



Groundwater occurs in:

- ① Unconsolidated alluvial deposits mainly occurring along portions of river valleys
- ② Solution channels and fractures occurring in the carbonate rocks of the Chuniespoort Group. However carbonate rocks (dolomite) in primary form are generally poor aquifers

MIDDLE LEVEL

This geological cross-section diagram illustrates the Middle Level of a deposit. The vertical axis is labeled "North" at the bottom left. The horizontal axis represents distance, with labels "0" and "1000" at the top right. The diagram shows a series of geological units and features:

- Unit 1:** A blue-shaded area representing a surface or lens, bounded by a dashed line.
- Unit 2:** A pink-shaded area representing a surface or lens, positioned above Unit 1.
- Unit 3:** A yellow-shaded area representing a surface or lens, located to the right of the main body.
- Unit 4:** A green-shaded area representing a surface or lens, located at the bottom center.
- Unit 5:** A pink-shaded area representing a surface or lens, located on the far right.
- Unit 6:** A brown-shaded area representing a surface or lens, located between Units 1 and 3.
- Unit 7:** A grey-shaded area representing a surface or lens, located near the top center.
- Unit 8:** A pink-shaded area representing a surface or lens, located near the top right.
- Unit 9:** A yellow-shaded area representing a surface or lens, located on the far right.
- Unit d1:** A blue-shaded area representing a surface or lens, located below Unit 1.
- Unit d2:** A pink-shaded area representing a surface or lens, located below Unit 3.
- Unit d3:** A blue-shaded area representing a surface or lens, located below Unit 4.
- Unit Vr:** A pink-shaded area representing a surface or lens, located below Unit 1.
- Unit Q:** A blue-shaded area representing a surface or lens, located below Unit 1.
- Unit d4:** A blue-shaded area representing a surface or lens, located below Unit 4.
- Unit d5:** A blue-shaded area representing a surface or lens, located below Unit 5.
- Unit d6:** A blue-shaded area representing a surface or lens, located below Unit 6.
- Unit d7:** A blue-shaded area representing a surface or lens, located below Unit 7.
- Unit d8:** A blue-shaded area representing a surface or lens, located below Unit 8.
- Unit d9:** A blue-shaded area representing a surface or lens, located below Unit 9.

The diagram uses various patterns (crosses, dots, etc.) to distinguish different rock types or zones within the units. Numbered circles (1 through 9) mark specific points of interest along the profile.

Schematic cross-sections to illustrate typical groundwater occurrence

The figure displays a geological cross-section from Lowveld to Lebombo, illustrating various weathering zones and groundwater levels. The diagram shows a series of hills and valleys with different rock types and weathering characteristics. Key features include:

- LOWVELD:** Labeled on the left.
- LEBOMBO:** Labeled on the right.
- Weathering Zones:** Indicated by different patterns: stippled for zone 3, hatched for zone 4, and diagonal lines for zone 5.
- Groundwater Level:** Indicated by a pink dashed line.
- Inferred Base of Weathering:** Indicated by a black dashed line.
- Fracture Types:** Numbered circles indicate specific fracture types: 3, 4, 5, 6, 7, d2, d3, d4, and b2.
- Rock Units:** Labeled with abbreviations: Ze, Zd, Zz, Zs-Zd, Jl, Pe, Tr, and Jd.

Legend:

- Weathered zone: Predominantly decomposed** (Stippled area)
- Inferred base of weathering** (Black dashed line)
- Groundwater level** (Pink dashed line)

Note: For additional information concerning groundwater occurrence refer to accompanying brochure.

This general hydrogeological map is part of the 1:500 000 Hydrogeological map series of the Republic of South Africa.

This map is not to be used for the purpose of local borehole siting. Simplified lithology may be considered as guidelines only. Further geological information can be obtained from the Council for Geoscience. The map series is produced with Arc/Info software.

Digital data, copies of this map and accompanying brochure are obtainable from:

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Mokolian	M	Lebowa S. (Mle)
Vaalian	V	Rustenburg S.(Vr); Diabase (N-Zd)*; Pretoria G.(Vp); Undifferentiated Black Reef F. and Chuniespoort G.(Vh-Vbl); Black Reef F. (Vbl); Wolkberg G.(Vw)

