

INDEXES OF HYDROLOGIC DATA FROM SELECTED COAL-MINING
AREAS IN NORTHWESTERN COLORADO

By Neville G. Gaggiani

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CONVERSION FACTORS

Inch-pound units in this report may be converted to metric (International System) units by using the following conversion factors:

<i>Multiply</i>	<i>By</i>	<i>To obtain</i>
cubic foot per second (ft ³ /s)	0.001233	cubic hectometer
foot (ft)	0.3048	meter
mile	1.609	kilometer

Degree Celsius (°C) may be converted to degree Fahrenheit (°F) by using the following equation:

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

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

The following terms and abbreviations also are used in this report:

degree Celsius (deg C)
microgram per liter (µg/L)
micromhos per centimeter at 25 degrees Celsius (µmhos/cm)
microsiemens per centimeter at 25 degrees Celsius (µS/cm)
milliequivalent per liter (meq/L)
milligram per liter (mg/L)
milliliter per liter (mL/L)
millivolt (mV)

INDEXES OF HYDROLOGIC DATA FROM SELECTED COAL-MINING AREAS IN NORTHWESTERN COLORADO

By Neville G. Gaggiani

ABSTRACT

Currently (1988), data from hydrologic studies related to coal mining that have been done in northwestern Colorado since the early 1970's are stored in the files of private companies and government offices and in various computer systems. To compile these data for additional research, a trip to each office would have to be made to determine the availability and acceptability of the data. A data base (COALDATA) was compiled that includes stream discharge, ground-water levels, and chemical analysis of water samples that were collected by private companies and government agencies other than the U.S. Geological Survey in and near selected coal mines in northwestern Colorado. Indexes in this report list 93 surface-water sites and 95 ground-water sites where hydrologic data are available in the COALDATA data base. The indexes also list 62 surface-water sites and 480 ground-water sites in the U.S. Geological Survey data base, which is separate from the COALDATA data base and contains only data collected by the U.S. Geological Survey. The combined output of the COALDATA data base and the U.S. Geological Survey data base provides surface-water and ground-water data that include most of the study area.

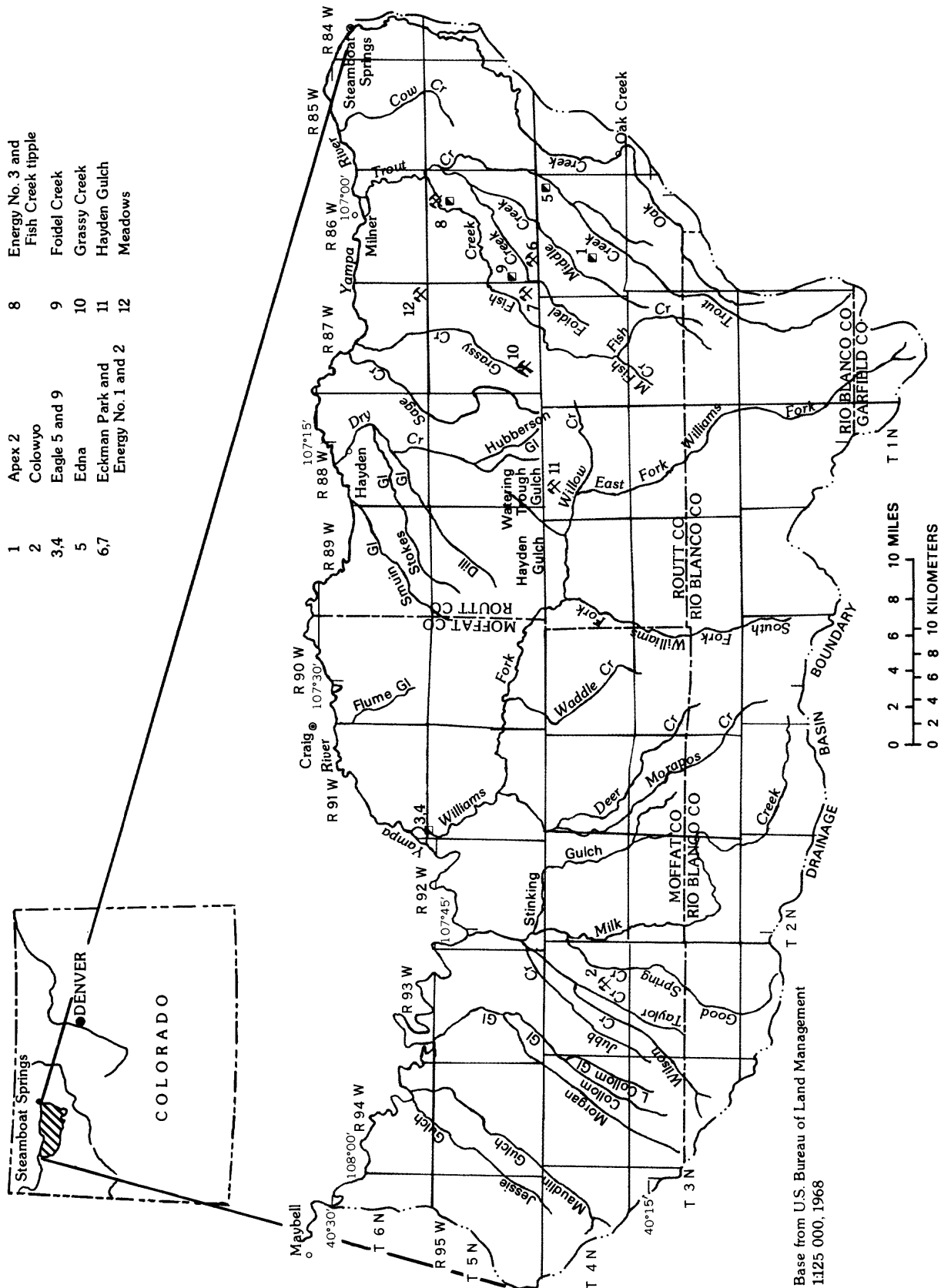
INTRODUCTION

Hydrologic studies related to coal mining have been done in northwestern Colorado (fig. 1) since the early 1970's. The studies, which were done by private companies and government agencies, have included collection of data from 93 surface-water sites and 95 ground-water sites. The data include continuous discharge measurements from streamflow gaging stations, intermittent discharge measurements from miscellaneous sites, ground-water level measurements, well-construction data, some geologic data, and water-quality analyses of surface water and ground water. The water-quality constituents included in the chemical analyses are listed in table 1.

Currently (1988), hydrologic data are stored in the files of private companies and government offices, and in a variety of computers. In order to compile these data in preparation for research, a trip to each office would need to be made to determine the availability and acceptability of the data. To make these data more easily available, a centralized data base and index has been developed. This data base (COALDATA), which was compiled by the U.S. Geological Survey, in cooperation with the U.S. Bureau of Land Management and

EXPLANATION

UNDERGROUND COAL MINE AND NUMBER		SURFACE COAL MINE AND NUMBER	
MAP NUMBER	COAL MINE	MAP NUMBER	COAL MINE
1	Apex 2	8	Energy No. 3 and Fish Creek tippie
2	Colowyo	9	Foidel Creek
3,4	Eagle 5 and 9	10	Grassy Creek
5	Edna	11	Hayden Gulch
6,7	Eckman Park and Energy No. 1 and 2	12	Meadows



Base from U.S. Bureau of Land Management
1125 000, 1968

Figure 1.--Location of study area and coal mines.

the Colorado Department of Natural Resources, Mined Land Reclamation Division, contains locations, descriptions, and hydrologic data from surface-water and ground-water sites in northwestern Colorado. In addition to the data in the COALDATA data base, the U.S. Geological Survey has hydrologic data from 62 surface-water sites and 480 ground-water sites in the study area stored in a separate U.S. Geological Survey data base.

Table 1.--*Water-quality constituents used in the COALDATA data base for this report*

[NWIS, National Water Information System; °C, degrees Celsius; ft³/s, cubic feet per second; mV, millivolts; µS/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; meq/L, milliequivalents per liter; µmhos/cm, micromhos per centimeter; µg/L, micrograms per liter; mL/L, milliliters per liter; ft, feet]

NWIS codes	Description of constituent
00010	Temperature, water (°C)
00060	Discharge (ft ³ /s)
00090	Oxidation reduction potential (mV)
00095	Specific conductance (µS/cm)
00300	Oxygen, dissolved (mg/L)
00400	pH (standard units) (meq/L)
00401	Cations minus anions
00402	Specific conductance, non-temperature corrected (µmhos/cm)
00440	Bicarbonate ion (mg/L as HCO ₃)
00445	Carbonate ion (mg/L as CO ₃)
00608	Nitrogen, ammonia, dissolved (mg/L as N)
00610	Nitrogen, ammonia, total (mg/L as N)
00613	Nitrogen, nitrite, dissolved (mg/L as N)
00615	Nitrogen, nitrite, total (mg/L as N)
00618	Nitrogen, nitrate, dissolved (mg/L as N)
00619	Ammonia, un-ionized (mg/L as N)
00620	Nitrogen, nitrate, total (mg/L as N)
00630	Nitrogen, nitrite plus nitrate, total (mg/L as N)
00631	Nitrogen, nitrite plus nitrate, dissolved (mg/L as N)
00650	Phosphate, total (mg/L as PO ₄)
00653	Phosphate, dissolved (mg/L as PO ₄)
00660	Phosphate, ortho, dissolved (mg/L as PO ₄)
00665	Phosphorus, total (mg/L as P)
00745	Sulfide, total (mg/L as S)
00746	Sulfide, dissolved (mg/L as S)

Table 1.--Water-quality constituents used in the COALDATA data base
for this report--Continued

NWIS codes	Description of constituent
00900	Hardness, total (mg/L as CaCO ₃)
00901	Hardness, carbonate (mg/L as CaCO ₃)
00902	Hardness, noncarbonate (mg/L as CaCO ₃)
00910	Calcium, total (mg/L as CaCO ₃)
00915	Calcium, dissolved (mg/L as Ca)
00916	Calcium, total recoverable (mg/L as Ca)
00920	Magnesium (mg/L as CaCO ₃)
00921	Magnesium, total recoverable (mg/L as Mg)
00923	Sodium, total recoverable (mg/L as Na)
00925	Magnesium, dissolved (mg/L as Mg)
00927	Magnesium, total (mg/L as Mg)
00929	Sodium, total (mg/L as Na)
00930	Sodium, dissolved (mg/L as Na)
00931	Sodium adsorption ratio
00935	Potassium, dissolved (mg/L as K)
00937	Potassium, total (mg/L as K)
00939	Potassium, total recoverable (mg/L as K)
00940	Chloride, dissolved (mg/L as Cl)
00945	Sulfate, dissolved (mg/L as SO ₄)
00946	Sulfate (mg/L as SO ₄)
00951	Fluoride, total (mg/L as F)
00999	Boron, total recoverable (µg/L as B)
01002	Arsenic, total (µg/L as As)
01005	Barium, dissolved (µg/L as Ba)
01007	Barium, total (µg/L as Ba)
01009	Barium, total recoverable (µg/L as Ba)
01020	Boron, dissolved (µg/L as B)
01022	Boron, total (µg/L as B)
01027	Cadmium, total (µg/L as Cd)
01030	Chromium, dissolved (µg/L as Cr)
01032	Chromium, hexavalent, dissolved (µg/L as Cr)
01033	Chromium trivalent (µg/L as Cr)
01034	Chromium, total (µg/L as Cr)
01040	Copper, dissolved (µg/L as Cu)
01042	Copper, total (µg/L as Cu)
01045	Iron, total (µg/L as Fe)
01046	Iron, dissolved (µg/L as Fe)
01049	Lead, dissolved (µg/L as Pb)
01051	Lead, total (µg/L as Pb)

Table 1.--Water-quality constituents used in the COALDATA data base
for this report--Continued

NWIS codes	Description of constituent
01055	Manganese, total ($\mu\text{g/L}$ as Mn)
01056	Manganese, dissolved ($\mu\text{g/L}$ as Mn)
01060	Molybdenum, dissolved ($\mu\text{g/L}$ as Mo)
01062	Molybdenum, total ($\mu\text{g/L}$ as Mo)
01065	Nickel, dissolved ($\mu\text{g/L}$ as Ni)
01067	Nickel, total ($\mu\text{g/L}$ as Ni)
01074	Nickel, total recoverable ($\mu\text{g/L}$ as Ni)
01075	Silver, dissolved ($\mu\text{g/L}$ as Ag)
01077	Silver, total ($\mu\text{g/L}$ as Ag)
01079	Silver, total recoverable ($\mu\text{g/L}$ as Ag)
01090	Zinc, dissolved ($\mu\text{g/L}$ as Zn)
01092	Zinc, total ($\mu\text{g/L}$ as Zn)
01094	Zinc, total recoverable ($\mu\text{g/L}$ as Zn)
01105	Aluminum, total ($\mu\text{g/L}$ as Al)
01106	Aluminum, dissolved ($\mu\text{g/L}$ as Al)
01114	Lead, total recoverable ($\mu\text{g/L}$ as Pb)
01118	Chromium, total recoverable ($\mu\text{g/L}$ as Cr)
01123	Manganese total recoverable ($\mu\text{g/L}$ as Mn)
01129	Molybdenum total recoverable ($\mu\text{g/L}$ as Mb)
01145	Selenium, dissolved ($\mu\text{g/L}$ as Se)
01147	Selenium, total ($\mu\text{g/L}$ as Se)
01355	Ice cover, floating or solid (severity)
70301	Solids, sum of constituents, dissolved (mg/L)
70348	Settleable solids (mL/L)
70507	Phosphorus, orthophosphate, total (mg/L as P)
71825	Acidity, total (mg/L as H)
71900	Mercury, total recoverable ($\mu\text{g/L}$ as Hg)
72019	Depth below land surface (water level) (ft)
80154	Sediment, suspended concentration (mg/L)
90410	Alkalinity (mg/L as CaCO_3)

Purpose and Scope

This report describes the type of data that are available in COALDATA and gives examples of the types of information retrievals that are available from the system. Because the data base is large, actual data stored in the data base are not included in this report. Some descriptive information about the sites to aid in site selection are included in tables 2 through 5.

The data have been collected from private sources such as coal companies in northwestern Colorado and government sources such as the Colorado Department of Natural Resources, Mined Land Reclamation Division. Surface-water data include site location, type of gage, ownership, and surface-water discharge values. Ground-water data include well location, well depth, ownership (name of mine), depth of water-producing zone, and name of aquifer. Water-quality data include chemical analyses of selected constituents. Onsite water-quality measurements such as temperature, specific conductance, pH, and dissolved oxygen also are included, if available.

Hydrologic data stored in COALDATA have not been checked by the U.S. Geological Survey; also data collection and analysis procedures have not been verified to ensure that they meet standard U.S. Geological Survey methods and techniques. Therefore, proper data accuracy determination and appropriate data application are left to the user's discretion.

Approach

Several methods were used to transfer data to the COALDATA data base. One method used was to manually enter data from reports and paper records. A second method of data transfer was to transfer the hydrologic data to magnetic tape from the host computer and then read the tape into the U.S. Geological Survey computer.

The COALDATA data base was developed using the U.S. Geological Survey National Water Information system (NWIS). This system processes and stores data in the COALDATA data base using two programs: the ground-water site inventory program (GWSI), which processes data for ground-water levels and information related to the drilling and operation of the site; and the quality of water program (QWDATA), which processes data for onsite measurements, chemical laboratory analyses of surface and ground water, and data for instantaneous surface-water discharge measurements. Site description information is stored so that it is available to both programs.

System of Numbering Well Locations

The well locations (local well number) in tables 4 and 5 are based on the U.S. Bureau of Land Management system of land subdivision, and indicate the location of the well by quadrant, township, range, section, and position within the section. A graphic illustration of this method of well location is shown in figure 2. The first letter "S" preceeding the location number means that the well is located in the area governed by the sixth principal meridian. The second letter 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. The 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 letters are assigned within the section in a counter-clockwise direction, beginning with (A) in the northeast quarter. Letters are assigned within each quarter section and within each quarter-quarter section in the same manner. Where two or more locations are within the smallest subdivision, consecutive numbers beginning with 1 are added in the order in which the wells were inventoried. For example, SC6-47-16AAA indicates a well in the northeast quarter of the northeast quarter of the northeast quarter of sec. 16, T. 6 S., R. 47 W. The "S" refers to the sixth principal meridian. The "C" indicates the township is south of the base line and that the range is west of the principal meridian.

Acknowledgments

Bob Liddle, Candy Thompson, and Jim Pendelton of the Colorado Mined Land Reclamation Division helped compile the data, and Gary McIntosh of the U.S. Office of Surface Mining helped with writing computer programs. Their assistance is gratefully appreciated.

DATA INDEXES

Indexes of surface-water and ground-water sites in and near selected coal mines in northwestern Colorado are listed in tables 2 through 5. The sites that are in the COALDATA data base, which contains only data that were collected by agencies other than the U.S. Geological Survey are listed in tables 2 and 4. The sites that are in the main U.S Geological Survey data base, which contains only data collected by the U.S Geological Survey are listed in tables 3 and 5. Data retrievals combining the U.S. Geological Survey files and COALDATA files can be combined into one output, since these two data bases use the same computer system. Locations of these sites are indicated in maps on plates 1 through 3.

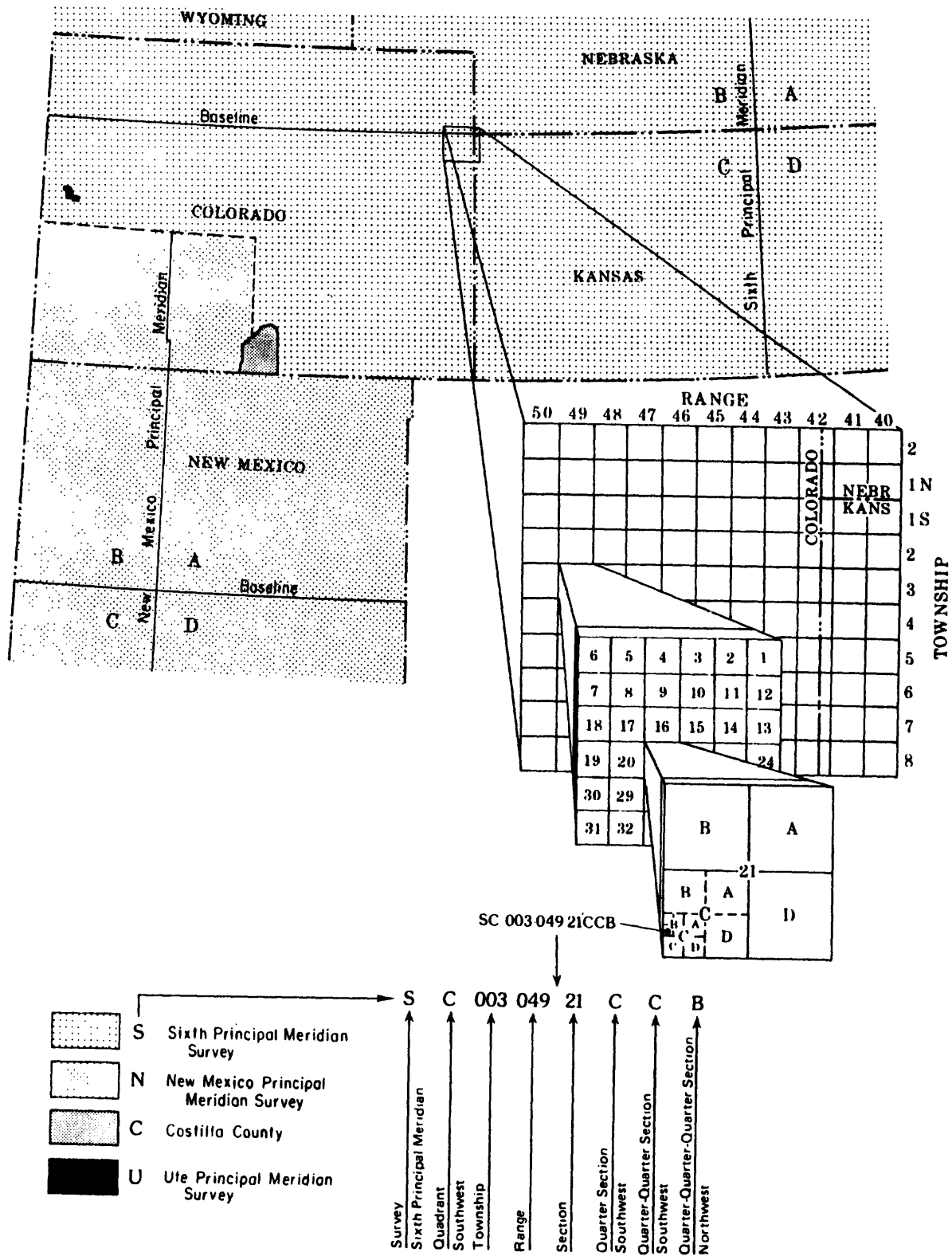


Figure 2.--Well-numbering system.

Table 2.--Surface-water site descriptions and availability of data collected by agencies other than the U.S. Geological Survey

[Site-ID, site identification, a unique number used to identify a site; datum, altitude above sea level of the reference mark used to measure the height of the stream; NPDES, National Pollutant Discharge Elimination System; Apx, Apex mine 2; Col, Colowyo strip mine; Egl, Eagle mines 5 and 9; Edn, Edna strip mine; Ekm, Eckman Park and Energy No. 1 & 2 strip mines; Egy, Energy No. 3 strip mine; Fis, Fish Creek tippile; Foi, Foidel Creek mine; Gra, Grassy Gap strip mine; Hyd, Hayden Gulch strip mine; Med, Meadows strip mine; GS, gaging station; C, chemical data only; X, data available; --, no data]

Map number (plate 1)	Site identification in COALDATA data base	Station name	Township	Range	Section	Coal mine	Site ID used by mine	Datum (feet)	Site type	Availability of	
										Flow data	Water-quality data
1	401844107003501	Trout Creek W of Edna Mine & U.S. paved county road	4N	86W	23	Apx	Downstream	7,250	--	X	X
2	401749107021001	Trout Creek SW of property	4N	86W	27	Apx	Upstream	7,440	--	X	X
3	401510107472201	NPDES 004, Gulch above Good Spring Creek	3N	93W	02	Col	NPDES004	6,640	--	X	X
4	401819107481901	E of Gossard Loadout, NPDES 003, Taylor Creek Drive	4N	93W	22	Col	NPDES003	6,400	--	X	X
5	401601107490701	NPDES 002, W of maintenance warehouse complex road	4N	93W	34	Col	NPDES002	7,190	--	X	X
6	401539107471801	NPDES 001, Good Spring Creek at Streeter Mine	3N	93W	02	Col	NPDES001	6,590	--	X	X
7	401546107471701	Good Spring Creek, lower site	3N	93W	02	Col	Goodspgl	6,560	--	X	X
8	401506107471601	Good Spring Creek, upper site	3N	93W	02	Col	Goodspgu	6,640	--	X	X
9	401845107475701	Taylor Creek, W of Gossard Ranch	4N	93W	14	Col	Taylorcr	6,360	--	X	X
10	402604107394301	Yampa River, downstream	6N	92W	36	Egl	Y-1	6,130	--	--	X
11	402629107390401	Yampa River, upstream	6N	91W	30	Egl	Y-2	6,160	--	--	X
12	402541107393901	Yampa River, downstream	6N	92W	36	Egl	YS-2	6,115	--	--	--
13	402851107365601	Yampa River, upstream	6N	91W	16	Egl	YS-1	6,200	--	--	--
14	402513107392501	Williams Fork, upstream	5N	91W	06	Egl	WF-1	6,142	GS	X	X
15	402613107385701	Williams Fork, downstream	6N	91W	31	Egl	WF-2	6,120	GS	X	X
16	402537107390601	No. 5 Mine, coal seam F discharge	6N	91W	31	Egl	#5 Mine	6,150	--	--	X
17	402555107384101	No. 9 Mine, coal seam P discharge	6N	91W	31	Egl	#9 Mine	6,315	--	--	X
18	402248106581701	Trout Creek downstream	5N	85W	19	Edn	TR-D	6,810	C	--	X
19	402100106583001	Trout Creek	5N	86W	36	Edn	TR-C	6,950	C	--	X
20	402014106585101	Trout Creek	4N	86W	12	Edn	TR-B	7,030	C	--	X
21	401838107003901	Trout Creek upstream	4N	86W	23	Edn	TR-A	7,250	C	--	X
22	401805106574101	Oak Creek upstream	4N	85W	19	Edn	OK-A	7,290	C	--	X
23	401944106573101	Oak Creek	4N	85W	08	Edn	OK-B	7,160	C	--	X
24	401900106573201	Oak Creek NPDES 001 site	4N	85W	18	Edn	NPDES001	7,240	--	--	--
25	401931106591701	Drainage, Trout Creek NPDES 002 discharge site	4N	86W	12	Edn	NPDES002	7,120	--	--	--
26	401939106590301	Drainage, Trout Creek NPDES 003 discharge site	4N	86W	12	Edn	NPDES003	7,120	--	--	--
27	401841107003701	Knoll Flume discharge to Trout Creek upstream of Edna mine.	4N	86W	23	Edn	Knoll flume	7,180	--	--	--
28	402102107003701	Homestead flume discharge to Trout Creek	5N	86W	36	Edn	Homestead	7,010	--	--	--
29	401825107002501	Trout Creek upstream of Edna strip mine	4N	86W	14	Edn	TRa	7,190	GS	--	--
30	402245106581701	Trout Creek downstream of Edna strip mine	5N	85W	19	Edn	TRb	6,780	GS	--	--
31	401840106573501	Oak Creek at conveyer	4N	85W	20	Edn	OKa	7,230	GS	--	--
32	402816107003901	Trout Creek below mouth of Elk Creek	6N	86W	14	Ekm	Site 110	6,515	--	--	--
33	402751107004901	Elk Creek near Milner	6N	86W	22	Ekm	Site 68	6,540	--	--	--
34	402524106582701	Trout Creek near mouth	5N	85W	06	Ekm	Site 69	6,595	GS	X	X
35	402509106595001	Fish Creek at Fish Creek tippile	5N	86W	02	Ekm	Site 28	6,590	--	--	--

Table 2.--Surface-water site descriptions and availability of data collected by agencies other than the U.S. Geological Survey--Continued

Map number (plate 1)	Site identification in COALDATA data base	Station name	Township	Range	Section	Coal mine	Site ID used by mine	Datum (feet)	Site type	Availability of	
										Flow data	Water-quality data
36	402510107001101	Near mouth of unnamed tributary to Fish Creek, at tipple.	5N	86W	02	Ekm	Site 65	6,800	--	--	--
37	402954107024601	Foidel Creek downstream from mine	5N	86W	28	Ekm	GS 2005	6,800	GS	X	--
38	402101107033001	Unnamed tributary to Foidel Creek, below spoil pile	5N	86W	32	Ekm	Site 109	6,930	GS	--	X
39	402005107045601	Unnamed tributary to Foidel Creek, near mouth	5N	86W	07	Ekm	Site 39	6,915	GS	X	X
40	402120107061601	Fish Creek at Routt County highway 29	5N	87W	25	Ekm	Site 16	6,810	C	--	X
41	402307107021401	Fish Creek - 26, downstream from mine	5N	86W	16	Ekm	GS 1002	6,670	GS	X	X
42	402140107030301	Foidel Creek downstream from mine	5N	86W	28	Ekm	Site 8	6,814	--	X	X
43	401939107051601	S tributary to Foidel Creek	4N	86W	07	Ekm	Site 12	6,985	--	X	X
44	402007107050401	Foidel Creek upstream from mining operations	4N	86W	07	Ekm	Site 14	6,910	--	X	X
45	401821107065801	S tributary to Foidel Creek	4N	87W	24	Ekm	Site 33	7,580	--	X	X
46	402108107033701	Discharge point for pond D - (NPDES 005)	5N	86W	32	Ekm	Site 84	--	--	X	--
47	402108107033801	Water sampling site	5N	86W	32	Ekm	Site 83	6,865	C	--	X
48	402105107033401	Water sampling site	5N	86W	32	Ekm	Site 7	6,850	F	--	X
49	402108107033701	Discharge point for pond E - (NPDES 006)	5N	86W	32	Ekm	Site 85	--	--	X	X
50	402320106590501	Middle Creek	5N	86W	13	Egy	Site 18	6,685	C	--	X
51	402414106583101	Middle Creek below confluence with Foidel Creek	5N	86W	12	Egy	Site 29	6,645	--	X	X
52	402320106585201	Old sediment pond site SE of Middle Creek	5N	86W	13	Egy	Site 99	6,690	--	X	--
53	402351106584501	Effluent monitoring site, Middle Creek Mine	5N	86W	12	Egy	Site 24	6,660	--	X	X
54	402341106584701	Effluent monitoring site, mine no. 3	5N	86W	13	Egy	Site 76	6,665	--	X	X
55	402511106594701	27A Fish Creek upstream	5N	86W	02	Fis	Site 27A	6,595	--	--	X
56	402510106594401	Pond E outlet at Fish Creek tipple	5N	86W	02	Fis	Site 62	6,610	--	--	X
57	402534106585301	Fish Creek downstream	5N	86W	01	Fis	GS 1003	6,510	GS	X	X
58	402003107081601	Fish Creek	4N	87W	11	Foi	GS 1001	6,920	GS	X	X
59	402000107104901	E tributary to Foidel Creek	4N	86W	07	Foi	Sed Pond A	6,930	--	--	X
60	402330107082101	Grassy Creek Culvert at County Road	5N	87W	15	Gra	SW-1	7,050	--	--	X
61	402312107092201	Grassy Creek downstream	5N	87W	21	Gra	SW-4	7,040	--	--	X
62	402306107092401	Tributary to Grassy Creek	5N	87W	21	Gra	SW-8	7,058	--	--	X
63	402217107100601	Grassy Creek	5N	87W	20	Gra	SW-2	7,170	--	--	X
64	402217107095901	Tributary to Grassy Creek	5N	87W	29	Gra	SW-7	7,250	--	--	X
65	402120107104201	West Fork Grassy Creek SE of Pit 5	5N	87W	32	Gra	SW-6	7,515	--	--	X
66	402131107104001	West Fork Grassy Creek	5N	87W	32	Gra	SW-5	7,450	--	--	X
67	402139107103701	West Fork Grassy Creek	5N	87W	29	Gra	SW-10	7,425	--	--	X
68	402135107102201	East Fork Grassy Creek	5N	87W	29	Gra	SW-3	7,455	--	--	X
69	402141107101001	Pond S of Pit 2	5N	87W	29	Gra	SW-9	7,690	--	--	X
70	402857107144801	Dry Creek, downstream, tipple area	6N	88W	14	Hyd	SW Down	6,470	--	X	X

Table 2.--Surface-water site descriptions and availability of data collected by agencies other than the U.S. Geological Survey--Continued

Map(1) number	Site identi- fication in COALDATA data base	Station name	Town- ship	Range	Sec- tion	Coal mine	Site ID used by mine	Datum (feet)	Site type	Availability of	
										Flow data	Water- quality data
71	402726107154001	Dry Creek, upstream, tippie area	6N	88W	22	Hyd	SW Up	6,485	--	X	X
72	402202107174601	Hayden Gulch upstream	5N	88W	30	Hyd	Upstream	7,475	--	X	X
73	402201107175001	Settling pond S of shopping area	5N	88W	30	Hyd	003	7,440	--	--	--
74	402159107180001	Pond, area A	5N	88W	30	Hyd	002	7,550	--	--	--
75	402159107180801	Settling pond NE of explosives area	5N	88W	30	Hyd	001	7,600	--	--	--
76	402151107175701	Pond HG-8	5N	88W	30	Hyd	004	7,400	--	--	--
77	402151107175901	Downstream sampling site, Hayden Gulch	5N	88W	30	Hyd	Downstream	7,370	--	X	X
78	402129107175501	Settling pond HG-5	5N	88W	31	Hyd	005	7,595	--	--	--
79	402156107175601	Facilities downstream site	5N	88W	30	Hyd	FAC DS	7,420	--	X	X
80	402642107153401	Dry Creek upstream of H.G. tippie and Dill Gulch	6N	88W	28	Hyd	S7	6,470	--	X	X
81	402004107183201	Dowden Gulch, below H.G. mine	4N	88W	08	Hyd	S1	7,140	--	X	X
82	401857107194601	Dowden Gulch at mouth	4N	88W	13	Hyd	S2	6,840	--	--	X
83	402004107202201	Hayden Gulch downstream of mine	5N	89W	36	Hyd	S3	7,160	--	X	X
84	401914107204201	Hayden Gulch at mouth	4N	89W	13	Hyd	S4	6,720	--	X	X
85	402855107070501	Yampa River upstream of Meadows strip mine	6N	87W	14	Med	Upstream	6,420	GS	--	X
86	402859107065601	Yampa River downstream of Meadows strip mine	6N	87W	14	Med	Downstream	6,425	GS	--	X
87	402811107062001	Coal View Gulch, 1 mile above mouth	6N	87W	24	Med	--	6,740	--	--	--
88	402759107062301	Outflow from sediment pond	6N	87W	23	Med	--	7,160	--	--	--
89	402743107062701	Outflow from sediment pond no. 1	6N	87W	23	Med	--	7,400	--	--	--
90	402733107063501	Spring	6N	87W	23	Med	--	7,200	--	--	--
91	402712107063201	Outflow from sediment pond no. 3	6N	87W	26	Med	--	7,300	--	--	--
92	402706107063401	Outflow from sediment pond	6N	87W	26	Med	--	7,210	--	--	--
93	402655107065501	Unnamed tributary to Grassy Creek, downstream of mine.	6N	87W	26	Med	--	7,020	--	--	--

Table 3.--Surface-water site descriptions and availability of data collected by the U.S. Geological Survey

[Datum, altitude above sea level of the reference mark used to measure the height of the stream; GS, gaging station; SM, surface-water measuring site; QW, water-quality sampling site; X, data available; --, no data]

Map number (plate 1)	Site identi- fication in COALDATA data base	Station name	Town- ship	Range	Sec- tion	Datum (feet)	Site type	Availability of Flow data	Water- quality data
94	09238000	Oak Creek near Oak Creek	3N	85W	06	7,850	GS	X	X
95	09239500	Yampa River at Steamboat Springs	6N	84W	17	6,695	GS	X	X
96	09243700	Middle Creek near Oak Creek	5N	86W	13	6,720	GS	X	X
97	09243800	Foidel Creek near Oak Creek	5N	86W	31	6,880	GS	X	X
98	09243900	Foidel Creek at mouth, near Oak Creek	5N	86W	14	6,695	GS	X	X
99	09244100	Fish Creek near Milner	5N	87W	34	6,911	GS	X	X
100	09244300	Grassy Creek near Mount Harris	6N	87W	34	6,580	GS	X	X
101	09244410	Yampa River below diversion, near Hayden	6N	87W	09	6,380	GS	X	X
102	09244415	Sage Creek above Sage Creek reservoir, near Hayden	5N	87W	19	7,220	GS	X	X
103	09244460	Watering Trough Gulch near Hayden	5N	88W	20	6,920	GS	X	X
104	09244464	Hubberson Gulch near Hayden	5N	88W	16	6,780	GS	X	X
105	09244470	Stokes Gulch near Hayden	6N	88W	22	6,375	GS	X	X
106	09246550	Yampa River below Elkhead Creek, near Craig	6N	90W	08	6,845	GS	X	X
107	09247600	Yampa River below Craig	6N	91W	09	--	GS	X	X
108	09248600	East Fork of Williams Fork above Willow Creek	3N	88W	05	7,100	GS	X	X
109	09249000	East Fork Williams Fork near Pagoda	4N	88W	18	6,840	GS	X	X
110	09249200	South Fork Williams Fork near Pagoda	3N	90W	24	7,235	GS	X	X
111	09249450	Waddle Creek near Pagoda	4N	90W	21	7,035	GS	X	X
112	09249455	Deep Rock Gulch near Hamilton	4N	90W	20	7,005	GS	X	X
113	09249750	Williams Fork at mouth, near Hamilton	6N	91W	31	6,118	SM	X	X
114	09250000	Milk Creek near Thornburgh	3N	92W	32	6,599	GS	X	X
115	09250400	Good Spring Creek at Axial	4N	93W	26	6,390	SM	X	X
116	09250507	Wilson Creek above Taylor Creek, near Axial	4N	93W	14	6,315	SM	X	X
117	09250510	Taylor Creek at mouth, near Axial	4N	93W	14	6,300	SM	X	X
118	09250600	Wilson Creek near Axial	4N	93W	14	6,300	SM	X	X
119	09250610	Jubb Creek near Axial	4N	93W	16	6,400	GS	X	X
120	09250700	Morgan Gulch near Axial	5N	93W	31	6,330	GS	X	X
121	09251000	Yampa River near Maybell	6N	95W	02	5,900	GS	X	X
122	401601107375400	Morapos Creek near Iles Grove	3N	91W	--	--	QW	--	X
123	401601107395300	Stinking Gulch near Thornburgh	4N	92W	36	--	QW	--	X

Table 3.--Surface-water site descriptions and availability of data collected by the U.S. Geological Survey--Continued

Map number (plate 1)	Site identi- fication in COALDATA data base	Station name	Town- ship	Range	Sec- tion	Datum (feet)	Site type	Availability of Flow data	Water- quality data
124	401747107161600	Willow Creek near Duncckley	4N	88W	22	--	QW	--	X
125	401816107011000	Trout Creek near Oak Creek	4N	86W	23	--	QW	--	X
126	401829107375600	Deer Creek near Hamilton	4N	91W	20	--	QW	--	X
127	401857107243500	South Fork Williams Fork at mouth, near Pagoda	4N	89W	17	--	QW	--	X
128	401913107204100	Hayden Gulch near Pagoda	4N	89W	13	--	QW	--	X
129	401925107523500	Collum Gulch near Axial	4N	93W	06	--	QW	--	X
130	401944107322900	Waddle Creek near Hamilton	4N	90W	07	--	QW	--	X
131	401948107445600	Milk Creek near Iles Grove	4N	92W	07	--	QW	--	X
132	402038107585100	Maudlin Gulch near Axial	4N	95W	01	--	QW	--	X
133	402145108001000	Jesse Gulch near Axial	5N	95W	24	--	QW	--	X
134	402330107082000	Grassy Creek at Grassy Gap	5N	87W	15	--	QW	--	X
135	402409107503600	Morgan Gulch near mouth, near Axial	5N	93W	09	--	QW	--	X
136	402530106585700	Fish Creek at mouth, near Milner	5N	86W	01	--	QW	--	X
137	402605107181500	Dill Gulch near Hayden	5N	89W	02	--	QW	--	X
138	402720106591200	Trout Creek above Milner	6N	86W	25	--	QW	--	X
139	402829107193700	Smuin Gulch near Hayden	6N	89W	14	--	QW	--	X
140	402836106550100	Cow Creek near Steamboat Springs	6N	85W	21	--	QW	--	X
141	402845107185100	Smuin tributary creek near Hayden	6N	89W	24	--	QW	--	X
142	402911107323600	Flume Gulch near Craig	6N	90W	18	--	QW	--	X
143	401650107291501	Waddle Creek No. 2	4N	90W	27	7,300	QW	--	X
144	401734107302801	Waddle Creek No. 5	4N	90W	28	7,035	QW	--	X
145	401753107305701	Waddle Creek No. 10	4N	90W	21	6,980	QW	--	X
146	401807107310501	Waddle Creek No. 12	4N	90W	21	6,940	QW	--	X
147	401816107311601	Waddle Creek No. 13	4N	90W	20	6,900	QW	--	X
148	401847107314601	Waddle Creek No. 15 (Hart Gulch near mouth)	4N	90W	17	6,820	QW	--	X
149	402000107315601	Waddle Creek No. 17	4N	90W	08	6,620	QW	--	X
150	401608107304601	Deep Rock Gulch No. 2	4N	90W	33	7,780	QW	--	X
151	401731107312101	Deep Rock Gulch No. 5	4N	90W	29	7,120	QW	--	X
152	401732107312201	Deep Rock Gulch No. 6 (Stinky Tributary)	4N	90W	29	7,120	QW	--	X
153	401733107312201	Deep Rock Gulch No. 7	4N	90W	29	7,100	QW	--	X
154	401532107340401	North Fork Deer Creek	3N	91W	01	7,220	QW	--	X
155	401529107273501	HSP1 (pond)	3N	90W	02	7,900	QW	--	X

Table 4.--Ground-water site descriptions and availability of data collected by agencies other than the U.S. Geological Survey

[Site-ID, site identification, a unique number used to identify a site; Datum, altitude above sea level of the reference mark used to measure the height of the stream; Apx, Apex mine number 2; Col, Colowyo strip mine; Edn, Edna strip mine; Egl, Eagle mines 5 and 9; Egy, Energy No. 3 strip mine; Ekm, Eckman Park and Energy No. 1 & 2 strip mines; Fis, Fish Creek tippie; Foi, Foidel Creek mine; Gra, Grassy Gap strip mine; Hyd, Hayden Gulch strip mine; Med, Meadows strip mine; X, data available; --, no data]

Map number (plate 2)	Site identification in COALDATA data base	Local well number (see fig. 2)	Latitude	Longitude	Mine	Site-ID used by mine	Datum (feet)	Availability of		
								Water-level data	Water-quality data	Well-construction data
1	401902107002001	SB00408614DBB	40°19'02"	107°00'20"	Apx	SEC14NWSE	7,180	--	X	X
2	401753107020101	SB00408622CCC	40°27'53"	107°02'17"	Apx	SEC22SWSW	7,420	--	X	X
3	401541107472201	SB00309302ACB	40°15'41"	107°47'22"	Col	6600N	6,580	X	X	--
4	401533107472101	SB00309302ACD	40°15'33"	107°47'21"	Col	6600S	6,590	X	X	--
5	401539107473401	SB00309302BDA	40°15'33"	107°47'21"	Col	6900N	6,700	X	X	--
6	401535107473301	SB00309302BDD	40°15'35"	107°47'33"	Col	6900S	6,760	X	X	--
7	401832107482701	SB00409315DDC	40°18'32"	107°48'27"	Col	GOSSARD WL	6,370	X	X	--
8	402204106582701	SB00508519BAC	40°22'04"	106°58'27"	Edn	TR-4	6,900	--	X	X
9	402103106583001	SB00508636AAD	40°21'03"	106°58'30"	Edn	TR-3	6,920	--	X	X
10	402017106585101	SB00408612AAC	40°20'17"	106°58'51"	Edn	TR-2	7,050	--	X	X
11	401909107000201	SB00408614	40°19'09"	107°00'02"	Edn	TR-1.5	7,160	--	X	X
12	401904107001101	SB00408614DAB	40°19'04"	107°00'11"	Edn	TR-1	7,160	--	X	X
13	401917106573101	SB00408517BCC	40°19'17"	106°57'31"	Edn	OK-2	7,210	--	X	X
14	401802106574201	SB00408519DDA	40°18'02"	106°57'42"	Edn	OK-1	7,280	--	X	X
15	402540107391801	SB00609131CCC	40°25'40"	107°39'18"	Egl	#5MINEWELL	6,190	--	X	X
16	402540107391802	SB00509106CA	40°25'40"	107°39'18"	Egl	#5A WELL	6,190	--	X	X
17	402525107381301	SB00509106AAD	40°25'25"	107°38'13"	Egl	OKIE PLAZA	6,552	--	X	X
18	402645107373601	SB00609129DBC	40°25'45"	107°37'36"	Egl	TR-4	6,304	--	X	X
19	402628107385801	SB00609131BAB	40°26'28"	107°38'58"	Egl	TR-7A	6,220	--	X	X
20	402546107381401	SB00609131DDA	40°25'46"	107°38'14"	Egl	81-01	6,413	--	X	X
21	402614107385101	SB00609131BDA	40°26'14"	107°38'51"	Egl	83-01	6,173	--	X	X
22	402534107371201	SB00509105AAA	40°25'34"	107°37'12"	Egl	83-02	6,683	--	X	X
23	402740107382701	SB00609119DAC	40°27'40"	107°38'27"	Egl	83-03	6,131	--	X	X
24	402615107385401	SB00609131BAD	40°26'15"	107°38'54"	Egl	259	6,128	--	X	X
25	402644107373601	SB00609129DCB	40°26'44"	107°37'36"	Egl	84-01	6,307	--	X	X
26	402608107380401	SB00609132BCA	40°26'08"	107°38'04"	Egl	#9MINEWELL	6,383	--	X	--
27	402706107372901	SB00609129ACB	40°27'06"	107°37'39"	Egl	81-03A	6,227	--	--	--
28	402725107391001	SB00609119CDD	40°27'25"	107°39'10"	Egl	81-04A	6,378	--	X	X
29	402818107375201	SB00609117CDC	40°28'18"	107°37'52"	Egl	81-19	6,138	--	X	X
30	402631107374401	SB00609129CDD	40°26'31"	107°37'44"	Egl	NORTHSPRNG	6,310	--	X	Spring
31	402636107401601	SB00609125BAC	40°26'36"	107°40'16"	Egl	HAXTONSPRG	6,600	--	X	Spring
32	402613107385101	SB00609131BDA	40°26'13"	107°38'51"	Egl	#1STRIPPIT	6,170	--	X	Spring
33	402746107381901	SB00609119DAA	40°27'46"	107°38'19"	Egl	YAW-1	6,130	--	X	X
34	402732107382701	SB00609119DDB	40°27'32"	107°38'27"	Egl	YAW-2	6,130	--	X	X
35	402706107380101	SB00609129BCA	40°27'06"	107°38'01"	Egl	YAW-3	6,130	--	X	X
36	402718107383801	SB00609130ABA1	40°27'18"	107°38'38"	Egl	YAW-5	6,130	--	X	X
37	402718107383601	SB00609130ABA2	40°27'18"	107°38'36"	Egl	YAW-6	6,130	--	X	X
38	402550107385901	SB00609131CAC	40°25'50"	107°38'59"	Egl	AVF-3	6,135	--	X	X
39	402601107385401	SB00609131BDD	40°26'01"	107°39'18"	Egl	AVF-5	6,135	--	X	X
40	402535107391801	SB00509106BBB	40°25'35"	107°39'18"	Egl	AVF-6	6,140	--	X	--
41	402327106585601	SB00508613	40°23'27"	106°58'56"	Egy	008-AV-1	6,679	--	X	X
42	402345106585301	SB00508613ABC	40°23'45"	106°58'53"	Egy	008-AV-2	6,676	--	X	X
43	402344106585101	SB00508613	40°23'44"	106°58'51"	Egy	008-AV-3	6,676	--	X	X
44	402343106585001	SB00508613	40°23'43"	106°58'50"	Egy	008-AV-4	6,676	--	X	X
45	402414106583001	SB00508612	40°24'14"	106°58'30"	Egy	008-AX-1	6,655	--	X	X
46	402344106585901	SB00508613	40°23'44"	106°58'59"	Egy	008-FM-6	6,673	--	X	X
47	402339106585601	SB00508613ABD	40°23'39"	106°58'56"	Egy	008-77-35	6,673	--	X	X
48	402313106585501	SB00508613DBC	40°23'13"	106°58'55"	Egy	008-77-42	6,741	--	X	X
49	402313106584701	SB00508613DCA	40°23'13"	106°58'47"	Egy	008-77-43	6,714	--	X	X
50	402320106584501	SB00508613DBA	40°23'20"	106°58'45"	Egy	008-77-58	6,720	--	X	X

Table 4.--Ground-water site descriptions and availability of data collected by agencies other than the U.S. Geological Survey--Continued

Map number (plate 2)	Site identification in COALDATA data base	Local well number (see fig. 2)	Latitude	Longitude	Mine	Site-ID used by mine	Datum (feet)	Availability of		
								Water- level data	Water- quality data	Well-con- struction data
51	402344106585801	SB00508613ABC1	40°23'44"	106°58'58"	Egy	008-79-6	6,676	--	X	X
52	402346106585901	SB00508613ABC2	40°23'46"	106°58'59"	Egy	008-79-7	6,696	--	X	X
53	402341106584201	SB00508613	40°23'41"	106°58'42"	Egy	008-AY-2	6,680	--	X	--
54	402509107003001	SB00508602	40°25'09"	107°00'30"	Egy	008-AU-1	6,616	--	X	X
55	402136107060101	SB00508725CCA	40°21'36"	107°06'01"	Ekm	006-AW-1	6,785	--	X	--
56	402300107033301	SB00508616DCA	40°23'00"	107°03'33"	Ekm	006-AW-2	6,690	--	X	--
57	402002107050301	SB00408607BDB	40°20'02"	107°05'03"	Ekm	009-S-10	6,905	--	X	--
58	401926107053201	SB00408618BCC	40°19'26"	107°05'32"	Ekm	026-SP-1	7,080	--	X	--
59	401951107045101	SB00408607DBA	40°19'51"	107°04'51"	Ekm	026-SP-2	6,990	--	X	--
60	401854107061201	SB00408713DDC	40°18'54"	107°06'12"	Ekm	026-SP-3	7,270	--	X	X
61	401828107065901	SB00408724BCA	40°18'28"	107°06'59"	Ekm	026-BRDH-1	7,530	--	X	X
62	401935107053201	SB00408618BBB	40°19'35"	107°05'32"	Ekm	026-79-4	7,087	--	X	--
63	401902107061901	SB00408713DBD	40°19'02"	107°06'19"	Ekm	026-79-6	7,290	--	X	--
64	401844107064101	SB00408713CCD	40°18'44"	107°06'41"	Ekm	026-79-7	7,358	--	X	X
65	401955107043401	SB00408607DAA	40°19'55"	107°04'34"	Ekm	009-79-4	7,003	--	X	--
66	402357106585101	SB00508612	40°23'57"	106°58'51"	Ekm	008-AY-1	6,680	--	X	--
67	402507107002901	SB00508602	40°25'07"	107°00'29"	Fis	008-AU-2	6,610	--	X	X
68	402504107002801	SB00508602CCA	40°25'04"	107°00'28"	Fis	008-AU-3	6,608	--	X	X
69	402501107003701	SB00508602	40°25'01"	107°00'27"	Fis	008-AU-4	6,608	--	--	--
70	402458107002701	SB00508602	40°24'58"	107°00'27"	Fis	008-AU-5	6,609	--	X	X
71	402456107002601	SB00508602	40°24'56"	107°00'26"	Fis	008-AU-6	6,610	--	X	X
72	402511106594501	SB00508602DAB	40°25'11"	106°59'45"	Fis	008-AW-3	6,595	--	X	X
73	402245107052901	SB00508724ACA	40°22'45"	107°05'29"	Foi	006-81-30	6,780	--	X	X
74	402244107041601	SB00508619AAC	40°22'44"	107°04'16"	Foi	006-81-31	6,805	--	X	--
75	402211107041801	SB00508619DDC	40°22'11"	107°04'18"	Foi	006-82-38	7,080	--	X	X
76	402143107041801	SB00508630ADC1	40°21'43"	107°04'18"	Foi	006-82-48	7,300	--	X	X
77	402143107041802	SB00508630ADC2	40°21'43"	107°04'18"	Foi	006-82-48A	7,300	--	X	X
78	402141107031201	SB00508628BCB	40°21'41"	107°03'17"	Foi	001-S-5	6,817	--	X	X
79	402114107033601	SB00508629DCD	40°21'14"	107°03'36"	Foi	001-S-6	6,830	--	X	X
80	402147107102801	SB00508729	40°21'47"	107°10'28"	Gra	MW-1	7,370	--	X	--
81	402220107100401	SB00508720	40°22'20"	107°10'04"	Gra	MW-2	7,230	--	X	--
82	402308107092501	SB00508716	40°23'08"	107°09'25"	Gra	MW-3	7,052	--	X	--
83	402148107100601	SB00508729	40°21'48"	107°10'06"	Gra	PIT2 SPOIL	7,670	--	X	--
84	402124107104801	SB00508729	40°21'24"	107°10'48"	Gra	PIT5 SPOIL	7,595	--	X	X
85	402204107180501	SB00508830ACA1	40°22'04"	107°18'05"	Hyd	LC-2	7,560	--	X	--
86	402204107180502	SB00508830ACA2	40°22'04"	107°18'05"	Hyd	UC-2	7,560	--	X	--
87	402203107174601	SB00508830BAB1	40°22'03"	107°17'46"	Hyd	LC-1	7,475	--	X	--
88	402203107174602	SB00508830BAB2	40°22'03"	107°17'46"	Hyd	UC-1	7,475	--	X	--
89	402154107175601	SB00508830DBB	40°21'54"	107°17'56"	Hyd	LC-4	7,425	--	X	--
90	402144107174201	SB00508830DDD	40°21'44"	107°17'42"	Hyd	UC-3	7,530	--	X	--
91	402157107180901	SB00508830BCA	40°21'57"	107°18'09"	Hyd	LC-3	7,655	--	X	--
92	402814107143901	SB00608822BA	40°28'14"	107°14'39"	Hyd	UPDIP WELL	6,380	--	X	--
93	402815107142201	SB00608815DD	40°28'15"	107°14'22"	Hyd	DWNDIPWELL	6,380	--	X	--
94	402854107070001	SB00608714BDA	40°28'54"	107°07'00"	Med	CRUSH WELL	6,400	--	X	X
95	402900107070401	SB00608714BAC	40°29'00"	107°07'04"	Med	TRAIL WELL	6,480	--	--	--

Table 5.--Ground-water site descriptions and availability of data collected by the U.S. Geological Survey

[Datum, altitude of land surface above sea level; USGS, U.S. Geological Survey; BLM, U.S. Bureau of Land Management; CONSOL, Consolidation Coal Company; X, data available; --, no data]

Map number (plate 3)	Site identification in COALDATA data base	Local well number (see fig. 2)	Datum ¹ (feet)	Depth of well below land surface (feet)	Owner	Availability of		
						Water-level data	Water-quality data	Well-construction data
1	401500107363401	SB00309109AAC	7,150	8.00	Hill Forbes	X	--	X
2	401500107431401	SB00309209BAD	6,930	30.0	Jim Leander	X	X	X
3	401503107363901	SB00309109ABA1	--	29.0	J. Cooper	X	X	X
4	401503107460101	SB00309312AAB	6,810	--	Harry Kourlis	X	--	X
5	401506107474401	SB00309302CDC	7,160	--	--	X	--	X
6	401508107485401	SB00309303DCC	7,360	--	--	X	--	X
7	401510107483101	SB00309310DCC	7,340	198	USGS	X	--	X
8	401516107475000	SB00309303CDB	--	--	U.S. Government	X	X	--
9	401535107472001	SB00309302ACC	6,800	--	--	X	--	X
10	401539107472601	SB00309302ACB	--	30.0	Colowyo Coal Co.	X	X	X
11	401619107485401	SB00309303CAC	7,200	36.0	--	X	--	X
12	401622107320201	SB00409032BCD	7,920	600	--	X	--	X
13	401708107473301	SB00409326CAD	6,470	27.0	Walter Mack	X	--	X
14	401729107312701	SB00409029ABA	7,200	--	Phillips Petroleum	X	--	X
15	401741107453901	SB00409230BBC	6,300	30.0	Jim Leander	X	--	X
16	401801107470301	SB00409323DAC	--	11.0	Tom Wheeler	X	X	X
17	401806107470901	SB00409323DAB	--	120	Tom Wheeler	X	--	X
18	401829107440501	SB00409220ABC	6,400	63.0	Tom Moore	X	--	X
19	401833107333501	SB00409113DCC	7,270	500	--	X	--	X
20	401838107411601	SB00409223BBB	--	2,930	Texaco Oil Co.	X	--	X
21	401847107314801	SB00409017CAD	6,830	--	H. Tuttle	X	--	X
22	401854107474901	SB00409314CBD	6,310	70.0	Bill Gossard	X	X	X
23	401855107351401	SB00409115DAD	7,240	--	Phillips Petroleum	X	--	X
24	401857107385201	SB00409118DDB	6,430	--	Al Camilletti	X	--	X
25	401906107472901	SB00409314BDD1	--	100	Bill Gossard	X	X	X
26	401943107392401	SB00409212DCA	--	150	Al Camilletti	X	--	X
27	401944107352901	SB00409110DDB	7,020	--	Phillips Petroleum	X	--	X
28	401944107464901	SB00409312CBC	--	30.0	Bill Gossard	X	--	X
29	401953107384701	SB00409107DDB	6,380	49.0	H. Rakestraw	X	--	X
30	402001107481301	SB00509335CDC	6,310	70.0	--	X	--	X
31	402013107374901	SB00509132CDA	--	380	Al Camilletti	X	--	X
32	402019107385301	SB00509131DBB	6,490	--	Moffat County	X	--	X
33	402049107325001	SB00509136AAA	6,800	205	Durham Livestock Co.	X	X	X
34	402116107361801	SB00509128DAC	--	--	Myron Jeffcoat	X	--	X
35	402123107365301	SB00509128CAB	--	12.0	J.E. Carpenter	X	--	X
36	402129107265201	SB00509025BCD1	6,600	5.00	L. Seeley	X	--	X
37	402146107294601	SB00509028ABA1	6,420	12.0	D. Seeley	X	--	X
38	402201107304601	SB00509020DDB	6,370	30.0	Hamilton	X	--	X
39	402203107304602	SB00509020DAC2	6,360	460	Gilbert Myers	X	--	X
40	402204107304501	SB00509020DAC1	6,370	35.0	Gilbert Myers	X	--	X
41	402208107304201	SB00509020DAC	6,390	480	Gilbert Myers	X	--	X
42	402208107315201	SB00509019DAC	--	50.0	Jacob Hamilton	X	--	X
43	402211107361901	SB00509121DAC	6,260	53.0	R.E. Southard	X	--	X
44	402211107363501	SB00509121DBC	--	250	Shirley Brown	X	--	X
45	402211107363701	SB00509121DBC	--	190	Bill Kendall	X	--	X
46	402212107363402	SB00509121DBC	--	25.0	Shirley Brown	X	--	X
47	402216107390801	SB00509119CAB	6,920	180	Mead Brothers	X	X	X
48	402244107385401	SB00509119ABB	--	180	Mead Brothers	X	--	X
49	402301107445301	SB00509208BCA	6,240	205	--	X	X	--
50	402316107282401	SB00509015ADC1	--	--	--	--	X	Spring
51	402347107351900	SB00509110DCD	--	--	--	--	X	Spring
52	402347107352201	SB00509110DCD1	--	--	--	--	X	Spring
53	402416107275801	SB00509011BCB	--	--	--	X	--	--
54	402505107435501	SB00509204BBB	6,380	205	--	X	X	--
55	402518107381801	SB00509106ADA	6,560	--	Empire Energy Co.	X	--	X

Table 5.--Ground-water site descriptions and availability of data collected by
the U.S. Geological Survey--Continued

Map number (plate 3)	Site identi- fication in COALDATA data base	Local well number (see fig. 2)	Datum ¹ (feet)	Depth of well below land surface (feet)	Owner	Availability of		
						Water- level data	Water- quality data	Well-con- struction data
56	402520107292300	SB00509004AAC1	--	--	--	X	--	--
57	402529107445901	SB00609232CBC	6,310	1,100	--	X	X	X
58	402541107420801	SB00609234ACD	6,100	60.0	Elgen Lawrence	X	--	X
59	402543107423201	SB00609234BDC	6,120	20.0	Elgen Lawrence	X	--	X
60	402549107270300	SB00609035DAB1	--	--	--	X	--	--
61	402558107421101	SB00609234ABA	6,240	832	Elgen Lawrence	X	X	X
62	402613107390801	SB00609136BBD1	--	1,100	--	X	X	X
63	402627107381801	SB00609131AAA	--	100	Brasel and Simms	X	--	X
64	402647107400600	SB00609225BAD	--	--	--	--	X	--
65	402647107400601	SB00609225BAD1	6,610	600	Haxton Iva	X	--	--
66	402649107382001	SB00609130DAA	--	--	W.R. Grace Co.	X	--	X
67	402658107305501	SB00609029BDD	6,500	340	Clyde Skidmore	X	--	X
68	402659107352801	SB00609127BDD1	--	1,100	Paul Schipke	X	X	X
69	402718107333201	SB00609112CCA1	--	--	--	X	X	X
70	402722107310701	SB00609020CDC	--	600	Clyde Skidmore	X	--	X
71	402734107301501	SB00609021CBC	--	360	Anton Knez	X	X	X
72	402738107422001	SB00609222AAB	6,400	800	Ed Johnston	X	--	X
73	402743107364702	SB00609121CAB	6,160	120	Ed Loudy	X	--	X
74	402744107364901	SB00609121CAB	--	700	Ed Loudy	X	--	X
75	402811107295301	SB00609021BAB	--	40.0	Mike Voloshin	X	--	X
76	402812107271401	SB00609014DCD1	6,580	182	E.G. Deakins	X	X	X
77	402814107321101	SB00609019BAB	6,460	360	Eugene Biskup	X	X	X
78	402814107490001	SB00609315DBB	6,120	425	U.S. Dept. of Conservation.	X	X	X
79	402815107271101	SB00609014DCD2	6,610	876	E.G. Deakins	X	--	X
80	402824107401001	SB00609213BDA	6,350	20.0	John Salioko	X	--	X
81	401735107344901	SB00409126BAD1	8,123	115	BLM	X	--	X
82	401630107310702	SB00409032AAD2	7,739	--	CONSOL	X	--	X
83	401532107280202	SB00309002ACB	7,940	517	--	X	X	X
84	401706107313301	SB00409029DBB	7,400	--	CONSOL	--	X	Spring
85	401752107310501	SB00409021CBC	7,000	--	CONSOL	--	X	Spring
86	401613107325201	SB00409031CAA	7,640	--	CONSOL	--	X	Spring
87	401646107314601	SB00409029CAC	7,768	--	--	X	X	--
88	401726107312301	SB00409029AAC1	7,240	--	--	X	X	--
89	401726107312302	SB00409029AAC2	7,240	--	--	X	X	--
90	401654107312401	SB00409029DCA	7,560	--	--	X	--	--
91	401551107312802	SB00409032DCC2	8,408	221	BLM	X	--	X
92	401504107310801	SB00409005DDC	8,200	--	CONSOL	--	X	Spring
93	401657107312901	SB00409029DBD	7,560	--	CONSOL	--	X	Spring
94	401729107312301	SB00409029AAB1	7,160	--	CONSOL	--	X	Spring
95	401730107312501	SB00409029AAB2	7,160	--	CONSOL	--	X	Spring
96	401748107311102	SB00409020DDA2	7,020	--	CONSOL	--	X	Spring
97	401748107311101	SB00409020DDA1	7,020	17.0	CONSOL	X	X	X
98	4019411073325901	SB00409007CAA	6,820	--	Almon Durham	X	--	X
99	401902107315101	SB00409017BDB	6,800	--	CONSOL	--	X	Spring
100	401749107311201	SB00409020DDA1	7,020	17.0	CONSOL	X	--	X
101	401748107311501	SB00409020DDA2	7,040	22.0	CONSOL	X	X	X
102	401747107311401	SB00409020DDA3	7,020	19.0	--	X	--	X
103	401745107304401	SB00409021CDB	7,040	26.0	CONSOL	X	--	X
104	401747107311301	SB00409020DDA4	7,020	25.7	CONSOL	X	--	X
105	401746107311301	SB00409020DDA5	7,040	24.0	CONSOL	X	X	X
106	401745107304301	SB00409021CDB1	7,060	25.0	CONSOL	X	X	X
107	401743107304101	SB00409021CDD	7,060	26.0	CONSOL	X	--	X
108	401742107304201	SB00409021CDC	7,060	26.0	CONSOL	X	X	X
109	401744107304501	SB00409021CDB2	7,040	26.5	--	X	--	X
110	401743107304601	SB00409021CDB3	7,040	26.0	CONSOL	X	X	X

Table 5.--Ground-water site descriptions and availability of data collected by the U.S. Geological Survey--Continued

Map number (plate 3)	Site identification in COALDATA data base	Local well number (see fig. 2)	Datum ¹ (feet)	Depth of well below land surface (feet)	Owner	Availability of		
						Water-level data	Water-quality data	Well-construction data
111	401815107364801	SB00409121DCC	6,940	--	CONSOL	--	X	Spring
112	401819107362601	SB00409121DAB	7,100	--	CONSOL	--	X	Spring
113	401813107362501	SB00409121DAC	7,120	--	CONSOL	--	X	Spring
114	401825107334601	SB00409124BAA	7,300	--	CONSOL	--	X	Spring
115	401911107325901	SB00409118BAC	7,200	--	CONSOL	--	X	Spring
116	401919107325701	SB00409118BAA	7,000	--	CONSOL	--	X	Spring
117	401827107321601	SB00409118BAA	6,960	--	CONSOL	--	X	Spring
118	401817107321601	SB00409020BBC	6,940	--	CONSOL	--	X	Spring
119	401744107304401	SB00409021CDB	7,040	--	CONSOL	--	X	Spring
120	401532107280201	SB00309002ACB1	7,940	583	BLM	X	X	X
121	401532107280203	SB00309002ACB2	7,940	372	BLM	X	X	X
122	401551107312801	SB00409032DCC	8,408	337	BLM	X	X	X
123	401617107310001	SB00409033BCC	7,911	340	BLM	X	--	X
124	401600107314002	SB00409032CDA2	8,413	425	BLM	X	--	X
125	401600107314003	SB00409032CDA3	8,413	310	BLM	X	X	X
126	401600107314101	SB00409001CDA1	8,412	350	BLM	X	X	X
127	401630107310701	SB00409032AAD1	7,738	500	BLM	X	X	X
128	401630107310601	SB00409032AAD2	7,739	303	BLM	X	X	X
129	401625107313101	SB00409032ACB1	7,973	300	BLM	X	X	X
130	401625107313102	SB00409032ACB2	7,973	103	BLM	X	X	X
131	401745107341301	SB00409123DDD1	7,920	156	BLM	X	X	X
132	401745107341302	SB00409123DDD2	7,920	115	BLM	X	X	X
133	401744107341301	SB00409123DDD3	7,921	153	BLM	X	--	X
134	401744107341302	SB00409123DDD4	7,921	107	BLM	X	--	X
135	401748107333601	SB00409124DCB1	7,700	162	BLM	X	X	X
136	401748107333602	SB00409124DCB2	7,700	118	BLM	X	X	X
137	401747107333601	SB00409124DCB3	7,700	171	BLM	X	--	X
138	401747107333602	SB00409124DCB4	7,700	117	BLM	X	--	X
139	401735107344902	SB00409126BAD	8,123	34.0	--	X	X	X
140	401552107312701	SB00409032DCC	8,408	346	BLM	X	--	X
141	401600107314001	SB00409032CDA	8,413	495	BLM	X	X	X
142	401617107310002	SB00409033BCC	7,911	312	BLM	X	X	X
143	401552107035301	SB00308605ACB1	7,550	--	R. Carnahan	X	--	X
144	401611106575001	SB00408531DDC1	7,600	30.0	George Stieduhar	X	X	X
145	401702107111501	SB00408729CDD1	7,660	300	--	X	--	X
146	401729106575400	SB00408730	--	--	--	--	X	Spring
147	401729106575701	SB00408530ACD1	--	260	Pittsburg Midway Co.	X	X	X
148	401735107104201	SB00408729ADA1	7,630	8.00	Robert Kagie	X	--	X
149	401751107045201	SB00408630ABA1	--	--	--	--	X	Spring
150	401754107020501	SB00408622CCC1	7,400	--	Steel	X	--	X
151	401801107015101	SB00408622CDB1	7,380	12.0	Edwin Yorty	X	X	X
152	401804107062101	SB00408724DBD	7,890	263	U.S. Government	X	X	X
153	401826107070401	SB00408724BCB	7,510	145	U.S. Government	X	X	X
154	401828107020601	SB00408622BCB1	--	--	--	--	X	Spring
155	401837107054501	SB00408619BBD	7,520	111	U.S. Government	X	X	X
156	401842107032201	SB00408620AAA1	7,100	--	B. Flatten	X	X	X
157	401847107003101	SB00408614DCC1	7,220	20.0	U.S. Government	X	X	X
158	401847107003301	SB00408614CDD	--	--	Foidel Coal Co.	X	X	--
159	401850107003301	SB00408614CDD2	7,260	140	U.S. Government	X	--	X
160	401857106573101	SB00408517CCB1	7,230	--	E. Lombardi	X	--	X
161	401904107060800	SB00408713AAD	--	--	U.S. Government	X	X	--
162	401904107060801	SB00408713DAA	7,100	173	U.S. Government	X	X	X
163	401904107202601	SB00408913BDC1	6,790	--	Lee Roads	X	--	X
164	401909107221701	SB00408915ACA1	6,670	20.0	L. Wyran	X	--	X
165	401912107031300	SB00408616CBA	--	--	Foidel Coal Co.	X	X	--

Table 5.--Ground-water site descriptions and availability of data collected by
the U.S. Geological Survey--Continued

Map number (plate 3)	Site identi- fication in COALDATA data base	Local well number (see fig. 2)	Datum ¹ (feet)	Depth of well below land surface (feet)	Owner	Availability of		
						Water- level data	Water- quality data	Well-con- struction data
166	401912107031301	SB00408616CBA	7,020	122	U.S. Government	X	X	X
167	401913107214301	SB00408914BBD1	6,740	--	V. Preece	X	--	X
168	401914107244301	SB00508931DDC1	--	100	Gail Coulverwel	X	--	X
169	401915107244301	SB00408917ABC1	--	20.0	H. Wynan	X	--	X
170	401922107050101	SB00408618BDA1	--	--	--	X	--	--
171	401922107050701	SB00408618BDA	7,160	180	U.S. Government	X	X	X
172	401935106595401	SB00408612CBD1	7,240	750	USGS	X	X	X
173	401939107091201	SB00408710CCD1	7,010	8.00	K. Rhodes	X	--	X
174	401941107002001	SB00408611DCC	7,490	1,030	--	X	X	X
175	401941107222101	SB00408910DBC1	--	210	A.J. Klein	X	--	X
176	401950107103300	SB00408709CBC	--	--	Dale Weldon	X	X	--
177	401950107103301	SB00408709CBC	7,080	26.0	--	X	--	X
178	401952107103101	SB00408709CBC1	7,090	--	Dale Weldon	X	--	X
179	402005107200101	SB00408912ABD1	--	--	--	--	X	Spring
180	402013107245201	SB00508931DDC1	--	--	--	X	X	--
181	402015107014501	SB00408610BAD	6,940	100	U.S. Government	X	X	X
182	402015107015500	SB00408610BAD	--	--	Foidel-Midway Co.	X	X	--
183	402040106591001	SB00508636CAC1	7,160	716	USGS	X	--	X
184	402041107013301	SB00508634CAB1	6,920	200	D. Hayes	X	X	X
185	402048107203201	SB00508923CCC	--	--	--	X	X	--
186	402056106590901	SB00508636BDD1	7,080	560	Perley Green	X	X	X
187	402106107011801	SB00508622DCC1	6,820	--	William Rogers	X	--	X
188	402108107220301	SB00508923CCC	7,360	280	--	X	X	X
189	402112107050801	SB00508630CCC1	--	350	Dale Kemeer	X	X	X
190	402113106590501	SB00508636BAA2	7,080	750	Perley Greene	X	X	X
191	402114107034300	SB00508629CDD1	6,820	126	U.S. Government	X	X	X
192	402114107034301	SB00508629CDD2	6,820	266	U.S. Government	X	X	X
193	402118107033101	SB00508629DCC1	--	126	Energy Fuels Co.	X	X	X
194	402124107031801	SB00508629DDB	6,820	126	Tom Greenhaugh	X	X	X
195	402128106583901	SB00508625DDB1	--	15.0	Perley Green	X	--	X
196	402149107013801	SB00508627BCA1	6,840	--	Robert George	X	X	X
197	402156107015201	SB00508627BBC1	6,810	14.0	Robert George	X	X	X
198	402157106583801	SB00508625AAC1	--	20.0	Robert McKune	X	--	X
199	402158106570701	SB00408529BAC1	7,060	40.0	Giacomo Camilletti	X	--	--
200	402202107022101	SB00508628ABB1	6,800	14.0	Vaughn Hockaday	X	X	X
201	402202107160801	SB00508809CDB1	6,750	15.0	H. Green	X	--	X
202	402204107012201	SB00508627BAA	6,820	18.0	U.S. Government	X	X	X
203	402204107022801	SB00508628BAA1	--	--	--	X	X	--
204	402205107013201	SB00508627BAB1	6,800	14.0	Don Hinkle	X	X	X
205	402209107023101	SB00508621CDD	6,840	282	U.S. Government	X	X	X
206	402212107011801	SB00508622DCC1	--	--	--	X	X	--
207	402213107024401	SB00508621CCA1	--	--	--	--	X	Spring
208	402217107113601	SB00508719CDA2	7,380	18.0	Leonard Yoast	X	--	--
209	402221107005201	SB00508622DAD1	--	--	--	--	X	Spring
210	402222107113001	SB00508719CDA1	7,370	90.0	Leonard Yoast	X	X	X
211	402231107111601	SB00508719ABA2	7,340	62.0	Peabody Coal Co.	X	X	X
212	402231107111602	SB00508719ABA1	7,320	58.5	Peabody Coal Co.	X	X	X
213	402231107111603	SB00508719DBA1	7,580	133	Peabody Coal Co.	X	--	X
214	402231107111604	SB00508719DBA2	7,580	146	Peabody Coal Co.	X	--	X
215	402231107111605	SB00508730ABA1	7,740	9.50	Peabody Coal Co.	X	--	X
216	402231107111606	SB00508730ABA2	7,740	26.3	Peabody Coal Co.	X	--	X
217	402231107111607	SB00508729BBA1	7,980	65.0	Peabody Coal Co.	X	--	X
218	402231107111609	SB00508720CBA1	7,800	48.0	Peabody Coal Co.	X	--	X
219	402231107111611	SB00508720BBA1	7,700	27.0	Peabody Coal Co.	X	--	X
220	402231107111612	SB00508720BBA2	7,700	37.4	Peabody Coal Co.	X	X	X

Table 5.--Ground-water site descriptions and availability of data collected by
the U.S. Geological Survey--Continued

Map number (plate 3)	Site identi- fication in COALDATA data base	Local well number (see fig. 2)	Datum ¹ (feet)	Depth of well below land surface (feet)	Owner	Availability of		
						Water- level data	Water- quality data	Well-con- struction data
221	402231107111613	SB00508717CBC2	7,540	85.7	Peabody Coal Co.	X	--	X
222	402231107111614	SB00508717CBC1	7,540	101	Peabody Coal Co.	X	--	X
223	402231107111615	SB00508717BCC2	7,400	79.5	Peabody Coal Co.	X	--	X
224	402231107111616	SB00508717BCC1	7,400	104	Peabody Coal Co.	X	X	X
225	402231107111617	SB00508717ADC1	7,560	90.0	Peabody Coal Co.	X	X	X
226	402231107111618	SB00508717ADC2	7,560	109	Peabody Coal Co.	X	--	X
227	402231107111619	SB00508717DAC1	7,760	25.0	Peabody Coal Co.	X	--	X
228	402231107111620	SB00508717DAC2	7,760	43.0	Peabody Coal Co.	X	--	X
229	402231107111630	SB00508719ABB1	7,300	47.0	Peabody Coal Co.	X	X	X
230	402231107111631	SB00508719ABB2	7,300	47.0	Peabody Coal Co.	X	X	X
231	402231107111632	SB00508719ABB3	7,300	54.0	Peabody Coal Co.	X	X	X
232	402231107111633	SB00508719ABB4	7,300	54.0	Peabody Coal Co.	X	X	X
233	402231107111634	SB00508719DBA3	7,580	135	Peabody Coal Co.	X	X	X
234	402231107111635	SB00508719DBA4	7,580	135	Peabody Coal Co.	X	--	X
235	402231107111636	SB00508719DBA5	7,580	151	Peabody Coal Co.	X	X	X
236	402231107111637	SB00508719DBA6	7,580	151	Peabody Coal Co.	X	X	X
237	402231107111638	SB00508719DBA7	7,580	170	Peabody Coal Co.	X	--	X
238	402231107111646	SB00508718CAC1	7,200	39.1	USGS	X	X	X
239	402231107111647	SB00508718CAC2	7,200	29.4	USGS	X	--	X
240	402231107111648	SB00508719BAA1	7,240	44.0	USGS	X	--	X
241	402231107111649	SB00508719BAA2	7,240	59.0	USGS	X	--	X
242	402231107111650	SB00508719BAA3	7,240	45.0	USGS	X	--	X
243	402231107111651	SB00508719CCB1	7,360	40.0	USGS	X	--	X
244	402231107111652	SB00508719CCB2	7,360	45.0	USGS	X	--	X
245	402231107111653	SB00508719CCB3	7,360	20.0	USGS	X	X	X
246	402231107111654	SB00508719CCB4	7,360	20.0	USGS	X	--	X
247	402231107111655	SB00508719CCA1	7,360	50.0	USGS	X	--	X
248	402231107111656	SB00508719CDC1	7,360	40.0	USGS	X	--	X
249	402231107111657	SB00508719CDC2	7,360	40.0	USGS	X	X	X
250	402231107111658	SB00508719CDC3	7,360	30.0	USGS	X	--	X
251	402232107234201	SB00508920ACD1	7,820	640	BLM	X	X	X
252	402236107025301	SB00508621BCC	6,760	198	U.S. Government	X	X	X
253	402239107040301	SB00508620BCB	6,820	30.0	U.S. Government	X	X	X
254	402244107165001	SB00508820ACA1	--	49.0	--	X	X	--
255	402244107165002	SB00508820DAB1	--	--	--	X	--	--
256	402250107151801	SB00508822BBC1	--	--	--	X	X	--
257	402250107151802	SB00508822BBC2	7,060	235	--	X	--	X
258	402257107015301	SB00508621AAA	6,700	207	U.S. Government	X	X	X
259	402303107215701	SB00508915CAB	7,400	440	--	X	X	X
260	402316107182301	SB00508913ACC	7,000	720	--	X	X	X
261	402327106590000	SB00508613ACC	--	--	Foidel-Midway Co.	X	X	--
262	402327106590001	SB00508613ACC	6,680	237	U.S. Government	X	X	X
263	402327107161301	SB00508816CAB1	--	62.0	--	X	X	--
264	402334106574601	SB00508518ACA1	6,800	80.0	Wegener	X	--	X
265	402336106574400	SB00508518ACA	6,780	105	Truman Yowell	X	X	X
266	402344107195001	SB00508912CCD1	--	--	P. Barns	X	X	X
267	402346106590000	SB00508613ABB	--	--	Foidel-Midway Co.	X	X	--
268	402346106590001	SB00508613ABB	6,660	100	U.S. Government	X	X	X
269	402356107171701	SB00508808CDC	6,780	80.0	U.S. Dept. of Conservation.	X	X	X
270	402414106580701	SB00508507CBC1	6,680	180	--	X	--	X
271	402414106585701	SB00508612DBB1	--	--	--	X	X	--
272	402415107184401	SB00508807CBB1	6,680	85.0	Marvin D. Barnes	X	--	X
273	402430107070801	SB00508711BDB1	--	--	--	X	--	--
274	402438106572001	SB00508508BBC1	6,960	--	Streeter	X	--	X
275	402440106591001	SB00508612BAC	--	--	--	X	X	--

Table 5.--Ground-water site descriptions and availability of data collected by
the U.S. Geological Survey--Continued

Map number (plate 3)	Site identi- fication in COALDATA data base	Local well number (see fig. 2)	Datum ¹ (feet)	Depth of well below land surface (feet)	Owner	Availability of		
						Water- level data	Water- quality data	Well-con- struction data
276	402459107154901	SB00508804DBC1	--	80.0	G.A. Bowen	X	X	X
277	402514106561501	SB00508505ADD1	--	91.0	J.T. Kelton	X	X	X
278	402514107065001	SB00508702ACC1	--	--	--	X	--	--
279	402514107065002	SB00508702ACC2	--	--	--	X	--	--
280	402515107005401	SB00508603ADC1	6,700	460	Arther Hudspeth	X	X	X
281	402517106590701	SB00508601BDA1	6,600	--	--	X	--	--
282	402526107231601	SB00508904BBA1	6,920	80.0	Otis Lyons	X	X	X
283	402535106582301	SB00608531CCC1	6,580	--	V. Lazer	X	--	X
284	402535106582501	SB00608531CCC1	6,600	--	Adams	X	--	X
285	402535107234401	SB00608932DDB	7,060	--	Otis Lyons	X	--	X
286	402545107073901	SB00608734DDB1	--	--	--	X	X	--
287	402600107160001	SB00608833DBB	6,500	205	U.S. Dept. of Conservation.	X	X	X
288	402609107124801	SB00608836BDC1	--	60.0	William Coley	X	X	X
289	402614107125001	SB00608836BDB1	6,650	66.0	Allen Codey	X	--	X
290	402620107072924	SB00608734DDA1	6,800	52.0	Peabody Coal Co.	X	--	X
291	402620107072925	SB00608734DAA1	6,800	25.0	Peabody Coal Co.	X	--	X
292	402620107072926	SB00608734DAD1	6,760	64.0	Peabody Coal Co.	X	--	X
293	402620107072928	SB00608734ADA1	6,760	50.5	Peabody Coal Co.	X	X	X
294	402620107072929	SB00608734ADA2	6,740	43.5	Peabody Coal Co.	X	X	X
295	402620107072930	SB00608734ADB3	6,720	38.5	Peabody Coal Co.	X	X	X
296	402620107072932	SB00608734ACA1	6,640	143	Peabody Coal Co.	X	X	X
297	402620107072933	SB00608734ACA2	6,640	141	Peabody Coal Co.	X	X	X
298	402620107072935	SB00508703DAC1	6,840	260	Peabody Coal Co.	X	X	X
299	402620107072939	SB00608722DDD1	--	--	--	X	X	--
300	402620107072950	SB00608734DDB1	6,740	261	Peabody Coal Co.	X	X	X
301	402620107072951	SB00608734DDB2	6,740	78.0	Peabody Coal Co.	X	X	X
302	402620107072952	SB00508703DAA1	6,780	350	Peabody Coal Co.	X	X	X
303	402620107072953	SB00508711BDB1	7,020	300	Peabody Coal Co.	X	X	X
304	402620107072955	SB00508711BDB2	7,020	300	Peabody Coal Co.	X	X	X
305	402620107072956	SB00608734BAB1	--	--	--	X	X	--
306	402620107072958	SB00608734	--	--	Peabody Coal Co.	X	X	--
307	402627107115900	SB00608731BBB	--	--	Jim Rowley	X	X	--
308	402627107115901	SB00608731BBB	6,580	--	Jim Rowley	X	--	X
309	402633107080101	SB00608727DCA	--	10.0	Seneca Coal Co.	X	X	X
310	402641107090201	SB00608728DCA1	6,600	--	H. Rhodes	X	--	X
311	312643107153301	SB00608828DAD1	6,460	160	Cross Mountain Ranch	X	X	X
312	402646106585501	SB00608625DBC1	6,550	13.0	Arnold Lieske	X	--	X
313	402647106585000	SB00608625DBD	--	--	Arnold Lieske	X	X	--
314	402647106585001	SB00608625DBD	6,580	12.0	Arnold Lieske	X	--	X
315	402709106591201	SB00608625BDB1	6,590	116	Dan Bedell	X	X	X
316	402709107252501	SB00608930BAB1	--	--	--	X	X	--
317	402710106591401	SB00608625BAC1	6,600	116	Bedells	X	--	X
318	402738107011300	SB00608622DBC	--	--	--	X	X	--
319	402738107011301	SB00608622DBC	6,580	--	--	--	--	Spring
320	402804107095201	SB00608720AAC1	6,500	--	Beryl Rienks	X	--	X
321	402809106595501	SB00608623ABA1	6,600	260	Wyman	X	--	X
322	402815107003001	SB00608623BBA1	6,490	150	E.C. Black	X	--	X
323	401710107562800	SB00409428DBB	--	--	W.R. Grace Co.	--	X	--
324	401759107555400	SB00409422CBC	--	--	W.R. Grace Co.	--	X	--
325	401810107553200	SB00409422BDD	--	--	W.R. Grace Co.	--	X	--
326	402120106535201	SB00508526CCC1	6,990	105	Don Zoller	--	X	X
327	402146106543401	SB00508527ACC1	7,100	17.0	W. Whitercotton	X	--	X
328	329157106543101	SB00508527ABC1	7,110	17.0	W. Whitercotton	X	--	X
329	402309106520801	SB00508513DDB	6,920	15.0	--	X	--	--
330	402321106534601	SB00508514CBA	7,160	--	--	X	--	--

Table 5.--Ground-water site descriptions and availability of data collected by
the U.S. Geological Survey--Continued

Map number (plate 3)	Site identi- fication in COALDATA data base	Local well number (see fig. 2)	Datum ¹ (feet)	Depth of well below land surface (feet)	Owner	Availability of		
						Water- level data	Water- quality data	Well-con- struction data
331	402324106545001	SB00508515CAB1	7,600	302	--	X	--	--
332	402329106541001	SB00508515ADC1	7,300	200	Bill Bulden	X	--	X
333	402338106503600	SB00508417BCB	--	--	R. Rubish	--	X	--
334	402345106503601	SB00508417BBC1	6,820	155	Vernon Summer	X	--	X
335	402349106535201	SB00508514BBB1	7,360	320	Gary Hertzog	X	--	--
336	402357106535801	SB00508511CCC1	7,440	150	Michael R. Roper	X	--	X
337	402358106503601	SB00508417BCB	6,840	237	R. Rubish	X	--	--
338	402358106535900	SB00508511CCC	--	--	Betty Pugh	--	X	--
339	402358106535901	SB00508511CCC	7,310	224	Betty Pugh	X	--	X
340	402423106552500	SB00508509ADC	--	--	Gary Brenneman	--	X	--
341	402423106552501	SB00508509ADC	7,400	150	Gary Brenneman	X	--	X
342	402436106510101	SB00508407ABD1	6,860	130	Capra Doyle	X	--	X
343	402440106505701	SB00508407AAC	6,840	--	--	X	--	--
344	402442106530401	SB00508511AAB	7,300	100	--	X	--	--
345	402551106505201	SB00608431DDB1	--	525	Richard Hunter	X	--	X
346	402551106513901	SC00608431CCA	8,000	310	--	X	--	--
347	402552106504101	SB00608431DDA	7,080	475	--	X	--	--
348	402631106485700	SB00608433BAD	--	--	Cyril Barber	--	X	--
349	402631106485701	SB00608433BAD	6,760	55.0	Cyril Barber	X	--	--
350	402639106493600	SB00608429DDD	--	--	L. Ardrey	--	X	--
351	402639106493601	SB00608429DDD	6,800	25.0	L. Ardrey	X	--	X
352	402810106551001	SB00608509DDD1	--	95.0	Hoffman E. Perry	X	X	X
353	402840107105501	SB00608718DAA1	6,430	--	Tom Cozzens	X	--	--
354	402842107120001	SB00608813ADD2	--	60.0	Robert V. Barnes	X	X	X
355	4028431071150601	SB00608815BDC1	6,440	16.5	V.C. Williams	X	--	X
356	402843107151201	SB00608815BCD1	6,440	--	M. Rolando	X	--	--
357	402845107115901	SB00608813ADD1	6,400	35.0	Scott Ecil	X	--	--
358	402852107125801	SB00608814ADA1	6,450	35.0	Yampa Valley AI	--	X	--
359	402858107102501	SB00608717BAD1	6,506.5	28.0	Colorado Ute Coal Co.	X	X	X
360	402900106533000	SB068417A	--	--	--	--	X	--
361	402902106470401	SB00608514BBC1	7,380	12.0	Clayson	--	--	--
362	402902107101801	SB00608717BAA1	6,472.6	28.0	Colorado Ute Coal Co.	X	X	X
363	402904106595701	SB00608614ABA1	6,560	16.0	L.B. Morris	X	--	X
364	402908107103701	SB00608708CCD1	6,510.9	50.0	Colorado Ute Coal Co.	X	X	X
365	402910107103501	Hayden seep no. 5.	--	--	--	--	X	Seep
366	402912107112401	SB00608707DCC1	6,506.1	45.0	Colorado Ute Coal Co.	--	X	--
367	402913107103701	SB00608708CCD2	6,502.3	39.0	Colorado Ute Coal Co.	--	X	--
368	402913107132101	SB00608811DDC1	--	15.0	E.C. Signs	X	--	X
369	402918106502700	Steamboat spring.	--	--	--	--	X	--
370	402920106550701	SB00608509DAD1	6,640	400	Carmen Alessi	X	--	X
371	402920107154301	SB00608809CBD1	6,340	20.0	Wessley Signs	X	--	X
372	402921107103801	HS SP-1	--	--	--	--	X	--
373	402921107104001	SB00608708CBD1	6,504.2	42.0	Colorado Ute Coal Co.	X	X	X
374	402922106502500	Steamboat soda spring.	--	--	--	--	X	--
375	402922107042301	SB00608607DBD2	6,460	30.0	K. Rains	X	--	X
376	402922107104001	SB00608708CBD2	6,502.0	40.0	Colorado Ute Coal Co.	--	X	--
377	402924106532301	SB00608511CAD1	6,760	300	Gary Garratt	--	X	X
378	402924107112001	SB00608707DBC1	6,493.9	39.0	Colorado Ute Coal Co.	X	X	X
379	402924107112201	SB00608707DBC2	6,497.8	42.0	Colorado Ute Coal Co.	X	X	X
380	402929107110301	SB00608707DAB1	6,493.6	36.0	Colorado Ute Coal Co.	X	--	X

Table 5.--Ground-water site descriptions and availability of data collected by
the U.S. Geological Survey--Continued

Map number (plate 3)	Site identi- fication in COALDATA data base	Local well number (see fig. 2)	Datum ¹ (feet)	Depth of well below land surface (feet)	Owner	Availability of		
						Water- level data	Water- quality data	Well-con- struction data
381	402930107105101	SB00608707DAA1	6,495.1	37.0	Colorado Ute Coal Co.	X	X	X
382	402930107105201	SB00608707DAA2	6,495.3	38.0	Colorado Ute Coal Co.	X	X	X
383	402931106565501	SB00608508CAB1	--	12.0	Pat Tellier	--	--	X
384	402932107110101	SB00608707ADC1	6,493.6	41.0	Colorado Ute Coal Co.	X	X	X
385	402932107112001	SB00608707DBB1	6,499.6	49.0	Colorado Ute Coal Co.	X	X	X
386	402933107110201	SB00608707ADC2	6,490.8	35.5	Colorado Ute Coal Co.	X	X	X
387	402933107110701	SB00608707ADC3	6,490.4	36.0	Farrington Carpenter	X	X	X
388	402933107110702	SB00608707ADC4	6,485.6	29.0	Colorado Ute Coal Co.	X	X	X
389	402933107111301	SB00608707ACD1	6,497.8	42.0	Colorado Ute Coal Co.	X	X	X
390	402933107112201	SB00608707ACC1	6,496.3	43.0	Colorado Ute Coal Co.	X	X	X
391	402934107111301	SB00608707ACD2	6,496.7	43.0	Farrington Carpenter	X	X	X
392	402935107105301	SB00608707ADD1	6,493.1	38.0	Farrington Carpenter	X	X	X
393	402937106503100	Steamboat sulfur spring.	--	--	--	--	X	--
394	402937107111401	SB00608707ACD3	6,487.1	35.0	Farrington Carpenter	X	X	X
395	402941106523101	SB00608512BCA1	6,760	265	Peter Stanko	X	--	--
396	402949107135201	SB00608811BAC1	6,400	20.0	James Camilletti	X	--	--
397	402954107103501	SB00608708BBA1	6,440	--	Carpenter	X	--	--
398	402955107123501	SB00608812BAA1	--	--	--	X	--	--
399	402957107103301	SB00608708BAB1	--	10.6	--	X	X	--
400	402959107131101	SB00608802DDD1	6,400	--	--	X	--	--
401	402620107072960	Pond 004	7,220	--	--	--	X	--
402	402437107051704	SBU287	7,029.97	175	--	--	X	--
403	402437107051703	SBW287	7,031.97	164	--	--	X	--
404	402437107051701	SBL287	7,031.96	98.5	--	--	X	--
405	402359107054404	SCU287	6,957.14	122	--	--	X	--
406	402359107054402	SCI287	6,957.08	70.0	--	--	X	--
407	402359107054401	SCL287	6,957.12	30.0	--	--	X	--
408	402359107054403	SCW287	6,957.05	90.0	--	--	X	--
409	402358107054501	SCS87	--	--	--	--	X	--
410	402401107054701	SCS1487-62	6,975.51	51.5	--	--	X	--
411	402401107054702	SCS2487-63	6,979.68	37.5	--	--	X	--
412	402401107054703	SCS3487-64	6,982.73	37.2	--	--	X	--
413	402401107054704	SCS4487-65	6,997.08	25.0	--	--	X	--
414	402454107071605	SSU187	6,860.73	127	--	--	X	--
415	402454107071604	SSU487	6,860.73	105	--	--	X	--
416	402454107071602	SSI287	6,859.84	79.8	--	--	X	--
417	402454107071603	SSW287	6,859.91	98.5	--	--	X	--
418	402454107071601	SSL287	6,860.64	58.0	--	--	X	--
419	402454107071606	SSD487	6,859.74	195	--	--	X	--
420	402454107071201	SSS87	--	--	--	--	X	--
421	402456107071101	SSS1487-59	6,898.61	33.0	--	--	X	--
422	402456107071102	SSS2487-60	6,892.55	22.8	--	--	X	--
423	402456107071103	SSS3487-61	6,891.86	26.0	--	--	X	--
424	402455107073001	SZL287	6,822.14	181	--	--	X	--
425	402455107073002	SZI287	6,818.60	222	--	--	X	--
426	402455107073004	SZU287	6,820.28	265	--	--	X	--
427	402455107073003	SZW487	6,817.03	237	--	--	X	--
428	401114107493601	SB00309333ACD1	--	--	--	--	X	--
429	401142107514801	SB00309330DCA	7,520	394	D. Smith -M. Crawford	--	--	X
430	401207107505901	SB00309329BDD	7,400	275	David Smith	X	--	X
431	401225107493301	SB00309328ABA	--	560	George Sturgeon	X	X	X
432	401332107481501	SB00309315DDB	6,770	259	Harry Durham, Jr.	X	X	X
433	401351107362901	SB00309116DAA	7,090	--	Larry Osborn	X	--	--
434	401402107524501	SB00309413AAC1	7,300	100	Texaco Oil Co.	--	X	X
435	401407107352301	SB00309115AAC	--	8.0	Leonard Forbes	--	--	--

Table 5.--Ground-water site descriptions and availability of data collected by
the U.S. Geological Survey--Continued

Map number (plate 3)	Site identi- fication in COALDATA data base	Local well number (see fig. 2)	Datum ¹ (feet)	Depth of well below land surface (feet)	Owner	Availability of		
						Water- level data	Water- quality data	Well-con- struction data
436	401415107522801	SB00309307CCC1	--	100	--	--	X	--
437	401425107492201	SB00309309DDB	7,580	82.0	--	X	--	X
438	401444107482501	SB00309310ACD	7,420	--	--	X	--	--
439	401444107482901	SB00309310ACC	7,440	--	W.R. Grace Co.	X	--	X
440	401446107490901	SB00309310BCB1	7,940	85.0	Colowyo Coal Co.	X	X	--
441	401446107515801	SB00309307ACB1	7,030	100	Pat Sweeney	--	X	--
442	401449107490601	SB00309310BCB2	7,360	65.0	--	X	--	X
443	401453107500600	SB00309309BBD	7,280	85.0	--	X	X	--
444	401457107490500	SB00309310BBB	--	--	U.S. Government	--	X	--
445	401507107493001	SB00309304DCD	7,430	217	--	X	--	--
446	401515107502201	SB00309333DCB	7,120	26.0	USGS	--	--	X
447	401531107500501	SB00309304BCD	7,100	--	W.R. Grace Co.	X	--	X
448	401547107511501	SB00309305CCA	7,120	20.0	USGS	X	--	X
449	401602107504301	SB00409332DCD	6,740	--	--	X	--	X
450	401619107502901	SB00409332DAB	6,630	140	U.S. Government	X	X	X
451	401621107493301	SB00409333DBA	6,770	25.0	--	X	--	X
452	402012108042601	SB00409517ADC	--	--	--	X	--	--
453	402136108041601	SB00509528BAB1	6,810	--	--	X	--	X
454	402208108034301	SB00509521DBA	6,660	40.0	Sterling Cook	X	X	--
455	402212108034301	SB00509521ADC1	--	300	Sterling Cook	X	X	--
456	402223107533601	SB00509424ABC1	6,220	1,600	--	X	--	X
457	402638107553601	SB00609427ADB	--	--	Utah International	X	--	--
458	402801107571000	Juniper hot springs.	--	--	--	--	X	--
459	402802107571101	SB00609416CDA1	--	--	--	--	X	--
460	402803107571001	SC00609417CAD1	--	--	--	--	X	--
461	402822107564200	SB069416CAC	--	--	--	--	X	--
462	402832107394701	SB00609213ABD	--	255	C.A. Roberts	--	--	X
463	402834107394301	SB00609213AAB	6,380	--	Pearce	X	--	X
464	402849107272501	SB00609014ACB1	--	900	L. Fedinec	--	--	X
465	402857107323401	SB00609018BBC	6,270	23.0	Wesley Robinson	X	--	X
466	402857107385101	SB00609118BAD	6,250	200	Earl McCloskey	--	X	X
467	402907107322901	SB00609007CCC	6,225	369	Marvin Carroll	--	--	X
468	402911107332501	SB00609112CDC	6,370	--	Robert Herman	--	--	X
469	402914107332901	SB00609112CCA	--	264	C. Davidson	X	--	X
470	402914107532801	SB00609112CCD	6,360	265	High Country Equipment	X	--	X
471	402916107061601	SB00608712DDA	--	--	--	--	X	--
472	402918107333201	SB00609112CCA	--	600	Marietha Glantz	X	X	X
473	402929107381801	SB00609107DAA	6,300	--	Charles Carrol	X	--	X
474	402931107311401	SB00609008BCD	--	18.0	High Country Ave.	--	X	--
475	402931107314001	SB00609007DAB	6,190	500	Cleve Preece	--	--	X
476	402933107445101	SB00609208BAB	6,320	--	G. Culverwell	--	--	X
477	402942107373101	SB00609108ACA	--	200	E. Dale Scott	--	--	X
478	402955107304201	SB00609008ABA	6,190	20.0	Moffat County	--	--	X
479	401618107563402	SB00509432ACD1	--	--	--	--	X	--
480	401629107573001	SB00509433CAA	--	--	--	--	X	--

¹Number of significant figures varies because some of the wells are listed as surveyed; however, these results have not been confirmed.

Surface-water sites are listed in tables 2 and 3. The locations of these sites are shown on plate 1. Sites that have discharge and water-quality data collected by agencies other than the U.S. Geological Survey are listed in table 2. Sites that have discharge and water quality data collected by the U.S. Geological Survey are listed in table 3. The sites are first identified by site identification. The site identification is a unique number that identifies each site and is the number used to retrieve data for a site. The eight-digit site-identification number is a unique number assigned to a surface-water site that is operated by the U.S. Geological Survey. The 15-digit site-identification number is composed of a 6-digit latitude, a 7-digit longitude, and a 2-digit sequence number. The station name describes the location of the site using names of streams, towns, roads, and so forth. In table 2, the mine and the mine's site ID are used to correlate the COALDATA site identification (site identification, station name, township, range, section) with local non-standard identification (mine's site ID). The mines are identified using three-letter codes, which are defined in the table. The datum is the altitude above sea level (see explanation of sea level following the conversion factor table) of the reference point used at a site for measuring the height of the water surface. All the sites in table 3 are U.S. Geological Survey surface-water sites in the study area that have data in the U.S. Geological Survey data base. The site type column in tables 2 and 3 describes a site as having a continuous recording gage (GS) or chemical sampling site only (C). The last two columns in tables 2 and 3 indicate what kind of hydrologic data is available for a site.

Ground-water site descriptions are listed in tables 4 and 5. Ground-water sites used by agencies other than the U.S. Geological Survey that have data in the COALDATA data base are listed in table 4. Ground-water sites used by the U.S. Geological Survey that have data in the U.S. Geological Survey data base are listed in table 5. The general locations of these ground-water sites are shown on plates 2 and 3. The unique 15-digit site identification for a ground-water site listed in tables 4 and 5 is established the same way as with a surface-water site. The local well number in tables 4 and 5 is used to locate the ground-water site (well or spring) easily using the township, range, section, and subdivisions of the section (fig. 2). The mine and site ID of the mine in table 4 is the same as in table 2. The datum in tables 4 and 5 is the altitude of the land surface in feet above sea level. Ground-water levels are commonly measured in feet below land surface. In table 5, the owners of ground-water sites (wells or springs) sampled by the U.S. Geological Survey include private individuals, companies, and the U.S. Government. The types of data available are listed in the last three columns of tables 4 and 5. Locations of the ground-water sites are shown in the maps on plates 2 and 3.

DATA AVAILABLE IN THE COALDATA DATA BASE

Surface-water data include discharge measurements. Surface-water station descriptions include the following: Latitude and longitude; township, range, and section; a narrative description of the location of the gage, measurement site, or sampling site; codes for county and state; station type (gaging station, flume); mine name; and mine's site identification. An example of a computer printout of surface-water data is listed in table 6 in the "Supplemental Data" section at the back of the report.

Ground-water data in the system consist of site descriptions and water levels. Water levels are reported in feet below land surface. Site descriptions, which are the major components of ground-water data in COALDATA, include: Latitude and longitude; township, range, and section; state, and county codes; station type; data reliability, type of ground-water site; primary use of site; and date of water level, if a measurement was taken. Other data that may be available in the ground-water site description include: Depths to geologic formations; well-construction information; and hydrologic information about the aquifer. An example of a computer printout of ground-water data is listed in table 7 in the "Supplemental Data" section at the back of the report.

Quality of water data in the system include chemical analyses of water samples of surface water and ground water. There is an extensive list of chemical, physical, and biological constituents that can be stored in the quality of water data base. The constituents stored in the COALDATA data base are listed in table 1. An example of a computer printout of quality of water data is listed in table 8 in the "Supplemental Data" section at the back of the report.

Several sites are listed in tables 2 and 4 that have only a site location. These sites were included in the tables because, even though there are no data for them in the COALDATA data base, the sites are part of the hydrologic data-collection network established by the indicated coal mine and there may be data available elsewhere.

SUPPLEMENTAL DATA

Table 6.---Example printout of U.S. Geological Survey stream-discharge data

1985 WY												
UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY - WATER RESOURCES DIVISION												
09243800 FOIDEL CREEK NEAR OAK CREEK, CO.												
LAT 402045 LONG 1070504 STATE 08 COUNTY 107 DATUM OF GAGE: 6880.00 FT NGVD PROCESS DATE: 27-MAR-87 08:17 BJC DRAINAGE AREA: 8.61												
DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985												
MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.89	1.3	.88	.86	.79	1.7	3.8	17	7.5	1.8	1.3	.57
2	.92	1.2	.70	.89	.78	1.9	4.1	19	7.2	1.7	1.6	.78
3	.90	1.2	.84	.86	.80	2.1	5.5	22	6.7	1.7	1.6	1.1
4	.86	1.2	.86	.84	.82	2.6	7.2	23	6.2	1.6	1.5	1.3
5	.92	1.1	.88	.84	.82	3.0	4.9	22	5.8	1.6	1.5	1.6
6	.86	1.0	.88	.84	.82	2.5	6.2	21	5.3	1.6	1.8	1.0
7	.79	.96	.88	.85	.82	1.8	9.1	20	4.9	1.6	2.7	.74
8	.74	1.0	.88	.89	.80	1.9	11	18	4.5	1.5	2.4	.68
9	.70	1.1	.88	.90	.78	3.1	21	16	4.1	1.5	2.4	.57
10	.72	1.2	.88	.90	.80	4.4	24	15	3.8	1.5	2.3	.45
11	.76	1.2	.88	.90	.78	3.4	21	15	3.4	1.5	2.1	.45
12	.76	1.2	.88	.88	.76	3.3	23	15	3.1	1.4	2.3	.48
13	.78	1.3	.88	.82	.73	3.3	19	14	2.8	1.5	2.0	.30
14	.86	1.5	.88	.80	.78	3.2	17	13	2.5	1.6	1.7	.23
15	.94	1.7	.88	.82	.88	3.9	15	12	2.4	1.4	1.6	.23
16	.96	1.6	.88	.84	.94	4.6	13	11	2.4	1.4	1.7	.26
17	1.0	1.6	.88	.85	.96	5.9	13	11	2.3	1.4	1.5	.17
18	1.1	1.6	.90	.85	1.0	5.7	12	11	2.3	2.2	1.5	.12
19	1.1	1.2	.90	.86	1.3	5.5	14	11	2.2	3.6	1.4	.17
20	1.2	.90	.89	.86	1.9	5.8	15	9.6	2.2	3.2	1.2	.18
21	1.2	.89	.88	.89	2.9	6.8	16	9.0	2.1	2.8	.97	.26
22	1.2	.94	.84	.92	2.7	6.9	17	8.7	2.1	2.4	.90	.54
23	1.2	.96	.84	.94	2.2	4.7	19	8.3	2.0	2.1	.75	.41
24	1.2	.96	.83	.94	1.6	4.8	18	8.1	2.0	2.2	.68	.45
25	1.1	.95	.83	.89	1.4	5.5	19	8.0	2.0	2.3	.71	.54
26	1.2	.96	.84	.90	1.4	6.6	19	8.1	2.0	2.1	.97	.60
27	1.2	1.0	.86	.92	1.3	5.2	19	7.9	1.9	2.0	.80	.70
28	1.2	.98	.94	.88	1.4	4.7	19	7.7	1.8	1.8	.73	.72
29	1.2	.90	.97	.86	---	4.3	19	7.6	1.8	1.6	.66	.74
30	1.2	.85	.93	.85	---	4.0	19	7.5	1.8	1.6	.55	.76
31	1.3	---	.90	.86	---	3.9	---	7.4	---	1.6	.47	---
TOTAL	30.95	34.45	27.07	27.00	32.96	127.0	442.8	403.9	101.1	57.8	44.29	17.10
MEAN	1.00	1.15	.87	.87	1.18	4.10	14.8	13.0	3.37	1.86	1.43	.57
MAX	1.3	1.7	.97	.94	2.9	6.9	24	23	7.5	3.6	2.7	1.6
MIN	.70	.85	.70	.80	.73	1.7	3.8	7.4	1.8	1.4	.47	.12
AC-FT	61	68	54	54	65	252	878	801	201	115	88	34
WTR YR 1985 TOTAL	1346.43											2670
	MEAN											.12
	MAX											AC-FT

Table 7.--Example printout of ground-water levels

DATE: 03/30/87												
SITE ID 402620107072950												
WELL DEPTH 261												
WATER LEVELS IN FEET BELOW LAND SURFACE DATUM												
CALENDAR YEAR JANUARY 1979 TO DECEMBER 1979												
DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	36.85	36.25	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	38.10	---
10	---	---	---	---	---	---	---	37.20	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	36.50	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	36.23	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	36.20	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	38.04	---	36.89	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	36.34	---	---
MAX	---	---	---	---	38.04	36.85	36.89	37.20	---	36.34	38.10	---
MIN	---	---	---	---	38.04	36.20	36.25	37.20	---	36.34	38.10	---
CALENDAR YEAR 1979 HIGHEST 36.20 JUN 22, 1979 LOWEST 38.10 NOV 09, 1979												

Table 8.--Example printout of U.S. Geological Survey water-quality data

DISTRICT CODE 08

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09243700 - MIDDLE CREEK NEAR OAK CREEK, CO.

PROCESS DATE 3-27-87

WATER QUALITY DATA, CALENDAR YEAR JANUARY 1981 TO DECEMBER 1981

DATE	TEMPER- ATURE (DEG C) (00010)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH (STAND- ARD UNITS) (00400)	PH LAB (STAND- ARD UNITS) (00403)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS N) (00618)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L) AS P) (00660)
JAN 20...	0.0	80020	890	11.9	7.60	8.00	0.00	--	--	0.28	0.0
FEB 25...	0.0	80020	660	11.7	8.00	7.90	--	--	--	0.48	0.18
MAR 31...	2.0	80020	655	12.8	8.40	8.20	--	--	--	0.10	0.0
APR 29...	13.0	80020	690	10.0	8.30	8.30	--	--	--	0.02	0.25
MAY 27...	16.0	80020	680	8.7	8.20	8.30	--	0.00	0.04	0.04	0.09
JUL 01...	20.0	80020	666	7.6	8.30	8.30	--	--	--	0.01	0.46
29...	21.0	--	--	--	--	--	--	--	--	--	--
29...	21.0	80020	735	7.9	8.10	8.20	--	--	--	0.00	0.0

DATE	HARD- NESS (MG/L) AS CaCO3 (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CaCO3 (00902)	CALCIUM DIS- SOLVED (MG/L) AS Ca (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS Mg (00925)	SODIUM, DIS- SOLVED (MG/L) AS Na (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K (00935)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	ARSENIC TOTAL (UG/L) AS AS (01002)	BORON, DIS- SOLVED (UG/L) AS B (01020)
JAN 20...	370	67	86	37	51	1	2.1	5.8	180	--	40
FEB 25...	290	82	69	29	37	1	5.7	6.0	160	--	10
MAR 31...	280	56	66	27	33	0.9	2.7	4.9	140	--	30
APR 29...	330	48	77	33	34	0.8	3.0	4.7	120	1	30
MAY 27...	300	81	71	30	33	0.9	2.8	4.1	130	--	20
JUL 01...	310	47	72	31	32	0.8	3.1	3.8	120	--	40
29...	--	--	--	--	--	--	--	--	--	--	--
29...	320	51	71	35	41	1	3.4	4.6	130	--	50