

Bookid 5306      Cat 44  
STONE, WILLIAM J., LYFORD, FOREST P., FRENZEL, PETER F.,  
MIZELL, NANCY H., AND PADGETT, ELIZABETH T.  
HYDROGEOLOGY AND WATER RESOURCES OF SAN JUAN BASIN, NEW  
MEXICO HYDROLOGIC REPORT 6  
The San Juan Basin of northwest New Mexico contains a wealth  
of energy resources. Although petroleum reserves are nearly  
depleted, vast reserves of uranium and coal remain to be  
extracted. In this arid to semiarid region, surface-water  
resources are limited and fully appropriated. New water  
supplies for energy development and growing municipalities  
must, therefore, be derived from negotiated surface water or  
ground water.  
New Mexico Bureau of Mines and Mineral Resources: Socorro, NM 1983  
Notes                      Includes Maps and Microfilm

BookID/Cat-ID    Bookid 1805    Cat 44  
THORN, CONDE' R., LEVINGS, GARY W., CRAIGG, STEVEN D., DAM, WILLIAM L.,  
AND KERNODLE, JOHN MICHAEL  
HYDROGEOLOGY OF THE OJO ALAMO SANDSTONE IN THE SAN JUAN STRUCTURAL BASIN,  
NEW MEXICO, COLORADO, ARIZONA, AND UTAH, HYDROLOGIC INVESTIGATION ATLAS  
HA-720-B  
Includes two maps: Map 1. Hydrologic Investigations; Map 2.  
Hydrologic Investigations. This report is one in a series  
resulting from the U.S. Geological Survey's Regional  
Aquifer-System Analysis (RASA) study of the San Juan  
structural basin that began in October 1984. The purpose of  
the RASA (Welder, 1986) are to (1) Define and evaluate the  
aquifer system; (2) Assess the effects of past, present, and  
potential ground-water use on aquifers and streams, and (3)  
determine the availability and quality of ground water.  
Previous reports in the series describe the hydrology of the  
Dakota Sandstone (Craig and Others, 1989), Gallup Sandstone  
(Kernodle and others, 1989), Morrison Formation (Dam and  
others, 1990), Point Lookout Sandstone (Craig and others,  
1990), Pictured Cliffs Sandstone (Dam and others, 1990),  
Kirtland Shale and Fruitland Formation (Kernodle and others,  
1990), Menefee Formation (Levings and others, 1990), and  
Cliff House Sandstone (Thorn and others, 1990) in the San  
Juan structural basin. This report summarizes information on  
the geology and the occurrence and quality of water in the  
Ojo Alamo sandstone, one of the primary water-bearing units  
in the regional aquifer system.  
Publisher            U.S. Department of the Interior Geological Survey :  
Reston, VA 1990  
Notes                      Map Scales 1:1,000,000 and 1:2,000,000

BookID/Cat-ID    Bookid 1804    Cat 44  
LEVINGS, GARY W., CRAIGG, STEVEN D., DAM, WILLIAM L., KERNODLE, JOHN  
MICHAEL, AND THORN, CONDE' R.  
HYDROGEOLOGY OF THE SAN JOSE, NACIMIENTO, AND ANIMAS FORMATIONS IN THE  
SAN JUAN STRUCTURAL BASIN, NEW MEXICO, COLORADO, ARIZONA, AND UTAH,  
HYDROLOGIC INVESTIGATIONS ATLAS HA-720-A  
Includes two maps: Map 1. Hydrologic Investigations; Map 2.

Hydrologic Investigations. This report is one in a series resulting from the U.S. Geological Survey's Regional Aquifer-System Analysis (RASA) study of the San Juan structural basin that began in October 1984. The purpose of the RASA (Welder, 1986) are to (1) Define and evaluate the aquifer system; (2) Assess the effects of past, present, and potential ground-water use on aquifers and streams, and (3) determine the availability and quality of ground water. Previous reports in the series describe the hydrology of the Dakota Sandstone (Craig and Others, 1989), Gallup Sandstone (Kernodle and others, 1989), Morrison Formation (Dam and others, 1990), Point Lookout Sandstone (Craig and others, 1990), Pictured Cliffs Sandstone (Dam and others, 1990), Kirtland Shale and Fruitland Formation (Kernodle and others, 1990), Menefee Formation (Levings and others, 1990), and Cliff House Sandstone (Thorn and others, 1990) in the San Juan structural basin. On a regional scale, the San Jose, Nacimiento, and Animas Formations are hydraulically connected and form one of the primary water-bearing units in the regional aquifer system. This report summarizes information on the geology and the occurrence and quality of water in the San Jose, Nacimiento, and Animas Formations.

Publisher U.S. Department of the Interior Geological Survey:  
Reston, VA 1990

Notes Map Scales 1:1,000,000 and 1:2,000,000

BookID/Cat-ID Bookid 1806 Cat 44

MICHAEL, KERNODLE JOHN, THORN, CORDE' R., LEVINGS, GARY W., CRAIGG, STEVEN D., AND DAM, WILLIAM L.

HYDROGEOLOGY OF THE KIRTLAND SHALE AND FRUITLAND FORMATION IN THE SAN JUAN STRUCTURAL BASIN, NEW MEXICO, COLORADO,

ARIZONA, AND UTAH HYDROLOGIC INVESTIGATIONS ATLAS HA-720-C

Includes two maps: Map 1. Hydrologic Investigations; Map 2.

Hydrologic Investigations. This report is one in a series resulting from the U.S. Geological Survey's Regional Aquifer-System Analysis (RASA) study of the San Juan structural basin that began in October 1984. The purpose of the RASA (Welder, 1986) are to (1) Define and evaluate the aquifer system; (2) Assess the effects of past, present, and potential ground-water use on aquifers and streams, and (3) determine the availability and quality of ground water. Previous reports in the series describe the hydrology of the Dakota Sandstone (Craig and Others, 1989), Gallup Sandstone (Kernodle and others, 1989), Morrison Formation (Dam and others, 1990), Point Lookout Sandstone (Craig and others, 1990), Pictured Cliffs Sandstone (Dam and others, 1990), Menefee Formation (Levings and others, 1990), Cliff House Sandstone (Thorn and others, 1990) and Ojo Alamo Sandstone (Thorn and others, 1990) in the San Juan structural basin.

This report summarizes information on the geology and the occurrences and quality of water in the combined Kirtland Shale and Fruitland Formation, one of the primary water-bearing units in the regional aquifer system. These two formations are treated as a single hydrogeologic unit because they commonly are mapped together, they contain strata of similar lithology, and they have similar hydrologic properties.

Publisher U.S. Department of the Interior Geological Survey:  
Reston, VA 1990  
Notes Map Scales 1:1,000,000 and 1:2,000,000

BookID/Cat-ID Bookid 1807 Cat 44  
DAM, WILLIAM L., KERNODLE, JOHN MICHAEL, THORN, CONDE' R.,  
LEVINGS, GARY W., AND CRAIGG, STEVEN D.  
HYDROGEOLOGY OF THE PICTURED CLIFFS SANDSTONE IN THE SAN  
JUAN STRUCTURAL BASIN, NEW MEXICO, COLORADO, AND UTAH  
HYDROLOGIC INVESTIGATIONS ALTAS HA-720-D  
Includes two maps: Map 1. Hydrologic Investigations; Map 2.  
Hydrologic Investigations. This report is one in a series  
resulting from the U.S. Geological Survey's Regional  
Aquifer-System Analysis (RASA) study of the San Juan  
structural basin that began in October 1984. The purpose of  
the RASA (Welder, 1986) are to (1) Define and evaluate the  
aquifer system; (2) Assess the effects of past, present, and  
potential ground-water use on aquifers and streams, and (3)  
determine the availability and quality of ground water.  
Previous reports in the series describe the hydrology of the  
Dakota Sandstone (Craig and Others, 1989), Gallup Sandstone  
(Kernodle and others, 1989), Morrison Formation (Dam and  
others, 1990), Point Lookout Sandstone (Craig and others,  
1990) Pictured Cliffs Sandstone (Dam and others, 1990),  
Kirtland Shale and Fruitland Formation (Kernodle and others,  
1990), Menefee Formation (Levings and others, 1990), and  
Cliff House Sandstone (Thorn and others, 1990), and Ojo  
Alamo Sandstone (Thorn and others, 1990) in the San Juan  
structural basin. This report summarizes information on the  
geology and the occurrences and quality of water in the  
Pictured Cliffs Sandstone, one of the primary water-bearing  
units in the regional aquifer system.

Publisher U.S. Department of the Interior Geological Survey:  
Reston, VA 1990  
Notes Map Scale 1:1,000,000 and 1:2,000,000

BookID/Cat-ID Bookid 64 Cat 44  
THORN, C.R., LEVINGS, G.W., CRAIGG, S.D., DAM, W.L., AND  
KERNODLE, J.M.  
HYDROLOGY OF THE CLIFF HOUSE SANDSTONE IN THE SAN JUAN  
STRUCTURAL BASIN, NEW MEXICO, COLORADO, ARIZONA, AND UTAH  
This report summarizes knowledge about the hydrogeology of  
the Cliff House Sandstone of Late Cretaceous age in the  
basin. Data used in this report were derived from data  
collected during the study, from existing records in the U.  
S. Geological Survey's national, computerized Water-Data  
Storage and Retrieval System (WATSTORE) data base, and the  
Petroleum Information Corporation's data base. All data  
available for the Cliff House Sandstone were included in the  
discussions in the text; however, not all data could be  
plotted on the illustrations.

Publisher U.S. Department of the Interior Geological Survey 1988

BookID/Cat-ID Bookid 65 Cat 44

LEVINGS, G.W., CRAIGG, S.D., DAM, W.L., KERNODLE, J.M., AND THORN, C.R.

HYDROGEOLOGY OF THE MENELEE FORMATION IN THE SAN JUAN STRUCTURAL BASIN, NEW MEXICO, COLORADO, ARIZONA, AND UTAH  
This report summarizes information about the hydrogeology of the Menefee Formation of Late Cretaceous age in the basin. Data used in this report were derived from data collected during the study, from existing records in the U.S. Geological Survey's national computerized Water-Data Storage and Retrieval System (WATSTORE) data base, and the Petroleum Information Corporation data base. All data available for the Menefee Formation were included in the discussion in the text; however, not all the data could be plotted on the illustrations.

Publisher U.S. Department of the Interior Geological Survey:  
Albuquerque, NM 1988

BookID/Cat-ID Bookid 66 Cat 44

CRAIGG, S.D., DAM, W.L., KERNODLE, J.M., THORN, C.R., AND LEVINGS, G.W.

HYDROGEOLOGY OF THE POINT LOOKOUT SANDSTONE IN THE SAN JUAN STRUCTURAL BASIN, NEW MEXICO, COLORADO, ARIZONA, AND UTAH  
This report summarizes information about the hydrogeology of the Point Lookout Sandstone of Late Cretaceous age in the basin. Data used in this report were derived from data collected during the study, from existing reports in the U.S. Geological Survey's national, computerized Water-Data Storage and Retrieval System (WATSTORE) data base, and the Petroleum Information Corporation's data base. All data available for the Point Lookout Sandstone were included in the discussions in the text; however, not all of the data could be plotted on the illustrations.

Publisher U.S. Department of the Interior Geological Survey:  
Albuquerque, NM 1988

BookID/Cat-ID Bookid 67 Cat 44

KERNODLE, J.M., LEVINGS, G.W., CRAIGG, S.D., AND DAM, W.L.  
HYDROGEOLOGY OF THE GALLUP SANDSTONE IN THE SAN JUAN STRUCTURAL BASIN, NEW MEXICO, COLORADO, ARIZONA, AND UTAH  
This is one in a series of reports from the U.S. Geological Survey's San Juan Structural Basin Regional Aquifer-System ( RASA) project to define and understand the hydrogeology and geochemistry of the 19,400-square-mile study area. This report contains 14 figures showing geologic, hydrogeologic, and water-quality data for the Gallup Sandstone.

Publisher U.S. Department of the Interior Geological Survey:  
Albuquerque, NM 1987

BookID/Cat-ID Bookid 68 Cat 44

DAM, W.L., KERNODLE, J.M., LEVINGS, G.W., AND CRAIGG, S.D.  
HYDROGEOLOGY OF THE MORRISON FORMATION IN THE SAN JUAN STRUCTURAL BASIN, NEW MEXICO, COLORADO, UTAH, AND ARIZONA  
The purpose of this report is to summarize knowledge about the hydrogeology of the Morrison Formation in the San Juan

Basin. Data used in this report consist of new data collected during the study and existing records in the U.S. Geological Survey's computerized WATSTORE (National Water-Data Storage and Retrieval System) data base and the Petroleum Information Corporation's data base.

Publisher U.S. Department of the Interior Geological Survey:  
Albuquerque, NM 1987

BookID/Cat-ID Bookid 69 Cat 44  
CRAIGG, S.D., DAM, W.L., KERNODLE, J.M., AND LEVINGS, G.W.  
HYDROGEOLOGY OF THE DAKOTA SANDSTONE IN THE SAN JUAN  
STRUCTURAL BASIN, NEW MEXICO, COLORADO, ARIZONA, AND UTAH  
This report is one in a series of report resulting from the  
U.S. Geological Survey's San Juan Structural Basin Regional  
Aquifer-System Analysis (RASA) project to define and  
understanding the hydrogeology and geochemistry of the 19,,  
400-square-mile study area. This report contains 15 figures  
showing geologic, hydrogeologic, and water-quality data that  
summarize knowledge about the hydrogeology of the Dakota  
Sandstone.

Publisher U.S. Department of the Interior Geological Survey:  
Albuquerque, NM 1987

BookID/Cat-ID Bookid 3164 Cat 44  
LEVINGS, GARY W., KERNODLE, JOHN M., AND THORN, CONDE R.  
SUMMARY OF THE SAN JUAN STRUCTURAL BASIN REGIONAL AQUIFER-  
SYSTEM ANALYSIS, NEW MEXICO, COLORADO, ARIZONA, AND UTAH  
WATER-RESOURCES INVESTIGATIONS REPORT 95-4188  
Ground-water resources are the only source of water in most  
of the San Juan structural basin and are mainly used for  
municipal, industrial, and stock purposes. Industrial use  
increased dramatically during the late 1970's and early  
1980's because of increased exploration and development of  
uranium and coal resources.

Publisher U.S. Department of the Interior Geological Survey:  
Albuquerque, NM 1996

BookID/Cat-ID Bookid 4646 Cat 44  
KERNODLE, JOHN MICHAEL  
HYDROGEOLOGY AND STEADY-STATE SIMULATION OF GROUND-WATER  
FLOW IN THE SAN JUAN BASIN, NEW MEXICO, COLORADO, ARIZONA,  
AND UTAH WATER-RESOURCES INVESTIGATIONS REPORT 95-4187  
As part of the multidisciplinary regional aquifer-system  
analysis, a three-dimensional steady-state ground-water-  
flow model was constructed for the San Juan Basin in parts  
of New Mexico, Colorado, Arizona, and Utah. The model  
simulated ground-water flow in 12 hydrostratigraphic units  
representing all the major source of ground water from  
aquifers of Jurassic and younger age.

Publisher U.S. Department of the Interior Geological Survey:  
Albuquerque, NM 1996

BookID/Cat-ID Bookid 1808 Cat 44  
THORN, CONDE'R., LEVINGS, GARY W., CRAIGG, STEVEN D., DAM,

WILLIAM L., AND KERNODLE, JOHN MICHAEL  
HYDROGEOLOGY OF THE CLIFF HOUSE SANDSTONE IN THE SAN JUAN  
STRUCTURAL BASIN, NEW MEXICO, COLORADO, ARIZONA, AND UTAH  
HYDROLOGIC INVESTIGATIONS ATLAS HA-720-E

Includes two maps: Map 1. Hydrologic Investigations; Map 2. Hydrologic Investigations. This report is one in a series resulting from the U.S. Geological Survey's Regional Aquifer-System Analysis (RASA) study of the San Juan structural basin that began in October 1984. The purpose of the RASA (Welder, 1986) are to (1) Define and evaluate the aquifer system; (2) Assess the effects of past, present, and potential ground-water use on aquifers and streams, and (3) determine the availability and quality of ground water. Previous reports in the series describe the hydrology of the Dakota Sandstone (Craig and Others, 1989), Gallup Sandstone (Kernodle and others, 1989), Morrison Formation (Dam and others, 1990), Point Lookout Sandstone (Craig and others, 1990), Menefee Formation (Levings and others, 1990), and Cliff House Sandstone (Thorn and others, 1990) in the San Juan structural basin. This report summarizes information on the geology and the occurrences and quality of water in the Cliff House Sandstone, one of the primary water-bearing units in the regional aquifer system.

Publisher U.S. Department of the Interior Geological Survey:  
Reston, VA 1990

Notes Map Scales 1:1,000,000 and 1:2,000,000

BookID/Cat-ID Bookid 1809 Cat 44

LEVINNGS, GARY W., CRAIGG, STEVEN D., DAM, WILLIAM L.,  
KERNODLE, JOHN MICHAEL, AND THORN, CONDE' R.  
HYDROGEOLOGY OF THE MENEFEЕ FORMATION IN THE SAN JUAN  
STRUCTURAL BASIN, NEW MEXICO, COLORADO, ARIZONA, AND UTAH  
HYDROLOGIC INVESTIGATIONS ATLAS HA-720-F

Includes two maps: Map 1. Hydrologic Investigations; Map 2. Hydrologic Investigations. This report is one in a series resulting from the U.S. Geological Survey's Regional Aquifer-System Analysis (RASA) study of the San Juan structural basin that began in October 1984. The purpose of the RASA (Welder, 1986) are to (1) Define and evaluate the aquifer system; (2) Assess the effects of past, present, and potential ground-water use on aquifers and streams, and (3) determine the availability and quality of ground water. Previous reports in the series describe the hydrology of the Dakota Sandstone (Craig and Others, 1989), Gallup Sandstone (Kernodle and others, 1989), Morrison Formation (Dam and others, 1990), Point Lookout Sandstone (Craig and others, 1990) and Cliff House Sandstone (Thorn and others, 1990) in the San Juan structural basin. This report summarizes information on the geology and the occurrences and quality of water in the Menefee Formation, one of the primary water-bearing units in the regional aquifer system.

Publisher U.S. Department of the Interior Geological Survey:  
Reston, VA 1990

Notes Map Scales 1:1,000,000 and 1:2,000,00

