

STATION DESCRIPTIONS AND AVAILABILITY OF DISCHARGE AND
WATER-QUALITY DATA THROUGH 1985 FOR EASTERN MONTANA STREAM
SITES NOT INCLUDED IN THE NATIONAL WATER DATA EXCHANGE PROGRAM

By Brenda L. Groskinsky Link and Lawrence E. Cary

U.S. GEOLOGICAL SURVEY

Open-File Report 87-770

Prepared in cooperation with the

U.S. BUREAU OF LAND MANAGEMENT



Helena, Montana
February 1988

DEPARTMENT OF THE INTERIOR
DONALD PAUL HODEL, Secretary

U.S. GEOLOGICAL SURVEY
Dallas L. Peck, Director

For additional information
write to:

District Chief
U.S. Geological Survey
428 Federal Building
301 South Park, Drawer 10076
Helena, MT 59626-0076

Copies of this report can be
purchased from:

U.S. Geological Survey
Books and Open-File Reports
Federal Center, Building 810
Box 25425
Denver, CO 80225-0425

CONTENTS

	Page
Abstract.	1
Introduction.	1
Purpose and scope	1
Acknowledgments	2
Data acquisition	2
Station descriptions and data availability.	3
Sarpy Creek drainage basin.	3
Armells Creek drainage basin.	10
Rosebud Creek drainage basin.	27
Tongue River drainage basin	41
Selected references	78

ILLUSTRATIONS

Figure 1. Map showing location of drainage basins and sites of water-discharge and water-quality data collection.	4
---	---

CONVERSION FACTORS

The following factors can be used to convert inch-pound units in this report to the International System of units (SI).

<u>Multiply inch-pound unit</u>	<u>By</u>	<u>To obtain SI unit</u>
foot	0.3048	meter
inch	25.40	millimeter
mile	1.609	kilometer
square mile (mi ²)	2.590	square kilometer

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 "Mean Sea Level of 1929."

STATION DESCRIPTIONS AND AVAILABILITY OF DISCHARGE AND WATER-QUALITY
DATA THROUGH 1985 FOR EASTERN MONTANA STREAM SITES NOT INCLUDED
IN THE NATIONAL WATER DATA EXCHANGE PROGRAM

By

Brenda L. Groskinsky Link and Lawrence E. Cary

ABSTRACT

Selected stations that monitor water discharge and water quality of streams in eastern Montana have been identified. This report describes the stations and indicates the availability of hydrologic data. Included are stations that are operated by organizations that do not belong to the National Water Data Exchange (NAWDEX) program managed by the U.S. Geological Survey. Each station description contains a narration of the station's history including location, drainage area, elevation, operator, period of record, type of equipment and instruments used at the station, and data availability. The data collected at each station have been identified according to type: water discharge, chemical quality, and suspended sediment. Descriptions are provided for 113 stations. These data have potential uses in characterizing small hydrologic basins, as well as other uses. A map of eastern Montana shows the location of the stations selected.

INTRODUCTION

Streamflow and water-quality data have been collected at many sites in eastern Montana for various purposes. Some of these purposes include research projects, environmental studies by Federal and State agencies, environmental baseline studies for mining permit applications, and monitoring. These data are useful for other purposes as well, including but not limited to characterizing small basins.

Most of the collected hydrologic data have been documented by members of the National Water Data Exchange (NAWDEX), which is a nationwide program managed by the U.S. Geological Survey to assist users of water data or water-related data in identifying, locating, and acquiring needed data. For the most part, documented data are readily available. However, data for some stations are described in publications that do not have wide distribution. Commonly, the descriptions include only stations operated by one organization. Data for some stations are documented only in files of the station operator.

Purpose and Scope

The purpose of this study was to locate, document, and describe the availability of water-discharge and water-quality data for streams in eastern Montana. The purpose of this report is to provide, in a single publication, descriptions of

data collected at stations operated by various organizations that are not members of the National Water Data Exchange.

Much of the data were collected as the result of renewed interest in the development of coal. Because much of this renewed interest occurred after 1970, emphasis was on stations operated from 1970 to the present (1985).

Acknowledgments

In locating and acquiring the station descriptions, the authors contacted many individuals, in person or by telephone. Although too numerous to identify individually, their assistance is gratefully acknowledged. The following organizations provided assistance:

Decker Coal Company
Hydrometrics
Kiewit Mining and Engineering Company
Montco
Northern Cheyenne Research Project
Peabody Coal Company
Spring Creek Coal Company, a subsidiary of NERCO Coal Corp (formerly NERCO, Inc., and Northern Energy Resources Company).
Western Energy, Inc.
Westmoreland Resources, Inc.

This report was prepared in cooperation with the U.S. Bureau of Land Management.

DATA ACQUISITION

Contact was made with other Federal agencies, State agencies, universities, mining companies, and consulting firms. A list of organizations involved in the collection of surface-water data was compiled from the information obtained. The "Directory of Member Organizations of the National Water Data Exchange" (Blackwell and Nokes, 1982) was consulted and any member organizations appearing on the list were deleted. Although identification of every organization collecting streamflow data was attempted, some may have been inadvertently overlooked.

Information to be used in the station descriptions was extracted from documents produced by, or on behalf of, the organizations. The documents included environmental baseline studies, mining permit applications, monitoring reports, and data reports. Additional information was obtained by letter or telephone requests.

The station descriptions range from brief to detailed, depending on the information available. If information was not available or not provided, the entry is shown as "not available." In some instances, stations were still in operation but the period of record indicated no data beyond an earlier year; thus, more current information was not provided by the operating organization.

The station descriptions consist of station name and numbers, location, drainage area, elevation, operator, and type of gage. The station name is preceded by

a station number assigned for this report. Some station names are followed by an identification number assigned by the operator of the station.

The location includes the latitude and longitude, legal description, and position based on local cultural or geographic features. If exact locations were not provided by the operating organization, the approximate location was determined from available information. The hydrologic unit code identifies a geographic area that represents all or part of a drainage basin or distinct hydrologic feature in which the station was located. The code was determined from a hydrologic unit map of Montana (scale 1:500,000) published by the U.S. Geological Survey (1976).

If not provided by the operating organization, the drainage area was measured and the elevation above sea level was determined from U.S. Geological Survey 7.5-minute (scale 1:24,000) topographic maps. In some instances, the drainage area was reported as not available, because the drainage was in an area being mined. The last two entries in the station description are operating organization and type of gage (instrumentation)¹.

The station description is followed by a summary of the data availability. The summary includes the type of data, the period of record, and how and where the data are stored.

Most of the interest in water-data collection was associated with surface coal mining in southeastern Montana. Therefore, most stations were in four drainage basins: Sarpy Creek, Armells Creek, Rosebud Creek, and the Tongue River. Location of the basins and the streamflow and water-quality stations is shown in figure 1.

STATION DESCRIPTIONS AND DATA AVAILABILITY

Sarpy Creek Drainage Basin

The Sarpy Creek drainage basin has one mining operation. Westmoreland Resources operates several monitoring stations as requested by the Montana Department of State Lands near the Absaloka Mine located northeast of Hardin, Mont., and west of Colstrip, Mont.

¹Use of firm or trade names in this report is for identification purposes only and does not constitute endorsement by the U.S. Geological Survey.

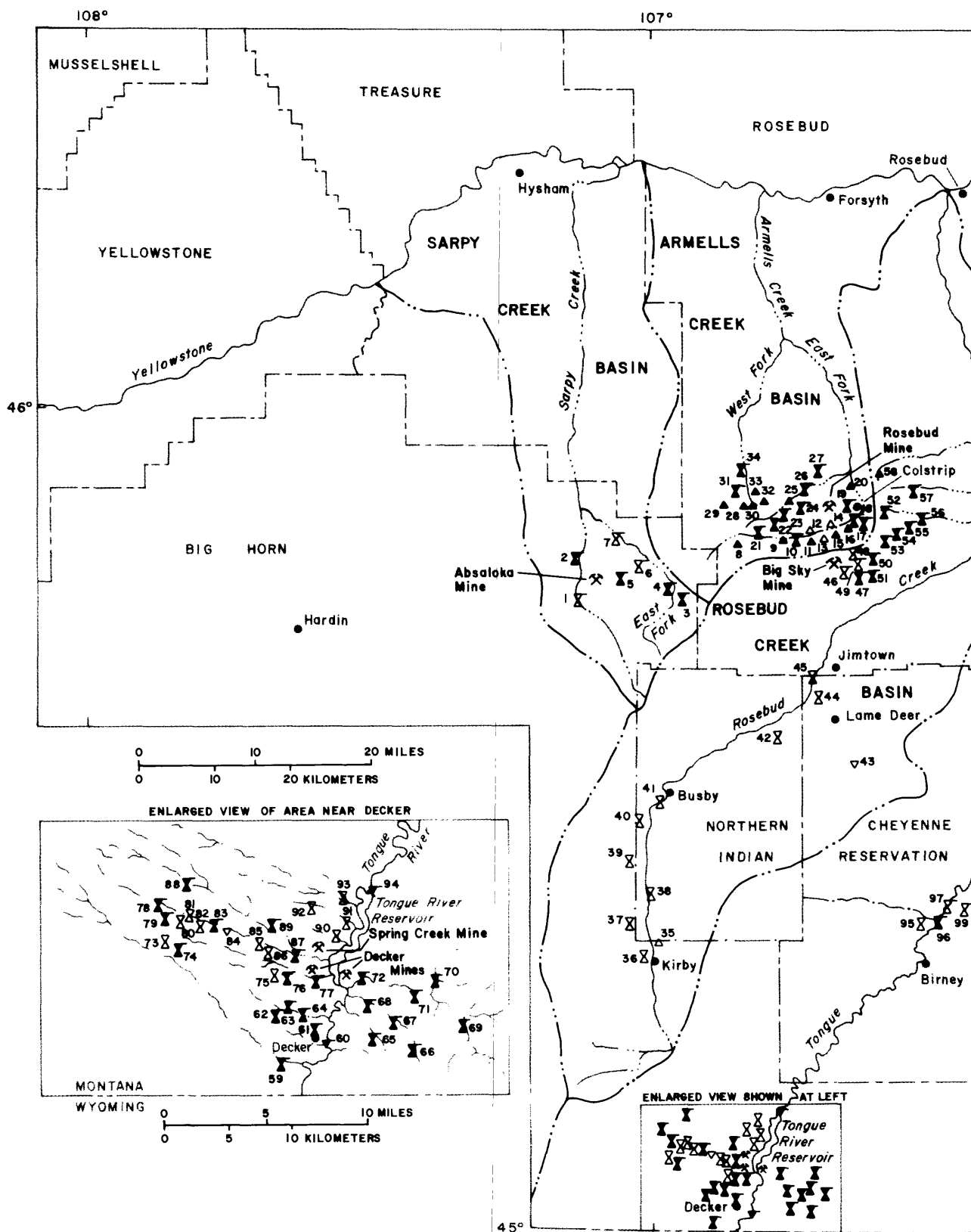
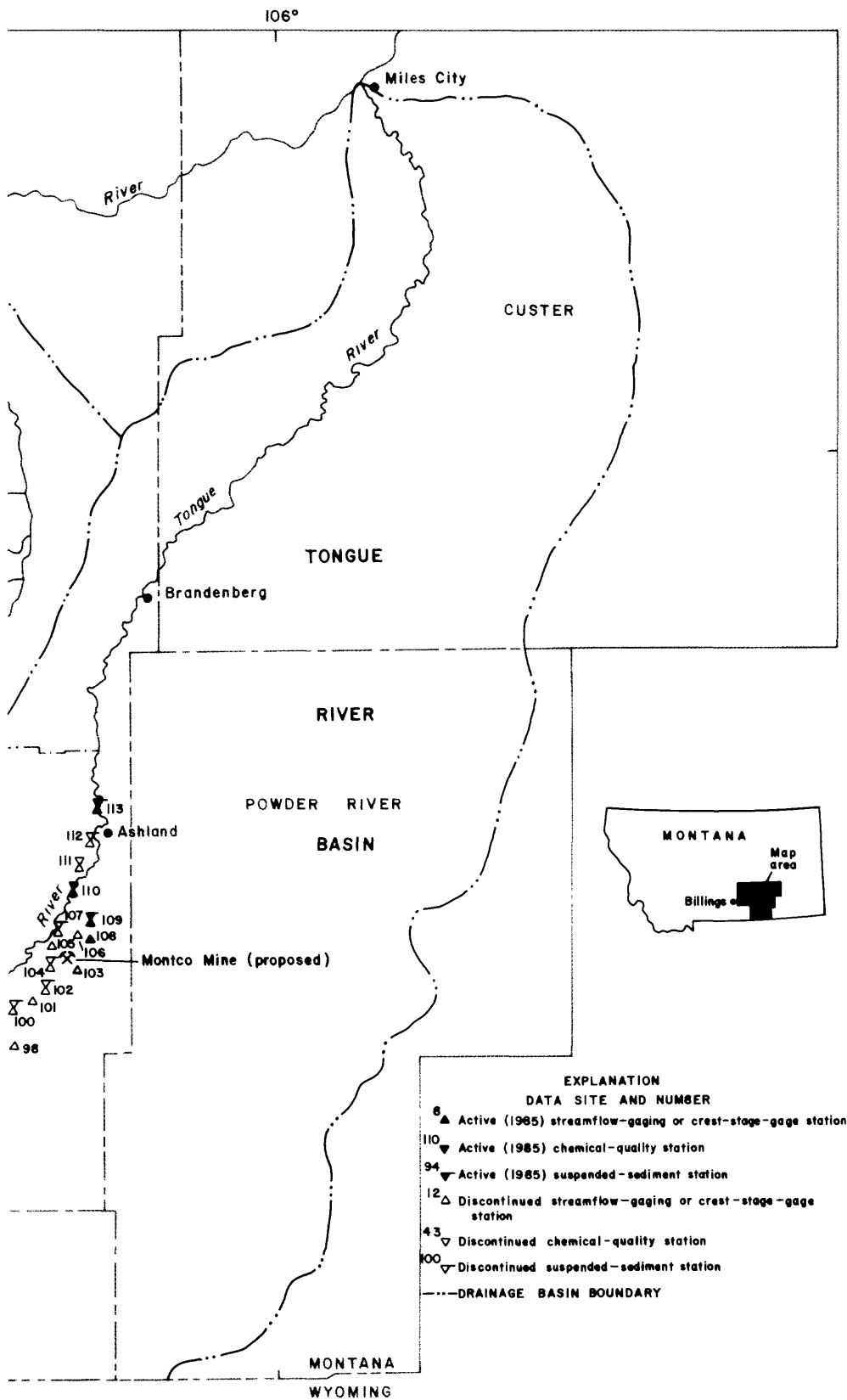


Figure 1.--Location of drainage basins and sites of water-discharge



and water-quality data collection.

SARPY CREEK BASIN

Station 1--MIDDLE FORK SARPY CREEK NEAR HARDIN, MONT (G-4)

LOCATION.--Lat 45°47'46", long 107°06'45", in NW1/4NW1/4NW1/4 sec. 34, T. 1 N., R. 37 E., Big Horn County, Hydrologic Unit 10100001, 0.2 mile upstream from mouth, 2.7 miles southwest of Absaloka Mine, 2.9 miles south of Sarpy Creek Road, and 28.1 miles northeast of Hardin.

DRAINAGE AREA.--12.6 mi².

ELEVATION.--3,330 feet, from topographic map.

OPERATOR.--Westmoreland Resources, Inc., Hardin, Mont.

GAGE.--Twelve-inch, 90-degree V-notch weir equipped with a continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurred, 1980 through 1984.

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, 1980 through 1984.

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, 1980 through 1984.

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 2--SARPY CREEK AT COUNTY BRIDGE NEAR HARDIN, MONT. (G-1)

LOCATION.--Lat 45°49'46", long 107°06'44", in NW1/4SW1/4SW1/4, sec. 15, T. 1 N., R. 37 E., Big Horn County, Hydrologic Unit 10100001, 0.3 mile southeast of Sarpy Creek Road, 2.2 miles north of Absaloka Mine, and 25.8 miles northeast of Hardin.

DRAINAGE AREA.--66.6 mi².

ELEVATION.--3,280 feet, from topographic map.

OPERATOR.--Westmoreland Resources, Inc., Hardin, Mont.

GAGE.--Three-foot Parshall flume with removable 90-degree V-notch weir equipped with a continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, 1980 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SARPY CREEK BASIN

Station 2--SARPY CREEK AT COUNTY BRIDGE NEAR HARDIN, MONT. (G-1)--Continued

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1979 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1979 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 3--EAST FORK SARPY CREEK NEAR HARDIN, MONT. (G-8)

LOCATION.--Lat 45°48'58", long 106°59'41", in SW1/4NE1/4SW1/4 sec. 22, T. 1 N., R. 38 E., Big Horn County, Hydrologic Unit 10100001, 2.5 miles northwest of Sarpy School, 2.6 miles northeast of Wolf School, and 32.7 miles northeast of Hardin.

DRAINAGE AREA.--0.99 mi².

ELEVATION.--3,410 feet, from topographic map.

OPERATOR.--Westmoreland Resources, Inc., Hardin, Mont.

GAGE.--Three-foot Parshall flume with removable 90-degree V-notch weir equipped with a continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, 1980 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1979 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1979 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SARPY CREEK BASIN

Station 4--EAST FORK SARPY CREEK NEAR HARDIN, MONT. (G-5)

LOCATION.--Lat 45°50'54", long 107°03'19", in SW1/4SE1/4NE1/4 sec. 12, T. 1 N., R. 37 E., Big Horn County, Hydrologic Unit 10100001, 3.6 miles northeast of Absaloka Mine, 4.6 miles northwest of Wolf School, and 30.3 miles northeast of Hardin.

DRAINAGE AREA.--79.2 mi².

ELEVATION.--3,270 feet, from topographic map.

OPERATOR.--Westmoreland Resources, Inc., Hardin, Mont.

GAGE.--Three-foot Parshall flume with removable 90-degree V-notch weir equipped with a continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, 1980 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1979 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1979 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 5--EAST FORK SARPY CREEK TRIBUTARY NEAR HARDIN, MONT. (G-6)

LOCATION.--Lat 45°48'45", long 107°00'09", in SW1/4SE1/4SE1/4 sec. 21, T. 1 N., R. 38 E., Big Horn County, Hydrologic Unit 10100001, 3.2 miles northwest of Sarpy School, 7.9 miles northeast of Wolf School, and 31.8 miles northeast of Hardin.

DRAINAGE AREA.--4.07 mi².

ELEVATION.--3,410 feet, from topographic map.

OPERATOR.--Westmoreland Resources, Inc., Hardin, Mont.

GAGE.--Twelve-inch, 90-degree V-notch weir equipped with a continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, 1981 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SARPY CREEK BASIN

Station 5--EAST FORK SARPY CREEK TRIBUTARY NEAR HARDIN, MONT. (G-6)--Continued

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1981 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1981 to present (1985).

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 6--EAST FORK SARPY CREEK TRIBUTARY NEAR HARDIN, MONT. (G-7)

LOCATION.--Lat 45°49'09", long 107°02'33", in SE1/4SE1/4NW1/4 sec. 19, T. 1 N., R. 38 E., Big Horn County, Hydrologic Unit 10100001, 1.3 miles north of Wolf School, 2.5 miles northeast of Absaloka Mine, and 28.2 miles northeast of Hardin.

DRAINAGE AREA.--1.23 mi².

ELEVATION.--3,390 feet, from topographic map.

OPERATOR.--Westmoreland Resources, Inc., Hardin, Mont.

GAGE.--Twelve-inch, 90-degree V-notch weir equipped with a continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurred, 1981 through 1984.

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, 1981 through 1984.

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, 1981 through 1984.

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SARPY CREEK BASIN

Station 7--EAST FORK SARPY CREEK TRIBUTARY NEAR HARDIN, MONT. (G-9)

LOCATION.--Lat 45°50'02", long 107°02'02", in SW1/4SE1/4NE1/4 sec. 18, T. 1 N., R. 38 E., Big Horn County, Hydrologic Unit 10100001, 4.4 miles northeast of Absaloka Mine, 4.4 miles north of Wolf School, and 30.7 miles northeast of Hardin.

DRAINAGE AREA.--2.51 mi².

ELEVATION.--3,330 feet, from topographic map.

OPERATOR.--Westmoreland Resources, Inc., Hardin, Mont.

GAGE.--Twelve-inch, 90-degree V-notch weir equipped with a continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurred, 1981 through 1983.

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, 1981 through 1983.

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, 1981 through 1983.

REMARKS.--Data are stored in computer files at Hydrometrics, Inc., Helena, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Armells Creek Drainage Basin

Western Energy Company operates streamflow-gaging and water-quality stations in the Armells Creek basin. The stations are located in the vicinity of the Rosebud Mine, which is near Colstrip, Mont.

ARMELLS CREEK BASIN

Station 8--EAST FORK ARMELLS CREEK NEAR COLSTRIP, MONT. (SW-75)

LOCATION.--Lat 45°50'45", long 106°47'31", in NW1/4NW1/4NW1/4 sec. 17, T. 1 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 8.3 miles southwest of Colstrip, and 9.3 miles southwest of Highway 39.

DRAINAGE AREA.--7.73 mi².

ELEVATION.--3,570 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Flume with continuous water-stage recorder.

ARMELLS CREEK BASIN

Station 8--EAST FORK ARMELLS CREEK NEAR COLSTRIP, MONT. (SW-75)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, May 1981 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 9--EAST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-35 AND SW-35)

LOCATION.--Lat 45°50'57", long 106°43'40", in NE1/4SW1/4SW1/4 sec. 11, T. 1 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 0.5 mile upstream from mouth, 5.6 miles southwest of Highway 39, and 6.2 miles southwest of Colstrip.

DRAINAGE AREA.--0.54 mi².

ELEVATION.--3,440 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Combination 3-foot Cipolletti weir and 6-inch, 90-degree V-notch weir with a continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, February 1981 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 10--EAST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-60 AND SW-60)

LOCATION.--Lat 45°50'59", long 106°42'44", in NE1/4SE1/4SE1/4 sec. 11, T. 1 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 0.1 mile upstream from mouth, 5.1 miles southwest of Highway 39, and 5.7 miles southwest of Colstrip.

DRAINAGE AREA.--0.52 mi².

ELEVATION.--3,395 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Continuous water-stage recorder, crest-stage gage, and static chemical-quality samplers.

ARMELLS CREEK BASIN

Station 10--EAST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP,
MONT. (CG-60 AND SW-60)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, June 1979 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 11--EAST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-30 AND SW-30)

LOCATION.--Lat 45°51'31", long 106°40'49", in SW1/4NW1/4NE1/4 sec. 7, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, 0.1 mile upstream from mouth, 3.2 miles southwest of Highway 39, and 3.8 miles southwest of Colstrip.

DRAINAGE AREA.--0.61 mi².

ELEVATION.--3,335 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Three-foot Cipolletti weir with continuous water-stage recorder and crest-stage gage.

ARMELLS CREEK BASIN

Station 11--EAST FORK ARMELLS CREEK TRIBUTARY
NEAR COLSTRIP, MONT. (CG-30 AND SW-30)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, July 1979 to present (1985).
REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 12--EAST FORK ARMELLS CREEK TRIBUTARY NEAR
COLSTRIP, MONT. (CG-20 AND SW-20)

LOCATION.--Lat 45°51'29", long 106°39'42", in SE1/4NE1/4NW1/4 sec. 8, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, 0.1 mile upstream from mouth, 2.6 miles southwest of Highway 39, and 3.4 miles southwest of Colstrip.

DRAINAGE AREA.--0.77 mi².

ELEVATION.--3,315 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Combination 5-foot Cipolletti weir and 6-inch 90-degree V-notch weir with continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurred, June 1979 to October 1983.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, October 1982 to October 1983.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 13--EAST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-25 and SW-25)

LOCATION.--Lat 45°51'35", long 106°39'19", in NW1/4NE1/4NE1/4 sec. 8, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, 0.1 mile upstream from mouth, 1.7 miles southwest of Highway 39, and 2.8 miles southwest of Colstrip.

DRAINAGE AREA.--0.91 mi².

ELEVATION.--3,290 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Combination 5-foot Cipolletti weir and 6-inch, 90-degree V-notch weir with continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurred, November 1979 to August 1983.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, July 1980 to September 1983.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena. Crest-stage gage is located 0.25 mile upstream from SW-25.

Station 14--EAST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-15 AND SW-15)

LOCATION.--Lat 45°51'24", long 106°38'38", in NE1/4SW1/4NW1/4 sec. 9, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, 0.6 mile upstream from mouth, 1.5 miles southwest of Highway 39, and 2.3 miles southwest of Colstrip.

DRAINAGE AREA.--0.52 mi².

ELEVATION.--3,335 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Six-inch V-notch weir with continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurred, May 1979 to October 1984.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 14--EAST FORK ARMELLS CREEK TRIBUTARY NEAR
COLSTRIP, MONT. (CG-15 AND SW-15)--Continued

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, May 1979 to October 1984.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 15--POND DISCHARGE CANAL NEAR COLSTRIP, MONT. (CG-85 AND SW-85)

LOCATION.--Lat 45°52'01", long 106°38'12", in NE1/4NW1/4SE1/4 sec. 4, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, 0.7 mile southwest of Highway 39, and 1.5 miles southwest of Colstrip.

DRAINAGE AREA.--Not available.

ELEVATION.--3,250 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--V-notch cutthroat flume with a continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, February 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 16--EAST FORK ARMELLS CREEK NEAR COLSTRIP, MONT. (CG-55 AND SW-55)

LOCATION.--Lat 45°52'28", long 106°37'38", in NW1/4NW1/4NW1/4 sec. 3, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, 0.1 mile west of Highway 39, and 0.8 mile south of Colstrip.

DRAINAGE AREA.--34.4 mi².

ELEVATION.--3,240 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--V-notch cutthroat flume with a continuous water-stage recorder and crest-stage gage.

ARMELLS CREEK BASIN

Station 16--EAST FORK ARMELLS CREEK NEAR
COLSTRIP, MONT. (CG-55 AND SW-55)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, July 1979 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 17--EAST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-13)

LOCATION.--Lat 45°52'00", long 106°36'51", in NE1/4NW1/4SE1/4 sec. 3, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, at Highway 39, and 1.5 miles southeast of Colstrip.

DRAINAGE AREA.--Not available.

ELEVATION.--3,290 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 18--EAST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-5)

LOCATION.--Lat 45°52'35", long 106°37'43", in SE1/4SE1/4SE1/4 sec. 33, T. 2 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, 0.1 mile west of Highway 39, and 0.7 mile south of Colstrip.

DRAINAGE AREA.--Not available.

ELEVATION.--3,270 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1979 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 19--EAST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-4)

LOCATION.--Lat 45°52'56", long 106°38'34", in NW1/4NE1/4SW1/4 sec. 33, T. 2 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, 0.6 mile west of Highway 39, 0.8 mile west of Colstrip, and 1.2 miles upstream from mouth.

DRAINAGE AREA.--0.40 mi².

ELEVATION.--3,310 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, July 1980 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 19--EAST FORK ARMELLS CREEK TRIBUTARY
NEAR COLSTRIP, MONT. (CG-4)--Continued

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 20--EAST FORK ARMELLS CREEK TRIBUTARY
NEAR COLSTRIP, MONT. (CG-10 AND SW-10)

LOCATION.--Lat 45°54'30", long 106°37'56", in SW1/4NE1/4SE1/4 sec. 21, T. 2 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, 0.1 mile upstream from mouth, 0.3 mile east of Highway 39, and 1.9 miles north of Colstrip.

DRAINAGE AREA.--1.54 mi².

ELEVATION.--3,170 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Combination 5-foot Cipolletti weir and 6-inch, 90-degree V-notch weir with continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, August 1979 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 21--STOCKER CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-50 AND SW-50)

LOCATION.--Lat 45°52'20", long 106°47'00", in SW1/4NW1/4NE1/4 sec. 5, T. 1 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 0.5 mile upstream from mouth, 7.3 miles west of Highway 39, and 7.4 miles southwest of Colstrip.

DRAINAGE AREA.--0.70 mi².

ELEVATION.--3,435 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Five-foot Cipolletti weir with continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, July 1979 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 22--STOCKER CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-8)

LOCATION.--Lat 45°52'34", long 106°45'51", in SE1/4SE1/4SW1/4 sec. 33, T. 2 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 0.2 mile upstream from mouth, 7.2 miles west of Highway 39, and 7.7 miles southwest of Colstrip.

DRAINAGE AREA.--1.18 mi².

ELEVATION.--3,410 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage.

ARMELLS CREEK BASIN

Station 22--STOCKER CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-8)--Continued

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 23--STOCKER CREEK NEAR COLSTRIP, MONT. (CG-65 and SW-65)

LOCATION.--Lat 45°52'55", long 106°45'23", in NW1/4NE1/4SE1/4 sec. 33, T. 2 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 6.1 miles upstream from mouth, 7.3 miles west of Highway 39, and 6.2 miles west of Colstrip.

DRAINAGE AREA.--6.43 mi².

ELEVATION.--3,380 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--V-notch cutthroat flume with continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, February 1981 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, September 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 23--STOCKER CREEK NEAR COLSTRIP, MONT. (CG-65 and SW-65)--Continued

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 24--STOCKER CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-40 AND SW-40)

LOCATION.--Lat 45°53'36", long 106°40'56", in NE1/4SE1/4SW1/4 sec. 30, T. 2 N., R. 41 E., Rosebud County, Hydrologic Unit 10100001, 1.6 miles upstream from mouth, 2.9 miles west of Highway 39, and 4.9 miles northwest of Colstrip.

DRAINAGE AREA.--0.24 mi².

ELEVATION.--3,335 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Combination 3-foot Cipolletti weir and 6-inch, 90-degree V-notch weir with continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, November 1979 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, November 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 25--STOCKER CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-45 AND SW-45)

LOCATION.--Lat 45°52'52", long 106°44'33", in SE1/4NW1/4SW1/4 sec. 34, T. 2 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 0.3 mile upstream from mouth, 6.5 miles west of Highway 39, and 7.2 miles west of Colstrip.

DRAINAGE AREA.--0.62 mi².

ELEVATION.--3,390 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Combination 3-foot Cipolletti weir and 6-inch, 90-degree V-notch weir with continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Daily when flow occurs, February 1981 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 26--STOCKER CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-7)

LOCATION.--Lat 45°54'00", long 106°42'19", in NW1/4SE1/4NW1/4 sec. 25, T. 2 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 0.4 mile upstream from mouth, 3.3 miles southwest of Highway 39, and 6.5 miles northwest of Colstrip.

DRAINAGE AREA.--3.45 mi².

ELEVATION.--3,250 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 26--STOCKER CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-7)--Continued

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 27--STOCKER CREEK NEAR COLSTRIP, MONT. (CG-19)

LOCATION.--Lat 45°54'28", long 106°42'09", in NE1/4SE1/4SW1/4 sec. 24, T. 2 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 2.9 miles southwest of Highway 39, 3.1 miles upstream from mouth, and 3.9 miles northwest of Colstrip.

DRAINAGE AREA.--0.24 mi².

ELEVATION.--3,230 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, March 1984 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, March 1984 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, March 1984 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 28--WEST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-17)

LOCATION.--Lat 45°52'48", long 106°49'34", in SE1/4NE1/4SW1/4 sec. 36, T. 2 N., R. 39 E., Rosebud County, Hydrologic Unit 10100001, 7.3 miles south of Trail Creek School, and 10.6 miles west of Colstrip.

DRAINAGE AREA.--2.58 mi².

ELEVATION.--3,370 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 29--WEST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-18)

LOCATION.--Lat 45°53'23", long 106°50'54", in NW1/4NE1/4NW1/4 sec. 35, T. 2 N., R. 39 E., Rosebud County, Hydrologic Unit 10100001, 0.8 mile upstream from mouth, 9.4 miles south of Trail Creek School, and 12.5 miles west of Colstrip.

DRAINAGE AREA.--0.98 mi².

ELEVATION.--3,350 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 30--WEST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-16)

LOCATION.--Lat 45°53'24", long 106°48'15", in NE1/4NE1/4NW1/4 sec. 31, T. 2 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 1.5 miles upstream from mouth, 6.8 miles southeast of Trail Creek School, and 10.4 miles northwest of Colstrip.

DRAINAGE AREA.--0.07 mi².

ELEVATION.--3,390 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 31--WEST FORK ARMELLS CREEK NEAR COLSTRIP, MONT. (CG-23)

LOCATION.--Lat 45°54'19", long 106°49'25", in SW1/4SW1/4SE1/4 sec. 24, T. 2 N., R. 39 E., Rosebud County, Hydrologic Unit 10100001, 2.1 miles south of mouth of Robbie Creek, and 12.1 miles northwest of Colstrip.

DRAINAGE AREA.--8.13 mi².

ELEVATION.--3,230 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, December 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, December 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED--SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, December 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 32--WEST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-14)

LOCATION.--Lat 45°53'35", long 106°47'36", in NW1/4SW1/4SW1/4 sec. 29, T. 2 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 2.3 miles upstream from mouth, and 9.9 miles northwest of Colstrip.

DRAINAGE AREA.--0.62 mi².

ELEVATION.--3,350 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ARMELLS CREEK BASIN

Station 33--WEST FORK ARMELLS CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-9)

LOCATION.--Lat 45°54'04", long 106°47'34", in NW1/4SW1/4NW1/4 sec. 29, T. 2 N., R. 40 E., Rosebud County, Hydrologic Unit 10100001, 1.8 miles upstream from mouth, and 8.0 miles northwest of Colstrip.

DRAINAGE AREA.--0.35 mi².

ELEVATION.--3,330 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 34--WEST FORK ARMELLS CREEK NEAR COLSTRIP, MONT. (CG-21)

LOCATION.--Lat 45°55'45", long 106°49'41", in NW1/4SE1/4NW1/4 sec. 13, T. 2 N., R. 39 E., Rosebud County, Hydrologic Unit 10100001, 0.4 mile south of mouth of Robbie Creek, and 10.1 miles northwest of Colstrip.

DRAINAGE AREA.--14.0 mi².

ELEVATION.--3,130 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, December 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, December 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, December 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Rosebud Creek Drainage Basin

The Rosebud Creek drainage basin includes two mining operations and the Northern Cheyenne Indian Reservation. The Western Energy Company operates the Rosebud Mine located near Colstrip, Mont. The Peabody Coal Company operates the Big Sky Mine located east of Colstrip, Mont. The Western Energy Company and the Peabody Coal Company operate several monitoring stations located on tributaries of Rosebud Creek as requested by the Montana Department of State Lands. The Northern Cheyenne Research Project performed monitoring on Rosebud Creek and its tributaries located in the Northern Cheyenne Indian Reservation north of Kirby, Mont., in cooperation with the U.S. Environmental Protection Agency (Andrews and others, 1980).

ROSEBUD CREEK BASIN

Station 35--DRY FORK CREEK NEAR KIRBY, MONT.

LOCATION.--Lat 45°21'52", long 106°59'13", in SW1/4NE1/4 sec. 36, T. 5 S., R. 38 E., Big Horn County, Hydrologic Unit 10100003, 50 feet upstream from Highway 314 bridge, 0.2 mile east of mouth, and 2.3 miles north of Kirby.

DRAINAGE AREA.--15.6 mi².

ELEVATION.--3,790 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

GAGE.--None.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 14, 1976; September 14, 1976; October 27, 1976; November 24, 1976; and April 4, 1979.

REMARKS.--Data are listed in Andrews and others (1980).

Station 36--ROSEBUD CREEK AT NORTHERN CHEYENNE INDIAN RESERVATION (SOUTH) BOUNDARY LINE, NEAR KIRBY, MONT. (TR-2)

LOCATION.--Lat 45°21'57", long 106°59'28", in NE1/4NW1/4 sec. 36, T. 5 S., R. 38 E., Big Horn County, Hydrologic Unit 10100003, on the right bank, 0.3 mile west of Highway 314, 0.8 mile north of Northern Cheyenne Indian Reservation boundary line, and 2.3 miles north of Kirby.

DRAINAGE AREA.--123 mi².

ELEVATION.--3,750 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

GAGE.--Servo-manometer bubble gage, continuous water-stage recorder, and outside cantilever staff gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Miscellaneous discharge measurements, June 1976 through May 1977. Continuous, June 1977 through September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

ROSEBUD CREEK BASIN

Station 36--ROSEBUD CREEK AT NORTHERN CHEYENNE INDIAN RESERVATION
(SOUTH) BOUNDARY LINE, NEAR KIRBY, MONT. (TR-2)--Continued

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Monthly, December 1975 through July 1977, October 1977, February 1979 through May 1979, August 1979, and September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

Station 37--CORRAL CREEK AT NORTHERN CHEYENNE INDIAN RESERVATION
WEST BOUNDARY LINE, NEAR KIRBY, MONT.

LOCATION.--Approximately lat 45°23'00", long 107°00'00" in sec. 23, T. 5 S., R. 38 E., Big Horn County, Hydrologic Unit 10100003, at the Northern Cheyenne Indian Reservation west boundary line, 0.7 mile southwest of the Corral Creek road junction, and 3.8 miles northwest of Kirby.

DRAINAGE AREA.--30.4 mi².

ELEVATION.--3,870 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

REMARKS.--Location of station was estimated. Actual location is not given in Andrews and others (1980).

GAGE.--None.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Miscellaneous discharge measurements, September 1976 through April 1979.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--February 15, 1977, and April 27, 1977.

REMARKS.--Data are listed in Andrews and others (1980).

Station 38--TRAIL CREEK AT MOUTH, NEAR KIRBY, MONT.

LOCATION.--Approximately lat 45°25'00", long 106°59'00", in sec. 12, T. 5 S., R. 38 E., Big Horn County, Hydrologic Unit 10100003, at Small Ranch road crossing, 0.5 mile west of mouth, and 6.9 miles north of Kirby.

DRAINAGE AREA.--21.5 mi².

ELEVATION.--3,660 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

REMARKS.--Location of station was estimated. Actual location is not given in Andrews and others (1980).

GAGE.--None.

ROSEBUD CREEK BASIN

Station 38--TRAIL CREEK AT MOUTH, NEAR KIRBY, MONT.--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Miscellaneous discharge measurements, July 1976 through April 1979.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--February 17, 1977; April 27, 1977; and February 17, 1977.

REMARKS.--Data are listed in Andrews and others (1980).

Station 39--DAVIS CREEK AT NORTHERN CHEYENNE INDIAN RESERVATION
WEST BOUNDARY LINE, NEAR BUSBY, MONT.

LOCATION.--Approximately lat 45°30'00", long 107°00'00", in SE1/4 sec. 11, T. 4 S., R. 38 E., Big Horn County, Hydrologic Unit 10100003, at the Northern Cheyenne Indian Reservation west boundary line upstream from Parker Ranch, and 3.5 miles southwest of Busby.

DRAINAGE AREA.--21.6 mi².

ELEVATION.--3,570 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

REMARKS.--Location of station was estimated. Actual location is not given in Andrews and others (1980). Two measurements were made at Highway 314 bridge.

GAGE.--None.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Miscellaneous discharge measurements, July 1976 through April 1979.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--July 9, 1976; February 17, 1977; and April 27, 1977.

REMARKS.--Data are listed in Andrews and others (1980).

Station 40--THOMPSON CREEK AT NORTHERN CHEYENNE INDIAN RESERVATION
WEST BOUNDARY LINE, NEAR BUSBY, MONT.

LOCATION.--Approximately lat 45°27'00", long 107°00'00", in sec. 26, T. 4 S., R. 38 E., Big Horn County, Hydrologic Unit 10100003, at Northern Cheyenne Indian Reservation west boundary line, upstream from LaFever Ranch, and 7.5 miles southwest of Busby.

DRAINAGE AREA.--21.9 mi².

ELEVATION.--3,590 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

ROSEBUD CREEK BASIN

Station 40--THOMPSON CREEK AT NORTHERN CHEYENNE INDIAN RESERVATION WEST BOUNDARY LINE, NEAR BUSBY, MONT.--Continued

REMARKS.--Location of station was estimated. Actual location is not given in Andrews and others (1980). Several locations in this area were used for miscellaneous measurements.

GAGE.--None.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Miscellaneous discharge measurements, July 1976 through April 1979.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--February 17, 1977, and April 27, 1977.

REMARKS.--Data are listed in Andrews and others (1980).

Station 41--ROSEBUD CREEK AT BUSBY, MONT.

LOCATION.--Lat 45°32'12", long 106°57'55", in sec. 6, T. 4 S., R. 39 E., Big Horn County, Hydrologic Unit 10100003, at U.S. Highway 212 bridge, 0.6 mile southwest of Busby, and 1.5 miles southeast of Rednose Reservoir.

DRAINAGE AREA.--271 mi².

ELEVATION.--3,410 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

GAGE.--None.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Miscellaneous discharge measurements, October 1977 through April 1979.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--June 3, 1976; April 4, 1979; August 27, 1979; and September 18, 1979.

REMARKS.--Data are listed in Andrews and others (1980).

Station 42--MUDDY CREEK NEAR LAME DEER, MONT. (MC-1)

LOCATION.--Approximately lat 45°36'00", long 106°45'00", in NE1/4SE1/4, sec. 2, T. 3 S., R. 40 E., Big Horn County, Hydrologic Unit 10100003, 1.1 mile southeast of U.S. Highway 212, 1.3 miles upstream from mouth, and 4.1 miles southwest of Lame Deer.

DRAINAGE AREA.--10.2 mi².

ELEVATION.--3,280 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

GAGE.--Continuous water-stage recorder, staff gage, and a trapezoidal weir.

ROSEBUD CREEK BASIN

Station 42--MUDDY CREEK NEAR LAME DEER, MONT. (MC-1)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Miscellaneous discharge measurements were made at about 1 mile downstream from the weir and 30 feet upstream from U.S. Highway 212 bridge, July 1976 through November 1977. Continuous, May 1978 through September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Monthly, January 1976 through September 1977 and February 1979 through September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

Station 43--LAME DEER CREEK AT NORTHERN CHEYENNE INDIAN POW-WOW GROUNDS,
NEAR LAME DEER, MONT. (LDC-2)

LOCATION.--Approximately lat 45°34'00", long 106°37'00", in SW1/4SE1/4 sec. 13, T. 3 S., R. 42 E., Rosebud County, Hydrologic Unit 10100003, at the Northern Cheyenne Indian Pow-Wow Grounds, 0.1 mile northwest of the confluence of the South Fork and East Fork, and 4.1 miles southeast of Lame Deer.

DRAINAGE AREA.--18.1 mi².

ELEVATION.--3,530 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

GAGE.--None.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Monthly, December 1975 through September 1977.

REMARKS.--Data are listed in Andrews and others (1980).

Station 44--LAME DEER CREEK NEAR LAME DEER, MONT. (LDC-1)

LOCATION.--Approximately lat 45°39'00", long 106°41'00", in NE1/4NW1/4SE1/4 sec. 17, T. 2 S., R. 41 E., Rosebud County, Hydrologic Unit 10100003, 0.2 mile east of Highway 39, 1.0 mile southwest of Jimtown, 0.7 mile upstream from the mouth, 3.1 miles northwest of Lame Deer.

DRAINAGE AREA.--81.9 mi².

ELEVATION.--3,180 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

REMARKS.--Location given in Andrews and others (1980) (NE1/4NW1/4SE1/4 sec. 8, T. 2 S., R. 41 E.) is not accurate.

GAGE.--Continuous water-stage recorder, 7-foot Cipolletti weir, and outside staff gage.

ROSEBUD CREEK BASIN

Station 44--LAME DEER CREEK NEAR LAME DEER, MONT. (LDC-1)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous, April 1977 through November 1978. Monthly discharge measurements, March through September 1979. Miscellaneous discharge measurements were made at locations near LDC-1, May 1976 through January 1980.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Monthly, May 1976 through August 1977 and February through September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

Station 45--ROSEBUD CREEK AT NORTHERN CHEYENNE INDIAN RESERVATION
NORTHERN BOUNDARY LINE, NEAR LAME DEER, MONT. (RC-1)

LOCATION.--Approximately lat 45°40'00", long 106°42'00" in SE1/4SW1/4 sec. 8, T. 2 S., R. 41 E., Rosebud County, Hydrologic Unit 10100003, on the right bank, 0.1 mile south of the Northern Cheyenne Indian Reservation northern boundary line, 0.2 mile northeast of mouth of Lame Deer Creek, 0.8 mile southwest of Jimtown, and 4.0 miles northwest of Lame Deer.

DRAINAGE AREA.--638 mi².

ELEVATION.--3,150 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

GAGE.--Servo-manometer bubble gage, continuous water-stage recorder, and outside cantilever staff gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Miscellaneous discharge measurements, June 1976 through May 1977. Continuous, June 1977 through September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Monthly, December 1975 through October 1977 and February 1979 through September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

Station 46--MILLER COULEE NEAR COLSTRIP, MONT. (SW-BS-CG-5)

LOCATION.--Lat 45°49'39", long 106°37'21", in SW1/4NE1/4NW1/4 sec. 22, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100003, 2.5 miles west of Highway 39, and 4.2 miles south of Colstrip.

DRAINAGE AREA.--0.05 mi².

ELEVATION.--3,310 feet, from topographic map.

OPERATOR.--Peabody Coal Company, Colstrip, Mont.

GAGE.--Crest-stage gage, single-stage sediment sampler, and scour chain.

ROSEBUD CREEK BASIN

Station 46--MILLER COULEE NEAR COLSTRIP, MONT. (SW-BS-CG-5)--Continued

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, October 1979 to 1983.

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena. Gage site was destroyed by mining in 1983.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, October 1979 to 1983.

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena. Gage site was destroyed by mining in 1983.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, October 1979 to 1983.

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena. Gage site was destroyed by mining in 1983.

Station 47--MILLER COULEE NEAR COLSTRIP, MONT. (SW-BS-CG-6)

LOCATION.--Lat 45°48'46", long 106°35'50", in NW1/4SE1/4NE1/4 sec. 26, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100003, 1.4 miles west of Highway 39, and 5.3 miles southeast of Colstrip.

DRAINAGE AREA.--3.67 mi².

ELEVATION.--3,160 feet, from topographic map.

OPERATOR.--Peabody Coal Company, Colstrip, Mont.

GAGE.--Crest-stage gage, single-stage sediment sampler, and scour chain.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1979 to present (1985).

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1979 to present (1985).

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ROSEBUD CREEK BASIN

Station 47--MILLER COULEE NEAR COLSTRIP, MONT. (SW-BS-CG-6)--Continued

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1979 to present (1985).

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 48--COALBANK COULEE NEAR COLSTRIP, MONT. (SW-BS-CG-1)

LOCATION.--Lat 45°50'18", long 106°37'07", in SW1/4SE1/4NE1/4 sec. 15, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100003, 2.2 miles west of Highway 39, and 3.4 miles southeast of Colstrip.

DRAINAGE AREA.--0.22 mi².

ELEVATION.--3,320 feet, from topographic map

OPERATOR.--Peabody Coal Company, Colstrip, Mont.

GAGE.--Crest-stage gage, single-stage sediment sampler, and scour chain.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, October 1979 to 1981.

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena. Gage site was destroyed by mining in 1981.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, October 1979 to 1981.

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena. Gage site was destroyed by mining in 1981.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, October 1979 to 1981.

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena. Gage site was destroyed by mining in 1981.

Station 49--COALBANK COULEE NEAR COLSTRIP, MONT. (SW-BS-CG-2)

LOCATION.--Lat 45°50'00", long 106°36'50", in SE1/4SW1/4NE1/4 sec. 15, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100003, 2.0 miles west of Highway 39, and 3.7 miles southeast of Colstrip.

DRAINAGE AREA.--0.61 mi².

ELEVATION.--3,260 feet, from topographic map.

OPERATOR.--Peabody Coal Company, Colstrip, Mont.

GAGE.--Crest-stage gage, single-stage sediment sampler, and scour chain.

ROSEBUD CREEK BASIN

Station 49--COALBANK COULEE NEAR COLSTRIP, MONT. (SW-BS-CG-2)--Continued

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, October 1979 to 1982.
REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena. Gage site was destroyed by mining in 1982.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, October 1979 to 1982.
REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena. Gage site was destroyed by mining in 1982.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, October 1979 to 1982.
REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena. Gage site was destroyed by mining in 1982.

Station 50--COALBANK COULEE NEAR COLSTRIP, MONT. (SW-BS-CG-3)

LOCATION.--Lat 45°49'48", long 106°36'04" in NW1/4NE1/4NW1/4 sec. 23 T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100003, 1.4 miles west of Highway 39, and 4.1 miles southeast of Colstrip.

DRAINAGE AREA.--0.91 mi².

ELEVATION.--3,210 feet, from topographic map.

OPERATOR.--Peabody Coal Company, Colstrip, Mont.

GAGE.--Crest-stage gage, single-stage sediment sampler, and scour chain.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1979 to present (1985).

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1979 to present (1985).

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1979 to present (1985).

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ROSEBUD CREEK BASIN

Station 51--COALBANK COULEE NEAR COLSTRIP, MONT. (SW-BS-CG-4)

LOCATION.--Lat 45°49'45", long 106°36'00", in NW1/4NE1/4NW1/4 sec. 23, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100003, 1.3 miles west of Highway 39, and 4.2 miles southeast of Colstrip.

DRAINAGE AREA.--1.34 mi².

ELEVATION.--3,200 feet, from topographic map.

OPERATOR.--Peabody Coal Company, Colstrip, Mont.

GAGE.--Crest-stage gage, single-stage sediment sampler, and scour chain.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1979 to present (1985).

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1979 to present (1985).

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1979 to present (1985).

REMARKS.--Data are published in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 52--COW CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-2)

LOCATION.--Lat 45°51'47", long 106°35'14", in SE1/4NE1/4SE1/4 sec. 2, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100003, 0.4 mile north of Highway 39, and 2.5 miles southeast of Colstrip.

DRAINAGE AREA.--Not available.

ELEVATION.--3,290 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, August 1979 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ROSEBUD CREEK BASIN

Station 52--COW CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-2)--Continued

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 53--SOUTH FORK COW CREEK NEAR COLSTRIP, MONT. (CG-11)

LOCATION.--Lat 45°50'25", long 106°34'13", in SW1/4SE1/4NE1/4 sec. 13, T. 1 N., R. 41 E., Rosebud County, Hydrologic Unit 10100003 at Cow Creek Road, 0.3 mile southeast of Highway 39, and 4.3 miles southeast of Colstrip.

DRAINAGE AREA.--Not available.

ELEVATION.--3,290 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ROSEBUD CREEK BASIN

Station 54--SOUTH FORK COW CREEK NEAR COLSTRIP, MONT. (CG-12)

LOCATION.--Lat 45°50'44", long 106°32'54", in NW1/4NE1/4NE1/4 sec. 18, T. 1 N., R. 42 E., Rosebud County, Hydrologic Unit 10100003, 1.4 miles northwest of Cow Creek Road, 1.4 miles east of Highway 39, and 5.2 miles southeast of Colstrip.

DRAINAGE AREA.--Not available.

ELEVATION.--3,190 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 55--SOUTH FORK COW CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-6)

LOCATION.--Lat 45°51'06", long 106°31'58", in SW1/4NW1/4SE1/4 sec. 8, T. 1 N., R. 42 E., Rosebud County, Hydrologic Unit 10100003, 0.6 mile northwest of Cow Creek Road, 2.4 miles east of Highway 39, and 5.4 miles southeast of Colstrip.

DRAINAGE AREA.--0.57 mi².

ELEVATION.--3,150 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, starting in 1985.

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ROSEBUD CREEK BASIN

Station 55--SOUTH FORK COW CREEK TRIBUTARY NEAR COLSTRIP, MONT. (CG-6)--Continued

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 56--COW CREEK NEAR COLSTRIP, MONT. (CG-90)

LOCATION.--Lat 45°52'44", long 106°32'37", in NW1/4SW1/4SW1/4 sec. 32, T. 2 N., R. 42 E., Rosebud County, Hydrologic Unit 10100003, 3.9 miles east of Colstrip, 4.3 miles northeast of Highway 39, and 5.1 miles northwest of Cow Creek Road.

DRAINAGE AREA.--5.65 mi².

ELEVATION.--3,110 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Crest-stage gage and static water-quality samplers.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

ROSEBUD CREEK BASIN

Station 57--PONY CREEK NEAR COLSTRIP, MONT. (CG-3, CG-80, AND SW-80)

LOCATION.--Lat 45°54'26", long 106°34'02", in NE1/4SE1/4 sec. 24, T. 2 N., R. 41 E., Rosebud County, Hydrologic Unit 10100003, 3.4 miles northeast of Colstrip, and 3.7 miles northeast of Highway 39.

DRAINAGE AREA.--0.50 mi².

ELEVATION.--3,290 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Flume with continuous water-stage recorder, two crest-stage gages, and static water-quality samplers.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, December 1980 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, August 1983 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 58--SPRING CREEK NEAR COLSTRIP, MONT. (CG-70 AND SW-70)

LOCATION.--Lat 45°55'16", long 106°35'34", in NE1/4SW1/4SE1/4 sec. 14, T. 2 N., R. 41 E., Rosebud County, Hydrologic Unit 10100003, 2.5 miles west of Highway 39, and 3.3 miles northeast of Colstrip.

DRAINAGE AREA.--0.43 mi².

ELEVATION.--3,270 feet, from topographic map.

OPERATOR.--Western Energy Company, Colstrip, Mont.

GAGE.--Weir with continuous water-stage recorder and crest-stage gage.

ROSEBUD CREEK BASIN

Station 58--SPRING CREEK NEAR COLSTRIP, MONT. (CG-70 AND SW-70)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, September 1981 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, November 1982 to present (1985).

REMARKS.--Data are stored in Western Energy Company computer files in Dallas, Texas, and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Tongue River Drainage Basin

The Tongue River drainage basin in Montana extends from the Montana-Wyoming State line to the Yellowstone River. This area includes several existing and proposed coal-mining operations that monitor stations at the request of the Montana Department of State Lands. These coal operations are: the proposed Montco Mine located north of Birney, Mont., and east of the Tongue River; the Decker Mines located north of Decker, Mont., along the Tongue River; and the Spring Creek Mine located north of Decker, Mont., and west of the Tongue River. The Northern Cheyenne Indian Research Project also operated monitoring stations in the Tongue River basin in cooperation with the U.S. Environmental Protection Agency (Andrews and others, 1980). The Northern Cheyenne Indian Reservation borders the Tongue River to the west and is located north of Birney, Mont. Many of the stations in this area have been discontinued because mining operations have destroyed the stations or because of lack of funding.

TONGUE RIVER BASIN

Station 59--SQUIRREL CREEK AT DECKER, MONT. (SQ-1)

LOCATION.--Lat 45°00'46", long 106°51'41", in NW1/4SE1/4SW1/4, sec. 29, T. 9 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile northeast of Decker, 0.4 mile southwest of Squirrel Creek School, and 0.7 mile upstream from the mouth.

DRAINAGE AREA.--50.0 mi².

ELEVATION.--3,504.77 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Four-foot culvert with continuous water-stage recorder, two crest-stage gages, and one sediment sampler.

TONGUE RIVER BASIN

Station 59--SQUIRREL CREEK AT DECKER, MONT. (SQ-1)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous, August 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded occasionally during spring and summer, August 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled four times annually, August 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled four times annually, August 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 60--TONGUE RIVER AT DECKER BRIDGE, NEAR DECKER, MONT. (TR-9)

LOCATION.--Lat 45°01'48", long 106°48'47", in NE1/4NW1/4SE1/4 sec. 22, T. 9 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, at the Decker bridge, 0.9 mile south of the mouth of Pond Creek, and 2.9 miles northeast of Decker.

DRAINAGE AREA.--1,584 mi².

ELEVATION.--3,440 feet, from topographic map.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--None.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled at least quarterly, 1976 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 60--TONGUE RIVER AT DECKER BRIDGE, NEAR DECKER, MONT. (TR-9)--Continued

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled at least quarterly, 1976 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 61--UNNAMED TRIBUTARY NEAR DECKER, MONT. (CSEC)

LOCATION.--Lat 45°02'20", long 106°50'09", in SW1/4SW1/4SE1/4 sec. 16, T. 9 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile east of Highway 314, 1.2 miles upstream from mouth of Pond Creek, and 2.3 miles northeast of Decker.

DRAINAGE AREA.--0.24 mi².

ELEVATION.--3,486.8 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Six-inch flume with continuous water-stage recorder and static chemical-quality sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, 1981 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1981 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1981 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 62--SOUTH FORK POND CREEK NEAR DECKER, MONT. (SPDC)

LOCATION.--Lat 45°03'06", long 106°52'04", in NW1/4NW1/4 sec. 17, T. 9 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile upstream from Pond Creek, 1.5 miles west of Highway 314, 2.7 miles upstream from mouth of Pond Creek, and 3.7 miles north of Decker.

DRAINAGE AREA.--0.49 mi².

ELEVATION.--3,607.3 feet, surveyed.

TONGUE RIVER BASIN

Station 62--SOUTH FORK POND CREEK NEAR DECKER, MONT. (SPDC)--Continued

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Four-foot Parshall flume with continuous water-stage recorder, two crest-stage gages, one static chemical-quality sampler, and one sediment sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, September 1980 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, September 1980 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 63--NORTH FORK POND CREEK NEAR DECKER, MONT. (NPDC)

LOCATION.--Lat 45°03'08", long 106°51'57", in NE1/4NW1/4NW1/4 sec. 17, T. 9 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile upstream from Pond Creek, 1.4 miles west of Highway 314, 2.6 miles upstream from mouth of Pond Creek, and 3.7 miles north of Decker.

DRAINAGE AREA.--0.37 mi².

ELEVATION.--3,590 feet, from topographic map.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Two crest-stage gages, one static chemical-quality sampler, and one sediment sampler.

TONGUE RIVER BASIN

Station 63--NORTH FORK POND CREEK NEAR DECKER, MONT. (NPDC)--Continued

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, September 1980 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, September 1980 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, September 1980 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 64--UPPER POND CREEK NEAR DECKER, MONT. (PDC)

LOCATION.--Lat 45°03'06", long 106°51'54", in NE1/4NW1/4NW1/4 sec. 17, T. 9 S., R. 40 E., Bighorn County, Hydrologic Unit 10090101, 1.4 miles west of Highway 314, 2.5 miles upstream from mouth, and 3.7 miles north of Decker.

DRAINAGE AREA.--2.22 mi².

ELEVATION.--3,590 feet, from topographic map.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Four-foot Parshall flume with continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, December 1981 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, December 1981 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 64--UPPER POND CREEK NEAR DECKER, MONT. (PDC)--Continued

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, December 1981 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 65--UPPER COAL CREEK NEAR DECKER, MONT. (UCC)

LOCATION.--Lat 45°01'55", long 106°45'59", in SE1/4SE1/4NE1/4 sec. 24, T. 9 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 1.5 miles upstream from mouth, 4.3 miles east of Highway 314, and 5.7 miles northeast of Decker.

DRAINAGE AREA.--1.49 mi².

ELEVATION.--3,542.7 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Two crest-stage gages, one static chemical-quality sampler, and one sediment sampler.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 66--UPPER MIDDLE CREEK NEAR DECKER, MONT. (UMC)

LOCATION.--Lat 45°02'26", long 106°44'18", in NW1/4SE1/4SW1/4 sec. 17, T. 9 S., R. 41 E., Big Horn County, Hydrologic Unit 10090101, 1.9 miles southwest of Holmes Ranch, 2.6 miles upstream from mouth, and 8.8 miles northeast of Decker.

DRAINAGE AREA.--4.02 mi².

ELEVATION.--3,580.8 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Four-foot flume with continuous water-stage recorder, two crest-stage gages, one static chemical-quality sampler, and one sediment sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 67--LOWER MIDDLE CREEK NEAR DECKER, MONT. (LMC)

LOCATION.--Lat 45°03'02", long 106°45'26", in NE1/4NE1/4NW1/4 sec. 18, T. 9 S., R. 41 E., Big Horn County, Hydrologic Unit 10090101, 1.1 miles south of Deer Creek, 1.5 miles north of Coal Creek, 1.5 miles upstream from mouth, and 5.8 miles northeast of Decker.

DRAINAGE AREA.--5.49 mi².

ELEVATION.--3,513.6 feet, surveyed.

TONGUE RIVER BASIN

Station 67---LOWER MIDDLE CREEK NEAR DECKER, MONT. (LMC)---Continued

OPERATOR.---Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.---Two crest-stage gages, one static chemical-quality sampler, and one sediment sampler.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.---Recorded per event when flow occurs, January 1981 to present (1985).

REMARKS.---Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.---Sampled per event when flow occurs, January 1981 to present (1985).

REMARKS.---Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.---Sampled per event when flow occurs, January 1981 to present (1985).

REMARKS.---Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 68---MIDDLE CREEK DIVERSION NEAR DECKER, MONT. (MCD)

LOCATION.---Lat 45°03'13", long 106°44'49", in SE1/4SE1/4SE1/4 sec. 7, T. 9 S., R. 41 E., Big Horn County, Hydrologic Unit 10090101, 0.6 mile north of Upper Middle Creek, 1.8 miles west of Holmes Ranch, and 7.1 miles northeast of Decker.

DRAINAGE AREA.---Not available.

ELEVATION.---3,585 feet, from topographic map.

OPERATOR.---Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.---Two crest-stage gages and one sediment sampler.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.---Recorded per event when flow occurs, 1980 to present (1985).

REMARKS.---Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 68--MIDDLE CREEK DIVERSION NEAR DECKER, MONT. (MCD)--Continued

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, 1980 to present (1985).
REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 69--SOUTH FORK DEER CREEK NEAR DECKER, MONT. (SFDC)

LOCATION.--Lat 45°02'47", long 106°40'47", in SE1/4SW1/4NW1/4 sec. 14, T. 9 S., R. 41 E., Big Horn County, Hydrologic Unit 10090101, 1.2 miles southeast of Deer Creek, 2.0 miles southeast of Holmes Ranch, and 10.9 miles northeast of Decker.

DRAINAGE AREA.--4.67 mi².

ELEVATION.--3,636.1 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Four-foot Parshall flume with continuous water-stage recorder, two crest-stage gages, and one static water-quality sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, December 1980 to present (1985).
REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, December 1980 to present (1985).
REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, December 1980 to present (1985).
REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, December 1980 to present (1985).
REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 70--DRY FORK DEER CREEK NEAR DECKER, MONT. (DFDC)

LOCATION.--Lat 45°05'12", long 106°42'03", in NE1/4NW1/4SW1/4 sec. 34, T. 8 S., R. 41 E., Big Horn County, Hydrologic Unit 10090101, 1.8 miles north of Holmes Ranch, 1.9 miles north of Deer Creek, and 10.9 miles northeast of Decker.

DRAINAGE AREA.--21.0 mi².

ELEVATION.--3,568.8 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Four-foot Parshall flume with continuous water-stage recorder and two crest-stage gages.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, December 1980 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, December 1980 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, December 1980 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, December 1980 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 71--DEER CREEK AT HOLMES RANCH NEAR DECKER, MONT. (DCHR)

LOCATION.--Lat 45°03'47", long 106°42'58", in NE1/4SE1/4NW1/4 sec. 9, T. 9 S., R. 41 E., Big Horn County, Hydrologic Unit 10090101, at Holmes Ranch, 2.9 miles upstream from mouth, and 8.6 miles northeast of Decker.

DRAINAGE AREA.--47.7 mi².

ELEVATION.--3,499.3 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Four-foot Parshall flume with continuous water-stage recorder, two crest-stage gages, and one sediment sampler.

TONGUE RIVER BASIN

Station 71--DEER CREEK AT HOLMES RANCH NEAR DECKER, MONT. (DCHR)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous, October 1974; May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded at least quarterly, October 1974 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled at least quarterly, October 1974 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled at least quarterly, October 1974 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 72--LOWER DEER CREEK NEAR DECKER, MONT. (LDC)

LOCATION.--Lat 45°03'59", long 106°44'56", in NW1/4NE1/4NE1/4 sec. 7, T. 9 S., R. 41 E., Big Horn County, Hydrologic Unit 10090101, 1.2 miles upstream from mouth, 1.8 miles west of Holmes Ranch, and 7.5 miles northeast of Decker.

DRAINAGE AREA.--51.7 mi².

ELEVATION.--3,432.98 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Four-foot Parshall flume with continuous water-stage recorder, two crest-stage gages, one static chemical-quality sampler, and one sediment sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 72--LOWER DEER CREEK NEAR DECKER, MONT. (LDC)--Continued

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 73--UPPER PEARSON CREEK NEAR DECKER, MONT. (CS-7)

LOCATION.--Lat 45°05'25", long 106°54'44", in SW1/4SE1/4NE1/4 sec. 35, T. 8 S., R. 39 E., Big Horn County, Hydrologic Unit 10090101, 5.0 miles upstream from mouth, and 5.9 miles northwest of Decker.

DRAINAGE AREA.--2.09 mi².

ELEVATION.--3,790 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, 1976 to 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurred, 1976 to 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 74--UNNAMED TRIBUTARY AT HIDE OUT CAVE, NEAR DECKER, MONT. (HOC)

LOCATION.--Lat 45°05'04", long 106°54'53", in NE1/4SW1/4SE1/4 sec. 35, T. 8 S., R. 39 E., Big Horn County, Hydrologic Unit 10090101, 0.2 mile north of South Fork Pearson Creek, 0.5 mile southwest of Pearson Creek, and 7.7 miles northwest of Decker.

DRAINAGE AREA.--0.04 mi².

ELEVATION.--3,745 feet, from topographic map.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Six-inch flume with continuous water-stage recorder, two crest-stage gages, and one static chemical-quality sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1982 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 75--LOWER PEARSON CREEK NEAR DECKER, MONT. (CS-9)

LOCATION.--Lat 45°04'51", long 106°52'02", in NW1/4NW1/4NW1/4 sec. 5, T. 9 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 2.8 miles southwest of Tongue River Mine, 2.9 miles upstream from mouth, and 4.7 miles north of Decker.

DRAINAGE AREA.--6.26 mi².

ELEVATION.--3,590 feet, from topographic map.

TONGUE RIVER BASIN

Station 75--LOWER PEARSON CREEK NEAR DECKER, MONT. (CS-9)--Continued

OPERATOR.--Spring Creek Coal Company, Decker, Mont.
GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, March 1976 to 1980.
REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, March 1976 to 1980.
REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 76--UPPER PEARSON CREEK NEAR DECKER, MONT. (UPC)

LOCATION.--Lat 45°04'44", long 106°51'44", in SW1/4NE1/4NW1/4 sec. 5, T. 9 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 1.2 miles northwest of Highway 314, 2.5 miles west of mouth, and 5.7 miles north of Decker.
DRAINAGE AREA.--6.26 mi².
ELEVATION.--3,570 feet, from topographic map.
OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.
GAGE.--Two-foot flume with continuous water-stage recorder, two crest-stage gages, one static chemical-quality sampler, and one sediment sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, October 1980 to present (1985).
REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, October 1980 to present (1985).
REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1980 to present (1985).
REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 76--UPPER PEARSON CREEK NEAR DECKER, MONT. (UPC)--Continued

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, October 1980 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 77--LOWER PEARSON CREEK NEAR DECKER, MONT. (LPC)

LOCATION.--Lat 45°04'12", long 106°49'16", in NW1/4SE1/4SW1/4 sec. 3, T. 9 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.4 mile upstream from mouth, 0.8 mile east of Highway 314, and 5.3 miles northeast of Decker.

DRAINAGE AREA.--8.65 mi².

ELEVATION.--3,437.6 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Four-foot flume with continuous water-stage recorder, two crest-stage gages, one static chemical-quality sampler, and one sediment sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 78--UPPER SOUTH FORK SPRING CREEK NEAR DECKER, MONT. (RS-3)

LOCATION.--Lat 45°06'49", long 106°56'44", in NW1/4SW1/4SW1/4 sec. 22, T. 8 S., R. 39 E., Big Horn County, Hydrologic Unit 10090101, 5.5 miles upstream from mouth, and 11.8 miles northwest of Decker.

DRAINAGE AREA.--6.91 mi².

ELEVATION.--3,870 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Continuous water-stage recorder and crest-stage gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, March 1976 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, March 1976 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurred, March 1976 to 1983. Semiannually 1984 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Monthly when flow occurs, 1982 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 79--SOUTH FORK SPRING CREEK TRIBUTARY NEAR DECKER, MONT. (CS-20)

LOCATION.--Lat 45°06'49", long 106°56'08", in NE1/4SW1/4SE1/4 sec. 22, T. 8 S., R. 39 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile upstream from mouth, 5.6 miles northwest of Tongue River Mine, and 11.1 miles northwest of Decker.

DRAINAGE AREA.--1.48 mi².

ELEVATION.--3,830 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Crest-stage gage and sediment sampler.

TONGUE RIVER BASIN

Station 79--SOUTH FORK SPRING CREEK TRIBUTARY NEAR DECKER, MONT. (CS-20)--Continued

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, 1980 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurred, 1980 to 1983. Semiannually 1984 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Monthly when flow occurs, 1980 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 80--SOUTH FORK SPRING CREEK TRIBUTARY NEAR DECKER, MONT. (CS-21)

LOCATION.--Lat 45°06'30", long 106°55'40", in SW1/4NW1/4NW1/4 sec. 26, T. 8 S., R. 39 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile upstream from mouth, 5.1 miles northwest of Tongue River Mine, and 10.3 miles northwest of Decker.

DRAINAGE AREA.--0.30 mi².

ELEVATION.--3,810 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, 1980 through 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurred, 1980 through 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 81--SOUTH FORK SPRING CREEK TRIBUTARY NEAR DECKER, MONT. (CS-22)

LOCATION.--Lat 45°06'20", long 106°54'45", in NE1/4SE1/4NE1/4 sec. 26, T. 8 S., R. 39 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile upstream from mouth, and 9.5 miles northwest of Decker.

DRAINAGE AREA.--0.15 mi².

ELEVATION.--3,730 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Crest-stage gage, sediment sampler, and bed scour chain.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, 1980 through 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurred, 1980 through 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Monthly when flow occurred, 1980 through 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 82--SOUTH FORK SPRING CREEK TRIBUTARY NEAR DECKER, MONT. (CS-23)

LOCATION.--Lat 45°06'12", long 106°54'36", in NE1/4NE1/4SE1/4 sec. 26, T. 8 S., R. 39 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile upstream from mouth, and 9.2 miles northwest of Decker.

DRAINAGE AREA.--0.17 mi².

ELEVATION.--3,730 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, 1980 through 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 82--SOUTH FORK SPRING CREEK TRIBUTARY NEAR DECKER, MONT. (CS-23)--Continued

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurred, 1980 through 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 83--SOUTH FORK SPRING CREEK TRIBUTARY NO. 5 NEAR DECKER, MONT. (RS-7)

LOCATION.--Lat 45°06'05", long 106°53'48", in SW1/4NW1/4SE1/4 sec. 25, T. 8 S., R. 39 E., Big Horn County, Hydrologic Unit 10090101 at mouth of South Fork Spring Creek, and 9.1 miles northwest of Decker.

DRAINAGE AREA.--10.2 mi².

ELEVATION.--3,670 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Continuous water-stage recorder, crest-stage gage, and sediment sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, 1980 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, 1980 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurs, 1980 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Monthly when flow occurs, 1980 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 84--SOUTH FORK SPRING CREEK NEAR DECKER, MONT. (MS-4)

LOCATION.--Lat 45°05'59", long 106°53'30", in NW1/4NW1/4SE1/4 sec. 25, T. 8 S., R. 39 E., Big Horn County, Hydrologic Unit 10090101, 2.7 miles upstream from mouth, and 6.2 miles northwest of Decker.
DRAINAGE AREA.--12.8 mi².
ELEVATION.--3,650 feet, from topographic map.
OPERATOR.--Spring Creek Coal Company, Decker, Mont. at NERCO Coal Corp office, Portland, Ore.
GAGE.--None.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurred, March 1976 through 1980.
REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 85--SOUTH FORK SPRING CREEK TRIBUTARY NEAR DECKER, MONT. (CS-25)

LOCATION.--Lat 45°05'49", long 106°52'36", in SW1/4SW1/4SE1/4 sec. 30, T. 8 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile upstream from mouth, and 7.3 miles north of Decker.
DRAINAGE AREA.--0.04 mi².
ELEVATION.--3,650 feet, from topographic map.
OPERATOR.--Spring Creek Coal Company, Decker, Mont.
GAGE.--Crest-stage gage, sediment sampler, and bed scour chain.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, 1980 through 1982.
REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurred, 1980 through 1982.
REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Monthly when flow occurred, 1980 through 1982.
REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 86--SOUTH FORK SPRING CREEK TRIBUTARY NO. 7 NEAR DECKER, MONT. (CS-24)

LOCATION.--Lat 45°05'39", long 106°52'37", in SW1/4NW1/4NE1/4 sec. 31, T. 8 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile upstream from mouth, and 7.3 miles north of Decker.

DRAINAGE AREA.--0.28 mi².

ELEVATION.--3,630 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, 1980 through 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurred, 1980 through 1982.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 87--LOWER SPRING CREEK NEAR DECKER, MONT. (LSC)

LOCATION.--Lat 45°05'12", long 106°50'39", in SE1/4NW1/4SW1/4 sec. 33, T. 8 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.2 mile upstream from Spring Creek, 0.4 mile northwest of Highway 314, and 5.8 miles north of Decker.

DRAINAGE AREA.--12.8 mi².

ELEVATION.--3,472.2 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Four-foot flume with continuous water-stage recorder, two crest-stage gages, one static chemical-quality sampler, and one suspended-sediment sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 87--LOWER SPRING CREEK NEAR DECKER, MONT. (LSC)--Continued

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena, Mont.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena, Mont.

Station 88--UPPER SPRING CREEK NEAR DECKER, MONT. (CS-1)

LOCATION.--Lat 45°07'27", long 106°54'52", in NE1/4NW1/4NE1/4 sec. 23, T. 8 S., R. 39 E., Big Horn County, Hydrologic Unit 10090101, 4.3 miles northwest of Tongue River Mine, 5.8 miles upstream from mouth, and 11.1 miles northwest of Decker.

DRAINAGE AREA.--17.1 mi².

ELEVATION.--3,770 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Continuous water-stage recorder, one crest-stage gage, and one sediment sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, 1984 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, March 1976 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 88--UPPER SPRING CREEK NEAR DECKER, MONT. (CS-1)--Continued

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Quarterly when flow occurred, March 1976 through 1983. Semi-annually when flow occurs, 1984 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Monthly when flow occurs, March 1976 to present (1985).

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 89--NORTH FORK UPPER SPRING CREEK NEAR DECKER, MONT. (USC)

LOCATION.--Lat 45°06'21", long 106°51'52", in NE1/4SW1/4NW1/4 sec. 29, T. 8 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.9 mile west of Highway 314, 2.9 miles upstream from mouth, and 7.6 miles north of Decker.

DRAINAGE AREA.--21.8 mi².

ELEVATION.--3,585 feet, from topographic map.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--Two-foot flume with continuous water-stage recorder, two crest-stage gages, one static chemical-quality sampler, and one sediment sampler.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 89--NORTH FORK UPPER SPRING CREEK NEAR DECKER, MONT. (USC)--Continued

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurs, May 1975 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 90--UNNAMED TRIBUTARY NEAR DECKER, MONT. (CS-16)

LOCATION.--Lat 45°06'13", long 106°47'47", in SW1/4SW1/4NE1/4 sec. 26, T. 8 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.1 mile upstream from mouth, 3.3 miles northeast of Tongue River Dam, and 8.8 miles northeast of Decker.

DRAINAGE AREA.--0.41 mi².

ELEVATION.--3,430 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, March 1976 through 1978.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, March 1976 through 1978.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 91--UNNAMED TRIBUTARY NEAR DECKER, MONT. (CS-14)

LOCATION.--Lat 45°07'54", long 106°51'59", in NW1/4NW1/4SW1/4 sec. 17, T. 8 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 4.2 miles upstream from mouth, and 8.9 miles north of Decker.

DRAINAGE AREA.--0.86 mi².

ELEVATION.--3,730 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Crest-stage gage.

TONGUE RIVER BASIN

Station 91--UNNAMED TRIBUTARY NEAR DECKER, MONT. (CS-14)--Continued

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, March 1976 through 1978.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, March 1976 through 1978.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 92--UNNAMED TRIBUTARY NEAR DECKER, MONT. (CS-17)

LOCATION.--Lat 45°06'32", long 106°47'11", in NW1/4NW1/4NW1/4 sec. 25, T. 8 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, at mouth, and 9.6 miles northeast of Decker.

DRAINAGE AREA.--3.33 mi².

ELEVATION.--3,430 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, March 1976 through 1978.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, March 1976 through 1978.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 93--MONUMENT CREEK NEAR DECKER, MONT. (MS-10)

LOCATION.--Lat 45°07'42", long 106°47'55", in NW1/4SW1/4SE1/4 sec. 14, T. 8 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, 0.2 mile upstream from mouth, 5.8 miles northeast of Tongue River Dam, and 11.6 miles northeast of Decker.

DRAINAGE AREA.--13.1 mi².

ELEVATION.--3,430 feet, from topographic map.

OPERATOR.--Spring Creek Coal Company, Decker, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event when flow occurred, March 1976 through 1978.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled per event when flow occurred, March 1976 through 1978.

REMARKS.--Data are stored in computer files at NERCO Coal Corp office, Portland, Ore., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 94--TONGUE RIVER AT TONGUE RIVER DAM, NEAR DECKER, MONT.

LOCATION.--Lat 45°08'29", long 106°46'15", in SW1/4SE1/4SE1/4 sec. 12, T. 8 S., R. 40 E., Big Horn County, Hydrologic Unit 10090101, on left bank, 0.5 mile downstream from Tongue River Dam, 9.9 miles northeast of Decker, and at mile 188.4.

DRAINAGE AREA.--1,770 mi².

ELEVATION.--3,344.40 feet, surveyed.

OPERATOR.--Kiewit Mining and Engineering, Sheridan, Wyo.

GAGE.--None.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled at least quarterly, 1976 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled at least quarterly, 1976 to present (1985).

REMARKS.--Data are stored in a Kiewit Mining and Engineering Company hydrologic data base in Omaha, Nebr., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 95--COOK CREEK NEAR BIRNEY, MONT. (CC-1)

LOCATION.--Lat 45°22'32", long 106°29'58" in SW1/4NW1/4 sec. 25, T. 5 S., R. 42 E., Rosebud County, Hydrologic Unit 10090102, 0.25 mile upstream from mouth, 3.5 miles southwest of Birney Day School, and 4.5 miles north of Birney.

DRAINAGE AREA.--64.3 mi².

ELEVATION.--3,100 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

GAGE.--Stilling well, float gage, continuous water-stage recorder, 7-foot Cipolletti weir, and outside staff gage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous, October 1977 through September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Monthly, December 1975 through October 1977, March 1979, and May 1979.

REMARKS.--Data are listed in Andrews and others (1980).

Station 96--TONGUE RIVER AT MISSION CREEK, NEAR BIRNEY, MONT. (TR-2)

LOCATION.--Approximately lat 45°25'00", long 106°28'00", in SE1/4NE1/4 sec. 7, T. 5 S., R. 43 E., Rosebud County, Hydrologic Unit 10090102, at the mouth of Mission Creek, 0.5 mile downstream from the Birney Day School Bridge, 8.4 miles northeast of Birney, and at mile 143.9.

DRAINAGE AREA.--2,621 mi².

ELEVATION.--3,060 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

REMARKS.--Station was previously located in sec. 36, T. 5 S., R. 42 E., on the 3 Circle Ranch, on the left bank of river mile 151.8, and south of the Northern Cheyenne Indian Reservation boundary, and operated seasonally by the Montana Department of Natural Resources and Conservation 1967-73. Location of station was estimated. Actual location not available in Andrews and others (1980).

GAGE.--Continuous water-stage recorder with float, outside cantilever staff gage, and cableway.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous, April 1976 through May 1978 and October 1978 through September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Monthly, December 1975 through October 1977, March 1979, April 1979, August 1979, and September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

TONGUE RIVER BASIN

Station 96--TONGUE RIVER AT MISSION CREEK, NEAR BIRNEY, MONT. (TR-2)--Continued

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Intermittent, 1979.

REMARKS.--Data are listed in Andrews and Osborne (1979).

Station 97--TONGUE RIVER AT BIRNEY DAY SCHOOL BRIDGE, NEAR BIRNEY, MONT. (TR-1)

LOCATION.--Lat 45°24'42", long 106°27'26", in SW1/4SW1/4SW1/4 sec. 8, T. 5 S., R. 43 E., Rosebud County, Hydrologic Unit 10090102, 0.2 mile east of Birney Day School, 5.5 miles downstream from Cook Creek, 6.5 miles northeast of Birney, and at mile 144.3.

DRAINAGE AREA.--2,621 mi².

ELEVATION.--3,060 feet, from topographic map.

OPERATOR.--Montco, Billings, Mont.

GAGE.--None.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Measured monthly, January 1979 through December 1982; three times annually (maximum, minimum, and mean) January 1983 to present (1985).

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled monthly, January 1979 through December 1982; three times annually (maximum, minimum, and mean) January 1983 to present (1985).

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT DISCHARGE

PERIOD OF RECORD.--Sampled monthly, January 1979 through December 1982; three times annually (maximum, minimum, and mean) January 1983 to present (1985).

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 98--POKER JIM CREEK NEAR BIRNEY, MONT.

LOCATION.--Lat 45°23'43", long 106°26'17", in SW1/4SW1/4 sec. 16, T. 5 S., R. 43 E., Rosebud County, Hydrologic Unit 10090102, 2.2 miles southeast of Birney Day School, 3.6 miles southwest of Nance Landing Field, and 7.5 miles east of Birney.

DRAINAGE AREA.--18.3 mi².

ELEVATION.--3,152.01 feet, surveyed.

TONGUE RIVER BASIN

Station 98--POKER JIM CREEK NEAR BIRNEY, MONT.--Continued

OPERATOR.--Montco, Billings, Mont.

GAGE.--Parshall flume with a 72-inch throat and continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 99--POKER JIM CREEK NEAR BIRNEY, MONT. (CSG-8)

LOCATION.--Lat 45°23'55", long 106°26'36", in SE1/4SE1/4 sec. 17, T. 5 S., R. 43 E., Rosebud County, Hydrologic Unit 10090102, 1.5 miles southeast of Birney Day School, 2.5 miles southwest of Nance Landing Field, and 7.1 miles north-east of Birney.

DRAINAGE AREA.--18.5 mi².

ELEVATION.--3,133.91 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 100--POKER TEECHEE CREEK NEAR BIRNEY, MONT. (CSG-7)

LOCATION.--Lat 45°24'35", long 106°25'20", in SE1/4SE1/4 sec. 9, T. 5 S., R. 43 E., Rosebud County, Hydrologic Unit 10090102, 1.9 miles south of Nance Landing Field, 2.1 miles east of Birney Day School, and 8.3 miles northeast of Birney.

DRAINAGE AREA.--5.04 mi².

ELEVATION.--3,125.81 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 101--UNNAMED TRIBUTARY NEAR BIRNEY, Mont. (CSG-6)

LOCATION.--Lat 45°25'49", long 106°24'16", in NW1/4SE1/4 sec. 3, T. 5 S., R. 43 E., Rosebud County, Hydrologic Unit 10090102, 4.9 miles northeast of Birney Day School, and 9.7 miles northeast of Birney.

DRAINAGE AREA.--0.95 mi².

ELEVATION.--3,088.91 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 102--GATE CREEK NEAR BIRNEY, MONT. (CSG-9)

LOCATION.--Lat 45°26'33", long 106°23'29", in NE1/4SW1/4 sec. 35, T. 4 S., R. 43 E., Rosebud County, Hydrologic Unit 10090102, 5.5 miles northeast of Birney Day School, and 11.2 miles northeast of Birney.

DRAINAGE AREA.--3.08 mi².

ELEVATION.--3,084.00 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 103--O'DELL CREEK NEAR ASHLAND, MONT.

LOCATION.--Lat 45°26'24", long 106°20'07", in SW1/4SW1/4 sec. 32, T. 4 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 1.2 miles southeast of O'Dell Creek Road turnoff, 8.5 miles northeast of Birney Day School, and 11.3 miles southwest of Ashland.

DRAINAGE AREA.--45.7 mi².

ELEVATION.--3,150.42 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Parshall flume with a 72-inch throat and continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 104--O'DELL CREEK NEAR ASHLAND, MONT. (CSG-5)

LOCATION.--Lat 45°27'03", long 106°21'05", in NE1/4NW1/4 sec. 31, T. 4 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 0.3 mile southwest of O'Dell Creek Road turnoff, 7.5 miles northeast of Birney Day School, 7.5 miles southwest of Ashland, and 13.2 miles northeast of Birney.

DRAINAGE AREA.--45.7 mi².

ELEVATION.--3,130.45 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 105--UNNAMED TRIBUTARY NEAR ASHLAND, MONT. (CSG-4)

LOCATION.--Lat 45°28'42", long 106°20'44", in NW1/4NE1/4 sec. 19, T. 4 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 1.8 miles north of O'Dell Creek Road turnoff, 9.2 miles northeast of Birney Day School, and 9.7 miles southwest of Ashland.

DRAINAGE AREA.--1.47 mi².

ELEVATION.--3,043.54 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 106--DRY CREEK NEAR ASHLAND, MONT. (CSG-3)

LOCATION.--Lat 45°29'03", long 106°20'15", in SE1/4SE1/4 sec. 18, T. 4 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 2.5 miles northeast of O'Dell Creek Road turnoff, 8.1 miles southwest of Ashland, and 9.7 miles northeast of Birney Day School.

DRAINAGE AREA.--4.45 mi².

ELEVATION.--3,030.96 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 107--CEDAR CREEK NEAR ASHLAND, MONT. (CSG-2)

LOCATION.--Lat 45°29'38", long 106°20'12", in NE1/4NE1/4 sec. 18, T. 4 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 3.1 miles northeast of O'Dell Creek Road turnoff, 7.5 miles southwest of Ashland, and 10.4 miles northeast of Birney Day School.

DRAINAGE AREA.--1.54 mi².

ELEVATION.--3,009.83 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 through December 1982.

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 108--KING CREEK NEAR ASHLAND, MONT.

LOCATION.--Lat 45°29'21", long 106°17'44", in SE1/4NE1/4 sec. 16, T. 4 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 0.4 mile southwest of the Schaudel Reservoir, 3.2 miles southeast of O'Dell Creek Road turnoff, and 7.5 miles southwest of Ashland.

DRAINAGE AREA.--11.0 mi².

ELEVATION.--3,145.16 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Parshall flume with a 72-inch throat and a continuous water-stage recorder.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous, January 1979 to present (1985).

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 109--KING CREEK NEAR ASHLAND, MONT. (CSG-1)

LOCATION.--Lat 45°30'30" long 106°19'45", in NE1/4NW1/4 sec. 8, T. 4 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 4.2 miles northeast of O'Dell Creek Road turnoff, 6.7 miles southwest of Ashland, and 10.6 miles northeast of Birney Day School.

DRAINAGE AREA.--12.6 mi².

ELEVATION.--2,990.87 feet, surveyed.

OPERATOR.--Montco, Billings, Mont.

GAGE.--Crest-stage gage.

CREST-STAGE GAGE RECORDS

PERIOD OF RECORD.--Recorded per event January 1979 to present (1985).

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 to present (1985).

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled twice annually if flow existed, January 1979 to present (1985).

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

TONGUE RIVER BASIN

Station 110--TONGUE RIVER BELOW KING CREEK, NEAR ASHLAND, MONT. (TR-2)

LOCATION.--Lat 45°31'03", long 106°20'02" in NW1/4SW1/4 sec. 5, T. 4 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 0.6 mile downstream from King Creek, 6.2 miles southwest of Ashland, 7.2 miles upstream from Logging Creek, and at mile 127.7.

DRAINAGE AREA.--2,815 mi².

ELEVATION.--2,960 feet, from topographic map.

OPERATOR.--Montco, Billings, Mont.

GAGE.--None.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Measured monthly, January 1979 through December 1982; three times annually (maximum, minimum, and mean) January 1983 to present (1985).

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled monthly, January 1979 through December 1982; three times annually (maximum, minimum, and mean) January 1983 to present (1985).

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled monthly, January 1979 through December 1982; three times annually (maximum, minimum, and mean) January 1983 to present (1985).

REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

Station 111--LOGGING CREEK AT TONGUE RIVER, NEAR ASHLAND, MONT. (LC-1)

LOCATION.--Lat 45°33'09", long 106°18'18", in NW1/4NE1/4 sec. 28, T. 3 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 0.25 mile upstream from mouth, 3.9 miles southwest of St. Labre Mission, and 4.1 miles southwest of Ashland.

DRAINAGE AREA.--38.0 mi².

ELEVATION.--2,980 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

REMARKS.--Location given in literature (NE1/4NW1/4NE1/4 sec. 28, T. 3 S., R. 44 E.) not accurate.

GAGE.--Continuous water-stage recorder, 3-foot Parshall flume, and outside staff gage.

TONGUE RIVER BASIN

Station 111--LOGGING CREEK AT TONGUE RIVER, NEAR ASHLAND, MONT. (LC-1)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Continuous, October 1976 through February 1977 and June 1977 through September 1979.

REMARKS.--Data are listed in Andrews and others (1980).

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled monthly, December 1975 through July 1977, October 1977, and March 1979.

REMARKS.--Data are listed in Andrews and others (1980).

Station 112--TONGUE RIVER AT ASHLAND, MONT.

LOCATION.--Approximately lat 45°35'20", long 106°17'40", in SE1/4NW1/4 sec. 10, T. 3 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 1.2 miles southwest of Ashland, 1.5 miles south of St. Labre Mission, and at mile 115.8.

DRAINAGE AREA.--2,886 mi².

ELEVATION.--2,910 feet, from topographic map.

OPERATOR.--Northern Cheyenne Research Project, Lame Deer, Mont.

REMARKS.--Location of station estimated. Actual location not available in Andrews and others (1980).

GAGE.--None.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Intermittent measurements, 1979.

REMARKS.--Data are listed in Andrews and others (1980).

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Intermittent samples, 1979.

REMARKS.--Data are listed in Andrews and Osborne (1979).

Station 113--TONGUE RIVER BELOW DOUBLE E COULEE, NEAR ASHLAND, MONT. (TR-6)

LOCATION.--Lat 45°39'10", long 106°17'25", in SW1/4NW1/4 sec. 22, T. 2 S., R. 44 E., Rosebud County, Hydrologic Unit 10090102, 3.2 river miles below the mouth of Double E Coulee, 3.3 miles north of the St. Labre Mission, 4.1 miles northwest of Ashland, and at mile 104.4.

DRAINAGE AREA.--3,682 mi².

ELEVATION.--2,850 feet, from topographic map.

OPERATOR.--Montco, Billings, Mont.

REMARKS.--Site is changed to Tongue River at St. Labre Bridge (TR-5) located at lat 45°35'52", long 106°16'28", in NE1/4NE1/4 sec. 10, T. 3 S., R. 44 E., and 0.5 mile northwest of Ashland when high flows require bridge monitoring.

GAGE.--None.

TONGUE RIVER BASIN

Station 113--TONGUE RIVER BELOW DOUBLE E COULEE,
NEAR ASHLAND, MONT. (TR-6)--Continued

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Measured monthly January 1979 through December 1982 and three times annually (maximum, minimum, and mean) January 1983 to present (1985).
REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

CHEMICAL-QUALITY RECORDS

PERIOD OF RECORD.--Sampled monthly January 1979 through December 1982 and three times annually (maximum, minimum, and mean) January 1983 to present (1985).
REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SUSPENDED-SEDIMENT RECORDS

PERIOD OF RECORD.--Sampled monthly January 1979 through December 1982 and three times annually (maximum, minimum, and mean) January 1983 to present (1985).
REMARKS.--Data are filed at Montco's main office in Billings, Mont., and in annual reports submitted by the operator to the Montana Department of State Lands, Helena.

SELECTED REFERENCES

- Andrews, C.B., and Osborne, T.J., 1979, Sediment characteristics of the Tongue River basin, Wyoming and Montana: Lame Deer, Mont., Northern Cheyenne Research Project, 119 p.
- Andrews, C.B., Osborne, T.J., and Whiteman, Jason, 1980, Hydrologic data from the Northern Cheyenne Reservation [Montana]: Cincinnati, Ohio, Industrial Environmental Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Grant R806082, 596 p.
- Blackwell, C.D., and Nokes, J.M., 1982, Directory of member organizations of the National Water Data Exchange (NAWDEX): U.S. Geological Survey Open-File Report 82-902, 70 p.
- Decker Coal Company, 1983, 1982 annual progress report for surface mining permit 81001, Volume 1: Sheridan, Wyo., 30 p.
- _____, 1984, 1983 annual progress report for surface mining permit 81001, Volume 1: Sheridan, Wyo., 30 p.
- _____, 1985, 1984 annual progress report for surface mining permit 81001, Volume 1: Sheridan, Wyo., 58 p.
- _____, 1986, Annual hydrologic report for the 1985 water year: Sheridan, Wyo., 54 p.
- Dingman, J.S., and others, 1983a, Big Sky Mine, Rosebud County, Montana, 1982 Annual hydrology report: Denver, Colo., Peabody Coal Company, 225 p.
- _____, 1983b, 1983 water year annual hydrology report, Big Sky Mine, Rosebud County, Montana: Denver, Colo., Peabody Coal Company, 225 p.
- Dingman, Slade, and Mednick, Jay, 1985, Surface mine permit application no. 00132, Volume IV, Hydrology: Denver, Colo., Peabody Coal Company, 549 p.
- Koffler, Mark, Mednick, Jay, and Dingman, Slade, 1985, 1984 water year annual hydrology report, Big Sky Mine, Rosebud County, Montana: Denver, Colo., Peabody Coal Company, 30 p.
- Koffler, Mark, and Wheaton, John, 1986, 1985 water year annual hydrology report, Big Sky Mine, Rosebud County, Montana: Denver, Colo., Peabody Coal Company, 506 p.
- Montco, 1983a, Montco mine permit application, Volume 10, surface water hydrology: Billings, Mont., 35 p.
- _____, 1983b, Montco mine permit application, Volume 12, water quality: 26 p.
- NERCO, Inc., 1981, 1980 Hydrology monitoring [Spring Creek Mine, Montana]: Portland, Ore., 1981 annual report, v. 2, appendix IV, 175 p.
- Nipple, Allen, 1983, Hydrology monitoring, 1982 [Spring Creek Mine, Montana]: Decker, Mont., Spring Creek Coal Company 1983 Annual report, v. 2, appendix III, 85 p.

- ____ 1984, Hydrology monitoring, 1983 [Spring Creek Mine, Montana]: Decker, Mont., Spring Creek Coal Company 1984 Annual report, v. 2, appendix III, 83 p.
- ____ 1985, Hydrology monitoring, 1985 [Spring Creek Mine, Montana]: Decker, Mont., Spring Creek Coal Company 1985 Annual report, v. 2, appendix III, 83 p.
- Northern Energy Resources Company, 1978, Environmental baseline study, Spring Creek project [Montana], v. 2, Hydrology: Portland, Ore., 124 p.
- Spring Creek Coal Company, 1979, Application for surface mining permit [Spring Creek Mine, Montana]: Portland, Ore., Spring Creek Coal Company, application No. 00050, amendment 1, v. 1, 450 p.
- ____ 1981, 1980 Hydrology monitoring [Spring Creek Mine, Montana]: Decker, Mont., 1981 annual report, v. II, appendix IV, 18 p.
- ____ 1982, 1981 Hydrology monitoring [Spring Creek Mine, Montana]: Decker, Mont., 1982 annual report, v. 2, appendix 4, 50 p.
- Steele, Richard, and others, 1982, 1980-81 Hydrology report, Big Sky Mine, Rosebud County, Montana: Denver, Colo., Peabody Coal Company, 285 p.
- Turcotte, D.B., and Garnett, D.L., 1981, Predevelopment, Montco Mine site, Rosebud County, Montana: Billings, Mont., Montco Hydrologic monitoring manual, 160 p.
- U.S. Geological Survey, 1976, Hydrologic Unit map--1974, State of Montana: scale 1:500,000, 2 sheets.
- ____ 1984, Water resources data for Montana, water year 1983--volume 1, Hudson Bay basin and Missouri River basin: U.S. Geological Survey Water-Data Report MT-83-1, 585 p.
- Western Energy Company, 1982, Hydrologic resource data, Rosebud Mine [Montana]: Colstrip, Mont., v. 1, 225 p.
- ____ 1985, Annual hydrology report 1985, Rosebud Mine [Montana]: Colstrip, Mont., 520 p.
- Westmoreland Resources, Inc., 1982, Annual report on resources monitoring for 1981, Absaloka Mine, Big Horn County, Montana: Hardin, Mont., v. 1, 350 p.