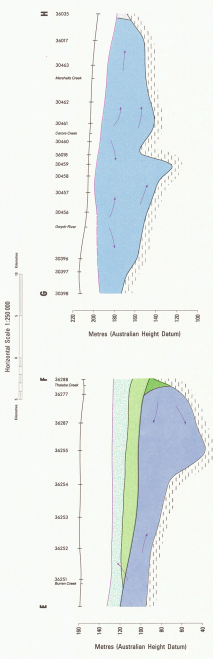
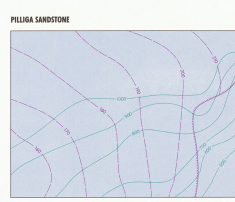


CROSS SECTIONS ALLUVIAL FORMATIONS



INSETS



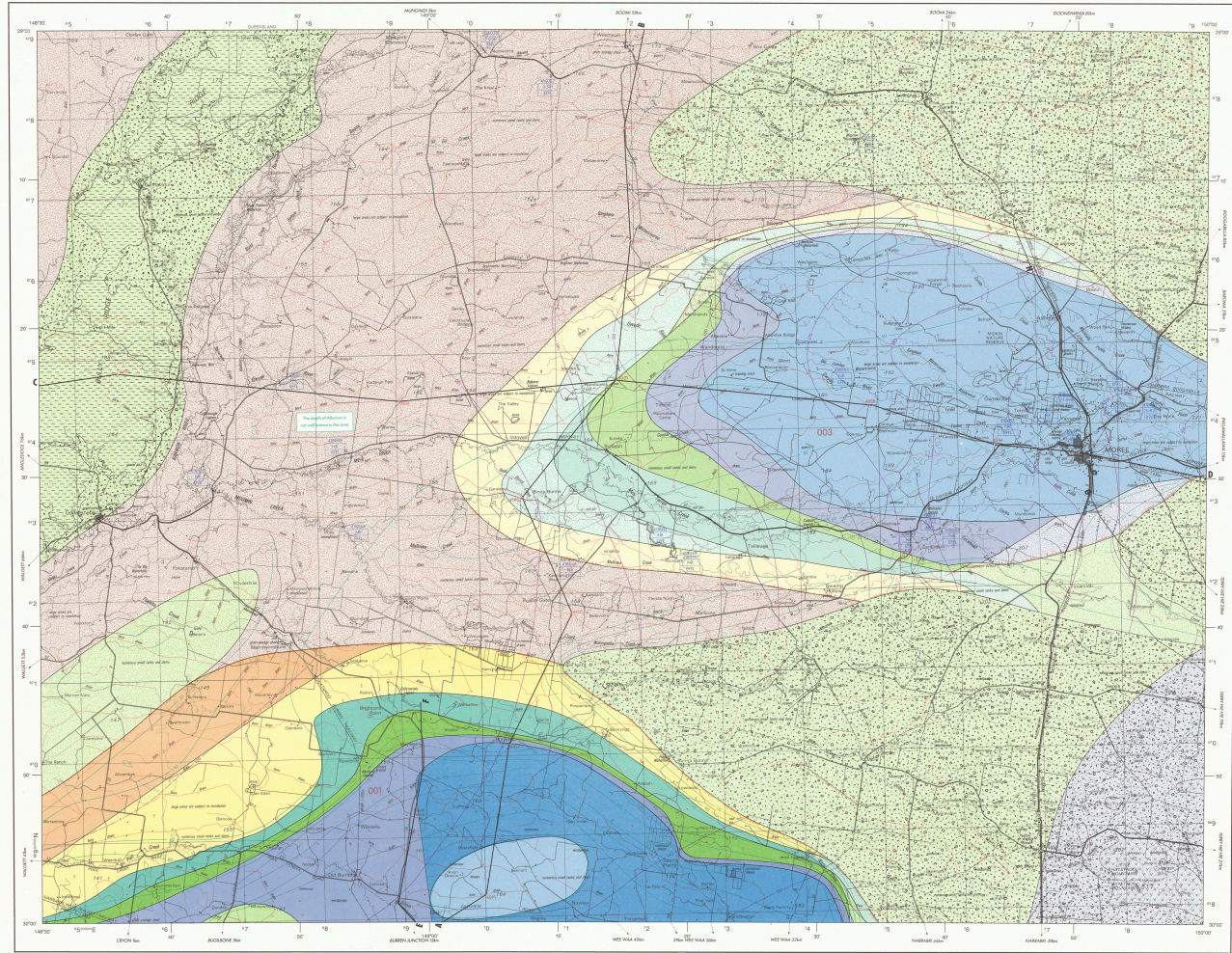
Contours indicating the depth to the base of the sandstone formations (100 metres interval).

Contours indicating the approximate surface of groundwater contained in the Pilliga Sandstone in AD 1984.

Line of area of stream flow.

MOREE SHEET SH 55-B

United States Geological Survey, Department of the Interior, Geological Survey, Reston, Virginia, 1984. Modified by the Department of Water Resources, New South Wales, 1988. All rights reserved. This sheet is published by the Department of Water Resources, New South Wales.



1:250 000 SHEET INDEX

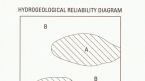
SPRINGWOOD	GLEBEVIEW	LEITCH	GOONABARRA
ANGLEDWOOD	MOREE	RYVALL	
MULLIST	NARRABRA	MUNDILLA	



CONTOUR INTERVAL 50 METRES
TRANSVERSE MERCATOR PROJECTION
GRID NUMBERS SHOWN OUTSIDE THE MAPLINE INDICATE THE 1000 METRE AUSTRALIAN MAP GRID (ZONE 56, AUSTRALIAN NATIONAL GRID)

Compiled by: Hydrogeology Unit, Department of Water Resources, New South Wales.
Hydrogeology by: S. Harbison, J.B. Ross, R.M. Williams.
Cartography by: Central Mapping Authority, Department of Lands, Topographic base compiled and drawn by the Central Mapping Authority, Department of Lands, for the Royal Australian Survey Corps, 1955.
Published by the Department of Water Resources, 1988.

- Reference**
- Photo: Shaded area or river line. Dotted line area.
 - Alkali: Unshaded area or more saline. Unshaded line area.
 - Vehicle track, foot track or rail.
 - Railway: Multiple track with station. Single track.
 - Public road: Hatched.
 - Town/Settlement: Large, Small, 'Yard'.
 - Lake: Perennial, intermittent.
 - River or Creek.
 - Sediment accumulation: Marsh or Swamp.
 - Contour: Contour.
 - Horizontal control point: Spot elevation.



The map is based on the following data: 1. Aerial photography from 1954 to 1960. 2. Groundwater level data from 1954 to 1960. 3. Geologic maps of the area. 4. Data from the Australian National Grid. 5. Data from the Department of Water Resources, New South Wales.



LEGEND

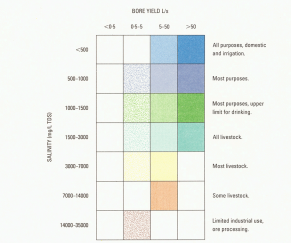
AQUIFERS

Aquifers are rock formations from which water can be obtained in usable quantities. They occur in a variety of geological settings and are generally unconsolidated. They are generally unconsolidated and are composed of sand, silt, and fractured rock. Although all types may be represented in this area, only the major aquifers are shown on this map.

- Unconsolidated Sediments**
- Alluvium**
These sediments were deposited by the ancient and present day Gwyder River. In some distributaries channels and temporary streams. The sediments are generally Pleistocene to Holocene (up to 10 000 years BP) in age except in the south where they were deposited by the Namoi River. Here sediments have been preserved from the Alluvial Deposits. In some areas BP is 10 000 years. These sediments are composed of clay, silt and coarse sand and gravel layers deposited by clay, silt and coarse sand layers. They are the main source of water.
 - Claystone**
These sediments are generally Recent in age although there are some remnants of older deposits which are unconsolidated. They are generally unconsolidated and are composed of clay, silt and coarse sand layers. They are the main source of water.
- Sedimentary Rocks**
- Jurassic and Cretaceous rocks 195 to 105 million years BP occur over the entire sheet but are extensively obscured by unconsolidated sediments except in the north and south-west areas.
- Sandstone**
Clay sandstone beds separated by shales and siltstone sequences are the main source of water. The Mangrove Sandstone, Cretaceous and the Pilliga Sandstone (Jurassic) are important aquifers in the Great Artesian Basin. Sandstone units up to 100 metres thick are present in the Basin.
 - Sandstone, Shale, Mudstone and Coal**
These sediments are the main confining layers for the sandstone units and are rarely aquifers. The Boree Sandstone, Cretaceous, Mangrove Sandstone, Early Cretaceous, Cretaceous, Cretaceous, Cretaceous and Wollong Coal Measures (Early Jurassic) are the main geological units in this part of the Great Artesian Basin.
 - Unconsolidated Lower Mesozoic and Palaeozoic Rocks**
A variety of sedimentary rocks of Triassic, 220 to 180 million years BP and Permian age (200 million years BP) occur in the eastern part of the sheet and occur below the sedimentary rocks of the Great Artesian Basin in the Boree Basin. The rocks are generally too deep to be considered aquifers.
- Fractured Rocks**
- Groundwater is stored in fractures in these rocks and there are considerable variations in yield. The ability of the groundwater to move over wide ranges being generally dependent on the rock type and the residence time of the groundwater.
- Basalt**
Cretaceous basalt flows of Early Miocene age (18 to 21 million years BP) crop out in the south-west part of the sheet. These highly fractured basalt and andesite rocks are the main source of water.
 - Diorite**
Cretaceous diorite flows from the Ordovician (200 million years BP) form the basement of the Great Artesian Basin and Boree Basin sediments. They comprise quartz, plagioclase, calcic and volcanic and do not occur in sequence.

GROUNDWATER MANAGEMENT AREAS

Several groundwater management areas have been defined for the groundwater resources, particularly those located within the unconsolidated sediments. The allocation and control of these resources is closely monitored. In the lower Namoi Water Management Area (SW) there is an overlap of two groundwater management areas from the adjacent sediments.



- REFERENCE**
- Contours indicating the depth to basepoint of the alluvial sediments (20 metres interval).
 - Water table contours for groundwater contained in alluvial sediments, with elevation in metres (100 metres interval).
 - Stream Gauging Station: New South Wales, Department of Water Resources, 1988.
 - Direction of Groundwater Flow.
 - Base and Registered number: Boree Basin.
 - Boundary of groundwater management area with number.