlc,Klb, Kla,Kfm	S,E	D	200R	70	30	209	5,812	4-20-59	AT; EL; L; Pf1,126-1,274, 1,348-1,408, 1,470-1,570; Sa; Sl. Well drilled to 2,102 feet, later plugged at 1,570 feet
2	18bdac	3,530	3,270	H. Cooper	1959	790R	6 to 4	TKdu	Cyl,W	S	12R	10	. .	310	5,992	6-12-59	Dr; L; Pf550-590, 660-690, 760-790
2	19cbbc	2,270	5,050	J. Assey.	1960	449R	6 to 4	TKdu	S,E	D	12M	210	. .	90	6,075	4-25-60	B1; Dr; FD; H7 5; L; Tch214-449
2	29babb	5,000	3,900	Federal Aviation Agency	1957	600R	6 to 4	TKdu	Cyl,E	D	4E	300	48	270	6,160	2- -58	C; Dr; EL; L; Tch393-439, 531-600; WS; WSr
2	30aaab	5,050	650	C. Quick.	1960	550R	6	TKdu	St,E	D,S	11R	. .	. .	354	6,135	11-25-60	C; Dr; H6-4; L; Pf360-550
2	31cccc	50	5,000	U.S. Air Force. . . .	1950	677R	6 to 4	TKdu	T,E	D	25R	59	8	317	6,168	12-26-50	Dr; FD; L; Pf85-677; WS; WSr
	C5-66-																
2	6bada	4,290	2,750	Meadow Hills Country Club.	1956	2,187R	8 to 6	Klb,Kla, Kfm	S,E	Irr	B73R	84	3	80	5,719	8-31-56	B26; Dr; EL; L; Sa; SL; Tch297
2	6bada2	4,300	2,750	. . do.	1956	1,278R	12 to 8	Kdmc,Kdlc	S,E	Irr	B73R	25	. .	135	5,720	9-15-56	DL; Dr; FD; Tch264; WS
2	6dbbd	2,160	2,020	Meadow Hills Land Co.	1957	2,182R	8 to 6	Klb,Kla, Kfm	N	PS	B166R	196	. .	150.0	5,723	7- 7-60	DL; Dr; EL; H11-7; Sa; Tch362
2	6dbbd2	2,120	2,020	. . do.	1957	1,291R	10 to 8	Kdmc,Kdlc	S,E	PS	177R	136	. .	162	5,723	9- 3-57	DL; Dr; EL; H13-9; Tch308
2	12dacc	1,550	1,020	E. Rippe.	1962	990R	6	TKdu	S,E	D	5R	. .	. .	384	5,900	2- 6-62	C; Dr; L; Sa; SL
1	18cadb	1,660	3,000	City of Aurora. . . .	1958	95R	. .	Qp,Qb,Ql	T,E	TW,O	1,450M	16.1	48	12.4	5,601.7	7-12-58	AT; B105; Dr
1	18dcdc	150	1,900	Corps of Engineers. .	. .	60R	24	Qp,Qb,Ql	T,E	Irr,Ot	1,084M	12.9	. .	21.1	5,626.7	4-12-62	Dr; FD
1	18dddd	20	50	. . do.	. .	61.2	24	Qp,Qb,Ql	N	Irr,Ot	300R	. .	. .	30.3	5,644.5	4-12-62	Dr
1	19aaaa	5,250	100	J. and T. Mee	1958	64R	18	Qp,Qb,Ql	T,E	D,G	300R	13	. .	32	5,644.5	7- 3-58	A.5; B60; Dr; GE; H21; L
1	19aada	4,300	200	F. Schleiger.	1951	51R	18	Qp,Qb,Ql	T,E	D,G,B, Irr	900R	12	8	35.9	5,635.8	9- 1-59	A.25(1959); A25(1956)Dr

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C5-66-																
1	19aadc	4,050	550	Denver Wholesale Florists	1960	58R	48	Qp,Qb,Ql	T,E	AC,G,B	900R	12	8	23	5,630	2- -60	A.7; B57; D
1	19accd	2,800	2,000	Corps of Engineers		39.2	7	Qp,Qb,Ql	Cyl,W	S,Ot				12.2	6,630.6	4-12-62	Dr
1	19addd	2,700	220	P. Weiss	1940	53.6	24	Qp,Qb,Ql	T,E	Irr,Ot	1,400R	8		3.7	5,628.9	4-12-62	A50; Dr; U(1959)
1	19baaa	4,940	2,800	City of Aurora	1958	112R		Qp,Qb,Ql	T,E	TW	1,570M	26.4	48		5,613.3		AT; B112; Dr; TH
1	19bdad	3,310	2,700	Corps of Engineers		35.2	24	Qp,Qb,Ql	T,E	Irr,O				4.2	5,620.8	4-12-62	Dr; GE; U(1959); WL(7-9-56)17.7; WL(9-1-59)10.7
1	19bdda	2,980	2,710	do		32.2	48	Qp,Qb,Ql	N	Irr	300R			12.0	5,622.5	9- 1-59	A30; D; U(1959)
2	19cdca	600	3,500	E. Talley	1959	1,350R	8 to 6	Kdmc,Kdlc	S,E	PS	30R	136		30	5,670	4-18-59	B38; DL; Dr; EL; FD; H11-7; Tch920-1,300; WS
2	19cdca2	590	3,480	do	1959	245R	6	TKdu	S,E	PS	30	200		30	5,670	5-12-59	DL; Dr; H11-7; Tch115-135; 175-225
1	19daad	2,000	100	Valley Country Club	1955	48R		Qp,Qb,Ql	T,E	Irr,Ot	955M	10.2	24	7.0	5,633.1	4-12-62	A65; AT; B47; Dr; L
1	19daad2	2,070	100	do		29.3	1-1/2	Qp,Qb,Ql	N	Ot				6.7	5,630.4	4-12-62	
1	19daad3	2,040	100	do		35.0	1-1/2	Qp,Qb,Ql	N	Ot				4.9	5,633.2	4-12-62	
1	19daad4	2,110	100	do		30.3	1-1/2	Qp,Qb,Ql	N	Ot				8.1	5,632	6- 6-59	Dr
2	19dbaa	2,360	1,620	do	1956	1,199R	8 to 6	TKdu,Kdmc	T,E	Sw,Com	B100R	64	4	36	5,664.5	11- 6-56	B18; Dr; EL; L; Tch1,056-1,176
1	19ddcd	190	960	City of Aurora	1955	25.8	4	Qp,Qb,Ql	N	Ot				2.2	5,637.7	4-12-62	Dr
1	19ddcd2	160	870	do	1955			Qp,Qb,Ql	N	Ot				.5	5,638.2	4-12-62	Dr
1	19ddcd3	150	820	do	1955	109R	18	Qp,Qb,Ql	T,E	PS	1,200R	41	48	8.2	5,640.6	6-19-57	B109; Dr; GE; L; Lo20-109
1	19ddcd4	120	730	do	1955	43.2	4	Qp,Qb,Ql	N	Ot				2.0	5,640.3	4-12-62	Dr
1	19dddd	20	210	do	1955		4	Qp,Qb,Ql	N	Ot				5.1	5,642.1	4-12-62	Dr
1	19dddd2	120	150	do	1955	58R	18	Qp,Qb,Ql	T,E	PS,Ot	1,300R	38	52	11.2	5,642.3	6-18-57	B56; Dr; GE; L; Lo20-58
1	19dddd3	20	100	do	1955			Qp,Qb,Ql	N	Ot				16.9	5,640 0	10-28-59	Dr
1	19dddd4	60	150	do	1955	26.0		Qp,Qb,Ql	N	O				3.1	5,640.0	4-12-62	Dr; WL(6-19-57)5.7; WL(10-28-59)16.1
2	20adda	3,000	200	J. Cavey	1962	1,377R	6 to 4	Kdmc,Kdlc	S,E	D	24R			184.0	5,785	7-14-62	Dr; L; Pf1,188-1,377; WL(5-62)160
1	20ccbd	950	4,750	Valley Country Club	1955	48R	18	Qp,Qb,Ql	T,E	Irr,Ot	985R	13		11.8	5,638.7	4-12-62	A65; B47; Dr; L
1	20ccdd	150	4,220	G. Gillen		52.1	24	Qp,Qb,Ql	T,O	Irr,Ot	1,000R	14		9.6	5,647.8	4-12-62	A42; Dr
2	28aaac	4,940	500	J. Winters	1957	450R	4	TKdc	N	D	2R	222	36	178.0	5,860	3-25-57	B5; C; Dr; EL; FD; GE; L; Pf276-450
2	29baab	5,150	3,050	D. Murdock	1937	160R	4	TKdu	J,E	D	10E			6	5,672.4	1959	B3; Dr; FD; L; WL(5-55) 40; WS. Flows in winter
1	29bbdc	4,100	4,600	do	1950	55R	24	Qp,Qb,Ql	T,E	Irr,Ot	873M	12.0	9	10.2	5,654.0	4-12-62	A40(with bcba); Dr; FD; WSp
1	29bcba	3,850	4,900	do		42.3	60	Qp,Qb,Ql	T,E	Irr,Ot	400R	9		8.1	5,655.9	4-12-62	D
1	29ddcc	50	1,200	O. Smith		64R	24	Qp,Qb,Ql	T,E	Irr,Ot	650M		168	4.8	5,678.4	4-12-62	A120; Dr; FD; WS
1	29ddcc2	50	1,050	do		49.6	24	Qp,Qb,Ql	N	Ot	500R			4.5	5,679.1	4-12-62	Dr
2	30aaaa	5,200	100	D. Murdock	1916	400R	6	TKdu	J,E	D	6M	20.0	1/2	16.1	5,642.2	9-27-57	Dr; FD; WS. Flowed in 1916
1	30aaaa2	5,150	250	City of Aurora	1956	106R	24	Qp,Qb,Ql	T,E	PS	2,060R	31	26	10.6	5,643.6	6-18-57	B75; Dr; GE; L; Lo20-106
1	30aaaa3	5,190	260	do	1956		3	Qp,Qb,Ql	N	Ot				4.7	5,644.2	4-12-62	Dr
1	30aaaa4	5,040	210	do	1956		3	Qp,Qb,Ql	N	Ot				5.5	5,645.4	4-13-62	Dr
1	30aaaa5	4,970	130	do	1956	38.1	3	Qp,Qb,Ql	N	Ot				5.4	5,644.8	4-13-62	Dr
1	30aada	4,500	220	do	1956	98R	24	Qp,Qb,Ql	T,E	PS	1,370M	13.6	26	12.9	5,647.8	6-15-57	AT; B85; Dr; FD; GE; L; Lo20-98; WS
1	30aada2	4,550	250	do	1956	36.6	3	Qp,Qb,Ql	N	Ot				6.7	5,647.9	4-13-62	Dr
1	30aada3	4,400	180	do	1956	39.1	3	Qp,Qb,Ql	N	Ot				8.4	5,649.4	4-13-62	Dr
1	30aada4	4,320	100	do	1956	37.4	3	Qp,Qb,Ql	N	Ot				7.4	5,648.5	4-13-62	Dr
1	30adaa	3,850	40	do	1961	98R	24	Qp,Qb,Ql	T,E	PS	1,070R			10.8	5,650	6-24-61	B98; Dr; GE; L; Lo51-98
1	30addd	2,750	80	do	1961	80R	24	Qp,Qb,Ql	T,E	PS	1,440R			10.2	5,660	6-24-61	B80; Dr; GE; L; Lo35-80
1	32dcdc	50	1,650	J. Race		31.5	24	Qp,Qb,Ql	T,E	Irr,Ot	1,300M	19.5	336	4.7	5,707.2	4-13-62	Dr; FD; WSp
1	32dcdd	250	1,600	do		49.4	24	Qp,Qb,Ql	T,E	Irr,Ot	1,189M	27.5	336	4.9	5,706.2	4-13-62	Dr; FD; WS. Irrigating 60 acres with 2 wells
1	33cbcc	1,400	5,100	J. Kragelund	1945	44.8	24	Qp,Qb,Ql	T,E	Irr,Ot	350M	16.2	336	15.8	5,711.2	4-13-62	A127; Dr; FD; QW

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
1	C5-66-33ccbc	800	5,100	J. Race	1955	44.8	18	Qp,Qb,Ql	T,E	Irr,Ot	315M	..	..	0.2	5,701.4	4-13-62	A60(1956); A35(1957); B45; Dr; L; Pf21-46; WS
2	33cdbd	950	3,450	.. do.	..	230R	4	TKdu	..	D,S	F4M	..	..	..	5,744	4-27-59	Dr; FD
2	33cddb	600	3,050	R. Race	1958	263R	7 to 4	TKdu	..	D	30R	30R	38	17	5,770	2- 4-58	B36; DL; Dr; Pf233-263
1	C5-67-2abca	4,600	2,100	Corps of Engineers.	1943	118R	..	Qp,Qb,TKdu	..	TW	..	..	..	3	5,510	10- -43	B102; Dr; L; PP(for adjacent test holes)
1	2baac	4,650	2,100	.. do.	1943	58.0	..	Qb,Ql	..	O	..	..	..	23.9	5,524.2	4-13-62	Dr; WL(10-14-59)23.8
1	2babd	4,630	3,600	City and County of Denver.	1961	105R	..	Qb,Ql	T,E	Irr	1,220M	19.4	..	19.6	5,511	3- 3-61	B103; Dr; GE; L; Pf50-105; Sa; SL
1	2baca	4,450	3,350	Corps of Enginee.s.	1943	48.2	..	Qb,Ql	..	O	..	..	..	29.4	5,528.7	4-13-62	Dr; WL(10-14-59)30.6
1	2bacc	4,250	3,700	.. do.	1943	102	..	Qb,Ql	..	O	..	..	..	28.6	5,528.6	4-13-62	Dr; WL(10-14-59)29.6
1	2bbaa	5,150	4,250	City and County of Denver.	1961	102R	18	Qb,Ql	..	Irr	1,050M	13.6	..	21.6	5,502	6-24-61	B90; Dr; GE; L; Pf47-102; Sa; SL
1	2bbdd	4,000	4,050	Corps of Engineers.	1943	70.0	..	Qb,Ql	..	O	..	..	..	30.5	5,525.2	4-13-62	Dr; WL(10-14-59)31.6
1	2bcab	3,830	4,300	.. do.	1943	52.5	..	Qb,Ql	..	O	..	..	..	18.2	5,511.3	4-13-62	Dr; WL(10-14-59)19.0
1	2bcbd	3,550	4,650	.. do.	1943	52.5	..	Qb,Ql	..	O	..	..	..	19.0	5,511.4	4-13-62	Dr; WL(10-14-59)19.8
1	2bcbd2	3,400	4,910	.. do.	1943	77.5	..	Qb,Ql	..	O	..	..	..	19.6	5,511.4	4-13-62	Dr; WL(10-14-59)20.6
1	2bccb	3,180	5,200	.. do.	1943	44.0	..	Qb,Ql	..	O	..	..	..	19.9	5,511.4	4-13-62	Dr; WL(10-14-59)20.9
2	3bbdd	4,150	4,180	Cherry Creek School District.	1958	1,005R	6	Kdmc	S,E	D,S	B30R	50	..	37	5,548	9- 8-58	B35; Dr; EL; H7; L; Pf900-1,005
1	3dacb	1,750	1,100	Corps of Engineers.	1943	55R	..	..	N	TW	..	..	..	..	5,555	10- -43	Dr; L; PP(for adjacent test holes). Dry
2	5bdab	3,900	3,000	W. Johnson.	1957	2,092R	8 to 6	Klb,Kla,Kfm	N	PS	B83R	100	..	.0	5,560	4-12-57	L43; Dr; EL; L
2	5ccda	550	4,200	R. Braun.	1951	1,096R	7 to 4	Kdmc	T,E	D,Sw	74R	..	..	70	5,615	11-26-51	Dr
2	6abab	5,100	1,950	Continental Oil Co.	1957	1,100R	4	Kdmc	S,E	SS	B13R	20	..	103.9	5,548	6-13-57	B44; DL; Dr; WL(4-1957) 100
2	6abbb	5,150	2,500	Standard Oil Co.	1958	1,104R	5	Kdmc	S,E	SS	B25R	86	..	128	5,554	6-17-58	B26; DL; Dr; H7-6; Tch842-1,104; WSp
2	6abbd	4,900	2,150	Safeway Stores, Inc.	1957	1,100R	4	Kdmc	S,E	Com,C	14R	20	..	100	5,555	1-14-57	DL; Dr; Tch300
2	6badb	4,400	3,020	S. Kiesper	1956	1,064R	6 to 4	Kdmc	N	Ot	B25R	60	..	136.7	5,560	4- 3-62	Dr; EL; L
2	6cccd	20	4,650	E. Gilman	1940	822R	..	TKdu,Kdmu	T,E	D,S	F10R	..	..	+40	5,465	7- -40	DL; Dr
2	7bacb	4,540	3,920	E. Honnen	1898	797R	7 to 3	Kdmu	..	D	F84R	..	..	..	5,480	1898	Dr; Pf713-797. Flowed 36 gpm in 1923, 19 gpm in 1951, 9 gpm in 1957
2	7cddd	250	2,750	T. Hodge	1959	1,062R	4	Kdmc	S,E	D	33M	30	..	40	5,540	10- 7-59	B42; DL; Dr; EL; Pf805-865, 915-990
2	7dbac	2,000	1,700	J. Tyler	1955	1,269R	6 to 4	Kdmc,Kdlc	J,E	D	F30R	..	..	..	5,520	6-13-57	B28; Dr; L
2	8bbaa	5,000	4,140	T. Carlile	1955	1,992R	6 to 4	Klb,Kla	S,E	D	B40R	59	..	6	5,600	5- -55	B15; Dr; EL; L
2	8bbad	4,880	4,160	J. Marrone	1953	1,346R	6 to 4	Kdmc,Kdlc	..	D	F50R	50	..	..	5,600	9- -53	DL; Dr
2	9cccb	500	5,200	Paradise Valley Country Club.	1961	1,473R	8 to 6	Kdmc,Kdlc	T,E	Com,Irr, Sw	150R	..	..	135	5,672	5-10-61	A43; DL; Dr; H11-7; Pf1,009-1,028, 1,111-1,292, 1,349-1,440; Su
2	9ccdc	200	4,450	Prospector Motel.	1957	1,199R	4	Kdmc	..	Com	B26R	20	..	80	5,665	5-11-57	B18; DL; Dr; Tch310
2	10bcba	3,920	4,730	Cherry Creek Village.	1960	1,400R	6 to 4	Kdmc,Kdlc	T,E	PS	225R	121	24	80	5,640	5-11-60	B49; Dr; EL; L; SL; T78; Tch990-1,440
2	10cabb	2,490	3,830	Cherry Creek School District No. 5.	195	1,150R	8 to 6	Kdmc	S,E	Sch	100R	390	..	80	5,670	3- -53	DL; Dr; Pf176; WS
2	10cbab	1,930	4,980	.. do.	1957	1,200R	4	Kdmc	T,E	Irr	B60R	100	..	80.0	5,622	9-19-57	A2; DL; Dr; Tch822-1,200
1	13aadd	4,050	100	Corps of Engineers.	..	43.8	48	Qp,Qb,Ql	T,E	Irr,Ot	1,000R	7	..	10.2	5,584.0	4-13-62	D
1	13abdc	4,100	1,950	.. do.	1940	45.1	60	Qp,Qb,Ql	T,G	Irr,Ot	800R	..	..	11.4	5,579.6	4-13-62	A35; D; U(1957-59)
1	13baca	4,550	3,350	.. do.	..	7.0	36 to 24	Qp,Qb,Ql	N	Irr,S,D	..	..	..	2.0	5,569.7	7-14-59	D; U(1957)
1	13badd	4,050	2,750	.. do.	1934	28R	48 x 60	Qp,Qb,Ql	N	Irr	900R	10	..	8.9	5,576.5	7-13-59	A50; B29; U(1957-59)
1	14aabb	5,150	1,200	.. do.	1937	55.2	8	Ql	Cyl,W	D,S,Ot	..	..	..	44.3	5,593.9	10-28-59	DD; U(1957)

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
2	C5-67-16bcdb	3,250	4,300	Petroleum Research Corp.	1957	1,498R	6 to 4	Kdmc,Kdlc	S,E	Com	155R	43	2	70	5,696	3-9-57	B52; Dr; EL; L; Pf1,000-1,498; WS
2	16dbcc	1,660	2,350	E. Baker	1955	1,078R	4	Kdmc	S,E	D	B20R	46	..	92	5,695	5--55	DL; Dr
2	16dccb	520	2,580	Castlewood Fire Dept.	1958	1,196R	6 to 4	Kdmc	..	D	B60R	35	..	80	5,710	6-5-58	B2; DL; Dr; H7-5; Tch845-869, 925-961, 988-1,196
2	16dcdc	100	1,900	Castlewood School	1951	980R	6 to 4	Kdmc	S,E	Sch	B30R	48	..	82	5,717	1951	B12; DL; Dr; U(1960)
2	17abbc	4,650	2,480	E. Lambert	1956	900R	6 to 4	Kdmc	J,E	D	B32R	71	6	48.0	5,610	6-11-57	B12; DL; Dr
2	17abdd	4,100	1,550	L. Anderson	1956	1,165R	6 to 4	Kdmc,Kdlu	S,E	D	25R	101	12	84	5,630	10-3-56	B70; DL; Dr; EL
2	17adda	3,200	50	H. Croft	1956	1,034R	5 to 4	TKdu	Cyl,E	D	4R	95	6	145	5,693	1-10-56	B70; DL; Dr; Pf665-865
2	17adda2	3,200	60	.. do.	1958	1,020R	4	Kdmc	S,E	D	14R	12	..	128	5,693	5-22-58	B12; DL; Dr; Pf850-1,020
2	17bccb	3,100	5,150	S. Clark	1956	1,058R	4	Kdmc	J,E	D,IrrL	B30R	8	..	2	5,551	5-22-56	B3; DL; Dr; Tch276
2	17bddd	2,720	2,800	Greenwood Hills Mutual Water Co.	1959	1,406R	6 to 4	Kdmc,Kdlc	T,E	PS	B64R	25	..	87.2	5,602	9-16-60	B1; DL; Dr; EL; FD; Tch787-803, 824-1,118, 1,195-1,406; WS
1	17cbbb	2,320	5,200	Cherry Creek School District No. 5.	..	27.5	36	Qy	Cyl,H	N	..	..	..	23.9	5,554.9	6-26-57	D; U(1957)
2	17cbbb2	2,450	5,000	.. do.	1957	1,400R	6	Kdmc,Kdlc	..	Sch	B60R	20	2	3.7	5,572.5	6-26-57	B73; Dr; DL; EL; GRL; Tch903-1,089, 1,196-1,381; WSp. Slight odor
2	17cdcd	100	3,400	Greenwood Hills Mutual Water Co.	1960	1,375R	6 to 4	Kdmc,Kdlc	T,E	PS	240R	115	23	+14	5,543	5-24-60	AT; B19; Dr; H7-5; L; Pf713-745; 871-1,039; 1,123-1,207, 1,249-1,291
2	17dbca	1,750	2,250	D. Miller	1956	1,060R	5 to 3	Kdmu	S,E	D	16M	190	5	64.4	5,642	6-11-57	DL; Dr; T76. Abandoned in 1961
2	17dbca2	1,730	2,240	.. do.	1957	1,155R	4	Kdmc	S,E	D,IrrL, PS	40R	..	..	84	5,642	1961	A7.5; DL; Dr; EL; H6-5; Pf965-1,152
2	18baad	4,920	2,750	M. Markheim	..	972R	..	Kdmu	..	D	..	..	..	..	5,523	....	Dr; PD
2	18bbaa	4,950	4,050	M. Taylor	1934	1,169R	6 to 4	Kdmc	J,E	D	F100R	..	..	..	5,480	6-11-57	DL; Dr
2	19aacc	4,100	1,050	L. Lord	1954	945R	6 to 4	Kdmu	S,E	D,IrrL	50R	40	10	20	5,580	5-19-54	B43; DL; Dr; Pf665-685, 705-725,765-785, 825-845, 885-905
2	19bbbb	5,180	5,080	Denver Water Board.	1958	886	6 to 4	Kdmc	..	D,IrrL, Ot	F33M	..	..	+43.0	5,494.3	4-2-62	AT; B22; Dr; EL; FD; H8-5; L; Tch692-876; WS. Flowed 90 gpm when drilled
2	21acbb	3,650	2,320	M. Jones	1959	1,206R	6 to 4	Kdmc	..	D	B60R	31	..	97.7	5,700	10-7-59	B12; Dr; L; Tch898-1,206
2	34bddd	3,000	2,960	Larrick Farms, Inc.	1957	1,619	8 to 6	Kdmc,Kdlc	T,E	D,S,Irr	183R	47	20	259.4	5,865	6-20-61	A40; B2; Dr; EL; H11-7; L; Tch589
1	C5-68-1ccdd	50	4,200	J. Hyer	1957	29R	21	Qp	N	N	80R	7	2	7.3	5,410	4-10-62	B15; GE; L; Pf9-29; U(1961-62); WL(3-26-57) 8.6; WL(2-19-62)6.9
2	1cddb	350	1,120	.. do.	..	1,104R	6 to 4	Kdmc,Kdlu	..	IrrL	F100R	..	..	..	5,423	3-26-57	Dr
2	1dbad	2,240	1,620	B. Edwards	1956	1,014R	6 to 4	Kdmc	S,E	IrrL	B55R	106	1-1/4	100	5,480	6-16-56	DL; Dr; EL; Tch300
2	1dbbb	2,550	2,500	L. Shulman	1959	1,191R	6 to 4	Kdmc,Kdlu	..	IrrL	50R	..	..	141.6	5,475	10-8-59	B40; Dr; EL; H7-5; L; Tch699-915, 1,084-1,191
2	1dbbd	2,060	2,030	C. Glasscock, Jr.	1956	856R	8 to 5	Kdmc	..	IrrL	10R	..	..	..	5,480	....	DL; Dr; Tch694-856
2	1dccd	320	2,280	F. Manning, Jr.	1956	1,150R	6	Kdmc,Kdlu	S,E	D,IrrL	40E	..	..	..	5,430	....	DL; Dr; EL; Tch1,096-1,120
1	1ddca	650	900	C. Sommer	1958	28R	18	Qp	S,E	IrrL	30R	..	..	3.3	5,435	4-10-62	B10; DL; Dr; GE; H36; Pf10-28; WL(11-8-59)5.2
2	2aabc	4,640	1,200	R. Manning	1946	1,026	..	Kdmc	T,E	D,Irr	..	..	..	..	5,435	....	Dr; EL; Pf766-770, 780-785, 790-795, 820-825
2	2aadd	4,180	250	I. Krick	1955	1,051R	6 to 4	Kdmc	T,E	D	B20R	79	..	86	5,440	3--55	DL; Dr

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C5-68-																
2	2abab	5,140	1,940	Country Homes Land Co.	1923	1,231R	10 to 3	Kdmc,Kdlc	T,E	PS	P108R	..	..	..	5,420	1923	DL; Dr
2	2accb	3,100	2,400	A. Rydstrom	1940	1,797R	..	Kdmc,Kdlu	S,E	D,IrrL	P50R	..	..	..	5,405	1940	A5; B20; Dr; L. Flowed 20 gpm at 970 feet
2	2accb2	3,050	2,400	.. do.	..	800	..	TKdu,Kdmc	Cyl,E	D,IrrL	..	..	..	..	5,403	....	Dr; WS
2	2adad	3,370	100	J. Maitland	1953	1,395R	6 to 4	Kdmc,Kdlc	..	..	..	..	..	120P	5,435	6- 3-57	DL; Dr
2	2addd	2,790	40	Chism	..	1,125R	..	Kdmc,Kdlu	T,E	D	30R	..	..	..	5,425	....	DL; Dr
2	2badd	4,050	2,830	J. Stone	..	1,300R	6	Kdmc,Kdlu	T,E	N	35E	..	..	40.8	5,413	6-10-56	DL; Dr; U(1961)
2	2bbbb	5,230	5,050	Ownes Dairy	1951	860R	6 to 4	Kdmc	T,E	B,Dy	B16R	50	..	110	5,368	1951	DL; Dr; WSp
1	2bdcb	3,200	3,780	Cherry Hills Country Club.	1955	39R	48	Qp,Qb	T,E	Irr	250R	..	..	12	5,342	2- 7-62	A165(with 6 wells); B39; By3; D; S; Su
1	2bdcc	2,900	3,760	.. do.	1955	41R	48	Qp,Qb	T,E	Irr	250R	..	..	44	5,345	2- 7-62	B41; D; S; Su
1	2caad	2,100	2,700	.. do.	1954	30R	48	Qp,Qb	C,E	Irr	197M	9	8	15	5,357	9- 4-54	B30; D; DL; Su
2	2cbdc	1,470	4,380	W. Robinson	1951	429R	..	TKdu	T,E	D	15E	..	..	..	5,375	....	Dr
2	2ccac	870	4,350	R. Martin	1932	1,030R	10 to 4	Kdmc,Kdlu	..	TW	..	..	..	..	...	....	DL; Dr; SL; WS. Later deepened to 1,728 feet; see ccac2
2	2ccac2	870	4,350	.. do.	1932	1,728R	10 to 4	Klb,Kla,Kfm	S,E	Irr	150R	..	..	1	5,390	1955	A10; B35; Dr; L; OH(1,512-1,728); SL. Flowed 250 gpm in 1932
2	2dadc	1,450	550	Cherry Hills Country Club.	1940	1,822R	10 to 6	Klb,Kla,Kfm	S,E	D,Sw	90R	..	..	..	5,411	....	DL; Dr
1	2dbca	1,820	2,240	.. do.	1934	27R	48	Qp,Qb	C,E	Irr	..	..	..	7.9	5,352	4-10-62	B27; By3; D; L; Su; WL(2-7-62)4.2. Battery of 3 wells pumps 300 gpm
1	2dbca2	1,850	2,300	.. do.	1934	27R	48	Qp,Qb	C,E	Irr	..	..	..	20	5,352	1956	D; Su
1	2dcdb	580	1,900	.. do.	1955	26R	48	Qp,Qb	T,E	Irr	278R	..	..	8	5,368	2- 7-62	B26; D; Su; WL(1956)26
1	3baba	5,120	3,500	F. Pearson	1955	56R	4	Qb,Ql	J,E	IrrL,Ot	..	..	..	27.3	5,315	4- 9-62	Dr; L; Pf35-56
1	4aadb	4,550	420	O. Beam	1955	36R	6	Qb,Ql	J,E	IrrL,Ot	25R	10	1/2	18.4	5,350	8-25-58	Dr
1	4abdb	4,450	1,850	F. Beam	..	30R	5	Qb,Ql	J,E	D,Ot	..	..	..	24.4	5,306	4- 9-62	Dr
1	4abdb2	4,420	1,850	H. Gomer	..	45R	5	Qb,Ql	J,E	D	..	..	..	20.1	5,285	8-15-56	Dr
2	4abdb3	4,350	1,950	Grace Assembly Church	1955	70R	6	TKdu	J,E	D	<1R	14	1/2	40	5,285	2-23-55	B37; Dr; L
2	4acda	3,050	1,570	City of Englewood	1940	1,700R	10	Klu,Klb,Kla, Kfm	N	N	P6M	..	..	+15.5	5,309	7- 9-58	Dr; FD; WS; WSt
2	4adbb	3,880	1,020	H. Turk	1955	57R	5	TKdu	J,E	D,IrrL	..	..	..	25.2	5,305	8-29-56	B40; DD; DL; GE; Pf20-54
1	4babb	5,100	3,680	Herbertson Sand and Gravel Co.	..	..	..	Qpp,Qb	C,E	Ind,Pr	400R	..	..	10.0	5,272	12-15-60	Re. Sump
1	4bbbc	4,850	5,220	C. Kealiner	1955	85R	6	Qpa,TKdu	J,E	D	2R	..	..	16.4	5,285	8-14-56	Dr
1	4bdcc	2,700	3,700	E. Hartner	1953	37.6	18	Qb,Ql	T,E	Irr,Ot	800R	..	8	16.0	5,282	4-10-62	A35(with 2 wells); B39; Dr; L; Pf18-39
1	4cbdd	1,320	4,230	.. do.	1953	38R	18	Qb,Ql	T,E	Irr,Ot	204M	10.1	4	16.0	5,290	4-10-62	Dr
1	4ccab	1,100	4,400	Hall Sand and Gravel Co.	..	22R	12 x 12	Qb	C,E	Ind,Pr	2,000R	..	..	12	5,285	11- 8-59	
1	4cccd	100	4,780	Denver Water Board	1955	39R	24	Qb,Ql	T,E	PS,E	828M	..	..	10.7	5,289.3	4-29-55	B45; DL; Dr; GE; U(1960)
1	4ccdc	100	4,520	.. do.	1955	47R	6	Qb,Ql	T,G	TW	74M	6.8	2 1/2	8.4	5,290.0	4-29-55	AT; B45; Dr; L
1	4ccdc2	100	4,500	.. do.	1955	41R	24	Qb,Ql	T,E	PS,E	692M	..	..	8.4	5,290.0	4-29-55	B42; DL; Dr; GE; U(1960)
1	4dbdc	1,620	1,950	D. Dhority	1955	33R	6	Qb,Ql	..	D	5R	..	..	..	5,320	....	DL; Dr; Pf26-33
1	4dccc	280	2,380	Ajax Storage Co.	1954	57.6	5	Qb,Ql	J,E	D	5R	..	..	22.1	5,330	8-21-56	B30; DL; Dr
2	4ddad	900	300	F. Ankenman	1954	233R	6 to 4	Kdmu	J,E	D,IrrL	8R	111	2	37.6	5,315	8-21-56	Dr
2	5aaab	5,200	350	A. Radliff	1957	210R	6 to 4	Kdmu	S,E	Com	B15R	50	.	60	5,290	7-25-57	B21; DL; Dr; Pf190-205
2	5aaac	4,650	350	.. do.	1959	227R	6	Kdmu	S,E	PS	15R	175	..	40	5,290	9-12-59	DL; Dr; Pf187-227
1	5aaca	4,340	680	Colo. Central Power Co.	1954	33.3	18	Qb,Ql	T,E	Irr	628R	15	..	10.2	5,285	10- 9-59	B34; DL; Dr; GE; H28; Pf15
1	5aacc	4,020	1,200	.. do.	1957	29.0	18	Qb,Ql	T,E	Irr,PS	450R	17	..	7.2	5,290	10- 9-59	A56(with 5 wells); B34; DL; Dr; GE; Pf15
1	5aada	4,320	210	.. do.	1955	34.0	18	Qb,Ql	T,E	Irr,PS	275R	18	..	15.3	5,282	10- 9-59	B33; DL; Dr; GE; H28; Pf15

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C5-68-																
1	5abcd	4,150	2,020	C. Dunn	1958	29.5	24	Qb,Ql	T,E	PS	100R	. .	. .	9.8	5,292	4- 9-62	A1; B32; Dr; GE; H36; L; Pf10-32; WL(11-8-59)8.6
2	5abbb	5,230	2,350	Continental Oil Co.	1957	312R	6 to 4	Kdmu	S,E	SS	B20R	14	. .	52	5,305	3-21-57	B25; DL; Dr; Tch132
1	5acba	3,950	2,050	C. Dunn	1959	27R	12	Qb,Ql	C,E	Sw	100R	2	. .	8	5,293	5-15-59	B27; DL; Dr; Pf12-27
1	5adaa	3,940	270	Colo. Central Power Co.	1955	35R	18	Qb,Ql	T,E	Irr,PS	450R	19	. .	11	5,281	3-15-55	B34; DL; Dr; GE; H28; Pf15
1	5adba	3,940	720	. . do.	1955	35R	18	Qb,Ql	T,E	Irr,PS	450R	25	. .	8.2	5,285	10- 9-59	B34; DL; Dr; GE; H28
1	5adca	3,290	900	. . do.	1954	32.5	18	Qb,Ql	T,E	Irr,PS	400R	. .	. .	15.0	5,289	10- 9-59	B34; DL; Dr
1	5cdcc	320	3,850	Sheridan Union High School.	. .	70R	8	Qp,Ql	T,E	Irr	40R	. .	. .	. .	5,390	. . . .	A3; Dr
1	5cddd	150	2,700	. . do.	1957	45R	18	Qp,Ql,TKdu	T,E	Irr	40R	. .	. .	36	5,369	2-18-57	A3; B18; Dr; GE; L; Pf36-45; S
2	5dbad	2,050	1,550	Rocky Mountain Prestress Concrete Co.	1958	577R	4	Kdmc	. .	Ind,S	B15R	42	. .	88	5,340	10- 8-58	B27; DL; Dr; H7-5; Tch439-577; WSp
1	5dcbb	1,250	2,500	Hackstaff Bros., Inc.	1960	100R	6 to 5	Qs	J,E	SS	15R	1	. .	56	5,381	1- 9-60	B58; Dr; L; Pf52-91, 56-91
2	6dccb	550	2,500	Colo. Dept. of Institutions.	1903	698R	10 to 6	Kdmc,Kdlu	A	N	. .	. .	. .	132.2	5,439	1- 6-60	Dr; Pf470-698; U(1942-60); WL(10-03)157
2	7ccad	780	4,020	F. Holmes	1956	768	8 to 6	TKdu,Kdmc, Kdlu	S,E	D,IrrL, Ot	25M	88.7	24	172.5	5,530	4-25-61	AT; B20; Dr; EL; FD; L; Pf284-316, 440-500, 590-666, 715-750; Sa; SL; WS
2	7ccbb	1,180	5,200	Ambrose-Williams.	1951	1,080R	8 to 6	Kdmc,Kdlc	N	Ot	B15R	105	24	182.1	5,540	4- 2-62	B30; Dr; GRL; L; QW
2	7cccb	580	5,100	W. Holthaus	1956	578R	6	Kdmc	S,E	IrrL	B24R	80	5	174	5,545	5- 2-56	A1; B17; DL; Dr; Tch355-375, 418-426, 454-474, 488-521, 528-548
2	7cccc	200	5,230	E. Ambrose.	1947	1,670R	10 to 6	Klb,Kla	T,E	Irr	75R	. .	. .	160	5,543	7- -57	A12; B50; FD; L; WL-6-21-62)230.3; WS
2	7ccdd	100	4,040	A. Gillis	1956	550R	6 to 4	Kdmu	S,E	IrrL	13R	180	60	90	5,518	6-10-56	DL; Dr; Pf279-340, 365-550; Sa; WS
1	8abad	4,750	1,500	Arapahoe County	. .	38.0	42	Qp,Qb,Ql	N	N	1,000R	16	4	12.0	5,289	11- 8-59	B42; Dr; GE; L; Pf10-42
1	8acca	3,120	2,200	G. Adams.	. .	41.5	18	Qp,Qb,Ql	T,Tr	Irr	500R	. .	6	10.1	5,302	11- 8-59	A40; B42; DL; Dr; GE; Pf10-42; S
2	8bcbc	3,470	5,200	J. Jackson.	1953	494R	6 to 4	Kdmu	S,E	D,IrrL	B12R	55	. .	70	5,404.7	4- -53	B9; Dr; L
1	8cada	1,660	2,810	M. McLaughlin	1958	43.5	5	Ql	N	IrrL	15R	. .	. .	24.3	5,333.0	4-10-62	Dr; L; Pf18-43; WL(5-2-58)22.3
1	8dsac	2,300	340	E. Ausfahl.	1952	16.1	48	Qpp,Qb	C,E	Irr,Ot	50E	. .	. .	3.6	5,302	4-10-62	D
1	8dcad	850	1,400	A. Williams	1955	22.6	15	Qpp,Qb	C,Tr	Irr,Ot	160M	4.0	1-1/4	4.7	5,311	4-10-62	A15; AT; Dr; GE
1	8dcba	1,200	2,050	City of Englewood	1955	53R	24	Qb,Ql	T,E	PS,Ot	990R	. .	. .	13.7	5,314	4-20-59	B52; DL; Dr
1	8dcba2	990	2,100	Belleview Bowl.	1958	37R	8	Qb,Ql	S,E	AC	50R	15	. .	12	5,314	6-30-58	DL; Dr; Pf15-37; He
1	8dcbd	750	2,130	City of Englewood	1955	50R	24	Qpp,Qb,Ql	T,E	PS,Ot	750R	5	5	9.8	5,314	7- 8-57	B50; DL; Dr; Pf10-50
1	8dccb	400	2,530	. . do.	1955	50R	24	Qpp,Qb,Ql	T,E	PS,Ot	750R	5	5	8.6	5,316	5-26-59	B49; DL; Dr; Pf10-50
1	8dcda	580	1,380	A. Williams	1955	25R	16	Qpp,Qb	T,E	Irr,Ot	500R	7	2	5.0	5,310	4-10-62	DL; Dr; WSp
1	9abba	5,180	2,180	J. Norris	1953	43R	6	Qb,Ql	J,E	IrrL	B30R	13	2	15	5,320	8- 4-53	B38; Dr; GE; L; Pf23-43
1	9accb	3,120	2,380	R. Cummings	1955	52R	6	Qb,Ql	N	Irr,Ot	8R	4	2	30.6	5,338	4-10-62	B49; DL; Dr; Tch12-48; U(1956)
1	9bbaa	5,080	4,250	Western Paving Construction Co.	1954	40.0	18	Qb,Ql	T,E	Irr	600R	. .	. .	12.4	5,294.8	11- 8-59	A15; B39; DL; Dr; F; U(1958)
1	9caac	2,020	3,000	D. Roesner.	1955	23.8	24	Qb,Ql	N	Irr	500R	3	5	9.3	5,315	10- 9-59	Dr; Pf10-25; U(1959)
1	9cadc	1,520	3,300	J. Hazlett.	. .	25R	48	Qas,Ql	C,E	Ind	300E	. .	. .	. .	5,330	. . . .	D
1	9cbaa	2,520	3,980	R. Selzer	1958	40R	6	Qas,Ql	J,E	IrrL	75R	10	. .	6	5,310	6-10-59	B16; DL; Dr
1	9cbca	1,680	4,840	D. Rea.	. .	9.0	24	Qp,Ql	C,E	D	313R	. .	. .	3.8	5,305	10- 9-59	B11; DL; Dr; GE
1	9ccbd	820	4,860	. . do.	1957	18.1	21	Qp,Ql	N	Irr	70R	14	4	3.1	5,310	10- 9-59	B18; Dr; L; Pf3-20; U(1959)

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
2	C5-68-9cddb	500	3,200	Ready Mix Concrete Co.	1957	410R	6	Kdmc	. .	Ind	B40R	75	. .	62	5,347	10-12-57	B58; DL; Dr; Tch246-390
2	11caad	2,200	2,700	R. Thomte	1949	754R	6 to 4	Kdmc	J,E	D	12R	. .	. .	20	5,434	1949	B38; DL; Dr; T70
2	11dbcd	1,640	2,220	J. Goodstein	1949	1,014R	8 to 4	Kdmc,Kdlu	S,E	D,IrrL	30R	75	. .	200	5,440	1956	B48; DL; Dr; WL(3-1949)5
2	11ddad	700	80	W. Lorton	1930	1,000R	6 to 3	Kdmc,Kdlu	. .	D	F5R	. .	. .	. .	5,455	1930	DL; Dr
2	12abad	4,750	1,440	R. Polichio	1956	800R	6 to 4	Kdmu	. .	D	F5R	. .	. .	+23	5,415	5-24-56	B16; DL; Dr; Tch685-800
2	12abbd	4,800	2,250	C. Tucker	1956	1,000R	6 to 4	Kdmc,Kdlu	. .	D	B50R	42	. .	65	5,420	6-29-56	DL; Dr; Tch230
1	12abda	4,350	1,500	D. Thornton	1957	28R	24	Qp	C,E	Irr	60R	. .	. .	1.7	5,409	4-10-62	A2; B27; Dr; GE; H36, L; Pf8-28; WL(11-8-59)2.4
1	12bbbb	5,220	5,200	Cherry Creek School District	1957	40R	6	Qp,Qb	T,E	Irr	B40R	22	2	1.7	5,384	4-10-62	Dr; GE; L; Pf15-40; WL(12-14-60)3.6
1	12bbcb	4,530	5,000	G. Stemmler	1956	24.7	24	Qy,Qb	C,E	Irr	120R	10	2	1.0	5,385	1-17-61	B20; Dr; GE; L; Pf5-20
2	12bdab	3,850	3,050	Carlile-Koelbel	1954	1,136R	8 to 6	Kdmc,Kdlc	. .	PS	50R	. .	. .	. .	5,420	2- -54	B2; Dr; L. Flowing well
2	12bdab2	3,850	3,050	. . do.	1956	1,867R	6 to 4	Klb,Kla,Kfm	T,E	PS	B65R	36	. .	34	5,420	1- -56	DL; Dr; EL
2	12ddad	980	230	J. Shafroth	1953	891R	6 to 4	Kdmc	. .	D,IrrL	F40R	. .	. .	. .	5,450	1961	B9; DL; Dr; Tch716-891. Flowed 75 gpm in 1953
2	13aabd	4,940	1,250	J. Cosden	1956	953R	2	Kdmc	T,E	D	25R	25	. .	. .	5,480	4-30-56	DL; EL. Original flow 2 gpm; flows when not pumped
2	13abac	4,850	1,720	R. Flair	. .	800R	6	Kdmu	J,E	D	3E	. .	. .	76.0	5,490	9- 4-59	Dr
2	13adbd	3,600	750	Anderson-Bieber	1956	1,192R	6 to 4	Kdmc,Kdlc	. .	PS	F2M	. .	. .	+4.8	5,521	2- 1-60	DL; Dr; EL; FD
2	13baaa	5,080	2,740	J. Elfstrom	1956	950R	6 to 4	Kdmc	. .	D	B40R	25	. .	45	5,490	10-27-56	DL; Dr; EL; Tch696-927
2	13bdcd	2,800	3,500	R. Niedrack	1897	960R	. .	Kdmc	. .	. .	F	. .	. .	. .	5,430	6- 6-57	Dr
2	13cbdb	1,950	4,600	J. Lindsay	1960	879R	. .	Kdmc	S,E	D	50R	35	. .	40	5,485	7-16-60	DL; Dr; Pf668-859
2	13dacd	1,600	800	W. Stanley	1957	1,147R	6 to 4	Kdmc,Kdlc	. .	D,Irr	F59M	. .	. .	+61.6	5,490	6- 5-57	AT; B25; Dr; EL; FD; L; Tch318; WSp
2	14bdbb	3,900	3,910	T. Savage	1954	1,128R	8 to 6	Kdmc,Kdlc	N	D	160R	200	8	35	5,485	10- -54	B11; DL; Dr
2	15bdcc	2,750	3,700	Norgren-Stemac, Inc.	1958	778R	8 to 6	Kdmu	T,E	Ind,D, C,IrrL	B50R	40	. .	50	5,420	1-30-58	B52; DL; Dr; H11-7; Tch476-778; WSp
1	16baba	5,200	3,500	Colo. Central Power Co.	1955	45R	18	Qb,Ql	T,E	Irr	350R	5	2	35	5,345	7-14-55	B44; Dr; GE; L; Lo30-45
1	17adbc	3,380	,300	Centennial Turf Club	1955	44R	18	Qpp,Ql	C,E	Irr	400R	8	2	7.9	5,316.9	7-27-56	B43; DL; Dr; GE; Pf24-44
2	17bbbb	5,150	5,150	Safeway Stores, Inc.	1959	744R	6	Kdmc,Kdlc	S,E	Com	40R	48	. .	27	5,378	6-20-59	DL; Dr; WSp
1	17caaa	2,580	2,650	Town of Littleton	1955	41.9	24	Qpp,Ql	T,E	PS	900M	18	3	8.3	5,316	7-27-56	B42; Dr; GE; H40; L; Pf23-42; WS
1	17caab	2,580	3,040	. . do.	1955	43.6	40 to 24	Qpp,Ql	T,E	PS	1,000M	6	3	7.9	5,315	7-27-56	DL; Dr; GE; Pf15-43; WL(2-1955)6
1	17caac	2,150	2,980	. . do.	1955	42.0	40 to 24	Qpp,Ql	T,E	PS	1,200M	28	. .	7.9	5,317	7-27-56	B43; DL; Dr; GE; H40; Pf23-41
1	17cdaa	1,160	2,690	. . do.	1952	42.0	24	Qpp,Ql	T,E	PS	750M	30	. .	7.9	5,316.7	7-27-56	B43; DL; Dr; FD; GE; Pf23-41; WS; WSr
1	17cdad	880	2,650	E. Watson	. .	28.7	48 to 6	Qpp,Ql	N	Irr,Ot	. .	. .	. .	2.8	5,320.7	4-10-62	Dr; U(1957)
1	17cdad2	850	2,680	Town of Littleton	1951	43.6	18	Qpp,Ql	T,E	PS	800M	28	. .	7.9	5,317	7-27-56	B33; Dr; GE; L; Pf30; WS
1	17cdba	1,280	3,600	T. Koldeway	1942	22.7	48	Qpp,Ql	T,E	Irr,Ot	. .	. .	. .	3.3	5,322	4-20-59	D; U(1957)
1	17cdcb	550	3,800	E. Watson	. .	20.7	6	Qpp,Ql	N	N,Ot	. .	. .	. .	5.4	5,323.6	4-10-62	D
1	17dbba	2,630	2,280	Town of Littleton	1955	37.9	24	Qpp,Ql	T,E	PS	700M	18	3	9.4	5,315	7-27-56	B43; Dr; GE; H40; L; Pf15-43; WS
1	17dbcd	1,380	2,280	. . do.	1942	30R	48	Qpp,Ql	T,E	PS,E	500R	. .	. .	11	5,318	10-11-60	D
1	17dbcd2	1,400	2,280	. . do.	1942	30R	48	Qpp,Ql	T,E	PS,E	1,000	17	. .	11	5,318	10-11-60	D
2	17dcda	500	1,500	. . do.	1895	732R	6	Kdmc,Kdlu	J,E	PS,Ind	30R	. .	. .	48P	5,332	10-11-60	Dr; L

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C5-68-																
2	18accd	2,830	2,300	R. Buchanan	1956	713R	6 to 4	Kdmc,Kdlu	S,E	D,IrrL	812R	120	..	115	5,486	4-21-56	A.75; Dr; EL; FD; L
2	18baba	5,150	3,550	T. Rogers	1956	580R	6 to 4 to 3	Kdmc	S,E	IrrL	88R	80	..	70	5,510	4-18-56	A.5; B14; DL; Dr; Pf200-580
2	18cbac	2,300	4,480	L. King	1957	593	6	Kdmc	N	D	B35R	44	..	88	5,470	1-22-57	DL; Dr; EL; Tch240
2	19cdca	520	3,400	Town of Littleton	1956	511R	10 to 7	Kdmc,Kdlc	T,E	PS	120R	212	6	30.2	5,418	6-21-57	B32; Dr; EL; L; Tch161; WS
1	20abcc	4,060	2,600	Champion Nursery	..	9.5	36	Qpp	C,E	Irr	100R	..	..	2.9	5,324.1	4-10-62	A2; D; WL(3-24-59)3.5
1	20baca	4,550	3,500	J. Buckner	..	8.8	36	Qpp	C,E	S	200E	..	..	5.8	5,226.1	4-30-59	D
1	20bacc	4,200	3,700	A. Tolan	1956	10.8	24	Qpp	C,E	Irr	88M	..	..	8.5P	5,327.3	4-30-59	D; FD; Su
1	20bada	4,580	2,640	Town of Littleton	1952	30R	48	Qpp,Ql	T,E	PS	1,000M	20	..	7	5,321	10-11-60	D
1	20bcda	3,230	4,270	Columbine Country Club	1955	48R	24	Qpp,Ql	T,E	Irr	1,460	15	3	9	5,332.0	1-22-55	DL; Dr; GE; H40; Pf6-48
1	20cbad	2,300	4,230	.. do.	1955	54R	24	Qpp,Ql	T,E	Irr,Ot	1,960R	18	3	14.3	5,339.2	4-18-57	A121(with 5 wells); B52; DL; Dr; GE; H40; Pf6-54
1	20cbbb	2,320	5,070	.. do.	1955	60R	24	Qpp,Ql	T,E	Irr	1,375R	14	3	21.7	5,347.0	8-22-56	B60; DL; Dr; GE; H40; Pf9-60
1	20cbdd	1,580	4,015	.. do.	1955	60R	24	Qpp,Ql	T,E	Irr,Ot	1,292	26	3	9.3	5,336.8	4-10-62	B47; DL; Dr; GE; H40; Pf6-60; U(1956-62)
1	20ccab	1,080	4,470	.. do.	1955	52R	24	Qpp,Ql	N	Irr,O	1,375	14	3	7.4	5,344.0	10-26-59	DL; Dr; GE; H40; Pf9-52; WL(8-22-56) 9.0; WL(10-26-59)7.4
1	20cccc	220	4,970	.. do.	1955	64R	24	Qp,Ql	T,E	Irr,D	1,225R	17	3	18.6	5,351.5	8-29-56	DL; Dr; GE; H40; Pf12-48
1	20dcab	1,150	1,650	A. Heineman	1955	5R	..	Qb	T,E	Irr,D	269R	..	..	..	....	....	D
2	21abad	4,670	1,520	Town of Littleton	1955	1,826R	8 to 6	Klb,Kla,Kfm	S,E	PS	100R	36	16	66	5,451	2- -55	B20; Dr; EL; Gun456; L; WS
2	21adca	3,200	700	Carmelite Monastery	..	810R	6 to 4	Kdmc	..	IrrL	15R	..	..	..	5,46[illegible]	....	Dr; GRL; Su
1	24cbcd	1,340	4,860	Highline Canal Co.	..	29.7	6	Qs	Cyl,H	D	..	..	..	20.1	5,503	2- 3-61	Dr
2	24ddab	1,050	420	Chapel Hills Cemetery Assn.	1959	1,450R	12	Kdmc,Kdlc	T,E	Irr	B125R	35	..	25	5,630	3-30-59	A44; Dr; L. Tch918-1,418
2	24ddac	980	450	.. do.	..	2,100R	8	Klb,Kla,Kfm	T,E	Irr	200R	..	..	223.2	5,630	3-17-59	A44; Dr
2	27dccd	200	2,100	Ohio Oil Co.	1955	996R	..	Kdmc,Kdlu	S,E	Ind,C	250R	328	..	103.0	5,610	10- 1-59	B13; Dr; WS
2	27dccd2	170	2,100	.. do.	1955	1,910R	8 to 6	Klb,Kla,Kfm Kt	S,E	Ind,F, IrrL	159M	266	20	175.0	5,610	10- 2-59	A20; AT; B13; Dr; EL; L; Pf1,560-1,860; WL(5-2-55)+15.9; WS
2	28aacb	4,470	1,190	Town of Littleton	1952	1,948R	8 to 6	Klb,Kla,Kfm	S,E	PS	400R	344	48	36	5,515	1956	DL; Dr; FD; Pf1,370-1,464, 1,495-1,612, 1,680-1,715, 1,797-1,808; WS; WSr. Flowing 1952
2	28bccc	2,900	5,000	W. Deems	..	693R	6	TKdu	S,E	D	40R	..	..	..	5,470	....	DL; Dr
2	29abbc	4,700	2,550	Crowley Bros.	1952	400R	6 to 4	TKdu	T,E	D,G,B	10R	..	..	..	5,345.0	....	Dr
1	29abbc2	4,700	2,520	.. do.	1953	12.6	48	Qpp	C,E	G,AC	100R	..	..	7.8	5,345.0	4-13-59	D
1	29abdc	4,050	1,900	R. Miller	1954	8R	..	Ql	C,E	Irr	..	..	..	3.8	5,353.2	4-13-59	A4.5; D. Sump
1	29baad	4,800	2,750	A. Waller	..	6.0	..	Qpp	C,E	Irr	..	..	..	4.4	5,341.6	7-17-59	D. Sump
1	29bada	4,500	2,900	.. do.	..	11.0	48	Qpp	C,E	Irr	150E	..	..	1.7	5,337.9	7-17-59	Dr
2	29bcdb	3,100	4,520	I. Olsen	..	251R	..	TKdu,Kdmu	..	D	F.5M	..	..	+3.4	5,341	8-29-56	AT; Dr; T53
1	29cdca	500	3,500	M. Ensor	..	12R	..	Qp	..	Irr	..	..	..	..	5,350	....	Spring-fed sump
1	30aabd	4,780	750	L. Morris	..	69.2	18	Qb,Ql	T,E	Irr,Ot	700E	..	..	30.3	5,367.5	4-12-62	A60; Dr; Su
1	30adad	3,520	180	R. Olsen	1955	11.8	48	Qpp	T,G	Irr,Ot	200E	..	..	1.8	5,342.7	4-12-62	A4; D
1	31aabb	5,130	1,310	Town of Littleton	1959	56R	24	Ql	T,E	PS	1,025R	22	..	13	5,358	8-22-59	B56; Dr; GE; H40; L; Pf26-56
1	31abaa	5,250	1,320	.. do.	1959	55R	24	Ql	T,E	PS	1,020R	28	..	14.2	5,360	4-12-62	B55; DL; Dr; GE; H40; Pf25-55; WL(8-16-59) 15
1	31abaa2	5,010	1,330	.. do.	1959	54R	24	Ql	T,E	PS	1,051R	27	..	14	5,359	8- 2-60	B54; DL; Dr; GE; H40; Pf24-54

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C5-68-																
2	31abba	5,240	2,220	C.R.T., Inc.	1959	452R	6	Kdmc,Kdlc	T,E	PS	855R	150	..	..	5,378	4-13-59	B48; Dr; H16; L; Tch152-452
1	31adad	3,580	80	K. Ensor.	1955	39R	24	Qpp,Ql	N	Irr,Ot	950R	11	3	1.6	5,360.9	4-12-62	B37; Dr; L; Pf21-39
1	31adca	3,100	890	.. do.	1955	39R	24	Qpp,Ql	N	Irr	520R	6	3	8	5,364.0	4- -55	B37; DL; Dr; Pf21-39
1	31addb	3,050	450	.. do.	1955	36R	24	Qpp,Ql	N	Irr	1,680R	19	3	2.6	5,364.9	4-12-62	B36; DL; Dr; Pf18-36; WL(3-23-59)4.0
1	31cacd	1,400	3,500	So. Side Gravel Co.	1955	14R	12	Qpp,Ql	..	Ind,Cons	10R	..	..	7	5,405	5-28-55	B10; DL; Dr; GE; Pf5-10. Destroyed in 1959
1	31daab	2,630	450	K. Ensor.	1955	34R	24	Qpp,Ql	T,E	Irr,Ot	1,290R	21	3	2.7	5,367.4	4-12-62	B30; DL; Dr; Pf16-34
1	31daac	2,120	350	.. do.	1955	34R	24	Qpp,Ql	T,E	Irr,Ot	1,350R	26	3	5.4	5,370.8	4-12-62	B34; DL; Dr; GE; Pf16-34
1	31daba	2,630	910	.. do.	1955	40R	24	Qpp,Ql	N	Irr	1,980R	16	3	4.9	5,366.0	3-23-59	B40; DL; Dr; GE; Pf22-40
1	31dadd	1,580	250	.. do.	1955	27R	24	Qpp,Ql	N	Irr	485R	..	..	2	5,370.0	4-20-55	B27; DL; Dr; Pf9-27
1	31dccd	180	1,990	P. Kiewit & Sons Co.	1956	42.5	24	Qpp,Ql	N	Ind	1,200R	7	6	2.5	5,369.2	4-13-59	AT; B45; DL; Dr; Pf10-45; U(1958)
1	32ccba	1,300	4,800	Mann Construction Co.	1956	21.5	24	Qp,Qb,Ql	C,E	Irr	120R	2	2	4.4	5,372.2	4-12-62	B23; Dr; GE; L; Pf10-20; WL(4-15-59)5.0
1	32cccd	20	4,850	E. Jordan	1870	70R	40 x 40	Qb,Ql	T,E	Com,Sw Irr,D	300E	..	..	..	5,385	....	A3.5; DD
	C5-69-																
2	1abcc	4,100	2,480	R. Bober.	1955	280R	6	Kdmu	S,E	..	B10R	215	2	35	5,430	6-10-55	B19; DL; Dr; Tch125-260
2	2bacc	4,050	3,930	J. Wiebenson.	1954	915R	6 to 4	Kdmc,Kdlc	S,E	D,AC,G	B20R	30	8	170	5,500	10- 8-54	A.3; B54; FD; Dr; L; Pf528-633, 680-700, 830-850
2	2bcdd	2,850	4,000	State of Colorado	1915	735R	8	Kdmc,Kdlc	T,E	D,Irr	55R	..	..	153.5	5,555	8- 1-61	B5; DL; Dr; U(1961). Mountain View Girls' School
2	3addd	2,740	100	Federal Correctional Institution	1893	1,400R	..	Klb,Kla,Kfm	Cyl,E	Irr	40R	300	..	90	5,525	1950	Dr. Flowed 176 gpm in 1893
1	5bacd	4,140	3,460	Denver Water Board.	..	11.1	..	Qp	C,E	D	..	..	..	5.0	5,550	4-12-62	D; FD; WL(2-11-59)6.2; WS
1	6aaad	4,740	310	L. Shipley.	..	90R	6	Qp,Ql,Ks	J,E	Com	10R	..	..	10	5,560	3-17-59	B14; Dr; FD; TH; WS
1	6bdcc	2,940	3,820	G. Pallaoro	..	10.5	24	Ql	N	Ot	..	..	..	2.6	5,675	4-12-62	D
1	6dbab	2,400	1,840	A. Bevans	1949	79R	..	Qp,Ql,Ks	J,E	D	..	..	..	10	5,605	3-16-59	D
2	6dcca	550	2,000	Pallaoro.	1955	9,585R	..	Ks	..	Oil	..	..	..	..	5,660.2	....	EL. Brackish water
2	7accd	2,750	2,170	Panuco Oil and Transportation Co.	1923	2,700R	..	Kp,Kd	..	Oil,S	F	..	..	..	5,750	....	DL; Dr. Penetrated sandstone unit of Pierre Shale at 1,565 feet
2	7baca	4,450	3,550	Lillie Pallaoro	..	9,649R	..	..	..	Oil	..	..	..	..	5,822	....	DL; Dr; SL. Produced oil. Penetrated faults and overturned section of Cretaceous rocks. South Platte Formation at 9,440 contains saline water; higher sand beds contain brackish to saline water
2	7badc	3,970	3,230	Mt. Morrison Asphalt Oil and Gas Co.	1913	1,470R	..	Ks	..	Oil,S	..	..	..	..	5,790	....	DL; Dr. Flowed at 1,345 feet
2	7bcdb	3,100	4,400	L. Mann	1955	109R	..	Ks	..	S	..	..	..	..	5,830	....	Dr; EL
2	7cacb	1,900	3,800	A. Coors.	..	566	4	Ks	N	Ot	..	..	..	35.9	5,807	4-20-62	Dr; FD; GRL; WS
1	8aabd	4,930	820	A. Wesselman.	1905	28R	..	Qs,Kt	Cyl,E	D	..	..	..	..	5,635	....	D
1	8abcd	4,010	2,170	J. Noble.	1954	23R	48	Qp	J,E	D,S	..	..	..	11.2	5,650	4-12-62	D; WL(4-57)12. Dry in summer, 1955

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C5-69-																
1	8abcd2	4,000	2,150	J. Noble.	1955	100R	6 to 5	Qp,Qe,Kp	J,E	D,S	B15R	58	2	11.1	5,650	4-12-62	B23; Dr; L; Pf15-100; TH; WL(3-16-59)10.3
2	8addd	2,700	80	Not known	. .	220R	. .	Kt	. .	D	. .	. .	. .	. .	5,655	. . . .	Dr; WS
1	8bcaa	3,650	3,980	R. Bevans	1950	50R	5	Qp,Ql	J,E	. .	26R	. .	. .	11	5,675	3-16-59	B34; Dr; FD; WS
1	9bbba	4,960	4,740	C. Anderson	1943	24R	. .	Qp,Qe	Cyl,E	D	. .	. .	. .	12	5,615	2- 7-59	D
2	9bbbb	5,060	5,100	. . do.	1955	160R	6 to 4	Klb	J,E	D,S	B25R	90	3	52.5	5,640	4-12-57	B40; Dr; L; Tch60-80, 115-160
2	9ddcc	200	1,050	C. Stohlman	1957	246R	6	Kdlc	S,E	IrrL	B13R	50	2	130	5,680	3- 7-57	B25; Dr; L; Pf179-246; WSp
2	11abbb	5,000	2,450	K. Steinberg.	1959	485R	6 to 4	Kdmc,Kdlc	S,E	D,IrrL	10R	25	. .	198	5,564	6-25-59	A.75; Dr; FD; H7-5; L; Tch255-415
1	11acbc	3,620	2,520	W. Spuhler.	1958	43R	5	Qp,Qs	C,E	IrrL	15R	. .	. .	.9	5,532	4-12-62	B12; Dr; GE; H12; L; Pf11-43; WL(6-14-61) 1.0
2	16aaaa	5,200	50	L. Overmeyer.	1958	257R	6 to 5	Kdmc	S,E	D,IrrL	20R	54	. .	127.7	5,665	10-23-59	B33; Dr; FD; GE; H14; L; Pf156-257; WL(4-58)114
2	16aaab	5,160	540	L. Bonen.	1955	202R	6	Kdmc	S,E	D	2R	50	8	113.5	5,670	12-24-60	Dr; EL; WL(1955)87
2	16aada	4,380	150	B. Clubb.	1956	370R	6	Kdmc,Kdlu	. .	D	B16R	20	. .	100	5,650	7- 5-56	B23; DL; Dr
2	16acaa	3,950	1,400	J. Schjeldrup	1954	180R	. .	Kdlc	S,E	D	15R	. .	. .	150	5,663	6-30-54	Dr; WS
2	17aaba	5,250	820	C. Allen.	1945	36R	84	Kp	C,E	D,S	6R	. .	. .	15	5,775	1- 5-61	D
2	17cbbb	2,600	5,200	G. Hancock.	1922	16R	48	Kp	Cyl,H	S	1E	. .	. .	3	5,835	12-14-60	D. Dry 1954-56
2	18baaa	5,180	2,960	A. Coors III.	1954	598R	6	Ks	S,E	D,S,Irr	30R	. .	. .	. .	5,798	2- -58	A30; B8; Dr; L; Su
2	18bbcc	4,260	5,030	. . do.	1956	900	8 to 6	Pl	C,E	D,Ot	P6M	. .	. .	+48.0	5,865.0	7-31-57	AT; B18; Dr; EL; GRL; L; OH(446-900); Sa; SL; WS
2	18dccb	500	2,480	D. Webster.	1957	354	7	Ks	S,E	D,S,IrrL	6M	44	. .	85.2	5,934.8	6-27-57	DL; Dr; EL; FD; GRL; L; S; Sa; WS; WSr. Well deepened from 302 feet
2	19adbc	3,450	1,000	K. Axsom.	1958	906	6 to 4	Ks,Kly	J,E	D,S	30R	22	. .	75	5,928.0	6-30-58	Dr; EL; H7-5; Tch640-730, 860-905
2	21abaa	5,220	1,350	K. Murphy	1961	315R	. .	Klu	N	. .	. .	. .	. .	. .	5,715	. . . .	B9; Dr; L. Dry
2	21ddac	980	380	R. Spykstra	1950	100R	6	TKd,Kl	J,E	D	8E	. .	. .	35	5,690	7-31-61	Dr; FD
2	21ddba	1,050	730	. . do.	. .	100R	6	TKd,Kl	Cyl,E	S	5E	. .	. .	35	5,691	7-31-61	Dr
2	22aabb	4,960	1,260	R. Strawn, Jr. . . .	1954	405R	8 to 6	Kdmc,Kdlc	S,E	D,IrrL	20E	. .	. .	130	5,580	1954	B22; Dr; L; WS
2	22aabc	4,880	1,120	T. Francis.	. .	125R	. .	TKdu,Kl	. .	. .	. .	. .	. .	. .	5,570	. . . .	Inadequate for domestic supply
2	22abaa	5,030	1,630	B. Lockhart	1951	460R	6 to 4	Kdmc,Kdlc, Kl	S,E	D	10R	55	24	130	5,592	1951	B14; Dr; FZ; L
2	22abab	5,100	1,900	M. Van Der Heul . . .	1955	405R	5	Kdmc,Kdlc, Kl	J,E	D,IrrL	B10R	40	. .	100	5,602	10- 1-55	B30; DL; Dr; Tch205-405
2	22abba	5,000	2,220	J. Champion	1952	402R	6 to 4	Kdmc,Kdlc, Kl	S,E	D,IrrL	30R	40	. .	118.6	5,603	10-23-59	Dr; FZ; L; WL(6-1955)90
2	22baaa	5,230	2,750	D. Blackburn.	1955	410R	5	Kdmc,Kdlc, Klu	S,E	D,IrrL	B10R	45	5	109	5,620	10- 1-55	B5; Dr; L; Tch210-410
2	22ccac	800	4,450	R. Spykstra	1955	108R	. .	Kdl,Klu	N	D	B5R	9	2	50	5,670	1-31-55	B11; Dr; L; Pf24-30, 59-67; U(1961)
2	24aabc	4,820	1,280	J. Kelso.	1959	388R	6 to 4	Kdmc,Kdlc	S,E	D	15R	17	. .	116.4	5,495	10-23-59	DL; Dr; Pf302-388
2	24abab	5,080	1,930	R. Barksdale.	1957	473	4	Kdmc,Kdlc	. .	D	B15R	18	. .	70	5,490	2- 8-57	B22; Dr; EL; L; Tch184
2	25aaac	4,750	450	R. Duboc.	1955	1,580R	8 to 6	Klb	N	Ot	130R	410	24	40.1	5,450	4-20-62	B10; Dr; EL; FD; FZ; L; WS; WSp. Flowed 10 gpm saline water and yielded gas to flare at 1,130 feet. Plugged at 1,190 feet
2	26bbbb	5,200	5,150	F. Brock.	1955	160R	6 to 4	Kdmc	Cyl,E	D,IrrL	7R	50	. .	50	5,540	4- 9-55	B30; Dr; L; Tch100-160. Water rust-colored in winter
2	26ddad	950	220	S. Stene.	1950	1,705R	8 to 6	Klb,Kla,Kfm	N	N	. .	. .	. .	111.6	5,556	6-29-61	Dr; FZ. Flowed; yielded gas to flare in 1950. Salty water kills vegetation

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C5-69-																
2	27baaa	5,160	2,820	J. Wasselman.	1956	390R	6 to 4	Kdmc,Kdlc, Klu	S,E	D,IrrL	810R	72	10	104	5,615	10-29-56	B20; Dr; FD; FZ; L; Tch167-390. Water rusts pipes and has a bad odor
2	36aabb	5,250	1,300	B. Koran.	1957	320R	4	Kdmc	T,E	Irr	45R	. .	. .	61	5,450	11-30-57	EL; GRL
	C5-70-																
1	1aabc	4,910	1,290	D. Taylor	. .	6R	. .	Qpp	J,E	D	. .	. .	. .	3	5,642	3-19-59	D
1	1abba	4,970	2,140	W. DeMoss	. .	15R	. .	Qpp,Ql	P,E	D	. .	. .	. .	6	5,660	3-17-59	Dr
2	1cacc	1,420	3,750	M. Pallaoro	. .	100R	. .	Ks	. .	S	F16M	. .	. .	. .	5,850	3-30-59	Dr; FD; WS
-	6ccab	1,280	4,600	F. Brush.	1959	202R	6	pC	S,E	D	2R	. .	. .	75	7,595	9- 5-59	L; OH(16-202); SG. Water from fractures 126-130 feet and 194-200 feet
-	7aacb	4,480	1,100	Indian Hills Water District.	1957	20R	48	Qpp,pC	J,E	PS,E	21E	. .	. .	10	7,255	5- 5-61	Gr; Gy. Three gravel-filled trenches extend radially upslope
-	7aacb2	4,500	1,250	. . do.	1957	83R	6	pC	J,E	PS	8R	. .	. .	12	7,270	5- 5-61	Dr; GR; WS
-	7aacb3	4,550	1,300	. . do.	1957	30R	48	Qpp,pC	J,E	PS	30E	. .	. .	.0	7,260	5- 5-61	Gr. Spring converted to well
-	7abda	4,600	1,480	. . do.	. .	143R	5	pC	N	N	<1	. .	. .	16.8	7,275	5- 5-61	Gr; U(1961)
-	7abda2	4,500	1,400	. . do.	1957	50R	6	pC	J,E	PS	6R	. .	. .	12	7,270	5- 5-61	Gr; Dr
-	7baad	4,830	2,870	Indian Hills Fire Dept.	1958	50R	. .	pC	J,E	D,Fire	20R	. .	. .	. .	7,340	. . . .	DL; Gr; H7-5; Pf35-50
-	7bbbd	4,900	4,750	C. Jones.	1959	109R	6 to 5	pC	S,E	D,IrrL	5E	<91	1/2	27.0	7,450	5-11-59	Dr; GR, H7-5; L; WL(spring, 1960)22. Water from fractures at 38 feet
2	11dbcb	1,880	2,350	R. Starmer.	1960	703R	7	Pf	. .	Com	F13M	. .	. .	+95.2	6,190	9-23-60	Dr; FD; L; OH(55-703); Sa; SL; WS
2	14baba	5,150	3,420	O. Sanger	. .	Spring	. .	pC	. .	D,S	F<1R	. .	. .	. .	6,260	9-23-60	FD; WS
2	15bcbb	3,920	5,020	Dodson and Stark. . .	1951	10R	36	pC	C,E	D,IrrL	5R	9	8	.5	6,560	1-18-61	D; FD; SG. Water from fractures at 7 feet
2	16accb	3,270	2,400	D. Hauptmann	1959	313R	5	pC	S,E	D	3E	. .	. .	74	7,010	3-22-59	B6; Dr; FD; L; OH(11-313); SG. Water from fractures at 86-89 feet and 268-313 feet
2	16bdcc	2,750	3,650	Indian Hills Water District.	1942	20R	120x144 to 96x 96	pC	C,E	PS	20R	8	15	3	6,820	5- 5-61	Dr; SG
2	17adbd	3,370	700	M. Kadrie	1957	62R	. .	Qp,pC	J,E	D	20R	. .	. .	. .	6,960	. . . .	B10; Dr; L; OH(42-62); SG
2	21acda	3,300	1,600	J. Fields	1959	308R	6	pC	S,E	D	<1R	20	. .	260	6,930	8-29-59	B10; Dr; FD; L; OH(13-308); SG. Water from fractured quartz veins at 155, 245, 265, and 285 feet
2	21adda	3,290	250	E. Clark.	1935	12R	48	Qpp,pC	P,E	D,S,Com	10R	1	72	3.4	6,810	4-12-62	D; FD; SG; WL(5-6-61) 3.2
2	21addb	3,230	350	. . do.	1955	87R	8 to 6	pC	S,E	Com	2E	. .	. .	4.6	6,815	5- 6-61	Dr; FD; SG
2	21daac	2,150	400	F. Hoffower	1960	52R	8	pC	. .	D	10R	. .	. .	42	6,840	7-12-60	B15; Dr; FZ; L; Pf50-52; SG. Water from decomposed rock at 50 feet
2	22cbbc	2,250	5,300	A. Sedgley.	1958	210R	5	pC	S,E	D	<1R	. .	. .	23	6,860	10- 4-58	B30; Dr; L; SG
1	22ccca	600	4,760	L. Granzella.	1960	50R	6 to 4	Qp,Ql,pC	J,E	D	100R	. .	. .	20	6,870	9- 1-60	B20; DL; Dr; FD; FZ; Pf32-50; SG

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C5-70-																
2	24b4da	2,980	2,730	L. Bax		772	8	Pf		Oil,S	F0.5M				6,122.0	2-12-57	Dr; EL; GRL; WS
2	29dbba	2,600	2,000	G. Garrett	1957	46R	6	pC		D,IrrL	8R			15	7,240	11-14-57	BS; Dr; Gr; L; OH(13-46)
2	33dadb	1,700	350	H. Jeffers	1957	51R	6 to 5	pC	J,E	D	B3R	27	3	13	7,210	4-23-57	B12; Dr; FD; Gr; L; Pf15-24, 30-50
1	34bbad	4,630	4,220	Muckabee Estate	1957	33R	6	Qp,pC	F,E	D	8M	8	1/6	2.5	6,990	4-12-62	B8; Dr; FD; F2; L; OH(10-33); Pf4-10; SG; WL(5-2-61)2.5
2	34cbdc	1,540	4,610	C. Hill		72R	4	pC	J,E	D	<1R				7,120		Dr; SG. Water from fracture at 50 feet
2	34cbdc2	1,570	4,500	do.	1959	433R	6	pC	N	D				17.0	7,135	5- 6-61	B6; Dr; L; OH(22-433); SG
2	34cbdc3	1,540	4,560	do.	1959	133R	6 to 5	pC	S,E	D	<1R			13	7,130	6- 9-59	Dr; FD; L; OH(44-133); SG. Water from fracture at 126 feet
	C5-71-																
-	11ccdb	650	4,350	C. Angelo	1923	130R	72 to 6	pC		D	<1			60	7,480	6-21-60	F2; SG; WS
-	16bada	4,350	2,800	Propst	1959	85R	6	pC		D	3R			13.6	7,355.2	9-22-59	DL; Gr; Pf28-65
-	16bada2	4,420	2,700	C. Savage	1957	85R	5	pC		D	4R	55	14	42.9	7,486.4	9-22-59	DL; FD; Gr; Pf70-85
-	16badb	4,500	3,180	Young		190R		pC	Cyl,E	D				38.3	7,411.0	9-22-59	FD; Gr
-	16badb2	4,350	3,050	E. Porter				pC		D				78.8	7,400.0	9-22-59	FD; Gr
-	16badc	4,120	3,050	Goins				pC		D				+35	7,349.2	9-22-59	Gr
-	17accb	3,000	2,500	R. Lewis	1958	261R	7	pC		D	8R				7,920		DL; FD; Gr
-	17accb2	3,050	2,400	do.		Spring		pC							7,920		FD; Gr
	C6-65-																
2	4cdcb	350	3,950	C. Gartrell	1957	317R	4	TKdu	J,E	D	12R	100		88	6,248	6- -61	Dr; GE; L; Pf160-180, 277-317
2	6dddd	120	100	K. Edwards	1957	152	6 to 4	TKdu	S,E	D,IrrL	B15R	10		50.3	6,100	6-25-61	B5; Dr; L; Tch90-100, 125-140; WL(2-7-1957) 70
2	9bacb	4,530	3,880	C. Gartrell	1956	332R	4	TKdu	J,E	D,S	B15R	56		114.3	6,215	6-25-61	B2; Dr; L; Tch184; WL(9-18-56)110
2	16bcda	2,980	4,200	do.	1960	326R	4	TKdu	Cyl,W	S	9R			250	6,350	6-25-61	B2; Dr; L; Tch236-326
2	18adaa	3,820	150	L. Barron	1958	409	5	TKdu	S,E	D	20R	60		225.8	6,295	6-25-61	B2; Dr; EL; H7; L; Pf323-391; Sa; SL
2	18cddc	300	3,080	R. Baker	1961	250R	6 to 4	TKdu	S,E	D,S	B30R	32		88	6,145	3- 3-61	DL; Dr; H7-5; Tch88-248
2	18cddd	150	2,930	do.	1958	200R	6	TKdu	S,E	D,IrrL	12R	40		57	6,140	5- 6-58	Dr; H7; L; Tch73-100, 140-190
2	32dabd	2,220	920	P. Calahan	1960	323R	6 to 4	TKdu	S,E	D	12M	10	14	200	6,418	4-28-60	B1; Dr; FD; H7-5; L; Tch200-323
2	32dccb	500	2,620	R. Hampton	1960	311R	6 to 4	TKdu	S,E	D	B10R	13		197	6,415	6- 1-60	B4; Dr; H8-5; L; Pf200-311
	C6-66-																
1	4bcab	3,850	4,600	J. Archer			24	Ql	T,E	Irr					5,724.0		A50; Dr
1	4bcda	3,150	3,970	L. Dixon	1952	59R	18	Ql	T,E	Irr	600M	12		4.9	5,721.7	4-13-62	A65; Dr; WL(10-28-59) 14.6
1	4bddc	2,750	3,050	do.		34.9	18	Ql	N	Irr,Ot				11.6	5,733.7	4-13-62	Dr; U(1959)
1	4cada	1,900	2,900	do.		48.4	24	Ql	T,E	Irr,Ot	250M	2.4	4	12.5	5,733.4	4-13-62	A35; Dr; F
1	4ccaa	1,200	4,050	do.	1952	59R	24	Qb,Ql	T,E	Irr	1,075M	8.8	4	17.0	5,738.8	4-13-62	A65; Dr; FD; WL(10-28-59)24.6; WS
2	4dbac	2,140	1,950	do.	1909	220R	5	TKdu		D,S, IrrL	F20M			+23.6	5,748.3	3-23-59	Dr; FD; WS
2	4ddac	870	400	J. Loyd	1945	350R	6	TKdu	J,E	D				8	5,793.0	1957	Dr. Flowed at 275 feet in 1945
1	5adac	3,500	350	L. Dixon	1956	69.6	24	Qb,Ql	T,E	Irr,Ot	850M	14.5	6	10.4	5,720.3	4-13-62	A40; Dr; FD; WSp
2	5adcc	2,830	1,200	do.	1953	220R	5 to 4	TKdu	J,E	D	F8E			13.1	5,767.3	3-23-59	Dr; FD. Flowed in 1953
2	7dcaa	1,150	1,350	W. Schumann	1959	224R	8 to 6 to 4	TKdu	S,E	D,IrrL	9M			144	5,900	3-21-59	B45; Dr; FD; WS

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
1	C6-66-9aabh	5,050	1,250	J. Loyd	--	43.5	--	Qp,Qb,Ql	T,E	Irr	500R	--	--	12.6	5,754.6	4-13-62	A20(1956); A60(1959-with 2 wells); B41; Dr; L; WL(7-16-56) 19.9; WL(9-2-59)17.(
1	9abbb	5,300	2,320	-- do.	1956	43R	5	Qpp,Ql	Cyl,H	S	10R		--	9	5,737.8	5-11-56	Dr; L; Tch30-43
1	9accc	2,700	2,400	-- do.	1953	57R	18	Qb,Ql	T,E	Irr	970M	20.3	--	17.4	5,764.5	4-13-62	A50(1956-59); Dr; FD; WL(10-28-59)21.1; WS
1	9addc	2,700	350	-- do.	1943	41.9	24	Qb,Ql	T,E	Irr,Ot	700E	17.9	5	14.7	5,769.1	4-13-62	A91(1951); A40(1956); A60(1959-with 2 wells); Dr
1	9addc2	2,690	450	-- do.	--	31.4	24	Qb,Ql	N	Irr,Ot	--	--	--	+.3	5,758.4	4-13-62	Dr; U(1956-62)
1	9bcdc	2,670	4,300	L. Dixon.	1954	71.0	18	Ql	T,E	Irr,Ot	180M	39.7	--	24.6	5,773.7	4-13-62	A50(with bdcc); FD; L; WSp
1	9bdcc	2,670	3,800	-- do.	1954	70.0	18	Ql	T,E	Irr,Ot	241M	33.3	4	23.2	5,770.8	4-13-62	FD; L; WS
1	9dacc	1,500	1,200	D. Weaver	1958	71.0	8	Ql	T,E	D,Irr	52R	--	--	15	5,776.3	10-16-58	B60; Dr; FD; GE; L; Pf28-60; WS
1	9dbcb	1,700	2,550	L. Rose	1953	86R	18	Qb,Ql	T,E	Irr	1,000R	25	--	26.2	5,776.2	4-13-62	A45(1956); A115(1959); B84; Lo50; WL(8-9-56)34.7; WL(9-1-59) 35.4
1	9dddc	50	600	D. Weaver	1953	85R	18	Qb,Ql	T,E	Irr	1,000R	9	--	21.5	5,791.3	4-13-62	A45(1956); A47(1959); B79; Dr; GE; L; WL(9-2-59)24.3
2	13ddab	1,150	550	D. Pope	1958	203R	6	TKdu	S,E	D,S	B12R	20	--	108.0	6,140	10- 1-59	Dr; H7; L; Tch145-190; WL(6-21-58)140
2	14abda	4,400	1,330	F. Pearson.	1960	350R	6 to 4	TKdu	--	D	B15	--	--	185	6,000	10-27-60	B3; DL; Dr; H8-5
2	15baab	5,250	3,300	R. Daughenbaugh	1961	400R	10	TKdu	T,E	Ind	84R	154	48	30	5,834	4-22-61	B65; Dr; H15; L; Pf220-400
2	15bddb	3,050	2,980	L. Thiel.	1954	175R	6	TKdu	J,E	D	5R	--	--	--	5,864.4	--	C; Dr; FD; WS
1	15cccd	100	4,930	G. Clarke	1950	60R	18	Qb,Ql	T,E	Irr	418M	20	--	20.9	5,814.6	4-13-62	A80(1956); A70(1959); Dr
1	16adcd	2,700	700	F. Dransfeldt	1946	47.8	24	Ql	T,E	Irr	874M	16.6	456	13.5	5,793.4	4-13-62	A139(1956); A110(1959); DL; FD; WL(8-9-56) 19.0; WL(7-13-59) 14.7; WS
1	21abaa	5,150	1,600	G. Clarke	1950	34.4	48	Qpp,Qb,Ql	N	Irr	650R	22	--	5.6	5,802.3	4-13-62	Dr; U(1959); WL(9-1-59)6.1
1	22abdd	4,050	1,550	Parker Fire Dept.	1959	75R	6	Ql,TKdu	J,E	D,Fire	25R	--	--	31.5	5,869	4-13-62	B38; Dr; H7; L; Tch60-75; WL(4-1-60)27.8
1	22bacd	4,050	3,450	G. Clarke	1955	58.2	18	Ql	T,E	Fire,Irr, Ot	565M	--	--	30.1	5,846.9	4-13-62	A50; B39; Dr; L
1	22bcab	3,950	4,500	-- do.	1946	63.4	24	Qb,Ql	T,E	Irr,Ot	706M	25.9	31	24.6	5,836.8	4-13-62	A75; A7; B85; Dr; FD; TH; WS
1	22bcab2	3,940	4,440	U.S. Geological Survey	1959	90.0	10	Qb,Ql	N	Ot	--	--	--	27.9	5,839.4	10-28-59	B85; Dr; GE; L; PP; Sa; SL
1	22bcab3	3,940	4,470	-- do.	1959	92.5	10	Qb,Ql	N	Ot	--	--	--	28.1	5,838.6	10-28-59	B86; Dr; GE; L; PP; Sa; SL
1	22bcbc	3,450	5,100	I. Gregg.	1959	63.7	18	Ql	T,E	Irr	600R	--	--	23.8	5,834.3	4-13-62	A45; B61; Dr; L; S; WL(9-2-59)18.3
2	22bdbb	3,730	3,900	-- do.	1959	222R	6 to 4	TKdu	S,E	D	20R	--	--	40	5,843	11- -59	B80; Dr; H8-6; L; Tch140-222
1	22cbbc	2,250	5,050	R. Murdock.	--	56.4	18	Ql	T,E	Irr	1,000R	--	--	15.4	5,833.9	4-13-62	A45; B62; Dr; GE; H40; L; WL(9-2-59) 25.8
1	22ccdd	50	4,000	R. Williamson.	--	54.8	24	Ql	T,E	Irr,Ot	630M	11.7	--	12.4	5,840.2	4-13-62	A65; Dr; F; FD; WS
2	24dccd	20	2,300	L. Birch.	--	Spring	--	TKdu	--	S	F20R	--	--	--	6,088	6-25-61	
1	27badd	4,230	2,720	R. Williamson	--	51R	18	Qb,Ql	T,E	Irr	850M	--	--	--	5,843.1	--	A45; Dr
1	27bcdd	2,800	4,200	L. Motzenbocker	1950	58R	24	Qb,Ql	T,E	Irr	1,200R	--	--	17.1	5,857.4	4-13-62	A100; B58; Dr; Pf28-58; WL(8-10-56)33.6; WL(9- 3-59)24.7
1	27cccc	70	5,000	F. Poliochio.	1953	58.9	18	Ql	T,E	Irr	220R	36	2	17.1	5,878.6	4-13-62	A30; B60; Dr; L; WL(8-10-56)35.1

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
1	C6-66-27ccdd	50	4,000	F. Polrochio	1954	48.3	24	Qp,Qb,Ql	T,E	Irr	850R	39	3	5.4	5,866.2	4-13-62	A30; B51; DL; Dr; Pf39-51; WL(2-26-54)6; WL(8-10-56)10.0; WL(9- 3-59)15.2
1	27ccdd2	50	3,980	do.	1960	57R	18	Qp,Qb,Ql	T,E	Irr	1,000R	25	.	9	5,866.8	7- -60	B55; Dr; L; Pf22-58. Replacement for ccdd
1	27cddd	20	2,700	do.	. .	48.9	18	Qp,Qb,Ql	T,E	Irr	600R	. .	. .	4.6	5,868.1	4-13-62	A45; Dr; WL(7-26-56) 26.9; WL(9-3-59)15.2
1	27dbcc	1,340	2,630	J. Forkner	1954	44R	18	Qp,Ql	T,E	Irr	300M	17.0	1/2	4.8	5,861.7	4-13-62	A65; B42; Dr; FD; GE; L; WL(7-26-56)23.4; WSp
1	30aacd	4,030	700	V. Parker	1954	34.6	18	Qb	T,G	Irr	400R	12	6	16.8	5,960	4-13-62	A16; B26; DL; Dr; FJ; Pf21-36; TH; WL(6-28-54)12
1	33adab	3,900	600	H. Stroh	1950	. .	. .	Qp	. .	Irr	. .	. .	.	. .	5,920.9	. . . .	U(1952-59). Inadequate
1	34bacb	4,300	3,700	F. Egger	1948	60.9	24	Qb,Ql	T,E	Irr	798M	19.7	1/2	10.9	5,875	4-13-62	A72; B62; Dr; FD; GE; H52; L; Pf28-62; WL(8-10-56)24.2; WL(9- 2-59)19.6; WS
1	34bcab	3,900	4,550	D. Stroh	1953	57.0	24	Qb,Ql	T,E	Irr	430M	9.2	3	15.2	5,883.7	4-13-62	A40; Dr; WL(1953)45; WL(9-3-59)27.9
1	34cdab	1,250	3,200	do.	1951	66R	18	Qb,Ql	T,E	Irr	640M	19.2	24	13.5	5,899.3	4-13-62	A140; Dr; WL(8-10-56) 23.7
1	34cddc	50	3,000	do.	1946	53.3	24	Qb,Ql	T,E	Irr	800R	25	.	18.7	5,913.8	4-13-62	A180(1951); A60(1956); Dr; U(1959); WL(8-10-56)24.3; WL(9- 3-59)23.6
1	34dcbb	1,230	2,520	E. Rodine	1952	71R	24	Qb,Ql	T,E	Irr	450M	19.8	5	44.7	5,915.7	8-10-56	A180; Dr; Pf15-71
1	34dcbc	900	2,500	do.	1958	73.1	18	Qb,Ql	N	Irr	. .	. .	.	31.2	5,917.8	4-13-62	B73; DL; Dr; WL(9-3-59)39.2
2	C6-67-6abaa	5,400	1,460	Western Concrete, Inc.	1960	318R	6 to 4	TKdu	S,E	Ind,Pr	F13R	. .	. .		5,705	6-30-60	B1; Dr; H7-5; L; Tch234-318
2	8bcba	3,700	4,820	L. Phipps, Jr.	1948	121R	6 to 4	TKdu	Cyl,W	D,Ot	5R	. .	.	21.8	5,820.0	4-21-62	B37; Dr; L
2	18baab	5,260	3,100	do.	. .	334R	4	TKdu	Cyl,W	S	4R	8	.	115.0	5,947	7-17-57	Dr; FD; L; WSp
2	20ddbb	1,300	1,260	H. Webster	1960	235R	6 to 4	TKdu	S,E	D	B20R	30	.	190	6,260	7- 8-60	DL; Dr; FD; HB-6; Pf190-220; WL(7-9-62)205.5
2	27cdda	350	2,750	V. Ramer	1959	120R	6	TKdu	J,E	D	10E	. .	. .	56.2	6,210	12-18-59	Dr; L; Tch66-111; WS; WSr
2	27ddcb	350	1,250	A. Ceresa	1960	92.4	6	TKdu	J,E	S	20R	. .	.	60.1	6,220	9-15-60	DL; Dr; Tch70-92; WL(8-15-59)60
2	C6-68-1caaa	2,400	2,880	L. Phipps, Jr.	. .	332R	4	TKdu	Cyl,W	S	6R	30	.	60	5,828	. . . .	B4; Dr; FD; L
2	3dbac	2,200	1,970	do.	. .	533R	12 to 10	Kdmc	. .	S	Fl.5M	. .	. .	110.9	5,570	7-17-57	Dr; FD; WSp
2	4aaad	4,800	170	M. Fisher	. .	250R	. .	TKdu	. .	S	F1M	. .	. .	. .	5,470	4-26-55	Dr
2	4aaba	5,200	900	do.	1955	810R	6 to 4	Kdmc,Kdlc	. .	D,IrrL	F111M	. .	.	186.3	5,540	4-26-55	AT; B39; Dr; EL; FD; GRL; L; Pf367-810
2	4aadb	4,550	400	do.	1916	258R	5 to 4	TKdu,Kdmu	J,E	D	F0.7M	. .	. .		5,490	4-25-55	B27; DL; Dr; T56. Flowed 45 gpm in 1916
2	4abaa	5,350	1,450	do.	1956	392R	6 to 4	Kdmc	J,E	S	B27R	22	. .	8	5,500	5-31-56	B21; DL; Dr
2	4abaa2	5,500	1,430	do.	1957	760R	6	Kdmc,Kdlc	. .	D	F300R	. .	.	. .	5,515	7-25-61	DL; Dr
2	4abad	4,700	1,550	do.	1953	595R	6 to 4	Kdlu	. .	Pond	F5M	. .	.	.	5,498	4-25-55	DL; Dr; T63; Tch416-595. Bailed 60 gpm
2	4abdc	4,130	1,730	do	1958	605R	6 to 4	Kdmc,Kdlu	. .	Pond	F50R	. .	.	. .	5,520	12- 8-58	B14; DL; Dr; Pf148-170, 412-605
2	6dcdb	350	1,800	Coppco, Inc.	1957	699	8	Kdlc,Klu	S,E	Ind,B	89R	517	23		5,498.0	12-18-57	B72; Dr; EL; L; Tch526-680; WSp. Flows 5 gpm

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C6-68-																
1	7bbba	5,190	4,720	Colo. Central Power Co.	1957	41.5	18	Qp,Qb,Ql	T,E	Irr	800R	25	2	5.8	5,406.5	4-11-62	A28.4; B43; Dr; GE; H34; L; Pf15; WL(7-15-59)5.2
1	7bbbb	5,260	5,020	. . do	1957	43.0	18	Qp,Qb,Ql	T,E	Irr	1,200R	26	3	5.5	5,405.0	7-15-59	A28; B43; DL; Dr; GE; H42; Pf15
1	7bbda	4,600	4,200	. . do	1957	52.5	18	Qb,Ql	T,E	Irr	1,050R	. .	. .	17.1	5,421.6	4-11-62	A28.4; B50; DL; Dr; GE; H42; Pf37; WL(7-15-59)14.9
1	7bcdd	2,680	4,120	L. Phipps, Jr.	. .	14.0	48	Qpp,Qb	N	Irr	. .	. .	. .	5.3	5,422.1	4-11-62	Dr; U(1959); WL(7-15-59)6.6
1	7cacc	1,620	3,680	. . do	. .	38R	24	Qpp,Qb	T,E	Irr	620M	. .	. .	5	5,426.2	. . . .	A40; Dr
1	7cacc2	1,620	3,780	. . do	. .	23.3	48	Qpp,Qb	C,E	IrrL,Ot	50E	3	. .	1.9	5,426.9	4-11-62	D; Gy100
1	7cacc3	1,520	3,800	. . do	. .	23R	48	Qpp,Qb	N	Irr	. .	. .	. .	. .	5,427.0	. . . .	D; Gy100
2	8abbd	4,700	2,130	. . do	1954	214R	6 to 4	Kdmc	Cyl,G	S	B22R	30	. .	60	5,547	2- -54	B19; Dr; L
2	8bbbc	4,620	5,300	. . do	. .	373	4	Kdmc	Cyl,H	Ot	. .	. .	. .	8.6	5,563.8	4- 5-62	Dr
2	10acab	3,750	1,650	. . do	. .	302R	4 to 3	TKdu	. .	S	PJM	. .	. .	+5.8	5,669	7-17-57	DL; Dr; FD; WSp
2	13acbc	3,320	2,400	. . do	. .	326R	4	TKdu	Cyl,W	S	8R	5	. .	100	5,944.0	1957	B3; Dr; L
2	14bdda	3,050	2,670	. . do	. .	800R	10 to 5	Kdmc,Kdlu	Cyl,W	S,D	. .	. .	. .	. .	5,996.0	. . . .	Dr
2	14bdda2	3,000	2,670	. . do	. .	1,012	12 to 5	TKdu,Kdmc, Kdlu	Cyl,W	S,D	3M	. .	. .	. .	5,996.0	. . . .	Dr; FD; L; WS
2	14dbbc	2,050	2,350	. . do	1930	800R	10 to 6	TKdu,Kdmc	T,E	D	150M	. .	30	470	5,996	7-16-57	Dr; FD; L; WS
2	16abaa	5,120	1,580	. . do	1950	465R	12 to 8	TKdu	Cyl,G	. .	2M	. .	. .	115.8	5,684	7-19-57	B40; Dr; FD; L; WSp
2	17bdad	3,530	2,770	. . do	1947	354R	4	TKdu	Cyl,W	S	7R	39	. .	130	5,688.0	10- -47	B47; Dr; FD; L; Pf120; WSp
1	17cbcc	1,380	5,000	. . do	1960	46R	18	Qpp,Qb,Ql	C,E	Irr	800R	. .	. .	4.8	5,468	1- 3-62	A35; Dr; H42; L; Pf24-46; WL(5-60)5
1	17ccad	700	4,050	. . do	. .	18.7	216	Qp,Qb	C,G	Irr	. .	. .	. .	11.4	5,492.8	7-29-57	D
1	18abcb	4,460	2,520	. . do	. .	19.6	48	Qpp,Qb	C,E	Irr,Ot	410M	. .	. .	5.9	5,444.0	4-11-62	A112; By2; D; Si
1	18abcb2	4,450	2,530	. . do	. .	48R	18	Qpp,Qb,Ql	T,E	Irr	410M	34.1	1-1/2	9.5	5,443.4	8-12-59	AT; B38; By2; L; TH
1	18dabb	2,400	1,050	. . do	. .	28.2	96	Qp,Qb,Ql	T,E	Irr,Ot	. .	. .	. .	8.1	5,461.2	4-11-62	D; U(1957)
1	18dabb2	2,400	1,010	. . do	. .	41.5	18	Qp,Qb,Ql	N	Irr,O	. .	. .	. .	7.0	5,460.6	1- 2-57	D; U(1957)
2	18ddbb	1,200	1,180	. . do	.	350R	6	Kdmc,Kdlu	. .	S,Ot	F4.4M	. .	. .	+28.8	5,477.8	4-21-62	AT; Dr; FD; WSp
1	18dddd	300	220	. . do	. .	31.3	40	Qpp,Qb	C,E	Irr,Ot	280M	9.6	. .	.0	5,473.3	4-11-62	A70(with 2 wells); D; FD; WSp
2	19abba	5,150	2,250	J. Braley	1950	220R	4	Kdmc	J,E	D,S	10E	9.8	1/6	10.6	5,574	7-19-57	Dr
1	20bcbd	3,500	4,920	L. Phipps, Jr.	. .	31.9	48	Qpp,Qb,Ql	N	Irr	57M	5.3	1-1/2	7.4	5,472.2	5- 6-59	AT; D
2	20bdbd	3,420	3,300	E. Wilkinson	1911	222R	. .	TKdu,Kdmc	J,E	D,S	F10E	. .	. .	. .	5,514	5- 6-59	Dr; FD; Pf111. Flow greater in 1911
1	20bdca	3,080	3,380	. . do	. .	7.5	48 x 48	Qp	Cyl,H	N	. .	. .	. .	4.5	5,503.0	4-11-62	D; WL(5-6-59)5.0
1	20dcdb	420	1,850	H. Axtel	. .	. .	36	Qp,Ql(?)	C,N	Irr	. .	. .	. .	. .	5,524.3	. . . .	Dr; U(1959)
1	20dcdb2	380	1,790	. . do	. .	13.6	48	Qp,Ql(?)	J,E	D	. .	. .	. .	9.1	5,529.0	4-11-62	D; WL(7-16-59)9.9
1	20dcdb3	460	1,750	. . do	. .	11.6	6	Qp,Ql(?)	N	N	. .	. .	. .	9.2	5,526.9	7-15-59	Dr
2	23addd	2,960	10	L. Phipps, Jr.	. .	454R	. .	TKdu	Cyl,W	S	. .	. .	. .	285	6,128	. . . .	Dr; L
2	24bccc	2,930	5,250	. . do	. .	400R	4	TKdu	Cyl,W	S	2M	14	. .	286	6,128	. . . .	Dr; FD; L; WSp
2	27ccac	750	4,300	. . do	1961	600R	8 to 6	Kdmc	T,E	Irr	60E	73	8	62	5,700	6- 5-61	A14; Dr; H11-7; L; Tch280-600
1	33dbbb	2,550	2,380	E. I. DuPont de Nemours & Co.	1938	34R	24	Qpp,Ql	T,E	Ind,B,C	153M	8	1	10	5,595	9-16-60	Dr; FD; Pf25
2	33dbcc	1,500	2,350	. . do	1906	715R	12 to 8	Kdmc,Kdlc	T,E	Ind,PS	374M	. .	. .	. .	5,600	4- 7-60	B42; Dr; FD; L; WS; WSs. Flowed 178 gpm in 1906
	C6-69-																
1	1aadb	4,400	350	Four Corners Uranium Co.	1957	20.3	48	Qpp,Qb	N	Irr	. .	. .	. .	3.2	5,383.9	4-12-62	D; U(1959); WL(4-11-59)4.0
2	1acac	3,620	1,700	R. Flood	1960	152R	4	Kdlc	. .	D	B15R	22	. .	2	5,410	3- 8-60	B34; Dr; L; OH(60-152); Pf48-60
2	1bbbc	4,800	5,050	W. Petty	1959	264R	4	Kdlc	S,E	PS	14R	96	. .	138.6	5,538	10-26-59	B12; Dr; GE; H8-6; L; Tch218-264

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C6-69-																
1	1dbcb	1,930	2,500	I. Becker.	. .	18.0	6	Qpp,Ql(?)	C,E	IrrL,Sw	50E	. .	. .	3.3	5,407.3	4-12-62	Dr; WL(5-11-59)4.6
2	2abbb	5,420	2,620	National Development Co.	1955	449R	8 to 6	Kdm1,Kdlc	T,E	PS	830R	20	. .	130	5,585	10-29-55	B15; Dr; EL; L
1	2bcdd	2,650	4,000	. . do	1960	23R	48	Qp,Qe	C,E	PS	30R	. .	. .	10	5,550	8- -60	B23; D; L
1	2ddab	1,020	460	J. Janowitz.	. .	32.9	. .	Qa,Qv	N	Ot	. .	. .	. .	30.4	5,427.3	4-11-62	D; U(1956-62)
1	2dddа	600	180	. . do	1929	48.2	36	Ql,Qe,Qv	C,E	Irr,Ot	272M	13.2	12	16.7	5,411.7	4-11-62	A15; AT; Dr; WSp
1	3ccca	460	4,900	M. Hildebrand. . . .	1895	23.1	84	Qp	J,E	Irr,S	. .	. .	. .	10.8	5,438.7	7-14-59	A40; D
2	8abca	4,360	2,120	Mannon Associates. .	1961	957R	8	Pf	. .	PS	P2M	. .	. .	49.6	5,750	7-18-62	B39; Dr; FD; H11-7; L; Q8(97-957)
1	8abcb	4,350	2,550	. . do	1960	22R	24	Qp	N	PS	14R	14	. .	5.4	5,760	4-11-62	D; Gy80x70; WL(3-15-62)2.0
1	8badd	4,250	2,700	. . do	1960	28R	24	Qp	J,E	PS	13R	. .	. .	8.8	5,770	4-11-62	B28; Dr; H16; L; Pf10-28; WL(8-3-60)8; WL(3-15-62)8.4
1	10adaa	3,750	100	E. Green	1959	51R	8	Qp,Ql	S,E	PS	20R	2	. .	8	5,470.2	4-13-59	B41; Dr; L; Tch18-41
1	10adad	3,480	50	. . do.	1956	42R	12	Qp,Ql	T,E	Irr	240M	. .	. .	10	5,467.5	. . . .	Dr; U(1959)
1	11aada	4,450	70	J. Janowitz.	1956	48.3	24	Qp,Ql	N	Irr	939R	10	. .	11.8	5,407.2	4-11-62	B48; Dr; GE; H48; L; Pf33-48; WL(5-11-59) 11.8
1	11bcdc	2,800	4,500	D. Hugans.	. .	56.0	18	Qp,Ql	N	Irr	. .	. .	. .	10.9	5,452.6	4-11-62	Dr; U(1959); WL(5-11-59)7.3
1	11cbab	2,550	4,600	. . do	. .	50.8	18	Qp,Ql	N	Irr	58M	2.4	1-1/2	12.1	5,452.0	4-11-62	AT; Dr; U(1959)1 WL(7-16-59)3.1
1	12aaac	4,850	500	J. Stryker	1961	23R	48	Qp,Ql	C,E	Irr	100R	9	. .	6	5,400	4-20-61	A16; D; L; Pf13-23; WL(7-27-61)10
2	12acdb	3,100	1,700	J. Filbert	1953	235R	4	Kdl1,Klu	T,E	D	. .	. .	. .	. .	5,430	1953	Dr; FD; Pf211-219
1	12bacc	4,120	3,900	L. Skinner	1958	50R	6	Qpp,Ql	J,E	D	30R	. .	. .	15	5,398.3	8-30-58	B47; Dr; L
2	12dcbd	900	2,000	R. Moaser	1956	512R	6 to 4	Kdl1,Klu	Cyl,E	D	B13R	140	. .	10	5,485	5-25-56	B26; Dr; EL; L
1	14aaac	4,880	400	Gardner Construction Co.	1958	22R	6	Qpp,Ql	S,E	D	15M	. .	. .	9	5,421.4	4- 8-58	DL; Dr; Pf7-22
2	15dcac	750	1,900	City of Englewood. .	1953	9,235	. .	. .	N	Oil	. .	. .	. .	. .	5,638	. . . .	Dr; EL. Bottom-hole temperature 162°F
2	23dada	1,700	100	H. Hines	1957	215R	. .	. .	. .	TW	. .	. .	. .	. .	5,510	. . . .	Dr. Dry
2	23dadb	1,900	450	. . do	1958	598	6	Klu	N	TW	. .	. .	. .	26.2	5,470	4- 1-58	Dr; EL; FD; OH(26-598)
1	23dadd	1,560	120	. . do	1958	39R	7	Ql,Qa	. .	D,S	10R	. .	. .	. .	5,479.5	. . .	DD; FD; L; WS
1	23dbbb	2,430	2,640	Denver Water Board .	1954	35R	48	Qpp,Ql	T,E	PS,E	924M	21.7	4	7.1	5,446.5	12- 3-5	AT; Dr; L; Pf17-35
1	23dbbb2	2,470	2,400	. . do	. .	41.4	6	Qpp,Ql	N	TW,Ot	. .	. .	. .	5.8	5,446.6	4-11-62	B38; DL; Dr
1	23dbbc	2,200	2,630	. . do	1954	31R	48	Qpp,Ql	T,E	PS,E	713M	18.6	10	6.9	5,446.8	11-19-54	AT; B31;DL;Dr; Pf12.8-31
1	23dbbc2	2,150	2,500	. . do	. .	36.8	6	Qpp,Ql	N	TW,Ot	. .	. .	. .	6.7	5,448.1	4-11-62	B40.5; DL; Dr
1	23dbbc3	2,350	2,620	. . do	. .	38.3	6	Qpp,Ql	N	TW,Ot	. .	. .	. .	5.8	5,446.8	4-11-62	B38; DL; Dr; FD; WS; WSr
1	23dbcc	1,550	2,620	. . do	1955	37.8	24	Qpp,Ql	T,E	PS,E	750M	. .	. .	8.0	5,449.5	6-28-55	B33; Dr; L
1	23dbcc2	1,450	2,400	. . do	1955	37.3	24	Qpp,Ql	T,E	PS,E	750M	. .	. .	6.6	5,449.1	6-29-55	B32; DL; Dr
1	23dbdb	1,850	1,800	. . do	. .	27.8	6	Qpp,Ql	N	TW,Ot	. .	. .	. .	5.1	5,446.1	4-11-62	B33.5; DL; Dr
1	23dccd	100	2,000	A. Myrick.	. .	. .	. .	Qpp	C,G	Irr	1,100R	. .	. .	. .	5,450.5	. . . .	A35. Sump
2	24aacb	4,370	1,160	B. Clark	1954	833R	6 to 4	Kdlc,Klu	J,E	D	5R	50	. .	24	5,555	1960	DL; Dr
2	24abdd	4,150	1,430	C. Ramsdell.	1960	210R	6	Kdl	S,E	D	B10R	66	. .	29	5,550	8-15-60	B54; Dr; L; Pf140-210
2	24acab	3,830	1,700	R. Evans	1960	850R	4	Kl	N	TW	. .	. .	. .	. .	5,550	. . .	B54; DL; Dr; EL; Sa
2	24acab2	3,830	1,950	. . do	1961	900	7 to 4	Klb	S,E	D	13R	210	. .	70	5 499	3-21-61	B29; Dr; EL; L; H8 5; Sa; SL; Tch785-900
2	24acbb	3,680	2,550	J. Johnson	1900	600	4	Klb,Kla	J,E	D	20E	. .	. .	20	5,539	1956	Dr; WL(1900)+10; WS
2	24acda	3,300	1,560	Hier and Price . . .	1962	1,029R	7 to 4	Klb,Kla	N	PS	B42R	176	. .	59.4	5,565	8-11-62	B29; DL; Dr; H7-5; Pf839-1,029; WL(6-62)60
2	24cccd	130	4,670	M. Rosendale	190	1,340R	12	Klb,Kla, Kfm,Kt	N	Oil	F1E	. .	. .	. .	5,524.9	7- 2-57	FD; GRL; WSp
1	26acbd	3,500	2,000	. Shore	1954	8R	. .	Qpp	C,N	Irr	670R	. .	. .	. .	5,459	. . . .	A35
1	26bccb	3,100	5,070	Air Products Corp. .	1957	26R	. .	Qp,Ql	T,E	Ind,Pr	150R	. .	. .	7.4	5,462.0	7-20-57	Dr; Sa; SL
1	26bdba	3,700	3,550	G Martin	. .	24.8	24	Qp,Ql	T,E	Cons,Ot	360M	9.3	1/2	1.9	5,457.6	4-11-62	Dr

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
1	C6-69-14addb	1,150	500	Associated Realty	1950	29.5	48	Qpp,Ql	N	PS	190E	4.5	1/4	5.5	5,493.0	7-14-59	AT; B31; D; L; T56; U(1959)
2	C6-70-2ddbb	1,000	1,000	A. Schmitt	1959	102R	6	pC	. .	D	1R	. .	. .	76	7,200	6-23-59	B8; Dr; Gr; H7-5; L; OH(26-102)
2	4bbdb	4,500	4,630	Mountain High Chapel Church	1959	64R	7 to 6	pC	J,E	D	6R	. .	. .	31.0	7,540	5- 2-61	Dr; FZ; Gr; L; OH(10-64)
2	4daab	2,500	550	G. Anderson	1957	4[illegible]R	8 to 7	pC	Cyl,H	D	83R	21	3	18.1	7,230	5- 2-61	B9; DL; Dr; FD; FZ; Gr; WL(5-22-57)19. Water from fracture at 34 feet
2	4dada	1,650	240	J. Shelley	1956	112R	7	pC	S,E	D,S	4R	60	12	45.2	7,280	5- 2-61	DL; Dr; FZ; Gr Pf58-106
1	4dadb	1,900	600	B. Braconier	1953	50R	8 to 6	Qp,pC	S,E	D	15R	. .	. .	14	7,220	9-12-59	B40; Dr; Gr; L
-	5dbbd	2,200	2,250	E. Hobbs	1958	38R	5	pC	S,E	D	1R	30	. .	5	7,630	5- 2-61	B8; Dr; FD; FZ; H8-6; Pf20-28; SG
2	11abdd	4,200	1,530	R. Downare	1958	143R	4	pC	S,E	D	4R	. .	. .	228	7,040	11-16-58	Dr; FD; H7-5; Gr; L
2	13cbcd	1,460	4,920	W. Rees	1959	201R	6	pC	. .	D	<1R	. .	.	10	6,680	11-24-59	B9; Dr; FZ; L; OH(12-201); SG
1	24bbcb	4,230	5,700	S. Zahn	.	16.5	48	Qpp	C,E	D,IrrL	5R	. .	. .	4.8	6,765	4-11-62	D; FD; WL(5-6-61)9.1
2	24bbcc2	4,260	5,700	. . do	.	16R	42	pC	C,E	D,IrrL	2E	. .	. .	8.2	6,760	4-11-62	D; FD; SG; WL(5-2-61)5.6
2	25bddc	2,850	3,260	M. Olson	1959	91R	6	pC	J,E	D	3R	. .	. .	21	7,300	9- -59	B1a; Dr; FD; L; SG; Tch47-92. Water rust colored after standing; water yielding fractures at intervals 52 to 83 feet
-	C6-71-12adcd	2,700	900	H. Johnson	1957	100	6 to 5	pC	J,E	D,IrrL	5E	80	3/4	. .	7,980	2-11-59	B6; Dr; FD; Gr; H8-6; L; Pf50-100; WS
-	15bcdd	2,650	4,250	W. Gollan	1956	183	6	pC	. .	D	4R	. .	. .	. .	8,330	. . . .	Dr; Gr; WS; WSr
-	C7-65-1daad	2,200	300	B. McBreem	1950	25R	. .	TKdu	Cyl,W	D,S	3R	. .	. .	175	6,405	1960	Dr
2	8cddb	400	3,100	K. Rosenthal	1960	232R	6 to 4	TKdu	S,E	D,IrrL	B15R	4	. .	196	6,540	10-12-60	Dr; H8-5; L; Pf186-232
2	9bccc	2,650	5,050	P. Britton	1958	307R	6 to 4	TKdu	S,E	D,S	10R	. .	. .	265	6,595	7-14-58	B3; Dr; H7-5; L; Pf244-307
2	9cbcb	1,900	5,050	A. Reno	1958	320R	6 to 4	TKdu	. .	D,S,IrrL	B11R	20	. .	280	6,600	11-10-58	B3; Dr; H7-5; L; Pf250-320
2	9ccdb	400	4,600	W. Maxwell	1962	315R	6 to 4	TKdu	S,E	D	12R	52	. .	257	6,600	4-25-62	B2; DL; Dr; H8-5, Pf263-315; Sa; SL
2	14cccc	200	5,200	G. Bentley	. .	298R	6 to 4	TKdu	S,E	D,IrrL	B10R	14	. .	200	6,550	6-30-61	B3; Dr; FD; H7-5; L
2	15ddaa	1,200	200	R. Bentley	1955	300R	. .	TKdu	S,E	D,S	10R	. .	. .	250	6,580	6-30-61	Dr
2	16acbc	3,500	2,500	R. Birney, Jr.	1958	310R	6	TKdu	S,E	D	10R	30	. .	260	6,610	3-21-58	B15; DL; Dr; H7; Tch270-310
2	16bacc	4,150	3,900	L. Wallden	1958	298R	6 to 4	TKdu	. .	D	B10R	22	. .	230	6,600	7- 5-58	B12; Dr; H7-5; L; Pf253-298
2	29aacb	4,500	1,050	G. McCown	1961	184R	4	TKdu	S,E	S	B18R	20	. .	80	6,445	6-30-61	B1; Dr; H9-5; L; Pf126-182
2	29adaa	3,900	250	. . do	1959	182R	6	TKdu	S,E	D	18R	. .	. .	69	6,435	1959	Dr
1	29adaa2	3,920	250	. . do	. .	35R	24	Qp	N	E	. .	. .	. .	21.4	6,435	4-13-62	D; WL(6-30-61)30
1	29cbcc	1,500	5,250	A. Rothschopf	. .	28R	48	Qp,Qb,Ql	C,E	Irr	150E	10	. .	3.5	6,305	4-13-62	D; TH; WL(6-30-61)10.0
1	29cbcd	1,500	4,900	. . do	1952	42R	18	Qp,Qb,Ql	T,E	Irr	300E	16	6	3.2	6,309	4-13-62	A25; Dr; GB; TH; WL(6-30-61)10
1	29cdca	350	3,600	E. Wallden	1954	50R	18	Qp,Qb,Ql	T,E	Irr	110E	24	1/4	10.4	6,332	4-13-62	A20(with 2 wells); Dr; WL(6-30-61)7. Surging with intake at 31 feet. Well discharges into cdcb
1	29cdcb	350	3,900	E. Wallden	1960	30R	48	Qp,Qb,Ql	T,E	Irr	220M	4	1/4	6.5	6,330	4-13-62	D; DL; Pf8-30; WL(6-6-60)7
2	30babb	5,120	3,800	E. Obroslinski	1958	120R	5	TKdu	J,E	D,IrrL	12R	15	. .	60	6,250	3-31-58	B21; Dr; FD; L; Pf62-108

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C7-65-																
1	10daad	2,000	250	J. Rothschopf	1954	70R	48 to 18	Qp,Qb, Ql,TKdu	C,E	Irr	100E	12	7	17.5P	6,300	6-30-61	A23(with 2 wells); B56; DD; L; TH; WL(3-61)5
1	10dacb	1,800	1,100	do	1953	54R	18	Qp,Qb, Ql,TKdu	T,E	Irr	200E	25	7	55.3P	5,285	6-30-61	B56; Dr; GE; TH
1	10dbbb	2,600	2,550	E. Bowles	1954	66R	16	Qp,Qb, Ql,TKdu	T,E	Irr	150R	21	6	7.6	6,260	4-13-62	A40; B64; Dr; GE; L; Pf11-58; Su; WL(9-10-55)15; WL(7- 1-61)7.6
2	11bdca	1,000	3,600	C. Verdos	1956	185R	16	TKdu	T,E	Irr	150E	56	.	71.9	6,440	7-31-62	A20; B8; DL; Dr; GE; H38; Pf84-164; WL(12-17-56)63. Drilled to 345 feet; plugged back to 185 feet
	C7-66-																
2	1aaaa	5,000	250	L. Secord	1959	160R	5	TKdu	S,E	D	B15R	60	.	60	5,976.6	1- -59	Dr; FD; WSp
1	1aacd	4,200	900	W. O'Brien	1946	38R	24	Qp,Qb,Ql	T,N	Irr,Ot	250R	. .	.	21.5	5,957.6	4-13-62	B38; Dr; TH; U(1956-59)
1	1abcb	4,400	2,600	do	1955	75R	18	Qp,Qb,Ql	T,E	Irr	790M	16	6	25.5	5,925.6	4-13-62	A70; B74; Dr; GE; L; WL(7-26-56)31.6
1	1baaa	5,150	2,800	J. Willis	1958	80R	4	Qp,Qb,Ql	J,E	D	20R	2	. .	23	5,915.8	7-17-58	B76; Dr; GE; L; Pf50-80
2	1bbcc	4,050	5,000	W. Swinney	. . .	80R	6	TKdu	Cyl,H	S	. . .	.	. .	9.2	5,918.2	9-15-59	Dr
1	1bdcc	2,800	3,750	do	1956	61R	18	Qp,Ql	T,E	Irr	420M	14	10	11.8	5,919.8	4-13-62	A100; B61; Dr; GE; L; Pf27-61; WL(8-10-56)19.7
1	1cacc	1,550	1,700	M. Christensen	1955	57R	24	Qp,Qb,Ql	C,N	Irr	662M	6.9	1/4	12.5	5,921.6	9-15-59	A94(with 2 wells); B57; DL; Dr; GE; Pf30; WL(8-11-56)13.0
1	1cdad	800	4,050	do	1947	50R	24	Qp,Qb,Ql	T,E	Irr	166M	25	.	10.9	5,928.7	8-13-56	Dr; GE; Lo30
1	1cddc	50	1,200	D. Vestal	1954	48R	24	Qp,Qb,Ql	T,E	Irr	. .	.	.	11.8	5,932.3	9-18-59	A450(with 6 wells); Dr
1	1dbba	2,550	2,150	M. Christensen	1946	40R	18	Qp,Qb,Ql	T,E	Irr	250R	20	.	11.8	5,921.8	9-15-59	A25; B40; Dr; GE; Lo30
2	1dbcd	1,330	2,200	D. Vestal	. . .	Spring	. .	TKdu	. .	S	F50R	. .	.	. .	5,921.5	9-15-59	
1	4abdd	4,400	1,400	W. Swinney	.	Spring	. .	Qr,TKdu	. .	S	F1E	. .	.	. .	6,002.9	9-15-59	
1	4accc	2,900	2,500	do	. . .	Spring	. .	Qr,TKdu	. .	D,S	F1E	. .	.		6,016.6	9-15-59	
1	4dabd	2,000	900	do	1956	60R	4	Ql,TKdu	Cyl,G	S	. .	. .	.	30	5,957.2	1956	B36; Dr; L
1	10acca	1,100	2,200	D. Vestal	1956	65R	24	Qb,Ql	T,E	Irr	560M	18	. .	24.3	5,946.4	4-13-62	B65; Dr; GE; H48; L; Lo20; WL(8-13-56)24.4
1	10badd	4,100	2,850	do	1946	64R	24	Qb,Ql	T,E	Irr	1,200R	18	.	24.7	5,948.1	9-18-59	DL; Dr; GE; WL(1946)11; WL(8-13-56)34.9
1	10bdaa	3,750	2,800	S. Millard	1953	64R	4	Qb,Ql	J,E	D	31R	. .	.	29	5,951.7	10- -53	B64; DL; Dr
1	10cddd	70	4,100	P. Losey	1947	41.6	20	Qp,Qb	N	Irr	150E	. .	.	25.8	5,981.5	4-13-62	Dr; GE; H42; U(1959); WL(9-21-59)26.3
1	10c cc	70	3,900	do	1956	58R	18	Qp,Qb,Ql	T,E	Irr	306M	11.8	6	6.1	5,961.9	4-13-62	A60; B56; Dr; F; GE; H42; L; Pf10-58; WL(8-13-56)8.5; WL(9-21-59)9.4
1	10dbba	2,500	2,100	S. Millard	1949	52R	18	Qb,Ql	N	N	. .	.	.	37	5,965.7	1949	B48; Dr. Yield insufficient for large scale irrigation
1	10dbbb	2,600	2,550	do	1956	59R	18	Qb,Ql	T,E	Irr	252M	7.2	33	17.5	5,952.5	4-13-62	A55; B58; Dr; GE; H42; L; Pf15-60; TH; WL(7-25-56)28.4; WL(9-18-59)28.6
2	10ddcc	90	1,100	do	1953	273R	. .	TKdu	J,E	D,IrrL	5R	30		60	6,013.3	4-12-53	Dr

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C7-66-																
2	15aacc	4,200	1,200	F. Szymanski		Spring		TKdu		D	F5E				6,016.6	9-21-59	C
2	15adbb	3,900	1,100	do		Spring		TKdu		S	F5E				6,007.3	9-22-59	C
1	15adbb2	3,900	1,200	do	1949	90R	6	Qs(?),TKdu	J,E	D	5E	60		27	6,000.8	1959	
2	15adbb3	3,700	1,200	do		Spring		TKdu		S	F1E				6,021.2	9-21-59	
1	15adbc	3,500	1,250	do		69.1	40 x 40	Qs,TKdu	H	H				43.8	6,021.7	9-21-59	D; U(1959)
1	15adcb	3,250	1,250	do	1959	120R	6	Qs,TKdu	J,E	D	4E	35		80	6,018.9	1959	Dr
1	15badb	4,500	3,280	do	1956	62.3	18	Qp,Ql	C,E	Irr	800R	8	8	10.7	5,967.2	4-13-62	A100; B58; Dr; L; Pf15-60; TH; WL(8-13-56)6.6; WL(9-22-59)7.2
1	15bdcc	2,950	3,850	do	1951		300	Qpp	C,E	S,F, Irr,E	400R			10.4	5,982.1	9-22-59	A30; D
1	15cdcc	280	3,800	D. Vestal	1957	68R	18	Qp,Ql	T,E	Irr	400R	24		14.9	5,999.0	9-22-59	B68; DL; Dr
1	15cddc	200	3,000	do	1949	62.8	18	Qp,Ql	T,E	Irr	1,200R	23		14.3	6,004.7	4-13-62	Dr; WL(9-22-59)16.7
2	19aaac	4,850	400	E. Scott	1959	271R	4	TKdu	Cyl,W	S	12R			160	6,275	10- -59	B3; Dr; L; WSp
2	19bddb	3,150	3,150	E. Driver	1931	225R	5	TKdu	Cyl,W	D,S	1E			57	6,440	7- 5-60	Dr; FD; OH(60-225); WSr
1	22baac	4,900	3,100	D. Vestal	1956	58R	24	Qp,Qb,Ql	T,E	Irr	480M	15		7.2	6,007.8	4-13-62	B57; Dr; GE; H40; L; Sa40; WL(5-25-56)13
1	22ccad	800	4,200	M. Bechtold	1946	69R	18	Qp,Qb,Ql	T,E	Irr	1,300M	18	72	10.5	6,028.9	4-21-62	A135; B69; DL; Dr; FD; GE; WL(8-26-59)20; WS
1	22cdcc	250	3,900	R. Clark		70R	18	Qb,Ql	T,E	Irr	1,108M	13.5	30	18.7	6,030.3	9-22-59	A35; B67; Dr; FD; L; WSp
1	25aaad	4,800	100	E. Bowles	1954	10R		Qp,Qb,Ql	T,E	Irr,E	600R	4	24	.0	6,195	7- 1-61	A40; D
1	27bcdd	2,700	4,200	C. Converse		65R	16	Qb,Ql	T,E	Irr	570M			8.9	6,044.2	4-13-62	A75; B65; WL(9-22-59)16.0
1	27bddd	2,700	2,750	do		70R		Qb,Ql	T,E	Irr	700R	57			6,043.4		A70; Dr; GE
1	27cdad	970	2,650	C. Everitt	1950	75R	18	Qp,Qb,Ql	T,E	Irr	850R	47		4.5	6,054.1	4-13-62	A80; B66; Dr; GE; H32; L; Pf30; WL(8-14-56)9.7; WL(9-25-59)9.7
2	27daba	2,550	900	J. Habinck	1959	270R	4	TKdu	J,E	D	B18R	42		80.1	6,122.2	9-22-59	B1; Dr; L; Tch170-270; WSr
2	32ddbc	800	1,150	J. Arenda	1956	220R	6	TKdu	J,E	D	8R			115	6,320	7- 5-56	Dr; L; Pf100-220
1	34acda	3,200	1,600	R. Walker	1952	45R	18	Qp,Qb,Ql	J,E	D	500R			4.7	6,069.1	8-14-56	A57; GE; H40
1	34acdb	3,000	1,850	do	1952	50.9	24	Qp,Qb,Ql	T,E	Irr	271M	38.3	1/2	.8	6,069.7	4-13-62	A81; Dr; FD; WL(9-23-59)6.0; WS
1	34bdaa	3,700	2,700	do	1954	15R		Qp,Qb,Ql	C,G	Irr	750R			5.5	6,064.8	9-24-59	A20; D. Sump
1	34dbcd	1,450	2,250	H. Kelty	1950	66R	18	Qp,Qb,Ql	T,E	Irr,S	1,000R	20			6,077.6		A24; B63; Dr; L
1	34dcbd	700	2,100	W. Hewins	1956	55R	24	Qp,Qb,Ql	T,E	Irr	460E	24		4.0	6,084.5	4-13-62	A60; B52; Dr; L; WL(8-14-56)13.0; WL(9-23-59)11.2
2	34dddd	100	150	E. Larreau	1956	465R	4	TKdu	S,E	D	10R	5	5	73.4	6,100	9-30-59	B35; Dr; L; Pf160-200, 290-465
2	35cbcc	1,500	5,000	R. Walker		Spring		TKdu		S	F3R				6,130	9-23-59	
	C7-67-																
2	3abcd	4,200	2,020	H. Higgins	1957	1,795R	8 to 6	Kdmc,Kdlc	S,E	PS,Ot	63M	103	24	609.2	6,430	1-12-60	AT; B2; Dr; EL; FD; GRL; L; Tch860-960, 1,260-1,600, 1,680-1,792; WS; WSr
2	3abcd2	4,200	2,000	do	1957	801R	8 to 6	TKdu	S,E	PS,Ot	B18R	20		495.1	6,430	7- 5-61	DL; Dr; EL; FD; GRL; Tch494-800; WS; WSr
2	15abcc	4,250	2,550	B. Williamson	1958	174R	4	TKdu	S,E	D,IrrL	15R	106		47.9	6,301.6	9-25-59	B1; DL; Dr; Tch109-174; WL(2-19-1958)32; WSr
2	15bada	4,450	2,950	J. Lagas	1957	208R	4	TKdu	S,E	D,IrrL	12R	60		60	6,360	9-15-59	B1; Dr; L; Tch81; WSr
2	17acca	3,100	2,350	T. Walker	1956	369R	6 to 5	TKdu	Cyl,E	S	88R	43	3	77	6,104.5	9- 1-56	B4; Dr; Pf309-369,L
1	19bbbc	4,800	5,000	do	1956	80.5	24	Qp,Qb,Ql	T,E	Irr	550E	40	6	37.6	5,880	4-11-62	A110(with 2 wells); B93; Dr; L; Pf33-60; WL(5-7-56)12
1	19bbcd	4,000	4,700	do		55.0	24	Qp,Qb,Ql	T,E	Irr	550E			9.6	5,855	4-11-62	Dr; WL(7-9-59)16.1

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C7-67-																
2	25bdda	3,150	2,850	M. Murphy	1958	300R	6	TKdu	S,E	D	12R	50	..	200	6,500	7-18-58	Dr; L; Pf225-260, 290-300
2	26bcba	3,850	4,630	H. Springer	1958	800R	6	TKdu,Kdmu	S,E	Inst	840R	26	..	221.3	6,198.9	10- 6-59	B2; Dr; H11-7; L; Tch342-797; WL(4-23-58)200
2	27abad	4,900	1,550	.. do	1958	450R	4	TKdu	N	Ot	B22R	34	..	169.3	6,169.8	4- 5-62	B2; Dr; H7-5; L; Tch309-450
2	27bdcb	3,200	3,950	J. Cramer	1956	300R	4	TKdu	J,E	D	B82R	70	..	60	6,043.1	11-1-56	B1; DL; Dr; Tch207-300
	C7-68-																
2	1bcda	3,080	4,050	L. Phipps, Jr.	.	230R	4	TKdu	Cyl,W	S	7M	12	3	62.1	6,000	8-27-57	B4; Dr; L
1	2dacb	1,950	1,300	.. do	.	100R	12 to 5	Qp,TKdu	Cyl,W	S	..	..	..	3.0	5,865	8-27-57	DD; FD; WSp
2	4abba	5,100	2,300	Louviers Mutual Water Co.	1960	800R	12 to 8	Kdmc,Kdlc	T,E	PS	273M	74	..	58.9	5,670	8-15-60	B107; Dr; FD; L; Tch194-232, 288-800; WS
2	4bdbc	3,600	3,900	E. I. DuPont de Nemours & Co.	1934	850	12 to 8	Kdmc,Kdlc	T,E	PS,Ind	310M	..	..	143.7	5,791.6	4- 4-59	B32; Dr; L; Pf349-375, 474-490, 517-532, 552-586, 623-741, 790-822
2	5dabb	2,520	1,010	Eldorado, Inc.	1958	861R	8	Kdmc,Kdlc	N	Ot	B70R	100	..	176.0	5,760	4- 5-62	B39; Dr; EL; L; Tch350-861
2	11cbac	2,000	4,600	F. Navratil	1958	229R	4	TKdu	Cyl,E	D,IrrL	B11R	..	..	100	5,780	5-23-58	B2; Dr; L; Tch160-229
2	11dbad	2,000	1,550	Sedalia Land Co.	1957	2,087R	9 to 6	TKdu,Kdmc, Kdlc	N	Ot	73B	156	..	197.8	5,942.8	4- 5-62	B1; Core; DL; Dr; EL; GKL; PP; Sa; SL; Tch50-1,040. Plugged back to 1,354 feet
2	13abca	4,460	2,050	T. Walker	.	450R	4	TKdu	Cyl,E	S	3M	..	..	250	6,079.4	9-25-59	Dr; WSp
1	13cdcd	200	3,550	Sedalia Water Co	1900	45.8	276	Qb,Ql	T,E	PS	500E	3.3	.	25.8	5,840	7- 9-59	D; FD; WL(9-16-60) 29.1; WS
2	14daca	1,700	950	Santa Fe Railway Co.	1899	643R	8 to 4	Kdmc	N	N	..	..	..	..	5,848.1	....	B30; Dr; L. Plugged in 1959
2	27bbaa	5,000	3,970	Jesuit Retreat Home.	1956	995R	8 to 6	Kdmc,Kdlc	S,E	D,S	B30R	41	..	212.5	6,067.8	9-25-59	B12; Dr; EL; L; Tch723; WL(9-24-56) 200
1	36cdad	800	2,900	Williams	.	45.4	18	Qpp,Ql	N	Irr	..	..	..	5.7	5,865	4-11-62	Dr; U(1959); WL(7-6-59)7.7
	C7-69-																
1	2abaa	5,000	1,550	Helmer Bros.	1930	30R	48 x 48	Qp	J,E	D,S	7E	..	..	3	5,630	7- 6-61	D. Dry 1955-56
2	2accc	2,660	2,400	T. Helmer	1956	490R	4	Ks,Kly	J,E	D,IrrL,E	13R	22	2	85	5,800	1- 6-61	Dr; EL; L; Tch259-352, 398-490; WL(11-16-56)108. Water contains iron
1	2daba	2,550	950	A. Kominsky	.	27R	..	Qp	J,E	D,S	7E	..	..	3	5,650	7- 6-61	D
2	21acba	3,660	2,250	U.S. Government	.	Spring	..	pC	..	..	F	..	..	..	5,980	....	FZ; SG; WSr
2	21acbc	3,470	2,330	.. do	.	Spring	..	pC	..	..	F	..	..	..	6,000	....	SG; WSr
2																	
	C8-65-																
2	6cabd	2,000	3,600	W. Larsen	1957	270R	4	TKdu	S,E	D,IrrL	13R	28	..	192	6,430	4-23-57	B1; Dr; L; Tch68
2	6ccba	1,100	4,900	D. Ranes	1959	223R	6 to 4	TKdu	N	D	B12R	53	..	85	6,400	7- 7-59	Dr; H8-5; L; Pf109-132, 188-223; U(1961)
2	8ccbb	1,000	5,000	F. Arnold	1958	135R	6	TKdu	J,E	D,S	B20R	30	..	60	6,500	4-11-58	Dr; FD; H7; L;Pf94-135
2	9dccc	200	2,600	G. Mathias	1958	176R	..	TKdu	J,E	D	10R	40	..	54	6,685	11- 1-58	Dr; H6; L; Pf54-57, 160-170, 175-176
2	16dacc	1,500	1,000	P. Davis	1958	182R	6	TKdu	L,E	D,S, IrrL	20R	..	..	118	6,775	7- 9-58	Dr; FD; H8; L; Pf118-182
-	32dcac	700	1,900	C. Konkel	1957	145R	6	TKdu	S,E	IrrL,D	12R	..	..	97.4	6,762	7- 3-61	B2; D; FD; L; Pf100-145

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
	C8-66-																
2	1bbbc	4,800	5,150	G. Vanderwelt. . . .	1960	229R	6 to 4	TKdu	S,E	D,S	816R	25	. .	115	6,340	5- 3-60	Bl; Dr; FD; L; Tch199-229
1	2ccdc	300	4,550	C. McLain.	1950	64R	18	Qp,Qb,Ql	T,E	Irr	400R	. .	. .	7.3	6,126.7	9-24-59	A20; B63; Dr; GE; L; U(1959); WL(8-13-56)7.8
1	3abba	5,000	2,000	T. Helm	1950	70R	18	Qb,Ql	T,E	Irr,E	550R	28	. .	25.1	6,108.3	4-13-62	A55; B59; Dr; GE; H36; L; WL(1956)32; WL(9-24-59)31.2
1	3abda	4,500	1,500	. . do	1956	66R	18	Qp,Qb,Ql	T,E	Irr	1,050R	. .	. .	9.9	6,091.8	9-24-59	A50; Dr; GE; H36
1	3acaa	3,900	1,600	. . do	1956	54.4	18	Qp,Qb	C,E	S,Irr, Ot	800R	. .	. .	.3	6,097.8	4-13-62	Dr; GE; TH. Insufficient yield for large-scale irrigation
1	3ddca	600	700	C. McLain	1956	54R	18	Qp,Qb,Ql	T,E	Irr	1,000R	. .	. .	5.7	6,116.4	4-13-62	A60; B52; Dr; L; WL(8-13-56)6.9 WL(9-24-59)6.7
1	10abab	5,150	1,660	Cherry Creek Bird Farm	1957	52R	6	Ql	J,E	D,S	7M	. .	. .	27.1	6,145.4	2- 4-58	Dr; FD; WS; WSr
1	11bbac	4,900	4,350	C. McLain.	1935	72R	24	Qp(?), Qb,Ql	T,E	Irr	400R	50	. .	8.3	6,143.4	4-13-62	A20; Dr; GE; L; U(1959); WL(9-24-59) 14.8
2	12bbac	4,700	4,550	F. Green	1958	195R	4	TKdu	T,E	D,IrrL	818R	66	. .	74	6,300	1-13-58	Bl; Dr; L; Tch85-195
1	12bccc	2,800	5,100	F. Newton.	. .	12R	. .	Qp,Qb	Port,G	Irr	. .	. .	. .	. .	6,225	. . . .	Sump (with cbad they hold 45 acre-feet)
1	12cbad	2,100	4,200	. . do	. .	12R	. .	Qp,Qb	Port,G	Irr	. .	. .	. .	. .	6,220	. . . .	Sump
2	17bada	4,400	2,900	A. Mickelson	1958	326R	4	TKdu	Cyl,G	S	810R	128	. .	112	6,605	9-18-58	Bl; Dr; HS; L; Tch221-308
2	17ddad	900	100	. . do	. .	Spring	. .	TKdu	. .	S	F5R	. .	. .	. .	6,500	7- 3-61	
	C8-67-																
2	1dccd	200	2,250	C. Christensen . . .	1959	628R	6 to 4	TKdu	S,E	D	812R	55	. .	420	6,490	5-15-59	Dr; H9-5;L;Tch336-628
2	3cacd	1,450	3,350	G. Schweiger	1957	352R	4	TKdu	S,E	IrrL	12R	45	. .	219.6	6,290	10-22-59	Dr; HS; L; Tch252-352; WL(11-57)223
2	7caaa	2,650	2,900	C. Blevins	1958	224R	4	TKdu	Cyl,E	D	B13R	85	. .	85	6,282.9	7-11-58	Dr; H8-5; L; Tch134-224
2	8ccdb	600	4,300	F. Moyer	1959	286R	4	TKdu	S,E	D	10R	. .	. .	251.5	6,412.8	9-28-59	Dr; H8-5; L; Tch171-286; WL(1-59)150; WS
1	11baab	5,000	3,200	Town of Castle Rock.	1948	43.2	12	Qp,Qb,Ql	N	Ot	. .	. .	. .	10.5	6,165	4-11-62	Dr; U(1958-62)
2	11baab2	5,020	3,210	. . do	1962	800R	7 to 4	Kdmc	T,E	PS	250R	. .	. .	94.5	6,165	10- 1-62	B75; DL; Dr; PE290-474; WL(8-62)44
1	11baca	4,600	3,400	. . do	1948	90R	16	Qb,Ql	T,E	PS	150R	. .	. .	41.4	6,185	2-27-58	B90; Dr; FD; GE; WS; WSr
2	11bcbc	3,500	5,050	V. Perez	1956	352R	4	TKdu	Cyl,E	. .	B12R	47	. .	100	6,248.1	10-18-56	B34; Dr; L
2	11dacb	1,700	1,300	Town of Castle Rock.	1954	1,608R	6 to 5	Kdmc,Kdlc	T,E	PS	175R	. .	. .	110P	6,240.1	3- -54	B62; Dr; FD; L; WS; WSr
1	11dbac	2,100	1,700	. . do	1932	55.5	48	Ql	N	PS	. .	. .	. .	32.4	6,230	4-11-62	U(1953-58); WL(2-27-58)36.0
1	11dbdb	1,700	1,700	Douglas County Fairgrounds . . .	. .	. .	. .	Ql	T,E	S,Irr	75R	. .	. .	35	6,247	2-27-58	Dr
1	11dbdd	1,600	1,400	Town of Castle Rock.	1932	90R	48	Ql	T,E	PS	200R	6.8	4	46.8P	6,248	6-29-59	Dr; FD; WL(2-58)33; WS; WSr
2	16cbbd	2,240	4,940	J. Abercrombie . . .	1953	9,926R	. .	. .	N	Oil	. .	. .	. .	. .	6,569	. . . .	Dr; EL; L
2	28aaad	4,900	300	Continental Divide Raceway.	1959	506R	8 to 6	TKdu	S,E	Com	B38R	. .	. .	110	6,494.3	6-10-59	Dr; H11-7; L; Tch278-506

Table 2.--Records of selected wells and springs--Continued

Plate number	Location number	Map distance north (feet)	Map distance west (feet)	Owner or user	Year completed	Depth of well (feet)	Diameter of casing (inches)	Geologic source	Method of lift, and power	Use of water	Yield (gpm)	Drawdown (feet)	Drawdown (hours)	Depth to water (feet)	Altitude of land surface (in feet above m.s.l.)	Date of measurement	Remarks
1	C8-68-1abcc	4,200	2,450	Curtis Bros.	1956	48R	36 to 18	Qpp,Qb,Ql	T,G	Irr	570M	14.1	1/4	2.9	5,880.4	4-11-62	B46; Dr; GE; L; Pf8-40; WL(7-6-59)5.4
2	5bcbd	3,500	4,820	J. Williams.	1945	25R	60	pC	P,E	D,S, IrrL	2R	. .	. .	3.2	6,850	7- 8-61	D; FD; Gr. Converted spring
2	6cadd	1,650	2,800	Conservative Baptist Camping Assn. . .	19 5	35R	4	pC	J,E	Inst,S	10E	. .	. .	2	7,025	7- 8-61	Dr; Gr; L
	C8-69-																
2	1cbbb	2,540	5,130	L. Anderson	1945	14.1	48	pC	J,E	D	3E	. .	. .	8.9	7,305	7- 3-61	D; Gr
2	1cbbb2	2,450	5,000	. . do	1954	18R	36	pC	J,E	D	5E	. .	. .	11.0	7,315	7- 3-61	Dr; Gr; Pf12-18
2	3dcaa	1,260	1,640	U.S. Government. . .	.	Spring	. .	pC	Cyl,E	D	7E	. .	. .	. .	7,530	7- 3-61	FD; Gr

Altitudes shown are for land surface at the well or test-hole site. Formational names have been added to the logs by the authors, and drillers' terms have been retained where possible. Information shown in brackets, [ ], was taken from electric or other logs of the same well. Thickness is in feet. Depth is in feet below land surface. Yield is in gpm (gallons per minute)

	Thick-ness	Depth
C1-65-7cbba. Alt. 5,052 ft.		
Eolian sand:		
Sand.	6	6
Verdos Alluvium:		
Clay.	5	11
Clay, sandy	4	15
Sand.	18	33
Clay.	11	44
Dawson Formation (upper part):		
Shale	46	90
Shale, sandy.	10	100
Shale, soft, gray	63	163
Dawson Formation (lower part):		
Middle conglomerate:		
Sand.	19	182
Shale	4	186
C1-65-15baab. Alt. 5,219 ft.		
Eolian sand:		
Sand.	16	16
Clay.	7	23
Sand.	51	74
Dawson Formation (upper part):		
Clay.	6	80
Shale	13	93
Sandstone, soft	17	110
Shale	14	124
Sand.	6	130
Shale	4	134
Sand.	4	138
Shale	16	154
Rock.	1	155
Sand, dirty	7	162
Rock.	5	167
Shale	9	176
Dawson Formation (lower part):		
Middle conglomerate:		
Sand.	48	224
Shale	4	228
C1-65-23caaa. Alt. 5,148 ft.		
Piney Creek Alluvium:		
Clay, sandy	6	6
Verdos Alluvium:		
Gravel.	2	8
Clay.	3	11
Gravel.	43	54
Dawson Formation:		
Clay.	2	56
Shale	1	57
C1-65-26bddd. Alt. 5,172 ft.		
Piney Creek Alluvium:		
Soil.	7	7
Verdos Alluvium:		
Gravel.	23	30
Clay.	5	35
Gravel.	9	44
Clay.	3	47
Gravel.	17	64
Clay.	2	66
Rocks	1	67
Dawson Formation:		
Shale	1	68
C1-65-27dddd. Alt. 5,188.5 ft.		
Piney Creek Alluvium:		
Clay, sandy	9	9
Verdos Alluvium:		
Gravel.	17	26
Clay.	6	32
Gravel.	9	41
Rock.	1	42
Clay.	4	46
Rock.	2	48
Clay, sandy	18	66
Dawson Formation (upper part):		
Shale and sand.	18	84
Rock.	2	86
Dawson Formation (lower part):		
Middle conglomerate:		
Sand.	36	122
Shale	2	124
Sand.	22	146
Rock.	1	147
Sand.	5	152
Shale	14	166
C1-66-4cdcd. Alt. 5,075 ft.		
Eolian sand:		
Sand.	15	15
Dawson Formation (upper part):		
Clay.	10	25
Sandstone	6	31
Clay, brown and yellow, and shale	14	45
Dawson Formation (lower part):		
Sandstone [Middle conglomerate, 45 to 210 feet]	52	97
Clay, blue, and sandstone	85	182
Shale, sandy; contains streaks of sandstone	28	210
C1-66-4cdcd.--Continued		
Clay and shale	69	279
Lower conglomerate:		
Sand	5	284
Clay	45	329
Sand	15	344
Clay	16	360
C1-66-4dcad. Alt. 5,110 ft.		
Eolian sand:		
Sand	25	25
Clay	2	27
Sand	7	34
Clay	6	40
Sand	2	42
Dawson Formation (upper part):		
Clay, hard	11	53
Shale.	47	100
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone.	8	108
Shale.	2	110
Sandstone.	14	124
Shale.	38	162
Sand	24	186
Shale.	2	188
C1-66-4dccd. Alt. 5,105 ft.		
Eolian sand:		
Sand, fine	30	30
Dawson Formation (upper part):		
Clay, yellow	15	45
Clay, gray	8	53
Rock	2	55
Clay, gray and yellow.	22	77
Rock	1	78
Clay, brown and gray	17	95
Rock	2	97
Dawson Formation (lower part):		
Clay, sandy, gray and brown [Middle conglomerate, 97 to 170 feet]	25	122
Shale, blue.	38	160
Sandstone.	10	170
Shale, blue.	190	360
Lower conglomerate:		
Sandstone.	4	364
Shale, blue.	16	380
Sandstone.	3	383
Laramie Formation:		
Shale, blue.	36	419
Shale.	301	720
[Well plugged back to 420 feet.]		
C1-66-5abba. Alt. 5,005 ft.		
No record	50	50
Dawson Formation (upper part):		
Shale.	10	60
Sand	7	67
Shale.	5	72
Shale, light-blue.	8	80
Shale, hard, black	16	96
Dawson Formation (lower part):		
Sandstone, silty, clayey, white [Middle conglomerate, 96 to 131 feet.]	7	103
Sandstone.	4	107
Shale	15	122
Sandstone	9	131
Shale.	39	170
Rock, soft	4	174
Shale.	4	178
Rock, hard	1	179
Shale, hard.	48	227
Shale, sandy, sticky	8	235
Lower conglomerate:		
Sand	15	250
Shale.	7	257
C1-66-5bbbc. Alt. 4,972 ft.		
Piney Creek Alluvium:		
Soil and clay.	8	8
Broadway and Louviers Alluvium, undifferentiated:		
Sand and gravel.	27	35
C1-66-6abbc. Alt. 4,969 ft.		
Broadway Alluvium:		
Soil	4	4
Gravel	5	9
Louviers Alluvium:		
Clay	2	11
Gravel	25	36
Rock, sandy.	3	39
Dawson Formation:		
Shale.	8	47
C1-66-6acac. Alt. 4,975 ft.		
Piney Creek Alluvium:		
Clay	5	5
Broadway Alluvium:		
Gravel	12	17
C1-66-6acac.--Continued		
Louviers Alluvium:		
Clay	7	24
Gravel	12	36
Clay	1	37
Dawson Formation (upper part):		
Sandstone.	3	40
Shale.	26	66
Rock	1	67
Shale, sandy	6	73
Shale, blue.	43	116
Dawson Formation (lower part):		
Sand [Middle conglomerate, 116 to 152 feet]	11	127
Shale.	18	145
Sandstone.	7	152
Shale.	44	196
Rock	1	197
Shale, gray	13	210
Shale, brown	8	218
Lower conglomerate:		
Chalk, white	6	244
Sandstone.	18	262
Laramie Formation:		
Shale, gray.	54	316
Rock	2	318
Shale, gray.	8	326
Rock	1	327
Shale, gray.	18	345
Rock, soft	2	347
Shale, hard, blue.	55	402
Rock	3	405
Shale.	33	438
Rock	2	440
Coal	3	443
Shale, brown	5	448
Shale, gray.	13	461
Shale, soft, white	9	470
Shale, gray.	35	505
Rock	1	506
Shale, gray.	20	526
Rock	2	528
Shale, blue.	19	547
Coal	4	551
Shale.	11	562
Coal	6	568
Shale, brown	2	570
Shale, blue.	10	580
Rock	2	582
Shale, brown	8	590
Rock	1	591
Shale, gray.	41	632
Shale, white	6	638
Rock	2	640
Sand	12	652
Shale.	28	680
Coal	4	684
Shale, brown	4	688
Coal	4	692
Shale.	3	695
Rock	3	698
Shale.	2	700
Coal	4	704
Sand, fine	12	716
Shale, brown	5	721
Rock	2	723
Shale, soft, gray.	16	739
C1-66-6cddd. Alt. 4,961 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Gravel	28	28
Clay	1	29
Sand, blue	1	30
Dawson Formation:		
Sandstone, gray.	1	31
Clay, gray	3	34
Shale.	1	35
C1-66-6dbbc. Alt. 4,976 ft.		
Broadway Alluvium:		
Soil	2	2
Gravel	8	10
Sand	9	19
Louviers Alluvium:		
Clay	3	22
Gravel	16	38
Clay, sandy.	3	41
Dawson Formation:		
Shale.	1	42
C1-66-6dcbc. Alt. 4,977 ft.		
Broadway Alluvium:		
Clay	3	3
Gravel	4	7
Sand	12	19
Dawson Formation:		
Clay	4	23
Shale.	17	40

	Thickness	Depth
C1-66-7abba. Alt. 4,982 ft.		
Piney Creek Alluvium:		
Surface	6	6
Clay, gray	16	22
Louviers Alluvium:		
Sand	5	27
Clay, gray	11	38
Sand and clay	22	60
C1-66-7bcab. Alt. 4,978 ft.		
Piney Creek Alluvium:		
Topsoil, silty, gray	4	4
Broadway and Louviers Alluvium, undifferentiated:		
Sand, medium, to fine gravel	6	10
Sand, coarse, and fine gravel	5	15
Gravel, fine, very clean	15	30
Sand, coarse, and fine gravel	5	35
Sand, coarse, gravelly, and fine gravel	19	54
Dawson Formation:		
Sandstone, hard, cemented, shaly	.6	54.6
C1-66-7cbba. Alt. 4,983 ft.		
Piney Creek Alluvium:		
Soil	4	4
Clay, hard	14	18
Broadway Alluvium:		
Sand, fine	14	32
Louviers Alluvium:		
Quicksand	6	38
Gravel, coarse	19	57
Dawson Formation:		
Shale, blue	3	60
C1-66-7dbba. Alt. 4,987 ft.		
Broadway Alluvium:		
Gravel	11	11
Louviers Alluvium:		
Clay	2	13
Gravel	17	30
Dawson Formation:		
Shale	2	32
C1-66-7dccb. Alt. 4,992 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Topsoil	4	4
Gravel	57	61
C1-66-9cccc. Alt. 5,050 ft.		
Eolian sand:		
Sand	10	10
Clay	4	14
Sand	12	26
Dawson Formation (upper part):		
Clay	22	48
Shale	88	136
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	19	155
Shale	12	167
C1-66-11cdcc. Alt. 5,080 ft.		
Eolian sand:		
Sand, fine	11	11
Verdos Alluvium:		
Clay	24	35
Gravel and rock	5	40
Dawson Formation (upper part):		
Clay	8	48
Sandstone, hard	14	62
Clay, hard	2	64
C1-66-12abdc. Alt. 5,020 ft.		
Eolian sand:		
Sand	16	16
Verdos Alluvium:		
Clay	6	22
Sand	18	40
Gravel	4	44
Dawson Formation (upper part):		
Shale, sandy	16	60
Shale, hard	52	112
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	41	153
Shale	7	160
C1-66-12bbcb2 Alt. 5,035 ft.		
No sample	27	27
Verdos Alluvium:		
Gravel	3	30
Clay	5	35
Gravel	30	65
Dawson Formation (upper part):		
Rock	30	95
Shale	25	120

	Thickness	Depth
C1-66-12bbcb2.--Continued		
Dawson Formation (lower part):		
Middle conglomerate:		
Rock: contains some gravel	17	137
C1-66-12bbcb3. Alt. 5,042.0 ft.		
Eolian sand:		
Sand	3	3
Verdos Alluvium:		
Clay	4	7
Sand	9	16
Clay	22	38
Gravel	2	40
Clay	1	41
Gravel	22	63
Dawson Formation:		
Shale	1	64
C1-66-12cbba. Alt. 5,041 ft.		
Eolian sand:		
Sand	3	3
Verdos Alluvium:		
Clay	4	7
Sand	9	16
Clay	22	38
Gravel	2	40
Clay	1	41
Gravel	22	63
Dawson Formation:		
Rock	1	64
Clay	4	68
Shale	2	70
C1-66-12dddd. Alt. 5,052 ft.		
Eolian sand:		
Clay	6	6
Sand, fine	5	11
Verdos Alluvium:		
Clay	9	20
Sand, fine	1	21
Clay	22	43
Sand, fine	3	46
Clay	2	48
Sand, hard	2	50
Dawson Formation:		
Shale	2	52
C1-66-13bbcd. Alt. 5,041.5 ft.		
Eolian sand:		
Clay	3	3
Sand, fine	17	20
Verdos Alluvium:		
Clay	10	30
Gravel	3	33
Clay	1	34
Gravel	16	50
Clay	3	53
Gravel	7	60
Dawson Formation:		
Clay	2	62
Shale	2	64
C1-66-14dccc. Alt. 5,068.0 ft.		
Eolian sand:		
Sand	11	11
Verdos Alluvium:		
Clay	2	13
Sand	[illegible]	19
Clay	36	55
Gravel	3	58
Clay	7	65
Gravel	[illegible]	72
Dawson Formation (upper part):		
Rock	[illegible]	72
Sandstone	2	74
C1-66-15dcba. Alt. 5,090 ft.		
Eolian sand:		
Sand, fine	21	21
Verdos Alluvium:		
Clay	4	25
Sand and gravel	17	42
Clay	26	68
Sand	29	97
Dawson Formation (upper part):		
Sand and gravel, clayey, soft, white	8	105
C1-66-17aabb. Alt. 5,035 ft.		
Eolian sand and Louviers Alluvium, undifferentiated:		
Overburden	42	42
Dawson Formation (upper part):		
Clay, blue and shale	30	72
Dawson Formation (lower part):		
Sandstone (Middle conglomerate, 72 to 106 feet.)	3	75
Clay	20	95
Shale, sandy	11	106
Clay	60	166
Clay, sandy	2	168
Clay and shale	70	238

	Thickness	Depth
C1-66-17aapb.--Continued		
Lower conglomerate:		
Sandstone	5	243
Clay	12	255
Sand	5	260
Clay	15	275
Shale, sandy	5	280
Clay	20	300
C1-66-17cbcc. Alt. 5,028 ft.		
Eolian sand:		
Sand, fine	5	5
Louviers Alluvium:		
Clay, sandy	11	16
Gravel	10	26
Clay	11	37
Sand, fine	2	39
Dawson Formation:		
Clay	1	40
Shale	3	43
C1-66-18aaac. Alt. 4,993.4 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Clay	3	3
Gravel	27	30
Dawson Formation:		
Clay	8	38
Shale	4	42
C1-66-18dbcc. Alt. 5,005 ft.		
Broadway Alluvium:		
Clay	3	3
Gravel	11	14
Louviers Alluvium:		
Clay	4	18
Gravel	27	45
C1-66-20cddd. Alt. 5,050 ft.		
Eolian sand:		
Soil, sandy	8	8
Sand	4	12
Louviers Alluvium:		
Clay	2	14
Sand	10	24
Dawson Formation (upper part):		
Shale	16	40
Sandstone	5	45
Shale	100	145
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	15	160
Shale	10	170
Sand	6	176
Shale	7	183
C1-66-21caaa. Alt. 5,090 ft.		
Eolian sand:		
Sand	11	11
Dawson Formation (upper part):		
Clay, hard	41	52
Shale	6	58
Shale, brown	5	63
Sand	7	70
Shale, sandy, brown	6	76
Shale, blue	66	142
Shale, sandy, brown	4	146
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	[illegible]	[illegible]
Shale	6	166
Shale, soft, gray	14	180
Sand	30	210
Shale, gray	9	219
C1-66-21cddc. Alt. 5,098 ft.		
Eolian sand:		
Soil, sandy	8	8
Sand	7	15
Dawson Formation (upper part):		
Clay	19	34
Sand	2	36
Sandstone	14	50
Sandstone, hard	20	70
Shale	15	85
Sandstone, blue	20	105
Shale, hard	55	160
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone, soft	10	170
Shale, blue	20	190
Sandstone, soft	30	220
Shale	10	230
C1-66-23cacb. Alt. 5,101.0 ft.		
Eolian sand:		
Sand, fine	19	19
Verdos Alluvium:		
Clay	2	21
Sand, fine	17	38
Clay	15	53
Clay and gravel layers	10	63
Clay	5	68

	Thickness	Depth
C1-66-21cacb.--Continued		
Clay, rocky	6	74
Clay, sandy	4	78
Gravel	2	80
Dawson Formation:		
Shale, blue	4	84
Shale	2	86
C1-66-30cddd. Alt. 5,055 ft.		
Eolian sand:		
Sand, fine	7	7
Louviers Alluvium:		
Clay	21	28
Gravel	9	37
Sand, fine	13	50
Rock	2	52
Dawson Formation:		
Shale	1	53
C1-66-31cdaa. Alt. 5,081 ft.		
Eolian sand:		
Sand, fine, loose	4	4
Louviers Alluvium:		
Sand, very fine to fine, angular to subangular, loose	9	13
Sand, very fine to fine, silty, friable, calcareous	7	20
Silt, sandy, brown	4	24
C1-66-31dcdd.		
Eolian sand:		
Sand, medium, dark-green to brown	5	5
Sand, medium, brown	5	10
Verdos Alluvium:		
Sand, fine to medium, slightly clayey, subangular, yellowish-gray	3	13
Clay, slightly sandy, pinkish-gray; contains slightly weathered volcanic ash	3	16
Sand, very fine, clayey; contains slightly weathered volcanic ash	3	19
C1-66-32dccda. Alt. 5,100 ft.		
Eolian sand:		
Soil, sandy	8	8
Verdos Alluvium:		
Clay, white	12	20
Gravel	22	42
Rock	1	43
Gravel	2	45
Dawson Formation:		
Shale	1	46
C1-66-33aacc. Alt. 5,099 ft.		
Eolian sand:		
Sand, very fine, slightly clayey, dark-brown	3	3
Silt, sandy	4	7
Verdos Alluvium:		
Sand, medium to coarse, slightly clayey	5	12
Sand, fine, uniform, subangular, slightly clayey, yellowish-gray	.5	12.5
Sand, medium to very coarse, clayey (water)	7.5	20
Sand, very fine to fine, poorly-sorted, clayey and silty; contains volcanic ash	25	45
Dawson Formation (upper part):		
Conglomerate, limy, hard at 45 feet		
C1-66-33addd. Alt. 5,120 ft.		
Eolian sand:		
Sand, fine, fairly uniform, angular to subangular, slightly clayey, brown	7	7
Sand, fine, clayey, brown	3	10
Verdos Alluvium:		
Clay, silty and sandy, limy, plastic, yellowish gray	5	15
Clay, very limy, plastic, yellowish-gray; contains streaks of caliche	5	20
Clay, silty and slightly sandy, semiplastic, limy, yellowish-gray	5	25
Clay, silty and slightly sandy; contains very little limy material	10	35
Clay, silty to finely sandy, very limy, yellowish-gray	15	50

	Thickness	Depth
C1-66-33addd.--Continued		
Sand, very fine, clayey, wet	5	55
Dawson Formation (upper part):		
Shale, finely silty, gray, noncalcareous	3	58
C1-66-33cbbb. Alt. 5,089 ft.		
Eolian sand:		
Silt, finely sandy, slightly clayey, noncalcareous, friable even when wet	8	8
Verdos Alluvium:		
Silt, fine	12	20
Sand, medium to coarse, loose, angular to subangular; contains very fine gravel and cobbles	13	33
Dawson Formation (upper part):		
Rock, hard (water under artesian pressure)	3	36
Shale, dark-gray, noncalcareous, and calcareous yellowish-gray clay	6	42
C1-67-1ccaa. Alt. 4,960 ft.		
Piney Creek Alluvium:		
Topsoil	5	5
Louviers Alluvium:		
Gravel	20	25
Dawson Formation:		
Clay	2	27
Shale	3	30
C1-67-1cddc. Alt. 4,960 ft.		
Post-Piney Creek alluvium and Louviers Alluvium, undifferentiated:		
Gravel	18	18
Clay	2	20
Gravel	11	31
Dawson Formation:		
Shale	52	83
Shale, sandy	3	86
Shale, gray	23	109
Sand	4	113
Laramie Formation:		
Shale	142	255
Rock	2	257
Shale	39	296
Shale, sandy	6	302
Rock	3	305
Shale	71	376
Coal	4	380
Shale	24	404
Rock	2	406
Shale, sandy	12	418
Rock	3	421
Sandstone	5	426
Shale, soft, gray	44	470
Coal	1	471
Shale, gray	36	507
Rock	3	510
Shale, sandy	7	517
Shale, gray	3	520
Coal	1	521
Shale, gray	46	567
Rock	1	568
Shale, gray	22	590
Sand	5	595
Shale, gray	4	599
Rock	1	600
Coal	2	602
Shale, gray	16	618
Rock	2	620
Shale, gray	41	661
Sand	11	672
Shale, gray	17	689
Coal	4	693
C1-67-1ccdd. Alt. 5,175 ft.		
Dawson Formation:		
No record	272	272
Laramie Formation:		
Shale	57	329
Rock	1	330
Shale	9	339
Shale, hard	57	396
Rock	2	398
Shale	10	408
Coal	2	410
Shale	21	431
Shale, sandy	5	436
Shale, hard, gray	64	500
Shale, sandy	11	511
Rock	2	513
Shale, gray	25	538
Shale, soft, black	2	540
Shale, gray	5	545
Rock	1	546
Shale, gray	38	584
Rock	2	586

	Thickness	Depth
C1-67-1ccdd.--Continued		
Shale, hard, blue	20	606
Rock	1	607
Shale	9	616
Coal	3	619
Shale	10	629
Rock	1	630
Shale, sandy	8	638
Shale, soft, gray	17	655
Rock	1	656
Shale, hard	16	672
Coal	9	681
Shale	13	694
Rock	1	695
Shale, black	17	712
Rock	2	714
Sandrock	6	720
Shale, gray	38	758
Coal	4	762
B sandstone:		
Sand	25	787
Shale	4	791
Sand	10	801
Shale, sandy	22	823
C1-67-4cccc. Alt. 5,225 ft.		
Dawson Formation (upper part):		
Clay	3	3
Clay, sandy	11	14
Sandstone, soft	16	30
Clay	10	40
Shale	33	73
Shale, sandy	15	88
Shale, blue	9	97
Shale, sandy	4	101
Shale, blue	17	118
Dawson Formation (lower part):		
Sandstone, hard, white [Middle conglomerate, 118 to 162 feet.]	9	127
Shale, blue	34	161
Rock	1	162
Shale, blue	100	262
Shale, sandy	8	270
Shale, hard	7	277
Shale, sandy	6	283
Lower conglomerate:		
Sand	4	287
Shale, sandy	3	290
Rock	1	291
Sand	7	298
Shale	8	306
Sandstone	3	309
Laramie Formation:		
Shale	19	328
Shale, soft, brown	9	337
Shale, blue	23	360
Shale, brown	23	383
Rock	2	385
Shale, soft, gray	20	405
Shale, hard	3	408
Shale, soft, gray	19	427
Coal, soft	2	429
Shale, soft, gray	12	441
Shale, hard	2	443
Shale, gray	15	458
Rock, hard	1	459
Sand	6	465
Shale, brown	1	466
Shale, hard, blue	10	476
Sandstone	4	480
Shale, gray	9	489
Rock	1	490
Sand	14	504
Shale, gray	3	507
Rock	3	510
Sand	6	516
Shale, gray	4	520
Rock	7	527
Shale	7	534
Shale, soft, brown	13	547
Shale, hard	25	572
Rock	1	573
Shale, gray	14	587
Shale, sandy	3	590
Sand	6	596
Clay, gray	10	606
Rock	2	608
Sand	6	614
Shale	3	617
Rock	2	619
Sandstone	4	623
Shale, gray	5	628
Shale, soft, brown	4	632
Shale, soft, gray	9	641
Rock	1	642
Shale, gray	28	670
Coal, soft	3	673
Shale, gray	4	677
Rock	1	678
Coal	1	679
Shale	15	694
Coal	4	698

	Thickness	Depth
C1-67-4cccs.--Continued		
Shale, gray	6	704
Coal	5	709
Coal, rock, hard	2	711
Shale, soft, brown	4	715
Coal, hard	2	717
Shale, soft, gray	15	732
Rock	3	735
Shale, hard	40	775
Sand	3	778
Shale	41	819
Shale, black	3	822
B sandstone:		
Sand	16	838
Shale, hard	4	842
Sand	28	870
Rock	2	872
B and A sandstones of the Laramie Formation and Milliken Sandstone Member of the Fox Hills Sandstone, undifferentiated:		
Sand	154	1,026
Shale, sandy	28	1,054
C1-67-5dcdd. Alt. 5,170 ft.		
Dawson Formation (upper part):		
Topsoil and clay	37	37
Shale, blue	6	43
Shale, gray	42	85
Dawson Formation (lower part):		
Middle conglomerate:		
Sand, white, and gray shale	32	117
Shale, gray	9	126
C1-67-6ccbb. Alt. 5,100 ft.		
Piney Creek Alluvium:		
Overburden	35	35
Dawson Formation (upper and lower parts, undifferentiated):		
Sand	30	65
Clay, blue	65	130
Clay and shale	94	224
Coal blossom, and clay	105	329
Clay and shale; contains streaks of coal	113	442
Rock	3	445
Clay and shale	47	492
No sample	5	497
Sandstone	44	541
Laramie Formation:		
Clay and shale	4	545
Coal	13	558
Clay and shale	6	564
Coal	7	571
Clay and shale	3	574
Coal	42	616
Clay and shale	6	622
Shale, sandy	13	635
Clay	13	648
Sand and shale; sandy	12	660
Clay	38	698
B sandstone:		
Sand and sandstone	9	707
Clay	11	718
Sand and shale; sandy	47	765
C1-67-7ccac. Alt. 5,165 ft.		
Dawson Formation (upper part):		
Clay	2	2
Dawson Formation (lower part):		
Middle conglomerate:		
Gravel	31	33
Clay	1	34
Shale	3	37
C1-67-8bddd. Alt. 4,955 ft.		
Dawson Formation (lower part):		
Clay and topsoil	27	27
Mud, heavy	19	46
Sand, fine	2	48
Shale, gray	38	86
Lower conglomerate:		
Sand, white, and gray shale	23	109
Shale, gray	3	112
C1-67-8dbcc. Alt. 5,162 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Sand and clay	20	22
Gravel, small	.5	22.5
Shale, weathered, green	27.5	50
Dawson Formation (lower Part):		
Sand, coarse, soft, yellow (Middle conglomerate, 50 to 190 feet.)	18	68
C1-67-8dbcc.--Continued		
Shale, weathered, rusty-yellow and brown	2	70
Shale, gray	7	77
Sand, clean, gray	8	85
Shale, gray	7	92
Coal	.5	92.5
Sand, gray	8.5	101
Shale	14	115
Sand, dirty, gray, and thin beds of shale	75	190
Shale, sandy, gray	31	221
Shale, sandy, and thin beds of fine sand	19	240
Shale, soft, gray	80	320
Lower conglomerate:		
Sand, gray	5	325
Shale, sandy, gray	15	340
Sand, gray	5	345
Shale, sandy, gray, and thin beds of dirty sand	35	380
Laramie Formation:		
Shale, gray	20	400
Shale, dry, crumbly	115	515
Rock	2	517
Shale, dry, crumbly	83	600
Sandstone	3	603
Shale, carbonaceous, dark-colored	195	798
B and A sandstones of the Laramie Formation and Milliken Sandstone Member of the Fox Hills Sandstone, undifferentiated:		
Sandstone	2	800
Clay, soft, sandy, light-colored	50	850
Clay, soft, sandy, light-colored, and thin beds of gray shale	120	970
Shale, gray	25	995
Sandstone, hard, gray	1	996
Shale, soft, gray	9	1,005
C1-67-9abab. Alt. 5,148 ft.		
Dawson Formation (upper part):		
Clay	18	18
Clay, sandy	9	27
Clay, chalky, hard	18	45
Clay, sandy	5	50
Sandstone	4	54
Clay, hard	26	80
Shale	6	86
C1-67-11bbab. Alt. 5,062 ft.		
Dawson Formation (upper part):		
Topsoil and clay	12	12
Sand, fine	6	18
Mud, black	28	46
Shale, gray	26	72
Hardpan	31	103
Dawson Formation (lower part):		
Middle conglomerate:		
Sand, white, and gray shale	19	122
Shale, gray	5	127
C1-67-12addd 2. Alt. 4,977 ft		
Piney Creek Alluvium:		
Clay, sandy	2	2
Louviers Alluvium:		
Gravel	38	40
Dawson Formation (lower part):		
Clay	3	43
Shale	30	73
Shale, soft, gray	27	100
Sand, dirty	12	112
Shale, brown	20	132
Lower conglomerate:		
Sand	16	148
Shale	8	156
C1-67-12ccdb. Alt. 4,969.0 ft.		
Post-Piney Creek alluvium:		
Clay, sandy	5	5
Louviers Alluvium:		
Gravel	24	29
Clay	1	30
C1-67-13badc2. Alt. 4,970 ft.		
Piney Creek Alluvium:		
Clay	2	2
Louviers Alluvium:		
Gravel	19	21
Dawson Formation:		
Sandstone	1	22
Shale	3	25
C1-67-20bdcb. Alt. 5,321 ft.		
Overburden	60	60
Dawson Formation (upper part):		
Clay, blue, and shale	33	93
Sand, coarse, interbedded with sandy shale (Upper conglomerate, 93 to 197 feet.)	104	197
Shale	119	316
Dawson Formation (lower part):		
Sandstone and sand, interbedded with sandy shale (Middle conglomerate, 316 to 461 feet.)	145	461
Shale and siltstone	114	575
Lower conglomerate:		
Sandstone and sand, interbedded with sandy shale	65	640
Laramie Formation:		
Clay, shale, and thin streaks of coal	98	738
Sandrock	4	742
Shale	188	930
Shale, sandy, and sandrock	15	945
Shale	20	965
Shale, sandy	50	1,015
Shale and streaks of coal	15	1,030
B sandstone:		
Sand and sandy clay	35	1,065
Sandrock	5	1,070
B and A sandstones, undifferentiated:		
Sand and sandy clay	115	1,185
Shale	17	1,202
C1-67-22badd. Alt. 5,060 ft.		
Dawson Formation (lower part):		
Surface	4	4
Clay, brown	38	42
Clay, yellow	140	182
Lower conglomerate:		
Sand, white	18	200
C1-67-24cccc. Alt. 5,018 ft.		
Broadway Alluvium:		
Clay	3	3
Gravel	9	12
Louviers Alluvium:		
Clay	6	18
Gravel	18	36
Clay	2	38
C1-67-25abbb. Alt. 5,022 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Clay	7	7
Gravel	27	34
Clay	2	36
Gravel	9	45
Clay	1	46
C1-67-26dbbb. Alt. 5,011 ft.		
Post-Piney Creek alluvium and Louviers Alluvium, undifferentiated:		
Gravel	28	28
Dawson Formation (upper and lower parts, undifferentiated):		
Clay	4	32
Shale	35	67
Sandstone	5	72
Shale	25	97
Chalk, sandy	9	106
Shale, brown	9	115
Shale, gray	57	172
Shale, sandy	12	184
Dawson Formation (lower part):		
Lower conglomerate:		
Sand	8	192
Shale	71	263
Rock	1	264
Shale	3	267
Rock	1	268
Shale	182	450
Rock	3	453
Shale, soft, white	4	457
Sand	3	460
Laramie Formation:		
Shale	94	554
Rock	2	556
Shale	26	582
Rock	2	584
Shale	9	593
Rock	2	595
Shale, hard	16	611
Rock	2	613
Sand, fine	29	642
Shale	18	660

	Thickness	Depth
C1-67-12bbca. Alt. 5,172 ft.		
Overburden.	68	68
Dawson Formation (upper part):		
Clay, blue.	2	70
Sand.	5	75
Clay, blue, and shale	71	146
Clay, sandy	6	152
Clay and shale.	114	266
Dawson Formation (lower part):		
Sand and sandstone [Middle conglomerate, 266 to 304 feet.]	15	281
Shale	9	290
Sand and sandstone.	14	304
Clay.	91	395
Lower conglomerate:		
Sandrock.	2	397
Clay.	5	402
Sandstone	8	410
Clay.	3	413
Sand and sandstone.	5	418
Clay.	17	435
C1-67-13bcba. Alt. 5,104 ft.		
Dawson Formation (upper part):		
Clay.	8	8
Shale	55	63
Sand.	3	66
Shale	92	158
Dawson Formation (lower part):		
Middle conglomerate:		
Sand.	5	163
Shale	23	186
Sand.	8	194
Shale	9	203
Sand.	10	213
Shale	7	220
Shale, sandy.	8	228
Shale	2	230
C1-67-15acdd. Alt. 5,036 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Clay, sandy	10	10
Sand and gravel	17	27
Dawson Formation:		
Clay, brown	1	28
Shale, blue	12	40
C1-67-16bdcb. Alt. 5,062 ft.		
Eolian sand:		
Sand.	18	18
Louviers Alluvium:		
Clay.	7	25
Gravel.	31	56
Dawson Formation (upper part):		
Shale	14	70
Shale, hard, black.	26	96
Shale, soft, blue	16	112
Dawson Formation (lower part):		
Middle conglomerate:		
Sand.	15	127
Shale	16	143
Sand.	6	149
Shale	5	154
Rock.	1	155
Shale	10	165
C1-68-5dcdd. Alt. 5,320 ft.		
Dawson Formation:		
Topsoil	2	2
Clay, yellow to gray	63	65
Dawson(?) and Laramie Formations, undifferentiated:		
Shale, medium hard, gray to blue	310	375
Coal measures, interbedded with shale.	250	625
B and A sandstones of the Laramie Formation and Milliken Sandstone Member of the Fox Hills Sandstone, undifferentiated:		
Sandstone, fine; contains occasional shale breaks.	230	855
C1-68-9bbaa. Alt. 5,288 ft.		
Dawson and Laramie Formations, undifferentiated:		
Clay.	5	5
Sandstone	7	12
Soapstone	68	80
Laramie Formation:		
Shale, gray	85	165
Shale, blue	45	210
Shale, gray	80	290
Iron rock	1	291
Slate, gray	34	325
Slate, blue	25	350
Coal.	1	351
Slate, gray	9	360
Rock.	1	361
Slate, gray	65	426
C1-68-9bbaa.--Continued		
Iron rock.	1	427
Slate, gray.	147	574
Iron rock.	2	576
Slate, gray.	14	590
Iron rock.	1	591
Slate, gray.	63	654
Coal	6	660
Slate, gray.	35	695
Coal, smut	2	697
B and A sandstones, undifferentiated:		
Sand slate, gray	28	725
Iron rock.	1	726
Sandstone.	17	743
Iron rock.	1	744
Sandstone.	16	760
Iron rock.	1	761
Sandstone.	71	832
C1-68-10cbbc. Alt. 5,268 ft.		
Dawson and Laramie Formations, undifferentiated:		
Topsoil.	2	2
Clay, brown to yellow.	12	14
Clay, sandy, brown	24	38
Clay, brown to yellow.	8	46
Shale, medium hard, gray to blue; contains occasional sandy streaks.	464	510
Laramie Formation:		
Coal layers interbedded with shale	190	700
B sandstone:		
Sand, fine, interbedded with thin shale breaks in lower section	109	809
C1-68-10dddb. Alt. 5,170 ft.		
Dawson Formation (lower part):		
Soil	2	2
Clay, yellow and gray.	47	49
Shale, gray.	8	57
Sandstone, soft, brown	4	61
Shale, gray.	41	102
Sandstone, gray.	2	104
Shale, gray.	61	165
Shale, gray, fine sand, and coal	15	180
Laramie Formation:		
Shale, gray.	147	327
Lime, sandy.	1	328
Shale, gray.	28	356
Shale, brown	5	361
Shale, gray.	183	544
Mudstone	2	546
Shale, gray.	12	558
Shale, gray, and coal.	11	569
Coal	4	573
Mudstone	1	574
Shale, gray.	16	590
Mudstone	1	591
Shale, gray.	11	602
Coal and gray shale.	126	728
Sand, fine [B sandstone, 727 to 808 feet.]	61	789
Shale, gray.	11	800
Sandstone:		
Shale, gray and fine sand	121	921
Shale, gray.	19	940
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone, hard, gray.	4	944
Shale, gray.	62	1,006
C1-68-12abaa. Alt. 5,071.6 ft.		
Piney Creek Alluvium and Dawson Formation, undifferentiated:		
Sand, gravel, and clay	105	105
Laramie Formation:		
Shale.	10	115
Sand, shaly.	35	150
Shale, blue.	20	170
Sand, shaly.	15	185
Shale.	15	200
Sand	4	204
Shale.	76	280
Sand, shaly.	40	320
Shale.	70	390
Sand	10	400
Shale.	104	504
Coal	4	508
Shale.	12	520
Coal	4	524
Shale.	12	536
Coal	4	540
Shale.	30	570
Coal	2	572
Shale.	18	590
Coal	6	596
Shale.	10	606
C1-68-12abaa.--Continued		
Sand	10	616
Shale.	10	626
Sand	10	636
Shale.	10	646
Sand [B sandstone, 666 to 740 feet.].	74	740
Shale [A sandstone, 748 to 875 feet.].	135	875
C1-68-18ddad. Alt. 5,320 ft.		
Dawson Formation (lower part):		
Clay	25	25
Sandstone.	15	40
Shale, gray.	35	75
Sand, blue, and shale.	55	130
Laramie Formation:		
Shale, blue.	12	142
Iron rock.	3	145
Shale, sandy	20	165
Sandstone.	10	175
Shale, sandy, blue	35	210
Shale, sandy, gray	25	235
Sandstone, "split"	9	244
Coal	1	245
Shale, brown	45	290
Shale, gray.	50	340
Shale, blue.	30	370
Shale, sandy, gray	20	390
Shale, gray.	20	410
C1-68-19baba. Alt. 5,363 ft.		
Dawson Formation:		
Clay	10	10
Soapstone.	50	60
Shale, gray.	38	98
Iron rock.	1	99
Shale, brown	28	127
Shale, gray.	33	160
Sandstone.	23	183
Laramie Formation:		
Shale, black	20	203
Coal	2	205
Shale, gray.	40	245
Sandstone.	11	256
Shale, gray.	244	500
Iron rock.	1	501
Shale, gray.	34	535
Coal	1	536
Shale, gray.	9	545
Iron rock.	1	546
Shale, brown	10	556
Shale, gray.	39	595
Iron rock.	2	597
Shale, gray.	8	605
Coal	4	609
Shale, gray.	61	670
Coal	2	672
Shale, gray.	2	674
Coal	4	678
Shale, gray.	7	685
B sandstone:		
Sandstone.	90	775
A sandstone:		
Sandstone (water)	90	865
C1-68-20aaad. Alt. 5,289 ft.		
Dawson Formation (upper and lower parts, undifferentiated):		
Clay, sandy, and topsoil	25	25
Shale and stringers of hard sandstone	80	105
Shale, hard.	13	118
Dawson Formation (lower part):		
Sand	24	142
Shale.	18	160
Shale and stringers of sandstone.	100	260
Laramie Formation:		
Shale.	240	500
Shale and sand	16	516
Sandstone.	4	520
Shale.	60	580
Shale; contains streaks of sand.	60	640
B sandstone:		
Sandstone.	60	700
A sandstone:		
Sand, very good.	100	800
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand; contains streaks of shale	90	890
Sand	30	920
Transition zone:		
Sand; contains streaks of shale	56	976
Sand, good	20	996
Sand; contains streaks of shale	49	1,045

Table 1.--Logs of wells and test holes --Continued

	Thickness	Depth
C1-68-11cdbc. Alt. 5,282 ft.		
Rocky Flats Alluvium:		
Clay and boulders	22	22
Dawson Formation:		
Sandstone, firmly cemented	2	24
Sand and gray shale	80	104
Shale, blue	80	184
Iron rock	2	186
Laramie Formation:		
Shale, gray	89	275
Sand and gray shale	75	350
Shale, blue	50	400
Shale, gray	150	550
Shale, blue	40	590
Sand and blue shale	40	630
Shale, gray	57	687
Coal	8	695
Shale, gray	30	725
Coal	2	727
Sand and gray shale	8	735
B and A sandstones, undifferentiated:		
Sandstone	165	900
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Lime	17	917
Sand, fine	27	944
Lime	1	945
Sand, fine	29	974
Lime	2	976
Sand, fine, and gray shale	14	990
Transition zone:		
Shale, gray, sandy	30	1,020
Sand, fine, and gray shale	10	1,030
Coal and gray shale	18	1,048
Lime	2	1,050
Sand, fine, and gray shale	40	1,090
Shale, gray	5	1,095
Lime	2	1,097
Shale, gray	3	1,100
C1-69-7cccb. Alt. 5,545 ft.		
Laramie Formation:		
Soil	1	1
Shale, weathered, and soil	17	18
Shale, clayey, yellow, weathered	35	53
Shale, firm, gray	74	127
Coal	5	132
Shale, gray, and coal, interbedded	65	197
Sand, fine, soft, gray (water-yielding)	16	213
Shale	16	229
Coal	6	235
Shale, gray, and coal	29	264
Mine shaft	7	271
No sample	100	371
Sand, fine, firm [B sandstone, 371 to 426 feet.]	15	386
Sand, fine, cemented	1	387
Sand, fine, firm	39	426
Shale, gray	8	434
A sandstone:		
Sand, fine, firm	52	486
Sand, cemented	3	489
Sand, fine, firm	23	512
Sandstone, gray and brown	8	520
Laramie Formation and Fox Hills Sandstone, undifferentiated:		
Sand, fine, firm	179	699
Shale, gray	9	708
Lime, hard	1	709
C1-69-10dabb. Alt. 5,193 ft.		
Piney Creek Alluvium:		
Clay and rocks	4	4
Broadway Alluvium:		
Sand and gravel	11	15
Laramie Formation:		
Soapstone	5	20
Coal	1	21
Soapstone	26	47
Coal	1	48
Shale, gray	22	70
Iron rock	2	72
Shale, gray	5	77
Coal, soft	1	78
Shale, gray	30	108
Rock, hard, brown	1	109
Shale, gray	19	128
Coal	1	129
Sandstone	5	134
Shale, blue	6	140
C1-69-10dabb.--Continued		
Coal	7	147
B sandstone:		
Sandstone, gray	5	152
Sandstone	88	240
A sandstone of the Laramie Formation and Milliken Sandstone Member of the Fox Hills Sandstone, undifferentiated:		
Iron rock	1	241
Sandstone	204	445
Iron rock	2	447
Sandstone, white	22	469
C1-69-17bcbd. Alt. 5,191 ft.		
Piney Creek Alluvium:		
Clay	8	8
Broadway Alluvium:		
Gravel	6	14
Laramie Formation:		
Soapstone	30	44
Coal	1	45
Shale, gray	63	108
Soapstone	20	128
Iron rock	1	129
Shale, gray	29	158
Soapstone	17	175
Shale, black	7	182
Crevice (old mine shaft)	5	187
Shale, gray	33	220
Shale, black	4	224
Coal	6	230
Shale, black	10	240
Coal	4	244
Shale, gray	20	264
Coal	1	265
Sand and shale	10	275
B and A sandstones of the Laramie Formation and Milliken Sandstone Member of the Fox Hills Sandstone, undifferentiated:		
Sandstone	255	530
Transition zone:		
Shale, blue	40	570
Sandstone	30	600
Shale, gray	150	750
Shale, gray	150	900
Shale, blue	150	1,050
Sand shale	70	1,120
Sand, gray, and shale	60	1,180
Limestone, very sandy, very hard	1	1,181
Shale, gray	169	1,350
Limestone, very sandy, very hard	1	1,351
Shale, blue-gray	174	1,525
C1-69-22dabd. Alt. 5,240 ft.		
Laramie Formation and Fox Hills Sandstone, undifferentiated:		
Clay	15	15
Shale, blue	15	30
Sand and gray shale	40	70
Shale, blue	25	95
Shale, gray	56	151
Shale, black	4	155
Sandstone, hard, gray	49	204
Coal	2	206
Sandstone, hard, gray	79	285
Coal	1	286
Shale, gray	54	340
Sand and gray shale	55	395
Shale, black	2	397
Sand and gray shale	3	400
Sandstone	44	444
Iron rock	1	445
Sandstone	75	520
Rock, hard	1	521
Sandstone	69	590
Rock, hard, brown	3	593
Sandstone	54	647
Shale	3	650
C1-69-26cccd. Alt. 5,425 ft.		
Dawson Formation (lower part):		
Sand and clay	60	60
Laramie Formation:		
Shale, gray	20	80
Shale, blue	77	157
Shale, gray	43	200
Shale and streaks of sand	80	280
Shale, blue	70	350
Shale, gray	47	397
Shale, blue	33	430
Shale, gray	50	480
Shale, blue	40	520
Shale, sandy	50	570
Shale, sandy, and coal	35	605
Shale and coal	55	660
Shale, gray	12	672
C1-69-26cccd.--Continued		
Shale	8	680
Sandstone [B sandstone, 680 to 750 feet.]	70	750
Shale	135	885
A sandstone:		
Sand	15	900
Shale, gray	60	960
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand	45	1,005
Shale, gray	20	1,025
Shale, hard, gray	13	1,038
C1-69-35ddda. Alt. 5,348 ft.		
No sample	116	116
Dawson Formation (lower part):		
Lower conglomerate:		
Sand, fine, and shale, sandy, gray; interbedded	39	155
Sand, fine, silty, and sandy shale	9	164
Shale, gray	11	175
Sand, silty, and shale	10	185
Laramie Formation:		
Shale, gray; contains thin breaks of fine sand and lignitic coal	30	215
Sand, fine, and gray sandy shale, interbedded	20	235
Shale, gray; contains thin sandy streaks	40	275
Sand, fine, and silty shale	10	285
Shale, gray; contains thin streaks of sand and thin layers of coal	40	325
Shale, dark-gray; contains a few streaks of sand and thin layers of coal	90	415
Shale, gray; contains occasional thin beds of coal and thin hard cemented streaks of fine-grained sandstone	80	495
Shale interbedded with silty fine sand	20	515
Shale, gray, interbedded with fine sand and coal	210	725
B sandstone:		
Sand, fine, somewhat silty	63	788
Sand, fine, shaly; contains a trace of coal	22	810
A sandstone:		
Sand, fine	30	840
Shale, sandy	30	870
Fox Hills Sandstone		
Milliken Sandstone Member:		
Sand, fine, white	30	900
Sand, fine, and gray shale	5	905
Sand; occasionally cemented in hard streaks; contains thin layers of gray shale	35	940
Shale, sandy, gray	5	945
Sand, fine; contains a trace of shale	25	970
Transition zone:		
Shale, gray, and fine shaly sand	83	1,053
C1-70-21bdac. Alt. 5,560 ft.		
Rocky Flats Alluvium:		
Boulders, gravel, and clay	10	10
Laramie Formation:		
B sandstone (faulted):		
Sandstone	47.5	57.5
Coal, earthy	2.5	60
Sandstone	5	65
Coal, earthy, and streaks of coal	8	73
Sandstone	19	92
A sandstone:		
Sandstone, very hard; contains thin streaks of coal	6	98
Sandstone, moderately hard	6	104
Shale	4	108
Sandstone, gray	12	120
Coal, earthy, and some shale	5	125
Sandstone, gray	20	145
Shale, gray	5	150

	Thickness	Depth
C1-70-18cbaa. Alt. 5,953 ft.		
Rocky Flats Alluvium:		
Boulders and gravel	24	24
Laramie Formation:		
Sandstone and clay.	5	29
Soapstone, gray	2	31
Sandstone; contains thin streaks of coal	15	46
Soapstone, gray and bentonite; contains thin streaks of coal	7	53
Bentonite	12	65
Soapstone, gray, and bentonite; contains streaks of earthy coal.	10	75
Shale, gray	12	87
Sandrock, brown and gray, hard.	1	88
Bentonite	2	90
Shale and streaks of sandstone	10	100
Shale and earthy coal	5	105
Shale	9	114
Coal, very soft, streaks of bentonite, and brown sandstone	14	128
Sandstone, white.	22	150
Sandstone, gray	20	170
Coal.	11	181
Shale	4	185
Shale and sandstone	5	190
Shale	40	230
Shale and coal.	13	243
Shale	1	244
Coal.	13	257
Shale	3	260
Shale, sandy, and some sandstone	15	275
Shale	10	285
C2-65-14cddc. Alt. 5,282 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Gravel.	26	26
Dawson Formation (upper part):		
Clay.	9	35
Rock.	2	37
Clay.	1	38
Shale	12	50
Rock.	1	51
Shale, blue	34	85
Coal.	4	89
Shale	6	95
Shale, sandy.	5	100
Upper conglomerate:		
Sand.	50	150
Shale	16	166
C2-65-21ddd. Alt. 5,419 ft.		
Eolian sand and Dawson Formation, undifferentiated:		
Surface	97	97
Dawson Formation (upper part):		
Clay, blue; contains streaks of coal	23	120
Clay, blue.	30	150
Sandstone	45	195
Clay, blue.	105	300
Shale, blue, and streaks of sandstone.	250	550
Dawson Formation (lower part):		
Shale, sandy [Middle conglomerate, 550 to 780 feet.] (some water).	125	675
Shale, blue, and streaks of sandstone.	65	740
Shale, hard	30	770
Sandstone (water)	10	780
Shale, blue	75	855
Lower conglomerate:		
Sand (water).	10	865
Shale	35	900
C2-65-31dcdd. Alt. 5,310 ft.		
Piney Creek Alluvium:		
Clay, sandy	4	4
Clay.	14	18
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, dirty	7	25
Gravel.	27	52
Clay.	2	54
Gravel.	7	61
Clay.	3	64
Dawson Formation:		
Shale	11	75
C2-65-35cdcd. Alt. 5,358 ft.		
Piney Creek Alluvium:		
Clay.	10	10
Sand.	6	16
C2-65-35cdcd.--Continued		
Dawson Formation (upper part):		
Clay	2	18
Shale, gray.	6	24
Shale.	16	40
Rock	2	42
Shale.	83	125
Shale, sandy	14	139
Shale.	27	166
Upper conglomerate:		
Sand	8	174
Shale.	16	190
Sand	47	237
Shale.	11	248
C2-65-35dcdc2. Alt. 5,362 ft.		
Piney Creek Alluvium:		
Clay	6	6
Broadway and Louviers Alluvium, undifferentiated:		
Sand	24	30
Gravel	10	40
Clay	2	42
Gravel	3	45
Clay	3	48
C2-66-4abbb.		
Piney Creek Alluvium:		
Sand, very fine to fine, subangular, fairly loose, dark-brown.	4	4
Clay, silty and sandy, friable, noncalcareous, dark-brown	8	12
Sand, very fine, silty	12	24
Sand, medium to coarse, loose, angular to subangular, tan	5	29
Dawson Formation (upper part):		
Shale, clay, very-dark-gray	5	34
C2-66-5bccb. Alt. 5,125 ft.		
Eolian sand:		
Sand, medium, uniform, loose, angular, brown	2	2
Sand, very fine, and tan clay	9	11
Sand, very fine to fine, and tan clay	6	17
Verdos Alluvium:		
Sand, very fine to fine, clay, friable; contains some pebbles	4	21
Gravel, very fine to fine; contains subrounded to rounded pebbles	3	24
Clay	1.5	25.5
Sand, coarse to very coarse, and subangular very fine to fine gravel	8.5	34
Sand, fine to coarse, silty.	.5	34.5
C2-66-5ccbb. Alt. 5,120 ft.		
Eolian sand:		
Sand, fine, angular to subangular, loose, light-brown.	8	8
Sand, fine to medium, subangular, loose, light-brown.	10	18
Verdos Alluvium:		
Gravel, medium, well-sorted, subangular, subrounded; much broken material.	1	19
Sand, fine, clayey, and 10 percent or less very fine gravel	1	20
Gravel, very fine to medium, subrounded, and silty sand; large rock	15	35
Sand, medium to very coarse, loose, angular to subangular.	8	43
Dawson Formation (upper part):		
Shale, noncalcareous, gray, very hard when dry.	2	45
C2-66-6aaaa. Alt. 5,110 ft.		
Eolian sand:		
Sand, medium, uniform, subangular to angular.	3	3
Verdos Alluvium:		
Silt, sandy, cream-white coatings; very bentonitic	11	14
C2-66-6aaaa.--Continued		
Gravel, fine to medium, subrounded	5	19
Dawson Formation (upper part):		
Clay, plastic, slightly sandy, micaceous, gray; contains black minerals (no water)	5	24
C2-66-7abab. Alt. 5,100 ft.		
Eolian sand:		
Sand, fine to medium, loose, angular	5	5
Verdos Alluvium:		
Sand, fine, clayey, friable, very calcareous; occasional particles of tan very fine gravel (water at 20 feet)	19	24
No sample.	3	27
Sand, as above, but with less fine gravel	2	29
Sand, fine to medium, clayey; slight increase to about 5 percent very fine gravel.	2	31
C2-66-7abbb. Alt. 5,103.5 ft.		
Eolian sand:		
Silt, sandy, clayey, friable, brown, dry; 30 percent sand.	6.8	6.8
Sand, clayey, soft, saturated, brown; 20 percent fines	1.4	8.2
Clay, sandy, stiff, brown, moist, slightly calcareous	1.8	10
Clay, as above; 30 percent fine sand and a lens of fine to medium sand 0.1 foot thick.	2.1	12.1
Sand, medium to fine, silty, saturated, tan-brown; 60 percent fine sand; 20 percent medium sand; and 20 percent fines; contains lenses of clayey sands at about 15 feet	7.5	19.6
Verdos Alluvium:		
Sand, gravelly, clayey	.4	20
Sand, gravelly, moist, white-tan; slightly cemented (may be a flat boulder).	2.1	22.1
Dawson Formation (upper part):		
Clay, sandy, stiff, moist, moderately weathered, gray-brown, slightly iron-stained; contains fragments of lignite; noncalcareous	2.9	25
C2-66-7adaa. Alt. 5,143 ft.		
Eolian sand:		
Sand, fine to medium, subangular, poorly sorted, loose, tan	9	9
Verdos Alluvium:		
Sand, fine, very clayey, very calcareous, slightly bentonitic	15	24
Sand, fine, calcareous very bentonitic, yellowish-tan.	2	26
C2-66-7baaa. Alt. 5,100 ft.		
Eolian sand:		
Clay, silty and sandy, plastic, very calcareous, medium-brown	6	6
Sand, very fine.	4	10
Sand, very fine, clayey, very calcareous.	7	17
Sand, medium to coarse, clayey, very calcareous; contains streaks of caliche.	1	18
Dawson Formation (upper part):		
Shale, slightly silty, noncalcareous, dark-brown; flaky partings	11	29
C2-66-7babb. Alt. 5,110 ft.		
Eolian sand:		
Clay, sandy, plastic, very calcareous, tan	12	12
Sand, medium to coarse, loose, angular to subangular	7.5	19.5
Dawson Formation (upper part):		
Shale, silty, noncalcareous, light-gray	9.5	29

	Thickness	Depth
C2-66-7cbbb. Alt. 5,140 ft.		
Eolian sand:		
Silt, sandy, noncalcareous, clayey, dark-reddish-brown	5	5
Sand, fine to medium, poorly-sorted, loose, subangular to subrounded, light-tan	2	7
Sand, fine to coarse, very poorly-sorted, subangular to angular, very calcareous	11	18
Verdos Alluvium:		
Gravel, very fine to coarse, subangular, and clayey sand	8	26
Gravel, coarse, well-sorted, clean, subrounded to rounded	4	30
Gravel, as above, and 50 percent medium to very coarse sand	5	35
Gravel, fine to coarse, poorly-sorted, subrounded to subangular	3	38
Gravel, fine to medium, poorly-sorted, and 50 percent clayey sand	3	41
Dawson Formation (upper part):		
Sand, medium to very coarse, dry calcareous cemented poorly-sorted very fine angular gravel, silt, clay, and platey shale	3	44
C2-66-7cccc. Alt. 5,159 ft.		
Eolian sand:		
Sand, fine, loose, subangular, slightly clayey, tan	12	12
Sand, very fine, clayey, very calcareous; contains small bits of calcareous material	3	15
Verdos Alluvium:		
Gravel, very fine to fine, subangular, and clayey medium sand	8	23
Silt and very fine sand	7	30
Sand, angular to subangular, medium to coarse and very fine to medium angular clayey gravel	13	43
Sand, medium to coarse; contains some scattered subangular to subrounded coarse gravel (no water)	10	53
Dawson Formation (upper part):		
Sandstone, caliche, and bentonitic clay at 53 feet		
C2-66-7dada. Alt. 5,120 ft.		
Eolian sand:		
Sand, fine, and brown clay	11	11
Sand, coarse, calcareous, compact, light-tan	4	15
Verdos Alluvium:		
Sand, medium to coarse, subangular, loose, tan	6	21
Sand, fine to medium, and silt	9	30
Clay, silty, sandy, calcareous, bentonitic	4	34
C2-66-7dddd. Alt. 5,143 ft.		
Eolian sand:		
Sand, fine, angular to subangular, loose, light-brown	3	3
Verdos Alluvium:		
Sand, fine to medium, subangular, tan, and very fine gravel	5	8
Sand, fine to medium, very calcareous	5	13
Sand, silty, calcareous, and very fine angular gravel	5	18
Sand, silty, very calcareous, light-brown	12	30
Sand, fine to coarse, silty, very calcareous, yellow	5	35

	Thickness	Depth
C2-66-7dddd.--Continued		
Dawson Formation (upper part):		
Shale, gray, and yellow clay, noncalcareous	8	43
Shale, yellow and gray, noncalcareous	1	44
C2-66-8bbbd. Alt. 5,145 ft.		
Eolian sand:		
Sand	18	18
Clay	10	28
Verdos Alluvium:		
Gravel	2	30
Clay	9	39
Sand	4	43
Clay	7	50
Clay and layers of gravel	5	55
Gravel	11	66
Dawson Formation (upper part):		
Clay	6	72
Shale	124	196
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	5	201
Shale	7	208
Rock	1	209
Sand	25	234
Shale	14	248
C2-66-10acab. Alt. 5,190 ft.		
Eolian sand:		
Sand	13	18
Clay	3	21
Sand	4	25
Dawson Formation (upper part):		
Clay, blue	7	32
Sand, fine [Upper conglomerate, 32 to 154 feet.]	8	40
Coal	3	43
Shale	7	50
Sand	11	61
Shale, hard	3	64
Sand, hard	15	79
Shale	45	124
Shale, soft, gray	5	129
Sand	25	154
Shale	8	162
Shale, hard, black	12	174
Rock	1	175
Shale, soft gray	70	245
Rock	1	246
Shale	14	260
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	13	273
Shale	15	288
C2-66-18ddbc. Alt. 5,193 ft.		
Eolian sand:		
Soil, sandy	1	1
Silt, fine, clay	5	6
Clay, silty, tan	9	15
Verdos Alluvium:		
Sand, coarse, buff, and fine gravel	5	20
Clay, sticky	4	24
Gravel and coarse sand	9	33
Clay, silty	5	38
Sand, medium to coarse	2	40
Dawson Formation (upper part):		
Clay, yellow to gray	1	41
Shale, gray	5	46
Sandstone, fine, hard, cemented	1	47
Shale, gray, silty	5	52
Coal, soft, lignitic	1	53
Shale, gray, silty to clayey	27	80
Coal, soft, lignitic	2	82
Shale, gray, clay	9	91
Coal, soft, lignitic	3	94
Shale, gray, and clay	34	128
Sand, very fine, silty to clayey [Upper conglomerate, 128 to 146 feet.]	6	134
Coal, soft, lignitic	6	140
Shale, gray, silty to clayey	37	177
Sand, fine, soft, silty to clayey	5	182
Shale, gray, clayey, of variable hardness	20	202
Sand, very fine, silty, sticky, and shale	40	242
Sand, very fine, gray, soft	4	246
Shale, gray to brown, silty to clayey	102	348
Sand, very fine, soft, silty	9	357

	Thickness	Depth
C2-66-18ddbc.--Continued		
Shale, gray, clay	2	359
Coal, soft, lignitic	2	361
Shale, gray, clayey; contains few fine sand lenses	70	431
Dawson Formation (lower part):		
Sand, very fine, soft (Middle conglomerate, 431 to 488 feet.)	9	440
Shale, gray, and clay	43	483
Sand, very fine, gray, silty	5	488
Shale, gray, and clay	57	545
Sandstone, gray, hard, cemented	2	547
Shale, gray, and clay	42	589
Lower conglomerate:		
Sand, fine to medium, clean, well-rounded (best water-bearing sand in well)	6	595
Laramie Formation:		
Shale, gray, and clay	50	645
Sandstone, cemented; contains a trace of coal	1	646
Shale, gray, clayey to silty	22	668
Shale, gray, silty to clayey; contains very thin sandy streaks	92	760
C2-66-19dabd. Alt. 5,198 ft.		
Eolian sand:		
Topsoil	.9	.9
Silt, sandy, dark-brown	2	2.9
Silt, clayey, semiplastic, calcareous	1.1	4
Silt, as above; contains some fine sand and clay	1	5
Verdos Alluvium:		
Silt, as above; contains volcanic ash having calcareous streaks	2	7
Silt, clayey, semiplastic, calcareous	8.4	15.4
Dawson Formation (upper part):		
Shale, weathered, subfirm, grayish-green	1.6	17
Shale, as above, slightly calcareous, iron oxide stains	1	18
Shale, weathered, subfirm, grayish-green; contains streaks of dark-gray shale	3	21
Siltstone, weathered, soft, friable, laminated, light-gray	1.3	22.3
Shale, weathered, medium-gray, iron oxide stains	1.9	24.2
Siltstone, weathered, soft, friable, laminated, medium-gray	1	25.2
Shale, weathered, dark-gray and medium-gray	3.8	29
Shale, weathered, highly carbonaceous, soft, moist, maroonish-gray	1.6	30.6
Claystone, weathered, medium-gray, iron oxide stains	1.4	32
C2-66-20adaa. Alt. 5,166 ft.		
Eolian sand:		
Silt, sandy, compact, friable, calcareous, medium-brown; calcium carbonate streaks	3.4	3.4
Sand, silty, fine, loose, calcareous, medium-brown	.9	4.3
Silt, friable to compact, calcareous, medium-brown; contains some clay and sand	3.8	8.1
Sand, fine, loose, silty, calcareous, medium-brown; contains pebbles	2.1	10.2
Sand, fine, loose, calcareous, greenish-gray	2.6	12.8
Sand, fine, loose, friable, rusty-brown; contains some layers of silt	2.8	15.6
Sand, silty, fine, loose, moist, yellowish-green; light-brown zone from 17.0 to 17.4 feet	1.8	17.4

	Thickness	Depth
C2-66-20adaa.--Continued		
Dawson Formation (upper part):		
Shale, weathered, medium-gray	0.9	18.3
Siltstone, weathered, light- to medium-gray; contains pieces of gypsum	2	20.3
Shale, weathered, medium-gray; contains carbonaceous flecks and streaks	1.7	22
C2-66-20adad. Alt. 5,166.7 ft.		
Eolian sand:		
Topsoil	.9	.9
Silt, sandy, clayey, dark-brown; 60 percent silt, 20 percent clay, and 20 percent fine sand	1.1	2
Silt, as above; calcareous	1	3
Silt, soft, semiplastic, medium-brown	3.4	6.4
Silt, clayey, soft, brownish-gray; 60 percent silt, 40 percent clay (water at 7.5 feet)	4.1	10.5
Sand, fine, silty, soft, saturated, grayish-brown; 60 percent sand, 30 percent silt, and 10 percent clay	7.3	17.8
Dawson Formation (upper part):		
Sand, fine, laminated, brownish-gray	1.2	19
Sand, as above; green tinge	2	21
Sand, as above; contains limestone concretions from 21.3 to 21.6 feet	1.3	22.3
C2-66-29eccc. Alt. 5,230 ft.		
Eolian sand:		
Topsoil	.7	.7
Silt, sandy, compact, calcareous, medium- to light-brown	4.3	5
Silt, as above; contains more sand	1.3	6.3
Sand, silty, fine, loose, calcareous, light-brown	9.9	16.2
Silt, sandy, compact, calcareous, medium-brown	4.8	21
Dawson Formation (upper part):		
Silt, as above; contains small pieces of gypsum	2	23
Silt, as above; contains no gypsum	7.5	30.5
Sand, silty, fine, loose, slightly calcareous, grayish-brown	2.2	32.7
Siltstone, weathered, yellowish-green; brown iron stains	3.3	36
Siltstone, as above; contains some streaks of clay	3.2	39.2
Shale, weathered, greenish-gray	4.8	44
Shale, very fissile, medium-dark-brown; white flecks	1	45
C2-66-30cbab. Alt. 5,190 ft.		
Piney Creek Alluvium:		
Soil	7	7
Broadway and Louviers Alluvium, undifferentiated:		
Gravel	8	15
Clay	2	17
Gravel	3	20
Dawson Formation (upper part):		
Sand (rock)	29	49
Shale	1	50
C2-66-30cbbc. Alt. 5,190.1 ft.		
Piney Creek Alluvium:		
Topsoil	.9	.9
Silt, clayey, semiplastic, medium-brown; contains minor amount of sand	1.6	2.5
Silt, as above; micaceous	1	3.5
Silt, as above; soft	3.1	6.6
Sand, silty, fine, loose, saturated, medium-brown 8.4 to 9.5 feet, dark-gray 9.5 to 10 feet, some clay; contains streaks of very coarse sand at 11 feet; contains medium gravel	8.2	14.8
Sand, fine, loose, yellow	1.2	16
Dawson Formation (upper part):		
Sand, fine, yellow with greenish tinge, some silt; contains uniformly disseminated dark grains	16.6	32.6
Sand, as above; a little coarser; contains less clay	9	41.6
Shale, weathered, carbonaceous material, dark-gray; iron oxide stains	1.4	43
C2-66-31bdaa. Alt. 5,232 ft.		
Eolian sand:		
Topsoil	1.1	1.1
Silt, clayey, calcareous, soft, grayish-brown	.9	2
Silt, as above	1	3
Silt, as above; very soft, muck at 4.5 feet	1	4
Silt, as above; soft, semiplastic	1	5
Silt, as above; medium-brown	1	6
Silt, as above; contains minor amount of fine sand	8.7	14.7
Sand, fine, loose, medium-brown, some silt and clay	3.9	18.6
Sand, medium, loose, medium-brown	.7	19.3
Dawson Formation (upper part):		
Siltstone, weathered, compact, sandy, medium-brown	.7	20
Siltstone, as above; contains joints and iron stains	1	21
Siltstone, as above; contains subrounded medium gravel	7	28
C2-66-32adbc. Alt. 5,278 ft.		
Eolian sand:		
Topsoil	7	.7
Silt, sandy, compact, calcareous, medium-brown; contains calcium carbonate streaks	4.3	5
Silt, as above, loose	5	10
Silt, sandy, loose, calcareous, medium-brown; contains minor amount of clay	3.2	13.2
Sand, silty, fine loose, calcareous medium-brown	2.8	16
Sand, as above; contains some clay	1.8	17.8
Sand, medium, loose, brownish-gray; wet zone between 21.0 and 22.1 feet	4.3	22.1
Dawson Formation (upper part):		
Shale, weathered, carbonaceous, very fissile, slightly calcareous, reddish-brown	1.2	23.3
Shale, weathered, light-gray	.5	23.8
Shale, silty, weathered, gray-brown	.6	24.4
Siltstone, clayey, weathered, greenish to light-gray; iron oxide stains, very grainy; resembles weathered sandstone in texture	5.6	30
C2-67-1abab. Alt. 5,075 ft.		
Eolian sand:		
Sand, fine	7	7
Louviers Alluvium:		
Clay	14	21
Sand	17	38
Dawson Formation (upper part):		
Clay	5	43
Shale	19	62
Shale, soft, gray	7	69
Shale, black	6	75
Rock, soft	1	76
Shale, soft	31	107
Rock	1	108
Shale	17	125
Shale, brown	4	129
Shale, blue	47	176
Sand, dirty	12	188
Rock, hard	2	190
Shale	8	198
Sand, hard, dirty	3	201
Shale	79	280
Rock	1.5	281.5
Shale	27.5	309
Rock	1	310
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	23	333
Shale	17	350
C2-67-1baba. Alt. 5,058 ft.		
Eolian sand:		
Clay, sandy	26	26
Louviers Alluvium:		
Gravel	8	34
Dawson Formation (upper part):		
Clay	3	37
Shale	70	107
Shale, sandy	16	123
Shale, blue	11	134
Sandstone, dirty	6	140
Shale	43	183
Shale, sandy	7	190
Shale, blue	17	207
Shale, sandy	27	234
Shale, brown	37	271
Rock	1	272
Shale, sandy	6	278
Rock	2	280
Shale	55	335
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	24	359
Shale	13	372
C2-67-1cccc. Alt. 5,092.3 ft.		
Eolian sand:		
Sand	7	7
Louviers Alluvium:		
Clay	6	13
Sand, fine	9	22
Clay	6	28
Gravel	10	38
Clay	5	43
C2-67-2cddd. Alt. 5,080 ft.		
Eolian sand:		
Soil	31	31
Louviers Alluvium:		
Clay	8	39
Gravel	7	46
Clay	1	47
Gravel and boulders	4	51
Dawson Formation (upper part):		
Rock, cemented	1	52
Clay, sandy, and boulders	16	68
Shale	15	83
C2-67-3aabb. Alt. 5,020 ft.		
Post-Piney Creek alluvium:		
Topsoil	5	5
Louviers Alluvium:		
Sand and gravel	40	45
Dawson Formation (upper part):		
Shale, blue	20	65
Sandstone	10	75
Shale, blue	65	140
Shale, blue; contains layers of sand	60	200
Shale, blue	45	245
Shale, sandy, and layers of sandstone	25	270
Shale, sandy	14	284
C2-67-3dbda. Alt. 5,060 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Soil	3	3
Sand and gravel	27	30
Louviers Alluvium:		
Clay	5	35
Gravel, coarse, and boulders	25	60

	Thickness	Depth
C2-67-4dbdc. Alt. 5,025.0 ft.		
Post-Piney Creek alluvium:		
Sand, fine, uncemented, tan	1.6	1.6
Silt, clayey, soft, brown-gray; 5 to 10 percent fine sand; much organic material, moderately iron stained	5.8	7.4
Sand, gravelly, loose, saturated, uncemented, gray	3	10.4
Louviers Alluvium:		
Gravel, sandy, loose, gray-white; 60 percent fine gravel, 30 percent coarse sand, and 10 percent fine sand; some very coarse gravel subrounded to well-rounded	7.7	18.1
Gravel, clayey, sandy, tan and gray	5.1	23.2
Sand, gravelly, tan	4.3	27.5
Sand, clayey, gravelly, brown and tan	1.8	29.3
Dawson Formation (upper part):		
Clay, silty, and lignite	.7	30
C2-67-9addd. Alt. 5,050 ft.		
Piney Creek Alluvium:		
Clay, sandy	5	5
Louviers Alluvium:		
Sand	4	9
Gravel	8	17
Dawson Formation (upper part):		
Clay	13	30
Rocks	10	40
Clay	1	41
Shale	117	158
Sand [Upper conglomerate, 158 to 180 feet.]	11	169
Shale	7	176
Sand	4	180
Shale, hard, brown	32	212
Shale, sandy	4	216
Shale, hard, black	12	228
Shale, sandy	21	249
Shale, brown	7	256
Shale, blue	36	292
Rock	3	295
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	15	310
Shale, hard, blue	16	326
Shale, brown	14	340
C2-67-9bdba. Alt. 5,035.0 ft.		
Post-Piney Creek alluvium:		
Silt, sandy, clayey, brown-gray; moderately iron stained	3.9	3.9
Louviers Alluvium:		
Sand, fine, gravelly, brown-gray; 20 percent gravel, 10 percent fines	4.3	8.2
Sand, gravelly, tan-gray; 30 percent gravel, 10 percent fines	1.8	10
Sand, as above, brown-tan	2.3	12.3
Sand, clayey, gravelly, tan-gray; 20 percent fine gravel, 15 percent fines; may be slightly indurated at about 18 feet	7.7	20
Sand, as above; clay content decreasing; material is considerably more porous	7.4	27.4
Silt, clayey, sandy, stiff, gray; top 0.3 foot weathered to brown	2.6	30
C2-67-9dcdb.		
Broadway Alluvium:		
Clay	15	15
Sand	13	28
Louviers Alluvium:		
Clay	3	31
Gravel, coarse	16	47
Dawson Formation:		
Shale	6	53
C2-67-9dcdc. Alt. 5,081 ft.		
Broadway Alluvium:		
Clay	6	6
Sand	28	34
Louviers Alluvium:		
Gravel	10	44
Clay	3	47
Dawson Formation:		
Shale	2	49
C2-67-9dcdc2. Alt. 5,081 ft.		
Broadway Alluvium:		
Topsoil	3	3
Sand	21	24
Louviers Alluvium:		
Gravel	6	30
Rocks	13	43
Dawson Formation (upper part):		
Clay	3	46
Shale, blue	22	68
Sand and shale	11	79
Shale, blue	10	89
Sandrock	12	101
Shale, blue	190	291
Sandrock	15	306
Dawson Formation (lower part):		
Shale; contains streaks of sandrock [Middle conglomerate, 360 to 522 feet.]	78	384
Sandrock	14	398
Sand and shale	8	406
Sandrock	8	414
Shale; contains streaks of sandrock	108	522
Rock, hard	1	523
Sandrock	4	527
Shale, blue; contains streaks of sandrock	94	621
Rock, hard	3	624
Shale, blue	45	669
Lower conglomerate:		
Sandrock	11	680
Shale, blue	13	693
Sandrock	31	724
Shale, blue	8	732
C2-67-10aacb. Alt. 5,070 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Clay, sandy	30	30
Gravel	12	42
C2-67-10cddd. Alt. 5,079.5 ft.		
Broadway Alluvium:		
Clay	11	11
Gravel	2	13
Louviers Alluvium:		
Clay, sandy	10	23
Gravel	18	41
Dawson Formation (upper part):		
Sandstone	11	52
Shale	2	54
C2-67-10dcdc. Alt. 5,073.2 ft.		
Broadway Alluvium:		
Sand, fine, clayey, noncalcareous, light-brown; 30 percent fines	5.2	5.2
Sand, clayey, gravelly, highly calcareous, brown-white; 30 percent fines, 15 percent gravel; no gravel 6.5 to 8.0 feet	4.8	10
Sand, as above; 50 percent sand; 30 percent fines, 20 to 30 percent gravel; moderately to highly calcareous; fines decreasing	8.3	18.3
Gravel, sandy, cemented, brown; 35 percent sand, 30 percent fine gravel, 20 percent cobbles, 15 percent fines	1.7	20
Gravel, as above, noncemented, slightly iron stained	1.6	21.6
Louviers Alluvium:		
Silt, fine, sandy, tan-gray, slightly iron stained	2.4	24
Sand, gravelly, brown-tan; 20 percent fine gravel, 15 percent fines	1.8	25.8
Sand, fine, silty, tan-gray, slightly iron stained	1.7	27.5
Gravel, sandy, brown-gray; 40 percent fine gravel, 15 percent sand, 15 percent fines, 10 percent cobbles	2.5	30
Gravel, sandy, brown-gray; 50 percent fine gravel, 35 percent sand, 15 percent fines, rounded to well-rounded, saturated	3.6	33.6
Dawson Formation (upper part):		
Clay, silty, brown-gray, highly fractured, iron stained, moderately weathered; contains 15 percent organic material, color changing to reddish brown at about 36.5 feet	4.8	38.4
Sand, clayey, tan	2.6	41
C2-67-10ddbb. Alt. 5,081.5 ft.		
Broadway Alluvium:		
Clay	4	4
Sand, fine	2	6
Clay, sandy	4	10
Louviers Alluvium:		
Clay	2	12
Sand	3	15
Gravel	6	21
Clay	3	24
Gravel	2	26
Clay	2	28
Gravel	15	43
Clay	2	45
C2-67-11aaba. Alt. 5,091 ft.		
Eolian sand:		
Clay, sandy	8	8
Louviers Alluvium:		
Clay	23	31
Sand, fine	3	34
Gravel	5	39
Dawson Formation:		
Cement rock	4	43
Clay	2	45
C2-67-11cdcb. Alt. 5,097.0 ft.		
Eolian sand:		
Clay	7	7
Clay, sandy	5	12
Clay, hard	14	26
Louviers Alluvium:		
Gravel	12	38
Dawson Formation (upper part):		
Conglomerate	6	44
Clay	2	46
Shale	2	48
C2-67-11daaa. Alt. 5,110 ft.		
Eolian sand:		
Sand, fine, clayey, loose, brown; 55 percent fines	3.7	3.7
Sand, fine, silty, moderately calcareous, tan; 25 percent fines	9	12.7
Sand, fine, clayey, slightly calcareous, brown; 25 percent fines which decrease with depth	4.4	17.1
Sand, fine, silty; 30 percent fines	2.9	20
Sand, fine, silty, tan; 20 percent fines	2.5	22.5
Louviers Alluvium:		
Sand, gravelly, clayey, light-brown; 65 percent medium to fine sand, 25 percent coarse sands and fine gravels, 10 percent fines	3.9	26.4
Silt, sandy, clayey, slightly calcareous, brown; 30 percent fine sand	4.4	30.8
Sand, medium to fine, light-brown; 10 percent fines; saturated at about 33.5 feet	5.8	36.6
Dawson Formation (upper part):		
Sand, clayey, moderately cemented, gray-tan-white; 20 percent fines; small disc-shaped concretions with a white noncalcareous cementing agent	3	39.6
Sand, fine, moderately iron stained	.4	40
Sand, fine, silty, tan-gray; 20 percent fines;		

	Thickness	Depth
C2-67-11dasa.--Continued		
a few small cobbles 46.0 feet	7.9	47.9
Silt, sandy, clayey, light-gray-tan; 25 percent very fine sand; slightly iron stained	4.1	52
Sand, fine, clayey, silty, light-brown; 30 percent fines; moderately iron stained	2	54
C2-67-11dccc. Alt. 5,115 ft.		
Eolian sand:		
Sand, fine to medium, loose, angular to subangular, slightly silty, tan	10	10
Sand, fine to medium, slightly calcareous, silty, slightly clayey, tan	4	14
Sand, fine to medium, cemented	2	16
Louviers Alluvium:		
Silt, sandy, calcareous, slightly bentonitic, salmon-tan	9	25
Silt, calcareous, sandy, compact, very bentonitic	4	29
Dawson Formation (upper part):		
Shale, variegated	5	34
Silt, sandy, very bentonitic, calcareous, micaceous, at 34 feet		
C2-67-11ddcc. Alt. 5,123 ft.		
Eolian sand:		
Sand, very fine to medium, clayey, poorly sorted, slightly bentonitic	3	3
Louviers Alluvium:		
Silt, sandy, calcareous, slightly bentonitic	3	6
Sand, very fine, silty, very calcareous, bentonitic	4	10
Clay and silt, slightly sandy, tan, micaceous, calcareous, bentonitic	10	20
Clay and silt, sandy, tan, very bentonitic	9	29
C2-67-12abbb. Alt. 5,115 ft.		
Eolian sand:		
Sand, very fine to medium, subangular to angular, loose, tan	15	15
Louviers Alluvium:		
Sand, fine, clayey, very calcareous	10	25
Sand, medium to coarse, fairly well-sorted, very loose, subangular to subrounded	10	35
Sand, coarse to very coarse, well-sorted, subangular, loose	11	46
Sand, fine clayey, very slightly calcareous; plastic when wet; at 46 feet		
C2-67-12bcba. Alt. 5,110 ft.		
Eolian sand:		
Sand	18	18
Clay	5	23
Louviers Alluvium:		
Sand, fine	17	40
Gravel	9	49
Dawson Formation:		
Clay	3	52
Shale	1	53
C2-67-12bdad. Alt. 5,123 ft.		
Eolian sand:		
Clay, sandy	19	19
Sand	4	23
Louviers Alluvium:		
Gravel	12	35
Dawson Formation (upper part):		
Sandstone, soft	3	38
Clay, hard, yellow	2	40
Shale	3	43
C2-67-12cadb. Alt. 5,120 ft.		
Eolian sand:		
Silt, sandy, brown; contains 65 percent silt, 35 percent sand	2.8	2.8
Sand, silty, calcareous, tan; contains 60 percent sand, 40 percent silt	4.4	7.2
Sand, fine, loose, calcareous, tan; contains 90 percent fine sand, 10 percent silt	5.4	12.6
Silt, sandy, calcareous; contains 65 percent silt, 35 percent sand	4.1	16.7
Clay, fine, sandy, calcareous, red-tan; contains 55 percent clay, 35 percent sand, 10 percent silt; mottled with calcium carbonate	2.7	19.4
Sand, fine, tan; contains 90 percent sand, 10 percent silt	.6	20
Sand, fine, loose, mildly calcareous, tan; contains a trace of silt	6.3	26.3
Silt, sandy, highly calcareous, tan; contains 70 percent silt, 30 percent fine sand, and a trace of clay	2	28.3
Sand, fine, loose, wet, tan; contains a trace of silt; saturated at 29.5 feet	11.7	40
Sand, fine, tan-brown; contains 5 to 7 percent silt and clay	5.5	45.5
Sand, as above, becoming coarse; contains 75 percent medium sand, 15 percent fine sand, 10 percent coarse sand, pebbles to diameter of 1.0 inches	.9	46.4
Dawson Formation (upper part):		
Clay, nonplastic, gray-brown; contains iron stains, carbonaceous matter, color changing to gray-green at 48.5 feet	3.6	50
C2-67-13abcb. Alt. 5,130 ft.		
Eolian sand:		
Sand, fine, clayey, silty, brown; 30 percent fines	3.8	3.8
Sand, fine, silty, loose, moderately calcareous, brown; 20 percent fines	3.5	7.3
Sand, clayey, moderately calcareous, brown; 60 percent fine sand, 25 to 30 percent fines, 10 percent medium and coarse sand	2.7	10
Sand, clayey, slightly calcareous, brown; 40 percent fines, fines decreasing with depth	7.7	17.7
Dawson Formation (upper part):		
Sand, fine, silty, loose, slightly calcareous, light-brown; 20 percent fines, slightly iron-stained	2.3	20
Sand, fine, silty, loose, light-brown	2.1	22.1
Sand, fine, light-brown; 5 to 10 percent fines, slightly iron stained; saturated at approximately 25.0 feet	4.8	26.9
Sand, fine, clayey, light-brown; 15 to 20 percent medium and coarse sand, 15 percent fines; slightly calcareous	3.1	30
Sand, fine, clayey, tan-brown; 20 percent fines, 20 percent medium sand; occasional		
C2-67-13abcb.--Continued		
grains of coarse sand; fines decrease with depth	5.5	35.5
Sand, medium to fine, tan; 55 percent medium sand, 40 percent fine sand, 5 percent fines	1.9	37.4
Sand, clayey, gravelly, light-brown; 75 percent medium and fine sand, 15 percent fines, 10 percent fine gravel; slightly iron stained	3.9	41.3
Sand, fine, silty, slightly cemented, light-gray; 25 percent fines; moderately calcareous, highly iron stained in fractures; iron stained at about 43.0 feet; not cemented below 44.0 feet; slight amount of clay, 1 to 4 percent	4.7	46
C2-67-13accc. Alt. 5,140 ft.		
Eolian sand:		
Sand, fine, clayey, brown; 30 percent fines; moderately calcareous at 3.0 feet	10	10
Sand, clayey, brown; 20 percent fines, 20 percent medium and coarse sand; slightly calcareous; moisture increasing about 13.0 feet, clay content decreasing at about 15.5 feet	8.1	18.1
Sand, fine, loose, light-brown; 10 percent fines	1.9	20
Dawson Formation (upper part):		
Sand, as above; 5 to 10 percent fines; wet, slightly iron stained, increase in silt at about 22.5 feet; saturated at about 24.5 feet	7.3	27.3
Sand, fine, clayey, light-brown; 15 percent fines; some gravel; contains many gypsiferous growths	2.7	30
Sand, clayey, gravelly, slightly calcareous, light-brown; 50 percent sand, 30 percent fine gravels, 20 percent fines	3.4	33.4
Silt, sandy, clayey, slightly weathered, medium-gray; moderately iron stained; 15 percent very fine sand, very micaceous	2.3	36.7
Clay, silty, dark-gray; 5 percent fine sand; color changes to tan-gray, slightly iron stained at about 38.5 feet	3.3	40
C2-67-13babb. Alt. 5,125 ft.		
Eolian sand:		
Sand, poorly sorted, fine to coarse, angular to subangular, loose light-brown	5	5
Silt, finely sandy and clayey, very calcareous, yellowish-tan	5	10
Sand, medium to very coarse, angular to subangular, loose, tan	10	20
Dawson(?) Formation (upper part):		
Sand, coarse, subangular to subrounded, and very fine gravel	15	35
Sand, medium, clayey, calcareous	4	39
Sand, medium to coarse, loose; contains silt; at 39 feet		

	Thickness	Depth
C2-67-13bccb. Alt. 5,140 ft.		
Eolian sand:		
Clay, sandy, slightly bentonitic, pale-gray to pink	5	5
Clay, silty, calcareous, yellowish-gray	5	10
Clay, silty, calcareous, yellowish-gray, more compact and firm	1	11
Clay, as above; contains calcareous materials	4	15
Dawson(?) Formation (upper part):		
Clay, very plastic, sticky, mostly silt free, tan to buff	10	25
C2-67-14aaaaa. Alt. 5,125 ft.		
Eolian sand:		
Clay, silty, sandy, calcareous, bentonitic, tan	3	3
Verdos Alluvium:		
Clay, sandy, calcareous, bentonitic, cream-white to grayish-orange	5	8
Sand, fine to medium, silty, calcareous, bentonitic	5	13
Clay, silty, sandy, calcareous, bentonitic, grayish-orange	7	20
Dawson Formation (upper part):		
Shale, weathered, yellow to brown	4	24
Silt, coarse, and very fine sand; calcareous, slightly bentonitic, dark-tan	1	25
Clay, very bentonitic, tan	4	29
C2-67-14babb. Alt. 5,100 ft.		
Eolian sand:		
Sand, fine to very fine, silty	7	7
Sand, medium to coarse, silty, calcareous, coarse grains, subrounded	3	10
Sand, fine to medium, angular to subangular, clayey	2	12
Sand, very fine, angular, finely micaceous; contains some medium gravel	3	15
Sand, very fine, angular; contains some fine gravel, subrounded to rounded	2	17
Dawson Formation (upper part):		
Silt, clayey, sandy, calcareous, cemented, pale-tan	8	25
Sand, coarse to very coarse, subangular to subrounded, coated, calcareous	1	26
Gravel, fine to coarse, poorly sorted, subangular, arkosic, loose	1	27
Gravel, very fine to fine, subangular to subrounded, calcareous	7	34
Silt, sandy	5	39
C2-67-14bddc. Alt. 5,120 ft.		
Piney Creek Alluvium:		
Sand, fine, silty, dark-brown; 80 percent fine sand, 20 percent clay and silt	3.8	3.8
Clay, fine, sandy, wet, light-brown; 70 percent clay, 30 percent fine sand; very calcareous	2.5	6.3
Sand, fine, silty, loose, wet, slightly calcareous, dark- and light-brown; 80 percent fine sand, 15 percent silt	1.9	8.2
Sand, fine, clayey, loose, wet, very calcareous, tan; 45 percent clay, 55 percent fine sand	1.3	9.5
Sand, fine, silty, loose, saturated, very calcareous, tan; 60 percent fine sand, 40 percent silt and clay	5.5	15
C2-67-14bddc.--Continued		
Sand, fine, silty, slightly calcareous, gray; 10 to 15 percent silt	5	20
Dawson Formation (upper part):		
Sand, fine, silty, loose, tan; 65 to 75 percent fine sand, 15 percent silt, 10 to 15 percent medium sand	9.4	29.4
Sand, fine, silty, weakly cemented, tan, iron stained; 75 percent fine sand, 25 percent silt	2.1	31.5
Sand, as above, but 65 percent fine sand, 20 percent silt, 15 percent clay	2.3	33.8
Sand, as above, 75 to 80 percent coarse and fine sand, 15 to 20 percent silt	2.2	36
C2-67-15bacc. Alt. 5,071.5 ft.		
Piney Creek Alluvium:		
Sand, fine, clayey, gray-tan; 40 percent fines; highly calcareous below 0.5 feet	4.5	4.5
Silt, sandy, clayey, tan to medium-gray; 20 percent fine sand, moderately iron stained; slightly iron stained at about 7 feet; moderately calcareous at 9 feet	5.8	10.3
Sand, fine, silty, brown; 25 to 30 percent fines; slightly clayey, slightly calcareous; clay content increasing at about 13 feet; saturated at 14 feet	5.1	15.4
Broadway and Louviers Alluvium, undifferentiated:		
Sand, fine, clayey, brown; 35 percent fines, 10 percent lime nodules; highly calcareous at 17.3 feet, moderately iron stained about 18.0 feet; some gravel	4.7	20.1
Gravel, clayey, sandy, loose, brown-gray; 35 percent sand, 15 to 20 percent fines; moderately iron stained	8.1	28.2
Sand, gravelly, loose, tan; contains a trace of clay, 55 percent fine sand, 25 percent medium sand, 20 percent fine gravel, 10 percent coarse gravel	1.8	30
Sand, gravelly, loose, red-tan; 40 percent medium sand, 30 percent fine gravel, 15 percent coarse sand, 15 percent fine sand, trace of clay-silt	3.7	33.7
Dawson Formation (upper part):		
Clay, fine, sandy, blue-gray; 85 percent clay, 15 percent very fine sand, trace of silt; trace iron oxide, moderately iron stained	6.3	40
C2-67-15bdcc. Alt. 5,084 ft.		
Piney Creek Alluvium:		
Clay	17	17
Broadway Alluvium:		
Gravel	13	30
Dawson Formation:		
Clay	3	33
Shale	10	43
C2-67-15cddc. Alt. 5,100 ft.		
Younger loess:		
Clay, silty, micaceous, bentonitic	8	8
No sample	2	10
Verdos Alluvium:		
Clay, silty to finely sandy, calcareous, bentonitic, pale-orange	6	16
Clay, silty, sandy, bentonitic, noncalcareous, pale-orange	5	21
Clay, silty, sandy, bentonitic, very calcareous, pale-orange	3	24
Gravel, very fine, brown clay, and coarse sand	6	30
Gravel, coarse, rounded to subrounded	2	32
Gravel, medium, and sandy clay	2	34
Dawson Formation (upper part):		
Silt, gravelly, sandy, very bentonitic, calcareous	4.5	38.5
Shale, gray, at 38.5 feet		
C2-67-15dcdd. Alt. 5,120 ft.		
Eolian sand:		
Silt and clay, calcareous, bentonitic	4	4
Dawson Formation (upper part):		
Clay; contains gravel	2	6
Silt and clay, sandy, bentonitic, tan	1.5	7.5
Clay, silty, bentonitic, very calcareous, tan	4.5	12
Clay, bentonitic, yellowish-tan	6	18
Clay, slightly silty, calcareous, bentonitic, yellowish-tan	12	30
Clay, bentonitic, noncalcareous	5	35
No sample	4	39
Silt, very fine; clay, very bentonitic, slightly calcareous, slightly sandy	8	47
Silt, sandy, calcareous, very bentonitic	2	49
C2-67-16cdcc. Alt. 5,097 ft.		
Broadway Alluvium:		
Silt and clay, sandy, calcareous, salmon-tan; contains montmorillonite	5	5
Clay, silty, medium-brown	5	10
Louviers Alluvium:		
Clay, less sandy, silty, calcareous, bentonitic, salmon-tan	5	15
Clay, sandy; contains silt, as above	4	19
Clay, more sandy; contains silt as above and coarse sand, very fine gravel and scattered cobbles	2	21
Silt, sandy, bentonitic	3	24
Dawson Formation (upper part):		
Rock	1	25
C2-67-16dabc. Alt. 5,078 ft.		
Broadway Alluvium:		
Soil	1	1
Clay, yellow	17	18
Louviers Alluvium:		
Sand	16	34
Dawson Formation (upper part):		
Clay, yellow	2	36
Shale, gray	168	204
Sand, fine	12	216
Shale, gray	25	241
Sandstone, blue	17	258
Shale, gray	16	274
Sandstone, gray	4	278
Shale, gray	22	300
Shale, brown	4	304
Shale, grsy	44	348
Dawson Formation (lower part):		
Lime, sandy [Middle conglomerate, 348 to 533 feet.]	4	352
Sand, fine	3	355
Shale, grsy	15	370
Sand, fine	11	381
Shale, gray	14	395
Sand, fine	5	400
Shale, gray	9	409
Sand, fine	8	417
Shale, gray	37	454

	Thick-ness	Depth
C2-67-16dabc.--Continued		
Sand, fine and gray shale	15	489
Shale, gray	31	520
Sand, fine, and gray shale	13	533
Shale, gray	46	599
Lower conglomerate:		
Sand, fine, and gray shale	31	630
Shale, gray, and sand	82	712
Lime, sandy	1	713
C2-67-16dccc. Alt. 5,092 ft.		
Broadway Alluvium:		
Topsoil	1	1
Clay, silty, light-gray	3	4
Clay, silty, reddish	1	5
Clay, plastic, tan: contains isolated grains of sand and gravel	15	20
Louviers Alluvium:		
Clay; contains large pebbles	2	22
Gravel, moist	3	25
Clay interbedded with gravel	10	35
Dawson Formation (upper part):		
Shale, weathered (hard drilling)	3	38
Shale, hard, gray	8	46
Shale, soft, gray	2	48
Shale, silty, hard, gray	35	83
C2-67-20abab. Alt. 5,073 ft.		
Post-Piney Creek alluvium and Louviers Alluvium, undifferentiated:		
Topsoil	2	2
Gravel	10	12
Dawson Formation (upper part):		
Clay, blue	8	20
Soapstone	115	135
Shale, brown	5	140
Soapstone	22	162
Sand and shale	4	166
Soapstone	14	180
Sand and shale, gray	5	185
Sandstone	17	202
Shale, streaky, and sandstone	28	230
Sand and shale	7	237
Shale, hard	3	240
Soapstone	8	248
Sandstone	12	260
Soapstone	10	270
Sandstone	40	310
Sand and shale	5	315
Soapstone	7	322
Sand and shale	35	357
Shale	3	360
Dawson Formation (lower part): Middle conglomerate:		
Sandstone	10	370
Soapstone	14	384
C2-67-21aada. Alt. 5,103 ft.		
Younger loess:		
Topsoil and clay	19	19
Louviers Alluvium:		
Clay, sandy	2	21
Clay, gray	5	26
Sand and gravel	21	47
Dawson Formation (upper part):		
Clay, brown	2	49
Clay, blue, and shale	77	126
Shale, sandy	12	138
Clay, blue, and shale	13	151
Shale, sandy	11	162
Clay, blue, and shale	28	190
Sandstone	3	193
Sandstone and clay	3	196
Clay, gray	52	248
Clay, sandy	14	262
Clay, blue-gray, and shale	20	282
Shale, dark-blue: contains some coal	4	286
Shale, hard, gray	12	298
Clay, blue, and shale	34	332
Sandstone, very fine-grained; contains some ash	2	334
Clay, blue-gray	13	347
Shale, fine, sandy; contains some ash	5	352
Sandrock, hard	1	353
Shale, blue-gray, and clay	5	358
Sandstone, hard	4	362
Clay, gray, and shale	20	382

	Thick-ness	Depth
C2-67-21aada.--Continued		
Dawson Formation (lower part):		
Sandrock, hard (Middle conglomerate, 382 to 415 feet.)	1	383
Clay, blue-gray	10	393
Sandrock, hard	1	394
Sandstone	7	401
Sandrock, hard	1	402
Sandstone, fine to medium	13	415
Clay, gray; shaly	44	459
Lower conglomerate:		
Sandstone, medium	14	473
Sand and streaks of clay	7	480
Clay, gray	5	485
Sandstone and streaks of clay	5	490
Shale, gray, and clay	45	535
C2-67-21bddc. Alt. 5,107.4 ft.		
Piney Creek Alluvium:		
Clay	30	30
Broadway and Louviers Alluvium, undifferentiated:		
Gravel	17	47
Clay	9	56
Sand, fine and gravel	16	72
Clay	3	75
Gravel, coarse	22	97
C2-67-22acbd2. Alt. 5,141 ft.		
Eolian sand and Verdos(?) Alluvium, undifferentiated:		
Overburden	75	75
Dawson Formation (upper part):		
Clay, blue, and shale	155	230
Rock	2	232
Clay and shale	63	295
Clay, sandy	13	308
Clay	17	325
Dawson Formation (lower part):		
Clay, sandy, and coarse sand [Middle conglomerate, 325 to 487 feet.]	31	356
Clay	49	405
Shale, sandy, and sandrock	7	412
Clay	38	450
Clay, sandy	10	460
Clay	18	478
Sand, fine	9	487
Clay	48	535
Lower conglomerate:		
Sand and sandstone	15	550
Clay	35	585
Sandstone	5	590
Clay	4	594
Sand and sandstone	20	614
Clay	46	660
C2-67-22acdc. Alt. 5,148.2 ft.		
Eolian sand:		
Topsoil	.7	.7
Sand, fine, silty, calcareous, medium-brown; 15 to 25 percent silt	5.5	6.2
Sand, fine, loose, calcareous, medium-brown; silt, 5 percent	7.4	13.6
Silt, fine, sandy, clayey, compact, calcareous, medium-brown; 50 percent silt, 30 percent sand, and 15 to 20 percent clay; contains calcium carbonate streaks	3.9	17.5
Louviers Alluvium:		
Silt, calcareous, compact, buff	1.8	19.3
Silt, fine, sandy, clayey, compact, calcareous, medium-brown; 50 percent silt, 25 percent clay, and 25 percent sand	7.4	26.7
Sand, coarse, gravelly, loose, light-brown; contains subrounded pebbles	8.9	35.6
Gravel, fine, sandy, loose, light-brown; contains subangular cobbles	2.4	38
Gravel, as above; contains streaks of sand	2	40
Dawson Formation (upper part):		
Shale, weathered, friable, dark-gray; iron oxide stains	1.5	41.5

	Thick-ness	Depth
C2-67-22acdc.--Continued		
Shale, as above, but brownish-gray with greenish tinge	4	47.5
Shale, as above, medium-gray	2.5	50
Shale, as above, greenish-gray; contains iron and manganese stains	4	54
Shale, as above, medium-gray; contains carbonaceous streaks and flecks	3	57
Shale, light-gray	2	59
Shale, greenish-gray	2.6	61.6
Shale, greenish-gray; iron stains	3.5	65.1
Silt, fine, sandy, friable, rusty-dark-brown; 70 percent silt, 30 percent fine sand; contains minor amount of clay	2.1	67.2
Claystone, grayish-blue; 20 to 30 percent silt; some silt and very fine sand at 70 feet; micaceous at 71 feet	5.9	73.1
Sand, silty, very fine, micaceous	1.1	74.2
Shale, dark-gray with bluish tinge	4.3	78.5
Shale, as above, medium-gray	11.5	90
Shale, as above, medium-greenish-gray; contains some very fine sand	4.7	94.7
Sandstone, fine-grained, friable, highly micaceous, medium-gray with bluish tinge	2.8	97.5
Shale, friable, dark- to medium-gray; greenish tinge at about 101 feet; some fine sand at 102 feet	6.8	104.3
Sandstone, fine-grained, friable, micaceous, grayish-green; contains some silt and clay with hard layers	2.7	107
Sandstone, friable, hard, grayish-green	5.5	112.5
Shale, medium- to dark-gray; contains carbonaceous flecks; greenish tinge at about 116 feet	6.7	119.2
Sandstone, fine-grained	.4	119.6
Shale	.8	120.4
Claystone, subfirm, micaceous, grayish-green	9.6	130
Sandstone, fine-grained, friable, grayish-green; light-gray at about 145 feet	16.5	146.5
Shale, subfirm, grayish-green; light-gray at about 156 feet	13	159.5
Sand, fine	1.2	160.7
Shale, subfirm, dark-gray	9.9	170.6
Sandstone	.8	171.4
Shale	6.6	178
C2-67-22bbba. Alt. 5,098 ft.		
Younger loess:		
Silt, finely sandy, tan	4	4
Silt, very finely sandy, calcareous	2	6
Clay, silty, micaceous, brown	4	10
Sand, fine to medium, subangular, loose, micaceous, tan	3	13
Silt, very calcareous, sandy, compact, tan to salmon-tan	3	16
Verdos(?) Alluvium:		
Silt, very sandy, bentonitic, calcareous, tan to salmon-tan	6	22
Gravel, fine to medium, subangular, arkosic, and silt	7	29
Gravel, very fine to fine, subangular, clean, loose	.5	29.5
Gravel, coarse	9.5	29
Silt, fine to very fine, calcareous, clayey, compact, very bentonitic	5	44

	Thickness	Depth
C2-67-22bdbb. Alt. 5,108.8 ft.		
Eolian sand:		
Sand, fine, silty, moderately calcareous, light-brown; 30 percent fines; slightly clayey upper part; moisture content increasing at about 4 feet. . . .	8.7	8.7
Silt, clayey, sandy, gray-brown; 20 percent fine sand. . .	3.1	11.8
Clay, sandy, moderately calcareous, light-brown; slightly iron stained; 25 percent fine sand	4.6	16.4
Silt, clayey, tan-gray; 10 percent fine sand; slightly calcareous with exception of highly calcareous nodules	3.1	19.5
Sand, fine, silty, tan; 20 percent fines; slightly iron stained, moderately calcareous.	1.7	21.2
Silt, sandy, clayey, tan-gray; moderately iron stained; moderately calcareous; occasional large hard lime nodules; color changes to light-gray at about 26 feet.	6.2	27.4
Sand, clayey, brown; 35 percent fines; occasional pebbles, slightly calcareous, slight iron stains, occasional small lime nodules. . . .	2.4	29.8
Sand, brown; 35 to 40 percent fines, 2 to 4 percent carbonaceous material.	3.9	33.7
Verdos(?) Alluvium:		
Sand, gravelly, saturated, brown-gray; 30 percent gravel (maximum diameter 3 inches), 25 percent medium sand, 20 percent coarse sand, 20 percent fine sand, 5 percent fines, occasional cobbles; rounded to well-rounded, grains have sphericity . .	6	39.7
Sand, clayey, iron stained, partly cemented with iron, brown-gray.	2.6	42.3
Sand, silty, fine, slightly iron stained, light-gray.	1.9	44.2
Sand, clayey, dark-gray	.8	45
C2-67-22dbab. Alt. 5,146.3 ft.		
Eolian sand:		
Topsoil	1.2	1.2
Silt, sandy, compact, medium-brown. . . .	1	2.2
Sand, silty, fine, loose, calcareous, light-brown	5.4	7.6
Silt, sandy, loose, medium-brown; contains calcium carbonate streaks	2.4	10
Verdoes Alluvium:		
Silt, as above, with pebbles	6.1	16.1
Silt, compact, light-gray; contains small amount of montmorillonite at about 19 feet	4.1	20.2
Sand, silty, fine, compact, medium-brown, moderately calcareous; contains a few small pebbles at about 22 feet.	1.5	23.7
Sand, fine to medium, clayey, calcareous, brown	.1	24
Sand, coarse, loose, light-brown; pebbles as large as 1 inch in diameter	4.8	28.8
Gravel, sandy, loose, light-brown to gray; cobbles up to 2 inches in diameter.	2.7	31.5
Silt, sandy, micaceous, medium-brown; iron stains.	.6	32.1
Gravel, sandy, loose, light-gray; contains small cobbles, 50 percent fines . . .	5.6	37.7
Dawson Formation (upper part):		
Claystone, weathered, bentonitic, medium-gray; contains iron oxide stains. . . .	2.3	40
C2-67-22d1ba. Alt. 5,152.7 ft.		
Eolian sand:		
Topsoil	1	1
Silt, sandy, compact, calcareous, light-brown	1.8	2.8
Sand, silty, fine, loose, calcareous, medium-brown. . . .	3.5	6.3
Verdos Alluvium:		
Silt, light-gray and grayish-yellow. . .	2	8.3
Sand, fine, calcareous, medium-brown; contains calcium carbonate streaks and montmorillonite clay. .	4.5	12.8
Silt, calcareous, compact, buff to light-brown; contains montmorillonite clay. .	5.6	18.4
Sand, medium, compact, moderately calcareous, medium-brown, and silt	3.2	21.6
Sand, silty, fine, calcareous, medium-brown	2.9	24.5
Silt, clayey, compact, calcareous, light-gray.	2.9	27.4
Sand, coarse, gravelly, loose, medium-gray; contains coarse gravel.	5.2	32.6
Gravel, sandy, loose, light-gray; contains small pebbles; saturated at 39 feet .	7.4	40
Gravel, sandy, loose, medium-brown; contains 5 percent clay and plastic fines . . .	6.1	46.1
Gravel, clayey. . . .	1.5	47.6
Dawson Formation (upper part):		
Claystone, weathered, subfirm, medium-gray	1.4	49
C2-67-23abdb. Alt. 5,150.1 ft.		
Eolian sand:		
Topsoil	.9	.9
Verdos Alluvium:		
Silt, clayey, light-brown; medium-brown from 3 to 5 feet; wet at about 7 feet; contains volcanic ash	6.9	7.8
Sand, coarse, loose, saturated, light-brown	4.1	11.9
Dawson Formation (upper part):		
Claystone, weathered, dark-gray	4.4	16.3
Silt, sandy, loose, yellowish-brown . .	1.8	18.1
Shale, weathered, subfirm, slightly calcareous, medium-gray; iron stained. . . .	1.9	20
C2-67-24aada. Alt. 5,193 ft.		
Eolian sand:		
Topsoil	.8	.8
Sand, silty, fine, loose, calcareous, medium-brown	7.5	8.3
Silt, loose, damp, calcareous, medium-brown	2.9	11.2
Verdos Alluvium:		
Silt, calcareous, compact, buff; contains montmorillonite clay	1.3	12.5
Silt, sandy, clayey, compact, medium-brown; contains calcareous streaks	4.2	16.7
Sand, silty, fine, compact, calcareous, medium-brown. . . .	2.6	19.3
C2-67-24aada.--Continued		
Sand, medium to coarse, loose, calcareous, dry, medium-brown; contains very fine gravel	1.9	21.2
Silt, clayey, compact, medium-brown; contains calcareous streaks, sandy at about 23 feet	5.2	26.4
Sand, silty, fine, medium-gray.	1.7	28.1
Clay, sandy, calcareous, greenish-gray; contains gravel	.9	29
Dawson Formation (upper part):		
Shale, weathered, slightly calcareous, medium-gray; contains iron oxide streaks.	5	34
Siltstone, weathered, laminated, brownish-gray	1.4	35.4
Shale, weathered, maroonish-gray; contains leaf impressions and carbonaceous streaks and flecks .	2.6	38
C2-67-24dbcd. Alt. 5,169.3 ft.		
Eolian sand:		
Silt, fine, sandy, compact, dark-brown; contains 15 to 20 percent sand	2.7	2.7
Sand, fine, silty, compact, calcareous, light- to medium-brown; 10 to 20 percent silt	7.3	10
Sand, as above, but 15 to 25 percent silt .	3.2	13.2
Sand, fine to medium, loose, wet, light-brown.	4.1	17.3
Sand, fine, silty; saturated at 18.5 feet.	2.9	20.2
Sand, fine to medium, loose, light-brown .	3.2	23.4
Dawson Formation (upper part):		
Shale, weathered, medium-gray; contains iron stains; carbonaceous flecks and a blue tinge at about 29 feet	6.1	29.5
C2-67-25bdad. Alt. 5,224.0 ft.		
Eolian sand:		
Topsoil.	.4	.4
Silt, sandy, light-medium-brown; contains some gravel.	3.7	4.1
Silt, compact, calcareous, buff; contains very coarse gravel. . . .	.8	4.9
Verdos Alluvium:		
Gravel, clayey, compact, calcareous, grayish-brown; contains small cobbles.	9.9	14.8
Silt, sandy, clayey, brownish-gray; contains medium gravel. . . .	2.4	17.2
Sand, silty, clayey, brownish-gray, calcareous; contains very fine gravel	3.2	20.4
Gravel, clayey, calcareous, brownish-gray. . . .	2.2	22.6
Sand, silty, clayey, brownish-gray; contains some medium gravel .	3.3	25.9
Sand, fine, loose, brownish-gray, yellowish-green, and light-brown.	8.8	34.7
Dawson Formation (upper part):		
Shale, weathered, medium-gray; contains iron oxide stains	4.3	39

	Thickness	Depth
C2-67-25bdad. Alt. 5,224.0 ft.		
Eolian sand:		
Topsoil	.4	.4
Silt, sandy, light-medium-brown; contains some gravel	3.7	4.1
Silt, compact, calcareous, buff; contains very coarse gravel	.8	4.9
Verdos Alluvium:		
Gravel, clayey, compact, calcareous, grayish-brown; contains small cobbles	9.9	14.8
Silt, sandy, clayey, calcareous, brownish-gray; contains medium gravel.	2.4	17.2
Sand, silty, clayey, brownish-gray, calcareous; contains very fine gravel	3.2	20.4
Gravel, clayey, calcareous, brownish-gray	2.2	22.6
Sand, silty, clayey, brownish-gray; contains some medium gravel.	3.3	25.9
Sand, fine, loose, brownish-gray, yellowish-green, and light-brown	8.8	34.7
Dawson Formation (upper part):		
Shale, weathered, medium-gray; contains iron oxide stains.	4.3	39
C2-67-25dccs. Alt. 5,229.6 ft.		
Eolian sand and Dawson Formation (upper part), undifferentiated:		
Topsoil	.6	.6
Silt, sandy, medium-brown; calcareous at about 2 feet; more sandy with minor amount of clay at about 8 feet	18.2	18.8
Dawson Formation (upper part):		
Silt, sandy, clayey, compact, calcareous, medium-brown; contains some fine gravel.	5.8	24.6
Clay, silty, semiplastic, calcareous, medium-brown	10.6	35.2
Silt, sandy, loose, micaceous, calcareous, light-gray.	.9	36.1
Sand, fine, loose, light-gray.	1.9	38
Silt, sandy, semiplastic, calcareous, grayish-brown; contains some clay; streaks of saturated sand at about 45 feet	12	50
Sand, fine to medium, loose, brownish-gray	1.2	51.2
Shale, weathered, rusty-brown; contains carbonaceous matter and plant impressions; slightly calcareous	2	53.2
Coal (lignite), weathered; contains small pieces of amber, very hard from 54.0 to 56.0 feet.	2.8	56
C2-67-26abac. Alt. 5,187.3 ft.		
Verdos Alluvium and Dawson(?) Formation, undifferentiated:		
Conglomerate, quartz, angular, unconsolidated	90	90
Dawson Formation (upper part):		
Shale, dark-gray.	60	150
Sand, medium, rounded, unconsolidated, white, [Upper conglomerate, 150 to 190 feet.]	6	156
Gravel, very coarse, clear to buff; contains light-gray shale from 160 to 170 feet	14	170
Shale, gray to light-gray.	10	180
Shale, gray to light-gray; contains gravel	10	190
Shale, gray	60	250
Shale, silty.	20	270
Siltstone, compact, gray to gray-green, and gray silty shale	10	280
C2-67-26abac.--Continued		
Shale, silty, gray; contains a trace of siltstone	10	290
Siltstone to very fine-grained sandstone, gray to black, salt and pepper, shaly; contains carbonaceous inclusions	10	300
Shale, silty, light-gray.	10	310
Gravel, medium to very coarse, clear to buff	10	320
Shale, gray	10	330
Shale, gray, in part silty	40	370
Dawson Formation (lower part):		
Gravel to sand, clear to white to brown [Middle conglomerate, 370 to 480 feet.]	10	380
Sand, medium to coarse, clear to buff	10	390
Shale, gray	20	410
Sand, coarse to very coarse, clear to buff	20	430
Sand, coarse to very coarse, clear to buff, and gray shale.	10	440
Shale, silty gray.	10	450
Sand, coarse, grading to gravel, clear to buff.	20	470
Sandstone, medium-grained, quartz, shaly, soft, gray to black; contains carbonaceous inclusions.	10	480
Shale, gray to gray-green	40	520
Shale, gray to gray-green, siltstone, and very fine-grained gray to white sandstone; contains some mica and trace of glauconite.	40	560
Shale, gray	20	580
Shale, gray, and gray medium hard siltstone	10	590
Shale, gray	15	605
Siltstone, gray, hard, shaly, and fine-grained sandstone [Lower conglomerate, 605 to 700 feet.].	15	620
Shale, silty, gray.	20	640
Siltstone, gray, medium hard, to very fine-grained sandstone	10	650
Siltstone to medium-grained sandstone	10	660
Shale, gray	20	680
Sand, coarse, clear to buff.	20	700
Laramie Formation:		
Shale, gray	10	710
Sandstone, fine- to medium-grained, salt, soft, white to gray; contains carbonaceous inclusions.	20	730
Shale, silty, gray.	10	740
Shale, silty, gray, and gray shaly siltstone	10	750
Shale, silty, gray.	25	775
Sandstone, fine- to medium-grained, shaly, gray.	11	786
Shaly, silty gray; contains carbonaceous inclusions.	14	800
Shale, silty, gray; contains carbonaceous inclusions and some siltstone grading to shaly gray fine-grained sandstone	40	840
Shale, silty, gray, siltstone and shaly gray fine-grained sandstone; contains a trace of coal	40	880
Shale, silty, gray.	10	890
Shale, silty, gray and gray-green.	70	960
Shale, silty, gray; contains a trace of coal.	10	970
Siltstone, glauconitic, hard, grading to quartzitic, gray to green.	10	980
Shale, silty, gray to gray-green	10	990
Shale, dark-gray	50	1,040
Siltstone, shaly, light-gray; contains some glauconite	40	1,080
Shale, dark-gray	10	1,090
Siltstone, hard, gray.	10	1,100
Shale, gray to dark-gray, in part silt,	20	1,120
Siltstone, grading to very fine-grained sandstone, gray; very glauconitic.	10	1,130
Shale and siltstone.	15	1,145
Shale, gray to dark-gray	5	1,150
Siltstone, medium hard, white to gray.	10	1,160
Sandstone, silty	10	1,170
Siltstone, medium hard, white to gray.	10	1,180
Shale, dark-gray	40	1,220
Coal	30	1,250
Sandstone, fine- to medium-grained, loosely consolidated, clear to white; contains subangular grains [B sandstone, 1,250 to 1,325 feet.]	40	1,290
Shale, silty, gray to dark-gray.	10	1,300
Sandstone, fine- to medium-grained	23	1,323
Shale, silty gray.	4	1,327
Sandstone, fine- to medium-grained, shaly, loosely consolidated, clear to white; contains traces of glauconite, pyrite, and carbonaceous inclusions; sand grains are subangular [A sandstone, 1,327 to 1,380 feet.]	53	1,380
Shale, dark-gray, and silty sandstone.	10	1,390
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone, very fine- to fine-grained, shaly, loosely consolidated, gray to white; contains trace of glauconite; sand grains are subangular.	20	1,410
Sandstone, fine- to medium-grained, shaly, loosely consolidated, gray to white; contains trace of glauconite; sand grains are subangular	25	1,435
Transition zone:		
Shale, silty, gray, dark-gray, and gray-brown	65	1,500
Shale, gray and gray-green, in part silty	40	1,540
Shale, gray to dark-gray	30	1,570
Shale, gray to dark-gray, and white to gray siltstone	20	1,590
Shale, gray to dark-gray, in part silty.	50	1,640
Siltstone, white to gray	20	1,660
Siltstone, white to gray, and gray to dark-gray shale.	50	1,710
Siltstone, shaly, gray	10	1,720
Shale, gray to dark-gray, in part silty.	30	1,750
Shale, gray to dark-gray, siltstone grading to fine-grained white to gray salt and pepper medium hard sandstone; contains some glauconite.	70	1,820
Pierre Shale:		
Shale, gray to dark-gray, in part silty.	210	2,030
No record.	20	2,050
Siltstone, gray, hard, and silty light-gray shale.	50	2,100

	Thickness	Depth
C2-67-26abac.--Continued		
Siltstone, shaly, medium hard, gray; contains trace of pyrite from 2,130 to 2,140 feet	60	2,160
Shale, silty, gray, and gray shaly medium hard siltstone	40	2,200
Siltstone, shaly, hard, gray	230	2,430
Shale, very silty, gray	10	2,440
Siltstone, shaly, hard, gray	30	2,470
Shale, very silty, gray	10	2,480
Shale, very silty, gray, and gray shaly hard siltstone	50	2,530
Siltstone, white to gray, soft to friable, grading to fine-grained sandstone; contains gray silty shale between 2,540 and 2,550 feet	20	2,550
Shale, silty, gray	10	2,560
Sandstone, fine- to very fine-grained, white to gray, soft	10	2,570
Shale, silty, gray; contains trace of gypsum between 2,600 and 2,610 feet	40	2,610
Shale, silty, gray, and clear to buff, coarse to very coarse sand	20	2,630
Shale, silty, gray, and gray medium hard siltstone	10	2,640
Siltstone, medium hard, gray	10	2,650
Siltstone, hard, quartzitic, gray to gray-green, shaly from 2,660 to 2,670 feet	20	2,670
Siltstone, white, grading to very fine-grained soft glauconitic sandstone	30	2,700
Shale, silty, gray	10	2,710
Siltstone, soft, gray	20	2,730
Sandstone, fine-grained, soft, gray to white	20	2,750
Siltstone, shaly, hard, brown	10	2,760
Shale, silty, gray	10	2,770
Siltstone, gray to white, grading to fine-grained medium hard sandstone	10	2,780
Shale, silty, gray	120	2,900
Siltstone, hard, white to gray	10	2,910
Shale, silty, gray	20	2,930
Siltstone, medium hard, gray	10	2,940
Shale, silty, gray	70	3,010
Siltstone, hard, white to gray	10	3,020
Shale, silty, gray	10	3,030
Siltstone, shaly, medium soft, gray; contains trace of gypsum between 3,050 and 3,060 feet	30	3,060
Shale, silty, gray	10	3,070
Siltstone, hard, gray	60	3,130
Shale, silty, gray	30	3,160
Siltstone, medium hard, gray to white	20	3,180
Shale, gray, in part silty	340	3,520
Niobrara Formation:	-	7,710
Benton Shale:	-	8,076
Dakota Group:	-	8,485
South Platte Formation:	-	8,485
Lytle Formation:	-	8,633
Morrison Formation:	-	8,786
Lykins Formation:	-	8,972
Lyons Sandstone:	-	9,582
Fountain Formation:	-	9,772
Ordovician(?):	-	11,895
Precambrian:	-	11,974
Total depth of well (Formation tops only given in this log, beginning with Niobrara Formation.)	-	12,045

	Thickness	Depth
C2-67-26adda. Alt. 5,220.0 ft.		
Eolian sand:		
Topsoil	.6	.6
Silt, sandy, compact, dark-brown	2.1	2.7
Sand, fine, silty, calcareous, medium-brown	3.1	5.8
Verdos Alluvium:		
Silt, clayey, loose semiplastic, calcareous, medium-brown; contains calcium carbonate streaks and sand.	9.2	15
Silt, as above; contains more sand	8.4	23.4
Silt, clayey, semiplastic, calcareous, medium-brown; contains very coarse gravel	6.6	30
Sand, coarse, loose, calcareous, medium-brown; contains small cobbles	2.1	32.1
Sand, fine to medium, loose, calcareous, medium-brown; contains very coarse gravel.	8.5	40.6
Gravel, coarse, loose, brownish-gray, sand, and small cobbles	1.3	41.9
Sand, fine, loose, saturated, greenish-gray	4.3	46.2
No sample	5.8	52
Dawson Formation (upper part):		
Sand, fine, loose, greenish-gray; contains layers of clay and silt	2	54
Siltstone, sandy, compact, laminated, light-brown	2	56
C2-67-27baab. Alt. 5,134.0 ft.		
Eolian sand:		
Topsoil	.8	.8
Sand, silty, fine	3.5	4.3
Silt, clayey, sandy, fine	23.3	27.6
Clay, silty	10.2	37.8
Louviers Alluvium:		
Sand, silty, fine	3.9	41.7
Sand, fine to medium.	2.8	44.5
Sand, coarse.	6	50.5
Clay, silty	6.7	57.2
Gravel, coarse, sandy	6	63.2
Dawson Formation:		
Shale	1.8	65
C2-67-28aabd. Alt. 5,120 ft.		
Eolian sand:		
Topsoil	5	5
Sand.	8	13
Louviers Alluvium:		
Clay.	14	27
Sand and gravel	23	50
Clay.	21	71
Sand, gravel, and rock	6	77
Dawson Formation:		
Shale	5	82
C2-67-29ccdd. Alt. 5,123.5 ft.		
Piney Creek Alluvium:		
Soil	2	2
Clay, sticky, yellow to gray	23	25
Dawson Formation (upper part):		
Shale, blue and gray.	13	38
Sandstone, fine, cemented.	22	60
Shale, sticky, blue and gray.	33	93
Sandstone, fine, gray	3	96
Shale, gray	4	100
Sandstone, fine, gray	5	105
Sand, lime cemented	5	110
Sandstone, fine, well-cemented, gray.	15	125
Shale, glue-gray.	23	148
Sand, fine; contains coal (lignite).	7	155
Shale, gray	67	222
Coal (lignite).	10	232
Shale, gray; becomes sandy	36	268
Sand, fine, soft, clean	12	280
Shale, sandy.	22	302
Sand, fine, soft, clean	16	318
Shale, gray	28	346
Sandstone, hard, cemented.	16	362

	Thickness	Depth
C2-67-29ccdd.--Continued		
Shale, sandy, gray	22	384
Sandstone, calcareous, cemented, blue-gray	16	400
Shale, gray, interbedded with sand	15	415
Sandstone, fine, well-cemented, gray	6	421
Shale, gray.	4	425
Dawson Formation (lower part):		
Sandstone, gray; contains streaks of shale (Middle conglomerate, 425 to 570 feet.)	13	438
Sand, fine	5	443
Shale, sandy	11	454
Sand, fine, cemented	10	464
No sample.	8	472
Sand, fine, soft, gray	9	481
Shale.	6	487
Sand, fine, soft, clean, well-rounded, gray	13	500
Shale and interbedded thin layers of shaly sand	37	537
Sand, fine, soft, clean.	15	552
Shale, sandy	4	556
Sand, fine, soft, clean.	14	570
Shale, gray and brown	42	612
Sand, fine, shaly.	18	630
Shale, gray and brown	20	650
Lower conglomerate:		
Sand, fine, soft, clean.	20	670
Shale, gray.	15	685
Sandstone, gray; contains thin shale layers throughout	23	708
Shale: very sandy in thin layers.	27	735
Sand, fine	10	745
Shale, sandy	5	750
Sand, fine, becomes shaly.	25	775
Shale, gray.	7	782
Sand, shaly, and shale.	8	790
C2-67-30abaa. Alt. 5,071 ft.		
Post-Piney Creek alluvium and Louviers Alluvium, undifferentiated:		
Overburden	30	30
Dawson Formation (upper part):		
Clay, blue	132	162
Sandstone.	3	165
Clay, blue	75	240
Shale.	12	252
Clay, blue	33	285
Shale.	10	295
Clay, blue	51	346
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone and sand	14	360
Clay, blue	35	395
Sand and sandstone	13	408
Clay, blue	12	420
C2-67-31dccd. Alt. 5,155 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Sand and gravel.	47	47
Dawson Formation (upper part):		
Clay, yellow	1	48
Shale, gray.	11	59
Sandstone, gray.	5	64
Shale, gray.	206	270
Sand, fine	8	278
Shale, gray.	65	343
Sandstone, gray.	17	360
Shale, gray.	31	391
Sand	6	397
Shale, gray.	52	449
Lime, sandy.	5	454
Shale, sandy	7	461
Dawson Formation (lower part):		
Sand, medium fine, and gray shale (Middle conglomerate, 461 to 535 feet.)	54	515
Shale, gray.	11	526
Sand	9	535
Shale, gray.	72	607
Lower conglomerate:		
Sand, fine	12	619
Shale, gray.	46	665
Sand, fine	13	678
Shale, gray.	30	708
Sand, fine	14	722
Sand and shale	12	734
Shale, gray.	17	751

	Thickness	Depth
C2-67-12aadd. Alt. 5,150.0 ft.		
Eolian sand:		
Topsoil and sand.	10	10
Louviers Alluvium:		
Sand, coarse.	10	20
Gravel, coarse, and clay.	10	30
Gravel, coarse.	20	50
Clay, sandy	10	60
Gravel, coarse.	40	100
Dawson Formation (upper part):		
Shale	30	130
Shale, hard	40	170
Shale	10	180
Shale, hard	10	190
Shale	90	280
Sand [Upper conglomerate, 280 to 420 feet.]	140	420
Shale	120	540
Dawson Formation (lower part):		
Sand [Middle conglomerate, 540 to 660 feet.]	120	660
Shale	80	740
Lower conglomerate:		
Sand.	20	760
Shale	22	782
C2-67-13addc. Alt. 5,170.3 ft.		
Eolian sand:		
Topsoil	.9	.9
Sand, silty, fine	1.8	2.7
Sand, fine.	4.5	7.2
Silt, sandy, clayey	5.6	12.8
Sand, fine.	3.9	16.7
Louviers Alluvium:		
Sand, medium.	15	31.7
Silt, sandy, clayey	3.1	34.8
Sand, fine.	11.4	46.2
Sand, silty, fine	2.9	49.1
Sand, coarse, gravelly	17.8	66.9
Gravel, coarse, sandy	4.6	71.5
Sand, coarse, gravelly	5.8	77.3
Sand, fine, clayey, silty	3.9	81.2
Dawson Formation:		
Shale, weathered.	.8	82
C2-67-35adac. Alt. 5,236.4 ft.		
Eolian sand:		
Topsoil	.9	.9
Silt, sandy	1.4	2.3
Verdos(?) Alluvium:		
Sand, fine, silty	19.3	21.6
Silt, clayey.	3.1	24.7
Sand, fine, silty	4.5	29.2
Silt, clayey.	10.1	39.3
Dawson Formation (upper part):		
Siltstone, weathered.	2.7	42
C2-67-15bbdd. Alt. 5,210.0 ft.		
Eolian sand:		
Topsoil	.9	.9
Silt, sandy	1.5	2.4
Sand, fine, silty	2.1	4.5
Silt, sandy	4.8	9.3
Verdos Alluvium:		
Silt, calcareous; contains montmorillonite	2	11.3
Sand, fine, silty	1.4	12.7
Silt, clayey.	5.4	18.1
Silt, sandy, clayey	8.4	26.5
Gravel, sandy	4.9	31.4
Dawson Formation (upper part):		
Sand, fine, partially cemented; contains uniformly disseminated black grains.	9.8	41.2
Graywacke, weathered.	.9	42.1
Sand, fine.	1.1	43.2
No sample	1.8	45
C2-67-36bbda. Alt. 5,238.9 ft.		
Eolian sand:		
Topsoil	.7	.7
Silt, sand.	1.9	2.6
Silt, clayey.	3.7	6.3
Sand, fine, silty	3.1	9.4
Silt, clayey, sandy	3.3	12.7
Sand, fine, silty	2.7	15.4
Silt, clayey.	1.1	16.5
Silt, sandy, soft, calcareous.	.7	17.2
Silt, clayey.	1.1	18.3
Sand, fine, silty, loose; wet at 20 feet	2.5	20.8
Silt, sandy	2.1	22.9
Dawson Formation (upper part):		
Shale, weathered.	5.2	28.1
Silt, clayey, and laminated silty clay	1.9	30

	Thickness	Depth
C2-68-4caad. Alt. 5,360 ft.		
Overburden.	60	60
Dawson Formation (lower part):		
Clay, blue.	4	64
Middle conglomerate:		
Sand and sandstone.	6	70
Clay, blue, and shale	190	260
Lower conglomerate:		
Sand and sandstone	22	282
Clay.	6	288
Sand and sandstone	19	307
Clay and shale.	23	330
Sand and sandstone.	14	344
Clay and shale.	43	387
Shale and hard rock	3	390
Sand, coarse.	5	395
Laramie Formation:		
Shale	4	399
Coal.	1	400
Shale	20	420
Sandshale and two streaks of sand	13	433
Coal.	1	434
Shale	66	500
Sandshale	6	506
Clay and shale.	94	600
C2-68-10bbaa. Alt. 5,450 ft.		
Dawson Formation (upper part):		
Clay.	5	5
Sandstone	17	22
Soapstone	15	37
Sandstone	33	70
Soapstone	15	85
Shale, gray	55	140
Shale, brown.	3	143
Shale, gray	82	225
Dawson Formation (lower part):		
Sandstone [Middle conglomerate, 225 to 445 feet.]	15	240
Shale, gray	59	299
Sandstone	26	325
Shale, gray	77	402
Iron rock	2	404
Shale, gray	11	415
Sandstone	10	425
Shale, blue	15	440
Sandstone	5	445
Shale, brown.	35	480
Sandstone	15	495
Shale, gray	20	515
Lower conglomerate:		
Sand (water)	20	535
Sand and shale.	30	565
Shale, gray	25	590
Sandstone (water)	42	632
Shale, gray	33	665
Sandstone	5	670
Sand and shale.	30	700
C2-68-15abab. Alt. 5,383 ft.		
Overburden.	60	60
Dawson Formation (upper part):		
Clay, blue.	60	120
Sandstone	10	130
Clay, blue, and shale	40	170
Sandstone	8	178
Clay and shale.	52	230
Sandstone	6	236
Clay and shale.	64	300
Dawson Formation (lower part):		
Sand, coarse, cemented [Middle conglomerate, 300 to 450 feet.]	11	311
Clay and shale.	17	328
Sand, tight	9	337
Clay and shale.	63	400
Sandstone, hard	10	410
Shale	27	437
Sandstone	13	450
Shale, hard	55	505
Lower conglomerate:		
Sand and sandstone.	15	520
Shale	45	565
Sand and sandstone.	5	570
Shale	25	595
Sand and sandstone.	7	602
Laramie Formation:		
Clay and shale.	223	825
C2-68-17acbc. Alt. 5,550 ft.		
Dawson Formation (upper part):		
Surface material.	8	8
Clay, sandy	34	42
Sandrock.	8	50
Shale, sandy.	20	70
Shale	15	85
Shale, sandy.	5	90
Sand, hard.	15	105
Shale, blue	45	150
Shale	30	180
Shale, sandy.	53	233

	Thickness	Depth
C2-68-17acbc.--Continued		
Sand and sandy shale	8	241
Shale, hard, blue.	4	245
Dawson Formation (lower part):		
Sand [Middle conglomerate, 245 to 478 feet.]	45	290
Shale, sandy	10	300
Shale.	125	425
Clay, sandy.	5	430
Sand, hard; pyrite	2	432
Sand	28	460
Sandstone, hard.	15	475
Sand	3	478
Shale.	4	482
Shale, sandy	48	530
Shale.	46	576
Lower conglomerate:		
Sand	14	590
Shale, hard.	90	680
Sandrock, hard	2	682
Sandstone, soft.	6	688
Sandstone, hard.	9	697
Gravel, hard	2	699
Clay and shale	3	702
Sand, hard	3	705
Clay and shale	27	732
Shale, soft.	22	754
Rock	1	755
Shale.	100	855
Sandstone, hard.	5	860
Shale and soft clay	30	890
Sandstone, hard.	2	892
Clay and shale	2	894
Rock	1	895
Sand or gravel	15	910
Clay and shale	19	929
Gravel	2	931
Laramie Formation:		
Shale, soft.	14	945
Clay and shale	28	973
Sandstone, hard.	3	976
Shale and clay	29	1,005
Sandstone.	.5	1,005.5
Sand and clay; trace of sulfur.	14.5	1,020
Rock	3	1,023
C2-68-19ddca. Alt. 5,528 ft.		
Dawson Formation (upper part :		
Soil	2	2
Clay, sandy, yellow.	15	17
Clay, yellow	34	51
Shale, light-gray.	25	76
Shale, blue.	3	79
Shale, gray.	4	83
Shale, blue.	4	87
Shale, gray.	17	104
Shale, blue.	7	111
Shale, gray.	6	117
Sandstone, blue.	3	120
Shale, gray.	31	151
Sandstone, gray.	4	155
Shale, gray.	27	182
Dawson Formation (lower part):		
Sand [Middle conglomerate, 182 to 408 feet.]	4	186
Sandstone, hard, white	5	191
Sand	30	221
Shale, gray, and sand	28	249
Shale, gray	3	252
Shale, gray, and sand.	12	269
Shale, gray.	40	309
Shale, gray, and sand	49	358
Shale, gray.	8	366
Sandstone, blue.	6	372
Shale, gray, and layers of sandstone	21	393
Sand, fine, and gray shale.	15	408
Shale, gray.	53	461
Lower conglomerate:		
Sand, fine	5	466
Sandstone, white	4	470
Sand	13	483
Shale, gray.	13	496
Sand, fine	9	505
Shale, gray.	9	514
Sand, fine to medium	38	552
Shale, gray.	5	557
Sand, fine, and gray shale.	12	569
Shale, gray.	50	619
Sand, fine, and gray shale.	42	661
Shale, gray.	20	681
Sand, fine, and gray shale.	9	690
Shale, gray.	17	707
Sand, fine, and gray shale.	15	722
Laramie Formation:		
Shale, gray.	159	881
Shale, sandy, brown.	15	896

	Thickness	Depth
C2-68-19ddca.--Continued		
Shale, gray	15	911
Shale, brown, and coal	9	920
Shale, gray	102	1,022
Mudstone	2	1,024
Shale, gray	46	1,070
Coal	3	1,073
Shale, gray	46	1,119
Mudstone	3	1,122
Shale, gray	25	1,147
Shale, gray, and coal	31	1,178
Shale, gray	7	1,185
Mudstone	3	1,188
Shale, gray	10	1,198
Shale, gray, and coal	13	1,211
Mudstone	3	1,214
Shale, gray	7	1,221
Shale, gray, and coal	11	1,232
Shale, gray	22	1,254
Shale, gray, and coal	51	1,305
Shale, sandy, gray, and pyrite	26	1,331
Sand, fine [B sandstone, 1,331 to 1,401 feet]	70	1,401
Shale, gray	6	1,407
Sand, fine, and gray shale [A sandstone, 1,407 to 1,561 feet]	19	1,426
Shale, gray	54	1,480
Sand, fine, and gray shale	81	1,561
Shale, gray	37	1,598
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, fine, hard	32	1,630
C2-68-20dcda. Alt. 5,475 ft.		
Overburden	62	62
Dawson Formation (upper part):		
Clay, blue, and shale	226	288
Sandstone	6	294
Shale, and streaks of sandstone	14	308
Dawson Formation (lower part):		
Sand and sandstone	16	324
Clay and shale	13	337
Sand and sandstone	25	362
Clay and shale	136	498
Clay, sandy	7	505
Lower conglomerate:		
Sand and sandstone	27	532
Clay and shale	10	542
Sand and sandstone	18	560
Clay	28	588
Sandstone	2	590
Clay	20	610
Sand and sandstone	30	640
Clay	3	643
Sand and sandstone	21	664
Clay and shale	22	686
Sandstone and sand	18	704
Clay and shale	76	780
Sandstone	5	785
Clay	7	792
C2-68-21cbbb2. Alt. 5,284.5 ft.		
Fill	2	2
Dawson Formation (upper part):		
Soil	3	5
Clay, yellow	3	8
Sandstone, yellow	6	14
Clay, gray	3	17
Clay, yellow	12	29
Clay, gray	17	46
Sandstone, gray	4	50
Shale, gray	15	65
Shale and gray sandstone	9	74
Sandstone, gray	8	82
Shale, gray	4	86
Sandstone, gray	4	90
Shale, gray	27	117
Sand	7	124
Shale, gray	12	136
Shale, blue	5	141
Shale, gray	17	158
Shale, sandy, gray	18	176
Shale, gray	202	378
Shale, sandy, gray	6	384
Dawson Formation (lower part):		
Sand [Middle conglomerate, 184 to 425 feet.]	6	390
Lime	1	391
Sandstone, gray	4	395
Shale, gray	20	415
Sand, fine	10	425
Shale, gray	5	430
Shale, sandy, brown	6	436
Shale, gray; contains fine sand	19	455
Shale, gray	53	508
C2-68-21cbbb 2.--Continued		
Lower conglomerate:		
Sand, fine	20	528
Shale, gray	19	547
Shale, gray; contains fine sand	50	597
Shale, gray	24	621
Shale, gray; contains fine sand	19	640
Shale, gray	5	645
Mudstone	1	646
Shale, gray; contains mudstone	74	720
Shale, brown	5	725
Laramie Formation:		
Shale, gray; contains mudstone	98	823
Coal	5	828
Shale, gray; contains mudstone and coal	358	1,186
Coal	9	1,195
Sand, fine	2	1,197
Coal	3	1,200
Sand, fine [B sandstone, 1,200 to 1,283 feet.]	83	1,283
Shale, gray	30	1,313
A sandstone:		
Shale, gray; contains fine sand	19	1,332
Shale, gray	20	1,352
Lime	3	1,355
Sand, fine	35	1,390
Shale, gray	56	1,446
C2-68-28bccb. Alt. 5,503 ft.		
Slocum Alluvium:		
Clay, yellow	3	3
Gravel	8	11
Dawson Formation (upper part):		
Clay, sandy, yellow	47	58
Shale, blue	2	60
Clay, yellow	19	79
Sandstone, gray	19	98
Shale, blue	6	104
Shale, gray	146	250
Dawson Formation (lower part):		
Sand and gray shale [Middle conglomerate, 309 to 455 feet.]	149	399
Sand	6	405
Shale, gray	24	429
Lime, sandy	4	433
Shale, gray	13	446
Sandstone, gray	6	452
Sand, fine	3	455
Shale, gray	50	505
Lime, sandy	3	508
Shale, gray	17	525
Lower conglomerate:		
Sand, fine	4	529
Lime, sandy	3	532
Sand, medium to fine	108	640
Shale, gray	23	663
Sand, fine	11	674
Shale, gray	9	683
Sand, fine, and gray shale	87	770
C2-68-29cbbc. Alt. 5,541 ft.		
Slocum Alluvium:		
Surface	10	10
Dawson Formation (upper part):		
Shale, yellow	60	70
Shale, blue	57	127
Shale, hard, black	5	132
Shale, green	4	136
Shale, hard, black, and sand	6	142
Shale, green, and some sand	45	187
Sandrock, clayey, gray	6	193
Shale, gritty, green	54	247
Shale, sandy, gray	15	262
Shale, green (caving)	47	309
Shale, sandy, gray and green	25	334
Dawson Formation (lower part):		
Sandrock [Middle conglomerate, 334 to 482 feet.]	4	338
Shale, dark-gray	6	344
Shale, blue-gray	12	356
Sandstone and gray-white shale	16	372
Shale, sticky, black (caving)	20	392
Shale, jointy, black	19	411
Sandstone	10	421
Shale, crumbling, greenish-gray and black	49	470
C2-68-29cbbd.--Continued		
Gravel, quartz, sand, and white clay	12	482
Shale, tough, green	13	495
Shale, sandy, soft	15	510
Shale, dark-gray	75	585
Lower conglomerate:		
Sand, quartz, fine to coarse, and gravel; contains some white clay	23	608
Shale, gray	33	641
Sandstone, fine-grained	4	645
Shale	12	657
Sandstone	5	662
Shale, blackish	75	737
Sandstone	20	757
Laramie Formation:		
Shale, sticky, black	81	838
Shale, very sticky, black	152	990
Shale, dark, crumbles; 10-inch coal seam at 1,085 feet	95	1,085
Shale, crumbling, carbonaceous, black	55	1,140
Coal	1	1,141
Shale, black, crumbling, carbonaceous; 10-inch coal seam at 1,212 feet	71	1,212
Shale, crumbling, carbonaceous, black; 8-inch coal seam at 1,280 feet	68	1,280
Shale, crumbling, carbonaceous, black	18	1,298
Shale, sandy, hard	2	1,300
Shale, black; 8-inch coal seam at 1,320 feet	20	1,320
Shale, carbonaceous, black	20	1,340
Coal	1	1,341
Shale, sandy, gray	31	1,372
B sandstone:		
Sandstone, fine-grained	50	1,422
Shale, sandy, gray	38	1,460
Shale, sticky, gray	66	1,526
A sandstone:		
Shale, gray, slate-like shells; and sand	18	1,544
Sandrock	29	1,573
Shale, sandy, gray	23	1,596
Shale, black; contains white chalk-like impregnations	10	1,626
C2-68-31acab. Alt. 5,350 ft.		
No sample	105	105
Dawson Formation (lower part):		
Clay, blue-gray, and fine white sand [Middle conglomerate, 105 to 280 feet.]	10	115
Ash, white	10	125
Clay, blue	15	140
Clay, blue, and light-gray clay	5	145
Clay, blue, white ash, and some white fine sand	5	150
Clay, dark-gray	15	165
Gumbo, blue-gray	15	180
Gumbo, blue-gray, and some white fine sand	10	190
Gumbo, blue-gray	5	195
Sand, medium-gray, and gumbo	5	200
Clay, ashy, light-gray	15	215
Clay, light-gray and tan, and sandy shale	5	220
Shale, ashy, light-gray, and clay	5	225
Sand, ashy, fine, white	5	230
Sand, ashy, very fine, gray	5	235
Sand, medium to coarse, gray	5	240
Sand, fine, white, and some gray sandy clay	5	245
Clay, sandy, gray, and conglomerate	5	250
Conglomerate and gray clayey sand	5	255
Sand, fine, white; contains some dark-gray clay	5	260
Sand, medium, angular, white	5	265
Sand, shaly, gray; contains shale and some conglomerate	15	280

	Thick-ness	Depth
C2-68-11cab.--Continued		
Clay, gray.	15	295
Clay, gray, and some gray sandy clay.	5	300
Clay, gray; contains gray sand and conglomerate	5	305
Clay, gray.	15	320
Clay, gray, and gray sandy shale	10	330
Clay, gray and tan, and conglomerate.	10	340
Clay, gray.	30	370
Shale, gray	10	380
Lower conglomerate:		
Sand, fine, gray, and gray shale.	5	385
Sand, medium, quartz, well-rounded, white	15	400
Sand, as above; contains some green-gray shale	10	410
Shale, green-gray, and medium white sand	5	415
Sand, fine, white	5	420
Sand, medium, white, and conglomerate.	5	425
Sand, medium and coarse, white	10	435
Sand, quartz, coarse, white	10	445
Shale, gray; contains white sand and conglomerate.	5	450
Sand, medium.	5	455
Shale, sandy, gray, and white fine sand	5	460
Sand, fine, white, and gray sandy shale.	5	465
Shale, sandy, gray.	15	480
Sand, fine, white	10	490
Clay, gray.	10	500
Sand, fine to medium, white	5	505
Sand, shaly, fine, gray.	5	510
Shale, gray, and white ash	10	520
Sand, shaly, fine, gray.	5	525
Sand, medium, gray.	5	530
Shale, sandy, gray.	5	535
Clay, gray, and medium gray sand	5	540
Clay, gray.	25	565
Sand, clayey, gray.	15	580
Clay, sandy, gray	20	600
Sand, clayey, gray.	5	605
Clay, sandy, gray	10	615
Clay, gray.	15	630
Shale, sandy, gray.	15	645
Sand, shaly, gray	5	650
Clay, gray.	5	655
Clay, gray, and conglomerate	5	660
Clay, gray; contains rare specks of lignite.	10	670
Clay, gray, and some gray sand	5	675
Clay, gray, and some white sand.	5	680
Clay, gray, and some conglomerate.	5	685
Sand, clayey, gray.	5	690
Conglomerate, medium sand, and clay.	5	695
Sand, medium, white, and some conglomerate	5	700
Clay, gray.	3	703
C2-68-11caab2. Alt. 5,333 ft.		
Younger loess:		
Soil.	2	2
Dawson Formation (upper part):		
Clay, brown	4	6
Sandstone, brown.	13	19
Clay, yellow.	25	44
Shale, gray	61	105
Dawson Formation (lower part):		
Sand (Middle conglomerate, 105 to 256 feet.)	15	120
Sandstone, gray	7	127
Shale, gray	17	144
Sandstone, soft, gray	9	153
Shale, gray	12	165
Shale, sandy, gray.	9	174
Shale, gray	16	210
Shale, sandy, gray.	24	234
Sand.	6	240
Shale, gray	10	250
Sand.	6	256
Shale, brown.	3	259

	Thick-ness	Depth
C2-68-11caab.--Continued		
Shale, blue	6	265
Shale, gray	32	297
Shale, sandy, gray.	15	312
Stone, gray	20	332
Shale, gray	19	351
Lower conglomerate:		
Sand.	5	356
Lime, sandy	2	358
Sandstone, gray	4	362
Shale, gray	4	366
Sand, fine.	8	374
Lime, sandy	2	376
Sand, medium to fine.	43	419
Sand, medium to fine, and gray shale.	15	434
Shale, gray	21	455
Shale, gray, and fine sand.	12	467
Shale, gray	41	508
Sand, fine.	11	519
Shale, gray	11	530
Sand, fine.	12	542
Sand, fine, and gray shale	9	551
Shale, gray	60	611
Shale, brown.	2	613
Shale, gray	102	715
Sand, fine.	3	718
Shale, gray	27	745
Shale, brown.	11	756
Shale, gray	24	780
Sand, fine.	3	783
Laramie Formation:		
Shale, gray	57	840
Shale, brown.	10	850
Shale, gray	16	866
Shale, brown.	6	872
Shale, gray	134	1,006
Shale, gray, and coal	13	1,019
Shale, gray	66	1,085
Coal.	4	1,089
Shale, gray	7	1,096
Coal.	5	1,101
Shale, gray	8	1,109
Coal.	3	1,112
Sand, fine, and layers of gray shale	31	1,143
Shale, gray	17	1,160
Coal.	3	1,163
Shale, gray	7	1,170
Coal and layers of gray shale.	20	1,190
Shale, gray	20	1,210
B sandstone:		
Sand.	88	1,298
A sandstone:		
Shale, gray, and fine sand.	61	1,359
Sand, fine.	9	1,368
Lime, sandy	1	1,369
Sand, fine.	11	1,380
Lime, sandy	4	1,384
Shale, gray	73	1,457
Sand, fine.	24	1,481
Shale, gray	6	1,487
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, fine.	36	1,523
Transition zone:		
Shale, gray, and fine sand.	10	1,533
Shale, gray	13	1,546
C2-68-15c[illegible]. Alt. 5,140 ft.		
Piney Creek Alluvium:		
Soil.	2	2
Clay, yellow.	5	7
Broadway and Louviers Alluvium, undifferentiated:		
Sand and gravel	32	39
Dawson Formation (upper part):		
Shale, blue	6	45
Shale, gray	163	208
Dawson Formation (lower part):		
Sand (Middle conglomerate, 208 to 297 feet.)	13	221
Shale, sandy, gray.	11	232
Sandstone, gray	21	253
Shale, gray	7	260
Sandstone, blue	18	278
Shale, blue	8	286
Sandstone, blue	11	297
Shale, gray	99	396
Lower conglomerate:		
Sand.	6	402
Shale, gray	9	411
Sand, fine.	27	438
Shale, gray	24	462
Sand, fine, and gray shale	43	505
Sand, fine.	38	543

	Thick-ness	Depth
C2-68-15cccc1.--Continued		
Shale, gray.	18	561
Sand, fine, and gray shale.	42	603
Shale, gray.	13	616
C2-68-15daad. Alt. 5,120.7 ft.		
Piney Creek Alluvium:		
Soil	5	5
Broadway and Louviers Alluvium, undifferentiated:		
Sand and boulders.	25	30
Dawson Formation:		
Shale.	5	35
C2-68-16bdaa. Alt. 5,100.1 ft.		
Piney Creek Alluvium:		
Clay	6	6
Louviers Alluvium:		
Gravel	12	18
C2-69-1cccb. Alt. 5,125 ft.		
Dawson Formation (lower part):		
Clay and rocks	18	18
Clay, blue	15	33
Clay, hard, brown.	9	42
Lower conglomerate:		
Sandstone.	10	52
Shale.	29	81
Rock	1	82
Sand	16	98
Shale.	9	107
Coal	3	110
Shale.	45	155
Sand	10	165
Shale.	5	170
Sandstone.	3	173
Laramie Formation:		
Shale.	126	299
Rock	2	301
Shale.	13	314
Rock	1	315
Shale, gray.	31	346
Rock	2	348
Shale, gray.	7	355
Rock	1	356
Shale, gray.	54	410
Rock	1	411
Shale, blue.	51	462
Coal	2	464
Shale, blue.	118	582
Sandstone, rocky	2	584
Shale, sandy	5	589
Shale, brown	11	600
Shale, hard, gray.	12	612
Sand	5	617
Shale, gray.	17	634
Coal	3	637
Shale, gray.	30	667
Sandstone.	3	670
Shale, blue.	26	696
Shale, hard, black	21	717
Rock	1	718
Shale, hard, and coal.	17	735
Rock	1	736
Shale, gray.	20	756
Sandstone, soft.	4	760
Shale, gray.	12	772
Coal	4	776
Shale, gray.	5	781
Coal	9	790
Sand (B sandstone, 790 to 852 feet.)	62	852
Shale.	2	854
A sandstone of the Laramie Formation and Milliken Sandstone Member of the Fox Hills Sandstone, undifferentiated:		
Sand	28	882
Shale, sandy	8	890
Sand	107	997
Shale.	10	1,007
C2-69-2bbab. Alt. 5,435 ft.		
Dawson Formation (lower part):		
Soil	3	3
Clay, sandy, yellow.	15	18
Clay, sandy, gray.	11	29
Clay, sandy, yellow.	17	46
Shale, gray.	65	111
Sandstone, gray.	3	114
Shale, gray.	205	319
Sandstone, gray.	2	321
Laramie Formation:		
Shale, gray.	171	492
Lime, sandy, gray.	2	494
Sandstone, gray.	22	516
Shale, gray.	103	619
Coal	5	624
Shale, gray.	24	648
Coal	5	653
Shale, gray, and coal.	8	661

	Thickness	Depth
C2-69-2bbab.--Continued		
Shale, gray	18	679
Coal blossom	2	681
Shale, gray	2	683
Sand, fine, white	12	695
Sandstone, gray	3	698
Shale, gray	8	706
Sand, fine	6	712
Shale, gray	4	716
Coal	5	721
Shale, brown	1	722
Shale, gray	4	726
Shale, sandy, gray	13	739
Coal	5	744
Shale, gray	13	757
Coal	7	764
Shale, gray	3	767
Coal	2	769
B sandstone:		
Sand, fine, white	71	840
A sandstone:		
Sand, fine, and gray shale	79	919
Lime, sandy	4	923
Sand, fine	27	950
Shale, gray	42	992
Coal	4	996
Shale, gray	21	1,017
Sandstone, gray	2	1,019
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Lime	2	1,021
Shale, sandy, grey	33	1,054
Shale, gray	86	1,140
C2-69-14bbcc. Alt. 5,379 ft.		
Dawson Formation (lower part):		
Soil	1	1
Clay, yellow	18	19
Boulders	2	21
Clay, yellow	13	34
Clay, gray and yellow	7	41
Shale, gray	9	50
Lower conglomerate:		
Sandstone, gray	2	52
Sandstone, gray, and shale	24	76
Shale, gray	103	179
Sandstone, gray	6	185
Shale, sandy, gray	15	200
Sandstone, gray	4	204
Shale, sandy, gray	11	215
Laramie Formation:		
Lime, sandy	1	216
Shale, gray	3	219
Lime, sandy	2	221
Shale, gray	41	262
Sandstone, hard	2	264
Shale, gray	85	349
Coal blossom	3	352
Shale, gray	69	421
Coal	2	423
Shale, gray	37	460
Coal	3	463
Shale, gray	119	582
Coal	3	585
Shale, gray	27	612
Shale, gray and coal	71	683
Mudstone	2	685
Shale, gray	31	716
Coal and gray shale	18	734
B and A sandstone, undifferentiated:		
Sand, fine	132	866
Lime, sandy	1	867
Sand, fine	5	872
Lime, sandy	1	873
Sand, fine	13	886
Laramie Formation and Fox Hills Sandstone, undifferentiated:		
A sandstone of the Laramie Formation and Milliken Sandstone Member of the Fox Hills Sandstone, undifferentiated:		
Lime, sandy	1	887
Sand, fine	115	1,002
Transition zone:		
Shale, sandy, gray	30	1,032
C2-69-18cccc. Alt. 5,600 ft.		
Louviers Alluvium:		
Soil	2	2
Clay, sandy, brown	5	7
Dawson Formation (upper part):		
Sandstone, brown	3	10
Clay, brown	9	19
Clay, gray	11	30
Clay, sandy, brown	4	34
Clay, gray	11	45
Dawson Formation (lower part):		
Lower conglomerate:		
Sandstone, gray	6	51
Shale, sandy, gray	12	63

	Thickness	Depth
C2-69-18cccc.--Continued		
Shale, gray	34	97
Shale, sandy, gray	21	118
Shale, gray	47	165
Sandstone, hard, white	4	169
Shale, sandy, gray	11	180
Shale, gray	35	215
Shale, sandy, gray	5	220
Sand, fine, gray	4	224
Laramie Formation:		
Shale, gray	10	234
Coal and gray shale	8	242
Shale, sandy, gray	32	274
Sandstone, gray	2	276
Shale, sandy, gray	8	284
Shale, gray	6	290
Shale, sandy, gray	28	318
Sandstone, hard, gray	3	321
Shale, gray	15	336
Coal and gray shale	14	350
Shale, gray	11	361
Shale, sandy, gray	8	369
Sandstone, gray, and layers of hard gray shale	21	390
Coal and gray shale	8	398
Shale, gray	20	418
Shale, sandy, gray	19	437
Coal and gray shale	13	450
Shale, sandy, gray	20	470
Shale, gray, and fine sand	20	490
Coal and gray shale	12	502
Mudstone	2	504
Shale, gray, and coal	11	515
Shale, gray	16	531
Sand, fine, and gray shale	9	540
Shale, gray	12	552
Coal and gray shale	23	575
Shale, sandy, gray	8	583
Mudstone	2	585
Shale, gray, and fine sand	8	593
Shale, gray, and coal	67	660
Shale, sandy, gray	9	669
Shale, gray	5	674
Coal and gray shale	7	681
Lime, sandy	4	685
Shale, gray	2	687
Sandstone, hard (B sandstone, 687 to 761 feet.)	4	691
Sand, fine, and gray shale	68	759
Lime, sandy	2	761
Shale, gray, and coal	9	770
Lime, sandy	2	772
Coal, gray shale, and layers of fine sand	28	800
Lime	4	804
Shale, gray and coal	17	821
Laramie Formation and Fox Hills Sandstone, undifferentiated:		
A sandstone of the Laramie Formation and Milliken Sandstone Member of the Fox Hills Sandstone, undifferentiated:		
Sand, fine, and gray shale	164	985
Shale, gray	30	1,015
Sand, fine, and gray shale	11	1,026
Shale, gray	4	1,030
C2-69-19acba. Alt. 5,552 ft.		
Piney Creek Alluvium:		
Clay	10	10
Sand and clay	8	18
Louviers Alluvium:		
Sand	12	30
Dawson Formation (lower part):		
Shale, blue	2	32
Gravel, coarse, black	9	41
Shale	1	42
C2-69-25daaa. Alt. 5,390 ft.		
Piney Creek Alluvium:		
Soil	1	1
Younger loess and Dawson Formation, undifferentiated:		
Clay, yellow	25	26
Clay, sandy, yellow	13	39
Dawson Formation (lower part):		
Sand (Middle conglomerate, 39 to 176 feet.)	16	55
Shale, blue	6	61
Shale, gray	3	64
Sandstone, gray	3	67
Sand, fine, and gray shale	35	102

	Thickness	Depth
C2-69-25daaa.--Continued		
Shale, gray	52	154
Sand, fine, and gray shale	22	176
Shale, gray	33	209
Lime, sandy	2	211
Sandstone, gray	10	221
Shale, gray	20	241
Sandstone, gray	3	244
Shale, gray	40	284
Sandstone, gray	15	299
Shale, gray	13	312
Lime, sandy	2	314
Lower conglomerate:		
Sand	73	387
Shale, gray	30	417
Sand, fine, and gray shale	130	547
Shale, gray	49	596
C2-69-26baab. Alt. 5,473.4 ft.		
Slocum Alluvium:		
Clay, sandy, brown	14	14
Dawson Formation (lower part):		
Gravel and brown clay	11	25
Clay, brown	30	55
Shale, blue	6	61
C2-69-26baab2. Alt. 5,470 ft.		
Slocum Alluvium:		
Topsoil	7	7
Dawson Formation (upper part):		
Clay, yellow	13	15
Dawson Formation (lower part):		
Sand, coarse (water-bearing) (Middle conglomerate, 15 to 25 feet.)	10	25
Clay, sticky, gray	20	45
Shale, hard, brown	7	52
Shale, gray to blue, hard	128	180
Lower conglomerate:		
Sand (water)	30	210
Shale, blue	10	220
Sand (water)	20	240
Shale, gray to blue	30	270
Sand (water)	70	340
Shale	30	370
Sand (water)	25	395
Shale, hard, dark-gray	125	520
Shale: contains interbedded layers of water-bearing sand	70	590
Shale	13	603
C2-69-26baab3. Alt. 5,473.6 ft.		
Slocum Alluvium:		
Topsoil	2	2
Dawson Formation (upper part):		
Clay, sandy, brown	48	50
Sand, brown	2	52
Shale, blue	3	55
C2-69-27aaaa. Alt. 5,500 ft.		
Dawson Formation (upper part):		
Soil	2	2
Clay, sandy, yellow	21	23
Clay, yellow	32	55
Clay, seam, gray	1	56
Clay, sandy, yellow	5	61
Shale, brown	2	63
Sandstone, brown	2	65
Sandstone, blue	2	67
Sandstone, brown	2	69
Shale, blue	8	86
Dawson Formation (lower part):		
Sandstone, gray (Middle conglomerate, 86 to 171 feet.)	21	107
Shale, gray	23	130
Sandstone, hard, gray	1	131
Sandstone, gray	18	149
Sand	6	155
Shale, gray	4	159
Sand	12	171
Shale, gray	34	205
Sand, fine	11	216
Shale, gray	15	231
Lower conglomerate:		
Sand, fine, and shale	17	248
Sandstone	6	254
Sand, coal, and gray shale	13	267
Shale, gray	13	280
Sand, medium to fine	8	288
Shale, gray	19	307
Sand, fine	6	313
Shale, gray	25	338
Sand and gray shale	13	351
Laramie Formation:		
Shale, gray	49	400

	Thickness	Depth
C2-69-29baaa. Alt. 5,588 ft.		
Colluvium:		
Topsoil, and clay	5	5
Dawson Formation (upper and lower parts, undifferentiated):		
Sandstone, cemented	18	23
Clay, gray	8	31
Shale, sandy, and gray-brown rock	19	50
Clay, brownish-gray; contains a little coal	55	105
Shale, blue, and clay	35	140
Rock, very hard, brown	5	145
Dawson Formation (lower part):		
Lower conglomerate:		
Sandstone, fine-grained	19	164
Clay, blue-gray, and shale	33	197
Sandstone	4	201
Shale, gray	11	212
Shale, fine, sandy	8	220
Sandstone, fine-grained, hard	15	235
Shale, gray, and clay	24	259
Sandstone, fine-grained	4	263
Clay, blue, and shale	4	267
Shale, gray, and clay	27	294
Sandstone, fine-grained	2	296
Laramie Formation:		
Shale, brown; contains a little coal	3	299
Shale, gray, and clay	13	312
Sand, very fine, and streaks of shale	4	316
Sandrock, hard	1	317
Shale, gray	20	337
Shale, brown	2	339
Clay, blue-gray, and shale	19	358
Clay, brown-gray, and some coal	4	362
Shale, gray	13	375
C2-69-10dbcc. Alt. 5,650 ft.		
Colluvium:		
Topsoil	2	2
Dawson Formation (lower part):		
Clay	45	47
Shale, blue	95	142
Lower conglomerate:		
Sand and blue shale	8	150
Shale, blue	35	185
Sand	10	195
Shale, blue	1	196
C2-69-11cbad. Alt. 5,566.7 ft.		
Slocum Alluvium:		
Topsoil and clay	14	14
Sand and small rock	16	30
Clay	2	32
C2-69-12adcc. Alt. 5,545 ft.		
Colluvium:		
Clay, wet, brown	15	15
Dawson Formation (upper part):		
Clay, sandy	11	26
Dawson Formation (lower part):		
Middle conglomerate:		
Sand and gravel	6	32
Sandstone, brown	44	76
Sandstone and interbedded shale	49	125
C2-69-12bccc. Alt. 5,498 ft.		
Piney Creek Alluvium:		
Clay	14	14
Louviers Alluvium:		
Gravel and boulders	2	16
Dawson Formation:		
Shale	7	23
C2-69-13dddd. Alt. 5,546 ft.		
Fill	1	1
Piney Creek Alluvium:		
Topsoil	2	3
Clay, sandy, brown	3	6
Dawson Formation (upper part):		
Clay, gray	12	18
Clay, sandy, brown	20	38
Dawson Formation (lower part):		
Sandstone, brown [Middle conglomerate, 38 to 195 feet.]	4	42
Clay, gray	3	45
Clay, sandy, brown	4	49
Sandstone, hard, brown	1	50
Clay, sandy, brown	3	53
Shale, gray	21	74
Sand, medium to fine	5	79
Shale, gray	11	90
Shale, sandy, gray	8	98
Shale, gray	32	130
C2-69-13dddd.--Continued		
Shale, sandy, gray	12	142
Sandstone, gray	9	151
Shale, gray	6	157
Sandstone, gray	24	181
Sand, coarse, and sandstone	14	195
Shale, gray, and sandstone	14	209
Shale, gray	17	226
Shale, sandy, gray	16	242
Sandstone, gray	4	246
Sand, shaly, gray	10	256
Shale, gray	14	270
Sandstone, gray	3	273
Lime, sandy	2	275
Shale, sandy, gray	3	278
Lower conglomerate:		
Sand, fine, white	7	285
Sand, coarse, and gray shale	18	303
Shale, gray	11	314
Lime, sandy	2	316
Sandstone, gray	8	324
Sand, coarse, and gray shale	9	333
Shale, gray	8	341
Sandstone, gray	2	343
Sand, fine, and gray shale	39	382
Sand, coarse, and gray shale	21	403
Sand, fine, and gray shale	12	415
Shale, sandy, gray	6	421
Sand, fine, and gray shale	7	428
Shale, gray	11	439
Lime, sandy	1	440
Sand, coarse	7	447
Sand, fine, and sandy shale	17	464
Shale, gray	16	480
Shale, sandy, gray	20	500
C2-69-35dbbb. Alt. 5,475 ft.		
Slocum Alluvium:		
Clay, blue	30	30
Dawson Formation (upper part):		
Shale, blue; contains streaks of sandstone	20	50
Shale, blue	19	69
Dawson Formation (lower part):		
Sandstone [Middle conglomerate, 69 to 171 feet.]	2	71
Shale, blue; brown streaks	91	162
Sand, coarse	9	171
Shale, blue; contains streaks of sandstone	149	320
Lower conglomerate:		
Sand, coarse; contains streaks of shale	35	355
Shale	20	375
Shale; contains thin layers of sand	137	512
Sand, fine	7	519
Shale	7	526
Sand, fine	6	531
Shale; contains sandy streaks	7	538
Shale	7	545
C2-70-21abbb. Alt. 6,183 ft.		
Rocky Flats Alluvium:		
Gravel, boulders, and layers of clay	30	30
Laramie Formation:		
Shale, weathered	30	60
Coal and shale	10	70
Shale	30	100
Sandstone; contains layers of clay	30	130
Sandstone	5	135
Shale, blue	13	148
Sandstone	9	157
Shale and coal	4	161
Sandstone	3	164
Shale	24	188
Sandstone	2	190
Coal	10	200
Shale	7	207
Sandstone	10	217
Shale	33	250
Sandstone	4	254
Coal	9	263
Sandstone [B sandstone, 263 to 380 feet.]	26	289
Coal	1	290
Shale	14	304
Sandstone	16	320
C2-70-21abbb.--Continued		
Shale	5	325
Sand	55	380
Shale	7	387
A sandstone:		
Sand	25	412
Shale	18	430
C2-70-25cdbb. Alt. 5,680 ft.		
Rocky Flats Alluvium:		
Clay, brown, and rock	28	28
Dawson Formation (lower part):		
Clay, brown	10	38
Shale, gray	65	103
Shale, gray; contains streaks of sandstone	2	105
Shale, gray	9	114
Sandstone	3	117
Shale, gray	14	131
Shale, sandy, gray	6	137
Laramie Formation:		
Shale, gray	351	488
Coal and gray shale	22	510
Shale, gray	28	538
Coal and gray shale	116	654
Shale, gray; contains sandstone stringers	16	670
Coal and bentonitic clay	15	685
Clay, gray; contains sandstone lenses	40	725
Coal and gray clay	25	750
Sandstone lenses, bentonitic clay, and coal [B sandstone, 750 to 842 feet.]	50	800
Shale, gray, and sandstone	25	825
Shale, gray, sandstone lenses, and coal	17	842
Coal and gray shale	40	882
Coal, gray shale, and white sandy clay	22	904
A sandstone:		
Coal, white sandy clay, and sandstone	20	924
Shale, gray	21	945
Coal, white sandy clay, and streaks of sandstone	30	975
Clay, white, sandy, and some coal	79	1,054
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Shale, gray	61	1,115
Clay, dark-gray, and shale	25	1,140
Clay, dark-gray, and shale; contains streaks of coal and fine sand	35	1,175
Clay, dark-gray, and shale	25	1,200
Clay, dark-gray, and shale; contains thin streaks of coal and fine sand	52	1,252
C2-70-26ccdac. Alt. 5,715 ft.		
Colluvium and Dawson Formation, undifferentiated:		
Boulders, clay, and shale	100	100
Dawson and Laramie Formations undifferentiated:		
Shale	585	685
Laramie Formation:		
Coal and shale	30	715
C2-70-26ddad. Alt. 5,633.2 ft.		
Piney Creek Alluvium:		
Topsoil and silt	9	9
Broadway Alluvium:		
Gravel, coarse	5	14
Dawson Formation (lower part):		
Shale, blue	2	16
Gravel and rock	13	29
Shale, gray	6	35
C2-70-27dbdc. Alt. 5,764.7 ft.		
No sample	66	66
Dawson Formation (lower part):		
Lower conglomerate:		
Sand	12	78
Shale	29	107
Sand	19	126
Sand and gravel	3	129
Sand	10	139
Shale	27	166
Sand	44	210
Shale	13	223
Sand	16	239
Laramie Formation:		
Shale	57.5	296.5

	Thickness	Depth
C2-70-27dbdc.--Continued		
Coal	1.5	298
Shale	32	330
Sandstone	25	355
Shale	33.5	388.5
Coal	1.5	390
Shale	22	412
Sandstone	5	417
Iron rock	1	418
Sandstone	8	426
Shale	49	475
Sandstone	17	492
Shale	10	502
Sandstone	28	530
Shale	2.5	532.5
Coal	1.5	534
Shale	23	557
Coal, bone	2	559
Sandstone	21	580
Shale	11.5	591.5
Coal	2.5	594
Shale	15.3	609.3
Coal	.7	610
Sandstone	24	634
Coal	5.5	639.5
Shale	24.5	664
Coal	3.5	667.5
Shale	10.5	678
Sandstone [B sandstone, 678 to 732 feet.]	54	732
Shale	1.3	733.3
Coal	5.2	738.5
Shale	20.6	759.1
Coal	2.1	761.2
Shale	11.8	773
Coal	1	774
Shale	9	783
Coal	8.4	791.4
C3-65-1dddd. Alt. 5,396 ft.		
Eolian sand:		
Topsoil and sandy clay	11	11
Younger loess:		
Clay, plastic	16	27
Dawson Formation:		
Shale, weathered, medium hard	4	31
Shale, very hard, buff	6	37
C3-65-9bbbb. Alt. 5,408 ft.		
Eolian sand:		
Topsoil and tan sandy clay	4	4
Younger loess:		
Clay, plastic, buff	7	11
Dawson Formation:		
Shale, weathered, tough	3	14
Shale, hard, buff	8	22
C3-65-14dbaa2. Alt. 5,418 ft.		
Post-Piney Creek alluvium and Broadway Alluvium, undifferentiated:		
Sand	24	24
Louviers Alluvium:		
Clay	4	28
Gravel	2	30
Clay	6	36
Gravel	14	50
Dawson Formation:		
Clay	5	55
Shale	5	60
C3-65-16dada. Alt. 5,525.9 ft.		
Eolian sand:		
Topsoil	2	2
Younger loess:		
Clay, brown	14	16
Dawson Formation (upper part):		
Sand, coarse (water-bearing)	16	32
Shale, gray to blue; contains interbedded coal seams	333	365
Upper conglomerate:		
Sand interbedded with stringers of shale	35	400
Shale, gray	30	430
Sand layers interbedded with stringers of shale	40	470
Shale, gray	30	500
Sand	30	530
Shale, gray	45	575
Sand	25	600
Shale, gray	20	620
Sand interbedded with stringers of shale	50	670
Shale	20	690

	Thickness	Depth
C3-66-1dddd. Alt. 5,387 ft.		
Topsoil and road-bed	2	2
Dawson Formation (upper part):		
Shale, weathered, limonitic stains, tan	6.5	8.5
Shale, sandy, hard, platy-structure, tan-orange	3.5	12
C3-66-2caac. Alt. 5,425 ft.		
Eolian sand:		
Sand, light-brown	40	40
Dawson Formation (upper part):		
Shale, gray, and gravel	55	95
Coal, black, and gray shale	5	100
Shale, light-gray	250	350
Shale, gray	40	390
Sand, light-gray	20	410
Shale, gray, and gray sand	70	480
Shale, gray	30	510
Sand, shaly, gray	10	520
Shale, gray	50	570
Shale, gray, and gray sand	60	630
Shale, sandy, gray	85	715
Shale, light- to medium-gray	95	810
Dawson Formation (lower part):		
Sand, gray, and gray shale [Middle conglomerate, 810 to 880 feet.]	10	20
Shale, sandy, gray	10	830
Shale, gray	10	840
Sand, gray, and gray shale	30	870
Shale, sandy, gray	10	880
Shale, gray	124	1,004
Lower conglomerate:		
Sand, light-gray	30	1,034
Shale, gray	66	1,100
Shale, sandy, gray	70	1,170
Shale, gray	20	1,190
Shale, gray, and gray sand	10	1,200
Laramie Formation:		
Shale, light- and medium-gray	10	1,210
Shale, light-gray and gray	110	1,320
Shale, light- and medium-gray	170	1,490
Shale, gray and light-gray	110	1,600
B sandstone:		
Sand and sandstone; contains a few beds of light-gray sandy shale	60	1,660
A sandstone:		
Shale, sandy, light- and medium-gray	40	1,700
Shale, sandy, gray	55	1,755
Shale, sandy, gray, and gray sand	10	1,765
Shale, gray	10	1,775
Shale, gray, and carbonaceous shale	20	1,795
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Shale, sandy, gray	10	1,805
Shale, gray	30	1,835
Shale, gray and light-gray	10	1,845
Shale, gray	150	1,995
C3-66-4bccb. Alt. 5,305.0 ft.		
Eolian sand:		
Clay	4	4
Sand	2	6
Clay	8	14
Clay, sandy	10	24
Broadway Alluvium:		
Gravel	19.5	43.5
C3-66-4cdad. Alt. 5,330 ft.		
Eolian sand:		
Clay	2	2
Sand, fine	6	8
Clay	11	19
Broadway Alluvium:		
Gravel	32	51
Dawson Formation (upper part):		
Clay	1	52
Coal	1	53

	Thickness	Depth
C3-66-5acac. Alt. 5,297.0 ft.		
Eolian sand:		
Topsoil	.6	.6
Silt	4.1	4.7
Dawson Formation (upper part):		
Silt, clayey	1.7	6.4
Siltstone, weathered	5.5	11.9
Sand, silty, fine, friable, salt and pepper texture; contains iron manganese concretions to a maximum diameter of 1 inch	16.1	28
Aragonite, purplish	.2	28.2
Claystone, weathered	3.4	31.6
Shale, weathered, sub-firm to very fissile, purplish	4.4	36
C3-66-6adda. Alt. 5,259 ft.		
Piney Creek Alluvium:		
Topsoil, mucky, black	8	8
Broadway Alluvium:		
Sand	10	18
Dawson Formation (upper part):		
Clay	72	90
Gravel and clay	10	100
Sand	24	124
Sand and gravel (water)	16	140
C3-66-6babd. Alt. 5,247.5 ft.		
Eolian sand:		
Topsoil	.5	.5
Silt, sandy	1.8	2.3
Sand, fine, silty	4.1	6.4
Silt, clayey	1.1	7.5
Sand, fine, silty, clayey	1.2	8.7
Silt, clayey	6.7	15.4
Sand, fine, loose	5.8	21.2
Sand, fine, silty, clayey	3.1	24.3
Dawson Formation (upper part):		
Claystone, silty, weathered	3.1	27.4
Siltstone, weathered	.6	28
Claystone, weathered	1.5	29.5
Siltstone, friable	.5	30
C3-66-7dbcb. Alt. 5,296.7 ft.		
Eolian sand:		
Topsoil	.8	.8
Silt, sandy	2.4	3.2
Sand, fine, silty, loose, friable	7.4	10.6
Silt, clayey	5.8	16.4
Sand, fine, silty, loose, soft	4.9	21.3
Clay, silty	2.6	23.9
Dawson Formation (upper part):		
Siltstone, weathered, friable	2.2	6.1
Shale, weathered	2.7	28.8
Siltstone, weathered	1.2	30
C3-66-8bbad. Alt. 5,284.1 ft.		
Eolian sand:		
Topsoil	.9	.9
Silt, sandy	4.4	5.3
Sand, fine, silty	6.2	11.5
Sand, fine	4.3	15.8
Sand, medium	6.9	22.7
Sand, fine, silty, loose, friable	1.7	24.4
Dawson Formation (upper part):		
Shale, weathered; contains carbonaceous flecks and stains	5.6	30
C3-66-9bbcc. Alt. 5,304.3 ft.		
Eolian sand:		
Sand	3	3
Clay	6	9
Broadway Alluvium:		
Sand and gravel	20	29
Dawson Formation (upper part):		
Sandstone	2	31
Shale	1	32
C3-66-10bbab. Alt. 5,350 ft.		
Eolian sand:		
Topsoil	5	5
Sand	17	22
Clay	21	43
Clay, sandy	10	53
Dawson Formation (upper part):		
Shale	41	94
Coal	3	97
Shale	81	178
Coal	6	184
Shale	63	247

	Thickness	Depth
C1-66-10bbaa.--Continued		
Upper conglomerate:		
Sand, gravel, and rock	3	250
Shale	30	280
Sand, gray	25	305
Shale	15	320
C1-66-10bbdd. Alt. 5,340 ft.		
Eolian sand:		
Clay	10	10
Clay, sandy	5	15
Sand	7	22
Clay	8	30
Sand, fair	10	40
Sand, fine	4	44
Sand, fair	6	50
Dawson Formation (upper part):		
Sand and layers of clay	4	54
Clay	1	55
Shale	1	56
C1-66-16cacc. Alt. 5,355 ft.		
Eolian sand:		
Sand	8	8
Clay	8	16
Clay, sandy	12	28
Broadway and Louviers Alluvium, undifferentiated:		
Sand, fine	8	36
Clay	4	40
Sand	10	50
Clay	4	54
C1-66-17aaad. Alt. 5,380 ft.		
Eolian sand:		
Sand	10	10
Clay	16	26
Broadway Alluvium:		
Sand	8	34
Dawson Formation (upper part):		
Clay	10	44
Shale	38	82
Coal	3	85
Shale	11	96
Shale, sandy	7	103
Shale	93	196
Rock	1	197
Shale	18	215
Upper conglomerate:		
Sand	39	254
Shale	15	269
C1-66-17bdcd. Alt. 5,325.9 ft.		
Eolian sand:		
Sand, fine	7	7
Clay	20	27
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, fine and some sand	21	48
Dawson Formation:		
Clay	19	67
Shale	3	70
C1-66-29cdad. Alt. 5,383 ft.		
Piney Creek Alluvium:		
Clay, sandy	20	20
Broadway and Louviers Alluvium, undifferentiated:		
Sand mixed with clay	22	42
Sand and gravel	6	48
Dawson Formation:		
Shale	12	60
C1-66-30dadc. Alt. 5,363 ft.		
Piney Creek Alluvium:		
Clay, sandy	9	9
Broadway Alluvium:		
Sand, fine	8	17
Gravel	4	21
Dawson Formation (upper part):		
Clay	3	24
Shale	3	27
Coal	1	28
Shale	8	36
Coal	2	38
Shale, soft, gray	3	41
Rock	1	42
Sandstone, hard	8	50
Coal	2	52
Shale	6	58
Coal	2	60
Shale	20	80
Shale, soft, blue	12	92
Shale, soft, gray	10	102
Rock	1	103
Shale	14	117
Coal	2	119
Shale, gray	17	136
Coal	3	139
Shale	25	164
Shale, soft, gray	54	218
C1-66-30dadc.--Continued		
Shale, sandy	12	230
Shale, hard	18	248
Shale, sandy, soft, white	6	254
Coal	4	258
Shale, hard, blue	14	272
Rock	1	273
Shale, sandy	11	284
Coal	2	286
Shale, blue	14	300
Shale, soft, gray	29	329
Shale, hard	36	365
Upper conglomerate:		
Sand, dirty	25	390
Shale	20	410
C1-66-11abca. Alt. 5,385 ft.		
Fill	6	6
Piney Creek Alluvium:		
Clay, sandy	29	35
Broadway Alluvium:		
Sand	10	45
Dawson Formation (upper part):		
Clay, yellow	5	50
Clay, blue	25	75
Shale, brown	35	110
Shale, gray	18	128
Sand, gray	4	132
Shale, caving, green	8	140
Clay, blue	25	165
Clay, gray	5	170
C1-66-11cbdb2. Alt. 5,350 ft.		
Piney Creek Alluvium:		
Topsoil	2	2
Clay, yellow to brown	12	14
Broadway Alluvium:		
Sand, fine (water-bearing)	8	22
Dawson Formation (upper part):		
Shale, medium hard, gray to blue	68	90
Sandstone (water-bearing)	20	110
Shale, gray	180	290
Sand [Upper conglomerate, 290 to 445 feet.]	30	320
Shale, gray	90	410
Shale, and layers of sand	35	445
Shale, medium hard, gray to blue; contains layers of sand	265	710
Dawson Formation (lower part):		
Sand [Middle conglomerate, 710 to 835 feet.]	125	835
Shale, dark-gray	155	990
Sand [Lower conglomerate, 990 to 1,069 feet.]	79	1,069
C1-66-11cdcb. Alt. 5,365 ft.		
Clay, fill	5	5
Piney Creek Alluvium:		
Topsoil	3	8
Clay, sandy, brown	12	20
Broadway Alluvium:		
Sand and gravel (water-bearing)	6	26
Dawson Formation (upper part):		
Shale, gray to blue; occasional layers of coal	266	292
Shale; contains layers of sand [Upper conglomerate, 292 to 368 feet.]	76	368
Shale, gray to blue; occasional sand breaks	358	726
Dawson Formation (lower part):		
Sand; occasional shale breaks [Middle conglomerate, 743 to 870 feet.]	144	870
Shale, gray	146	1,016
Lower conglomerate:		
Sand	18	1,034
Shale, gray	50	1,084
Sand	26	1,110
Shale	50	1,160
C1-66-12bcca. Alt. 5,554 ft.		
Dawson Formation (upper part):		
Clay, sandy	56	56
Clay, gray	10	66
Shale, dark-gray	13	79
Sandstone, gray, and layers of gray shale	24	103
Shale, blue	6	109
C1-66-12bcca.--Continued		
Coal	1	110
Shale, gray	9	119
Shale, blue	38	157
Shale, sandy, gray	5	162
Shale, gray	7	169
Coal blossom	1	170
Shale, blue	10	180
Coal blossom	1	181
Shale, blue	4	185
Coal blossom	3	188
Coal and layers of gray shale	9	197
Sandstone, gray	15	212
Shale, sandy, gray	6	218
Sandstone, hard, gray	2	220
Shale, gray	6	226
Sandstone, hard, gray	2	228
Shale, gray	15	243
Shale, sandy, gray	11	254
Sand, fine, gray, and layers of sandstone	13	267
Sandstone, gray	2	269
Coal	4	273
Shale, gray	3	276
Coal and layers of gray shale	3	279
Shale, gray	8	287
Shale, sandy, gray	4	291
Shale, gray	6	297
Shale, sandy, blue	11	308
Shale, sandy, gray	5	313
Sandstone, gray, and sandy shale	4	317
Shale, brown	10	327
Shale, gray	19	346
Coal blossom	2	348
Coal	3	351
Shale, gray	10	361
Sandstone, gray, and shale	8	369
Shale, gray	4	373
Shale, sandy, gray	7	380
Sandstone, gray, and gray shale	9	389
Shale, gray	68	457
Shale, blue	4	461
Shale, sandy, gray	5	466
Shale, gray	9	475
Coal blossom	1	476
Shale, gray	31	507
Shale, sandy, gray	5	512
Shale, gray	18	530
Shale, blue	8	538
Shale, gray	3	541
Sand, fine, gray	7	548
Shale, gray	16	564
Limestone, sandy	1	565
Shale, gray	8	573
Sand, fine, gray	3	576
Shale, gray	42	618
Shale, blue	13	631
Shale, gray	27	658
Shale, sandy, gray	5	663
Sand, fine, gray	7	670
Shale, gray	7	677
Shale, sandy, gray	26	703
Shale, blue	20	723
Sand, fine, gray	2	725
Shale, gray	29	754
Sand, fine, gray, and layers of shale	7	761
Shale, gray	79	840
Shale, sandy, gray	7	847
Shale, gray	4	851
Dawson Formation (lower part):		
Middle conglomerate:		
Sand, fine, gray	9	860
Sand, fine, gray, and layers of shale	7	867
Shale, gray	3	870
Sand, fine, gray	2	872
Shale, sandy, gray	8	880
Sand, fine, gray	10	890
Shale, gray	2	892
Sand, fine, gray	7	899
Limestone	1	900
Sand	9	909
Shale	4	913
C1-66-14aadb. Alt. 5,487.0 ft.		
Eolian sand:		
Sand, very fine, and brown loose silt	2.5	2.5
Silt, very sandy, very calcareous, yellowish-brown	3.5	6
Dawson Formation (upper part):		
Shale, very silty, soft, noncalcareous, micaceous, moderate-yellowish-brown and pale-yellowish-orange	1	7

	Thickness	Depth
C3-66-14cbab. Alt. 5,440 ft.		
Dawson Formation (upper part):		
Shale, black	190	190
Shale, gray	10	200
Shale, black	33	233
Shale, gray	4	237
Shale, black	63	300
Coal	60	360
Shale, gray	20	380
Sand [Upper conglomerate, 380 to 410 feet.]	30	410
Shale, gray	50	460
Shale, black and gray mixed	20	480
Limestone, white, and gray shale mixed	20	500
Shale, greenish	10	510
Shale, black	5	515
Rock, gray	5	520
Shale, black	10	530
Shale, blue, and some sand	15	545
Shale, black; contains some white sandstone	18	563
Shale, blue	27	590
Shale, blue, and some white sandstone	5	595
Shale, blue, mixed with gray and white rock	5	600
Shale, crumbly, gray	55	655
Shale, sticky, gray	75	730
Shale, black	5	735
Shale, sandy	61	796
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	116	912
Shale, sandy	8	920
Sand	21	941
Shale, sandy	5	946
C3-66-14cbdd. Alt. 5,441 ft.		
Piney Creek Alluvium:		
Soil, surface	6	6
Loam, finely sandy	11	17
Broadway and Louviers Alluvium, undifferentiated:		
Sand and gravel (water-bearing)	43	60
C3-66-15bccb. Alt. 5,512 ft.		
Eolian sand:		
Topsoil; sandy loam	2	2
Dawson Formation (upper part):		
Clay, yellow to gray	63	65
Shale, gray; occasional sandy breaks	145	210
Sandstone	35	245
Shale	43	288
Coal	2	290
Sandstone layers and interbedded shale breaks	230	520
Shale, medium hard, gray to black	320	840
Dawson Formation (lower part):		
Sandstone and occasional shale breaks (Middle conglomerate, 840 to 1,002 feet.)	162	1,002
Shale, black	96	1,098
Lower conglomerate:		
Sandstone and occasional shale breaks	102	1,200
Shale, dark-gray	22	1,222
C3-67-1dddd. Alt. 5,276.2 ft.		
Eolian sand:		
Topsoil	.6	.6
Sand, fine, silty	22.8	23.4
Verdos(?) Alluvium:		
Silt, sandy, clayey	.9	24.3
Sand, fine, silty, loose, soft	2.8	27.1
Silt, sandy, clayey	2.3	29.4
Sand, fine, silty, soft	3.3	32.7
Clay, silty	3.7	36.4
Silt, sandy, clayey	4.8	41.2
Sand, fine, silty	1.2	42.4
Silt, sandy, clayey	2.6	45
Sand, fine, loose	11.2	56.2
Sand, fine to medium, loose	1.2	57.4
Sand, fine to medium, clayey	3.1	60.5
Sand, fine, loose	1.7	62.2
Sand, medium to fine, loose	3.4	65.6
Sand, fine, silty	5.2	70.8
Sand, medium, loose; contains carbonaceous streaks	2.5	73.3
Sand, coarse, loose	1.9	75.2
Dawson Formation:		
Siltstone, weathered	1.8	77
C3-67-1cbac. Alt. 5,209.0 ft.		
Topsoil	.7	.7
Sand, fine, silty	2.6	3.3
Verdos(?) Alluvium:		
Silt, calcareous; contains montmorillonite	1.7	5
Silt, sandy, clayey	6.2	11.2
Sand, fine, silty	2.8	14
Sand, fine, loose	17.6	31.6
Sand, fine to medium	5.6	37.2
Sand, fine	39.4	76.6
Sand, fine to medium, loose	7.7	84.3
Sand, coarse, loose	4.1	88.4
Sand, coarse, gravelly, loose	7.2	95.6
Gravel, fine, sandy; contains pebbles as large as 2 inches in diameter	7	102.6
Sand, medium to coarse, loose	3.6	106.2
Sand, coarse, loose	3.9	110.1
Dawson Formation:		
Shale, weathered	2.1	112.2
C3-67-4bcaa. Alt. 5,180 ft.		
Eolian sand:		
Soil	6	6
Sand	11	17
Verdos Alluvium:		
Soil, sandy	9	26
Sand	9	35
Clay	31	66
Gravel	14	80
Sand, dirty	8	88
Clay	3	91
Gravel	5	96
Dawson Formation:		
Shale	1	97
C3-67-5abcd2. Alt. 5,165 ft.		
Eolian sand:		
Clay	6	6
Louviers Alluvium:		
Clay, sandy	40	46
Gravel	15	61
C3-67-5abcd3. Alt. 5,167.3 ft.		
Eolian sand and Louviers Alluvium, undifferentiated:		
Sand, fine, silty	60	60
Dawson Formation (upper part):		
Shale, silty, clayey; contains streaks of sand	195	255
Sand, medium to coarse; contains coal particles	15	270
Shale; contains streaks of sand	50	320
Sand, fine to medium [Upper conglomerate, 320 to 410 feet.]	15	335
Shale, gray	5	340
Sand, fine	15	355
Shale, gray	25	380
Sand, fine	10	390
Shale, silty, gray	10	400
Sand, fine	10	410
Shale, gray; contains thin beds of sand and coal	160	570
Dawson Formation (lower part):		
Sand, fine to medium [Middle conglomerate, 570 to 630 feet.]	60	630
Shale, gray, silty	40	670
Lower conglomerate:		
Sand, fine to medium	10	680
Shale; contains coal streaks	75	755
Sand, medium to coarse	20	775
Shale	10	785
Sand, silty, shaly	15	800
Shale, gray	35	835
Sand, silty, shaly	10	845
Laramie Formation:		
Shale; contains thin beds of sand and coal	190	1,035
Sand, fine	15	1,050
Shale	5	1,055
Sand, fine	5	1,060
Shale; contains streaks of coal	80	1,140
Sand, fine	20	1,160
Shale; contains much coal	65	1,225
Coal	10	1,235
Shale; contains streaks of coal	45	1,280
C3-67-5abcd1.--Continued		
B sandstone:		
Sand, fine, clean, white	105	1,385
A sandstone:		
Sand and shale interbedded	30	1,415
Shale; contains streaks of sand	45	1,460
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, fine, silty, dirty	35	1,495
Shale, sandy	15	1,510
Sand, silty	10	1,520
Shale, clayey	5	1,525
C3-67-5dddd. Alt. 5,191 ft.		
Eolian sand:		
Clay, sandy	45	45
Louviers Alluvium:		
Clay	10	55
Gravel	10	65
Clay	10	75
Gravel	5	80
C3-67-5dddd2. Alt. 5,189.0 ft.		
Eolian sand:		
Soil, sandy	4	4
Clay, yellow, soft	8	12
Louviers Alluvium:		
Sand, loose	33	45
Clay, yellow	10	55
Sand, loose, coarse	7	62
Clay, yellow	3	65
Sand	17	82
Dawson Formation (upper part):		
Shale, gray	16	98
Shale, gray, and sandstone	7	105
Shale, gray	17	122
Sandstone, gray	6	128
Shale, blue and gray	44	172
Shale, sandy, gray	2	174
Shale, gray and blue	23	197
Shale, sandy, gray	6	203
Shale, blue and gray	29	232
Coal, soft, lignitic	5	237
Shale, blue and gray	40	277
Shale, gray, interbedded with layers of thin sand	21	298
Shale, gray	22	320
Sand, fine, and gray shale interbedded in thin layers	10	330
Sand, fine; contains thin layers of coal; lignitic	13	343
Shale, gray, silty	79	422
Dawson Formation (lower part):		
Sand, fine [Middle conglomerate, 422 to 500 feet.]	26	448
Shale, gray to brown	26	474
Sand, fine, and gray shale interbedded	11	485
Shale, gray, and sandstone	15	500
Shale, gray; occasional thin layers of sandstone	97	597
Sand, fine, soft, clean [Lower conglomerate, 597 to 785 feet.]	11	608
Shale, silty, gray	18	626
Sand, fine, soft, clean	20	646
Shale, sticky, gray	18	664
Sand, fine, soft, clean	14	678
Shale, silty, gray	7	685
Sand, fine; shale interbedded	68	753
Shale, sticky, gray	12	765
Sand, fine, and gray shale	20	785
Laramie Formation:		
Shale, sticky, gray	15	800
C3-67-7abca. Alt. 5,153 ft.		
Piney Creek Alluvium:		
Soil	2	2
Clay, sandy	6	8
Broadway Alluvium:		
Sand	11	19
Dawson Formation (upper part):		
Clay, yellow and gray	9	28
Shale, gray	92	120
Coal	1	121
Shale, gray	14	135
Shale, blue	7	142
Shale, gray	4	146
Limestone, sandy, white	1	147
Shale, gray	2	149

	Thickness	Depth
C3-67-7abca.--Continued		
Sandstone, gray	5	154
Shale, gray	15	169
Shale, blue	6	175
Shale, sandy, blue	9	184
Shale, gray	136	320
Shale, light-brown	6	326
Shale, gray	11	337
Sandstone, gray	8	345
Shale, light-brown	2	347
Sandstone, gray	2	349
Shale, gray	26	375
Sandstone, fine, white	3	378
Shale, gray	14	392
Lime	1	393
Sandstone, gray	8	401
Shale, gray	14	415
Sandstone, gray	6	421
Shale, gray	31	452
Shale, blue	4	456
Shale, gray	65	521
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone, gray	22	543
Shale, gray	20	563
Sand	1.5	564.5
Shale, gray	49.5	614
Lime, sandy, white	9	623
Shale, gray	15	638
Shale, brown	2	640
Shale, gray	8	648
Lower conglomerate:		
Sand, fine, white	11	659
Shale, sandy, gray	11	670
Sand, white	11	681
Shale	9	690
Sand, white	10	700
Shale	5	705
C3-67-7acaa. Alt. 5,158 ft.		
Piney Creek Alluvium:		
Topsoil	8	8
Broadway Alluvium:		
Gravel, fine, dirty	2	10
Gravel	5	15
Louviers Alluvium:		
Clay	1	16
Gravel, coarse	4	20
Dawson Formation:		
Shale	2	22
C3-67-9bbab. Alt. 5,169 ft.		
Eolian sand and Louviers Alluvium, undifferentiated:		
Sand and clay	35	35
Louviers Alluvium:		
Gravel, rock; contains small layer of clay	15	50
C3-67-9ccad. Alt. 5,212.3 ft.		
Eolian sand:		
Topsoil	.7	.7
Sand, fine, loose	20	20.7
Silt, clayey	3.7	24.4
Sand, fine, silty	3.9	28.3
Sand, medium	2.6	30.9
Verdos(?) Alluvium:		
Silt, fine, sandy, clayey	3.7	34.6
Clay, silty	3.7	38.3
Silt, sandy, clayey	6.8	45.1
Sand, fine, loose	6.4	51.5
Silt, clayey; contains thin layers of silty, fine sand	3.3	54.8
Sand, silty, fine, soft, loose	2.5	57.3
Sand, coarse, loose	13.1	70.4
Dawson Formation (upper part):		
Claystone, weathered	4.6	75
C3-67-10addc. Alt. 5,241 ft.		
Eolian sand:		
Topsoil	.7	.7
Sand, fine, silty, loose	5.9	6.6
Sand, fine, loose	1.8	8.4
Sand, medium, loose	4.4	12.8
Sand, fine, loose	7.9	20.7
Sand, fine to medium, loose	3.6	24.3
Verdos(?) Alluvium:		
Sand, coarse, loose	1.6	25.9
Sand, fine, loose	1.9	27.8
Sand, fine, silty, loose	3.4	31.2
Sand, medium, loose	7.5	38.7
Silt, sandy, soft	4	42.7
Silt, sandy, clayey	12.4	55.1
Sand, fine, silty	1	56.1
Sand, medium, loose	.4	56.5
Dawson Formation (upper part):		
Claystone, weathered	2.5	59
Shale, weathered	3.2	62.2

	Thickness	Depth
C3-67-11ddda. Alt. 5,279 ft.		
Eolian sand:		
Topsoil	.4	.4
Sand, fine, silty	10.4	10.8
Silt, sandy, compact	4.5	15.3
Silt, sandy, clayey	1.5	16.8
Sand, fine, silty	3.6	20.4
Silt, sandy, soft, loose	7.1	27.5
Sand, fine, silty, loose	3.8	31.3
Verdos Alluvium:		
Sand, medium, loose	1.9	33.2
Silt, clayey	3.5	36.7
Sand, fine, silty	2.2	38.9
Sand, fine, loose	18.4	57.3
Silt, sandy, clayey, compact	2.7	60
Sand, fine to medium	1.8	61.8
Silt, sandy	3.4	65.2
Clay, silty	5.5	70.7
Sand, fine, silty	1.7	72.4
Sand, fine to medium	8.9	81.3
Dawson Formation (upper part):		
Siltstone, weathered; 2-inch concretions; iron stains	4.7	86
C3-67-12dcda. Alt. 5,283 ft.		
Eolian sand:		
Topsoil	.7	.7
Silt, sandy	3.7	4.4
Sand, fine, silty, loose	1.7	6.1
Silt, clayey	6.6	12.7
Sand, fine, silty	5.1	17.8
Verdos Alluvium:		
Sand, medium, loose	18	35.8
Sand, fine	.3	36.1
Sand, medium, loose	8.2	44.3
Sand, fine, loose	2.8	47.1
Sand, medium, loose; contains coarse gravel	2.9	50
Sand, medium, loose; pieces of shale float	3.9	53.9
Dawson Formation (upper part):		
Siltstone, clayey, weathered	6.1	60
C3-67-14acaa. Alt. 5,270.5 ft.		
Piney Creek Alluvium and eolian sand, undifferentiated:		
Sand	2	2
Clay	4	6
Broadway Alluvium:		
Sand	18	24
Louviers Alluvium:		
Gravel	8	32
Clay	6	38
Gravel	3	41
Clay	1	42
Gravel, coarse	3	45
Clay	6	51
C3-67-14bcbb. Alt. 5,262 ft.		
Eolian sand:		
Sand, very fine to fine, fairly well-sorted, silty, subrounded to rounded, arkosic, moderate-yellowish-brown	6	6
Silt, sandy, very calcareous, white-spotted, light-olive-brown; resembles caliche; contains very fine sand	6.5	12.5
Sand, very fine to very coarse, poorly sorted, arkosic, subangular to subrounded; contains dark-yellowish-orange very calcareous silt	4.5	17
Verdos Alluvium:		
Clay, very sandy, sticky, tan	1	18
Silt, sandy, very calcareous, dusky-yellow, white-spotted	12	30
Sand, very fine to medium, silty, arkosic, micaceous, subangular to subrounded, dusky-yellow	3	33
Clay, sandy, light-brown	11	44
Silt, micaceous, calcareous, moderate-olive-brown; contains montmorillonite	3.5	47.5

	Thickness	Depth
C3-67-14bcbb.--Continued		
Sand, very fine to medium, silty, subangular to subrounded, micaceous, very calcareous, moderate-yellow; contains montmorillonite	5	52.5
Silt, very sandy, very calcareous, dusky-yellow; contains montmorillonite	5.5	58
Dawson Formation (upper part):		
Sandstone	2	60
Shale, silty, noncalcareous, dusky-yellow; contains much montmorillonite, at 60 feet		
C3-67-14cccc. Alt. 5,280 ft.		
Eolian sand:		
Sand, very fine to medium, subangular, micaceous, arkosic, loose	6.5	6.5
Silt, very sandy, compact, very calcareous, moderate-yellowish-brown; contains very fine sand and some montmorillonite	3.5	10
Sand, very fine to medium, very silty, very calcareous, arkosic, dark-yellowish-orange; contains about 50 percent silt	2.5	12.5
Silt, very sandy, very calcareous, moderate-yellowish-brown	10	22.5
Silt, very calcareous, moderate-yellowish-brown, and about 50 percent fine to medium arkosic sand	2.5	25
Dawson Formation (upper part):		
Shale at 25 feet		
C3-67-17abba. Alt. 5,204 ft.		
Overburden	32	32
Dawson Formation (upper part):		
Clay, blue, and shale	328	360
Sand	10	370
Clay and shale	59	429
Dawson Formation (lower part):		
Sand [Middle conglomerate, 429 to 510 feet.]	16	445
Clay	5	450
Sand	7	457
Clay	11	468
Sand and sandstone; two small streaks of clay	42	510
Clay and shale	135	645
Lower conglomerate:		
Sand and sandstone	20	665
Shale	10	675
Sand, tight	10	685
Sand	10	695
Shale	4	699
Sand	11	710
Shale	17	727
Shale, sandy	3	730
C3-67-17bdab. Alt. 5,210 ft.		
Eolian sand:		
Loam, sandy, hard	3	3
Broadway Alluvium:		
Sand, soft	12	15
Louviers Alluvium:		
Clay	16	31
Gravel	6	37
Clay, blue	9	46
Sand	6	52
Dawson Formation:		
Shale	1	53
C3-67-18acad2. Alt. 5,180 ft.		
Overburden	54	54
Dawson Formation (upper part):		
Clay and shale	71	125
Sandstone and sandy shale	10	135
Clay and shale	177	312
Sand, coarse	6	318
Clay and shale	22	340
Shale, sandy	25	365
Clay and shale	48	413
Dawson Formation (lower part):		
Sandrock [Middle conglomerate, 413 to 453 feet.]	2	415
Sand and sandrock	38	453

	Thickness	Depth
C1-67-18acad2.--Continued		
Clay and shale. . . .	147	600
Lower conglomerate:		
Clay, and streaks of packed sand	35	635
Sandstone and sand. .	20	655
Shale	15	670
C1-67-18bdda. Alt. 5,180 ft.		
Post-Piney Creek alluvium:		
Sand.	6	6
Broadway Alluvium:		
Gravel.	9	15
Louviers Alluvium:		
Clay.	11	26
Gravel.	11	37
Clay.	3	40
Dawson Formation (upper part):		
Sandstone, hard . . .	2	42
C1-67-19cdad. Alt. 5,265.7 ft.		
Piney Creek Alluvium:		
Clay.	9	9
Broadway Alluvium:		
Gravel.	18	27
Louviers Alluvium:		
Clay.	4	31
Gravel.	7	38
Clay.	12	50
Gravel.	12	62
Clay.	12	74
Gravel, fine.	6	80
Dawson Formation:		
Clay.	12	92
Shale	3	95
C1-67-21dddb. Alt. 5,250 ft.		
Post-Piney Creek alluvium:		
Sand, silty, coarse .	2.5	2.5
Louviers Alluvium:		
Sand, very fine, very silty, arkosic, subangular, only slightly calcareous; 40 to 50 percent silt. . . .	3.5	6
Sand, medium to very coarse, subangular, arkosic, and about 20 percent very fine gravel; contains dark-yellowish-orange silt from 10.0 feet to 14.0 feet and cobbles from 11.0 feet to 12.0 feet .	8	14
Dawson Formation (upper part):		
Shale, clay, noncalcareous, dusky-yellow; contains limonite and montmorillonite and has sandy streaks	6	20
C1-67-22ccdc. Alt. 5,265 ft.		
Piney Creek Alluvium:		
Clay, silty, dark-brown	2.5	2.5
Sand, very fine to medium, very silty, calcareous, dark-yellowish-brown .	2.5	5
Clay, silty, dark-brown	5	10
Louviers Alluvium:		
Silt, sandy and clayey, very calcareous, very micaceous	2	12
Sand, fine to coarse, subangular to subrounded, arkosic, silty, pale-yellowish-brown	.5	12.5
Sand, very fine to very coarse, mostly subangular to subrounded; contains a little very fine gravel, well-rounded sand, and pale-yellowish-brown silt	7.5	20
Gravel, very fine to fine, angular to subrounded, silty, and poorly sorted sand.	7.5	27.5
Sand, very fine to very coarse, poorly sorted, arkosic, subangular to subrounded, and about 10 percent very fine gravel.	2.5	30
Gravel, very fine to fine, angular to subrounded, fairly clean, and poorly sorted sand.	3	33
Dawson Formation (upper part):		
Shale, silty and sandy, calcareous, micaceous, moderate-yellowish-brown; contains montmorillonite.	4.5	37.5

	Thickness	Depth
C1-67-24bddd. Alt. 5,330 ft.		
Eolian sand, Broadway and Louviers Alluvium, and Dawson Formation, undifferentiated:		
Surface sand and gravel near top.	100	100
Dawson Formation (upper and lower parts, undifferentiated):		
Sand and gravel (water)	78	178
Coal and shale. . . .	4	182
No sample	23	205
Gravel (water). . . .	11	216
Soapstone and clay. .	284	500
No sample	22	522
Coal, shale; Scranton coal (water). . . .	7	529
No sample	271	800
"Shale to the iron deposit".	10	810
Gravel (water). . . .	10	820
Shale	10	830
No sample	264	1,094
Laramie Formation:		
Shale, lime (water) .	14	1,108
No sample	120	1,228
Shale and sand. . . .	17	1,245
No sample	55	1,300
Shale, light-colored (gas flow).	140	1,440
Shales, black	30	1,470
Shales, black; contains shells (show of oil)	5	1,475
Shale, brown.	65	1,540
Coal.	10	1,550
B and A sandstones, undifferentiated:		
Sand, solid	130	1,680
Shale	10	1,690
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand (show of oil). .	20	1,710
Transition zone:		
Shale and limestone; shells.	140	1,850
Shale and shells (show of oil) . . .	100	1,950
Shale and shells. . .	60	2,010
Shale and shells (oil sand)	55	2,065
Total depth 3,790 feet		
C1-67-29aaaa. Alt. 5,283.5 ft.		
Eolian sand:		
Sand, very fine, very silty, micaceous, subangular, pale-yellowish-brown; dusky yellow 4 to 5 feet.	5	5
Louviers Alluvium:		
Silt, very calcareous, light-olive-gray; contains a little coarse sand, some white calcareous particles, and much montmorillonite . .	12.5	17.5
C1-67-29caaa. Alt. 5,316.2 ft.		
Eolian sand:		
Clay.	3	3
Sand, fine.	4	7
Louviers Alluvium:		
Clay.	17	24
Sand and gravel . . .	56	80
Dawson Formation:		
Clay, tan	15	95
C1-67-34dbba. Alt. 5,324 ft.		
Piney Creek Alluvium:		
Topsoil	8	8
Broadway Alluvium:		
Sand.	4	12
Sand and gravel . . .	3	15
Louviers Alluvium:		
Clay.	38	53
Gravel.	1	54
Dawson Formation (upper part):		
Shale, blue	19	73
Sand, gray, and sandstone	5.5	78.5
C1-67-35adda. Alt. 5,363 ft.		
Younger loess:		
Clay, brown	18	18
Dawson Formation (upper part):		
Clay, sandy	17	35
Clay, yellow.	30	65
Coal blossom.	5	70
Shale, medium hard, gray to blue; occasional interbedded thin coal seams	680	750
Dawson Formation (lower part)		

	Thickness	Depth
C1-67-35adda.--Continued		
Sand; occasional thin shale breaks (water) (Middle conglomerate, 750 to 940 feet.) . .	90	840
Shale, sandy	35	875
Sand; occasional shale breaks (water) . . .	65	940
Shale, hard, dark-gray	75	1,015
Lower conglomerate:		
Sandstone (water-bearing).	40	1,055
Shale, sandy, hard, dark-gray.	45	1,100
C1-67-36acdb. Alt. 5,370 ft.		
Younger loess:		
Loam	15	15
Broadway Alluvium:		
Gravel, sandy.	21	36
Louviers Alluvium:		
Clay and gravel. . . .	4	40
Dawson Formation (upper part):		
Shale, brown	10	50
Shale, blue.	5	55
Coal	1.5	56.5
Shale, brown	7.5	64
Sandrock	5	69
Shale, sandy, hard . .	15	84
Clay	5	89
Shale.	78	167
Rock	2	169
Shale and clay	114	283
Sandrock [Upper conglomerate, 284 to 291 feet.]	2	285
Clay	2	287
Sand, white.	4	291
Clay and shale	134	425
Rock	5	430
Clay	22	452
Sandrock, soft	8	460
Clay and shale	115	575
Rock	2	577
Sandrock, soft	28	605
Clay	20	625
Shale, caved	65	690
Dawson Formation (lower part):		
Middle conglomerate:		
Sandrock (water) . . .	40	730
Clay and shale	60	790
Sandrock, hard	15	805
Sandrock (water) . . .	98	903
Shale, black	24	927
C1-68-1aaad. Alt. 5,103 ft.		
Overburden	33	33
Dawson Formation (upper part):		
Clay, blue, and shale.	37	70
Sandstone.	15	85
Clay and shale	80	165
Sand	5	170
Sandrock	3	173
Clay and shale	104	277
Sand and sandstone . .	21	298
Clay and shale	67	365
Sand, tight, and sandstone.	25	390
Clay and shale	57	447
Dawson Formation (lower part):		
Middle conglomerate:		
Sand and sandstone . .	41	488
Clay	8	496
Sand and sandstone . .	22	518
Clay	7	525
C1-68-3bccc. Alt. 5,180 ft.		
Piney Creek Alluvium:		
Soil	2	2
Clay, sandy, yellow. .	17	19
Dawson Formation (upper part):		
Sandstone, blue. . . .	10	29
Shale, gray.	165	194
Dawson Formation (lower part):		
Sand [Middle conglomerate, 76 to 202 feet.]	8	202
Shale, gray.	105	307
Sand, fine [Lower conglomerate, 338 to 501 feet.]	186	493
Shale, gray.	21	514
Sand, fine, and gray shale.	23	537
Shale, gray.	12	549
Sand, fine, and gray shale.	36	585
Shale, brown	6	591
Shale, gray, and fine sand	19	610

	Thickness	Depth
CJ-68-1cddc. Alt. 5,165 ft.		
Post-Piney Creek alluvium:		
Topsoil	5	5
Broadway and Louviers Alluvium, undifferentiated:		
Gravel	28	33
CJ-68-4acdb. Alt. 5,232.6 ft.		
Younger loess:		
Soil, surface	5	5
Clay, yellow	30	35
Louviers Alluvium:		
Sand and gravel (water)	20	55
Dawson Formation:		
Clay, blue	15	70
CJ-68-4bccc. Alt. 5,246.0 ft.		
Younger loess and Louviers Alluvium, undifferentiated:		
Sand and shale	20	20
Louviers Alluvium:		
Boulders and gravel	10	30
Dawson Formation:		
Shale, gray	5	35
CJ-68-5ccbb. Alt. 5,275.5 ft.		
Piney Creek Alluvium:		
Topsoil	18	18
Slocum Alluvium:		
Clay	9	27
Gravel	22	49
Dawson Formation:		
Shale	1	50
CJ-68-5ccdc. Alt. 5,252.8 ft.		
Younger loess:		
Topsoil, and pale-yellowish-brown sandy very calcareous finely micaceous silt	2.5	2.5
Silt, compact, micaceous, very calcareous, pale-yellowish-brown	5.5	8
Dawson Formation (upper part):		
Shale, very silty, hard, very calcareous, grayish-orange	4.5	12.5
CJ-68-5daaa. Alt. 5,245 ft.		
Fill	1	1
Younger loess:		
Clay, yellow	18	19
Sand	3	22
Slocum Alluvium:		
Clay, yellow	10	32
Sand and gravel	11	43
Dawson Formation (upper part):		
Shale, blue	8	51
Shale, gray	139	190
Dawson Formation (lower part):		
Sand [Middle conglomerate, 180 to 235 feet.]	12	202
Shale, gray	7	209
Sand	21	230
Shale, gray	61	291
Shale, blue	6	297
Shale, gray	19	316
Shale, gray, and fine sand	19	335
Lower conglomerate:		
Sand and gray shale	128	463
Shale, gray	19	482
Sand	39	521
Shale, gray	52	573
Sand	21	594
Shale, gray, and fine sand	46	640
CJ-68-5dcab. Alt. 5,254 ft.		
Younger loess:		
Topsoil	15	15
Louviers Alluvium:		
Gravel (water, shut out)	20	35
Dawson Formation (upper part):		
Shale	73	108
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone, blue	15	123
Shale	2	125
CJ-68-6cadd. Alt. 5,303 ft.		
Younger loess:		
Soil	2	2
Clay, yellow	15	17
Dawson Formation (upper part):		
Clay, yellow and gray	34	51
Dawson Formation (lower part):		
Shale, gray, and sandstone [Middle conglomerate, 51 to 219 feet.]	69	120
Lime, sandy	5	125

	Thickness	Depth
CJ-68-6cadd.--Continued		
Sand, fine	13	138
Shale, gray	19	157
Sand, fine, and gray shale	23	180
Shale, gray, and fine sand	36	216
Sand, fine, and gray shale	20	236
Sandstone, gray	7	243
Shale, gray	21	264
Sandstone, gray	4	268
Shale, gray	6	274
Sandstone, gray	15	289
Shale, gray	39	328
Sandstone, gray	11	339
Shale, gray	5	344
Lime, sandy	1	345
Lower conglomerate:		
Sand, medium to fine	39	384
Sand, fine, and gray shale	81	465
Shale, gray	11	476
Sand, fine, and gray shale	106	582
Shale, gray	25	607
Shale, brown	4	611
Shale, gray	3	614
CJ-68-6dccb. Alt. 5,297.9 ft.		
Younger loess:		
Clay	30	30
Dawson Formation (lower part):		
Middle conglomerate:		
Silt and caliche stringers, very hard	2	32
Gravel, packed, very hard	18	50
Gravel, loose	10	60
Shale	45	105
CJ-68-7cabb. Alt. 5,271 ft.		
Piney Creek Alluvium:		
Soil	1	1
Clay, yellow	6	7
Louviers Alluvium:		
Boulders	7	14
Dawson Formation (upper part):		
Clay, yellow	12	26
Shale, gray	56	82
Dawson Formation (lower part):		
Sand, fine [Middle conglomerate, 82 to 157 feet.]	4	86
Shale, gray	13	99
Sand, fine	6	105
Shale, gray	44	149
Sandstone, gray, and gray shale	8	157
Lime, sandy	3	160
Shale, gray	23	183
Sandstone, gray, and shale	36	219
Shale, gray	26	245
Sandstone, gray	19	264
Shale, gray	17	281
Sandstone, gray	14	295
Shale, gray	19	314
Lower conglomerate:		
Sand, fine	5	319
Lime, sandy	4	323
Sand	52	375
Sand and gray shale	36	411
Shale, gray	7	418
Sand and gray shale	121	539
Shale, gray	77	616
CJ-68-8bbda. Alt. 5,222.7 ft.		
Post-Piney Creek alluvium:		
Soil, loam, clayey, sandy, damp, brown	.5	.5
Silt, sandy, clayey, noncalcareous, pale-brown; contains montmorillonite	2	2.5
Silt, sandy, very micaceous, very calcareous, grayish-orange; contains very fine to fine sand at 8 feet	5.5	8
Silt, sandy, compact, very calcareous, moderate-yellowish-brown; contains montmorillonite	3	11
Broadway Alluvium:		
Gravel, sand, and clay	.5	11.5
Clay, sandy, light-tan	.5	12
Gravel, very fine, and very fine to fine sand	1	13
Clay, silty and sandy, plastic, gray	1	14

	Thickness	Depth
CJ-68-8bbda.--Continued		
Gravel, very fine to medium, subangular to rounded, arkosic, and very fine to coarse sand	7	21
Louviers Alluvium:		
Sand and silt; contains some fine angular to subrounded gravel and cobbles	8	29
Dawson Formation (upper part):		
Shale, noncalcareous, medium-light-gray; contains montmorillonite	3.5	32.5
CJ-68-8bddd. Alt. 5,205.3 ft.		
Post-Piney Creek alluvium:		
Cobbles, very fine to very coarse gravel, and medium to coarse sand; grains are angular to well-rounded	.5	.5
Broadway Alluvium:		
Gravel, very fine to medium, subrounded to well-rounded, arkosic, and fine to very coarse sand	1.4	1.9
Louviers Alluvium:		
Clay, very sandy, very micaceous, noncalcareous, brown, and some gravel	1.7	3.6
Gravel, very fine to very coarse, subrounded to well-rounded, arkosic; iron stained	1.2	4.8
Cobbles, very fine to coarse gravel, and sand	1.5	6.3
Sand, medium to coarse, angular to subangular, arkosic	1.1	7.4
Cobbles, coarse gravel, and sand, subrounded to well-rounded	5	12.4
Sand, medium to very coarse, angular to subrounded	.8	13.2
Cobbles and coarse gravel, well-rounded	3.6	16.8
Dawson Formation:		
Shale at 16.8 feet		
CJ-68-8dbbc. Alt. 5,209.2 ft.		
Post-Piney Creek alluvium:		
Sand and loam, loose, tan	6	6
Silt, noncalcareous, pale-yellowish-brown; contains some very fine sand	2.5	8.5
Broadway Alluvium:		
Gravel, medium to coarse, subrounded to well-rounded, arkosic, and angular to subangular fine to medium sand	2.5	11
Louviers Alluvium:		
Gravel and cobbles, well-rounded	3	13
Sand, very fine to medium, silty, noncalcareous, finely micaceous, pale-yellowish-brown	1	14
Gravel, coarse, and cobbles	3.5	17.5
Sand, very fine to medium, silty, slightly calcareous, pale-yellowish-brown	2	19.5
Dawson Formation (upper part):		
Shale, slightly silty, noncalcareous, light-olive-gray and olive-gray; contains montmorillonite	3	22.5
CJ-68-8dcab. Alt. 5,204.2 ft.		
Post-Piney Creek alluvium:		
Silt, very sandy, micaceous, noncalcareous, plastic, dark-yellowish-brown	4	4
Louviers Alluvium:		
Sand, very fine to very coarse, subangular to subrounded, arkosic, micaceous, noncalcareous, in part silty, pale-yellowish-brown; contains some gravel, clay, and cobbles	6.5	10.5

	Thickness	Depth
C3-68-8dcab.--Continued		
Dawson Formation (upper part):		
Shale, silty, noncalcareous, micaceous, dark-gray; contains montmorillonite	2	12.5
C3-68-9cadd2. Alt. 5,232 ft.		
Eolian sand:		
Clay	6	6
Louviers Alluvium:		
Sand and gravel	6	12
Dawson Formation (upper part):		
Slate, yellow	12	24
Shale, blue	8	32
Shale, gray	6	38
Sand and blue shale	12	50
Sandstone	5	55
Shale, blue	25	80
Sandstone	5	85
Shale, gray	50	135
Dawson Formation (lower part):		
Sandstone [Middle conglomerate, 135 to 351 feet.]	5	140
Sandslate, gray	42	182
Sandstone	5	187
Sandslate, gray	41	228
Rock, hard, brown	1	229
Slate, gray	16	245
Sandstone	10	255
Sandslate, gray	5	260
Sandstone	23	283
Sandslate, gray	20	303
Slate, gray	37	340
Sandstone	11	351
Sandslate, gray	59	410
Lower conglomerate:		
Sandstone	25	435
Slate, gray	8	443
Sandstone	47	490
Slate, gray	35	525
Rock, hard	3	528
Sandstone	9	537
Sandslate, blue	13	550
Sandstone	10	560
Sandstone, gray	65	625
Sandstone	12	637
Laramie(?) Formation:		
Shale, hard, blue-gray	71	708
C3-68-10ccdb. Alt. 5,220 ft.		
Eolian sand:		
Sand, fine, and clay	8	8
Louviers Alluvium:		
Sand, gravel, and boulders	8	16
Dawson Formation (upper part):		
Shale, sandy, grayish	32	48
Shales, green, blue, and black, in alternating layers	44	92
Dawson Formation (lower part):		
Quartz sand, white clay, and gravel [Middle conglomerate, 92 to 328 feet.]	20	112
Shale, tough, grayish	26	138
Shales, green, blue, and black; green shale disintegrates and caves	155	293
Quartz sand, white clay, and gravel	35	328
Shale, sandy, grayish	14	342
Shale, hard, siliceous, black	13	355
Shale, hard, white	15	370
Lower conglomerate:		
Clay, whitish; contains coarse gravel	42	412
Clay, white, gravel, and hard alternating layers of fine sandstone	63	475
Shale, viscous, white	35	510
Sandstone, coarse	14	524
Sandstone, fine, sugarlike	41	565
Shale, white, and alternating layers of fine sandstone	29	594
Sandstone, fine, white	9	603
C3-68-10dadc. Alt. 5,220 ft.		
Overburden	18	18
Dawson Formation (upper part):		
Clay, blue, and shale	22	40
Sandstone	5	45
Clay and shale	105	150
Dawson Formation (lower part):		
Sand and sandstone [Middle conglomerate, 150 to 264 feet.]	7	157
C3-68-10dadc.--Continued		
Clay and shale	13	170
Sand and sandstone	10	180
Clay and shale	17	197
Sand and sandstone	14	211
Clay and shale	27	238
Sand and sandstone	14	252
Clay, sand, and sandstone	12	264
Clay and shale	98	362
Sandstone	10	372
Shale	113	485
Lower conglomerate:		
Sand and sandstone	25	510
Clay and shale	23	533
Sandstone	12	545
Shale	10	555
Sand and sandstone	20	575
Clay and shale	27	602
Sand	5	607
Shale	41	648
Rock	2	650
Clay and shale	13	663
Sandstone	5	668
Laramie Formation:		
Shale	38	706
Rock	1	707
Clay	36	743
Rock	3	746
Clay	19	765
C3-68-11acda. Alt. 5,131.0 ft.		
Piney Creek Alluvium:		
Clay, sandy, brown	3	3
Louviers Alluvium:		
Sand, coarse, gravel, and boulders	13	16
Dawson Formation (upper part):		
Shale, blue	58	74
Dawson Formation (lower part):		
Middle conglomerate:		
Sand, fine, gray	20	94
Shale, gray	26	120
Sand, very soft, gray	50	170
Shale, gray	50	220
Sandstone, very hard, gray	50	270
Shale, soft, gray	112	382
Lower conglomerate:		
Sandstone, gray	148	530
Sandstone; contains streaks of shale	50	580
Laramie Formation:		
Shale, gray; contains streaks of coal	363	943
C3-68-11adda2. Alt. 5,118.5 ft.		
Post-Piney Creek alluvium:		
Sand and silt	4	4
Gravel	5	9
Louviers Alluvium:		
Clay	.5	9.5
Gravel to cobbles	20.5	30
Dawson Formation:		
Shale at 30.0 feet		
C3-68-11bccb. Alt. 5,182 ft.		
Eolian sand:		
Clay	6	6
Louviers Alluvium:		
Gravel, dirty	6	12
Dawson Formation (upper part):		
Clay	9	21
Shale	31	52
Rock, hard	3	55
Shale, brown	2	57
Shale, blue	17	74
Dawson Formation (lower part):		
Sand, dirty [Middle conglomerate, 74 to 306 feet.]	3	77
Shale, gray	12	89
Sandstone	11	100
Shale, soft, gray	140	240
Shale, sandy	6	246
Sandstone	3	249
Sand	6	255
Shale, gray	31	286
Sand	20	306
Shale, brown	8	314
Shale, hard, brown	46	360
Shale, blue	34	394
Coal	2	395
Shale	4	400
Rock	2	402
Lower conglomerate:		
Sand	8	410
Shale	37	447
Sand	73	520
Shale	32	552
Sand	29	581
Shale	21	602
Sand	10	612
C3-68-11bccb.--Continued		
Laramie Formation:		
Shale, hard	99	711
Rock	2	713
Shale	21	734
Shale, gray	31	765
Rock	2	767
Shale, brown	5	772
Shale, gray	18	790
Shale, hard	14	804
C3-68-12cbac. Alt. 5,120 ft.		
Post-Piney Creek alluvium:		
Topsoil	3	3
Gravel	15	18
Louviers Alluvium:		
Clay	.5	18.5
Gravel	16	34.5
C3-68-12cdba. Alt. 5,145 ft.		
Overburden	30	30
Dawson Formation (upper part):		
Clay, blue, and shale	110	140
Dawson Formation (lower part):		
Sand and sandstone [Middle conglomerate, 140 to 341 feet.]	12	152
Clay, gray	28	180
Sand and sandstone	38	218
Clay, gray, and streaks of sandstone	11	229
Sand	7	236
Clay, gray	26	262
Sandstone and sand	12	274
Shale, gray	4	278
Sandstone and sand	15	293
Shale, gray	26	319
Sandstone and sand	22	341
Shale, gray	62	403
Sandstone, hard	4	407
Shale	27	434
Lower conglomerate:		
Sandstone	4	438
Shale	27	465
Sandstone	19	484
Shale	16	500
Sandstone	19	519
Shale	3	522
Sandstone	4	526
Shale, broken	4	530
Sandstone	13	543
Shale	14	557
Sandrock	5	562
Shale, gray	6	568
Sandstone	28	596
Shale, gray	9	605
Sandstone	8	613
Shale, gray	55	668
Sandstone	18	686
Shale	28	714
Sandstone	12	726
Shale	2	728
Sand	3	731
Laramie Formation:		
Shale	59	790
Shale and streaks of sandstone	22	812
Shale	163	975
C3-68-12dadb. Alt. 5,150 ft.		
Piney Creek Alluvium:		
Clay, sandy	8	8
Broadway Alluvium:		
Gravel	4	12
Louviers Alluvium:		
Clay	4	16
Gravel and rocks	12	28
Clay	7	35
Gravel	8	43
Dawson Formation:		
Clay	1	44
Shale	3	47
C3-68-12dcaa. Alt. 5,158 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Topsoil, sandy	3	3
Sand and gravel	41	44
Dawson Formation (upper part):		
Clay, yellow	3	47
Shale, blue	5	52
Shale, gray	15	67
Sandstone, gray	5	72
Shale, gray	19	91
Sandstone, gray, and gray shale	79	170
Shale, gray	14	184
Shale, sandy, gray	12	196
Shale	49	245
Dawson Formation (lower part):		
Sand, coal, and gray shale [Middle conglomerate, 245 to 408 feet.]	13	258

	Thickness	Depth
C3-68-12dcaa.--Continued		
Shale, gray	7	265
Sand, fine.	17	282
Shale, gray	36	318
Sand, fine, and gray shale	17	335
Shale, gray	19	354
Sand, fine.	14	368
Shale, gray	32	400
Sandstone, gray	8	408
Shale, gray, and sandstone	38	446
Shale, gray	24	470
Sandstone, gray	6	476
Shale, gray	11	487
Shale, blue	9	496
Shale, gray	17	513
Lower conglomerate:		
Sand, medium.	10	523
Shale, gray	13	536
Sand.	22	558
Shale, gray, and sand	12	570
Sand.	27	597
Shale, gray	18	615
Sand, medium.	12	627
Sand, fine, and gray shale	23	650
Shale, gray	50	700
Lime, sandy	1	701
Shale, sandy, gray.	13	714
Sand, medium.	12	726
Laramie Formation:		
Shale, gray	115	841
Shale, brown.	4	845
Shale, gray	25	870
Shale, brown, and coal blossom	13	883
Shale, gray	47	930
Lime, sandy	2	932
Shale, gray	218	1,150
Coal and gray shale.	37	1,187
Sand, fine.	10	1,197
Coal and gray shale.	21	1,218
Sand, fine, and gray shale	21	1,239
Coal and gray shale.	12	1,251
Sand, fine [B sandstone, 1,251 to 1,325 feet.]	74	1,325
Shale, sandy, gray.	57	1,382
A sandstone:		
Sand, fine, coal, and gray shale.	12	1,394
Shale, gray	34	1,428
Sand, fine, and gray shale	14	1,442
Shale, gray	14	1,456
Sand, fine, and gray shale	22	1,478
Shale, sandy, gray.	19	1,497
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone, hard, white	3	1,500
Sand, fine, and gray shale	102	1,602
Shale, gray	11	1,613
Sand, fine.	5	1,618
Shale, gray	8	1,626
C3-68-13abbb. Alt. 5,165 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Gravel.	28	28
Louviers Alluvium:		
Shale	7	35
Sand; contains streak of clay	5	40
Clay; contains rock	2	42
Gravel.	3	45
Dawson Formation:		
Shale, brown.	2	47
Shale, blue, at 47 feet		
C3-68-14acbc. Alt. 5,135 ft.		
Post-Piney Creek alluvium:		
Soil.	2	2
Clay, sandy, yellow	5	7
Louviers Alluvium:		
Sand and gravel	26	33
Dawson Formation (upper part):		
Shale, blue	8	41
Shale, gray	25	66
Sandstone, gray	5	71
Sand, fine.	5	76
Shale, gray	51	127
Dawson Formation (lower part):		
Sand, fine, and gray shale [Middle conglomerate, 127 to 301 feet.]	72	199
Shale, gray	30	229
Sand, fine.	8	237
Shale, gray	41	278
Sand, medium to fine.	23	301

	Thickness	Depth
C3-68-14acbc.--Continued		
Shale, gray	128	429
Lower conglomerate:		
Sand, medium to fine.	24	453
Shale, gray	10	463
Sand.	33	496
Sand, fine, and gray shale	79	575
Shale, gray	41	616
C3-68-14bccd. Alt. 5,138 ft.		
Post-Piney Creek alluvium:		
Overburden.	2	2
Sand and gravel	11	13
Louviers Alluvium:		
Clay.	1.5	14.5
Sand and gravel	18.5	33
C3-68-15dbcb. Alt. 5,201.0 ft.		
Eolian sand:		
Sand, very fine to fine, loose, tan.	2.5	2.5
Sand, very fine to medium, silty, calcareous, dark-yellowish-orange.	1.5	4
Caliche, silty, pale-yellowish-brown, white-mottled and streaked	3	7
Dawson Formation (upper part):		
Shale, silty, sandy, weathered, calcareous, grayish-yellow and dusky-yellow; contains montmorillonite; less sand below 12.5 feet	10.5	17.5
Shale, clay, noncalcareous, pale-olive	2.5	20
Shale, silty, dusky-yellow, noncalcareous; contains montmorillonite.	2.5	22.5
C3-68-15ddbc. Alt. 5,146.5 ft.		
Fill.	6	6
Post-Piney Creek alluvium:		
Gravely, medium to coarse, arkosic, subrounded to rounded, dirty, dry	4	10
Louivers Alluvium:		
Gravel, fine to coarse, arkosic, subangular to subrounded, loose, *clean; contains* cobbles	2.5	12.5
Gravel, medium to very coarse, arkosic, subrounded to well-rounded, loose, clean; contains cobbles.	1.5	14
Gravel, very fine to medium, and very coarse sand, fairly well-sorted.	3.5	17.5
Gravel, very fine to medium, arkosic, subangular to subrounded; contains cobbles.	7.5	25
Gravel, fine, well-sorted, subangular, arkosic	5	30
Gravel, medium to coarse, subangular to subrounded, arkosic, loose	2.5	32.5
Dawson Formation (upper part):		
Shale, clay, noncalcareous, light-olive-gray; contains montmorillonite.	5	37.5
C3-68-16dcac. Alt. 5,242.0 ft.		
Piney Creek Alluvium:		
Topsoil	2	2
Dawson Formation (upper part):		
Shale and clay.	258	260
Dawson Formation (lower part):		
Sand and sandstone; contains streaks of shale [Middle conglomerate, 260 to 348 feet.]	88	348
Shale and clay.	42	390
Shale; contains streaks of sandstone.	98	488
Lower conglomerate:		
Sandstone; contains streaks of shale.	144	632
Shale	27	659
C3-68-17acda. Alt. 5,355 ft.		
Overburden.	40	40
Dawson Formation (upper part):		
Clay, blue, and shale	260	300

	Thickness	Depth
C3-68-17acda.--Continued		
Shale, sandy	7	307
Clay	3	310
Dawson Formation (lower part):		
Sand, coarse [Middle conglomerate, 310 to 394 feet.]	6	316
Shale, sandy	6	322
Sand, coarse, and sandstone.	16	338
Shale, sandy	32	370
Sandstone.	11	381
Flintrock.	4	385
Clay	5	390
Sand, coarse	4	394
Shale.	128	522
Lower conglomerate:		
Sandrock	2	524
Clay, sandy, and coarse sand	71	595
Sand	25	620
Shale.	15	635
Sand and sandstone	15	650
Shale.	35	685
Sand and sandstone	25	710
Shale.	22	732
Shale, sandy	6	738
Laramie Formation:		
Shale.	72	810
C3-68-17adba. Alt. 5,341 ft.		
Younger loess:		
Topsoil.	5	5
Clay, sandy.	10	15
Dawson Formation (upper part):		
Clay and shale	30	45
Shale; contains streaks of sandstone	55	100
C3-68-17adcc. Alt. 5,358.0 ft.		
Younger loess:		
Soil	5	5
Slocum Alluvium:		
Sand	30	35
Dawson Formation (upper part):		
Shale.	10	45
Sand	5	50
Shale.	25	75
C3-68-23acca. Alt. 5,186.0 ft.		
Broadway Alluvium:		
Topsoil, sandy, black, and fill	3.5	3.5
Gravel, very fine to coarse, about 30 percent coarse, subangular to subrounded, arkosic, loose, poorly sorted; contains scattered cobbles.	6.5	10
Gravel, very fine to fine, subangular, arkosic, loose, and about 50 percent medium to very coarse sand	2.5	12.5
Louviers Alluvium:		
Sand, very fine to fine, silty, calcareous, arkosic, dusky-yellow	3.5	16
Gravel, very fine to fine, arkosic, subangular, and very fine to very coarse sand; contains cobbles	11.5	27.5
Sand, very coarse, subangular to subrounded, arkosic, and about 5 percent very fine to medium subangular to well-rounded gravel.	2.5	30
Gravel, very fine to fine, dirty, subangular, arkosic, and very fine to very coarse sand; contains cobbles	7.5	37.5
Gravel, very fine to fine, subangular to subrounded, arkosic, and about 30 percent very fine to very coarse sand.	6.5	44
Dawson Formation (upper part):		
Shale, silty, olive-gray, noncalcareous; contains montmorillonite.	3.5	47.5

	Thickness	Depth
CJ-68-21bbba. Alt. 5,144 ft.		
Fill	9	9
Post-Piney Creek alluvium and Louviers Alluvium, undifferentiated:		
Sand, gravel (water)	22	31
Dawson Formation (upper part):		
Shale, hard, blue, and green sandy shale	68	99
Sandrock, hard, gray	6	105
Shales, bluish, hard and soft strata	74	179
Shale, green, caves	11	190
Dawson Formation (lower part):		
Sandrock [Middle conglomerate, 190 to 380 feet.]	6	196
Shale, green, caving	5	201
Shale, gray, sandy	64	265
Sandrock, gray (water)	20	285
Shale, sticky, bluish	34	319
Sandrock (water)	5	324
Shale, greenish and gray	11	335
Sandrock (water)	5	340
Shale, sticky, bluish and gray	30	370
Sandrock (water)	10	380
Shale, sticky, greenish	20	400
Shale, alternating hard and soft layers, caves	32	432
Lower conglomerate:		
Sand and clay (water)	8	440
Shale, sticky, greenish	40	480
Sand and white clay, alternating layers	23	503
Shale, caves, bluish-brown and green	67	570
Sandrock; contains intervening layer of black shale (water)	19	589
Shale, black and brown; contains intervening layers of sandstone	12	601
Laramie Formation:		
Shale, caves, greenish and black	49	650
CJ-68-23dabb. Alt. 5,193.0 ft.		
Piney Creek Alluvium:		
Sand and loam, brown	3	3
Broadway Alluvium:		
Sand, very fine to very coarse, subangular, arkosic, loose, and about 20 percent arkosic subangular to subrounded very fine to fine gravel	4.5	7.5
Gravel, coarse to very coarse, arkosic, subangular to subrounded, and about 20 percent very coarse sand	2.5	10
Gravel, very fine to fine, and medium to very coarse sand	1	11
Louviers Alluvium:		
Gravel, coarse, subrounded to rounded, arkosic, and about 10 percent very fine to very coarse sand; contains cobbles from 13.0 to 15.5 feet	4.5	15.5
Gravel, very fine to medium, subangular to subrounded, loose, clean; contains some cobbles	4.5	20
Sand, very fine to very coarse, subangular to subrounded, slightly silty, and about 50 percent very fine to fine gravel	2.5	22.5
Gravel, very fine to fine, subangular to subrounded, arkosic, and coarse to very coarse sand	4.5	27
Cobbles, well-rounded, and loose arkosic subrounded to rounded very fine to coarse gravel	7	34
Gravel, fine, fairly well-sorted, arkosic, subrounded to rounded	3.5	37.5
Cobbles and fine to coarse sand	4.5	42

	Thickness	Depth
CJ-68-23dabb.--Continued		
Dawson Formation (upper part):		
Shale, silty, noncalcareous, pale-olive; contains montmorillonite	5.5	47.5
CJ-68-24bbdd. Alt. 5,189 ft.		
Younger loess:		
Overburden	3	3
Silt, sandy, dry	10	13
Broadway Alluvium:		
Sand, fine to medium	10	23
Louviers Alluvium:		
Clay, sandy	2	25
Gravel and cobbles	3	28
Clay, sandy	4	32
Clay, tight	4	36
Gravel	11	47
CJ-68-27dcdd. Alt. 5,205 ft.		
Broadway Alluvium:		
Soil, sandy	4	4
Sand, fine	19	23
Louviers Alluvium:		
Sand, coarse, and fine gravel	29	52
Dawson Formation (upper part):		
Clay and shale	82	134
Sandstone, gray	6	140
Clay and shale	38	178
Dawson Formation (lower part):		
Sand [Middle conglomerate, 178 to 430 feet.]	4	182
Clay	18	200
Sandstone, gray	13	213
Clay	85	298
Clay and hard shale	15	313
Clay	54	367
Sandstone, hard	15	382
Sandstone	2	384
Sandstone, hard	41	425
Sandstone	5	430
Clay and rock, alternating	100	530
Lower conglomerate:		
Sandstone	4	534
Quicksand	207	741
Shale	20	761
Clay, sandy	24	785
Clay	15	800
CJ-68-31acaa. Alt. 5,324.5 ft.		
Younger loess:		
Topsoil	8	8
Clay, yellow	10	18
Slocum Alluvium:		
Sand (water-bearing)	7	25
Clay, sandy (no water)	15	40
Dawson Formation (upper part):		
Clay, blue, and sand	10	50
Sandstone, black	5	55
Shale	3	58
CJ-68-33bccc. Alt. 5,185 ft.		
Post-Piney Creek alluvium:		
Soil, surface	6	6
Louviers Alluvium:		
Sand and gravel	9	15
Dawson Formation (upper part):		
Shale, brown	10	25
Shale, blue	32	57
Sand, black	5	62
Shale, blue	32	94
Dawson Formation (lower part):		
Sandstone (water) [Middle conglomerate, 94 to 276 feet.]	11	105
Shale	54	159
Sandstone (water)	10	169
Shale	14	183
Limestone	7	190
Shale, blue	26	216
Sandstone	12	228
Shale	18	246
Sandstone (water)	21	267
Shale	10	277
Limestone, sandy	10	287
Sandstone	9	296
Limestone	14	310
Shale	35	345
Sandstone	10	355
Slate, blue, and clay	70	425
Sandstone	35	460
Shale, sandy	11	471
Sandstone	15	486
Shale, gray	57	543
Lower conglomerate:		
Sand, gray (water)	21	564
Shale, gray	27	591
Sand, gray (water)	10	601
Sand and shale, alternating	11	612

	Thickness	Depth
CJ-68-33bccc.--Continued		
Shale, muddy, gray	25	637
Sand and shale, hard, gray	10	647
Sand, hard, gray	6	653
Sand, medium-gray (water)	8	661
Shale, muddy, gray	16	677
Shale, blue	25	702
CJ-68-33cadb. Alt. 5,189 ft.		
Fill	3.5	3.5
Post-Piney Creek alluvium and Louviers Alluvium, undifferentiated:		
Sand and gravel	14.5	18
Louviers Alluvium:		
Gravel and boulders	2	20
Sand, gravel, and boulders	18	38
Boulders	2	40
CJ-68-34cabc. Alt. 5,222 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Boulders and gravel	14	14
Dawson Formation (upper part):		
Clay, blue	56	90
Sandrock	6	96
Clay, blue	14	110
Sandrock	5	115
Shale	11	126
Clay, tough	2	128
Shale	8	136
Clay, blue	12	148
Sandrock	8	156
Clay, blue	61	217
Sandrock, hard	2	219
Clay, tough	31	250
Dawson Formation (lower part):		
Rock (water) [Middle conglomerate, 250 to 428 feet.]	4	254
Clay, blue	12	266
Sandrock	2	268
Rock (water)	15	283
Sandrock	8	291
Clay, blue	51	342
Sandrock	6	348
Clay, blue	22	370
Sandrock	3	373
Clay	1	374
Sandstone	1	375
Clay and rock, alternating (water)	53	428
Clay, blue	50	478
Shale	12	490
Lower conglomerate:		
Sandstone	1	491
Shale	21	512
Sandstone, hard	9	521
Shale	19	540
Sandstone	12	552
Rock (water)	16	568
Clay, blue	17	585
Sandstone	4	589
Rock (water)	5	594
Shale	16	610
CJ-68-34bccd. Alt. 5,212 ft.		
Roadway	1	1
Broadway Alluvium:		
Sand, medium to coarse, and gravel as large as 1/4-inch in diameter, slightly moist	3	4
Silt, sandy, slightly moist	4.5	8.5
Clay, silty, plastic, slightly moist	1.5	10
Clay, as above, and fine to medium sand	1	11
Sand, fine to medium, slightly moist	2	13
Sand, medium to coarse, and gravel as large as 3/4-inch in diameter, slightly moist	3.5	16.5
Sand, medium to coarse, gravel, and cobbles, slightly moist	5	21.5
Louviers Alluvium:		
Sand, very clayey, coarse, and gravel as large as 3/4-inch in diameter, slightly moist	3	24.5
Sand, coarse, and gravel as large as 1-inch in diameter, wet	11	35.5
Clay, very sandy, moist	2	37.5
Sand, coarse, gravel, cobbles, and boulders as large as 16-inches in diameter	6.5	44

	Thickness	Depth
CJ-68-14bccd.--Continued		
Dawson Formation (upper part):		
Shale, carbonaceous, very slightly moist, blue to gray	10	54
CJ-68-14cbcb. Alt. 5,216 ft.		
Overburden	38	38
Dawson Formation (upper part):		
Clay and shale	63	101
Sandrock	19	120
Clay and shale	4	124
Sandrock	17	141
Clay and shale	11	152
Shale	41	193
Clay and shale	26	219
Dawson Formation (lower part):		
Sand (water) [Middle conglomerate, 219 to 441 feet.]	12	231
Clay and shale	19	270
Shale	40	310
Sand (water)	20	330
Sandrock, hard	4	334
Clay and shale	22	356
Sand (water)	30	386
Clay and shale	5	391
Sandrock	4	395
Sand (water)	46	441
Shale and clay	88	529
Lower conglomerate:		
Sandrock	4	533
Clay and shale	4	537
Sand (water)	3	540
Clay and shale	43	583
Sand (water)	37	620
Shale	28	648
Sand (water)	61	709
Clay and shale	6	715
Sand (water)	13	728
Shale	21.5	749.5
CJ-68-14cdab. Alt. 5,231.4 ft.		
Broadway Alluvium:		
Clay, silty, brown, and sand	5.5	5.5
Sand, fine to coarse, and some gravel	7.5	13
Louviers Alluvium:		
Clay, silty, brown, mixed with fine sand	10	23
Sand, fine to coarse, and gravel	16	39
Dawson Formation (upper part):		
Shale, weathered	1.5	40.5
CJ-68-14cdad. Alt. 5,234 ft.		
Broadway Alluvium:		
Sand, gravel, and cinder fill	3	3
Sand, fine to coarse, and some gravel	10.5	13.5
Louviers Alluvium:		
Sand, fine, brown; contains trace of clay	.2	13.7
Sand, fine to coarse, and gravel	25.8	39.5
Clay, silty, brown; contains thin beds of silty fine sand	7	46.5
Sand, fine, silty, brown; contains trace of silty clay	5.5	52
Sand, medium to coarse, and gravel	9	61
Dawson Formation (upper part):		
Shale, weathered	1.5	62.5
Shale and sandstone, at 62.5 feet		
CJ-68-14cdda. Alt. 5,237 ft.		
No sample	67	67
Dawson Formation (upper part):		
Clay, gray-green	13	80
Clay, gray-green, and some gravel	10	90
Sand, coarse, and some gray-green clay	10	100
Clay, gray-green, and some coarse sand	10	110
Clay, gray-green and brown	20	130
Clay, gray-green, and some gravel	10	140
Clay, sticky, gray-green	10	150
Shale, sandy, gray-green	50	200
Clay, gray, and some fine sand	10	210
Clay, gray, and some coarse sand	10	220
CJ-68-14cdda.--Continued		
Clay, gray, and some gravel	10	230
Clay, gray	50	280
Dawson Formation (lower part):		
Sand, fine to medium, and gray clay [Middle conglomerate, 258 to 440 feet.]	10	290
Sand, fine to medium, gray clay, and some gravel	10	300
Clay, gray, and some gravel	10	310
Clay, gray, and some fine sand	20	330
Clay, gray	50	380
Sand, fine, white, and gray clay	20	400
Sand, medium to coarse	10	410
Sand, coarse, and gravel	30	440
Clay, gray	10	450
Sand, fine, some gravel, and gray clay	10	460
Sand, fine, white	40	500
Sand, fine, and gray clay	10	510
Clay, gray	10	520
Sand, coarse, silty	20	540
Clay, gray, and some gravel	20	560
Lower conglomerate:		
Sand, coarse	50	610
Sand, coarse, and some gravel	20	630
Clay, gray, and coarse sand	30	660
Gravel	10	670
Clay, gray, and sand	50	720
Sand, medium, and tan clay	10	730
Sand, medium to coarse	10	740
Sand, medium to coarse, and tan clay	10	750
Clay, gray	10	760
Clay, gray, and sand	10	770
Clay, gray	10	780
Sand, medium	40	820
Sand, medium, and gray clay	10	830
Sand, fine, and tan and gray clay	20	850
Laramie Formation:		
Clay, gray, and fine sand	30	880
Clay, gray, and some gravel	10	890
Clay, gray	10	900
Clay, gray, and some sand	20	920
Clay, gray; contains specks of lignite	10	930
Clay, gray	50	980
Sand, gray, and gray clay	40	1,020
Concretion, gray clay, and some sand	10	1,030
Clay, gray, and carbonaceous shale	10	1,040
Clay, gray	40	1,080
Shale, sandy, gray	10	1,090
Clay, gray	40	1,130
Clay, gray, and coal	10	1,140
Shale, sandy, dark-gray	70	1,210
Clay, gray; contains specks of lignite	30	1,240
Clay, gray; contains carbonaceous shale	10	1,250
Clay, gray, and gray sandy shale; some lignite	10	1,260
Sand, fine, salt and pepper, and gray clay	10	1,270
Sand, fine, salt and pepper, and some coal	10	1,280
Sand, fine, salt and pepper [B sandstone, 1,280 to 1,379 feet.]	40	1,320
Sand, fine, salt and pepper, and some coal	10	1,330
Sand, fine, salt and pepper, and some clay	10	1,340
Sand, fine, salt and pepper	10	1,350
Sand, fine, salt and pepper, and some gray clay	10	1,360
Clay, gray	40	1,400
Shale, carbonaceous	10	1,410
CJ-68-14cdda.--Continued		
Shale, sandy, gray	10	1,420
Shale, sandy, gray; contains specks of lignite	10	1,430
A sandstone:		
Sand, hard, white, sandy shale, and coal	10	1,440
Clay, gray	20	1,460
Sand, salt and pepper, and some clay	40	1,500
Clay, gray, and some sand	20	1,520
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, salt and pepper	60	1,580
Clay, gray	10	1,590
Transition zone:		
Shale, sandy, gray	10	1,600
Shale, sandy, gray, and gray clay	15	1,615
CJ-68-14cddb3. Alt. 5,221.9 ft.		
Broadway Alluvium:		
Clay, silty, brown, and sand	7.5	7.5
Sand, fine to coarse, brown, and some gravel	6	13.5
Louviers Alluvium:		
Clay, silty, brown, and silty fine sand	9.5	23
Sand, fine to coarse, brown, and gravel	16	39
Dawson Formation (upper part):		
Clay, shaly, brown	3	42
Shale, weathered	4	46
CJ-68-15acbb. Alt. 5,270 ft.		
Eolian sand:		
Fill	2	2
Topsoil	2	4
Louviers Alluvium:		
Clay, sandy, brown	28	32
Gravel	4	36
Sand	15	51
Gravel	18	69
Dawson Formation (upper part):		
Sandstone	6	75
Clay, brown	16	91
Shale, blue	7	98
Sandstone, gray	11	109
Shale, brown	5	114
Sandstone, gray, and gray shale	106	220
Shale, gray	25	245
Sandstone, gray, and gray shale	15	260
Shale, gray	92	352
Sand, fine, and gray shale	17	369
Sandstone, gray	12	381
Shale, green	7	388
Shale, sandy, gray	14	402
Shale, gray	42	444
Shale, sandy, gray	13	457
Dawson Formation (lower part):		
Sand and gray shale [Middle conglomerate, 457 to 599 feet.]	28	485
Shale, gray	24	509
Sand, fine, and gray shale	57	566
Sand, coarse, and gray shale	33	599
Shale, gray, and sandstone	22	621
Shale, gray	24	645
Shale, sandy, gray	9	654
Shale, brown	17	671
Shale, gray	14	685
Lower conglomerate:		
Sandstone, gray, and shale	12	697
Shale, gray	15	712
Sand, fine, and gray shale	54	766
Sand, coarse, and gray shale	22	788
Shale, gray	28	816
CJ-68-15acdc. Alt. 5,285 ft.		
Eolian sand:		
Clay, yellow	56	56
Dawson Formation (upper part):		
Shale, blue	153	209
Shale, gray	21	230
Shale, blue	45	275
Shale, sandy, gray	5	280
Shale, blue	18	298
Shale, greenish	42	340
Shale, black	16	356
Shale, greenish	42	398

	Thickness	Depth
C1-68-15acdc.--Continued		
Dawson Formation (lower part):		
Sand, gray (Middle conglomerate, 398 to 544 feet.)	12	410
Shale, siliceous	69	479
Shale, hard, sandy, light-gray	31	510
Shale, arenaceous, black	22	532
Sandstone, white	12	544
Shale, soft, disintegrating, blue	26	570
Shale, hard, jointed, dark-gray	70	640
Shale, hard, slatelike, black; contains streaks of light-gray sand and beds of soft blue shale	28	668
Lower conglomerate:		
Sandstone, soft, gray	4	672
Shale, hard, black	28	700
Shale, arenaceous, dark-gray	28	728
Conglomerate, coarse gravel, sand, and clay	14	742
Clay, soft, whitish	12	754
Shale, hard, arenaceous, bluish	46	800
C1-68-15bccc. Alt. 5,257 ft.		
Eolian sand:		
Soil	6	6
Loam, sandy	20	26
Louviers Alluvium:		
Gravel and boulders	22	48
Dawson Formation (upper part):		
Clay, yellow	5	53
Sand and blue sandrock	9	62
Clay and shale	80	142
Coal smut	2	144
Clay and shale	47	191
Shale, blue	12	203
Clay and shale	100	303
Sandrock	2	305
Clay and shale	8	313
Sand and rock	4	317
Clay and shale	5	322
Dawson Formation (lower part):		
Sand (water) (Middle conglomerate, 322 to 447 feet.)	7	329
Clay and shale	4	333
Sand (water)	7	340
Sandrock	23	363
Sand (water)	42	405
Clay and shale	16	421
Sandrock	5	426
Clay and shale	4	430
Sandrock and clay	5	435
Sandrock	12	447
Clay and shale	106	553
Lower conglomerate:		
Sand (water)	3	556
Clay and shale	9	565
Sandrock	6	571
Sand (water)	9	580
Sandrock	5	585
Clay and shale	53	638
Sand (water)	14	652
Clay and shale	48	700
Sand (water)	41	741
Clay and shale	24	765
C1-68-16abba. Alt. 5,288.0 ft.		
Younger loess:		
Silt, sandy, clayey, micaceous, calcareous, grayish-orange; becomes pale-yellowish-brown at 7.0 feet	9	9
Dawson Formation (upper part):		
Shale, very hard, very sandy, calcareous, pale-yellowish-brown; contains medium to coarse sand grains	3.5	12.5
C1-68-16bbbb. Alt. 5,241.0 ft.		
Piney Creek Alluvium:		
Topsoil, clayey	2	2
Silt, very calcareous, pale-yellowish-brown	8	10
Silt, sandy, very calcareous, grayish-orange	16	26
Dawson Formation (upper and lower parts, undifferentiated):		
Shale, silty, dark-yellowish-brown; contains montmorillonite	4	30
C1-68-16dbdd. Alt. 5,271.0 ft.		
Piney Creek Alluvium:		
Clay, sandy, damp, plastic, light-brown	2.5	2.5
Silt, slightly sandy, micaceous	7.5	10
Silt, very sandy, very calcareous, dark-yellowish-orange; contains abundant white grains of calcareous material	4	14
Dawson Formation (upper part):		
Shale, silty, very finely micaceous, dark-yellowish-orange; contains montmorillonite	3.5	17.5
C1-69-1dcad. Alt. 5,418 ft.		
Dawson Formation (upper part):		
Soil	1	1
Clay, sandy, yellow	76	77
Shale, blue	4	81
Shale, gray	22	103
Dawson Formation (lower part):		
Sand (Middle conglomerate, 123 to 260 feet.)	25	128
Shale, gray	18	146
Coal	2	148
Shale, sandy, gray	9	157
Shale, gray	51	208
Sand and gray shale	18	226
Shale, gray	4	230
Lime, sandy	1	231
Shale, gray	18	249
Sand and gray shale	11	260
Shale, gray	49	309
Sandstone, gray	19	328
Shale, gray	7	335
Shale, gray, and sandstone	28	363
Lime, sandy	2	365
Shale, sandy, gray	15	380
Lime, sandy	4	384
Lower conglomerate:		
Sand	51	435
Shale, gray	35	470
Sand, fine	15	485
Shale, gray	13	498
Sand, fine	15	513
Shale, gray	45	558
Sand, fine	57	615
Sand, fine; contains gray shale	70	685
Shale, gray	11	696
C1-69-1bbbb. Alt. 5,536.4 ft.		
Slocum Alluvium:		
Topsoil	3	3
Clay	12	15
Sand	5	20
Dawson Formation (upper and lower parts, undifferentiated):		
Hardpan	8	28
Clay and streaks of gravel	21	49
Shale, blue	3	52
C1-69-6cbab. Alt. 5,545 ft.		
Broadway Alluvium:		
Soil	3	3
Gravel, coarse, water-bearing; contains quartz, basalt, gneiss, and schist	7	10
Dawson Formation (upper part):		
Shale, clayey, yellow	5	15
Dawson Formation (lower part):		
Sand, very fine to very coarse, water-bearing, and a little fine gravel (Middle conglomerate, 15 to 124 feet.)	5	20
Shale, clayey, yellow	5	25
Sand, very fine to very coarse, chiefly quartz, water-bearing, subrounded to rounded, and a little angular to subangular fine gravel	5	30
Gravel, very fine to fine, mostly angular, and coarse sand; contains quartz, orthoclase, schist, gneiss, quartzite, and basalt	20	50
Shale, clayey, light-greenish-gray; contains a little rounded medium sand	25	75
C1-69-6cbab.--Continued		
Sand, fine to coarse, angular to subrounded; contains a little gray shale	5	80
Shale, clayey, gray	25	105
Sand, very fine to very coarse, and very fine gravel; cemented at top	19	124
Shale, gray and brownish, and a thin bed of hard shaly sandstone	6	130
Shale, clayey, gray, and a little sand and sandstone	10	160
Sand, fine to coarse, water-bearing, angular; about 50 percent feldspar and 50 percent quartz; contains gray shale	15	175
Shale, gray and brownish-gray; contains a few particles of coal and brown quartzite from 190 to 195 feet	20	195
Shale, gray and brownish-gray, slightly sandy; contains partings of carbonaceous material, a little coal, and very fine to coarse sand	15	210
Lower conglomerate:		
Sand, very fine, silty, subangular to rounded, gray, and about 20 percent gray carbonaceous clayey shale	10	220
Sand, very fine to medium, water-bearing, brownish-gray; contains magnetite and a little coal	20	240
Shale, clayey, sandy, brownish-gray	10	250
Shale, slightly sandy, light-gray and brownish-gray	20	270
Shale, clayey, light-gray and gray	10	280
Shale, slightly sandy, light-gray to gray; contains fragments of coal between 280 and 290 feet	20	300
Shale, very clayey, light-gray	10	310
Sand, very fine to fine, angular to subrounded, brownish-gray and gray; contains a little carbonaceous shale	10	320
Shale, sandy, carbonaceous, brownish-gray light-gray and gray; contains very fine to coarse arkosic sand, very thin coal seams between 338 and 340 feet, and limonite between 340 and 345 feet	35	355
Sand, very fine, silty, angular to subrounded, brownish-gray	5	360
Shale, slightly sandy, carbonaceous and limonitic, gray to dark-gray; contains very fine angular sand	20	380
Sand, very micaceous, very fine to coarse, gray to dark-gray and brownish-gray; contains much pyrite from 390 to 400 feet	20	400
Laramie Formation:		
Shale, clayey, sandy, gray	10	410
Sand, very fine to medium, angular to subangular, and gray clayey shale	10	420
Shale, carbonaceous, sandy, clayey, dark-gray light-gray and brownish-gray; contains coal between 510 and 520 feet and very fine to medium sand	115	535

	Thickness	Depth
CJ-69-6cbab.--Continued		
Shale, clayey, slightly sandy, light-gray, and rounded medium- to very coarse-grained sandstone	5	540
Shale, light-gray dark-gray and brownish-gray; contains coal and fine sand	50	590
Shale, clayey, sandy, light-gray; contains bentonite	10	600
Shale, clayey, sandy, light-gray; contains small amount of coal and medium sand	30	630
Shale, slightly sandy, light-gray and brownish-gray; contains bentonite and coal fragments.	30	660
Sandstone, very fine-grained, silty, gray, and light-gray to dark-brownish-gray shale; sand grains are subangular to subrounded.	10	670
Shale, gray, and coal	10	680
Shale, slightly sandy, clayey, gray light-gray and brownish-gray; contains very fine sand	80	760
Shale, gray dark-gray and brownish-gray	29	789
Coal	1	790
Shale, carbonaceous, gray dark-gray and black	5	795
Shale, silty, slightly sandy	5	800
B sandstone:		
Sand, very fine, subangular to subrounded, silty, gray, and about 40 percent gray shale	16	816
Sand, very fine to very coarse, subangular to subrounded, salt and pepper	9	825
Coal and about 25 percent subangular to subrounded very fine to medium sand.	5	830
Sand, very fine to medium, subrounded to rounded; contains limonite and dark minerals, salt and pepper appearance.	30	860
A sandstone:		
Sand, very fine, silty, subrounded to rounded; salt and pepper texture	36	896
Sand, very fine, silty, subrounded, and about 50 percent coal	4	900
Shale, sandy, clayey, dark-brownish-gray; contains some coal; does not break down in water.	1	901
Sand, very fine, silty, subrounded, brownish-gray; salt and pepper texture	11	912
Sand, very fine to medium, gray and brownish-gray; salt and pepper texture; contains coal and dark minerals.	22	934
Coal; contains 15 percent dark-gray shale and 5 percent gray subangular very fine to fine sand.	3	937
Shale, clayey, sticky, dark-gray	4	941
Sand, very fine to medium, subangular to subrounded; salt and pepper texture; contains 2 limonite and coal breaks	5	946
Coal and 20 percent subangular to subrounded very fine sand.	4	950
Shale, clayey and slightly sandy, dark-gray and brownish-black; contains coal	10	960

	Thickness	Depth
CJ-69-6cbab.--Continued		
Sand, very fine, subrounded to subangular, gray, and about 50 percent coal.	6	966
Sand, very fine to fine, subangular to subrounded, light-gray; salt and pepper texture.	9	975
Sand, very fine, subangular to subrounded; chiefly quartz but contains dark minerals.	15	990
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, very fine, silty, gray; salt and pepper texture	111	1,101
Transition zone:		
Shale, sandy, dark-gray	9	1,110
Shale, clayey, dark-gray.	2	1,112
Shale, slightly sandy, dark-gray gray and brownish-gray; contains calcareous iron oxide concretions and very fine sand.	28	1,140
Sand, very fine, subrounded; contains about 20 percent dark-gray shale and 20 percent coal	4	1,144
Shale, brownish-gray, and about 40 percent brownish-gray sand.	6	1,150
Shale, very sandy, brownish-gray; contains about 10 percent sand.	5	1,155
Shale, sandy, clayey, gray and dark-gray; contains very fine sand.	16	1,171
Shale, clayey, gray	3	1,174
Shale, clayey, slightly sandy, gray	2	1,176
Shale, clayey, gray	24	1,200
Shale, slightly sandy, gray; contains very fine sand	2	1,202
Shale, clayey, gray	3	1,205
Shale, slightly sandy, gray; contains very fine sand	5	1,210
Shale, clayey, sandy, gray.	10	1,220
CJ-69-7baad. Alt. 5,565 ft.		
Colluvium:		
Soil.	1	1
Clay.	17	18
Slocum Alluvium:		
Clay, sandy	21	39
Sand, gravel, and streaks of clay	12	51
Dawson Formation (upper and lower parts, undifferentiated):		
Shale and clay	50	[illegible]
Sand and gravel	3	[illegible]
Shale, blue	10	104
CJ-69-8bbbb. Alt. 5,549 ft.		
Slocum Alluvium:		
Topsoil	2	2
Clay, hard.	18	20
Dawson Formation (upper and lower parts, undifferentiated):		
Clay and streaks of sand.	40	60
Shale, blue	42	102
Shale, gray	119	221
Shale, blue	22	243
Sandstone, white.	15	258
Shale, gray	2	260
CJ-69-8cdcd. Alt. 5,445.5 ft.		
Piney Creek Alluvium:		
Topsoil	5	5
Silt, sandy, and a few cobbles	17	22
Dawson Formation (upper part):		
Sandstone, yellow	2	24
Shale, brown.	2	26
Shale, blue	4	30
CJ-69-8dcbb. Alt. 5,459.7 ft.		
Colluvium and Slocum Alluvium, undifferentiated:		
Sand and red clay	20	20
Gravel.	4	24
Dawson Formation (lower part):		
Clay.	24	48
Shale	32	80

	Thickness	Depth
CJ-69-10dacb. Alt. 5,352.4 ft.		
Slocum Alluvium:		
Clay	8	8
Rock, sand, and gravel	15	23
Dawson Formation (lower part):		
Clay	6	29
Clay, blue	12	41
Sand	6	47
Shale, blue.	3	50
CJ-69-11accd. Alt. 5,302.4 ft.		
Post-Piney Creek alluvium:		
Soil, sandy, plastic, brown.	1	1
Sand, very fine to medium, very silty, very calcareous, moderate-yellowish-brown.	9	10
Louviers Alluvium:		
Sand, very fine to medium, very calcareous pale-yellowish-orange; less silty than above	7.5	17.5
Gravel, very fine, fairly uniform, subangular, arkosic, and very coarse sand	2.5	20
Dawson Formation (upper part):		
Shale, sandy, noncalcareous, deep-blue; contains fine sand and montmorillonite	5	25
CJ-69-11dbbc. Alt. 5,303.9 ft.		
Post-Piney Creek alluvium:		
Clay, silty, very sandy, plastic, very micaceous.	2.5	2.5
Sand, very fine, silty, angular, moderately calcareous, very micaceous, dark-yellowish-brown	5	7.5
Sand, very fine, silty, very micaceous, moderately calcareous, moderate-yellowish-brown.	5	12.5
Louviers Alluvium:		
Sand, very fine, very micaceous, very calcareous, dark-yellowish-brown and slightly montmorillonitic silt	7.5	20
Gravel, very fine to very coarse, angular to subrounded.	2.5	20.5
Sand, very coarse, fairly-uniform, angular to subangular; contains about 5 percent frosted well-rounded sand.	2	22.5
Dawson Formation (upper part):		
Sand, very fine to fine, very silty, in part calcareous, pale-olive, and weathered shale.	5	27.5
Shale, very silty, [illegible] calcareous, light-olive-gray; contains montmorillonite; at 27.5 feet		
CJ-69-11ccad. Alt. 5,344.9 ft.		
Slocum Alluvium:		
Topsoil.	5	5
Dawson Formation (upper part):		
Clay	9	14
Shale, black	1	15
Rock and sand.	14	29
Shale.	3	32
CJ-69-12dbda. Alt. 5,290 ft.		
Louviers Alluvium:		
Gravel and boulders.	22	22
Sand	6	28
Dawson Formation (upper part):		
Shale, brown	4	32
Shale, gray.	6	38
Dawson Formation (lower part):		
Sand, fine; contains gray shale [Middle conglomerate, 38 to 101 feet.]	14	52
Sand, fine to medium	8	60
Sand, medium; contains gray shale	13	73
Shale, gray.	17	90
Sand, coarse; contains gray shale	11	101

	Thickness	Depth
C1-69-12dbda.--Continued		
Shale, gray	19	120
Sandstone, gray	2	122
Shale, gray	46	168
Sandstone, hard	1	169
Shale, gray	19	188
Sandstone, gray	12	200
Shale, gray	29	229
Sandstone, gray	13	242
Shale, sandy, gray	15	257
Sandstone, gray	4	261
Lower conglomerate:		
Sand, fine	4	265
Shale, gray	12	277
Shale, gray; contains sandstone	8	285
Sand	34	319
Shale, gray	15	334
Sand and gray shale	35	369
Shale, gray	5	374
Sand	14	388
Shale, gray	5	393
Sand; contains gray shale	58	451
Shale, gray	12	463
Sand and gray shale	27	490
Shale, gray	12	502
Sand and gray shale	6	508
Shale, gray	68	576
Shale, gray; contains fine sand	22	598
Shale, gray	18	616
C1-69-12dcdc. Alt. 5,265.8 ft.		
Post-Piney Creek alluvium:		
Topsoil	4	4
Louviers Alluvium:		
Rocks, large, and fine sand	16	20
Dawson Formation:		
Shale, blue	1	21
C1-69-13adab. Alt. 5,265 ft.		
Fill	2	2
Post-Piney Creek alluvium:		
Clay, sandy	3	5
Broadway and Louviers Alluvium, undifferentiated:		
Sand and gravel	16	21
Dawson Formation (upper part):		
Shale, blue	6	27
Shale, gray	113	140
Dawson Formation (lower part):		
Sandstone, gray (Middle conglomerate, 140 to 208 feet.)	4	144
Sand, fine, white	21	165
Shale, gray	4	169
Sand and gray shale	39	208
Lime, sandy	2	210
Shale, gray	4	214
Shale, blue	3	217
Sandstone, blue	23	240
Shale, gray	9	249
Sandstone, blue	9	258
Shale, gray	4	262
Sandstone, blue	24	286
Shale, gray	26	312
Lower conglomerate:		
Sand, fine	4	316
Lime, sandy	4	320
Sand, fine; contains medium sand	32	352
Shale, gray	9	361
Sand	9	370
Shale, gray	30	400
Sand, fine and medium	18	418
Shale, gray	15	433
Sand, fine and medium	28	461
Shale, gray	26	487
Sand	17	504
Shale, gray	9	513
Sand, fine	6	519
Laramie Formation:		
Shale, gray	77	596
C1-69-14accb. Alt. 5,304.6 ft.		
Fill	4	4
Post-Piney Creek alluvium:		
Topsoil	2	6
Louviers Alluvium:		
Rock and sand	12	18
C1-69-14babd. Alt. 5,331 ft.		
Post-Piney Creek alluvium and Louviers Alluvium, undifferentiated:		
Sand, gravel, and boulders	26	26
Dawson Formation (lower part):		
Middle conglomerate:		
Sand, sandstone, and gray shale	103	129
Shale, blue	39	168
C1-69-14babd.--Continued		
Shale, gray	9	177
Sandstone, gray	5	182
Shale, gray	77	259
Lime, sandy	4	263
Lower conglomerate:		
Sand and gray shale	69	332
Shale, gray	6	338
Sand	81	419
Shale, gray	8	427
Sand and gray shale	55	482
Shale, gray	10	492
Sand	9	501
Laramie Formation:		
Lime, sandy	2	503
Shale, gray; contains sand	77	580
Shale, gray	36	616
C1-69-15addd2. Alt. 5,324 ft.		
No sample	30	30
Dawson Formation (upper part):		
Sand, fine, gray, ashy	5	35
Clay, gray	15	50
Clay, slightly sandy, gray	10	60
Clay, gray	5	65
Dawson Formation (lower part):		
Sand, white, and thin beds of gray shale (Middle conglomerate, 65 to 195 feet.)	25	90
Sand, fine, gray	5	95
Sand, coarse; contains dark-gray clay	50	145
Gravel	30	175
Sand, coarse; contains gray clay	10	185
Gravel	10	195
Clay, gray; contains some gravel	5	200
Clay, gray	20	220
Clay, gray; contains medium-white sand	30	250
Ash, somewhat sandy, white	10	260
Lower conglomerate:		
Sand, ashy, white	5	265
Sand, coarse; contains dry shale	5	270
Sand, medium	5	275
Sand, ashy, white	10	285
Sand, medium, white	10	295
Sand, medium and coarse	35	330
Sand, fine, white	35	365
Sand, medium to coarse, white	10	375
Sand, medium to coarse, white; contains gray clay	10	385
Sand, medium to coarse, white	5	390
Sand, fine, white	15	405
Sand, medium to coarse; contains gray clay	10	415
Sand, medium to coarse	5	420
Clay, gray; contains some gravel		425
Clay, gray; contains sand, and some ash	10	435
Clay, gray; contains gravel	10	445
Gumbo, gray	5	450
Gumbo, gray; contains gravel	5	455
Sand, fine, white; contains gray clay	20	475
Clay, gray, and gravel	10	485
Gravel	45	530
Clay, gray, and gravel	5	535
Gravel	5	540
Clay, sticky, gray, and gravel	5	545
Laramie Formation:		
Shale, gray, sandy	5	550
Shale, gray	10	560
Gumbo, gray	5	565
Clay, sticky, gray	30	595
Clay, dark-gray	45	640
Gumbo, light-gray	50	690
Sand, ashy, light-gray	10	700
Clay, dark-gray; contains lignite	10	710
Shale, sandy, light-gray	5	715
Shale, sandy, gray, and carbonaceous shale	5	720
Shale, sandy, gray	5	725
Clay, gray	5	730
Clay, gray, and carbonaceous shale	15	745
C1-69-15addd2.--Continued		
Clay, gray	25	770
Shale, sandy, tan; contains dark-gray clay	20	790
Clay, gray	30	820
Clay, gray and tan	10	830
Clay, gray	75	905
Clay, gray and tan	15	920
Clay, gray	5	925
Clay, gray; contains carbonaceous shale	15	940
Shale, sandy, gray; contains gray and tan clay	10	950
Clay, gray	25	975
Clay, gray, and carbonaceous shale	5	980
Clay, gray	15	995
Shale, carbonaceous	10	1,005
Shale, sandy, gray	5	1,010
Shale, gray	5	1,015
Clay, gray and tan	10	1,025
Shale, sandy, gray	15	1,040
Clay, dark-gray	5	1,045
Shale, sandy, gray	15	1,060
Shale, sandy, gray; contains white fine sand	5	1,065
Clay, sticky, gray	10	1,075
Shale, sandy gray; contains white fine sand	5	1,080
Clay, gray	5	1,085
Shale, sandy; contains carbonaceous shale	15	1,100
Clay, gray	25	1,125
Clay, gray; contains sandy shale	15	1,140
Clay, gray; contains carbonaceous shale	5	1,145
Clay, gray	5	1,150
Sand, fine, tan (B sandstone, 1,150 to 1,210 feet.)	5	1,155
Sand, salt and pepper	35	1,190
Shale, sandy, gray	10	1,200
Sand, salt and pepper	10	1,210
Shale, sandy, gray	15	1,225
Shale, sandy, gray; contains coal	5	1,230
Shale, sandy, gray	5	1,235
Clay, gray	5	1,240
Shale, sandy, gray; contains gray clay	5	1,245
Shale, sandy, gray; contains coal	10	1,255
Shale, gray; contains carbonaceous shale	10	1,265
Shale, sandy, gray	5	1,270
A sandstone:		
Sand, fine, brown	5	1,275
Sand, salt and pepper	40	1,315
Shale, sandy, gray	15	1,330
Shale, gray; contains some carbonaceous shale	10	1,340
Sand, fine, salt and pepper	35	1,375
Sand, salt and pepper, gray shale, and coal	5	1,380
Sand, fine, salt and pepper	5	1,385
Sand, fine	5	1,390
Sand, salt and pepper	5	1,395
Sand, salt and pepper; contains carbonaceous shale	5	1,400
Shale, gray; contains salt and pepper sand	10	1,410
Sand, salt and pepper; contains slightly carbonaceous gray shale	5	1,415
Shale, slightly carbonaceous, gray; contains tight fine sand	10	1,425
Shale, carbonaceous, gray	5	1,430
Sand, tight, fine, gray; contains coal	5	1,435
Shale, carbonaceous concretion, gray; contains hard white sand	5	1,440
Shale, gray; contains sandy shale concretion	10	1,450
Shale, carbonaceous, gray	30	1,480
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, fine, white	55	1,535
Shale, sandy, hard, light-gray; concretion	10	1,545
Shale, light-gray, and concretion	13	1,558

	Thickness	Depth
CJ-69-15bbaa. Alt. 5,430 ft.		
No sample	107	107
Dawson Formation (upper part):		
Clay	20	127
Clay, sandy	10	137
Dawson Formation (lower part):		
Sand, fine (Middle conglomerate, 137 to 290 feet)	10	147
Sand	11	158
Clay	12	170
Sand, fine	10	180
Sand, fine, and clay	10	190
Sand, fine	10	200
Sand, fine, and clay or shale	10	210
Shale	10	220
Sand	70	290
Sand and clay	10	300
Sand and shale	10	310
Sand	10	320
Shale and sand	100	420
Lower conglomerate:		
Sand and clay	10	430
Sand	50	480
Shale	20	500
Sand	10	510
Sand and clay	10	520
Sand and shale	10	530
Sand	10	540
Sand and shale or clay	30	570
Sand and clay	10	580
Sand	10	590
Shale	30	620
Shale and sand	6	626
Shale	10	636
Shale and sand	10	646
Shale or clay	19	665
Shale and sand	10	675
Shale	13	688
Shale and sand	7	695
Sand and shale	10	705
Shale	30	735
Shale and sand	10	745
Shale	20	765
Shale and sand	40	805
Shale	10	815
Shale and sand	20	835
CJ-69-15dbbc2. Alt. 5,337.4 ft.		
Post-Piney Creek alluvium:		
Cobbles	3	3
Louviers Alluvium:		
Gravel, very fine to coarse, subangular to well-rounded, arkosic, about 50 percent medium to very coarse sand, and scattered cobbles	4.5	7.5
Gravel, very fine to coarse, very fine to fine sand, and grayish-orange silt; contains scattered cobbles	5	12.5
Gravel, very fine to coarse, angular to well-rounded, arkosic, and very fine to very coarse sand; contains scattered cobbles to 14 feet	3	15.5
Gravel, very fine, fairly well-sorted, and very coarse subangular to subrounded sand	5	22.5
Sand, very coarse, fairly well-sorted, arkosic, angular to subrounded, and some very-pale-orange silt	5	27.5
Dawson Formation (upper part):		
Shale, silty, noncalcareous, pale-olive; contains montmorillonite at 27.5 feet		
CJ-69-15dbcd. Alt. 5,339.1 ft.		
Post-Piney Creek alluvium:		
Clay	1	1
Clay, sandy	4	5
Louviers Alluvium:		
Boulders, gravel, and sand	14	19
Clay	4	23
Boulders	2	25
CJ-69-15dcab. Alt. 5,331.6 ft.		
Post-Piney Creek alluvium:		
Silt, sandy, very calcareous, micaceous, moderate-yellowish-brown; contains some montmorillonite	2.5	2.5
CJ-69-15dcab.--Continued		
Louviers Alluvium:		
Gravel, very coarse, well-rounded, arkosic; contains about 20 percent sand, very fine to fine gravel, and some cobbles	2.5	5
Gravel, medium to coarse, arkosic, rounded to well-rounded, and about 40 percent medium to coarse sand; contains pale-yellowish-brown calcareous silt and scattered cobbles	2.5	7.5
Gravel, sand, and cobbles, very micaceous	2.5	10
Gravel, very fine to coarse (about 40 percent coarse); subrounded to to rounded, and about 40 percent medium to coarse subangular to subrounded arkosic sand	7.5	17.5
Sand, very fine to very coarse, subangular to subrounded, arkosic, and about 30 percent very fine to coarse subrounded to well-rounded gravel	5	22.5
Dawson Formation (upper part):		
Shale, silty, pale-olive; contains montmorillonite at 22.5 feet		
CJ-69-15ddbc. Alt. 5,330.4 ft.		
Post-Piney Creek alluvium:		
Silt, sandy, noncalcareous, micaceous, moderate-yellowish-brown	1	1
Louviers Alluvium:		
Cobbles and boulders	4	5
Silt, very sandy and gravelly, calcareous, grayish-orange; contains cobbles	2.5	7.5
Gravel, very fine to very coarse, arkosic, subangular to well-rounded, numerous cobbles, and about 20 percent medium to very coarse sand	5	12.5
Sand, very fine to very coarse, poorly sorted, subangular to subrounded, a little very fine to fine arkosic gravel, and grayish-orange noncalcareous silt (drills hard)	5	17.5
Gravel, angular, well-cemented, and sand	7.5	25
Dawson Formation (upper part):		
Shale, slightly silty and sandy, noncalcareous, light-olive-gray	5	30
CJ-69-15ddcd. Alt. 5,328.5 ft.		
Fill	5	5
Louviers Alluvium:		
Cobbles, coarse gravel, and sand	5.5	6
Sand, poorly sorted, arkosic, subangular to rounded, silty, micaceous, poorly sorted very fine to medium gravel, and grayish-yellow very calcareous silt	1.5	7.5
Gravel, very fine to coarse, subangular to well-rounded, arkosic, and about 40 percent medium to very coarse angular to subrounded sand; contains cobbles	5	12.5
Cobbles, coarse gravel, and sand	5	17.5
Sand, medium to very coarse, arkosic, subangular to subrounded, about 10 percent very fine to fine gravel, and some yellowish-gray micaceous silt	2.5	20
Dawson Formation (upper part):		
Shale, slightly sandy, micaceous, noncalcareous, light-olive-gray; contains montmorillonite	2.5	22.5
CJ-69-16ddaa. Alt. 5,362.6 ft.		
Post-Piney Creek alluvium:		
Topsoil	2	2
Louviers Alluvium:		
Rock, sand, and gravel	15	17
Dawson Formation:		
Shale, blue	8	25
CJ-69-17addc. Alt. 5,475 ft.		
Slocum Alluvium:		
Topsoil	8	8
Dawson Formation (upper part):		
Limestone	8	16
Sand and rock	11	27
Clay	8	35
Shale	6	41
Limestone	2	43
Sand	7	50
Shale, gray	3	53
CJ-69-18acdc. Alt. 5,543.8 ft.		
Slocum Alluvium:		
Clay, calcareous	6	6
Sand and cobbles	12	18
Sand and gravel	4	22
Dawson Formation:		
Shale, brown	15	37
Shale, blue	8	45
CJ-69-18cccc. Alt. 5,560 ft.		
Slocum Alluvium:		
Topsoil	4	4
Sand and rock	6	10
Sand and gravel	7	17
Dawson Formation (upper part):		
Clay, yellow	11	28
Clay, gray	2	30
Clay and blue shale	2	32
CJ-69-18cddb. Alt. 5,535 ft.		
Slocum Alluvium:		
Overburden	25	25
Dawson Formation (upper and lower parts, undifferentiated):		
Clay and blue shale	85	9
Sandstone and sandy shale	20	110
Clay and shale	18	128
Shale, sandy, and sandstone	16	144
Clay and shale	26	170
Shale, sandy	12	182
Clay and shale	13	195
Dawson Formation (lower part):		
Lower conglomerate:		
Sandstone and sandy shale	27	222
Shale	7	229
Sandrock and sandstone	66	295
Clay, blue	10	305
Sandstone	14	319
Clay and shale	20	339
Sandrock and sand	10	349
Clay	4	353
Sandrock	4	357
Shale	21	378
Sand	9	387
Shale and clay	10	397
Sand and sandstone	11	408
Shale	12	420
Sand and sandstone	10	430
Shale	6	436
Sand and sandstone	4	442
Sandrock	8	450
Shale and clay	70	520
CJ-69-18dbaa. Alt. 5,535 ft.		
Colluvium:		
Topsoil	1	1
Clay	4	5
Broadway and Louviers Alluvium, undifferentiated:		
Sand	9	14
Sand and cobbles	7	21
Dawson Formation:		
Shale	14	35
CJ-69-20acca. Alt. 5,421.6 ft.		
Post-Piney Creek alluvium, and Broadway and Louviers Alluvium, undifferentiated:		
Rock and gravel	22	22
Boulders, large, and fine sand	8	30
Dawson Formation:		
Shale, blue	2.6	32.6

Table 1.--Logs of wells and test holes--Continued

	Thickness	Depth
CJ-69-21abcc. Alt. 5,380.5 ft.		
Post-Piney Creek alluvium and Broadway and Louviers Alluvium, undifferentiated:		
Topsoil	5	5
Gravel and sand (water-bearing	25	30
Dawson Formation:		
Shale	2	32
CJ-69-21accc. Alt. 5,381 ft.		
Post-Piney Creek alluvium and Broadway and Louviers Alluvium, undifferentiated:		
Sand and gravel	10	10
Dawson Formation (upper and lower parts, undifferentiated):		
Shale, gray	116	126
Shale, gray, and sand	18	144
Sandstone, brown	2	146
Sandstone, gray	38	184
No sample	65	249
Dawson Formation (lower part):		
Lower conglomerate:		
Sand, white	6	255
Lime	4	259
Sand and gray shale	83	342
Sandstone, gray, hard	10	352
No sample	2	354
Sandstone, gray	6	360
Sandstone, gray, hard	1	361
Sandstone, gray	6	367
Shale, gray, and fine sand	2	369
No sample	74	443
Shale, gray, and sand	17	460
No sample	7	467
Sandstone, gray, hard, and gray shale	8	475
Laramie Formation:		
Shale, gray	17	492
Shale	104	596
CJ-69-21cddd. Alt. 5,396.6 ft.		
Piney Creek Alluvium:		
Clay	25	25
Slocum Alluvium:		
Sand and gravel	10	35
Dawson Formation:		
Clay, blue	5	40
CJ-69-21dbca. Alt. 5,384.7 ft.		
Post-Piney Creek alluvium:		
Topsoil	5	5
Louviers Alluvium:		
Gravel, coarse	5	10
Dawson Formation:		
Shale at 10 feet		
CJ-69-22cdad. Alt. 5,405 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, sandy, yellow	18	20
Clay, yellow	10	30
Dawson Formation (lower part):		
Sand (Middle conglomerate, 30 to 185 feet.)	40	70
Shale, gray to blue	46	116
Sand	5	121
Shale	39	160
Sand, interbedded with shale	25	185
Shale	115	300
Lower conglomerate:		
Sand, water-bearing, interbedded with shale	225	525
Shale	25	550
Sand, water-bearing	35	585
Shale	10	595
CJ-69-23bbcc. Alt. 5,323.5 ft.		
Post-Piney Creek alluvium and Louviers Alluvium, undifferentiated:		
Sand, very fine to medium, poorly sorted, arkosic, silty, subangular to subrounded, silty, moderate-yellowish-brown, and about 10 percent very fine to medium gravel; contains cobbles at 0.5 and 1.5 feet.	5	5
Sand, very fine to medium, very fine gravel, scattered cobbles, and very sandy silty clay.	2.5	7.5
Dawson Formation (upper part):		
Silt, sandy, noncalcareous, grayish-orange	.5	8
Shale, silty, slightly sandy, noncalcareous, light-olive-gray; contains montmorillonite	2	10

	Thickness	Depth
CJ-69-23bdcd. Alt. 5,402.4 ft.		
Eolian sand and Slocum Alluvium, undifferentiated:		
Soil	2	2
Clay, sandy	8	10
Gravel and sand	2	12
Dawson Formation (upper part):		
Gravel, clay, and shale	15	27
Clay, gravel, and sand, mixed	16	43
CJ-69-23cbda. Alt. 5,436 ft.		
Eolian sand:		
Soil, sandy, micaceous, brown	4	4
Silt, sandy, noncalcareous, very micaceous, moderate-yellowish-brown; contains fine sand	4.5	8.5
Silt, sandy and gravelly, very calcareous, grayish-orange	6	14.5
Slocum Alluvium:		
Silt, very calcareous, very sandy, micaceous; contains cobbles and coarse gravel	4	18.5
Dawson Formation (upper part):		
Sandstone, very sandy siltstone, and very sandy very calcareous moderate-yellowish-brown shale; contains montmorillonite	1.5	20
CJ-69-24cddc. Alt. 5,413.0 ft.		
Eolian sand and Slocum Alluvium, undifferentiated:		
Clay and streaks of sand	19	19
Clay	11	30
Dawson Formation:		
Shale, soft	10	40
CJ-69-25bbbd. Alt. 5,429.7 ft.		
Eolian sand:		
Soil	2	2
Sand	12	14
Sand and clay	5	19
Clay	9	28
Slocum Alluvium:		
Gravel and clay	14	42
Dawson Formation:		
Clay	6	48
Shale and clay	6	54
CJ-69-26acaa. Alt. 5,449.2 ft.		
Piney Creek Alluvium:		
Soil	3	3
Sand	10	13
Slocum Alluvium:		
Sand, coarse	6	19
Gravel and shale	8	27
Dawson Formation:		
Clay and shale	4	31
CJ-69-26dbdd. Alt. 5,464.0 ft.		
Younger loess:		
Soil	2	2
Slocum Alluvium:		
Sand and clay	17	19
Sand and gravel	8	27
Gravel and streaks of clay	14	41
Dawson Formation:		
Clay	9	50
CJ-69-27adcb. Alt. 5,530.1 ft.		
Younger loess:		
Soil	4	4
Sand, fine	18	22
Slocum Alluvium:		
Sand, medium	10	32
Sand, coarse	4	36
Clay and sand	6	42
Sand and gravel	20	62
Clay and coarse sand	7	69
Rock, loose	5	74
Dawson Formation (upper part):		
Clay, blue, and gravel	8	82
CJ-69-30adcb2. Alt. 5,510 ft.		
Louviers Alluvium:		
Topsoil	1	1
Clay	9	10
Sand and gravel	12	22
Dawson Formation (upper part):		
Shale, brown	14	36
Shale, blue	7	43
Shale, blue, and sand	11	54
Shale, blue	2	56
Shale	32	88

	Thickness	Depth
CJ-69-30adcb2.--Continued		
Dawson Formation (lower part):		
Sand (Middle conglomerate, 88 to 113 feet.)	5	93
Shale, blue	17	110
Sand and shale	3	113
Shale, gray	190	303
Lower conglomerate:		
Sand and shale	3	306
Sandrock	28	334
Sand	131	465
Shale	1	466
Sand	9	475
Shale	2	477
Sand	8	485
CJ-69-30addb. Alt. 5,519.1 ft.		
Colluvium:		
Topsoil	5	5
Louviers Alluvium:		
Sand and rocks	30	35
Clay	5	40
Sand	2	42
Dawson Formation:		
Shale, blue	3	45
CJ-69-30bdda. Alt. 5,519 ft.		
Louviers Alluvium:		
Gravel	18	18
Dawson Formation (upper part):		
Clay, blue	17	35
Shale, blue	29	64
Dawson Formation (lower part):		
Sand, gray (Middle conglomerate, 64 to 290 feet.)	5	69
Shale, blue	23	92
Sand, gray	16	108
Sand, blue, and shale	31	139
Shale, pink	1	140
Sand and thin beds of shale	74	214
Sand, gray	46	260
Shale, blue	7	267
Sand, gray	23	290
Shale, sandy, gray	24	314
Shale, gray, and sand	76	390
Shale, blue	5	395
Lower conglomerate:		
Sand, gray	131	526
Slate, gray	4	530
Sand, gray	35	565
Shale, pink	10	575
Sand, gray	85	660
Laramie Formation:		
Shale, gray	155	815
Sand, gray	5	820
Shale, gray	60	880
Shell, hard	2	882
Shale, gray	16	898
Sand, red	6	904
Shale, gray	6	910
Shale, sandy, gray	6	916
Shale, gray	17	933
Sand, gray	14	947
Shale, gray	33	980
Sand, gray	23	1,003
Shale, gray	82	1,085
Sand, gray	27	1,112
Shale, sandy, gray	8	1,120
Shale, gray	3	1,123
Coal	2	1,125
Shale, gray	10	1,135
B and A sandstones, undifferentiated:		
Sand, gray	160	1,295
Sand, broken, gray	10	1,305
Coal	2	1,307
A sandstone:		
Sand, gray	30	1,337
Shell, hard	4	1,341
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, gray	124	1,465
Shale, gray	14	1,479
Sand, gray	6	1,485
Shale, gray	105	1,590
Lime shell, gray	8	1,598
Shale, gray	1,402	3,000
CJ-69-30dccc. Alt. 5,577 ft.		
Colluvium:		
Sand, clay, and overburden	20	20
Dawson Formation (upper and lower parts, undifferentiated):		
Shale, blue and gray, and fine sand	232	252
Shale, gray; contains a trace of sand	178	430
Dawson Formation (lower part):		
Lower conglomerate:		
Sand, shaly	22	452

	Thickness	Depth
C3-69-10dddc.--Continued		
Sand, good.	26	478
Shale, gray	4	482
Sand, good.	50	532
Shale, blue	10	542
Sand, good.	24	566
Shale, blue	5	571
Sand, fair.	25	596
Shale, blue	10	606
Sand, cemented.	12	618
Shale, blue	18	636
Sand, cemented.	1	637
C3-69-12dccc. Alt. 5,626 ft.		
Piney Creek Alluvium:		
Topsoil	2	2
Clay, sandy, yellow	5	7
Louviers Alluvium:		
Gravel.	9	16
Dawson Formation (upper part):		
Clay, sandy, brown.	23	39
Sandstone, gray	7	46
Shale, gray	4	50
Sandstone, gray	18	68
Shale, gray	4	72
Sandstone, gray	62	134
Shale, brown, and gray shale	4	138
Shale, gray, and sandstone	18	156
Shale, brown.	5	161
Shale, gray, and sandstone	39	200
Shale, gray	202	402
Dawson Formation (lower part):		
Sand, fine, and gray shale [Middle conglomerate, 402 to 508 feet.]	26	428
Sandstone	10	438
Shale, sandy, gray.	11	449
Shale, gray	7	456
Shale, sandy, gray.	5	461
Sand, fine, and gray shale	16	477
Shale, sandy gray.	6	483
Sand and gray shale	25	508
Shale, gray	101	609
Lower conglomerate:		
Sand, fine to coarse, and gray shale.	6	615
Lime.	3	618
Sand, coarse, and gray shale	52	670
Shale, gray	10	680
Sand, medium to coarse	10	690
Shale, gray	11	701
C3-69-11adaa. Alt. 5,585.4 ft.		
Younger loess:		
Topsoil	8	8
Clay, sandy	7	15
Dawson Formation (upper part):		
Upper conglomerate:		
Shale, brown, water-bearing (yields 2 gpm)	22	37
Clay, sandy	2	39
Shale, brown.	6	45
Clay, sandy, yellow	11	56
Shale, blue	17	73
Sand, water-bearing (yields 8 gpm).	5	78
Shale, blue	2	80
C3-69-11cdac. Alt. 5,600 ft.		
Slocum Alluvium:		
Soil.	3	3
Dawson Formation (upper part):		
Sandstone, soft, brown	14	17
Clay, yellow.	1	18
Shale, brown.	3	21
Sandstone, blue [Upper conglomerate, 21 to 131 feet.]	5	26
Sandstone, gray	68	94
Shale, gray	26	120
Sandstone, gray	11	131
Shale, gray	9	140
Shale, blue	33	173
Shale, gray	22	195
Shale, blue	8	203
Shale, gray	57	260
Sandstone, gray	4	264
Shale, gray	13	277
Sandstone, gray	12	289
Shale, gray	68	357
Dawson Formation (lower part):		
Sand, fine [Middle conglomerate, 357 to 493 feet.]	6	363
Shale, gray	17	380
Sand, fine.	30	410
Shale, gray	10	420
C3-69-11cdac.--Continued		
Sand and gray shale	33	453
Lime.	2	455
Shale, gray	10	465
Sand, fine.	12	477
Shale, gray	11	488
Sand, fine.	5	493
Shale, gray	33	526
Shale, blue	8	534
Shale, gray	7	541
Lower conglomerate:		
Sand, fine, and gray shale	39	580
Shale, gray	14	594
C3-69-11dddc. Alt. 5,556 ft.		
No record	100	100
Dawson Formation (upper part):		
Sand, white ash, and light-gray clay [Upper conglomerate, 105 to 235 feet.]	40	140
Clay, silty, light-gray	20	160
Clay, silty, light-gray, ashy.	2	162
Conglomerate, coarse, varicolored	13	175
Conglomerate, coarse, varicolored; contains gray clay	5	180
Clay, light- and dark-gray.	10	190
Clay, gray.	5	195
Clay, gray; contains white ash and white sand.	5	200
Clay, gray; contains white ash, white sand, and specks of lignite	5	205
Clay, gray, and white ash	5	210
Clay, gray and buff	10	220
Clay, gray and buff, and some coarse sand	5	225
Sand, coarse, and gray shale	5	230
Sand, coarse, angular, and gray clay	5	235
Clay, gray.	10	245
Clay, light-gray; some ash	15	260
Clay and conglomerate, buff and gray	5	265
Clay, sandy, gray, and some conglomerate	5	270
Shale, gray and tan, some conglomerate	5	275
Clay, gray, and coarse sand.	5	280
Clay, yellowish-gray.	5	285
Dawson Formation (lower part):		
Clay, gray, and coarse sand [Middle conglomerate, 285 to 435 feet.]	5	290
Clay, light-gray.	5	295
Clay, light-gray; contains specks of lignite	10	305
Clay, light-gray.	20	325
Shale, sandy, light-gray.	10	335
Clay, light-gray.	5	340
Clay, light-gray; contains bentonite	10	350
Clay, gray, and sandy ash	5	355
Sand, medium, and gray clay.	5	360
Clay, buff and tan, and sand.	5	365
Clay, buff and gray	10	375
Clay, gray; contains some bentonite.	10	385
Clay, gray; and some conglomerate.	5	390
Clay, dark-gray and buff, and some conglomerate	5	395
Sand, coarse, white, and gray clay	5	400
Shale, gray, and some white sand.	5	405
Sand, coarse, quartz, white	20	425
Sand, very coarse, white, quartz; some clay.	10	435
Clay, light- and dark-gray; contains conglomerate	20	455
Clay, gray and buff	5	460
Clay, light- and dark-gray	5	465
C3-69-11dddc.--Continued		
Clay, light- and dark-gray; contains some fine sand.	5	470
Sand, coarse, gray clay, and ash.	5	475
Conglomerate, gray, and tan clay	5	480
Conglomerate and gray clay	5	485
Clay, gray; some conglomerate.	5	490
Conglomerate, coarse, and andesitic clay	5	495
Clay, gray, buff, and black, andesitic clay and some conglomerate.	5	500
Clay, gray, and bentonite.	5	505
Conglomerate, and tan clay	5	510
Clay, gray; some conglomerate.	10	520
Clay, gray	5	525
Sand, black, andesite, and tan clay	10	535
Lower conglomerate:		
Conglomerate, black, andesitic sand, and gray clay.	5	540
Conglomerate, black, andesitic sand, and tan clay	5	545
Clay, buff, and conglomerate.	5	550
Sand, fine and coarse, and gray clay.	10	560
Bentonite; some conglomerate.	5	565
Conglomerate, tan, and gray clay.	20	585
Clay, gray and tan; some conglomerate.	5	590
Conglomerate and gray clay	15	605
Bentonite and conglomerate.	5	610
Clay, gray, bentonitic	10	620
Clay, gray, and some white sand	5	625
Clay, gray	20	645
Clay, gray, slightly sandy.	5	650
Clay, gray and buff.	15	665
Conglomerate, gray and buff clay, and bentonite.	10	675
Conglomerate, gray, and buff clay; contains specks of lignite.	5	680
Clay, light-gray	10	690
Clay, dark-gray, and some coarse sand	15	705
Shale, dark-gray, and coal	5	710
Clay, gray	30	740
Clay, gray, and fine white sand	15	755
Clay, gray, and rare conglomerate	5	760
Clay, gray	30	790
Clay, gray and buff.	5	795
Clay, gray	20	815
Gumbo, gray; contains specks of lignite.	5	820
Gumbo, gray specks; contains some conglomerate.	15	835
Laramie Formation:		
Clay, gray; contains specks of lignite.	5	840
Clay, silty, gray.	5	845
Clay, gray	5	850
Clay, silty, gray.	10	860
Clay, silty, gray; contains rare specks of lignite.	10	870
Clay, gray	30	900
Clay, gray; contains rare specks of lignite	15	915
Clay, gray; contains rare specks of lignite and some sand.	5	920
Clay, gray	10	930
Clay, gray; contains specks of lignite.	5	935
Clay, gray	5	940
Clay, gray; contains specks of lignite.	10	950
Clay, gray; contains hard, white sand	10	960

	Thickness	Depth
C3-69-13dddc.--Continued		
Clay, gray; contains rare specks of lignite	20	980
Clay, gray	15	995
Clay, gray; contains fragments of coal	5	1,000
Clay, gray; contains fragments of coal and some white fine sand	5	1,005
Clay, gray; fragments of coal	10	1,015
Clay, gray	10	1,025
Clay, silty, gray	25	1,050
Clay, silty, gray; contains fragments of lignite	45	1,095
Clay, silty, gray; contains medium sand	5	1,100
Shale, fine, gray	5	1,105
Shale, fine, gray, medium sand, and fragments of lignite	15	1,120
Shale, fine, tan and gray	15	1,135
Sand, medium; contains gray shale	5	1,140
Shale, tan, medium sand and some coal	15	1,155
Clay, gray; contains specks of lignite	5	1,160
Clay, silty, gray, and fragments of coal	10	1,170
Clay, gray	10	1,180
Clay, silty, gray; contains specks of lignite	10	1,190
Clay, gray; contains concretions	5	1,195
Shale, sandy, gray; contains concretions and gray clay	5	1,200
Shale, sandy, gray, and carbonaceous shale	10	1,210
Shale, sandy, gray	5	1,215
Shale, sandy, gray; contains fragments of coal	15	1,230
Shale, sandy, gray-green; contains fragments of coal and some sand grains	10	1,240
Sand, fine, gray; contains tan and gray sandy shale	5	1,245
Sand, fine, gray	10	1,255
Sand, fine, gray and white	5	1,260
Sand, fine, gray	5	1,265
Sand, fine, gray; contains concretion	10	1,275
Sand, fine, gray; contains sandy shale, and concretions	5	1,280
Sand, hard, fine, gray; contains coal fragments	5	1,285
Sand, hard, white; contains pyrite	5	1,290
Sand, hard, fine, gray and white; contains sandy shale	5	1,295
Sand, medium to fine, gray and white	5	1,300
Sand, medium to fine, gray and white; contains sandy shale and gray shale	5	1,305
Shale, sandy, gray; contains coal	5	1,310
Shale, carbonaceous; contains concretions and coal	5	1,315
Shale, sandy, gray	5	1,320
Shale, carbonaceous; contains concretion, and tan and gray sandy shale	10	1,330
Shale, carbonaceous; contains concretion and tan and gray shale	10	1,340
Shale, sandy, gray; contains coal	10	1,350
Sand, fine, salt and pepper texture [B sandstone, 1,350 to 1,440 feet.]	10	1,360
Sand, hard, fine, shaly; contains white sand	5	1,365
Sand, hard, white, and fine gray sand	5	1,370
C3-69-13ddde.--Continued		
Sand, gray and white; contains some loose sand	5	1,375
Shale, sandy, gray and tan, and some white sand	5	1,380
Shale, sandy, gray; contains coal	5	1,385
Sand, white; contains coal	5	1,390
Sand, medium, white, and carbonaceous shale	5	1,395
Sand, medium, gray and white	5	1,400
Sand, medium, gray and white, and some coal	10	1,410
Sand, fine, dirty, gray	5	1,415
Sand, fine, tan	5	1,420
Sand, medium, white and gray	15	1,435
Sand, medium, white	5	1,440
Shale, sandy, gray, and some white sand	5	1,445
Shale, sandy, gray	5	1,450
Shale, carbonaceous, and gray sandy shale; contains pyrite	5	1,455
Shale, carbonaceous	5	1,460
Shale, sandy; some white, tight sand	5	1,465
Shale, sandy, and some white, tight sand; contains coal and pyrite	5	1,470
Shale, dark-gray, and some white medium sand	5	1,475
A sandstone:		
Sand, medium, white, gray sandy shale, and coal	5	1,480
Shale, sandy, gray; white and tan tight shaly sand	5	1,485
Shale, sandy, gray	5	1,490
Sand, medium, white	15	1,505
Shale, sandy, gray, and sand	10	1,515
Sand, medium and fine	10	1,525
Sand, medium, gray and white	5	1,530
Shale, dark-gray, and fine sand	10	1,540
Sand, medium, white	5	1,545
Sand, medium and fine, gray and white	30	1,575
Sand, medium, variegated; gray shale	5	1,580
Sand, medium to fine, gray	10	1,590
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, medium, salt and pepper	35	1,625
Sand, medium, salt and pepper; some gray shale	5	1,630
Sand, medium, salt and pepper	5	1,635
C3-69-36aadd. Alt. 5,313 ft.		
Piney Creek Alluvium:		
Topsoil	2	2
Clay, slippery, gray	15	17
Clay, light-gray	4	21
Dawson Formation:		
Clay, yellow and brown	21	42
Clay, gray	2	44
Clay, blue, and shale	4	48
Shale, blue	2	50
Clay, blue	11	61
Clay, gray	4	65
C3-70-1abab. Alt. 5,590 ft.		
Slocum Alluvium:		
Clay	43	43
Dawson Formation (upper and lower parts, undifferentiated):		
Shale, blue	28	71
Sand, fine	1	72
Shale, gray	43	115
Sand, white	5	120
Shale, gray	2	122
C3-70-12bcdc2. Alt. 5,690 ft.		
Colluvium:		
Sand, silty	28	28
Dawson Formation (upper part):		
Siltstone and shale	88	116
Sand, very fine to very coarse, silty, poorly sorted, subangular; contains about 20 percent medium-dark gray shale, lignite, and gray carbonaceous siltstone; feldspar particles are well-weathered	20	136
Silt, slightly sandy to clayey, compact, slightly carbonaceous and calcareous, light-olive-gray and light-bluish-gray; cemented with pyrite at 172 feet	36	172
Dawson Formation (lower part):		
Lower conglomerate:		
Sand, very fine to very coarse, rounded to well-rounded, iron stained, slightly micaceous; feldspar particles are well-weathered	22	194
Silt	10	204
Sand, very fine to very coarse, silty, subangular to well-rounded	10	214
Silt, compact to loose, light-olive-gray; contains fine sand	16	230
Sand, very fine to very coarse, partly rounded to very well-rounded and frosted, partly subangular; feldspar particles are well-weathered; some grains are iron stained	33	263
Silt, slightly calcareous, carbonaceous, medium-gray; contains very fine sand	41	304
Sand, very fine to medium, rounded, frosted, cemented; contains a little coarse sand, some very fine gravel, and about 10 percent light-olive-gray silty shale	14	318
Siltstone, medium-light-gray to greenish-gray	10	328
Sand, very fine to medium, cemented, slightly calcareous; feldspar grains are deeply weathered	37	365
Silt and siltstone, sandy, moderately calcareous, medium-light-gray	29	394
Sandstone, very fine- to fine-grained, silty, compact, friable, iron stained; feldspar grains are white coated	20	414
Laramie Formation:		
Siltstone, noncalcareous, greenish-gray; contains fine sand	29	443
Sandstone, very fine-grained, hard, silty, calcareous; iron stained in part; contains thin sandy limestone	19	462
Shale, silty, slightly calcareous, carbonaceous, light-olive-gray and light-gray, noncalcareous to slightly calcareous; contains some fragments of coal and a little swelling clay	166	628
Limestone, very sandy, grayish-yellow, and white very calcareous very fine-grained sandstone	1	629
Silt, noncalcareous, very sandy, medium-light-gray	85	714
Coal	2	716
Siltstone, noncalcareous, medium-light-gray	32	748
Coal	1	749

	Thickness	Depth
C1-70-12bcdc2.--Continued		
Siltstone, noncalcareous, light-olive-gray, and thin coal beds: contains some fine sand	101	850
Sandstone, very fine-grained, soft	13	863
Siltstone, light-gray and light-bluish-gray, carbonaceous, noncalcareous, and silty shale	39	902
Coal	2	904
Siltstone, light-gray	14	918
Coal	4	922
Silt, slightly sandy, noncalcareous, light-gray, siltstone, and coal	46	968
Sand, medium to very coarse, subrounded to rounded, iron stained	15	983
Silt, very sandy, medium-light-gray, and carbonaceous pyritic noncalcareous siltstone	103	1,086
Coal	5	1,091
Siltstone and silty shale	8	1,099
Coal	7	1,106
Siltstone, carbonaceous, noncalcareous, pyritic	10	1,116
B and A sandstones, undifferentiated:		
Sand, very fine to fine, subangular to rounded: has salt and pepper texture	10	1,126
Sand, very fine to coarse, subrounded to very well-rounded: contains some very fine gravel between 1,160 and 1,170 feet.	46	1,172
Sandstone, fine-grained	38	1,210
Sand, very fine to very coarse, subrounded to rounded, noncalcareous, silty, medium-gray.	48	1,258
Shale, gray; contains pyrite and coal	2	1,260
C1-70-13acbc. Alt. 5,603 ft.		
Overburden.	22	22
Dawson Formation (upper part):		
Clay, blue, and shale	45	67
Dawson Formation (lower part):		
Sandrock and shale [Middle conglomerate, 67 to 100 feet.]	5	72
Clay.	8	80
Clay, sand, and shale	20	100
Clay and shale.	145	245
Clay, sandy and shale	5	250
Lower conglomerate:		
Sandstone	6	256
Clay.	2	258
Sandstone	2	260
Clay.	2	262
Sandstone and sand.	12	274
Shale and clay.	41	315
Shale, sandy.	24	339
Sand and sandstone.	7	346
Laramie(?) Formation:		
Clay and shale.	104	450
C1-70-13adcd. Alt. 5,573.3 ft.		
Broadway Alluvium:		
Soil.	2	2
Clay, sandy	6	8
Louviers Alluvium:		
Boulders.	8	16
Dawson Formation:		
Sand, tight	26	42
Clay, blue.	4	46
C1-70-13cadc. Alt. 5,588 ft.		
Slocum Alluvium:		
Fill.	1	1
Soil.	1	2
Clay, yellow.	6	8
Gravel.	5	13
Dawson Formation (upper part):		
Shale, blue	1	14
Shale, gray	8	22
Clay, yellow.	20	42
Shale, gray	46	88
Dawson Formation (lower part):		
Sandstone, blue [Middle conglomerate, 88 to 225 feet.]	8	96
Shale, blue	6	102

	Thickness	Depth
C1-70-13cadc.--Continued		
Shale, gray	5	107
Sandstone, gray	16	123
Shale, gray	6	129
Sandstone, gray	2	131
Shale, gray	3	134
Sandstone, gray, and shale	44	178
Shale, gray	37	215
Sand, fine to medium.	3	218
Sandstone, gray	2	220
Sand.	5	225
Shale, gray	74	299
Lower conglomerate:		
Sandstone, hard, gray	1	300
Sand.	4	304
Shale, gray	4	308
Sand, fine, white	12	320
Shale, gray	7	327
Sand, medium to fine, and gray shale.	5	332
Shale, gray	36	368
Sandstone, gray	1	369
Sand, gray.	27	396
Laramie Formation:		
Shale	159	555
C1-70-14dbda2. Alt. 5,688 ft.		
Colluvium and Dawson Formation, undifferentiated:		
Clay.	33	33
Sand.	3	36
Dawson Formation (upper part):		
Clay.	24	60
Shale, sandy.	40	100
C1-70-14dbda. Alt. 5,671.5 ft.		
Colluvium:		
Boulders and clay	30	30
Dawson Formation (upper part):		
Clay.	22	52
Sand.	5	57
Shale	2	59
C1-70-23dcba. Alt. 5,630 ft.		
Louviers Alluvium:		
Soil, sandy	2	2
Clay, sandy, yellow	20	22
Boulders.	21	43
Dawson Formation (upper part):		
Clay, sandy, yellow	3	46
Shale, gray	68	114
Shale, blue	5	119
Shale, gray	62	181
Shale, brown.	3	184
Shale, gray	126	310
Dawson Formation (lower part):		
Sandstone, blue [Middle conglomerate, 310 to 451 feet.]	11	321
Shale, blue	3	324
Shale, gray	13	337
Sandstone, gray	20	357
Shale, gray	19	376
Sandstone, gray, and shale	33	409
Shale, gray	16	425
Sandstone, hard, gray	4	429
Shale, gray	5	434
Sandstone, gray	12	446
Shale, sandy, gray.	5	451
Shale, gray	56	507
Lower conglomerate:		
Sandstone, hard, gray	1	508
Sand.	24	532
Shale, gray	4	536
Sandstone, hard, gray	3	539
Sand and gray shale.	7	546
Shale, gray	49	595
C1-70-24aaab. Alt. 5,568 ft.		
Slocum Alluvium:		
Rock and limestone.	10	10
Rock and sand	17	27
Dawson Formation:		
Shale, blue	3	30
C1-70-24bdad. Alt. 5,590 ft.		
Overburden.	40	40
Dawson Formation (upper part):		
Clay, blue.	60	100
Dawson Formation (lower part):		
Middle and lower conglomerate, undifferentiated:		
Sand and sandstone.	285	385
Conglomerate.	115	500
C1-70-26bacd. Alt. 5,605 ft.		
Colluvium:		
Topsoil	4.5	4.5
Gravel, loose, and boulders.	9.5	14
Gravel, silty, tight, and boulders.	12.5	26.5

	Thickness	Depth
C1-70-26bdba. Alt. 5,625.7 ft.		
Colluvium:		
Sand and clay, mixed	33	33
Rock	8	41
Sand and gravel.	14.5	55.5
C1-71-13cabb. Alt. 7,140 ft.		
Precambrian:		
Clay	33	33
Granite, red	72	105
Shale, red	1	106
Granite, red	44	150
C4-65-19cbbb. Alt. 5,600 ft.		
Broadway Alluvium:		
Gravel, fill	2	2
Louviers Alluvium:		
Clay, sandy, brown	33	35
Sand and gravel, water-bearing.	15	50
Dawson Formation (upper part):		
Shale.	12	62
Sandstone, fine-grained, tight; contains thin shale breaks	36	98
Shale, medium hard, blue to gray.	22	120
Sandstone, fine-grained, tight, water-bearing	10	130
Shale, gray to blue: contains hard sandy shale breaks from 175 to 185 feet.	92	222
Sandstone, hard, tight	13	235
Shale, gray; contains occasional sandstone breaks	89	324
Coal	2	326
Shale, gray.	64	390
Upper conglomerate:		
Sandstone, water-bearing; contains thin shale breaks	58	448
Shale, gray.	30	478
Sandstone layers, thin, interbedded with shale breaks	32	510
Shale, gray.	16	526
Sandstone, thin layers, interbedded with shale breaks	59	585
Shale, gray.	10	595
C4-65-31bbda. Alt. 5,655 ft.		
Overburden	52	52
Dawson Formation (upper part):		
Coal and blue clay.	17	69
Coal	8	77
Clay and shale	69	146
Coal	11	157
Clay and shale	100	257
Clay, sandy, and streaks of sand [Upper conglomerate, 257 to 420 feet.]	25	282
Clay and shale	27	309
Coal	7	316
Clay	66	382
Clay, sandy	8	390
Clay	17	407
Clay, sandy, and sand.	13	420
Clay	16	436
Coal	5	441
Clay	22	463
Rock	1	464
Clay	6	470
Shale, sandy	5	475
Clay	28	503
Coal	2	505
Clay	35	540
Coal	3	543
Clay, sandy.	7	550
Clay	33	583
Clay, sandy, and sand.	29	612
Coal	1	613
Clay	32	645
Clay, sandy.	7	652
Clay	130	782
Dawson Formation (lower part):		
Middle conglomerate:		
Sand and two clay streaks.	11	793
Clay	57	850
C4-65-34abbc. Alt. 5,715 ft.		
Dawson Formation (upper part):		
Soil	20	20
Shale.	63	83
Clay	60	143
Coal	12	155
Clay	42	197
Clay and shale	132	329
Sandstone [Upper conglomerate, 329 to 591 feet.]	28	357

Table 1.--Logs of wells and test holes--Continued

	Thickness	Depth
C4-65-14abbc.--Continued		
Sandstone, hard	2	359
Clay and shale	101	460
Sandstone, hard	4	464
Clay	67	531
Sandstone (water)	58	589
Sandstone, hard	2	591
Clay and shale	240	831
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone (water)	84	915
Clay	10	925
C4-66-2cbdc. Alt. 5,475.6 ft.		
Piney Creek Alluvium:		
Sand, fine, yellow	11	11
Broadway Alluvium:		
Sand, coarse, yellow	2	13
Louviers Alluvium:		
Clay, red	1	14
Sand, fine, and muck	2	16
Sand, coarse	2	18
Dawson Formation (upper part):		
Clay, yellow	16	34
Clay, blue	5.5	39.5
Shale, blue	11.5	51
Clay, gray, and shale	14	65
Shale, soft, gray	35	100
C4-66-2cccb. Alt. 5,475.1 ft.		
Post-Piney Creek alluvium:		
Sand, fine	4	4
Louviers Alluvium:		
Clay, sandy, brown	24	28
Gravel	2	30
Dawson Formation (upper part):		
Clay, sandy, gray	4	34
Clay, gray and blue	1	35
C4-66-3cccc. Alt. 5,467.7 ft.		
Post-Piney Creek alluvium:		
Sand, white	3.5	3.5
Louviers Alluvium:		
Sand, fine, silty	3.5	7
Sand, coarse	3	10
Sand, fine	7.5	17.5
Sand, coarse	1	18.5
Dawson Formation (upper part):		
Shale, yellow	6.5	25
Shale, black and blue	11	36
Shale, sandy, black	1	37
Shale, sandy, dark-black	50	87
Shale, sandy, black	31	118
Sandrock	2	120
Shale, dark-blue	30	150
C4-66-3bada. Alt. 5,447 ft.		
Post-Piney Creek alluvium:		
Soil	4	4
Broadway and Louviers Alluvium, undifferentiated:		
Sand, fine	14	18
Gravel	11	29
Dawson Formation:		
Shale, blue	3	32
C4-66-3bcbb. Alt. 5,438 ft.		
Post-Piney Creek alluvium:		
Soil, sandy	5	5
Broadway Alluvium:		
Sand	3	8
Louviers Alluvium:		
Clay	1	9
Gravel	20	29
Dawson Formation (upper part):		
Shale	8	37
C4-66-3dabc. Alt. 5,460 ft.		
Piney Creek Alluvium:		
Sand, fine	4	4
Sand; contains clay	6	10
Broadway Alluvium:		
Gravel, sandy	3	13
Louviers Alluvium:		
Clay and gravel	5	18
Sand and gravel; contains a few boulders	4	22
Dawson Formation (upper part):		
Clay, brown	2	24
C4-66-3dabd. Alt. 5,455.3 ft.		
Piney Creek Alluvium:		
Topsoil	.5	.5
Broadway Alluvium:		
Sand	3.5	4
Louviers Alluvium:		
Clay, brown	7	11
Sand and gravel	6	17
Dawson Formation (upper part):		
Clay, yellow-gray	10	27
Clay, blue	2	29

	Thickness	Depth
C4-66-4abda. Alt. 5,431.0 ft.		
Piney Creek Alluvium:		
Sand, very fine, and loose micaceous light-brown silt	2.5	2.5
Sand, fine to medium, subangular to subrounded, silty	3.5	6
Broadway Alluvium:		
Gravel, very fine, to sand, very coarse, angular to subrounded, clean; contains tan clay lenses and coal fragments	1.5	7.5
Sand, very coarse, fairly well-sorted, arkosic, subangular, and about 10 percent very fine gravel	8	15.5
Louviers Alluvium:		
Sand, medium to coarse, angular to subangular, arkosic, finely micaceous; contains a little silt	2	17.5
Gravel, fine to medium, subangular, arkosic, clean, and about 20 percent fine to very coarse sand	2.5	20
Sand, very coarse, well-sorted, arkosic, subangular	2.5	22.5
Sand, fine to very coarse, arkosic, subangular to subrounded	5	27.5
Gravel, very fine, to sand, very coarse, angular to subrounded, clean; contains tan clay lenses and coal fragments	2.5	30
Dawson Formation (upper part):		
Shale, clay, noncalcareous, grayish-orange	2.5	32.5
C4-66-4bdaa. Alt. 5,443 ft.		
Piney Creek Alluvium:		
Clay, heavy; contains sandy streaks	14	14
Dawson Formation (upper part):		
Sandstone (water-bearing)	.7	14.7
Shale, blue	17.3	32
C4-66-4bdaa2. Alt. 5,443 ft.		
Piney Creek Alluvium:		
Soil	6	6
Soil, sandy	4	10
Dawson Formation (upper part):		
Clay, yellow	20	30
Clay and shale	10	40
Clay and gravel	5	45
Clay	20	65
Coal	5	70
Shale, rotten	4	74
Clay, gray	16	90
Shale and clay	20	110
Shale	4	114
Clay	6	120
Rock	12	132
Shale	12	144
Shale and coal	11	155
Shale	16	171
Rock	3	174
Clay and streaks of coal	12	186
Rock	1	187
Clay and shale	78	265
Shale, clay, and a streak of coal	47	312
Rock	8	320
Shale and a streak of coal	34	354
Rock	2	356
Clay and a streak of shale	31	387
Sand	47	434
Shale and clay	10	444
C4-66-4cccc. Alt. 5,480.0 ft.		
Younger loess:		
Sand, very fine to medium, and loose tan silt	2.5	2.5
Silt, sandy, very calcareous, moderate-yellowish-brown and very-pale-orange	2.5	5
Dawson Formation (upper part):		
Shale, silty, very calcareous, grayish-orange; contains much sand at 8.0 feet	7.5	12.5

	Thickness	Depth
C4-66-5bcab. Alt. 5,444.0 ft.		
Younger loess and Slocum(?) Alluvium, undifferentiated:		
Clay	63	63
Sand, dirty	9	72
Dawson Formation:		
Shale at 72 feet		
C4-66-5bcba. Alt. 5,438 ft.		
Surface	66	66
Dawson Formation (upper part):		
Shale, brown and yellow	4	70
Coal	1	71
Clay, blue	65	136
Coal	1	137
Clay, blue	115	252
Coal	3	255
Clay, gray	46	301
Sandstone	15	316
Clay, blue	32	348
Coal, soft	6	354
Clay, blue	174	528
Sandstone	8	536
Shale, blue	219	755
Sandstone, hard	5	760
Shale, blue	15	775
Dawson Formation (lower part):		
Middle conglomerate:		
Sand (water)	15	790
Clay, blue	70	860
Sand streaks (water)	40	900
Shale	20	920
Shale and clay	41	961
C4-66-5cabc. Alt. 5,445 ft.		
Younger loess:		
Clay, yellow	16	16
Dawson Formation (upper part):		
Sandstone	5	21
Clay, sandy	11	32
Sand	16	48
Clay, yellow	22	70
Clay, blue	32	102
Shale, gray	5	107
Sand (water)	2	109
Clay, blue	26	135
Shale, brown	7	142
Clay, gray	18	160
Shale, brown	12	172
Clay, green	8	180
Shale, light-brown	5	185
Shale, gray	45	230
Shale, light-brown	19	249
Clay, green	1	250
C4-66-5cccc. Alt. 5,452 ft.		
Younger loess:		
Clay, brown	27	27
Broadway Alluvium:		
Gravel	9	36
Dawson Formation (upper part):		
Shale, blue and light-blue	234	270
Coal	12	282
Clay, brown	78	360
Shale, blue	44	404
Sand [Upper conglomerate, 404 to 573 feet.]	5	409
Clay, sandy	6	415
Shale, blue; contains coal	146	561
Sand streaks	12	573
Shale, blue	135	708
Shale, sandy	2	710
Clay, sandy	12	722
Sand, firm	10	732
Shale, blue	33	765
Sand, firm	8	773
Shale, blue	144	917
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	15	932
Shale, blue	29	961
Sand; contains blue shale	73	1,034
Shale, blue	26	1,060
C4-66-7ddda. Alt. 5,450 ft.		
No sample	232	232
Dawson Formation (upper part):		
Coal	110	342
Sand (water) [Upper conglomerate, 342 to 545 feet.]	203	545
Shale, sandy, gray	29	574
Coal	1	575
Shell, hard	65	640
Sand (water)	9	649
Shale, sandy	165	814
Dawson Formation (lower part):		
Sand, gray [Middle conglomerate, 814 to 950 feet.]	136	950

	Thickness	Depth
C4-66-7ddda.--Continued		
Shell, hard	10	980
Shale, sandy	95	1,075
Shale, dark-green	5	1,080
Lower conglomerate:		
Sand (artesian water)	25	1,105
Shale, sandy	133	1,238
Sand (heavy artesian flow)	57	1,295
Laramie Formation:		
Shale, black	30	1,325
Sand, yellow	90	1,415
Coal	29	1,444
Shale, sandy, dark, and some coal	158	1,602
Shale, brown	23	1,625
Coal	10	1,635
B sandstone:		
Sand; show of gas (water)	50	1,685
B and A sandstones, undifferentiated:		
Sand, dark	118	1,803
Shale, dark	21	1,824
Shale, sandy	41	1,865
Shale	20	1,885
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, dark	3	1,888
Sand, hard, dark	28	1,916
Sand	22	1,938
Sand, hard	66	2,004
Transition zone:		
Shale, sandy	47	2,051
Sand, hard	109	2,160
Shale, gray	30	2,190
Sand, hard	80	2,270
Shale, hard	72	2,342
Shell, hard	118	2,460
No sample	3	2,463
Sand, hard	9	2,472
Shale, sandy, light-colored	28	2,500
Conglomerate, hard	15	2,515
Shale, gray, and sandstone	345	2,860
C4-66-8cccc. Alt. 5,450 ft.		
Piney Creek Alluvium:		
Fill	3	3
Topsoil	2	5
Clay, sandy, brown	7	12
Broadway Alluvium:		
Sand	4	16
Dawson Formation (upper part):		
Clay, gray	4	20
Clay, yellow	19	39
Shale, blue	4	43
Shale, gray	10	53
Shale, sandy, gray	7	60
Shale, gray, and sandstone	42	102
Shale, gray	19	121
Sandstone, gray	21	142
Shale, gray, and sandstone	97	239
Coal	4	243
Shale, gray	9	252
Coal and gray shale	32	284
Shale, gray	46	330
Coal and gray shale	30	360
Shale, sandy, gray	22	382
Shale, gray	9	391
Shale, sandy, gray	14	405
Sand and gray shale [Upper conglomerate, 405 to 583 feet.]	34	439
Shale, gray	27	466
Coal and gray shale	12	478
Shale, gray, and sandstone	21	499
Shale, gray	8	507
Sand and gray shale	31	538
Sandstone	4	542
Sand, medium to coarse, and gray shale	41	583
Shale, gray	47	630
Shale, sandy, gray	8	638
Sand, fine	19	657
Shale, gray	50	707
Sand, fine, and gray shale	17	724
Shale, gray	64	788
Sand, fine	4	792
Shale, gray	16	808
Sand, fine	4	812
Shale, gray	47	859
Dawson Formation (lower part):		
Sand, fine, and gray shale [Middle conglomerate, 859 to 1,012 feet.]	41	900
Shale, gray	32	932

	Thickness	Depth
C4-66-8cccc.--Continued		
Sand, fine	4	936
Sand, fine, hard	5	941
Shale, gray	18	959
Shale, sandy, gray	29	988
Sand, fine, hard	8	996
Shale, gray	12	1,008
Sand, fine	4	1,012
Shale, gray	16	1,028
Sand, fine, and gray shale	13	1,041
Shale, gray	32	1,073
Lower conglomerate:		
Sand, fine, and gray shale	21	1,094
Shale, gray	18	1,112
Sand, fine, and gray shale	12	1,124
Shale, gray	36	1,160
Sand, fine, and gray shale	12	1,172
Shale, gray	13	1,185
Sand, fine	5	1,190
Shale, gray	23	1,213
Sand, fine, and gray shale	15	1,228
Shale, gray	21	1,249
Sand, fine, and gray shale	32	1,281
Shale, gray	79	1,360
Sand, fine, and gray shale	13	1,373
Shale, gray	27	1,400
C4-66-10aadb. Alt. 5,517.9 ft.		
Older(?) loess:		
Topsoil	2	2
Loam, red	4	6
Dawson Formation (upper part):		
Clay, yellow	29	35
Clay, sandy, yellow	4	39
Clay, as above; more sand	2	41
Clay, sandy, yellow	6	47
Clay, sandy, and broken shale	3	50
Shale, broken, yellow and blue	22	72
Shale, blue	2	74
Sandrock	5	79
Shale, blue	1	80
Sandrock	1	81
Shale, sandy, hard	19	100
C4-66-11badb. Alt. 5,479.8 ft.		
Post-Piney Creek alluvium:		
Sand, fine, gray	3	3
Louviers Alluvium:		
Sand, coarse, gray	12	15
Dawson Formation:		
Clay, grayish-brown	5	20
Shale, soft, blue	2	22
C4-66-11bbda. Alt. 5,479.8 ft.		
Post-Piney Creek alluvium:		
Sand, fine	3	3
Piney Creek Alluvium:		
Sand, fine, and clay binder	4	7
Louviers Alluvium:		
Sand and some clay	8	15
Clay, yellow	2	17
Gravel and boulders	5	22
Dawson Formation:		
Shale	2	24
C4-66-11bbdb. Alt. 5,476.5 ft.		
Post-Piney Creek alluvium:		
Sand, fine, gray	5	5
Louviers Alluvium:		
Sand, gray	18	23
Dawson Formation:		
Shale, blue	10	33
C4-66-18cbcb. Alt. 5,568 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, yellow and brown	22	24
Clay, yellow to gray	25	49
Clay, sandy, brown	35	84
Shale, medium hard, gray to blue	321	405
Sandstone, thin layers, interbedded with shale and coal breaks	27	432
Shale, gray; contains occasional thin coal breaks	118	550
Sandstone; contains thin shale breaks [Upper conglomerate, 550 to 590 feet.]	40	590

	Thickness	Depth
C4-66-18ccab.--Continued		
Shale, gray; contains thin coal seams	100	690
Sandstone, shaly; interbedded shale	90	780
Shale, gray	145	925
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone; contains occasional thin shale breaks	105	1,030
Shale	33	1,063
C4-66-20bcbb. Alt. 5,569 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, brown to yellow	24	26
Clay, gray	31	57
Shale, gray to blue; contains occasional interbedded coal seams	453	510
Sandstone (Upper conglomerate, 510 to 585 feet.)	75	585
Shale	275	860
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone	45	905
Shale	20	925
Sandstone	15	940
Shale	20	960
C4-66-24adac. Alt. 5,600 ft.		
Piney Creek Alluvium:		
Clay	16	16
Broadway Alluvium:		
Gravel	5	21
Dawson Formation (upper part):		
Shale	221	242
Sandrock	30	272
Shale	74	346
Bentonite	2	348
Shale	24	372
Upper conglomerate:		
Sandstone	44	416
Shale	8	424
C4-67-1abbd. Alt. 5,391 ft.		
Overburden	56	56
Dawson Formation (upper part):		
Clay, blue, and shale	204	260
Coal and shale	3	263
Shale, sandy	67	330
Clay, blue, and shale	65	395
Coal	2	397
Clay and shale	13	410
Shale, sandy	10	420
Clay and shale	50	470
Sand	5	475
Clay and shale	265	740
Shale, sandy	22	762
Clay and shale	23	785
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	5	790
Clay and shale	40	830
Sand	5	835
Clay and shale	13	848
Sandstone	5	853
Clay	5	858
Sand and sandstone	27	885
Clay and shale	35	920
C4-67-1abdc. Alt. 5,394 ft.		
Younger loess:		
Topsoil	2	2
Clay, brown to yellow	16	18
Clay, sandy	14	32
Dawson Formation (upper part):		
Clay, gray to yellow	33	65
Shale, gray to blue	107	172
Shale, gray to blue; occasional coal breaks	118	290
Shale, gray to blue; contains occasional sand layers	445	735
Dawson Formation (lower part):		
Sandstone interbedded with thin shale layers [Middle conglomerate, 735 to 900 feet.]	165	900
Shale, hard, gray	62	962

	Thickness	Depth
C4-67-1daaa. Alt. 5,422 ft.		
Younger loess:		
Soil.	8	8
Sand.	7	15
Dawson Formation (upper part):		
Clay.	5	20
Clay, sandy	10	30
Clay.	20	50
Clay, sandy	20	70
Sandstone	2	72
Shale, blue	18	90
Shale, grayish.	10	100
Shale, blue	8	108
Sandstone	2	110
Shale, blue	5	115
Shale, sandy, gray.	5	120
Shale, blue	5	125
Sandstone	4	129
Coal.	1	130
Shale, gray	5	135
Shale, brown.	5	140
Shale, gray	5	145
Shale, brown.	4	149
Coal.	9	158
Shale, brown.	7	165
Shale, gray	4	169
Coal.	1	170
Shale, blue	5	175
Shale, gray	15	190
Shale, blue	5	195
Shale, brown.	5	200
Coal.	5	205
Shale, blue	5	210
Shale, gray	10	220
Shale, blue	5	225
Shale, sandy, gray.	5	230
Shale, blue	15	245
Shale, brown.	8	253
Shale, gray	7	260
Shale, blue	10	270
Sandstone	3	273
Shale, brown.	10	283
Shale, blue	7	290
Shale, gray	10	300
Coal.	10	310
Shale, gray	8	318
Coal.	4	322
Shale, blue	3	325
Coal.	5	330
Shale, gray	10	340
Coal.	5	345
Shale, gray	5	350
Shale, blue	10	360
Shale, gray	19	379
Sandstone	4	383
Shale, gray	7	390
Shale, blue	10	400
Shale, gray	10	410
Shale, blue	30	440
Coal.	5	445
Shale, brown.	5	450
Shale, blue	30	480
Shale, gray	30	510
Shale, blue	40	550
Shale, gray	15	565
Sand, fine (Upper conglomerate, 565 to 644 feet.)	15	580
Shale, blue	20	600
Shale, gray	10	610
Shale, blue	10	620
Sand.	2	622
Shale, blue	8	630
Sand.	14	644
Shale, blue	6	650
Shale, gray	20	670
Shale, blue	20	690
Shale, sandy, gray.	10	700
Sand and shale.	10	710
Shale, sandy, gray.	10	720
Shale, blue	10	730
Sand and shale.	20	750
Shale, gray	14	764
Shale, sandy, gray.	16	780
Shale and sand.	10	790
Shale, blue	10	800
Shale, gray	10	810
Coal.	5	815
Shale, blue	15	830
Shale, gray	10	840
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone	5	845
Shale, sandy, gray.	5	850
Sand.	10	860
Sandstone	4	864
Sand, coarse.	5	869
Shale, blue	2	871
Sand.	9	880
Rock.	1	881
Sand.	5	886
Shale, blue	2	888
Sand.	2	890

	Thickness	Depth
C4-67-2daaa.--Continued		
Rock.	3	893
Shale, blue	4	897
Sand.	5	902
Shale, blue	8	910
Shale, gray	5	915
Sand.	2	917
Shale, gray	23	940
Shale, blue	5	945
Sand.	10	955
Shale, blue	10	965
Sand and shale.	10	975
Shale, hard, blue	15	990
C4-67-1caad. Alt. 5,370 ft.		
Younger loess:		
Soil.	2	2
Clay, sandy, brown.	24	26
Dawson Formation (upper part):		
Clay, yellow and gray	34	60
Shale, blue	8	68
Shale, gray	13	81
Shale, sandy, gray.	4	85
Shale, gray	5	90
Shale, brown; contains coal.	4	94
Shale, blue	26	120
Shale, gray	7	127
Shale, brown.	4	131
Shale, blue	6	137
Shale, gray, and sandstone	6	143
Shale, gray	13	156
Sandstone, gray	2	158
Shale, blue	8	166
Sandstone, gray	3	169
Shale, gray	8	177
Shale, blue	3	180
Sandstone, gray	5	185
Shale, gray	5	190
Shale, blue	4	194
Shale, brown.	3	197
Shale, gray	18	215
Sandstone, gray	3	218
Shale, blue	8	226
Shale, brown.	5	231
Shale, gray	108	339
Coal blossom.	2	341
Shale, sandy, gray.	6	347
Shale, gray	4	351
Shale, blue	7	358
Shale, sandy, gray.	13	371
Shale, gray	6	377
Sandstone, gray	4	381
Shale, brown.	5	386
Sandstone, gray	20	406
Shale, blue	8	414
Shale, brown.	5	419
Shale, gray	70	489
Sand, fine.	6	495
Shale, gray	101	596
Lime, sandy	1	597
Shale, gray	100	697
Sand, fine.	3	700
Lime, sandy	1	701
Dawson Formation (lower part):		
Sand (Middle conglomerate, 701 to 824 feet.)	7	708
Shale, gray	7	715
Sand.	18	733
Shale, gray	4	737
Sand, fine.	5	742
Shale, gray	10	752
Sand, fine.	31	783
Shale, gray	10	793
Sand, fine.	31	824
Shale, gray	61	885
Sand, fine, and gray shale	8	893
Shale, gray	59	952
Lower conglomerate:		
Sand, fine.	4	956
Lime, sandy	3	959
Sand, fine.	7	966
Shale, gray	21	987
Sand, fine.	17	1,004
Shale, gray	51	1,055
Sand, fine, and gray shale	19	1,074
Shale, gray	41	1,115
Sand, medium.	27	1,142
Sand and gray shale.	7	1,149
Sand, medium.	11	1,160
Sand and gray shale.	12	1,172
Shale, gray	14	1,186
Sand, fine.	3	1,189
Laramie Formation:		
Shale, gray	17	1,206
Coal.	8	1,214
Sand, fine, and gray shale	31	1,245
Shale, gray	100	1,545
Shale, gray, and coal.	59	1,604

	Thickness	Depth
C4-67-1caad.--Continued		
Lime, sandy (B sandstone, 1,604 to 1,665 feet.)	3	1,607
Sand and gray shale, interbedded.	58	1,665
Shale, sandy, gray	24	1,689
Shale, gray, and coal.	94	1,783
A sandstone:		
Sand	59	1,842
Coal	4	1,846
Shale, gray.	7	1,853
Sand	6	1,859
Shale.	21	1,880
Coal	2	1,882
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone, hard.	3	1,885
Sand, fine	20	1,905
Transition zone:		
Shale, sandy, fine	13	1,918
Sand and gray shale	19	1,937
Shale, gray.	86	2,023
C4-67-3bdbb. Alt. 5,362 ft.		
Younger loess:		
Loam, sandy.	32	32
Silt (water-bearing)	6	38
Dawson Formation (upper part):		
Clay, yellow	16	54
Clay, blue	26	80
Sand, gray (water-bearing)	5	85
Clay, blue	40	125
Clay, gray	35	160
Sand	10	170
Clay, gray	15	185
Coal smut.	5	190
Clay, blue	30	220
Coal smut.	5	225
Clay, blue	25	250
C4-67-6bdcc. Alt. 5,309 ft.		
No sample.	80	80
Dawson Formation (upper part):		
Sand, silty.	10	90
Shale and sand, light-olive-gray	10	100
Shale, light-olive-gray	30	130
Shale, sandy, dusky-yellow	10	140
Shale, pale-yellowish-brown.	10	150
Shale, light-olive-gray	10	160
Shale, light-olive-gray; contains coal fragments.	10	170
Shale, light-olive-gray	10	180
Shale, silty, light-olive-gray	20	200
Shale, silty	30	230
Sandstone, silty	5	235
Shale.	8	243
Sandstone, silty	12	255
Shale, light-olive-gray	65	320
Sand, clear, subangular to well-rounded, very arkosic, micaceous; 5 percent coarse, 25 percent medium, 20 percent fine, 50 percent very fine (Upper conglomerate, 320 to 380 feet.)	5	325
Shale, light-olive-gray	4	329
Sand, clear, subangular to well-rounded, very arkosic, micaceous; 5 percent coarse, 25 percent medium, 20 percent fine, 50 percent very fine	6	335
Shale, sandy, light-olive-gray; contains coal fragments	30	365
Sandstone, very fine- to medium-grained, subangular to subrounded, very arkosic, micaceous	5	370
Shale, light-olive-gray	5	375
Sandstone, very fine- to coarse-grained, subangular to subrounded, very arkosic, micaceous	5	380
Shale and thin layers of sand, light-olive-gray	123	503
Dawson Formation (lower part):		
Sand, angular to subrounded, light-olive-gray, arkosic; 5 percent silt, 45 percent fine, 50 percent very fine; contains some basalt fragments		

	Thickness	Depth
C4-67-6bdcc.--Continued		
[Middle conglomerate, 503 to 635 feet.]	10	513
Shale, gray; contains ash and coal fragments	18	531
Sand, very arkosic, angular to subrounded; 5 percent coarse, 10 percent medium, 50 percent fine, 35 percent very fine	9	540
Shale, sandy, gray.	10	550
Sand, 5 percent very coarse, 5 percent coarse, 10 percent medium, 30 percent fine, 30 percent very fine	13	563
Shale, light-gray	5	568
Sand, arkosic, slightly frosted; 5 percent very coarse, 10 percent coarse, 15 percent medium, 35 percent fine, 35 percent very fine; sample contains 10 percent mica, pyrite and other minerals.	17	585
Shale, light-gray	5	590
Sand, very arkosic; 5 percent coarse, 25 percent medium, 50 percent fine, 20 percent very fine, sample contains 30 percent mica, schist, and hornblende.	45	635
Shale, silty, light-olive-gray.	23	658
Shale, sandy; contains coal and basalt fragments	57	715
Sand, 5 percent coarse, 20 percent medium, 50 percent fine, 25 percent very fine	15	730
Shale, silty, light-olive-gray.	20	750
Sand, very arkosic, angular to well-rounded; 5 percent very coarse, 30 percent medium, 40 percent fine, 20 percent very fine; sample contains 20 percent dark mineral and 10 percent mica.	5	755
Shale, sandy, light-olive-gray.	42	797
Lower conglomerate:		
Sand, very arkosic; 5 percent very coarse, 10 percent coarse, 20 percent medium, 40 percent fine, 20 percent very fine, and 5 percent very fine gravel; sample contains 10 percent mica and 10 percent dark minerals	13	810
Shale, sandy, light-olive-gray.	12	822
Sand, 5 percent very coarse, 10 percent coarse, 10 percent medium, 40 percent fine, 15 percent very fine	5	827
Shale, sandy, light-olive-gray.	5	832
Sand, part well-cemented, highly calcareous; 5 percent very coarse, 10 percent coarse, 30 percent medium, 40 percent fine, 15 percent very fine; part cemented with pyrite	6	838
Shale, sandy, light-olive-gray.	12	850
Sand, 10 percent very coarse, 25 percent coarse, 30 percent medium, 20 percent fine, 10 percent very fine, and 5 percent very fine gravel.	10	860
Shale, sandy, light-olive-gray.	15	875
Sand, moderately cemented, slightly calcareous; 5 percent very coarse, 10 percent coarse, 50 percent medium, 25 percent fine, 10 percent very fine; contains pyrite	10	885
Shale, sandy, light-olive-gray.	10	895
Sand, 5 percent very coarse, 5 percent coarse, 45 percent medium, 30 percent fine, 15 percent very fine	10	905
Shale, sandy, light-olive-gray.	15	920
Sand, 5 percent very coarse, 5 percent coarse, 35 percent medium, 30 percent fine, 20 percent very fine; contains coarse fragments of red and black basalt.	5	925
Shale, silty, light-olive-gray.	48	973
Sand.	7	980
Shale, silty.	6	986
Sand and gravel	20	1,006
Shale, silty.	6	1,012
Sand.	13	1,025
Shale	7	1,032
Sand, silty	6	1,038
Shale, silty.	4	1,042
Sandstone, calcareous	4	1,046
Sand, silty	9	1,055
Shale	5	1,060
Sand and sandstone.	15	1,075
Shale, medium-gray.	25	1,100
Sand and shale, medium-gray.	35	1,135
Laramie Formation:		
Shale, silty, medium-gray.	43	1,178
Coal.	3	1,181
Shale, sandy.	4	1,185
Sand, shaly	10	1,195
Coal.	3	1,198
Shale, medium-gray.	7	1,205
Sand, shaly	13	1,218
Shale, sandy.	10	1,228
Sand, silty	4	1,232
Coal.	2	1,234
Shale, silty.	7	1,241
Sand and shale, and streaks of coal	9	1,250
Sand, shaly	13	1,263
Coal.	2	1,265
Shale and sand, and streaks of coal	35	1,300
Shale, sandy.	13	1,313
Coal.	3	1,316
Shale, sandy.	9	1,325
Coal.	4	1,329
Shale and sand, medium-gray; contains streaks of coal	32	1,361
Coal.	3	1,364
Shale, medium-gray.	45	1,409
Sandstone, very fine-grained	6	1,415
Shale, sandy.	3	1,418
Coal.	2	1,420
Shale, sandy.	4	1,424
Coal.	3	1,427
Shale, sandy.	9	1,436
Coal.	3	1,439
Shale, silty, medium-gray, and coal	16	1,455
B sandstone:		
Sandstone, very fine- to medium-grained	35	1,490
Sandstone, very fine- to fine-grained; contains about 10 percent medium sand; has salt and pepper texture	55	1,545
A sandstone:		
Sand, very fine, silty, iron stained; contains layers of shale	75	1,620
Sand, very arkosic, iron stained, 60 percent fine, 40 percent very fine	45	1,665
Shale, light-gray	5	1,670
Sand, arkosic, iron stained, 60 percent fine; 40 percent very fine.	14	1,684
C4-67-6bdcc.--Continued		
Shale, calcareous, light-gray	43	1,727
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone, very fine- to medium-grained; contains iron-cemented nodules and fragments of fossils	20	1,747
Sand, 15 percent medium, 60 percent fine, 25 percent very fine; contains medium-sized pyritic nodules.	17	1,764
Shale, highly calcareous	17	1,781
Sandstone, very fine- to coarse-grained, iron-cemented; contains pyritic nodules.	14	1,795
Transition zone:		
Silt, silty sand, and shale; progressive decrease in sand toward bottom	45	1,840
C4-67-7ccdc. Alt. 5,345 ft.		
Eolian sand:		
Clay	7	7
Louviers Alluvium:		
Gravel	17	24
Sand, dirty.	11	35
Clay	5	40
Gravel and rocks	5	45
Dawson Formation (upper part):		
Sandstone, hard.	5	50
Shale.	3	53
C4-67-8dcbb. Alt. 5,390 ft.		
Younger loess:		
Clay	6	6
Slocum Alluvium:		
Sand and gravel.	66	72
Clay	4	76
Gravel and boulders.	3	79
Sand	5	84
Dawson Formation (upper part):		
Rock, hard	2	86
Shale.	11	97
Rock, hard	3	100
C4-67-10adab. Alt. 5,423 ft.		
Younger loess and Dawson Formation (upper part) undifferentiated:		
Clay, brown and yellow	83	83
Dawson Formation (upper part):		
Shale, gray.	38	121
Coal	3	124
Shale, gray.	100	224
Sandstone, gray [Upper conglomerate, 224 to 329 feet.]	14	238
Shale, gray.	48	286
Sandstone, gray.	4	290
Shale, gray.	25	315
Sandstone, gray.	2	317
Shale, brown	6	323
Sandstone, gray.	6	329
Shale, gray.	136	465
Shale, gray and sandstone.	11	476
Shale, gray.	216	692
Dawson Formation (lower part):		
Sand, fine [Middle conglomerate, 692 to 997 feet.]	8	700
Shale, gray.	30	730
Sand, fine	7	737
Shale, gray.	29	766
Shale, gray, and fine sand	14	780
Shale, gray.	36	816
Sand, fine	7	823
Shale, gray.	36	859
Sand, medium to fine	38	897
Shale, gray.	71	968
Shale, gray, and fine sand	13	981
Shale, gray.	44	1,025
Lower conglomerate:		
Sand, medium	22	1,047
Shale, gray.	33	1,080
Lime	2	1,082
Shale, gray.	55	1,137
Sand, fine	8	1,145
Laramie Formation:		
Shale, gray.	95	1,240

	Thickness	Depth
C4-67-14ccdd. Alt. 5,486 ft.		
Younger loess:		
Soil.	1	1
Clay, sandy	22	25
Slocum Alluvium:		
Sand, fine.	11	36
Sand, coarse.	12	48
Clay.	2	50
C4-67-15dddb. Alt. 5,473 ft.		
Younger loess:		
Soil.	1	1
Clay, sandy	18	21
Slocum Alluvium:		
Sand, fine.	13	34
Sand, coarse.	5	39
Clay.	4	43
C4-67-16cdbd. Alt. 5,471 ft.		
Eolian sand:		
Sand, fine.	21	21
Younger(?) loess:		
Clay, sandy, brown.	28	49
Clay, sandy, yellow	11	60
Dawson Formation (upper part):		
Clay, yellow.	12	72
Sandstone, gray	15	87
Shale, blue	9	96
Sandstone, gray	6	102
Shale, gray, and sandstone	40	142
Shale, sandy, gray.	4	146
Shale, gray, and sandstone	14	160
Shale, brown.	6	166
Shale, gray	25	191
Shale, sandy, gray.	12	203
Sandstone, gray, and shale	187	390
Shale, gray	52	442
Sandstone, gray and shale	52	494
Shale, brown.	11	505
Sandstone, gray	23	528
Shale, brown.	8	536
Shale, gray	117	653
Sand.	6	659
Shale, gray	59	718
Shale, sandy, gray.	20	738
Shale	48	786
Dawson Formation:		
Sand, fine, and gray shale [Middle conglomerate, 786 to 882 feet.]	18	804
Shale, sandy, gray.	14	818
Sand, fine.	10	828
Shale, sandy, gray.	37	865
Sand, coarse, and gray shale.	17	882
Shale, sandy, gray.	11	893
Sand, fine, and gray shale	62	955
Shale, gray	19	974
Sand, fine, and gray shale	76	1,050
Shale, gray	21	1,071
Sand, fine, and gray shale	16	1,087
Shale, sandy, gray	22	1,109
Lower conglomerate:		
Sand, fine, and gray shale	34	1,143
Lime	2	1,145
Shale, gray	5	1,150
C4-67-17dbbc. Alt. 5,400 ft.		
Louviers Alluvium:		
Sand and gravel	14.5	14.5
Dawson Formation (upper part):		
Shale, brown.	2.5	17
Shale, blue	195	212
Sand.	13	225
Shale, blue	401	626
Shale and layers of sand.	71	697
Shale, blue	23	720
Dawson Formation (lower part):		
Middle conglomerate:		
Sand.	28	748
C4-67-17ddbd. Alt. 5,389.0 ft.		
Overburden.	33	33
Dawson Formation (upper part):		
Clay, blue, and shale	212	245
Coal.	1	246
Clay and shale.	414	660
Sand and sandy clay.	11	671
Clay.	6	677
Sand.	5	682
Clay.	5	687
Rock.	2	689
Clay, sandy	8	697
Clay.	25	722
C4-67-17ddbd.--Continued		
Dawson Formation (lower part):		
Middle conglomerate:		
Sand, coarse.	9	731
Rock.	1	732
Clay and shale.	12	744
Sand.	3	747
Clay and shale.	28	775
Sand and sandstone.	22	797
Clay and shale.	33	830
Sand and sandstone.	15	845
Shale	25	870
Sand and sandstone.	6	876
Shale	10	886
Sand and sandstone.	21	907
Clay and shale.	33	940
Sand and sandstone.	28	968
Clay and shale.	16	984
Sandrock.	3	987
Sand.	4	991
Clay.	29	1,020
C4-67-17ddbd2. Alt. 5,390.3 ft.		
Piney Creek Alluvium:		
Soil.	8	8
Broadway Alluvium:		
Sand, dirty	22	30
Gravel, fine.	4	34
Louviers Alluvium:		
Clay.	3	37
Gravel, fine.	8	45
Gravel, coarse, and clay.	4	49
C4-67-18aacc. Alt. 5,367.1 ft.		
Piney Creek Alluvium:		
Sand, silt, and very fine to medium gravel, loose	2.5	2.5
Gravel, very fine to fine, arkosic, subrounded, coarse sand, and pale-yellowish-brown silt	1	3.5
Clay, very sandy and gravelly, brown; compact from 6.0 to 7.0 feet.	3.5	7
Broadway Alluvium:		
Gravel, fine, arkosic, subrounded to rounded, coarse sand, and pale-yellowish-brown calcareous silt.	5.5	12.5
Gravel, very fine to medium, arkosic, subrounded, and about 20 percent coarse sand; contains fragments of welded tuff	5	17.5
Louviers Alluvium:		
Gravel, fine, arkosic, coarse sand, and calcareous silt.	2.5	20
Sand, medium to very coarse, subrounded, arkosic, and about 10 percent very fine arkosic subrounded to rounded gravel	2.5	22.5
Dawson Formation (upper part):		
Shale, silty, noncalcareous, grayish-orange, and a little very fine gravel, at 22.5 feet		
C4-67-18acaa. Alt. 5,356.5 ft.		
Piney Creek Alluvium:		
Silt, micaceous, calcareous, dark-greenish-gray; contains montmorillonite	5	5
Silt, very sandy and gravelly, calcareous, greenish-gray; contains montmorillonite	2.5	7.5
Gravel, very fine to fine, subrounded to rounded, arkosic, coarse sand, and light olive-gray noncalcareous silt.	7.5	15
Louviers Alluvium:		
Cobbles, gravel, and sand.	.5	15.5
Gravel, very fine to medium, arkosic, subrounded to rounded, very coarse sand, and light-olive-gray silt	7	22.5
Sand, very coarse, arkosic, subangular, and about 40 percent arkosic subangular very fine to fine gravel	5	27.5
C4-67-18acaa.--Continued		
Gravel, very fine to medium, clean.	5	32.5
Sand, very coarse, arkosic, subangular, and about 40 percent arkosic subangular very fine to medium gravel	3.5	36
Dawson Formation (upper part):		
Shale, silty, sandy, medium-light-gray changing downward to light-olive-gray; slightly calcareous at top decreasing downward; contains montmorillonite.	4	40
C4-67-18accd2. Alt. 5,352.0 ft.		
Broadway Alluvium:		
Soil, sandy.	10	10
Louviers Alluvium:		
Clay	5	15
Gravel	20	35
Gravel and large rocks	8	43
Dawson Formation:		
Shale at 43 feet		
C4-67-18acdb. Alt. 5,356.1 ft.		
Broadway Alluvium:		
Topsoil.	2.5	2.5
Silt, calcareous, light-olive-gray, very fine arkosic subangular to subrounded gravel, and poorly sorted sand; contains montmorillonite	10	12.5
Sand, medium to very coarse, arkosic, subangular to subrounded, and about 20 percent very fine subrounded to rounded gravel.	10	22.5
Louviers Alluvium:		
Gravel, very fine to fine, arkosic, subangular to well-rounded, and about 20 percent poorly sorted sand	10	32.5
Gravel, very fine to fine, subangular to rounded; contains cobbles and poorly sorted sand	5	37.5
Gravel, very fine.	2.5	40
Gravel, very fine to fine, subangular to rounded, and about 20 percent poorly sorted sand; contains cobbles.	5	45
Gravel, very fine to fine, subangular to rounded, and about 20 percent poorly sorted sand; sand increases to about 40 percent from 47 to 50 feet.	5	50
Gravel, very fine, subangular to rounded, 40 percent poorly sorted sand, and some grayish-orange silt.	5	57.5
Sand, fine to very coarse, subangular to rounded, arkosic, about 40 percent very fine to fine gravel, and some grayish-orange silt.	5	58
Gravel, very fine, subangular to rounded	4	62
Dawson Formation:		
Shale, blue.	5.5	67.5
C4-67-18cabb. Alt. 5,349.5 ft.		
Piney Creek, Broadway, and Louviers Alluvium, undifferentiated:		
Sand, fine	37	37
Dawson Formation (upper part):		
Clay	3	40
Sand, dirty, silty	10	50
Sandrock	1	51
C4-67-18cadc. Alt. 5,378.1 ft.		
Eolian sand:		
Topsoil, sandy, brown.	3	3
Silt, sandy and gravelly, calcareous, dusky-yellow and pale-yellowish-brown.	9.5	12.5
Broadway Alluvium:		
Sand, medium to very coarse, subangular to rounded.		

	Thickness	Depth
C4-67-18cadc.--Continued		
arkosic, and about 40 percent very fine to medium gravel.	5	17.5
Louviers Alluvium:		
Silt, sandy and gravelly, grayish-orange.	5	22.5
Sand, medium to very coarse, arkosic, subrounded to rounded, and a little very fine to fine gravel.	5	27.5
Dawson Formation (upper part):		
Silt, very sandy, calcareous, moderate-yellowish-brown and dusky-yellow; contains montmorillonite	20	47.5
Silt, very sandy, very calcareous, micaceous, grayish-orange; contains montmorillonite	12.5	60
Shale, silty, sandy, noncalcareous; contains montmorillonite	2.5	62.5
C4-67-18cbcd. Alt. 5,370 ft.		
Fill.	4	4
Eolian sand:		
Sand.	11	15
Younger loess:		
Clay, yellow.	11	26
Slocum Alluvium:		
Gravel.	2	28
Dawson Formation (upper part):		
Clay, brown, and sandstone	6	34
Sandstone, blue	23	57
Shale	41	98
Sandstone, blue	10	108
Shale, blue	19	127
Shale, gray	81	208
Sandstone, gray	12	220
Shale, blue and brown	26	246
Shale, gray	58	304
Sandstone, gray	19	323
Shale, gray	155	478
Upper(?) conglomerate:		
Sand.	14	492
Shale, gray	28	520
Sand, medium to coarse	9	529
Shale, gray	31	560
Sandstone, gray	18	578
Shale, gray	34	612
Dawson Formation (lower part):		
Sand, fine, and gray shale [Middle conglomerate, 658 to 778 feet.]	75	687
Shale, gray	13	700
Sand, fine.	33	733
Shale, gray	13	746
Sand, medium to coarse	15	761
Shale	6	767
Sand, medium to coarse	11	778
Shale, gray	65	843
Lower conglomerate:		
Shale, gray, and fine to medium sand.	107	950
C4-67-18dbbb. Alt. 5,351 ft.		
No sample	6	6
Broadway Alluvium:		
Sand and gravel	18	24
Louviers Alluvium:		
Clay, soft, brown	7	31
Sand and gravel	13	44
Clay, blue.	9	53
Gravel,	6	59
Dawson Formation:		
Shale, blue	1	60
C4-67-18dbbb2. Alt. 5,356.7 ft		
Post-Piney Creek alluvium:		
Fill, sand, and gravel	3	3
Louviers Alluvium:		
Gravel, fine to medium, arkosic, subrounded to rounded, and pale-yellowish-brown silt	4.5	7.5
Sand, coarse to very coarse, arkosic, subrounded, 10 percent very fine to fine gravel, and pale-yellowish-brown silt	5	12.5
Silt, noncalcareous, micaceous, pale-yellowish-brown; contains fine sand	1.5	14
Sand, medium to coarse, fairly well-sorted, arkosic, loose.	3.5	17.5

	Thickness	Depth
C4-67-18dbbb2.--Continued		
Cobbles, very fine arkosic subrounded gravel, and very coarse sand	2.5	20
Gravel, very fine, arkosic, subrounded to well-rounded, and very coarse sand.	4	24
Clay, silty, very sandy, grayish-orange.	.5	24.5
Gravel, very fine, angular to subrounded, poorly sorted sand, and grayish-orange silt.	9.5	34
Sand, very coarse, arkosic, angular to subrounded, clean, and about 40 percent very fine to fine arkosic subangular to subrounded gravel.	6	40
Cobbles, very coarse sand, and very fine to fine gravel.	4	44
Dawson Formation (upper part):		
Shale, very silty, sandy, noncalcareous, dusky-yellow; contains montmorillonite	6	50
C4-67-19bdab. Alt. 5,415 ft.		
Younger loess:		
Soil.	6	6
Clay.	24	30
Dawson Formation (upper part):		
Shale, brown.	10	40
Clay.	5	45
Shale, brown.	20	65
Shale, blue	3	68
Sandstone	38	106
Shale, hard, gray	4	110
Shale, gray	7	117
Shale, blue	6	123
Sandstone	6	129
Shale, hard, gray	6	135
Shale, sandy, gray.	3	138
Shale, hard, gray	16	154
Shale, blue	5	159
Shale, gray	3	162
Shale, brown.	8	170
Shale, gray	14	184
Shale, blue	8	192
Shale, brown.	2	194
Shale, gray	5	199
Sandstone	6	205
Shale, gray	4	209
Shale, blue	2	211
Shale, brown.	8	219
Shale, gray	6	225
Shale, blue	3	228
Shale, gray	5	233
Shale, brown.	6	239
Shale, gray	13	252
Shale, blue	6	258
Shale, gray	6	264
Shale, blue	6	270
Shale, gray	9	279
Shale, sandy	18	297
Shale, gray	10	327
Shale, brown.	4	331
Shale, gray	79	410
Shale, sandy, gray.	10	420
Shale, blue	7	427
Shale, gray	23	450
Shale, brown.	10	460
Shale, blue	25	485
Shale, gray	15	500
Shale, sandy, gray.	3	503
Shale, gray	8	511
Shale, blue	8	519
Sandstone	1	520
Shale, gray	27	547
Shale, blue	3	550
Shale, sandy, gray.	2	552
Sandstone	6	558
Shale, blue	6	564
Shale, gray	16	580
Sand.	1	581
Shale, gray	24	605
Limestone	1	606
Shale, sandy, gray.	7	613
Shale, gray	31	644
Shale, sandy, gray.	4	648
Sand and streaks of gray shale.	27	675
Shale, gray	10	685
Shale, sandy, gray.	5	690
Shale, gray	3	693
Rock.	2	695
Shale, gray	25	720
Shale, sandy, gray.	5	725

	Thickness	Depth
C4-67-19bdab.--Continued		
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone.	1	726
Shale, sandy, gray	4	730
Sandstone.	1	731
Shale, gray.	13	744
Rock	2	746
Shale, gray.	19	765
Shale, sandy, gray	1	766
Shale, gray.	9	775
Shale, sandy, gray	11	786
Shale, gray.	18	804
Sand	1	805
Shale, gray.	4	809
Sand	1	810
Shale, sandy, gray	12	822
Sand and shale	22	844
Sand	1	845
Sand and shale	13	858
Sand	3	861
Sand and shale	24	885
Shale, gray.	5	890
Shale, sandy	20	910
Shale, hard.	15	925
Sand and shale	10	935
Sand	4	939
Shale, sandy, gray	4	943
Sand	6	949
Sand and shale	56	1,005
C4-67-20aabb. Alt. 5,394.9 ft.		
Piney Creek Alluvium:		
Topsoil.	3	3
Broadway Alluvium:		
Gravel	16	19
Louviers Alluvium:		
Sand	7	26
Gravel and sand.	5	31
Gravel	7	38
Clay	2	40
Gravel and rock.	7	47
Dawson Formation:		
Shale.	1	48
C4-67-20aacd. Alt. 5,398.7 ft.		
Piney Creek Alluvium:		
Topsoil.	4	4
Clay	3	7
Broadway Alluvium:		
Gravel and sand.	7	14
Louviers Alluvium:		
Clay	2	16
Gravel	33	49
Gravel, rocks, and some clay	5	54
Dawson Formation (upper part):		
Sandstone.	2	56
Shale.	1	57
C4-67-20cddd. Alt. 5,415 ft.		
Piney Creek Alluvium:		
Fill	2	2
Topsoil.	2	4
Younger loess:		
Clay, yellow	6	10
Clay, sandy, yellow.	3	13
Dawson Formation (upper part):		
Sandstone, brown	5	18
Clay, yellow	10	28
Shale, gray.	7	35
Shale, blue.	6	41
Sandstone, gray.	4	45
Shale, gray.	9	54
Sandstone, gray.	12	66
Shale, brown	5	71
Sandstone, gray.	4	75
Shale, gray.	9	84
Shale, brown	6	90
Shale, gray.	12	102
Shale, brown	5	107
Shale, blue.	6	113
Shale, brown	4	117
Shale, gray.	3	120
Sandstone, gray.	5	125
Shale, gray.	5	130
Sandstone, gray, and gray shale	30	160
Shale, brown	3	163
Shale, gray, and sandstone.	23	186
Shale, brown	4	190
Shale, gray, and sandstone.	21	211
Shale, brown	6	217
Shale, gray.	23	240
Sandstone, gray, and shale.	55	295
Sand and gray shale.	29	324
Shale, gray, and sandstone.	22	346
Shale, brown	4	350
Shale, gray.	48	398

	Thickness	Depth
C4-67-20cddd.--Continued		
Shale, brown.	7	405
Shale, gray, and sandstone	60	465
Shale, brown.	4	469
Sandstone, gray . . .	11	480
Shale, gray	4	484
Shale, brown.	4	488
Shale, gray	125	613
Sand, fine.	6	619
Shale, gray	97	716
Sand, fine.	9	725
Shale, gray	88	813
Dawson Formation (lower part):		
Sand, fine [Middle conglomerate, 813 to 969 feet.].	12	825
Sand, coarse, and gray shale	15	840
Shale, gray	17	857
Sand, fine, and gray shale	21	878
Shale, gray	78	956
Sand, fine.	13	969
Shale, gray	32	1,001
Sand, fine, and gray shale	18	1,019
Shale, gray	37	1,056
Lower conglomerate:		
Sand, fine, and layers of gray shale . . .	21	1,077
Shale, gray	13	1,090
Sand, fine, and gray shale	19	1,109
Shale, gray	7	1,116
C4-67-20ddab. Alt. 5,411 ft.		
Piney Creek Alluvium:		
Clay.	3	3
Broadway Alluvium:		
Sand and gravel . . .	21	24
Louviers Alluvium:		
Clay.	11	35
Sand and gravel . . .	10	45
Dawson Formation:		
Shale	1	46
C4-67-21babb. Alt. 5,460 ft.		
Piney Creek Alluvium:		
Topsoil, sandy. . . .	3	3
Broadway Alluvium:		
Sand.	8	11
Dawson Formation (upper part):		
Clay, sandy, brown. .	5	16
Clay, yellow.	8	24
Sandstone, brown. . .	8	32
Clay, sandy, yellow .	11	43
Sandstone, brown. . .	6	49
Sandstone, gray . . .	5	54
Shale, blue	7	61
Sandstone, gray . . .	16	77
Shale, gray, and sandstone	55	132
Shale, brown.	8	140
Shale, gray, and sandstone	56	196
Shale, brown.	4	200
Sandstone, gray . . .	33	233
Sandstone, soft . . .	9	242
Shale, gray, and sandstone	32	274
Shale, sandy, gray. .	13	287
Shale, gray, and sandstone	24	311
Shale, sandy, brown .	6	317
Shale, gray	39	356
Sand.	5	361
Shale, sandy, gray. .	11	372
Shale, gray	12	384
Sandstone, gray . . .	12	396
Shale, gray	89	485
Sandstone, gray . . .	6	491
Shale, gray	128	619
Lime.	4	623
Sand.	3	626
Shale, sandy, gray. .	27	653
Shale, gray	29	682
Shale, sandy, gray. .	9	691
Shale, gray	19	710
Sand, fine, and gray shale	92	802
Dawson Formation (lower part):		
Middle conglomerate:		
Sand, coarse, and gray shale	10	812
Sand, fine, and gray shale	12	844
Sand, coarse, and gray shale	86	930
Shale, gray	15	945
C4-67-21bcda. Alt. 5,408.9 ft.		
Piney Creek Alluvium:		
Clay.	5	5

	Thickness	Depth
C4-67-21bcda.--Continued		
Broadway and Louviers Alluvium, undifferentiated:		
Gravel to large cobbles	40	45
Dawson Formation (upper part):		
Sandstone	3	48
Shale	5	53
C4-67-22bada. Alt. 5,485 ft.		
Younger loess:		
Loam, sandy	32	32
Dawson Formation (upper part):		
Shale, gray	6	38
Clay, brown	40	78
Sand (water).	7	85
Clay, blue.	5	90
C4-67-22cbda. Alt. 5,505 ft.		
Eolian sand and Dawson Formation (upper part), undifferentiated:		
Soil and sandy clay .	70	70
Dawson Formation (upper part):		
Shale, blue-gray. . .	230	300
Shale, gray	100	600
Shale, brown.	25	625
Shale, blue-gray. . .	75	700
Coal and brown shale	10	710
Shale, gray	80	790
Sand, fine, gray. . .	35	825
Shale, gray	75	900
Dawson Formation (lower part):		
Sand, white	50	950
C4-67-27cbac2. Alt. 5,454 ft.		
Piney Creek Alluvium:		
Sand, fine.	6	6
Clay, brown	16	22
Louviers Alluvium:		
Sand and gravel . . .	20	42
Dawson Formation:		
Shale	2	44
C4-67-28adaa2. Alt. 5,455.1 ft.		
Eolian sand:		
Sand, fine to coarse, silty, loose. . . .	2.5	2.5
Silt, very sandy, noncalcareous; contains fine to medium arkosic sand.	6.5	9
Louviers Alluvium:		
Sand, fine to medium, subangular to rounded, silty, arkosic, noncalcareous, very-pale-orange, moderate-yellow, and grayish-yellow.	11	20
Dawson Formation (upper part):		
Shale, silty, noncalcareous, olive-gray; contains montmorillonite.	2.5	22.5
C4-67-28adca. Alt. 5,442.7 ft.		
Piney Creek Alluvium:		
Topsoil, sandy, buff.	.5	.5
Silty, clayey and sandy, calcareous, pale-brown	14.5	15
Broadway Alluvium:		
Gravel, very fine to fine, arkosic, subangular, and fine to very coarse sand. .	2.5	17.5
Louviers Alluvium:		
Sand, medium to very coarse, gravelly, subangular, arkosic; contains cobbles from 19.0 to 19.5 feet .	5	22.5
Gravel, very fine, subangular to subrounded, arkosic, and about 20 percent sand. . . .	15	37.5
Gravel, very fine to fine, arkosic, angular to subrounded; contains cobbles at 46.0 feet; becomes more rounded and well sorted between 47.5 to 50.0 feet.	12.5	50
Dawson Formation (upper part):		
Shale, very silty and sandy, light-olive-brown; contains montmorillonite	2.5	52.5
C4-67-28adcc. Alt. 5,438.2 ft.		
Piney Creek Alluvium:		
Topsoil, loose, brown	2.5	2.5
Silt, clayey, very sandy, calcareous, light-olive-gray; contains very coarse sand	13.5	16

	Thickness	Depth
C4-67-28adcc.--Continued		
Broadway Alluvium:		
Gravel, very fine to fine, subangular to subrounded, arkosic, and about 10 percent very coarse sand . .	3	19
Louviers Alluvium:		
Clay, sandy and gravelly, brown.	3.5	22.5
Gravel, very fine to medium, arkosic, subangular to rounded, and about 30 percent medium to very coarse sand	5	27.5
Sand, coarse to very coarse, slightly silty, angular to subangular, and about 10 percent very fine to medium gravel	5	32.5
Gravel, very fine to fine, subangular to subrounded, arkosic, and about 10 percent medium to very coarse sand.	15	47.5
Gravel, very fine, arkosic, subangular to subrounded; contains cobbles.	5	52.5
Gravel, very fine to fine, arkosic, subangular to rounded; contains coarse to very coarse angular to subangular sand and interbedded cobbles.	16.5	69
Clay, sticky, tan. . .	1	70
Gravel and sand; contains cobbles from 90.0 to 94.0 feet.	24	94
Dawson Formation (upper part):		
Shale, sandy, gravelly, noncalcareous, light-olive-gray; limonite stained.	3.5	97.5
C4-67-28baba2. Alt. 5,421.2 ft.		
Piney Creek Alluvium:		
Loam, finely sandy, silty, slightly moist	3.5	3.5
Silt, clayey, moist. .	1.5	5
Broadway Alluvium:		
Sand, fine to coarse .	4	9
Sand, fine to coarse, very clayey; occasional pebbles.	5	14
Sand, medium to coarse, slightly clayey; pebbles.	6	20
Sand, medium to coarse; pebbles.	5	25
Louviers Alluvium:		
Sand, medium to coarse, very moist	14	39
Sand, medium to coarse, wet; contains streaks of clay.	2	41
Sand, medium to coarse; cobbles.	3	44
Dawson Formation:		
Shale and clay, weathered, blue . .	3	47
Shale and clay, blue to slightly blue. . . .	1.5	48.5
C4-67-28baba4. Alt. 5,421.5 ft.		
Piney Creek Alluvium:		
Silt, sandy, calcareous, light-olive-gray; contains angular to subangular fine sand and montmorillonite. . .	3.5	3.5
Broadway Alluvium:		
Sand, poorly sorted, very fine to medium, arkosic, subangular gravel, and about 50 percent silt	5	8.5
Sand, fine to coarse, silty; contains medium gravel	5	13.5
Louviers Alluvium:		
Sand, poorly sorted, subangular to subrounded, slightly silty, and about 30 percent very fine to medium gravel	10	23.5
Sand, very fine to very coarse, subangular to subrounded, and about 40 percent very fine to medium gravel . .	5	28.5

	Thickness	Depth
C4-67-28baba4.--Continued		
Sand, very fine to very coarse, poorly sorted, subangular to subrounded, arkosic, wet	5	33.5
Sand, very coarse, fairly well-sorted, arkosic, subangular to subrounded	5	38.5
Gravel, very fine, arkosic, subangular to rounded, and 20 percent very coarse sand.	4	42.5
Sand, medium to coarse, cemented; contains medium gravel and streaks of clay	3	45.5
Dawson Formation (upper part):		
Shale and clay, blue.	3	48.5
C4-67-28bada. Alt. 5,426.6 ft.		
Piney Creek Alluvium:		
Topsoil	3	3
Broadway Alluvium:		
Sand.	5	8
Sand and fine gravel	25	33
Louviers Alluvium:		
Sand and silt, rust-colored	6	39
Boulders and cobbles, bedded.	5	44
C4-67-28bdca. Alt. 5,428 ft.		
Piney Creek Alluvium:		
Topsoil	2	2
Broadway Alluvium:		
Sand, fine.	14	16
Sand, coarse.	23	39
Louviers Alluvium:		
Clay, sandy, light-brown	3	42
Sand and layers of gray sandy clay	9	51
Boulders.	2	53
Dawson Formation:		
Shale, gray and brown	7	60
Shale, blue	3	63
C4-67-28bddd. Alt. 5,432.7 ft.		
Post-Piney Creek alluvium:		
Fill.	6	6
Broadway Alluvium:		
Gravel, very fine to fine, arkosic, subrounded, very silty, and very coarse sand	4	10
Sand, medium to very coarse, and very fine to fine gravel.	2.5	12.5
Louviers Alluvium:		
Gravel, very fine to fine, subangular to subrounded, and about 30 percent medium to very coarse sand; contains cobbles at 17.0 feet	10	22.5
Gravel, fine, well-sorted, subangular to subrounded.	5	27.5
Gravel, very fine to fine, arkosic, subangular to rounded, and about 30 percent fine to very coarse sand.	15	42.5
Gravel, fine, arkosic, subangular to subrounded, fairly well-sorted.	6.5	49
Gravel, coarse.	1	50
Dawson Formation (upper part):		
Shale, silty and sandy, weathered, noncalcareous, soft, pale-olive-gray and yellow	12.5	62.5
Shale and clay; contains montmorillonite; at 62.5 feet		
C4-67-28caca. Alt. 5,462.4 ft.		
Younger loess:		
Topsoil	2.5	2.5
Silt, sandy, pale-yellowish-brown	5	7.5
Louviers Alluvium:		
Sand, very fine to very coarse, subrounded, silty, arkosic, calcareous, pale-yellowish-brown, and about 10 percent very fine gravel.	8.5	16

	Thickness	Depth
C4-67-28caca.--Continued		
Dawson Formation (upper part):		
Shale, silty, calcareous, dusky-yellow; contains montmorillonite and some gravel	1.5	17.5
C4-67-28cbad. Alt. 5,463 ft.		
No sample	100	100
Dawson Formation (upper part):		
Shale, medium hard, blue to gray; interbedded stringers of sandstone	120	220
Shale, medium hard, blue to gray.	452	672
Sand, fine-grained, medium hard (water) [Upper conglomerate, 672 to 706 feet.]	34	706
Shale, dark-gray; occasional thin streaks of sand	192	898
Dawson Formation (lower part):		
Sand, coarse-grained (water) [Middle conglomerate, 898 to 965 feet.]	67	965
Shale, hard, gray to black	45	1,010
C4-67-28ccab. Alt. 5,494.0 ft.		
Younger loess:		
Topsoil	2	2
Dawson Formation (upper part):		
Shale, silty, noncalcareous, compact, micaceous, pale-yellowish-brown; contains very fine sand	5.5	7.5
C4-67-28cdaa. Alt. 5,443.4 ft.		
Younger loess:		
Topsoil	2.5	2.5
Silt, clayey, slightly sandy, calcareous, compact, pale-yellowish-brown, increase in sand between 22.5 and 27.5 feet	25	27.5
Louviers Alluvium:		
Silt, sandy and gravelly, pale-yellowish-brown; contains about 30 percent sand.	5	32.5
Sand, arkosic, to very fine gravel; contains about 50 percent pale-yellowish-brown calcareous silt.	2.5	35
Dawson Formation (upper part):		
Shale, clay, pale-olive; contains montmorillonite.	2.5	37.5
C4-67-29abab. Alt. 5,443 ft.		
Younger loess:		
Topsoil	2	2
Clay, brown	7	9
Louviers Alluvium:		
Sand.	18	27
Dawson Formation (upper part):		
Clay, sandy, brown.	9	36
Shale, blue	4	40
Shale, brown.	5	45
Shale, blue	17	62
Shale, gray	8	70
Sandstone, gray	2	72
Shale, gray	2	74
Sandstone, gray	15	89
Shale, gray	4	93
Shale, brown.	2	95
Sandstone, gray	2	97
Shale, gray	11	108
Shale, blue	25	133
Shale, brown.	9	142
Shale, blue	6	148
Shale, brown.	6	154
Shale, gray	3	157
Shale, brown.	23	180
Shale, blue	5	185
Shale, brown.	9	194
Sandstone, gray	2	196
Shale, brown.	12	208
Sandstone, gray	1	209
Shale, blue	4	213
Sandstone, gray	11	224
Shale, blue	3	227
Sandstone, gray	2	229
Shale, sandy, gray.	4	233
Shale, brown.	3	236
Shale, gray	7	243
Shale, blue	4	247
Shale, brown.	2	249
Shale, gray	26	275

	Thickness	Depth
C4-67-29abab.--Continued		
Shale, blue.	6	281
Shale, gray.	4	285
Shale, blue.	3	288
Shale, gray.	19	307
Shale, brown	2	309
Sandstone, gray.	6	315
Shale, sandy, gray	6	321
Shale, gray.	9	330
Sand	4	334
Shale, gray.	7	341
Sand	4	345
Shale, gray.	7	352
Shale, blue.	13	365
Shale, gray.	19	384
Lime	1	385
Sandstone, gray.	7	392
Shale, blue	9	401
Shale, gray.	17	418
Shale, blue.	4	422
Shale, gray.	4	426
Shale, brown	8	434
Shale, gray.	16	450
Sandstone, gray.	18	468
Shale, blue.	4	472
Shale, gray.	10	482
Sandstone, gray.	3	485
Shale, brown	21	506
Shale, blue.	8	514
Shale, brown	4	518
Shale, gray.	3	521
Shale, brown	7	528
Shale, blue.	17	545
Shale, gray.	11	556
Shale, blue.	7	563
Shale, gray.	7	570
Shale, blue.	16	586
Shale, gray.	5	591
Shale, blue.	12	603
Shale, brown	11	614
Shale, blue.	22	636
Shale, gray.	52	688
Lime	1	689
Shale, blue.	9	698
Shale, gray.	38	736
Sandstone, gray.	2	738
Dawson Formation (lower part):		
Sand [Middle conglomerate, 738 to 784 feet.]	3	741
Shale, gray.	9	750
Shale, blue.	5	755
Shale, gray.	17	772
Sand, fine, white.	12	784
Shale, gray.	20	804
Shale, gray.	88	892
Sand	23	915
Shale, gray.	6	921
Sand	7	928
Shale, gray.	37	965
Sand	10	975
Shale, blue.	5	980
Shale, gray.	26	1,006
Shale.	31	1,037
Lower conglomerate:		
Sand and gray layers of shale	17	1,054
Shale.	6	1,060
C4-67-30caab. Alt. 5,442 ft.		
Younger loess:		
Soil and clay.	16	16
Dawson Formation (upper part):		
Clay, sandy, hard.	17	33
Clay, brown.	12	45
Shale, blue.	37	82
Sandstone, hard.	2	84
Shale, blue.	26	110
Sandstone, hard.	4	114
Shale, blue.	166	280
Shale, hard, brittle, gray	84	364
Shale, blue.	186	550
Shale, hard, brittle, gray	222	772
Shale, blue.	24	796
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone and fine sand	34	830
Sand (water)	41	871
Sand, fine	19	890
Shale, blue.	10	900
C4-67-31bbcb. Alt. 5,425 ft.		
Younger loess:		
Topsoil.	5	5
Louviers Alluvium:		
Sand	11	16
Dawson Formation (upper part):		
Clay	38	54
Shale.	5	59
Sandstone.	4	63
Shale, sandy	27	90
Shale, gray.	12	102
Shale, blue.	108	210
Sandstone.	10	220

	Thickness	Depth
C4-67-12babb. Alt. 5,502 ft.		
Younger loess:		
Soil, surface	4	4
Slocum Alluvium:		
Sand, dry	14	18
Dawson Formation (upper part):		
Sandrock	3	21
Shale	53	74
Shale, blue	46	120
Sandrock, brown	4	124
Clay and shale	40	164
Sandrock	2	166
Clay and shale	57	223
Sandrock, hard	1	224
Clay and shale	117	341
Sandrock, brown [Upper conglomerate, 341 to 561 feet.]	1	342
Sand (water)	3	345
Clay and shale	12	357
Sandrock, brown	5	362
Clay and shale	55	417
Sandrock, hard	11	428
Clay and shale	71	499
Sand, hard, and shale	11	510
Clay and shale	48	558
Sandrock, brown	3	561
Clay and shale	16	577
Shale, loose	12	589
Clay and shale	131	720
Shale, hard	2	722
Clay and shale	12	734
Clay, blue, and sand	25	759
Clay and shale	55	814
Dawson Formation (lower part):		
Sand (water) [Middle conglomerate, 814 to 1,047 feet.]	5	819
Clay and shale	12	831
Sand (water)	7	838
Clay and shale	19	857
Sand (water)	3	860
Clay and shale	15	875
Sand (water)	13	888
Clay and shale	83	971
Sand (water)	11	982
Sand, hard	3	985
Sand (water)	12	997
Clay and shale	8	1,005
Sand (water)	3	1,008
Clay and shale	28	1,036
Sand and shale (water)	6	1,042
Sand (water)	5	1,047
Clay and shale	178	1,225
Lower conglomerate:		
Sand, fair (water came to surface)	5	1,230
Clay and shale	16	1,246
Sand and shale (water started to flow at 48 gpm from a depth of 1,246 feet)	9	1,255
Clay and shale	2	1,257
Sand (water)	8	1,265
Clay, white	5	1,270
C4-67-13babb. Alt. 5,510 ft.		
No sample	600	600
Dawson Formation (upper part):		
Clay and shale	120	720
Sand, fine	12	732
Sandrock	5	737
Sand, fine	11	748
Clay and shale	22	770
Sand, fine	10	780
Clay and shale	70	850
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	12	862
Clay and shale	33	895
Sand, coarse	12	907
Clay	8	915
C4-67-14aadb. Alt. 5,507 ft.		
Eolian sand:		
Sand	14	14
Younger loess:		
Clay, sandy, yellow	20	34
Slocum Alluvium:		
Sand	5	39
Dawson Formation (upper part):		
Clay, yellow	5	44
Shale, gray	17	61
Sandstone, gray	4	65
Shale, gray	44	109
Sandstone, gray	15	124
Shale, gray	216	340
Sandstone, gray	7	347
Shale, gray	8	355
Shale, brown	6	361
Shale, gray	27	388
Shale, brown	4	392
C4-67-14aadb.--Continued		
Shale, gray, and sandstone	46	438
Shale, gray	53	491
Sandstone, hard, gray	2	493
Shale, gray	237	730
Sand, fine	6	736
Shale, gray	78	814
Sand, fine	9	823
Lime, sandy	3	826
Sandstone, blue	7	833
Shale, gray	65	898
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	7	905
Shale, gray	39	944
Sand	3	947
Shale, gray	15	962
Sand and shale	49	1,011
Shale, gray	13	1,024
C4-67-14ddcb. Alt. 5,493.8 ft.		
Piney Creek Alluvium:		
Top	4	4
Sand and clay	3	7
Broadway Alluvium:		
Gravel, rusty, and sand	7	14
Louviers Alluvium:		
Gravel, fairly coarse, and clean sand	62	76
Gravel, fine sand, and clay	9	85
Gravel, some fine sand, and clay	7	92
Gravel, sand, and rocks	4	96
Dawson Formation:		
Shale	1	97
C4-67-14dddd. Alt. 5,494.9 ft.		
Piney Creek Alluvium:		
Soil, clayey, hard	4	4
Broadway Alluvium:		
Sand, coarse; contains fine gravel	4.5	8.5
Louviers Alluvium:		
Clay, brown	5.5	14
Sand, fine, and silt	2	16
Gravel, fine to medium, and coarse sand	7	23
Clay	.2	23.2
Gravel, fine to medium	16.8	40
Sand, coarse; contains fine gravel	20	60
Clay, brown	.5	60.5
Gravel, coarse and medium; contains pebbles; thin lens of clay at 64 feet	3.5	64
Gravel, medium to fine	10	74
Gravel, fine, and coarse sand	8.6	82.6
Dawson Formation:		
Shale, soft, weathered, greenish	1	83.6
Shale, blue, hard	1	84.6
C4-67-15bccb4. Alt. 5,483.1 ft.		
Eolian sand:		
Fill	3	3
Soil	2	5
Sand	14	19
Dawson Formation (upper part):		
Clay, yellow	9	28
Sandstone, blue	6	34
Shale, gray	20	54
Lime	1	55
Sandstone, gray	7	62
Shale, blue and gray	41	103
Sandstone, gray	11	114
Shale, gray	13	127
Sandstone, gray	8	135
Shale, blue gray and brown	78	213
Shale, sandy, gray	12	225
Shale, gray	7	232
Sandstone, gray	6	238
Lime	2	240
Shale, gray and brown	14	254
Coal	2	256
Shale, gray and brown	37	293
Coal	2	295
Shale, gray and brown	9	304
Shale, sandy, gray	11	315
Shale, blue gray and brown	19	334
Sandstone, gray	3	337
Shale, brown	3	340
Sandstone, gray	33	373
Shale, gray and brown	15	388
Shale, sandy, gray	14	402
Shale, brown	6	408
Sandstone, gray [Upper conglomerate, 408 to 552 feet.]	10	418
C4-67-15bccb.--Continued		
Shale, gray and brown	68	486
Sand, fine	9	495
Shale, gray	18	513
Sand, fine	5	518
Coal	2	520
Shale, gray	6	526
Sand, fine	8	534
Shale, gray and brown	12	546
Sand, fine	6	552
Shale, gray and brown	36	588
Sandstone, gray	24	612
Shale, gray and brown	144	756
Sand	5	761
Shale, gray	24	785
Sand, fine	10	795
Shale, gray	69	864
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	17	881
Shale, gray	12	893
Sand	4	897
Shale, gray	55	952
Sand	9	961
Shale, gray	4	965
Sand	20	985
Sand and gray shale	37	1,022
Shale, gray	22	1,044
C4-67-16cacd2. Alt. 5,609.2 ft.		
Eolian sand:		
Sand, medium, slightly cemented, brown	25	25
Dawson Formation (upper part):		
Clay, sandy, soft, brown	23	48
Clay, clean, soft, gray	47	95
Shale, subfirm, gray	19	114
Sand, medium, loose, gray (some water loss)	1	115
Shale, subfirm, gray	61	176
Shale, blue and gray	46	222
Shale, sandy, gray	8	230
Shale, blue	7	237
Shale, sandy, gray	11	248
Shale, blue and gray	107	355
Lime	1	356
Sandstone, gray	3	359
Shale, gray	5	364
Sandstone, gray	15	379
Shale, sandy, gray	11	390
Shale, gray	13	403
Shale, sandy, gray	21	424
Lime, sandy	1	425
Sandstone, brown	6	431
Shale, gray, and sandstone	31	462
Shale, brown and gray	11	473
Coal	3	476
Shale, brown, and coal blossom	7	483
Shale, gray	4	487
Coal	4	491
Shale, gray	23	514
Coal	3	517
Shale, gray	3	520
Shale, sandy, gray	11	531
Coal blossom	5	536
Shale, sandy, brown	6	542
Sandstone, gray	5	547
Shale, brown and gray	55	602
Shale, sandy, gray	19	621
Shale, gray	4	625
Sand	12	637
Shale, gray and brown	136	773
Shale, sandy, gray	7	780
Shale, gray	24	804
Shale, sandy, gray	26	830
Shale, gray	104	934
Dawson Formation (lower part):		
Middle conglomerate:		
Sand, fine and medium	11	945
Shale, gray	9	954
Sand, fine and medium	12	966
Shale, gray	35	1,001
Sand, fine	8	1,009
Shale, gray	60	1,069
Sand, fine	11	1,080
Shale, gray	10	1,090
Sand	15	1,105
Shale, gray	11	1,116
Sand	9	1,125
Shale, gray	21	1,146
Sand	20	1,166
Shale, gray, and sand	7	1,173
Sand	18	1,191
Shale, gray, and sand	7	1,198

	Thickness	Depth
C4-68-2dbcc. Alt. 5,321.0 ft.		
Eolian sand:		
Sand, loose, brown. .	2	2
Dawson Formation (upper part):		
Silt, sandy, very calcareous, grayish-orange; contains montmorillonite	12	14
Shale, silty, very sandy, very calcareous, micaceous	6	20
Shale, silty and sandy, micaceous, very calcareous, moderate-yellowish-brown; contains montmorillonite	7.5	27.5
C4-68-3abac. Alt. 5,273 ft.		
Eolian sand and Louviers Alluvium, undifferentiated:		
Sand and gravel . . .	98	98
Dawson Formation (upper part):		
Clay and shale. . . .	208	306
Sandrock, hard. . . .	2	308
Clay.	20	328
Sandrock.	24	352
Clay.	8	360
Dawson Formation (lower part):		
Sand (water-bearing) [Middle conglomerate, 360 to 445 feet.] .	22	382
Clay.	10	392
Sandrock.	41	433
Clay.	4	437
Rock (water-bearing).	8	445
Sandrock, hard. . . .	37	482
Clay.	50	532
Clay and shale. . . .	117	649
Lower conglomerate:		
Sand (water-bearing).	40	689
Clay.	8	697
Sand (water-bearing).	42	739
Shale	31	770
Clay.	12	782
C4-68-3cbdc. Alt. 5,236 ft.		
Piney Creek Alluvium:		
Fill.	10	10
Broadway Alluvium:		
Sand and gravel . . .	4	14
Louviers Alluvium:		
Clay, silty	6	20
Sand and gravel (water-bearing).	31	51
Dawson Formation:		
Shale, brown.	1	52
Shale, blue	2	54
C4-68-3ccbb. Alt. 5,247.0 ft.		
Broadway Alluvium:		
Soil, sandy and clayey, dark-brown.	2.5	2.5
Sand, fine to medium, arkosic, slightly silty, and about 5 percent very fine gravel.	5.5	8
Gravel, very fine to fine, subangular, arkosic, and fine to very coarse sand. .	3	11
Gravel, very fine to medium, arkosic, subangular to subrounded, and about 20 percent fine to very coarse sand.	1.5	12.5
Louviers Alluvium:		
Gravel, very fine to very coarse, poorly sorted, subangular to well-rounded, arkosic	7	19.5
Silt, very sandy, noncalcareous, clayey, grayish-orange; contains montmorillonite . .	3	22.5
Gravel, very fine to very coarse, and medium to very coarse sand; contains beds of tan sandy clay between 28.0 and 33.0 feet.	10.5	33
Cobbles	2	35
Gravel, very fine to fine, and about 50 percent medium to very coarse sand	9	44
Silt, sandy, noncalcareous, pale-yellowish-orange; contains very fine sand.	3.5	47.5
Gravel and cobbles. .	8.5	56
C4-68-3ccbb.--Continued		
Sand, medium to very coarse, arkosic, subangular to angular, silty, grayish-orange	3	59
Cobbles	2	61
Dawson Formation (upper part):		
Shale, silty, light-olive-gray, noncalcareous; contains montmorillonite.	6.5	67.5
C4-68-3cdba. Alt. 5,238.0 ft.		
Piney Creek Alluvium:		
Loam, sandy, dark-brown	3.5	3.5
Broadway Alluvium:		
Gravel, very fine to medium, angular to subrounded; contains some sand and silt.	4	7.5
Gravel, very fine, subangular to subrounded, arkosic, and very fine to very coarse sand	3.5	11
Gravel, very fine to fine, subangular to subrounded, arkosic, and very fine to very coarse sand	2.5	13.5
Louviers Alluvium:		
Gravel; contains silt	1.5	15
Gravel, very fine to fine, and very fine to very coarse sand	2.5	17.5
Sand, very silty, pale-yellowish-brown . .	2.5	20
Sand, very fine to very coarse, angular to subangular, arkosic, and about 40 percent clean very fine to medium arkosic gravel	6	26
Dawson Formation (upper part):		
Shale, silty, noncalcareous, light-olive-gray; contains montmorillonite	4	30
C4-68-3ddab. Alt. 5,307.0 ft.		
Eolian sand:		
Loam, sandy, brown. .	2.5	2.5
Slocum Alluvium:		
Sand, well-sorted, medium to coarse, arkosic, subrounded	3.5	6
Sand, very fine, silty, noncalcareous, pale-yellowish-brown . .	2	8
Sand, very fine to coarse, silty, subrounded; contains about 10 percent coarse sand.	4.5	12.5
Sand, medium to very coarse, loose, and very fine gravel; contains a thin bed of clay.	9.5	22
Sand, very coarse, and very fine arkosic subrounded to rounded gravel.	1	23
Clay, hard.	3	26
Sand, very fine to coarse, arkosic, subrounded to rounded.	3	29
Dawson Formation (upper part):		
Sandstone, medium- to very coarse-grained, arkosic, soft; grains are subrounded to rounded	3.5	32.5
Sandstone, fine-grained, very soft, arkosic, at 32.5 feet		
C4-68-4babc. Alt. 5,195 ft.		
Post-Piney Creek alluvium:		
Fill.	5	5
Louviers Alluvium:		
Clay, sandy	11	16
Sand and gravel (water-bearing).	30	46
Dawson Formation (upper and lower parts, undifferentiated):		
Shale, soft, blue; contains some sand streaks	775	821
Shale and sand streaks	35	856
Laramie Formation:		
Shale, soft, blue . .	115	971
C4-68-4babc.--Continued		
Shale, black	24	995
Shale, hard, and lime.	110	1,105
Coal	17	1,122
Shale, hard, blue. . .	113	1,235
Sand; contains streaks of hard blue shale [B sandstone, 1,235 to 1,342 feet.] . . .	107	1,342
Shale, hard, black . .	41	1,383
Shale, blue.	37	1,420
Limestone, hard. . . .	45	1,465
Sandstone [A sandstone, 1,465 to 1,508 feet.]	43	1,508
Shale, hard, black . .	47	1,555
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone.	13	1,568
Shale, very hard . .	127	1,695
Limestone, hard. . . .	17	1,712
Sandstone; contains streaks of hard shale	84	1,796
Limestone, hard. . . .	24	1,820
C4-68-4ccbb. Alt. 5,199 ft.		
Post-Piney Creek alluvium:		
Topsoil.	3	3
Louviers Alluvium:		
Sand	7	10
Sand, clean.	11	21
Dawson Formation:		
Shale at 21 feet		
C4-68-4dcab. Alt. 5,238.0 ft.		
Piney Creek Alluvium:		
Soil and fill.	5	5
Silt, slightly sandy, micaceous, calcareous, pale-yellowish-brown; contains montmorillonite	4	9
Broadway Alluvium:		
Gravel, very fine to medium, arkosic, subrounded to rounded, and about 10 percent poorly sorted sand .	3.5	12.5
Gravel, medium to coarse, subrounded to well-rounded, arkosic, and about 30 percent sand	2	14.5
Louviers Alluvium:		
Silt, sandy, very calcareous, olive-gray; contains montmorillonite	16.5	31
Gravel, very fine to medium, subangular, arkosic, loose . . .	2.5	33.5
Gravel, subangular to angular, arkosic, loose, 40 percent very fine, 20 percent fine, and medium to very coarse sand.	18	51.5
Dawson Formation (upper part):		
Shale, silty, noncalcareous, pale-olive; contains montmorillonite. .	6	57.5
C4-68-4dccc. Alt. 5,225 ft.		
Piney Creek Alluvium:		
Fill	4	4
Loam	2	6
Loam and rock	1	7
Broadway Alluvium:		
Sand and gravel. . . .	5	12
Louviers Alluvium:		
Gravel and rock. . . .	2	14
Dawson Formation (upper part):		
Sandrock, brown. . . .	1	15
Clay, brown.	1	16
Sandrock, brown. . . .	4	20
C4-68-5adad. Alt. 5,193.9 ft.		
Post-Piney Creek alluvium:		
Fill	3	3
Sand	3	6
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, dirty.	3	9
Sand	4	13
Clay, yellow	1	14
Clay, blue	11	25
Sand	1	26
Clay, yellow	1	27
Sand and gravel. . . .	7	34
Dawson Formation:		
Clay, yellow	1	35
Shale, blue.	1	36

	Thickness	Depth
C4-68-5adbd. Alt. 5,198 ft.		
Piney Creek Alluvium:		
Fill	6	6
Broadway Alluvium:		
Gravel	15	21
Louviers Alluvium:		
Clay	3	24
Gravel	7	31
Gravel and boulders	6	37
Dawson Formation:		
Clay	1	38
Shale	2	40
C4-68-5cdab. Alt. 5,249.0 ft.		
Piney Creek Alluvium:		
Silt, sandy, and clayey, very calcareous, pale-yellowish-brown; contains montmorillonite	7.5	7.5
Dawson Formation (upper part):		
Silt, very calcareous, moderate-yellowish-brown; contains montmorillonite	5	12.5
Silt, very calcareous, pale-yellowish-brown; contains montmorillonite	10	22.5
Shale, very calcareous, dark-yellowish-brown; contains montmorillonite; at 22.5 feet		
C4-68-5cdcb. Alt. 5,289.0 ft.		
Dawson Formation (upper part):		
Topsoil, loam, sandy, dark-brown	.5	.5
Shale, sandy and silty, very calcareous, pale-yellowish-brown and moderate-yellowish-brown; contains montmorillonite	12	12.5
C4-68-5dbda. Alt. 5,211.0 ft.		
Piney Creek Alluvium:		
Silt, sandy, very calcareous, dark-yellowish-brown; contains coal fragments and small fragments of brick (probably fill)	13	13
Louviers Alluvium:		
Gravel, very fine to coarse, subrounded to well-rounded, arkosic, loose	6	19
Clay	1	20
Sand, very fine to coarse, angular to well-rounded, and gravel	8	28
Gravel, very fine to medium, well-sorted, arkosic, subangular to rounded, loose	9.5	37.5
Gravel, very fine to fine, well-sorted, arkosic, subangular to rounded	13.5	51
Dawson Formation (upper part):		
Sandstone, very fine-grained, silty, soft, arkosic, noncalcareous, yellowish-gray, and very sandy shale; contains montmorillonite	6.5	57.5
C4-68-7aaac. Alt. 5,342 ft.		
Slocum Alluvium:		
Topsoil	8	8
Gravel, coarse	12	20
Dawson Formation (upper part):		
Clay, brown	40	60
Shale, blue	6	66
Clay, sandy, blue	12	78
Shale, blue	38	116
Sandstone, blue	10	126
Shale, blue	10	136
Sand, firm	5	141
Shale, blue	7	148
Sand, firm	7	155
Shale, blue	102	257
Sand, firm	3	260
Shale, blue	44	304
Rock	1	305
Shale, blue	92	397
Coal	2	399
Shale, blue	9	408
Dawson Formation (lower part):		
Middle conglomerate:		

	Thickness	Depth
C4-68-7aaac.--Continued		
Sand, firm	6	414
Shale	14	428
Sand; contains streaks of shale	47	475
Shale	17	492
C4-68-9badb. Alt. 5,210 ft.		
Post-Piney Creek alluvium:		
Clay, black "dobie"	7	7
Broadway and Louviers Alluvium, undifferentiated:		
Sand and boulders	18	25
Dawson Formation:		
Shale, blue	15	40
C4-68-9bcaa. Alt. 5,210 ft.		
Post-Piney Creek alluvium and Louviers Alluvium, undifferentiated:		
Gravel and boulders	28	28
Dawson Formation (upper part):		
Shale, clay, and blue sand, in alternate streaks	72	100
Sandstone, hard	91	191
Clay	13	204
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone, soft, and clay	49	253
Sandstone, medium	42	295
Clay	10	305
Rock, hard	45	350
Clay	9	359
Sandstone	49	408
Clay	14	422
Sandstone, hard	46	468
Clay	32	500
Lower conglomerate:		
Clay and sand (water-bearing)	59	559
Sandstone	14	573
Sand (water-bearing)	90	663
Sandstone	10	673
Sand (water-bearing)	72	745
Clay and sandstone	34	779
C4-68-9dcad. Alt. 5,215.7 ft.		
Post-Piney Creek alluvium:		
Soil	2	2
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, coarse	28	30
Dawson Formation:		
Shale, blue	2	32
C4-68-11addd. Alt. 5,303.4 ft.		
Piney Creek Alluvium:		
Loam, sandy	20	20
Broadway and Louviers Alluvium, undifferentiated:		
Gravel and rock	28	48
C4-68-11bcdd. Alt. 5,271.8 ft.		
Piney Creek Alluvium:		
Clay, sandy, dry	12	12
Dawson Formation:		
Shale, blue	12	24
C4-68-11dcaa. Alt. 5,272.8 ft.		
Piney Creek Alluvium:		
Loam, sandy	10	10
Broadway and Louviers Alluvium, undifferentiated:		
Gravel (water-bearing)	19	29
Dawson Formation:		
Clay	3	32
Shale	3	35
C4-68-11dcaa. Alt. 5,278.9 ft.		
Piney Creek Alluvium:		
Topsoil	2	2
Broadway Alluvium:		
Sand, coarse	28	30
Louviers Alluvium:		
Gravel	5	35
Dawson Formation:		
Shale at 35 feet		
C4-68-11dbaa. Alt. 5,285.1 ft.		
Piney Creek Alluvium:		
Topsoil	8	8
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, fine	40	48
Louviers Alluvium:		
Gravel, coarse	4	52
Dawson Formation:		
Shale at 52 feet		

	Thickness	Depth
C4-68-11dbba. Alt. 5,279 ft.		
Piney Creek Alluvium:		
Soil	1.5	1.5
Sand, fine, dry	4.5	6
Flood clay	.5	6.5
Broadway Alluvium:		
Sand, dry	1.1	7.6
Sand, fine (water-bearing)	1.9	9.5
Flood clay	.5	10
Sand, fine (water-bearing)	2.4	12.4
Flood clay	.6	13
Sand, fine (water-bearing)	8	21
Louviers Alluvium:		
Sand, coarse (water-bearing)	4	25
Flood clay	.5	25.5
Sand, coarse (water-bearing)	11	36.5
Flood clay	.5	37
Gravel	4.3	41.3
Dawson Formation:		
Shale at 41.3 feet		
C4-68-11ddaa. Alt. 5,301.6 ft.		
Piney Creek and Broadway Alluvium, undifferentiated:		
Sand	25	25
Louviers Alluvium:		
Clay, hard	2.5	27.5
Sand	2.5	30
Clay	1	31
Sand, coarse	15.5	46.5
Dawson Formation:		
Shale	2.5	49
C4-68-12accb. Alt. 5,327.9 ft.		
Younger loess:		
Topsoil	4	4
Broadway Alluvium:		
Sand, fine, dry	31	35
Louviers Alluvium:		
Sand, fine, and gravel (water-bearing)	25	60
Dawson Formation:		
Clay, blue	10	70
C4-68-12ccba. Alt. 5,301.5 ft.		
Piney Creek and Broadway Alluvium, undifferentiated:		
Clay	1	1
Sand	11	12
Louviers Alluvium:		
Clay	4	16
Sand and gravel	32	48
Dawson Formation:		
Shale	1	49
C4-68-12cccb. Alt. 5,308.3 ft.		
Piney Creek Alluvium:		
Clay, sandy	12	12
Broadway Alluvium:		
Sand and gravel	3	15
Louviers Alluvium:		
Clay	29	44
Gravel	6	50
C4-68-12dccd. Alt. 5,308.7 ft.		
Piney Creek Alluvium:		
Fill	7	7
Broadway Alluvium:		
Sand	8	15
Dawson Formation (upper part):		
Shale, brown	10	25
Sandstone, hard, blue	3	28
C4-68-12cdda. Alt. 5,318.6 ft.		
Piney Creek Alluvium:		
No sample	1	1
Clay	3	4
Broadway Alluvium:		
Sand, fine	2	6
Louviers Alluvium:		
Clay	3	9
Sand, gravel, and rock	30	39
Clay	4	43
Sand	2	45
Clay	2	47
Gravel	9	56
Rock, hard	1	57
C4-68-13acac. Alt. 5,335.3 ft.		
Piney Creek Alluvium:		
Topsoil	3	3
Broadway Alluvium:		
Sand	9	12
Dawson Formation (upper part):		
Clay, sandy	23	35
Shale, blue	33	68
Sand and shale	12	80

	Thickness	Depth
C4-68-13acad. Alt. 5,334.7 ft.		
Post-Piney Creek alluvium and Broadway Alluvium, undifferentiated:		
Sand.	25	25
Younger loess:		
Clay.	25	50
Louviers Alluvium:		
Gravel.	30	80
Shale at 80 feet		
C4-68-13acda. Alt. 5,352.4 ft.		
Younger loess:		
Topsoil	30	30
Louviers Alluvium:		
Gravel (water-bearing)	3	33
Dawson Formation:		
Shale at 33 feet		
C4-68-13addc. Alt. 5,345 ft.		
Piney Creek Alluvium:		
Topsoil	3	3
Broadway Alluvium:		
Sand.	26	29
Louviers Alluvium:		
Clay.	1	30
Sand (water-bearing).	17	47
Dawson Formation (upper part):		
Sandstone, blue	21	68
Shale	2	70
C4-68-14baba. Alt. 5,305.0 ft.		
Eolian sand:		
Sand, medium, very silty, noncalcareous, arkosic, subangular, dark-yellowish-brown	2.5	2.5
Slocum(?) Alluvium:		
Silt, very sandy, noncalcareous, dark-yellowish-brown	5	7.5
Sand, very fine to coarse, silty, pale-yellowish-brown	6.5	14
Dawson Formation (upper part):		
Silt, sandy, very calcareous, pale-yellowish-brown; contains montmorillonite	4	18
Shale, clay, very calcareous, yellowish-gray; contains montmorillonite.	9.5	27.5
C4-68-15abda. Alt. 5,260.0 ft.		
Fill.	0.5	0.5
Silt, slightly sandy, calcareous, dark-yellowish-brown	3	3.5
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, very fine to medium, arkosic, angular to well-rounded, mostly subrounded, and medium to very coarse sand; contains about 10 percent coarse gravel from 7.5 to 10.0 feet and 15.0 to 17.5 feet; cobbles 13.5 to 16.0 feet and 26.0 to 27.5 feet	27.5	31
Sand and fine gravel.	18	49
Dawson Formation (upper part):		
Sandstone, and pale-yellowish-brown silty shale; contains montmorillonite	3.5	52.5
C4-68-15bbcd1. Alt. 5,230 ft.		
Piney Creek Alluvium:		
Fill.	12	12
Broadway Alluvium:		
Sand and gravel	13	25
Dawson Formation (upper part):		
Clay, stiff	2	27
Clay, brown	1	28
Shale, blue	12	40
C4-68-15bdab. Alt. 5,254 ft.		
Broadway Alluvium:		
Clay, brown	4	4
Gravel.	18	22
Louviers Alluvium:		
Clay.	5	27
Gravel.	12	39
Clay, blue.	6	45
C4-68-15cacd. Alt. 5,250 ft.		
Piney Creek Alluvium:		
Fill.	14	14
Slocum(?) Alluvium:		
Clay and rock; mixed.	16	30
Dawson Formation (upper part):		
Clay, and blue sand	50	80
Shale	3	83
C4-68-15dcbc. Alt. 5,264 ft.		
Road fill	4	4
Broadway Alluvium:		
Sand, fine.	8	12
Sand and gravel	3	15
Louviers Alluvium:		
Boulders, sand, and gravel.	9	24
Sand, coarse, and small boulders.	4	28
Clay, white	5	33
Sand, coarse, and small boulders.	5	38
Sand and gravel	4	42
Dawson Formation (upper part):		
Sandrock.	4	46
Shale, hard, blue.	14	60
C4-68-15dcdb2. Alt. 5,266 ft.		
Piney Creek Alluvium:		
Topsoil	4	4
Broadway Alluvium:		
Gravel, dry	20	24
Gravel, wet	2	26
Louviers Alluvium:		
Clay.	2	28
Gravel and boulders	7	35
Clay, blue.	3	38
Gravel and boulders	11	49
Dawson Formation:		
Shale	1	50
C4-68-16acdd. Alt. 5,229.0 ft.		
Colluvium:		
Fill.	4	4
Dawson Formation (upper part):		
Silt, sandy, noncalcareous, carbonaceous, dark-yellowish-brown; rust-colored limonite streaks and spots, and montmorillonite	9	13
Shale, silty, noncalcareous, pale-yellowish-brown; contains montmorillonite	2	15
Sandstone, silty, fine-grained, pale-yellowish brown and moderate-reddish-orange; contains montmorillonite	1.5	16.5
Shale, sandy, very hard, platey, brown	1	17.5
C4-68-16dabe. Alt. 5,227.0 ft.		
Piney Creek Alluvium:		
Loam, sandy, silty, noncalcareous, pale-yellowish-brown; contains very fine sand.	4	4
Louviers Alluvium:		
Gravel, very fine to cobbles, subrounded to well-rounded, arkosic, and about 20 percent fine to coarse sand	11	15
Gravel, very fine to fine, arkosic, subrounded to rounded; contains scattered cobbles	2.5	17.5
Gravel, very fine to very coarse, arkosic, subangular to rounded	7.5	25
Gravel, very fine to very coarse, arkosic, subangular to well-rounded, about 40 percent very coarse, and medium to very coarse sand	1.5	26.5
Clay.	1.5	28
Gravel, very fine to medium; contains cobbles and boulders at 34.0 feet.	7	35
Dawson Formation (upper part):		
Sandstone, fine-grained, noncalcareous, poorly cemented.	3.5	38.5
Shale, silty, sandy, noncalcareous; contains montmorillonite	4	42.5
C4-68-16dadc2. Alt. 5,235 ft.		
Piney Creek Alluvium:		
Topsoil	3	3
Louviers Alluvium:		
Sand and gravel	22	25
Clay, brown	4	29
Sand and gravel	4	33
Dawson Formation:		
Clay, brown and blue.	2	35
Shale at 35 feet		
C4-68-20aaba. Alt. 5,345 ft.		
Piney Creek Alluvium:		
Clay, brown.	36	36
Clay, sandy.	2	38
Dawson Formation (upper part):		
Shale, brown	17	55
Sandstone (water-bearing)	21	76
Shale, blue, at 76 feet		
C4-68-21cddb. Alt. 5,390.5 ft.		
Verdos Alluvium:		
Soil	2	2
Clay, sandy.	12	14
Gravel	5	19
Dawson Formation (upper part):		
Clay, yellow	29	48
Sandstone, sandy, blue	9	57
Shale, blue.	13	70
Sandstone, blue.	11	81
Shale, gray, and sandstone.	72	153
Shale, brown	5	158
Shale, gray.	93	251
Sand	3	254
Lime	2	256
Shale, gray.	23	279
Shale, blue.	28	307
Shale, sandy, gray	3	310
Shale, gray.	31	341
Shale, brown	7	348
Shale, gray.	79	427
Sandstone, white	8	435
Shale, blue.	6	441
Shale, gray.	15	456
Dawson Formation (lower part):		
Sand [Middle conglomerate, 456 to 634 feet.].	3	459
Shale, gray.	90	549
Lime	1	550
Shale, sandy, gray	20	570
Shale, gray.	22	592
Sandstone, white	2	594
Sand	3	597
Shale, gray.	5	602
Sand, white.	3	605
Shale, brown	5	610
Lime	9	619
Shale, gray, and lime.	12	631
Sand, white.	3	634
Shale, gray.	31	665
Shale, sandy, gray	30	695
Shale, gray.	53	748
Lower conglomerate:		
Sand, white.	3	751
Shale, gray.	37	788
Lime	1	789
Shale, gray.	36	825
Sand	2	827
Shale, gray.	50	877
Sand	3	880
Lime	6	886
Shale, gray.	4	890
C4-68-22bbac. Alt. 5,232 ft.		
Pre-Piney Creek alluvium:		
Soil, sandy, black	6	6
Boulder gravel	6	12
Broadway and Louviers Alluvium, undifferentiated:		
Sand, coarse, and gravel	32	44
Dawson Formation:		
Shale.	6	50
C4-68-22bdbc. Alt. 5,258 ft.		
Broadway Alluvium:		
Sand and gravel.	10	10
Dawson Formation (upper part):		
Clay, brown.	7	17
Sandrock and clay.	16	33
Shale, blue.	297	330
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	10	340
Shale, blue	10	350
Sand	15	365
Shale, blue.	28	393
Sand	2	395
Shale, blue.	30	425
Sand	30	455
Shale and sand	11	466
C4-68-24adac. Alt. 5,435 ft.		
No sample.	18	18
Dawson Formation (upper part):		
Clay and shale	56	74
Sandstone.	2	76
Shale.	148	224
Sand	2	226
Clay, blue	42	268
Clay and shale	52	320
Sand, hard	2	322
Shale.	15	337
Clay, blue	33	370
Sandstone.	3	373
Shale.	3	376
Sand	3	379

	Thickness	Depth
C4-68-24adac.--Continued		
Clay	31	410
Sand, blue	2	412
Shale	7	419
Sandstone	2	421
Shale	9	430
Sandstone	2	432
Clay	63	495
Shale	14	509
Sandstone [Upper conglomerate, 509 to 628 feet.]	3	512
Sand (water-bearing)	4	516
Sandstone	3	519
Clay	2	521
Sand (water-bearing)	7	528
Clay	42	570
Sand (water-bearing)	4	574
Clay and shale	9	583
Sandstone	3	586
Clay and shale	32	618
Sand (water-bearing)	10	628
Sandstone	4	632
Shale, clay	97	729
Sandstone	6	735
Clay and shale	21	756
Dawson Formation (lower part):		
Middle conglomerate:		
Sand (water-bearing)	7	763
Clay and shale	6	769
Sand (water-bearing)	4	773
Clay and shale	19	792
Sandstone	8	800
Sand (water-bearing)	12	812
Clay	4	816
Sandstone	17	833
Sand (water-bearing)	3	836
Clay	25	861
Sand (water-bearing)	9	870
Clay	3	873
Sand (water-bearing)	4	877
Clay	2	879
C4-68-26ccca. Alt. 5,329 ft.		
Eolian sand:		
Topsoil	3	3
Younger loess:		
Clay, brown	9	12
Slocum Alluvium:		
Sand	16	28
Dawson Formation (upper part):		
Clay, sandy, brown	4	32
Sandstone, brown	4	36
Sandstone, gray	3	39
Shale, gray	30	69
Sandstone, gray	5	74
Shale, gray	17	91
Shale, brown	2	93
Sandstone, gray	2	95
Shale, brown	18	113
Sandstone, gray	16	129
Shale, brown	7	136
Shale, gray	6	142
Sandstone, gray	53	195
Shale, gray	4	199
Shale, brown	5	204
Shale, gray	58	262
Shale, sandy, gray	3	265
Sandstone, gray	6	271
Sand	21	292
Shale, gray	35	327
Sandstone, gray	11	338
Shale, gray	40	378
Shale, sandy, gray	7	385
Sand, fine, white	6	391
Shale, gray	69	460
Sand, fine, white	13	473
Shale, sandy, gray	6	479
Shale, gray	18	497
Shale, sandy, gray	25	522
Shale, gray	40	562
Dawson Formation (lower part):		
Sand [Middle conglomerate, 562 to 746 feet.]	8	570
Shale, gray	23	593
Sand	5	598
Shale, gray	8	606
Sand and gray shale, in layers	15	621
Shale, sandy, gray	10	631
Shale, gray	90	721
Sand, fine, gray, and shale, in layers	7	728
Shale, gray	9	737
Sand	2	739
Shale, blue	7	746
Shale, gray	53	799
Lower conglomerate:		
Sand and gray shale, in layers	155	954
Laramie Formation:		
Shale, gray	32	986
Coal	4	990
Sand	6	996
Shale, gray	115	1,111

	Thickness	Depth
C4-68-26cccb.--Continued		
Sand, fine, white	7	1,118
Shale, gray	21	1,139
Shale, gray, and fine sand	8	1,147
Sand, fine	3	1,150
Sand, fine, and gray shale	8	1,158
Shale, gray	5	1,163
Sand, fine, and gray shale	3	1,166
Shale, gray	130	1,296
Coal	2	1,298
Shale, gray	8	1,306
Coal	3	1,309
Shale, gray	3	1,312
Coal	2	1,314
Shale, gray	27	1,341
Coal and gray shale	19	1,360
Sand, fine	3	1,363
Shale, sandy, gray	13	1,376
Sand	3	1,379
Coal and gray shale	14	1,393
Sand and gray shale	11	1,404
Shale, gray	21	1,425
Coal	4	1,429
B sandstone:		
Sand	91	1,520
Shale, gray, and sand [A sandstone, 1,520 to 1,620 feet.]	47	1,567
Sand	53	1,620
Shale	3	1,623
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand	47	1,670
Sand and gray shale	26	1,696
Shale, gray	51	1,747
C4-68-27cbcc. Alt. 5,270 ft.		
Dawson Formation (upper part):		
Clay, yellow	13	13
Shale, blue	10	23
C4-68-27dcbb. Alt. 5,305 ft.		
Broadway Alluvium:		
Soil	2	2
Sand	19	21
Louviers Alluvium:		
Sand and boulders	4	25
Gravel and clay streaks	9	34
Dawson Formation (upper part):		
Clay, blue	29	63
Clay, brown, and shale	10	73
Clay, blue, and gravel	7	80
Sand and clay streaks	18	98
C4-68-28aadd. Alt. 5,248.9 ft.		
Topsoil and fill	14	14
Louviers Alluvium:		
Sand	16	30
Gravel	2	32
Dawson Formation:		
Shale, blue	1	33
C4-68-28dcad. Alt. 5,258.2 ft.		
Broadway Alluvium:		
Gravel, very fine	7	7
Gravel, fine	3	10
Gravel, very fine	10	20
Louviers Alluvium:		
Gravel, coarse	10	30
Gravel, very fine	17	47
Dawson Formation (upper part):		
Clay, tan and gray, and fine sand	38	85
Sand, very fine; contains tan and green clay	5	90
Clay, gray and green	11	101
Sand, very fine	4	105
Clay, light-gray	21	126
Clay, gravelly, light-gray	15	141
Gravel and gray clay	20	161
Clay, gray	34	195
Gravel	6	201
Clay, gray	9	210
Sand, fine, white	5	215
Shale, gray, in part sandy	21	236
Dawson Formation (lower part):		
Sand, medium to coarse, white [Middle conglomerate, 236 to 365 feet.]	30	266
Clay, gray	11	277
Gravel	4	281
Clay, gray	29	310
Gravel and white coarse sand	35	345
Gravel and gray clay	20	365
Clay, gray	30	395
Clay, gray, and gravel	15	410
Clay, gray	15	425

	Thickness	Depth
C4-68-28dcad.--Continued		
Sand, fine, interbedded with gray shale	60	485
Clay, gray, in part sandy	26	511
Sand, white, and gravel	19	530
Clay, gray	54	584
Lower conglomerate:		
Gravel and clay	10	594
Clay, gray	11	605
Sand, coarse, white, and gravel	19	624
Clay, gravelly, gray	10	634
Gravel	19	653
Clay, gray	11	664
Sand, medium, white	6	670
Clay, gravelly, gray	9	679
Sand, coarse, white	10	689
Clay, gray, in part gravelly	60	749
Shale, gray and green, and sandy clay	25	774
Clay, green	19	793
Sand, fine, white	4	797
Clay, gray and green	51	848
Gravel, clayey	6	854
Laramie Formation:		
Shale, gray and tan	44	898
Clay, gray, and coal	5	903
Shale, gray	10	913
Sand, gray, and coal	5	918
Clay, gray, and shale	55	973
Sand, clay, and coal	10	983
Clay, gray	10	993
Clay, gray, and coal	10	1,003
Sand, fine, gray	4	1,007
Shale, carbonaceous and sandy	21	1,028
Sand, medium to coarse, gray	5	1,033
Shale, sandy, gray	10	1,043
Sand, fine to medium gray	15	1,058
Shale, gray, in part sandy	40	1,098
Coal, carbonaceous shale, and gray sandy shale	5	1,103
Shale, gray, carbonaceous, and gray clay	180	1,283
Sand, fine, white	4	1,287
Shale, gray, clay, and fine white sand	26	1,313
Sand, fine white [B sandstone, 1,313 to 1,410 feet.]	4	1,317
Shale and fine gray sand	6	1,323
Sand, fine, gray	41	1,364
Coal and sandy gray shale	6	1,370
Sand, gray, in part shaly	19	1,389
Coal and gray shale	31	1,420
Sandstone, fine, gray, and gray carbonaceous shale [A sandstone, 1,420 to 1,475 feet.]	55	1,475
Shale, sandy, gray and coal	10	1,485
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone, fine to medium gray, and white fine sand	59	1,544
Sandstone, fine to medium, white, and white fine sand interbedded with gray carbonaceous shale	88	1,632
Transition zone:		
Shale, sandy, gray, and sandstone; contains shell fragments	14	1,646
Sandstone, fine, gray	15	1,661
Shale, sandy, gray, and white hard sandstone	14	1,675
Sandstone, fine, white	22	1,697
Shale, sandy, gray, and white fine sandstone	23	1,720
C4-68-28ddcb. Alt. 5,256.9 ft.		
Broadway Alluvium:		
Topsoil	4.4	4.4
Sand and gravel	5	9.4
Broadway and Louviers Alluvium, undifferentiated:		
Sand, coarse, and gravel	27.4	36.8
Dawson Formation:		
Clay	8.2	45
C4-68-29adbb. Alt. 5,422 ft.		
Younger loess:		
Topsoil	2	2
Clay, silty, calcareous	6	8
Dawson Formation (upper part):		
Clay, damp	4	12
Clay, soft, and shale	8	20
Clay, hard, and shale	12	32

	Thickness	Depth
C4-68-29daaa. Alt. 5,400 ft.		
Piney Creek Alluvium:		
Topsoil	2	2
Clay	16	18
Dawson Formation (upper part):		
Shale, brown	24	42
Sand and shale	108	150
Shale, sandy, blue and brown, and fine sandstone	99	249
Sand, fine to medium	9	258
Shale, blue	30	288
Sandstone, fine to medium, very micaceous, moderately consolidated; grains are subangular to subrounded	2	290
Shale, blue	62	352
Sandstone, fine to medium, arkosic, and fine sand	4	356
Shale, silty and slightly sandy, gray	16	372
Shale, and very fine sandstone	4	376
Shale, silty, sandy, gray	24	400
Shale, silty, sandy, gray, and some light colored clay	10	410
Shale, silty, sandy, gray; contains some very fine sandstone	10	420
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone, very micaceous, gray, thin limestone beds, and gray shale	10	430
Shale, silty and sandy, light-gray to pink	10	440
Sand, coarse, subangular, very micaceous; contains much biotite and gray clay and shale	10	450
Sand, fine to medium	10	460
Shale, gray, and thin arkosic sandstone beds	10	470
Shale, gray	10	480
Shale, gray, and sand	10	490
Shale, gray	20	510
Sand, fine, subangular to subrounded, slightly indurated sandstone, and gray shale	10	520
Shale, blue, hard	30	550
C4-68-30cddb. Alt. 5,515 ft.		
Younger loess:		
Soil	2	2
Clay, sandy, brown	31	33
Dawson Formation (upper part):		
Clay, yellow	7	40
Shale, brown	3	43
Sandstone, brown, and brown shale	19	62
Sandstone, blue	2	64
Shale, brown	5	69
Shale, gray	7	76
Shale, brown	16	92
Sandstone, gray	4	96
Sandstone, blue	9	105
Shale, gray	4	109
Shale, blue	7	116
Shale, gray	21	137
Sandstone, gray	16	153
Shale, brown	6	159
Shale, blue	2	161
Shale, brown	10	171
Shale, gray	4	175
Shale, brown	14	189
Shale, blue	9	198
Shale, gray	7	205
Shale, brown	5	210
Shale, gray	12	222
Shale, blue	8	230
Shale, gray	14	244
Shale, brown	6	250
Shale, gray	7	257
Shale, blue	8	265
Shale, gray	10	275
Shale, blue	11	286
Sand [Upper conglomerate, 286 to 301 feet.]	6	292
Shale, blue	2	294
Sand, coarse	7	301
Shale, gray	5	306
Shale, brown	2	308
Shale, gray	7	315
Shale, brown	5	320
Shale, gray	23	343
Sand	6	349
Shale, blue	11	360
Shale, gray	20	380
Shale, brown	7	387
Shale, gray	91	478

	Thickness	Depth
C4-68-30cddb.--Continued		
Dawson Formation (lower part):		
Sand, fine [Middle conglomerate, 476 to 626 feet.]	12	490
Shale, gray	6	496
Sand, fine	16	512
Shale, blue	10	522
Shale, gray	18	540
Shale, brown	6	546
Sand, fine	3	549
Shale, gray	15	564
Sand, fine, and gray shale	16	580
Shale, gray	27	607
Sand	19	626
Shale, gray	6	632
Lime	4	636
Shale, gray	14	650
Shale, sandy, gray	10	660
Lower conglomerate:		
Sand	34	694
Shale, sandy, gray	8	702
Sand	6	708
Sand, and gray shale	22	730
Shale, gray	60	790
Sand, fine	8	798
Laramie Formation:		
Shale, gray, and mudstone	4	802
Shale, gray	52	854
Shale, sandy, gray	3	857
Shale, gray	5	862
Limestone	2	864
Shale, gray	91	955
C4-68-31cdcb. Alt. 5,335.6 ft.		
Post-Piney Creek alluvium:		
Sand and clay	26	26
Broadway Alluvium:		
Sand, coarse	2	28
Louviers Alluvium:		
Clay, blue	3	31
Sand, coarse, and gravel	5	36
Dawson Formation:		
Shale, blue	6	42
C4-68-32adcd. Alt. 5,343.5 ft.		
Piney Creek Alluvium:		
Silt, sandy, micaceous, very calcareous, pale-yellowish-brown; contains montmorillonite	14.5	14.5
Dawson Formation (upper part):		
Shale, silty and sandy, pale-yellowish-brown	8	22.5
C4-68-32bdcd2. Alt. 5,470 ft.		
Younger loess and Verdos Alluvium, undifferentiated:		
Surface, sand, and gravel	37	37
Dawson Formation (upper part):		
Clay and shale	18	55
Sandrock, hard	3	58
Clay and shale	6	64
Sandrock, hard	10	74
Clay and shale	15	89
Sand and rock	8	97
Sandrock, hard	2	99
Clay and shale	44	143
Sandrock, hard	3	146
Shale	5	151
Clay, tough	3	154
Shale	20	174
Clay and shale	80	254
Sandrock, hard	1	255
Clay and shale	24	279
Shale and rock	59	338
Shale	14	352
Shale and rock	7	359
Shale	26	385
Clay and shale	84	469
Dawson Formation (lower part):		
Sandrock [Middle conglomerate, 469 to 512 feet.]	16	485
Shale	2	487
Sandrock	11	498
Shale	2	500
Sand (water-bearing)	12	512
Shale	6	518
Clay and shale	68	586
Sandrock	9	595
Clay	3	598
Shale	29	627
Lower conglomerate:		
Sand (water-bearing)	38	665
Shale	25	690
Sand (water-bearing)	14	704
Shale	14	718
Sand (water-bearing)	80	798

	Thickness	Depth
C4-68-33addd. Alt. 5,286.2 ft.		
Post-Piney Creek alluvium:		
Fill	7	-
Louviers Alluvium:		
Sand, fine to medium, loose, subangular to subrounded, micaceous, grayish-orange	5	12
Silt, sandy, noncalcareous, micaceous, grayish-orange	13	25
Silt, sandy, very calcareous, moderate-yellowish-brown; contains montmorillonite	4	29
Sand and very fine to fine gravel; arkosic, silty	13.5	42.5
Dawson Formation (upper part):		
Shale, silty, noncalcareous, limonite, light-olive-gray; contains montmorillonite	5	47.5
C4-68-33bcdd. Alt. 5,268.2 ft.		
Piney Creek Alluvium:		
Silt, slightly sandy, calcareous, dusky-yellow; contains montmorillonite between 7.5 and 10 feet	14	14
Louviers Alluvium:		
Gravel, very fine to fine, arkosic, subrounded to well-rounded, and coarse to very coarse sand	6	20
Sand, medium to very coarse, arkosic, subangular to subrounded, and about 30 percent very fine to fine gravel	2.5	22.5
Dawson Formation (upper part):		
Shale, silty, noncalcareous, pale-olive; contains montmorillonite	5	27.5
C4-68-33bddd. Alt. 5,264.8 ft.		
Piney Creek Alluvium:		
Loam, silty, brown	1	1
Sand, very fine, silty, noncalcareous, moderate-yellowish-brown and dark-yellowish-brown	9	10
Dawson Formation (upper part):		
Shale, silty, noncalcareous, dark-yellowish-brown and light-olive-brown; contains montmorillonite	10	20
C4-68-33ccbc. Alt. 5,298 ft.		
Colluvium:		
Topsoil	5	5
Dawson Formation (upper part):		
Clay and rock	35	40
Shale	50	90
Shale, sandy (water-bearing)	10	100
C4-68-33cdca2. Alt. 5,272.1 ft.		
Post-Piney Creek alluvium:		
Sand, fine to very coarse, and gravel	3	3
Pre-Piney Creek alluvium and Broadway Alluvium, undifferentiated:		
Gravel, medium to very coarse; contains some cobbles	2	5
Gravel, fine to medium, fairly well-sorted, clean	3	8
Cobbles	1	9
Sand	7	16
Louviers Alluvium:		
Sand, hard, saturated	1	17
Sand, firm	9	26
Sand, loose	1	27
Sand, gravelly	5	32
Clay, gray	2.5	34.5
Cobbles	1	35.5
Gravel, very fine to medium, clean	7.5	43
Dawson Formation (upper part):		
Shale, gray	2	45

	Thickness	Depth
C4-68-11dbba. Alt. 5,269.2 ft.		
Fill	8	8
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, very fine to medium, arkosic, subrounded to rounded, and medium to very coarse sand; contains cobbles	17	25
Gravel, very fine to coarse, subangular to well-rounded, arkosic, loose, clean, and about 30 percent fine to very coarse sand; contains cobbles	7.5	32.5
Gravel, very fine to fine, well-sorted, arkosic, subangular to subrounded	6	38.5
Cobbles	1	39.5
Dawson Formation (upper part):		
Shale, very silty and sandy, noncalcareous, pale-yellowish-brown; contains montmorillonite	3	42.5
C4-68-14accd. Alt. 5,306.4 ft.		
Eolian sand:		
Soil and fill	1	1
Broadway Alluvium:		
Sand and gravel	2	3
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, fine, sand, and cobbles	13	16
Louviers Alluvium:		
Gravel, very fine to medium, arkosic, subrounded to rounded	5	21
Cobbles	5	26
Dawson Formation (upper part):		
Shale, yellowish-green	1.5	27.5
C4-68-14cbba. Alt. 5,302.8 ft.		
Piney Creek Alluvium:		
Silt, dark-yellowish-brown; contains montmorillonite	7	7
Broadway Alluvium:		
Gravel, very fine to medium, silty, arkosic, subangular to rounded	10	17
Louviers Alluvium:		
Sand, medium to very coarse, subangular to rounded, arkosic, cobbles, boulders, and clay	9	26
Dawson Formation (upper part):		
Sand, poorly sorted, and grayish-orange noncalcareous silt	6.5	32.5
Silt, slightly sandy, calcareous, dusky-yellow	23.5	56
Shale, silty and sandy, hard calcareous, light-olive; contains montmorillinite, at 56 feet.		
C4-68-14dsab. Alt. 5,371.3 ft.		
Eolian sand:		
Soil and fill	2	2
Sand, clayey	5.5	7.5
Slocum Alluvium:		
Clay, sandy, compact	4.5	12
Gravel, fine, arkosic, subangular to subrounded, and coarse sand; decrease in sand 17.5 to 22.5 feet; very clean fine gravel 22.5 to 27.5 feet	15.5	27.5
Dawson Formation:		
Sandstone, very silty, arkosic, pale-yellowish-brown	5.5	33
C4-68-16dddb. Alt. 5,480 ft.		
Younger loess:		
Soil	1	1
Clay, sandy, yellow	13	14
Clay, sandy, gray	5	19
Dawson Formation (upper part):		
Clay, yellow	22	41
Sandstone, gray	34	75
Shale, brown	6	81
Shale, gray	14	95
Shale, blue	4	99
Shale, gray	5	104
Shale, blue	2	106
C4-68-16dddb.--Continued		
Shale, brown	3	109
Sandstone, gray	5	114
Sandstone, blue	6	120
Shale, brown	7	127
Sandstone, gray	19	146
Sandstone, brown	3	149
Shale, blue	3	152
Shale, gray	4	156
Shale, brown	8	164
Shale, gray	4	168
Sandstone, brown, and shale	14	182
Sandstone, blue	4	186
Sandstone, gray	9	195
Sandstone, brown	3	198
Sandstone, blue	7	205
Shale, brown	6	211
Shale, gray and brown	63	274
Shale, sandy, gray	4	278
Shale, blue and brown, and sandstone	57	335
Shale, gray	35	370
Sandstone, gray	11	381
Shale, gray	22	403
Shale, brown	4	407
Shale, gray	41	448
Shale, sandy, gray	4	452
Shale, brown	8	460
Shale, gray	8	468
Sandstone, gray	14	482
Shale, brown	3	485
Sandstone, gray	14	499
Shale, gray	76	575
Sand	6	581
Shale, gray	94	675
Sand	10	685
Lime	1	686
Shale, gray	133	819
Shale, gray, and fine sand, in layers	8	827
Shale, gray	9	836
Sand, fine and gray shale	7	843
Shale, gray	19	862
Dawson Formation (lower part):		
Sand, coarse [Middle conglomerate, 860 to 960 feet]	6	868
Shale, gray	24	892
Sand, fine to medium	35	927
Shale, gray	23	950
Sand, fine	10	960
Shale, gray	36	996
Shale, gray, and fine sand, in layers	42	1,038
Shale, gray	74	1,112
Lower conglomerate:		
Sand, silty	6	1,118
Shale	58	1,176
Shale, sandy, gray	52	1,228
Sand, fine, and sandstone	42	1,270
Shale, gray, and silty sandstone	39	1,309
Sand, fine, and gray shale	18	1,327
Shale, gray	38	1,365
Sand, fine, silty, and gray shale, interbedded	31	1,396
Laramie Formation:		
Shale, gray	162	1,558
Coal blossom	4	1,562
Shale, gray	36	1,598
Coal	9	1,607
Shale, gray and brown	49	1,656
Shale, gray	22	1,678
Shale, gray, and coal	20	1,698
Sand, fine, and gray shale [B sandstone, 1,698 to 1,756 feet.]	58	1,756
Shale, gray, and coal	23	1,779
Shale, gray	34	1,813
A sandstone:		
Sand, fine, and gray shale	58	1,871
Shale, gray	4	1,875
Shale, gray, and fine sand	21	1,896
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, fine, and gray shale	46	1,942
Shale, gray	46	1,988
Transition zone:		
Sand, fine	16	2,004
Shale, gray	8	2,012
Sand, fine	2	2,014
Shale, gray	13	2,027
C4-69-1bdad. Alt. 5,360 ft.		
Piney Creek Alluvium:		
Topsoil	10	10
C4-69-1bdad.--Continued		
Slocum Alluvium:		
Sand, dry	10	20
Dawson Formation (upper part):		
Clay, yellow	25	45
Shale	15	60
Sandstone, blue	30	90
Shale	5	95
C4-69-2babc2. Alt. 5,451 ft.		
Slocum Alluvium:		
Surface soil	4	4
Sand, medium to coarse (water-bearing)	19	23
Dawson Formation (upper part):		
Shale, hard, gray	12	35
Sand, medium (water-bearing)	8	43
Shale, hard, blue	22	65
Shale, gray	25	90
Shale, hard, gray	55	145
Shale, brown	8	153
Sand, hard	2	155
Shale, sandy, light-gray	10	165
Shale, hard, blue	45	210
Sand, fine, hard	5	215
Shale, hard, blue	15	230
Shale, sandy, blue	25	255
Shale, blue	60	315
Dawson Formation (lower part):		
Shale; contains streaks of sand [Middle conglomerate, 315 to 401 feet.]	10	325
Shale, hard, blue	30	355
Sand, coarse, variolored (water-bearing)	10	365
Shale, blue	5	370
Sand, fine (water-bearing)	15	385
Shale, sandy, hard	8	393
Sand, medium, shaly, very hard	14	407
Shale, hard, blue	48	455
Shale, sandy, gray; contains thin streaks of sand	90	545
Shale, hard, blue	10	555
Lower conglomerate:		
Sand, fine to medium (water-bearing)	35	590
Shale, blue	7	597
Sand, fine to medium; contains streaks of shale	46	643
Shale, hard, blue	42	685
C4-69-3dbcc. Alt. 5,470 ft.		
Piney Creek Alluvium:		
Fill	1	1
Soil	2	3
Younger loess:		
Clay, yellow	11	14
Slocum Alluvium:		
Gravel and sand	5	19
Dawson Formation (upper part):		
Clay, yellow	17	36
Shale, gray	14	50
Shale, blue	4	54
Shale, gray	98	152
Sandstone, gray	15	167
Shale, gray	2	169
Sandstone, gray	18	187
Shale, gray	9	196
Sandstone, gray	4	200
Shale, gray	12	212
Shale, blue	5	217
Shale, gray	14	231
Sandstone, gray	9	240
Shale, gray	30	270
Dawson Formation (lower part):		
Shale, gray, and sandstone [Middle conglomerate, 270 to 392 feet.]	65	335
Sand, fine, and gray shale	11	346
Sand, and gray shale	46	392
Limestone, gray, and shale	132	524
Lime, sandy	1	525
Lower conglomerate:		
Sand, fine to medium	40	565
Shale, gray	38	603
Sand, fine to medium	37	640
Shale, gray	10	650
C4-69-4bcbb. Alt. 5,600 ft.		
Slocum Alluvium:		
Clay	18	18
Dawson Formation (upper part):		
Shale, sandy, hard	18	36
Shale	20	56
Shale, sandy	28	84
Shale	16	100

	Thickness	Depth
C4-69-9acab. Alt. 5,595 ft.		
Slocum Alluvium:		
Topsoil, silty. . .	11	11
Dawson Formation (upper part):		
Shale, sandy, weathered	13	24
Shale, moderately hard, very micaceous; contains thin layers of dirty sandstone	12	36
Shale, hard, brown and buff; contains a few thin sandstone layers.	24	60
Sandstone, very fine, dirty; contains some shale (water-bearing)	16	76
Shale, slightly sandy, gray, brown, and buff.	16	92
C4-69-10dcaa. Alt. 5,532 ft.		
Slocum Alluvium:		
Soil.	2	2
Clay, sandy, yellow	9	11
Dawson Formation (upper part):		
Sandstone, brown. .	11	22
Shale, sandy, brown	10	32
Shale, brown. . . .	7	39
Shale, gray	8	47
Sandstone, gray . .	43	90
Shale, gray	14	104
Shale, blue	4	108
Shale, gray	28	136
Shale, brown. . . .	3	139
Sandstone, gray . .	18	157
Shale, gray, and sandstone	14	171
Sandstone, gray . .	27	198
Shale, gray	22	220
Sandstone, gray . .	7	227
Shale, gray	63	290
Sandstone, gray . .	20	310
Shale, gray	11	321
Sandstone, gray, and shale	36	357
Shale, gray	8	365
Dawson Formation (lower part):		
Sand [Middle conglomerate, 290 to 496 feet.]	11	376
Shale, gray	9	385
Sand, and gray shale	16	401
Shale, gray	33	434
Sand.	29	463
Shale, gray	5	468
Sand.	7	475
Shale, gray	9	484
Sand, and gray shale	12	496
Lime.	2	498
Shale, gray	72	570
Lower conglomerate:		
Sand.	11	581
Lime, sandy	5	586
Shale, sandy, gray.	47	633
Lime.	1	634
Sand.	16	650
Laramie Formation:		
Shale, gray	53	703
Shale, gray, and mudstone.	32	735
Shale, gray, mudstone and coal blossom.	7	742
Shale, gray, and mudstone	40	782
Shale, brown. . . .	8	790
Shale, gray	122	912
Shale, brown. . . .	4	916
Shale, gray	31	947
Lime.	1	948
Shale, gray	18	966
Sand.	12	978
Lime, sandy	4	982
Shale, gray	208	1,190
Shale, sandy, gray and brown	110	1,300
Shale, gray	31	1,331
Lime.	1	1,332
Coal, and gray shale	33	1,365
Lime.	3	1,368
Shale, gray, and mudstone	28	1,396
Sand, fine [B sandstone, 1,396 to 1,471 feet.]	75	1,471
Coal, gray shale, and mudstone.	41	1,512
A sandstone:		
Shale, sandy, gray.	46	1,558
Fox Hills Sandstone:		
Sand, shaly [Milliken Sandstone Member, 1,558 to 1,620 feet.].	62	1,620
Shale, gray, and sand.	40	1,660

	Thickness	Depth
C4-69-10ddcd. Alt. 5,538 ft.		
Slocum Alluvium:		
Topsoil, gumbo, and clay.	12	12
Dawson Formation (upper part):		
Clay.	12	24
Shale, brown. . . .	11	35
Shale, blue	5	40
Coal, and shale . .	5	45
Shale, blue; contains streaks of sandstone (Water in sandstone insufficient for drilling.). . . .	29	74
Shale, blue	11	85
Shale, black and blue; contains sandstone streaks	48	133
Upper conglomerate:		
Sand, coarse (water-bearing). . . .	18	151
Shale, black, very hard.	17	168
C4-69-12ddca2. Alt. 5,416 ft.		
Slocum Alluvium:		
Clay.	4	4
Clay and alkali . .	3	7
Loam and fine sand.	6	13
Gravel, coarse, heavy	4	17
C4-69-14dcbb2. Alt. 5,473 ft.		
Colluvium and Dawson Formation, undifferentiated:		
Shale, hard	40	40
Dawson Formation (upper part):		
Sand, fine to coarse, gravelly, and shale [Upper conglomerate, 40 to 130 feet.].	30	70
Shale and sand. . .	45	115
Sandstone, fine to medium, white . .	5	120
Sand, coarse, gravelly	10	130
Shale, sandy. . . .	50	180
Sand and thin shale beds.	60	240
Shale, gray, coarse sand, and traces of coal.	10	250
Shale	16	266
Dawson Formation (lower part):		
Sandstone, sand, and shale [Middle conglomerate, 260 to 550 feet.].	78	338
Sand, medium to coarse	4	342
Shale	23	365
Sand, fine to medium	5	370
Sandstone; contains shale streaks . .	70	440
Sand, coarse, and small gravel.	75	515
Shale, sandy. . . .	25	540
Sand, coarse, and gravel.	10	550
Shale, sandy. . . .	70	620
Lower conglomerate:		
Sand, coarse, and gravel	20	640
Shale, sandy. . . .	92	732
Sand, fine, shaly .	16	748
Laramie Formation:		
Shale, gray	142	890
Clay, brown	10	900
Shale, gray; contains streaks of dirty sand, sandstone, and coal.	348	1,248
Sandstone, fine . .	4	1,252
Coal and sandstone.	8	1,260
Shale, gray; contains streaks of coal .	30	1,290
Sandstone, hard, white; contains streaks of coal.	86	1,376
Sandstone, fine[B sandstone, 1,376 to 1,452 feet.]. . .	76	1,452
Shale	4	1,456
Coal.	2	1,458
A sandstone:		
Shale and silty sandstone	22	1,480
Sandstone, fine; contains streaks of coal.	104	1,584
Shale, gray; contains streaks of sand .	12	1,596
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone, fine, soft; contains streaks of gray shale and a thin hard limestone layer	104	1,700

	Thickness	Depth
C4-69-14dcbb2.--Continued		
Transition zone:		
Shale, silty. . . .	86	1,786
Sand, silty; contains a thin, hard limestone layer . . .	15	1,801
C4-69-15dddb2. Alt. 5,555 ft.		
Colluvium:		
Topsoil	4	4
Dawson Formation (upper part):		
Shale, brown. . . .	9	13
Sandstone, brown. .	8	21
Shale, gray, hard .	3	24
Shale, blue	28	52
Sandstone, gray, hard	28	80
Shale, gray	56	136
Shale, blue	43	179
Sandstone, very hard, conglomeratic; contains basalt fragments coated with purplish black manganese oxide [Upper conglomerate, 179 to 183 feet.]. . . .	4	183
Shale, blue	34	217
Shale, gray	55	272
Sandstone	4	276
Shale, sandy, gray.	9	285
Sandstone, hard . .	4	289
Dawson Formation (lower part):		
Middle conglomerate:		
Sand.	8	297
Shale, blue	9	306
Sandstone	24	330
Shale	15	345
Sandstone	15	360
Shale	24	384
C4-69-17dadd. Alt. 5,5785 ft.		
Dawson Formation (upper part):		
Soil.	2	2
Clay, sandy, brown.	3	5
Clay, brown	14	19
Clay, gray.	2	21
Clay, yellow. . . .	11	32
Shale, gray, and sandstone	4	36
Sandstone, gray . .	11	47
Shale, blue	3	50
Shale, sandy, gray.	4	54
Sandstone, gray . .	15	69
Shale, gray	9	78
Sandstone, gray . .	8	86
Shale, gray	5	91
Shale, brown. . . .	3	94
Shale, blue	4	98
Shale, gray	6	104
Shale, brown. . . .	4	108
Shale, blue	4	112
Shale, brown. . . .	3	115
Sandstone	9	124
Shale, brown. . . .	3	127
Sandstone, gray . .	6	133
Shale, gray	5	138
Shale, brown. . . .	3	141
Sandstone, gray . .	13	154
Shale, blue	2	156
Sandstone, blue . .	13	169
Sandstone, gray . .	15	184
Shale, gray	3	187
Shale, brown. . . .	4	191
Shale, gray	14	205
Sandstone, gray . .	3	208
Shale, gray	16	224
Sandstone, blue . .	15	239
Sandstone, gray . .	11	250
Shale, brown. . . .	6	256
Shale, gray	52	308
Shale, gray, and sandstone	27	335
Shale, gray	21	356
Shale, blue	7	363
Shale, gray	8	371
Sandstone, gray . .	6	377
Shale, gray	76	453
Shale, sandy, gray.	37	490
Dawson Formation (lower part):		
Shale, gray [Middle conglomerate, 508 to 788 feet.] . . .	12	502
Shale, sandy, gray.	6	508
Sand and gray shale	16	524
Sandstone, hard, gray	1	525
Shale, gray	14	539
Sandstone, gray . .	16	555
Sandstone, gray, and shale	13	568
Lime, sandy	1	569
Sand, fine.	6	575
Shale, gray	12	587
Sand and gray shale	13	600
Shale, gray	12	612
Sandstone, gray . .	9	621

	Thickness	Depth
C4-69-17dadd.--Continued		
Shale, sandy, gray and sandstone	27	668
Shale, gray	15	683
Lime, sandy	1	684
Sand, fine, and gray shale	14	698
Sand and gray shale	25	723
Sandstone, gray, and shale	113	836
Shale, blue	6	842
Shale, gray	20	862
Shale, brown	11	873
Lime	1	874
Lower conglomerate:		
Sand, fine, and gray shale	21	895
Shale, gray	41	936
Lime	1	937
Shale, gray	41	978
Mudstone	1	979
Laramie Formation:		
Shale, gray, and mudstone	323	1,302
Sand, fine	12	1,314
Mudstone	1	1,315
Shale, light-brown	14	1,329
Shale, gray	185	1,514
Sand, fine, and gray shale	68	1,582
Shale, gray	65	1,647
Coal	9	1,656
Shale, gray, and coal	14	1,670
Coal and fine sand	5	1,675
Sand, fine [B and A sandstones, undifferentiated, 1,690 to 1,870 feet.]	94	1,869
Fox Hills Sandstone:		
Shale, gray [Milliken Sandstone Member, 1,903 to 1,979 feet.]	85	1,954
Sand, fine	25	1,979
Shale, gray	18	1,997
C4-69-21ccac. Alt. 5,560 ft.		
Slocum Alluvium:		
Clay, brown	17	17
Dawson Formation (upper part):		
Sandrock, blue	29	46
Shale, blue	119	165
Sandstone	8	173
Shale, blue	27	200
Sand, blue	20	220
Shale, blue	47	267
Dawson Formation (lower part):		
Sand, blue, and thin beds of shale [Middle conglomerate, 267 to 393 feet.]	57	324
Shale, blue	27	351
Sand and sandstone	42	393
Shale and silt	55	448
Lower conglomerate:		
Sand, blue, and shale	27	475
Shale, blue	9	484
Sand and streaks of shale	19	503
Shale, blue	5	508
Sand and streaks of shale	34	542
C4-69-24eddc. Alt. 5,445 ft.		
Younger loess:		
Clay	16	16
Slocum Alluvium:		
Gravel	5	21
Dawson Formation (upper part):		
Shale, brown	35	56
Sand, gray	4	60
Shale, brown	15	75
Shale, gray	115	190
Shale, brown	28	218
Shale, sandy	72	290
Dawson Formation (lower part):		
Sand, gravel, and conglomerate [Middle conglomerate, 290 to 401 feet.]	15	305
Shale, gray	86	391
Sand (water-bearing)	10	401
Shale, sandy	76	477
Shale, gray	54	531
Lower conglomerate:		
Shale, sandy	24	555
Lime, shell	5	560
Shale, gray	80	640
Shale, sandy	75	715
Shale, gray	80	795

	Thickness	Depth
C4-69-24eddc.--Continued		
Sand (water-bearing)	10	805
Laramie Formation:		
Lime, shell	10	815
Shale, gray	280	1,095
Coal	1	1,096
Shale, brown	49	1,145
Shale, gray	55	1,200
Shale, brown	102	1,302
Lime, shell	5	1,307
Shale, gray	38	1,345
Shale, brown	15	1,360
Sand [B sandstone, 1,360 to 1,473 feet.] (water rose to within 200 feet of surface)	113	1,473
Shale, sandy	137	1,610
Sand [A sandstone, 1,610 to 1,685 feet.] (water-bearing, well flowed at surface)	75	1,685
Shale, gray	36	1,721
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand (heavy flow of water)	10	1,731
Sand	70	1,801
Transition zone:		
Lime, shells	6	1,807
Shale, gray	74	1,881
Sand (water-bearing) (show of gas at 1,910 feet)	50	1,931
Sand, gray	736	2,667
Sand (water-bearing)	2	2,669
Shale, gray	771	3,440
Shale, sandy, gray	5	3,445
C4-69-24dddd. Alt. 5,436 ft.		
No sample	185	185
Dawson Formation (upper part):		
Shale, gray	10	195
Swamp dirt, oily, and rotten egg water	10	205
Shale, gray	40	245
Sandstone	15	260
Shale, gray	25	285
Shale, sandy	23	308
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone	3	311
Shale, blue	3	314
Sandstone	24	338
Shale	7	345
Sandstone	55	400
Shale	25	425
Sand and shale layers: bottom 40 feet contains coarse sand	65	490
C4-69-25aaaa. Alt. 5,438 ft.		
Dawson Formation (upper part):		
Shale, brown	12	12
Sandrock, blue	43	55
Shale, blue-gray, and clay	14	69
Clay, blue-gray	23	92
Sandrock	3	95
Clay, gray	5	100
Sandrock	3	103
Clay, blue-gray	22	125
C4-69-25aada. Alt. 5,458 ft.		
Younger loess:		
Clay, brown	38	38
Dawson Formation (upper part):		
Sandstone, gray [Upper conglomerate, 18 to 119 feet.]	57	95
Sandstone, blue	24	119
Clay, blue	16	135
Clay, blue; contains sandstone streaks	25	160
Clay, blue	55	215
Clay, blue; contains sandstone streaks	25	240
Dawson Formation (lower part):		
Sandstone, sand, and clay [Middle conglomerate, 240 to 335 feet.]	44	284
Sand	5	289
Clay	23	312
Clay; contains sand streaks	23	335
Clay	55	390

	Thickness	Depth
C4-69-25aada.--Continued		
Lower conglomerate:		
Sand	18	408
Clay	38	446
Sand	26	472
Clay	14	486
Sand	20	506
C4-69-25bbbc2. Alt. 5,461.7 ft.		
Piney Creek Alluvium:		
Fill	2	2
Sand, clayey	1	3
Slocum Alluvium:		
Sand, fine to coarse, clayey; contains medium gravel	2.5	5.5
Clay, fine, sandy, silty, humic	3.5	9
Sand, fine to coarse; contains gravel	.5	9.5
Clay, sandy, brown	3	12.5
Dawson Formation:		
Shale, clay, weathered, brown	1.5	14
Shale, clay, brown	4.5	18.5
C4-69-25bcbc. Alt. 5,470 ft.		
Piney Creek Alluvium:		
Topsoil	5	5
Dawson Formation (upper part):		
Sandstone, brown	3	8
Shale	6	14
Shale, blue	2	16
Shale, brown	2	18
Shale, blue	16	34
Sandstone	3	37
Sandstone, gray	20	57
Sandstone, brown	13	70
Sandstone, gray	9	79
Shale, brown	6	85
Sandstone, gray	20	105
Shale, gray	13	118
Shale, blue	12	130
Shale, brown	25	155
Shale, gray	39	194
Shale, sandy, brown	5	199
Clay, blue	11	210
Shale, gray	28	238
Dawson Formation (lower part):		
Sandstone, gray [Middle conglomerate, 238 to 395 feet.]	7	245
Shale, gray	36	281
Limestone	1	282
Sandstone and shale, in alternate layers	18	300
Shale, gray	88	388
Sandstone, coarse	7	395
Shale, gray	23	418
Shale, sandy, brown	7	425
Shale, gray	12	437
Shale, blue	25	462
Lower conglomerate:		
Sand, fine, white, and shale, in alternate layers	20	482
Shale, gray	24	506
Sand, fine	12	518
Shale, gray	4	522
Sand, coarse	16	538
Shale, gray	9	547
Lime	2	549
Shale, gray	11	560
Sand and shale, in alternate layers	20	580
Sand, fine, white	15	595
Shale, gray	5	600
Sand	15	615
Laramie Formation:		
Shale, gray	85	700
C4-69-25ccba. Alt. 5,550 ft.		
Younger loess:		
Soil	9	9
Dawson Formation (upper part):		
Shale, clayey, yellow	11	20
Sand, concretions, and conglomerate [Upper conglomerate, 20 to 150 feet.]	30	50
Sand, coarse, and conglomerate	10	60
Shale, gray and brown	20	80
Sand	10	90
Sand, shaly	20	110
Sand; clay cementing	10	120
Clay, sandy, gray and dark-gray	20	140
Sand	10	150
Clay, sandy, gray and brown	40	190

	Thickness	Depth
C4-69-25ccbb.--Continued		
Shale, and arkosic gray sand	10	200
Shale, sandy, gray	10	210
Shale, clay; greenish-gray	30	240
Shale, clayey; contains 35 percent sand	10	250
Shale, clayey, sandy, gray	10	260
Shale; contains 50 percent sand	10	270
Dawson Formation (lower part):		
Sand [Middle conglomerate, 270 to 380 feet.]	20	290
Clay, sandy, light-gray	10	300
Shale, clayey, gray	10	310
Sand and conglomerate	20	330
Clay, sandy, gray and dark-gray	20	350
Sand	20	370
Sand; contains 50 percent gray shale	10	380
Shale, clayey, sandy	70	450
Shale, sandy, dark-gray	20	470
Shale, clayey, dark-gray	20	490
Shale, sandy, dark-gray	10	500
Shale, clayey, greenish-gray	40	540
Shale, sandy, gray	10	550
Lower conglomerate:		
Sand, gray	10	560
Sand, shaly, gray	10	570
Shale, clayey, gray	10	580
Shale, clayey, sandy, dark-gray	10	590
Shale, sandy, gray and brown	40	630
Conglomerate; contains 35 percent shale	10	640
Shale, brown and gray	10	650
Conglomerate; contains 30 percent brown and gray shale	10	660
Shale, sandy, gray; contains limonite	100	760
Shale, slightly sandy, gray, and limonite	20	780
Laramie Formation:		
Shale, sandy, hard, gray	10	790
Shale, sandy, limy, gray	10	800
Shale, limy, hard, gray	20	820
Sand, shaly, gray (water-bearing)	10	830
Shale, sandy, gray	10	840
Shale, limy, gray	10	850
Shale, sandy, gray	20	870
Shale, sandy, gray; contains coal	10	880
Shale, sandy, gray to dark-gray	40	920
Shale, sandy, gray, carbonaceous, and limonite	10	930
Shale, sandy, gray, and limonite	10	940
Shale, sandy, light-gray	10	950
Shale, sandy, light- to dark-gray	70	1,020
Shale, sandy, gray and yellow	10	1,030
Shale, green to reddish-gray	20	1,050
Shale, gray, and a little sand	10	1,060
Shale, carbonaceous, gray to dark-gray	10	1,070
Shale, sandy, gray	80	1,150
Shale, sandy, gray; contains 5 percent coal	10	1,160
Shale, sandy, gray	10	1,170
Shale, greenish-gray, and coal	10	1,180
Shale, sandy, gray	40	1,220
Shale, sandy, gray, coal, and limy concretions	10	1,230
Shale, sandy, gray	30	1,260
Shale, sandy, gray, and coal	10	1,270
Shale, sandy, gray	30	1,300
Shale, sandy, gray; contains about 10 percent sand	20	1,320

	Thickness	Depth
C4-69-25ccbb.--Continued		
Shale, sandy, gray, and coal	40	1,360
Sand, 75 percent: 10 percent red shale; 15 percent green shale	10	1,370
Shale, sandy, gray; and coal	10	1,380
Shale, sandy, gray	10	1,390
Shale, sandy, gray, and coal	30	1,420
Sand, fine, gray; contains 35 percent shale	18	1,438
Lime, shells	1	1,439
Shale, light-gray; 35 percent sand; 5 percent coal	51	1,490
Shale, gray to black, and coal	35	1,525
Sand, dark-gray	32	1,557
Sand, and 50 percent shale	15	1,572
Sand, contains a little shale, and coal	63	1,635
Shale, and 50 percent sand	25	1,660
B sandstone:		
Sand, 90 percent; 10 percent shale	60	1,720
A sandstone:		
Sand and 50 percent shale	15	1,735
Shale, 85 percent; 15 percent sand, and coal	82	1,817
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, brownish-gray, 95 percent, limonite, and mica	68	1,885
Transition zone:		
Shale, gray	55	1,940
Sand, 90 percent; 10 percent shale	22	1,962
C4-69-27cbbb. Alt. 5,600 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, brown to yellow	18	20
Shale, medium hard, gray to blue	330	350
Dawson Formation (lower part):		
Sandstone, interbedded with thin shale stringers [Middle conglomerate, 350 to 500 feet.]	150	500
Shale	35	535
Sandstone	33	568
Shale	22	590
Lower conglomerate:		
Sandstone; contains thin shale layers	70	660
Shale	6	666
C4-69-27ddbb. Alt. 5,481.8 ft.		
Colluvium:		
Silt, gravelly, non-calcareous, dark-yellowish-brown	10	10
Dawson Formation (upper part):		
Silt, sandy, non-calcareous, pale-yellowish-orange; contains montmorillonite	2	12
Shale, silty and slightly sandy, calcareous, micaceous, hard, platy, dark-yellowish-brown; contains montmorillonite	10.5	22.5
Shale, silty, calcareous, micaceous, moderate-yellowish-brown	10	32.5
C4-69-27ddcc. Alt. 5,422.8 ft.		
Colluvium:		
Silt, sandy, micaceous, pale-yellowish-brown; contains fine sand	5	5
Dawson Formation (upper part):		
Silt, less sandy than above, micaceous, pale-yellowish-brown; contains montmorillonite	10.5	15.5

	Thickness	Depth
C4-69-27ddcc.--Continued		
Shale, silty, sandy, micaceous, pale-yellowish-brown; contains montmorillonite, small limonite concretions, and thin seams of carbonaceous material	2	17.5
C4-69-28adcd. Alt. 5,650 ft.		
Dawson Formation (upper part):		
Conglomerate [Upper conglomerate, surface to 211 feet.]	20	20
Sandstone, blue	28	48
Shale, green	8	56
Sandstone, blue	9	65
Clay, sandy, gray	20	85
Sandstone	13	98
Shale, sandy, brown	7	105
Shale, blue	5	110
Clay, sandy, brown	30	140
Shale and clay; blue	16	156
Shale, sandy, blue	4	160
Shale and clay; blue and gray	10	170
Shale, blue	3	173
Shale and clay; brownish-blue	7	180
Shale, sandy	8	188
Sandrock	9	197
Shale, brown and gray	3	200
Sandrock	11	211
Shale, hard, brownish-blue	4	215
Shale and clay; blue-gray	45	260
Shale, blue	8	268
Shale and clay; brown and gray	22	290
Shale, brown; contains fine sand	11	301
Sandstone, silty, hard	11	312
Shale and clay; blue	8	320
Shale, brown and gray	3	323
Shale, blue, and clay	30	353
Sandstone	3	356
Shale and clay; blue	63	419
Dawson Formation (lower part):		
Sandstone, very fine-grained [Middle conglomerate, 419 to 496 feet.]	2	421
Shale, gray	5	426
Sandstone, fine-grained	15	441
Shale and clay; gray	26	467
Sandstone	5	472
Shale and clay; gray	8	480
Sandstone, fine-grained	16	496
Clay and shale; blue	4	500
Shale, hard, gray	7	507
Shale, sandy, gray	9	516
Sandstone	3	519
Shale, gray	17	536
Shale, very sandy, hard; contains fine sand	17	553
Rock, very hard, blue	1	554
Clay, blue, and shale	9	563
Lower conglomerate:		
Sand and shale, in streaks	7	570
Sandstone, hard	6	576
Clay and shale; blue-gray	11	587
Sandstone	9	596
Shale, gray; contains streaks of hard sandstone	21	617
Sandstone	10	627
Shale and clay; gray	28	655
C4-69-31dcdc. Alt. 5,580 ft.		
Piney Creek Alluvium:		
Topsoil	5	5
Slocum Alluvium:		
Gravel and boulders	8	13
Pierre Shale:		
Shale at 13 feet		
C4-69-31dcdd. Alt. 5,580 ft.		
Slocum Alluvium:		
Boulders and clay	20	20
Slocum Alluvium and Pierre Shale, undifferentiated:		
Shale, dark, and gravel	30	50

Table 3.--Logs of wells and test holes--Continued

	Thickness	Depth
C4-69-14aabb. Alt. 5,401.4 ft.		
Post-Piney Creek alluvium:		
Silt, micaceous, noncalcareous, sandy, light-olive-gray; contains montmorillonite	2.5	2.5
Louviers Alluvium:		
Silt, finely micaceous, dark-yellowish-brown, noncalcareous.	3	5.5
Sand, very coarse, well-sorted, arkosic, subangular to subrounded, about 10 percent very fine to fine gravel, and a little pale-brownish-yellow non-calcareous silt.	3.5	9
Gravel, very fine to coarse, arkosic, subangular to well-rounded, and about 20 percent sand	11.5	20.5
Dawson Formation (upper part):		
Shale, silty, non-calcareous, hard, platy; contains montmorillonite	2	22.5
C4-69-14aach. Alt. 5,400.8 ft.		
Post-Piney Creek alluvium:		
Silt, sandy, non-calcareous, micaceous, dark-yellowish-brown; contains very fine sand and montmorillonite	2.5	2.5
Broadway Alluvium:		
Gravel, fine, and sand.	2	4.5
Sand, medium to very coarse, subangular to subrounded, arkosic, about 10 percent very fine to fine gravel; contains some gravel	3	7.5
Louviers Alluvium:		
Gravel, very fine to coarse, arkosic, subangular to subrounded, and about 50 percent medium to very coarse sand	10.5	18
Dawson Formation (upper part):		
Shale, silty, non-calcareous, light-olive-gray; contains montmorillonite and limonite.	4.5	22.5
C4-69-14aacc. Alt. 5,400.8 ft.		
Post-Piney Creek alluvium:		
Silt, sandy, micaceous, noncalcareous, dark-yellowish-brown; contains montmorillonite	3.5	3.5
Louviers Alluvium:		
Gravel, very fine to coarse, poorly sorted, subrounded to rounded, arkosic, loose, and coarse to very coarse sand	10.5	14
Gravel, fine, and sand.	1.5	15.5
Dawson Formation (upper part):		
Shale, silty, non-calcareous, pale-olive; contains montmorillonite	2	17.5
C4-69-14abaa. Alt. 5,405 ft.		
Post-Piney Creek alluvium:		
Topsoil	4	4
Louviers Alluvium:		
Sand, coarse, gravel and boulders.	11	15
Dawson Formation (upper part):		
Sand, cemented, dirty, and clay.	4	19
Shale at 19 feet		
C4-69-14acdd. Alt. 5,453.4 ft.		
Slocum Alluvium:		
Silt, sandy, calcareous, dark-yellowish-brown; contains fine sand.	3	3
Gravel, very fine to coarse, arkosic, loose, subangular to rounded.	3.5	6.5
Dawson Formation (upper part):		
Shale, silty, soft, moderate-yellowish-brown; becomes slightly calcareous below 17.5 feet	13.5	20
Shale, silty, sandy, hard, noncalcareous, moderate-yellowish-brown; contains limonitic material, at 20 feet		
C4-69-14adbb. Alt. 5,396.6 ft.		
Post-Piney Creek alluvium:		
Silt, sandy, very calcareous, dark-yellowish-brown	6	6
Broadway Alluvium:		
Sand, medium to coarse, very micaceous, silty, subangular to rounded, arkosic, moderate yellowish-brown	3	9
Sand, very coarse, arkosic, subrounded to rounded, and arkosic rounded very fine to fine gravel.	5	14
Louviers Alluvium:		
Cobbles	1	15
Sand, loose	2.5	17.5
Dawson Formation (upper part):		
Shale, silty, sandy, grayish-olive; contains montmorillonite, coal, and limonitic material.	5	22.5
C4-69-14adbc. Alt. 5,406.0 ft.		
Post-Piney Creek alluvium:		
Silt, slightly sandy, calcareous, micaceous, pale-yellowish-brown; contains fine sand.	8.5	8.5
Louviers Alluvium:		
Cobbles and gravel.	2	10.5
Dawson Formation (upper part):		
Shale, silty, sandy, and gravelly, noncalcareous, moderate-yellow; contains montmorillonite	2	12.5
C4-69-16cbba. Alt. 5,365 ft.		
Post-Piney Creek alluvium:		
Clay.	12	12
Piney Creek Alluvium:		
Clay, sandy	11	23
Louviers Alluvium:		
Boulders, gravel, and sand.	16	39
Dawson Formation:		
Clay.	6	45
Shale	13	58
C4-69-16dcad. Alt. 5,340 ft.		
Post-Piney Creek alluvium:		
Soil.	2	2
Louviers Alluvium:		
Gravel.	22	24
Dawson Formation (upper part):		
Shale, blue	12	36
Shale, gray	18	54
Sandstone, gray	11	65
Shale, gray	81	146
Dawson Formation (lower part):		
Sand [Middle conglomerate, 146 to 409 feet].	3	149
Shale, gray	80	229
Sand.	7	236
Shale, gray.	58	294
Sand	6	300
Shale, gray.	34	334
Sand, fine	4	338
Shale, sandy, gray	9	347
Sand, fine	9	356
Shale, gray.	29	385
Sandstone, gray, and gray shale	19	404
Sand	5	409
Shale, gray.	11	420
Lime, sandy.	1	421
Sand and gray shale.	12	433
Shale, gray.	21	454
Sandstone, gray.	12	466
Shale, gray.	22	488
Sand, fine [Lower conglomerate, top at 479 feet.]	10	498
Pyrite and sand.	1	499
Shale, gray.	28	527
Sand, fine	3	530
Shale, gray.	8	538
Sand, fine	3	541
Shale, gray.	47	588
Sandstone, hard, gray.	2	590
Shale, gray.	20	610
Sand, fine	30	640
Laramie Formation:		
Shale, gray.	79	719
C4-70-1adac. Alt. 5,733 ft.		
Verdos Alluvium:		
Hardpan.	10	10
Rock, red.	15	25
Dawson Formation (upper part):		
Shale, sandy	5	30
Sand, (water-bearing)	7	37
Shale, blue.	20	57
Lime, sandy.	8	65
Shale, blue.	10	75
Lime, blue	5	80
Shale, blue.	19	99
Shale, sandy	11	110
Shale, brown	70	180
Shale, blue.	15	195
Shale, brown	10	205
Shale, white	20	225
Shale, sandy	5	230
Shale, blue.	40	270
Shale, green	5	275
Shale, blue.	7	282
Lime, white.	3	285
Shale, blue.	65	350
Shale, brown	30	380
Shale, blue.	45	425
Shale, brown	10	435
Shale, blue.	60	495
Shale, white	3	498
Dawson Formation (lower part):		
Sand, white [Middle conglomerate, 498 to 580 feet.] (water-bearing, 4 gpm).	19	517
Shale, blue.	3	520
Lime, sandy.	4	524
Sand (water-bearing)	56	580
Shale, black	3	583
Lime, light-colored.	10	593
Shale, dark.	12	605
Lime, sandy.	10	615
Shale, brown	25	640
Lime, white.	15	655
Shale, brown	20	675
Lower conglomerate:		
Sand (water-bearing, yields 20 gpm at 700 feet.)	67	742
Shale, brown	2	744
Sand (water-bearing)	6	750
Sandstone, gray.	50	800
Shale, gray.	10	810
Sand, coarse	20	830
Sandrock, calcareous	35	865
Laramie Formation:		
Shale, brown	17	882
Shale, sandy, brown.	13	895
Shale, sticky, brown	15	910
Shale, brown and gray.	25	935
Shale, sticky, white; has characteristics of bentonite; closes hole and squeezes tools and casing	3	938
Shale, sticky, brown, caving	12	950
Shale, soft, brown; contains hard shells	28	978
Shale, blue and white.	22	1,000
Shale, white	5	1,005

	Thickness	Depth
C4-70-1adac.--Continued		
Sand, brown.	5	1,010
Shale, brown	5	1,015
Shale, brown, caving	83	1,098
Sand, shale, and coal, in thin strata	7	1,105
Shale, sandy, brown.	19	1,124
Shale, blue.	21	1,145
Sand, shale, and coal.	13	1,158
Shale, gray.	7	1,165
Sand, hard, gray (dry)	10	1,175
Shale, gray.	2	1,177
Sand, gray (water rose 647 feet.)	3	1,180
Shale, gray.	35	1,215
Shale, carbonaceous, dark	37	1,252
Sand, brown.	8	1,260
Shale, gray; hard at top, becomes softer toward bottom.	23	1,283
Shale, carbonaceous, black.	4	1,287
Shale, sticky, gray.	30	1,317
Shale, carbonaceous, black.	3	1,320
Shale, hard, gray.	17	1,337
Shale, sticky, green	4	1,341
Shale, brown and gray, sandstone, and coal	23	1,364
Shale, hard, gray.	10	1,374
Sandstone, very hard	1	1,375
Shale, some hard, some soft, gray and black; caves badly.	11	1,386
Shale.	7	1,393
Shale, hard, black	4	1,397
Sandstone, fine-grained, gray (water-bearing)	8	1,405
Shale, hard, black	5	1,410
Sandstone, hard, gray [B sandstone, 1,410 to 1,471 feet.]	4	1,414
Sandrock, soft, gray (water rose 970 feet.)	6	1,420
Shale, gray.	4	1,424
Shale, sandy, hard, gray	13	1,437
Sandrock; hard at top, becomes softer toward bottom (water-bearing)	10	1,447
Shale, soft, sticky, gray	7	1,454
Sandstone, hard (water rose 1,251 feet to within 220 feet of ground surface).	17	1,471
Shale, soft, gray.	15	1,486
Shale, sticky, black	48	1,534
Sand, dark-brown [A sandstone, 1,534 to 1,636 feet.] (water-bearing).	18	1,552
Shale, sandy, gray	20	1,572
Sand, fine, gray: contains lime shells and fossils (water rose to within 153 feet of ground surface)	28	1,600
Sand, dark shale, shells, and coal, in alternate layers.	36	1,636
Shale, light-gray.	7	1,643
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, gray, (water-bearing)	85	1,728
Transition zone:		
Shale, light-gray; has white spots.	20	1,748
Lime, hard	5	1,753
Sand, gray (water rose to within 120 feet of ground surface)	20	1,773
Shale, gray.	13	1,786
C4-70-4daab. Alt. 6,075 ft.		
Dirt	12	12
Clay, red.	9	21
Precambrian:		
Granite, red	14	35
Granite, red and gray, mixed.	54	89
Fracture, broken granite (water-bearing)	2	91
Granite, red and gray.	7	98

	Thickness	Depth
C4-70-10adad. Alt. 6,040 ft.		
Piney Creek and Rocky Flats Alluvium, undifferentiated:		
Clay and gravel	25	25
Laramie Formation:		
Shale, dark	28	53
Shale, sandy, gray.	37	90
C4-70-10dbac. Alt. 6,160 ft.		
Piney Creek Alluvium:		
Clay, sandy, red.	9	9
Lykins Formation:		
Shale, red.	100	109
Sand, fine.	10	119
Shale, red.	23	142
Shale, gray, and sand.	42	184
Sand, fine.	31	215
Sand, yellow.	12	227
Sand.	241	468
Lime, sandy, hard	41	509
Sandstone, red.	19	528
Sand, fine, and red shale	36	564
Lime, sandy	25	589
Shale, red, and fine sand.	12	601
Shale, red, and streaks of sandy lime.	21	622
C4-70-11aacd. Alt. 6,009 ft.		
Colluvium and Rocky Flats Alluvium, undifferentiated:		
Topsoil	2	2
Dawson Formation (upper part):		
Sandstone, brown.	12	14
Shale, blue	2	16
Sandstone, blue	6	22
Shale, brown.	2	24
Sandstone, brown.	8	32
Shale, brown.	4	36
Sandstone, gray	21	57
Shale, brown.	4	61
Shale, gray	11	72
Sandstone, gray	4	76
Shale, brown, and sandstone	5	81
Sandstone, gray	8	89
Shale, brown.	4	93
Shale, gray	4	97
Shale, green.	6	103
Shale, sandy, blue.	13	116
Sandstone, gray, and shale	39	155
Sandstone, blue	4	159
Sandstone, gray, and shale	4	163
Shale, sandy, blue.	2	165
Sandstone, gray	2	167
Shale, sandy, brown	3	170
Sandstone, gray, and shale	67	237
Sandstone, blue, and blue sandy shale.	13	250
Shale, sandy, gray.	3	253
Sandstone, blue, and blue sandy shale	6	259
Sandstone, blue	4	263
Shale, brown.	2	265
Sandstone, blue, and shale	13	278
Sandstone, blue	42	320
Sandstone, blue, and sandy shale	13	333
Shale, brown, and sandy shale	4	337
Sand, fine, and sandy shale; in layers.	13	350
Sandstone, brown, and brown shale; in layers	3	353
Sandstone, gray, and shale	9	362
Sand, fine, and shale	12	374
Shale, gray	126	500
Sandstone, gray	7	507
Shale, gray	246	753
Dawson Formation (lower part):		
Sand, fine, and gray shale; in layers [Middle conglomerate, 753 to 845 feet.]	9	762
Shale, gray	35	797
Sand, fine.	3	800
Sand and gray shale, in layers	15	815
Shale, gray	3	818

	Thickness	Depth
C4-70-11aacd.--Continued		
Sand and gray shale:		
in layers.	27	845
Shale, gray.	80	925
Lower conglomerate:		
Sand	10	935
Sandstone, blue.	6	941
Sand	17	958
Shale, gray.	4	962
Shale, blue.	24	986
Sandstone, hard.	56	1,042
Shale, gray.	16	1,058
Sand, fine, and gray shale.	20	1,078
Laramie Formation (faulted):		
Shale, gray; contains thin layers of fine sand	111	1,189
Shale, gray.	21	1,210
Shale, gray; contains layers of fine sand.	18	1,228
Shale, gray.	31	1,259
Shale, hard, blue.	9	1,268
Shale, gray.	14	1,282
Shale, hard, blue.	9	1,291
Shale, gray.	99	1,390
Sand, fine	15	1,405
Sand, fine, and gray shale.	17	1,422
Shale, gray.	18	1,440
Mudstone	2	1,442
Shale, gray.	12	1,454
Shale, gray, and coal.	32	1,486
Sand, fine, and gray shale.	47	1,533
Coal	12	1,545
Shale, gray.	26	1,571
Shale, brown	3	1,574
Shale, gray.	24	1,598
Sand, fine, and gray shale [B and A sandstones, undifferentiated, 1,598 to 1,689 feet.] (faulted).	18	1,616
Shale, gray.	32	1,648
Sand, fine, white.	11	1,659
Shale, gray.	6	1,665
Coal, and gray shale	6	1,671
Shale, gray.	4	1,675
Sand, fine, white.	3	1,678
Shale, red	4	1,682
Sand, fine, white.	7	1,689
Shale, gray.	61	1,750
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, fine	87	1,837
Sand, fine, and gray shale.	22	1,859
Transition zone:		
Shale, gray.	6	1,865
Sand, fine	11	1,876
Shale, gray.	1	1,877
Sand, fine	7	1,884
Sand, fine, and gray shale.	3	1,887
Shale, gray.	81	1,968
C4-70-23dbbc. Alt. 5,985 ft.		
Benton Shale:		
Shale, laminated, fissile, pyritic, gray and black, and a little non-calcareous sandstone.	148	148
Shale, fissile: contains bentonite seams and manganese dendrites common	4	152
Shale, fissile, non-calcareous, iron-stained.	6	158
Shale, fissile, gray to dark-gray	17	175
Dakota Group:		
South Platte Formation:		
Sandstone, very fine- to fine-grained, noncalcareous, in part pyrite-cemented: sand grains are frosted and well-rounded.	15	190
Sandstone, fine-grained, quartzose; sand grains are frosted; contains pyrite.	17	207
Sandstone, fine-grained; contains less pyrite.	68	275

	Thickness	Depth
C4-70-23dcba2. Alt. 5,950 ft.		
Colluvium:		
Soil and clay.	5	5
Benton Shale:		
Clay, blue	10	15
Shale, gray.	20	35
Rock, blue	2	37
Shale, sandy, black.	15	52
C4-70-26cdaa. Alt. 6,011 ft.		
Post-Piney Creek alluvium:		
Sand, fine, and gravel	2	2
Piney Creek Alluvium:		
Topsoil, and silt.	4	6
Broadway Alluvium:		
Sand and gravel.	12	18
Louviers Alluvium:		
Sand, silty.	7	25
Gravel and boulders.	7	32
C4-70-29acda. Alt. 6,840 ft.		
Louviers(?) Alluvium:		
Boulders and sand.	15	15
Precambrian:		
Granite, blue.	20	35
Quartz, white.	13	48
C4-70-29adcb. Alt. 6,790 ft.		
Piney Creek Alluvium:		
Clay, black.	6	6
Louviers Alluvium:		
Gravel and boulders.	6	12
Precambrian:		
Granite, decomposed.	4	16
Granite, rose, and quartz	15	31
Granite, rose (water at 61, 68, and 82 feet).	57	88
C4-70-33bcab. Alt. 6,395 ft.		
Piney Creek Alluvium:		
No sample.	1	1
Clay, sandy.	5	6
Louviers Alluvium:		
Rock, decomposed	12	18
Clay, blue	4	22
Sand and gravel.	6	28
Precambrian:		
Granite.	1	29
C5-65-2cccc. Alt. 5,751 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Sand and gravel.	30	30
Dawson Formation (upper part):		
Shale, blue.	70	100
Coal, soft	5	105
Shale, gray.	45	150
C5-65-2cdcc. Alt. 5,827 ft.		
Dawson Formation (upper part):		
Sand	27	27
Boulders	5	32
Shale, sandy	8	40
Shale, blue and gray	110	150
C5-65-2cddd. Alt. 5,772 ft.		
Dawson Formation (upper part):		
Sand and gravel.	40	40
Shale.	110	150
C5-65-2ddcc. Alt. 5,749 ft.		
Post-Piney Creek alluvium and Broadway and Louviers Alluvium, undifferentiated:		
Sand, gravel, and sandy shale.	42	42
Dawson Formation (upper part):		
Sandstone.	11	53
Shale.	72	125
Sandstone.	3	128
Shale.	22	150
C5-65-5bdab2. Alt. 5,812 ft.		
Dawson Formation (upper part):		
Topsoil, silty, clayey	5	5
Claystone, silty, buff, and fine silty clayey sand	45	50
Shale, silty to sandy, greenish-gray, and very fine to fine silty sand; contains a little coarse sand	180	230
C5-65-5bdab2.--Continued		
Sand, fine to coarse, arkosic, clean, pinkish-gray; contains streaks of shale [Upper conglomerate, 230 to 415 feet.]	35	265
Shale, silty, gray; contains streaks of fine, silty, gray sand	125	390
Lignite	25	415
Shale, clayey, silty, and sandy, interbedded with gray fine silty sand and fine-grained sandstone; contains numerous beds of lignite	560	975
Dawson Formation (lower part):		
Shale, silty to sandy, interlayered with very fine to fine, silty to clean sand and very fine- to fine-grained sandstone [Middle conglomerate, 975 to 1,273 feet.]	155	1,130
Sand, medium to coarse, clean, arkosic, light-gray; contains layers of gray silty shale	143	1,273
Shale, clayey to silty, gray	87	1,360
Lower conglomerate:		
Sand, very fine to fine, clean, gray; contains layers of gray, silty to clayey shale.	50	1,410
Shale, clayey to silty, gray	60	1,470
Sand, very fine to fine, clean, gray; contains streaks and layers of gray silty to clayey shale	100	1,570
Laramie Formation:		
Shale, silty to clayey, gray; contains a few layers of very fine silty light-gray sand	140	1,710
Sand, very fine, silty to clean, light-gray; contains streaks of gray silty shale	40	1,750
Shale, silty to clayey, light-gray; contains a few thin lignite beds and thin streaks of light-gray very fine silty sand	155	1,905
Lignite, underlain by a few feet of gray, silty shale	15	1,920
B sandstone:		
Sand, very fine to fine, clean, light-gray.	75	1,995
A sandstone:		
Shale, silty, light-gray, and light-gray very fine silty sand.	67	2,062
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, very fine, clean, light-gray; grades downward to light-gray silt.	40	2,102
C5-65-18bdac. Alt. 5,992 ft.		
Dawson Formation (upper part):		
Sandstone	75	75
Shale	155	230
Sand (dry)	10	240
Shale	190	430
Upper conglomerate:		
Sand (dry)	60	490
Shale	58	548
Sand (yields some water)	37	585
C5-65-18bdac.--Continued		
Shale.	75	660
Sand	30	690
Shale and some layers of coal.	70	760
Sand, fine, hard	30	790
C5-65-19cbbc. Alt. 6,075 ft.		
Dawson Formation (upper part):		
Topsoil.	1	1
Clay, sandy, brown	3	4
Clay, yellow	3	7
Clay, sandy, gray.	10	17
Sandstone.	16	33
Shale, green	8	41
Shale, gray.	12	53
Sandstone, white	34	87
Clay, sandy, yellow.	5	92
Sand	6	98
Shale, sandy, gray	28	126
Shale, gray.	11	137
Shale, brown	3	140
Sandstone and gray shale.	5	145
Shale, brown	7	152
Shale, sandy, gray	7	159
Shale, brown	4	163
Shale, gray.	32	195
Shale, brown	16	211
Shale, gray, and sandstone.	28	239
Sand and sandstone	17	256
Shale, green	3	259
Shale, gray.	22	281
Shale, brown	3	284
Shale, gray.	37	321
Sand and gray shale.	10	331
Shale, gray.	48	379
Sand, fine, and gray shale.	27	406
Limestone.	4	410
Sand and shale	11	421
Shale, gray.	3	424
Lime	2	426
Sand	8	434
Shale, gray.	4	438
Lime	3	441
Shale, brown	8	449
C5-65-29babb. Alt. 6,160 ft.		
Dawson Formation (upper part):		
Topsoil.	2	2
Clay, sandy, yellow.	4	6
Clay, yellow	8	14
Clay, blue	2	16
Clay, yellow	5	21
Sand and white sandy clay	17	38
Clay, yellow	9	47
Clay, white.	[illegible]	58
Clay, sandy, gray.	15	73
Sand and white sandy clay	17	90
Clay, sandy, gray.	7	97
Shale, blue.	28	125
Sand, medium	10	135
Shale, gray.	6	141
Shale, sandy, gray	79	220
Shale, blue and gray	16	236
Shale, sandy, gray	14	250
Sand and sandy shale: in layers.	26	276
Coal	1	277
Sandstone, limy.	1	278
Shale, sandy	2	280
Shale, blue-gray	38	318
Shale, sandy, gray	6	324
Shale, sandy, gray, and gray sandstone	9	333
Coal	1	334
Conglomerate, quartzite	2	336
Shale, gray.	13	349
Shale, sandy, gray	7	356
Shale, sandy, brown.	3	359
Shale, sandy, gray	2	361
Sand and gray sandy shale; in layers	79	440
Shale, sandy, gray, and gray shale	30	470
Shale, sandy, brown, and sand	25	495
Shale, gray.	6	501
Shale, sandy, gray, and gray shale	23	524
Coal	2	526
Shale, gray, and gray sandy shale.	26	552
Coal	1	553
Shale, gray.	6	559
Sand	7	566
Shale, gray.	34	600

	Thickness	Depth
C5-65-10aaab. Alt. 6,135 ft.		
Dawson Formation (upper part):		
Topsoil, heavy	3	3
Clay, brown	55	58
Shale, blue	102	160
Coal and sand (yields about 1 gpm)	7	167
Shale, blue	151	318
Sand, fine, and coal	4	322
Shale, blue	64	386
Sand, fine, black	4	390
Shale, blue	80	470
Rock, layer	4	474
Shale, blue	9	483
Shale, sandy (dry)	22	505
Shale, blue	10	515
Upper conglomerate:		
Sand, fine to coarse, (water-bearing)	30	545
Shale, blue	5	550
C5-65-33cccc. Alt. 6,168 ft.		
Dawson Formation (upper part):		
Conglomerate and fine sand (water-bearing)	70	70
Sandstone, cemented	40	110
Shale, blue	5	115
Sandstone, fine-grained	15	130
Shale, brown, blue, and red; contains coal seams	66	196
Shale, clay; contains coal seams	114	310
Rock, hard	4	314
Shale	26	340
Rock, hard; has no fractures	3	343
Shale; contains many coal seams	112	455
Shale; contains thin layers of dry sand	23	478
Rock, hard	2	480
Rock; harder than above	30	510
Rock, hard; contains breaks of sandstone	30	540
Shale; contains layers of sandstone	45	585
Shale	8	593
Upper conglomerate:		
Sand; contains thin breaks of shale	84	677
C5-66-6bada. Alt. 5,719 ft.		
Eolian sand:		
Sand, windblown	2	2
Topsoil	1	3
Sand, fine	23	26
Dawson Formation (upper part):		
Clay, sandy, brown	17	43
Sandstone, yellow	5	48
Clay, yellow	5	53
Sandstone, brown	5	58
Sandstone, gray	2	60
Silt, sandy, compact, very micaceous, noncalcareous; contains some light-olive-gray and light-brownish-gray gypsum, and 5 percent very fine sand	33	93
Sandstone, very fine-grained, friable, micaceous, noncalcareous, light-olive-gray; rounded grains	7	100
Silt and shale, noncalcareous, light-olive-gray	12	112
Sandstone, very fine- to fine-grained, silty, light-olive-gray	2	114
Sand, very fine, silty, and silt; micaceous, arkosic, light-olive-gray; contains some coal	62	176
Sandstone, very fine-grained, carbonaceous	4	180
Silt, clayey, carbonaceous	4	184

	Thickness	Depth
C5-66-6bada.--Continued		
Sand, subangular to angular, very arkosic, 50 percent coarse, 20 percent medium, 20 percent fine, 10 percent very fine, very micaceous, slightly silty, dusky-yellow, about 40 percent light-colored feldspar; contains carbonaceous streaks in lower part	19	203
Silt, dusky-yellow	7	210
Sand, subangular to angular, very arkosic, very micaceous, 30 percent coarse, 40 percent medium, 20 percent fine, 10 percent very fine; contains pyrite and coal	12	222
Silt, noncalcareous, sandy, micaceous; contains very fine sand	29	251
Sand, very fine, subangular, silty	2	253
Silt, noncalcareous, sandy, micaceous; contains very fine sand	10	263
Sand and gravel, subrounded, very arkosic, 20 percent very fine gravel, 60 percent very coarse sand, 15 percent coarse sand, 5 percent very fine to medium sand; contains a little mica and pyrite	13	276
Sand, fairly well-sorted, 40 percent very coarse, 30 percent coarse, 20 percent medium; includes many iron-stained quartz grains	7	283
Silt, light-olive-gray; contains much pyrite	10	293
Sand and gravel, subangular to subrounded, 10 percent very fine gravel, 30 percent very coarse sand, 30 percent coarse sand, 20 percent medium sand, 10 percent very fine to fine sand; contains abundant pyrite and coal	12	305
Silt and shale, sandy, light-olive-gray; contains pyrite	2	307
Coal	2	309
Silt and shale, sandy, carbonaceous, light-olive-gray	25	334
Sandstone, coarse-grained, light-olive-gray	4	338
Silt and shale, sandy, carbonaceous, pyritic, micaceous, light-olive-gray	20	358
Siltstone, micaceous, carbonaceous, yellowish-gray	6	364
Shale, silty, micaceous, carbonaceous, light-olive-gray	17	381
Sand, very arkosic, subrounded to rounded, silty, 10 percent very coarse, 40 percent coarse, 30 percent medium, 10 percent fine, 10 percent very fine; contains numerous iron-stained grains; yellowish-gray	7	388

	Thickness	Depth
C5-66-6bada.--Continued		
Siltstone and shale, sandy, carbonaceous, yellowish-gray, and lignite	19	407
Siltstone, sandy, carbonaceous, yellowish-gray, lignite, and very fine-grained sandstone	53	460
Limestone, sandy, hard, yellowish-gray and white	2	462
Siltstone, sandy, yellowish-gray, silt, and silty clay	32	494
Limestone, sandy, greenish-gray	1	495
Siltstone, calcareous, firm	1	496
Limestone, sandy, greenish-gray	1	497
Siltstone, calcareous, light-gray	1	498
Sandstone, fine-grained, calcareous, grayish-yellow-green	3	501
Siltstone, sandy, calcareous, greenish-gray	9	510
Limestone, dense, crystalline, greenish-gray	1	511
Shale, silty, greenish-gray	6	517
Silt, siltstone, silty shale, thin bedded sandy limestone and greenish-gray calcareous carbonaceous silty medium-grained sandstone	47	564
Sand, arkosic, silty, carbonaceous, subangular to well-rounded, micaceous, dusky-yellow, 30 percent very coarse to coarse, 70 percent medium to very fine; contains shale [Upper conglomerate, 564 to 621 feet.]	23	587
Shale, yellowish-gray	5	592
Coal, shiny, black	2	594
Sand, silty, noncalcareous, 10 percent coarse, 20 percent medium, 50 percent fine, 20 percent very fine; contains coal and iron-stained siltstone	8	602
Sand, 10 percent coarse, 20 percent medium, 50 percent fine, 20 percent very fine, and medium-grained hard calcareous sandstone	5	607
Shale, silty, greenish-gray	4	611
Sand, clean, iron-stained, 10 percent coarse, 40 percent medium, 40 percent fine, 10 percent very fine; contains coal	6	617
Sand, medium-grained, silty	4	621
Shale, medium-light-gray	6	627
Limestone, slightly sandy, light-gray	1	628
Siltstone, calcareous, and shale	1	629
Limestone, slightly sandy, light-gray	1	630
Silt, siltstone, and silty sandstone, medium-light-gray	13	643
Coal and carbonaceous siltstone	3	646
Silt, carbonaceous, medium-light-gray	3	649
Limestone, sandy, light-gray	4	653

Table 3.--Logs of wells and test holes--Continued

	Thickness	Depth
C5-66-6bada.--Continued		
Silt, siltstone and coal	12	665
Limestone, sandy, white to light gray	2	667
Siltstone, carbonaceous, light-gray	6	673
Siltstone, limonite-stained, dusky-yellow; contains about 5 percent carbonaceous materials	16	689
Sandstone, medium-grained, siltstone, and light-gray carbonaceous material	8	697
Siltstone, light-gray, silty sandstone and lignite; contains much mica	40	737
Siltstone, gravelly, carbonaceous, light-olive-gray	9	746
Shale, carbonaceous, light-olive-gray	5	751
Silt, grayish-blue, and medium-grained sandstone	6	757
Silt, carbonaceous, grayish-blue, and lignite	6	763
Siltstone, grayish-blue	3	766
Siltstone, carbonaceous, noncalcareous, light-gray, lignite, and pale-purple clay	18	784
Sandstone, fine-grained, silty, calcareous	7	791
Siltstone, noncalcareous, light-gray, silty sandstone, thin sandy limestone, and lignite	58	849
Sandstone, very coarse-grained, very arkosic, calcareous, and light-gray dense sandy limestone	7	856
Siltstone, light-gray, dark-greenish-gray clay, shale, and lignite	33	889
Sandstone, coarse-grained, very arkosic, greenish-gray pale-purple; contains waxy clay streaked with carbonaceous material and lignite	14	903
Siltstone, sandy, carbonaceous, medium-blue-gray	20	923
Shale, clay, carbonaceous, medium-bluish-gray and dusky-yellow	13	936
Siltstone, micaceous, carbonaceous, light-gray, lignite, and grayish-olive waxy clay shale	32	968
Sand, coarse, silty, carbonaceous, and coal	9	977
Shale, clay, iron-stained, grayish-olive	4	981
Sandstone, medium-grained, and lignite	3	984
Shale, silty, grayish-olive, clay shale, lignite, and silty sand	19	1,003
Sand, very silty and clayey, subrounded to rounded, 40 percent very coarse, 30 percent coarse, 20 percent medium, 5 percent fine, 5 percent very fine; clay is grayish-green; silt is light-gray	10	1,013
C5-66-6bada.--Continued		
Sand, very clayey, silty, 10 percent coarse, 30 percent medium, 40 percent fine, 20 percent very fine	8	1,021
Shale, silty, carbonaceous, light-olive-gray and greenish-gray	46	1,067
Siltstone, greenish-gray	4	1,071
Shale and siltstone, greenish-gray; contains some lignite	10	1,081
Shale, silty, carbonaceous, pale-olive and yellowish-gray, lignite; contains small amounts of silty coarse sand and coal	14	1,095
Sandstone, silty, very fine-grained to very coarse-grained, carbonaceous, yellowish-gray, and grayish-green clay shale	15	1,110
Shale, clay, dusky-yellow, and silty, coarse, rounded to well-rounded, arkosic sand	12	1,122
Dawson Formation (lower part):		
Sand, silty, arkosic, subangular to subrounded, 10 percent medium, 40 percent fine, 50 percent very fine; contains some very fine gravel, and grayish-olive to light-olive, carbonaceous, clay shale [Middle conglomerate, 1,122 to 1,276 feet.]	10	1,132
Shale, silt, and siltstone; carbonaceous, grayish-olive and light-olive	35	1,167
Sand, subangular, arkosic, micaceous, 60 percent very coarse, 10 percent coarse, 10 percent medium, 10 percent fine, 10 percent very fine	7	1,174
Shale, clay, pale-olive	4	1,178
Sand, arkosic, micaceous, fairly well-sorted, subangular, 50 percent very coarse, 10 percent coarse, 30 percent medium, 10 percent fine	2	1,180
Shale, clay, light-olive-gray	8	1,188
Sand, arkosic, very pyritic, subrounded to rounded, silty, 10 percent very coarse, 20 percent coarse, 40 percent medium, 20 percent fine, 10 percent very fine	8	1,196
Sand and gravel, very arkosic, slightly micaceous, 20 percent very fine gravel, 40 percent very coarse sand, 10 percent coarse sand, 10 percent medium sand, 10 percent fine sand, 10 percent very fine sand	13	1,209
Shale, clay, pale-olive and yellowish-gray, and siltstone	6	1,215
C5-66-6bada.--Continued		
Sand, very coarse, and very fine gravel	4	1,219
Shale, clay, pale-olive, and carbonaceous siltstone	5	1,224
Sand and gravel: subrounded, arkosic, 5 percent very fine gravel, 50 percent very coarse sand, 15 percent coarse sand, 15 percent medium sand, 10 percent fine sand, 5 percent very fine sand	9	1,233
Silt, soft, sandy, light-olive-gray and yellowish-gray clay shale	6	1,239
Sand, silty, poorly sorted, arkosic, and shale	16	1,255
Shale and siltstone; light-olive-gray and yellowish-gray	5	1,260
Sand, fine, arkosic	5	1,265
Siltstone, calcareous, light-olive-gray, and clay shale	5	1,270
Sand, fine, arkosic	6	1,276
Shale, light-olive-gray, and calcareous siltstone	6	1,282
Sand and gray shale	11	1,293
Shale, clay, pale-olive, and sandy siltstone	48	1,341
Shale, greenish-gray	11	1,352
Shale, greenish-gray, noncalcareous, and micaceous, carbonaceous siltstone	9	1,361
Shale, silty, noncalcareous, micaceous, carbonaceous, dusky-yellow	15	1,376
Lower conglomerate:		
Sand, very pyritic, arkosic, loose, subangular to subrounded, micaceous, 50 percent very coarse, 20 percent coarse, 20 percent medium, 5 percent fine, 5 percent very fine; contains some grains cemented with pyrite	18	1,394
Shale, very pyritic, micaceous, light-gray and dusky-yellow	8	1,402
Shale, as above, and siltstone	10	1,412
Shale, noncalcareous, carbonaceous, medium-light-gray	5	1,417
Sand, 10 percent very coarse, 20 percent coarse, 30 percent medium, 30 percent fine, 10 percent very fine, and medium-light-gray very calcareous very micaceous siltstone	15	1,432
Siltstone and shale; calcareous, micaceous, light-olive-gray and medium-light-gray	9	1,441
Sand, silty, calcareous, medium-light-gray, 10 percent very coarse, 10 percent coarse, 30 percent medium, 30 percent fine, 20 percent very fine calcareous silt, carbonaceous shale, and recrystallized calcareous material; contains abundant pyrite from 1,472 to 1,482 feet	16	1,477

	Thickness	Depth
C5-66-6bada.--Continued		
Sand, subangular, arkosic, silty in part, 5 percent very coarse, 10 percent coarse, 20 percent medium, 50 percent fine, 15 percent very fine.	11	1,488
Shale and silt: non-calcareous, medium-light-gray and dusky-yellow, micaceous, pyritic, sandy; and about 10 percent dense, white- and black-speckled limestone	14	1,502
Sand, fine, and gray shale.	13	1,515
Silt, sandy, non-calcareous, sandy, medium-light-gray, and medium-gray shale; contains abundant pyrite and mica	7	1,522
Shale, noncalcareous, light-olive-gray, and dusky-yellow, micaceous, sandy silt; pyrite rare.	11	1,533
Shale, gray.	19	1,552
Sand, clean, loose, subrounded to well-rounded, very arkosic, 10 percent very coarse, 20 percent coarse, 40 percent medium, 20 percent fine, 10 percent very fine.	16	1,568
Laramie Formation:		
Silt, sandy, dusky-yellow, medium-gray shale, and about 10 percent black and white-speckled soft limestone.	32	1,600
Shale, medium-light-gray, silt, soft, black and white speckled limestone, abundant pyrite, dusky-yellow and medium-light-gray sandy silt, and coal	49	1,649
Sand, subrounded, arkosic, silty, lignitic, 10 percent very coarse, 20 percent coarse, 40 percent medium, 20 percent fine, 10 percent very fine and soft limestone	6	1,655
Shale, medium-gray	28	1,683
Sand, subrounded to rounded, arkosic, moderately cemented, 10 percent very coarse, 20 percent coarse, 40 percent medium, 20 percent fine, 10 percent very fine.	10	1,693
Shale, sandy, non-calcareous, medium-gray, silt, sand, and coal	34	1,727
Shale, noncalcareous, medium-gray, and sandy speckled yellowish-gray silt.	20	1,747
Sand, subrounded, loose, very arkosic, 10 percent very coarse, 10 percent coarse, 40 percent medium, 30 percent fine, 10 percent very fine	15	1,762
Shale, noncalcareous, medium-gray, silt, calcareous silty sandstone, and coal.	60	1,822
Sand, silty, shaly, arkosic.	11	1,833
Shale, carbonaceous, noncalcareous, medium-gray.	12	1,845
Coal	2	1,847

	Thickness	Depth
C5-66-6bada.--Continued		
Shale, carbonaceous, noncalcareous, medium-gray	18	1,865
Coal.	2	1,867
Shale, medium-gray; contains 5 percent arkosic subangular fine to medium sand.	30	1,897
Coal.	1	1,898
Shale, medium-gray.	1	1,899
Coal.	3	1,902
Siltstone and shale	1	1,903
Coal.	1	1,904
Silt, siltstone, shale; medium-gray, and coal.	41	1,945
Coal, shiny, black.	6	1,951
Shale, medium-gray, and siltstone	3	1,954
Coal, shiny, black.	4	1,958
Shale, medium-gray.	4	1,962
B sandstone:		
Sandstone, very fine- to medium-grained, quartz, salt and pepper texture, noncalcareous	94	2,056
A sandstone:		
Sandstone, silty, salt and pepper texture, quartz	3	2,059
Silt and fine sand, medium-light-gray	6	2,065
Sandstone, fine-grained, quartz, salt and pepper texture, silty and pyrite.	9	2,074
Shale, silty, medium-light-gray, sandy siltstone, silty sandstone, and coal; abundant pyrite.	73	2,147
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone, very fine-grained, in part calcareous, quartz, salt and pepper texture, and some white calcareous crystals.	30	2,177
Shale, medium-light-gray.	10	2,187
C5-66-12dacc. Alc. 5,900 ft.		
Dawson Formation (upper part):		
Topsoil	1	1
Soil, sandy	11	12
Sand.	7	19
Clay, brown, blue and yellow.	64	83
Shale, blue	39	122
Sand.	19	141
Shale, blue	47	188
Sand.	4	192
Shale, blue	86	278
Sandstone, soft	12	290
Shale, blue	72	362
Clay, soft, brown	3	365
Sand (Upper conglomerate, 365 to 607 feet.)	4	369
Coal.	7	376
Shale, blue	137	513
Sand.	9	522
Rock.	1	523
Sand, fine, white	6	529
Clay, soft, white	26	555
Coal, good quality.	23	578
Clay, soft, blue.	6	584
Sand, fine.	8	592
Rock.	1	593
Sand, fine.	14	607
Shale	56	663
Clay, white	6	669
Coal.	15	684
Shale, blue	6	690
Sandstone, very hard, very calcareous	2	692
Shale; contains very hard, thin limestone seams at 822, 845, and 870 feet.	211	903
Sand.	8	911
Shale; contains very hard, thin limestone seam at 913 feet.	26	937
No sample	53	990

	Thickness	Depth
C5-66-19aaaa. Alt. 5,644.5 ft.		
Piney Creek Alluvium:		
Clay	6	6
Clay, sandy.	4	10
Clay	3	13
Clay, sandy.	3	16
Broadway Alluvium:		
Sand	15	31
Louviers Alluvium:		
Clay, sandy.	2	33
Sand and coarse gravel	27	60
Dawson Formation:		
Clay, yellow	4	64
C5-66-19daad. Alt. 5,633.1 ft.		
Piney Creek Alluvium:		
Soil	8	8
Broadway Alluvium:		
Sand and gravel (dry)	3	11
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, (water-bearing)	36	47
Dawson Formation:		
Shale.	1	48
C5-66-19dbaa. Alt. 5,664.5 ft.		
Younger loess:		
Clay, brown; contains fill	7	7
Clay, brown.	8	15
Louviers Alluvium:		
Sand and gravel (dry).	3	18
Dawson Formation (upper part):		
Clay, brown and yellow	17	35
Clay, blue	15	50
Shale, carbonaceous, silty, and sandy	33	83
Sand, fairly hard.	13	96
Shale, silty, lignite, limestone, and silty sand and sandstone, interbedded.	803	899
Dawson Formation (lower part):		
Middle conglomerate:		
Sand (yields a little water)	12	911
Shale, silt, limestone, and silty sand and sandstone, interbedded	136	1,047
Sand, coarse, and gravel; contains breaks of silty shale.	152	1,199
C5-66-19dbab. Alt. 5,669 ft.		
Younger loess:		
Clay, brown.	3	3
Clay, sandy, brown	3	6
Louviers Alluvium:		
Sand, clean (dry).	11	17
Dawson Formation (upper part):		
Clay, brown.	13	30
Clay, yellow	8	38
Clay, brown.	7	45
Shale at 45 feet		
C5-66-19ddcd3. Alt. 5,640.6 ft.		
Piney Creek, Broadway, and Louviers Alluvium, undifferentiated:		
Sand and gravel, clean.	70	70
Sand and gravel, blue.	39	109
Dawson Formation:		
Shale at 109 feet		
C5-66-19dddd2. Alt. 5,642.3 ft.		
Piney Creek Alluvium:		
Overburden	6	6
Broadway and Louviers Alluvium, undifferentiated:		
Sand and gravel.	32	38
Louviers Alluvium:		
Sand, gravel, and blue clay	8	46
Sand and gravel.	10	56
Dawson Formation:		
Shale, loose	2	58
Shale at 58 feet		
C5-66-20adda. Alt. 5,785 ft.		
Eolian sand:		
Blow sand.	1	1
Dawson Formation (upper part):		
Clay, sandy.	4	5
Sand, fine	16	21

	Thickness	Depth
C5-66-20adda.--Continued		
Clay	2	23
Sand	5	28
Clay	1	29
Clay, sandy	4	33
Sand, rusty	3	36
Shale, blue	4	40
Clay	5	45
Sandstone	5	50
Shale, gray	10	60
Coal	1	61
Sandstone	8	69
Shale, gray	17	86
Sandstone	14	100
Shale, gray	4	104
Sandstone	13	117
Shale, gray	32	149
Shale, brown	9	158
Sand	10	168
Shale, brown	3	171
Sand	6	177
Shale, gray	7	184
Shale, brown	7	191
Sandstone, gray	22	213
Shale, gray and brown	245	458
Lime, sandy	3	461
Shale, gray	27	488
Coal	10	498
Shale, gray	513	1,011
Dawson Formation (lower part):		
Sand [Middle conglomerate, 1,011 to 1,215 feet.]	9	1,020
Shale, gray	25	1,145
Sand	8	1,153
Shale, gray	47	1,200
Sand	15	1,215
Shale, gray	4	1,219
Lime, sandy	2	1,221
Sand, silty	10	1,231
Shale, gray	16	1,247
Lime sandy	2	1,249
Sand, silty	11	1,260
Shale, gray	10	1,270
Lower conglomerate:		
Sand and gray shale	66	1,336
Shale, gray	21	1,357
Sand, fine	11	1,368
Shale, gray	9	1,377
C5-66-20ccbd. Alt. 5,638.7 ft.		
Piney Creek Alluvium:		
Soil	8	8
Broadway Alluvium:		
Gravel (dry)	3	11
Gravel (water-bearing)	7	18
Louviers Alluvium:		
Clay	1	19
Gravel	12	31
Clay	1	32
Gravel and boulders	15	47
Dawson Formation:		
Shale	1	48
C5-66-20cccc. Alt. 5,644.5 ft.		
Piney Creek Alluvium:		
Loam, sandy, clayey, dark-brown	3	3
Broadway Alluvium:		
Sand, very fine to very coarse, angular to subangular, arkosic, and very fine gravel	17	20
Sand, medium to very coarse, arkosic angular to subangular	2.5	22.5
Sand, fine to very coarse, angular to subangular, arkosic, and about 40 percent subangular to rounded very fine gravel	10.5	33
Louviers Alluvium:		
Gravel, very fine, subangular to subrounded, cobbles, and very coarse poorly sorted angular to subangular arkosic sand	4.5	37.5
Gravel, very fine to fine, and fine to very coarse sand	6.5	44
Cobbles, boulders, and very fine to fine arkosic angular to rounded, mostly subangular, arkosic gravel; contains some poorly sorted sand	5	49
C5-66-20cccc.--Continued		
Gravel, very fine to fine, clean, angular, arkosic, and medium to coarse sand	4	53
Dawson Formation (upper part):		
Shale, slightly sandy, very hard, blue	4.5	57.5
C5-66-20cccd. Alt. 5,643.2 ft.		
Piney Creek Alluvium:		
Loam, sandy, brownish-black	2.5	2.5
Clay, silty and sandy, light-brown	10.5	13
Broadway Alluvium:		
Sand, very fine to very coarse, angular; compact and fine-grained below 17.0 feet	17	30
Gravel, very fine, and sand	13	43
Louviers Alluvium:		
Gravel, very fine to coarse, cobbles, and sand	7	50
Cobbles	1.5	51.5
Dawson Formation (upper part):		
Shale, hard, blue-gray	3.5	55
C5-66-20cdac. Alt. 5,645.6 ft.		
Piney Creek Alluvium:		
Loam, sandy, clayey, dark-brown	2	2
Clay, slightly sandy, plastic, tan; becomes very sandy at 6.5 feet	8	10
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, very fine, and fine to very coarse angular sand; contains rare cobbles and thin beds of clay	32	42
Cobbles, sand, and gravel	10	52
Dawson Formation (upper part):		
Shale, sandy, hard, dark-gray and brown	5.5	57.5
C5-66-20cdcc. Alt. 5,671.6 ft.		
Dawson Formation (upper part):		
Sandstone, very fine-grained, very micaceous, arkosic, friable, thin-bedded, black-speckled, dark-yellowish-orange; has limonite-stained streaks	3	3
Sand and dark-yellowish-orange soft micaceous fine- to medium-grained sandstone	1	4
C5-66-20cdcc2. Alt. 5,650.1 ft.		
Piney Creek Alluvium:		
Loam, sandy, dark-brown	2.5	2.5
Sand, medium to coarse, subrounded to rounded, arkosic, pale-yellowish-brown	.5	6
Silt, sandy, micaceous, calcareous; contains montmorillonite	7	13
Broadway Alluvium:		
Sand, fine to very coarse, angular to subrounded, arkosic, slightly micaceous, and about 30 percent very fine gravel	7	20
Sand, medium to coarse, arkosic, micaceous, and about 10 percent very fine gravel	6	26
C5-66-20cdcc2--Continued		
Louviers Alluvium:		
Clay	2	28
Sand, fine to very coarse, angular to subrounded, arkosic, clean, and about 30 percent very fine gravel	24	52
Boulders and cobbles	1	53
Dawson Formation (upper part):		
Shale, silty, micaceous, non-calcareous, dark-yellowish-brown; contains montmorillonite	4.5	57.5
C5-66-20cdcc3. Alt. 5,652.9 ft.		
Piney Creek Alluvium:		
Loam, sandy, dark-brown	2	2
Sand, medium to very coarse, subangular to subrounded, damp, loose	2.5	4.5
Dawson Formation (upper part):		
Silt, very calcareous, grayish-orange; contains montmorillonite	3	7.5
Silt, very sandy, calcareous, compact, micaceous, dark-yellowish-brown	8.5	16
Sand, coarse to very coarse, slightly silty, angular to subangular	1	17
Clay, silty, very sandy, brown	.5	17.5
Sand, very coarse, subangular to subrounded, arkosic, and very fine gravel	6.5	24
Shale, silty, calcareous, grayish-orange; contains montmorillonite	3.5	27.5
C5-66-20cdcd. Alt. 5,655.5 ft.		
Piney Creek Alluvium:		
Topsoil, sandy, dark-brown	1.5	1.5
Dawson Formation (upper part):		
Sandstone, very fine- to medium-grained, silty, arkosic, very calcareous, pale-yellowish-brown; contains montmorillonite	6	7.5
C5-66-28aaac. Alt. 5,860 ft.		
Dawson Formation (upper part):		
Topsoil, sandy	5	5
Clay, gray	20	25
Clay, yellow	42	67
Sand	1	68
Clay, blue	4	72
Clay, mixed, yellow and gray	2	74
Clay, sandy, yellow	5	79
Clay, sandy, blue	22	101
Sand	2	103
Shale, blue	3	106
Rock	1	107
Shale, blue	3	110
Sandstone, blue	11	121
Sand	5	126
Clay and sand, mixed	4	130
Clay, light-blue	8	138
Clay, brown, yellow, and light-blue	9	147
Shale, blue	4	151
Shale, brown	4	155
Shale, blue	5	160
Clay, light-blue	16	176
Clay, mixed brown and gray	5	181
Shale, light-blue	2	183
Sand	1	184
Shale	12	196
Clay, blue	5	201
Shale	9	210
Clay, blue	5	215
Sand, silty, and shale	34	249

	Thickness	Depth
C5-66-28aaac.--Continued		
Clay, sandy	5	254
Sand, silty, and shale	26	280
Upper conglomerate:		
Sand	3	283
Clay	6	289
Sand and thin lignite seam	7	296
Clay	19	315
Sand	6	321
Shale, carbonaceous	14	335
Sand and thin lignite seam	6	341
Shale, lignite, and limy sandstone	22	363
Sand	6	369
Rock	1	370
Shale	10	380
Sand	3	383
Shale	20	403
Sand	7	410
Shale	12	422
Rock	1	423
Shale	6	429
Sand	1	430
Shale	20	450
C5-66-29baab. Alt. 5,672.4 ft.		
Piney Creek Alluvium:		
Topsoil	3	3
Dawson Formation (upper part):		
Sandrock, red	15	18
Shale	47	65
Sand (water-bearing)	20	85
Shale	50	135
Rock, blue	2	137
Sand (water-bearing)	18	155
Shale	5	160
C5-66-30aaaa2. Alt. 5,643.6 ft.		
Piney Creek Alluvium:		
Top, clay	20	20
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, clean	55	75
Dawson Formation (upper part):		
Sandstone, weakly-cemented	25	100
Shale	6	106
C5-66-30aada. Alt. 5,647.8 ft.		
Piney Creek Alluvium:		
Topsoil	10	10
Broadway Alluvium:		
Sand	10	20
Louviers Alluvium:		
Gravel, and 15 feet of cobble gravel at the bottom	65	85
Dawson Formation (upper part):		
Sandstone, hard	13	98
Shale at 98 feet		
C5-66-30adaa. Alt. 5,650 ft.		
Piney Creek Alluvium:		
Clay	13	13
Clay, sandy	6	19
Broadway and Louviers Alluvium, undifferentiated:		
Gravel	26	45
Rock	7	52
Louviers Alluvium:		
Clay	2	54
Gravel	9	63
Clay, blue	19	82
Gravel	16	98
Rock at 98 feet		
C5-66-30addd. Alt. 5,660 ft.		
Piney Creek Alluvium:		
Topsoil	13	13
Broadway Alluvium:		
Sand	7	20
Gravel	16	36
Louviers Alluvium:		
Clay	4	40
Gravel	13	53
Clay	3	56
Gravel	9	65
Clay, blue	7	72
Sand, dirty	8	80
Rock at 80 feet		
C5-66-31ccbc. Alt. 5,701.4 ft.		
Piney Creek Alluvium:		
Soil	6	6
Broadway Alluvium:		
Gravel, (water-bearing)	6	12

	Thickness	Depth
C5-66-31ccbc.--Continued		
Louviers Alluvium:		
Clay	5	17
Gravel	10	27
Clay	11	38
Gravel	7	45
Dawson Formation:		
Shale	1	46
C5-66-31cddb. Alt. 5,735 ft.		
Piney Creek Alluvium:		
Clay, sandy, brown	36	36
Dawson Formation (upper part):		
Shale, blue	9	45
Sandstone, gray	18	63
Shale, blue	97	160
Sand	2	162
Shale, blue	78	240
Sandstone	23	263
C5-67-2abca. Alt. 5,510 ft.		
Piney Creek Alluvium:		
Loam, sandy, clayey	5	5
Broadway Alluvium:		
Sand	25	30
Dawson Formation (upper part):		
Clay, lean, and sandy loam, in alternate layers	35	65
Sand	10	75
Loam	3	78
Sand	4	82
Loam	4	86
Sand	4	90
Clay, lean	10	100
Sand and gravel	2	102
Claystone	16	118
C5-67-2babd. Alt. 5,511 ft.		
Piney Creek Alluvium:		
No sample	15	15
Broadway Alluvium:		
Gravel, very fine to fine, arkosic, loose, subangular, and very coarse, clean sand	10	25
Gravel, very fine to fine, arkosic, fairly well-sorted, subangular to subrounded, loose, clean, and a little medium to coarse sand	5	30
Louviers Alluvium:		
Sand, medium to very coarse, arkosic, angular to subangular, loose, clean	10	40
Gravel, very fine, angular to subangular, arkosic, and about 40 percent medium to coarse sand	5	45
Gravel, very fine to very coarse, arkosic, clean, subangular to well-rounded: contains many cobbles and small boulders	5	50
Gravel, cobbles, loose, arkosic, subangular to well-rounded, and a little pale-yellowish-brown clayey silt	5	55
Sand, medium to very coarse, arkosic, angular to subangular, loose, and about 30 percent very fine to fine gravel	10	65
Gravel, very fine, angular to subangular, clean, loose, arkosic, and about 40 percent medium to very coarse sand	5	70
Gravel, fine to medium, loose, arkosic, clean, subangular to subrounded: many particles iron-stained	5	75

	Thickness	Depth
C5-67-2babd.--Continued		
Silt, micaceous, yellowish-gray; stained with iron oxide	5	80
Sand, very coarse, arkosic, very fine gravel, and light-olive-gray silt	15	95
Silt, light-olive-gray, fine to very coarse sand, and very fine gravel	5	100
Louviers Alluvium and Dawson Formation, undifferentiated:		
Gravel, very fine to medium, loose, arkosic, subangular to subrounded, and a little silty and gravelly micaceous sandstone	3	103
Dawson Formation (upper part):		
Shale, noncalcareous, light-gray; contains montmorillonite	2	105
C5-67-2bbaa. Alt. 5,502 ft.		
Post-Piney Creek alluvium:		
Silt, dark-yellowish-brown, and very fine sand	5	5
Sand, very coarse, subangular, arkosic, loose, clean, and very fine gravel	5	10
Broadway Alluvium:		
Gravel, very fine, subangular to subrounded, fairly uniform, arkosic, loose, clean, and a little very coarse sand	5	15
Sand, very coarse, fairly well-sorted, subangular to subrounded, loose, clean, arkosic, and a little very fine gravel	5	20
Gravel, very fine to fine, subangular to subrounded, very arkosic, loose, clean, and coarse to very coarse sand	10	30
Louviers Alluvium:		
Sand, coarse to very coarse, subangular to subrounded, very arkosic, loose, and very fine gravel	5	35
Gravel, very fine to fine, subangular to subrounded, loose, very arkosic, and very coarse sand	5	-
Gravel, and cobbles, subangular to very well-rounded: contains many small boulders	10	50
Sand, coarse to very coarse, loose, subangular to angular, arkosic, very fine gravel, and cobbles	15	65
Gravel, very fine, loose, subangular to subrounded, very arkosic, and very coarse sand	10	75
Gravel, very fine, and very coarse sand; contains a little light-olive-gray and dark-yellowish-orange iron-stained silt	5	80
Silt, sandy, micaceous, light-olive-gray	5	85
Sand, medium to very coarse, moderately arkosic, subrounded to rounded, silty, light-olive-gray	5	90
Dawson Formation (upper part):		
Silt, micaceous, chloritic, light-olive-gray	5	95

	Thickness	Depth
C5-67-2bbaa.--Continued		
Silt, very sandy, micaceous, chloritic, light-olive-gray	5	100
Rocks	2	102
C5-67-3bbdd. Alt. 5,548 ft.		
Piney Creek Alluvium:		
Topsoil	3	3
Younger loess:		
Clay, brown	15	18
Louviers Alluvium:		
Clay, sandy, and gravel	17	35
Dawson Formation (upper part):		
Clay, brown	11	46
Shale, blue	579	625
Sand	13	638
Shale, blue	299	937
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	30	967
Shale, blue	11	978
Sand	18	996
Shale, blue	9	1,005
C5-67-1dacb. Alt. 5,555 ft.		
Younger loess:		
Topsoil	4	4
Clay, sandy, stiff	11	15
Louviers Alluvium:		
Sand and gravel	21	36
Dawson Formation (upper part):		
Clay	19	55
C5-67-3bdab. Alt. 5,560 ft.		
Piney Creek Alluvium:		
Topsoil	2	2
Clay, sandy, yellow	5	7
Younger loess:		
Clay, brown	4	11
Clay, yellow	16	27
Clay, brown	11	38
Clay, yellow	5	43
Dawson Formation (upper part):		
Clay, sandy, yellow	7	50
Shale, gray	4	54
Shale, blue	5	59
Shale, sandy, brown	4	63
Shale, gray	36	99
Sandstone, gray	27	126
Shale, gray	47	173
Sandstone, gray	11	184
Shale, gray, and sandstone	21	205
Shale, gray	46	251
Sand	4	255
Shale, gray, and sandstone	15	270
Shale, brown	5	275
Sandstone, gray	18	293
Shale, brown	6	299
Shale, gray	8	307
Shale, brown	7	314
Sandstone, gray, and shale	23	337
Shale, brown	4	341
Shale, gray, and sandstone	21	362
Shale, brown	3	365
Shale, gray, and sandstone	49	414
Shale, brown	6	420
Shale, gray, and sandstone	30	450
Shale, gray	15	465
Shale, brown	5	470
Shale, gray	10	480
Shale, sandy, gray	22	502
Sandstone, gray	9	511
Shale, gray	11	522
Shale, sandy, gray	55	577
Sandstone, gray	13	590
Shale, gray	13	603
Sandstone, gray, and shale	25	628
Shale, brown	6	634
Shale, gray	127	761
Sand, fine, and gray shale	17	778
Shale, gray	58	836
Sand, fine, and gray shale	24	860
Shale, gray	30	890
Dawson Formation (lower part):		
Sand, coarse, and gray shale [Middle conglomerate, 890 to 1,080 feet.]	32	922
Shale, gray	11	933
C5-67-3bdab. Alt. 5,560 ft.		
Sand, coarse, and gray shale	72	1,005
Shale, gray	5	1,010
Shale, gray, and coarse sand	23	1,033
Sand, coarse	13	1,046
Shale, gray, and sand	8	1,054
Shale, gray	11	1,065
Shale, gray, and sand	15	1,080
Shale, gray	72	1,152
Shale, gray, and fine sand	29	1,181
Shale, gray	28	1,209
Lower conglomerate:		
Sand, fine and gray shale	14	1,223
Shale, gray	28	1,251
Sand, fine	6	1,257
Shale, gray, and fine sand	20	1,277
Sand, coarse	17	1,294
Shale, gray	5	1,299
Sand, coarse	5	1,304
Shale, gray	39	1,343
Shale, gray, and sand	23	1,366
Laramie Formation:		
Shale, gray	49	1,415
Coal and gray shale	8	1,423
Shale, brown	5	1,428
Shale, gray	46	1,474
Sand, fine, white, and gray shale	12	1,486
Shale, gray	22	1,508
Sand, fine, white, and gray shale	9	1,517
Shale, gray	117	1,634
Sand, fine, white, and gray shale	20	1,654
Shale, gray, and coal	25	1,679
Shale, gray	21	1,700
Shale, gray, and coal	41	1,741
Shale, gray	34	1,775
Coal and gray shale	35	1,810
A sandstone:		
Sand, fine	85	1,895
Shale, gray, and fine sand [A sandstone, 1,895 to 2,012 ft-t.]	40	1,935
Shale, gray	19	1,954
Sand, fine, and gray shale	58	2,012
Shale, gray	21	2,033
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, fine, and gray shale	47	2,080
Shale, gray	12	2,092
C5-67-6badb. Alt. 5,560 ft.		
Younger loess:		
Topsoil	2	2
Dawson Formation (upper part):		
Clay, sandy, yellow	4	6
Sandstone, brown	10	16
Clay, sandy, yellow	3	19
Sandstone	2	21
Gravel	3	24
Sandstone, brown	11	35
Clay, yellow	23	58
Clay, sandy, yellow	11	69
Sandstone, gray	6	75
Shale, blue	3	78
Sandstone, gray	49	127
Shale, blue	5	132
Sandstone, gray	17	149
Shale, brown	6	155
Shale, gray	25	180
Shale, brown	8	188
Sandstone, gray	7	195
Shale, gray	18	213
Shale, brown	3	216
Sandstone, gray, and shale	70	286
Shale, brown, and sandstone	22	308
Sandstone, gray	37	345
Shale, brown	6	351
Shale, gray, and sandstone	87	438
Shale, gray	114	552
Sandstone, gray	15	567
Shale, gray	39	606
Sandstone, gray	3	609
Shale, brown	4	613
Shale, gray, and sandstone	22	635
C5-67-6badb.--Continued		
Shale, gray	115	750
Shale, sandy, gray	30	780
Sand, fine	3	783
Shale, sandy, gray	45	828
Sand and gray shale	23	851
Shale, gray	47	898
Lime	1	899
Shale, sandy	15	914
Dawson Formation (lower part):		
Sand and gray shale [Middle conglomerate, 908 to 1,055 feet.]	38	952
Lime	1	953
Sand and gray shale	102	1,055
Shale, gray	9	1,064
C5-67-7dbac. Alt. 5,520 ft.		
Colluvium:		
Topsoil	4	4
Younger loess:		
Clay, yellow	24	28
Dawson Formation (upper part):		
Clay, sandy, brown	4	32
Sandstone, brown	19	51
Shale, blue	4	55
Shale, gray	7	62
Sandstone, gray	4	66
Shale, brown	3	69
Shale, gray	9	78
Sandstone, gray	20	98
Shale, gray	11	109
Sandstone, gray	6	115
Shale, gray	36	151
Shale, brown	37	188
Shale, gray	11	199
Sandstone, brown	12	211
Shale, gray	19	230
Shale, brown	18	248
Sandstone, brown	8	256
Shale, gray	9	265
Sandstone, gray	8	273
Shale, gray	4	277
Sandstone, gray	32	309
Shale, gray	47	356
Shale, brown	4	360
Sandstone, gray	17	377
Shale, sandy, gray	15	392
Shale, gray	140	532
Shale, brown	4	536
Sandstone, gray	6	542
Shale, gray	67	609
Sandstone and gray shale; in layers	19	628
Shale, gray	9	637
Sandstone and gray shale; in layers	12	649
Shale, gray	125	774
Dawson Formation (lower part):		
Sand [Middle conglomerate, 774 to 959 feet.]	6	780
Shale, gray	32	812
Sandstone	3	815
Shale, sandy, gray	26	841
Sand	16	857
Shale, gray	8	865
Sandstone	7	872
Sand and gray shale	4	876
Shale, gray	36	912
Sand	6	918
Shale, sandy, gray	30	948
Sand	11	959
Shale, gray	6	965
Sand and gray shale	28	993
Shale, sandy, gray	30	1,023
Sand and gray shale; in layers	28	1,051
Shale, gray	11	1,062
Sand, fine, and gray shale; in layers	31	1,093
Shale, gray	28	1,121
Lower conglomerate:		
Sand	13	1,134
Shale, gray	13	1,147
Sand and gray shale; in layers	37	1,184
Shale, gray	13	1,197
Sand	6	1,203
Shale, gray	66	1,269
C5-67-8bbaa. Alt. 5,600 ft.		
Younger loess:		
Topsoil	3	3
Clay, yellow	12	15
Dawson Formation (upper part):		
Shale, sandy, brown	6	21
Sandstone, brown	26	47
Shale, gray	3	50
Sandstone, gray	12	62

	Thickness	Depth
C5-67-8bbaa.--Continued		
Shale, sandy, gray	5	67
Shale, gray	7	74
Shale, sandy, blue	8	82
Shale, brown	5	87
Shale, gray	15	102
Sandstone, gray	13	115
Sandstone, blue	2	117
Sandstone, gray	10	127
Sandstone, brown	2	129
Sandstone, gray	11	140
Sandstone, blue	3	143
Sandstone, gray	17	160
Sandstone, blue	5	165
Shale, sandy, gray	5	170
Sandstone, gray	7	177
Sandstone, brown	4	181
Shale, sandy, green	4	185
Shale, sandy, gray	2	187
Shale, brown	3	190
Shale, sandy, gray	68	258
Shale, sandy, blue	9	267
Shale, sandy, brown	8	275
Shale, sandy, gray	135	410
Shale, gray	6	416
Shale, sandy, gray	116	532
Sandstone, gray	11	543
Shale, sandy, gray	19	562
Sandstone, gray	5	567
Shale, brown	5	572
Shale, gray	53	625
Shale, brown	9	634
Shale, gray	49	683
Shale, sandy, gray	11	694
Shale, gray	59	753
Sand	9	762
Shale, gray	10	772
Sand	9	781
Shale, gray	42	823
Sand	10	833
Shale, gray	37	870
Sand	1	871
Shale, gray	18	889
Sand	11	900
Shale, gray	5	905
Sand	7	912
Shale, gray	1	913
Sand	4	917
Shale, gray	32	949
Shale, gray, and sand; in layers	8	957
Dawson Formation (lower part):		
Sand [Middle conglomerate, 957 to 1,045 feet.]	5	962
Sand and gray shale; in layers	3	965
Shale, gray	17	982
Sand	3	985
Shale, gray	10	995
Sand	5	1,000
Shale, gray	4	1,004
Sand	14	1,018
Shale, gray	23	1,041
Sand	4	1,045
Shale, gray	30	1,075
Sand and gray shale; in layers	23	1,098
Shale, gray	17	1,115
Sand and gray shale; in layers	6	1,121
Shale, gray	12	1,133
Lower conglomerate:		
Sand	11	1,144
Shale, gray	11	1,155
Sand and gray shale; in layers	34	1,189
Sand and gray shale	125	1,314
Shale, gray	7	1,321
Sand	6	1,327
Shale, gray	13	1,340
Sand and gray shale	15	1,355
Laramie Formation:		
Shale, gray	33	1,388
Sand and gray shale	9	1,397
Shale, gray	27	1,424
Coal and gray shale	12	1,436
Shale, gray	26	1,462
Shale, gray, and fine sand	6	1,468
Shale, gray	93	1,561
Shale, sandy, gray	25	1,586
Shale, gray	16	1,602
Coal, sand, and gray shale	38	1,640
Coal and gray shale	5	1,645
Shale, gray	35	1,680
Sand	6	1,686
Shale, gray	3	1,689
Sand and gray shale	6	1,695
Shale, gray	3	1,698
Sand	4	1,702
Shale, gray	45	1,747

	Thickness	Depth
C5-67-8bbaa.--Continued		
Coal	4	1,751
Shale, gray	15	1,766
Coal and gray shale	17	1,783
Sand, coal, and gray shale	23	1,806
Sand, fine, white [B sandstone, 1,806 to 1,878 feet.]	41	1,847
Sand, fine, white, and gray shale	31	1,878
Shale, gray	15	1,893
Coal and gray shale	38	1,931
Sand and gray shale [A sandstone, 1,931 to 1,989 feet.]	58	1,989
Shale, gray	3	1,992
C5-67-10aada. Alt. 5,620 ft.		
Younger loess:		
Clay	12	12
Dawson Formation (upper part):		
Claystone	18	30
Sandstone or compact sand	15	45
Shale	22	67
C5-67-10bcba. Alt. 5,640 ft.		
Younger loess:		
Soil	1	1
Clay, yellow and brown	48	49
Dawson Formation (upper part):		
Shale, blue, gray, and brown	71	120
Sandstone, gray	4	124
Shale, gray and blue	125	249
Sand	6	255
Shale, blue and gray	39	294
Sandstone, gray	1	295
Shale, brown, gray, and blue	300	595
Sand	7	602
Shale, gray and brown	299	901
Shale, gray and brown; contains streaks of medium sand	1	902
Sand, medium, light-gray	8	910
Shale, gray	115	1,025
Dawson Formation (lower part):		
Sand, medium to coarse, clean, light-gray; contains layers of shale [Middle conglomerate, 1,025 to 1,265 feet.]	50	1,075
Shale, gray; contains streaks of sand	70	1,145
Sand, fine to coarse, interlayered with gray shale	120	1,265
Shale, gray; contains streaks of gray fine sand	85	1,350
Lower conglomerate:		
Sand, fine, clean, gray	20	1,370
Sand, fine, gray, interbedded with gray shale	25	1,395
Shale, gray	5	1,400
C5-67-16bcdb. Alt. 5,696 ft.		
Younger loess:		
Soil	1	1
Clay, yellow	51	52
Dawson Formation (upper part):		
Sandstone, brown	4	56
Clay, yellow	4	60
Shale, blue	5	65
Shale, gray	13	78
Sandstone, gray	3	81
Shale, gray	23	104
Shale, blue	4	108
Shale, gray	28	136
Shale, blue	11	147
Shale, gray	29	176
Shale, blue	3	179
Shale, gray	170	349
Sandstone, gray	12	361
Shale, gray	66	427
Shale, brown	4	431
Shale, gray	37	468
Shale, brown	4	472
Shale, gray	4	476
Sandstone, gray	14	490
Shale, gray	35	525

	Thickness	Depth
C5-67-16bcdb.--Continued		
Shale, brown	4	529
Sandstone, gray	2	531
Shale, gray	16	547
Shale, brown	21	568
Shale, gray	34	602
Shale, brown	6	608
Shale, gray	21	629
Shale, brown	5	634
Shale, gray	90	724
Shale, brown	4	728
Shale, gray	302	1,030
Dawson Formation (lower part):		
Sand [Middle conglomerate, 1,030 to 1,200 feet.]	6	1,036
Shale, gray	10	1,046
Sand	9	1,055
Shale, gray	9	1,064
Sand	7	1,071
Lime, sandy	1	1,072
Shale, gray	8	1,080
Sand	7	1,087
Shale, gray	18	1,105
Sand	7	1,112
Shale, gray	20	1,132
Sand	9	1,141
Shale, gray	10	1,151
Sand	3	1,154
Shale, gray	4	1,158
Sand	12	1,170
Shale, gray	22	1,192
Sand	8	1,200
Shale, gray	10	1,210
Sand, and gray shale	21	1,231
Shale, gray	22	1,253
Sand, and gray shale	14	1,267
Lime, sandy	2	1,269
Shale, gray	7	1,276
Sand	7	1,283
Shale, gray, lime, and sand	9	1,292
Shale, gray	29	1,321
Lower conglomerate:		
Sand	15	1,336
Shale, gray	20	1,356
Sand	16	1,372
Shale, gray	4	1,376
Sand	9	1,385
Shale, gray	36	1,421
Sand	3	1,424
Shale, gray	31	1,455
Sand, fine	19	1,474
Shale, gray	24	1,498
C5-67-17cdcd. Alt. 5,543 ft.		
Younger loess:		
Soil	1	1
Clay, yellow	18	19
Dawson Formation (upper part):		
Shale, brown, blue, and gray	121	140
Sandstone, gray	23	163
Shale, blue, brown, and gray	169	332
Sandstone, gray, and shale	24	356
Shale, brown and gray	374	730
Sand, medium to coarse, clean, gray	30	760
Shale, blue and gray	120	880
Dawson Formation (lower part):		
Sand, medium to coarse, clean, light-gray [Middle conglomerate, 880 to 1,083 feet.]	14	894
Shale, silty, gray, and clay	36	930
Sand, fine to coarse, predominantly clean, gray; contains layers of gray, silty shale and clay	130	1,060
Shale, silty, gray; contains layers of gray fine to medium silty sand	8	1,068
Sand, medium to coarse, clean, gray; contains layers of silty shale	15	1,083
Shale, silty, gray	119	1,202
Lower conglomerate:		
Sand, medium to coarse, clean, light-gray; contains thin beds of sandy and silty shale	68	1,270
Shale, silty to clayey, gray; contains layers of fine, silty, gray sand	105	1,375

	Thickness	Depth
C5-67-19bbbb. Alt. 5,494.3 ft.		
Piney Creek Alluvium:		
Topsoil	5	5
Broadway Alluvium:		
Sand	17	22
Dawson Formation (upper part):		
Clay, red, yellow, blue, and green	106	128
Shale, blue, and streaks of sandstone	53	181
Shale, blue, and silty streaks	132	313
Shale, blue	14	327
Sand, silty	17	344
Shale, blue	44	388
Shale, sandy	51	439
Shale, blue	70	509
Sand, silty, hard	25	534
Shale, blue	56	590
Sand, silty, hard	15	605
Shale, blue	17	622
Sand, silty, hard	20	642
Shale, blue	55	697
Sand, silty, tight, and streaks of shale	31	728
Shale, blue	13	741
Sand, silty, tight, and blue streaks of shale	47	788
Shale, blue	14	802
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	68	870
Shale, blue	16	886
C5-67-21acbb. Alt. 5,700 ft.		
Younger loess:		
Topsoil	1	1
Clay, sandy, brown	11	12
Dawson Formation (upper part):		
Sandstone, brown	24	36
Shale, brown	5	41
Sandstone, coarse-grained	5	46
Clay, gray	2	48
Sandstone, brown, and sandy clay	15	63
Shale, blue	2	65
Sandstone and gray shale	10	75
Sand, coarse	2	77
Clay, gray	12	89
Sandstone, gray, and shale	6	95
Sand, coarse	2	97
Sandstone, gray, and shale	9	106
Shale, green, gray, and brown	32	138
Shale, sandy, gray	3	141
Sand, coarse	11	152
Shale, gray, and sandstone	238	390
Shale, gray	41	431
Sandstone	4	435
Shale, gray	11	446
Limestone	1	447
Shale, gray	26	473
Sandstone, gray	6	479
Shale, brown	4	483
Sandstone, gray	3	486
Shale, brown and gray	18	504
Sandstone, gray	7	511
Shale, brown	4	515
Sandstone, gray, and shale	34	549
Sand, coarse, and gray shale	5	554
Shale, gray	20	574
Sandstone, gray, and shale	20	594
Limestone	3	597
Sandstone, gray	13	610
Sand, coarse, and gray shale	6	616
Shale, gray	8	624
Sand, coarse, and gray shale	13	637
Shale, gray	39	676
Shale, sandy, gray	14	690
Sandstone, gray, and shale	40	730
Shale, gray	10	740
Shale, sandy, gray	14	754
Shale, gray	25	779
Lime, sandy	2	781
Shale, sandy, gray and brown	15	796
Shale, gray	54	850
Sand, fine, gray, and shale	10	860
C5-67-21acbb.--Continued		
Shale, gray	30	890
Dawson Formation (lower part):		
Middle conglomerate:		
Sand, coarse, and gray shale	43	933
Limestone	3	936
Sand, coarse, and gray shale	7	943
Shale, gray	24	967
Sand, coarse, and gray shale	103	1,070
Shale, gray	27	1,097
Sand, coarse, and gray shale	47	1,144
Limestone	3	1,147
Sand, coarse, and gray shale	20	1,167
Limestone	1	1,168
Sand, coarse, and gray shale	29	1,197
Shale, gray	9	1,206
C5-67-34bddd. Alt. 5,865 ft.		
Younger loess:		
Topsoil	2	2
Dawson Formation (upper part):		
Sandstone, yellow	10	12
Sand	5	17
Sandstone, brown	7	24
Sand	6	30
Gravel	10	40
Clay, sandy, gray	3	43
Sandstone, yellow	7	50
Clay, sandy, gray	6	56
Shale, gray	25	81
Shale, sandy, gray	12	93
Shale, gray	23	116
Sandstone, gray	36	152
Shale, gray	9	161
Shale, brown	7	168
Shale, sandy, gray	11	179
Sand, coarse	6	185
Shale, gray	55	240
Shale, sandy, gray, and sandstone	12	252
Sand, coarse [Upper conglomerate, 252 to 420 feet.]	42	294
Shale, gray, and coarse sand	11	305
Shale, sandy, gray	14	319
Sand, coarse, and gray shale	9	328
Shale, green	4	332
Sandstone, gray, and coal	8	340
Shale, brown	7	347
Shale, sandy, gray	14	361
Sand, coarse	6	367
Sandstone, gray and coal	5	372
Sand, coarse	6	378
Shale, gray, and coal	8	386
Shale, gray	19	405
Sand, coarse, and gray shale	15	420
Shale, gray	11	431
Shale, sandy, gray	28	459
Shale, gray	32	491
Sandstone, gray, and shale	15	506
Shale, gray	18	524
Sandstone, gray	6	530
Shale, sandy, gray	19	549
Sandstone, gray	2	551
Shale, sandy, gray	15	566
Shale, gray	12	578
Shale, sandy, gray	20	598
Sand, coarse, and gray shale	12	610
Shale, gray	19	629
Sand, coarse, and gray shale	14	643
Shale, sandy, gray	15	658
Shale, gray	11	669
Sandstone, gray	7	676
Shale, sandy, gray, and sandstone	15	691
Shale, gray	7	698
Shale, sandy, brown	10	708
Shale, sandy, gray	12	720
Shale, sandy, brown	8	728
Sand, medium to coarse, and gray shale	21	749
Shale, sandy, gray	6	755
Shale, gray, and sandstone	13	768
Sand, coarse, and gray shale	34	802
Sand, fine, and gray shale	26	828
C5-67-34bddd.--Continued		
Shale, brown	7	835
Shale, gray	35	870
Sand, fine to medium	6	876
Shale, gray	121	997
Sand, coarse, and gray shale	20	1,017
Shale, gray	50	1,067
Sand, medium to coarse	38	1,105
Shale, gray	16	1,121
Sand, coarse	12	1,133
Shale, gray	44	1,177
Dawson Formation (lower part):		
Sand, coarse, and gray shale [Middle conglomerate, 1,182 to 1,400 feet]	54	1,231
Shale, gray	17	1,248
Sand, coarse, and gray shale	102	1,350
Sand, fine to medium, and gray shale	48	1,398
Shale, gray	22	1,420
Sand, fine to coarse, and gray shale	60	1,480
Shale, gray	12	1,492
Lower conglomerate:		
Sand, fine, and gray shale	54	1,546
Shale, gray	11	1,557
Sand, fine to coarse, and gray shale	53	1,610
Shale, gray	9	1,619
C5-68-1ccdd. Alt. 5,410 ft.		
Piney Creek Alluvium:		
Clay, dark-brown	15	15
Dawson Formation:		
Shale, brown	14	29
C5-68-1dbbb. Alt. 5,475 ft.		
Younger loess:		
Topsoil	2	2
Clay, sandy, brown	26	28
Clay, yellow	12	40
Dawson Formation (upper part):		
Sandstone, brown	3	43
Clay, sandy, brown	28	71
Shale, blue	6	77
Shale, sandy, gray, and sandstone	6	83
Shale, green	3	86
Sandstone, gray, and shale	106	192
Shale, brown and gray	27	219
Sandstone, gray, and shale	66	285
Shale, gray	56	341
Sandstone, gray	110	451
Shale, gray	71	522
Shale, sandy, gray	15	537
Shale, gray	120	657
Dawson Formation (lower part):		
Sand, coarse, and gray shale [Middle conglomerate, 676 to 915 feet]	34	691
Shale, gray	17	708
Sand, fine, and gray sandy shale	32	740
Lime	1	741
Sand, coarse, and gray shale	10	751
Shale, gray	9	760
Shale, sandy, gray	12	772
Sand, coarse, and gray shale	10	782
Shale, gray	43	825
Sand, fine to coarse, and gray shale	18	843
Shale, gray	17	860
Shale, sandy, gray	22	882
Sand, coarse, and gray shale	18	900
Sand, fine, and sandy shale	15	915
Lime	1	916
Sand, fine to coarse, and gray shale	79	995
Shale, gray	89	1,084
Lime [Lower conglomerate, top at 1,082 feet.]	1	1,085
Shale, gray	91	1,176
Sand, fine, and gray shale	11	1,187
Shale, gray	4	1,191
C5-68-2accb. Alt. 5,405 ft.		
Colluvium and Younger loess, undifferentiated:		
Soil, surface	20	20

	Thick-ness	Depth
C5-68-2accb.--Continued		
Dawson Formation (upper part):		
Sandrock, blue	20	40
Shale, blue	7	47
Sandrock, blue	34	81
Shale	9	90
Sandrock, gray	28	118
Shale, blue	8	126
Sandrock, blue	13	139
Clay and shale, blue	41	180
Sandrock, blue	12	192
Shale, sandy	88	280
Sandrock, hard, gray	13	293
Shale, blue	82	375
Sandrock, blue	20	395
Clay, gray	145	540
Dawson Formation (lower part):		
Sand [Middle conglomerate, 540 to 788 feet.] (water-bearing)	6	546
Clay and shale	124	670
Sand (water-bearing)	8	678
Clay and shale	52	730
Sand (water-bearing)	15	745
Clay and shale	25	770
Sand (water-bearing)	18	788
Clay and shale, gray	162	950
Lower conglomerate:		
Sand (water-bearing, well flowed 20 gpm at surface)	20	970
Clay and shale	115	1,085
Sand (water-bearing)	17	1,102
Laramie Formation:		
Shale, blue	48	1,150
Limestone	5	1,155
Shale, brown	95	1,250
Coal	10	1,260
Shale, brown	70	1,330
Limestone	5	1,335
Shale, gray	15	1,350
Coal	5	1,355
Limestone	10	1,365
Shale, chocolate	15	1,380
Coal	5	1,385
Shale, gray	45	1,430
Sandrock, dark-gray	5	1,435
Shale, chocolate	15	1,450
Coal	5	1,455
Limestone, shell, black	5	1,460
Shale, chocolate	20	1,480
Coal	5	1,485
Shale, chocolate	29	1,514
Sandrock, hard	3	1,517
Shale, gray, and coal	13	1,530
Limestone, shell	8	1,538
Sand [B sandstone, 1,538 to 1,627 feet.] (water-bearing)	89	1,627
Shale, chocolate	18	1,645
A sandstone:		
Sandrock, dark-gray, hard	8	1,653
Shale, sandy, gray	12	1,665
Sand (water-bearing)	45	1,710
Shale, chocolate	7	1,717
Shale, sandy, gray	4	1,721
Fox Hills Sandstone:		
Sand [Milliken Sandstone Member, 1,721 to 1,785 feet.] (water-bearing)	64	1,785
Shale, gray	12	1,797
C5-68-2ccac2. Alt. 5,390 ft.		
Younger loess:		
Soil, sandy, caves	35	35
Dawson Formation (upper part):		
Shale, blue (yields a little water at 67, 80, and 100 feet)	65	100
Shale, blue, gray, brown, and green	220	320
Shale, gray	110	430
Sand (water-bearing)	15	445
Shale, sticky, gray	45	490
Sand, caves	10	500
Shale, sandy	55	555
Sand and shale	12	567
Dawson Formation (lower part):		
Sand [Middle conglomerate, 507 to 707 feet.] (water-bearing)	10	577
Shale, gray	10	587
Sand (water-bearing, water rose 550 feet)	3	590
Shale, gray	5	595
Sand (water-bearing, flows 6 gpm at surface)	3	598
Shale, gray	79	677
Sand and shale (water-bearing, yields 6 gpm)	30	707
Shale, gray	49	756
Sand (yields no water)	7	763
Shale, gray	77	840
Lower conglomerate:		
Sand, gray (water bearing)	3	843
Shale, gray and brown	186	1,029
Sand, gray (yields 3 gpm)	8	1,037
Sand and shale	28	1,065
Laramie Formation:		
Shale, gray	80	1,145
Coal, thin strata	5	1,150
Shale, sticky, gray	15	1,165
Sand (water-bearing)	1	1,166
Shale, gray	3	1,169
Sand (water-bearing, heavy flow at surface)	16	1,185
Sand and shale (increase in flow at 1,209 feet)	41	1,226
Shale, gray	12	1,238
Coal	10	1,248
Shale, gray, brown, or black	77	1,325
Coal	6	1,331
Shale, gray, and sand	39	1,370
Shale, brown	35	1,405
Coal	3	1,408
Shale, brown	1	1,409
Coal	2	1,411
Shale and shells; contains coal	29	1,440
Shale, gray	8	1,448
Shale, brown, and coal	8	1,456
Sand (water-bearing, flowed at surface)	1	1,457
Shale, hard, gray-brown	4	1,461
Shale, brown, hard, mixed with coal	7	1,468
Coal and brown shale	5	1,473
Shale, brown	11	1,484
Sand, medium to very coarse, soft, gray to white; 95 percent of quartz grains subangular to rounded; contains coal; (water-bearing, water rose 350 feet in 2 hours)	5	1,489
Sand, medium to coarse, gray, white, and colorless, subangular to rounded	7	1,496
Coal, hard	6	1,502
Shale, hard, impervious	5	1,507
Coal	3	1,510
Sand, medium to coarse, subangular to rounded, white to glassy; 3 to 4 percent dark minerals give a salt and pepper appearance [B sandstone, 1,510 to 1,597 feet.]	89	1,599
Shale, sandy, clayey, gray and brown	20	1,619
A sandstone:		
Sand, medium to coarse, angular to subangular brown to glassy, and light-grayish-brown and dark-gray sandy to clayey shale; contains 5 percent dark minerals, limonite particles, and light-gray splintery shale	6	1,625
Sand, slightly shaly, fine to coarse, angular to sub-angular, white to glassy; contains 4 percent dark minerals (yielded large flow of water at 1,627 feet)	59	1,684
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand, fine to coarse, angular to sub-angular, white to glassy; contains 4 percent dark minerals (increase in flow of water began at 1,686 and continued to 1,728 feet)	44	1,728
C5-68-2dbca. Alt. 5,352 ft.		
Piney Creek Alluvium:		
Topsoil	10	10
Broadway Alluvium:		
Sand	2	12
Louviers Alluvium:		
Clay	4	16
Sand, heavy, and light gravel	11	27
Dawson Formation (upper part):		
Sandstone at 27 feet		
C5-68-3baba. Alt. 5,315 ft.		
Broadway Alluvium:		
Topsoil	4.5	4.5
Sand, fine	7.5	12
Louviers Alluvium:		
Clay, brown	16	28
Sand and gravel	16	44
Clay, brown	7	51
Gravel and boulders	5	56
C5-68-4abdb1. Alt. 5,285 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Sand and gravel	37	37
Dawson Formation:		
Shale, gray	33	70
C5-68-4bdcc. Alt. 5,282 ft.		
Post-Piney Creek Alluvium:		
Topsoil	5.5	5.5
Broadway and Louviers Alluvium, undifferentiated:		
Boulders and sand	11.5	17
Clay	2	19
Gravel	7	26
Clay, blue	5	31
Gravel	8	39
Dawson Formation:		
Shale at 39.0 feet		
C5-68-4ccdc. Alt. 5,290.1 ft.		
Post-Piney Creek alluvium:		
Earth	5	5
Broadway Alluvium:		
Sand, fine	15	20
Louviers Alluvium:		
Clay, blue	1	21
Sand	9	30
Cobbles	7	37
Sand	6	43
Sand, coarse	2	45
Dawson Formation:		
Shale, blue	2	47
C5-68-5abcd. Alt. 5,292 ft.		
Post-Piney Creek alluvium:		
Soil	4	4
Broadway Alluvium:		
Gravel	11	15
Louviers Alluvium:		
Silt and clay	5	20
Sand	5	25
Clay	3	28
Sand	4	32
Shale at 32 feet		
C5-68-5baaa. Alt. 5,309.8 ft.		
Post-Piney Creek alluvium:		
Silt, slightly sandy, calcareous, dark-yellowish-brown; contains montmorillonite	5	5
Louviers Alluvium:		
Gravel, very fine to coarse, angular to subrounded	8	13

Table 1.--Logs of wells and test holes--Continued

	Thickness	Depth
C5-68-5baaa. Alt. 5,309.8 ft.		
Silt, sandy and gravelly, dark-yellowish-brown. . .	5.5	18.5
Dawson Formation (upper part):		
Shale, clay, non-calcareous, dusky-yellow; contains montmorillonite. . .	4	22.5
C5-68-5bada. Alt. 5,301.6 ft.		
Post-Piney Creek alluvium:		
Silt, carbonaceous, micaceous, very calcareous, dark-yellowish-brown; smells like swamp mud between 5 and 7 feet	7	7
Broadway Alluvium:		
Sand, fine to very coarse, angular to subangular, arkosic, slightly micaceous, and about 10 percent very fine to fine gravel; contains medium gravel between 15.0 and 16.0 feet.	10.5	17.5
Louviers Alluvium:		
Silt, sandy, non-calcareous, moderate-yellowish-brown. . .	5	22.5
Sand, very coarse, fairly well-sorted, angular to sub-angular, arkosic, and some very fine gravel	3.5	26
Gravel, coarse, and cobbles.	6.5	32.5
Dawson Formation (upper part):		
Shale, clay, dark-yellowish-brown, noncalcareous; contains montmorillonite.	5	37.5
C5-68-5bdaa. Alt. 5,307.3 ft.		
Piney Creek Alluvium:		
Silt, slightly sandy, micaceous, calcareous, dark-yellowish-brown.	3	3
Silt, compact, very calcareous, pale-yellowish-brown; contains montmorillonite.	7	10
Broadway Alluvium:		
Gravel, very fine to coarse, arkosic, subangular to subrounded; subrounded to rounded between 13.5 and 15 feet	5	15
Louviers Alluvium:		
Clay, very sandy, brown, mixed with very fine to medium gravel. . .	4.5	19.5
Gravel, very fine to medium, arkosic, subangular to sub-rounded, loose, clean.	4	23.5
Gravel, very fine to coarse, arkosic, subangular to well-rounded, and about 10 percent medium to coarse, angular to subangular sand .	3.5	26
Cobbles, boulders, clean, and very fine to very coarse arkosic, subangular to well-rounded gravel	11	37
Dawson Formation (upper part):		
Shale, silty, non-calcareous, moderate-greenish-yellow. . .	5.5	42.5
C5-68-5bdad. Alt. 5,311.2 ft.		
Fill, sand, and gravel	5	5
Piney Creek Alluvium:		
Silt, slightly sandy, micaceous, dark-yellowish-brown; contains montmorillonite; pale-yellowish-brown from 7.5 to 10.0 feet.	5	10
Broadway Alluvium:		
Sand and very fine to coarse gravel, poorly sorted, silty, arkosic. . .	5	15
Louviers Alluvium:		
Cobbles, coarse gravel, and light-tan clay, mixed . .	2	17
Sand, poorly-sorted, arkosic, and very silty, arkosic very fine gravel. .	3	20
Sand, very coarse, arkosic, subangular, clean, and very fine to fine gravel; contains cobbles and coarse gravel at intervals from 29 to 39 feet . . .	20	40
Sand, poorly sorted, silty, arkosic, subangular.	2.5	42.5
Dawson Formation (upper part):		
Shale, silty, dusky-yellow; contains montmorillonite and small, hard, concretions	5	47.5
C5-68-5cddd. Alt. 5,369 ft.		
Fill dirt	18	18
Dawson Formation (upper part):		
Clay, brown	16	34
Gravel.	9	43
Shale, brown.	2	45
C5-68-5dbbb. Alt. 5,349.7 ft.		
Slocum Alluvium:		
Clay, tough, sandy, brown	2.5	2.5
Silt, sandy, micaceous, calcareous, pale-yellowish-brown . .	2.5	5
Silt, very sandy, very calcareous, pale-yellowish-brown	5	10
Gravel, very fine to very coarse, arkosic, subangular to sub-rounded, and cobbles	3	13
Gravel, very fine to fine, fairly well-sorted, subangular to subrounded; contains cobbles. .	2	15
Gravel, very fine to coarse, arkosic, subangular to angular, very coarse sand, and cobbles	4	19
Dawson Formation (upper part):		
Shale, silty, sandy, micaceous, weathered, pale-yellowish-brown . .	3.5	22.5
Shale, silty, moderate-yellowish-brown, noncalcareous; contains montmorillonite	2.5	25
C5-68-5dcbb. Alt. 5,381 ft.		
Slocum Alluvium:		
Clay.	15	15
Sand, gravel, and boulders.	43	58
Dawson Formation (upper part):		
Clay.	2	60
Shale	36	96
Shale, hard	1	97
Shale	3	100
C5-68-7ccad. Alt. 5,530 ft.		
Younger loess:		
Topsoil, dark clay. .	4	4
Clay, yellow.	16	20
C5-68-7ccad.--Continued		
Dawson Formation (upper part):		
Shale, sandy, hard yellow	7	27
Shale, brown and yellow	30	57
Shale, hard, blue. . .	14	71
Shale, hard, brown; contains soft streaks.	11	82
Shale, gray and blue; contains some sand .	163	245
Sandrock, coarse-grained; contains streaks of shale . .	13	258
Shale, gray.	26	284
Rock, hard	2	286
Sand and some blue clay	5	291
Shale, gray, and blue clay	19	310
Sand	3	313
Shale, gray and blue .	9	322
Sand	2	324
Shale, gray and brown, soft, in part sandy.	36	360
Shale; contains streaks of sand.	10	370
Shale, gray.	30	400
Shale; contains streaks of sand. . .	11	411
Sand	3	414
Shale; contains streaks of sand. . .	16	430
Shale, firm, gray; contains streaks of sand	21	451
Dawson Formation (lower part):		
Sand [Middle conglomerate, 451 to 499 feet.]	14	465
Shale, sandy	4	469
Sand	5	474
Shale and silt	7	481
Sand	5	486
Shale, sandy	2	488
Sand	11	499
Shale, sandy, claystone, siltstone, and silty sand . . .	96	595
Lower conglomerate:		
Sand, coarse	11	606
Shale.	10	616
Sand, coarse; contains streaks of shale . .	47	663
Shale, sandy, interbedded with sandstone.	57	720
Sand	10	730
Shale.	8	738
Sand; contains pyrite.	6	744
Shale, hard, gray, and blue soft clay . . .	26	770
C5-68-7ccbb. Alt. 5,540 ft.		
Younger loess:		
Soil	2	2
Clay, yellow . . .	28	30
Dawson Formation (upper part):		
Shale, brown	8	38
Sandstone, gray. . . .	11	49
Clay, yellow	7	56
Shale, gray.	5	61
Sandstone, gray. . . .	16	77
Shale, brown	6	83
Shale, gray.	7	90
Sandstone, gray. . . .	6	96
Shale, brown	2	98
Shale, gray.	4	102
Sandstone, gray. . . .	3	105
Shale, gray.	10	115
Shale, blue.	6	121
Shale, gray.	19	140
Sandstone, gray. . . .	3	143
Shale, gray.	15	158
Sandstone, gray. . . .	10	168
Shale, gray.	18	186
Sandstone, gray. . . .	4	190
Shale, gray.	37	227
Sandstone, gray. . . .	6	233
Shale, gray.	5	238
Sandstone, gray. . . .	4	242
Shale, gray.	6	248
Sandstone, gray. . . .	12	260
Shale, gray.	27	287
Shale, sandy, gray . .	4	291
Sand	7	298
Shale, gray.	39	337
Shale, blue.	7	344
Shale, gray.	26	370
Sandstone, gray. . . .	8	378

	Thickness	Depth
C5-68-7ccbb.--Continued		
Shale, gray.	47	425
Dawson Formation (lower part):		
Sand (Middle conglomerate, 425 to 541 feet.)	1	428
Shale, gray.	15	443
Sand	7	450
Shale, gray.	8	458
Sand	4	462
Shale, gray.	22	484
Sand	8	492
Shale, gray.	32	524
Sand	9	533
Sand and gray shale: in alternate layers.	8	541
Sandstone, gray.	4	545
Shale, gray.	19	564
Shale, sandy, gray	10	574
Shale, gray.	32	606
Sandstone, gray.	11	617
Shale, gray.	21	638
Lower conglomerate:		
Sand, fine, white.	9	647
Shale, gray.	4	651
Sand, fine, white.	6	657
Shale, gray.	76	733
Shale, sandy, gray	4	737
Shale, gray.	6	743
Shale, sandy, gray	8	751
Shale, gray.	12	763
Sand, fine, white.	4	767
Shale, gray.	4	771
Sand, fine, white.	5	776
Shale, gray.	11	787
Sand, fine, white.	6	793
Laramie Formation:		
Shale, gray.	129	922
Lime	2	924
Sand, fine, white.	3	927
Shale, gray.	94	1,021
Sand, fine, white.	16	1,037
Shale, gray.	25	1,062
Coal	3	1,065
Shale, gray.	15	1,080
C5-68-7cccc. Alt. 5,543 ft.		
Younger loess, Slocum Alluvium, and Dawson Formation, undifferentiated:		
Surface soil, clay, boulders, and sandstone.	50	50
Dawson Formation (upper and lower parts, undifferentiated):		
Shale, sandy, broken	35	85
Shale, hard, black	25	110
Shale.	20	130
Shale, sandy shale, and clay	100	230
Clay	170	400
Shale, sandy	20	420
Clay	62	482
Shale and coal	3	485
Clay	15	500
Sand	20	520
Clay and sandy shale	30	550
Shale, sandy, and clay	120	670
Shale.	60	730
Clay	90	820
Laramie Formation:		
Shale	110	930
Clay	10	940
Shale.	280	1,220
Clay, blue	110	1,330
Shale, blue.	60	1,390
Clay, gray, shale, and gray sand.	100	1,490
Shale, gray and coal	10	1,500
Shale and sandy shale.	20	1,520
Shale, coal, and sand.	30	1,550
Sand and shale	14	1,564
Shale and coal	6	1,570
Shale, some coal	30	1,600
Sandstone.	70	1,670
Shale at 1,670 feet		
C5-68-8abad. Alt. 5,289 ft.		
Piney Creek Alluvium:		
Surface soil	3	3
Broadway Alluvium:		
Sand and gravel.	13	16
Louviers Alluvium:		
Clay and streaks of sand, flood wash	7	23
Sand and gravel.	7	30
Gravel, coarse, and rocks.	12	42
Dawson Formation:		
Shale, blue, at 42 feet		
C5-68-8accc. Alt. 5,320.5 ft.		
Piney Creek Alluvium:		
Clay, silty, dark-brown: contains coarse sand and very fine gravel.	6	6
Broadway Alluvium:		
Gravel, very fine to coarse, angular to subrounded, and clay.	.5	6.5
Gravel, fine to coarse, angular to well-rounded	5.5	12
Sand, medium to very coarse, and very fine, angular to subrounded gravel	4.5	16.5
Louviers Alluvium:		
Clay, very sandy, tan: contains streaks of sand	11	27.5
Sand, fine, loose	5.5	33
Clay, hard.	2	35
Gravel, very fine, angular to sub-rounded, and very coarse arkosic sand.	16	51
Gravel, very fine to very coarse, angular to well-rounded: contains cobbles and very-coarse sand.	6	57
Dawson Formation (upper part):		
Shale, hard, blue: contains small concretions	3	60
C5-68-8accc. Alt. 5,316.6 ft.		
Piney Creek Alluvium:		
Clay, sandy, brown: contains fine gravel.	3.5	3.5
Broadway Alluvium:		
Gravel, very fine to coarse, angular to subrounded, clean, loose: contains fine to very coarse sand	6.5	10
Louviers Alluvium:		
Clay, very sandy, tan: contains medium to coarse sand and very fine gravel.	5	15
Clay, sandy, gray, and medium sand	11	26
Gravel, very fine, angular, and medium to coarse sand.	23	49
Dawson Formation (upper part):		
Shale, hard, sandy, platy, gray	3.5	52.5
C5-68-8bcbc. Alt. 5,404.7 ft.		
Slocum Alluvium:		
Clay, sandy	9	9
Dawson Formation (upper part):		
Shale, brown.	19	28
Sandstone, blue	15	43
Shale, brown and blue	17	60
Sandstone, gray	3	63
Shale, brown.	9	72
Sandstone	4	76
Shale, blue	26	102
Shale, sandy, brown	3	105
Sandstone, gray	4	109
Shale, gray	16	125
Shale, sandy, gray.	3	128
Shale, gray	13	141
Sandstone, gray	2	143
Shale, gray	7	150
Shale, sandy, brown	2	152
Shale, gray and brown	81	233
Shale, sandy, brown	3	236
Sandstone, fine-grained, white.	5	241
Shale, gray and brown	62	303
Sandstone, fine-grained, white.	16	319
Shale, blue	19	338
Coal.	1	339
Dawson Formation (lower part):		
Middle conglomerate:		
Sandstone, fine-grained, white.	3	342
C5-68-8bcbc.--Continued		
Shale, gray.	35	377
Shale, soft, brown	10	387
Sandstone, fine-grained, white	21	408
Shale, blue.	3	411
Sandstone, fine-grained, white	3	414
Shale, gray.	37	451
Sandstone, fine-grained, white	11	462
Shale, gray.	9	471
Limestone.	1	472
Shale, gray.	3	475
Sandstone, fine-grained, white	3	478
Shale and white fine sand: in alternate layers	16	494
C5-68-8bcda. Alt. 5,356.1 ft.		
Slocum Alluvium:		
Silt, sandy, very calcareous, clayey, pale-yellowish-brown: contains montmorillonite.	1	1
Dawson Formation (upper part):		
Shale, silty, slightly sandy, clayey, very calcareous, pale-yellowish-brown: contains montmorillonite.	4	5
C5-68-8cada. Alt. 5,333.0 ft.		
Piney Creek Alluvium:		
Surface.	6	6
Broadway and Louviers Alluvium, undifferentiated:		
Gravel and boulders.	32	38
Clay	4	42
Gravel	14	56
C5-68-9abba. Alt. 5,320 ft.		
Broadway Alluvium:		
Topsoil.	3	3
Gravel	15	18
Louviers Alluvium:		
Clay	2	20
Gravel	8	28
Gravel, hard	10	38
Dawson Formation (upper part):		
Clay, brown.	2	40
Shale.	3	43
C5-68-9bdcd. Alt. 5,320.6 ft.		
Fill	4	4
Piney Creek Alluvium:		
Silt, sandy, dark-yellowish-brown: contains coal.	8.5	12.5
Silt, very sandy and gravelly, slightly calcareous, pale-yellowish-brown: contains montmorillonite.	2.5	15
Louviers Alluvium:		
Gravel, fine to very coarse, well-rounded, arkosic, loose, and cobbles	8.5	23.5
Gravel, very fine to very coarse, arkosic, subangular to well-rounded: contains some silt and clay beds	6.5	30
Dawson Formation (upper part):		
Shale, very silty, micaceous, light-olive-gray and dusky-yellow: contains montmorillonite.	5	35
C5-68-9cacs. Alt. 5,312.2 ft.		
Piney Creek Alluvium:		
Silt, pale-yellowish-brown, and medium to coarse, arkosic sand	12.5	12.5
Louviers Alluvium:		
Silt, sandy and gravelly, very calcareous, pale-yellowish-brown: contains montmorillonite.	.5	13

Table 1.--Logs of wells and test holes--Continued

	Thickness	Depth
C5-68-9cacs.--Continued		
Gravel, fine to medium, arkosic, subrounded to rounded	.5	13.5
Clay, sandy, grayish-tan; contains very fine gravel	1.5	15
Gravel, very fine to medium, arkosic, subangular to rounded, about 10 percent coarse sand, and pale-yellowish-brown, very calcareous, montmorillonitic silt; contains cobbles at 20 feet	14	29
Dawson Formation (upper part):		
Shale, silty, non-calcareous, pale-yellowish-brown; contains montmorillonite	3.5	32.5
C5-68-9ccbd. Alt. 5,310 ft.		
Piney Creek Alluvium:		
Topsoil	5	5
Silt, sandy, caves (wet)	4	9
Louviers Alluvium:		
Boulders	1	10
Sand, gravel, boulders	8	18
Dawson Formation:		
Clay, brown	1	19
Shale	1	20
C5-68-9dbad. Alt. 5,351.1 ft.		
Eolian sand:		
Silt, slightly sandy, moderately calcareous, dark-yellowish-orange; contains montmorillonite	3.5	3.5
Silt, sandy, non-calcareous, moderate-yellowish-brown; contains montmorillonite	4	7.5
Broadway Alluvium:		
Sand, medium to coarse, subangular, arkosic, and about 10 percent very fine to fine gravel; contains a little silt to 10.0 feet and about 20 percent very fine to medium gravel from 10.0 to 13.5 feet	6	13.5
Louviers Alluvium:		
Gravel, coarse, and cobbles	1	14.5
Sand, medium to very coarse, subrounded to well-rounded, arkosic, and about 20 percent very fine to medium gravel	8.5	23
Dawson Formation (upper part):		
Shale, silty, very sandy, about 50 percent arkosic sand; pale-yellowish-brown; contains montmorillonite	4.5	27.5
C5-68-10bcdd. Alt. 5,402.0 ft.		
Eolian sand and Slocum Alluvium, undifferentiated:		
Sand, very fine to very coarse, arkosic, subangular to subrounded, and about 20 percent very fine gravel	3	3
Dawson Formation (upper part):		
Shale, silty, slightly sandy, micaceous, dark-yellowish-brown	4.5	7.5
Shale, very sandy and gravelly, grayish-orange to dark-yellowish-brown	2.5	10
C5-68-12abda. Alt. 5,409 ft.		
Piney Creek Alluvium:		
Topsoil	6	6
Silt, sandy	11	17
Younger loess:		
Clay, brown	10	27
Dawson Formation:		
Sandstone	1	28
C5-68-12bbbb. Alt. 5,384 ft.		
Piney Creek Alluvium:		
Soil and clay	5	5
Soil and clay (water)	20	25
Broadway Alluvium:		
Gravel and sand (water)	15	40
C5-68-12bbcb. Alt. 5,385 ft.		
Younger loess:		
Topsoil	5	5
Younger loess and Broadway Alluvium, undifferentiated:		
Mud, sand, and gravel	15	20
Dawson Formation:		
Shale	5	25
C5-68-12bdab. Alt. 5,420 ft.		
Younger loess:		
Soil	2	2
Clay, sandy, yellow	10	12
Dawson Formation (upper part):		
Sandstone, brown	2	14
Shale, brown	20	34
Sandstone, blue and gray	44	78
Shale, gray	2	80
Sandstone, gray	28	108
Shale, brown	6	114
Shale, sandy, gray	9	123
Sandstone, gray	7	130
Shale, brown	5	135
Shale, sandy, gray	10	145
Shale, brown	3	148
Shale, sandy, gray	8	156
Shale, blue and gray	14	170
Sandstone, gray	16	186
Shale, gray, brown, and blue	177	363
Sandstone, blue and brown	32	395
Shale, blue	15	410
Sandstone, gray	7	417
Shale, gray	95	512
Shale, sandy, gray	8	520
Shale, gray	101	621
Sandstone, gray	21	642
Shale, gray	5	647
Shale, sandy, gray	14	661
Shale, gray	28	689
Dawson Formation (lower part):		
Sand [Middle conglomerate, 689 to 866 feet.]	6	695
Shale, gray	11	706
Sand	6	712
Shale, gray	16	728
Sand	4	732
Shale, gray	26	758
Sand	17	775
Shale, gray	38	813
Sand	7	820
Shale, gray	32	852
Sand	14	866
Shale, gray	8	874
Shale, gray, and sand	54	928
Shale, gray	17	945
Mudstone	2	947
Shale, gray	21	968
Shale, gray, and mudstone	46	1,014
Lower conglomerate:		
Sand, fine	12	1,026
Shale, gray	44	1,070
Sand	28	1,098
Shale, brown and gray	38	1,136
C5-68-11dacd. Alt. 5,490 ft.		
Younger loess:		
Soil	2	2
Dawson Formation (upper part):		
Clay, sandy, yellow	34	36
Shale, brown, blue, and gray	51	87
Sandstone, brown and gray	13	100
Shale, blue	4	104
Sandstone, gray	2	106
Shale, gray	6	112
Sandstone, gray, blue, and brown	33	145
Shale, brown	6	151
C5-68-11dacd.--Continued		
Sandstone, gray	49	200
Shale, gray	17	217
Sandstone, gray	30	247
Shale, blue	3	250
Sandstone, gray	2	252
Shale, gray	82	334
Sand	7	341
Shale, gray	26	367
Shale, brown	4	371
Shale, gray	25	396
Sandstone, gray	14	410
Shale, gray	178	588
Sand [Upper conglomerate, 588 to 658 feet.]	2	590
Lime, sandy	2	592
Sand	6	598
Shale, gray	26	624
Sand, fine	12	636
Shale, gray	15	651
Sand	7	658
Shale, gray	70	728
Dawson Formation (lower part):		
Sand [Middle conglomerate, 714 to 904 feet.]	18	746
Shale, gray	14	760
Lime, sandy	1	761
Sand	5	766
Shale, gray	8	774
Sand	6	780
Shale, gray	10	790
Sand	6	796
Shale, gray	6	802
Sand	6	808
Shale, gray	17	825
Sand	16	841
Shale, gray	19	860
Sand	13	873
Shale, gray	219	1,092
Lower conglomerate:		
Sand, fine, gray	55	1,147
C5-68-16baba. Alt. 5,345 ft.		
Broadway Alluvium:		
Sand, dirty	9	9
Louviers Alluvium:		
Gravel	24	33
Gravel and sand	11	44
Dawson Formation (upper part):		
Sandstone	1	45
C5-68-17caaa. Alt. 5,316 ft.		
Post-Piney Creek alluvium:		
Soil	3	3
Louviers Alluvium:		
Gravel and rocks	9	12
Clay	3	15
Gravel	21	36
Rocks	1	37
Gravel and rocks	5	42
Dawson Formation:		
Shale at 42 feet		
C5-68-17cdad2. Alt. 5,317 ft.		
Post-Piney Creek alluvium:		
Soil	4	4
Louviers Alluvium:		
Gravel	22	26
Silt	2	28
Gravel and rocks	5	33
Dawson Formation:		
Shale at 33 feet		
C5-68-17dbba. Alt. 5,315 ft.		
Piney Creek Alluvium:		
Soil	3	3
Louviers Alluvium:		
Gravel and rocks	10	13
Silt	5	18
Gravel	7	25
Silt	2	27
Gravel	3	30
Silt, hard	5	35
Gravel and rocks	8	43
Dawson Formation:		
Shale at 43 feet		
C5-68-17dcda. Alt. 5,332 ft.		
Surface	6	6
Dawson Formation (upper part):		
Shale, brown	2	8
Sandstone, gray	26	34
Clay, blue	47	81
Shale	2	83
Clay, blue	25	108
Rock (water-bearing)	2	110
Clay, blue	55	165
Shale	12	177
Clay and shale	16	193

	Thickness	Depth
C5-68-17dcda.--Continued		
Sand [Upper conglomerate, 193 to 240 feet.] (water-bearing)	3	196
Clay, tough	4	200
Clay and sand	35	235
Sand (water-bearing)	5	240
Clay, blue	10	250
Sandstone	40	290
Clay and shale	30	320
Sandstone	6	326
Clay, blue	16	342
Sandstone	5	347
Clay, blue	2	349
Sandstone, hard	2	351
Sandstone	7	358
Clay, tough	9	367
Dawson Formation (lower part):		
Sand [Middle conglomerate, 367 to 472 feet.] (water-bearing)	5	372
Clay, blue	54	426
Sand (water-bearing)	4	430
Clay, blue	2	432
Sandstone	4	436
Clay	4	440
Sand (water-bearing)	2	442
Clay, blue	12	454
Sandstone	13	467
Sand (water-bearing)	5	472
Clay	46	518
Lower conglomerate:		
Sand (water-bearing)	20	538
Clay, blue	34	572
Sand (water-bearing)	5	577
Clay	40	617
Sandstone, hard	2	619
Sand (water-bearing)	2	621
Sandstone, hard	29	650
Laramie Formation:		
Clay and shale	82	732
C5-68-18accd. Alt. 5,486 ft.		
Younger loess:		
Clay, brown	10	10
Dawson Formation (upper part):		
Shale, blue	96	106
Sandstone, gray	27	133
Shale	17	150
Sand, silty	5	155
Shale, silty	25	180
Sand, fine, and sandstone	6	186
Shale; contains fine sand and thin sandy streaks	68	254
Sand, fine, shaly	20	274
Shale, silty	30	304
Sand, fine, and sandstone	4	308
Shale, silty	19	327
Sand, fine, white, interbedded with shale	27	354
Shale, silty, gray	98	452
Dawson Formation (lower part):		
Sand, fine; contains thin streaks of shale [Middle conglomerate, 452 to 561 feet.]	109	561
Shale, sandy; contains fine sand	63	624
Lower conglomerate:		
Sand, medium	10	634
Shale, clay	4	638
Sand, medium, clean, and sandstone	8	646
Shale, sandy, gray	38	684
Sand, fine	8	692
Shale, sandy, gray	4	696
Sand, fine, shaly	14	710
Shale, gray	3	713
C5-68-19cdca. Alt. 5,418 ft.		
Slocum Alluvium:		
Topsoil	2	2
Clay, sandy, brown	13	15
Sand	6	21
Clay, red	3	24
Clay, sandy, yellow	4	28
Gravel	4	32
Dawson Formation (upper part):		
Clay, sandy, yellow	13	45
Shale, gray and blue	29	74
Shale, sandy, gray	3	77
Dawson Formation (lower part):		
Sand [Middle conglomerate, 77 to 236 feet.]	5	82
Shale, sandy, gray	11	93
Shale, gray	23	116
Shale, sandy, gray	5	121
Sand, coal, and gray shale	14	135
Shale, sandy, gray	18	153
Shale, gray	75	228
Sand, fine, and gray shale	8	236
Shale, sandy, gray	8	244
Shale, gray	7	251
Shale, sandy, brown and gray	34	285
Lower conglomerate:		
Sand, fine, and gray shale	27	312
Shale, gray	14	326
Sand, fine, and gray shale	36	362
Shale, gray	32	394
Shale, brown and gray	14	408
Sand, fine, and gray shale	22	430
Sand, fine to medium, and gray shale	15	445
Sand, fine, and gray shale	5	450
Lime	1	451
Sand, fine, and gray shale	14	465
Shale, gray	5	470
Sand, fine	3	473
Laramie (?) Formation:		
Shale, gray	38	511
C5-68-20cbdd. Alt. 5,335.3 ft.		
Post-Piney Creek alluvium:		
Soil	3	3
Louviers Alluvium:		
Clay, light-brown	3	6
Sand and gravel	5	11
Clay, gray	1	12
Sand and gravel	9	21
Sand and clay lenses	9	30
Sand	4	34
Sand, gravel, and clay lenses	9	43
Gravel and boulders	4	47
Dawson (?) Formation:		
Shale (?) at 47 feet		
C5-68-21abad. Alt. 5,451 ft.		
Eolian sand:		
Soil	2	2
Clay, yellow	20	22
Dawson Formation (upper part):		
Sandstone, brown	3	25
Clay, brown and yellow	35	60
Shale, blue, gray, and brown	92	152
Sandstone, gray	19	171
Shale, gray and brown	23	194
Shale, gray, and sandstone	14	208
Shale, gray	29	237
Shale, gray, and sandstone	6	243
Shale, gray	56	299
Sand; contains layers of gray shale [Upper conglomerate, 299 to 396 feet.]	19	318
Shale, gray	69	387
Coal	3	390
Shale, gray	58	448
Shale, gray, and fine sand	16	464
Shale, gray	4	468
Lime	1	469
Sand	8	477
Shale, gray	23	500
Lime, sandy	1	501
Dawson Formation (lower part):		
Shale, gray [Middle conglomerate, 546 to 610 feet.]	63	564
Shale, sandy, gray	31	595
Sand, fine	12	607
Shale, gray	13	620
Sand; contains layers of gray shale	15	635
Shale, gray	14	649
Sand	15	664
Shale, gray	18	682
Sand; contains layers of gray shale	16	698
Shale, gray	14	712
C5-68-21abad.--Continued		
Sand; contains layers of gray shale	19	731
Sand	17	748
Shale, gray	29	777
Sand; contains layers of gray shale	12	789
Shale, gray	8	797
Shale, sandy, gray	4	801
Laramie Formation:		
Shale, gray	80	881
Sand	6	887
Shale, gray	152	1,039
Lime	2	1,041
Shale, gray, and mudstone	117	1,158
Coal; contains layers of gray shale	37	1,195
Shale, gray	26	1,221
Coal; contains layers of gray shale	56	1,277
Shale, gray	93	1,370
Sand, fine [B sandstone, 1,370 to 1,464 feet.]	94	1,464
Coal and gray shale	31	1,495
Sand, fine [A sandstone, 1,495 to 1,612 feet.]	117	1,612
Coal and gray shale	21	1,633
Shale, gray	47	1,680
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sand; contains layers of shale	35	1,715
Transition zone:		
Shale, gray	82	1,797
Sand, fine, and gray shale	11	1,808
Shale, gray	18	1,826
C5-68-24ddab. Alt. 5,630 ft.		
Younger loess and Dawson Formation, undifferentiated:		
Clay, andesitic, brown, tan	85	85
Dawson Formation (upper part):		
Sand, coarse, and gray and tan clay	10	95
Clay, gray and tan; contains some coarse sand	10	105
Clay, gray with brownish cast	40	145
Clay, greenish-gray and tan	90	235
Clay, gray-green and tan; contains some gravel	10	245
Clay, gray-green; contains some sand	45	290
Clay, gray-green; contains some gravel	10	300
Sand, fairly hard, gray, and some gray clay	40	340
Clay, brown	30	370
Gravel	10	380
Clay, gray	110	490
Clay, green and gray, and some gravel	10	500
Clay, brown	10	510
Sand, white, and gravel	10	520
Clay, brown	10	530
Sand and clay	10	540
Clay, gray	50	590
Sand and clay	20	610
Sand, coarse	10	620
Gravel	10	630
Clay, gray, and some gravel	110	740
Dawson Formation (lower part):		
Sand [Middle conglomerate, 740 to 997 feet.]	10	750
Sand, coarse	6	756
Clay, gray, and some sand and gravel	34	790
Gravel, fine	20	810
Gravel, coarse	15	825
Gravel and clay	10	835
Sand, coarse, and clay	10	845
Gravel	60	905
Sand, medium, and some gray clay	30	935
Gravel	32	967
Sand, coarse, and some gray clay	30	997
Clay, gray	10	1,007
Clay, gray, and some gravel	10	1,017

Table 1.--Logs of wells and test holes--Continued

	Thickness	Depth
C5-68-14ddab.--Continued		
Clay, sticky, gray	52	1,069
Clay, sticky, gray; contains some sand	31	1,100
Clay, sticky, ashy, gray	40	1,140
Clay, gray, and fine sand	10	1,150
Lower conglomerate:		
Sand, coarse	10	1,160
Clay, gray; contains some fine sand	32	1,192
Clay, gray	28	1,220
Clay, gray; contains fine sand	10	1,230
Gravel	23	1,253
Clay, gray, sand, and gravel	20	1,273
Clay, gray	21	1,294
Sand, coarse	39	1,333
Shale, gray, and coarse sand	22	1,355
Clay, gray, and coarse clean sand	18	1,373
Shale, gray	47	1,420
Sand, fine	18	1,438
Shale, gray	12	1,450
C5-68-27dccd. Alt. 5,610 ft.		
Younger loess:		
Soil	2	2
Clay, sandy, yellow	11	13
Dawson Formation (upper part):		
Clay, yellow and brown	45	58
Sandstone, blue	2	60
Sandstone, gray	18	78
Shale, gray	16	94
Sandstone, gray	8	102
Shale, gray	56	158
Shale, brown	6	164
Sandstone, gray	7	171
Shale, blue	7	178
Shale, brown	4	182
Sandstone, gray	6	188
Shale, gray	9	197
Shale, blue	4	201
Sandstone, blue	6	207
Shale, sandy, gray	5	212
Shale, gray	5	217
Shale, blue	4	221
Shale, gray	29	250
Sandstone, gray	5	255
Shale, gray	41	296
Sand	9	305
Shale, gray	36	341
Shale, blue	5	346
Shale, gray	56	402
Sandstone, gray, and gray shale	8	410
Dawson Formation (lower part):		
Shale, gray [Middle conglomerate, 482 to 628 feet.]	84	494
Sand	13	507
Shale, gray	71	578
Sand	8	586
Shale, gray	12	598
Sand	14	612
Shale, gray	3	615
Sand	13	628
Shale, gray	37	665
Sand	5	670
Shale, gray	18	688
Lower conglomerate:		
Sand	13	701
Shale, gray	16	717
Sand	12	729
Shale, gray	12	741
Sand	15	756
Shale, gray	4	760
Sand and gray shale	31	791
Shale, gray	32	823
Sand	8	831
Shale, gray	3	834
Sand	8	842
Sand and gray shale	18	860
Shale, gray	26	886
Sand, fine	18	904
Shale, gray	4	908
Sand, fine	6	914
Shale, gray	76	990
Sand, fine	26	1,016
Laramie Formation [top at 1,066 feet.]:		
Shale, gray	207	1,223
Shale, gray, and fine sand	10	1,233
Shale, gray	6	1,239
Shale, hard, gray	2	1,241
Shale, gray	87	1,328
Limestone	2	1,330

	Thickness	Depth
C5-68-27dccd.--Continued		
Shale, sandy, fine	2	1,332
Shale, gray	151	1,483
Coal	7	1,490
Shale, gray	41	1,531
Coal	12	1,543
Shale, gray	23	1,566
Sand [B sandstone, 1,566 to 1,647 feet.]	14	1,580
Shale, gray	2	1,582
Sand	3	1,585
Shale, gray	1	1,586
Sand	23	1,609
Shale, gray	6	1,615
Sand	31	1,646
Shale, hard, gray	2	1,648
Sand [A sandstone, 1,650 to 1,703 feet.]	76	1,724
Fox Hills Sandstone:		
Sand [Milliken Sandstone Member, 1,709 to 1,776 feet]	8	1,732
Sand; contains layers of gray shale	10	1,742
Sand	34	1,776
Transition zone:		
Shale, gray; contains layers of sand	7	1,783
Shale, gray	6	1,789
Shale, gray; contains layers of sand	2	1,791
Shale, gray	13	1,804
Shale, gray; contains layers of sand	4	1,808
Shale, gray	21	1,829
Shale, gray; contains layers of fine sand	11	1,840
Sand, fine	24	1,864
Shale, gray	46	1,910
C5-68-31aabb. Alt. 5,358 ft.		
Post-Piney Creek alluvium:		
Soil	4	4
Louviers Alluvium:		
Sand and gravel; contains streaks of clay	52	56
Dawson Formation:		
Shale at 56 feet		
C5-68-31abba. Alt. 5,378 ft.		
No sample	48	48
Dawson Formation (upper part):		
Clay, yellow	14	62
Sandstone, blue	3	65
Shale, blue and gray	117	182
Dawson Formation (lower part):		
Sand, fine [Middle conglomerate, 182 to 206 feet.]	24	206
Shale, gray	107	313
Lower conglomerate:		
Sand, fine	8	321
Shale, gray	6	327
Shale, gray, and fine sand	8	335
Shale, gray	24	359
Lime, sandy	1	360
Shale, gray, and fine sand	92	452
C5-68-31adad. Alt. 5,360.9 ft.		
Post-Piney Creek alluvium:		
Soil	4	4
Louviers Alluvium:		
Silt	17	21
Gravel and rocks	14	35
Boulders	2	37
Dawson Formation (upper part):		
Shale	2	39
C5-68-32ccba. Alt. 5,372.2 ft.		
Piney Creek Alluvium:		
Topsoil	4	4
Broadway Alluvium:		
Sand and gravel	7	11
Louviers Alluvium:		
Clay, blue	4	15
Sand and gravel	8	23
Dawson Formation:		
Shale at 23 feet		
C5-69-2bacc. Alt. 5,500 ft.		
Overburden	54	54
Dawson Formation (upper part):		
Clay, blue	81	135
Coal	2	137
Clay and shale	24	161

	Thickness	Depth
C5-69-2bacc.--Continued		
Sandstone	23	184
Clay and shale	61	245
Dawson Formation (lower part):		
Sand [Middle conglomerate, 245 to 375 feet.]	5	250
Clay	15	265
Shale, sandy	24	289
Clay and shale	81	370
Sand	5	375
Shale, sandy, hard	54	429
Sandstone, hard	56	485
Shale and clay	41	526
Lower conglomerate:		
Sand	10	536
Clay	9	545
Sand	5	550
Clay	10	560
Sand	4	564
Shale	31	595
Sand	6	601
Clay and shale	9	610
Sand	15	625
Laramie Formation:		
Clay and shale	290	915
C5-69-5bbab. Alt. 5,503.7 ft.		
Piney Creek Alluvium:		
Sand, very fine, silty; contains about 50 percent fine to very coarse, arkosic, subrounded to well rounded gravel and small cobbles	5	5
Louviers Alluvium:		
Silt, sandy, calcareous, plastic, olive-gray; contains fine sand	3	8
Silt, sandy and gravelly, calcareous, olive-gray	2	10
Gravel, medium to coarse, arkosic, subrounded to well-rounded; contains cobbles and boulders	4	14
Silt, sandy, very calcareous, moderate-yellowish-brown; contains some montmorillonite	3.5	17.5
Sand, medium to very coarse, arkosic, subrounded to subangular, and about 20 percent very fine gravel	4.5	22
Laramie Formation:		
Shale, silty, sandy, pale-greenish-yellow, noncalcareous; contains small ironstones and montmorillonite	.5	22.5
C5-69-5bbac. Alt. 5,504.8 ft.		
Piney Creek Alluvium:		
Silt, sandy and clayey, finely micaceous, pale-yellowish-brown	7.5	7.5
Louviers Alluvium:		
Gravel, medium to coarse, angular to well-rounded, arkosic, cobbles, and boulders; contains lenses of sand and clay	6.5	14
Silt, sandy, slightly calcareous, grayish-orange; contains some medium to coarse gravel	4	18
Silt, slightly sandy, noncalcareous, pale-olive and dusky-yellow	2	20
Silt, sandy and gravelly, very calcareous, dark-greenish-gray; contains montmorillonite	2.5	22.5
Transition zone:		
Shale, silty, sandy, dark-yellowish-brown, at 22.5 feet		

	Thickness	Depth
C5-69-5bbac2. Alt. 5,506.5 ft.		
Piney Creek Alluvium:		
Clay, plastic, sandy, tan; contains gravel	2.5	2.5
Louviers Alluvium:		
Sand, poorly sorted, micaceous, silty, calcareous, and well rounded very coarse gravel	1.5	4
Silt, gravelly, calcareous, micaceous, dark-yellowish-brown; contains cobbles	9.5	13.5
Cobbles and boulders, mixed with fine to coarse gravel; contains layer of sandy, pale-yellowish-brown, noncalcareous silt between 14.0 and 15.0 feet	3	16.5
Clay, silty; contains fine to medium gravel	1	17.5
Sand, coarse to very coarse, arkosic, subangular to subrounded, fairly well-sorted	5	22.5
Transition zone:		
Shale, silty, gravelly, calcareous, micaceous, light-olive-gray; contains montmorillonite	7.5	30
C5-69-5bbdb. Alt. 5,508.1 ft.		
Piney Creek Alluvium:		
Silt, sandy and gravelly, very calcareous, micaceous, grayish-orange	3	3
Louviers Alluvium:		
Cobbles	2	5
Silt, sandy and gravelly, micaceous, calcareous, dark-yellowish-brown	11	16
Cobbles and boulders	1.5	17.5
Silt, sandy, dark-yellowish-brown and pale-yellowish-brown; contains cobbles and medium to coarse sand	7.5	25
Gravel, fine, arkosic	10	35
Sand, fine to coarse, bluish; contains clay	4	39
Transition zone:		
Shale, calcareous, light-olive-gray; contains montmorillonite	1	40
C5-69-5bbdc. Alt. 5,510.6 ft.		
Piney Creek Alluvium:		
Loam, very sandy, loose, red-brown	2.5	2.5
Silt, sandy, micaceous, moderate-yellowish-brown	5	7.5
Louviers Alluvium:		
Gravel, medium to coarse, rounded	2.5	10
Silt, very sandy, micaceous, moderate-yellowish-brown	4	14
Gravel, coarse to very coarse, well-rounded, arkosic	1	15
Sand, coarse to very coarse, arkosic, subangular to subrounded, and some grayish-orange silt; contains some fine gravel	4	19
Cobbles	2	21
Gravel, fine, and coarse to very coarse sand; contains some grayish-orange silt	11.5	32.5
Transition zone:		
Silt, very calcareous, micaceous, pale-yellowish-brown, and fine to medium sand	5	37.5
C5-69-5bbdc.--Continued		
Shale, silty, gravelly, light-olive-gray; contains some montmorillonite	5	42.5
C5-69-5bdbb. Alt. 5,502.1 ft.		
Piney Creek Alluvium:		
Silt, sandy, micaceous, dark-yellowish-brown	1	1
Silt, sandy, very micaceous, moderate-brown to dark-yellowish-brown; becomes slightly calcareous between 4.0 to 7.0 feet	6	7
Louviers Alluvium:		
Sand, very fine to fine, micaceous, very silty, dark-yellowish-orange and dark-yellowish-brown; contains cobbles from 10 to 18 feet	11	18
Transition zone:		
Shale, clay, slightly calcareous, micaceous; contains limonite-stained silt	4.5	22.5
C5-69-5dcdc. Alt. 5,670.3 ft.		
Piney Creek Alluvium:		
Silt, sandy, micaceous, calcareous, pale-yellowish-brown	3	3
Shale, silty, micaceous, compact, platy, dusky-yellow	9.5	12.5
Transition zone:		
Shale, silty, very calcareous, dusky-yellow; contains montmorillonite; at 12.5 feet		
C5-69-6aaad2. Alt. 5,560 ft.		
Piney Creek Alluvium:		
Silt, sandy, micaceous, dark-yellowish-brown and dusky-yellow	7.5	7.5
Louviers Alluvium:		
Gravel, very fine to medium, mostly medium, subrounded to well-rounded, arkosic; contains small cobbles, sand, and some dusky-yellow silt	5	12.5
Sand, medium to very coarse, arkosic, subangular to subrounded, very fine gravel, and about 20 percent pale-olive, very micaceous silt	5	17.5
Silt, sandy, very micaceous, pale-olive; contains montmorillonite	10	27.5
Gravel, very fine, compacted and weakly cemented, subangular to well-rounded, arkosic, and about 40 percent pale-green slightly calcareous very micaceous silt	5	32.5
Transition zone:		
Shale, silty, greenish-gray and pale-yellowish-brown to 58.5 feet, light-olive-gray from 58.5 to 73.0 feet; contains montmorillonite	40.5	73
C5-69-6aaaa. Alt. 5,617.5 ft.		
Piney Creek Alluvium:		
Silt, clayey, very sandy, very calcareous, dusky-yellow; contains montmorillonite	3	3
C5-69-8aaaa.--Continued		
Laramie Formation:		
Shale, silty, sandy, very micaceous, dark-yellowish-brown	2	5
C5-69-8aaab. Alt. 5,630.3 ft.		
Piney Creek Alluvium:		
Silt, dark-yellowish-brown; contains arkosic very fine sand and a little gravel	4	4
Slocum Alluvium:		
Silt, sandy, very micaceous, very calcareous, grayish-orange	4.5	8.5
Sand, very fine to fine, silty, grayish-orange-pink, and scattered angular gravel	2.5	11
Sand, fine to very coarse, arkosic, poorly sorted, subrounded to rounded, and about 40 percent medium to coarse gravel	1.5	12.5
Gravel, very fine to medium, subrounded to rounded, arkosic, and about 20 percent coarse sand	2.5	15
Gravel, very fine to coarse, angular to subrounded, arkosic, and about 30 percent very coarse sand; contains grayish-orange-pink silt	2.5	17.5
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone and very fine silty sand in alternately hard and soft layers	24.5	42
Sand, very coarse, very well-sorted, subangular to subrounded, moderately cemented	10.5	52.5
Shale, silty, micaceous, slightly sandy, noncalcareous, medium-light-gray; contains montmorillonite at 52.5 feet		
C5-69-8aaba. Alt. 5,636.0 ft.		
Piney Creek Alluvium:		
Silt, clayey and sandy, slightly calcareous, dark-yellowish-brown	4	4
Slocum Alluvium:		
Sand, fine to medium, arkosic, angular to subrounded, silty, micaceous, grayish-orange-pink and about 10 percent very fine gravel	5.5	9.5
Gravel, fine to medium, angular to subrounded, and medium to very coarse red sand	1.5	11
Silt, very sandy and clayey, grayish-orange-pink	2	13
Gravel, very fine to medium, hard, subangular to well-rounded, arkosic; contains about 10 percent very coarse sand and numerous gray-white and very-pale-orange fragments of limestone	10	23
Transition zone:		
Shale, silty, finely micaceous, sandy; contains much limonite	4.5	27.5
C5-69-8abaa. Alt. 5,646.9 ft.		
Louviers Alluvium:		
Silt, very calcareous, grayish-yellow	7.5	7.5

	Thickness	Depth
C5-69-8abaa.--Continued		
Gravel, medium, arkosic, subrounded to well-rounded.	4.5	12
Slocum Alluvium:		
Sand, medium to very coarse, subangular to rounded, and very fine to fine gravel; has overall reddish hue.	1.5	13.5
Gravel, cemented, very hard, at 13.5 feet		
C5-69-8abab. Alt. 5,658.0 ft.		
Piney Creek Alluvium:		
Sand, very fine to medium, arkosic, angular to subangular, silty, very calcareous, pale-yellowish-brown.	2.5	2.5
Silt, sandy, very calcareous, dusky-yellow	15.5	18
Slocum Alluvium:		
Gravel, very fine to medium, subangular to subrounded, cemented, moderate-yellowish-brown, very calcareous, arkosic: contains iron-oxide concretions; some particles are weathered and break rather easily.	10	28
C5-69-8abbb. Alt. 5,711.6 ft.		
Slocum Alluvium:		
Loam, sandy and gravelly, very calcareous; contains poorly sorted sand, very fine to fine gravel, and pale-yellowish-brown silt	2	2
Silt, very calcareous; very fine to medium gravel, and very fine to very coarse sand.	6.5	8.5
Transition zone:		
Shale, silty, calcareous, dusky-yellow.	3	11.5
C5-69-8abcc. Alt. 5,662.1 ft.		
Piney Creek Alluvium:		
Silt, micaceous, very calcareous, light-brown.	6	6
Louviers Alluvium:		
Silt, sandy, micaceous, grayish-orange; contains montmorillonite; cobbles at 6 feet	4	10
Sand, coarse to very coarse, subangular to subrounded, arkosic: contains about 10 percent very fine to fine gravel	2.5	12.5
Cobbles and gravel	10	22.5
Slocum Alluvium:		
Conglomerate, sandy and gravelly, arkosic, cemented; contains subangular to subrounded very coarse sand and very fine gravel	1	23.5
C5-69-8abcd2. Alt. 5,650 ft.		
Piney Creek and Slocum Alluvium, undifferentiated:		
No sample.	20	20
Pierre Shale:		
Shale.	25	45
Shale; contains streaks of rock.	55	100
C5-69-9bbbb. Alt. 5,640 ft.		
Piney Creek and Louviers Alluvium, undifferentiated:		
Sand and boulders.	40	40
Laramie Formation:		
Shale.	30	70
Sandrock	12	82
Shale.	18	100
8 sandstone:		
Sandrock	60	160

	Thickness	Depth
C5-69-9ddcc. Alt. 5,680 ft.		
Slocum Alluvium:		
Soil.	6	6
Clay, yellow.	19	25
Dawson Formation (lower part):		
Clay, sandy, brown [Middle conglomerate, 25 to 53 feet.].	14	39
Limestone	1	40
Conglomerate.	13	53
Shale, gray and blue.	70	123
Lower conglomerate:		
Sandstone	3	126
Shale, gray	4	130
Sandstone	12	142
Shale, blue	17	159
Conglomerate.	20	179
Sand; contains layers of shale.	67	246
C5-69-11abbb. Alt. 5,564 ft.		
No sample	185	185
Dawson Formation (upper part):		
Shale, gray	40	225
Dawson Formation (lower part):		
Sand, fine, dirty [Middle conglomerate, 225 to 350 feet.].	25	250
Shale, gray	5	255
Sandstone, dirty.	10	265
Shale, gray	40	305
Sand, fine.	20	325
Shale, gray	20	345
Sand.	5	350
Shale, blue	5	355
Sandstone	45	400
Shale, blue	30	430
Lower conglomerate:		
Sand, coarse.	55	485
C5-69-11acbc. Alt. 5,532 ft.		
Piney Creek Alluvium:		
Clay, sandy, brown.	12	12
Slocum Alluvium:		
Gravel, fine, and sand.	31	43
C5-69-16aaaa. Alt. 5,665 ft.		
Slocum Alluvium:		
Clay.	33	33
Dawson Formation (lower part):		
Sandstone and clay.	129	162
Lower conglomerate:		
Gravel.	10	172
Clay and shale.	28	200
Sandrock and clay	57	257
C5-69-18baaa. Alt. 5,798 ft.		
Benton Shale:		
Soil.	2	2
Clay, sandy, red.	4	6
Sand, red	2	8
Bentonite	8	16
Shale, gray	55	71
Bentonite	1	72
Shale, gray	60	132
Bentonite	1	133
Shale, gray	36	169
Bentonite	1	170
Shale, gray	102	272
Bentonite	1	273
Shale, gray	197	470
Dakota Group:		
South Platte Formation:		
Sand.	27	497
Shale, gray	18	515
Sand.	83	598
C5-69-18bbcc. Alt. 5,865.0 ft.		
Piney Creek Alluvium:		
Soil.	2	2
Clay, sandy, red.	7	9
Lykins Formation:		
Sand, red	9	18
Shale, red.	117	135
Shale, red, and bentonite	157	292
Lime.	21	313
Shale, red.	32	345
Lime.	5	350
Shale, red.	50	400
Lime.	2	402
Shale, red, and lime.	19	421
Lyons Sandstone:		
Sandstone, hard	17	438
Sand, fine, yellow.	14	452
Sand, fine, pink.	28	480
Lime, pink.	12	492

	Thickness	Depth
C5-69-18bbcc.--Continued		
Sand	38	530
Sand, fine	119	649
Lime	5	654
Sand	27	681
Lime, sandy.	8	689
Sand	211	900
C5-69-18dccb. Alt. 5,934.8 ft.		
Benton Shale:		
Clay, brown and yellow	48	48
Shale, hard, gray.	58	106
Clay and gray sticky shale.	84	190
Shale, hard, gray.	52	242
Dakota Group:		
South Platte Formation:		
Sandstone, soft (water-bearing)	9	251
Shale, hard, gray.	40	291
Flintstone, very hard.	12	303
Sandstone (water-bearing)	54	357
Shale, hard, gray.	3	360
C5-69-21abaa. Alt. 5,715 ft.		
Laramie Formation:		
Topsoil and clay	9	9
Shale.	256	265
Sand, very fine, silty	50	315
C5-69-22aabb. Alt. 5,580 ft.		
Piney Creek Alluvium:		
Topsoil and clay	22	22
Dawson Formation (upper part):		
Clay, blue; has brown streaks.	32	54
Shale, blue, and clay.	24	78
Sandrock, hard	9	87
Clay and shale; blue-gray	37	124
Shale, blue.	4	128
Clay and shale; blue-gray	7	135
Shale, blue.	7	142
Clay and shale, blue.	42	184
Dawson Formation (lower part):		
Sandstone, fine-grained [Middle conglomerate, 184 to 260 feet.].	9	193
Clay, blue-gray.	41	234
Rock, hard, brown.	1	235
Shale and clay, blue-gray	16	251
Shale, sandy, blue, and sandrock	9	260
Clay, gray	14	274
Rock, hard, blue	1	275
Clay and shale; blue-gray	41	316
Rock, hard, brown.	1	317
Clay and shale; blue-gray	8	325
Limestone.	1	326
Shale and clay; sandy.	16	342
Rock, hard, brown.	3	345
Shale, sandy	5	350
Lower conglomerate:		
Sandstone, fine-grained.	18	368
Clay and shale; gray	37	405
C5-69-22abaa. Alt. 5,592 ft.		
Younger loess:		
Clay, yellow	14	14
Dawson Formation (upper part):		
Clay, gray	5	19
Clay, yellow and gray.	7	26
Clay, gray	4	30
Clay, yellow and gray.	33	63
Clay, blue	17	80
Sandstone.	6	86
Shale, blue.	6	92
Clay, blue	6	98
Shale, dark-blue	5	103
Clay, light-blue	26	129
Shale, gray.	16	145
Shale, dark-blue	3	148
Pyrite, iron	1	149
Shale, blue.	6	155
Clay, blue-gray.	19	174
Dawson Formation (lower part):		
Sandrock [Middle conglomerate, 174 to 271 feet.](faulted).	2	176
Sand, fine	11	187
Shale, blue.	5	192
Limerock, soft	4	196

	Thickness	Depth
CS-69-22abaa.--Continued		
Clay, blue.	9	205
Shale, blue	11	216
Sandrock.	2	218
Sand.	2	220
Shale, rough, blue.	14	234
Clay, dark-gray	5	239
Coal.	1	240
Shale, blue	2	242
Clay, dark-gray	4	246
Shale, blue	4	250
Sand, fine.	21	271
Shale, hard, gray	13	284
Clay, blue-gray	14	298
Shale, blue	9	107
Clay, blue-gray	15	122
Clay, brownish-blue	8	130
Shale, sandy, dark-blue	8	138
Sandrock, light-blue.	6	144
Limestone, soft, brown.	3	147
Lower conglomerate (faulted):		
Sand (water-bearing).	19	166
Shale, blue	5	171
Clay, blue-gray	4	175
Shale, blue	21	196
Sand.	2	198
Laramie Formation:		
Shale, blue, and clay	62	460
CS-69-22abba. Alt. 5,603 ft.		
No sample	187	187
Dawson Formation and Laramie Formation (upper part), undifferentiated (faulted):		
Shale, sandy.	19	206
Rock.	4	210
Shale, blue	16	226
Sandstone	2	228
Shale, blue	12	240
Sandstone	5	245
Shale, green.	5	250
Limestone	3	253
Shale, blue	7	260
Coal.	2	262
Shale, brown.	11	273
Sand, "sugar"	2	275
Shale, green.	5	280
Sandstone	5	285
Shale	19	304
Sandstone	1	305
Shale	35	340
Sandstone	2	342
Shale, blue	6	348
Sandstone	2	350
Shale, sandy.	18	368
Coal.	2	370
Sand, "sugar"	3	373
Coal.	5	378
Shale, gray	5	383
Sand, "sugar"	3	386
Shale, sandy.	14	400
Rock.	2	402
CS-69-22baaa. Alt. 5,620 ft.		
Younger loess:		
Soil.	5	5
Dawson Formation (upper part):		
Clay.	25	30
Shale, gray	3	33
Sand.	2	35
Shale, gray and brown	20	55
Clay, sandy	8	63
Sand.	3	66
Shale	7	73
Rock.	2	75
Shale, sandy, gray.	10	85
Shale, gray	3	88
Coal.	1	89
Shale, gray	3	92
Shale, gray, and coal	5	97
Shale, sandy, gray.	1	98
Sandstone	1	99
Coal.	1	100
Shale, gray	10	110
Shale, gray, and coal	5	115
Shale, gray	4	119
Rock.	1	120
Shale, sandy, gray.	5	125
Shale, gray	5	130
Shale, gray, and sand	6	136
Shale, gray	6	142
Rock.	1	143
Coal and rock	3	146
Shale, gray	5	151
Rock, sandy	2	153
Shale, hard, gray	5	158
Shale, gray, and coal	2	160
Shale, gray	3	163
Shale, gray, and sand	1	164
Shale, gray	16	180
Shale, gray, hard	20	200
Shale, gray	3	203
Shale, sandy, brown	1	204

	Thickness	Depth
CS-69-22baaa.--Continued		
Shale, gray	6	210
Shale, gray, and rocks	3	213
Shale, hard, gray	8	221
Shale, sandy, gray.	4	225
Rock.	1	226
Shale, sandy, and rock.	4	230
Dawson Formation (lower part):		
Sand, shale, and rock [Middle conglomerate, 230 to 289 feet.].	12	242
Sand.	1	243
Sand, shale, and rock.	7	250
Sand and shale.	11	261
Sand, shale, and rock.	11	265
Shale, gray	2	267
Sand, shale, and rock.	3	270
Shale, hard, gray	10	280
Shale, sandy, gray, and rock.	4	284
Sand.	1	285
Shale, sandy.	3	288
Sand.	1	289
Shale, sandy, hard.	21	310
Shale, blue	5	315
Sand, crusted	4	319
Shale	5	324
Sand.	2	326
Shale, sandy.	14	340
Shale, sandy, hard.	3	343
Shale, blue	1	344
Sand, crusted	2	346
Shale, sandy, and crusted sand.	4	350
Shale, blue	4	354
Lower conglomerate:		
Sand.	6	360
Shale, blue	5	365
Sand.	5	370
Shale, gray	8	378
Sand.	2	380
Shale, gray	3	383
Sand.	4	387
Shale, gray	4	391
Sand.	1	392
Laramie Formation (upper part):		
Shale, gray and blue.	16	408
Rock.	2	410
CS-69-22ccac. Alt. 5,670 ft.		
Slocum Alluvium:		
Clay, yellow.	6	6
Sand.	5	11
Dawson Formation (lower part):		
Clay, yellow.	13	24
Sand, fine.	6	30
"Bentonite"	9	39
Shale, gray and blue.	20	59
Sand (water-bearing).	8	67
Clay, yellow.	2	69
Laramie Formation (upper part):		
Shale, blue	39	108
CS-69-24abab. Alt. 5,490 ft.		
Slocum Alluvium:		
Topsoil	3	3
Clay, gray.	16	19
Clay, sandy, yellow	3	22
Dawson Formation (upper part):		
Clay, gray.	17	39
Shale, gray	58	97
Dawson Formation (lower part):		
Sand [Middle conglomerate, 97 to 204 feet.].	10	107
Shale, gray	22	129
Shale, sandy, gray, and thin beds of sand.	7	136
Shale, blue and gray, and thin beds of sand.	7	143
Sandstone, gray	11	154
Shale, gray	3	157
Sand, coarse, and gray shale	11	168
Shale, gray	6	174
Shale, sandy, gray.	3	177
Sand and gray shale	11	188
Sandstone, gray, and sand.	16	204
Shale, gray	14	218

	Thickness	Depth
CS-69-24abab.--Continued		
Sandstone, gray.	3	221
Shale, sandy, gray	5	226
Shale, gray.	22	248
Shale, sandy, gray	5	253
Shale, gray.	5	258
Shale, sandy, gray	5	263
Lower conglomerate:		
Sand, coarse, and gray shale	9	272
Shale, sandy, gray	6	278
Coal and gray sandy shale.	5	283
Shale, sandy, brown.	3	286
Sand and gray shale.	9	295
Sand, fine, gray	16	311
Shale, sandy, brown.	6	317
Sand and gray sandy shale.	58	375
Lime, sandy.	4	379
Shale, sandy, brown and gray	21	400
Sand and gray shale.	10	410
Shale, gray.	21	431
Sand, fine, and gray sandy shale.	19	450
Shale, gray.	23	473
CS-69-25aaac. Alt. 5,450 ft.		
Slocum Alluvium:		
Soil	6	6
Sand	4	10
Dawson (?) Formation (upper part):		
Clay	5	15
Dawson Formation (lower part):		
Sand [Middle conglomerate, 16 to 156 feet.]	30	45
Clay	10	55
Shale, blue.	5	60
Shale, green	10	70
Shale, blue.	10	80
Shale, gray.	10	90
Shale, blue.	20	110
Shale, gray.	9	119
Rock	1	120
Shale, blue.	10	130
Coal	3	133
Rock	2	135
Shale, gray.	14	149
Sand, fine	1	150
Shale, gray.	20	170
Shale, blue.	10	180
Shale, sandy, gray	10	190
Sandstone.	2	192
Shale, gray.	3	195
Shale, blue.	5	200
Shale, sandy, gray	10	210
Shale, gray.	5	215
Lower conglomerate:		
Sand	2	217
Shale, gray.	10	227
Sand	3	230
Rock	2	232
Shale, gray.	2	234
Sand	1	235
Shale, brown	5	240
Shale, blue.	10	250
Shale, gray.	15	265
Sand, fine	5	270
Shale, gray.	20	290
Rock	2	292
Shale, gray.	3	295
Shale, blue.	5	300
Shale, blue.	80	380
Sandstone.	12	392
Shale, blue.	2	394
Coal	6	400
Shale, sandy, gray	10	410
Shale, blue.	10	420
Shale, gray.	10	430
Shale, brown	4	434
Sand	5	439
Shale, blue.	1	440
Shale, sandy	5	445
Shale, blue.	5	450
Sand	8	458
Shale, gray.	2	460
Sandstone.	5	465
Shale, sandy, gray	5	470
Sand, cemented	1	471
Shale, gray.	4	475
Shale, sandy	1	476
Shale, blue.	8	484
Sand, fine	16	500
Laramie Formation:		
Shale, gray.	10	510
Shale, blue.	10	520
Shale, gray.	10	530
Coal	2	532
Shale, blue.	8	540
Rock	1	541

Table 3.--Logs of wells and test holes--Continued

	Thickness	Depth
C5-69-25aaac.--Continued		
Shale, sandy	25	566
Sand	2	568
Shale, gray	4	572
Coal	1	573
Shale, brown	2	575
Coal	1	576
Shale, blue	2	578
Sand	1	579
Shale, gray	3	582
Sand	3	585
Shale, blue	15	600
Shale, gray	6	606
Shale, blue	10	616
Sandstone	4	620
Shale, blue	10	630
Sandstone, porous	5	635
Shale, blue	2	637
Sandstone	3	640
Shale, blue	8	648
Coal	2	650
Shale, gray	10	660
Shale, sandy	15	675
Sandstone	5	680
Shale, blue	20	700
Coal	3	703
Shale, gray	162	865
Limestone	2	867
Shale, gray	21	888
Sand, fine, and gray shale	10	898
Shale, gray	26	924
Coal and gray shale	38	962
Limestone	4	966
Coal and gray shale	112	1,078
B and A sandstones, undifferentiated:		
Sand, fine, and gray shale	134	1,212
Coal and gray shale	126	1,338
Fox Hills Sandstone:		
Milliken Sandstone Member (repeated by faulting):		
Sand, fine, and gray shale	31	1,369
Shale, gray	97	1,466
Sand, fine, and gray shale	73	1,539
Shale, gray	31	1,570
C5-69-26bbbb. Alt. 5,540 ft.		
Slocum Alluvium:		
Topsoil	6	6
Sand	24	30
Dawson Formation (upper part):		
Clay	10	40
Shale, brown and blue	60	100
Rock	2	102
Shale, brown, gray, and blue	28	130
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	3	133
Shale, brown and blue	7	140
Sand	10	150
Shale, blue	5	155
Sand	5	160
Rock at 160 feet		
C5-69-27baaa. Alt. 5,615 ft.		
Slocum Alluvium:		
Soil	6	6
Clay	14	20
Dawson Formation (upper and lower parts, undifferentiated):		
Clay, brown and yellow	45	65
Shale, blue	20	85
Sand, cemented	19	104
Shale, blue and gray	36	140
Coal	2	142
Shale, gray and blue	12	154
Sand	8	162
Rock	2	164
Shale, hard, blue	6	170
Shale, gray, and rock	20	190
Shale, gray	5	195
Dawson Formation (lower part) or Laramie Formation (upper part) undifferentiated (faulted):		
Sand, hard	2	197
Sand, coarse	3	200
Rock	2	202
Sand	6	208
Shale, blue	8	216
Limestone	1	217
Shale, blue	1	218
Sand	3	221
Shale, blue	7	228
Sand	2	230
Shale, gray	5	235
Shale and sand	5	240
C5-69-27baaa.--Continued		
Shale, blue	5	245
Sand	5	250
Rock	5	255
Shale, gray and blue	10	265
Shale, sandy, gray	5	270
Sand	3	273
Shale, blue	6	279
Sand and shale	14	293
Coal	2	295
Sand and shale	5	300
Coal	5	305
Sand	5	310
Shale, blue	10	320
Sand	2	322
Coal	3	325
Shale, gray	5	330
Rock	5	335
Sand and shale	5	340
Shale, gray and blue	10	350
Shale, sandy, gray	15	365
Shale, blue	10	375
Sand	2	377
Rock	5	382
Shale and rock	8	390
C5-70-6ccab. Alt. 7,595 ft.		
Precambrian:		
Granite, decomposed	14	14
Granite, rose	12	26
Granite, soft, decomposed	2	28
Granite, rose	8	36
Granite, decomposed, rose	1	37
Granite, broken, rose	31	68
Quartz	17	85
Granite, gray	6	91
Granite, broken, decomposed	4	95
Granite, gray	3	98
Granite, broken, moist	2	100
Granite, gray	10	110
Granite, rose	6	116
Granite, gray	4	120
Sandstone, red	6	126
Sand, red, broken, and quartz (water-bearing)	4	130
Sandstone, red	4	134
Granite, rose, and quartz	7	141
Sandstone, red	4	145
Granite, broken, rose, and quartz	10	155
Quartz, broken	7	162
Granite, gray, and quartz	3	165
Quartz	12	177
Conglomerate, quartz, and granite	10	187
Granite, rose	7	194
Quartz (water-bearing)	6	200
Granite	2	202
C5-70-7bbbd. Alt. 7,450 ft.		
Precambrian (granite):		
Granite, decomposed, rose	6	6
Granite, rose	16	22
Schist and streaks of granite	10	32
Granite, rose	42	74
Granite, gray, and quartz	17	91
Granite, rose	12	103
Granite, gray	6	109
C5-70-11dbcb. Alt. 6,190 ft.		
Fountain Formation:		
Silt, sandy, red, and overburden	20	20
Sandstone, fine- to coarse-grained, firm to hard, tight; contains layers of red, silty shale	630	650
Sandstone, medium-grained, reddish-gray; contains streaks of red, silty shale (water-bearing)	25	675
Precambrian:		
Granite, reddish-gray, and schist	28	703
C5-70-16eccb. Alt. 7,010 ft.		
Colluvium:		
Topsoil and boulders	6	6
C5-70-16eccb.--Continued		
Precambrian:		
Granite, gray, and quartz	8	14
Granite, gray and rose	16	30
Granite, rose	56	86
Schist (yields about 6 gallons per hour)	3	89
Granite, gray	35	124
Granite, rose	3	127
Granite, gray	49	176
Granite, rose	8	184
Granite, gray	48	232
Granite, rose	6	238
Granite, gray, and biotite	30	268
Granite, gray (yields water at 294 feet)	26	294
Granite, gray, and biotite (water-bearing)	19	313
C5-70-17adbd. Alt. 6,960 ft.		
Piney Creek Alluvium:		
Loam and topsoil	10	10
Precambrian:		
Granite, decomposed, and soft rock	46	56
Granite, fairly hard	6	62
C5-70-21acda. Alt. 6,930 ft.		
Overburden	10	10
Precambrian:		
Granite, decomposed	3	13
Granite, rose	27	40
Quartz, moist	10	50
Granite, gray (moist at 57 feet)	15	65
Granite, rose	15	80
Granite, gray	15	95
Quartz and moist rose granite	20	115
Granite, gray	10	125
Granite, rose	30	155
Granite, gray, and broken quartz (water-bearing)	25	180
Granite, rose	15	195
Granite, decomposed, gray	15	210
Granite, rose, and quartz	15	225
Granite, rose (water level rose 50 feet)	20	245
Quartz, white (water-bearing)	25	270
Granite, decomposed, gray	15	285
Quartz (water-bearing)	10	295
Granite, gray	13	308
C5-70-21daac. Alt. 6,840 ft.		
Overburden	15	15
Precambrian:		
Granite, decomposed	35	50
Granite, gray (water-bearing)	2	52
C5-70-22cbbc. Alt. 6,860 ft.		
Piney Creek Alluvium:		
Sand, gravel, and boulders	30	30
Precambrian:		
Granite, decomposed	15	45
Granite	145	190
Granite, decomposed	20	210
C5-70-29dbba. Alt. 7,240 ft.		
Piney Creek Alluvium:		
Soil and clay	5	5
Precambrian (granite):		
Granite, very hard, brown	41	46
C5-70-33daab. Alt. 7,210 ft.		
Colluvium:		
Topsoil and clay	10	10
Gravel and sand (seepage water)	2	12
Precambrian (granite):		
Clay and decomposed rock	18	30
Granite, decomposed, red	11	41
Granite, red (yields 2.5 gpm at upper contact)	10	51
C5-70-34bbad. Alt. 6,990 ft.		
Piney Creek Alluvium:		
Soil and rock	4	4
Gravel, to small boulders	4	8

	Thickness	Depth
C5-70-14bbad.--Continued		
Precambrian (granite):		
Granite, gray	25	33
C5-70-14cbdc2. Alt. 7,135 ft.		
Precambrian:		
Granite, decomposed, and schist.	6	6
Granite, gray	14	20
Schist.	2	22
Granite, rose	5	27
Granite, gray; has soft streaks	32	59
Granite, rose	7	66
Granite, gray; has soft streaks	12	78
Granite, rose	28	106
Granite, gray	6	112
Granite, rose	37	149
Granite, gray	17	166
Granite, rose	4	170
Granite, gray	11	181
Granite, rose	47	228
Granite, gray	87	315
Granite, soft, gray	88	403
Granite, brittle, black and rose; has soft streaks; sloughs in (water-bearing)	30	433
C5-70-14cbdc1. Alt. 7,130 ft.		
Precambrian:		
Granite, decomposed	10	10
Granite, black and rose.	16	26
Schist, moist	5	31
Granite, gray; has soft streaks.	13	44
Granite, rose and gray.	8	52
Granite, gray, and quartz.	24	76
Granite, black; has soft streaks.	14	90
Granite, gray	22	112
Granite, rose (yields water at 124 feet).	21	133
C6-65-4cdcb. Alt. 6,248 ft.		
Dawson Formation (upper part):		
Sandstone	56	56
Shale	52	108
Sandrock.	9	117
Shale	27	144
Sandrock.	44	188
Shale	52	240
Sandstone	21	261
Shale	47	308
Sandstone	9	317
C6-65-6dddd. Alt. 6,100 ft.		
Dawson Formation (upper part):		
Topsoil	5	5
Sandstone, yellow	23	28
Shale, blue	12	40
Sand, blue.	37	77
Gravel, sandy, white.	3	80
Sand.	10	90
Gravel (water).	10	100
Clay.	25	125
Sand (water).	15	140
Shale, blue	10	150
C6-65-9bacb. Alt. 6,215 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, sandy, light-gray.	4	6
Clay, sandy, grayish-green	6	12
Clay, sandy, fine, gray.	14	26
Sand and gray fine sandy clay.	33	59
Ironrock, hard.	1	60
Shale, yellowish-gray.	13	73
Sand, fine and layers of sandy shale.	7	80
Ironrock.	1	81
Shale, light-gray	3	84
Shale, gray	9	93
Shale, sandy, light-gray and sand	6	99
Shale, gray	8	107
Shale, sandy, gray.	13	120
Shale, light-gray	13	133
Shale, sandy, gray.	18	151
Shale, gray	7	158
Shale, sandy, gray.	11	169
Shale, gray	7	176

	Thickness	Depth
C6-65-9bacb.--Continued		
Shale, sandy, and layers of sand.	5	181
Shale, gray	1	182
Sand.	5	187
Shale, gray	8	195
Shale, sandy, gray.	4	199
Shale, gray	13	212
Shale, sandy, blue.	12	224
Coal.	1	225
Shale, gray	6	231
Shale, blue	27	258
Shale, sandy, gray and layers of sand.	12	270
Shale, gray and blue.	13	283
Shale, sandy, blue and layers of sand.	10	293
Shale, blue	18	311
Shale, sandy, blue and layers of sand.	6	317
Shale, dark-gray.	5	322
Shale, gray and blue.	10	332
C6-65-16bcda. Alt. 6,350 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, sandy, brown.	3	5
Sandstone, gray	7	12
Sand.	5	17
Sandstone, gray	12	29
Sand.	28	57
Gravel.	3	60
Sand.	17	77
Clay, sandy, yellow	15	92
Sandstone, gray	4	96
Sand.	2	98
Sandstone, gray	2	100
Shale, blue and gray.	19	119
Sand.	16	135
Shale, gray	27	162
Sand.	10	172
Clay, sandy, yellow	6	178
Sand.	14	192
Clay, sandy, yellow	18	210
Shale, brown.	3	213
Shale, sandy, gray.	10	223
Sand.	10	233
Shale, sandy, gray.	30	263
Sand.	4	267
Shale, gray	37	304
Sand.	22	326
C6-65-18adaa. Alt. 6,295 ft.		
Dawson Formation (upper part):		
Sand, very fine, silty, light-gray	10	10
Sand, very fine to coarse, arkosic, subrounded, silty, light-gray.	10	20
Sand, medium to coarse, arkosic and rounded very fine gravel.	10	30
Gravel, very fine to fine, coated, rounded, arkosic, and coarse to very coarse sand	10	40
Sand, fine to coarse, silty, coated, subrounded, a little clay, and light-gray very fine gravel.	10	50
Sand, very fine to coarse, subrounded, arkosic, silty, yellowish-gray.	40	90
Sand, very fine to fine, silt, and silty clay; brownish-gray.	10	100
Sand, medium to coarse, rounded, coated, arkosic	10	110
Sand, very fine to medium, silty, micaceous, subrounded, greenish-gray	40	150
Sand, coarse, rounded, arkosic; coated with clay binder.	10	160
Sand, fine to medium arkosic, subrounded, slightly micaceous, brownish-gray, and a little coarse sand; grains coated with noncalcareous clay binder.	20	180

	Thickness	Depth
C6-65-18adaa.--Continued		
Sand, fine to coarse, silty, subrounded, arkosic, light-gray	20	200
Sand, fine, silty, micaceous, arkosic, light-olive-gray; contains a little medium sand between 200 and 210 feet and a little clay between 230 and 240 feet	40	240
Sand, fine to coarse, arkosic, subangular to subrounded, silty; grains coated with white kaolinitic clay binder.	20	260
Sand, fine to medium, arkosic, micaceous, silty, firm, light-gray; grains coated with white clay binder	30	290
Clay, red, and about 40 percent fine sand	10	300
Sand, silty.	10	310
Sand, medium to very coarse; subrounded arkosic very fine gravel; and red and orange clay.	10	320
Sand, fine to medium, mostly fine, arkosic, subrounded, and a little light-olive-gray clay.	20	340
Sand, fine to medium, and red and pale-orange clay.	10	350
Sand, fine to very coarse, subrounded to rounded, arkosic, a little silty and rounded very fine gravel; grains are coated with kaolinitic clay	30	380
Sand, fine to very coarse, and rounded very fine gravel, very silty; grains heavily coated	10	390
Sand, fine to coarse, rounded, silty, light-gray	10	400
Sand, fine to medium, rounded, silty and shaly, light-gray.	10	410
C6-65-18cddd. Alt. 6,140 ft.		
Dawson Formation (upper part):		
Clay and shale	53	53
Sandstone.	87	140
Sand (water)	50	190
Shale.	10	200
C6-65-22cccc. Alt. 6,351 ft.		
Dawson Formation (upper part):		
Sand and sandy shale	27	27
Shale.	26	53
Sand and gravel.	32	85
Shale.	20	105
Shale, blue.	5	110
Shale, sandy	25	135
Shale.	15	150
C6-65-27abcc. Alt. 6,324 ft.		
Dawson Formation (upper part):		
Sand	10	10
Shale.	25	35
Sand and gravel.	40	75
Shale.	30	105
Sand	5	110
Shale.	15	125
Shale, blue.	25	150
C6-65-27bcbc. Alt. 6,322 ft.		
Dawson Formation (upper part):		
Sand and gravel.	20	20
Shale.	9	29
Sand and gravel.	46	75
Shale, sandy, gray	80	155
Shale, sandy, blue	25	180
C6-65-27cbcb. Alt. 6,271 ft.		
Dawson Formation (upper part):		
Sand	6	6
Shale, sandy	24	30
Sand and gravel.	16	46
Shale, sandy, blue	50	96

Table 3.--Logs of wells and test holes--Continued

	Thickness	Depth
C6-65-27cbcb.--Continued		
Sand and gravel. . . .	27	123
Shale, blue.	57	180
C6-65-28aaba. Alt. 6,317 ft.		
Dawson Formation (upper part):		
Sand, gravel, and boulders	25	25
Shale.	10	35
Sand, gravel, and sandy shale.	40	75
Sand and gravel. . .	50	125
Shale.	25	150
C6-65-28abba. Alt. 6,399 ft.		
Dawson Formation (upper part):		
Sand and sandy shale .	25	25
Shale.	10	35
Sand, gravel, and sandy shale.	70	105
Shale.	10	115
Sandy shale.	17	132
Shale.	15	147
Shale, sandy	3	150
C6-65-28bbba. Alt. 6,333 ft.		
Piney Creek Alluvium:		
Sand	7	7
Dawson Formation (upper part):		
Shale, sandy	7	14
Sand and gravel. . . .	71	85
Shale, blue.	44	129
Shale, gray.	6	135
C6-65-29abab. Alt. 6,309 ft.		
Dawson Formation (upper part):		
Sand	5	5
Shale.	24	29
Sand and gravel. . . .	31	60
Shale.	35	95
Shale, sandy	60	155
Shale.	10	165
Shale, sandy	7	172
Shale.	8	180
C6-65-29bbaa. Alt. 6,286 ft.		
Piney Creek and Broadway(?) Alluvium, undifferentiated:		
Sand and gravel. . . .	30	30
Dawson Formation (upper part):		
Shale, gray.	30	60
Shale, blue.	25	85
Shale, gray.	15	100
Sand and gravel. . . .	7	107
Shale, gray.	8	115
Shale, blue.	30	145
Shale, gray.	5	150
C6-65-30aabb. Alt. 6,217 ft.		
Dawson Formation (upper part):		
Sand	10	10
Shale, sandy	20	30
Sand and gravel. . . .	40	70
Shale.	15	85
Shale, blue.	15	100
Shale.	20	120
C6-65-32dabd. Alt. 6,418 ft.		
Dawson Formation (upper part):		
Topsoil.	1	1
Clay, sandy, brown . .	2	3
Sandstone, white . . .	2	5
Clay, sandy, gray. . .	8	13
Clay, sandy, brown . .	17	30
Clay, gray	19	49
Clay, sandy, brown and gray	24	73
Sand	18	91
Clay, sandy, gray. . .	47	138
Sand	13	151
Clay, sandy, gray. . .	19	170
Sand and yellow clay .	6	176
Clay, yellow	52	228
Sand	15	243
Sand and yellow, sandy, clay	50	313
Shale, gray.	10	323
C6-65-33dccb. Alt. 6,415 ft.		
Dawson Formation (upper part):		
Topsoil.	4	4
Sand, white and clay .	7	11
Sand, rusty and gravel	17	28
Clay, white.	5	33
Clay, gray	47	80
Clay, sandy, soft. . .	8	88
Sand	5	93
Clay, soft, gray . . .	47	140
Sand	4	144
Clay, gray	43	187
Sand	9	196
Clay, gray	78	274
Sand, coarse, white. .	9	283
Shale, blue.	12	295
C6-65-33dccb.--Continued		
Sand, coarse.	13	308
Shale, blue	3	311
C6-65-33aaaa. Alt. 6,353 ft.		
Dawson Formation (upper part):		
Sand and gravel . . .	75	75
Shale	37	112
Sand and gravel . . .	33	145
Shale, sandy, gray. .	20	165
C6-65-33addd. Alt. 6,387 ft.		
Dawson Formation (upper part):		
Shale	15	15
Sand and gravel . . .	92	107
Shale	23	130
Shale, sandy.	5	135
C6-65-33dddd. Alt. 6,415 ft.		
Dawson Formation (upper part):		
Shale	15	15
Shale, sandy.	10	25
Sand and gravel . . .	70	95
Shale	22	117
Shale, sandy.	3	120
C6-65-34abcc. Alt. 6,276 ft.		
Piney Creek Alluvium:		
Sand.	5	5
Dawson Formation (upper part):		
Shale, sandy, blue. .	15	20
Shale, sandy, gray. .	40	60
Sand and gravel . . .	32	92
Shale, sandy, gray. .	33	125
Sand and gravel . . .	30	155
Shale, sandy, gray. .	10	165
Shale, blue	12	177
Sand and gravel . . .	3	180
C6-66-7dcaa. Alt. 5,900 ft.		
Topsoil	2	2
Louviers Alluvium:		
Clay, sandy, brown. .	6	8
Sand.	16	24
Clay, sandy, brown. .	4	28
Sand and gravel . . .	17	45
Dawson Formation (upper part):		
Sandstone, brown. . .	4	49
Sand.	6	55
Clay, sandy, brown. .	9	64
Shale, sandy, gray. .	6	70
Clay, sandy, brown. .	3	73
Sand.	44	117
Clay, yellow.	3	120
Sand (water-bearing).	27	147
Shale, gray	29	176
Sand.	6	182
Shale, brown.	1	183
Sand.	2	185
Shale, sandy, gray. .	5	190
Sand and sandy layers of gray shale . . .	24	214
Shale, gray	10	224
C6-66-9aabb. Alt. 5,754.6 ft.		
Piney Creek, Broadway, and Louviers Alluvium, undifferentiated:		
Silt, sandy	34	34
Gravel.	7	41
Dawson Formation (upper part):		
Ironstone	4	45
C6-66-9abbb. Alt. 5,737.8 ft.		
Post-Piney Creek alluvium:		
Sand.	19	19
Louviers Alluvium:		
Clay.	6	25
Gravel.	18	43
C6-66-9bcdc. Alt. 5,773.7 ft.		
Piney Creek Alluvium:		
Topsoil	5	5
Soil, sandy	8	13
Louviers Alluvium:		
Clay, blue.	37	50
Gravel, stony	15	65
Dawson Formation (upper part):		
Clay, red	15	80
C6-66-9bdcc. Alt. 5,770.8 ft.		
Piney Creek Alluvium:		
Topsoil	3	3
Clay, sandy	9	12
Louviers Alluvium:		
Gravel and clay . . .	6	18
Clay, blue.	8	26
Clay, yellow.	10	36
Gravel.	13	49
Clay and gravel . . .	6	55
Gravel.	5	60
Clay and stones . . .	2	62
Gravel and stones . .	5	67
Dawson Formation (upper part):		
Shale	3	70
C6-66-9dacc. Alt. 5,776.3 ft.		
Piney Creek Alluvium:		
Topsoil.	2.5	2.5
Clay, sandy, brown and sand	2.5	5
Clay	5	10
Louviers Alluvium:		
Clay, sand, and some gravel	10	20
Gravel, sand, and some clay.	10	30
Gravel, coarse, and sand	30	60
Dawson Formation (upper part):		
Clay, brown.	2	62
Clay, blue	9	71
C6-66-9dddc. Alt. 5,791.3 ft.		
Piney Creek Alluvium:		
Topsoil.	4	4
Clay	2	6
Broadway Alluvium:		
Sand and gravel. . . .	5	11
Louviers Alluvium:		
Gravel, dirty, sand, rocks and clay . . .	10	21
Gravel, dirty, sand, rocks, and quite a lot of clay.	13	34
Gravel and sand (not too good).	5	39
Gravel and sand. . . .	5	44
Gravel, dirty, sand, and clay	6	50
Gravel	21	71
Clay	3	74
Gravel	1	75
Clay and fine sand . .	4	79
Dawson Formation:		
Shale.	6	85
C6-66-10cdcc. Alt. 5,834 ft.		
Broadway Alluvium:		
Sand and gravel. . . .	20	20
Dawson Formation (upper part):		
Shale, yellow.	55	75
Shale, gray.	15	90
Sand and gravel. . . .	55	145
Shale, gray.	35	180
C6-66-10ddcc. Alt. 5,870 ft.		
Dawson Formation (upper part):		
Sand	12	12
Shale.	93	105
C6-66-11ccac. Alt. 5,941 ft.		
Dawson Formation (upper part):		
Shale, red	60	60
Shale, blue.	60	120
Shale, gray.	10	130
C6-66-11ddab. Alt. 6,140 ft.		
Dawson Formation (upper part):		
Sandstone.	100	100
Shale.	45	145
Sand (water)	45	190
Shale.	13	203
C6-66-15baab. Alt. 5,834 ft.		
Broadway Alluvium:		
Overburden	9	9
Dawson Formation (upper part):		
Sand	8	17
Clay	3	20
Sand, fine	10	30
Sand, coarse	8	38
Clay	3	41
Sand	4	45
Sand and strips of clay	15	60
Clay	5	65
Shale.	29	94
Sand	31	125
Clay	5	130
Sand	15	145
Coal	1	146
Shale.	42	188
Sand	4	192
Shale.	18	210
Sand	7	217
Shale.	88	305
Upper conglomerate:		
Sand	10	315
Shale.	5	320
Sand	4	324
Clay	4	328
Sand and strips of shale.	57	385
Shale.	15	400
C6-66-16aada. Alt. 5,803 ft.		
Broadway Alluvium:		
Sand and gravel. . . .	20	20

	Thickness	Depth
C6-66-16aada.--Continued		
Louviers Alluvium:		
Clay and streaks of sand	15	15
Sand and gravel	55	90
Dawson Formation (upper part):		
Sand, gravel, and sandy shale	45	135
C6-66-16abba. Alt. 5,769 ft.		
Post-Piney Creek alluvium:		
Sand and gravel	10	10
Louviers Alluvium:		
Clay and streaks of sand	10	20
Sand and gravel	7	27
Shale	45	72
Louviers Alluvium and Dawson Formation, undifferentiated:		
Sand, gravel, and sandstone	10	82
Dawson Formation:		
Shale	23	105
C6-66-16bbaa. Alt. 5,806 ft.		
Piney Creek Alluvium:		
Shale (probably clay)	5	5
Louviers Alluvium:		
Sand and gravel	12	17
Rock, broken	2	19
Sand and gravel	36	55
Dawson Formation:		
Shale	50	105
C6-66-17aabb. Alt. 5,826 ft.		
Dawson Formation (upper part):		
Shale, sandy	75	75
Shale, blue	17	92
Shale, brown	13	105
Shale, gray	12	117
Shale, blue	25	142
Sand	8	150
C6-66-18aaab. Alt. 5,913 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Sand and gravel	47	47
Dawson Formation (upper part):		
Shale, sandy, gray	20	67
Shale, blue	6	73
Upper conglomerate:		
Sand and gravel	42	115
Shale, blue	35	150
C6-66-21aacb. Alt. 5,809.5 ft.		
Post-Piney Creek alluvium:		
Soil, loamy, sandy, plastic	4	4
Louviers Alluvium:		
Sand, coarse to very coarse, subangular to rounded, arkosic; about 20 percent very fine to fine gravel; and a little yellowish-gray micaceous silt; silt increases to about 40 percent between 8.0 and 10 feet	11	15
Sand, fine to very coarse, well-sorted, arkosic, subangular to subrounded, and about 15 percent very fine to fine gravel	7.5	22.5
Gravel, very fine to fine, subangular to rounded, well-sorted, arkosic and about 30 percent very coarse sand	10	32.5
Sand, coarse to very coarse, subangular to subrounded, arkosic and about 30 percent very fine to fine gravel	10	42.5
Gravel, very fine to fine, arkosic, subangular to subrounded, and about 30 percent coarse to very coarse sand; contains cobbles at 44 feet and between 47.5 and 52.5 feet	11	53.5
Dawson Formation (upper part):		
Sandstone, silty, noncalcareous very-pale-orange and moderate-orange-pink; contains about 30 percent silt	4	57.5
C6-66-21aadc. Alt. 5,823.7 ft.		
Piney Creek Alluvium:		
Loam, sandy, dark-brown	3	3
Broadway Alluvium:		
Sand, very fine to very coarse, subangular to well-rounded, arkosic, poorly sorted	6	9
Louviers Alluvium:		
Sand, very fine to fine, calcareous, silty, subangular to subrounded, dark-yellowish-brown	1	10
Clay, silty, sandy, crumbly, dark-brown	2.5	12.5
Sand, medium to coarse, angular, loose, and fine gravel	1.5	14
Sand, very fine to fine, silty, micaceous, subangular to subrounded, arkosic, pale-yellowish-brown	1	15
Silt, sandy, micaceous, pale-yellowish-brown and very sandy tan clay; contains montmorillonite	23.5	38.5
Gravel, very fine to fine, well-sorted, arkosic, subangular to rounded	29	67.5
Sand, very coarse, arkosic, subangular to rounded, and very fine gravel	1.5	69
Dawson Formation (upper part):		
Sandstone, fine- to coarse-grained, pale-red and very pale-orange, noncalcareous; has overall pinkish-purple hue; sand is arkosic and angular to subangular, interlayered with silty and sandy shale	8.5	77.5
C6-66-21abda. Alt. 5,803.5 ft.		
Post-Piney Creek alluvium:		
Sand, very fine to medium, clean, loose, angular to subangular, arkosic, yellowish-gray	3	3
Louviers Alluvium:		
Sand, medium to coarse, arkosic, angular to subrounded, very micaceous; contains about 10 percent very fine gravel	14.5	17.5
Sand, coarse to very coarse, angular to subrounded, arkosic, well-sorted, and about 15 percent very fine to fine gravel	1.5	19
Dawson Formation (upper part):		
Shale, silty, very sandy, arkosic, noncalcareous, pale-olive; contains montmorillonite	8.5	27.5
C6-66-21adaa. Alt. 5,828.9 ft.		
Piney Creek Alluvium:		
Soil, dark	2.5	2.5
Broadway Alluvium:		
Sand, medium to coarse, arkosic, subangular to subrounded, silty, pale-yellowish-brown; contains scattered arkosic very fine to fine gravel	10	12.5
C6-66-21adaa.--Continued		
Louviers Alluvium:		
Silt, very sandy, calcareous, dusky-yellow; contains montmorillonite	5	17.5
Silt, slightly sandy, very calcareous, pale-yellowish-brown; contains very fine sand	12.5	30
Sand, very coarse, well-sorted, subangular to subrounded, arkosic	2.5	32.5
Sand, fine to very coarse, arkosic, subangular to rounded, poorly sorted, and some pale-yellowish-brown silt	5	37.5
Sand, coarse to very coarse, subangular to subrounded, well-sorted, arkosic	6.5	44
Gravel, very fine to fine, arkosic, subangular to rounded, and about 50 percent coarse to very coarse sand	3.5	47.5
Sand, medium to very coarse, arkosic, subangular to rounded, and about 20 percent very fine gravel; contains cobbles	5	52.5
Gravel, very fine to fine, arkosic, subangular to well-rounded, and about 30 percent very coarse sand; contains cobbles	5	57.5
Sand, medium to very coarse, arkosic, subangular to rounded, and about 30 percent very fine gravel	5	62.5
Gravel, very fine to fine, arkosic, subangular to subrounded, about 20 percent sand, and 10 percent silt; contains cobbles from 65.5 to 71.5 feet	13	75.5
Cobbles	2	77.5
Dawson Formation (upper part):		
Shale, silty and sandy, micaceous, dark-yellowish-brown and fine-grained sandstone; contains some fine gravel, montmorillonite, and much lignite	20	97.5
C6-66-22abdd. Alt. 5,869 ft.		
Piney Creek Alluvium:		
Topsoil	3	3
Louviers Alluvium:		
Clay and sand	35	38
Dawson Formation (upper part):		
Sand, fine, and silt	12	50
Sand, gravel, and clay	25	75
C6-66-22bacc. Alt. 5,843.6 ft.		
Piney Creek Alluvium:		
Topsoil	5	5
Clay, sandy	4	9
Broadway Alluvium:		
Gravel, very fine, and coarse sand	17	26
Louviers Alluvium:		
Sand, coarse, very fine gravel, and some clay	2	28
Gravel, very fine, wet	42	70
Dawson Formation (upper part):		
Shale	7.5	77.5
C6-66-22bacd. Alt. 5,846.9 ft.		
Piney Creek Alluvium:		
Topsoil, sandy	3	3
Louviers Alluvium:		
Clay, yellow	18	21

	Thickness	Depth
C6-66-22bacd.--Continued		
Clay and gravel. . . .	9	30
Gravel	29	59
C6-66-22badc. Alt. 5,856.1 ft.		
Piney Creek Alluvium:		
Topsoil.	6	6
Broadway Alluvium:		
Sand	4	10
Louviers Alluvium:		
Clay	1	11
Clay, sandy.	10	21
Clay, blue, and very fine gravel. . . .	6.5	27.5
Clay, sandy, brown . .	5	32.5
Clay, brown.	2.5	35
Clay, sandy.	2.5	37.5
Gravel, very fine. . .	20.5	58
Cobbles.	4	62
Dawson Formation:		
Shale.	3	65
C6-66-22bcaa. Alt. 5,839.8 ft.		
Piney Creek Alluvium:		
Clay	2	2
Sand	4	6
Clay, sandy.	2.5	8.5
Clay, soft	1.5	10
Broadway Alluvium:		
Sand, coarse, and very fine gravel. . . .	8	18
Gravel, very fine. . .	8	26
Louviers Alluvium:		
Clay, blue	10	36
Gravel, very fine. . .	3.5	39.5
Cobbles and gravel . .	10.5	50
Gravel, very fine. . .	12	62
Cobbles.	1	63
Gravel, very fine. . .	7	70
Cobbles.	3.5	73.5
Gravel	1.5	75
Cobbles.	3.5	78.5
Dawson Formation:		
Shale, brown	4	92.5
C6-66-22bcab2. Alt. 5,839.4 ft.		
Piney Creek Alluvium:		
Loam, sandy, dark-brown.	1	1
Silt, very sandy, micaceous, non-calcareous, dark-yellowish-brown. . .	5	6
Silt, very sandy, very calcareous, light-olive-gray . .	7	13
Broadway Alluvium:		
Sand, medium to very coarse, subangular, very silty, arkosic, about 50 percent silt, and very fine to fine gravel.	4.5	17.5
Sand, very fine to very coarse, subangular, very silty, arkosic, light-olive-gray	3.5	21
Louviers Alluvium:		
Silt, very sandy, light-olive-gray . .	6.5	27.5
Sand, very fine to medium, subangular, very silty, arkosic, noncalcareous, yellowish-gray . . .	7.5	35
Sand, very fine to medium, silty, slightly calcareous.	2.5	37.5
Silt, very sandy, light-olive-gray . .	7.5	45
Sand, fine to very coarse, arkosic, angular to subangular, about 40 percent coarse to very coarse, and a little very fine gravel; contains scattered cobbles from 51.5 to 52 feet	17.5	62.5
Sand, fine to coarse, very micaceous, angular to subangular and 20 percent very fine gravel; contains scattered cobbles.	7.5	70
Sand, medium to coarse arkosic, angular to subangular, about 40 percent coarse, and about 10 percent very fine gravel.	4	74
C6-66-22bcab2.--Continued		
Gravel, coarse, and fine sand.	11	85
Dawson Formation (upper part):		
Sandstone, shaly, arkosic, and very sandy shale; contains poorly sorted fine to very coarse sand and very fine gravel; shale and sandstone crumble easily . . .	5	90
C6-66-22bcab3. Alt. 5,838.6 ft.		
Piney Creek Alluvium:		
Topsoil, sandy, crumbly.	1	1
Silt, sandy, calcareous, dusky-yellow; contains fine sand .	9	10
Silt, very sandy, micaceous, very calcareous, dusky-yellow	9	19
Broadway Alluvium:		
Sand, coarse to very coarse, angular to subangular, arkosic, and very fine subrounded to well rounded gravel . . .	5	24
Sand, medium to very coarse, arkosic, subangular, silty, and about 10 percent very fine gravel	3.5	27.5
Louviers Alluvium:		
Gravel, very fine, and medium to coarse, angular sand; contains thin beds of silt	7.5	35
Sand, medium to very coarse, arkosic, angular to subangular, and about 10 percent very fine gravel. . . .	5	40
Gravel, very fine, and medium to coarse, angular sand; contains thin beds of silt.	15	55
Sand, medium to very coarse, arkosic, angular to subangular, and 10 percent very fine gravel	2.5	57.5
Gravel, very fine, and medium to coarse, angular sand; contains thin beds of silt.	6.5	64
Cobbles.	1	65
Sand, medium to very coarse, arkosic, angular to subangular, and about 20 percent very fine gravel	5	70
Sand, very fine to very coarse, arkosic, subangular to rounded, poorly sorted, and about 20 percent very fine to fine gravel; contains cobbles.	2.5	72.5
Sand, very fine to very coarse, subangular to rounded, arkosic, very fine to fine gravel, and a few thin silt beds; contains mica between 80 and 82.5 feet. . . .	13.5	86
Dawson Formation (upper part):		
Shale, very silty, very micaceous, noncalcareous; contains montmorillonite, fine sand, and very fine gravel	6.5	92.5
C6-66-22bcba. Alt. 5,834.3 ft.		
Piney Creek Alluvium:		
Topsoil.	2	2
Sand, very fine to medium, micaceous. .	3	5
C6-66-22bcba.--Continued		
Silt, pale-yellowish-brown	2.5	7.5
Silt, sandy, calcareous, yellowish-gray.	6.5	14
Broadway Alluvium:		
Sand, very fine to coarse, arkosic, silty, micaceous, calcareous, grayish-yellow. . .	3.5	17.5
Sand, very coarse, fairly well-sorted arkosic, subangular to subrounded, and very fine gravel. .	3.5	21
Gravel, very fine . .	1.5	22.5
Louviers Alluvium:		
Sand, very coarse, well-sorted arkosic, subangular to subrounded, and very fine gravel; contains a little moderate yellow silt	5	27.5
Sand, coarse to very coarse, arkosic, subangular to well-rounded, and about 20 percent very fine gravel	5	32.5
Sand, coarse, and clay.	5	37.5
Gravel, very fine . .	11	48.5
Cobbles	.5	49
Gravel, very fine . .	4.5	53.5
Cobbles	.5	54
Gravel, very fine, very hard from 64.0 to 65.0 feet. . . .	14	68
Cobbles	3	71
Dawson Formation (upper part):		
Shale, soft, blue . .	6.5	77.5
C6-66-22bcbc. Alt. 5,834.3 ft.		
Piney Creek Alluvium:		
Topsoil	4	4
Louviers Alluvium:		
Clay, sandy	18	22
Sand and medium to coarse gravel . . .	39	61
Dawson Formation:		
Shale, blue	3	64
C6-66-22bdbb. Alt. 5,843 ft.		
Piney Creek Alluvium:		
Topsoil	5	5
Broadway Alluvium:		
Sand, fine.	15	20
Louviers Alluvium:		
Clay, sandy	30	50
Sand and medium to coarse gravel . . .	30	80
Dawson Formation (upper part):		
Shale	20	100
Shale, sandy.	60	160
Upper conglomerate:		
Sandstone, white. . .	55	215
Shale	7	222
C6-66-22cbbc. Alt. 5,833.9 ft.		
Piney Creek Alluvium:		
Topsoil	6	6
Louviers Alluvium:		
Clay, sandy	19	25
Sand and medium to coarse gravel . . .	37	62
Dawson Formation:		
Shale, blue	3	65
C6-66-23baad. Alt. 5,956 ft.		
Dawson Formation (upper part):		
Sand.	7	7
Shale	15	22
Shale, sandy.	3	25
Shale	20	45
Shale, blue	60	105
C6-66-23bbcd. Alt. 5,890 ft.		
Piney Creek Alluvium:		
Clay, sandy	16	16
Dawson Formation (upper part):		
Shale	89	105
Gravel.	5	110
Shale, sandy.	7	117
Shale	33	150
C6-66-23cbaa. Alt. 6,014 ft.		
Post-Piney Creek alluvium:		
Sand.	5	5

	Thickness	Depth
C6-66-23cbaa.--Continued		
Louviers Alluvium:		
Clay	11	16
Sand and gravel	4	20
Dawson Formation (upper part):		
Shale	100	120
Shale, sandy	12	132
Sand and gravel	3	135
C6-66-23dccd. Alt. 6,045 ft.		
Dawson Formation (upper part):		
Sand and gravel	57	57
Shale, sandy, gray	20	77
Shale, red	33	110
Shale, gray	20	130
C6-66-24cccc. Alt. 6,049 ft.		
Dawson Formation (upper part):		
Sand	5	5
Shale	22	27
Sand and gravel	38	65
Shale, sandy, and gravel	30	95
Shale, red	25	120
C6-66-24dddd. Alt. 6,067 ft.		
Dawson Formation (upper part):		
Sand	7	7
Shale, sandy, gray	13	20
Sand and gravel	25	45
No sample	30	75
Shale, blue	25	100
Shale, gray	14	114
Shale, blue	31	145
C6-66-27cccc. Alt. 5,878.6 ft.		
Piney Creek Alluvium:		
Soil	7	7
Louviers Alluvium:		
Clay, white	10	17
Gravel	1	18
Clay	4	22
Gravel	3	25
Clay	10	35
Gravel	11	46
Clay	6	52
Gravel, coarse	8	60
Dawson Formation (upper part):		
Shale, sandy, blue	6	66
C6-66-27ccdd2. Alt. 5,866.8 ft.		
Piney Creek Alluvium:		
Soil	3	3
Broadway Alluvium:		
Gravel	16	19
Louviers Alluvium:		
Clay	4	23
Gravel	6	29
Clay	2	31
Gravel	5	36
Boulders or soft rock	1	37
Gravel	10	47
Boulders	4	51
Dawson Formation:		
Shale	6	57
C6-66-27dbcc. Alt. 5,861.7 ft.		
Piney Creek Alluvium:		
Soil	6	6
Louviers Alluvium:		
Clay, blue	16	22
Gravel	7	29
Clay	1	30
Gravel, coarse	12	42
Dawson Formation:		
Shale	2	44
C6-66-30baba. Alt. 6,131 ft.		
Dawson Formation (upper part):		
Shale	10	10
Sand	5	15
Shale, sandy	15	30
Sand and gravel	15	45
Shale, sandy	45	90
Sand	10	100
Shale	18	118
Shale, sandy	2	120
C6-66-30dccd. Alt. 5,960 ft.		
Dawson Formation (upper part):		
Topsoil	3	3
Gravel	23	26
Shale	2	28
C6-66-31aabb. Alt. 5,911 ft.		
Dawson Formation (upper part):		
Shale, sandy	5	5
Boulders, sand, and gravel	50	55
Shale	95	150
C6-66-31babb. Alt. 5,958 ft.		
Dawson Formation (upper part):		

	Thickness	Depth
C6-66-31babb.--Continued		
Sand, gravel, and boulders	25	25
Sandstone	71	96
Shale, blue	24	120
Sandstone	21	141
Shale, blue	24	165
C6-66-33cbcc. Alt. 6,069 ft.		
Dawson Formation (upper part):		
Shale, sandy	15	15
Sand and gravel	30	45
Shale	105	150
C6-66-34abcd. Alt. 5,888 ft.		
Broadway and Louviers Alluvium and Dawson Formation, undifferentiated:		
Sand, gravel, and sandy shale	50	50
Dawson Formation (upper part):		
Shale	25	75
Sand, gravel, and sandy shale	40	115
Shale	30	145
Sand, gravel, and shale	25	170
Shale	10	180
C6-66-34bacb. Alt. 5,875 ft.		
Piney Creek Alluvium:		
Soil and clay	17	17
Broadway Alluvium:		
Sand	11	28
Louviers Alluvium:		
Clay	10	38
Gravel (water-bearing)	24	62
Dawson Formation:		
Shale, blue, at 62 feet		
C6-66-34bbac. Alt. 5,881 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Sand, gravel, and boulders	34	34
Dawson Formation (upper part):		
Shale, sandy	26	60
Sand and sandy shale	76	136
Shale, blue	9	145
Shale, sandy	95	240
C6-67-6abaa. Alt. 5,705 ft.		
Dawson Formation (upper part):		
Topsoil	1	1
Shale, brown	13	14
Gravel	2	16
Clay, yellow	7	23
Shale, brown and gray	24	47
Sandstone, gray and shale	4	51
Shale, brown and gray	62	113
Shale, sandy, gray	5	118
Shale, brown and gray	79	197
Shale, sandy, brown	5	202
Sand and gray shale	4	206
Shale, gray	77	283
Sand, coarse and gray shale	9	292
Limestone	2	294
Sand	2	296
Limestone and sand	8	304
Shale, brown	8	312
Sand and gray shale	6	318
Limestone at 318 feet		
C6-67-8bcba. Alt. 5,820.0 ft.		
Piney Creek Alluvium:		
Clay, sandy	4	4
Broadway Alluvium:		
Sand	7	11
Louviers Alluvium:		
Clay, yellow	15	26
Sand	11	37
Dawson Formation (upper part):		
Shale, gray	32	69
Shale, brown	2	71
Shale, gray	6	77
Sand	1	78
Coal	1	79
Shale, sandy, brown	4	83
Shale, gray	17	100
Sand (water bearing)	3	103
Shale, gray and blue	18	121
C6-67-11aaaa. Alt. 5,877 ft.		
Dawson Formation (upper part):		
Sand and gravel	45	45
Shale, blue	40	85
Sand and gravel	30	115
Shale, blue	35	150
C6-67-11bbba. Alt. 5,958 ft.		
Dawson Formation (upper part):		
Shale, sandy	75	75

	Thickness	Depth
C6-67-11bbba.--Continued		
Shale, blue	22	97
Sand and gravel	33	130
C6-67-18baab. Alt. 5,947 ft.		
Dawson Formation (upper part):		
Topsoil	4	4
Clay, gray	41	45
Sandstone, soft	15	60
Clay, gray and bluish-gray	70	130
Clay, sandy	35	165
Ironrock, hard layer	1	166
Clay, sandy	10	176
Ironrock, hard layer	2	178
Clay, sandy	23	201
Ironrock	1	202
Clay, bluish-gray, and shale	76	278
Upper conglomerate:		
Shale, dark-gray, and alternate layers of water-bearing sandstone	56	334
C6-67-22cdcc. Alt. 6,312 ft.		
Castle Rock Conglomerate:		
Sand and gravel	20	20
Dawson Formation (upper part):		
Sandstone	5	25
Shale	10	35
Sand, gravel, and sandy shale	125	160
Shale, sandy	6	166
Shale	14	180
C6-67-27cdda. Alt. 6,210 ft.		
Dawson Formation (upper part):		
Sand and white clay	70	70
Gravel, coarse	10	80
Clay and sand	20	100
Rock, hard, brown	1	101
Clay, brown	11	112
Shale, blue	8	120
C6-67-33dbca. Alt. 6,404 ft.		
Dawson Formation (upper part):		
Sand and gravel	40	40
Shale	50	90
Sand, gravel, and sandy shale	50	140
Shale	25	165
C6-68-1caaa. Alt. 5,828 ft.		
Dawson Formation (upper part):		
Topsoil	4	4
Clay, sandy	7	11
Sandstone, soft	46	57
Clay, blue	31	88
Clay, gray	16	104
Clay and blue shale	54	158
Clay, brown	15	173
Clay and blue shale	54	227
Sandstone, conglomerate, hard	2	229
Clay, blue	13	242
Clay, brownish-gray	7	249
Clay, blue, occasional sandy streaks	38	287
Clay, dirty, black	11	298
Shale, black, and alternating layers of water-bearing sandstone	34	332
C6-68-4aaba. Alt. 5,540 ft.		
Slocum Alluvium:		
Topsoil	1	1
Clay, brown and sand	2	3
Sand and gravel	36	39
Dawson Formation (upper part):		
Clay, sandy, brown	27	66
Shale, gray	8	74
Sandstone, gray	8	82
Shale, gray	3	85
Sandstone, gray	2	87
Sandstone and layers of shale	9	96
Sandstone, coarse-grained and layers of gray shale	5	101
Shale, gray	79	180
Sandstone, blue and gray	12	192
Shale, gray	6	198
Sandstone, gray	11	209
Shale, gray	44	253
Shale, sandy, blue	9	262
Shale, gray	11	273
Dawson Formation (lower part):		
Sand [Middle conglomerate, 273 to 368 feet.]	13	286
Shale, gray	5	291

	Thickness	Depth
C6-68-4aaba.--Continued		
Sand	4	295
Shale, gray	37	332
Shale, sandy, gray	7	339
Shale, gray	8	347
Sand	21	368
Shale, gray and blue	34	402
Shale, sandy, gray, and layers of shale	15	417
Shale, gray and blue	22	439
Sand	2	441
Sandstone, hard	1	442
Coal	1	443
Shale, gray	16	459
Lower conglomerate:		
Sand	6	465
Sandstone	10	475
Shale, gray	9	484
Sand	7	491
Shale, gray	3	494
Sand	3	497
Shale, blue and gray	20	517
Sand and layers of gray shale	5	522
Sand	9	531
Shale, gray	5	536
Sand	4	540
Shale, gray	4	544
Sand, fine, gray	3	547
Shale, gray	28	575
Limestone	1	576
Sand	8	584
Shale, gray	2	586
Sandstone	2	588
Shale, gray	10	598
Sand	23	621
Shale, gray	4	625
Sand	8	633
Shale, gray	3	636
Sand	4	640
Shale, gray	22	662
Sand, fine, white	21	683
Shale, gray	35	718
Sand, fine, gray	2	720
Shale, gray	14	734
Sand, fine, gray	8	742
Shale, gray	32	774
Sand	21	795
Sandstone	1	796
Sand	1	797
Shale, gray	13	810
C6-68-6dccb. Alt. 5,498.0 ft.		
Eolian sand:		
Topsoil	2	2
Sand, yellow	8	10
Dawson Formation (upper part):		
Clay, sandy, yellow	11	21
Dawson Formation (lower part):		
Middle conglomerate:		
Sand and brown clay	14	35
Gravel	5	40
Clay, brown	4	44
Gravel	16	60
Sand, coarse	12	72
Shale, blue and gray	20	92
Sand, coarse	9	101
Shale, gray	9	110
Sand, coarse	6	116
Shale, sandy, gray	15	131
Sandstone, gray	7	138
Shale, gray	33	171
Shale, sandy, gray	18	189
Shale, gray	16	205
Lower conglomerate:		
Sand, fine, and gray shale	15	220
Sand, coarse	3	223
Shale, gray	27	250
Shale, sandy, gray	24	274
Shale, gray	10	284
Sand, fine	5	289
Shale, sandy, gray	6	295
Sand, fine, and gray shale	13	308
Shale, gray	22	330
Sand, fine, and gray shale	12	342
Shale, gray	15	357
Sand, fine, and gray shale	16	373
Shale, gray	15	388
Shale, sandy, gray	16	404
Sand, fine, and gray shale	16	420
Shale, gray	22	442
Shale, sandy, brown	8	450
Laramie Formation:		
Shale, gray	62	512
Shale, sandy, gray	23	535
Shale, gray	19	554
Shale, sandy, gray	29	583
Lime	3	586
Sand, coarse	3	589

	Thickness	Depth
C6-68-6dccb.--Continued		
Shale, sandy, gray	22	611
Shale, gray, and fine sand	11	622
Coal and gray shale	10	632
Shale, gray	14	646
Sand, fine, and gray shale	34	680
Shale, gray	20	700
C6-68-7bada. Alt. 5,486.4 ft.		
Slocum Alluvium:		
Sand, fine	14	14
Sand and brown clay	1	15
Clay, sandy, brown	8	23
Dawson Formation:		
Shale, brown	2	25
C6-68-7bbba. Alt. 5,406.5 ft.		
Piney Creek Alluvium:		
Clay, sandy	4	4
Broadway and Louviers Alluvium, undifferentiated:		
Gravel	36	40
Louviers Alluvium:		
Rock	2	42
Gravel	1	43
Dawson Formation:		
Shale	9	52
C6-68-7dddd. Alt. 5,548.4 ft.		
Eolian sand:		
Sand, very fine to very coarse, subrounded, poorly sorted, arkosic, and dark-yellowish-brown silt	2.5	2.5
Slocum Alluvium:		
Sand, poorly sorted, arkosic; a little very fine gravel; and grayish-orange noncalcareous silt	5	7.5
Sand, medium to very coarse; subrounded to well-rounded, very fine gravel, and a little pale-yellowish-brown silt	24	31.5
Dawson Formation (upper part):		
Shale, silty, sandy, micaceous, noncalcareous, pale-yellowish-brown; contains very fine sand	1	32.5
Shale, silty; noncalcareous yellowish-gray; contains montmorillonite	5	37.5
C6-68-8abbd. Alt. 5,547 ft.		
Eolian sand:		
Soil	2	2
Sand and yellow clay	17	19
Dawson Formation (upper part):		
Clay, sandy, yellow	2	21
Sandstone, brown	1	22
Clay, yellow	9	31
Shale, blue	3	34
Shale, blue and gray	27	61
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	2	63
Shale, gray	62	125
Sand	3	128
Shale, gray	7	135
Sand	3	138
Shale, gray	4	142
Sand	1	143
Shale, gray	56	199
Sand	10	209
Shale, gray	5	214
C6-68-11acbc. Alt. 5,944.0 ft.		
Dawson Formation (upper part):		
Topsoil	3	3
Sandstone, coarse, soft	69	72
Clay, gray	3	75
Sandstone, coarse	17	92
Clay, gray; contains layer of coal	7	99
Clay, red	7	106
Clay, blue-gray	14	120
Clay, sandy and shale	12	132
Ironrock, hard	2	134
Clay, blue	43	177
Clay, gray and coarse sandstone in alternate layers	16	193

	Thickness	Depth
C6-68-11acbc.--Continued		
Conglomerate, coarse, hard, sandy	39	232
Clay, dirty, brown, and blue clay and shale	20	252
Sandstone	9	261
Clay, brown	23	284
Upper conglomerate:		
Clay, blue, and alternating layers of water-bearing sandstone	42	326
C6-68-14bddaz. Alt. 5,996.0 ft.		
Dawson Formation (upper part):		
Sand, surface	50	50
Sandrock	43	93
Clay	36	129
Sandrock, hard	11	140
Sand (small amount of water)	50	190
Clay and shale	50	240
Sandrock	40	280
Clay and shale	45	325
Sandrock [Upper conglomerate, 325 to 592 feet.] (small amount of water)	35	360
Clay and shale	70	430
Sandrock	15	445
Clay and shale	30	475
Sandrock	35	510
Clay and shale	15	525
Sandrock (fair amount of water)	67	592
Clay and shale	43	635
Sandrock, hard, some iron	5	640
Sandrock	60	700
Clay and shale	80	780
Dawson Formation (lower part):		
Sandrock and sand [Middle conglomerate, 780 to 847 feet.] (water)	6	786
Sandrock, hard	34	820
Sand (water)	27	847
Clay and shale	53	900
Lower conglomerate:		
Sandrock (good water)	112	1,012
C6-68-14dbbc. Alt. 5,996 ft.		
Dawson Formation (upper part):		
Sand, yellow	85	85
Clay, blue	55	140
Sand, coarse, reddish (water at 190 feet)	75	215
Shale, blue	85	300
Sand, light-colored [Upper conglomerate, 300 to 690 feet.]	50	350
Shale, blue	180	530
Sand, reddish	105	635
Shale, blue	35	670
Sand, gray (water)	20	690
Shale, blue	20	710
Sand (very little water)	25	735
Shale, blue	20	755
Dawson Formation (lower part):		
Middle conglomerate:		
Sand (water)	25	780
Shale, sandy	20	800
C6-68-16abaa. Alt. 5,684 ft.		
Eolian sand:		
Topsoil	40	40
Dawson Formation (upper part):		
Sand (a little water)	20	60
Clay, greenish	30	90
Sand, soft (a little water)	25	115
Shale, blue	40	155
Sand, very soft [Upper conglomerate, 155 to 200 feet.] (good water)	45	200
Shale, soft, blue	75	275
Dawson Formation (lower part):		
Sand, red [Middle conglomerate, 275 to 315 feet.] (water-bearing)	40	315
Shale, cavey, blue	93	408
Lower conglomerate:		
Sand, soft (water-bearing)	37	445
Sand, gray (water-bearing)	5	450
Sand (water-bearing)	15	465
C6-68-17bdad. Alt. 5,688.0 ft.		
Eolian sand:		

	Thickness	Depth
C6-68-17bdad.--Continued		
Soil	2	2
Sand	23	25
Dawson Formation (upper part):		
Clay, sandy	22	47
Shale, blue and gray	150	197
Dawson Formation (lower part):		
Middle conglomerate:		
Sand	28	225
Shale, gray	18	243
Shale, sandy, gray	8	251
Shale, gray	16	267
Sand	10	277
Shale, gray	4	281
Sand	5	286
Sand and shale in alternating layers	64	350
Lime	1	351
Shale, gray	3	354
C6-68-17cbcc. Alt. 5,468 ft.		
Post-Piney Creek alluvium:		
Soil, light	2	2
Broadway and Louviers Alluvium, undifferentiated:		
Sand and clay	3	5
Sand, fine	3	8
Louviers Alluvium:		
Sand and coarse gravel	35	43
Dawson Formation:		
Sandstone and shale	3	46
C6-68-18abaa. Alt. 5,444.9 ft.		
Post-Piney Creek alluvium:		
Sand, very fine to very coarse, subangular to subrounded, noncalcareous, arkosic, light-olive-gray, and about 10 percent arkosic subrounded very fine to coarse gravel	3	3
Broadway Alluvium:		
Sand, medium to very coarse, subangular to subrounded, arkosic, fairly well-sorted	5	8
Gravel, very fine to medium, arkosic, subrounded to round, and about 30 percent poorly sorted sand	2	10
Gravel, very fine to fine, subrounded to rounded, fairly well-sorted, arkosic, and about 10 percent poorly sorted sand	19	29
Louviers Alluvium:		
Gravel, very fine to fine, subangular to rounded, and sand; becomes coarser and contains scattered cobbles below 36 feet	10	39
Dawson Formation (upper part):		
Shale, silty, noncalcareous, micaceous, medium-gray; contains montmorillonite	3.5	42.5
C6-68-18abab. Alt. 5,443.1 ft.		
Post-Piney Creek alluvium:		
Silt, slightly sandy, noncalcareous, pale-yellowish-brown; contains limonitic material	6	6
Broadway Alluvium:		
Sand, subangular to subrounded, poorly sorted, arkosic, silty	1.5	7.5
Gravel, very fine to fine, subangular to rounded; coarser at 9 feet	5	12.5
Louviers Alluvium:		
Gravel, fine to medium, mostly fine, well-sorted, arkosic, subangular to rounded, and about 20 percent very fine to fine, angular to subrounded sand	30	42.5
C6-68-18abab.--Continued		
Gravel, very fine to fine, arkosic, well-sorted, subangular to subrounded	1.5	44
Dawson Formation (upper part):		
Shale, silty, noncalcareous, pale-olive; contains montmorillonite	3.5	47.5
C6-68-18abcb2. Alt. 5,443.4 ft.		
Piney Creek Alluvium:		
Silt, slightly sandy, noncalcareous, olive-gray	5	5
Broadway Alluvium:		
Sand, coarse to very coarse, arkosic, subangular to rounded, and about 20 percent very fine to fine arkosic gravel	7.5	12.5
Louviers Alluvium:		
Gravel, well-sorted, about 50 percent very fine gravel, 30 percent fine gravel, and very fine to fine arkosic gravel; contains a bed of gray sticky clay from 18.0 to 18.5 feet	25.5	38
Dawson Formation (upper part):		
Shale, silty, noncalcareous, medium-light-gray; contains montmorillonite	2	40
C6-68-18abcb3. Alt. 5,443.7 ft.		
Piney Creek Alluvium:		
Silt, sandy, noncalcareous, dark-yellowish-brown; contains fine sand	3	3
Silt, very sandy and gravelly, noncalcareous, dusky-yellowish-brown	3	6
Broadway Alluvium:		
Gravel, very fine to medium, mostly very fine, arkosic, fairly well-sorted, subangular to subrounded	4	10
Louviers Alluvium:		
Gravel, very fine to medium, and about 30 percent dark-yellowish-brown noncalcareous silt	7	17
Gravel, fine, very well-sorted, arkosic, subangular to rounded, clean; becomes coarser at 29 feet	20.5	37.5
Dawson Formation (upper part):		
Sandstone, very fine-grained, very silty, noncalcareous, very micaceous; medium-gray; grains are very well rounded and frosted; contains scattered angular coarse sand grains	2.5	40
C6-68-18badc. Alt. 5,463.0 ft.		
Piney Creek Alluvium:		
Silt, sandy and gravelly, dusky-yellowish-brown	2.5	2.5
Louviers Alluvium:		
Gravel, very fine to medium, mostly very fine, arkosic, subangular to rounded, and coarse to very coarse sand; coarser gravel between 15 and 17.5 feet	17.5	20
Gravel, very fine to medium, better sorted than above, arkosic, subangular to well-rounded	6	26
C6-68-18badc.--Continued		
Dawson Formation (upper part):		
Shale, silty, noncalcareous, pale-olive; contains montmorillonite	1.5	27.5
C6-68-18bdbb. Alt. 5,471.9 ft.		
Louviers Alluvium:		
Gravel, very fine to fine, subangular to subrounded, arkosic, very silty (about 50 percent silt), moderate-yellowish-brown	2.5	2.5
Gravel, very fine to medium (about 10 percent medium), fairly well-sorted, arkosic, subangular to rounded	11.5	14
Silt, very sandy, noncalcareous, pale-yellowish-orange	1	15
Gravel, very fine to medium, subangular to subrounded, arkosic, about 20 percent medium and pale-yellowish-orange silt	2.5	17.5
Sand, poorly sorted, arkosic, subangular to subrounded, about 20 percent very fine to medium gravel, and pale-orange silt	5	22.5
Gravel, very fine to fine, fairly well-sorted, arkosic, subangular to subrounded, and about 20 percent very coarse sand	2.5	25
Gravel, very fine, subangular to well-rounded, sand, and grayish-orange silt	1	26
Gravel, very fine to fine, well-sorted, subangular to well-rounded, arkosic, loose, about 60 percent very fine	8	34
Silt, grayish-orange	1	35
Gravel, very fine, well-sorted subangular to well-rounded, arkosic, and about 40 percent very coarse sand	2.5	37.5
Sand, medium to very coarse, arkosic, angular to subangular, and poorly sorted very fine to medium gravel	1.5	39
Dawson Formation (upper part):		
Shale, sandy, silty, noncalcareous, grayish-orange, and arkosic sandstone	8.5	47.5
C6-68-23adda. Alt. 6,128 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, gray	2	4
Shale, gray, green and yellow	53	57
Sandstone, gray, and layers of shale	5	62
Sandstone, yellow	2	64
Shale, gray	11	75
Sandstone, yellow	4	79
Sand	1	80
Shale, gray	2	82
Sand	13	95
Shale, light-gray	4	99
Sand	5	104
Shale, gray	9	113
Shale, sandy, light-gray	5	118
Sandstone	8	126
Shale, sandy, light-gray	14	140
Sand and sandstone	9	149
Shale, light-gray	4	153
Sand	6	159
Shale, light-gray	12	171
Sand and sandstone	9	180

	Thickness	Depth
C6-68-21addd.--Continued		
Shale, light-gray. . .	8	188
Shale, sandy, light-gray	6	194
Sand	9	203
Shale, light-gray. . .	6	209
Shale, sandy, light-gray	8	217
Sand and layers of gray shale	7	224
Shale, gray.	4	228
Sand	7	235
Shale, gray, brown and yellow	62	297
Upper conglomerate:		
Sand	4	301
Shale, light-gray. . .	10	311
Sand	4	315
Shale, light-gray. . .	2	317
Sand and layers of gray shale	10	327
Shale, light-gray. . .	3	330
Sand and layers of sandstone.	16	346
Shale, yellow to gray.	17	363
Shale, sandy, yellow, and sand	34	397
Limestone.	1	398
Shale, gray.	23	421
Sand, yellow and sandstone.	6	427
Coal	1	428
Shale, sandy, gray . .	5	433
Shale, gray.	21	454
C6-68-24bccc. Alt. 6,128 ft.		
Dawson Formation (upper part):		
Clay, gray and shale .	51	51
Sandstone.	4	55
Clay, bluish-gray; contains a layer of ironrock at 66 feet.	11	66
Clay, sandy; contains a layer of ironrock at 75 feet	9	75
Clay, white.	6	81
Sandstone, coarse. . .	16	97
Clay, gray	5	102
Clay and coarse white sand	56	158
Clay, white.	13	171
Clay, sandy.	41	212
Sandstone, soft. . . .	3	215
Clay, sandy.	14	229
Sandstone, hard. . . .	7	236
Clay, white.	3	239
Clay, yellow, red, blue, and blue-gray.	17	256
Shale, hard, brown . .	3	259
Clay, reddish-brown. .	23	282
Upper conglomerate:		
Shale, grayish-black and alternate layers of water-bearing sandstone.	13	295
Shale, brown	6	301
Shale and alternate layers of water-bearing sandstone. .	13	314
Sand, soft, white. . .	34	348
Shale, gray.	2	350
Sand, fine, yellow . .	50	400
C6-68-27ccac. Alt. 5,700 ft.		
Piney Creek Alluvium and Dawson Formation, undifferentiated:		
Sand and yellow clay .	57	57
Dawson Formation (upper part):		
Shale, gray.	55	112
Sand [Upper conglomerate, 112 to 221 feet.]	13	125
Shale, gray.	24	149
Sand	11	160
Shale, gray.	14	174
Shale, red and yellow.	6	180
Sand, red.	13	193
Shale, yellow and gray	3	196
Shale, pink.	5	201
Sand, red.	11	212
Shale, gray.	4	216
Sand, red.	5	221
Shale, gray and brown.	59	280
Sand	15	295
Shale, gray and brown.	44	339
Shale, gray, and sand.	11	350
Dawson Formation (lower part):		
Middle conglomerate:		
Sand and alternate layers of gray shale.	198	548
Lime	2	550
Sand	34	584

	Thickness	Depth
C6-68-27ccac.--Continued		
Shale, gray.	10	594
Sand	6	600
C6-68-33dbcc. Alt. 5,600 ft.		
Post-Piney Creek alluvium:		
Soil, surface.	10	10
Louviers Alluvium:		
Sand and gravel. . . .	32	42
Dawson Formation (upper part):		
Clay, sandy, gray. . .	62	104
Sandrock, brown. . . .	6	110
Clay, brown.	78	188
Shale, sandy, brown. .	10	198
Sand (water-bearing) .	18	216
Clay, sticky, blue, and shale.	37	253
Dawson Formation (lower part):		
Sand, blue [Middle conglomerate, 253 to 349 feet.] (water-bearing)	3	256
Clay, blue	24	280
Clay, brown.	10	290
Sand (water-bearing) .	10	300
Clay, blue	10	310
Sand (water-bearing) .	10	320
Sand, fine (water-bearing)	10	330
Clay, blue	10	340
Sand (water-bearing) .	9	349
Sandstone and clay . .	54	403
Lower conglomerate:		
Sand (water-bearing) .	30	433
Sandstone, gray, and clay	15	448
Sandstone, gray. . . .	10	458
Sand (water-bearing) .	109	567
Clay, blue	3	570
Sand (water-bearing) .	10	580
Clay, tough, blue. . .	10	590
Sandstone, hard. . . .	17	607
Sand (water-bearing) .	70	677
Clay, tough, blue. . .	8	685
Sand (water-bearing) .	20	705
Clay, blue and shale .	10	715
C6-69-1acac. Alt. 5,410 ft.		
Piney Creek Alluvium:		
Topsoil.	2	2
Louviers Alluvium:		
Gravel and boulders. .	32	34
Dawson Formation (lower part):		
Shale, soft, blue. . .	6	40
Shale, hard, brittle, blue	38	78
Shale, blue.	46	124
Lower conglomerate:		
Sand	24	148
Shale, blue.	4	152
C6-69-1bbbc. Alt. 5,538 ft.		
Eolian sand:		
Topsoil.	5	5
Verdos Alluvium:		
Gravel	7	12
Dawson Formation (upper part):		
Clay, brown and yellow	24	36
Coal shale, greenish .	20	56
Rock	2	58
Shale, blue, and streaks of sand. . .	3	61
Shale.	18	79
Dawson Formation (lower part):		
Sand [Middle conglomerate, 79 to 153 feet.]	5	84
Shale.	54	138
Rock	.5	138.5
Shale.	1.5	140
Sand	5	145
Shale.	4	149
Sand	4	153
Shale.	38	191
Shale; contains streaks of sand.	18	209
Sand and rock.	7	216
Shale.	17	233
Lower conglomerate:		
Sand	4	237
Shale.	6	243
Sand and streaks of shale.	11	254
Shale.	10	264
C6-69-2abbb. Alt. 5,585 ft.		
Younger loess:		
Topsoil.	2	2
Dawson Formation (upper part):		
Clay, sandy, brown . .	13	15
Sandstone.	3	18
Clay, gray	31	49
Sand	4	53
Clay, gray	5	58

	Thickness	Depth
C6-69-2abbb.--Continued		
Shale, blue.	7	65
Shale, gray.	17	82
Coal and sand.	6	88
Shale, gray.	8	96
Dawson Formation (lower part):		
Sand [Middle conglomerate, 96 to 212 feet.]	2	98
Shale, gray.	20	118
Sand	18	136
Shale, gray.	11	147
Sand, fine	6	153
Coal and gray shale. .	16	169
Sand and gray shale. .	48	217
Shale, gray.	29	246
Shale, sandy, brown. .	8	254
Lower conglomerate:		
Sand, fine, and gray shale.	25	279
Shale, gray.	129	408
Sand, fine, and gray shale.	10	418
Laramie Formation:		
Shale, gray.	31	449
C6-69-2bbda. Alt. 5,550 ft.		
Piney Creek and Slocum Alluvium, undifferentiated:		
Sand and gravel. . . .	23	23
C6-69-8abcs. Alt. 5,750 ft.		
Piney Creek Alluvium:		
Soil, sandy.	5	5
Sand and red clay. . .	24	29
Fountain Formation:		
Sandstone, red	928	957
C6-69-8badd. Alt. 5,770 ft.		
Piney Creek Alluvium:		
Silt, clayey, dry. . .	12	12
Sand, fine, silty, moist to wet	16	28
Fountain Formation:		
Sandstone at 28 feet		
C6-69-10adaa. Alt. 5,470.2 ft.		
Piney Creek Alluvium:		
Loam, sandy.	5	5
Clay, reddish-brown. .	8	13
Louviers Alluvium:		
Gravel, coarse sand, boulders, and streaks of clay.	28	41
Pierre Shale:		
Shale, blue.	10	51
C6-69-11aada. Alt. 5,407.2 ft.		
Piney Creek Alluvium:		
Topsoil.	7	7
Louviers Alluvium:		
Gravel	41	48
Dawson Formation:		
Shale at 48 feet		
C6-69-12aaac. Alt. 5,400 ft.		
Post-Piney Creek alluvium:		
Topsoil.	2	2
Louviers Alluvium:		
Gravel, fine, dirty. .	6	8
Clay	2	10
Gravel, fine	5	15
Clay	2	17
Gravel, fine, clean. .	6	23
C6-69-12adad. Alt. 5,412.4 ft.		
Fill	1	1
Post-Piney Creek alluvium:		
Topsoil.	2	3
Sand, coarse, and fine gravel	1.5	4.5
Louviers Alluvium:		
Sand, fine, to fine gravel, and clay (water-bearing). . .	5.5	10
Sand, fine, and clay (water-bearing). . .	17	27
Clay	2	29
Gravel, fine to coarse, clean (water-bearing)	18	47
Clay	8	55
Dawson Formation:		
Shale, blue.	7	62
C6-69-12bacc. Alt. 5,398.3 ft.		
Post-Piney Creek alluvium and Louviers Alluvium, undifferentiated:		
Sand, and gravel (water).	47	47
Dawson Formation:		
Shale.	3	50

	Thickness	Depth
C6-69-12dcbd. Alt. 5,485 ft.		
Slocum Alluvium:		
Topsoil.	1	1
Clay, sandy, brown . .	21	22
Sand and gravel. . . .	4	26
Dawson Formation (lower part):		
Clay, sandy, brown . .	3	29
Clay, brown.	5	34
Clay, sandy, brown, and layers of sand .	6	40
Lower conglomerate:		
Boulders, sand, and gravel	24	64
Shale, brown	7	71
Shale, gray, and small layers of sand . . .	11	82
Boulders	3	85
Shale, sandy, brown. .	3	88
Shale, gray.	14	102
Coal	1	103
Shale, gray.	53	156
Shale, sandy, gray . .	6	162
Shale, gray.	4	166
Shale, brown	4	170
Sandstone, fine-grained, gray; contains layers of shale. . .	5	175
Limestone and iron pyrite; contains layers of gray shale	4	179
Laramie Formation:		
Shale, blue.	12	191
Shale, gray.	6	197
Shale, blue.	11	208
Shale, gray.	23	231
Shale, brown	5	236
Shale, gray.	122	358
Shale, blue.	23	381
Shale, gray.	9	390
Shale, brown	5	395
Shale, gray.	9	404
Limestone, sandy; contains layers of gray shale	3	407
Shale, dark-gray . . .	28	435
Sand, fine, gray . . .	3	438
Shale, dark-gray . . .	13	451
Shale, sandy, gray . .	11	462
Shale, dark-gray . . .	30	492
Shale, sandy, gray . .	5	497
Shale, gray.	15	512
C6-69-13addd. Alt. 5,535.3 ft.		
Slocum Alluvium:		
Topsoil, sandy	4	4
Gravel, fine to coarse	6	10
Gravel, coarse	5	15
Clay	2	17
Gravel, very fine to medium, arkosic, angular to rounded, poorly sorted, and angular to sub-angular sand	5	22
Gravel, fine to coarse	5	27
Gravel and clay. . . .	5	32
Sand and very fine gravel; poorly sorted, angular to subangular, arkosic	4	36
Gravel and clay. . . .	2	38
Gravel, fine to medium	4	42
Sand, coarse, and fine gravel.	3	45
Gravel, fine to very coarse	3	48
Gravel, medium, and clay	12	60
Dawson Formation:		
Shale, weathered . . .	2	62
Shale.	5	67
C6-69-23cccc. Alt. 5,498.6 ft.		
Pierre Shale:		
Topsoil.	.5	.5
Shale.	14.5	15
C6-69-23ccdd. Alt. 5,470.3 ft.		
Piney Creek Alluvium:		
Topsoil.	3.5	3.5
Louviers Alluvium:		
Soil and coarse gravel	3.5	7.0
Sand, fine, and clay .	4	11
Gravel, coarse	6	17
Sand and clay.	3	20
Gravel	4	24
Sand	3	27
Pierre Shale:		
Shale, weathered . . .	7	34
Shale, blue.	3	37
C6-69-23cdcd. Alt. 5,455.9 ft.		
Fill, cinders	4	4

	Thickness	Depth
C6-69-23cdcd.--Continued		
Louviers Alluvium:		
Gravel, very fine to coarse, poorly sorted, subangular to well-rounded, arkosic, sandy, silty.	7	11
Sand, medium to very coarse, fairly well-sorted, arkosic; contains about 20 percent poorly sorted gravel. . . .	10	21
Gravel, coarse	2	23
Boulders and cobbles .	1	24
Pierre Shale:		
Shale, weathered . . .	5	29
Shale, blue.	3	32
C6-69-23cddd. Alt. 5,450.5 ft.		
Post-Piney Creek alluvium:		
Topsoil, sandy	4	4
Sand and gravel. . . .	3	7
Louviers Alluvium:		
Gravel, coarse, and sand	6	13
Cobbles and boulders .	1	14
Sand and fine gravel; contains some cobbles.	7	21
Cobbles and boulders .	1	22
Gravel and sand; contains some cobbles.	4	26
Boulders	1	27
Gravel, fine to medium	3	30
Boulders	.5	30.5
Gravel, fine to medium	1	31.5
Pierre Shale:		
Shale, weathered . . .	2.5	34
Shale.	3	37
C6-69-23dadd. Alt. 5,479.5 ft.		
Louviers and Slocum Alluvium, undifferentiated:		
Cobbles, boulders, and gravel	39	39
C6-69-23dbbb. Alt. 5,446.5 ft.		
Piney Creek Alluvium:		
Topsoil.	3.5	3.5
Louviers Alluvium:		
Sand	.5	4
Sand and gravel. . . .	16	20
Sand, fine	5	25
Sand, gravel, and large cobbles. . . .	10	35
C6-69-23dbcc. Alt. 5,449.5 ft.		
Piney Creek Alluvium:		
Topsoil.	2	2
Louviers Alluvium:		
Sand, fine, and gravel	8	10
Gravel, coarse, and cobbles.	6	16
Sand, fine and gravel.	12	28
Sand, gravel, and cobbles.	5	33
Pierre Shale:		
Shale.	4.8	37.8
C6-69-23dcdc. Alt. 5,448.0 ft.		
Post-Piney Creek alluvium:		
Boulders	2	2
Broadway Alluvium:		
Sand and fine gravel .	3	5
Gravel, fine to medium	18	23
Gravel, coarse, and boulders	8	31
Pierre Shale:		
Shale, blue.	9	40
C6-69-24abdd. Alt. 5,550 ft.		
Eolian sand:		
Topsoil, sandy, and clay	12	12
Slocum Alluvium:		
Sand and gravel. . . .	26	38
Older loess:		
Clay, brown.	16	54
Dawson Formation (lower part):		
Shale, blue.	122	176
Sand, coarse	6	182
Shale, blue.	28	210
C6-69-24acab2. Alt. 5,499 ft.		
Eolian sand:		
Soil, sandy, brown . .	2	2
Slocum Alluvium:		
Clay, sandy and gravelly, soft	10	12

	Thickness	Depth
C6-69-24acab2.--Continued		
Sand, coarse, and very fine gravel; very calcareous, silty, very pale-orange	3	15
Gravel, medium to very coarse, and cobbles; loose, arkosic, subrounded to well-rounded.	14	29
Dawson Formation (lower part):		
Lower conglomerate:		
Sand, very fine to very coarse, subangular to subrounded, silty, very micaceous, compact, moderately calcareous, grayish-orange, loose. . . .	31	60
Laramie Formation:		
Shale, micaceous, soft, noncalcareous, greenish-gray, and some fine sand . . .	15	75
Shale, silty, non-calcareous, medium-gray	15	90
Shale, silty, micaceous, soft, light-greenish-gray, and about 50 percent very fine to fine, well rounded sand. .	15	105
Limestone, very sandy, very hard, light-olive and pinkish-gray	1	106
Shale, silty, slightly calcareous, light-gray and grayish-blue, small amount of coal and about 5 percent fine to medium sand.	29	135
Shale, silty, slightly calcareous, medium-light-gray and fine, well rounded sand	15	150
Shale, silty, soft, micaceous, noncalcareous, medium-gray and light-olive gray	30	180
Shale, soft, light-olive-gray, and fragments of coal. .	15	195
Shale, silty and slightly sandy, non-calcareous, light-gray	15	210
Shale, silty, soft, light-olive-gray, and brittle, shiny, black coal	15	225
Shale, silty, soft, greenish-gray, coal, and about 10 percent very fine to medium, arkosic sand	16	241
Limestone, very sandy, very hard, dark-gray	2	243
Shale, silty, sandy, soft, light-olive-gray, in part calcareous.	27	270
Shale, silty, sandy, slightly calcareous, medium-light-gray, and coal	15	285
Shale, silty, soft, noncalcareous, medium-gray, greenish-gray and light-olive-gray	45	330
Shale, silty, noncalcareous, soft, medium-light-gray, and sand	15	345
Shale, silty, soft, micaceous, medium-light-gray and light-olive-gray . .	60	405
Shale, carbonaceous, soft, medium-dark-gray, and lustrous black coal	15	420
Shale, silty, soft, light-olive-gray . .	15	435
Sand, fine to medium, subangular to subrounded, and about 10 percent medium-light-gray noncalcareous shale. . . .	6	441

	Thick-ness	Depth
C6-69-24acab2.--Continued		
Limestone, very sandy very hard, white. . .	1	442
Sand, fine to medium, well-rounded.	2	444
Limestone, very sandy, hard, medium-light-gray.	6	450
Sand, very fine to fine, and about 40 percent medium-light-gray silty and clayey shale.	15	465
Shale, silty, slightly calcareous, slightly sandy, medium-light-gray.	15	480
Shale, clay, soft, moderately calcareous, greenish-gray	15	495
Shale, noncalcareous, 50 percent silty, 50 percent clayey, medium-light-gray . .	15	510
Sandstone, very fine, hard, fine sand, and 30 percent medium-light-gray very calcareous silty shale	15	525
Sandstone, very fine to fine, fine sand, and about 20 percent silty and clayey shale. . .	18	543
Limestone, very sandy, hard, white	3	546
Sandstone, very fine to very coarse, and sub-rounded to rounded sand; contains pyrite and has much iron-staining; about 20 percent is calcareous clay shale. .	9	555
Shale, silty, calcareous, medium-gray	15	570
Sandstone, very fine, silty, calcareous, medium-light-gray . .	15	585
Shale, silty, medium-light-gray, noncalcareous, and about 30 percent very fine sand	30	615
Shale, silty, soft, noncalcareous, medium-light-gray and medium-gray, and some clay shale	60	675
Shale, clay, noncalcareous, dark-greenish-gray and medium-light-gray.	45	720
Shale, silty, noncalcareous, soft, medium-light-gray and dark-greenish-gray	30	750
Sandstone, very fine, quartzose, salt and pepper texture, silty and noncalcareous, olive-gray, and light-olive-gray, silty and clayey shale	15	765
Shale, silty, light-olive-gray, and some very fine sand. . . .	15	780
Shale, silty, greenish-gray, noncalcareous, and about 50 percent shiny to sooty brittle black coal.	15	795
Coal, shiny, brittle, black, and some silty fine quartz sand. . .	15	810
B sandstone:		
Sandstone, very fine to medium, moderately silty, quartz, sub-rounded to subangular, very-light-gray, pyrite, and a little silty shale; sandstone has salt and pepper texture. .	30	840
Shale, silty, light-gray, and very fine-grained sandstone . .	30	870
Sandstone, fine to medium, noncalcareous, light-gray and very-light-gray, quartzose, and medium-gray shale; sandstone has salt and pepper appearance . .	45	915

	Thick-ness	Depth
C6-69-24daad. Alt. 5,588.0 ft.		
Eolian sand:		
Sand	7	7
Dawson Formation:		
Shale.	10	17
C6-69-25bbbb. Alt. 5,535.0 ft.		
Slocum Alluvium:		
Sand, silty, and fine gravel	6	6
Gravel, fine to medium, some silt and clay .	11	17
Sand and fine gravel: fairly clean	8	25
Sand, fine to coarse; contains a small amount of gravel . .	7	32
Laramie Formation:		
Shale, weathered; becomes hard at 37 feet	10	42
C6-69-34addb. Alt. 5,493.0 ft.		
Post-Piney Creek alluvium:		
Topsoil, fine, sandy .	9	9
Louviers Alluvium:		
Gravel, very coarse. .	22	31
Lykins Formation:		
Shale at 31 feet		
C6-70-4bbdb. Alt. 7,540 ft.		
Precambrian (granite):		
Quartz and decomposed granite.	64	64
C6-70-4dadb. Alt. 7,220 ft.		
Piney Creek Alluvium:		
Sand and gravel. . . .	40	40
Precambrian:		
Sandstone (weathered crystallines). . . .	10	50
C6-70-4ddbb. Alt. 7,200 ft.		
Precambrian (schist and granite):		
Clay, black and red. .	8	8
Schist	16	24
Granite, gray, quartz, and soft streaks . .	52	76
Granite, black	26	102
C6-70-8dbbd. Alt. 7,630 ft.		
Piney Creek Alluvium:		
Overburden	8	8
Precambrian:		
Sand and decomposed boulders	20	28
Granite.	10	38
C6-70-11abdd. Alt. 7,040 ft.		
Precambrian (granite):		
Granite, decomposed. .	56	56
Granite, gray.	15	71
Granite, decomposed. .	7	78
Granite, gray.	19	97
Granite, decomposed. .	4	101
Granite, gray.	27	128
Granite, decomposed. .	40	168
Granite, gray; contains soft streaks	20	188
Granite, rose.	13	201
Granite, gray.	59	260
Granite, rose and decomposed granite .	83	343
C6-70-11cbcd. Alt. 6,680 ft.		
Piney Creek Alluvium:		
Boulders and black dirt	9	9
Precambrian:		
Granite, blue.	95	104
Granite, gray.	30	134
Granite, black	32	166
Granite, rose and quartz	11	177
Granite, gray.	24	201
C6-70-25bddc. Alt. 7,300 ft.		
Dirt	6	6
Clay and loose rock. .	8	14
Precambrian:		
Granite, decomposed. .	6	20
Granite, firm.	12	32
Granite, intermediate layers of firm and brittle (yields water at 52 feet). .	20	52
Granite, hard, red to gray	8	60
Granite, intermediate layers of hard and brittle (water). . .	14	74
Granite, hard, gray. .	6	80
Granite, brittle, (water-bearing). . .	3	83
Granite, gray, reddish	8	91

	Thick-ness	Depth
C6-71-12adcd. Alt. 7,980 ft.		
Precambrian (granite):		
Overburden	6	6
Granite, decomposed. .	12	18
Granite, red and gray.	82	100
C7-65-4ddad. Alt. 6,532 ft.		
Dawson Formation (upper part):		
Sand and gravel. . . .	39	39
Shale, sandy, gray . .	51	90
Sand and gravel. . . .	30	120
Shale, sandy	10	130
Sand and gravel. . . .	5	135
Shale, sandy, gray . .	55	190
C7-65-8cddb. Alt. 6,540 ft.		
Dawson Formation (upper part):		
Topsoil.	3	3
Sand and clay binders.	31	34
Clay, gray	101	135
Sand	22	157
Clay, gray	15	172
Sand	4	176
Clay, gray	14	190
Sand	33	223
Shale, blue.	9	232
C7-65-9bccc. Alt. 6,595 ft.		
Dawson Formation (upper part):		
Topsoil.	3	3
Sand, hard, layers . .	1	4
Clay, sandy.	10	14
Clay	34	48
Sand, hard, and layers of clay.	116	264
Sand	141	305
Clay	2	307
C7-65-9cbcb. Alt. 6,600 ft.		
Dawson Formation (upper part):		
Topsoil, sandy	3	3
Sand, hard packed. . .	15	18
Sand	11	29
Clay, occasional layer of sand. . . .	253	282
Sand	34	316
Clay	4	320
C7-65-14cccc. Alt. 6,550 ft.		
Dawson Formation (upper part):		
Topsoil, sandy	3	3
Clay, sandy.	10	13
Sandy.	17	30
Clay	15	45
Sand and gravel. . . .	21	66
Clay, gray	44	110
Sand	18	128
Clay	89	217
Sand	35	252
Clay, green.	8	260
Sand	32	292
Clay, green.	6	298
C7-65-15dccd. Alt. 6,600 ft.		
Dawson Formation (upper part):		
Shale.	15	15
Sand and gravel. . . .	20	35
Shale.	20	55
Sand, gravel and sandy shale.	20	75
Shale.	5	80
Sand and gravel. . . .	20	100
Shale.	10	110
Sand, gravel, and sandy shale.	25	135
Shale.	10	145
Shale, sandy	8	153
Shale.	12	165
C7-65-16bacc. Alt. 6,600 ft.		
Dawson Formation (upper part):		
Clay	12	12
Sand, hard	12	24
Clay, green.	14	38
Sand and gravel. . . .	7	45
Clay and layers of sand	195	240
Sand	42	282
Clay	16	298
C7-65-16daad. Alt. 6,599 ft.		
Dawson Formation (upper part):		
Shale, sandy	15	15
Sand and gravel. . . .	10	25
Shale.	34	59
Sand, gravel, and sandy shale.	41	100
Shale.	10	110
Sand, gravel, sandy shale, and shale . .	55	165
Shale.	15	180
C7-65-22dadd. Alt. 6,586 ft.		
Dawson Formation (upper part):		
Sand and gravel. . . .	24	24

	Thickness	Depth
C7-65-22dadd.--Continued		
Shale	6	10
Sand, gravel, and sandy shale	65	95
Shale	15	110
Sand, gravel, and sandy shale	5	115
Shale	20	135
C7-65-27daaa. Alt. 6,632 ft.		
Dawson Formation (upper part):		
Sand and gravel	17	17
Shale	20	37
Sand, gravel, sandy shale, and streaks of sandstone	56	93
Shale	27	120
C7-65-29aacb. Alt. 6,445 ft.		
Dawson Formation (upper part):		
Topsoil	1	1
Sand	22	23
Clay	5	28
Sand and layers of clay	26	54
Clay, gray	6	60
Clay, sandy	16	76
Sand	18	94
Clay, gray	16	110
Sand	36	146
Clay, yellow	9	155
Sand	20	175
Shale, gray	9	184
C7-65-29cbcd2. Alt. 6,315 ft.		
Dawson Formation (upper part):		
Topsoil	6	6
Clay	2	8
Sand, fine	2	10
Sand	5	15
Gravel	3	18
Clay	2	20
Gravel	5	25
Clay	22	47
Clay and gravel	8	55
Clay and gravel, tight. Shale at 60 feet	5	60
C7-65-30babb. Alt. 6,250 ft.		
Piney Creek Alluvium:		
Topsoil	2	2
Dawson Formation (upper part):		
Clay and sandstone	66	68
Gravel (water-bearing)	2	70
Clay	20	90
Gravel and sand (water-bearing)	20	110
Shale	10	120
C7-65-30daad. Alt. 6,300 ft.		
Piney Creek Alluvium:		
Topsoil	1	1
Clay	4	5
Broadway Alluvium:		
Sand	15	20
Sand and gravel	5	25
Gravel	3	28
Louviers Alluvium:		
Clay	1	29
Sand	7	36
Sand and gravel	8	44
Gravel	12	56
Dawson Formation (upper part):		
Gravel, cemented	10	66
Shale	4	70
C7-65-30dacs. Alt. 6,288 ft.		
Piney Creek Alluvium:		
Topsoil and clay	4	4
Clay and sand	4	8
Broadway and Louviers Alluvium, undifferentiated:		
Gravel and sand	2	10
Gravel	2	12
Gravel, coarse	3	15
Sand	15	30
Gravel	3	33
Gravel and clay	5	38
Dawson Formation (upper part):		
Clay	2	40
Shale	20	60
C7-65-30dbbb. Alt. 5,260 ft.		
Piney Creek Alluvium:		
Loam, heavy, black	4	4
Broadway Alluvium:		
Sand, fine (water-bearing)	8	12
Louviers Alluvium:		
Clay, blue	1.5	13.5
Sand and clay (water-bearing)	8.5	22
Clay, blue	1	23
Gravel, coarse (water-bearing)	7	30
C7-65-30dbbb.--Continued		
Clay, blue	1	31
Sand and gravel, blue-marbled, impervious (low water yield)	17	48
Sand, coarse, and gravel, iron stained (water-bearing)	16	64
Dawson Formation (upper part):		
Clay, weathered, blue	2	66
Shale, hard, at 66 feet		
C7-65-34addd. Alt. 6,642 ft.		
Dawson Formation (upper part):		
Sand and gravel	20	20
Shale	9	29
Sand and gravel	36	65
Shale	16	81
Sand, gravel, sandy shale, and streaks of sandstone	19	100
Shale	15	115
Sand, gravel, and sandy shale	18	133
Shale	17	150
C7-66-3abcb. Alt. 5,925.6 ft.		
Piney Creek Alluvium:		
Sand and clay	22	22
Broadway Alluvium:		
Sand and gravel	23	45
Louviers Alluvium:		
Clay, sandy, blue	5	50
Gravel, coarse	10	60
Clay	4	64
Gravel, coarse	10	74
Dawson Formation:		
Shale	1	75
C7-66-3baaa. Alt. 5,915.8 ft.		
Piney Creek Alluvium:		
Topsoil, dark	12	12
Sand and clay	10	22
Broadway Alluvium:		
Sand and fine gravel	23	45
Louviers Alluvium:		
Gravel, medium to coarse	31	76
Dawson Formation:		
Shale, blue	4	80
C7-66-3bcdd. Alt. 5,923.3 ft.		
Piney Creek Alluvium:		
Clay	48	48
Louviers Alluvium:		
Gravel	17	65
Dawson Formation:		
Shale	5	70
C7-66-3bdcc. Alt. 5,919.8 ft.		
Piney Creek Alluvium:		
Clay	38	38
Louviers Alluvium:		
Gravel, coarse	23	61
Dawson Formation:		
Shale at 61 feet		
C7-66-4dabd. Alt. 5,957.2 ft.		
Piney Creek Alluvium:		
Soil	6	6
Louviers Alluvium:		
Sand and gravel	18	24
Sand and clay	12	36
Dawson Formation (upper part):		
Sandstone	24	60
C7-66-5daab. Alt. 6,073 ft.		
Dawson Formation (upper part):		
Sand, gravel, and sandstone	34	34
Shale	68	102
Sand, gravel, and shale	43	145
Shale	20	165
C7-66-8dada. Alt. 6,143 ft.		
Dawson Formation (upper part):		
Shale, sandy, and gravel	45	45
Shale, sandy, sand, and gravel	40	85
Shale	65	150
C7-66-10accs. Alt. 5,946.4 ft.		
Piney Creek Alluvium:		
Clay	7	7
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, sandy	43	50
Louviers Alluvium:		
Gravel, sandy, and some clay	15	65
Dawson Formation:		
Shale at 65 feet		
C7-66-10cdcc. Alt. 5,961.9 ft.		
Piney Creek Alluvium:		
Topsoil	8	8
Broadway Alluvium:		
Sand and fine to medium gravel	17	25
Louviers Alluvium:		
Gravel and medium to coarse sand	31	56
Dawson Formation:		
Shale	2	58
C7-66-10dbbb. Alt. 5,952.5 ft.		
Piney Creek Alluvium:		
Topsoil	4	4
Broadway and Louviers Alluvium, undifferentiated:		
Clay and sand	14	18
Gravel, medium to coarse	40	58
Dawson Formation:		
Shale	1	59
C7-66-15badb. Alt. 5,957.2 ft.		
Piney Creek Alluvium:		
Topsoil	8	8
Broadway and Louviers Alluvium, undifferentiated:		
Gravel and sand	22	30
Louviers Alluvium:		
Gravel, medium to coarse	28	58
Dawson Formation:		
Shale, blue	3	61
C7-66-17aaaa. Alt. 6,179 ft.		
Dawson Formation (upper part):		
Sand and gravel	30	30
Shale	60	90
Sand, gravel, and sandy shale	27	117
Shale	18	135
C7-66-19aaac. Alt. 6,275 ft.		
Dawson Formation (upper part):		
Topsoil, light-textured, light-colored	3	3
Clay, sandy, white	67	70
Shale, blue and gray	100	170
Clay, gray and white	40	210
Sandstone, white	61	271
C7-66-20bacd. Alt. 6,223 ft.		
Dawson Formation (upper part):		
Shale, sandy	10	10
Sand and gravel	10	20
Shale	45	65
Sand, gravel, and sandy shale	20	85
Sandstone, blue	20	105
Shale, sandy	10	115
Shale, blue	15	130
Shale, sandy	10	140
Sandstone, blue	10	150
Shale, sandy	22	172
Shale	8	180
C7-66-22baac. Alt. 6,007.8 ft.		
Piney Creek Alluvium:		
Soil, sandy, loose	3	3
Clay, sandy	2	5
Clay, sandy, black	6	11
Broadway Alluvium:		
Sand, fine	7	18
Sand, medium; contains a trace of gravel	13	31
Louviers Alluvium:		
Sand, medium, coarse gravel, and a few boulders	12	43
Clay, gray	6	49
Sand, coarse, gravel, and a few boulders	7.5	56.5
Clay, brown	1.5	58
C7-66-22cdcc. Alt. 6,030.3 ft.		
Post-Piney Creek alluvium:		
Topsoil	4	4
Broadway Alluvium:		
Gravel and sand	7	11
Louviers Alluvium:		
Clay	4	15
Gravel, dirty, and sand	5	20
Gravel and sand	21	41
Gravel, sand, and thin clay	6	47
Clay	8	55
Gravel and some rocks	12	67
Dawson Formation:		
Shale	3	70
C7-66-27cdad. Alt. 6,054.1 ft.		
Piney Creek Alluvium:		
Top	3	3

	Thickness	Depth
C7-66-27cdad.--Continued		
Broadway Alluvium:		
Gravel and sand	11	14
Louviers Alluvium:		
Clay	4	18
Clay, dirty sand, and gravel	3	21
Clay	16	37
Gravel and sand	14	51
Clay and gravel	5	56
Gravel and clean sand	10	66
Dawson Formation (upper part):		
Shale and sand	4	70
Shale	5	75
C7-66-27dabq. Alt. 6,122.2 ft.		
Dawson Formation (upper part):		
Topsoil	1	1
Sandstone	9	10
Shale, gray	2	12
Sandstone, soft	2	14
Shale, gray, and sandstone	10	24
Shale, sandy, gray	5	29
Shale, gray	21	50
Shale, brown and gray	11	61
Sand	6	67
Shale, blue	3	70
Shale, sandy, gray, and sandstone	2	72
Sand and coal	4	76
Shale, gray	2	78
Sandstone, coarse	6	84
Coal	1	85
Sandstone	5	90
Sandstone and sandy shale	5	95
Sand and sandstone, coarse	17	112
Shale, sandy, gray	4	116
Sandstone, coarse	4	120
Shale, sandy, and soft sandstone	14	134
Shale, green and gray	27	161
Sandstone	6	167
Shale, brown	2	169
Sandstone, soft	8	177
Shale, gray, and sandstone	17	194
Sandstone	26	220
Sand, fine, and gray shale	10	230
Sand	15	245
Sand, fine, and brown shale	4	249
Shale, brown	3	252
Sand	16	268
Shale, gray	2	270
C7-66-30bbbb. Alt. 6,496 ft.		
Dawson Formation (upper part):		
Shale, sandy	8	8
Shale	47	55
Sand, gravel, sandy shale, and streaks of shale	75	130
Shale	11	141
Sand, gravel, sandy shale, and streaks of shale	39	180
Shale, sandy, blue	20	200
Sand and gravel	10	210
Shale, sandy, blue, and clay	30	240
C7-66-30cbbb. Alt. 6,477 ft.		
Dawson Formation (upper part):		
Sand and gravel	25	25
Shale, gray	65	90
Sandstone	5	95
Shale, gray	35	130
Sand and gravel	53	183
Shale, sandy, blue	42	225
C7-66-31ccccc. Alt. 6,496 ft.		
Dawson Formation (upper part):		
Shale, sandy	75	75
Sand and gravel	25	100
Shale, sandy, gray	35	135
Shale, blue	20	155
C7-66-32dbdd. Alt. 6,317 ft.		
Dawson Formation (upper part):		
Sand and gravel	12	12
Shale	23	35
Sand, gravel, sandy shale, and streaks of shale	48	83
Sand and gravel	12	95
Shale, sandy, blue	15	110
Sand, gravel, and blue sandy shale	20	130
Shale	10	140
Shale, sandy	27	167
Shale	13	180
C7-66-32ddbc. Alt. 6,320 ft.		
Dawson Formation (upper part):		
Sand and clay	115	115
Sandrock, white	105	220
C7-66-33dbbb. Alt. 6,189 ft.		
Dawson Formation (upper part):		
Gravel, sand, boulders, and sandy shale	25	25
Shale, sandy	10	35
Shale, blue	65	100
Shale	25	125
Gravel, sand, and shale	28	153
Gravel, hard, and sand	7	160
Shale, blue	40	200
C7-66-34dbcd. Alt. 6,077.6 ft.		
Piney Creek Alluvium:		
Topsoil	3	3
Clay	10	13
Broadway Alluvium:		
Gravel	14	27
Louviers Alluvium:		
Gravel and brown sand	5	32
Gravel	8	40
Gravel, fine sand, and clay	10	50
Gravel	9	59
Gravel and rocks	4	63
Dawson Formation (upper part):		
Sandstone	3	66
C7-66-34dcbd. Alt. 6,084.5 ft.		
Piney Creek Alluvium:		
Soil, black	5	5
Clay, sandy	3	8
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, medium to coarse	44	52
Dawson Formation (upper part):		
Clay and sandstone	3	55
C7-66-34dcdd. Alt. 6,087.4 ft.		
Piney Creek Alluvium:		
Sand, silt, and fine gravel	2.5	2.5
Broadway Alluvium:		
Gravel, very fine to fine, arkosic, subrounded to rounded, and about 30 percent coarse to very coarse angular to subangular sand	7.5	10
Louviers Alluvium:		
Silt, sandy, noncalcareous, greenish-yellow	3	13
Gravel, very fine to medium, subangular to rounded, arkosic, and about 30 percent medium to very coarse sand; contains rhyolite fragments	14.5	27.5
Sand, medium to very coarse, angular to subrounded, arkosic, silty, and about 30 percent very fine gravel	10	37.5
Sand, fine to coarse, arkosic, subangular to rounded, very silty, pale-yellowish-brown, and about 10 percent very fine to fine gravel; contains thin bed of coarse gravel at 40 feet	5.5	43
Sand, poorly sorted, arkosic, subangular to rounded, clean, and about 25 percent very fine to fine gravel	20	63
Dawson Formation (upper part):		
Sandstone, fine to medium, noncalcareous, speckled, very micaceous, light-gray; contains montmorillonite and abundant dark mica	3	66
C7-66-34ddcc. Alt. 6,079.6 ft.		
Broadway Alluvium:		
Gravel, very fine to medium, arkosic, subrounded to rounded, and about 40 percent very fine to very coarse sand	2.5	2.5
C7-66-34ddcc.--Continued		
Gravel, fine to very coarse, arkosic, subangular to subrounded, and fine to very coarse sand	11.5	14
Louviers Alluvium:		
Sand, medium to very coarse, arkosic, subangular to subrounded, silty, very micaceous, and some medium-light-gray silt; contains biotite	3.5	17.5
Gravel, very fine, subangular to subrounded, arkosic, coarse to very coarse sand; and dark-yellowish-brown noncalcareous silt	13.5	31
Silt, sandy, very micaceous, noncalcareous, light-olive-gray; contains fine sand and a bed of coarse gravel at 36 feet	11.5	42.5
Sand, very fine to very coarse, in part silty, very micaceous, noncalcareous, light-olive-gray, and a little arkosic very fine gravel	11.5	54
Cobbles	2	56
Dawson Formation (upper part):		
Sandstone, medium- to very coarse-grained, arkosic, and moderate-yellow noncalcareous silt; sand and very fine gravel grains are angular to subangular; contains montmorillonite	2	58
C7-66-34ddcd. Alt. 6,081.2 ft.		
Piney Creek Alluvium:		
Silt, very sandy, noncalcareous, dark-yellowish-brown and pale-yellowish-brown; contains poorly sorted sand and a little very fine gravel	2.5	2.5
Silt, clayey, slightly sandy, very micaceous, noncalcareous, coal-black when wet, dark-yellowish-brown	4.5	7
Broadway Alluvium:		
Sand, fine to medium, arkosic, angular to subangular, loose, micaceous, silty, pale-yellowish-brown	4.5	11.5
Gravel, very fine, subangular to rounded, fairly well-sorted, arkosic, and about 20 percent coarse sand	21	32.5
Louviers Alluvium:		
Sand, medium, subangular to subrounded, arkosic, micaceous, very silty, pale-yellowish-brown	5	37.5
Sand, very fine to very coarse, angular to subangular, beds of pale-yellowish-brown silt, and very fine to fine subangular to rounded gravel; contains coarse angular gravel at 38, 40, and 41 feet	15	52.5
Dawson Formation (upper part):		
Sandstone, coarse-grained, noncalcareous, arkosic; grains are angular to subrounded; contains montmorillonite	2.5	55
C7-66-34ddda. Alt. 6,100 ft.		
Piney Creek Alluvium:		
Clay, sandy	15	15
Broadway and Louviers Alluvium, undifferentiated:		
Sand and medium gravel	25	40
Dawson Formation:		
Shale, blue	2	42

	Thickness	Depth
C7-66-14dddd. Alt. 6,100 ft.		
Piney Creek Alluvium:		
Topsoil.	4	4
Broadway and Louviers Alluvium, undifferentiated:		
Sand, gravel, and clay	31	35
Dawson Formation (upper part):		
Shale, blue.	395	430
Upper conglomerate:		
Sandrock, white (water-bearing)	30	460
Shale, blue.	5	465
C7-67-1abcd. Alt. 6,430 ft.		
Dawson Formation (upper part):		
Topsoil.	2	2
Sandstone.	16	18
Clay, yellow and brown	23	41
Sand, coarse	16	57
Sandstone.	17	74
Clay, sandy, yellow. .	15	89
Sand	20	109
Sandstone.	10	119
Clay, sandy, yellow. .	7	126
Shale, sandy, gray . .	16	142
Sand	21	163
Shale, gray.	25	188
Clay, red.	11	199
Sand	31	230
Shale, sandy, brown. .	6	236
Sand	8	244
Shale, sandy, brown. .	11	255
Shale, brown	7	262
Shale, sandy, gray . .	11	273
Sandstone, gray. . . .	48	321
Shale, brown	9	330
Sandstone, gray. . . .	27	357
Shale, gray.	80	437
Sandstone, gray. . . .	28	465
Shale, gray.	15	480
Sandstone, gray. . . .	8	488
Shale, sandy, gray . .	11	499
Sand and gray shale [Upper conglomerate, 499 to 796 feet.]. .	27	526
Shale, gray.	16	542
Sand and gray shale. .	11	553
Shale, gray.	45	598
Shale, sandy, gray . .	11	609
Sand and gray shale. .	10	619
Sandstone.	11	650
Clay, sandy.	22	672
Sand and gray shale. .	16	688
Sandstone.	19	707
Shale, gray.	24	731
Sand and gray shale. .	16	747
Shale, gray.	26	773
Sand and gray shale. .	23	796
Shale, gray.	30	826
Shale, sandy, gray . .	9	835
Sand and gray shale. .	11	84[illegible]
Shale, sandy, gray . .	16	86[illegible]
Shale, gray.	6	868
Sand and gray shale. .	11	879
Shale, gray.	19	898
Sand and gray shale. .	67	965
Shale, gray.	49	1,014
Sand and gray shale. .	8	1,022
Shale, gray.	13	1,035
Sand	4	1,039
Shale, sandy, gray . .	26	1,065
Sand and sandy gray shale.	11	1,076
Shale, gray.	9	1,085
Shale, sandy, gray, and sand	74	1,159
Shale, gray.	29	1,188
Dawson Formation (lower part):		
Sand and gray shale [Middle conglomerate, 1,188 to 1,592 feet.]	24	1,212
Shale, gray.	26	1,238
Sand and gray shale. .	77	1,315
Shale, gray.	28	1,343
Sand and gray shale. .	67	1,410
Sand	16	1,426
Shale, gray.	6	1,432
Shale, gray, and sand.	13	1,445
Sand, fine	9	1,454
Shale, gray.	12	1,466
Sand, fine	21	1,487
Shale, gray, and fine sand	13	1,500
Shale, gray.	12	1,512
Sand, fine and coarse, and gray shale . . .	70	1,582
Shale, sandy, gray . .	25	1,607
Shale, gray.	73	1,680
Shale, gray, and sand [Lower conglomerate, top at 1,692 feet.].	38	1,718
Shale, gray.	9	1,727
Sand and gray shale. .	30	1,757
C7-67-1abcd.--Continued		
Shale, gray.	4	1,761
Sand and gray shale. .	34	1,795
C7-67-4baad. Alt. 6,351 ft.		
Dawson Formation (upper part):		
Sand and gravel. . . .	30	30
Shale.	25	55
Sand, gravel, and sandy shale.	70	125
Shale.	17	142
Shale, sandy	7	149
Shale, blue.	16	165
C7-67-9bddd. Alt. 6,569 ft.		
Dawson Formation (upper part):		
Sand and gravel. . . .	13	13
Sandstone.	7	20
Sand, gravel, sandy shale, and shale . .	60	80
Shale.	30	110
Sand, gravel, and sandy shale.	15	125
Shale.	25	150
C7-67-14cbbb. Alt. 6,575 ft.		
Dawson Formation (upper part):		
Sandstone.	22	22
Shale.	8	30
Sand and gravel. . . .	36	66
Shale, sandy, gray . .	24	90
Sand and gravel. . . .	25	115
Shale, sandy, gray . .	30	145
Sand and gravel. . . .	55	200
Shale, gray.	7	207
Sand and gravel. . . .	8	215
C7-67-15bada. Alt. 6,360 ft.		
Dawson Formation (upper part):		
Topsoil.	1	1
Sandstone, light-brown	11	12
Shale, gray.	8	20
Ironrock	1	21
Shale, gray.	2	23
Sandstone, fine, gray.	1	24
Shale, gray.	11	35
Shale, sandy, gray . .	4	39
Sand	7	46
Shale, gray.	2	48
Sand	9	57
Sandstone, gray. . . .	16	73
Sand	3	76
Shale, gray.	2	78
Sand and yellow sandy shale.	15	93
Shale, grayish-brown .	8	101
Shale, gray.	18	119
Sand	10	129
Shale, gray.	6	135
Shale, sandy, gray, and layers of sand . . .	6	141
Shale, blue and gray .	35	176
Shale, sandy, blue . .	5	181
Sand and small layers of blue sandy shale.	8	189
Sand and sandstone . .	13	202
Sandstone, hard. . . .	6	208
C7-67-17acca. Alt. 6,104.5 ft.		
Dawson Formation (upper part):		
Soil	4	4
Gravel, hard	15	19
Clay	6	25
Gravel, hard	5	30
Clay, brown.	21	51
Gravel, hard	13	64
Conglomerate, hard . .	2	66
Shale, sandy, brown. .	3	69
Silt, hard, blue . . .	28	97
Shale, blue.	4	101
Conglomerate, hard . .	9	110
Shale, blue.	15	145
Shale, sandy, yellow .	15	160
Conglomerate, hard . .	16	176
Silt, hard, white. . .	15	191
Conglomerate, hard . .	17	208
Silt, hard, white. . .	6	214
Conglomerate	1	215
Silt, hard, white. . .	3	218
Conglomerate	41	259
Silt, white.	13	272
Conglomerate	4	276
Silt, white and yellow	4	280
Conglomerate	2	282
Shale, yellow and blue	13	295
Silt, blue	4	299
Conglomerate	13	312
Silt, blue	7	319
Conglomerate	44	363
Silt, blue	6	369
C7-67-19bbbc. Alt. 5,880 ft.		
Piney Creek Alluvium:		
C7-67-19bbbc.--Continued		
Soil	4	4
Piney Creek and Broadway Alluvium, undifferentiated:		
Clay and gravel. . . .	14	18
Louviers Alluvium:		
Clay, white.	20	38
Gravel; contains streaks of clay.	10	48
Gravel, coarse	22	70
Clay	8	78
Gravel, coarse, hard, and boulders	15	93
Dawson Formation (upper part):		
Shale, sandy, blue . .	14	107
C7-67-23adda. Alt. 6,478 ft.		
Dawson Formation (upper part):		
Sand, gravel, and sandy shale.	30	30
Sandstone.	7	37
Shale.	13	50
Sand, gravel, sandy shale, and streaks of shale	150	200
Shale.	30	230
Sandstone.	10	240
C7-67-24ccbc. Alt. 6,456 ft.		
Dawson Formation (upper part):		
Sand and gravel. . . .	75	75
Shale, sandy	65	140
Sand and gravel. . . .	10	150
Shale, sandy	10	160
Clay and gravel. . . .	50	210
Shale, sandy	20	230
Shale, blue.	10	240
C7-67-25bdda. Alt. 6,500 ft.		
Dawson Formation (upper part):		
Sandstone.	190	190
Shale.	10	200
Sand (water)	60	260
Shale.	40	300
C7-67-26bcba. Alt. 6,198.9 ft.		
Dawson Formation (upper part):		
Topsoil.	2	2
Sand and gravel. . . .	30	32
Sand and brown sandy clay	15	47
Shale, blue and brown.	15	62
Shale, sandy, green. .	10	72
Sandstone, gray. . . .	36	108
Shale, gray.	22	130
Shale, sandy, gray . .	4	134
Sand, coarse	19	153
Sandstone and gray sandy shale.	12	165
Shale, gray.	35	200
Shale, sandy, gray . .	7	207
Shale, gray.	39	246
Shale, sandy, gray . .	6	252
Shale, sandy, brown. .	6	258
Sand, coarse, and brown sandy shale [Upper conglomerate, 258 to 485 feet.]. .	13	271
Shale, gray, and coarse sand	9	280
Shale, sandy, gray . .	13	293
Sand, coarse, and gray shale.	15	308
Shale, sandy, gray . .	18	326
Sand, coarse, and layers of gray sandy shale.	12	338
Shale, gray.	9	347
Sand, coarse	16	363
Shale, gray, and thin layers of coarse sand	9	372
Shale, gray and brown.	14	386
Shale, sandy, brown. .	11	397
Sand, gray, and shale .	11	408
Shale, gray.	7	415
Sand, medium, and gray sandy shale.	11	426
Shale, gray.	7	433
Shale, gray, and thin layers of sand . . .	13	446
Sand, coarse	39	485
Shale, sandy, gray . .	11	496
Shale, sandy; contains coarse sand.	2	498
Shale, sandy, gray . .	10	508
Sand, coarse	3	511
Shale, sandy, gray . .	18	529
Sand, coarse	28	557
Shale, sandy, gray . .	12	569
Sand, coarse	14	583
Shale, sandy, gray . .	20	603
Sandstone, gray. . . .	20	623
Shale, sandy, gray . .	16	639
Shale, gray, and thin layers of coarse sand	38	677

	Thickness	Depth
C7-67-16bcba.--Continued		
Shale, sandy, gray	33	710
Dawson Formation (lower part):		
Middle conglomerate:		
Sand, coarse	6	716
Sand, coarse, and thin layers of gray shale	36	752
Sand, coarse	16	768
Shale, gray	32	800
C7-67-27abad. Alt. 6,169.8 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, yellow	4	6
Clay, sandy, yellow	6	12
Shale, green, and sand	10	22
Sand and gravel	22	44
Shale, blue and gray	11	55
Shale, reddish-brown	2	57
Shale, gray	4	61
Sandstone, blue, and sand	14	75
Sandstone, hard	6	81
Shale, green, and sandstone	5	86
Sandstone, fine, gray	5	91
Shale, gray	5	96
Sandstone, fine, gray, and shale	11	107
Sand	2	109
Shale, blue	4	113
Sand, blue shale, and sandstone	9	122
Shale, green gray and brown	54	176
Sandstone, blue	7	183
Shale, gray, and sandstone	8	191
Shale, brown	4	195
Sandstone, gray	14	209
Shale, sandy, gray	9	218
Shale, gray	3	221
Upper conglomerate:		
Sand, coarse, and shale	75	296
Shale, gray	18	314
Sand, coarse	4	318
Shale, gray and brown	17	335
Sand, coarse, and gray shale	51	386
Shale, gray	4	390
Sand, coarse	53	443
Shale, gray	7	450
C7-67-36cabb. Alt. 6,335 ft.		
Dawson Formation (upper part):		
Sand, gravel, and sandy shale	13	13
Shale	36	49
Shale, sand, gravel streaks, and sandy shale	31	80
Shale	17	97
Sand, gravel, and streaks of shale	29	126
Shale	10	136
Shale, sandy	6	142
Shale	8	150
[illegible]. Alt. 6,300 ft.		
Piney Creek Alluvium:		
Topsoil, sandy, black	4	4
Dawson Formation (upper part):		
Sand	10	14
Clay, white	6	20
Sandstone, soft, white	12	32
Clay, white, and coarse sandstone, alternating	15	47
Clay, white	13	60
Sandstone, coarse; occasional thin layers of clay	39	99
Clay, white; contains a hard layer ironrock at 105 feet	12	111
Clay, gray	22	133
Sandstone and conglomerate, coarse, hard	7	140
Clay, white	12	152
Clay, sandy	8	160
Clay, dirty, dark-gray	19	179
Sandstone, coarse	14	193
Shale, hard, black; contains thin layers of water-bearing sandstone	14	207
Clay, red	23	230
C7-68-4abba. Alt. 5,670 ft.		
Louviers Alluvium:		
Soil	2	2
Clay, yellow	8	10
C7-68-4abba.--Continued		
Sand and yellow clay	97	107
Dawson Formation (upper part):		
Shale, gray	22	129
Sand, red [Upper conglomerate, 129 to 246 feet.]	15	144
Sand	56	200
Shale, gray	6	206
Sand	19	225
Shale, gray	12	237
Sand	9	246
Shale, gray	44	290
Dawson Formation (lower part):		
Sand [Middle conglomerate, 290 to 432 feet.]	31	321
Shale, gray	21	342
Sand	20	362
Shale, gray	8	370
Sand	24	394
Shale, gray	13	407
Sand	25	432
Lime, sandy	3	435
Shale, gray, and sand	164	599
Lime, sandy	1	600
Lower conglomerate:		
Sand and gray shale	159	759
Lime, sandy	2	761
Sand and gray shale	39	800
C7-68-4bdbc. Alt. 5,791.6 ft.		
Slocum Alluvium:		
Soil	8	8
Clay, light	2	10
Sand and gravel	10	20
Clay, sand, and gravel	4	24
Sand and gravel	4	28
Sand, gravel, and boulders	4	32
Dawson Formation (upper part):		
Sand, white	1	33
Clay, white, and sand	5	38
Clay, light-blue	5	43
Sand, fine	3	46
Clay and sand	11	57
Clay, blue	1	58
Sand (water-bearing)	18	76
Clay and shale	19	95
Sand, red, and gravel	5	100
Rock	1	101
Sand, red, and gravel	6	107
Clay, blue	2	109
Sandrock, blue	1	110
Clay, blue	4	114
Sand [Upper conglomerate, 114 to 278 feet.] (water-bearing)	3	117
Clay, blue, and shale	2	119
Sand (water-bearing)	26	145
Clay and shale	5	150
Sand (water-bearing)	28	178
Clay, blue	6	184
Sand (water-bearing)	7	191
Clay, blue	9	200
Sand (water-bearing)	8	208
Clay, brown and blue	5	213
Shale, blue	5	218
Sand (water-bearing)	21	239
Shale, hard	1	240
Clay and sand	5	245
Sand	6	251
Clay, brown, and shale	2	253
Sand (water-bearing)	1	254
Clay and sand	7	261
Sand (water-bearing)	17	278
Shale, gray	5	283
Clay, sandy, gray	2	285
Shale, sandy, gray	10	295
Sand, gray	4	299
Shale, blue	42	341
Clay, brown	3	344
Dawson Formation (lower part):		
Sand [Middle conglomerate, 344 to 585 feet.] (water-bearing)	31	375
Sand and shale	37	412
Shale	33	445
Sand	20	465
Clay, gray	10	475
Sand (water-bearing)	15	490
Clay, gray	5	495
Clay, gray, sandy	22	517
Sand (water-bearing)	15	532
Clay, brown, and sand	20	552
Sand and red clay (water-bearing)	33	585
Feldspar and sand	5	590
Shale, blue	18	608
Conglomerate, tight	3	611
Clay, tough, blue	8	619
Sand, coarse (lower part bears some water)	9	628
C7-68-4bdbc.--Continued		
Sand and red clay	6	634
Lower conglomerate:		
Sand, coarse, red (water-bearing)	58	692
Clay, blue	4	696
Sand, coarse (water-bearing)	23	719
Clay, blue, and shale	9	728
Quartz and sandstone (water)	19	747
Clay, gray and red	4	751
Quartz and hard sandstone (water)	3	754
Clay, brown and gray	12	766
Sand (water)	4	770
Clay, gray, and silica	15	785
Sand and layers of brown clay (water)	37	822
Shale and layers of clay	28	850
C7-68-5dabb. Alt. 5,760 ft.		
Slocum Alluvium:		
Topsoil	2	2
Clay, sandy, brown	16	18
Sand and gravel	21	39
Dawson Formation (upper part):		
Clay, gray	8	47
Shale, blue	4	51
Shale, sandy, gray	32	83
Sandstone, yellow, and sand	6	89
Shale, sandy, gray	8	97
Upper conglomerate (97 to 235 feet):		
Sand	4	101
Shale, gray	4	105
Sand	13	118
Shale, sandy, gray	8	126
Sand	5	131
Shale, sandy, gray	10	141
Sandstone, gray	22	163
Sand	3	166
Shale, gray	13	179
Sand	6	185
Shale, gray	5	190
Sand	6	196
Shale, gray	5	201
Shale, sandy, gray	11	212
Sandstone, gray	2	214
Shale, sandy, gray	8	222
Sand	13	235
Shale, sandy, gray	18	253
Shale, gray	17	270
Dawson Formation (lower part):		
Sand, coarse, and sandstone [Middle conglomerate, 270 to 710 feet.]	41	311
Sandstone, hard	1	312
Sand, coarse, and sandstone	9	321
Sandstone, hard	3	324
Sand, coarse	3	327
Sandstone	4	331
Shale, gray	11	342
Sand, coarse, and sandstone	14	356
Shale, gray	12	368
Sand, coarse, and sandstone	62	430
Shale, gray, interbedded with sand	19	449
Sand, coarse	5	454
Shale, gray	9	463
Sandstone	8	471
Sand, coarse, and thin beds of shale	39	510
Shale and shaly sand	106	616
Lower conglomerate:		
Sand	142	758
Shale, gray	3	761
Sand and sandstone	68	829
Shale, gray	32	861
C7-68-11cbac. Alt. 5,780 ft.		
Dawson Formation (upper part):		
Soil	2	2
Sand	26	28
Clay, sandy, yellow	29	57
Shale, blue	3	60
Sand	2	62
Shale, gray	3	65
Clay, sandy, yellow	6	71
Shale, gray	5	76
Sand and gra shale	15	91
Shale, blue	23	114
Upper conglomerate:		
Sand	5	119
Shale, blue and gray	49	168
Sandstone, gray	2	170
Shale, gray	9	179
Sand	2	181

	Thickness	Depth
C7-68-11cbac.--Continued		
Shale, gray.	9	190
Sand	8	198
Shale, gray.	15	213
Sand	12	225
Shale, gray.	4	229
C7-68-11dbad. Alt. 5,942.8 ft.		
Dawson Formation (upper part):		
Sandstone, medium, well-cemented, calcareous, very arkosic, yellowish-brown; grains are angular to well-rounded	10	10
Sand, angular to rounded, arkosic, 30 percent coarse, 40 percent medium, yellowish-gray; contains a trace of shale	8	18
Sandstone, medium to coarse, firmly cemented, moderately arkosic, grayish-orange; contains iron oxide; grains are angular.	24	42
Shale, silty, grayish-black.	9	51
Sand, medium, angular to rounded, very arkosic, pale-yellowish-orange; contains a trace of pyrite	6	57
Sand, fine, angular, moderately arkosic, light-olive-gray	10	67
Shale, sandy, black.	3	70
Shale, black	2	72
Sandstone, fine to medium, firmly cemented, moderately arkosic, greenish-gray; grains are angular.	4	76
Shale, black	12	88
Sand, angular, moderately arkosic, 30 percent medium, 70 percent fine, greenish-gray.	12	100
Sand, fine, well-rounded, light-olive-gray	7	107
Sand, medium, well-rounded, light-olive-gray	4	111
Shale, black	3	114
Sandstone, fine-grained, well-cemented, moderately arkosic, greenish-gray.	4	118
Shale, black	47	165
Sandstone, fine, angular, well-cemented, moderately arkosic, light-olive-gray	10	175
Sandstone, medium, angular, well-cemented, light-olive-gray	7	182
Shale, grayish-black	21	203
Sandstone, fine, rounded, well-cemented, arkosic, light-olive-gray	5	208
Shale, black, sandy.	3	211
Sandstone, fine to medium, angular, well-cemented, moderately arkosic, light-olive-gray.	7	218
Shale, black.	37	255
Sand, medium, angular, moderately arkosic, light-olive-gray (Upper conglomerate, 255 to 438 feet.)	4	259
Shale, black.	14	273
Sandstone, fine, angular, well-cemented, arkosic, light-olive-gray.	8	281
Shale, grayish-black; contains 30 percent fine sand	3	284
Sandstone, fine, angular, well-cemented, greenish-gray.	13	297
C7-68-11dbad.--Continued		
Sand, angular, arkosic, 40 percent medium, 60 percent fine, light-olive-gray	14	311
Shale, black	10	321
Sandstone, medium, angular to rounded, poorly-cemented, greenish-gray.	9	330
Shale, blackish-gray	27	357
Sand, medium, well-rounded, micaceous, moderately arkosic, light-brownish-gray.	13	370
Sand, angular, moderately arkosic, 50 percent coarse, 50 percent medium, light-olive-gray	7	377
Shale, grayish-black	4	381
Sandstone, fine to medium, angular, well-cemented, moderately arkosic, pale-yellowish-brown.	19	400
Sand, rounded, arkosic, 40 percent coarse, 60 percent medium, light-olive-gray	10	410
Sand, medium, angular, very arkosic, micaceous, pale-yellow-brown; contains a trace of coal.	11	421
Shale, black	5	426
Sand, angular to well-rounded, moderately arkosic, 60 percent medium, 40 percent fine, light-olive-gray	6	432
Sand, angular, 60 percent coarse, 40 percent medium, light-olive-gray	4	436
Shale, black	6	442
Sand, rounded, moderately arkosic, 40 percent medium, 60 percent fine, light-olive-gray	5	447
Shale, black	5	452
Sand, rounded, 40 percent medium, 60 percent fine, light-olive-gray	4	456
Shale, black	3	459
Sand, medium, angular to rounded, arkosic, light-olive-gray	11	470
Shale, black	8	478
Sand, coarse, angular to well-rounded, moderately arkosic, light-brownish-gray	5	483
Shale, grayish-black; contains 20 percent fine sand.	4	487
Sandstone, medium, angular, well-cemented, iron cement, slightly arkosic, light-olive-gray	8	495
Shale, grayish-black	5	500
Shale, sandy, slightly arkosic, black	3	503
Shale, grayish-black	12	515
Dawson Formation (lower part):		
Sand, angular, moderately arkosic, 40 percent coarse, 60 percent medium, light-olive-gray (Middle conglomerate, 515 to 839 feet.)	25	540
Sandstone, medium, angular, poorly cemented with iron oxide, light-brownish-gray.	3	543
Shale, black	3	546
Sandstone, medium, poorly cemented with iron oxide, light-brownish-gray; grains are angular.	4	550
Shale, black	4	554
Sand, medium, angular to rounded, arkosic, light-brownish-gray.	12	566
C7-68-11dbad.--Continued		
Sand, rounded, very arkosic, 40 percent coarse, 60 percent medium, light-olive-gray	12	578
Sandstone, medium to coarse, well-cemented, greenish-gray. grains are angular to rounded	19	597
Sand, coarse, angular to rounded, slightly arkosic, light-olive-gray; contains trace of mica.	31	628
Sandstone, medium to coarse, quartz, well-cemented, yellowish-brown; grains are angular to rounded and frosted.	17	645
Shale, black	10	655
Sandstone, fine, well-cemented, calcareous, medium-light-gray; grains are angular	8	663
Shale, black	20	683
Sandstone, medium to coarse, slightly arkosic, well-cemented, light-gray; grains are well-rounded	12	695
Shale, silty, grayish-black.	26	721
Sand, angular, moderately arkosic, 50 percent coarse, 50 percent medium, light-olive-gray; contains a trace of mica.	6	727
Shale, silty, black.	11	738
Sandstone, fine to medium, light-olive-gray; grains are well-rounded	9	747
Shale, silty, black.	12	759
Sandstone, medium to coarse, well-cemented, light-olive-gray; grains are rounded	11	770
Sand, angular, frosted, quartz, 30 percent coarse, 70 percent medium, light-olive-gray	7	777
Shale, black to grayish- black	23	800
Sand, medium, angular, light-olive-gray	11	811
Sandstone, medium, quartz, well-cemented, greenish-gray; grains are angular and frosted; contains trace of coal.	9	820
Sand, angular, 40 percent coarse, 60 percent medium, greenish-gray.	19	839
Shale, black	15	854
Sandstone, medium, well-cemented, light-brownish-gray.	5	859
Shale, sandy, grayish-black.	3	862
Sandstone, medium, angular, well-cemented, light-brownish-gray; contains trace of mica.	7	869
Shale, sandy, black.	5	874
Sandstone, coarse, angular to rounded, poorly cemented, moderately arkosic, yellowish-gray	5	879
Shale, sandy, black.	3	882
Lower conglomerate:		
Sand, angular to well-rounded, frosted, quartz, 70 percent coarse, 30 percent medium, light-gray	9	991
Sandstone, coarse, rounded, well-cemented, light-gray	6	997
Shale, silty, grayish-black.	8	905

	Thickness	Depth
C7-68-11dbad.--Continued		
Sand, medium, angular, frosted, quartz, rounded, arkosic, light-gray	11	916
Shale, black	4	920
Sandstone, coarse, well-cemented with iron oxide, light-olive-gray; grains are rounded	14	934
Shale, grayish-black	4	938
Sand, coarse, rounded, moderately arkosic, light-olive-gray	6	944
Sand, medium, angular, frosted, moderately arkosic, light-gray; contains trace of silty black shale, and feldspar grains are rounded	8	952
Sand, medium, angular, moderately arkosic, light-olive-gray	7	959
Shale, black to grayish-black; contains medium sand	4	963
Sand, medium, rounded, yellowish-gray; contains trace of sandy shale	5	968
Shale, silty, black	4	972
Sand, medium, angular to rounded, moderately arkosic, well-cemented, greenish-gray	6	978
Shale, black	9	987
Sand, medium, rounded, moderately arkosic, light-olive-gray	5	992
Sandstone, fine to medium, slightly arkosic, light-olive-gray; grains are angular to rounded	7	999
Shale, slightly sandy, black	5	1,004
Sand, medium, angular to rounded, light-olive-gray	4	1,008
Sand, rounded, moderately arkosic, 40 percent medium, 60 percent fine, light-olive-gray	10	1,018
Limestone, sandy, light-olive-gray	5	1,023
Sand, medium, angular to rounded, light-olive-gray	5	1,028
Sandstone, fine to medium, slightly arkosic, light-olive-gray; grains are angular to rounded	5	1,033
Shale, silty, grayish-black	-	1,040
Sand, angular to well-rounded, moderately arkosic, 40 percent coarse, 60 percent medium, light-gray	25	1,065
Shale, black	5	1,070
Sand, fine, well-rounded, arkosic, light-gray	4	1,074
Sand, angular, arkosic, 70 percent coarse, 30 percent medium, light-gray	6	1,080
Shale, slightly sandy, grayish-black	5	1,085
Sand, fine, rounded, arkosic, yellowish-gray	15	1,100
Sandstone, medium to coarse, angular, well-cemented, light-gray; grains are angular	12	1,112
Sandstone, medium, rounded, poorly cemented, light-gray	11	1,123
C7-68-11dbad.--Continued		
Sand, angular to rounded, slightly arkosic, 30 percent coarse, 70 percent medium, yellowish-gray	10	1,133
Shale, silty, black	7	1,140
Sand, coarse, rounded, slightly arkosic, medium-light-gray; contains a trace of mica	8	1,148
Sand, medium, angular, frosted, quartz, slightly arkosic, light-olive-gray; feldspar grains are rounded	10	1,158
Shale, grayish-black; contains medium sand	5	1,163
Sand, fine, angular to rounded, slightly arkosic, light-olive-gray; contains a trace of mica	27	1,190
Sand, medium, angular, frosted, quartz, rounded feldspar, moderately arkosic, pinkish-gray	10	1,200
Shale, sandy, black	6	1,206
Sandstone, fine to medium, rounded, well-cemented, slightly arkosic, light-olive-gray	11	1,217
Shale, sandy, black	18	1,235
Sandstone, fine, rounded well-cemented, moderately arkosic, light-olive-gray	10	1,245
Shale, sandy, grayish-black	4	1,249
Sand, medium, angular, frosted, quartz, light-olive-gray	15	1,264
Shale, sandy, grayish-black	4	1,268
Sandstone, fine to medium, well-cemented, moderately arkosic, light-olive-gray	20	1,288
Shale, silty, black	30	1,318
Sand, fine, angular, frosted, quartz, arkosic, light-olive-gray; feldspar grains are rounded	15	1,333
Shale, silty, black to grayish-black	16	1,349
Sand, fine, angular to rounded, arkosic, light-olive-gray	6	1,355
Laramie Formation:		
Shale, black	25	1,380
Shale, sandy, grayish-black	5	1,385
Shale, black	4	1,389
Sand, medium, angular, frosted, quartz, light-olive-gray	3	1,392
Shale, black; contains a trace of coal	68	1,460
Sandstone, fine, angular, light-olive-gray	7	1,467
Coal	1	1,468
Sand, fine, angular, frosted, quartz, rounded feldspar, moderately arkosic, light-gray; feldspar grains are rounded	34	1,502
Shale, silty, black	50	1,552
Coal	2	1,554
Shale, black	8	1,562
Shale, sandy, grayish-black	3	1,565
Shale, black	44	1,609
Coal, fractured	2	1,611
Shale, sandy, grayish-black	11	1,622
Coal	3	1,625
Sandstone, fine, well-cemented, calcareous, light-gray; contains 5 percent grayish-black shale; grains are angular	10	1,635
Shale, silty, grayish-black	29	1,664
Shale, sandy, grayish-black	20	1,684
Coal	4	1,688
Shale, silty, black	13	1,701
C7-68-11dbad.--Continued		
Coal	3	1,704
Shale, black	9	1,713
Coal	2	1,715
Shale, silty, grayish-black	3	1,718
Coal, fractured	3	1,721
Shale, silty, grayish-black	7	1,728
Coal	4	1,732
Shale, black	2	1,734
Sandstone, fine-grained, light-olive-gray; grains are rounded; contains 10 percent black shale	4	1,738
Shale, black	7	1,745
Coal, fractured	5	1,750
Shale, silty, black	8	1,758
Coal	3	1,761
Shale, black	3	1,764
Coal	1	1,765
Shale, slightly sandy, black	2	1,767
Sand, fine, rounded, light-gray; contains 10 percent shale	2	1,769
Shale, slightly sandy, black	4	1,773
Coal, fractured	6	1,779
Shale, grayish-black	14	1,793
Coal, highly fractured	7	1,800
Shale, grayish-black	3	1,803
Sandstone, fine to medium, light-gray; grains are rounded [8 sandstone, 1,803 to 1,870 feet]	67	1,870
Shale, grayish-black; contains fine sand	55	1,925
A Sandstone:		
Sandstone, fine, quartz, medium-light-gray; grains are rounded and frosted	32	1,957
Shale, grayish-black	4	1,961
Sand, fine, rounded, medium-light-gray	5	1,966
Shale, grayish-black	4	1,970
Sand, fine, rounded, light-gray	2	1,972
Shale, silty black	5	1,977
Sand, rounded, 30 percent medium, 70 percent fine, light-gray	6	1,983
Shale, silty, grayish-black	45	2,028
Fox Hills Sandstone:		
Milliken Sandstone Member:		
Sandstone, fine to medium, light-gray; grains are rounded	5	2,033
Shale, sandy, grayish-black	2	2,035
Shale, black	2	2,037
Shale, sandy, grayish-black	2	2,039
Shale, silty, black	2	2,041
Sandstone, fine, rounded, light-gray; contains 20 percent black shale	4	2,045
Sandstone, fine to medium, light-gray; grains are rounded	25	2,070
Shale, silty, black	17	2,087
C7-68-14daca. Alt. 5,848.1 ft.		
Piney Creek Alluvium:		
Loam	30	30
Dawson Formation (upper part):		
Shale, black	10	40
Sandrock, red (water)	2	42
Sand, blue	40	82
Sandrock, white	24	106
Shale	6	112
Sandrock, white	5	117
Shale	11	128
Sandrock, white	10	138
Coal shale	4	142
Coal	1	143
Sandrock, white [Upper conglomerate, 143 to 351 feet]	75	218
Shale	4	222
Sandrock	15	237
Sandrock, white (water)	8	245
Shale	6	251
Sandrock, white	6	257
Clay, blue	11	268
Sandrock, white	11	279
Clay, blue	8	287
Sandrock (water-bearing)	21	308

	Thickness	Depth
C7-68-14daca.--Continued		
Clay, blue	19	327
Shale	11	338
Sandrock, gray	7	345
Sandrock (water-bearing)	6	351
Sandrock	4	355
Coal	1	356
Sandrock	10	366
Clay	3	369
Shale	7	376
Clay	10	386
Sandrock	4	390
Clay	4	394
Sandrock, gray	6	400
Shale	5	405
Dawson Formation (lower part):		
Middle conglomerate:		
Sandrock, iron	6	411
Sandrock, hard, gray	14	425
Sandrock (water-bearing)	12	437
Clay, blue	9	446
Shale	10	456
Sandrock	9	465
Clay, blue	5	470
Shale	8	478
Sandrock	17	495
Shale, blue	29	524
Sandrock	5	529
Shale	35	564
Sandrock	7	571
Sandrock (dry)	9	580
Shale	13	593
Sandrock, white	42	635
Shale	8	643
C7-68-27bbaa. Alt. 6,067.8 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, sandy, brown	10	12
Sandstone, white	23	35
Clay, sandy, gray	3	38
Clay, red	4	42
Sandstone, red [Upper conglomerate, 42 to 194 feet]	4	46
Sandstone, white	11	57
Gravel	4	61
Sandstone, white	11	72
Shale, sandy, gray	6	78
Gravel	3	81
Shale, sandy, gray, and coarse sand	20	101
Shale, sandy, brown	12	113
Sand and layers of brown shale	5	118
Shale, sandy, gray	3	121
Sand	5	126
Shale, gray, and layers of sandstone	56	182
Shale, green	5	187
Shale, sandy, brown	4	191
Sand	3	194
Shale, gray	5	199
Shale, sandy, brown	9	208
Shale, gray	12	220
Sandstone, gray	14	234
Shale, gray	16	250
Shale, sandy, brown	4	254
Shale, sandy, gray	36	290
Sandstone	23	313
Shale, sandy, gray	26	339
Sandstone	39	378
Shale, sandy, gray	25	403
Sandstone	29	432
Shale, gray	11	443
Sandstone	5	448
Shale, gray, and layers of sand	19	467
Shale, gray	35	502
Dawson Formation (lower part):		
Sand, coarse [Middle conglomerate, 502 to 779 feet.]	13	515
Shale, sandy, gray	19	534
Sand, coarse	35	569
Shale, gray	8	577
Sand, coarse	22	599
Shale, gray	14	613
Sand, coarse	17	630
Shale, gray	28	658
Shale, sandy, brown	9	667
Shale, sandy, gray	5	672
Sand, coarse, and gray shale	71	743
Sandstone	18	761
Shale, sandy, gray	5	766
Sandstone, gray, sand, and thin beds of gray shale	13	779
Shale, gray, and coarse sand	69	848
Shale, hard, sandy, gray	70	918
C7-68-27bbaa.--Continued		
Lower conglomerate:		
Sand and thin beds of gray shale	50	968
Sand, coarse	8	976
Shale, gray, and sand	9	995
C7-69-2accc. Alt. 5,800 ft.		
Dakota Group:		
South Platte Formation:		
Clay, brown	3	3
Conglomerate	122	125
Sand	19	144
Conglomerate	4	148
Sandstone	198	346
Clay, fine	8	354
Lytle Formation:		
Sandstone	136	490
C8-65-3adad. Alt. 6,598 ft.		
Louviers Alluvium:		
Sand and gravel	20	20
Dawson Formation (upper part):		
Shale	15	35
Sand, gravel, and sandy shale	54	89
Shale	14	103
Sand, gravel, and sandy shale	12	115
Shale	20	135
C8-65-6cabd. Alt. 6,430 ft.		
Dawson Formation (upper part):		
Topsoil	1	1
Clay, sandy, yellow and brown	16	17
Clay, yellow	12	29
Clay, sandy, yellow	10	39
Clay, yellow	5	44
Clay, sandy, yellow	3	47
Sandstone	4	51
Sand, light-gray, shale, and sandstone	30	81
Shale, yellowish-gray	5	86
Shale, sandy, yellow	6	92
Sandstone, soft, and gray sandy shale	24	116
Sand	17	133
Shale, grayish-brown	9	142
Shale, light-gray	3	145
Shale, sandy, gray	6	151
Shale, yellow	6	157
Shale, light-gray	14	171
Shale, sandy, yellow	11	182
Sand and layers of gray sandy shale	8	190
Shale, yellow	2	192
Sand, fine, white, and sandy shale	5	197
Shale, yellow	4	201
Shale, sandy, grayish-brown	9	210
Shale, brown	1	211
Sand and layers of gray fine sandy shale	5	216
Shale, brownish-gray	4	220
Shale, sandy, brownish-gray	7	227
Shale, brown and gray	6	233
Shale, sandy, yellowish-gray	11	244
Sand	6	250
Shale, sandy, yellowish-gray	2	252
Sand	2	254
Sand and light-gray layers of sandy shale	14	268
Shale, gray	2	270
C8-65-6ccba. Alt. 6,400 ft.		
Dawson Formation (upper part):		
Topsoil and gravel	5	5
Clay, green	37	42
Sand	6	48
Clay	6	54
Sand and layers of clay	66	120
Clay	28	148
Sand	2	150
Clay	24	174
Mud, soft, blue	14	188
Clay	9	197
Sand and gravel	13	210
Clay	13	223
C8-65-8baab. Alt. 6,546 ft.		
Dawson Formation (upper part):		
Sand and gravel	10	10
Shale	45	55
C8-65-8baab.--Continued		
Sand, gravel, and streaks of hard shale	20	75
Shale	55	130
Shale, sandy	19	149
Sand, streaks of hard gravel, and sandy shale	76	225
Shale	20	245
Shale, blue	10	255
C8-65-8ccbb. Alt. 6,500 ft.		
Dawson Formation (upper part):		
Clay, sandy	18	18
Clay, green	42	60
Sand (very little water)	12	72
Clay, green	24	96
Sand and layers of clay	35	131
Shale	4	135
C8-65-9cdac. Alt. 6,715 ft.		
Dawson Formation (upper part):		
Gravel and boulders	35	35
Shale, sandy, gray	55	90
Sand and gravel	30	120
Shale, sandy, gray	30	150
C8-65-9dccc. Alt. 6,685 ft.		
Dawson Formation (upper part):		
No sample	54	54
Clay, hard, yellow	7	61
Sand	43	104
Clay	16	120
Sand (a little water)	12	132
Clay	8	140
Sand (water-bearing)	20	160
Sand and clay, mixed	11	171
Clay, hard	5	176
C8-65-10aadd. Alt. 6,682 ft.		
Dawson Formation (upper part):		
Shale	17	17
Sand and gravel	13	30
Shale	20	50
Sand, gravel, and sandy shale	45	95
Shale	22	117
Shale, sandy	3	120
C8-65-11dcdb. Alt. 6,548 ft.		
Dawson Formation (upper part):		
Sand	35	35
Shale, sandy, blue	45	80
Sand and gravel	5	85
Shale, sandy, gray	40	125
Sand and gravel	27	152
Shale, sandy	6	158
Shale, blue	12	170
Shale, sandy, blue	35	205
Sand and clay	8	213
Shale, sandy, blue	27	240
Shale, sandy, gray	25	265
Sand and gravel	25	290
Shale, sandy, gray	10	300
Shale, blue	12	312
Shale, sandy, blue	33	345
C8-65-13aabb. Alt. 6,519 ft.		
Dawson Formation (upper part):		
Sand, hard	12	12
Shale	8	20
Sand, hard gravel, and shale	23	43
Shale	17	60
Sand, hard gravel, and streaks of shale	35	95
Shale	55	150
C8-65-15acda. Alt. 6,689 ft.		
Dawson Formation (upper part):		
Shale	15	15
Sand and gravel	20	35
Gravel	5	40
Sand and gravel	35	75
Shale	30	105
Shale, sandy	32	137
Shale	13	150
C8-65-15dadd. Alt. 6,714 ft.		
Dawson Formation (upper part):		
Sandstone	65	65
Shale, gray	30	95

Table 1.--Logs of wells and test holes--Continued

	Thickness	Depth
C8-65-15dadd.--Continued		
Sand and sandy shale	65	160
Sand	40	200
Shale, blue	20	220
Shale, sandy	5	225
C9-65-16dacc. Alt. 6,775 ft.		
Dawson Formation (upper part):		
Clay, yellow and brown	20	20
Limestone	20	40
Clay, yellow	7	47
Sandstone and clay	68	115
Sand and gravel, medium to fine	30	145
Sand and clay	37	182
C8-65-23cdbc. Alt. 6,621 ft.		
Dawson Formation (upper part):		
Shale, sandy	5	5
Gravel	10	15
Boulders, broken rock, sand, and gravel	10	25
Shale	75	100
Sand, gravel, and sandy shale	15	115
Shale, sandy	10	125
Shale	10	135
C8-65-32dcac. Alt. 6,762 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, light-brown	13	15
Clay and sand	20	35
Rock	10	45
Clay, yellow, and rock	45	90
Sand and medium gravel	20	110
Sand and clay rock	35	145
C8-66-1bbbc. Alt. 6,340 ft.		
Dawson Formation (upper part):		
Topsoil, sandy	1	1
Sand	13	14
Clay, yellow	3	17
Sand	26	43
Clay, sandy, yellow	21	64
Sand and yellow sandy clay	19	83
Shale, gray	22	105
Clay, sandy, yellow	16	121
Sand and yellow sandy clay	40	161
Clay, sandy, yellow	15	176
Shale, gray	5	181
Clay, sandy, yellow, and sand	43	224
Shale, gray	5	229
C8-66-2aacd. Alt. 6,270 ft.		
Dawson Formation (upper part):		
Shale	7	7
Sand, hard gravel, streaks of shale, and yellow shale	38	45
Shale, yellow	10	55
Shale, blue	15	70
Shale, sandy	20	90
Sand and hard gravel	7	97
Shale	23	120
Gravel and hard sand	15	135
Shale	80	215
Gravel, hard, and streaks of shale	13	228
Shale	117	345
C8-66-2ccdc. Alt. 6,126.7 ft.		
Piney Creek Alluvium:		
Soil	15	15
Broadway Alluvium:		
Sand (water-bearing)	15	30
Louviers Alluvium:		
Clay	15	45
Gravel, coarse	18	63
Dawson Formation (upper part):		
Shale	1.5	64.5
C8-66-3aaab. Alt. 6,088.1 ft.		
Piney Creek Alluvium:		
Sand and silt, loose, tan	.5	.5
Silt, micaceous, calcareous, olive-gray; contains montmorillonite	7	7.5
Silt, sandy, calcareous, light-olive-gray	4.5	12
C8-66-3aaab.--Continued		
Broadway Alluvium:		
Sand, very fine to very coarse, poorly sorted, subangular, arkosic, and about 20 percent very fine gravel; contains yellowish-brown clay at 22 feet	20.5	32.5
Louviers Alluvium:		
Sand, very fine to fine, arkosic, noncalcareous, silty, medium-light-gray	5	37.5
Gravel, very fine, sand, medium to coarse, and tan sticky clay	10	47.5
Silt, sandy, noncalcareous, greenish-gray	5	52.5
Gravel, very fine to fine, arkosic, angular to subangular, and 20 percent very coarse sand	4.5	57
Dawson Formation (upper part):		
Shale, clay, noncalcareous, brownish-gray, and light-olive-gray soft very calcareous siltstone; contains montmorillonite	.5	57.5
C8-66-3aabb. Alt. 6,080.4 ft.		
Piney Creek Alluvium:		
Loam, sandy, plastic, brown and tan	.5	.5
Clay, silty and sandy, plastic	4.5	5
Broadway Alluvium:		
Sand, fine to coarse, angular to subrounded, arkosic, a little very fine gravel, and some light-olive-gray noncalcareous silt	12.5	17.5
Sand, very fine to fine, angular to subangular, arkosic, very silty, noncalcareous, pale-yellowish-brown	5	22.5
Louviers Alluvium:		
Clay, tough	2.5	25
Sand, very fine to very coarse, poorly sorted, arkosic, noncalcareous, pale-yellowish-brown; contains thin beds of silt and a thin lens of coarse gravel at 33 feet	17.5	42.5
Sand, very fine to medium, silty, noncalcareous, pale-yellowish-brown	5	47.5
Cobbles, fine to coarse gravel, and sandy clay	3.5	51
Sand, fine gravel, and sandy clay	6	57
Dawson Formation (upper part):		
Sandstone, fine- to very coarse-grained, arkosic, noncalcareous, very micaceous, soft, greenish-gray; in part limonite stained; contains montmorillonite	.5	57.5
C8-66-3abba. Alt. 6,108.3 ft.		
Piney Creek Alluvium:		
Topsoil	3	3
Clay	3	6
Sand	2	8
Clay and some sand	17	25
Broadway Alluvium:		
Gravel, fine, dirty, sand, and some clay	11	36
Louviers Alluvium:		
Clay	5	41
Clay and thin stripe of sand	14	55
Gravel, sand, and rocks	4	59
C8-66-3abba.--Continued		
Dawson Formation (upper part):		
Sandrock, cemented gravel, and clay	8	67
Shale	3	70
C9-66-3ddca. Alt. 6,116.4 ft.		
Piney Creek Alluvium:		
Topsoil	8	8
Broadway and Louviers Alluvium, undifferentiated:		
Gravel, medium to coarse	42	50
Louviers Alluvium:		
Gravel and clay	2	52
Dawson Formation		
Shale	2	54
C8-66-5bdaa. Alt. 6,568 ft.		
Dawson Formation (upper part):		
Sandstone, hard	145	145
Shale, yellow	11	156
Shale, gray	9	165
C8-66-6cadd. Alt. 6,501 ft.		
Dawson Formation (upper part):		
Sand and gravel	45	45
Shale, sandy	30	75
Sand and gravel	45	120
Shale, blue	9	129
Sand and gravel	11	140
Shale, blue	6	146
Shale, sandy	14	160
Shale, sandy, blue	30	190
C8-66-6ddaa. Alt. 6,509 ft.		
Dawson Formation (upper part):		
Shale	16	16
Sand, gravel, and sandstone	13	29
Sand and gravel	11	40
Shale	15	55
Sand, gravel, and sandy shale	35	90
Shale	15	105
Shale, sandy	5	110
Shale	10	120
C8-66-9cbcc. Alt. 6,595 ft.		
Dawson Formation (upper part):		
Shale	5	5
Sand, gravel, and sandstone	32	37
Shale	8	45
Sandstone, sand, and gravel	25	70
Shale	15	85
Sand, gravel, and sandstone	55	140
Sandstone, hard	20	160
Shale	7	167
Shale, sandy	5	172
Shale	8	180
C8-66-9dcdc. Alt. 6,517 ft.		
Dawson Formation (upper part):		
Sand gravel	12	12
Shale	3	15
Sand and gravel	25	40
Shale	22	62
Sand, gravel, sandy shale, and shale	35	97
Sand and gravel	13	110
Sand, gravel, sandy shale, and shale	35	145
Shale, sandy	18	163
Shale	14	177
Shale, sandy	3	180
C8-66-11bbac. Alt. 6,143.4 ft.		
Piney Creek, Broadway, and Louviers Alluvium, undifferentiated:		
Gravel and some clay	50	50
Louviers Alluvium:		
Gravel (water-bearing)	22	72
Boulders at 72 feet		
C8-66-12bbac. Alt. 6,300 ft.		
Dawson Formation (upper part):		
Topsoil	1	1
Clay, sandy, brown	3	4
Clay, yellow, and sand	2	6
Clay, yellow	3	9
Shale, grayish-green	11	20

	Thickness	Depth
C8-66-12bbac.--Continued		
Shale, yellow	3	23
Sandstone, soft, and gray shale	9	32
Sandstone, coarse, soft	4	36
Shale, gray	2	38
Sand, yellow, and ironrock	13	51
Sand, coarse	8	59
Ironrock	1	60
Shale, sandy, gray	3	63
Shale, gray	3	66
Shale, sandy, gray, and sand	5	71
Sand, fine, white	4	75
Sand	8	83
Sand, fine, white	3	86
Sand, coarse	3	89
Shale, gray	5	94
Shale, grayish-green	11	105
Shale, blue and gray	12	117
Shale, sandy, blue	7	124
Shale, blue	4	128
Shale, gray and yellow	2	130
Sand	7	137
Shale, gray	5	142
Sand and gray sandy shale	3	145
Shale, gray	13	158
Sand and gray sandy shale	5	163
Sand, coarse	13	176
Shale, gray	4	180
Sand and gray sandy shale	15	195
C8-66-17bada. Alt. 6,605 ft.		
Dawson Formation (upper part):		
Topsoil	1	1
Sandstone, hard	5	6
Shale, grayish-green	1	7
Sandstone, brown and gray	4	11
Sandstone, hard	5	16
Shale, grayish-green	2	18
Sandstone, grayish-green	2	20
Sandstone, hard	2	22
Shale, brown and gray	28	50
Sandstone, brown	2	52
Sandstone, hard	5	57
Sandstone, brown	6	63
Shale, grayish-green	6	69
Sandstone, hard	17	86
Shale, grayish-green	5	91
Shale, light-gray	13	104
Sandstone, hard	5	109
Sandstone, firm	11	120
Shale, gray	3	123
Shale, sandy, gray, and sand	11	134
Shale, gray	5	139
Shale, sandy, gray, and sandstone	11	150
Sand and sandstone	11	161
Sandstone	5	166
Shale, gray	7	173
Shale, yellowish-gray	12	185
Sand	17	202
Shale, yellowish-gray	7	209
Shale, brown	9	218
Shale, brown and gray	7	225
Shale, yellow	4	229
Sand and yellow shale	7	236
Sand	21	257
Shale, sandy, light-gray, and sand	9	266
Shale, yellow and gray	7	273
Sand	5	278
Shale, gray, and sand	5	283
Sand	6	289
Shale, blue	7	296
Sand	3	299
Shale, light-brown	6	305
Shale, light-blue	21	326
C8-67-1dccd. Alt. 6,490 ft.		
Dawson Formation (upper part):		
Topsoil, sandy	2	2
Clay, sandy, brown and yellow	19	21
Gravel	3	24
Sandstone	4	28
Clay, sandy, yellow	7	35
Sandstone	5	40
Clay, sandy, gray	6	46
Shale, green	4	50
Clay, sandy, yellow	15	65
Sand and yellow sandy clay	58	123
Shale, gray	21	144
Sand and gray sandy shale	19	163
Shale, gray	18	181

	Thickness	Depth
C8-67-1dccd.--Continued		
Sand	10	191
Shale, gray	17	208
Sand and gray shale	9	217
Shale, gray	15	232
Sand and gray sandy shale	27	259
Shale, gray, and sandstone	16	275
Sand	4	279
Shale, brown and gray	21	300
Sand	12	312
Clay, yellow brown and gray	22	334
Sand	29	363
Clay, gray	6	369
Clay, sandy	8	377
Clay, gray	15	392
Sandstone, gray	24	416
Shale, brown	4	420
Shale, sandy, green	5	425
Shale, gray	12	437
Shale, sandy, gray	24	461
Shale, brown and gray	23	484
Shale, sandy, gray	17	501
Shale, gray	30	531
Shale, sandy, gray	9	540
Upper conglomerate:		
Sand, fine, and sandy shale	11	551
Sand, fine and coarse, and gray shale	73	624
Shale, sandy, gray	4	628
C8-67-2cacd. Alt. 6,150.9 ft.		
Fill	1	1
Louviers Alluvium:		
Silt, noncalcareous sand, and arkosic very fine to fine gravel	1.5	2.5
Silt, slightly sandy, noncalcareous, pale-yellowish-brown	10	12.5
Silt, slightly sandy and gravelly, noncalcareous, olive-brown; contains montmorillonite	10.5	23
Gravel, very fine to fine, subangular to subrounded, arkosic, and silt	24.5	47.5
Gravel, very fine to medium, fairly well-sorted, arkosic, subangular to subrounded; about 20 percent sand and 20 percent grayish-orange noncalcareous micaceous silt	9	56.5
Dawson Formation (upper part):		
Sandstone, very fine to very coarse, silty, arkosic; contains montmorillonite	2	58.5
C8-67-2cadd. Alt. 6,144.1 ft.		
Broadway Alluvium:		
Sand, very fine to very coarse, silty, subangular to subrounded, noncalcareous, arkosic, grayish, and a little very fine gravel	2.5	2.5
Louviers Alluvium:		
Silt, very sandy, noncalcareous, medium gray, and scattered very fine to fine arkosic gravel	6.5	9
Silt, sandy, and very fine gravel, noncalcareous, mixed; contains montmorillonite	5	14
Dawson Formation (upper part):		
Silt, micaceous, noncalcareous, dusky-yellow and dark-yellowish-brown; contains montmorillonite	7.5	21.5
Shale, silty, noncalcareous, light-olive-gray; contains montmorillonite and some gravel	6	27.5
C8-67-2cdab. Alt. 6,141.9 ft.		
Fill, sand, gravel, and debris	3	3

	Thickness	Depth
C8-67-2cdab.--Continued		
Louviers Alluvium:		
Sand, fine to medium, very silty, noncalcareous, pale-yellowish-brown	5	8
Gravel, very fine to medium, angular to subangular, poorly sorted sand, and cobbles	2	10
Sand, fine to medium, very silty	2	12
Sand, very fine to very coarse, noncalcareous, subangular to subrounded, arkosic, medium-gray, and thin beds of medium gray silt	5.5	17.5
Sand, very fine to fine, micaceous, and thin beds of medium-light-gray micaceous noncalcareous silt; contains montmorillonite	10	27.5
Dawson Formation (upper part):		
Silt, sandy, micaceous, noncalcareous, medium-light-gray; contains montmorillonite	5.5	33
Shale, silty, noncalcareous, light-olive-gray; contains montmorillonite	2	35
C8-67-2cdbb. Alt. 6,158.6 ft.		
Fill	2.5	2.5
Broadway and Louviers Alluvium, undifferentiated:		
Sand, medium to very coarse, subangular to subrounded, and about 40 percent very fine gravel; contains grayish-orange noncalcareous silt and some gravel	5	7.5
Gravel, very fine to fine, arkosic, subangular to rounded, loose, and coarse to very coarse sand	15	22.5
Gravel, very fine, fairly well-sorted, subrounded to well-rounded, arkosic; mixed with clay and silt from 29.0 to 45 feet	25	47.5
Dawson Formation (upper part):		
Clay, silty, very sandy, tough, semiplastic	5	52.5
Sandstone, soft, very fine to very coarse, very silty, very calcareous, arkosic, dusky-yellow, at 52.5 feet		
C8-67-1cacd. Alt. 6,290 ft.		
Dawson Formation (upper part)		
Clay, sandy	10	10
Clay, sandy, brown, and layers of sand	6	16
Clay, yellow and gray	5	21
Shale, gray	9	30
Shale, sandy, gray	6	36
Shale, gray	32	68
Sandstone, blue	1	69
Shale, gray	3	72
Sandstone, blue	6	78
Sandstone, gray, and gray shale	14	92
Shale, brown gray and blue	63	155
Sandstone, blue	1	156
Shale, blue and gray	8	164
Coal	1	165
Shale, gray and blue	23	188
Shale, sandy, blue	3	191
Shale, brown gray blue and yellow	33	224
Sand and sandy shale	6	230
Shale, gray	2	232
Sand	1	233
Coal	1	234
Shale, sandy, gray	2	236

Table 1.--Logs of wells and test holes--Continued

	Thickness	Depth
C8-67-1caad.--Continued		
Sand and sandy shale.	4	240
Coal.	1	241
Shale, sandy, gray.	2	243
Shale, gray	3	246
Coal.	1	247
Shale, sandy, gray.	3	250
Shale, gray and brown	11	261
Shale, sandy, light-blue.	4	265
Shale, gray	2	267
Sand.	2	269
Coal.	1	270
Shale, gray	8	278
Upper conglomerate:		
Sand, coarse, and fine gravel.	4	282
Shale, sandy, gray.	2	284
Sand, sandy shale, and coal.	6	290
Shale, gray and blue.	18	308
Sand, coarse, and fine gravel.	5	313
Shale, gray	39	152
C8-67-7caaa. Alt. 6,282.9 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, brown	3	5
Sandstone, soft	1	6
Shale, green.	2	8
Sandstone, soft	2	10
Ironrock.	1	11
Sandstone, soft	1	12
Shale, gray	3	15
Ironrock.	3	18
Sandstone	4	22
Shale, gray	2	24
Sandstone	4	28
Shale, gray and yellow, and sandstone	5	33
Sand and gray shale	5	38
Shale, gray	4	42
Sandstone, sand, and gray shale	7	49
Ironrock and sand	2	51
Sandstone, coarse, soft	15	66
Shale, gray	12	78
Shale, gray and yellow, and sandstone	8	86
Shale, sandy, gray.	7	93
Shale, gray	3	96
Shale, red and brown.	2	98
Shale, light-gray	2	100
Sand.	11	111
Ironrock and sand	7	118
Shale, sandy, gray.	6	124
Sandstone, soft	38	162
Shale, yellow and gray.	9	171
Sand.	10	181
Ironrock.	3	184
Shale, gray	2	186
Coal and sand	3	189
Shale, gray	7	196
Sand.	2	198
Shale, gray	1	199
Shale, sandy, gray, and sand.	3	202
Shale, gray	9	211
Sand.	2	213
Shale, gray	5	218
Sand.	3	221
Shale, gray	3	224
C8-67-8ccdb. Alt. 6,412.8 ft.		
Dawson Formation (upper part):		
Topsoil	2	2
Clay, sandy, brown.	2	4
Clay, brown, and gravel.	3	7
Clay, brown	4	11
Sand and gravel	6	17
Clay, brown	4	21
Clay, sandy, yellow	1	22
Shale, sandy, grayish-brown	14	36
Shale, sandy, green, and sand.	8	44
Shale, sandy, blue, and sand.	3	47
Sandstone, blue, and sand.	6	53
Shale, dark-gray.	2	55
Shale, brown.	3	58
Shale, gray, and sand	7	65
Shale, gray	5	70
Coal.	1	71
Sand.	3	74
Shale, gray	1	75
Coal, sand, and gray shale	5	80
Shale, gray	3	83
Sand and grey shale	9	92
Shale, gray	4	96
Upper conglomerate:		
Sand.	6	102
C8-67-8ccdb.--Continued		
Coal and sand.	2	104
Shale, gray.	16	120
Sand	23	143
Shale, gray.	15	158
Sand	9	167
Shale, gray red and yellow	2	169
Shale, gray and blue	17	186
Coal	1	187
Shale, sandy, gray, and sand	3	190
Shale, blue.	2	192
Sand	2	194
Shale, gray.	5	199
Sand	4	203
Shale, blue.	4	207
Sand and coal.	6	213
Shale, gray.	2	215
Sand	10	225
Shale, gray.	5	230
Sand	8	238
Shale, gray.	11	249
Sand, fine, gray, and gray shale	7	256
Shale, gray	4	260
Sand	8	268
Shale, gray.	5	273
Sand	4	277
Shale, gray.	9	286
C8-67-11bcbc. Alt. 6,248.1 ft.		
Fill	2	2
Louviers Alluvium:		
Topsoil.	1	3
Sand and gravel.	16	19
Dawson Formation (upper part):		
Clay, sandy, blue and gray	8	27
Clay, blue	7	34
Shale, brown and gray.	32	66
Shale, hard, sandy, gray	3	69
Shale, sandy, blue	10	79
Sandstone, gray, and layers of sandy shale	9	88
Sandstone	3	91
Sandstone, gray, and layers of sandy shale	28	119
Shale, gray.	17	136
Sand and layers of gray shale.	8	144
Shale, sandy, gray	12	156
Shale, gray and brown.	16	172
Sand and layers of gray sandy shale	6	178
Shale, gray.	24	202
Shale, sandy, gray	6	208
Sand and layers of sandy shale.	4	212
Shale, blue and gray	24	236
Upper conglomerate:		
Sand	1	237
Shale, gray.	6	243
Sand and gray sandy shale.	3	246
Shale, gray.	5	251
Sand	2	253
Shale, gray	16	269
Sand	4	273
Coal	1	274
Sand	6	280
Shale, gray.	21	101
Shale, sandy, gray	3	304
Sand and layers of sandy shale.	9	313
Shale, gray	6	319
Shale, sandy, gray	2	321
Shale, gray	5	326
Sand, fine, gray, and shale.	6	332
Shale, gray.	4	336
Sand, fine, gray	3	339
Shale, gray.	5	344
Sand, fine, gray	3	347
Shale, gray.	5	352
C8-67-11dach. Alt. 6,240.1 ft.		
Broadway and Louviers Alluvium, undifferentiated:		
Soil	2	2
Sand	60	62
Dawson Formation (upper part):		
Shale, gray.	2	64
Sand	17	81
Sandstone, blue.	26	107
Sand	19	126
Sandstone, blue.	3	129
Shale, gray and blue	46	175
Shale, sandy, gray	6	181
Sand (Upper conglomerate, 181 to 760 feet.)	9	190
C8-67-11dach.--Continued		
Shale, gray	3	193
Sand.	18	211
Shale, gray	24	235
Sand and gray shale	12	247
Shale, gray	6	253
Sand.	10	263
Shale, blue and gray.	20	283
Sand.	4	287
Shale, gray	5	292
Sand.	10	302
Shale, gray	4	306
Sand.	5	311
Shale, gray	7	318
Sand.	13	331
Shale, gray	5	336
Sand.	9	345
Shale, gray	38	383
Sand.	18	401
Shale, gray, and sand	76	477
Sand.	23	500
Shale, gray	10	510
Sand.	3	513
Shale, gray	5	518
Sand.	4	522
Shale, gray	8	530
Sand.	5	535
Shale, gray	8	543
Sand.	13	556
Shale, gray	14	570
Shale, gray, and sand	51	621
Sand.	9	630
Shale, gray	11	641
Sand.	6	647
Shale, gray	10	657
Sand.	5	662
Shale, gray	17	679
Shale, gray, and sand	18	697
Sand.	9	706
Shale, gray	37	743
Sand.	17	760
Shale, brown.	5	765
Shale, brown and gray, and sand	60	825
Coal.	5	830
Shale, gray	41	871
Sand.	7	878
Shale, gray and brown	33	911
Coal.	4	915
Shale, gray	5	920
Dawson Formation (lower part):		
Sand (Middle conglomerate, 920 to 1,150 feet.)	6	926
Shale, gray	11	937
Sand.	6	943
Shale, gray	9	952
Sand.	6	958
Shale, gray	14	972
Sand.	17	989
Shale, gray, and sand	25	1,014
Sand.	12	1,026
Shale, gray	50	1,076
Sand.	32	1,108
Shale, gray	15	1,123
Sand.	14	1,137
Sand and gray shale	13	1,150
Shale, gray	50	1,200
Lower conglomerate:		
Sand.	16	1,216
Shale, gray	7	1,223
Sand.	9	1,232
Shale, gray	19	1,251
Lime, sandy	7	1,258
Shale, gray	5	1,263
Sand.	3	1,266
Shale, gray, and sandy lime.	14	1,280
Sand.	9	1,289
Shale, gray	29	1,318
Sand.	18	1,336
Shale, gray, and sand.	26	1,362
Sand.	9	1,371
Shale, gray	42	1,413
Sand.	16	1,429
Shale, gray	30	1,459
Sand.	6	1,465
Shale, gray	16	1,481
Lime, sandy	2	1,483
Shale, gray	13	1,496
Sand.	19	1,515
Shale, gray	18	1,533
Sand.	27	1,560
Shale, gray, and sand	42	1,602
Shale, gray	6	1,608
C8-67-28aaad. Alt. 6,494.3 ft.		
Dawson Formation (upper part):		
Sand and yellow clay.	23	23
Sandstone, blue	18	41
Sand, brown	5	46
Shale, blue	2	48
Sandstone, blue and brown	48	96

Table 3.--Logs of wells and test holes--Continued

	Thickness	Depth
C8-67-18aaad.--Continued		
Shale, gray and brown	64	160
Sand	21	181
Shale, gray	13	194
Sand	8	202
Shale, gray and brown	17	219
Sand	9	228
Shale, gray	7	235
Sand	4	239
Shale, gray	16	255
Sand	4	259
Shale, gray	12	271
Sand	97	368
Shale, brown gray and yellow	10	378
Sand	15	393
Shale, gray and brown	10	403
Sand	21	424
Shale, yellow and brown	8	432
Sand	34	466
Shale, gray	4	470
Sand	36	506
C8-68-1abcc. Alt. 5,880.4 ft.		
Post-Piney Creek alluvium and Broadway Alluvium, undifferentiated:		
Sand and clay	3	3
Sand and gravel	3	6
Louviers Alluvium:		
Clay, gray	12	18
Sand and gravel	28	46
Dawson Formation (upper part):		
Sandstone	2	48
C8-68-4cadd. Alt. 7,025 ft.		
Precambrian (granite):		
Granite, decomposed	35	35
Granite, hard, at 35 feet		

Table 4.--Measurements of the water level in wells

(Water levels are given in feet below, or (+) above land-surface datum)

Location number	Date	Water level
81-66-11cddd.		
	Oct. 5, 1955	22.54
	Nov. 4	23.11
	Nov. 30	23.14
	Jan. 4, 1956	23.33
	Feb. 3	21.64
	Mar. 2	22.52
	Apr. 2	22.69
	May 1	22.94
	July 30	23.32
	Oct. 2	23.66
	Nov. 6	24.55
	Dec. 4	24.72
	Jan. 8, 1957	24.97
	Feb. 5	23.25
	Mar. 5	22.90
	May 6	23.41
	June 4	21.00
	July 15	20.76
	Aug. 6	20.59
	Oct. 2	21.48
	Nov. 4	22.66
	Dec. 5	23.29
	Jan. 13, 1958	21.93
	Feb. 10	22.44
	Mar. 3	22.59
	Apr. 11	22.21
	May 5	22.55
	May 20	21.97
	Nov. 5	23.11
	Dec. 11	23.95
	Jan. 21, 1959	23.11
	Mar. 18	22.26
	Apr. 24	22.42
	June 1	22.01
	Aug. 13	23.12
	Sept. 18	22.90
	Nov. 26	23.18
	Dec. 4	23.61
	Jan. 5, 1960	23.87
	Feb. 11	22.59
	Mar. 23	22.29
	Apr. 30	22.53
	May 25	21.12
	June 24	21.52
	Sept. 30	22.65
	Jan. 12, 1961	24.38
	Apr. 27	22.75
	Sept. 21	21.25
	Jan. 5, 1962	23.48
	Apr. 11	22.00
	Oct. 3	22.74
	Jan. 23, 1963	23.73
C1-66-18cdcc.		
	Sept. 29, 1955	21.08
	Nov. 4	21.07
	Nov. 30	21.63
	Jan. 4, 1956	22.29
	Feb. 3	22.79
	Mar. 2	23.20
	Apr. 2	23.62
	May 1	23.15
	June 8	21.37
	July 6	20.34
	July 30	16.72
	Sept. 4	20.08
	Oct. 2	21.46
	Nov. 5	21.39
	Dec. 4	22.29
	Jan. 8, 1957	22.76
	Feb. 5	23.16
	Mar. 5	23.50
	May 6	23.98
	June 4	22.79
	July 15	20.24
	Aug. 6	17.70
	Sept. 2	17.03
	Oct. 2	16.06
	Nov. 4	14.64
	Dec. 5	16.97
	Jan. 13, 1958	18.06
	Feb. 10	18.75
	Mar. 3	19.19
	Apr. 11	19.88
	May 5	19.96
	May 20	19.50
	June 24	17.76
	July 14	17.20
	Aug. 19	16.70
	Sept. 24	16.93
	Nov. 5	17.95
	Dec. 11	19.00
	Jan. 20, 1959	19.06
	Mar. 18	21.09
	Apr. 24	21.44
	June 1	20.65
	June 23	19.43
	Aug. 13	17.76
	Sept. 18	18.04
	Oct. 26	18.97
	Dec. 9	20.03
C1-66-18cdcc.--Continued		
	Jan. 5, 1960	20.62
	Feb. 11	20.24
	Jan. 12, 1961	20.99
	Apr. 27	21.65
	Jul. 7	21.33
	Jan. 5, 1962	20.69
	Apr. 15	21.53
	Oct. 1	19.03
	Jan. 23, 1963	20.39
C1-66-30cdcd.		
	Sept. 29, 1955	27.69
	Nov. 11	28.99
	Nov. 30	24.29
	Jan. 4, 1956	22.95
	Feb. 3	27.17
	Mar. 2	23.29
	Apr. 2	23.46
	May 1	24.26
	June 8	27.04
	July 6	28.04
	July 30	28.73
	Sept. 4	27.35
	Oct. 2	26.60
	Nov. 6	27.60
	Dec. 4	23.96
	Jan. 8, 1957	22.96
	Feb. 5	23.10
	Mar. 5	23.20
	May 6	21.74
	June 4	19.78
	July 15	18.54
	Aug. 6	19.85
	Sept. 2	21.53
	Oct. 2	19.15
	Nov. 5	19.54
	Dec. 5	19.92
	Jan. 13, 1958	20.78
	Feb. 10	21.38
	Mar. 3	21.83
	Apr. 11	22.14
	May 5	22.67
C1-67-14addc.		
	Aug. 23, 1955	11.70
	July 12, 1957	9.75
	Aug. 16	9.95
	Sept. 16	10.24
	Nov. 12	10.38
	Dec. 11	10.68
	Jan. 16, 1958	10.63
	Feb. 19	11.00
	Mar. 12	10.97
	Apr. 22	10.52
	May 20	9.20
	June 24	10.00
	July 14	10.31
	Aug. 19	11.33
	Sept. 24	11.14
	Nov. 5	11.86
	Nov. 20	11.93
	Dec. 11	11.84
	Jan. 21, 1959	11.85
	Mar. 18	11.78
	Apr. 24	11.30
	June 1	10.77
	June 23	10.43
	July 18	10.04
	Aug. 13	10.08
	Sept. 18	11.96
	Oct. 26	12.28
	Dec. 4	12.24
	Jan. 5, 1960	12.18
	Feb. 11	12.53
	Mar. 23	11.74
	Apr. 30	11.26
	May 25	10.85
	Aug. 29	12.13
	Sept. 30	12.26
	Nov. 10	12.39
	Dec. 9	12.43
	Jan. 12, 1961	12.50
	Feb. 24	12.61
	Mar. 3	12.60
	Mar. 5	12.45
	Mar. 14	12.41
	Mar. 19	12.25
	Apr. 27	12.21
	July 7	11.39
	July 21	11.81
	July 30	12.05
	Aug. 8	12.60
	Sept. 21	11.06
	Jan. 5, 1962	11.55
	Apr. 10	11.26
	Oct. 3	12.06
	Jan. 23, 1963	11.67
C1-67-34ddcd.		
	Aug. 23, 1955	5.13
	Sept. 1	5.25
C1-67-34ddcd.--Continued		
	Oct. 3, 1955	5.14
	Nov. 4	5.41
	Dec. 1	5.57
	Jan. 4, 1956	5.32
	Feb. 3	5.14
	Mar. 2	5.04
	Apr. 2	5.00
	June 8	1.52
	July 6	1.91
	July 30	5.10
	Sept. 4	5.12
	Oct. 2	5.67
	Nov. 6	5.85
	Dec. 4	5.65
	Jan. 8, 1957	5.35
	Feb. 5	5.17
	Mar. 5	4.92
	May 6	4.56
	June 4	1.02
	July 15	2.69
	Aug. 6	2.12
	Sept. 3	2.38
	Oct. 2	2.42
	Nov. 5	4.31
	Dec. 5	2.49
	Jan. 13, 1958	2.84
	Feb. 10	3.01
	Mar. 3	3.16
	Apr. 11	3.26
	May 5	3.19
	May 20	2.59
	June 24	2.90
	July 14	2.98
	Aug. 19	4.13
	Mar. 18, 1959	4.10
	June 23	3.29
	Dec. 9	5.00
	Jan. 5, 1960	5.13
	Feb. 11	5.17
	Apr. 10, 1962	3.58
	Oct. 19	3.73
	Jan. 23, 1963	4.14
C1-67-36bdbc.		
	Aug. 23, 1955	54.64
	Sept. 1	54.60
	Oct. 3	55.22
	Nov. 4	53.64
	Nov. 30	51.94
	Jan. 4, 1956	50.82
	Feb. 3	51.16
	Mar. 2	51.57
	Apr. 2	52.03
	May 1	52.40
	June 8	52.75
	July 6	52.83
	July 30	53.14
	Sept. 4	52.88
	Oct. 2	53.52
	Nov. 6	53.74
	Dec. 4	53.28
	Jan. 8, 1957	59.25
	Feb. 5	52.57
	Mar. 5	52.76
	May 6	53.12
	June 4	52.17
	July 15	50.27
	Aug. 6	54.21
	Sept. 3	46.39
	Oct. 2	46.49
	Nov. 5	53.36
	Dec. 5	47.19
	Jan. 13, 1958	48.49
	Feb. 10	49.31
	Mar. 3	49.82
	Apr. 11	50.73
	May 5	51.29
	May 20	51.42
	June 24	53.38
	Nov. 5	52.31
	Dec. 11	51.66
	Jan. 21, 1959	51.89
	Mar. 18	52.42
	Apr. 24	52.75
	June 1	53.08
	June 23	51.15
	Aug. 13	51.55
	Sept. 18	51.75
	Oct. 26	51.34
	Dec. 9	52.03
	Jan. 5, 1960	52.61
	Feb. 11	52.92
	Apr. 30	53.85
	May 25	53.96
	June 24	51.20
	Sept. 30	52.75
	Jan. 12, 1961	52.98
	Apr. 27	54.08
	July 7	51.64
	Sept. 23	51.04

Location number	Date	Water level
C2-67-10cddd.		
	Aug. 19, 1955	25.63
	Sept. 1	25.75
	Oct. 3	25.64
	Nov. 4	25.54
	Nov. 30	25.46
	Jan. 4, 1956	25.10
	Feb. 3	24.98
	Mar. 2	25.15
	May 2	25.22
	July 6	25.39
	July 30	25.57
	Sept. 4	25.08
	Oct. 2	25.33
	Nov. 6	25.39
	Dec. 4	25.11
	Jan. 8, 1957	25.18
	Feb. 5	25.23
	Mar. 5	25.37
	May 6	25.52
	June 4	24.02
	July 15	23.18
	Aug. 6	23.00
	Sept. 3	21.32
	Oct. 2	21.01
	Nov. 5	20.24
	Dec. 5	21.42
	Jan. 13, 1958	21.95
	Feb. 10	22.14
	Mar. 3	22.27
	Apr. 11	23.13
	May 5	23.28
	May 20	23.30
	June 24	23.08
	July 14	23.34
	Aug. 19	23.49
	Dec. 11	23.39
	Jan. 21, 1959	23.54
	Mar. 18	23.86
	Apr. 24	24.03
	June 1	23.72
	June 23	23.12
	Aug. 13	23.40
	Sept. 18	23.25
	Oct. 26	23.36
	Dec. 9	23.39
	Jan. 5, 1960	23.83
	Feb. 11	23.99
	Mar. 28	24.34
	Apr. 30	23.84
	May 25	23.32
	June 24	22.37
	Sept. 30	23.26
	Jan. 12, 1961	23.75
	Apr. 27	24.60
	July 7	23.66
	Jan. 5, 1962	23.40
	Apr. 11	24.53
	Oct. 2	23.41
	Jan. 23, 1963	23.14
C2-67-11cdcb.		
	Apr. 3, 1956	37.65
	June 5	36.94
	July 6	37.28
	July 30	37.38
	Sept. 4	36.13
	Oct. 2	36.34
	Nov. 6	37.97
	Dec. 4	37.40
	Jan. 7, 1957	37.11
	Feb. 5	37.28
	Mar. 5	37.73
	May 4	38.08
	June 4	36.90
	July 15	33.75
	Aug. 6	31.32
	Sept. 2	28.76
	Oct. 2	28.94
	Nov. 5	29.59
	Dec. 5	30.78
	Jan. 13, 1958	32.62
	Feb. 10	33.69
	Mar. 3	34.37
	Apr. 11	35.52
	May 5	35.86
	May 20	35.78
	June 24	34.64
	July 14	34.13
	Aug. 19	33.27
	Dec. 11	34.31
	Jan. 21, 1959	35.54
	Mar. 18	36.84
	Apr. 24	37.29
	June 1	37.25
	June 23	36.51
	Sept. 18	34.93
	Oct. 26	34.53
	Dec. 9	35.59
	Jan. 5, 1960	36.35
	Feb. 11	37.12
	Jan. 12, 1961	36.29
	Apr. 27	38.17

Location number	Date	Water level
C2-67-11cdcb.--Continued		
	Apr. 11, 1962	37.36
	Oct. 2	34.41
	Jan. 23, 1963	34.79
C2-67-17bacb.		
	Oct. 10, 1955	8.58
	Nov. 14	8.73
	Dec. 1	8.94
	Jan. 4, 1956	9.14
	Feb. 3	9.35
	Mar. 2	9.52
	Apr. 3	9.78
	May 2	10.03
	June 5	9.66
	July 6	8.59
	July 30	8.37
	Sept. 4	8.65
	Oct. 2	9.22
	Nov. 6	9.35
	Dec. 4	9.30
	Jan. 8, 1957	9.55
	Feb. 5	9.73
	Mar. 5	9.93
	May 6	9.49
	June 4	9.54
	July 15	8.49
	Aug. 6	8.01
	Sept. 3	8.54
	Oct. 2	8.82
	Nov. 5	9.13
	Dec. 5	9.37
	Jan. 13, 1958	9.64
	Feb. 10	9.82
	Mar. 3	9.87
	Apr. 11	10.22
	May 5	10.40
	May 20	11.36
	June 24	10.96
	July 14	10.75
	Aug. 19	10.55
	Sept. 24	10.82
	Dec. 11	9.92
	Jan. 21, 1959	10.40
	Mar. 18	10.95
	Apr. 24	11.19
	June 1	11.00
	June 23	10.40
	Aug. 13	9.89
	Sept. 18	10.07
	Oct. 27	10.28
	Dec. 9	10.61
	Jan. 5, 1960	10.85
	Feb. 11	10.85
	Apr. 30	11.34
	May 25	11.36
	June 24	10.82
	Sept. 30	10.23
	Jan. 12, 1961	10.59
	Apr. 27	11.40
	July 10	11.30
	Sept. 23	9.60
	Jan. 5, 1962	10.00
	Apr. 10	11.07
	Oct. 2	9.68
	Jan. 23, 1963	10.17
C2-67-20cddc.		
	Aug. 9, 1955	29.43
	Aug. 31	29.27
	Oct. 3	28.71
	Nov. 4	28.34
	Dec. 1	27.94
	Jan. 4, 1956	27.94
	Feb. 3	28.02
	Mar. 2	28.10
	Apr. 2	28.21
	May 2	28.34
	June 4	28.57
	July 6	29.45
	July 30	29.70
	Sept. 4	29.30
	Oct. 2	29.57
	Nov. 6	29.69
	Dec. 4	29.10
	Jan. 8, 1957	28.73
	Feb. 5	28.78
	Mar. 5	28.78
	May 6	28.48
	June 4	26.50
	July 15	26.04
	Aug. 6	25.89
	Sept. 3	25.79
	Oct. 2	26.19
	Nov. 5	26.39
	Dec. 5	26.15
	Jan. 13, 1958	26.47
	Feb. 10	26.69
	Mar. 3	26.82
	Apr. 11	27.00
	May 5	27.15
	May 20	26.90
	June 24	26.20

Location number	Date	Water level
C2-67-20cddc.--Continued		
	July 14, 1958	26.27
	Aug. 19	27.04
	Sept. 24	27.50
	Nov. 5	27.48
	Dec. 11	27.11
	Jan. 21, 1959	27.15
	Mar. 18	27.17
	Apr. 24	27.30
	June 1	26.85
	June 23	27.04
	Aug. 13	28.00
	Sept. 18	28.50
	Oct. 26	27.63
	Dec. 4	27.14
	Jan. 5, 1960	27.18
	Feb. 11	27.29
	Apr. 30	27.21
	May 25	26.81
	June 24	26.67
	Sept. 30	28.34
	Jan. 12, 1961	28.13
	Apr. 24	27.50
	July 7	27.25
	Sept. 23	27.24
	Jan. 5, 1962	26.87
	Apr. 10	26.82
	Oct. 2	28.33
	Jan. 23, 1963	27.69
C2-68-20dbcb.		
	Mar. 4, 1957	432.05
	Apr. 16	436.55
	June 3	387.80
	Nov. 10, 1960	482.50
C2-68-36bccc.		
	June 1, 1959	19.43
	June 23	19.79
	Aug. 13	20.19
	Sept. 18	18.25
	Oct. 27	18.77
	Dec. 9	20.27
	Jan. 5, 1960	20.70
	Feb. 11	20.96
	Jan. 10, 1961	20.44
	Jan. 5, 1962	20.36
	Apr. 9	21.76
	Oct. 3	18.32
	Jan. 23, 1963	20.50
C2-68-36cbba.		
	Oct. 10, 1955	17.13
	Nov. 4	17.63
	Dec. 1	18.28
	Jan. 4, 1956	19.12
	Feb. 3	19.44
	Mar. 2	19.67
	Apr. 3	19.88
	May 2	20.41
	June 5	19.61
	July 6	18.35
	July 30	17.45
	Sept. 4	18.06
	Oct. 2	18.64
	Nov. 6	19.43
	Dec. 4	19.68
	Jan. 8, 1957	19.66
	Feb. 5	20.32
	Mar. 5	19.48
	June 4	19.10
	July 15	18.42
	Aug. 6	18.06
	Sept. 3	18.04
	Oct. 2	18.11
	Nov. 5	18.70
	Dec. 5	18.94
	Jan. 13, 1958	19.56
	Feb. 10	19.83
	Mar. 3	19.79
	May 5	20.28
	May 20	20.35
	June 24	18.57
	July 14	18.12
	Aug. 19	17.95
	Sept. 24	18.22
	Dec. 11	18.75
	Jan. 21, 1959	19.16
	Mar. 18	19.78
	Apr. 24	19.88
C3-65-2dccd.		
	Nov. 5, 1956	21.95
	Dec. 4	22.24
	Jan. 7, 1957	22.57
	Feb. 5	22.75
	Mar. 5	22.94
	May 4	22.88
	June 4	17.52
	July 15	19.71
	Aug. 1	16.40

Table 4.--Measurements of the water level in wells--Continued

Location number	Date	Water level
C3-65-7dccd.--Continued		
	Aug. 30, 1957	18.60
	Oct. 2	19.56
	Nov. 4	19.99
	Dec. 5	20.17
	Jan. 13, 1958	20.74
	Mar. 3	21.14
	Apr. 11	21.36
C3-67-4bbbb.		
	Sept. 12, 1955	51.61
	Oct. 3	51.73
	Nov. 4	51.91
	Nov. 30	52.04
	Jan. 4, 1956	52.21
	Feb. 3	52.08
	Mar. 2	51.42
	Apr. 2	51.22
	May 1	51.32
	June 4	50.42
	July 6	49.58
	July 30	49.25
	Sept. 4	48.62
	Oct. 2	49.28
	Nov. 5	50.20
	Dec. 4	50.52
	Jan. 7, 1957	50.26
	Feb. 5	49.80
	Mar. 5	48.59
	May 4	48.91
	June 4	49.04
	July 15	48.00
	Aug. 6	47.72
	Sept. 2	47.21
	Oct. 2	46.79
	Nov. 6	46.30
	Dec. 5	45.99
	Jan. 13, 1958	45.68
	Feb. 10	45.53
	Mar. 3	45.43
	May 5	45.03
	May 20	45.00
	June 24	44.86
	July 14	44.90
	Aug. 19	45.05
	Sept. 24	44.69
	Nov. 5	44.60
	Dec. 11	44.45
	Jan. 21, 1959	44.00
	Mar. 18	43.88
	Apr. 24	43.74
	June 1	44.75
	June 23	45.56
	Aug. 13	47.59
	Sept. 18	48.80
	Oct. 26	49.14
	Dec. 4	46.89
	Jan. 5, 1960	45.81
	Feb. 12	46.48
	Mar. 28	46.58
	Apr. 30	46.09
	May 25	45.68
	June 24	44.70
	Sept. 30	45.56
	Jan. 12, 1961	44.52
	Apr. 21	46.47
	July 10	45.67
	Sept. 23	45.49
	Jan. 5, 1962	44.72
	Apr. 11	44.74
	Oct. 2	46.07
	Jan. 23, 1963	48.59
C3-67-17ddba.		
	Oct. 23, 1956	12.47
	Dec. 4	12.43
	Jan. 3	12.61
	Mar. 4, 1957	12.52
	June 3	8.01
	July 15	8.08
	Aug. 6	7.98
	Sept. 9	8.20
	Oct. 15	8.36
	Nov. 15	8.43
	Dec. 12	8.43
	Jan. 18, 1958	8.40
	Feb. 18	8.34
	Mar. 12	8.52
	Apr. 22	8.75
	May 20	8.42
	June 24	8.33
	July 14	8.50
	Aug. 19	8.58
	Mar. 18, 1959	9.35
	Apr. 24	9.35
	June 23	9.44
	Aug. 13	10.06
	Sept. 18	10.54
	Oct. 27	10.42
	Dec. 9	10.17
	Jan. 5, 1960	6.77
	Jan. 6	9.98

Location number	Date	Water level
C3-67-17ddba.--Continued		
	Feb. 12, 1960	9.34
	Jan. 12, 1961	5.63
	Apr. 27	6.58
C3-67-18abcd.		
	Feb. 19, 1958	6.22
	Mar. 12	6.35
	Apr. 22	6.59
	May 20	5.52
	June 24	5.65
	July 14	5.69
	Aug. 19	6.09
	Nov. 5	6.64
	Dec. 11	6.67
	Feb. 3, 1959	6.50
	Mar. 18	6.25
	Apr. 24	6.21
	June 1	6.05
	June 23	6.06
	Aug. 13	6.66
	Sept. 18	6.95
	Oct. 27	6.64
	Dec. 9	6.65
	Feb. 12, 1960	7.19
	Mar. 28	6.64
	Apr. 30	6.69
	May 25	6.84
	June 24	7.01
	Oct. 4	7.68
	Jan. 13, 1961	7.67
	Apr. 27	8.32
	July 10	7.19
	Sept. 23	6.68
	Jan. 5, 1962	7.05
	Apr. 10	7.11
	Oct. 3	8.45
	Jan. 23, 1963	8.45
C3-67-18acad.		
	Mar. 12, 1958	299.25
	Apr. 22	299.53
	Apr. 22	299.70
	May 20	301.20
	June 24	303.0
	July 17	305.1
	Aug. 19	309.5
	Mar. 18, 1959	261.3
	Apr. 24	271.4
	June 1	289.80
	June 23	309.0
	Aug. 13	311.5
C3-67-23cbcb.		
	Oct. 23, 1956	21.22
	Oct. 31	21.24
	Dec. 4	21.36
	Jan. 3, 1957	21.46
	Feb. 5	21.52
	Mar. 4	21.59
	June 3	22.20
	July 15	21.36
	Aug. 7	21.27
	Sept. 9	21.16
	Oct. 11	21.03
	Nov. 15	20.96
	Dec. 12	20.80
	Jan. 16, 1958	20.83
	Feb. 18	20.79
	Mar. 12	20.73
	Apr. 25	20.81
	May 20	20.73
	June 24	23.00
	July 14	20.72
	Aug. 19	20.93
	Sept. 24	21.57
	Dec. 11	21.41
	Jan. 20, 1959	20.92
	Mar. 18	21.02
	June 1	21.30
	June 23	21.32
	Aug. 13	21.11
	Sept. 18	21.15
	Oct. 27	21.19
	Dec. 9	21.21
	Jan. 6, 1960	21.29
	Feb. 12	21.33
	Mar. 28	21.92
	Apr. 30	21.44
	May 25	21.90
	May 25	21.69
	June 24	21.70
	Oct. 4	21.69
	Jan. 13, 1961	21.63
	Apr. 27	22.54
	July 10	24.36
	Sept. 23	21.55
	Jan. 5, 1962	21.40
	Apr. 15	21.62
	Oct. 2	21.83
	Jan. 23, 1963	22.03

Location number	Date	Water level
C3-68-7dccb.		
	Dec. 4, 1956	160.78
	Jan. 3, 1957	158.81
	Feb. 5	161.69
	Mar. 4	161.20
	Aug. 6	161.91
	Sept. 9	161.79
	Oct. 15	161.37
	Nov. 15	161.49
	Dec. 13	162.10
	Jan. 18, 1958	161.90
	Feb. 19	162.07
	Mar. 12	161.40
	Apr. 22	161.35
	May 20	161.88
	June 24	162.48
	July 14	161.61
	Aug. 28	162.36
	Nov. 10	162.53
	Dec. 10	163.00
	Jan. 21, 1959	164.35
	Mar. 18	163.24
	Apr. 24	161.64
	June 1	161.85
	June 23	162.69
	Aug. 13	163.60
	Sept. 18	161.20
	Oct. 26	161.12
	Dec. 9	152.27
	Jan. 5, 1960	161.41
	Mar. 28	161.95
	Apr. 20	162.90
	May 25	161.48
	June 24	162.35
	Sept. 30	161.93
	Jan. 13, 1961	162.30
	Apr. 24	160.88
	July 11	163.01
	Sept. 23	160.69
	Jan. 5, 1962	160.51
	Apr. 10	161.34
	Oct. 2	160.50
	Jan. 23, 1963	159.60
C3-68-7dccb2.		
	July 26, 1956	2.05
	Aug. 31	.65
	Sept. 14	1.60
	Oct. 1	1.28
	Oct. 31	1.17
	Apr. 10, 1962	1.49
C3-68-13bddd.		
	Oct. 31, 1956	25.31
	Dec. 4	25.61
	Jan. 3, 1957	25.79
	Feb. 5	25.88
	Mar. 4	25.89
	Apr. 16	25.88
	June 3	24.88
	July 15	25.79
	Aug. 6	24.20
	Sept. 9	23.84
	Oct. 4	24.01
	Nov. 15	24.14
	Dec. 12	24.31
	Jan. 18, 1958	26.65
	Feb. 19	24.75
	Mar. 12	24.86
	Apr. 22	24.81
	May 20	24.40
	Aug. 19	24.04
	Nov. 5	23.97
	Jan. 20, 1959	24.50
	Mar. 18	24.64
	Apr. 24	24.37
	June 1	23.95
	Aug. 13	24.08
	Sept. 18	23.68
	Oct. 26	23.72
	Dec. 9	23.84
	Jan. 5, 1960	24.39
	Feb. 12	24.31
	Mar. 28	24.25
	Apr. 30	24.35
	May 25	24.13
	Sept. 30	23.54
	Jan. 13, 1961	23.97
	Apr. 27	24.28
	July 11	23.98
	Sept. 23	23.37
	Jan. 5, 1962	23.91
	Apr. 10	24.33
	Oct. 2	23.92
	Jan. 23, 1963	24.61
C3-68-14cdab.		
	May 25, 1960	14.05
	June 24	14.01
	Sept. 30	11.94
	Jan. 23, 1961	13.75
	Apr. 27	12.81

Location number	Date	Water level
C3-68-14cdab.--Continued		
	Sept. 23, 1961	9.41
	Jan. 5, 1962	10.61
	Apr. 4	11.50
	Oct. 2	10.67
	Jan. 23, 1963	12.54
C3-68-14cdba.		
	May 26, 1960	517.9
	June 24	511.4
	Sept. 30	515.2
	Jan. 23, 1961	510.6
	Apr. 27	504.2
	July 11	510.1
	Sept. 23	453.7
	Jan. 5, 1962	508.0
	Apr. 4	510.0
	Oct. 2	508.4
	Jan. 23, 1963	510.1
C3-68-23bdac.		
	Sept. 7, 1956	30.4
	Oct. 1	30.81
	Oct. 31	30.55
	Dec. 4	30.98
	Jan. 3, 1957	30.63
	Feb. 5	30.45
	Mar. 4	31.00
	Apr. 16	30.57
	June 3	29.48
	July 15	31.62
	Aug. 6	31.06
	Sept. 17	30.76
	Oct. 15	30.82
	Nov. 15	30.46
	Dec. 12	31.03
	Jan. 18, 1958	30.11
	Feb. 19	30.18
	Mar. 12	30.26
	Apr. 22	30.77
	May 20	30.08
	June 24	29.89
	July 14	29.79
	Aug. 19	30.43
	Nov. 6	30.03
	Dec. 11	30.00
	Jan. 20, 1959	29.90
	Mar. 18	29.89
	Apr. 24	30.38
	June 1	29.35
	June 23	29.26
	Aug. 13	30.51
	Sept. 18	29.72
	Oct. 26	29.70
	Dec. 4	28.97
	Jan. 6, 1960	28.78
	Feb. 12	29.09
	Feb. 23	29.10
	Apr. 30	29.44
	May 25	29.94
	June 24	28.91
	Sept. 30	29.42
	Jan. 13, 1961	28.35
	Apr. 22	29.18
	July 11	28.95
	Sept. 23	28.54
	Jan. 5, 1962	28.44
	Apr. 10	28.69
	Oct. 3	28.57
	Jan. 23, 1963	28.43
C3-68-34cdda.		
	Oct. 23, 1959	183.09
	Dec. 9	182.76
	Jan. 6, 1960	182.51
	Feb. 12	182.79
	Mar. 28	194.60
	May 10	204.94
	May 25	215.65
	June 27	209.15
	Sept. 30	211.00
	Jan. 23, 1961	206.25
	May 1	187.30
	July 11	193.11
	Sept. 22	198.88
	Jan. 9, 1962	207.25
	Apr. 2	212.21
	Oct. 1	211.37
	Jan. 21, 1963	208.80
C3-68-34cdda2.		
	Oct. 23, 1959	33.30
	Dec. 19	33.14
	Jan. 6, 1960	33.22
	Feb. 12	33.51
	Mar. 28	33.48
	May 10	35.09
	May 25	33.77
	June 27	33.68
	Sept. 10	33.32
	Jan. 23, 1961	33.34
	May 1	33.83
C3-68-34cdda2.--Continued		
	July 11, 1961	33.99
	Sept. 22	33.54
	Jan. 9, 1962	33.55
	Apr. 2	33.80
	Oct. 1	35.11
	Jan. 21, 1963	35.80
C3-69-13cbaa.		
	Dec. 13, 1957	5.14
	Jan. 18, 1958	4.90
	Feb. 1	5.83
	Mar. 12	5.60
	Apr. 22	5.24
	May 20	4.25
	June 18	4.15
	July 17	3.98
	Aug. 26	3.90
	Nov. 10	4.70
	Mar. 18, 1959	5.66
	June 23	4.09
	Oct. 26	4.68
	Dec. 4	5.14
	Jan. 5, 1960	5.55
	Feb. 11	5.83
C3-69-14aadd.		
	Aug. 31, 1956	5.06
	Sept. 14	5.23
	Oct. 1	5.38
	Oct. 31	5.21
	Dec. 4	4.95
	Jan. 3, 1957	5.03
	Feb. 5	5.22
	Mar. 4	4.95
	Apr. 16	3.65
	June 3	4.02
	July 10	4.16
	Aug. 6	4.44
	Sept. 9	4.23
	Oct. 15	4.85
	Nov. 15	4.74
	Dec. 13	5.05
	Jan. 18, 1958	5.22
	Feb. 19	5.05
	Mar. 12	4.80
	Apr. 22	4.83
	May 20	3.92
	June 18	4.42
	July 17	4.70
	Aug. 28	5.05
	Sept. 25	5.25
	Dec. 10	5.29
	Mar. 18, 1959	4.94
	Apr. 24	4.53
	June 1	4.22
	June 23	4.69
	Aug. 13	4.90
	Sept. 18	4.77
	Oct. 26	4.87
	Dec. 4	5.03
	Jan. 5, 1960	5.24
	Mar. 28	4.62
	Apr. 30	4.40
	May 25	4.56
	June 24	4.55
	Sept. 30	5.15
	Jan. 13, 1961	5.42
	Apr. 24	5.22
	July 10	4.72
	Sept. 23	4.67
	Jan. 5, 1962	5.46
	Apr. 9	5.20
	Oct. 2	5.32
	Jan. 23, 1963	5.78
C3-69-14cdcc.		
	Dec. 13, 1957	5.91
	Jan. 18, 1958	6.49
	Feb. 14	6.65
	Mar. 12	6.60
	Apr. 22	6.35
	May 20	4.19
	June 18	4.70
	July 17	4.35
	Aug. 26	4.10
	Mar. 18, 1959	6.60
	June 23	4.64
	Oct. 26	5.69
C3-69-15addd2.		
	Jan. 28, 1957	85.71
	Feb. 5	86.12
	Mar. 4	86.24
	Apr. 16	87.45
	June 3	88.45
	July 10	91.25
	Aug. 6	93.95
	Sept. 9	96.16
	Oct. 15	98.44
	Nov. 15	99.05
	Dec. 13	99.85
C3-69-15addd2.--Continued		
	Jan. 18, 1958	100.75
	Feb. 14	101.41
	Mar. 12	102.14
	Apr. 22	102.71
	May 20	103.59
	June 18	104.86
	July 17	106.98
	Aug 26	110.25
	Nov. 10	114.25
	Dec. 10	113.89
	Jan. 21, 1959	113.43
	Mar. 18	113.37
	Apr. 24	113.79
	June 1	114.90
	June 23	116.30
	Aug. 13	120.17
	Sept. 18	122.46
	Oct. 26	122.94
	Dec. 4	122.70
	Jan. 5, 1960	122.73
	Feb. 11	123.09
	Mar. 28	123.50
	Apr. 30	124.59
	May 25	125.60
	June 24	127.65
	Sept. 30	133.77
	Jan. 13, 1961	133.55
	May 5	134.60
	July 10	137.12
	Sept. 23	140.56
	Jan. 5, 1962	141.54
	Apr. 9	142.74
	Oct. 2	152.03
	Jan. 23, 1963	152.87
C3-69-15dbbc.		
	Dec. 13, 1957	6.01
	Jan. 18, 1958	6.60
	Feb. 14	6.74
	Mar. 12	6.89
	Apr. 22	6.30
	May 20	5.00
	July 17	4.41
	Aug. 26	5.08
	Dec. 10	7.08
	Jan. 21, 1959	8.94
	Mar. 18	6.45
	Apr. 24	5.56
	June 1	3.50
	June 23	3.75
	Aug. 13	4.46
	Sept. 18	6.13
	Oct. 26	6.27
	Dec. 4	6.28
	Jan. 5, 1960	7.19
	Feb. 11	7.93
	Mar. 28	6.94
	Apr. 30	7.12
	May 25	6.36
	June 24	5.83
	Sept. 30	6.57
	Jan. 12, 1961	7.44
	Apr. 24	5.68
	July 10	4.29
	Jan. 5, 1962	7.55
	Apr. 9	7.79
	Oct. 19	5.62
	Jan. 22, 1963	8.22
C3-69-16cccd.		
	Dec. 13, 1957	4.97
	Jan. 18, 1958	5.33
	Feb. 14	5.38
	Mar. 12	5.34
	Apr. 22	5.15
	May 20	4.30
	June 18	4.88
	July 17	4.97
	Aug. 26	5.09
	Jan. 18, 1959	5.80
	Mar. 18	5.49
	Apr. 24	4.50
	June 1	4.49
	June 23	3.89
	Aug. 13	3.25
	Sept. 18	5.50
	Oct. 26	5.38
	Dec. 4	5.41
	Jan. 5, 1960	5.63
	Feb. 11	5.86
C3-69-16dddb.		
	Dec. 13, 1957	5.48
	Jan. 18, 1958	5.82
	Feb. 14	5.87
	Mar. 12	5.80
	Apr. 22	5.79
	May 20	4.70
	June 18	5.87
	July 17	4.58
	Aug. 26	5.24

Table 4.--Measurements of the water level in wells--Continued

Location number	Date	Water level
C3-69-16ddcb.--Continued		
	Mar. 18, 1959	6.07
	June 23	4.88
	Aug. 13	4.74
	Sept. 18	6.53
	Oct. 26	5.93
	Dec. 4	5.82
	Jan. 5, 1960	6.19
	Feb. 11	6.19
	Mar. 28	5.15
	Apr. 30	5.26
	May 25	5.81
	June 24	5.51
	Sept. 30	7.00
	Jan. 12, 1961	6.52
	Apr. 24	6.15
	July 10	5.52
	Sept. 23	5.65
	Jan. 5, 1962	6.30
	Apr. 9	6.14
	Oct. 2	5.95
	Jan. 23, 1963	6.59
C3-69-21daac.		
	Dec. 13, 1957	5.99
	Mar. 12, 1958	6.69
	Apr. 22	6.33
	May 20	4.91
C3-69-21dbca.		
	Dec. 13, 1957	5.47
	Jan. 18, 1958	6.67
	Feb. 14	7.50
	Mar. 12	5.84
	May 20	5.42
	June 18	9.32
	July 17	6.93
	Aug. 26	3.82
	Nov. 10	5.44
C3-69-23cbdd.		
	Sept. 30, 1957	13.78
	Oct. 15	13.47
	Nov. 15	13.18
	Dec. 13	13.18
	Jan. 18, 1958	13.27
	Feb. 19	13.31
	Mar. 12	13.01
	Apr. 22	13.38
	May 20	12.57
	June 19	13.11
	July 17	13.06
	Aug. 16	13.58
	Nov. 10	13.61
	Dec. 10	10.50
	Jan. 21, 1959	13.68
	Mar. 18	13.63
	Apr. 24	12.97
	June 1	12.65
	June 23	12.89
	Aug. 13	14.42
	Sept. 18	13.74
	Oct. 26	12.89
	Dec. 8	12.72
	Jan. 5, 1960	12.89
	Feb. 11	12.96
	Mar. 28	12.61
	Apr. 30	12.72
	May 25	12.63
	June 24	13.10
	Sept. 30	13.31
	Jan. 12, 1961	12.81
	Apr. 24	12.70
	July 10	12.84
	Jan. 5, 1962	12.23
	Apr. 9	12.46
	Oct. 19	13.67
	Jan. 23, 1963	13.71
C3-69-24cbbc.		
	Sept. 30, 1957	7.09
	Oct. 15	6.86
	Nov. 15	6.42
	Dec. 13	6.53
	Jan. 18, 1958	6.70
	Feb. 19	6.67
	Mar. 12	6.53
	Apr. 22	6.31
	May 20	4.65
	June 19	5.61
	Aug. 26	6.66
	Dec. 10	6.99
	Jan. 21, 1959	6.89
	Mar. 18	6.18
	Apr. 24	4.02
	June 1	4.79
	June 23	5.24
	Aug. 13	6.55
	Aug. 21	6.93
	Sept. 18	6.85
	Oct. 26	6.09
	Dec. 8	5.79
C3-69-24cbbc.--Continued		
	Jan. 5, 1960	5.83
	Feb. 11	5.81
	Mar. 28	5.08
	Apr. 30	5.17
	May 25	4.90
	June 24	5.54
	Sept. 30	6.73
	Jan. 12, 1961	6.18
	Apr. 24	5.55
	July 10	6.03
	Sept. 23	5.23
	Jan. 5, 1962	5.40
	Apr. 9	4.94
	Oct. 19	7.68
	Jan. 23, 1963	7.35
C3-69-30bdda.		
	Nov. 23, 1956	95.12
	Dec. 4	103.67
	Jan. 3, 1957	114.09
	Feb. 5	122.23
C4-67-17ddbc.		
	Oct. 12, 1956	21.56
	Dec. 4	21.04
	Jan. 3, 1957	21.02
	Feb. 5	21.25
	Apr. 16	21.32
	June 3	20.58
	July 15	25.88
	Aug. 7	19.46
	Oct. 15	17.19
	Nov. 15	16.75
	Dec. 12	16.32
	Jan. 16, 1958	16.24
	Feb. 18	16.06
	Mar. 13	16.00
	Apr. 25	16.00
	June 20	15.32
	Mar. 17, 1959	14.55
	Apr. 27	14.70
	June 6	16.09
	July 31	16.16
	Oct. 9	16.59
	Oct. 27	15.82
	Dec. 9	15.94
	Jan. 6, 1960	16.33
	Feb. 8	16.42
	Mar. 23	16.10
	Apr. 27	16.54
	May 25	16.07
	Jan. 16, 1961	13.68
	Jan. 18, 1962	9.14
	Apr. 11	9.30
	Oct. 2	9.70
	Jan. 22, 1963	9.88
C4-67-18acca.		
	Jan. 28, 1959	21.09
	Mar. 17	21.22
	Apr. 27	20.92
	June 6	20.64
	June 23	20.53
	July 31	21.16
	Aug. 21	21.09
	Dec. 9	20.39
	Jan. 6, 1960	20.64
	July 12	20.99
	Jan. 22, 1963	18.69
C4-67-18accd4.		
	Mar. 17, 1959	17.25
	Apr. 27	16.98
	June 6	16.65
	June 24	16.99
	July 31	17.19
	Aug. 21	17.10
	Oct. 9	16.90
	Oct. 27	16.82
	Dec. 9	16.80
	Jan. 6, 1960	16.85
	Feb. 12	16.99
	Mar. 23	16.95
	Apr. 27	14.51
	May 25	14.74
	June 24	15.23
	Oct. 4	15.59
	Jan. 16, 1961	15.12
	Apr. 28	15.28
	July 10	14.67
	Oct. 21	13.53
	Jan. 18, 1962	14.05
C4-67-28acba.		
	June 24, 1958	12.27
	July 15	12.88
	Aug. 27	15.29
	Nov. 7	15.70
	Dec. 10	15.96
	Mar. 23, 1959	16.66
	Apr. 27	16.77
C4-67-28acba.--Continued		
	June 6, 1959	15.80
	June 24	17.04
	July 31	19.07
	Aug. 21	18.61
	Dec. 9	18.80
	Jan. 6, 1960	18.25
	Feb. 8	18.87
C4-67-28baab2.		
	Oct. 27, 1959	25.69
	Dec. 14	25.24
	Jan. 6, 1960	25.50
	Jan. 16, 1961	16.50
	Apr. 11, 1962	13.40
C4-67-28baab3.		
	Oct. 27, 1959	23.58
	Dec. 14	23.16
	Jan. 6, 1960	23.22
	Feb. 8	23.30
	Apr. 11, 1962	11.70
C4-67-28baad.		
	Apr. 15, 1955	22.10
	Oct. 4, 1960	17.27
	Jan. 16, 1961	15.48
	Apr. 11, 1962	13.30
C4-67-28baba.		
	Oct. 27 1959	22.12
	Dec. 14	22.31
	Jan. 6, 1960	22.06
	Mar. 23	21.91
	Apr. 11, 1962	10.30
C4-67-28baba2.		
	Oct. 9, 1959	22.21
	Oct. 27	21.65
	Dec. 14	21.19
	Jan. 6, 1960	21.34
	Feb. 8	21.36
	Mar. 23	21.13
	Apr. 27	20.29
	May 25	18.34
	June 24	20.70
	Oct. 4	14.48
	Jan. 16, 1961	13.09
	Apr. 28	12.18
	July 10	10.50
	Jan. 6, 1962	10.48
	Apr. 12	6.90
C4-67-28baba3.		
	July 29, 1959	22.89
	Oct. 9	21.63
	Oct. 27	20.95
	Dec. 14	20.64
	Jan. 6, 1960	20.66
	Feb. 8	20.73
	Mar. 23	20.59
	Apr. 27	19.25
	May 25	17.19
	June 24	19.05
	Apr. 28, 1961	11.70
	June 10	10.07
	Apr. 11, 1962	5.45
C4-67-28baba4.		
	July 29, 1959	24.27
	Oct. 9	22.75
	Oct. 27	22.09
	Dec. 14	21.17
	Apr. 27, 1960	21.35
	May 25	19.67
	June 24	22.70
	Apr. 28, 1961	12.60
	July 10	10.99
	Apr. 11, 1962	7.35
C4-67-28baba5.		
	Oct. 9, 1959	22.62
	Oct. 27	22.05
	Dec. 14	21.61
	Mar. 23, 1960	21.54
	Apr. 27	20.31
	May 25	17.91
	June 24	19.82
	Apr. 28, 1961	12.61
	July 10	10.99
	Apr. 11, 1962	6.65
C4-67-28baba6.		
	Oct. 9, 1959	22.61
	Oct. 27	22.10
	Dec. 15	19.68
	Jan. 6, 1960	21.62
	Feb. 9	21.73
	Mar. 23	21.58
	Apr. 27	21.94
	May 25	20.54
	June 24	24.55

Location number	Date	Water level
C4-67-28baba6.--Continued		
	Apr. 11, 1962	10.80
	Oct. 2	12.16
	Jan. 22, 1963	12.31
C4-67-28bada.		
	Oct. 27, 1959	22.95
	Dec. 14	23.21
	Jan. 6, 1960	22.86
	Apr. 11, 1962	12.00
C4-67-28bada2.		
	Oct. 9, 1959	23.44
	Oct. 27	23.00
	Dec. 14	22.79
	Jan. 6, 1960	22.88
	Feb. 8	22.91
	Mar. 23	22.54
	Apr. 27	24.56
	May 25	22.78
	June 24	23.01
	Oct. 4	16.33
	Jan. 16, 1961	14.89
	Apr. 28	14.02
	July 10	12.72
	Sept. 21	12.53
	Jan. 6, 1962	12.68
	Apr. 11	12.70
	Oct. 2	13.91
	Jan. 22, 1963	13.94
C4-67-28dacb.		
	June 10, 1957	19.79
	July 10	19.09
	Aug. 7	17.26
	Nov. 15	17.16
	Dec. 11	17.89
	Jan. 16, 1958	18.75
	Feb. 18	19.27
	Apr. 25	19.67
C4-67-34dddd2.		
	Oct. 12, 1959	24.95
	Oct. 27	24.87
	Dec. 14	24.87
	Jan. 6, 1960	24.96
	Feb. 8	24.95
	Mar. 22	24.73
	Apr. 27	23.57
	May 24	23.34
	June 24	24.18
	Oct. 4	24.85
C4-67-16cacd.		
	Feb. 4, 1957	105.62
	Feb. 14	105.34
	Feb. 22	105.24
	Feb. 25	105.90
	Mar. 1	105.21
	Mar. 25	104.80
	Apr. 22	104.28
	Apr. 26	104.42
	Apr. 30	104.35
	May 6	104.73
	May 13	104.18
	May 20	103.61
	May 28	104.04
	June 3	103.76
	June 10	104.15
	June 17	104.52
	June 24	104.49
	July 2	105.21
	July 10	106.09
	July 18	105.83
	July 25	104.72
	Aug. 2	105.88
	Aug. 9	105.91
	Aug. 17	105.68
	Aug. 26	106.19
	Sept. 9	106.74
	Sept. 19	106.45
	Sept. 23	105.98
	Sept. 30	108.41
	Oct. 15	108.29
	Dec. 12	103.69
	Jan. 16, 1958	104.13
	Feb. 18	102.84
	Mar. 13	102.77
	May 19	102.48
	June 20	105.37
	July 15	108.92
	Aug. 27	108.90
	Sept. 24	109.12
	Nov. 7	106.46
	Dec. 10	105.87
	Jan. 30, 1959	102.97
	Mar. 19	101.97
	Apr. 27	101.50
	June 6	105.42
	June 24	107.57
	July 31	111.67
	Aug. 21	113.53

Location number	Date	Water level
C4-67-16cacd.--Continued		
	Oct. 12, 1959	112.24
	Dec. 10	107.75
	Jan. 6, 1960	106.56
	Feb. 8	105.23
	Mar. 22	104.26
	Apr. 27	108.69
	May 24	107.82
	June 24	112.30
	July 25	114.10
	Sept. 2	116.02
	Oct. 4	115.88
	Nov. 1	113.87
	Dec. 1	111.72
	Jan. 4, 1961	110.00
	Feb. 9	108.75
	Apr. 7	107.17
	May 15	107.89
	July 7	110.38
	Sept. 21	112.08
	Jan. 4, 1962	109.53
	Apr. 6	108.91
	Sept. 18	117.61
	Jan. 22, 1963	115.22
C4-68-8adad2.		
	Aug. 24, 1956	9.10
	Aug. 31	9.28
	Sept. 14	9.59
	Sept. 28	9.69
	Oct. 30	10.38
	Dec. 4	11.41
	Jan. 3, 1957	11.81
	Feb. 5	12.14
	Mar. 4	12.28
	Apr. 16	11.43
	June 3	8.27
	July 10	8.09
	Aug. 6	8.68
	Sept. 9	8.80
	Oct. 14	9.68
	Nov. 16	10.51
	Dec. 11	10.95
	Jan. 17, 1958	11.40
	Feb. 17	11.66
	Mar. 12	11.73
	Apr. 25	10.47
	May 21	9.31
	June 23	8.37
	July 17	8.83
	Aug. 19	9.49
	Mar. 19, 1959	11.86
	Apr. 17	10.96
	Apr. 27	10.80
	May 26	10.06
	June 22	9.70
	July 31	9.86
	Aug. 21	9.69
	Oct. 26	10.52
	Dec. 8	10.97
	Jan. 8, 1960	11.35
	Mar. 22	11.38
	May 10	10.33
	May 25	10.10
	June 27	9.58
	Oct. 4	9.09
	Feb. 9, 1961	11.56
	Apr. 28	10.74
	Jan. 17, 1962	10.30
	Apr. 9	11.04
	Sept. 28	10.03
	Jan. 18, 1963	11.39
C4-68-9bbdd.		
	Sept. 4, 1956	8.84
	Sept. 14	8.91
	Sept. 28	9.01
	Oct. 30	8.89
	Dec. 4	9.00
	Jan. 3, 1957	9.07
	Feb. 5	10.00
	Mar. 4	9.82
	Apr. 16	9.53
	June 3	7.68
	July 10	8.64
	Aug. 6	8.83
	Sept. 9	9.50
	Oct. 12	9.87
	Nov. 16	9.78
	Dec. 11	10.10
	Feb. 14, 1958	10.61
	Mar. 12	10.68
	Apr. 25	9.80
	May 21	8.62
	June 23	9.66
	July 17	10.07
	Aug. 28	10.62
	Mar. 19, 1959	10.62
	Apr. 17	10.28
	May 26	10.25
	June 25	9.85
	July 30	10.20

Location number	Date	Water level
C4-68-9bbdd.--Continued		
	Sept. 21, 1959	10.47
	Nov. 2	9.92
	Dec. 8	10.92
	Jan. 8, 1960	10.34
	Feb. 11	10.24
	Mar. 22	9.82
	Apr. 26	9.62
C4-68-9bcbb.		
	Sept. 4, 1956	11.60
	Sept. 14	11.84
	Sept. 28	11.89
	Oct. 30	12.49
	Dec. 4	13.00
	Jan. 3, 1957	13.53
	Feb. 5	13.64
	Mar. 4	13.76
	Apr. 16	13.02
	June 3	10.18
	July 10	10.49
	Aug. 6	10.85
	Sept. 9	11.12
	Oct. 14	11.69
	Nov. 16	12.17
	Dec. 11	12.63
C4-68-9bcbc.		
	Aug. 31, 1956	8.74
	Sept. 14	9.15
	Sept. 28	10.30
	Oct. 30	9.93
	Dec. 4	10.74
	Jan. 3, 1957	11.04
	Feb. 5	11.45
	Mar. 4	11.56
	Apr. 16	10.73
	June 3	7.67
	July 10	7.77
	Aug. 6	8.04
	Sept. 9	8.36
	Oct. 14	9.17
	Nov. 16	9.82
	Dec. 11	10.31
	Jan. 17, 1958	10.72
	Feb. 17	10.95
	Mar. 12	11.00
	Apr. 25	9.85
	May 21	8.50
	June 23	8.00
	July 17	8.57
	Aug. 19	9.08
C4-68-9dcad.		
	Jan. 13, 1958	9.45
	Feb. 14	9.38
	Mar. 12	9.39
	Apr. 25	8.65
	May 21	7.35
	June 23	8.34
	July 17	8.65
	Aug. 19	8.90
	Dec. 10	9.41
	Apr. 17, 1959	8.85
	Apr. 27	9.13
	May 26	8.42
	June 22	8.14
	June 25	8.20
	July 30	8.60
	July 31	8.57
	Aug. 21	8.69
	Sept. 21	8.86
	Oct. 26	8.80
	Dec. 15	9.12
	Jan. 8, 1960	9.39
	Feb. 11	9.46
	Mar. 22	8.91
	Apr. 30	8.62
	May 25	8.27
	June 27	8.50
	Oct. 4	9.11
	Jan. 17, 1961	9.55
	Apr. 28	9.00
	Jan. 17, 1962	8.81
	Apr. 9	8.88
	Sept. 28	9.12
	Jan. 18, 1963	9.42
C4-68-11daad2.		
	Aug. 31, 1956	19.55
	Sept. 14	20.35
	Oct. 1	18.14
	Oct. 25	19.10
	Dec. 4	15.58
	Jan. 3, 1957	15.27
	Feb. 5	15.17
	Mar. 4	15.03
	Apr. 16	14.84
	June 3	14.70
	July 15	17.77
	Aug. 7	16.72
	Sept. 9	16.73

Table 4.--Measurements of the water level in wells--Continued

Location number	Date	Water level
C4-68-11daad2.--Continued		
	Oct. 15, 1957	15.36
	Nov. 15	14.47
	Dec. 13	14.29
	Jan. 18, 1958	14.57
	Feb. 20	14.51
	Mar. 12	14.59
	Apr. 22	15.40
	May 22	14.47
	June 20	17.74
	July 15	15.46
	Aug. 20	15.84
	Nov. 7	14.39
	Dec. 10	14.33
	Jan. 20, 1959	14.27
	Mar. 17	14.32
	Apr. 27	14.32
	June 6	16.24
	June 22	16.28
	July 31	15.78
	Aug. 21	18.18
	Oct. 9	13.98
	Oct. 26	22.51
	Dec. 9	13.60
	Feb. 12, 1960	13.95
	Mar. 23	13.87
	Apr. 27	14.85
	May 25	16.36
	June 24	15.90
	Oct. 4	14.82
	Jan. 16, 1961	13.88
	Apr. 28	14.56
	July 10	15.15
	Sept. 21	13.79
	Jan. 20, 1962	13.77
	Apr. 12	11.30
	Oct. 2	14.97
	Jan. 22, 1963	14.22
C4-68-11dada.1/		
	Sept. 14, 1932	10.5
	Oct. 24, 1934	9.3
	May 26, 1936	11.0
	July 10	12.0
	Aug. 28, 1937	11.0
	July 5, 1938	10.7
	July 20, 1939	11.3
	Oct. 20	8.8
	June 20, 1940	12.3
	Oct. 12, 1944	13.7
	June 14, 1946	13.3
	May 5, 1947	13.4
	July 9	14.5
	Aug. 5	14.8
	Sept. 18	14.7
	Sept. 25	15.0
	July 20, 1948	15.8
	Oct. 25	14.3
	July 20, 1949	15.9
	Sept. 13	14.3
	June 28, 1950	14.8
	Sept. 6	15.1
	July 30, 1951	15.8
	Sept. 6	15.3
	Aug. 6, 1954	15.7
	Apr. 21, 1955	14.3
	July 16, 1956	18.5
	Aug. 10	17.3
	Oct. 3	18.1
	Oct. 20, 1959	12.7
C4-68-12caab.		
	Oct. 26, 1959	23.93
	Dec. 9	23.70
	Jan. 6, 1960	24.36
	Feb. 12	23.96
	Mar. 23	24.06
	Apr. 27	24.18
	May 25	24.17
	June 24	24.28
	Oct. 4	24.13
	Jan. 16, 1961	23.83
	Apr. 28	24.29
	July 10	24.42
	Sept. 21	23.91
	Jan. 20, 1962	23.90
	Apr. 12	23.80
	Oct. 2	24.39
	Jan. 22, 1963	24.16
C4-68-13acac.		
	Aug. 31, 1956	16.27
	Sept. 14	15.29
	Sept. 28	15.44
	Oct. 25	15.32
	Dec. 4	15.25
	Jan. 3, 1957	15.48
	Feb. 5	15.65
	Mar. 4	16.64
	Apr. 16	16.37
	June 3	15.88
	July 15	15.99

Location number	Date	Water level
C4-68-13acac.--Continued		
	Aug. 7, 1957	15.39
	Sept. 9	14.76
	Oct. 15	15.14
	Nov. 15	15.28
	Dec. 18	15.60
	Jan. 17, 1958	15.50
	Feb. 19	15.71
	Mar. 12	15.91
	Apr. 22	16.64
	May 22	15.53
	June 19	15.42
	July 17	15.52
	Aug. 20	14.60
	Nov. 7	14.55
	Dec. 10	14.70
	Jan. 20, 1959	15.17
	Mar. 17	15.57
	Apr. 27	15.36
	June 6	15.50
	June 22	14.74
	July 31	14.83
	Aug. 21	15.87
	Oct. 9	13.89
C4-68-13acad.		
	Sept. 14, 1956	20.14
	Sept. 28	21.39
	Oct. 25	18.88
	Dec. 4	18.80
	Jan. 3, 1957	19.41
	Feb. 5	18.81
	Mar. 4	18.37
	Apr. 16	18.93
	June 3	17.85
	July 15	19.00
	Sept. 9	18.56
	Oct. 15	16.83
	Nov. 15	18.39
	Dec. 18	18.22
	Jan. 17, 1958	18.59
	Feb. 20	19.99
	Mar. 12	18.54
	Apr. 22	20.60
	May 22	19.78
	June 19	21.47
	July 15	21.70
	Aug. 20	19.53
	Mar. 17, 1959	18.70
	Apr. 27	18.63
	June 22	19.37
	July 31	21.22
	Aug. 21	21.46
	Oct. 9	17.65
	Oct. 26	17.52
	Dec. 9	17.70
	Jan. 6, 1960	18.13
	Feb. 12	18.37
	Mar. 23	17.85
	Apr. 27	18.70
	May 25	17.78
	Oct. 4	19.72
	Jan. 16, 1961	18.14
	Apr. 28	20.71
	July 10	21.05
	Sept. 21	18.74
	Jan. 18, 1962	16.52
	Apr. 12	18.00
	Oct. 2	18.71
	Jan. 22, 1963	18.06
C4-68-15cbda2.		
	Jan. 13, 1958	16.64
	Feb. 14	17.17
	Mar. 12	16.94
	Apr. 25	16.05
	May 21	13.92
	June 23	16.13
	July 17	17.20
	Aug. 28	18.10
	Apr. 17, 1959	17.13
	Dec. 8	17.74
	Jan. 8, 1960	16.46
	Feb. 11	18.48
	Mar. 22	17.44
	Apr. 30	17.43
	May 25	16.64
	June 27	17.45
	Sept. 22, 1961	14.29
	Apr. 9, 1962	15.25
C4-68-15cbdd2.		
	Jan. 13, 1958	17.47
	Feb. 14	18.18
	Mar. 12	17.89
	Apr. 25	16.92
	May 21	14.62
	June 23	16.75
	July 17	17.94
	Aug. 28	17.90
	Nov. 5	19.75
	Dec. 9	19.65

Location number	Date	Water level
C4-68-15cbdd2.--Continued		
	Jan. 20, 1959	19.80
	Mar. 18	18.98
	Apr. 17	17.76
	May 26	17.35
	June 25	17.44
	July 30	18.57
	Sept. 21	19.30
	Oct. 26	18.19
	Dec. 8	18.50
	Jan. 6, 1960	18.92
	Feb. 11	19.27
	Oct. 4	18.88
	Jan. 17, 1961	19.02
	Apr. 28	20.56
	July 11	17.62
	Sept. 22	13.25
	Jan. 17, 1962	15.35
	Apr. 9	14.40
	Sept. 28	15.43
	Jan. 18, 1963	15.72
C4-68-15dcdb2.2/		
	June 1, 1955	18.2
	Oct. 28	24.2
	Apr. 21, 1956	25.1
	June 29	26.2
	Nov. 8	25.7
	Mar. 22, 1957	25.2
	May 1	25.1
	June 4	24.1
	Aug. 9	23.5
	July 31, 1958	27.0
	Nov. 2, 1960	27.0
	Dec. 16	26.1
C4-68-19cddd.		
	Aug. 31, 1956	18.42
	Sept. 14	19.54
	Sept. 28	19.38
	Oct. 30	20.64
	Dec. 3	22.00
	Jan. 2, 1957	22.83
	Feb. 4	23.68
	Mar. 5	24.23
	Apr. 18	18.60
	June 4	17.62
	July 9	16.12
	Aug. 5	17.33
	Sept. 5	17.94
	Oct. 8	18.50
	Nov. 14	19.67
	Dec. 11	21.08
	Jan. 17, 1958	22.25
	Feb. 19	24.12
	Mar. 17	22.99
	Apr. 25	20.89
	May 22	15.86
	June 19	16.03
	July 16	16.84
	Aug. 28	16.93
	Sept. 25	17.75
	Dec. 12	21.58
	Feb. 6, 1959	22.74
	Mar. 19	21.53
	Apr. 17	17.47
	June 2	17.16
	June 26	16.55
	July 30	16.13
	Oct. 8	17.20
	Dec. 3	20.39
	Jan. 8, 1960	21.76
	Feb. 11	22.47
	Mar. 30	19.45
	May 10	17.54
	May 23	17.57
	June 27	17.34
	Sept. 27	18.77
	Jan. 17, 1961	21.64
	Apr. 28	19.63
	July 11	17.23
	Sept. 22	18.04
	Jan. 3, 1962	22.03
	Apr. 9	21.55
	Sept. 28	18.69
	Jan. 18, 1963	22.01
C4-68-21bbdd.		
	Aug. 29, 1956	118.08
	Sept. 14	121.86
	Sept. 28	122.27
	Oct. 30	125.48
	Dec. 7	125.93
	Jan. 3, 1957	127.07
	Feb. 5	127.59
	Sept. 18	134.55
	Oct. 8	133.27
	Nov. 15	132.51
	Dec. 11	132.59
	Jan. 17, 1958	132.82
	Feb. 18	132.89
	Mar. 12	132.83

See footnotes at end of table.

Location number	Date	Water level
C4-68-21bbdd.--Continued		
	Apr. 25, 1958	132.82
	May 22	132.66
	June 19	132.18
	July 16	131.04
	Aug. 19	131.46
	Dec. 9	130.65
	Feb. 6, 1959	131.08
	Mar. 19	132.28
	Apr. 17	131.62
	May 26	131.57
	June 25	131.57
	July 30	131.37
	Sept. 21	129.68
	Oct. 26	130.50
	Dec. 16	130.76
	Jan. 8, 1960	130.67
	Feb. 11	131.31
	Mar. 30	131.75
	Apr. 30	131.80
	May 23	130.36
	June 27	131.70
	Sept. 27	131.21
	Jan. 17, 1961	131.44
	Apr. 28	132.91
	July 11	133.27
	Sept. 22	132.23
	Jan. 3, 1962	132.40
	Apr. 16	132.88
	Sept. 28	131.32
	Jan. 23, 1963	131.97
C4-68-28abdd.		
	Aug. 31, 1956	7.98
	Sept. 14	8.50
	Sept. 28	8.78
	Oct. 29	8.67
	Dec. 3	8.59
	Jan. 2, 1957	8.66
	Feb. 4	8.68
	Mar. 5	8.52
	Apr. 18	8.10
	June 4	5.77
	July 9	6.63
	Aug. 5	6.75
	Sept. 5	6.89
	Oct. 14	7.04
	Nov. 14	8.66
	Dec. 11	7.71
	Jan. 17, 1958	7.90
	Feb. 19	7.76
	Mar. 12	8.23
	Apr. 22	7.16
	May 23	5.61
	June 19	6.72
	July 17	8.65
	Aug. 25	8.20
	Apr. 18, 1959	7.61
	Dec. 3	8.02
	Jan. 8, 1960	8.37
	Feb. 11	8.10
	Mar. 22	7.69
	Apr. 30	7.20
	May 23	6.58
	June 27	7.41
	Sept. 27	8.32
	Jan. 17, 1961	8.29
	Apr. 28	7.78
	July 11	9.52
	Jan. 15, 1962	7.85
	Apr. 9	7.52
	Sept. 28	8.32
	Jan. 18, 1963	8.17
C4-68-28acdd.		
	Sept. 28, 1956	11.90
	Oct. 29	11.52
	Dec. 3	11.51
	Jan. 2, 1957	11.43
	Feb. 4	11.57
	Mar. 5	11.37
	Apr. 18	11.26
	June 4	8.39
	Sept. 5	14.07
	Oct. 14	10.38
	Nov. 14	10.02
	Dec. 11	9.55
	Jan. 17, 1958	9.97
	Feb. 19	10.20
	Mar. 12	10.48
	Apr. 22	10.28
	May 23	8.18
	June 19	8.83
	July 17	8.87
	Aug. 25	10.70
	Apr. 18, 1959	10.54
	Dec. 3	10.62
	Jan. 8, 1960	10.49
	Feb. 11	10.59

Location number	Date	Water level
C4-68-28dabc.		
	Aug. 31, 1956	13.16
	Sept. 14	13.17
	Sept. 28	14.19
	Sept. 29	13.74
	Dec. 3	13.76
	Jan. 2, 1957	13.71
	Feb. 4	13.90
	Mar. 5	13.76
	Apr. 18	13.82
	June 4	10.64
	July 9	11.28
	Aug. 5	11.49
	Sept. 5	11.76
	Oct. 14	12.44
	Nov. 14	12.08
	Dec. 11	11.09
	Jan. 17, 1958	11.00
	Feb. 19	12.25
	Mar. 12	12.35
	Apr. 22	11.82
	May 23	10.47
	June 19	11.17
	July 17	12.16
	Aug. 25	12.49
	Sept. 24	9.90
	Nov. 5	13.10
	Dec. 9	13.12
	Jan. 30, 1959	13.29
	Mar. 19	13.43
	Apr. 18	12.84
	May 26	12.15
	June 25	12.58
	July 30	13.10
	Sept. 21	17.45
	Oct. 26	12.83
	Dec. 3	12.10
	Jan. 8, 1960	13.14
	Feb. 11	12.94
	Mar. 22	12.50
	Apr. 30	11.80
	May 23	10.68
	June 27	13.32
	Sept. 27	13.09
	Jan. 17, 1961	12.97
	Apr. 28	12.94
	July 11	12.94
	Jan. 15, 1962	12.10
	Apr. 9	12.26
	Sept. 28	13.00
	Jan. 18, 1963	13.02
C4-68-28dabc.		
	Aug. 31, 1956	12.50
	Sept. 14	12.97
	Sept. 28	13.36
	Oct. 29	12.87
	Dec. 3	12.91
	Jan. 2, 1957	12.88
	Feb. 4	13.05
	Mar. 5	12.89
	Apr. 18	12.86
	June 4	9.80
	July 3	9.73
	Sept. 5	10.97
	Oct. 14	11.61
	Nov. 14	11.32
	Dec. 11	11.11
	Jan. 17, 1958	11.01
	Feb. 19	11.60
	Mar. 12	11.71
	Apr. 22	11.67
	May 23	9.60
	June 19	6.41
	July 17	11.44
	Aug. 25	12.04
	Apr. 18, 1959	11.93
	Dec. 3	12.04
	Jan. 8, 1960	12.55
	Feb. 11	11.99
C4-68-28dbac.		
	Aug. 31, 1956	12.35
	Sept. 14	12.78
	Sept. 28	13.32
	Oct. 29	12.82
	Dec. 3	12.81
	Jan. 2, 1957	12.81
	Feb. 4	12.98
	Mar. 5	12.88
	Apr. 18	12.80
	June 21	9.61
	July 9	10.26
	Aug. 5	10.47
	Sept. 5	10.84
	Oct. 14	11.53
	Nov. 14	11.16
	Dec. 11	10.26
	Jan. 17, 1958	10.68
	Feb. 19	11.19
	Mar. 12	11.51
	Apr. 22	10.92

Location number	Date	Water level
C4-68-28dbac.--Continued		
	May 23, 1958	9.48
	June 19	10.08
	July 17	11.17
	Aug. 25	11.92
	Apr. 18, 1959	11.84
	Dec. 3	12.08
	Jan. 8, 1960	11.99
	Feb. 11	12.08
C4-68-28dbad.		
	Aug. 31, 1956	14.02
	Sept. 14	14.42
	Sept. 28	14.96
	Oct. 29	14.41
	Dec. 3	14.39
	Jan. 2, 1957	14.32
	Feb. 4	14.45
	Mar. 5	14.27
	Apr. 18	14.42
	June 4	11.20
	July 9	11.97
	Aug. 5	12.16
	Sept. 5	12.39
	Oct. 14	13.09
	Nov. 14	12.74
	Dec. 11	11.79
	Jan. 17, 1958	12.22
	Feb. 19	12.89
	Mar. 12	13.03
	Apr. 22	12.55
	May 23	11.09
	June 19	11.58
	July 17	12.65
	Aug. 25	13.54
	Apr. 18, 1959	13.44
	Dec. 3	13.69
	Jan. 8, 1960	13.70
	Feb. 11	13.63
C4-68-28dcad.		
	Apr. 14, 1958	60.82
	June 19	60.45
	July 17	61.93
	Aug. 25	63.21
	Sept. 24	63.62
	Nov. 5	64.31
	Dec. 1	64.77
	Dec. 9	64.99
	Dec. 11	65.05
	Feb. 6, 1959	64.68
	Mar. 17	65.17
	Mar. 24	65.10
	Apr. 18	64.66
	June 12	64.70
	July 3	65.67
	July 31	69.64
	Aug. 21	67.94
	Sept. 4	68.65
	Oct. 8	69.04
	Oct. 26	68.73
	Nov. 2	68.64
	Dec. 2	68.98
	Jan. 9, 1960	68.91
	Jan. 26	68.58
	Feb. 8	68.50
	Mar. 22	68.52
	Mar. 29	68.75
	Apr. 26	68.04
	May 23	68.02
	June 18	69.22
	Sept. 27	75.07
	Oct. 3	74.67
	Nov. 14	74.58
	Jan. 3, 1961	74.75
	Jan. 17	74.67
	Feb. 7	76.08
	Mar. 22	74.76
	Apr. 7	74.48
	Apr. 28	74.51
	May 10	74.12
	July 6	75.56
	Sept. 20	75.54
	Jan. 15, 1962	75.53
	Feb. 1	75.34
	Feb. 14	75.07
	Mar. 10	74.21
	Apr. 3	73.89
	July 2	72.99
	Sept. 28	77.15
	Jan. 18, 1963	76.29
C4-68-28dcad2.		
	July 29, 1948	+145.56
	Dec. 6, 1957	+54.10
	Dec. 13	+54.50
	Dec. 18	+54.40
	Dec. 24	+54.20
	Jan. 4, 1958	+53.70
	Jan. 12	+53.90
	Jan. 20	+53.60
	Feb. 1	+53.50

See footnotes at end of table.

Table 4.--Measurements of the water level in wells--Continued

Location number	Date	Water level
C4-68-28dcad2.--Continued		
	Feb. 17, 1958	+53.10
	Mar. 18	+53.20
	Apr. 3	+53.10
	Apr. 14	+52.90
	May 5	+51.90
	May 15	+51.80
	June 19	+50.3
	July 17	+48.8
	Nov. 19	+41.1
	Dec. 1	+4..1
	Dec. 11	+40.9
	Jan. 12, 1959	+41.5
	Feb. 6	+42.1
	Mar. 17	+41.3
	Mar. 24	+41.1
	Apr. 18	+41.6
	June 22	+39.9
	July 3	+39.5
	July 31	+37.2
	Aug. 21	+36.6
	Sept. 4	+35.5
	Oct. 8	+34.3
	Oct. 26	+33.5
	Nov. 2	+34.3
	Dec. 2	+33.7
	Jan. 26, 1960	+32.3
	Feb. 8	+34.3
	Mar. 5	+33.5
	Mar. 22	+34.3
	Mar. 29	+34.3
	Apr. 26	+34.1
	May 23	+33.3
	June 18	+31.8
	Sept. 27	+24.6
	Jan. 3, 1961	+24.1
	Jan. 17	+24.5
	Feb. 7	+24.4
	Mar. 22	+24.4
	Apr. 7	+24.7
	Apr. 28	+24.0
	May 10	+85.7
	May 10	+24.0
	July 6	+21.8
	Sept. 20	+20.3
	Jan. 15, 1962	+21.2
	Feb. 1	+21.3
	Feb. 14	+21.4
	Mar. 10	+21.2
	Apr. 3	+20.9
	July 2	+19.1
	Sept. 28	+16.3
	Dec. 10	+11.5
	Jan. 18, 1963	+14.6
C4-68-33cdca.		
	Sept. 21, 1942	6.43
	Oct. 20	6.28
	Nov. 27	7.35
	Dec. 30	7.47
	Jan. 26, 1943	7.63
	Feb. 25	7.85
	Mar. 25	7.91
	Apr. 28	6.89
	May 20	7.00
	June 22	6.56
	July 27	6.29
	Aug. 26	5.83
	Sept 28	6.14
	Oct. 28	7.76
	Nov. 26	8.48
	Dec. 29	8.69
	Jan. 25, 1944	8.75
	Feb. 24	8.73
	Mar. 31	8.51
	Apr. 27	7.61
	May 31	4.85
	July 29	5.85
	Aug. 31	7.57
	Sept. 22	7.67
	Nov. 4	8.00
	Dec. 1	7.74
	Dec. 29	8.87
	Jan. 31, 1945	8.94
	Feb. 24	8.83
	Mar. 10	9.19
	Apr. 28	7.24
	June 30	7.03
	Aug. 3	6.54
	Oct. 2	7.18
	Oct. 30	7.52
	Nov. 18	7.92
	Dec. 4	8.12
	Dec. 20	8.28
	Jan. 16, 1946	8.37
	Feb. 19	8.43
	Mar. 19	8.50
	Apr. 16	7.10
	May 15	6.88
	June 24	6.14
	July 3	6.43
	July 17	5.60

Location number	Date	Water level
C4-68-33cdca.--Continued		
	July 31, 1946	6.58
	Sept. 17	7.60
	Oct. 1	7.26
	Oct. 31	8.21
	Nov. 13	8.20
	Dec. 18	8.38
	Jan. 21, 1947	8.65
	Feb. 17	8.79
	Mar. 13	8.60
	Mar. 26	8.22
	Apr. 17	8.55
	May 1	7.86
	May 13	6.61
	May 26	6.29
	June 12	6.13
	June 27	4.60
	Aug. 1	5.29
	Aug. 19	6.29
	Sept. 8	6.65
	Oct. 3	7.60
	Oct. 19	7.96
	Nov. 18	8.71
	Dec. 18	9.12
	Jan. 5, 1948	9.05
	Feb. 3	8.66
	Mar. 16	8.84
	Mar. 26	8.64
	Apr. 7	8.46
	Apr. 23	6.73
	May 5	5.87
	May 20	6.11
	June 23	6.50
	July 9	6.66
	July 24	7.32
	Aug. 10	7.05
	Aug. 24	7.1
	Sept. 9	7.37
	Sept. 21	7.50
	Oct. 11	8.03
	Dec. 14	9.52
	Dec. 23	9.46
	Jan. 6, 1949	9.52
	Jan. 25	9.77
	Feb. 8	9.77
	Feb. 17	9.76
	Mar. 23	9.85
	Apr. 13	9.69
	Apr. 29	8.79
	May 24	8.21
	June 24	6.75
	June 28	7.09
	July 29	8.30
	Aug. 15	7.71
	Sept. 26	10.35
	Oct. 12	9.97
	Oct. 28	10.02
	Nov. 22	10.43
	Dec. 8	10.71
	Dec. 28	10.72
	Jan. 23, 1950	10.68
	Feb. 6	10.68
	Feb. 20	10.56
	Mar. 21	10.80
	Apr. 17	9.85
	May 18	9.55
	June 14	9.05
	July 20	9.21
	Aug. 16	8.98
	Sept. 26	10.82
	Oct. 27	8.98
	Nov. 20	10.92
	Dec. 21	11.32
	Jan. 4, 1951	11.16
	Jan. 16	11.20
	Feb. 6	11.23
	Feb. 21	11.12
	Mar. 26	11.51
	Apr. 24	11.25
	May 22	10.35
	June 27	9.62
	July 17	9.92
	July 31	9.29
	Aug. 21	9.92
	Sept. 13	10.33
	Oct. 31	11.06
	Dec. 3	11.45
	Jan. 3, 1952	11.51
	Jan. 18	11.50
	Feb. 4	11.67
	Feb. 18	11.72
	Mar. 3	11.64
	Mar. 20	11.70
	Apr. 23	11.26
	May 6	10.15
	July 2	9.58
	July 27	10.04
	Aug. 5	9.30
	Aug. 27	9.30
	Oct. 1	9.27
	Oct. 20	11.15
	Nov. 24	8.82

Location number	Date	Water level
C4-68-33cdca.--Continued		
	Dec. 31, 1952	8.54
	Jan. 26, 1953	7.88
	Feb. 19	12.07
	Mar. 17	12.33
	Apr. 30	11.50
	May 19	10.78
	June 23	9.43
	July 29	9.75
	Aug. 18	10.26
	Sept. 15	10.64
	Oct. 20	11.38
	Dec. 4	12.29
	Dec. 17	11.95
	Jan. 26, 1954	12.39
	Feb. 18	12.47
	Mar. 14	12.54
	Apr. 21	12.48
	May 14	12.15
	June 14	11.43
	July 27	11.11
	Aug. 20	11.92
	Sept. 21	12.57
	Oct. 13	12.91
	Nov. 28	12.75
	Dec. 23	13.16
	Jan. 14, 1955	13.01
	Feb. 23	13.16
	Mar. 26	13.40
	Apr. 25	12.71
	May 23	11.01
	June 24	12.51
	Aug. 1	11.88
	Sept. 8	12.24
	Oct. 1	12.73
	Oct. 24	12.72
	Nov. 25	13.53
	Jan. 3, 1956	13.93
	Jan. 25	14.53
	Feb. 28	14.55
	Apr. 4	14.89
	May 1	12.59
	May 25	12.21
	June 28	12.48
	July 23	12.64
	Aug. 29	12.67
	Oct. 3	14.47
	Oct. 25	14.16
	Nov. 30	14.39
	Dec. 26	14.34
	Jan. 28, 1957	14.65
	Feb. 26	15.22
	Mar. 25	15.01
	Apr. 25	14.29
	May 28	11.15
	June 27	12.70
	Aug. 1	13.03
	Aug. 31	13.32
	Sept. 28	14.59
	Oct. 31	14.08
	Nov. 27	14.03
	Dec. 30	14.72
	Jan. 27, 1958	14.96
	Feb. 28	14.66
	Mar. 24	14.60
	Apr. 28	13.95
	May 26	12.25
	June 27	13.95
	July 1	14.80
	Sept. 1	14.60
	Sept. 24	14.89
	Oct. 28	14.99
	Nov. 26	14.95
	Dec. 29	15.10
	Jan. 30, 1959	15.15
	Feb. 25	15.09
	Mar. 24	15.02
	Apr. 28	14.50
	May 26	14.19
	June 25	14.47
	July 30	14.63
	Sept. 21	15.26
	Oct. 26	14.74
	Dec. 3	14.77
	Jan. 8, 1960	14.80
	Feb. 10	15.03
	Mar. 22	14.26
	Apr. 30	14.18
	May 23	12.99
	June 27	14.15
	July 29	14.55
	Aug. 31	15.38
	Sept. 27	15.38
	Jan. 17, 1961	14.69
	Jan. 30	14.39
	Feb. 24	14.62
	Mar. 30	14.78
	Apr. 27	14.55
	May 29	13.45
	June 30	15.10
	July 26	14.55
	Sept. 21	13.97

See footnotes at end of table.

Location number	Date	Water level
C4-68-11cdca.--Continued		
	July 26, 1961	14.55
	Sept. 21	13.97
	Sept. 28	13.57
	Oct. 14	14.14
	Nov. 10	13.94
	Dec. 28	13.17
	Jan. 31, 1962	13.97
	Feb. 26	13.70
	Mar. 26	14.56
	Apr. 9	14.19
	May 29	14.36
	June 28	14.17
	July 26	14.28
	Aug. 29	14.86
	Sept. 23	15.00
	Oct. 22	15.36
	Nov. 28	15.18
	Dec. 26	14.93
	Jan. 21, 1963	14.82
C4-68-11cdca2.		
	May 23, 1960	12.81
	June 27	14.17
	July 29	14.62
	Aug. 31	15.43
	Sept. 27	15.41
	Jan. 17, 1961	14.72
	Jan. 30	14.37
	Feb. 24	14.69
	Mar. 30	14.76
	Apr. 27	14.62
	May 29	13.42
	June 30	15.19
	July 26	14.70
	Aug. 29	13.85
	Sept. 28	13.64
	Oct. 24	14.18
	Nov. 30	14.03
	Dec. 28	13.30
	Jan. 31, 1962	14.11
	Feb. 26	13.87
	Mar. 26	14.52
	Apr. 9	14.07
	May 29	14.45
	June 28	14.22
	July 26	14.34
	Aug. 29	14.97
	Sept. 23	14.99
	Oct. 22	15.32
	[illegible] 26	14.89
	[illegible] 21, 1963	14.82
C4-68-33dcbd.		
	Aug. 30, 1956	18.70
	Sept. 14	19.21
	Sept. 28	18.28
	Oct. 29	17.61
	Dec. 3	19.74
	Jan. 2, 1957	18.27
	Feb. 4	19.20
	Mar. 5	18.58
	Apr. 18	16.79
	July 9	16.41
	Aug. 5	18.01
	Sept. 5	18.48
	Oct. 14	18.92
	Nov. 15	19.01
	Dec. 11	19.95
	Jan. 14, 1958	21.90
	Feb. 18	20.33
	Mar. 12	18.48
	Apr. 22	17.94
	May 22	15.75
	June 19	17.30
	July 16	17.67
	Aug. 25	19.12
	Apr. 18, 1959	17.24
	Dec. 3	20.44
	Jan. 8, 1960	21.70
	Feb. 10	20.41
C4-68-36dddb.		
	Sept. 9, 1957	129.48
	Feb. 17, 1958	118.93
	Mar. 18	115.60
	May 22	115.55
	June 19	118.10
	Nov. 7	82.54
	Dec. 10	93.79
	Jan. 20, 1959	135.62
	Mar. 17	122.44
	Apr. 27	127.82
	June 2	141.05
	June 22	151.04
	Aug. 21	170.16
	Oct. 12	191.13
	Nov. 2	192.85
	Dec. 14	185.61
	Jan. 8, 1960	194.55
	Feb. 10	139.99
	Mar. 22	132.05
C4-68-36dddb.--Continued		
	May 24, 1960	153.22
	June 27	150.85
	Jan. 17, 1961	167.82
	July 11	171.13
	Sept. 22	166.21
	Jan. 6, 1962	161.79
	Apr. 3	148.88
	Oct. 1	169.46
	Jan. 23, 1963	189.47
C4-69-2babc.		
	May 17, 1960	439.65
	May 25	439.30
	June 27	444.00
	Sept. 27	448.31
	Jan. 23, 1961	443.68
	May 1	441.25
	June 29	445.73
	Oct. 14	445.80
	Jan. 5, 1962	444.10
	Apr. 2	441.53
	Oct. 2	449.33
	Jan. 21, 1963	449.50
C4-69-9acab.		
	Nov. 12, 1958	2.50
	Feb. 16, 1959	+ .15
	Mar. 14, 1962	1.40
	Mar. 21	1.28
	Apr. 20	1.23
	May 2	1.48
	May 13	1.12
	Sept. 28	+3.26
	Jan. 18, 1963	+2.03
C4-69-17dadd.		
	Dec. 10, 1956	341.46
	Jan. 3, 1957	341.28
	Feb. 6	339.63
	Feb. 14	339.79
	Feb. 22	339.81
	Feb. 28	337.15
	Mar. 25	339.49
	Apr. 30	339.10
	May 21	338.52
	June 4	338.11
	July 15	336.82
	Aug. 16	333.95
	Sept. 16	332.88
	Sept. 23	332.72
	Sept. 30	333.86
	Oct. 8	333.96
	Oct. 16	333.98
	Oct. 24	329.60
	Nov. 12	332.47
	Dec. 11	331.47
	Jan. 13, 1958	329.72
	Feb. 19	331.62
	Mar. 17	329.94
	Apr. 25	329.25
	May 23	327.18
	June 26	325.83
	July 17	325.30
	Aug. 29	324.02
	Sept. 24	323.00
	Oct. 7	316.55
	Nov. 6	318.13
	Dec. 9	319.20
	Dec. 27	319.90
	Feb. 3, 1959	314.00
	Mar. 18	313.16
	Apr. 24	313.19
	June 5	311.84
	June 22	310.29
	Aug. 13	310.64
	Sept. 14	310.66
	Nov. 2	309.66
	Dec. 3	307.84
	Dec. 13	308.50
	Jan. 4, 1960	306.98
	Feb. 10	306.81
	Mar. 31	307.63
	Apr. 30	307.91
	May 10	307.98
	June 27	307.66
	Aug. 31	306.32
	Sept. 27	306.57
	Nov. 14	305.91
	Dec. 6	305.19
	Dec. 26	305.82
	Jan. 15, 1961	305.35
	Feb. 7	305.80
	Mar. 7	305.70
	Apr. 10	306.19
	May 17	305.31
	June 23	304.94
	Sept. 5	304.33
	Jan. 25, 1962	302.56
	Apr. 6	308.64
	Sept. 29	269.74
	Jan. 18, 1963	255.77
C4-69-23abbd.		
	Mar. 26, 1957	294.10
	Apr. 1	294.12
	June 2	286.30
	July 9	278.50
	Aug. 5	292.88
	Sept. 5	293.77
	Sept. 30	294.02
	Nov. 14	294.12
	Dec. 11	293.93
	Jan. 13, 1958	293.64
	Feb. 18	294.02
	Mar. 17	294.31
	Apr. 22	294.52
	May 21	294.74
	June 26	295.10
	July 16	295.56
	Aug. 21	296.85
	Sept. 25	297.97
	Nov. 5	298.10
	Dec. 3	298.45
	Feb. 2, 1959	298.85
	Mar. 18	299.45
	Apr. 17	299.78
	May 26	294.95
	June 25	294.12
	July 30	294.55
	Sept. 24	295.95
	Oct. 26	296.69
	Dec. 3	296.37
	Jan. 8, 1960	296.45
	Feb. 11	296.17
	Mar. 21	296.20
	Apr. 10	295.90
	May 24	295.96
	June 23	296.40
	Jan. 13, 1961	299.76
	Apr. 28	300.84
	June 29	302.14
	Jan. 3, 1962	304.18
	Apr. 21	303.55
	Sept. 28	302.36
	Jan. 18, 1963	302.08
C4-69-26ccdd.		
	Oct. 10, 1956	5.26
	Oct. 30	5.00
	Dec. 4	4.87
	Jan. 3, 1957	4.79
	Feb. 4	4.59
	Mar. 3	4.45
	Apr. 1	4.34
	June 2	3.32
	July 10	2.95
	Aug. 5	1.92
	Dec. 12	2.50
	Jan. 13, 1958	2.43
	Feb. 18	2.23
	Mar. 17	2.10
	Apr. 22	1.97
	May 21	1.45
	July 16	1.35
	Aug. 21	2.09
	Apr. 17, 1959	.99
C4-69-27bccd2.		
	Sept. 10, 1956	180.21
	Sept. 20	181.98
	Oct. 1	183.62
	Oct. 30	185.83
	Dec. 3	187.48
	Jan. 2, 1957	187.84
C4-69-34aabc.		
	Oct. 9, 1956	3.43
	Oct. 30	3.36
	Dec. 4	3.39
	Jan. 3, 1957	3.58
	Feb. 4	3.62
	Mar. 3	3.64
	Apr. 1	3.70
	June 2	3.69
	July 10	3.59
	Aug. 5	3.41
	Sept. 5	3.31
	Oct. 14	3.10
	Nov. 17	3.12
	Dec. 12	3.12
	Feb. 17, 1958	3.28
	Mar. 17	3.26
	Apr. 22	3.37
	May 21	2.82
	June 23	3.20
	July 16	3.01
	Aug. 21	2.98
	Sept. 25	2.79
	Nov. 5	2.78
	Dec. 9	2.85
	Feb. 2, 1959	3.17
	Mar. 18	3.24
	Apr. 21	3.31
	May 26	3.33

See footnotes at end of table.

Table 4.--Measurements of the water level in wells--Continued

Location number	Date	Water level
C4-69-14aabc.--Continued		
	June 25, 1959	3.30
	July 30	3.01
	Sept. 24	2.86
	Oct. 26	2.84
	Dec. 3	2.86
	Jan. 9, 1960	2.93
	Feb. 11	5.13
	Mar. 21	5.10
	Apr. 30	5.14
	June 23	5.38
	Jan. 3, 1962	4.85
	Apr. 12	5.10
C4-69-14abaa.		
	Oct. 11, 1956	2.34
	Oct. 30	2.15
	Dec. 4	2.18
	Jan. 3, 1957	2.43
	Feb. 4	2.55
	Mar. 3	2.59
	Apr. 1	2.37
	June 2	2.32
	July 10	2.15
	Aug. 5	2.27
	Sept. 5	2.17
	Oct. 14	1.99
	Nov. 17	2.17
	Dec. 12	1.94
	Jan. 13, 1958	2.12
	Feb. 17	2.34
	Mar. 17	2.46
	Apr. 22	2.59
	May 21	2.20
	June 23	1.77
	July 16	1.92
	Aug. 21	2.06
	Apr. 21, 1959	2.47
	Dec. 3	2.13
	Jan. 9, 1960	2.37
	Feb. 11	2.31
	May 24	2.68
	June 23	2.18
	Sept. 28	2.00
	Jan. 13, 1961	1.99
	Apr. 25	2.27
	June 30	2.15
	Jan. 3, 1962	2.50
	Apr. 12	2.70
	Sept. 28	1.83
	Jan. 21, 1963	1.95
C4-69-35babb.		
	Nov. 17, 1957	3.65
	Dec. 12	4.65
	Jan. 13, 1958	5.00
	Feb. 18	4.94
	Mar. 17	3.68
	Apr. 22	5.41
	May 21	4.61
	June 19	3.49
	July 16	4.63
	Aug. 21	3.89
	Apr. 17	5.42
	Aug. 17	4.86
C4-69-35babb2.		
	Oct. 10, 1956	2.14
	Oct. 30	3.09
	Dec. 4	3.42
	Jan. 3, 1957	3.24
	Feb. 4	3.29
	Mar. 3	2.53
	Apr. 1	3.37
	June 2	2.13
	July 10	2.24
	Aug. 5	2.50
	Sept. 5	2.16
	Oct. 14	2.12
	Dec. 12	2.40
	Jan. 13, 1958	2.69
	Mar. 17	1.81
	Apr. 22	2.57
	May 21	2.18
	June 19	1.25
	July 16	2.77
	Aug. 21	2.38
	Apr. 17, 1959	2.98
C5-66-18dcdc.		
	Sept. 12, 1956	16.66
	Sept. 27	40.71
	Oct. 25	37.00
	Dec. 4	35.65
	Jan. 4, 1957	35.60
	Feb. 6	35.49
	Mar. 7	35.54
	Apr. 19	35.32
	June 5	30.33
	July 15	31.96
	Aug. 7	27.94
	Sept. 10	27.55

Location number	Date	Water level
C5-66-18dcdc.--Continued		
	Oct. 15, 1957	28.13
	Nov. 16	27.23
	Dec. 11	28.86
	Jan. 16, 1958	28.77
	Feb. 18	27.45
	Apr. 28	22.82
	May 19	22.46
	June 20	22.36
	July 15	23.41
	Mar. 19, 1959	25.44
	Mar. 23	25.04
	Apr. 27	41.92
	June 24	22.97
	Aug. 24	25.77
	Oct. 12	27.52
	Oct. 28	27.73
	Dec. 10	27.62
	Jan. 6, 1960	28.16
	Feb. 8	28.57
	Mar. 23	26.62
	Apr. 27	23.35
	May 24	22.36
	June 24	23.24
	Oct. 4	30.67
	Jan. 16, 1961	28.78
	Apr. 28	22.81
	June 30	22.87
	Jan. 4, 1962	21.63
	Apr. 12	21.10
	Oct. 1	28.64
	Jan. 22, 1963	26.97
C5-66-18dddd.		
	Sept. 12, 1956	42.16
	Sept. 27	43.28
	Oct. 25	42.54
	Dec. 4	42.55
	Jan. 4, 1957	42.60
	Feb. 6	42.52
	Mar. 7	42.61
	Apr. 19	42.77
	June 5	41.56
	Aug. 7	39.13
	Sept. 10	37.99
	Oct. 15	37.36
	Nov. 16	37.26
	Dec. 11	37.10
	Jan. 16, 1958	36.89
	Feb. 18	36.65
	Mar. 13	36.02
	Apr. 25	35.27
	Sept. 24	34.38
	Nov. 7	35.07
	Dec. 10	35.58
	Jan. 30, 1959	36.09
	Mar. 19	35.44
	Apr. 27	31.71
	June 6	32.39
	June 24	32.30
	Aug. 24	33.84
	Oct. 12	35.37
	Oct 28	35.60
	Dec. 10	36.03
	Jan. 6, 1960	36.28
	Feb. 8	36.51
	Mar. 22	36.69
	Apr. 27	35.97
	May 24	33.16
	June 24	33.09
	Oct. 4	35.68
	Jan. 16, 1961	36.87
	Apr. 28	33.98
	June 30	32.35
	Jan. 4, 1962	31.16
	Apr. 12	30.34
	Oct. 1	33.53
	Jan. 22, 1963	35.99
C5-66-19accd.		
	Sept. 12, 1956	32.23
	Sept. 27	32.45
	Oct. 26	31.01
	Dec. 4	30.84
	Jan. 4, 1957	30.75
	Feb. 6	30.70
	Mar. 7	30.77
	June 5	18.35
	Aug. 7	17.62
	Sept. 10	20.15
	Oct. 15	22.22
	Nov. 16	21.98
	Dec. 11	21.88
	Jan. 16, 1958	21.95
	Feb. 18	19.95
	Apr. 25	14.28
	May 19	13.75
	June 20	14.59
	July 15	16.07
	Aug. 20	17.91
	Sept. 24	20.84
	Nov. 7	21.26

Location number	Date	Water level
C5-66-19accd.--Continued		
	Dec. 10, 1958	21.97
	Jan. 30, 1959	22.05
	Mar. 19	16.29
	Apr. 27	14.40
	June 6	14.59
	June 24	16.05
	Aug. 24	19.26
	Oct. 12	21.46
	Oct. 28	21.80
	Dec. 10	22.43
	Jan. 7, 1960	22.84
	Feb. 8	23.12
	Mar. 22	17.15
	May 24	13.33
	Oct. 3	21.49
	Jan. 16, 1961	23.46
	Apr. 25	13.84
	June 30	15.29
	Sept. 21	17.40
	Jan. 4, 1962	13.62
	Apr. 12	12.20
	Oct. 1	19.74
	Jan. 22, 1963	23.03
C5-66-19addd.		
	Sept. 12, 1956	19.96
	Sept. 27	20.22
	Oct. 25	20.79
	Dec. 4	19.69
	Jan. 4, 1957	19.44
	Feb. 6	19.32
	Mar. 7	19.50
	Apr. 19	19.18
	June 5	13.87
	Sept. 10	11.56
	Oct. 15	12.14
	Nov. 16	11.44
	Dec. 11	10.88
	Jan. 16, 1958	10.19
	Feb. 18	9.06
	Mar. 13	7.72
	Apr. 25	6.88
	May 19	6.68
	June 20	7.06
	July 15	7.74
	Aug. 27	9.51
	Mar. 19, 1959	8.41
	Apr. 27	7.08
	June 6	6.81
	June 24	8.29
	Aug. 24	10.64
	Oct. 12	12.74
	Oct. 28	13.84
	Dec. 10	12.74
	Jan. 6, 1960	13.06
	Feb. 8	13.28
	Mar. 22	10.78
	Apr. 27	8.41
	May 24	6.90
	June 24	8.53
	Oct. 4	13.89
	Jan. 16, 1961	14.39
	Apr. 28	7.16
	June 30	7.30
	Jan. 4, 1962	6.06
	Apr. 12	3.70
	Oct. 1	13.70
	Jan. 22, 1963	16.05
C5-66-19daad.		
	June 19, 1957	15.87
	Aug. 7	14.21
	Sept. 10	13.49
	Oct. 15	14.50
	Nov. 16	13.49
	Dec. 11	12.72
	Jan. 16, 1958	11.94
	Feb. 18	10.68
	Mar. 13	9.65
	Apr. 25	8.71
	June 20	9.39
	July 15	6.01
	Aug. 27	12.11
	Mar. 19, 1959	11.06
	June 6	10.00
	Oct. 28	15.38
	Dec. 10	14.90
	Feb. 8, 1960	17.04
	Oct. 4	25.73
	Jan. 16, 1961	17.12
	Apr. 12, 1962	7.00
C5-66-19daad2.		
	June 19, 1957	13.84
	Aug. 7	14.74
	Sept. 10	14.33
	Oct. 15	13.92
	Nov. 16	12.96
	Dec. 11	12.24
	Jan. 16, 1958	11.42
	Feb. 18	10.16

See footnotes at end of table.

Location number	Date	Water level
C5-66-19daad2.--Continued		
	Mar. 13, 1958	9.07
	Apr. 25	9.50
	May 19	10.10
	June 20	9.22
	July 15	9.99
	Aug. 27	11.94
	Mar. 19, 1959	9.89
	Apr. 27	11.55
	June 6	8.97
	June 24	11.52
	Aug. 24	14.52
	Oct. 12	16.88
	Oct. 28	15.11
	Dec. 10	15.99
	Jan. 7, 1960	16.19
	Feb. 8	15.17
	Mar. 22	12.16
	Apr. 27	12.47
	May 24	10.58
	June 24	11.10
	Oct. 4	16.83
	Jan. 16, 1961	17.79
	Apr. 28	8.81
	June 30	9.73
	Jan. 4, 1962	7.26
	Apr. 12	6.70
	Oct. 1	18.70
	Jan. 22, 1963	17.84
C5-66-19daad3.		
	June 19, 1957	13.95
	Aug. 7	13.84
	Sept. 10	13.54
	Oct. 15	14.14
	Nov. 16	13.14
	Dec. 11	13.08
	Jan. 16, 1958	12.64
	Feb. 18	10.34
	Mar. 13	9.30
	Apr. 25	8.70
	May 19	11.04
	June 20	9.44
	July 15	10.24
	Aug. 27	12.24
	Mar. 19, 1959	10.12
	Apr. 27	12.60
	June 6	9.04
	June 24	12.17
	Aug. 24	15.64
	Oct. 12	18.42
	Oct. 28	15.12
	Dec. 10	13.79
	Jan. 7, 1960	13.93
	Feb. 8	15.42
	Oct. 3	17.07
	Jan. 16, 1961	15.53
	Apr. 28	9.01
	June 30	9.87
	Jan. 4, 1962	7.51
	Apr. 12	4.90
	Jan. 22, 1963	18.15
C5-66-19daad4.		
	June 19, 1957	13.55
	Aug. 7	13.53
	Sept. 10	13.07
	Oct. 15	13.63
	Nov. 16	12.68
	Dec. 11	11.94
	Jan. 16, 1958	11.08
	Feb. 18	9.63
	Mar. 13	8.75
	Apr. 25	7.90
	May 19	9.35
	June 20	8.54
	July 15	9.35
	Aug. 26	11.22
	Nov. 7	12.80
	Dec. 10	12.93
	Jan. 30, 1959	12.62
	Mar. 19	9.29
	Apr. 27	10.36
	June 6	8.09
C5-66-19ddcd.		
	Oct. 12, 1959	11.85
	Oct. 28	12.27
	Dec. 10	11.88
	Jan. 7, 1960	12.45
	Feb. 8	12.51
	Mar. 22	5.87
	Apr. 27	4.56
	May 24	3.61
	June 24	6.32
	Oct. 3	16.38
	Jan. 16, 1961	14.52
	Apr. 25	3.54
	June 30	3.93
	Jan. 4, 1962	3.27
	Apr. 12	2.20
	Oct. 1	17.53
	Jan. 22, 1963	17.76

Location number	Date	Water level
C5-66-19ddcd2.		
	Oct. 2, 1956	16.12
	Oct. 25	17.41
	Dec. 4	17.29
	Jan. 4, 1957	16.92
	Feb. 6	17.16
	Mar. 7	17.29
	Apr. 25	15.50
	June 5	6.32
	Sept. 10	9.66
	Nov. 16	8.33
	Dec. 11	7.32
	Jan. 16, 1958	5.88
	Oct. 12, 1959	12.19
	Oct. 28	12.95
	Dec. 10	12.19
	Jan. 7, 1960	13.15
	Feb. 8	12.91
	Mar. 22	5.84
	Apr. 27	4.84
	May 24	3.89
	June 24	6.75
	Oct. 3	17.78
	Jan. 16, 1961	15.13
	Apr. 25	2.89
	June 30	4.39
	Jan. 4, 1962	3.58
	Apr. 12	.50
	Oct. 1	18.42
	Jan. 22, 1963	18.87
C5-66-19ddcd4.		
	Oct. 2, 1956	16.41
	Oct. 25	17.73
	Dec. 4	17.67
	Jan. 4, 1957	17.27
	Feb. 6	17.88
	Mar. 7	17.69
	Apr. 25	15.90
	June 5	5.93
	Sept. 10	9.95
	Nov. 16	9.39
	Jan. 16, 1958	6.18
	Oct. 12, 1959	12.56
	Oct. 28	13.69
	Dec. 10	12.59
	Jan. 7, 1960	13.90
	Feb. 8	13.32
	Mar. 22	5.25
	Apr. 27	4.90
	May 24	4.09
	June 24	7.40
	Oct. 3	18.37
	Jan. 16, 1961	15.71
	Apr. 25	4.92
	June 30	4.75
	Jan. 4, 1962	3.82
	Apr. 12	2.00
	Oct. 1	19.16
	Jan. 22, 1963	22.21
C5-66-19dddd.		
	Oct. 2, 1956	20.00
	Oct. 25	21.00
	Dec. 4	20.92
	Jan. 4, 1957	20.57
	Feb. 6	21.63
	Mar. 7	20.89
	Apr. 25	19.13
	June 5	9.80
	Aug. 7	8.77
	Sept. 10	12.95
	Nov. 16	11.51
	Dec. 11	10.50
	Jan. 17, 1958	11.19
	Feb. 18	7.41
	Mar. 13	7.42
	Apr. 28	7.11
	May 19	7.00
	June 20	8.20
	July 15	8.83
	Aug. 20	12.47
	Nov. 7	13.33
	Dec. 10	13.77
	Jan. 30, 1959	12.16
C5-66-19dddd2.		
	Oct. 2, 1956	20.70
	Oct. 25	20.27
	Dec. 4	21.19
	Jan. 4, 1957	20.88
	Feb. 6	22.08
	Mar. 7	21.13
	Apr. 25	19.55
	June 5	11.07
	Aug. 7	10.17
	Sept. 10	13.11
	Nov. 16	11.95
	Dec. 11	10.90
	Jan. 16, 1958	9.77
	Feb. 18	7.91
	Mar. 13	7.78

Location number	Date	Water level
C5-66-19dddd2.--Continued		
	Apr. 28, 1958	7.28
	May 19	7.19
	June 20	8.89
	July 15	9.19
	Aug. 20	13.25
	Mar. 19, 1959	8.65
	Apr. 27	7.83
	June 6	9.08
	June 29	12.80
	Aug. 24	14.15
	Oct. 12	15.94
	Oct. 28	16.93
	Dec 10	16.02
	Jan. 7, 1960	17.29
	Feb. 8	16.74
	Mar. 22	10.65
	Apr 27	9.82
	May 24	7.50
	June 24	10.84
	Oct. 3	19.52
	Jan. 4, 1962	7.66
	Apr. 12	5.50
	Oct. 1	22.96
C5-66-19dddd3.		
	Oct. 2, 1956	19.70
	Oct. 25	20.92
	Dec. 4	20.78
	Jan. 4, 1957	20.48
	Feb. 6	22.00
	Mar. 7	20.66
	Apr. 25	19.09
	June 5	10.25
	Aug. 7	9.11
	Sept. 10	12.64
	Nov. 16	11.55
	Dec. 11	10.54
	Jan. 16, 1958	9.31
	Feb. 18	7.52
	Mar. 13	7.45
	Apr. 25	7.06
	May 19	6.91
	June 20	8.20
	July 15	8.64
	Aug. 20	12.24
	Mar. 19, 1959	8.23
	Apr. 27	7.39
	June 6	8.50
	June 29	11.04
	Aug. 24	13.43
	Oct. 12	15.41
	Oct. 28	16.07
	Dec. 10	15.46
	Jan. 7, 1960	15.80
	Feb. 8	16.19
	Mar. 22	9.69
	Apr. 27	8.10
	May 24	7.16
	June 24	9.94
	Oct. 3	18.84
	Jan. 16, 1961	18.27
	Apr. 25	7.58
	June 30	7.85
	Jan. 4, 1962	6.84
	Apr. 12	3.80
	Oct. 1	21.27
	Jan. 22, 1963	21.42
C5-66-19dddd4.		
	Sept. 12, 1956	17.52
	Sept. 27	18.36
	Oct. 25	19.12
	Dec. 4	19.05
	Jan. 4, 1957	18.87
	Feb. 6	18.96
	Mar. 7	19.03
	Apr. 25	18.03
	June 5	11.68
	June 19	9.91
	Aug. 7	10.13
	Sept. 10	10.59
	Nov. 16	10.51
	Dec. 11	7.82
	Jan. 16, 1958	7.07
C5-66-20ccdd.		
	Sept. 12, 1956	23.48
	Sept. 27	24.08
	Oct. 25	24.67
	Dec. 4	25.00
	Jan. 4, 1957	24.98
	Feb. 6	25.08
	Mar. 7	25.19
	Apr. 25	24.50
	June 5	18.65
	Aug. 7	16.61
	Sept. 10	16.07
	Nov. 16	16.59
	Dec. 11	15.39
	Jan. 16, 1958	14.04
	Feb. 18	12.69

See footnotes at end of table.

Location number	Date	Water level
C5-66-20ccdd.--Continued		
	Mar. 13, 1958	11.87
	Apr. 28	10.82
	May 19	10.30
	June 20	10.90
	July 15	11.82
	Aug. 20	13.90
	Sept. 24	15.90
	Mar. 19, 1959	13.42
	Apr. 27	11.53
	June 6	10.30
	June 29	13.16
	Aug. 24	15.66
	Oct. 12	18.87
	Oct. 28	18.99
	Dec. 10	19.40
	Jan. 7, 1960	19.68
	Feb. 8	20.09
	Mar. 22	18.23
	Apr. 27	13.37
	May 24	11.23
	June 24	12.43
	[illegible] 3	21.19
	Jan. 16, 1961	21.80
	Apr. 27	12.30
	June 30	11.06
	Sept. 21	12.35
	Jan. 4, 1962	10.09
	Apr. 12	9.60
	Oct. 1	20.82
	Jan. 22, 1963	24.15
C5-66-29bbdc.		
	Sept. 12, 1956	26.26
	Sept. 27	26.72
	Oct. 25	27.83
	Dec. 4	27.33
	Jan. 4, 1957	27.39
	Feb. 6	27.68
	Mar. 7	27.70
	July 15	24.56
	Nov. 16	17.73
	Dec. 11	19.50
	Jan. 16, 1958	11.32
	Feb. 18	13.23
	Mar. 13	12.28
	Apr. 28	10.99
	May 19	10.34
	July 15	13.75
	Aug. 20	17.83
	Mar. 19, 1959	13.68
	Apr. 27	11.67
	June 29	15.50
	Oct. 12	21.42
	Oct. 28	21.49
	Dec. 10	21.87
	Jan. 7, 1960	21.75
	Apr. 27	12.20
	Apr. 12, 1962	10.20
	Jan. 22, 1963	25.37
C5-66-29bcba.		
	Sept. 12, 1956	27.16
	Sept. 27	27.02
	Oct. 25	27.16
	Dec. 4	27.65
	Jan. 4, 1957	27.59
	Feb. 6	27.77
	Mar. 7	28.08
	Apr. 25	26.02
	June 5	18.66
	July 15	21.04
	Sept. 10	20.04
	Nov. 16	17.94
	Dec. 11	16.28
	Jan. 16, 1958	15.12
	Feb. 18	13.24
	Mar. 13	12.45
	Apr. 28	10.99
	May 19	9.68
	June 20	11.88
	July 15	13.91
	Mar. 19, 1959	13.21
	Apr. 21	11.28
	June 29	15.75
	Aug. 24	20.03
	Oct. 12	21.29
	Oct. 28	21.37
	Dec. 10	21.69
	Jan. 7, 1960	21.87
	Apr. 12, 1962	8.10
	Jan. 22, 1963	26.63
C5-66-29ddcc.		
	Sept. 12, 1956	11.87
	Sept. 27	11.24
	Oct. 25	11.69
	Dec. 5	11.57
	Jan. 4, 1957	11.82
	Feb. 6	12.00
	Mar. 11	12.13
	Apr. 25	10.25

Location number	Date	Water level
C5-66-29ddcc.--Continued		
	June 5, 1957	8.01
	July 15	8.78
	Aug. 7	9.14
	Oct. 17	9.03
	Nov. 16	7.60
	Dec. 11	7.50
	Jan. 16, 1958	7.22
	Feb. 18	5.66
	Mar. 13	6.41
	Apr. 25	6.20
	May 19	5.96
	June 20	6.03
	July 15	6.65
	Aug. 20	7.23
	Mar. 19, 1959	6.64
	Apr. 27	6.00
	June 6	6.05
	June 29	6.78
	Oct. 12	8.99
	Oct. 28	9.01
	Dec. 10	9.73
	Jan. 7, 1960	9.65
	Feb. 8	9.73
	Apr. 27, 1961	6.20
	June 30	6.63
	Apr. 12, 1962	4.80
C5-66-29ddcc2.		
	Sept. 12, 1956	11.80
	Sept. 27	11.00
	Oct. 25	11.24
	Dec. 5	11.49
	Jan. 4, 1957	11.68
	Feb. 6	11.93
	Mar. 11	12.09
	Apr. 25	10.25
	June 5	7.97
	July 15	8.60
	Aug. 7	9.17
	Sept. 10	13.52
	Oct. 17	8.93
	Nov. 16	7.49
	Dec. 11	7.02
	Jan. 16, 1958	6.77
	Feb. 18	6.54
	Mar. 13	6.35
	Apr. 25	6.10
	May 19	5.85
	June 20	5.92
	July 15	6.51
	Aug. 20	7.08
	Nov. 7	8.00
	Jan. 30, 1959	6.98
	Mar. 19	6.48
	Apr. 27	5.90
	June 6	5.95
	June 29	6.65
	Aug. 24	9.41
	Oct. 12	8.84
	Oct. 28	8.92
	Dec. 10	9.53
	Jan. 7, 1960	9.32
	Feb. 8	9.67
	Apr. 27, 1961	6.28
	June 30	6.49
	Apr. 12, 1962	4.50
C5-66-30aaaa1		
	Oct. 2, 1956	20.60
	Oct. 25	20.95
	Dec. 4	20.88
	Jan. 4, 1957	20.56
	Feb. 6	21.25
	Mar. 7	20.90
	Apr. 25	19.10
	June 5	9.85
	Aug. 7	9.06
	Sept. 10	12.87
	Nov. 16	11.31
	Dec. 11	10.28
	Jan. 16, 1958	9.30
	Feb. 18	7.23
	Mar. 13	7.24
	Apr. 28	6.80
	May 19	6.70
	June 20	8.30
	July 15	8.98
	Aug. 20	13.49
	Mar. 19, 1959	7.22
	Apr. 27	7.25
	June 6	9.57
	Aug. 24	14.27
	Oct. 12	15.60
	Oct. 28	19.15
	Dec. 10	15.73
	Jan. 7, 1960	20.00
	Feb. 8	17.99
	Mar. 22	9.12
	Apr. 27	8.02
	May 24	6.99
	June 24	10.68

Location number	Date	Water level
C5-66-30aaaa1.--Continued		
	Oct. 1, 1960	19.88
	Jan. 16, 1961	21.17
	Apr. 25	7.45
	Jan. 4, 1962	6.58
	Apr. 12	4.70
	Oct. 1	24.04
	Jan. 22, 1963	21.91
C5-66-30aaaa4.		
	Oct. 2, 1956	20.26
	Oct. 25	21.60
	Dec. 4	21.64
	Jan. 4, 1957	21.27
	Feb. 6	21.84
	Mar. 7	21.63
	Apr. 25	19.81
	June 5	10.58
	Aug. 7	10.00
	Sept. 10	13.54
	Nov. 16	11.91
	Dec. 11	10.88
	Jan. 16, 1958	9.92
	Feb. 18	7.85
	Mar. 13	7.83
	Apr. 28	7.22
	May 19	7.20
	June 20	8.95
	July 15	9.84
	Aug. 20	14.09
	Mar. 19, 1959	8.54
	Apr. 27	7.90
	June 6	9.90
	June 29	12.82
	Aug. 24	15.30
	Oct. 12	16.53
	Oct. 28	19.03
	Dec. 10	16.47
	Jan. 7, 1960	19.59
	Feb. 8	17.27
	Mar. 22	10.12
	Apr. 27	8.80
	May 24	7.57
	June 24	11.45
	Oct. 3	20.60
	Jan. 16, 1961	20.73
	Apr. 25	8.22
	Jan. 4, 1962	7.16
	Apr. 13	5.50
	Jan. 22, 1963	22.35
C5-66-30aaaa5.		
	Oct. 2, 1956	20.43
	Oct. 26	21.70
	Dec. 4	21.79
	Jan. 4, 1957	21.47
	Feb. 6	22.00
	Mar. 7	21.80
	Apr. 25	20.03
	June 5	11.00
	Aug. 7	10.38
	Sept. 10	13.64
	Nov. 16	12.08
	Dec. 11	7.00
	Jan. 16, 1958	10.10
	Feb. 18	8.05
	Mar. 13	8.02
	Apr. 28	7.41
	May 19	7.31
	June 20	8.06
	July 15	10.12
	Aug. 20	14.16
	Mar. 19, 1959	8.64
	Apr. 27	8.10
	June 6	9.82
	June 29	12.99
	Aug. 24	15.58
	Oct. 12	16.54
	Oct. 28	18.59
	Dec. 10	16.62
	Jan. 7, 1960	19.09
	Feb. 8	18.14
	Mar. 22	10.74
	Apr. 27	9.03
	May 24	7.64
	June 24	11.56
	Oct. 3	20.68
	Jan. 16, 1961	20.30
	Apr. 25	9.28
	Jan. 4, 1962	7.17
	Apr. 13	5.40
	Jan. 22, 1963	22.75
C5-66-30aada2.		
	Oct. 2, 1956	21.79
	Oct. 26	22.91
	Dec. 4	23.10
	Jan. 4, 1957	22.83
	Feb. 6	24.55
	Mar. 7	24.72
	Apr. 25	23.39
	June 5	12.54

See footnotes at end of table.

Table 4.--Measurements of the water level in wells--Continued

Location number	Date	Water level
C5-66-10aada2.--Continued		
	Aug. 7, 1957	13.23
	Sept. 10	14.52
	Nov. 16	13.34
	Dec. 11	12.10
	Jan. 16, 1958	13.92
	Feb. 18	11.51
	Mar. 13	10.10
	Apr. 28	10.72
	May 19	10.32
	June 20	9.32
	July 15	14.56
	Aug. 20	14.26
	Mar. 19, 1959	10.62
	Apr. 27	9.46
	June 6	9.29
	June 29	13.88
	Aug. 24	20.36
	Oct. 12	17.73
	Oct. 28	18.24
	Dec. 10	17.87
	Feb. 8, 1960	18.66
	Mar. 22	13.14
	Apr. 27	10.04
	May 24	8.11
	June 24	11.96
	Oct. 3	23.74
	Jan. 16, 1961	20.62
	Apr. 25	10.25
	Jan. 4, 1962	8.10
	Apr. 13	6.70
	Jan. 22, 1963	21.79
C5-66-10aada3.		
	Oct. 2, 1956	22.88
	Oct. 25	23.79
	Dec. 4	24.14
	Jan. 4, 1957	23.86
	Feb. 6	25.51
	Mar. 7	25.67
	Apr. 25	24.21
	June 5	13.74
	Aug. 7	14.39
	Sept. 10	15.51
	Nov. 16	14.41
	Dec. 11	13.13
	Jan. 16, 1958	14.22
	Feb. 18	12.96
	Mar. 13	11.05
	Apr. 28	11.05
	May 19	10.50
	June 20	9.90
	July 15	15.11
	Aug. 20	15.00
	Mar. 19, 1959	10.65
	Apr. 27	10.19
	June 6	9.82
	Aug. 24	20.76
	Oct. 12	18.48
	Oct. 28	19.01
	Dec. 10	19.84
	Jan. 7, 1960	19.51
	Feb. 8	19.56
	Mar. 22	14.48
	Apr. 27	10.86
	May 24	8.78
	June 24	12.67
	Oct. 3	24.47
	Jan. 16, 1961	21.48
	Apr. 25	8.78
	Jan. 4, 1962	8.99
	Apr. 13	8.40
	Oct. 1	25.90
	Jan. 22, 1963	23.73
C5-66-10aada4.		
	Oct. 2, 1956	23.41
	Oct. 25	24.17
	Dec. 4	24.45
	Jan. 4, 1957	24.26
	Feb. 6	25.49
	Mar. 7	25.65
	Apr. 25	24.13
	June 5	14.18
	Aug. 7	14.77
	Sept. 10	15.85
	Jan. 16, 1958	13.99
	Feb. 18	11.78
	Mar. 13	11.18
	Apr. 28	10.80
	May 19	10.29
	June 20	10.16
	July 15	14.81
	Aug. 20	15.28
	Mar. 19, 1959	11.01
	Apr. 27	10.44
	June 6	10.10
	June 29	14.87
	Aug. 24	20.44
	Oct. 12	19.02
	Oct. 28	19.35
	Dec. 10	19.19

Location number	Date	Water level
C5-66-10aada4.--Continued		
	Jan. 7, 1960	19.80
	Feb. 8	19.37
	Mar. 22	15.05
	Apr. 27	11.29
	May 24	9.11
	June 24	13.01
	Oct. 3	24.39
	Jan. 16, 1961	21.84
	Apr. 25	11.34
	Jan. 4, 1962	9.35
	Apr. 13	7.40
	Jan. 22, 1963	22.77
C5-66-12dcdc.		
	Sept. 12, 1956	20.40
	Oct. 25	12.03
	Dec. 5	9.88
	Jan. 4, 1957	9.09
	Feb. 6	8.50
	Mar. 11	8.02
	Apr. 25	6.38
	June 5	5.43
	July 15	10.19
	Sept. 16	9.27
	Nov. 16	5.84
	Dec. 12	5.75
	Jan. 16, 1958	5.50
	Feb. 18	5.33
	Mar. 13	5.29
	Apr. 25	5.15
	May 19	4.97
	July 15	7.96
	Mar. 19, 1959	5.22
	Apr. 27	4.89
	July 16	15.62
	Oct. 28	8.96
	Dec. 11	8.73
	Jan. 7, 1960	8.12
	Feb. 9	6.02
	Mar. 22	4.17
	Apr. 13, 1962	4.90
C5-66-12dcdd.		
	Sept. 27, 1956	17.39
	Oct. 25	12.09
	Dec. 5	9.58
	Jan. 4, 1957	8.87
	Feb. 6	8.19
	Mar. 11	7.67
	Apr. 25	6.15
	June 5	5.20
	July 15	10.00
	Sept. 16	9.19
	Nov. 16	5.58
	Dec. 12	5.35
	Jan. 16, 1958	5.60
	Feb. 18	5.18
	Mar. 13	5.20
	Apr. 25	5.30
	May 19	4.84
	June 20	9.43
	July 15	7.85
	Aug. 20	11.95
	Sept. 14	8.97
	Nov. 7	6.64
	Jan. 30, 1959	5.90
	Mar. 19	5.46
	Apr. 27	5.22
	Oct. 28	8.37
	Dec. 11	8.09
	Jan. 7, 1960	8.28
	Feb. 9	6.38
	Mar. 22	4.05
	Apr. 13, 1962	4.70
C5-66-13cbcc.		
	Sept. 12, 1956	23.78
	Sept. 27	23.28
	Oct. 25	22.28
	Dec. 5	20.47
	Jan. 4, 1957	20.61
	Feb. 6	20.04
	Mar. 11	19.57
	Apr. 25	18.20
	June 5	17.20
	Sept. 16	19.27
	Oct. 17	17.84
	Nov. 16	16.56
	Dec. 12	15.26
	Jan. 16, 1958	16.00
	Feb. 18	15.71
	Mar. 13	15.62
	Apr. 25	15.46
	May 19	15.32
	June 20	15.40
	Mar. 19, 1959	16.44
	Apr. 27	16.75
	June 6	17.61
	June 29	17.89
	Oct. 12	21.58
	Oct. 28	20.88

Location number	Date	Water level
C5-66-13cbcc.--Continued		
	Dec. 11, 1959	19.98
	Jan. 7, 1960	18.05
	Feb. 9	18.23
	Mar. 21	16.19
	Apr. 27	16.60
	May 24	16.36
	Oct. 3	21.02
	Jan. 16, 1961	18.49
	Apr. 27	16.79
	Jan. 4, 1962	17.27
	Apr. 13	15.80
	Oct. 19	21.28
	Jan. 22, 1963	18.80
C5-66-13ccbc.		
	Sept. 27, 1956	10.20
	Oct. 25	10.03
	Dec. 5	8.40
	Jan. 4, 1957	7.78
	Feb. 6	7.05
	Mar. 11	6.43
	Apr. 25	5.08
	June 5	4.12
	Aug. 7	6.64
	Sept. 16	6.31
	Oct. 17	5.53
	Nov. 16	4.31
	Dec. 12	3.92
	Jan. 16, 1958	3.70
	Feb. 18	3.47
	Mar. 13	3.32
	Apr. 25	3.31
	May 19	3.20
	June 20	3.36
	July 15	5.10
	Aug. 20	6.25
	Nov. 7	5.13
	Dec. 10	4.75
	Jan. 30, 1959	4.28
	Mar. 19	3.76
	Apr. 27	3.47
	June 29	5.10
	Oct. 12	8.64
	Oct. 28	7.84
	Dec. 11	6.20
	Jan. 7, 1960	8.04
	Feb. 9	4.39
	June 30, 1961	5.74
	Apr. 13, 1962	.20
C5-67-6badb.		
	June 13, 1957	127.15
	July 9	158.18
	Aug. 7	164.13
	Nov. 15	139.23
	Dec. 18	129.59
	Jan. 16, 1958	125.17
	Feb. 19	119.33
	Mar. 13	116.21
	Apr. 25	115.47
	May 19	114.43
	June 19	147.18
	July 15	165.97
	Aug. 20	178.89
	Sept. 24	185.40
	Nov. 7	167.15
	Dec. 10	148.04
	Jan. 20, 1959	135.30
	Mar. 17	124.44
	Apr. 27	119.23
	June 2	145.33
	June 24	167.44
	Oct. 9	190.02
	Oct. 26	177.29
	Dec. 14	151.47
	Jan. 8, 1960	143.37
	Feb. 10	136.58
	Mar. 22	130.42
	Apr. 26	134.82
	May 24	139.56
	June 27	179.22
	Oct. 3	227.12
	Jan. 17, 1961	159.77
	Apr. 25	138.99
	June 30	177.90
	Sept. 22	202.59
	Jan. 6, 1962	153.45
	Apr. 3	136.68
	Oct. 1	239.98
C5-67-13aadd.		
	Sept. 27, 1956	14.86
	Oct. 25	14.09
	Dec. 4	14.31
	Jan. 4, 1957	8.39
	Feb. 6	14.61
	Mar. 7	14.69
	Apr. 19	14.04
	June 5	10.38
	July 15	10.65
	Aug. 7	9.69

See footnotes at end of table.

Table 4.--Measurements of the water level in wells--Continued

Location number	Date	Water level
C5-67-11aadd.--Continued		
	Sept. 9, 1957	10.09
	Oct. 15	10.30
	Nov. 16	10.13
	Dec. 11	10.99
	Jan. 16, 1958	10.15
	Feb. 18	9.50
	Mar. 13	9.23
	Apr. 25	9.06
	May 19	9.00
	June 20	9.25
	July 15	9.43
	Aug. 27	9.89
	Nov. 7	10.63
	Dec. 10	10.43
	Jan. 30, 1959	10.44
	Mar. 19	9.51
	Apr. 27	8.83
	June 24	9.21
	July 14	9.59
	Aug. 24	9.77
	Oct. 12	9.75
	Oct. 28	9.75
	Dec. 10	9.82
	Jan. 6, 1960	9.90
	Feb. 8	9.76
	Apr. 13, 1962	10.20
C5-67-13abdc.		
	Sept. 12, 1956	13.16
	Sept. 27	13.26
	Oct. 25	14.53
	Dec. 4	14.70
	Jan. 4, 1957	14.82
	Feb. 6	14.94
	Mar. 7	15.07
	Apr. 19	14.33
	June 5	11.46
	July 15	11.59
	Aug. 7	10.75
	Sept. 9	10.92
	Oct. 15	11.11
	Nov. 16	10.93
	Dec. 11	10.90
	Jan. 16, 1958	10.98
	Feb. 18	10.57
	Mar. 13	10.06
	Apr. 25	9.87
	May 19	9.80
	June 20	10.22
	July 15	10.40
	Aug. 27	10.87
	Mar. 19, 1959	10.41
	Apr. 27	9.80
	June 24	10.24
	July 14	10.53
	Aug. 24	10.67
	Oct. 12	10.56
	Oct. 28	10.52
	Dec. 10	10.49
	Jan. 6, 1960	10.20
	Feb. 8	10.79
	Mar. 22	9.71
	Apr. 27	9.44
	May 24	9.17
	June 24	9.57
	Oct. 3	9.95
	Jan. 16, 1961	9.78
	Apr. 25	9.20
	July 6	9.82
	Jan. 4, 1962	9.28
	Apr. 13	11.40
	Oct. 1	9.82
	Jan. 22, 1963	9.87
C5-67-14aabb.		
	Oct. 17, 1957	49.33
	Nov. 16	48.88
	Dec. 11	48.50
	Jan. 16, 1958	48.15
	Feb. 18	47.90
	Mar. 13	47.52
	Apr. 25	46.92
	May 19	46.40
	June 20	45.68
	July 15	45.39
	Aug. 20	45.16
	Sept. 24	45.07
	Nov. 7	45.00
	Dec. 10	45.15
	Jan. 30, 1959	44.99
	Mar. 19	44.75
	Apr. 27	43.48
	June 6	44.21
	June 24	44.15
	July 14	44.15
	Aug. 24	44.26
	Oct. 12	44.19
	Oct. 28	44.10
	Dec. 10	44.19
	Jan. 6, 1960	44.44
	Feb. 8	44.14
C5-67-14aabb.--Continued		
	Mar. 22, 1960	43.70
	Apr. 26	42.64
	May 24	42.23
C5-67-19bbbb.		
	July 25, 1958	+41.4
	Aug. 27	+31.5
	Sept. 25	+29.4
	Nov. 7	+42.5
	Dec. 10	+47.5
	Feb. 2, 1959	+50.0
	Mar. 23	+56.15
	Apr. 27	+54.0
	June 2	+50.5
	July 3	+37.6
	Aug. 26	+18.96
	Sept. 24	+14.75
	Oct. 26	+33.37
	Dec. 15	+42.5
	Jan. 8, 1960	+44.5
	Feb. 10	+47.0
	Mar. 28	+49.1
	Apr. 26	+43.0
	May 24	+40.6
	June 27	+22.75
	Oct. 3	+ 7.90
	Jan. 17, 1961	+38.3
	Apr. 29	+42.2
	July 6	+23.5
	Sept. 22	+21.7
	Jan. 6, 1962	+38.1
	Apr. 2	+43.0
	Oct. 20	6.2
	Feb. 5, 1963	+25.1
C5-68-3baba.		
	Aug. 30, 1956	27.27
	Sept. 14	27.10
	Sept. 28	27.24
	Oct. 29	27.30
	Dec. 3	27.53
	Jan. 2, 1957	28.03
	Feb. 4	28.50
	Mar. 5	28.65
	Apr. 18	28.38
	June 4	25.55
	July 9	25.12
	Aug. 5	24.97
	Sept. 5	24.99
	Oct. 14	24.94
	Nov. 15	25.14
	Dec. 11	25.57
	Jan. 14, 1958	25.97
	Feb. 18	26.45
	Mar. 10	26.72
	Apr. 22	27.17
	June 19	26.75
	July 16	26.61
	Aug. 25	26.51
	Nov. 5	26.39
	Dec. 9	25.74
	Jan. 20, 1959	27.10
	Mar. 18	27.76
	Apr. 18	21.35
	May 26	28.47
	June 25	27.23
	July 30	26.99
	Sept. 21	26.11
	Oct. 26	25.60
	Dec. 15	25.88
	Jan. 8, 1960	26.22
	Feb. 10	25.36
	Mar. 21	26.42
	Apr. 10	26.94
	May 24	26.94
	June 27	26.45
	Sept. 28	25.11
	Jan. 13, 1961	25.30
	Apr. 25	24.95
	July 6	26.63
	Sept. 22	25.81
	Feb. 6, 1962	26.73
	Apr. 9	27.25
	Oct. 20	26.05
C5-68-4aadb.		
	Aug. 30, 1956	18.34
	Sept. 14	18.21
	Sept. 28	18.36
	Oct. 29	18.39
	Dec. 3	18.53
	Jan. 2, 1957	18.90
	Feb. 4	19.29
	Mar. 5	19.53
	Apr. 18	19.37
	June 4	16.70
	July 9	16.88
	Aug. 5	17.01
	Sept. 5	16.98
	Oct. 14	16.94
	Nov. 15	17.02
C5-68-4aadb.--Continued		
	Dec. 11, 1957	17.30
	Jan. 14, 1958	17.68
	Feb. 18	18.03
	Mar. 18	18.17
	Apr. 22	18.54
	May 22	18.10
	June 19	18.36
	July 16	18.42
	Aug. 25	18.40
C5-68-4abdb.		
	Aug. 30, 1956	24.89
	Sept. 14	24.88
	Sept. 28	24.83
	Oct. 29	24.70
	Dec. 3	25.01
	Jan. 2, 1957	25.62
	Feb. 4	25.40
	Mar. 5	25.52
	Apr. 18	25.26
	June 4	23.70
	July 9	24.42
	Aug. 5	24.37
	Oct. 14	24.31
	Nov. 15	24.25
	Dec. 11	24.38
	Feb. 18, 1958	24.94
	Mar. 18	24.88
C5-68-4bdcc.		
	Sept. 24, 1956	15.14
	Sept. 28	15.44
	Oct. 29	15.19
	Dec. 3	15.20
	Jan. 2, 1957	15.51
	Feb. 4	15.80
	Mar. 5	15.90
	Apr. 18	15.24
	June 4	12.90
	July 9	13.79
	Aug. 5	13.88
	Sept. 5	14.37
	Oct. 8	15.32
	Nov. 14	15.00
	Dec. 12	15.26
	Jan. 14, 1958	15.74
	Feb. 18	16.00
	Mar. 18	15.89
	Apr. 22	15.21
	May 22	13.80
	June 19	14.56
	July 16	15.95
	Aug. 28	16.37
	Apr. 18, 1959	16.05
	May 26	15.80
	June 25	16.08
	July 3	16.32
	Dec. 15	16.44
	Jan. 8, 1960	16.83
	Feb. 10	16.72
	June 27	15.65
	Sept. 28	16.26
	Apr. 10, 1962	15.95
	Sept. 28	17.25
C5-68-4cbdd.		
	Sept. 24, 1956	15.39
	Oct. 1	17.49
	Oct. 29	15.71
	Dec. 3	15.55
	Jan. 2, 1957	17.77
	Feb. 4	16.88
	Mar. 5	16.45
	Apr. 18	15.10
	June 4	12.95
	Aug. 5	14.00
	Sept. 5	14.27
	Oct. 8	16.07
	Nov. 14	15.90
	Dec. 12	16.37
	Jan. 14, 1958	16.26
	Mar. 18	16.15
	June 19	15.65
	July 16	17.39
	Nov. 5	17.12
	Dec. 9	15.70
	Feb. 2, 1959	16.28
	Mar. 18	16.41
	Apr. 18	15.88
	July 30	17.10
	Sept. 21	17.38
	Oct. 26	16.95
	Dec. 15	16.55
	Jan. 8, 1960	16.71
	Mar. 22	15.76
	Apr. 30	15.80
	May 23	16.03
	Jan. 13, 1961	17.30
	Apr. 25	16.74
	Jan. 23, 1962	17.20
	Apr. 10	15.98
	Jan. 21, 1963	18.06

See footnotes at end of table.

Table 4.--Measurements of the water level in wells--Continued

Location number	Date	Water level
C5-68-7ccad.		
	May 18, 1956	155.80
	Dec. 12, 1957	167.91
	Jan. 13, 1958	167.68
	Mar. 25	162.61
	Mar. 17, 1959	166.12
	Dec. 14	172.62
	Sept. 28, 1960	198.18
	Apr. 25, 1961	172.54
C5-68-7ccbb.		
	Feb. 20, 1957	173.49
	Mar. 19	172.64
	Apr. 18	171.95
	June 4	171.97
	July 9	177.99
	July 11	178.32
	July 18	180.34
	July 25	179.46
	Aug. 2	179.92
	Aug. 9	180.49
	Aug. 17	180.60
	Aug. 26	180.30
	Sept. 2	181.08
	Sept. 10	181.85
	Sept. 23	181.46
	Sept. 30	182.73
	Oct. 8	183.02
	Oct. 16	181.79
	Oct. 24	180.93
	Nov. 3	180.24
	Nov. 12	179.70
	Nov. 20	179.39
	Dec. 3	178.80
	Dec. 12	178.28
	Dec. 23	178.07
	Jan. 4, 1958	177.63
	Jan. 13	177.18
	Jan. 30	177.75
	Feb. 24	176.69
	Mar. 10	175.02
	Mar. 17	174.69
	Mar. 25	174.51
	Apr. 3	174.52
	Apr. 14	174.36
	Apr. 28	174.26
	May 10	174.22
	May 22	173.87
	June 3	174.88
	June 19	177.85
	July 2	179.44
	July 9	179.43
	July 16	180.54
	Aug. 1	180.15
	Aug. 8	182.27
	Aug. 15	183.93
	Aug. 22	185.33
	Aug. 29	184.79
	Sept. 12	185.51
	Sept. 25	184.92
	Oct. 6	184.79
	Oct. 17	185.29
	Nov. 5	183.64
	Nov. 19	182.71
	Nov. 26	182.25
	Dec. 1	181.02
	Dec. 8	181.67
	Dec. 19	181.07
	Feb. 6, 1959	179.11
	Feb. 17	178.85
	Mar. 17	178.27
	Mar. 24	177.97
	Apr. 1	177.76
	Apr. 10	177.15
	Apr. 21	176.81
	May 5	177.48
	May 13	177.26
	June 22	183.44
	June 29	184.09
	July 14	186.77
	July 31	189.96
	Aug. 21	190.59
	Sept. 2	190.98
	Sept. 22	190.57
	Oct. 8	188.06
	Oct. 26	186.04
	Nov. 11	184.60
	Nov. 24	183.78
	Dec. 3	183.14
	Dec. 19	182.50
	Dec. 31	181.71
	Jan. 7, 1960	182.45
	Jan. 27	182.00
	Feb. 10	180.54
	Feb. 24	180.04
	Mar. 12	179.70
	Mar. 23	179.25
	Apr. 4	179.16
	Apr. 16	178.62
	May 23	179.20
	June 8	181.60
	June 27	185.52
C5-68-7ccbb.--Continued		
	July 13, 1960	187.64
	July 28	190.90
	Aug. 25	193.62
	Sept. 6	195.00
	Sept. 19	195.12
	Sept. 28	195.38
	Oct. 10	195.88
	Oct. 20	195.10
	Oct. 29	194.16
	Nov. 14	192.63
	Nov. 30	191.80
	Dec. 10	191.03
	Dec. 19	190.38
	Jan. 1, 1961	189.00
	Jan. 13	188.33
	Feb. 10	186.51
	Feb. 26	187.78
	Mar. 14	185.24
	Apr. 7	183.08
	Apr. 23	182.30
	May 9	182.59
	May 25	182.30
	July 6	185.87
	July 10	182.35
	Aug. 7	186.82
	Sept. 20	187.36
	Jan. 3, 1962	186.37
	Apr. 2	182.08
	Sept. 28	194.60
	Jan. 23, 1963	189.44
C5-68-8daac.		
	Sept. 26, 1956	4.55
	Sept. 28	4.67
	Oct. 29	4.43
	Dec. 3	4.69
	Jan. 2, 1957	4.70
	Feb. 4	4.72
	Mar. 5	4.85
	Apr. 18	4.27
	June 4	2.90
	July 9	1.74
	Aug. 5	2.98
	Sept. 5	3.45
	Oct. 8	4.28
	Nov. 16	3.62
	Dec. 12	4.06
	Jan. 14, 1958	4.40
	Feb. 18	4.37
	Mar. 17	3.77
	Apr. 22	3.45
	May 22	2.75
	June 19	3.36
	July 16	3.47
	Aug. 28	3.73
	Apr. 20, 1959	3.68
	Dec. 15	5.68
	Jan. 8, 1960	4.51
	Feb. 10	4.40
C5-68-8dcad.		
	Sept. 5, 1957	3.77
	Oct. 8	4.69
	Nov. 16	4.63
	Dec. 12	5.07
	Jan. 14, 1958	5.58
	Mar. 18	5.36
	Apr. 20	5.43
	June 26	4.31
	July 30	4.98
	Sept. 21	7.84
	Oct. 26	5.98
	Dec. 14	6.09
	Jan. 8, 1960	6.09
	Feb. 10	6.03
	Mar. 22	5.40
	Apr. 30	4.87
	May 23	4.37
	Sept. 28	8.85
	Jan. 17, 1961	5.32
	Apr. 25	5.45
	July 6	5.40
	Sept. 22	3.87
	Jan. 29, 1962	4.85
	Apr. 10	4.67
	Sept. 28	8.83
	Jan. 21, 1963	5.55
C5-68-8dcba.		
	Sept. 26, 1956	11.59
	Sept. 28	11.88
	Oct. 31	15.01
	Dec. 3	14.79
	Jan. 2, 1957	15.43
	Feb. 4	15.77
	Mar. 5	16.00
	Apr. 18	15.58
	June 4	12.98
	July 9	10.48
	Aug. 5	11.02
	Sept. 5	10.95
C5-68-8dcba.--Continued		
	Oct. 8, 1957	11.86
	Nov. 16	12.00
	Dec. 12	12.43
	Jan. 14, 1958	12.92
	Feb. 18	13.20
	Mar. 17	12.69
	Apr. 22	12.47
	May 22	11.15
	June 19	9.63
	July 16	12.24
	Aug. 28	12.45
	Apr. 20, 1959	13.70
C5-68-8dcbd.		
	Sept. 26, 1956	10.28
	Sept. 28	10.44
	Oct. 31	14.04
	Dec. 3	14.12
	Jan. 2, 1957	13.72
	Feb. 4	14.05
	Mar. 5	14.26
	Apr. 18	13.89
	June 4	11.41
	July 8	9.77
C5-68-8dccb.		
	Sept. 26, 1956	5.56
	Sept. 28	5.59
	Oct. 31	9.33
	Dec. 3	8.11
	Jan. 2, 1957	8.41
	Feb. 4	9.01
	Mar. 5	9.20
	June 6	6.80
	July 8	5.91
	Aug. 5	5.18
	Sept. 5	5.12
	Oct. 8	5.73
	Nov. 16	6.05
	Dec. 12	6.13
	Mar. 17, 1958	6.72
	Apr. 22	6.48
	May 22	5.19
	June 19	3.50
	July 16	5.19
	Aug. 28	7.33
	Nov. 5	7.62
	Feb. 2, 1959	7.60
	Mar. 18	8.02
	Apr. 18	7.35
	May 26	8.59
C5-68-8dcda.		
	Aug. 30, 1956	4.88
	Sept. 4	5.40
	Sept. 28	6.05
	Oct. 29	8.64
	Dec. 3	7.70
	Jan. 2, 1957	8.08
	Feb. 4	8.39
	Mar. 5	8.55
	Apr. 18	7.86
	June 4	5.10
	July 8	4.80
	Aug. 5	4.74
	Oct. 8	4.76
	Nov. 16	4.64
	Dec. 12	4.99
	Jan. 14, 1958	5.54
	Feb. 18	5.80
	Mar. 18	5.48
	Apr. 22	4.87
	May 22	3.16
	July 16	3.96
	Aug. 28	5.77
	Dec. 9	5.63
	Apr. 20, 1959	5.65
	May 26	5.26
	Dec. 14	6.40
	Jan. 8, 1960	6.45
	Feb. 10	6.20
	Apr. 10, 1962	5.02
C5-68-9accb.		
	Aug. 30, 1956	27.41
	Sept. 14	27.35
	Sept. 28	27.37
	Oct. 29	26.94
	Dec. 3	29.27
	Jan. 2, 1957	30.64
	Feb. 4	31.30
	Mar. 5	31.75
	Apr. 18	32.00
	June 4	30.67
	July 9	28.79
	Aug. 5	27.76
	Oct. 14	27.53
	Nov. 16	28.54
	Dec. 11	29.55
	Jan. 14, 1958	30.60
	Feb. 18	31.34

See footnotes at end of table.

Table 4.--Measurements of the water level in wells--Continued

Location number	Date	Water level
C5-68-9accb.--Continued		
	Mar. 18, 1958	31.54
	Apr. 22	32.01
	May 22	31.25
	June 23	28.40
	July 16	27.59
	Aug. 28	27.30
	Nov. 5	27.43
	Dec. 9	29.81
	Feb. 2, 1959	30.98
	Mar. 18	32.05
	Apr. 20	31.91
	May 26	31.13
	June 25	29.47
	July 10	29.09
	Sept. 21	26.15
	Oct. 26	27.49
	Dec. 15	30.02
	Jan. 8, 1960	29.48
	Feb. 10	30.24
	Mar. 22	30.69
	Apr. 30	29.47
	May 24	29.56
	June 27	27.72
	Sept. 28	26.09
	Jan. 13, 1961	28.67
	Apr. 29	29.99
	July 6	28.39
	Jan. 29, 1962	29.79
	Apr. 10	30.63
	Oct. 1	26.63
C5-68-17cdad.		
	Feb. 7, 1957	5.77
	Feb. 14	5.67
	Feb. 22	6.01
	Mar. 1	5.82
	Mar. 8	5.86
	Mar. 15	6.17
	Mar. 21	6.55
	Mar. 28	6.39
	Apr. 4	7.83
	Apr. 11	5.31
	Apr. 19	4.39
	Apr. 28	4.60
	May 6	3.95
	May 13	3.19
	May 20	2.29
	May 28	3.68
	June 3	3.05
	July 17	2.51
	Sept. 2	4.83
	Oct. 8	4.07
	Nov. 17	3.36
	Dec. 12	3.96
	Feb. 17, 1958	4.42
	Mar. 18	4.13
	Apr. 25	4.44
	May 22	3.83
	June 19	4.85
	July 16	3.51
	Aug. 28	5.17
	Sept. 25	3.60
	Nov. 5	3.57
	Dec. 9	3.79
	Feb. 2, 1959	3.14
	Mar. 18	3.92
	Apr. 20	3.21
	May 26	3.26
	June 26	2.82
	July 30	4.66
	Sept. 21	5.07
	Oct. 26	3.70
	Dec. 15	4.01
	Jan. 7, 1960	5.97
	Feb. 10	6.89
	Mar. 21	3.20
	Apr. 30	2.95
	May 23	3.85
	June 27	4.80
	Sept. 28	6.59
	Jan. 13, 1961	3.81
	Apr. 27	5.15
	July 5	5.30
	Jan. 6, 1962	6.32
	Feb. 2	2.89
	Apr. 10	2.80
	Oct. 1	3.92
	Jan. 21, 1963	4.91
C5-68-17cdba.		
	Oct. 29, 1956	2.90
	Dec. 3	4.09
	Jan. 2, 1957	5.38
	Feb. 4	5.72
	Mar. 5	5.78
	Apr. 18	5.41
	June 4	3.10
	July 8	1.80
	Aug. 5	1.98
	Sept. 5	2.20
	Oct. 8	2.78
C5-68-17cdba.--Continued		
	Nov. 17, 1957	2.69
	Dec. 12	3.24
	Jan. 14, 1958	3.77
	Feb. 17	3.83
	Mar. 18	3.84
	Apr. 25	3.31
	May 22	2.48
	June 19	2.70
	July 16	1.30
	Apr. 20, 1959	3.26
C5-68-17cdcb.		
	Sept. 21, 1956	5.68
	Sept. 28	6.27
	Oct. 24	5.88
	Dec. 3	6.27
	Jan. 2, 1957	6.79
	Feb. 4	7.16
	Mar. 5	7.17
	Apr. 18	6.77
	June 4	4.79
	July 8	3.30
	Aug. 5	3.20
	Sept. 2	3.56
	Oct. 8	4.28
	Nov. 17	4.55
	Dec. 12	5.07
	Feb. 17, 1958	5.83
	Mar. 18	5.74
	Apr. 25	5.46
	May 22	4.25
	June 19	3.84
	July 16	2.34
	Aug. 28	1.00
	Mar. 24, 1959	5.70
	Apr. 20	5.07
	Dec. 15	5.50
	Jan. 7, 1960	5.82
	Feb 10	5.82
C5-68-20cbad.		
	Aug. 30, 1956	13.54
	Sept. 14	13.80
	Sept. 28	14.25
	Oct. 29	13.61
	Dec. 3	13.69
	Jan. 2, 1957	13.99
	Feb. 4	14.39
	Mar. 5	14.40
	Apr. 18	14.31
	Sept. 4	12.65
	Oct. 14	12.93
	Nov. 16	12.65
	Dec. 13	13.25
	Jan. 14, 1958	12.75
C5-68-20cbdd.		
	Aug. 30, 1956	9.18
	Sept. 14	9.43
	Sept. 28	9.88
	Oct. 29	9.12
	Dec. 3	8.96
	Jan. 2, 1957	9.33
	Feb. 4	9.74
	Mar. 5	9.71
	Apr. 18	9.65
	June 4	8.09
	July 8	7.79
	Aug. 5	7.63
	Sept. 4	8.02
	Oct. 14	8.27
	Nov. 16	7.96
	Dec. 12	8.50
	Jan. 4, 1958	9.07
	Feb. 18	9.30
	Mar. 18	9.31
	Apr. 22	9.74
	May 22	9.04
	June 23	8.94
	July 16	7.50
	Aug. 28	8.43
	Sept. 25	7.84
	Nov. 5	7.79
	Dec. 9	8.79
	Feb 2, 1959	9.44
	Mar. 18	8.61
	Apr. 20	8.83
	June 26	8.64
	July 10	7.07
	Sept. 24	7.79
	Oct. 26	7.44
	Dec. 14	8.48
	Jan. 8, 1960	8.77
	Feb. 10	8.87
	Mar. 21	8.84
	Apr. 30	9.02
	May 24	8.49
	June 23	8.69
	Sept. 28	8.24
	Jan. 13, 1961	8.91
	Apr. 29	9.41
C5-68-20cbdd.--Continued		
	July 5, 1961	9.48
	Sept. 22	8.01
	Jan. 3, 1962	8.94
	Apr. 10	9.29
	Sept. 28	7.95
	Jan. 21, 1963	9.22
C5-68-20dabd.		
	Oct. 1, 1956	29.36
	Oct. 29	29.26
	Dec. 3	29.42
	Jan. 2, 1957	29.95
	Feb. 4	30.34
	Mar. 5	30.45
	Apr. 18	30.49
	June 4	29.05
	July 8	27.10
	Aug. 5	27.80
	Sept. 4	27.75
	Nov. 17	28.18
	Dec. 13	28.84
	Jan. 14, 1958	29.42
	Feb. 18	30.40
	Mar. 18	30.41
	Apr. 22	30.49
	May 21	29.36
	June 23	27.98
	July 16	27.48
	Apr. 21, 1959	30.22
	Dec. 15	29.15
	Jan. 8, 1960	29.50
	Feb. 10	29.88
	Sept. 28	27.51
	Apr. 12	30.26
	Sept. 28	28.11
	Feb. 5, 1963	30.10
C5-68-30adad.		
	Aug. 29, 1956	0.59
	Sept. 21	1.66
	Sept. 28	1.60
	Oct. 29	1.01
	Dec. 3	1.28
	Jan. 2, 1957	1.64
	Feb. 4	2.30
	Mar. 5	2.00
	Apr. 18	1.94
	June 4	1.24
	July 8	+ .25
	Aug. 5	.49
	Sept. 4	.61
	Oct. 14	.64
	Nov. 17	.49
	Dec. 13	.94
	Jan. 14, 1958	1.40
	Feb. 18	1.89
	Mar. 18	1.77
	Apr. 22	2.18
	May 21	1.22
	June 23	.39
	July 16	+ .62
	Aug. 28	+ .03
	Nov. 5	.11
	Dec. 9	.20
	Feb. 2, 1959	1.92
	Mar. 18	2.20
	Apr. 18	1.98
	May 26	.72
	June 25	.31
	July 30	.58
	Sept. 24	+ .65
	Oct. 26	.43
	Dec. 15	1.42
	Jan. 8, 1960	1.64
	Feb. 10	1.47
	Mar. 21	1.25
	Apr. 30	1.66
	May 24	1.20
	June 23	.17
	Sept. 28	.46
	Jan. 13, 1961	1.70
	Apr. 29	2.05
	July 5	1.77
	Jan. 3, 1962	1.58
	Apr. 12	1.82
	Sept. 28	+ .08
	Feb. 5, 1963	1.64
C5-68-31adad.		
	Sept. 17, 1956	2.92
	Sept. 27	2.40
	Oct. 29	2.68
	Dec. 3	2.89
	Jan. 2, 1957	2.84
	Feb. 4	2.97
	Mar. 5	2.92
	Apr. 18	1.88
	July 3	1.87
	July 31	1.73
	Sept. 4	2.22
	Oct. 16	2.22

See footnotes at end of table.

Location number	Date	Water level
C5-68-11adad.--Continued		
	Nov. 14, 1957	2.00
	Dec. 12	2.25
	Jan. 13, 1958	2.54
	Feb. 18	2.95
	Mar. 18	3.60
	Apr. 22	2.96
	May 21	1.24
	June 23	1.37
	July 16	2.53
	Sept. 25	2.93
	Dec. 9	2.89
	Feb. 2, 1959	2.97
	Mar. 17	2.97
	Apr. 18	2.16
	June 25	1.99
	July 23	2.55
	Sept. 21	3.14
	Oct. 26	2.75
	Dec. 14	2.70
	Jan. 8, 1960	2.76
	Feb. 9	2.48
	Mar. 22	1.96
	May 4	1.88
	May 23	1.49
	June 27	2.12
	Sept. 28	2.91
	Jan. 13, 1961	2.55
	Apr. 29	2.16
	July 5	2.23
	Jan. 6, 1962	2.36
	Apr. 12	1.60
	Oct. 1	2.72
	Jan. 22, 1963	2.64
C5-68-11daab.		
	Sept. 17, 1956	2.70
	Sept. 27	2.96
	Oct. 29	2.45
	Dec. 3	2.85
	Jan. 2, 1957	2.94
	Feb. 4	2.95
	Mar. 5	2.89
	July 3	1.98
	July 31	2.12
	Sept. 4	3.02
	Oct. 16	2.89
	Nov. 14	2.64
	Dec. 12	3.03
	Jan. 13, 1958	3.33
	Mar. 18	3.67
C5-68-11daac.		
	Sept. 17, 1956	3.52
	Sept. 27	3.85
	Oct. 29	3.32
	Dec. 3	3.64
	Jan. 2, 1957	3.69
	Feb. 4	3.76
	Mar. 5	3.74
	July 3	2.95
	July 31	2.99
	Sept. 4	3.77
	Oct. 16	3.58
	Nov. 14	2.80
	Dec. 12	3.66
	Jan. 13, 1958	4.08
	Mar. 18	4.67
	Mar. 22, 1959	7.00
C5-69-6bdcc.		
	Oct. 11, 1956	5.80
	Oct. 30	5.97
	Dec. 1	2.67
	Jan. 3, 1957	2.16
	Feb. 4	2.09
	Mar. 3	2.11
	Apr. 1	2.06
	June 2	1.90
	July 9	1.70
	Aug. 5	1.91
	Sept. 5	2.09
	Oct. 14	2.40
	Nov. 17	2.82
	Dec. 13	2.90
	Jan. 22, 1958	2.79
	Feb. 17	2.52
	Mar. 17	2.44
	Apr. 22	2.44
	May 21	2.48
	June 23	1.97
	July 16	2.74
	Aug. 21	4.72
	Sept. 25	6.33
	Nov. 5	5.19
	Dec. 9	2.30
	Feb. 2, 1959	2.17
	Mar. 18	2.37
	Apr. 21	2.18
	May 26	2.00
	June 25	2.02
	July 23	3.20
C5-69-6bdcc.--Continued		
	Sept. 24, 1959	5.73
	Oct. 20	2.69
	Dec. 15	1.32
	Jan. 9, 1960	2.27
	Feb. 11	2.88
	Mar. 21	2.32
	Apr. 10	1.95
	May 24	2.17
	June 23	1.75
	July 26	1.22
	Sept. 28	5.93
	Jan. 13, 1961	2.28
	Apr. 25	3.44
	July 5	2.39
	Jan. 1, 1962	4.11
	Apr. 12	2.50
	Oct. 19	6.02
	Jan. 21, 1963	2.25
C5-69-7cacb.		
	June 11, 1957	46.43
	July 9	44.37
	July 31	43.52
	Sept. 5	44.41
	Oct. 14	42.26
	Nov. 16	41.71
	Dec. 13	41.63
	Jan. 13, 1958	41.97
	Feb. 18	40.52
	Mar. 17	40.08
	Apr. 22	39.68
	May 21	39.49
	June 23	41.54
	July 16	41.56
	Aug. 21	41.65
	Sept. 25	40.76
	Nov. 5	39.07
	Dec. 9	37.43
	Feb. 2, 1959	38.95
	Mar. 18	38.58
	Apr. 21	38.62
	May 26	38.20
	June 25	38.59
	July 23	39.50
	Sept. 24	39.66
	Oct. 26	38.52
	Dec. 15	38.25
	Jan. 9, 1960	37.99
	Feb. 11	37.93
	Mar. 21	37.99
	Apr. 30	37.68
	May 24	37.36
	June 23	37.74
	July 26	37.77
	Sept. 28	37.75
	Jan. 13, 1961	36.80
	Apr. 25	35.01
	July 5	35.51
	Jan. 3, 1962	35.32
	Apr. 20	35.91
	Sept. 28	36.19
	Jan. 21, 1963	34.55
C5-69-18bbcc.		
	Dec. 5, 1956	43.5
	Jan. 3, 1957	43.75
	Feb. 4	43.50
	Mar. 3	43.75
	Apr. 1	43.75
	June 3	46.00
	July 9	47.00
	July 31	48.00
C5-69-25aaac.		
	Apr. 18, 1957	14.70
	June 4	14.45
	July 3	15.46
	Aug. 5	16.91
	Sept. 5	18.16
	Oct. 14	18.56
	Nov. 17	18.45
	Dec. 13	18.58
	Jan. 14, 1958	18.46
	Feb. 18	17.32
	Mar. 18	17.31
	Apr. 22	17.12
	May 21	17.40
	June 23	19.32
	July 16	21.17
	Aug. 21	23.45
	Nov. 5	22.73
	Dec. 9	23.03
	Feb. 2, 1959	21.42
	Oct. 11, 1960	36.39
	Jan. 13, 1961	36.33
	Apr. 29	37.02
	July 6	36.73
	Sept. 22	36.74
	Jan. 3, 1962	39.57
	Apr. 20	40.08
	Sept. 28	45.01
	Jan. 21, 1963	45.05
C6-66-4bddc.		
	July 15, 1959	21.60
	Dec. 10	21.64
	Jan. 7	21.34
	Mar. 21	18.21
	Apr. 27	17.44
	May 24	16.67
	June 23	17.42
	Oct. 3	22.51
	Jan. 16, 1961	21.11
	July 1	16.38
	Jan. 4, 1962	16.09
C6-66-4cada.		
	Sept. 12, 1956	22.64
	Sept. 27	20.15
	Oct. 26	11.90
	Dec. 5	9.86
	Jan. 4, 1957	9.53
	Feb. 6	9.17
	Mar. 11	13.93
	Apr. 25	17.18
	June 5	15.15
	July 15	17.39
	Aug. 7	15.41
	Sept. 16	15.93
	Nov. 16	14.36
	Dec. 12	13.82
	Jan. 16, 1958	13.69
	Feb. 18	13.59
	Mar. 13	13.27
	Apr. 25	13.42
	May 19	13.27
	Mar. 19, 1959	13.78
	Apr. 27	13.27
	June 6	13.19
	July 16	34.69
	Aug. 24	18.38
	Oct. 12	17.39
	Oct. 28	17.16
	Dec. 10	16.76
	Jan. 7, 1960	16.52
	Feb. 9	15.56
	Mar. 21	14.06
	Jan. 4, 1962	12.50
	Apr. 13	12.50
	Oct. 19	16.95
	Jan. 22, 1963	17.07
C6-66-5adac.		
	Sept. 12, 1956	21.34
	Sept. 27	20.57
	Oct. 26	19.38
	Dec. 5	17.50
	Jan. 4, 1957	16.76
	Feb. 6	16.05
	Mar. 11	15.60
	Apr. 25	13.25
	June 5	12.22
	July 15	15.71
	Aug. 7	13.81
	Sept. 16	14.70
	Oct. 17	13.45
	Nov. 16	12.24
	Dec. 12	12.02
	Jan. 16, 1958	12.00
	Feb. 18	11.95
	Mar. 13	11.87
	Apr. 25	17.89
	May 19	11.79
	June 20	12.47
	Nov. 7	13.40
	Dec. 10	12.87
	Jan. 30, 1959	12.40
	Mar. 19	12.06
	Apr. 27	11.80
	June 6	13.65
	June 26	13.62
	July 15	30.10
	Oct. 13	17.52
	Oct. 28	16.43
	Dec. 10	14.65
	Jan. 7, 1960	15.37
	Feb. 9	13.56
	Mar. 22	10.33
	Apr. 27	11.35
	May 24	11.30
	Sept. 29	11.33
	Jan. 16, 1961	13.74
	Apr. 27	11.29
	July 1	15.20
	Sept. 21	15.35
	Jan. 4, 1962	11.36
	Apr. 13	10.40
	Oct. 1	18.45
	Jan. 22, 1963	13.96
C6-66-9addc.		
	Sept. 27, 1956	20.79
	Oct. 26	21.47
	Dec. 5	20.45
	Jan. 4, 1957	19.90

See footnotes at end of table.

Location number	Date	Water level
C6-66-9addc.--Continued		
	Feb. 6, 1957	19.44
	Mar. 11	19.09
	Apr. 25	16.45
	June 5	15.33
	Aug. 7	14.47
	Sept. 16	17.40
	Oct. 16	16.81
	Nov. 16	15.17
	Dec. 12	15.20
	Jan. 16, 1958	15.09
	Feb. 18	14.90
	Mar. 13	14.98
	Apr. 25	14.97
	May 19	14.85
	June 20	15.02
	Sept. 24	17.01
	Mar. 19, 1959	15.24
	Apr. 27	15 04
	June 6	15.06
	June 26	15.33
	Aug. 24	20.36
	Oct. 13	18.11
	Oct. 28	18.04
	Dec. 10	15.91
	Jan. 7, 1960	15.52
	Feb. 9	15.22
	Mar. 21	14.14
	Apr. 27	15.20
	May 24	15.11
	Sept. 29	20.35
	Jan. 16, 1961	15.53
	Apr. 27	15.25
	July 1	15.48
	Jan. 4, 1962	15.35
	Apr. 13	14.70
	Oct. 19	18.65
	Jan. 22, 1963	16.42
C6-66-9addc2.		
	Sept. 12, 1956	13.35
	Sept. 27	8.75
	Oct. 26	10.40
	Dec. 5	9.33
	Jan. 4, 1957	8.88
	Feb. 6	8.31
	Mar. 11	7.95
	Apr. 25	5.27
	June 5	4.18
	July 15	9.95
	Aug. 7	4.08
	Sept. 16	6.33
	Oct. 16	5.70
	Nov. 16	4.23
	Dec. 12	4.05
	Jan. 16, 1958	3.94
	Feb. 18	3.76
	Mar. 13	3.85
	Apr. 25	3.82
	May 19	3.70
	June 20	3.91
	July 15	7.81
	Aug. 20	8.60
	Nov. 7	4.70
	Dec. 10	4.50
	Jan. 30, 1959	4.30
	Mar. 19	4.12
	Apr. 27	3.90
	June 6	3.93
	June 26	4.26
	Aug. 24	9.54
	Oct. 13	[illegible]
	Oct. 28	8.95
	Dec. 10	4.73
	Jan. 7, 1960	4.28
	Feb. 9	4.09
	June 23	8.82
	Apr. 13, 1962	4.30
C6-66-9bcdc.		
	Sept. 12, 1956	35.10
	Sept. 27	34.28
	Oct. 26	35.38
	Dec. 5	33.89
	Jan. 4, 1957	33.41
	Feb. 6	32.95
	Mar. 11	32.73
	Apr. 25	31.55
	June 5	30.06
	July 15	36.02
	Aug. 7	30.99
	Sept. 16	31.30
	Nov. 16	29.77
	Dec. 12	28.70
	Jan. 16, 1958	28.49
	Feb. 18	28.82
	Mar. 13	28.06
	Apr. 25	28.45
	May 19	28.24
	June 2	27.70
	Sept. 24	29.96
	Nov. 7	29.10

Location number	Date	Water level
C6-66-9bcdc.--Continued		
	Dec. 10, 1958	28.78
	Jan. 30, 1959	28.31
	Mar. 19	28.49
	Apr. 27	27.48
	June 6	27.30
	Oct. 13	31.98
	Oct. 28	31.56
	Dec. 10	30.31
	Jan. 7, 1960	30.77
	Feb. 9	28.98
	Mar. 22	27.79
	Apr. 27	27.23
	May 24	27.65
	Sept. 29	31.83
	Jan. 16, 1961	28.97
	Apr. 27	27.83
	Apr. 13, 1962	24.60
C6-66-9bdcc.		
	Sept. 12, 1956	32.90
	Sept. 27	31.89
	Oct. 26	33.10
	Dec. 5	31.63
	Jan. 4, 1957	31.22
	Feb. 6	30.73
	Mar. 11	30.42
	Apr. 25	29.28
	June 5	27.63
	July 15	34.34
	Aug. 7	28.68
	Sept. 16	28.97
	Nov. 16	29.49
	Dec. 12	27.00
	Jan. 16, 1958	26.78
	Feb. 18	26.55
	Mar. 13	26.41
	Apr. 25	26.24
	May 19	25.98
	June 20	26.08
	Mar. 19, 1959	26.24
	Apr. 27	25.89
	June 6	25.73
	Oct. 28	29.35
	Dec. 10	28.07
	Jan. 7, 1960	28.43
	Feb. 9	26.70
	Apr. 13, 1962	23.20
C6-66-22bacd.		
	Sept. 12, 1956	41.85
	Oct. 26	42.66
	Dec. 5	41.46
	Jan. 4, 1957	39.73
	Feb. 6	39.35
	Mar. 11	39.06
	Apr. 25	38.44
	June 5	37.20
	July 15	38.58
	Aug. 7	37.04
	Sept. 16	38.31
	Oct. 16	35.73
	Nov. 16	38.91
	Dec. 12	34.47
	Jan. 16, 1958	34.05
	Feb. 18	33.87
	Mar. 13	33.67
	Apr. 25	33.46
	May 19	32.62
	June 20	32.86
	July 15	34.53
	Sept. 24	33.31
	Nov. 7	32.30
	Dec. 10	32.04
	Jan. 30, 1959	31.52
	Mar. 19	31.09
	Apr. 27	30.61
	May 11	30.54
	June 6	30.19
	June 26	31,44
	Aug. 24	32.23
	Oct. 13	31.78
	Oct. 28	31.11
	Dec. 10	30.55
	Jan. 7, 1960	30.51
	Feb. 8	30.17
	Apr. 27	31.29
	May 24	30.22
	June 23	31.82
	Sept. 29	31.94
	Jan. 16, 1961	30.21
	Apr. 27	30.10
	Sept. 21	27.24
	Jan. 4, 1962	26.19
	Apr. 13	30.10
	Oct. 19	34.16
	Jan. 22, 1963	33.04
C6-66-22bcab.		
	Sept. 12, 1956	34.12
	Oct. 26	35.14
	Dec. 5	32.73

Location number	Date	Water level
C6-66-22bcab.--Continued		
	Jan. 4, 1957	32.15
	Feb. 6	31.30
	Mar. 11	31.53
	Apr. 25	30.34
	June 5	29.07
	July 15	31.11
	Aug. 7	29.16
	Sept. 16	30.98
	Oct. 16	28.88
	Nov. 16	28.07
	Dec. 12	27.78
	Jan. 16, 1958	27.50
	Feb. 18	27.38
	Mar. 13	27.30
	Apr. 25	27.11
	May 19	27.12
	June 20	26.81
	July 15	28.05
	Mar. 19	25.88
	Apr. 27	25.66
	May 11	25.39
	June 6	25.30
	June 26	26.63
	July 13	51.60
	Aug. 24	28.09
	Oct. 13	26.99
	Oct. 28	26.56
	Dec. 10	25.92
	Jan. 7, 1960	25.77
	Feb. 8	25.53
	Mar. 21	25.06
	Sept. 29	27.36
	Apr. 13	24.60
	Oct. 19	28.66
	Jan. 22, 1963	27.59
C6-66-22bcab2.		
	June 6, 1959	26.67
	June 26	27.97
	Aug. 24	29.42
	Oct. 13	28.34
	Oct. 28	27.89
	Dec. 10	27.16
	Jan. 7, 1960	27.03
	Feb. 8	26.59
C6-66-22bcab3.		
	June 6, 1959	26.47
	June 26	28.23
	Aug. 24	29.50
	Oct. 13	28.53
	Oct. 28	28.07
	Dec. 10	27.40
	Jan. 7, 1960	27.07
	Feb. 8	26.99
C6-66-22ccdd.		
	Sept. 12, 1956	25.38
	Sept. 27	25.11
	Dec. 5	25.30
	Jan. 4, 1957	25.01
	Feb. 6	24.84
	Mar. 11	24.51
	June 5	23.42
	July 15	19.05
	Sept. 16	13.87
	Oct. 16	14.86
	Nov. 16	12.99
	Dec. 12	12.77
	Jan. 16, 1958	12.73
	Feb. 18	12.42
	Mar. 13	12.69
	Apr. 25	12.60
	May 19	12.41
	June 20	13.36
	July 15	14.50
	Aug. 20	16.10
	Nov. 7	16.46
	Dec. 10	16.25
	Jan. 3, 1959	13.62
	Mar. 19	12.82
	Apr. 27	12.62
	May 11	12.44
	June 6	12.52
	June 26	13.28
	July 27	15.67
	Aug. 24	27.40
	Oct. 13	17.49
	Oct. 28	17.38
	Dec. 10	17.47
	Jan. 7, 1960	17.82
	Feb. 9	15.59
	Apr. 13, 1962	12.40
C6-67-8bcba.		
	July 17, 1957	6.12
	Oct. 16	6.33
	Nov. 16	6.20
	Dec. 12	6.15
	Jan. 16, 1958	6.55
	Feb. 19	6.31

See footnotes at end of table.

Location number	Date	Water level
C6-67-9bcba.--Continued		
	Mar. 14, 1958	6.62
	Apr. 28	6.16
	May 19	6.32
	June 23	6.00
	July 15	9.16
	Aug. 21	6.20
	Sept. 25	6.30
	Nov. 7	6.92
	Dec. 10	14.73
	Feb. 2, 1959	7.38
	Mar. 17	6.93
	Apr. 18	6.08
	June 2	9.79
	June 26	14.25
	July 23	20.71
	Sept. 24	15.80
	Oct. 26	26.10
	Dec. 11	12.04
	Jan. 8, 1960	29.67
	Feb. 9	52.68
	Mar. 10	29.47
	Apr. 26	15.50
	May 24	18.27
	June 27	12.81
	Sept. 29	21.43
	Jan. 13, 1961	10.89
	Apr. 27	35.40
	July 5	11.45
	Apr. 21, 1962	21.78
	Oct. 1	8.24
C6-68-7cacc2.		
	Sept. 17, 1956	4.70
	Sept. 27	4.87
	Dec. 3	4.95
	Jan. 2, 1957	4.44
	Feb. 4	3.90
	Mar. 5	3.53
	Apr. 18	2.15
	June 4	1.34
	July 3	2.83
	July 31	3.16
	Sept. 14	3.74
	Oct. 16	5.64
	Nov. 14	2.86
	Dec. 12	2.85
	Jan. 13, 1958	2.80
	Feb. 18	2.64
	Mar. 18	2.48
	Apr. 22	2.70
	May 21	4.70
	June 23	3.24
	July 16	6.17
	Aug. 21	4.64
	Sept. 25	7.09
	Nov. 5	5.73
	Dec. 9	3.90
	Feb. 2, 1959	3.16
	Mar. 18	2.90
	Apr. 18	2.42
	May 26	2.67
	June 26	5.25
	Sept. 24	5.54
	Oct. 26	4.80
	Dec. 15	3.38
	Jan. 8, 1960	3.20
	Feb. 9	2.57
	Mar. 22	1.56
	Apr. 26	2.33
	May 23	1.97
	June 23	5.50
	Sept. 28	7.04
	Jan. 13, 1961	2.78
	Apr. 29	2.41
	July 5	4.47
	Sept. 22	2.79
	Jan. 3, 1962	2.23
	Apr. 11	1.86
	Oct. 1	6.12
	Jan. 21, 1963	3.03
C6-68-8bbbc.		
	Aug. 7, 1957	0.67
	Sept 4	.97
	Oct. 16	1.23
	Nov. 16	1.41
	Dec. 12	1.53
	Jan. 13, 1958	1.60
	Feb. 17	1.61
	Mar. 18	1.57
	Apr. 22	1.57
	May 21	1.44
	June 23	1.20
	July 16	1.45
	Aug. 28	1.75
	Sept. 25	2.13
	Nov. 5	2.45
	Dec. 9	2.72
	Feb. 2, 1959	2.72
	Mar. 18	2.82
	Apr. 18	2.58

Location number	Date	Water level
C6-68-8bbbc.--Continued		
	May 26, 1959	2.55
	June 25	2.37
	July 10	2.72
	Sept. 24	3.38
	Oct. 26	3.55
	Dec. 11	3.99
	Jan. 7, 1960	4.08
	Feb. 9	4.09
	Mar. 22	4.15
	Apr. 26	4.20
	May 23	3.83
	June 23	4.55
	Sept. 29	6.54
	Jan. 13, 1961	7.04
	Apr. 27	6.35
	July 5	5.41
	Sept. 22	8.04
	Jan. 3, 1962	8.65
	Apr. 5	8.59
	Sept. 28	11.69
	Jan. 21, 1963	14.42
C6-68-18abcb.		
	Sept. 12, 1956	7.76
	Oct. 29	7.94
	Dec. 3	7.76
	Jan. 2, 1957	7.62
	Feb. 4	7.48
	Mar. 5	7.38
	June 7	5.80
	July 3	7.79
	July 31	7.89
	Sept. 4	8.33
	Oct. 16	7.45
	Nov. 14	7.14
	Dec. 12	6.88
	Jan. 13, 1958	6.86
	Feb. 18	6.87
	Mar. 18	6.94
	Apr. 22	7.05
	May 21	7.57
	June 23	8.32
	July 16	10.43
	Aug. 21	10.54
	Apr. 18, 1959	7.14
	May 26	7.27
	June 25	8.31
	Sept. 24	8.98
	Oct. 26	8.17
	Dec. 15	7.17
	Jan. 8, 1960	7.25
	Feb. 9	7.09
	Sept. 28	8.72
	Apr. 11	5.92
	Oct. 1	8.18
C6-68-18dabb.		
	Sept. 17, 1956	7.08
	Sept. 27	7.02
	Oct. 29	6.97
	Dec. 3	6.92
	Jan. 2, 1957	6.99
	Feb. 4	6.64
	Mar. 5	6.76
	June 7	5.27
	July 3	5.68
	July 31	5.99
	Sept. 4	6.10
	Oct. 16	6.18
	Nov. 14	6.30
	Dec. 12	6.58
	Jan. 13, 1958	6.40
	Feb. 18	6.81
	Mar. 18	6.86
	Apr. 22	6.90
	May 21	6.60
	June 23	6.62
	July 16	6.70
	Aug. 21	6.55
	Nov. 5	7.20
	Dec. 9	6.79
	Feb. 2, 1959	6.62
	Mar. 18	6.52
	Apr. 18	6.27
	May 26	11.00
	June 25	17.97
	Oct. 26	5.45
	Dec. 15	4.70
	Jan. 8, 1960	4.78
	Apr. 11, 1962	8.11
C6-68-18ddbb.		
	Dec. 5, 1956	+32.75
	Jan. 2, 1957	+32.25
	Feb. 4	+32.75
	Mar. 5	+34.00
	Apr. 18	+35.25
	June 7	+34.00
	July 3	+34.75
	July 31	+34.00
	Sept. 4	+34.60

Location number	Date	Water level
C6-68-18ddbb.--Continued		
	Oct. 16, 1957	+35.60
	Nov. 14	+32.40
	Dec. 12	+31.00
	Jan. 13, 1958	+32.50
	Feb. 18	+33.00
	Mar. 18	+33.00
	Apr. 22	+32.80
	May 21	+33.00
	June 23	+31.75
	July 16	+32.60
	Aug. 21	+32.50
	Sept. 25	+25.50
	Nov. 5	+30.20
	Dec. 9	+31.80
	Feb. 2, 1959	+32.20
	Mar. 18	+30.70
	Apr. 18	+31.00
	May 26	+31.20
	June 25	+30.70
	Sept. 24	+29.10
	Oct. 26	+30.20
	Dec. 15	+30.70
	Jan. 8, 1960	+29.75
	Feb. 9	+29.45
	Mar. 28	+29.60
	Apr. 26	+29.90
	May 23	+29.40
	June 23	+30.70
	Sept. 28	+28.70
	Jan. 13, 1961	+29.00
	Apr. 29	+32.00
	July 5	+29.30
	Jan. 3, 1962	+29.40
	Apr. 21	+28.80
	Oct. 1	+27.20
	Feb. 5, 1963	+26.70
C6-68-18dddd.		
	Sept. 17, 1956	1.55
	Oct. 29	1.53
	Dec. 3	.82
	Jan. 2, 1957	.60
	Feb. 4	.29
	Mar. 5	.13
	Apr. 18	.52
	June 7	.65
	July 31	.47
	Sept. 4	.22
	Oct. 16	.19
	Nov. 14	.28
	Dec. 12	.58
	Oct. 1, 1962	.22
C6-69-2ddab.		
	Sept. 13, 1956	28.15
	Sept. 28	29.16
	Oct. 24	30.47
	Dec. 3	29.82
	Jan. 2, 1957	31.51
	Feb. 4	30.61
	Mar. 5	30.60
	Apr. 18	30.63
	June 4	26.79
	July 8	23.57
	Aug. 5	23.44
	Sept. 9	24.10
	Oct. 14	24.61
	Nov 16	27.31
	Dec. 12	28.60
	Jan. 14, 1958	30.00
	Feb. 18	29.53
	Mar. 18	29.62
	Apr. 22	28.92
	May 21	27.17
	June 23	24.52
	July 16	25.05
	Aug. 21	25.98
	Sept. 25	27.84
	Nov. 5	30.00
	Dec. 9	29.70
	Mar. 18	30.33
	Apr. 18	30.09
	May 26	24.72
	June 25	25.02
	July 10	24.49
	Sept. 24	27.75
	Oct. 26	28.22
	Dec. 11	29.78
	Jan. 8, 1960	29.98
	Feb. 10	30.16
	Mar. 21	29.85
	Apr. 26	28.47
	May 24	27.05
	June 23	25.40
	Sept. 28	28.53
	Jan. 13, 1961	30.27
	Apr. 29	30.62
	July 5	25.09
	Sept. 22	27.31
	Jan. 3, 1962	30.17
	Apr. 11	30.44
	Sept. 28	29.50
	Jan. 21, 1963	31.29

See footnotes at end of table.

Table 4.--Measurements of the water levels in wells--Continued

Location number	Date	Water level
C6-69-2ddda.		
	Sept. 13, 1956	15.17
	Oct. 1	15.90
	Oct. 29	15.79
	Dec. 3	16.11
	Jan. 2, 1957	16.02
	Feb. 4	16.05
	Mar. 5	16.00
	Apr. 18	15.63
	June 4	13.19
	July 8	10.65
	Aug. 5	10.47
	Sept. 4	12.20
	Oct. 14	12.63
	Nov. 16	13.39
	Dec. 12	14.84
	Jan. 14, 1958	15.55
	Feb. 18	16.10
	Mar. 18	15.69
	Apr. 22	14.57
	May 21	11.74
	June 23	12.89
	Aug. 21	14.18
	Apr. 18, 1959	15.88
	Dec. 11	16.44
	Jan. 8, 1960	16.76
	Feb. 10	16.42
	Sept. 28	15.88
	Jan. 3, 1962	16.97
	Apr. 11	16.69
	Sept. 28	17.54
C6-69-23dbbb2.		
	Sept. 4, 1957	5.84
	Oct. 14	6.46
	Nov. 16	6.02
	Dec. 12	6.32
	Jan. 14, 1958	6.72
	Mar. 18	6.52
	May 21	5.34
	July 16	6.17
	Apr. 18, 1959	6.60
	July 30	6.34
	Dec. 11	6.87
	Jan. 8, 1960	6.95
	Feb. 10	6.81
	Mar. 21	5.93
	Apr. 11, 1962	5.82
C6-69-23dbbc2.		
	Sept. 13, 1956	13.94
	Sept. 28	13.51
	Oct. 29	15.15
	Dec. 3	15.67
	Jan. 2, 1957	15.84
	Feb. 4	15.67
	Mar. 5	15.77
	Apr. 18	12.57
	June 4	12.41
	July 8	11.81
	July 31	6.46
	Jan. 14, 1958	7.15
	Feb. 18	7.07
	Mar. 18	6.92
	Apr. 22	6.19
	May 21	5.58
	June 23	5.97
	July 16	6.38
	Aug. 21	6.90
	Apr. 18, 1959	6.99
	Sept. 24	7.11
	Oct. 26	6.99
	Dec. 11	7.31
	Jan. 8, 1960	7.39
	Feb. 10	7.26
	Apr. 26	6.40
	May 24	6.19
	June 23	6.35
	Jan. 13, 1961	7.33
	July 5	6.98
	Jan. 3, 1962	7.00
	Apr. 11	6.24
	Oct. 1	7.22
	Jan. 21, 1963	7.64
C6-69-23dbbc3.		
	Sept. 13, 1956	15.50
	Sept. 28	16.07
	Oct. 29	16.82
	Dec. 3	17.60
	Jan. 2, 1957	17.68
	Feb. 4	17.51
	Mar. 5	17.67
	Apr. 18	12.27
	June 4	14.74
	July 8	14.45
	July 31	6.26
	Oct. 14	6.47
	Nov. 16	6.04
	Dec. 12	6.14
	Jan. 14, 1958	6.81
	Feb. 18	6.70
C6-69-23dbbc3.--Continued		
	Mar. 18, 1958	6.56
	Apr. 22	5.90
	May 21	5.12
	June 23	5.67
	July 16	6.11
	Aug. 21	6.50
	Apr. 18, 1959	6.62
	Dec. 11	6.81
	Jan. 8, 1960	7.21
	June 10	6.83
	Apr. 11, 1962	5.82
C6-69-23dbdb.		
	Sept. 13, 1956	10.90
	Sept. 28	11.13
	Oct. 29	11.84
	Dec. 3	12.12
	Jan. 2, 1957	12.42
	Feb. 4	12.18
	Mar. 5	12.00
	Apr. 18	9.07
	June 4	7.58
	July 7	8.82
	July 31	4.83
	Sept. 4	5.03
	Oct. 14	5.68
	Nov. 16	5.23
	Dec. 12	5.68
	Jan. 14, 1958	6.10
	Jan. 18	6.18
	Mar. 18	5.92
	Apr. 22	4.96
	May 21	4.24
	June 23	4.90
	July 16	5.34
	Aug. 21	5.74
	Apr. 18, 1959	5.89
	July 30	5.44
	Dec. 11	6.26
	Jan. 8, 1960	6.41
	Feb. 10	6.33
C6-69-26bdba.		
	Sept. 18, 1956	6.18
	Sept. 28	6.38
	Jan. 2, 1957	6.82
	Feb. 4	6.84
	Mar. 5	6.70
	Apr. 18	6.10
	June 4	3.82
	July 8	3.87
	July 31	4.15
	Sept. 4	4.89
	Oct. 14	5.14
	Nov. 16	4.77
	Dec. 12	5.27
	Feb. 18, 1958	5.91
	Mar. 18	5.57
	Apr. 22	4.17
	May 21	3.30
	June 23	4.70
	July 16	4.66
	Aug. 21	5.10
	Sept. 25	5.47
	Nov. 5	5.80
	Dec. 9	6.30
	Feb. 2, 1959	6.80
	Mar. 18	7.35
	Apr. 18	6.02
	May 26	4.97
	June 25	4.14
	July 30	4.80
	Oct. 26	5.33
	Dec. 11	7.47
	Jan. 8, 1960	6.09
	Feb. 9	6.03
	Mar. 21	5.55
	Apr. 26	4.65
	May 24	4.26
	June 23	4.57
	Sept. 28	5.81
	Jan. 13, 1961	6.98
	Apr. 29	6.37
	July 5	5.28
	Sept. 22	5.60
	Jan. 3, 1962	6.22
	Apr. 11	1.93
	Oct. 1	6.26
	Jan. 21, 1963	11.66
C7-66-1aacd.		
	Oct. 13, 1959	21.14
	Oct. 28	20.92
	Dec. 11	20.19
	Jan. 7, 1960	20.49
	Feb. 9	19.74
	Mar. 21	17.13
	Apr. 27	17.96
	May 24	17.56
	June 23	18.86
	Sept. 29	22.02
C7-66-1aacd.--Continued		
	Jan. 16, 1961	20.26
	Apr. 27	18.57
	July 5	21.34
	Sept. 21	21.65
	Jan. 4, 1962	22.01
	Apr. 13	21.50
	Oct. 1	22.72
	Jan. 22, 1963	22.94
C7-67-1abcd.		
	Jan. 11, 1957	536.25
	Feb. 17, 1958	631.4
	Mar. 18	607.9
	Apr. 28	615.97
	May 19	615.30
	June 23	617.25
	Aug. 21	615.8
	Sept. 25	618.5
	Nov. 7	617.9
	Dec. 10	618.7
	Feb. 6, 1959	619.3
	Mar. 17	620.3
	Apr. 21	623.6
	June 2	615.8
	June 26	618.9
	July 30	616.0
	Oct. 8	625.6
	Oct. 28	613.7
	Dec. 11	615.4
	Jan. 12, 1960	609.2
	Jan. 24, 1961	606.4
C7-67-1abcd2.		
	Jan. 12, 1960	519.0
	Feb. 8	511.3
	Mar. 22	511.4
	Apr. 26	507.3
	May 23	515.4
	June 27	505.5
	Jan. 24, 1961	500.9
	Apr. 29	494.0
	July 5	495.1
C7-67-27abad.		
	Sept. 24, 1959	166.88
	Dec. 11	166.55
	Jan. 7, 1960	166.60
	Feb. 8	165.49
	Mar. 22	166.15
	Apr. 26	163.96
	May 23	165.52
	June 23	166.23
	Sept. 29	167.88
	Jan. 13, 1961	168.81
	Apr. 27	169.48
	July 3	170.22
	Jan. 4, 1962	169.89
	Apr. 5	169.30
	Jan. 22, 1963	207.93
C7-68-5dabb.		
	Oct. 20, 1959	180.93
	Oct. 26	181.73
	Jan. 7, 1960	180.58
	Feb. 9	177.74
	Mar. 21	177.90
	Apr. 26	174.60
	May 23	177.64
	June 27	180.67
	Sept. 29	183.24
	Jan. 13, 1961	178.55
	Apr. 27	176.10
	July 3	181.17
	Jan. 4, 1962	176.43
	Apr. 5	175.99
	Oct. 1	178.14
	Jan. 21, 1963	179.75
C7-68-11dbad.		
	Sept. 25, 1959	214.00
	Dec. 11	202.30
	Jan. 7, 1960	190.90
	Feb. 9	191.92
	Mar. 30	197.45
	Apr. 26	197.85
	May 23	207.25
	June 23	206.95
	Sept. 29	205.75
	Jan. 13, 1961	205.05
	Apr. 27	201.55
	July 3	200.95
	Sept. 20	199.35
	Jan. 4, 1962	198.65
	Apr. 5	197.75
	Oct. 1	197.95
	Jan. 21, 1963	191.80
C8-66-1adaa.		
	Oct. 13, 1959	4.53
	Oct. 28	4.50
	Dec. 11	4.42

See footnotes at end of table.

Location number	Date	Water level
C8-66-1adaa.--Continued		
	Jan. 7, 1960	4.41
	Feb. 9	4.46
	Apr. 27	2.39
	May 24	1.84
	June 23	2.90
	Sept. 29	4.33
	Jan. 16, 1961	4.35
	Apr. 27	2.42
	July 1	3.11
	Sept. 20	2.70
	Jan. 4, 1962	3.31
	Apr. 13	.30
	Oct. 1	4.14
	Jan. 22, 1963	4.39
C8-67-11baab.		
	Feb. 4, 1958	9.26
	Mar. 13	10.39
	Apr. 28	9.88
	May 19	10.17
	June 23	12.59
	July 15	13.31
	Aug. 21	13.22
	Sept. 25	12.18
	Nov. 7	10.65
	Dec. 10	12.10
	Feb. 6, 1959	11.76
	Mar. 17	12.03
	Apr. 21	11.88
	June 2	12.47
	June 26	14.84
	July 23	16.48
	Sept. 24	17.58
	Oct. 26	14.22
	Dec. 11	13.38
	Jan. 7, 1960	10.84
	Feb. 8	10.98
	Mar. 22	9.83
	Apr. 26	12.50
	May 23	11.42
	June 23	13.63
	Sept. 29	14.91
	Jan. 13, 1961	9.67
	Jan. 16	10.01
	Apr. 27	9.45
	July 3	15.12
	Sept. 20	12.10
	Jan. 4, 1962	9.65
	Apr. 11	10.45
	Oct. 1	18.75
	Jan. 22, 1963	12.82

1/ Measured by the Denver Country Club.
2/ Measured by Shwayder Bros. Inc.

Table 5.--Chemical analyses of water from wells and springs
(Analytical results in parts per million except as indicated)

Geologic source: pC, Precambrian; Pf, Fountain Formation; Pl, Lyons Sandstone; Ks, South Platte Formation of the Dakota Group; Kb, Benton Shale; Kt, transition zone; Kfm, Milliken Sandstone Member of the Fox Hills Sandstone; Kf, Fox Hills Sandstone; Kls, a sandstone of the Laramie Formation; Klb, b sandstone of the Laramie Formation; Klu, upper part of the Laramie Formation; Kdlc, lower conglomerate of the Dawson Formation; Kdmu, upper part of the middle conglomerate of the Dawson Formation; Kdmc, middle conglomerate of the Dawson Formation; TKdc, upper conglomerate of the Dawson Formation; TKdu, upper part of the Dawson Formation; TKd, Dawson Formation; Qr, Rocky Flats Alluvium; Qv, Verdos Alluvium; Qs, Slocum Alluvium; Ql, Louviers Alluvium; Qy, younger loess; Qb, Broadway Alluvium; Qps, pre-Piney Creek alluvium; Qse, eolian sand; Qp, Piney Creek Alluvium; Qc, colluvium; Qpp, post-Piney Creek alluvium.

Depth of well: Measured depths of wells less than 100 feet are given in feet and tenths below land-surface datum. R, reported depth.

Source of data: a, U. S. Geological Survey; b, Colorado State Public Health Department; c, Colorado State University; d, commercial or private laboratory.

Remarks: Al, aluminum; As, arsenic; Cu, copper; Fe, iron; I, iodine; OH, hydroxide; PO_4, phosphate; Sr, strontium; Zn, zinc.

Location number	Geologic source	Depth of well (feet)	Date of collection	Temperature (°F)	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3) 1/	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids (calculated)	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH	Source of data	Remarks
B1-66-																										
31cddd	Qb, Ql	31.8	10- 5-55	55	19	0.01	. .	170	31	170	9.1	414	343	122	1.2	40	0.64	1,110	552	213	40	3.2	1,660	7.5	a	
C1-66-																										
1baac	Qv	70R	9-10-57	56	22	.00	. .	88	39	92	4.1	316	162	95	1.9	24	.26	690 2/	380	121	34	2.1	1,100	7.9	a	
6dbc	Ql	42R	9-21-60	57	22	.00	0.00	196	35	168	. .	362	425	155	1.3	59	. .	1,240	632	335	36	2.9	1,840	7.1	a	
7abac	Qb, Ql	40R	. .	. .	. .	. .	0	. .	. .	. .	. .	276	314	116	1.6	. .	. .	. .	640	414	. .	. .	. .	. .	b	Cu 0.02
7abac2	Qb, Ql	33R	. .	. .	. .	0	0	. .	. .	. .	. .	288	280	98	1.4	. .	. .	. .	. .	. .	. .	. .	. .	. .	b	Cu 0.02
7abbd	Qb, Ql	50R	1950	. .	. .	. .	0	. .	. .	. .	. .	284	277	122	1	. .	. .	. .	488	255	. .	. .	. .	. .	b	Cu 0.04
7dbcb	Qb, Ql	55.9	7-13-60	. .	. .	.3	0	. .	40	120	. .	261	241	106	1.1	. .	. .	. .	401	187	39	2.6	1,200	. .	b	
7dccb	Qb, Ql	61R	7-13-60	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	359	. .	. .	. .	1,170	. .	b	
18cdcc	Qb, Ql	39.5	4- 5-62	. .	23	1.3	. .	141	34	117	3.4	346	295	106	. .	28	. .	917	492	209	34	2.3	1,410	7.4	a	
29cac	Ql	45R	4- 5-62	. .	22	.37	. .	138	42	136	3.4	416	300	119	. .	2.0	. .	967	517	176	34	2.3	1,500	7.4	a	
32aadd	Qv	16.0	4- 5-62	. .	20	.16	. .	122	37	100	4.2	405	187	85	. .	35	. .	789	456	124	32	2.0	1,240	7.3	a	
C1-67-																										
3ccdd	Klb	823R	3- 5-58	. .	8.2	4.9	. .	174	21	1,000	6.0	292	1,960	362	1.8	1.0	.06	3,680	522	283	80	19	5,040	7.9	a	
13acdd	Qb Ql	35R	4- 5-62	. .	23	.15	. .	165	35	134	4.8	407	325	116	. .	22	. .	1,030	556	222	34	2.5	1,570	7.1	a	
C1-68-																										
10cbbc	Klb	809R	2-11-59	63	. .	. .	. .	38	15	338	3.2	560	348	36	2.8	8.5	. .	1,060 2/	156	0	82	12	1,930	7.7	a	
10cbbc2	Qp	48R	2-11-59	54	. .	. .	. .	147	80	382	4.0	506	980	40	4.2	38	. .	1,920 2/	696	282	54	6.3	2,660	7.9	b	
19baba	Klb	865R	1-22-59	64	. .	. . 12/	. .	1.6	1.0	276	1.0	603	2.9	67	3.2	.0	. .	649	8	0	98	42	1,120	8.8	a	
25bbab	Qs, Kdlc, Klu	530R	6- 8-59	. .	. .	.12/	. .	230	97	3,186		193	3,190	55	. .	. .	. .	5,050	748	590	90	51	. .	7.8	d	
30aaadZ	Kdlc,Klb,Kla,Kfm	1,045R	9-12-60	75	12	.06	.00	2.8	1.0	340	. .	689	19	118	4.3	.1	. .	837	11	0	97	45	1,430	8.3		Composite of 30aaad and 30aaadZ
35adac2	Kdmc, Kdlc	525R	9-21-60	61	9.8	.00	.05	2.0	.2	123	. .	280	30	5.8	2.5	.2	. .	312	6	0	97	22	516	8.1	a	
C1-69																										
11bcca	Qp	14R	1- 9-58	59	. .	. .	. .	74	69	220	1.2	722	299	25	2.0	9.4	. .	1,050	468	0	50	4.4	1,600	7.6	a	
11bccb	Klb	480R	1-27-59	. .	. .	. .	. .	1.6	.5	188	.8	479	3.7	16	1.0	.0	. .	448	6	0	98	31	765	8.9	a	
35bbab	Klb,Kla, Kfm	1,022R	9-19-60	71	12	.24	.00	.7	.4	218	. .	470	35	33	1.4	.0	. .	532	3	0	99	55	859	7.6	a	
35ddda	Klb,Kla, Kfm	1,053	6-19-60	70	9.3	.01	.00	1.0	9	222	. .	514	14	36	1.4	.0	. .	538	6	0	98	33	916	8.6	a	
C2-65-																										
35cdcd	TKdu	248R	3- 5-58	. .	11	.15	. .	9.8	1.3	129	1.8	302	3.3	37	1.0	.0	.04	343	30	0	90	10	571	8.2	a	
C2-66-																										
17ddcc	TKdu,Kdmc	455R	3- 9-56	. .	9.0	. .	. .	13	.9	183	.7	170	218	53	2.4	.1	. .	554	36	0	91	13	934	8.0	a	PO_4 0.05
18adad	TKdu	300R	. .	. .	12	. .	. .	151	28	448	2.7	133	1,190	114	1.2	2.6	.14	2,020	492	383	66	8.8	2,780	7.7	a	
19ccdc	Qp	14.5	. .	. .	14	. .	. .	200	83	365	5.7	222	1,270	119	1.6	.8	.42	2,170	842	660	48	5.5	2,870	7.7	a	
20bbbc	TKdu	173	11- 9-54	. .	3.8	. .	. .	9.6	4.9	327	3.6	168	539	43	.2	1.8	.05	1,020	44	0	94	21	1,570	8.8	a	PO_4 0.1
21ccca	Kdmc,Kdlc	700R	10- 7-55	. .	11	.	. .	1.5	.1	77	.6	182	17	3.0	2.0	.9	.01	203	4	0	97	17	336	8.8	a	
30ccbb	Qp	12.1	10- 3-55	. .	0	. .	. .	8.0	20	251	7.1	273	228	150	.6	.1	.31	799	104	0	83	11	1,380	8.8	a	
31bbac	Qes	28.7	10- 3-55	. .	24	. .	. .	115	43	179	7	376	345	89	1.2	.3	.3	1,080	465	0	45	3.6	1,720	7.6	a	
31dacd	Qp	41.2	10- 3-55	. .	25	. .	. .	58	28	82	4.5	309	91	43	1.4	35	.22	522	258	5	40	2.2	845	7.8	a	
32dcdd	Qp	49.2	10- 3-55	. .	28	. .	. .	60	43	72	5.5	338	116	50	1.0	21	.20	564	326	49	32	1.7	916	7.8	a	

See footnotes at end of table.

Table 5.--Chemical analyses of water from wells and springs --Continued

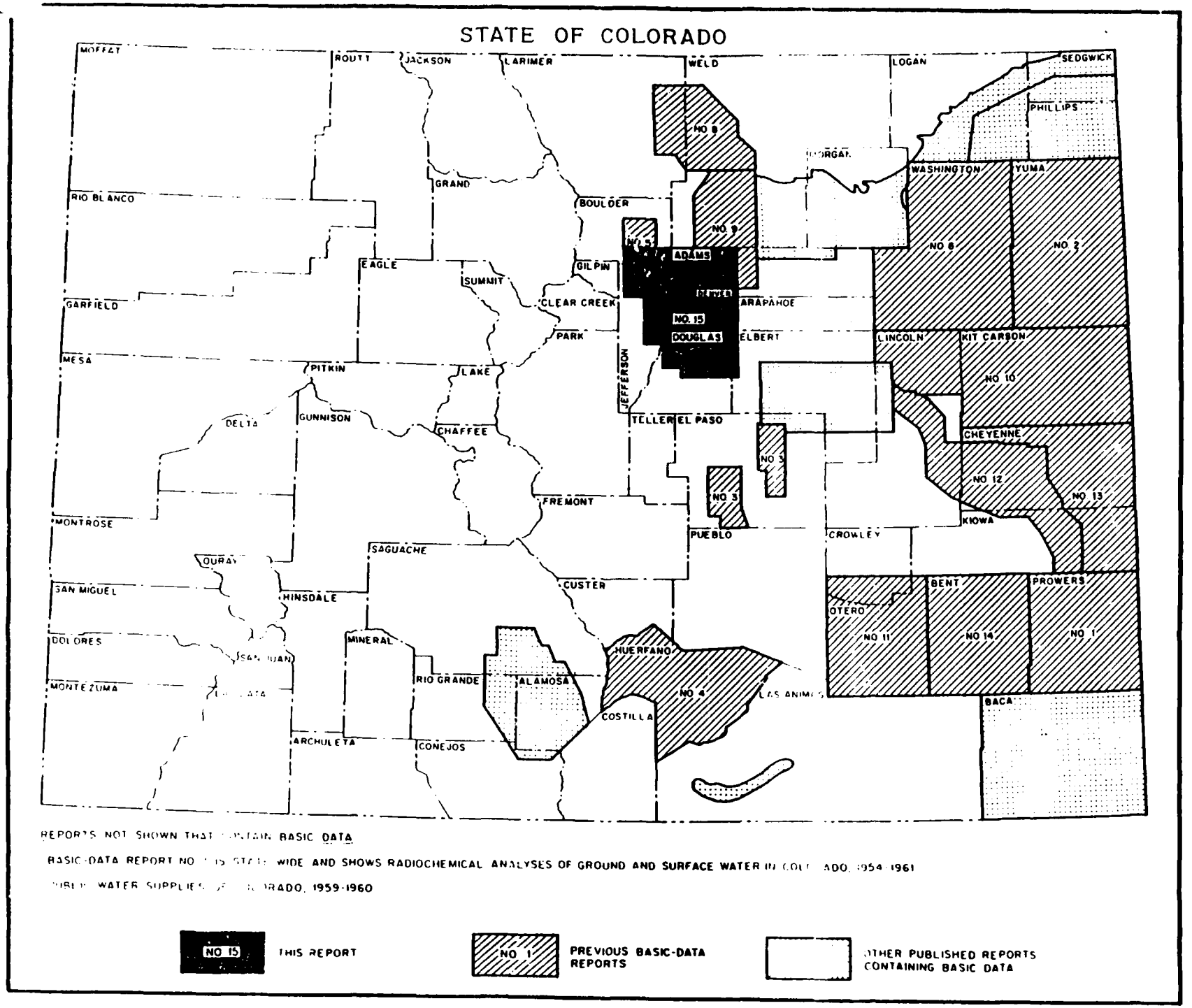
Location number	Geologic source	Depth of well (feet)	Date of collection	Temperature (°F)	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3) 1/	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids (calculated)	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH	Source of data	Remarks
C2-67-																										
1eccc	Ql	42.5	3- 9-56	..	..	..	..	..	..	..	..	..	480	149	..	..	..	..	..	..	..	..	1,820	..	a	
3cbab	Qpp	128	10- 8-55	..	24	..	..	134	31	111	6.0	325	246	106	1.6	46	0.25	866	464	197	34	2.2	1,340	7.4	a	
3ccdeb	Qpp,Ql	10.8	10- 8-55	..	26	..	..	136	33	108	.1	296	220	144	1.2	30	.22	845	474	231	33	2.2	1,370	7.2	a	
8bcca	Qpp,Ql	338	10- 8-55	..	17	..	..	114	9.6	53	.8	389	101	10	1.6	1.1	.12	500	324	5	26	1.3	782	7.4	a	
9add b	Qpp	13.1	9-15-55	57	25	..	..	213	62	141	3.2	302	305	356	1.8	27	.32	1,280	786	538	28	2.2	2,120	7.4	a	PO_4 0.1
9cdca	Qpp	128	10- 8-55	..	19	..	..	61	17	110	6.7	248	107	87	1.0	25	.19	558	223	20	51	3.2	950	7.4	a	
9daac	Qp,Ql	238	9-15-55	55	24	..	..	269	76	158	3.3	302	338	506	1.6	25	.28	1,550 2/	984	736	26	2.2	2,550	7.3	a	
9dadb	Qp,Ql	458	9-15-55	54	..	..	..	242	60	177	3	307	468	326	1.2	24	..	1,570 2/	850	598	31	2.6	2,310	7.4	a	
9dade	Qp,Ql	508	11-15-55	..	23	..	..	228	65	158	3.9	313	373	371	1.6	21	.33	1,400	836	579	29	2.4	2,250	7.4	a	
9dcdb2	Qp,Ql	688	....	..	26	..	..	161	47	76	2.3	300	300	136	1.2	19	..	917	596	350	22	1.4	1,440	7.6	a	PO_4 0.15
9dcdc2	Kdmc,Kdlc	7328	9-13-60	62	9.8	0.13 3/	0.01	2.4	.0	99	.9	241	12	3.5	2.8	.8	.05	256	6	0	99	25	392	8.8	a	Al 0.2, PO_4 5.3
9ddba	Qp,Ql	46.3	9-15-55	54	24	..	..	188	47	110	2.4	331	283	236	1.4	20	.29	1,070	664	393	26	1.9	1,720	7.3	a	
10aacb	Ql	41.9	....	..	22	..	..	147	42	114	2.7	380	303	112	1.2	18	.25	949	538	226	31	2.1	1,450	7.5	a	
10addd	Qp,Ql	49.4	9-15-55	54	24	..	..	121	36	100	3.0	379	183	105	1.0	20	.25	779	448	137	32	2.1	1,250	7.4	a	
10bdbc	Qp,Ql	32.8	9-20-55	55	25	..	..	181	52	134	2.8	348	305	238	1.6	14	.31	1,130	666	381	30	2.3	1,820	7.3	a	
10ccca	Qp,Ql	598	9-20-55	..	29	..	..	250	75	152	3.4	324	228	465	1.6	16	.29	1,440	932	666	26	2.2	2,470	7.6	a	
10ccca	Qp,Ql	598	9-11-57	..	29	.02	..	475	116	254	5.0	310	345	1,100	1.2	30	.28	2,510	1,660	1,410	25	2.7	4,240	7.8	a	
10ccdd	Qp,Ql	34.4	5-16-56	..	..	..	..	496	126	260	6.4	304	362	1,200	..	18	..	..	1,760	1,510	24	2.7	4,540	7.3	a	
10cddd	Qp,Ql	39.8	11-25-55	56	24	..	..	170	43	121	2.4	392	256	172	1.4	24	.24	1,010	600	279	30	2.1	1,600	7.3	a	
10dccd	Qp,Ql	39.5	11-17-54	54	..	..	..	136	35	161	3.4	426	296	106	1.6	14	..	1,000	484	134	42	3.2	1,490	7.3	a	
10ddbb2	Qp,Ql	558	9-12-55	54	27	..	..	133	37	107	3.2	406	195	124	1.2	18	.24	846	486	153	32	2.1	1,360	7.6	a	
11bdad	Ql	56.3	3-10-56	53	..	..	..	..	..	..	..	..	633	111	..	..	..	..	..	..	..	..	2,000	..	a	
11dbdd2	Ql	50.0	9-12-55	55	23	..	..	128	37	116	5.4	460	134	130	1.2	32	.26	833	472	95	34	2.3	1,380	7.6	a	
12abdd	Qv	30.8	3- 9-56	51	..	..	..	..	..	..	..	584	17	220	..	.6	..	..	158	0	..	..	1,580	8.0	a	
13cadd	Qv	40.5	9-15-55	..	35	..	..	122	75	498	40	1,710	15	194	1.4	.5	.67	1,820	612	0	62	8.8	3,030	7.8	a	
14aaaa	Qv	26.0	10- 5-55	57	15	..	..	114	24	428	5.0	230	840	184	5.2	11	.48	1,740	382	193	71	9.5	2,520	7.7	a	
14bbab	Ql	51.1	9- 9-55	53	26	..	..	208	61	244	3.7	406	525	290	.8	12	.44	1,570	770	437	41	3.8	2,380	7.6	a	
14bbbe2	Ql	558	9- 9-55	53	28	..	..	183	58	195	3.1	458	530	130	1.2	13	.36	1,370	696	320	38	3.2	1,980	7.5	a	
14ccdb	Kdmc	450R	3- 8-56	..	..	..	..	..	..	..	..	..	..	385	..	..	..	..	296	..	..	..	2,730	..	a	
14daaa	Kdmc,Kdlc	843R	1949	..	..	..	.04	..	..	..	..	340	4.5	11	4.4	..	..	..	3.2	0	..	..	..	..	a	Cu 0.06
14daaa	Kdmc,Kdlc	843R	3-12-56	..	11	..	..	..	..	178	.9	469	5.0	4.0	4.0	.0	..	9	0	97	26	713	8.2	a	
15adbc	Ql	46.6	9-17-55	57	22	..	..	161	40	144	3.0	414	340	118	1.2	32	.24	1,060 2/	568	229	35	2.6	1,590	7.5	a	
15badd	Qp,Ql	40.0	11-13-55	54	..	..	..	..	..	143	3.1	384	343	225	1.2	31	..	1,290 2/	720	405	30	2.3	1,910	..	a	
15bdaa	Qp,Ql	40.7	9-12-55	54	22	..	..	320	82	210	4.1	326	405	640	.8	30	.33	1,880	1,140	873	29	2.7	3,050	7.3	a	
15bdbb	Qp,Ql	47.8	9-17-55	58	23	..	..	142	35	160	2.7	438	290	137	1.6	17	.35	1,030	498	139	41	3.1	1,580	7.4	a	
15bdcc	Qp	34.5	5- 9-56	54	..	..	..	536	131	360	5.2	296	399	1,400	..	26	..	..	1,800	1,630	29	3.6	5,130	7.1	a	
15bdcc	Qp	34.5	9-11-57	53	28	.17	..	505	112	381	9.0	370	339	1,300	1.1	16	.26	2,870	1,720	1,420	32	4.0	4,890	7.3	a	
15cbcd	Qp,Ql	29.6	9-17-55	..	23	..	..	313	59	161	4.9	282	193	660	.8	18	.19	1,570	1,020	789	25	2.2	2,810	7.3	a	
15ccdd	Qp,Ql	38.8	9-17-55	54	22	..	..	285	72	183	5.1	297	228	656	.8	31	.24	1,630	1,010	766	28	2.5	2,830	7.4	a	
15cdcc	Qp,Ql	408	9-17-55	55	21	..	..	230	61	233	4.7	282	183	640	.8	9.9	.2	1,520	824	593	38	3.5	2,740	7.5	a	PO_4 0.1
15cdcd	Kdmc	535R	3- 8-56	..	10	..	..	1.9	.1	100	.2	260	5.0	3.0	3.2	.1	.07	252	5	0	98	19	424	8.7	a	
15dcbc	Qp,Ql	38.8	9-17-55	55	20	..	..	118	23	96	3.3	386	148	82	1.2	18	.24	699	388	71	35	2.1	1,140	7.4	a	
16acbd	Qp,Ql	40.3	9-21-55	54	24	..	..	140	33	73	3.2	288	198	140	1.0	11	.15	765	486	250	24	1.4	1,240	7.4	a	
16bdda	Qp,Ql	438	9-21-55	56	24	..	..	143	38	75	3.1	284	236	136	1.0	14	.6	810	512	279	24	1.4	1,300	7.5	a	
16bdda	Qp,Ql	438	9-11-57	54	24	..	..	..	..	98	3.4	316	173	..	..	..	..	..	740	481	22	1.6	1,690	8.1	a	
16bddc	Qp,Ql	42.5	9-21-55	..	22	..	..	131	28	73	3.4	280	200	114	.8	16	.11	726	444	214	26	1.5	1,170	7.4	a	
16ccdc2	Qp,Ql	44.2	9-17-55	..	23	..	..	132	29	71	3.1	320	188	94	.6	18	.08	716	448	186	25	1.5	1,600	7.8	a	
16dabc	Kdmc,Kdlc	716	8-12-58	..	8.0	.0	..	..	..	..	..	157	.1	5	..	..	..	..	7	0	..	..	..	8.0	a	
16dddd	Qp,Ql	38.8	9-17-55	55	25	..	..	203	49	105	4.0	292	140	380	.8	15	.2	1,070	708	409	24	1.7	1,910	7.7	a	PO_4 0.1
20cbdd	Qp,Ql	148	11-21-55	55	24	..	..	174	26	89	5.3	289	338	89	.8	33	.11	921	540	303	26	1.7	1,370	7.4	a	

See footnotes at end of table.

Table 5.--Chemical analyses of water from wells and springs --Continued

Location number	Geologic source	Depth of well (feet)	Date of collection	Temperature (°F)	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3) 1/	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids (calculated)	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH	Source of data	Remarks
C2-67-																										
20cbdd	Qp,Ql	14R	9-11-57	56	..	..	..	..	..	92	4.5	296	..	92	..	..	..	..	508	265	28	1.8	1,300	8.1	a	
21aada	Kdmc	535R	3-10-56	..	10	..	..	1.9	0.1	79	.2	199	6.0	2.5	3.2	0.7	..	202	5	0	97	15	350	9.0	a	
21adda	Ql	52.7	9-17-55	..	22	..	..	109	30	63	3.2	252	74	175	.6	4.3	0.1	605	396	189	26	1.4	1,100	7.7	a	
21bddc	Qp,Ql	97.0	9-17-55	55	22	..	..	117	20	58	3.5	248	215	52	.6	16	.06	626	376	173	25	1.3	964	7.9	a	
22aaab	Kdmc	400R	11-17-54	..	..	..	..	5.4	3.5	123	2.4	214	77	30	2.8	.3	..	..	28	0	90	10	610	8.8	a	
22acac	TKd	..	3-10-56	..	..	..	..	..	..	82	..	197	12	3	2.4	.8	..	.. 3/	3	0	96	21	341	9.0	a	
22bala	Ql	45R	11-12-55	..	..	..	..	..	..	232	4.6	328	475	640	.8	14	..	2,140 3/	1,160	891	30	3.0	3,160	7.3	a	PO_4 0.2
22bcbb	Ql	47.1	9-17-55	55	22	..	..	196	48	96	4.2	261	125	400	.6	9.5	.13	1,030	686	472	23	1.6	1,840	7.5	a	
22bccc2	Ql	45.7	9-20-55	..	22	..	..	378	100	138	5.1	200	135	944	.4	13	.12	1,830	1,360	1,200	18	1.6	3,440	7.6	a	
22bccc3	Ql	47.6	9-20-55	54	21	..	..	225	62	107	4.4	220	100	586	.6	9.4	.10	1,250	892	712	21	1.6	2,360	7.7	a	
22caad	Qse,Qv	50.7	9-20-55	54	21	..	..	982	355	1,300	11	182	579	4,250	.8	10	.25	7,600	3,910	3,760	42	6.6	12,800	7.2	a	PO_4 0.5
22cbcc	Qse,Qv	36.5	11- 9-55	..	..	..	..	..	..	..	..	..	..	178	..	..	..	..	..	..	..	..	1,080	..	a	
23badc	Kdmc	520R	10- 2-55	..	11	..	..	1.5	.1	87	.8	207	12	3.0	3.6	.7	.8	222	4	0	97	19	379	8.7	a	PO_4 0.2
24accc	Qp,Qse	28R	10- 2-55	..	26	..	..	185	60	198	2.6	302	650	148	.8	8.4	.33	1,430	710	462	38	3.2	2,040	7.4	a	
24bddc	Qse,Qv	33.3	10- 2-55	..	26	..	..	119	38	160	2.6	287	430	63	1.4	11	.59	993	453	218	43	3.3	1,510	7.4	a	PO_4 0.1
26abac	pC	12,045	1-27-62	260	83	0.36	1.	4,820	165	13,700	918	188	255	30,200	12	222	..	50,500 2/	12,700	12,500	70	..	01,700	6.7	a	
27bbac	Qse,Ql	35.7	11- 9-54	..	..	..	..	79	18	58	4.7	112	340	195	.6	1.3	.01	520 2/	271	179	31	1.5	875	7.0	a	
27ddda	Qse,Qv	57.8	10- 1-55	..	1.7	..	..	8.5	2.7	78	16	154	60	73	1.4	16	.08	333	32	0	76	19	576	8.7	a	PO_4 0.1
23acdd	Qse,Ql	53.2	10- 4-55	..	18	..	..	89	17	50	9.4	243	131	36	.6	10	.05	481	293	94	26	1.3	824	7.4	a	PO_4 0.2
28dbbc	Qse,Ql	30R	9-20-55	..	24	..	..	91	13	53	3.3	272	112	36	.6	17	.07	488	282	59	29	1.4	771	8.0	a	PO_4 0.1
32aaac	Ql	64R	11-17-54	..	..	..	..	187	22	79	6.6	250	383	70	.5	25	..	..	557	352	23	1.5	1,300	7.7	a	
33bcbc	Qp,Ql	47.6	10- 4-55	..	1.4	..	..	5.	3.4	60	4.2	43	170	64	.1	.3	.01	381	156	121	45	2.1	641	6.8	a	
34ddad	Qse,Ql	31.6	11-11-55	..	9.7	..	..	..	..	26	..	..	6	19	.1	.3	.01	..	..	..	..	..	837	6.8	a	
35bdbd	TKdu	126	....	..	5.1	..	..	27	7.4	280	1.8	175	475	69	.4	.1	.2	952	98	0	86	12	1,560	7.7	a	PO_4 0.1
C2-68-																										
20dbcc	Kdmc,Kdlc	780R	9-23-60	68	10	.42	.34	8.1	.7	164	..	307	123	7.4	.7	.9	..	467	23	0	91	15	763	7.8	a	
23cbbb	Kdmc,Kdlc	710R	1-10-58	62	10	.03	.00	1.6	.0	82	.2	203	14	2.0	1.8	.0	..	210	4	0	98	18	346	8.7	a	Al 0.0
23cbbb2	Klb,Kla	1,446R	1-10-58	77	11	.11 3/	.00	1.6	1.0	294	1.0	681	2.5	64	3.6	.0	..	714	8	0	99	45	1,210	8.2	a	Al 0.2, PO_4 0.5
25addd2	Qpp,Ql	30R	1-10-58	54	1.7	.01	.00	142	19	156	2.4	312	427	28	.8	22	..	967	432	177	44	3.3	1,370	7.0	a	Al 0.0
31acab	Kdmc,Kdlc	703R	....	..	27	6.0	.	8.8	3.1	51	6.1	29	86	8.0	0	..	..	233	..	..	..	..	..	..	d	Al 2.2
31caab	Kdmc,Kdlc	700R	1- 9-58	61	8.0	.11 3/	.00 4/	6.4	1.0	149	.8	318	67	4.0	1.1	1.9	..	395	20	0	94	15	637	8.7	a	
31caab2	Klb,Kla, Kfa	1,546R	1- 9-58	75	10	.47 3/	.00 4/	5.6	1.0	278	2.8	571	5.8	98	2.4	.0	..	685	18	0	97	29	1,160	8.1	a	
31dcda	TKdu	369R	11- 6-36	..	5.6	..	..	39	3.4	298	..	200	578	32	..	..	..	1,180	162	0	80	10	..	7.6	d	
31dcda2	Kdmc,Kdlc	542R	11-23-36	..	3.2	..	..	6.6	5.4	35	..	231	40	1.0	..	..	..	384	39	0	66	2.4	..	8.1	a	
32acdb	Kdmc,Kdlc	606R	2-12-52	..	9	..	..	4.1	1.9	133	..	295	76	12	..	..	..	311	18	0	94	14	..	8.2	d	
32acdb	Kdmc,Kdlc	606R	1- 9-58	61	8.0	.11	.00	6.4	1.0	149	.8	318	67	4.0	1.1	1.9	..	395	20	0	94	14	637	8.7	a	
32cacc	Klb,Kla, Kfa	1,548R	....	..	..	.11	..	.8	2.8	..	..	621	..	..	2.3	..	..	..	..	..	..	..	..	..	a	As 0.03, I 0.3
33abdb	Kdmc,Kdlc	692R	9-19-60	66	10	.02 4/	.00 4/	1.3	.5	84	..	209	11	3.7	1.8	.0	..	215	5	0	95	16	361	7.9	a	
33abdb2	Klb,Kla, Kfa	1,560	9-19-60	81	14	.05 4/	.00	1.3	.7	260	..	544	3.0	90	3.1	.0	..	640	6	0	97	46	1,100	8.2	a	
36bdaa2	Qpp,Ql	25R	9-23-60	58	19	.00 4/	.00	140	7.7	186	..	324	471	33	.5	37	..	1,050	381	115	49	4.2	1,550	7.1	a	
C2-69-																										
2bbab	Klb,Kla, Kfa	1,140R	10- 3-60	67	12	.05 4/	.00	.4	.5	200	..	472	7.8	27	1.2	.6	..	482	3	0	99	50	795	7.8	a	
2bbab	Klb,Kla, Kfa	1,140R	....	..	..	.03	..	4.8	.0	217	..	..	3.5	36	..	..	..	486 2/	12	..	97	33	..	8.2	d	
30dbcc	Kdlu	193	8-22-58	59	6.6	.00	1	112	24	266	4.2	462	505	46	1.3	2.9	..	1,200	378	0	60	5.9	1,750	7.3	a	Al 0.8
31ccdb	Kdmc,Kdlc	300R	5-27-59	54	..	.00	..	51	15	..	..	350	..	10	..	..	..	..	..	..	..	..	697	7.8	a	
C2-70-																										
26cdcc	Qr	Spring	10-20-58	56	..	..	..	32	5.8	13	.2	116	25	3.0	.4	4.6	..	141 2/	104	9	21	.6	257	7.7	a	
26ddad	Qp,Qb	35R	10-20-60	56	..	.00	.	160	68	..	..	432	..	40	.7	..	..	..	..	..	..	..	1,730	8.0	a	
C3-65-																										
36dada	TKdu,TKdc	690R	9-16-60	..	12	.20	.01 4/	11	.4	95	..	262	.0	14	.9	.0	..	263	29	0	87	7.7	442	7.5	a	

See footnotes at end of table.


STATE OF COLORADO
MOFFAT
ROUTT
JACKSON
LARIMER
WELD
LOGAN
SEDGWICK
PHILLIPS
MORGAN
WASHINGTON
YUMA
NO 8
NO 3
NO 9
NO 5
RIO BLANCO
GRAND
BOULDER
ADAMS
EAGLE
SUMMIT
GILPIN
DENVER
ARAPAHOE
GARFIELD
CLEAR CREEK
NO. 15
DOUGLAS
ELBERT
PARK
LINCOLN
KIT CARSON
MESA
PITKIN
LAKE
JEFFERSON
NO 10
DELTA
GUNNISON
CHAFFEE
TELLER
EL PASO
CHEYENNE
NO 5
NO 12
NO 13
NO 3
FREMONT
MONTROSE
KIOWA
PUEBLO
CROWLEY
SAGUACHE
OURAY
CUSTER
SAN MIGUEL
HINSDALE
BENT
PROWERS
OTERO
NO 11
NO 14
NO 1
DOLORES
MINERAL
HUERFANO
SAN JUAN
RIO GRANDE
ALAMOSA
NO 4
LAS ANIMAS
MONTEZUMA
COSTILLA
BACA
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REPORTS NOT SHOWN THAT CONTAIN BASIC DATA
BASIC-DATA REPORT NO 15 STATE WIDE AND SHOWS RADIOCHEMICAL ANALYSES OF GROUND AND SURFACE WATER IN COLORADO, 1954-1961
PUBLIC WATER SUPPLIES OF COLORADO, 1959-1960
NO 15
THIS REPORT
NO 1
PREVIOUS BASIC-DATA REPORTS
OTHER PUBLISHED REPORTS CONTAINING BASIC DATA

Table 5.--Chemical analyses of water from wells and springs --Continued

Location number	Geologic source	Depth of well (feet)	Date of collection	Temperature (°F)	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3) [1/3]	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids (calculated)	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH	Source of data	Remarks
C4-66-																										
3aacb	Qb,Ql	33.7	6-16-42	. .	67	. .	. .	111	16		55	275	206	32	. .	. .	. .	646	343	118	22	1.3	. .	7.6	d	
3dabc	Qpp,Ql	24R	10- 2-42	. .	38	. .	. .	62	4		17	207	42	8	. .	4.4	. .	294	171	1	18	.6	. .	7.8	d	
3ddbb	Qb,Ql	23.8	6- 8-42	. .	109	. .	. .	114	16		59	290	229	18	. .	. .	. .	704	350	102	27	1.4	. .	8.2	d	
3ddcb	Kdmc,Kdlc, Klb,Kla,Kfm	2,186R	8-21-42	. .	20	. .	. .	6.0	.8		210	484	4.2	34	. .	. .	. .	532	21	0	96	20	. .	8.3	d	
10abca	Kdlc,Klb, Kla,Kfm	2,038	8-31-42	. .	17	. .	0.00	4.3	.6		142	323	4.4	18	. .	. .	. .	366	13	0	96	17	. .	8.3	d	
10cabd	Kdlc,Klb, Kla,Kfm	2,100R	9-14-42	. .	17	. .	. .	4.0	.7		129	281	6.3	23	. .	. .	. .	339	15	0	95	14	. .	8.3	d	
10ddba	Kdlc,Klb, Kla,Kfm	2,196R	10-21-42	. .	38	. .	. .	6.8	.6		104	232	19	16	. .	.3	. .	318	19	0	93	11	. .	8.4	d	
C4-67-																										
6bdcc	Kdlc,Klb, Kla,Kfm	1,840R	10-17-55	89	13	. .	. .	3.8	1.6	269	. .	585	2.3	84	3.5	2.4	. .	678	16	0	98	29	. .	8.4	d	PO_4 0.2
6cbdd	Kdmc,Kdlc	1,116R	1937	. .	. .	. .	. .	. .	. .	. .	. .	171	. .	4.2	. .	. .	. .	224	. .	. .	. .	. .	. .	. .	b	
17ddbc	Qp,Qb,Ql	34R	8-28-57	55	. .	. .	. .	. .	. .	. .	. .	. .	. .	45	. .	. .	. .	. .	. .	. .	. .	. .	724	6.5	a	
18acac	Qb,Ql	60R	2-16-59	54	36	0.00	.00	106	12	43	4.4	240	130	34	.6	38	. .	523	314	118	23	1.1	807	7.7	a	PO_4 0.41
18acc-2	Qb,Ql	42.5	3- 4-59	54	28	.03	.11	80	9.7	37	3.8	214	88	24	.6	22	. .	398	240	64	25	1.0	625	7.7	b	Al 0.1, PO_4 0.67
18bacb	Qb,Ql	22R	. . . .	. .	. .	. .	0	349	15	80	. .	270	145	45	.7	. .	. .	733	442	220	28	1.6	. .	. .	b	Zn 0.1
18bacc	Qb,Ql	43R	. . . .	. .	. .	. .	0	250	10	56	. .	. .	132	35	1.5	. .	. .	531	332	. .	27	1.3	. .	. .	b	Zn 0.1
21bcda	Qp,Qb,Ql	56.1	1-31-58	56	26	.03	.00	69	9.7	38	2.0	180	80	32	.7	18	. .	364	212	64	28	1.1	570	7.1	a	PO_4 0.40
28bdca2	Qp,Qb	30R	6-24-60	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	43	. .	. .	. .	326	. .	. .	. .	. .	910	. .	a	
29abab	Kdmc,Kdlc	1,060	7- 7-60	70	14	.10	.00	7.6	1.5	53	2.4	139	19	1	1.2	.7	. .	168	25	0	82	4.6	271	7.6	a	Al 0.1
34ddcb	Ql	97R	7-15-59	53	. .	. .	.00	. .	. .	. .	. .	. .	. .	19	. .	. .	. .	304	. .	. .	. .	. .	708	. .	a	
34dddb	Ql	95R	7-25-59	52	. .	.03 [3/]	.00 [3/]	. .	. .	. .	. .	. .	. .	23	. .	. .	. .	372	. .	. .	. .	. .	868	. .	a	
36eacd	Kdmc	1,198R	2- 4-57	65	13	.15 [3/]	.00 [3/]	18	.5	35	3.0	125	12	4	1.0	.2	. .	150	47	0	60	2.2	240	8.4	a	
36eacd	Kdmc	1,198R	11-15-57	54	. .	.01	.00	. .	. .	. .	. .	132	16	1.2	. .	. .	. .	. .	52	0	. .	. .	242	7.6	a	
36eacd	Kdmc	1,198R	12-16-57	78	. .	.11	.00	. .	. .	. .	. .	133	16	1	. .	. .	. .	. .	60	0	. .	. .	252	7.7	a	
36eacd	Kdmc	1,198R	12-17-57	79	15	.21	.00	18	1.9	34	3.2	131	16	2	1.0	.2	. .	155	53	0	57	2.0	243	8.0	a	Al 0.1
C4-68-																										
3abac	Kdmc,Kdlc	782R	6-20-14	. .	16	. .	. .	. .	. .	. .	. .	. .	. .	12	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	d	
5adaa	Qpp,Qb,Ql	42R	. . . .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	318	. .	. .	. .	. .	. .	d	
5adab	Qpp,Qb,Ql	40.1	. . . .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	283	. .	. .	. .	. .	. .	d	
5adad	Qpp,Qb,Ql	36R	. . . .	54	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	256	. .	. .	. .	. .	. .	d	
5adca	Qpp,Qb,Ql	36R	8-29-60	. .	17	. .	. .	. .	. .	. .	. .	264	335	105	. .	. .	. .	. .	380	288	. .	. .	. .	7.1	d	
5addb	Qpp,Qb,Ql	39.6	. . . .	. .	. .	. . [3/]	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	290	. .	. .	. .	. .	. .	d	
9dcad	Qpp,Qb,Ql	32.2	1-16-58	54	17	.98 [3/]	.00	43	9.7	33	3.0	145	56	31	1.0	3.5	. .	268	147	28	33	1.2	482	7.3	a	PO_4 0.05
12cccb	Qb,Qb,Ql	50R	10-16-56	55	. .	.00	.00	. .	. .	. .	. .	. .	. .	136	. .	. .	. .	920	. .	. .	. .	. .	2,290	. .	a	
26cbda	Qp	28R	7-17-56	. .	. .	. .	. .	171	26	212	.	547	405	86	. .	. .	. .	530	82	46	46	4.0	. .	7.2	d	
28abdd	Qpp,Qb,Ql	18.0	8-22-56	60	. .	. .	. .	. .	. .	. .	. .	. .	. .	89	. .	. .	. .	. .	. .	. .	. .	. .	1,980	. .	a	PO_4 0.05
28dacd	Qpp,Qb,Ql	35R	11-19-53	. .	. .	. .	. .	. .	. .	. .	. .	173	. .	206	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	a	
28dcad	Qpp,Qb,Ql	35R	5- 2-58	51	. .	. .	. .	170	36	144	7.4	90	570	140	3.2	7.7	. .	1,120	572	498	35	2.6	1,620	6.7	a	
28dcad2	TKdu,Kdmc, Kdlc	680R	5-10-48	60	10	.1	. .	. .	. .	. .	. .	202	45	44	. .	. .	. .	. .	55	0	. .	. .	. .	8.0	d	
28dcad3	Klb,Klb,Kla Kfm	1,720R	6- 2-48	81	15	. .	. .	. .	. .	. .	. .	427	8.1	84	. .	. .	. .	. .	5	0	. .	. .	. .	8.7	d	
28ddbd	Qb,Ql	44R	8- 1-55	. .	17	. .	. .	. .	. .	. .	. .	264	135	63	. .	. .	. .	. .	296	79	. .	. .	. .	7.5	d	
28ddcb	Qb,Ql	45R	8- 1-55	. .	. .	. .	. .	. .	. .	. .	. .	281	124	59	. .	. .	. .	. .	304	74	. .	. .	. .	. .	d	
36dddb	Klb,Kla, Kfm	2,012	7-29-58	88	19	.14 [3/]	.00	1.6	.0	232	1.2	508	2.3	55	3.2	.0	. .	564	4	0	99	.	942	8.3	a	Al 0.1
C4-69-																										
2bccd	Qa	30R	8-26-55	.	. .	. .	. .	. .	. .	. .	. .	518	. .	0	. .	. .	. .	. .	260	0	. .	. .	1,620	7.9	a	
6adaa	Qa	30R	9-15-55	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	192	. .	. .	. .	1,170	. .	a	
10cadd	Qa	64R	. . . .	.	43	.05	.00	125	16	146	.6	453	287	22	.1	30	. .	895	380	15	45	3.2	1,310	7.0	a	
10daaa	Qa	60R	6-30-55	. .	. .	. .	. .	115	11	. .	. .	418	. .	0	. .	. .	. .	. .	332	0	. .	. .	1,510	7.5	a	
10daac	Qa	55R	5-31-55	. .	. .	. .	. .	115	18	. .	. .	392	. .	0	. .	. .	. .	. .	361	40	. .	. .	1,300	7.4	a	

See footnotes at end of table.

Table 5.--Chemical analyses of water from wells and springs --Continued

Location number	Geologic source	Depth of well (feet)	Date of collection	Temperature (°F)	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids (calculated)	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH	Source of data	Remarks
C3-68-																										
3baaaa	Kdmc,Kdlc	801R	10-31-60	..	8.7	..	..	4.5	1.1	60	..	145	21	4.8	1.0	0.7	..	149 [2]	16	0	89	6.5	..	..	a	
3baaaa2	Kdmc,Kdlc	750R	5- 9-00	..	..	..	..	..	..	..	..	..	..	6.0	..	.0	..	185 [2]	15	..	..	..	..	..	b	
3bcadd3	Kdmc,Kdlc	700R	8-17-57	..	24	0.0	..	14	.0	..	..	113	.0	6.8	..	..	..	.. [2]	14	0	..	..	..	7.5	d	
3bcbba	Kdmc	734R	4- 9-03	..	10	..	..	..	..	..	..	..	..	..	..	..	..	179 [2]	..	..	..	..	..	..	a	
C3-69-																										
3adcb2	Klb,Kla, Kfm	1,740R	9- 9-55	..	14	1.6 [3]	..	4.0	2.9	520		598	2..	454	10	3.5	..	1,300	12	0	97	40	2,330	8.0	a	Al 1.5, PO_4 0.2
3adcb2	Klb,Kla, Kfm	1,740R	9-14-56	82	14	.1 [3]	..	6.0	1.2	492	3.4	584	18	408	2.2	.4	..	1,230	20	0	98	48	2,170	7.6	a	Al_4 0.2
0cbab	Klb,Kla, Kfm	1,220R	7-13-35	..	13	..	..	7.7	2.5	138	..	347	26	13	..	..	..	371	30	0	91	11	..	8.0	d	
11cddd	Kdlc	425R	10-23-48	..	..	2.5	..	..	..	..	..	..	81	9	.9	..	..	..	27	..	..	..	..	..	b	Cu 0.02
11dcad	Kdlc	615R	10-23-48	..	..	.5	..	..	..	..	..	326	63	7	.7	..	..	..	20	0	..	..	..	..	a	Cu 0.02
15addd	Kdlc	550R	5-26-52	60	15	.14	..	27	2.1	161	1.9	342	139	10	.8	.4	..	525	76	0	82	8.0	846	7.9	a	
15addd	Kdlc	550R	6-10-54	60	11	.16	.. [2]	24	2.9	170	2.4	353	137	11	.7	.2	..	536	80	0	82	8.2	857	8.1	a	
15addd2	Klu,Klb, Kla,Kfm	1,558R	5-26-52	63	8.6	.71	..	3.0	.1	343	2.1	519	189	66	1.6	.4	..	869	8	0	99	53	1,480	8.8	a	
15bbaa	Kdlc	618R	1948	..	..	.0	..	..	..	..	..	333	118	11	.9	..	..	..	39	7	..	..	..	..	b	Cu 0.2
18badd	Kdmc	130R	2- 1-57	..	..	..	..	3.8	32	1,050		432	2,760	50	.3	.0	..	..	1,010	856	89	9.5	5,410	7.3	a	
20aaad	Qpp,Qb,Ql	30R	9-18-55	..	..	..	..	4.8	38	76	..	270	176	12	1.6	..	..	..	404	183	29	1.6	925	7.6	a	
20aadb	Qpp,Qb,Ql	34.5	10-17-59	..	..	..	..	5.8	52	88	..	322	196	15	2.4	..	..	..	460	196	29	1.8	1,090	7.5	b	
21accc	Kdlc,Kl	590R	10-17-55	..	..	.1	..	12	12	150	..	212	160	13	1.4	..	..	..	172	0	65	5.0	..	7.8	b	
23cbdd	Qes,Qs	17.0	9-30-57	57	..	.00	..	10	14	116	1.6	346	119	30	2.0	28	..	..	232	0	52	3.3	883	7.6	a	
24cadb	Qes,Qs	26R	4- 5-56	..	..	..	..	11	23	119	1.0	386	..	35	..	..	..	..	374	58	41	2.7	1,110	8.2	a	
24cbbc	Qes,Qs	21.7	9-30-57	57	..	..	..	9.1	21	138	1.6	394	178	32	2.4	55	..	1,100 [2]	314	0	49	3.4	1,100	7.7	a	
24cdba	Qes,Qs	31.1	4-29-58	55	..	..	..	..	..	..	..	..	..	49	..	..	..	..	..	..	28	..	1,680	..	a	
24cdbd	Qes,Qs	20R	4-20-56	..	..	..	..	9.1	41	350		471	..	..	..	..	..	..	380	0	67	7.8	2,050	8.2	a	
26acca	Qy,Qs	40R	4-23-56	54	21	.10	..	72	12	179	2.0	564	124	14	1.8	17	..	720	229	0	63	5.1	1,170	7.5	a	Al 0.5
30abcb	Qpp,Qb,Ql	18R	.. ..	..	24	.08	..	33	22	100	3.0	275	146	6	1.7	5.9	..	477	173	0	55	3.3	721	7.6	a	Al 1.5, PO_4 0.3
30add1	Ql	45R	8- 8-58	58	..	..	..	6..	19	49	1.8	358	53	6.0	.9	12	..	394	208	0	28	1.3	674	7.3	a	
30ddcc	TKdu,Kdlc	437R	7- 6-60	64	17	.. [3]	..	4..	14	100	2.8	316	79	11	1.0	1.2	0.05	423	162	0	57	3.4	713	7.9	a	
32cdba	Qb,Ql	40R	4-23-56	..	25	.02	..	7.4	13	161	.8	397	208	21	.8	5.4	..	704	238	0	59	4.5	1,100	7.5	a	Al 0.4, PO_4 0.1
33adaa	Qy,TKdc	30R	6- 6-56	..	..	..	..	30	9.2	356	1.4	..	..	41	..	..	..	..	113	..	87	15	1,680	..	a	
33cdac	Klc	594R	11-28-59	..	..	.43	..	..	..	..	..	..	..	2.0	..	..	..	..	..	..	..	..	675	..	a	
34dbbc	Klb,Kla, Kfm	1,745R	11-19-56	..	20	.11 [3]	..	1.2	.0	231		446	40	66	1.2	2.5	..	581	3	0	99	58	1,000	8.6	a	Al 0.2, PO_4 0.2
35aacd	Kdlc	740R	3-22-57	..	9.5	.00	..	1..	.5	165	1.2	156	230	25	1.1	.0	..	524 [2]	40	0	90	11	813	8.2	a	Al_4 0.2
36ccaa	Kdmc,Kdlc	820R	5-14-57	64	5.0	..	..	11	1	..	..	260	105	25	..	..	..	453 [2]	22	0	..	..	776	7.5	d	
C3-70-																										
8daca	Ks	Spring	4- -59	51	..	.00	..	56	15	..	..	170	..	6.0	..	..	..	..	..	..	..	..	460	8.1	a	
10dcbb	Qb	17.3	11-20-58	56	..	.0	..	61	17	..	..	284	..	29	..	..	..	..	..	..	..	..	812	8.1	a	
12bcdc	Kdlc,Klu	536R	11- 7-58	59	..	1.2	..	37	5.8	..	..	372	..	77	..	..	..	..	..	..	..	..	1,450	8.0	a	
12dbbc	Kdlc,Klu	49T	3-22-57	65	36	..	..	23	0	214	..	175	152	11	..	..	..	522	99	0	99	12	..	10.8	a	OH 11.0
13bdac	Kdmc,Kdlc	400R	9-29-59	59	..	..	..	..	..	..	..	..	..	15	..	..	..	..	17	..	..	..	874	8.5	a	
13bdad	Kdmc	130R	5-12-58	54	..	..	..	2.0	.0	175	1.2	204	118	19	1.2	2.5	..	470	20	0	95	17	771	8.2	a	
13bdad2	Qs	33R	5-13-58	49	..	..	..	10..	32	45	7.8	332	120	30	1.2	66	..	571	398	124	19	1.0	932	7.6	a	
26bacd	Qc	26R	10-15-59	..	..	1..	..	15..	23	..	..	193	55	4.0	1.4	..	..	..	248	90	..	..	400	7.6	b	
27bddd	Ql	12R	8- 8-58	61	15	.29 [3]	..	4..	13	15	3.0	114	84	7.0	.5	4.7	..	242	163	70	16	.5	380	6.6	a	Al 0.1, PO_4 0.04
27caac	Qc,Ql	12R	8- 8-58	59	..	..	..	9..	23	77	3.0	318	163	22	.5	13	..	544	309	48	35	1.9	876	7.0	a	

See footnotes at end of table.

Table 5.--Chemical analyses of water from wells and springs --Continued

Location number	Geologic source	Depth of well (feet)	Date of collection	Temperature (°F)	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3) [1]	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids (calculated)	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH	Source of data	Remarks
C5-68-																										
2accb2	TKdu,Kdmc	800R	1-16-40	..	9.1	..	..	18	1.8		63	132	68	7.0	..	..	..	296[2]	52	0	73	3.8	..	7.8	d	Fe+Al 2.0[3]
2ccac	Kdmc,Kdlu	1,030R	11-23-32	..	15	0.5	..	8.1	1.5	36	..	134	14	6.0	..	..	..	245	26	0	75	3.1	..	..	d	
2ccac2	Klb,Kla, Kfm	1,728R	9- 2-33	75	16	.3	..	2.5	1.0	226	..	446	.7	95	..	..	..	784	10	0	98	31	784	8.1	d	
4acda	Klu,Klb, Kla,Kfm	1,700R	7- 9-58	76	19	.14[3]	0.00	4.0	.2	308	1.8	451	.8	224	3.0	0.0	..	782	11	0	98	40	1,430	8.0	a	
7ccad	TKdu,Kdmc, Kdlu	768	5-19-56	62	..	..	..	41	1.0	148	1.8	156	244	32	1.6	.2	..	547	106	0	75	6.2	870	8.4	a	
7cccc	Klb,Kla	1,670R	7-11-57	79	..	..	..	1.6	.5	267	2.0	456	.7	145	3.2	.0	0.53	665	6	0	99	47	1,160	7.9	a	
7cccd	Kdmc	550R	2- 2-56	..	..	..	..	8.0	1.0	85	1.2	152	73	5.0	1.6	.8	..	251	24	0	88	7.5	408	8.1	a	
17caaa	Qpp,Ql	41.9	1948	..	..	..	..	..	..	..	..	..	..	29	..	..	..	..	157	..	..	..	..	..	b	
17caaa	Qpp,Ql	42.0	1-13-58	53	17	.10[3]	.00	78	19	50	2.8	234	114	40	.9	5.8	..	442	272	80	28	1.3	722	7.0	a	
17caad2	Qpp,Ql	43.6	1948	..	..	.1	..	..	..	..	..	..	180	29	8	..	..	..	152	..	..	..	..	..	b	
17dbba	Qpp,Ql	37.9	1948	..	..	..	..	..	..	..	..	..	..	35	..	..	..	..	135	..	..	..	..	..	b	
19adaa	Kdmc,Kdlc	511R	.. ..	59	12	.40	..	48	14	86	..	297	70	34	.9	2.9	..	..	178	0	51	2.8	..	7.8	d	Al 0.05, PO_4 0.1
21abad	Klb,Kla, Kfm	1,826R	1-28-57	82	..	..	..	1.7	.7	183	..	403	.6	54	1.0	.3	..	..	7	0	98	31	..	..	d	PO_4 0.3
27dccd	Kdmc,Kdlu	996R	8-25-56	..	13	..	..	23	2.1	37		143	22	3.5	.8	1.0	..	..	66	0	55	2.1	..	8.4	d	
27dccd	Kdmc,Kdlu	996R	11-23-60	..	..	..	..	..	..	..	..	..	..	1.0	..	..	..	..	..	..	..	..	259	..	a	
27dccd2	Klb,Kla, Kfm,Kt	1,910R	8-25-56	..	11	..	..	7.0	1.1	58		189	18	10	1.4	1.3	..	289	22	0	85	5.4	..	8.3	d	Al 0.05
28aacb	Klb,Kla, Kfm	1,948R	1-13-58	83	16	.03	.00	1.6	.0	180	1.0	388	1.9	54	2.0	.0	..	448	4	0	99	39	759	8.7	a	PO_4 0.3
C5-69-																										
5bacd	Qp	11.1	2-11-59	52	..	.00	..	96	45	..	..	156	10	..	..	..	..	..	424	296	..	..	1,070	7.7	a	
6aaad	Qp,Ql,Kf	90R	3-17-59	45	..	.00	..	99	22	..	..	260	..	7	..	..	..	..	338	124	..	..	1,020	8.0	a	
7ccab	Ks	1,660	11-22-57	62	..	..	..	..	..	..	..	..	..	6.0	.8	..	..	..	..	..	..	..	261	7.4	a	
8addd	Kt	220R	4- -59	..	..	.00	..	305	287	..	..	284	132	..	..	..	..	..	1,940	1,710	..	..	4,970	7.8	a	
8bcaa	Qp,Ql	50R	3-16-59	42	..	.00	..	117	49	..	..	324	11	..	..	..	..	..	494	228	..	..	926	8.1	a	
16acaa	Kdlc	180R	6-30-54	..	..	..	..	..	..	..	..	328	13	..	..	..	..	..	403	194	..	..	2,920	7.7	a	
18bbcc	Pl	900	12- 6-56	51	9.6	.07	.02	22	9.2	108	4.6	339	36	9.0	.8	.0	..	366	93	0	70	4.9	603	7.9	a	
18dccb	Ks	302	6- 4-57	..	..	..	..	53	4.9	6.0	1.8	154	29	5.5	.3	.2	..	177	152	26	8	.2	321	6.4	a	
18dccb2	Ks	354	7-22-60	53	21	1.1	.00	44	4.4	5.6	.8	144	20	2.0	.3	.7	..	170	128	10	9	.2	284	6.7	a	Al 0.2, PO_4 0.02
22aabb	Kdmc,Kdlc	405R	9-21-56	..	..	.7	.0	..	..	..	..	..	..	..	..	..	..	497[2]	120	..	..	..	..	7.6	a	
25aaac	Klb	1,580R	5- 3-57	..	..	..	..	112	60	2,040	..	150	200	3,060	..	..	..	..	520	94	89	39	..	8.0	c	
25aaac	Klb	1,580R	5- 3-57	..	..	..	..	..	..	..	..	..	..	670	..	..	..	..	..	..	..	..	2,460	..	a	
25aaac	Klb	1,580R	5- 3-57	..	..	..	..	..	..	..	..	..	..	1,350	..	..	..	..	..	..	..	..	4,600	..	a	
C5-70-																										
1ccc	Ks	100R	3-16-59	55	..	.33[4]	..	41	5.8	..	..	86	..	2.0	..	..	..	..	..	..	..	..	272	7.9	a	
7aacb2	pC	83R	1960	..	18	.28[4]	.00[4]	40	11	7.2	..	138	21	7.4	.5	24	..	197	146	33	9	.3	320	7.2	a	
11dbcb	Pf	703R	9-23-60	57	11	.96[4]	.06	24	48	637	6.8	262	886	355	5.5	1.0	..	2,110	256	41	89	22	3,130	8.0	a	Al 0.3, PO_4 5.4
14baba	pC	Spring	9-23-60	65	..	..	..	..	..	..	..	..	..	3.0	..	..	..	..	216	..	..	..	454	..	a	
24bdda	Pf	772	1-11-57	51	14	.13[4]	..	18	11	159	2.4	311	133	28	2.2	.0	..	521	90	0	79	7.2	335	8.2	a	
C5-71-																										
11ccbb	pC	130R	6-21-60	..	24	31	.00	30	4.9	15	1.4	134	11	3.0	.5	3.0	..	159	99	0	25	.7	245	7.6	a	Al 1.1
C6-66-																										
4ccaa	Qb,Ql	59R	7-16-59	52	..	.81	.20	75	8.8	26	3.8	212	86	13	.5	2.4	..	320[2]	223	50	20	.8	540	7.1	a	
4dbac	TKdu	220R	3-23-59	56	..	.00	..	18	1.0	53	3.0	176	11	4.0	2.0	.0	..	..	49	0	69	3.3	305	8.1	a	
7dcaa	TKdu	224R	9-15-60	57	30	.01	.00	70	8.3	23	3.1	237	51	10	.7	2.0	.04	324	208	14	19	.7	480	7.7	a	PO_4 8.4
9accc	Qb,Ql	57R	9- 1-59	..	..	.00	.00	..	..	..	..	..	..	12	..	..	..	..	..	..	..	..	446	..	a	
9bdcc	Ql	70.0	.. ..	53	..	.03	..	..	..	..	..	..	..	7.0	..	..	..	..	..	..	..	..	359	..	a	

See footnotes at end of table.

Table 5.--Chemical analyses of water from wells and springs --Continued

Location number	Geologic source	Depth of well (feet)	Date of collection	Temperature (°F)	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3) [1/]	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids (calculated)	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio	Specific conductance (mic.o-mhos at 25°C)	pH	Source of data	Remarks
C4-69-																										
10dcab	Klu,Klb, Kla,Kfa	1,660R	2-18-57	68	14	0.30 [3/]	0.[illegible]	4.8	0.0	191	1.6	442	2.8	37	2.2	0.0	..	470	12	0	97	24	785	7.7	a	PO_4 0.1
10dcbd2	Kdmc	500R	2-18-57	61	..	..	..	18	.0	148	.6	36	289	16	3.1	.0	..	..	45	16	88	9.6	794	8.1	a	
12cdaa	Qp,TKdu	100R	9- 8-60	..	..	..	..	..	..	..	..	..	..	134	..	..	..	..	848	..	..	..	3,910	..	a	
12cdaa2	Qp,TKdu	65.7	9- 8-60	..	..	..	..	..	..	..	..	..	..	30	..	..	..	..	284	..	..	..	1,710	..	a	
12dacb	Qs	60R	5-26-55	..	..	..	..	110	8.5	..	..	364	893	34	1.6	..	..	..	310	11	..	..	2,450	7.5	a	
15dbdd	Qp,TKdu	105R	4- 1-54	..	..	.10 [3/]	..	..	..	..	..	..	..	20	..	..	..	..	380	..	..	..	1,920	..	a	
15dddb	TKdu,TKdc	298R	12-15-57	59	..	1.2 [3/]	.21	4.8	3.4	156	.8	33	266	29	2.4	0	..	..	26	0	93	13	776	6.4	a	
15dddb2	Kdmu	384R	12-15-57	..	..	.03	..	16	1.9	148	1.0	74	264	28	1.8	0	..	..	48	0	87	9.3	609	7.5	a	
23ccac2	TKdu,Kdmc,	580R	12- 4-56	..	..	..	..	22	9.7	..	..	315	..	15	..	..	..	..	95	0	..	..	1,350	8.4	a	
25ccba	Kdmc,Kdlc	1,962R	1- -45	..	9.7	..	..	14	2.5	145	..	198	163	22	..	..	..	556	46	0	87	9.3	..	..	a	
C4-70-																										
1adac	Kdmc,Kdlc, Klb,Kla,Kfa	1,786R	4-11-55	..	13	.1	..	50	13	110	..	239	140	56	.8	.8	..	502	178	0	57	3.6	..	8.2	d	PO_4 0.1
4daab	pC	96R	....	..	..	..	..	..	..	..	..	..	..	..	2.4	..	..	..	..	..	..	..	..	..	a	
8bbcd	pC	18.0	7-10-61	50	..	..	..	25	6.3	..	..	113	..	4	.2	1.5	..	..	88	0	..	..	228	6.9	a	
11aacd	Klc,Klb, Kla,Kfa	1,968	6- 2-55	..	11	..	..	53	14	71	7	303	81	10	..	..	..	545	191	0	45	2.2	..	..	d	
23dbbc	Ka	275R	7-22-60	57	9	.6	..	20	7.3	6.0	1.0	81	22	2	.5	0	..	108	80	14	14	.3	197	6.2	a	
23dcba	Kb	48.5	7-28-60	..	..	.04		..	..	..	..	77	..	1.0	..	..	..	..	126	0	..	..	462	7.1	a	
23dcba2	Kb,Ka	52R	5- 4-60	..	..	16.8		42	4.8	..	..	142	..	8.0	..	..	..	..	125	9	..	..	..	6.5	b	
27dbaa	Pf	Spring	5-13-59	47	..	.00		6.4	1.0	..	..	14	..	1.5	..	..	..	..	20	9	..	..	64	6.6	a	
27dcad	Pf	Spring	5-12-59	51	..	.01 [4/]		11	2.9	..	..	40	..	.5	..	..	..	..	40	7	..	..	104	7.0	a	
29abd	spp,pC	Spring	5-24-60	64	18	.03 [4/]	.02 [4/]	24	9.0	7.9	..	111	18	1.7	.3	6.2	..	140	97	6	15	.3	224	6.9	a	
34abaa	pC	Spring	5-12-59	46	..	.00		6.4	2.9	..	..	20	..	1.5	..	..	..	..	28	12	..	..	78	6.8	a	
C4-71-																										
12cada	Qp,pC	92R	9- 8-60	52	23	.14	..	18	2.9	7.6	..	48	18	3.7	.4	13	..	111	57	18	22	.4	198	6.7	a	
C5-65-																										
29babb	TKdu	600R	2- 5-58	..	11	.83	..	63	14	66	19	276	149	19	.5	.8	..	488	240	14	35	1.9	742	7.1	a	Al 0.1, Si 1.0
33cccc	TKdu	677R	9-26-57	62	15	.00	.00	25	3.9	50	4.4	194	16	8.0	.9	.4	0.06	219	78	0	56	2.5	367	8.1	a	
33cccc	TKdu	677R	2- 5-58	62	12	.00	.00	26	2.9	52	4.2	195	17	11	.9	.1	..	222	77	0	58	2.6	366	8.2	a	
C5-66-																										
6bada2	Kdmc,Kdlc	1,278R	7- 7-60	73	15	.11 [4/]	.00 [4/]	10	1.7	52	3.2	145	19	2	1.6	.3	..	175	32	0	78	4.0	281	7.5	a	Al 0.3
19cdca	Kdmc,Kdlc	1,350R	10- 3-60	67	13	.19 [4/]	.00 [4/]	19	1.6	35	..	140	19	1.8	1.6	.0	..	160	54	0	54	2.1	263	7.6	a	
29baab	TKdu	160R	9-27-57	58	11	.00	.00	19	3.9	56	3.2	213	4.4	3.0	2.0	.4	..	208	63	0	64	3.1	345	8.0	a	
29ddcc	Qp,Qb,Ql	64R	9-10-57	52	..	.01	..	..	..	..	..	..	..	14	..	..	..	..	..	..	..	..	540	..	a	
30aaaa	TKdu	400R	9-27-57	56	10	.00	.00	16	1.5	50	1.8	182	1.7	4.0	1.1	.1	..	175	46	0	69	3.2	292	8.2	a	
30aada	Qp,Qb,Ql	98R	6-17-57	57	27	.00 [3/]	.03	62	9.7	21	1.8	218	48	9.0	.6	4.7	..	293	195	16	19	.7	480	7.3	a	PO_4 0.8
32dcdd	Qp,Qb,Ql	49.9	7-16-59	52	..	.1 [3/]	..	..	..	..	..	..	..	14	..	..	..	..	..	..	..	..	527	..	a	
33ccbc	Qp,Qb,Ql	44.8	9-27-57	52	28	2.6 [3/]	.08	77	9.2	35	3.6	240	99	13	.7	.4	..	379	230	42	24	1.0	584	7.7	a	Al 0.5, PO_4 0.2
C5-67-																										
16bcbb	Kdmc,Kdlc	1,498R	....	..	..	.. [4/]	.02 [4/]	18	.9	41	..	139	14	6.7	..	..	..	..	49	0	65	2.5	..	7.9	d	
17bddd	Kdmc,Kdlc	1,406R	9-16-60	73	12	.46 [4/]	.02 [4/]	14	.7	45	..	144	17	1.9	1.3	.0	..	163	38	0	69	3.2	274	7.2	a	
19bbbb	Kdmc	886	7-25-58	70	12	.48 [3/]	.00 [4/]	29	1.9	25	3.6	134	23	1.0	.8	.0	..	162	80	0	39	3.2	264	7.7	a	

See footnotes at end of table.

Table 6.--Field determination of chemical quality of water from wells and springs

Location number	Depth of well (feet) 1/	Geologic source 2/	Date of collection	Temperature (°F)	pH	Specific conductance 3/	Iron (Fe) 4/	Hardness as $CaCO_3$ 4/	Hydrogen sulfide (H_2S) 4/	Chloride (Cl) 4/
B1-66-31cddd	31.8	Qb,Ql	6-23-59	55	7.1	1,700	. . .	453	. . .	. . .
B1-67-19ddd	697R	Klb	4-11-57	59	8.7	1,050	. . .	. . .	10	. . .
B1-68-25bcbc	720R	Klb	4-15-58	62	8.8	1,980	. . .	. . .	< .1	. . .
C1-66-4dccd	420R	Kdmc,Kdlc	6-11-61	59	7.3	720	0.3	222	. . .	38
-18cacc	32.6	Qb,Ql	10- 7-55	56	. .	1,480	. .	. . .	. . .	.
-30aacc	43.6	Ql	10-24-55	55	. .	1,470	. .	. . .	. . .	.
C1-67-1cddc	693R	Klu	6-11-61	61	8.4	1,000	1.2	< 17	. .	63
-1cddc2	25R	Qpp,Ql	6-11-61	50	. .	. . .	. .	308	. .	.
-1dcbb	. . . .	Qpp,Ql	. . . .	63	. .	1,230	. . .	. . .		.
-13caaa	31.7	Qb,Ql	9-27-56	55	. .	1,510	. . .	. . .		.
-23dddd	. . . .	Qb	. . . .	55	. .	1,230	. . .	. . .		.
-2babcc	39.0	Qb,Ql	11- 6-55	55	. .	1,390	.	. . .	. . .	.
-25bddb	35.2	Qb,Ql	10- 5-55	65	. .	1,500	. .	. . .	. . .	.
-26aadd	41.1	Qb,Ql	10- 4-55	54	. .	1,920	. . .	. . .	. . .	.
-35dcbb	32.3	Qb,Ql	11- 7-55	56	. .	1,320	. . .	. . .	. . .	.
C1-68-9bbaa	832R	Klb,Kla	. . . .	. .	. .	1,410	. . .	< 17	. . .	. . .
-10cbbc	809R	Klb	2-17-59	63	8.4	1,850	. . .	145	. . .	. . .
-10cbbc2	48R	Qp	2-11-59	54	7.7	2,500	. . .	615	. . .	. . .
-19baba	865R	Klb	1-23-59	64	8.8	1,050	. . .	17	< .1	. . .
-30aaad2	1,045R	Kdlc,Klb,Kla,Kfm	9-12-60	72	8.7	1,420	.4	43	< .1	. . .
-35adac2	525R	Kdmc,Kdlc	9-21-60	62	8.6	540	.8	< 17	< .1	. . .
C1-69-10dabb	469R	Klb,Kla,Kfm	7-28-59	. .	. .	1,120	. . .	. . .	. . .	. . .
-10dcec	31R	Qp	7-28-59	. .	. .	1,200	. . .	. . .	. . .	. . .
-11bcca	14R	Qp	1-29-59	59	7.7	1,500	. . .	. . .	. . .	. . .
-11bccb	480R	Klb	1-27-59	. .	8.9	790	. . .	17	. . .	. . .
-22daba	650R	Klb,Kla,Kfm	9-19-58	. .	. .	750	. . .	. . .	. . .	. . .
-35bbab	1,022R	Klb,Kla,Kfm	9-19-60	71	8.9	920	.4	< 17	.2	. . .
-35dddb	1,053	Klb,Kla,Kfm	10- -60	74	9.1	880	.2	17	.2	38
C1-70-21bdac	150	Klb,Kla	4-19-57	56	7.8	405	. . .	136	. . .	. . .
-28cbaa	260	Klu	4-18-57	55	7.6	320	. . .	136	< .1	38
C2-65-21ddd	900R	TKdu,Kdmc,Kdlc	7- 2-53	59	7.9	700	1.3	94	. . .	22
C2-67-9dcdc2	732R	Kdmc,Kdlc	9-13-60	62	8.6	410	.2	17	. . .	. . .
-10ccca	59R	Qb,Ql	9-20-55	. .	. .	2,890	. . .	. . .	. . .	. . .
-22caad	50.7	Qes,Qv	11-23-55	54	. .	8,000	. . .	. . .	. . .	. . .
-28baca	56.5	Qb,Ql	11-23-55	59	. .	875	. . .	. . .	. . .	. . .
-28bccc	55.5	Qb,Ql	8- 8-55	57	. .	1,350	. . .	. . .	. . .	. . .
-28cacb	60R	Qb,Ql	8- 8-55	58	. .	900	. . .	. . .	. . .	. . .
C2-68-4badc	1,330R	Klb,Kla,Kfm	4-23-57	69	8.7	1,380	. . .	17	< .1	. . .
-20dbcc	780R	Kdmc,Kdlc	9-23-60	68	8.5	700	.5	60	. . .	. . .
-23cbbb	710R	Kdmc,Kdlc	1-10-58	62	8.6	345	. . .	17	. .	. . .
-23cbbb2	1,446R	Klb,Kla	1-10-58	77	8.6	1,090	. . .	17	.8	. . .
-25aadd2	30R	Qpp,Ql	1-10-58	54	6.9	1,380	. . .	376	. . .	. . .
-31caab	700R	Kdmc,Kdlc	10-11-59	61	8.3	. . .	. . .	. . .	. . .	. . .
-31caab2	1,546R	Klb,Kla,Kfm	10-11-59	75	8.4	1,110	. . .	. . .	< .1	. . .
-33abdb	692R	Kdmc,Kdlc	9-19-60	66	8.7	375	. . .	.1	<17	< .1
-33abdb2	1,560	Klb,Kla,Kfm	4-27-57	81	8.7	1,020	. . .	.3	<17	.1
-36adaa2	25R	Qpp,Ql	9-23-59	58	7.1	1,500	. . .	. . .	. . .	. . .
C2-69-10dbcc	196	Kdlu	8-30-56	55	7.1	1,950	. . .	. . .	. . .	.
-31ccdd	55R	Qp,Ql	8-23-58	59	7.2	380	. . .	370	. . .	25
-32bccc	23R	Qp,Ql	12-15-60	. .	8.4	950	< .1	410	. . .	18
-32bdab	100R	Kdmc	9-21-58	56	7.9	1,500		172		100
-32daad	117R	Kdmc	9-21-58	60	7.2	2,300		372		
-32dacb	100R	Kdmc	8-21-58	57	7.5	950	. . .	348	. . .	38
C2-70-26cdcc	Spring	Qr	12-15-58	56	. .	260	. . .	. . .	. . .	.
-26ddaa	35R	Qp,Qb	10-17-58	56	7.1	1,700	4	68	. . .	.
C2-71-29accb	Spring	pC	12- 7-60	48	. .	. . .	. . .	51	. . .	25
C3-65-21dccc	900R	TKdu,Kdmc	1-22-57	61	7.7	515	. . .	34	< .1	. . .
-36daca	785R	TKdu,Kdmc	2-12-57	61	6.2	300	. . .	43	. . .	12
-36dada	690R	TKdu,TKdc	9-16-60	66	8.4	450	.4	26	< .1	. . .
C3-66-10bbab	320R	TKdu	9-31-55	60	7.7	660	. . .	34	< .1	. . .
-22abbc	150R	TKdu	7- 8-57	59	7.7	425	7.7	154	. . .	. . .
-22cccc	965R	Kdmc,Kdlc	1-27-58	70	8.6	315	. . .	< 17	. . .	< 12
-30dadc	410R	TKdu	10-15-56	64	8.7	350	8.7	< 17	< .1	. . .
-31abca	170R	TKdu	6-13-57	68	8.7	1,800	. . .	393	< .1	. . .
-31ccdb	30R	Qp,Qb	8- 6-57	51	7.2	1,200	. . .	256	. . .	. . .
-32acad	28.9	Qb,Ql	9-20-60	54	7.3	860	1	205	. . .	.
-32acad2	28.4	Qb,Ql	9-20-60	55	7.5	810	.2	243	. . .	.
-32acda	27.7	Qb,Ql	9-20-60	56	7.2	880	< .1	256	. . .	.
-32ccca	1,003R	Kdmc	7-26-56	75	8.2	275	. . .	17	. . .	. . .
-32ddbd	500R	TKdu	9-15-60	63	8.4	420	.2	25	. . .	. . .

See footnotes at end of table.

Table 5.--Chemical analyses of water from wells and springs --Continued

Location number	Geologic source	Depth of well (feet)	Date of collection	Temperature (°F)	Silica (SiO_2)	Iron (Fe)	Manganese (Mn)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3) 1/	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids (calculated)	Hardness as $CaCO_3$	Noncarbonate hardness as $CaCO_3$	Percent sodium	Sodium adsorption ratio	Specific conductance (micromhos at 25°C)	pH	Source of data	Remarks
C6-66-																										
9daec	Ql	71.0	9- 2-59	. .	. .	0.06	0.00	. .	. .	. .	. .	. .	. .	10	. .	. .	. .	. .	. .	. .	. .	. .	415	. .	a	
15bddd	TKdu	175R	9-17-59	. .	. .	.25	.05	. .	. .	. .	. .	. .	. .	8.0	. .	. .	. .	. .	292	. .	. .	. .	835	7.7	a	
16adcd	Ql	47.8	9-17-59	51	. .	.01	.00	. .	. .	. .	. .	. .	. .	14	. .	. .	. .	. .	. .	. .	. .	. .	435	. .	a	
22bcab	Qb,Ql	63.4	7-14-59	53	35	.00	.00	62	5.8	18	2.6	202	31	9.0	0.7	15	. .	278	179	13	18	0.6	432	7.5	a	Al 0.1, PO_4 0.46
22ccdd	Ql	54.8	8-24-59	47	. .	.00	.00	.	. .	. .	. .	. .	. .	8.0	. .	. .	. .	. .	. .	. .	. .	. .	335	. .	a	
34bacb	Qb,Ql	60.9	9- 2-59	51	. .	.03	.00	. .	. .	. .	. .	. .	. .	10	. .	. .	. .	. .	. .	.	. .	. .	417	. .	a	
C6-67-																										
27cdda	TKdu	120R	12-10-59	. .	34	5.5	.05	34	4.9	6.2	1.4	92	20	3.5	.3	21	. .	170	105	30	11	.3	244	7.2	a	Al 0.5
C6-68-																										
14bddaa2	TKdu,Kdmc, Kdlu	1,012	7-16-57	60	. .	. .	.	64	5.8	13	6.4	188	58	4.0	.4	.	. .	. .	184	30	13	.4	408	8.1	a	
14dbbc	TKdu,Kdmc	800R	7-16-57	64	13	.11 3/	.00	20	1.5	38	4.2	152	13	2.0	1.6	.7	. .	169	56	0	57	2.2	274	8.1	a	Al 0.1
33dbc.	Kdmc,Kdlc	715R	2-26-58	59	14	.44 3/	.00	42	2.9	32	5.0	160	58	1.0	1.1	1.7	. .	237	117	0	36	1.3	373	7.9	a	
C6-69-																										
23dadd	Ql,Qa	39R	11- 5-58	. .	. .	. .	.	55	12	41	3.6	206	57	27	1.0	8.5	. .	. .	186	18	32	1.3	571	7.4	a	
23dbbc3	Qpp,Ql	38.3	1-17-58	49	11	.00	.00	30	9.2	23	1.6	87	65	18	1.2	1.4	. .	203	113	41	30	.9	341	7.3	a	Al 0.1, PO_4 0.05
24acbb	Klb,Kla	600R	6-25-56	. .	. .	. .	. .	6.4	1.9	101	2.2	219	53	6.0	1.8	1.1	. .	. .	24	0	89	18	491	8.3	a	
C6-71-																										
12adcd	pC	100R	7- 6-60	48	22	.08	.00	29	6.6	10	1.4	122	6.2	1.0	1.3	.2	0.03	134	90	0	20	.5	214	7.7	a	Al 0.3
15bcdd	pC	183R	7-19-60	. .	20	.06	.00	28	8.5	9.4	.2	128	16	1.0	1.0	1.7	. .	149	105	0	16	.4	237	7.1	a	Al 0.4
C7-66-																										
22ccad	Qp,Qb,Ql	69R	8-26-56	50	40	.03	.00	50	6.8	18	2.4	183	29	8.0	.3	4.6	. .	2..	153	3	20	.6	375	7.4	a	PO_4 0.9
34acdb	Qp,Qb,Ql	50.9	. . . .	52	. .	.50	.11	. .	. .	. .	. .	. .	. .	24	. .	. .	. .	.	216	. .	. .	. .	552	. .	a	
C7-67-																										
3abcd	Kdmc,Kdlc	1,795R	1-18-57	69	12	.0	.05	24	1.9	29	3.8	137	17	1.0	1.1	.0	. .	159	68	0	47	1.5	263	7.8	a	PO_4 0.05
3abcd	Kdmc,Kdlc	1,795R	10-13-59	. .	7.0	1.7	.11	26	1.0	34	4.0	144	21	2.0	1.0	.0	. .	167	69	0	50	1.8	278	7.9	a	Al 0.4
3abcd2	TKdu	801R	2- 4-58	49	34	2.1	.00	39	2.9	15	4.2	156	14	2.0	.5	1.4	. .	190	109	0	22	.6	279	7.6	a	Al 0.4
3abcd2	TKdu	801R	10- 5-59	59	. .	4.7	.	38	1.9	17	4.8	150	16	4.0	.5	.0	. .	. .	103	0	25	.7	276	7.6	a	
C7-68-																										
4abba	Kdmc,Kdlc	800R	9-16-60	60	11	.31 4/	.01 4/	43	2.8	33	. .	159	57	1.3	1.4	.1	. .	228 5/	119	0	37	1.3	380	7.4	a	
13cdcd	Qb,Ql	45.8	9-16-60	57	30	.11	.00	57	5.8	14	. .	128	53	11	8	15	. .	275 5/	166	61	16	.5	389	6.6	a	
C8-66-																										
10abab	Ql	52R	2- 4-58	46	36	.37 4/	.00	26	4.4	10	2.4	101	16	3	.3	1.2	. .	149	83	0	20	.5	210	7.3	a	Al 0.6, PO_4 0.55
C8-67-																										
8ccdb	TKdu	286R	. . . .	54	. .	4..	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	381	. .	a	
11bace	Qb,Ql	90R	2- 4-58	54	36	.57 4/	.00	58	7.3	19	3.6	108	85	22	.3	12	. .	296	175	86	19	.6	446	6.9	a	Al 0.1, PO_4 0.4
11dacb	Kdmc,Kdlc	1,648R	2-27-58	53	25	.21 3/	.00	34	12	12	2.2	128	46	4.0	.5	1.8	. .	198	134	29	16	.5	282	7.6	a	Al 0.1, PO_4 0.15
11dbdd	Ql	90R	2-27-58	52	38	.00	.	34	3.9	10	3.0	86	34	5.0	.3	14	. .	184	101	30	17	.4	256	6.9	a	PO_4 0.85

1/ Includes CO_3 as HCO_3 when present.

2/ Residue on evaporation at 180°C.

3/ Total iron or manganese.

4/ In solution at time of sampling.

5/ As oxides.

Table 5.--Field determination of chemical quality of water from wells and springs--Continued

Location number	Depth of well (feet) 1/	Geologic source 2/	Date of collection	Temperature (°F)	pH	Specific conductance 3/	Iron (Fe) 4/	Hardness as $CaCO_3$ 4/	Hydrogen sulfide (H_2S) 4/	Chloride (Cl) 4/
C3-70-25ddbb	110R	TKdc	8-21-58	58	8.3	850	. . .	38	. . .	50
-26bbcd	13R	Ql	7-24-58	62	6.6	300	. . .	142	. . .	25
-33aaac	108R	Kdmc	8-21-58	62	7.1	690	. . .	301	. . .	38
C3-71-7bbac	Spring	pC	12- 7-60	49	7.0	. . .	. . .	85	. . .	50
-14ccccd	18.5	pC	12- 2-60	58	7.6	. . .	. . .	. . . .	. . .	. . .
C4-66-5bcab	72R	Qy,Qs(?)	4-28-58	54	7.7	1,850	. . .	462	. . .	. .
C4-67-17ddbc	34R	Qp,Qb,Ql	7-15-57	55	7.1	760	. . .	222	. . .	. . .
-18acac	60R	Qb,Ql	2-13-59	55	7.2	810	. . .	205	. . .	. . .
-18accd2	42.5	Qb,Ql	2-25-59	54	. .	650	. . .	. . . .	. . .	. . .
-21bcda2	56.1	Qp,Qb,Ql	1-31-58	56	7.1	570	. . .	225	. . .	. . .
-21bdcc	38.1	Qp,Qb,Ql	7-27-59	53	7.0	770	. . .	200	. . .	. . .
-21ccad	40R	Qp,Qb,Ql	7-25-59	53	7.0	705	. . .	153	. . .	. . .
-21cddd	45.8	Qp,Qb,Ql	7-25-59	53	7.1	705	. . .	200	. . .	. . .
-27cbac	52.4	Qp,Qb,Ql	3-30-60	55	7.0	710	. . .	222	. . .	. . .
-28aadc	50R	Qp,Qb,Ql	9-27-59	53	7.0	695	. . .	171	. . .	. . .
-28acba	45.1	Qp,Qb,Ql	5-15-58	52	7.1	620	. . .	188	. . .	. . .
-28bdca2	30R	Qp,Qb	9-14-60	. .	7.0	900	0.2	171	. . .	. . .
-29abab	1,060R	Kdmc,Kdlu	7- 7-60	. .	8.1	250	. . .	. . . .	. . .	. . .
-34ddcb	97R	Qp,Qb,Ql	7-15-59	53	7.0	720	. . .	153	. . .	. . .
-34ddda	95R	Ql	7-25-59	52	6.9	730	. . .	145	. . .	. . .
-36cacd2	1,198	Kdmc	2-25-57	78	7.9	260	. . .	51	0.5	. . .
C4-68-9dcad	32.2	Qpp,Qb,Ql	3-27-58	54	7.1	475	. . .	120	. . .	. . .
-12cccb	50R	Qp,Qb,Ql	2- 9-60	55	7.1	. . .	.2	872	. . .	. . .
-28dabd	17.1	Qpp,Qb	7- 3-57	52	6.8	1,550	. . .	. . . .	. . .	. . .
-28daed	35R	Qpp,Qb,Ql	5- 2-58	51	7.7	1,650	. . .	530	. . .	. . .
-36dddb	2,012	Klb,Kla,Kfm	8-13-58	88	8.5	930	. . .	< 17	< .1	. . .
C4-69-5dbbd	200R	TKdc	8-20-58	54	8.7	1,400	. . .	136	. . .	. . .
-10dcab	1,660R	Klu,Klb,Kla,Kfm	3-27-57	68	8.8	750	. . .	. . . .	1.0	. . .
-10dcbd2	500R	Kdmc	3-27-57	61	8.7	760	. . .	. . . .	< .1	. . .
-12cdaa	100R	Qp,TKdu	8- 8-60	55	7.2	4,000	.4	616	. . .	. . .
-12cdaa2	65.7	Qp,TKdu	8- 8-60	60	7.5	1,750	.5	206	. . .	. . .
-15ddab	298R	TKdu,TKdc	12-15-57	59	6.7	770	. . .	. . . .	. . .	. . .
-23ccac	217R	TKdu	12-14-60	. .	7.7	890	< .1	94	. . .	50
-23cccc	83R	Qs,TKdc	5-17-62	. .	7.2	1,900	.3	325	. . .	. . .
-26aaad	27.0	Qp	11-22-60	. .	8.0	880	< .1	171	. . .	30
-31cddc	95R	Qs	3-17-59	47	7.3	1,120	. . .	. . . .	. . .	. . .
C4-70-4cbbc	90R	pC	12- 7-60	. .	6.4	225	.5	50	. . .	12
-4daab	98R	pC	5- 1-60	50	7.9	820	.4	199	. . .	. . .
-8bbcd	18.0	pC	7-10-61	50	6.5	255	.5	94	. . .	. . .
-11bcbc	42.5	Qp	6-30-60	. .	7.3	750	.6	307	. . .	. . .
-16bdda	Spring	pC	7-26-57	58	6.7	380	. . .	171	. . .	18
-23dbbc	275R	Ks	7-22-60	57	6.4	225	7.5	85	.1	. . .
-23dcba	48.5	Kb	7-22-60	56	6.5	500	>7.5	241	.1	. . .
-23dcba2	52R	Kb,Ks	7-22-60	56	6.3	500	>7.5	241	.1	. . .
-26bdbc	Spring	Qc	7-18-56	56	. .	600	. . .	. . . .	. . .	. . .
-26dcbb	Spring	Pf	7-18-56	60	. .	405	. . .	. . . .	. . .	. . .
-27dbaa	Spring	Pf	5-13-59	47	5.9	71	. . .	< 17	. . .	. . .
-27dcad	Spring	Pf	5-12-59	51	6.8	98	. . .	25	. . .	. . .
-27ddbc	91.1	Pf	5-13-59	61	. .	405	. . .	. . . .	. . .	. . .
-29adcb	88R	pC	1-17-61	57	7.1	345	.1	120	. . .	10
-32abac	30R	Qpp,Ql	5- 5-61	64	. .	240	. . .	. . . .	. . .	. . .
-34abaa	Spring	pC	5-12-59	46	6.1	81	. . .	< 17	. . .	. . .
C5-65-19cbbc	44?R	TKdu	7-24-61	57	7.0	445	.4	160	. . .	12
-33cccc	677R	TKdu	9-26-57	62	7.7	370	. . .	. . . .	. . .	. . .
C5-66-6bada2	1,278R	Kdmc,Kdlc	7- 7-60	73	8.1	. . .	. . .	. . . .	. . .	. . .
-18dcdc	60R	Qp,Qb,Ql	6- 5-57	52	6.7	705	. . .	256	. . .	38
-19cdca	1,350R	Kdmc,Kdlc	10- 3-60	67	8.3	290	.4	43	. . .	. . .
-28aaac	450R	TKdc	3-25-57	59	. .	630	. . .	154	. . .	40
-29baab	160R	TKdu	1-27-58	58	7.9	365	. . .	68	. . .	. . .
-29bbdc	55R	Qp,Qb,Ql	10-14-57	52	6.8	400	. . .	153	. . .	< 12
-29ddce	64R	Qp,Qb,Ql	9-10-57	52	6.8	370	. . .	188	. . .	20
-30aaaa	400R	TKdu	1-27-58	56	7.9	300	. . .	51	. . .	. . .
-30aada	98R	Qp,Qb,Ql	6-17-57	53	6.9	505	. . .	188	.1	20
-32dcdc	31.5	Qp,Qb,Ql	7-15-57	52	7.0	460	. . .	170	. . .	. . .
-32dcdd	49.4	Qp,Qb,Ql	6-30-59	52	7.0	580	. . .	196	. . .	. . .
-33cbcc	44.8	Qp,Qb,Ql	2- 2-59	52	6.9	610	. . .	. . . .	. . .	. . .
-33cdbd	230R	TKdu	7-14-62	58	7.7	310	.4	43	. . .	12
C5-67-17bddd	1,406R	Kdmc,Kdlc	9-16-60	73	8.3	285	.4	42	< .1	. . .
-18baad	772R	Kdmu	5-15-59	70	7.7	255	. . .	68	. . .	. . .
-19bbbb	986	Kdmc	7-25-58	70	7.7	260	. . .	50	< .1	< 12
C5-68-4acda	1,700R	Klu,Klb,Kla,Kfm	7- 9-58	76	8.8	. . .	. . .	< 17	. . .	. . .
-7ccad	768	TKdu,Kdmc,Kdlu	5-18-56	62	. .	850	. . .	. . . .	. . .	. . .

See footnotes at end of table.

Table 6.--Field determination of chemical quality of water from wells and springs--Continued

Location number	Depth of well (feet) 1/	Geologic source 2/	Date of collection	Temperature (°F)	pH	Specific conductance 3/	Iron (Fe) 4/	Hardness as $CaCO_3$ 5/	Hydrogen sulfide (H_2S) 6/	Chloride (Cl) 4/
C3-66-33bcac	41.5	Qb,Ql	9-18-60	56	7.1	740	<0.1	280	. . .	. . .
-33bcbc	45.3	Qb,Ql	9-18-60	55	7.3	855	.1	128	. . .	. . .
-33ddcd	36.1	Qb,Ql	9-18-60	55	7.3	930	.2	280	. . .	. . .
-34bbcd	525R	TKdu	3-11-57	54	8.7	295	. . .	17	0.1	. . .
C3-67-5abcd	800R	Kdmc,Kdlc	9-22-60	64	7.9	730	.2	60	. . .	. . .
-5abcd2	61R	Ql	9-22-60	56	7.3	1,410	.2	350	. . .	. . .
-6ddac	16.0	Qb,Ql	4- 3-58	52	7.4	1,750	. . .	. . .	. . .	. . .
-7aadd	37R	Qes,Ql	4-30-58	61	7.2	1,230	. . .	325	. . .	. . .
-7acaa	22R	Qp,Ql	9-21-60	60	7.7	1,750	.2	437	. . .	. . .
-7acda	32R	Qp,Ql	9-22-60	59	7.7	1,520	.2	437	. . .	116
-18acad2	670R	Kdmc,Kdlc	4-30-58	. .	8.6	305	. . .	< 17	. . .	. . .
-19cdad	95R	Qb,Ql	4-29-58	56	7.5	1,600	.3	713	. . .	. . .
-29caaa	35R	Ql	4-30-58	56	7.5	2,100	.3	734	. . .	. . .
-36acdb	327R	Kdmc	7- 6-57	63	8.7	335	. . .	47	.1	. . .
C3-68-5dddd	601R	Kdmc,Kdlc	9-23-60	60	8.6	345	.2	9	.1	. . .
-10accc	715R	Kdmc,Kdlc	9-13-60	66	8.6	355	.1	17	. . .	. . .
-11ddab	640R	Kdlc	6-11-57	64	8.0	325	2.5	43	. . .	. . .
-12cbbc2	850R	Kdmc,Kdlc,Kl	6- 6-57	64	. .	310	. . .	. . .	. . .	. . .
-13bddd	33R	Qb,Ql	8-28-57	56	7.6	1,800	. . .	675	. . .	. . .
-22aabb	25.8	Qb,Ql	8-16-56	58	. .	1,250	. . .	. . .	. . .	. . .
-23bdbd	64R	Qb,Ql	1-27-58	59	6.9	1,950	. . .	. . .	. . .	. . .
-27bcdb	700R	Kdmc,Kdlc	6-16-57	62	. .	350	. . .	. . .	. . .	. . .
-27cadd	771R	Kdmc,Kdlc	6- 4-57	64	. .	325	. . .	. . .	. . .	. . .
-27cbba	700R	Kdmc,Kdlc	6-14-57	62	. .	340	. . .	. . .	. . .	. . .
-35acdc	800R	Kdmc,Kdlc	7- 8-57	67	. .	290	. . .	. . .	. . .	. . .
C3-69-3adcb	800R	Kdlc,Klu	6- 6-57	65	. .	745	. . .	. . .	. . .	. . .
-3adcb2	1,740R	Klb,Kls,Kfm	9-14-56	82	7.6	. . .	. . .	. . .	. . .	. . .
-5cbba	285R	Kdmc	8-12-58	60	8.5	950	. . .	35	< .1	< 25
-7baad	95.6	Kdmc	8-25-58	61	7.1	1,170	. . .	319	. . .	53
-7dbcb	430R	Kdl	2-26-57	64	8.1	670	. . .	35	. . .	25
-8bbbb	260R	Kdl	8-12-58	61	7.5	3,000	. . .	430	. . .	75
-8caaa	352R	Kdl	8-15-58	61	8.5	830	. . .	35	. . .	25
-12dcbb	11.0	Qpp,Qb	11-29-57	50	7.7	1,550	. . .	428	. . .	60
-14cdcc	8.5	Qpp,Ql	11-29-57	41	7.5	1,200	. . .	342	. . .	75
-17eddc	53R	Qs,TKdu	8-20-58	57	7.2	950	. . .	425	. . .	30
-17beee	80R	Qs,Kdmc	4-29-58	50	7.5	2,100	. . .	282	. . .	18
-17cbaa	72R	Qs	8-23-58	61	7.2	775	. . .	407	. . .	38
-18acdc	45R	Qs	8-25-58	63	7.4	950	. . .	478	. . .	63
-18cddb	520R	Kdlc	8-20-58	64	8.3	990	. . .	53	. . .	38
-18dbaa	35R	Qb,Ql	8-18-59	60	7.5	925	. . .	513	. . .	. . .
-21ecca	120R	Qp,Qs,Kdmc	8-20-58	64	6.8	960	. . .	336	. . .	25
-23cbdd	17.0	Qes,Qs	10-30-57	57	7.6	990	. . .	171	. . .	. . .
-24cbbc	21.7	Qes,Qs	10-30-57	57	7.6	. . .	. . .	249	. . .	. . .
-24cdba	31.1	Qes,Qs	4-29-58	55	7.5	1,700	. . .	291	. . .	. . .
-26adaa	27.0	Qy,Qs,Qo(?)	9- 8-59	61	7.5	1,100	. . .	376	. . .	75
-30abcb	18R	Qpp,Qb,Ql	9-24-57	. .	7.3	570	. . .	. . .	. . .	. . .
-30adcb2	485R	TKdu,Kdmc,Kdlc	4- 1-62	53	7.7	510	2.8	120	. . .	. . .
-30addb	45R	Ql	8- 8-58	56	7.2	650	. . .	. . .	. . .	. . .
-30ddcc	637R	TKdu,Kdlc	7- 6-60	64	7.7	620	. . .	. . .	. . .	. . .
-30ddcc2	42R	Ql	7- 6-60	54	7.5	950	. . .	159	. . .	25
-33cdac	594R	Kdlc	11-28-59	53	7.9	352	. . .	. . .	. . .	. . .
-36ccaa	820R	Kdmc,Kdlc	2-10-59	64	. .	750	. . .	. . .	. . .	. . .
C3-70-1aabb	120R	Kdmc	8-11-58	57	6.8	1,550	. . .	700	. . .	. . .
-1aac	122R	TKdu,Kdl	4- 4-60	57	7.0	1,400	. . .	700	. . .	. . .
-1bccb	100R	Kdlu	8-25-58	58	8.2	890	. . .	35	. . .	25
-1cbbb	12.5	Qb	8-26-58	70	7.2	750	. . .	364	. . .	25
-1cbbb2	14	Qb	8-26-58	61	7.0	400	. . .	478	. . .	25
-2daca	Spring	Ks	11-17-59	51	7.5	285	. . .	. . .	. . .	. . .
-4adb	25R	Qp,Ql	8-22-58	59	7.0	600	. . .	212	. . .	25
-10dcbb	17.3	Qb	11-20-58	56	7.5	800	. . .	. . .	. . .	. . .
-11dbbb	243R	Kdlc,Klu	8-26-58	69	8.0	860	. . .	35	. . .	25
-12bcdc	536	Kdlc,Klu	9-29-59	59	8.8	1,400	. . .	. . .	. . .	. . .
-12dbbc	497	Kdlc,Klu	3-22-57	65	8.2	790	. . .	. . .	. . .	. . .
-13acbc	450R	Kdmc,Kdlc	6-15-58	62	8.4	800	. . .	71	. . .	38
-13adcd	46R	Qs	8-25-58	57	7.6	590	. . .	283	. . .	50
-13bbab	85R	Kdmc	8-23-58	57	7.9	700	. . .	71	. . .	. . .
-13bdac	400R	Kdmc,Kdlc	3-27-56	59	8.5	725	. . .	< 17	. . .	. . .
-13bdad	130R	Kdmc	5-13-58	54	8.4	770	. . .	17	. . .	. . .
-13bdad2	33R	Qs	5-13-58	49	7.7	940	. . .	323	. . .	. . .
-13bddb	490R	Kdlc	8-12-58	62	8.5	900	. . .	24	< .1	38
-13cadd	425R	Kdlc	8-18-58	49	8.3	880	. . .	12	< .1	38
-14aabb	93R	Kdmc	8-20-58	68	8.0	630	. . .	106	. . .	25
-15bbbb	94.1	Qc,Qs	9-29-59	55	9.0	890	. . .	147	. . .	. . .
-23cddb	100R	TKdc	8-23-58	57	8.2	410	. . .	35	. . .	25
-25bdcd	98R	Qc,Ql,TKdc(?)	7-25-58	59	8.3	800	. . .	71	. . .	25

See footnotes at end of table.

Table 9.--Field determination of chemical quality of water from wells and springs--Continued

Location number	Depth of well (feet) 1/	Geologic source 2/	Date of collection	Temperature (°F)	pH	Specific conductance 3/	Iron (Fe) 4/	Hardness as $CaCO_3$ 4/	Hydrogen sulfide (H_2S) 4/	Chloride (Cl) 4/
C6-70-4daab	40R	pC	3-22-57	48	7.3	660	0.4	256	. . .	262
-5dbbd	38R	pC	5- 2-61	49	6.7	195	.4	51	. . .	4
-11abdd	343R	pC	5- 2-61	50	7.1	445	.4	171	. . .	7
-24bbcb	16.5	Qpp	5- 6-61	46	6.6	130	.8	51	. . .	10
-24bbcc	16R	pC	5- 2-61	47	7.0	295	.3	103	. . .	12
-25bddc	91R	pC	5- 2-61	43	7.2	295	.5	103	. . .	8
C6-71-12adcd	100R	pC	7- 6-60	48	7.9	230	.1	72	. . .	. . .
C7-65-14cccc	298R	TKdu	6-30-61	57	6.8	185	.4	77	. . .	6
-30babb	120R	TKdu	3-31-58	55	6.8	235	.2	77	. . .	10
C7-66-3aaaa	160R	TKdu	9-21-59	. .	. .	330	.4	94	. . .	. .
-19bddb	225R	TKdu	7-17-62	58	7.7	620	.4	275	. . .	26
-22ccad	69R	Qp,Qb,Ql	9-26-59	50	6.9	390	.3	137	. . .	. .
-22cdcc	70R	Qb,Ql	9-22-59	51	6.9	330	.1	120	. . .	. .
-34acdb	50.9	Qp,Qb,Ql	9-23-59	52	6.9	565	.4	171	. . .	. .
C7-67-3abcd	1,795R	Kdmc,Kdlc	1-18-57	69	8.5	260	. . .	68	. . .	. . .
-3abcd2	801R	TKdu	10- 5-59	60	6.9	290	. . .	103	. . .	< 12
C7-68-2dacb	100R	Qp,TKdu	8-27-57	69	7.2	620	. . .	188	. . .	63
-4abba	800R	Kdmc,Kdlc	9-16-60	60	7.7	395	.4	111	< 0.1	. . .
-13cdcd	45.8	Qb,Ql	7- 9-59	57	6.9	420	.1	111	. . .	. . .
C8-65-3ccbb	135R	TKdu	4-11-58	61	6.8	610	.4	292	. . .	. . .
-16dacc	182R	TKdu	7- 1-61	57	6.9	165	.4	60	. . .	10
-32dcac	145R	TKdu	7- 3-61	54	7.1	350	.4	137	. . .	. . .
C8-66-1bbbc	229R	TKdu	7- 1-61	57	6.4	150	.4	43	. . .	10
-10abab	52R	Ql	2- 4-58	46	. .	225	. . .	86	. . .	. . .
C8-67-11baca	90R	Qb,Ql	2-27-58	54	6.6	450	. . .	154	. . .	. . .
-11dacb	1,608R	Kdmc,Kdlc	2-27-58	53	7.3	290	. . .	103	< .1	. . .
-11dbdd	90R	Ql	2-27-58	52	6.5	265	. . .	86	. . .	. . .
C8-68-5bcbd	25R	pC	7- 8-61	66	6.6	230	.3	94	. . .	9
C8-69-3dcaa	Spring	pC	7- 3-61	60	7.0	135	.4	60	. . .	. . .

1/ Depth of well: Measured depth of wells less than 100 feet are given in feet and tenths below land surface datum. R, reported depths.

2/ pC, Precambrian; Pf, Fountain Formation; Ks, South Platte Formation of the Dakota Group; Kb, Benton Shale; Kt, transition zone; Kfm, Milliken Member of the Fox Hills Sandstone; Kla, a sandstone of the Laramie Formation; Klb, b sandstone of the Laramie Formation; Klu, upper part of the Laramie Formation; Kl, Laramie Formation; Kdll, lower part of the lower conglomerate of the Dawson Formation; Kdlu, upper part of the lower conglomerate of the Dawson Formation; Kdlc, lower conglomerate of the Dawson Formation; Kdmu, upper part of the middle conglomerate of the Dawson Formation; Kdmc, middle conglomerate of the Dawson Formation; Kdl, Lower part of the Dawson Formation; TKdc, upper conglomerate of the Dawson Formation; TKdu, upper part of the Dawson Formation; TKd, Dawson Formation; Qr, Rocky Flats Alluvium; Qv, Verdos Alluvium; Qs, Slocum Alluvium; Qo, older loess; Ql, Louviers Alluvium; Qy, younger loess; Qb, Broadway Alluvium; Qes, eolian sand; Qp, Piney Creek Alluvium; Qc, colluvium; Qpp, post-Piney Creek alluvium.

3/ Specific conductance in micromhos at 25°C.

4/ Quantities given in parts per million.

5/ Sampled at 10 feet.

6/ Sampled at 200 feet.

< Less than. > Greater than.

Table 7.--Specific conductance of and chloride concentrations in water from wells and springs

Location number	Depth (feet) 1/	Geologic source 2/	Date of collection	Temperature (°F)	Chloride (Cl) 3/	Specific conductance 4/
B1-67-19ddda	697	Klb	4-11-57	59	50	1,140
B1-68-25bcbc	720	Klb	4-15-57	62	90	1,370
C1-66-18caca	32.6	Qb,Ql	9-28-56	56	113	1,500
C1-67-1dcbb	. . .	Qpp,Ql	9-28-56	63	120	1,290
-13caaa	31.7	Qb,Ql	9-28-56	54	113	1,480
-26aadd	41.1	Qb,Ql	9-28-56	54	99	1,330
-34dadb	280	Kdmc	9-10-55	. .	8	659
C1-70-21bdac	150.0	Klb,Kla	4-19-57	56	3	584
C2-67-1aada	28.4	Ql	9-11-55	56	87	1,000
-2baac	41.0	Qb,Ql	9-10-55	55	55	1,390
-2cddc	48.6	Ql	3-10-56	55	102	1,390
-2dddc2	39.1	Ql	3- 9-56	. .	119	1,820
-3cddb	46	Qb,Ql	9-15-55	. .	112	1,470
-9daac2	50	Qb,Ql	. . . .	. .	446	2,380
-9dcac 2/	54	Qb,Ql	10- -59	. .	390	2,120
-9dcdb2	68	Qb,Ql	. . . .	. .	230	1,670
-9dcdc3	50	Ql	10- -59	. .	133	1,030
-10dcec	41	Qb,Ql	11-13-55	53	148	1,740
-11aada	42.9	Ql	9-11-55	. .	125	1,840
-11adbd	41.1	Ql	. . . .	. .	121	1,820
-11baca	51.9	Ql	9-12-55	54	129	1,460
-11bdda	63	Ql	9-12-55	. .	140	1,500
-16ccdc	49.3	Qb,Ql	9-10-55	55	64	1,030
-16ddde	36.6	Qb,Ql	6- 2-56	55	260	1,460
-20daad	46.1	Qb,Ql	9-20-55	. .	85	1,160
-20dbda	50	Qb,Ql	11-23-55	. .	86	1,270
-20dcbc	41.2	Qb,Ql	9-21-55	56	86	1,340
-20ddde	37.9	Qb,Ql	9-21-55	. .	70	1,220
-21bbbd	500	Kdmc	9-20-55	. .	71	1,040
-21bcce	47.1	Qb,Ql	9-19-55	. .	59	884
-21bdeb	50	Qb,Ql	8-17-55	56	47	864
-21bded	49.4	Qb,Ql	9-17-55	. .	41	825
-21bded2	93	Qb,Ql	8-17-55	. .	42	824
-22acdc	178.0	TKdu	10- 2-55	. .	. . .	3,700
-22ccaa	42.1	Qas,Qv	6- 2-56	. .	1,120	3,970
-28aaaa	51	Qas,Ql	11-12-55	. .	204	1,190
-28aaaa 2/	51	Qas,Ql	1959	. .	264	1,220
-28abcc 2/	50	Qas,Ql	11-12-55	. .	42	826
-28bcab	70	Qb,Ql	10- -59	. .	40	771
-28bbca	44.1	Qb,Ql	. . . .	. .	47	805
-28bbda 2/	745	Kdmc,Kdlc	1959	. .	0	497
-28bddd 2/	50.0	Qb,Ql	10- -59	. .	46	. . .
-29dcdd	63.3	Qb,Ql	9-21-55	55	68	1,180
C2-68-4bade	1,330	Klb,Kla,Kfm	4-23-57	69	131	1,460
-10bbaa	700	Kdmc,Kdlc,Klu	10-21-59	54	4.0	209
C3-65-21dcca	900	TKdu,Kdmc	. . . .	61	16	484
-36daca	785	TKdu,Kdmc	. . . .	61	8.0	328
C3-66-10bbab	320	TKdu	6- 5-57	60	75	701
-22abbc	150	TKdu	6-12-57	59	10	414
-30dadc	410	TKdu	6-13-57	64	7.0	341
-31abca	170	TKdu	6-13-57	68	270	2,010
-31ccdb	30	Qp,Qb	4-30-58	51	48	1,170
-32ccca	1,003	Kdmc	6-13-57	76	3.0	271
-33bcac	41.5	Qb,Ql	9-14-60	56	37	737
-34bbcd	525	TKdu	3-11-57	54	3.0	324
C3-67-12bbab	23.0	Qp,Qv	9- 9-55	. .	121	2,550
-29caaa	95	Ql	7-16-58	56	116	2,190
C3-68-12cbbc2	850	Kdmc,Kdlc,Kl	6- 6-57	64	3.0	313
-13bddd	33	Qb,Ql	9-26-56	57	112	1,750
-13bddd	33	Qb,Ql	6-15-57	56	66	1,800
-22aabb	25.8	Qb,Ql	8-16-56	58	80	1,280
-27cadd	771	Kdmc,Kdlc	6- 4-57	64	7.0	326
-27cbba	700	Kdmc,Kdlc	6-14-57	62	4.0	341
-33acdc	800	Kdmc,Kdlc	6-11-57	67	3.0	279
C3-69-17bccc	80	Qs, Kdmc	4-29-58	. .	11	2,110
-22ccab	Spring	Qas	6-12-57	57	27	1,530
-22daec	Spring	Qc,Qp	6-13-57	55	49	1,500
C3-70-1abab	122	TKdu,Kdl	9- 8-60	57	60	1,860
-13bddb	490	Kdlc	8-12-58	62	. . .	874
-15bbbb	94.1	Qc,Qs	11-20-58	55	36	856
C4-66-7bccb	72	Qv,Qs(?)	4-28-58	54	49	1,850
C4-67-18accd4	26.0	Qb,Ql	2-25-59	53	26	606

See footnotes at end of table.

Table 7.--Specific conductance of and chloride concentrations in water from wells and springs--Continued

Location number	Depth (feet) 1/	Geologic source 2/	Date of collection	Temperature (°F)	Chloride (Cl) 3/	Specific conductance 4/
C4-67-21bdcc	38.1	Qp,Qb,Ql	7-27-59	53	42	738
-21cddd	45.8	Qp,Qb,Ql	7-25-59	53	28	648
-27cbac	52.4	Qp,Qb,Ql	3-30-60	54	39	718
-28aadc2	50	Qp,Qb,Ql	7-27-59	53	34	661
C4-68-12acca	61	Qb,Ql	8-10-56	58	100	1,500
-13acad	80	Ql	8-15-56	56	28	571
-13acda	32.5	Ql	8-13-56	57	148	1,880
-19cddd	54	Qp	8-17-56	56	24	1,410
-28acdd	30.7	Qpp,Qb,Ql	8-29-56	56	75	1,300
-28ccbb	101.9	TKdu	8-28-56	55	48	1,600
-28dabd	17.1	Qpp,Qb	. . . .	52	144	1,850
-33dcbd	49.3	Qpp,Qb,Ql	5-13-57	54	84	1,100
C4-69-1bdad	95	Qs(?),TKdu	11-15-60	. .	46	1,590
-5dbbd	200	TKdc	8-20-57	54	24	1,450
-25aada	506	Kdmc	11-15-60	. .	22	574
-31dcdd	36.6	Qs	11-15-60	55	8.0	1,140
C4-70-23dcba	48.5	Kb	7-22-60	56	3	417
C5-66-29bbdc	22	Qp,Qb,Ql	8-10-57	52	5.0	376
-32dcdc	31.5	Qp,Qb,Ql	6-24-59	52	9.0	428
C5-67-6abbb	1,104	Kdmc	11- 3-60	. .	4.0	278
-10cabb	1,150	Kdmc	11-23-60	. .	2.0	272
-17cbbb2	1,400	Kdmc,Kdlc	11-23-60	. .	14	585
C5-68-2bbbb	860	Kdmc	11-17-60	. .	24	302
-5dbad	577	Kdmc	11-16-60	. .	4.0	327
-8dcda	25	Qpp,Qb	8-30-56	55	67	934
-13daad	1,147	Kdmc,Kdlc	6- 6-57	75	7.0	279
-15bdcc	778	Kdmc	11-21-60	. .	4.0	276
-17bbbb	744	Kdmc,Kdlc	11-16-60	. .	8.0	488
C5-69-9ddcc	246	Kdlc	10-27-59	54	18	606
-25aaac	1,580	Klb	5- 3-57	. .	670	2,460
-25aaac	1,580	Klb	5- 3-57	. .	1,350	4,600
C6-66-5adac	69.6	Qb,Ql	9- 1-59	52	9.5	436
-9bcdc	71.0	Ql	10- 2-56	53	5.0	378
-9bcdc	71.0	Ql	6-26-59	53	9.5	365
-27dbcc	44	Qb,Ql	. . . .	52	16	543
C6-67-18baab	334	TKdu	. . . .	56	4.0	281
C6-68-34bac	533	Kdmc	7-17-57	60	4.0	283
-6dcdb	699.0	Kdlc,Klu	11-25-60	. .	10	447
-10acab	302	TKdu	7-17-57	56	3.0	288
-16abaa	465	TKdu	7-18-57	61	4.0	346
-17bdad	354	TKdu	7-19-57	59	5.0	370
-18ddbb	350	Kdmc,Kdlu	. . . .	56	1.0	309
-18dddd	31.3	Qpp,Qb	7- 3-57	57	20	613
-24bccc	400	TKdu	7-16-57	58	48	264
C6-69-2ddda	48.2	Ql,Qs,Qv	10- 1-56	54	44	708
-24cccd	1,340	Klb,Kla,Kfm,Kt	7-20-57	66	1,290	4,490
C7-66-3aaaa	160	TKdu	9-21-59	. .	8.0	316
-19aaac	271	TKdu	10-17-59	54	. . . .	410
-22cdcc	70	Qpp,Qb,Ql	9-28-59	51	6.0	316
C7-68-2dacb	100	Qp,TKdu	8-27-57	69	77	678
-13abca	450	TKdu	9-25-59	54	. . . .	270

1/ Measured depths are given in feet and tenths below land surface; reported depths are given in feet.

2/ Kb, Benton Shale; Kt, transition zone; Kfm, Milliken Sandstone Member of the Fox Hills Sandstone; Kla, a sandstone of the Laramie Formation; Klb, b sandstone of the Laramie Formation; Klu, upper part of the Laramie Formation; Kl, Laramie Formation; Kdlu, upper part of the lower conglomerate of the Dawson Formation; Kdlc, lower conglomerate of the Dawson Formation; Kdmc, middle conglomerate of the Dawson Formation; Kdl, lower part of the Dawson Formation; TKdc, upper conglomerate of the Dawson Formation; TKdu, upper part of the Dawson Formation; Qv, Verdos Alluvium; Qs, Slocum Alluvium; Ql, Louviers Alluvium; Qy, Younger loess; Qb, Broadway Alluvium; Qes, Eolian sand; Qp, Piney Creek Alluvium; Qc, Colluvium; Qpp, post-Piney Creek alluvium.

3/ Concentration of chloride, in parts per million.

4/ Specific conductance, in micromhos at 25°C.

5/ Analysis furnished by the Colorado State Public Health Department.

Table 8.--Radiochemical analyses of water from wells and springs

(pc/l, picocuries per liter; µg/l, micrograms per liter; ppm, parts per million)

Location number	Depth of well (feet) 1/	Geologic source 2/	Date of collection	Temperature (°F)	Beta-gamma activity (pc/l)	Radium-226 (Ra^{226}) (pc/l)	Uranium (U) (µg/l)	Radium-224 (Ra^{224}) (pc/l)	Radon (Rn^{222}) (pc/l)	Thorium (Th^{228}) (pc/l)	Gross alpha activity (pc/l)	Gross beta activity (pc/l)	Alpha activity (pc/l)	Beta activity (pc/l)	Strontium (Sr) (ppm)
C2-68-23cbbb	710	Kdmc,Kdlc	1-10-58	62	<11	<0.1	<0.1	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C2-68-23cbbb2	1,446	Klb,Kla	1-10-58	77	<34	.1	< .1	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C2-68-25addd2	30	Qpp,Ql	1-10-58	54	<38	.1	34	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C2-68-31caab	700	Kdmc,Kdlc	1-9-58	61	<17	.2	.2	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C2-68-31caab2	1,546	Klb,Kla,Kfm	1-9-58	75	<38	.2	.1	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C3-69-3edcb2	1,740	Klb,Kla,Kfm	9-9-55	.	<68	.5	.2	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C3-69-15eddd	550	Kdlc	6-10-54	60	9	.7	.1	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C3-69-34dbbc	1,745	Klb,Kla,Kfm	11-19-56	.	<27	.1	.1	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C4-67-21bcda	56.1	Qp,Qb,Ql	1-31-58	56	<19	.2	4.2	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C4-68-9dcad	32.2	Qpp,Qb,Ql	1-16-58	54	<19	.2	7.4	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C4-70-23dbbc	275	Ke	7-22-60	57	9.1±1.4	2.0±0.4	.1	. . . .	. . .	. . . .	. . . . .	. . . . .	7.2±4.0	9.1±1.4	. . . . .
C5-65-29babb	600	TKdu	2-5-58	.	<25	.4±0.2	1.0±0.1	0.1±0.1	. . .	<0.1	. . . . .	. . . . .	. . . .	. . . .	1.0
C5-65-33cccc	677	TKdu	2-5-58	60	< 8	.1±0.1	.1±0.1	.2±0.1	. . .	.2±0.1	. . . . .	. . . . .	. . . .	. . . .	< .1
C5-68-4acda	1,700	Klu,Klb,Kla,Kfm	. . . .	76	<37	.1	<.1	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C5-68-17cdaa	42.0	Qpp,Ql	1-13-58	53	<23	.3	18	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C5-68-28aacb	1,948	Klb,Kla,Kfm	1-13-58	83	<25	<.1	<.1	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C5-69-18dccbb2	354.4	Ke	7-26-60	.	. .	1.5±0.3	.1	. . . .	. . .	. . . .	. . . . .	. . . . .	<1.0	5.2±0.8	. . . . .
C6-57-27cdda	120	TKdu	12-10-59	.	. .	.3±0.1	.6±0.1	. . . .	. . .	. . . .	. . . . .	. . . . .	3.7±2.6	9.3±1.4	. . . . .
C6-68-33dbcc	715	Kdmc,Kdlc	2-26-58	59	<13	1.7±0.2	2.3	.6±0.4	. . .	< .6	. . . . .	. . . . .	8.2	. . . .	. . . . .
C6-69-23dbbc3	38.3	Qpp,Ql	1-17-58	49	22	.2	2.4	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C6-71-15bcdd	183	pC	7-19-60	.	. .	.2±0.1	52±5	. . . .	. . .	. . . .	. . . . .	. . . . .	54±24	33±5	. . . . .
C7-66-19bddb	225	TKdu	12-30-59	58	. .	. . . .	. . . .	. . . .	340	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C7-66-27daba	270	TKdu	7-5-60	.	. .	. . . .	. . . .	. . . .	1,480	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C7-67-3abcd	1,795	Kdmc,Kdlc	10-13-59	69	14±2	1.3±0.3	.2±0.1	. . . .	830	. . . .	25±13	87±13	5.4±2.9	14±2	. . . . .
C7-67-3abcd2	801	TKdu	2-4-58	49	21	19±2	1.1±0.1	1±1	44,500	3±2	. . . . .	. . . . .	. . . .	. . . .	< .1
Do	. . .	. . . . .	10-5-59	.	. .	. . . .	.9±0.1	23±5	. . .	. . . .	. . . . .	. . . . .	37±19	64±10	. . . . .
Do	. . .	. . . . .	at 11:40 am 12-18-59	.	. .	. . . .	. . . .	. . . .	46,000	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
Do	. . .	. . . . .	at 12:00 pm 12-18-59	.	. .	. . . .	. . . .	. . . .	48,000	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C7-67-15abcc	174	TKdu	12-30-59	.	. .	. . . .	. . . .	. . . .	1,400	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C7-67-15bada	208	TKdu	12-30-59	.	. .	. . . .	. . . .	. . . .	1,600	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C7-69-21acba	Spring	pC	6-15-59	.	. .	. . . .	. . . .	. . . .	7,500	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C7-69-21acbc	Spring	pC	6-15-59	.	. .	. . . .	. . . .	. . . .	3,600	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C8-66-10abab	52	Ql	2-4-58	46	<8	.1±0.1	.5±0.1	.2±0.1	. . .	.1±0.1	. . . . .	. . . . .	. . . .	. . . .	. . . . .
C8-67-11baca	90	Qb,Ql	2-4-58	54	<11	.4	.8	.8	. . .	.4	. . . . .	. . . . .	. . . .	. . . .	< .1
C8-67-11dacb	1,608	Kdmc,Kdlc	3-30-59	53	10	.3±0.1	.4	.3±0.1	. . .	.3±0.2	. . . . .	. . . . .	3.7	. . . .	. . . . .
C8-67-11dbdd	90	Ql	2-27-58	52	14	.6	.5	. . . .	. . .	. . . .	. . . . .	. . . . .	. . . .	. . . .	. . . . .

1/ Depth of well: Measured depths are given in feet and tenths below land surface; reported depths are given in feet below land surface.

2/ Geologic source: pC, Precambrian; Ke, South Platte Formation of the Dakota Group; Kfm, Milliken Sandstone Member of the Fox Hills Sandstone; Kla, a sandstone of the Laramie Formation; Klb, b sandstone of the Laramie Formation; Klu, upper part of the Laramie Formation; Kdlc, lower conglomerate of the Dawson Formation; Kdmc, middle conglomerate of the Dawson Formation; TKdu, upper part of the Dawson Formation; Ql, Louviers Alluvium; Qb, Broadway Alluvium; Qp, Piney Creek Alluvium; Qpp, post-Piney Creek alluvium.

< Less than.

Table 9.--Physical properties of selected samples of water-bearing materials
(Analyses by the Hydrologic Laboratory of the U.S. Geological Survey, Denver, Colo.)

Location number	Formation sampled 1/	Method of sampling 2/	Depth (feet) From	Depth (feet) To	Dry unit weight (gm/cc) 3/	Specific retention 4/ (percent)	Porosity 5/ (percent)	Specific yield (calculated) 6/ (percent)	Average coefficient of permeability (gpd/ft²) 7/	Particle-size distribution, in percent by weight: Clay and silt sizes (millimeters) less than 0.004	Clay and silt sizes (millimeters) 0.004 to 0.0625	Sand sizes (millimeters) Very fine 0.0625 to 0.125	Sand sizes (millimeters) Fine 0.125 to 0.25	Sand sizes (millimeters) Medium 0.25 to 0.5	Sand sizes (millimeters) Coarse 0.50 to 1.0	Sand sizes (millimeters) Very coarse 1.0 to 2.0	Gravel sizes (millimeters) Very fine 2.0 to 4.0	Gravel sizes (millimeters) Fine 4.0 to 8.0	Gravel sizes (millimeters) Medium 8.0 to 16.0	Gravel sizes (millimeters) Coarse 16.0 to 32.0	Gravel sizes (millimeters) Very coarse 32.0 to 64.0	Gravel sizes (millimeters) Cobbles 64.0 to 128.0
C2-67-																						
23abca	Qb	C	10.0	11.9	. .	6.5	34.7	28.2	1,800		5.6		1.7	4.7	9.6	18.8	13.9	24.1	13.1	4.7	3.8	. .	. .
27bccd	Ql	C	48	50	. .	8.4	31.7	23.3	9		10.2		6.2	17.5	30.2	12.9	6.2	6.9	4.8	2.0	2.1	1.0	. .
27bccd	Ql	C	57	58	. .	4.5	29.1	24.6	100		3.9		1.3	4.3	9.2	11.8	12.5	14.4	15.0	10.6	11.0	6.0	. .
31cac	Ql	D	39	40	. .	. .	32.8	. .	3,100	. .		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
31cac	Ql	D	41	42	. .	. .	37.0	. .	1,900	. .		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
31cac	Ql	D	43	44	. .	. .	29.1	. .	1,500	. .		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
31cac	Ql	D	44	45	. .	. .	35.1	. .	1,700	. .		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
31cac	Ql	D	45	46	. .	. .	33.2	. .	2,600	. .		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
31cac	Ql	D	47	48	. .	. .	36.6	. .	1,400	. .		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
31cac	Ql	D	50	51	. .	. .	29.0	. .	4,400	. .		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
C2-69-																							
30adaa	Kdmc	CH		outcrop	. .	19.0	45.9	26.9	37		8.5		4.0	10.5	18.2	21.5	24.8	9.6	1.9	1.0	. .	. .	. .
30adaa	Kdmc	CH		outcrop	. .	22.4	25.7	3.3	.04	9.0		9.8	4.8	20.4	45.2	9.6	1.2	. .	. .	. .	. .	. .	. .
C2-70-																							
25ddbc	Kdmc	C		outcrop	. .	4.1	28.7	24.6	9		8.2		15.7	61.6	14.0	.4	.1	. .	. .	. .	. .	. .	. .
28cdaa	Kfm	C		outcrop	. .	17.2	24.2	7.0	.003	16.0		21.0	15.4	37.4	7.7	2.3	.2	. .	. .	. .	. .	. .	. .
28dccb	Klb	C		outcrop	. .	. .	. .	. .	.02	13.0		12.6	26.0	35.2	10.8	2.0	.4	. .	. .	. .	. .	. .	. .
28dccb2	Klb	C		outcrop	. .	1.9	23.1	21.2	.02		6.3		11.2	52.5	30.0	. .	. .	. .	. .	. .	. .	. .	. .
C3-67																							
1acac	Qy	C	10.5	12.5	. .	. .	. .	. .	3	. .		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
1baba	Qes	C	11.5	23.3	. .	. .	. .	. .	16	. .		. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
1dddd	Qv	C	73	75	. .	4.3	36.6	32.3	100		6.3		1.9	6.3	15.5	34.1	26.5	6.4	1.8	1.2	. .	. .	. .
22ccdc	Qb	D	17.5	20.0	1.81	. .	31.2	. .	. . . .		2.4		.9	4.0	12.0	21.4	33.7	22.3	3.3	. .	. .	. .	. .
22ccdc	Qb	D	27.5	30.0	1.88	12.2	28.8	16.6	. . . .		5.1		2.0	6.1	16.4	20.7	19.7	20.0	6.7	3.3	. .	. .	. .
C3-68-																							
8bbdac	Qb	D	14.0	16.0	1.87	. .	29.7	. .	. . . .		4.0		2.9	3.5	4.8	8.9	19.3	18.0	18.1	20.5	. .	. .	. .
8bddd	Qpp	D	6.3	7.4	. .	. .	. .	. .	. . . .		3.0		2.1	13.0	38.2	30.7	9.2	2.1	1.7	. .	. .	. .	. .
23acca	Ql	D	27.5	30.0	1.79	17.6	32.2	14.6	93		8.8		1.9	2.1	5.3	18.4	36.5	11.8	10.7	4.5	. .	. .	. .
23acca	Ql	D	37.5	44.0	1.97	12.5	25.1	12.6	. . . .		3.8		1.8	3.6	6.0	9.8	20.7	30.5	23.4	.4	. .	. .	. .
C3-69-																							
16daaa	Ql	D		outcrop	. .	6.1	23.8	17.7	670		.3		.3	.6	1.2	1.4	1.0	4.7	5.0	9.1	19.3	29.3	27.8
C4-65-																							
18bcb	TKdu	CH		outcrop	. .	10.5	48.5	38.0	17		10.8		3.8	8.4	31.7	35.6	9.1	.5	.1	. .	. .	. .	. .
18bdc	TKdu	CH		outcrop	. .	32.8	39.1	6.3	.0007	35.0		38.2	15.6	9.4	1.6	.2	. .	. .	. .	. .	. .	. .	. .
18bdc	TKdu	CH		outcrop	. .	30.8	37.1	6.3	.03	34.0		19.0	6.2	21.8	18.2	.8	. .	. .	. .	. .	. .	. .	. .
18bdc	TKdu	Cyl		outcrop	. .	. .	. .	. .	.09	25.2		12.8	10.2	17.4	26.4	7.4	.6	. .	. .	. .	. .	. .	. .
C4-67-																							
18accd2	Ql	D	20.0	20.5	1.68	2.9	35.9	33.0	7,100		.0		.1	.5	3.2	16.7	32.8	35.3	11.2	.2	. .	. .	. .
18accd2	Ql	D	22.5	23.0	1.75	2.6	33.5	30.9	4,100		.2		.0	.3	3.2	10.8	36.9	37.0	10.9	.7	. .	. .	. .
18accd2	Ql	D	24.5	25.0	1.70	3.7	35.4	31.7	4,200		.0		.0	.1	2.0	12.9	31.7	36.1	15.8	1.4	. .	. .	. .
18accd2	Ql	D	26.5	27.0	1.69	2.9	36.0	33.1	5,800		.1		.0	.1	3.1	20.4	37.1	29.5	8.5	1.2	. .	. .	. .
18accd2	Ql	D	28.5	29.0	1.71	3.0	34.7	31.7	2,900		.0		.0	.1	.5	8.8	32.5	37.1	15.2	3.1	2.7	. .	. .
18accd2	Ql	D	30.5	31.0	1.71	3.8	34.5	30.7	1,100		.3		.1	.5	3.1	10.8	20.8	23.3	15.6	9.2	5.7	10.6	. .
18accd2	Ql	D	33.5	34.0	1.67	2.9	36.0	33.1	6,000		.3		.0	.2	3.5	24.3	40.5	23.7	6.8	.7	. .	. .	. .
18accd2	Ql	D	38.5	39.0	1.69	4.8	35.5	30.7	600		2.8		.6	.9	3.6	18.2	39.7	23.0	9.1	2.1	. .	. .	. .
18accd2	Ql	D	41.5	42.0	1.72	19.6	34.4	14.8	230		2.7		2.0	2.6	2.7	1.4	21.5	35.4	26.2	5.5	. .	. .	. .

See footnotes at end of table.

Table 9.--Physical properties of selected samples of water-bearing materials.--Continued
(Analyses by the Hydrologic Laboratory of the U.S. Geological Survey, Denver, Colo.)

Location number	Formation sampled 1/	Method of sampling 2/	Depth (feet) From	Depth (feet) To	Dry unit weight (gm/cc) 3/	Specific retention 4/ (percent)	Porosity 5/ (percent)	Specific yield (calculated) 6/ (percent)	Average coefficient of permeability (gpd/ft²) 7/	Particle-size distribution, in percent by weight: Clay and silt sizes (millimeters) less than 0.004	0.004 to 0.0625	Sand sizes (millimeters): Very fine 0.0625 to 0.125	Fine 0.125 to 0.25	Medium 0.25 to 0.5	Coarse 0.50 to 1.0	Very coarse 1.0 to 2.0	Gravel sizes (millimeters): Very fine 2.0 to 4.0	Fine 4.0 to 8.0	Medium 8.0 to 16.0	Coarse 16.0 to 32.0	Very coarse 32.0 to 64.0	Cobbles 64.0 to 128.0
C4-67-																						
28adcc	Ql	D	25.5	27.5	1.65	3.4	37.0	33.6	1,700		2.3	0.4	0.4	1.9	10.3	38.6	29.0	13.8	3.3	. .	. .	. .
28adcc	Ql	D	27.5	32.5	1.66	2.5	36.9	34.4	590		3.9	.3	.4	3.1	5.1	46.1	29.3	10.6	1.2	. .	. .	. .
28adcc	Ql	D	32.5	37.5	1.61	3.1	38.5	35.4	22,000		1.4	.4	.6	1.7	4.4	13.3	38.9	39.0	.3	. .	. .	. .
28adcc	Ql	D	42.5	47.5	1.67	3.5	36.0	32.5	3,300		1.6	.5	1.4	2.9	6.1	18.2	30.5	34.0	4.8	. .	. .	. .
28adcc	Ql	D	47.5	52.5	1.62	6.6	37.9	31.3	4,100		2.4	.7	.4	.6	1.1	15.1	61.9	17.2	.6	. .	. .	. .
28adoc	Ql	D	57.5	62.5	1.65	5.8	36.8	31.0	4,200		2.7	.5	.8	2.6	10.6	27.8	36.5	18.1	.4	. .	. .	. .
28baba2	Qp	D	.0	3.5	1.41	29.5	46.8	17.3	.06	23.0	35.8	14.4	12.0	10.4	4.0	.4	. .	. .	. .	. .	. .	. .
28baba2	Qp,Qb	D	3.5	8.5	1.82	17.9	31.6	13.7	8	8.2	7.6	3.3	8.9	20.3	13 9	12.0	11.0	10.3	4.5	. .	. .	. .
28baba2	Qb	D	8.5	13.5	1.83	14.9	31.7	16.8	8	5.8	3.4	1.9	5.0	14.6	17.8	18.5	20.0	10.3	2.7	. .	. .	. .
28baba2	Qb	D	13.5	18.5	1.84	14.4	29.8	15.4	33		5.1	3.4	5.5	14.2	20.0	23.1	18.1	7.4	3.2	. .	. .	. .
28baba2	Qb	D	18.5	23.5	1.86	12.3	29.0	16.7	17		9.2	3.0	5.6	11.9	17.1	22.6	21.2	7.9	1.5	. .	. .	. .
28baba2	Qb,Ql	D	23.5	28.5	1.77	8.8	33.0	24.2	22		5.8	1.9	4.5	8.8	15.0	18.3	32.7	6.2	2.7	4.1	. .	. .
28baba2	Ql	D	28.5	33.5	1.80	. .	31.8	. .	19		6.0	2.2	4.7	11.9	20.4	24.0	22.1	8.1	.6	. .	. .	. .
28baba2	Ql	D	33.5	38.5	1.73	10.0	34.5	24.5	91		4.2	1.4	3.3	9.2	19.9	27.9	24.3	9.8	. .	. .	. .	. .
28baba2	Ql	D	38.5	42.5	1.75	5.6	33.2	27.6	130		3.2	1.1	3.0	9.0	18.3	28.5	28.5	8.2	.2	. .	. .	. .
C4-68-																						
5dbda	Ql	D	22.5	27.5	. .	. .	. .	. .	. . . .		5.6	2.4	2.8	2.3	1.8	6.1	16.9	14.9	28.9	18.3	. .	. .
5dbda	Ql	D	30.0	37.5	1.78	5.2	31.8	26.6	9,000		3.0	1.1	1.6	2.5	3.8	13.6	28.2	30.3	15.9	. .	. .	. .
5dbda	Ql	D	37.5	42.5	1.70	11.0	35.2	24.2	2,000		7.0	2.0	3.0	4.7	6.1	37.1	32.9	4.8	2.4	. .	. .	. .
5dbda	Ql	D	42.5	47.5	1.73	9.4	34.0	24.6	540		6.0	1.9	3.1	7.0	12.2	33.8	26.0	9.1	.9	. .	. .	. .
C4-69-																						
19dbab	TKdc	C	outcrop		. .	13.7	51.5	37.8	73		10.1	6.7	14.0	30.1	28.2	9.2	1.6	.1	. .	. .	. .	. .
19dbab2	TKdc	D	outcrop		. .	. .	. .	. .	. . . .		6.3	3.2	5.0	7.3	10.0	8.2	9.0	8.4	9.5	11.2	5.4	16.5
30bbab	TKdu	C	outcrop		. .	18.9	28.9	10.0	.09		9.2	7.9	12.2	22.6	27.1	18.9	2.1	. .	. .	. .	. .	. .
34aabb	Ql	D	9.0	12.5	1.87	5.7	29.2	23.5	1,000	19.2	13.1	8.1	31.5	27.4	.7	. .	. .	. .	. .	. .	. .	. .
C4-70-																						
24ccbb	Kfm	C,D	outcrop		. .	12.9	31.6	18.7	.3	9.2	7.6	40.6	34.5	6.8	1.2	.1	. .	. .	. .	. .	. .	. .
24dcbb	Kdmc	C	outcrop		. .	15.1	30.3	15.2	170		5.3	4.3	12.3	35.3	31.9	8.3	1.4	.7	.5	. .	. .	. .
24dcbb	Kdl	Cyl	outcrop		. .	14.6	24.9	10.3	.3		10.4	16.0	42.6	28.1	2.8	.1	. .	. .	. .	. .	. .	. .
24dcbb	Kdl	CH	outcrop		. .	16.0	23.9	7.9	.008		11.1	25.9	47.4	15.1	.5	. .	. .	. .	. .	. .	. .	. .
24dcbb	Kdl	D	outcrop		. .	12.7	36.1	23.4	6,000		2.7	1.7	4.0	6.4	10.2	12.2	15.0	17.2	17.6	10.2	2.8	. .
24dcbb	Kdl	D	outcrop		. .	10.0	37.7	27.7	320		2.1	1.8	2.6	6.9	10.3	12.7	13.8	16.1	17.7	12.9	3.1	. .
24dcbb	Kdl	D	outcrop		. .	12.0	36.5	24.5	7,400		2.6	1.9	5.1	9.7	10.0	8.6	11.3	10.1	8.1	8.2	15.6	8.8
24dcbb	Kdl	C	outcrop		. .	14.5	21.8	7.3	.1		2.2	1.3	5.1	28.4	34.9	26.1	2.0	. .	. .	. .	. .	. .
24dcbb	Kdl	Cyl	outcrop		. .	19.2	31.1	11.9	.05		16.6	5.4	11.1	26.9	25.7	14.3	. .	. .	. .	. .	. .	. .
24dcbb	Kdl	Cyl	outcrop		. .	3.1	49.2	46.1	110		8.0	6.4	25.8	48.8	10.4	.6	. .	. .	. .	. .	. .	. .
25ab	TKdc	C	outcrop		. .	21.3	50.9	29.6	83		8.6	5.5	12.6	19.1	15.5	11.1	9.9	8.7	5.8	3.2	. .	. .
26acbc	Kly	C	outcrop		. .	. .	. .	. .	.3		5.8	33.9	54.1	5.8	.4	. .	. .	. .	. .	. .	. .	. .
26acca	Ks	C	outcrop		. .	. .	. .	. .	.05		23.6	48.3	26.0	2.1	. .	. .	. .	. .	. .	. .	. .	. .
35dcbc	Pl	C	outcrop		. .	. .	. .	. .	.2		5.9	29.4	53.4	10.9	.4	. .	. .	. .	. .	. .	. .	. .
35dcbc	Pl	C	outcrop		. .	. .	. .	. .	.0007		23.2	53.3	17.4	6.1	. .	. .	. .	. .	. .	. .	. .	. .
C5-66-																						
20cccc	Qb	D	15.0	17.5	1.78	4.6	32.6	28.0	840		1.3	.3	2.2	16.4	41.2	30.2	6.4	1.8	.2	. .	. .	. .
20cccc	Qb	D	20.0	22.5	1.71	6.2	35.0	28.8	550		1.7	.7	3.5	28.4	24.3	34.9	6.1	.4	. .	. .	. .	. .
20cccc	Qb	D	27.5	30.0	1.77	5.8	32.4	26.6	940		2.1	2.3	7.6	20.7	23.4	28.7	12.7	2.5	. .	. .	. .	. .
20cccc	Ql	D	35.0	37.5	1.69	3.7	35.7	32.0	3,100		.6	.3	2.7	19.7	21.4	49.9	1.4	4.0	. .	. .	. .	. .
20cccc	Ql	D	40.0	42.5	1.78	7.4	32.3	24.9	550		4.7	2.1	5.9	22.2	16.9	27.1	12.0	8.9	.2	. .	. .	. .

See footnotes at end of table.

Table 9.--Physical properties of selected samples of water-bearing materials.--Continued
(Analyses by the Hydrologic Laboratory of the U.S. Geological Survey, Denver, Colo.)

Location number	Formation sampled 1/	Method of sampling 2/	Depth (feet) From	Depth (feet) To	Dry unit weight (gm/cc) 3/	Specific retention 4/ (percent)	Porosity 5/ (percent)	Specific yield (calculated) 6/ (percent)	Average coefficient of permeability (gpd/ft²) 7/	Particle-size distribution, in percent by weight: Clay and silt sizes (millimeters) less than 0.004	Clay and silt sizes (millimeters) 0.004 to 0.0625	Sand sizes (millimeters) Very fine 0.0625 to 0.125	Sand sizes (millimeters) Fine 0.125 to 0.25	Sand sizes (millimeters) Medium 0.25 to 0.5	Sand sizes (millimeters) Coarse 0.50 to 1.0	Sand sizes (millimeters) Very coarse 1.0 to 2.0	Gravel sizes (millimeters) Very fine 2.0 to 4.0	Gravel sizes (millimeters) Fine 4.0 to 8.0	Gravel sizes (millimeters) Medium 8.0 to 16.0	Gravel sizes (millimeters) Coarse 16.0 to 32.0	Gravel sizes (millimeters) Very coarse 32.0 to 64.0	Gravel sizes (millimeters) Cobbles 64.0 to 128.0
C5-66-																						
20cccc	Ql	D	47.5	50.0	1.82	7.2	31.1	23.9	390		2.8	2.1	7.5	28.1	22.2	17.1	12.7	7.5	. .	. .	. .	. .
23ccdd	Qp	D	outcrop		. .	23.3	41.1	17.8	15		6.2	2.4	8.3	24.0	35.8	14.8	5.0	3.5	. .	. .	. .	. .
C5-68-																						
5bdaa	Ql	D	18.0	20.0	1.68	13.0	36.1	23.1	690		8.2	3.6	3.6	3.8	1.6	32.3	17.3	22.2	7.4	. .	. .	. .
5bdaa	Ql	D	22.5	27.5	1.71	2.4	35.0	32.6	14,000		.2	.0	.0	.3	5.3	55.4	19.8	12.1	5.1	1.8	. .	. .
5bdaa	Ql	D	27.5	32.5	1.68	3.2	36.1	32.9	14,000		.4	.1	.3	.5	6.5	46.0	20.4	15.6	10.2	. .	. .	. .
5bdaa	Ql	D	32.5	37.5	1.63	6.9	38.0	31.1	900		31.0	.2	.3	.3	2.0	17.6	11.4	11.1	9.8	16.3	. .	. .
5bdad	Ql	D	17.0	19.0	1.83	10.8	31.7	14.9	3		13.4	4.2	8.8	13.7	26.2	19.7	10.5	3.0	.5	. .	. .	. .
8accc	Ql	D	51.0	52.5	1.63	. .	38.3	. .	22,000					4.1.			16.6	66.2	13.1	. .	. .	. .
9cdc	Qb	D	outcrop		. .	2.2	28.7	26.5	1,300		1.3	1.0	4.4	9.0	10.5	11.7	15.9	10.7	7.6	13.9	14.0	. .
C5-69-																						
27cdc	Klb	CH	outcrop		. .	1.4	24.3	22.9	4		12.3	8.4	57.4	20.9	1.0	. .	. .	. .	. .	. .	. .	. .
C6-66-																						
22bcab2	Ql	D	45.0	47.5	1.60	2.8	39.4	36.6	170		1.6	1.2	4.9	13.0	22.2	31.4	24.8	.9	. .	. .	. .	. .
22bcab2	Ql	D	62.5	65.0	1.83	11.5	29.9	18.4	28		7.7	2.1	6.5	18.6	26.6	29.7	8.0	.8	. .	. .	. .	. .
22bcab2	Ql	D	70.0	72.5	1.71	5.0	35.0	30.0	1,300		.2	1.2	5.8	21.5	33.5	30.0	6.7	1.1	. .	. .	. .	. .
22bcab3	Ql	D	35.0	37.5	1.75	5.1	33.2	28.1	620		.1	.9	3.0	15.5	29.7	32.8	16.0	2.0	. .	. .	. .	. .
22bcab3	Ql	D	37.5	40.0	1.81	6.1	31.2	25.1	400		3.0	.3	2.5	33.3	27.5	23.0	8.4	2.0	. .	. .	. .	. .
22bcab3	Ql	D	55.0	57.5	1.76	5.8	31.8	26.0	580		1.4	.8	3.2	13.4	31.5	39.7	9.6	.4	. .	. .	. .	. .
22bcab3	Ql	D	65.0	67.5	1.76	5.0	32.8	27.8	640		3.1	2.8	4.6	14.2	32.5	34.8	6.4	1.6	. .	. .	. .	. .
24bad	TKdu	D	outcrop		. .	12.0	36.5	24.5	65		4.1	2.0	4.7	10.4	18.0	15.4	18.0	16.7	8.4	2.3	. .	. .
24bad	TKdu	D	outcrop		. .	11.7	45.9	34.2	46		8.8	6.2	15.7	33.1	25.8	6.3	2.6	1.1	.4	. .	. .	. .
C6-68																						
18abab	Qb	D	7.5	10.0	1.71	3.0	34.2	31.2	1,100		.9	1.0	2.3	3.9	9.0	27.5	36.3	15.8	3.3	. .	. .	. .
18abab	Ql	D	12.5	17.5	1.72	3.8	34.8	31.0	440		.9	.1	1.1	2.3	6.6	22.0	37.1	27.1	2.8	. .	. .	. .
18abab	Ql	D	22.5	25.0	1.72	3.6	34.4	30.8	4,600		1.3	.7	1.7	4.4	7.2	11.5	25.9	37.6	5.7	4.0	. .	. .
18abab	Ql	D	35.0	37.5	1.62	5.5	38.4	32.9	29,000		1.2	.4	.8	.5	2.3	2.8	24.1	57.8	10.1	. .	. .	. .
18abab	Ql	D	42.5	44.0	1.66	4.6	36.6	32.0	2,300		2.2	.9	.9	1.2	1.8	7.1	43.9	36.5	5.5	. .	. .	. .
C6-69-																						
12adaa	Ql	D	35.0	47.0	1.80	15.6	31.6	16.0	160		3.9	1.4	2.4	4.4	4.8	8.2	26.2	43.5	5.2	. .	. .	. .
13addd	Qs	D	17.0	22.0	1.87	19.0	28.6	9.6	140		11.6	3.3	3.9	5.0	10.0	10.7	29.7	20.6	5.2	. .	. .	. .
13addd	Qs	D	32.0	36.0	1.85	16.4	29.7	13.3	14		12.8	6.9	3.8	13.3	16.9	17.0	20.6	7.6	.5	.6	. .	. .
23cdcd	Qp	D	4.0	11.0	1.93	13.3	27.7	14.4	. . . .		12.0	5.8	6.8	6.9	7.8	10.7	6.7	10.0	16.6	16.7	. .	. .
23cdcd	Qb	D	11.0	21.0	1.79	6.7	32.7	26.0	290		3.4	1.6	2.9	8.2	16.7	19.9	24.2	17.4	4.8	.9	. .	. .
36adc	Kdl	CH	outcrop		. .	9.6	49.2	39.6	23		8.2	22.9	40.1	24.3	3.8	.7	. .	. .	. .	. .	. .	. .
36adc	Kdl	D	outcrop		. .	.7	33.8	33.1	67		11.1	5.4	10.4	17.1	24.6	31.4	. .	. .	. .	. .	. .	. .
36adc	Kdl	D	outcrop		. .	7.9	33.8	25.9	18		12.7	6.4	11.3	20.2	32.6	16.8	. .	. .	. .	. .	. .	. .
36dbdc	Klb	C,D	outcrop		. .	13.3	26.1	12.8	.1		19.2	13.1	8.1	31.5	27.4	.7	. .	. .	. .	. .	. .	. .
C7-68-																						
6bbbc	Kdl	C,D	outcrop		. .	6.9	21.7	14.8	.002		19.6	12.2	19.6	30.5	9.9	5.7	2.5	. .	. .	. .	. .	. .
6bbbc	Kdl	C	outcrop		. .	9.4	20.8	11.4	.2		3.4	1.4	3.0	10.4	29.0	52.8	.	. .	. .	. .	. .	. .
11dbad	Klb	C	1,825.0	1,826.4	. .	1.9	23.1	21.2	.02		10.5	40.2	43.3	6.0	. .	. .	. .	. .	. .	. .	. .	. .
C8-67-																						
2cacd	Ql	D	47.5	52.5	1.70	16.7	35.6	18.9	. . . .		8.6	1.5	2.5	4.1	4.8	10.3	25.7	39.4	3.1	. .	. .	. .

See footnotes at end of table.

Table 9.--Physical properties of selected samples of water-bearing materials.--Continued
(Analyses by the Hydrologic Laboratory of the U.S. Geological Survey, Denver, Colo.)

1/ Pl, Lyons Sandstone; Kly, Lytle Formation of the Dakota Group; Ks, South Platte Formation of the Dakota Group; Kfm, Milliken Sandstone Member of the Fox Hills Sandstone; Klb, b sandstone of the Laramie Formation; Kdmc, middle conglomerate of the Dawson Formation; Kdl, lower part of the Dawson Formation; TKdc, upper conglomerate of the Dawson Formation; TKdu, upper part of the Dawson Formation; Qv, Verdos Alluvium; Qs, Slocum Alluvium; Ql, Louviers Alluvium; Qy, younger loess; Qb, Broadway Alluvium; Qes, eolian sand; Qp, Piney Creek Alluvium; Qpp, post-Piney Creek alluvium.

2/ C, core; CH, large block or chunk of consolidated or moderately consolidated material collected; Cyl, sampling cylinder; D, unconsolidated material collected from drill cuttings or outcrop.

3/ Dry unit weight given in grams per cubic centimeter.

4/ Specific retention is the ratio of the volume of water retained after a saturated rock has been drained by gravity to the bulk volume of the rock.

5/ Porosity is the ratio of the aggregate volume of the voids in a rock or soil to its bulk volume.

6/ Specific yield is the ratio of the volume of water in a saturated rock that will drain by gravity to the bulk volume of the rock. Porosity minus specific retention equals specific yield.

7/ Coefficient of permeability is the amount of water that will flow through a unit cross section of material in a unit of time under a unit hydraulic gradient at a given temperature. The tabulated values are for a temperature of 60°F. (gpd/ft^2), gallons per day per square foot.