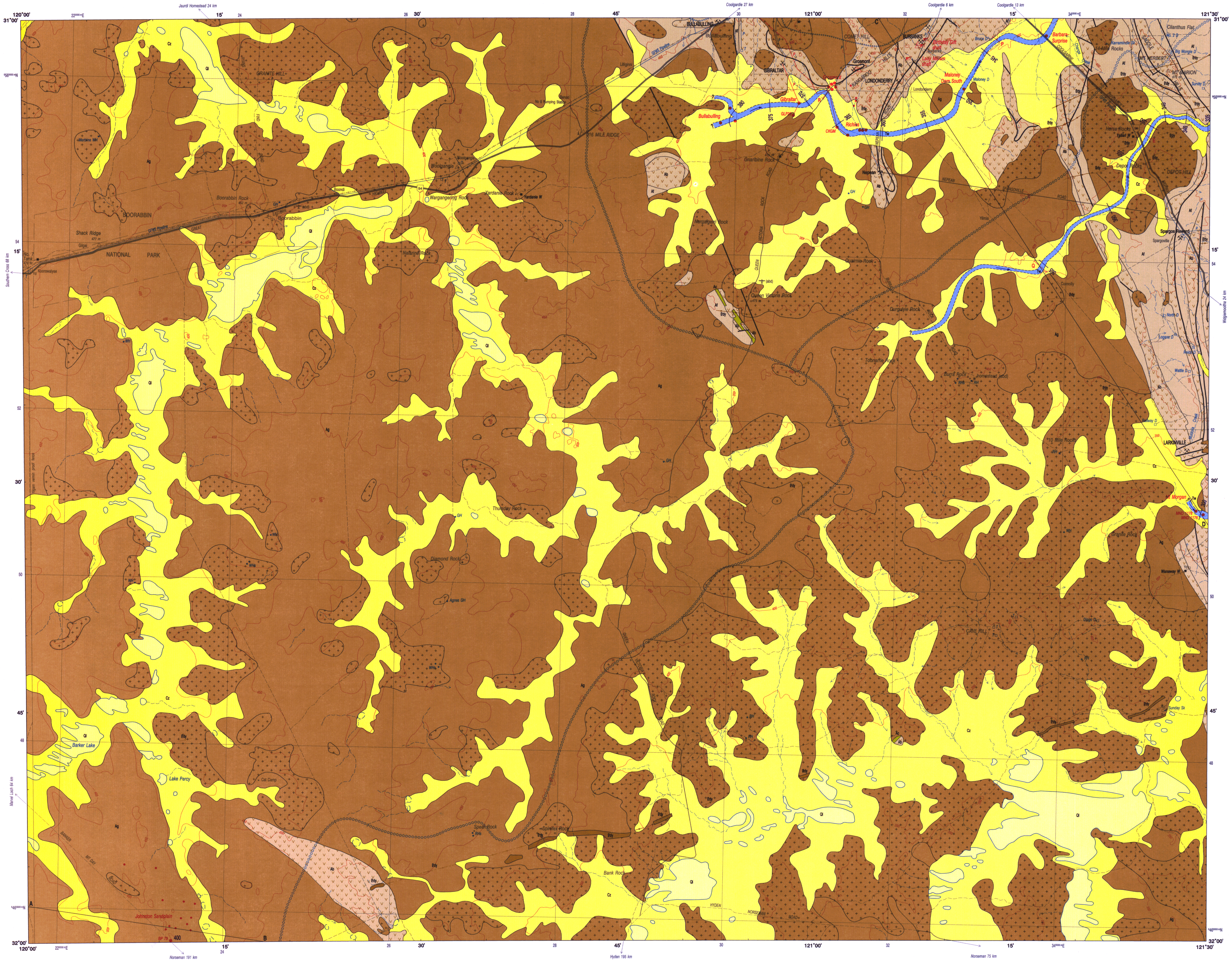
BOORABBIN

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA



REFERENCE

AQUIFER TYPES

- Surficial deposits—local aquifers (not saturated everywhere), minor groundwater resources
- Sedimentary rocks in palaeochannels—major aquifers, major groundwater resources
- Sedimentary rocks in palaeochannels—aquiclude, no groundwater resources (section only)
- Fractured and deeply weathered rocks—local aquifers, minor groundwater resources, locally large supplies from fracture zones

HYDROGEOLOGY

			Unit	Description	Aquifer
PHANEROZOIC	CAINOZOIC	QUATERNARY	Ql	Playa lake sediments—mostly clay	Minor shallow aquifer, possible small supplies in sandy beds; hypersaline
			Cz	Alluvium and colluvium—clay, sand, gravel; conceals palaeochannels	Local shallow aquifer; saline to hypersaline
		TERTIARY	Tp	PERKOLILLI SHALE and equivalents—shale, siltstone, minor sand; restricted to palaeochannels (section only)	Aquiclude
			Tw	WOLLUBAR SANDSTONE and equivalents—sand, siltstone (Eocene); restricted to palaeochannels; concealed by PERKOLILLI SHALE	Major aquifer; saline to hypersaline
PROTEROZOIC			Edy	Mafic and ultramafic dykes: outcrop; interpreted where dashed	Aquiclude
ARCHAEAN		YILGARN CRATON	Ag	Granitoid rock, includes pegmatite: outcrop (indicated by overprint); weathered	Local aquifer; brackish to saline
			Ac	Chert and banded iron-formation	Significant local aquifer; brackish to saline
			Af	Sedimentary, and felsic volcanic and volcaniclastic rocks	Minor local aquifer; saline to hypersaline
			Ab	Mafic and ultramafic rocks	Local aquifer; saline to hypersaline

SYMBOLS

GEOLOGY

- hydrogeological boundary; concealed
- fault or shear zone

SURFACE WATER FEATURES

- intermittent drainage
- surface water divide; major, minor
- claypan or intermittent lake, fresh to brackish
- playa lake, saline to hypersaline
- •RH •GH •WH — rock hole, gnamma hole, waterhole
- •Sk — soak
- □D — dam
- □T — tank
- P — water pipeline, Goldfields Water Supply

GROUNDWATER FEATURES

- 370 — isopotential (1985-1988), m AHD
- direction of groundwater flow
- water table (section only)

ARTIFICIAL FEATURES

- MND 1176 — production bore, >50 m³/day
- bore
- well, no data

- Grosmont — borefield name, cluster of bores
- pumped mine shaft, abandoned
- tailings storage
- E — G.S.W.A. exploratory drilling line
- P — groundwater pipeline

MINING INFORMATION

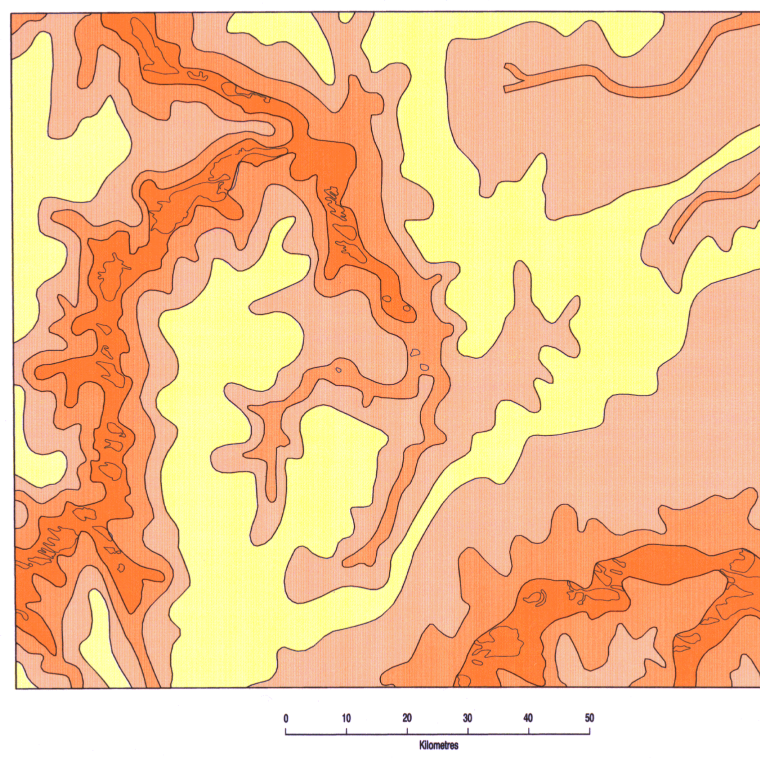
- significant mine, opencut
- BURBANKS — mining locality
- Spargos Reward — mine name

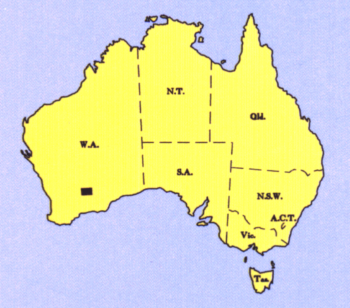
TOPOCADASTRAL INFORMATION

- 94 — highway with national route marker
- formed road
- track
- railway, abandoned
- landing ground
- Spargoville — locality
- □ Yd — yard
- microwave repeater station
- horizontal control; major, minor
- national park boundary
- 500 — contour line, 50 metre interval
- (abd) — abandoned

GROUNDWATER SALINITY

(Inferred from sparse data)

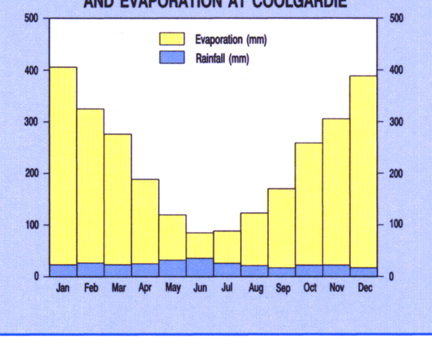




INDEX TO ADJOINING SHEETS

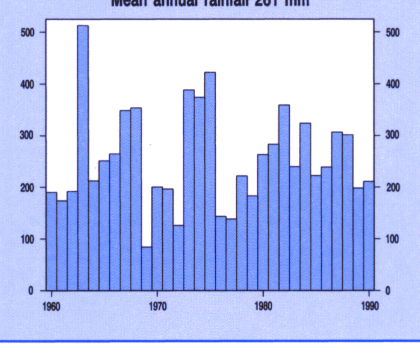
JACKSON SH 50 - 12	KALGOORLIE SH 51 - 9	KURNALPI SH 51 - 10
SOUTHERN CROSS SH 50 - 16	BOORABBIN SH 51 - 13	WIDGIEMOOLTHA SH 51 - 14
HYDEN SI 50 - 4	LAKE JOHNSTON SI 51 - 1	NORSEMAN SI 51 - 2

MEAN MONTHLY RAINFALL AND EVAPORATION AT COOLGARDIE

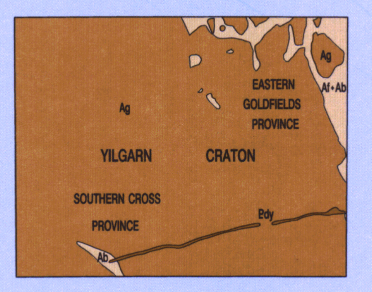


ANNUAL RAINFALL (mm) AT COOLGARDIE (1960-1990)

Mean annual rainfall 261 mm



REGIONAL GEOLOGICAL SKETCH



Hydrogeology by: A.M. Kern 1992—1993

Geology after M.W. Hunter 1981—84; C.P. Swager and T.J. Griffin, 1990

Edited by: C. Strong, R. Duberal

Cartography by: D. Ladbrook, M. Prause, B. Williams, G. Loan of the Cartographic Services Branch, Surveys and Mapping Division, Department of Minerals and Energy, Western Australia

Compiled and produced using computer-assisted graphic applications, and available in digital form

Topographic base supplied by the Department of Land Administration and modified from geological field survey

Published by and available from the Geological Survey of Western Australia, Department of Minerals and Energy, 100 Plain Street, East Perth, 6004

Printed by the State Print, Department of State Services, Western Australia

DEPARTMENT OF MINERALS AND ENERGY
HON. GEORGE CASH, J.P., M.L.C.
MINISTER FOR MINES
L. C. RANFORD, ACTING DIRECTOR GENERAL

PIETRO GUJ
DIRECTOR, GEOLOGICAL SURVEY OF WESTERN AUSTRALIA

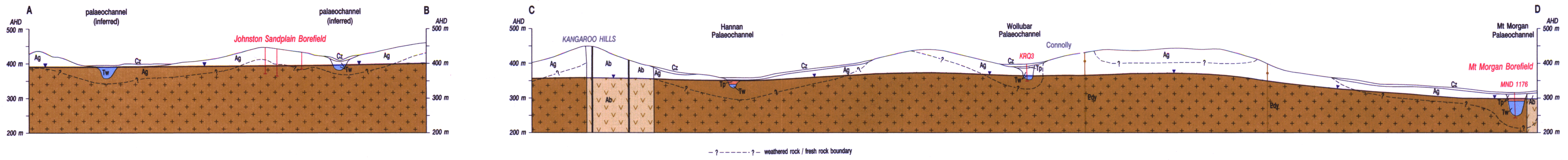
SCALE 1:250 000

5000 Metres 0 5 10 15 20 25 30 Kilometres

TRANSVERSE MERCATOR PROJECTION
ZONE 51 AUSTRALIAN MAP GRID
Grid lines indicate 20 000 metre interval of the Australian Map Grid Zone 51

DIAGRAMMATIC SECTIONS

Vertical exaggeration x 25



HYDROGEOLOGICAL SERIES

BOORABBIN

SHEET SH 51 - 13

© Western Australia 1994