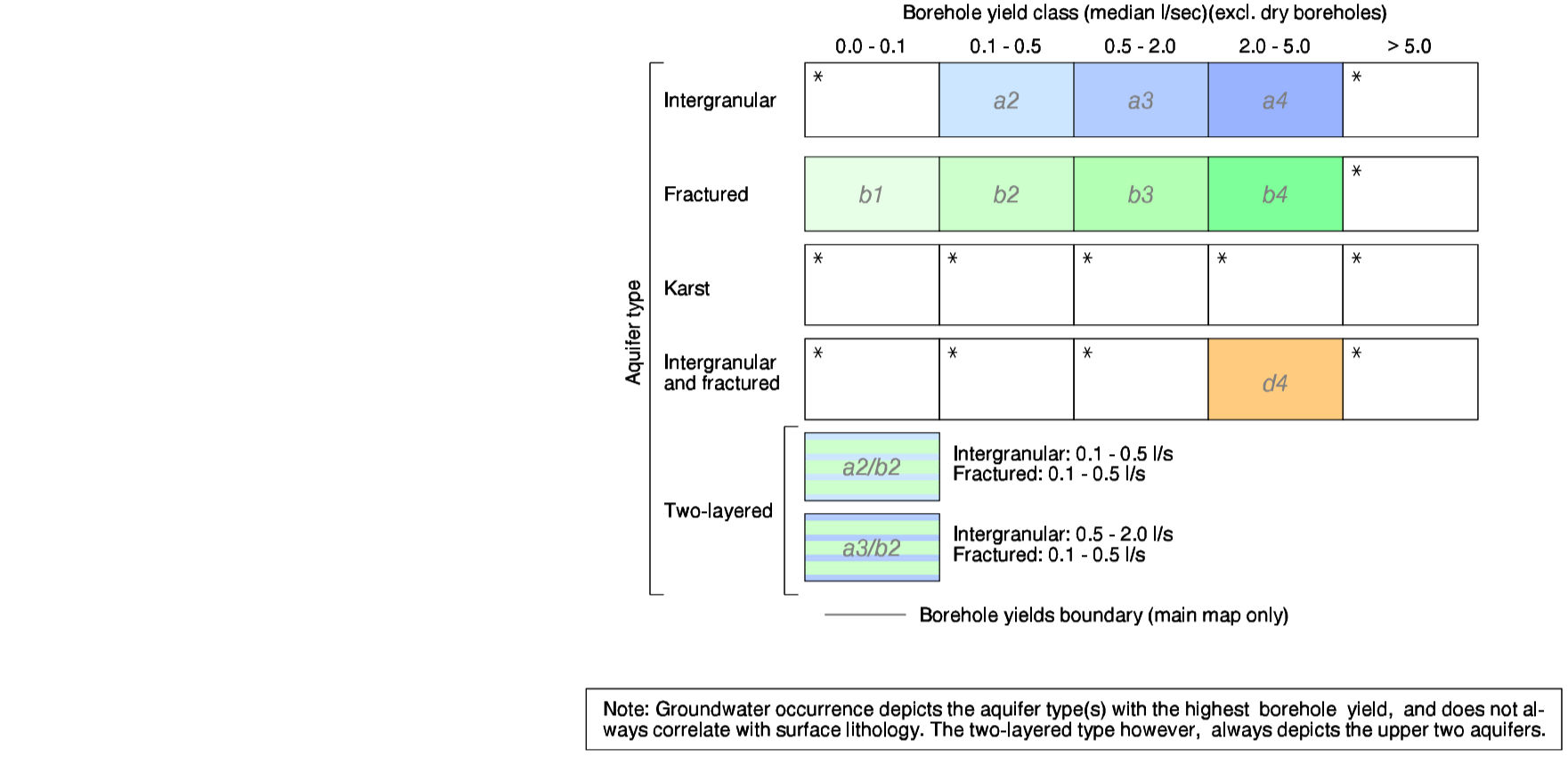


DEPARTMENT OF WATER AFFAIRS AND FORESTRY
NOSOB
2002

Map Author - E. van Wyk
 GIS Specialists - H. Mullin / T. Chetty
 Cartographer - F. Jonck

Assisted by:
 Mapping Management Team:
 J. Gilman, P.S. Meyer, H. Mullin, F. Jonck and E. Botes
 Editorial Board:
 E. Braune, W.R.G. Open (1 2000), P. Senechal, J. Gilman and Z.M. Dziembowski (Consultant)

This map was approved by the Director-General of the Department of Water Affairs and Forestry. The groundwater occurrence and groundwater quality maps, and the schematic cross-sections were compiled by E. van Wyk. The lithology was adapted from the 1:250 000 scale Geological map series: Nosob 2209 and Tseke River 2203 (Council for Geoscience, 1998) and amended from field data by E. van Wyk. T. Chetty was responsible for the compilation of the borehole distribution map. Precipitation and elevation data were obtained from the Computing Centre for Water Research, University of Natal, and compiled by H. Mullin. Information on roads, rivers, towns and municipal boundaries were obtained from the Chief Directorate: Surveys and Mapping, Department of Land Affairs, and edited by the Department of Water Affairs and Forestry. Farm names were obtained from the Department of Agriculture, Forestry and Fisheries. The aquifers are mapped as intergranular in the sediments from significant aquifers acknowledged. Borehole data were obtained from the National Groundwater Data Base (NGDB).

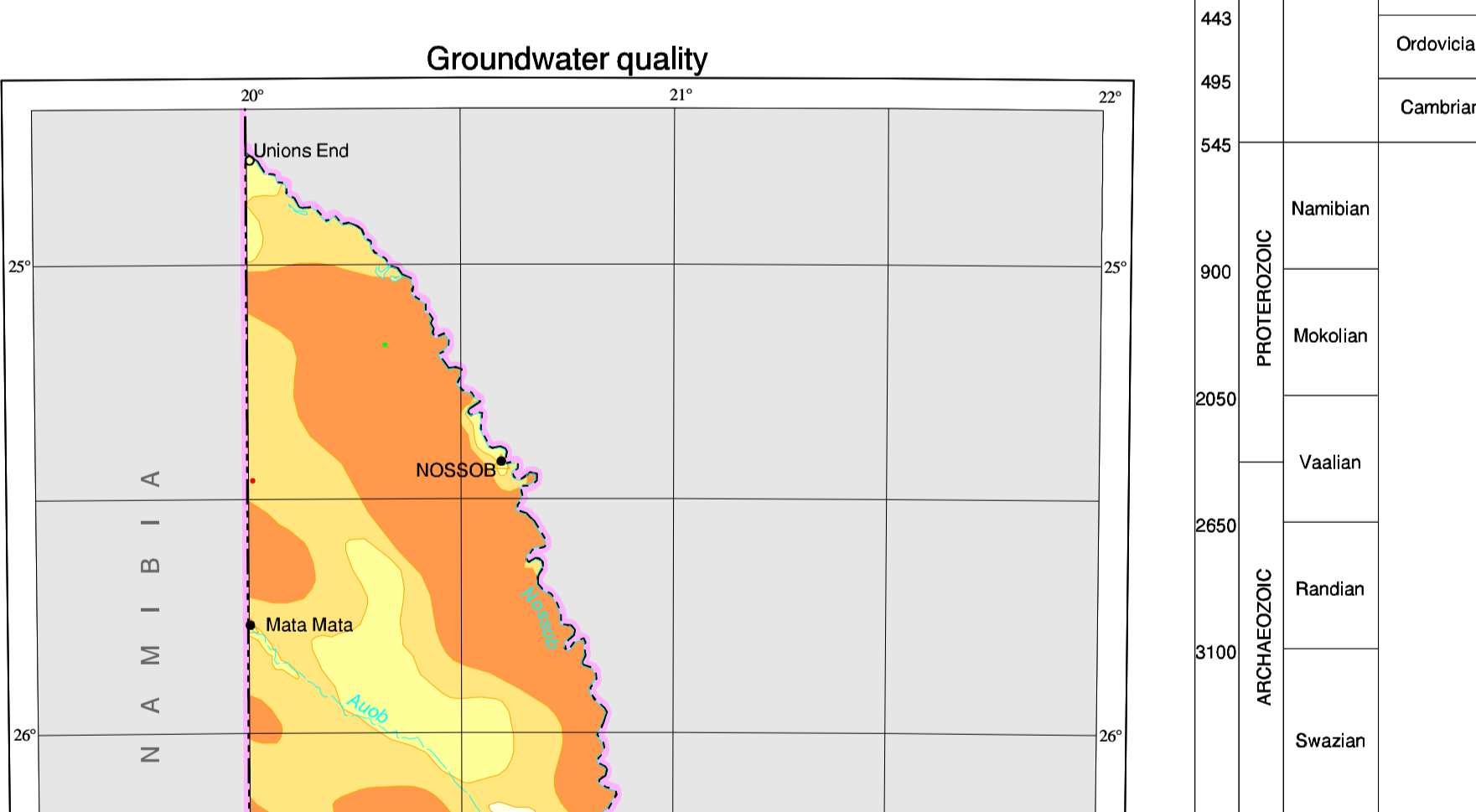


Surface / Sub-surface lithology
 (Unconsolidated sediments which are unsaturated, have been omitted from the map)

Unconsolidated sediments (unconsolidated to semi-consolidated sediments including sand, calcareous, calcareous, clay, siltstone, gravel and sandstone)	Agglutaceous and arenaceous rocks (approximately equal proportions shale and sandstone)	Lithological / stratigraphical boundary
Basic intrusive rocks (diabase)	Predominantly diamictite (tillite)	Interstadial lithological / stratigraphical boundary
Predominantly argillaceous rocks (shale, carbonaceous shale, claystone and mudstone) with interbedded sandstone lenses	Predominantly meta-arenaceous rocks (quartzite) and subordinate schists	Isogach (line of Kalahari Group (Groundwater Resources of the Republic of South Africa, Venter 1995). The isogach indicates the direction of the isogach. In areas mapped as intergranular the sediments form significant aquifers
		Diastolic interval

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 ArcInfo software.

Digital data, copies of this map and accompanying brochure are obtainable from:
 Department: Water Affairs and Forestry
 Private Bag X313
 0001
 Web site: <http://www.dwa.gov.za/geohydrology/index.htm>
 Printed by: Associated Printing, Cape Town
 Published by: Department of Water Affairs and Forestry
 First Edition 2002
 State copyright 2002



Chronostratigraphy

1	2	3	4	5	6
Quaternary	Q				
Tertiary	T				
Quaternary	Q				
Cretaceous	K				
Jurassic	J				
Triassic	Tr				
Permian	P				
Carboniferous	C				
Devonian	D				
Silurian	S				
Ordovician	O				
Cambrian	C				
Nambian	N				
Mikotian	M				
Vaalian	V				
Randian	R				
Swazian	Z				

