



**ECONOMIC GEOLOGY
RESEARCH UNIT**

University of the Witwatersrand
Johannesburg

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THE EGRU INFORMATION CIRCULARS :
THE FIRST TWO HUNDRED

D.A. PRETORIUS and L. TYLER

• INFORMATION CIRCULAR No. 200

THE EGRU INFORMATION CIRCULARS :
THE FIRST TWO HUNDRED

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The Economic Geology Research Unit was founded on 5 October, 1957, by a grant from the then Chamber of Mines of the Transvaal and Orange Free State to the University of the Witwatersrand, in Johannesburg, South Africa. It was the first, independent, geological research group established at a South African university, designed to operate on the post-graduate level only and unattached to an undergraduate, teaching department. The mandate given to the Economic Geology Research Unit was to carry out research of value and application to the needs of the South African mining industry, with particular emphasis to be placed on gold mineralization, especially that occurring in the Witwatersrand Basin. Three primary constraints were imposed : (i) the Unit was to remain small; (ii) its research was to be distinctly field-oriented; and (iii) it was to concern itself equally with the synthesis of existing information as with the gathering and analysis of new data.

EGRU came into operational existence on 4 June, 1959, when Chris Roering arrived from Sweden to take up one of the posts of Research Fellow. Rob Hargraves, from the U.S.A., joined on 1 September, 1959, as the second Research Fellow. The initial staff attained its full complement on 4 November, 1959, when Des Pretorius, previously with the mining industry in the then Northern Rhodesia, assumed the position of Senior Research Fellow.

The members of the Chamber of Mines stipulated that the results of EGRU's research activities be made available to the mining industry with minimum delay. It was indicated that a more effective means of disseminating the information should be employed than publication in recognized earth-sciences journals, where the delay between submission and appearance usually was of the order of months, if not years. It was decided that the Economic Geology Research Unit should compose, reproduce, issue, and distribute its own reports to the members of the mining industry, who contributed to the financial support of the Unit, and to other interested parties. Recipients would constitute a closed mailing list. Authors of the reports could, if they so wished, submit the contents of the reports for formal publication after such reports had been issued.

A name had to be devised for the limited-circulation reports, and a distinctive cover had to be designed so that they could be recognized readily as products of EGRU's research. The title "Information Circular" was proposed by Rob Hargraves. The logo of the earliest Circulars was chosen by Des Pretorius and nostalgically depicted one of the classic geological sections through the Northern Rhodesian Copperbelt. In later years, the logo was changed to a non-parochial geologist's hammer.

The first Information Circular was issued in August, 1960, a little more than a year after the Economic Geology Research Unit started work. Appropriately, the author of Information Circular No. 1 was Rob Hargraves.

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1960

1. Information Circular No. 1

R.B. Hargraves

A Bibliography of the Geology of the Witwatersrand System, First Edition
August, 1960, 41 pp.

2. Information Circular No. 2

D.A. Pretorius

List of Theses on Geological and Allied Subjects Submitted for
Higher Degrees at South African Universities
November, 1960, 75 pp.

1961

1. Information Circular No. 3

R.B. Hargraves

Silver Content of Gold in Witwatersrand Conglomerates
May, 1961, 25 pp.

2. Information Circular No. 4

C. Roering

The Mode of Emplacement of Certain Li- and Be-Bearing Pegmatites
in the Karibib District, South West Africa
June, 1961, 38 pp.

3. Information Circular No. 5

R.B. Hargraves

Cross-Bedding and Ripple-Marks in Main-Bird Quartzites in the East
Rand Area : a Reconnaissance Study
June, 1961, 32 pp.

1962

1. Information Circular No. 6

J.G Ramsay

The Geometry of Conjugate Fold Systems
May, 1962, 8 pp.

2. Information Circular No. 7

J.G. Ramsay

The Uses and Limitations of Beta-Diagrams and Pi-Diagrams in the
Geometrical Analysis of Folds
June, 1962, 15 pp.

3. Information Circular No. 8

D.A. Smith
Metamorphism, Granitization, Structure and Mineralization between
the Khan and Swakop Rivers, South West Africa
August, 1962, 80 pp.

4. Information Circular No. 9

C. Roering and T.W. Gevers
Lithium- and Beryllium-Bearing Pegmatites in the Karibib District,
South West Africa
October, 1962, 34 pp.

5. Information Circular No. 10

H. de la R. Winter
The Geology of the Virginia Section of the Orange Free State Goldfield
November, 1962, 46 pp.

1963

1. Information Circular No. 11

H. de la R. Winter
The Geology of the Northern Section of the Orange Free State Goldfield
January, 1963, 35 pp.

2. Information Circular No. 12

N.C. Gay
A Review of the Geochemical Characteristics of Gold in Ore Deposits
March, 1963, 70 pp.

3. Information Circular No. 13

D.A. Pretorius
The Geology of the Central Rand Goldfield
April, 1963, 69 pp.

4. Information Circular No. 14

J.G. Ramsay
Structural Investigations in the Barberton Mountain Land,
Eastern Transvaal
June, 1963, 44 pp.

5. Information Circular No. 15

R.B. Hargraves and H. de la R. Winter
A Bibliography of the Geology of the Witwatersrand System,
Second Edition
June, 1963, 60 pp.

6. Information Circular No. 16

H. de la R. Winter
Algal Structures in Sediments of the Ventersdorp System
August, 1963, 12 pp.

1964

1. Information Circular No. 17
D.A. Pretorius
The Geology of the South Rand Goldfield
February, 1964, 86 pp.
2. Information Circular No. 18
A.B. Simpson
A Bibliography of the Geology of the Ventersdorp System and Other
Pre-Bushveld Extrusives and Associated Sediments
March, 1964, 66 pp.
3. Information Circular No. 19
N.C. Gay
The Composition of Gold from the Barberton Mountain Land
May, 1964, 53 pp.
4. Information Circular No. 20
C. Roering
Aspects of the Genesis and Crystallization Sequence of the
Karibib Pegmatites, South West Africa
September, 1964, 25 pp.
5. Information Circular No. 21
C. Roering and R.O. Heckroodt
The Alteration of Beryl in the Dernburg Pegmatite, Karibib,
South West Africa
September, 1964, 16 pp.
6. Information Circular No. 22
E.J. Poole
Structural Control of Mineralization in the Agnes Gold Mine,
Barberton Mountain Land
December, 1964, 31 pp.

1965

1. Information Circular No. 23
C. Roering
The Tectonics of the Main Gold-Producing Area of the
Barberton Mountain Land
May, 1965, 23 pp.
2. Information Circular No. 24
C.R. Anhaeusser
Wrench Faulting and its Relationship to Gold Mineralization
in the Barberton Mountain Land
May, 1965, 20 pp.

3. Information Circular No. 25

C.R. Anhaeusser and M.J. Viljoen
The Base of the Swaziland System in the Barberton-Noordkaap-
Louw's Creek Area, Barberton Mountain Land
June, 1965, 32 pp.

4. Information Circular No. 26

W.B. Hemphins
The Applicability of Mathematical Surfaces to Correlation and
Prediction in Witwatersrand Gold Mines
November, 1965, 23 pp.

1966

1. Information Circular No. 27

A.E.J. Engel
The Barberton Mountain Land : Clues to the Differentiation
of the Earth
April, 1966, 17 pp.

2. Information Circular No. 28

H.D. Pflug
Structured Organic Remains from the Fig Tree Series of the
Barberton Mountain Land
April, 1966, 14 pp.

3. Information Circular No. 29

C.R. Anhaeusser
Supergene Gold Enrichment in the Barberton Mountain Land,
with Particular Reference to the Lily Mine
May, 1966, 16 pp.

4. Information Circular No. 30

C.R. Anhaeusser
A Comparison of Pebble and Fold Deformation in the Nelspruit
Granite Contact Aureole
June, 1966, 11 pp.

5. Information Circular No. 31

C.R. Anhaeusser, M.J. Viljoen, and R.P. Viljoen
A Correlation of Pre-Fig Tree Rocks in the Northern and
Southern Parts of the Barberton Mountain Land
June, 1966, 22 pp.

6. Information Circular No. 32

C. R. Anhaeusser
Facets of the Granitic Assemblage on the Northwest Flank of
the Barberton Mountain Land
August, 1966, 27 pp.

7. Information Circular No. 33

D.A. Pretorius
Conceptual Geological Models in the Exploration for Gold
Mineralization in the Witwatersrand Basin
December, 1966, 39 pp.

1967

1. Information Circular No. 34

C. Roering
The Geometrical Significance of Natural En-Echelon Crack-Arrays
March, 1967, 11 pp.

2. Information Circular No. 35

C. Roering
Non-Orogenic Granites in the Archean Geosyncline of the
Barberton Mountain Land
March, 1967, 13 pp.

3. Information Circular No. 36

M.J. Viljoen and R.P. Viljoen
A reassessment of the Onverwacht Series of the Komati River Valley
May, 1967, 35 pp.

4. Information Circular No. 37

R. Saager and P. Mihálik
Notes on Two Varieties of Pyrite from the Basal Reef of the
Free State Geduld Mine, Orange Free State Goldfield
June, 1967, 11 pp.

5. Information Circular No. 38

C.R. Anhaeusser, C. Roering, M.J. Viljoen, and R.P. Viljoen
The Barberton Mountain Land : a Model of the Elements and
Evolution of an Archean Fold Belt
July, 1967, 31 pp.

6. Information Circular No. 39

R. Saager
New Techniques for Polishing Ore Minerals
July, 1967, 13 pp.

7. Information Circular No. 40

R.P. Viljoen
The Composition of the Main Reef and Main Reef Leader Conglomerate
Horizons in the Northeastern Part of the Witwatersrand Basin
September, 1967, 54 pp.

1968

1. Information Circular No. 41
R.P. Viljoen
The Quantitative Mineralogical Properties of the Main Reef and
Main Reef Leader of the Witwatersrand System
January, 1968, 63 pp.
2. Information Circular No. 42
R. Saager
Newly Observed Ore-Minerals from the Basal Reef in the Orange
Free State Goldfield in South Africa
February, 1968, 11 pp.
3. Information Circular No. 43
P. Mihálik and R. Saager
Chromite Grains Showing Altered Borders from the Basal Reef,
Witwatersrand System
February, 1968, 6 pp.
4. Information Circular No. 44
C. Roering
Geometrical Characteristics of Sinusoidal Folds
April, 1968, 11 pp.
5. Information Circular No. 45
R. Saager
Structures in Pyrite from the Basal Reef in the Orange Free
State Goldfield
April, 1968, 25 pp.
6. Information Circular No. 46
C. Roering
Non-Orogenic Granites and the Age of the Precambrian
Pongola Sequence
May, 1968, 20 pp.
7. Information Circular No. 47
G.C. Armstrong
Sedimentological Control of Gold Mineralization in the
Kimberley Reefs of the East Rand Goldfield
July, 1968, 24 pp.
8. Information Circular No. 48
C. Roering
The Tectonics of the West Rand Syncline : a Field Study of
Brittle Failure in the Witwatersrand Basin
August, 1968, 28 pp.

9. Information Circular No. 49
C.R. Anhaeusser, R. Mason, M.J. Viljoen, and R.P. Viljoen
A Reappraisal of Some Aspects of Precambrian Shield Geology
September, 1968, 30 pp.
10. Information Circular No. 50
D.A. Pretorius
Mineral Exploration in Southern Africa : Problems and Prognosis
for the Next Twenty Years
October, 1968, 15 pp.

1969

1. Information Circular No. 51
A. Button
Stratigraphic Analysis of the Transvaal Sequence in the
Irene-Delmas-Devon Area, Transvaal
February, 1969, 12 pp.
2. Information Circular No. 52
R. Saager
The Relationship of Silver and Gold in the Basal Reef of the
Witwatersrand System, South Africa
March, 1969, 19 pp.
3. Information Circular No. 53
R. Saager and P.A. Esselaar
The Use of Factor Analysis in the Processing of Geochemical Data
from the Basal Reef, Orange Free State Goldfield, South Africa
April, 1969, 11 pp.

1970

1. Information Circular No. 54
C. R. Anhaeusser
Cyclic Volcanicity and Sedimentation in the Evolutionary Development
of Archaean Greenstone Belts of Shield Areas
July, 1970, 13 pp.
2. Information Circular No. 55
C.R. Anhaeusser
The Barberton Mountain Land, South Africa : a Guide to the
Understanding of the Archaean Geology of Western Australia
August, 1970, 17 pp.
3. Information Circular No. 56
K.B. McQuillan and P.A. Esselaar
The Design for a Computer-Based Data Storage, Retrieval, and
Processing System for Coal Geology
August, 1970, 9 pp.

4. Information Circular No. 57

H.D. Pflug
Botswanella : a Bacteria-Produced Concretion from the Ventersdorp
Sequence of Botswana
September, 1970, 11 pp.

5. Information Circular No. 58

A. Button
The Stratigraphy of the Witwatersrand Sequence in the Delmas Area,
Transvaal
October, 1970, 20 pp.

6. Information Circular No. 59

A. Button
Subsurface Stratigraphic Mapping of the Witwatersrand Sequence in
the Delmas Area, Transvaal
October, 1970, 8 pp.

1971

1. Information Circular No. 60

A. Button
Early Proterozoic Algal Stromatolites of the Pretoria Group,
Transvaal Sequence
March, 1971, 8 pp.

2. Information Circular No. 61

D.R. Hunter and D.H. Lenthall
A Preliminary Review of Tin Mineralization, with Particular
Reference to the Bushveld Igneous Complex
June, 1971, 44 pp.

3. Information Circular No. 62

C.R. Anhaeusser
The Geology and Geochemistry of the Archean Granites and Gneisses
of the Johannesburg-Pretoria Dome
June, 1971, 41 pp.

4. Information Circular No. 63

D.R. Hunter
The Granitic Rocks of the Precambrian in Swaziland
August, 1971, 25 pp.

5. Information Circular No. 64

C.R. Anhaeusser
The Geology of the Jamestown Hills Area of the Barberton
Mountain Land, South Africa
September, 1971, 44 pp.

6. Information Circular No. 65

D.R. Hunter
Notes on Some Potassium Feldspars in the Precambrian
Granitic Rocks of Swaziland
October, 1971, 11 pp.

1972

1. Information Circular No. 66

C.R. Anhaeusser and A. Button
A Petrographic and Mineragraphic Study of the Copper-Bearing
Formations in the Witvlei Area, South West Africa
January, 1972, 32 pp.

2. Information Circular No. 67

D.A. Pretorius
Bibliography of Theses in the Geological Sciences Submitted to
Universities in Southern Africa
March, 1972, 98 pp.

3. Information Circular No. 68

D.H. Lenthall
Quantitative Compositional Variations in Witwatersrand Conglomerates
in the East Rand-Delmas Area, Transvaal
April, 1972, 12 pp.

4. Information Circular No. 69

A. Button
Algal Stromatolites of the Early Proterozoic Wolkberg Group,
Transvaal Sequence
May, 1972, 9 pp.

5. Information Circular No. 70

C.R. Anhaeusser
The Evolution of the Early Precambrian Crust of Southern Africa
May, 1972, 31 pp.

6. Information Circular No. 71

A. Button
The Depositional History of the Wolkberg Proto-Basin, Transvaal
July, 1972, 18 pp.

7. Information Circular No. 72

D.H. Lenthall
The Application of Discriminatory and Cluster Analysis as an Aid
to the Understanding of the Acid Phase of the Bushveld Complex
October, 1972, 33 pp.

8. Information Circular No. 73

A. Button

The Stratigraphic History of the Malmani Dolomite in the Eastern
and Northeastern Transvaal

November, 1972, 23 pp.

1973

1. Information Circular No. 74

D.R. Hunter

The Bushveld Complex : a Review - I. The Regional Setting and
Extent of the Bushveld Complex

January, 1973, 12 pp.

2. Information Circular No. 75

A. Button

A Palaeocurrent Study of the Dwaal Heuvel Formation,
Transvaal Supergroup

March, 1973, 16 pp.

3. Information Circular No. 76

A. Button

Low-Potash Pillow-Basalts in the Pretoria Group,
Transvaal Supergroup

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4. Information Circular No. 77

D.A. Pretorius

The Role of E.G.R.U. in Mineral Exploration in South Africa

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5. Information Circular No. 78

C.R. Anhaeusser

Precambrian Tectonic Environments

May, 1973, 19 pp.

6. Information Circular No. 79

V.H. Köppel and R. Saager

Lead Isotope Evidence for the Detrital Origin of Witwatersrand
Pyrites and Its Bearing on the Provenance of the
Witwatersrand Gold

June, 1973, 17 pp.

7. Information Circular No. 80

J.R. McIver and D.H. Lenthall

Mafic and Ultramafic Extrusives of the Onverwacht Group in
Terms of the System $XO-YO-R_2O_3-ZO_2$

June, 1973, 8 pp.

8. Information Circular No. 81

D.R. Hunter
Geochemistry of Granitic and Associated Rocks in the
Kaapvaal Craton
July, 1973, 19 pp.

9. Information Circular No. 82

R.C.A. Minnitt, A. Button, and E.J.D. Kable
The Gold Content of the Pre-Malmani Argillaceous Sediments
in the Transvaal Supergroup, Northeastern Transvaal
July, 1973, 11 pp.

1974

1. Information Circular No. 83

D.R. Hunter
Crustal Development in the Kaapvaal Craton, Part I :
The Archean
March, 1974, 28 pp.

2. Information Circular No. 84

D.R. Hunter
Crustal Development in the Kaapvaal Craton, Part II :
The Proterozoic
March, 1974, 25 pp.

3. Information Circular No. 85

C.R. Anhaeusser and A. Button
A Review of Southern African Stratiform Ore Deposits :
Their Position in Time and Space
April, 1974, 48 pp.

4. Information Circular No. 86

D.A. Pretorius
The Nature of the Witwatersrand Gold-Uranium Deposits
May, 1974, 50 pp.

5. Information Circular No. 87

D.A. Pretorius
Gold in the Proterozoic Sediments of South Africa :
Systems, Paradigms, and Models
May, 1974, 22 pp.

6. Information Circular No. 88

D.A. Pretorius
The Structural Boundary Between the Kaapvaal and Sonama
Crustal Provinces
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7. Information Circular No. 89
A. Button
Iron Formations as an End-Member in Carbonate Sedimentary
Cycles in the Transvaal Supergroup, South Africa
July, 1974, 10 pp.
8. Information Circular No. 90
C.R. Anhaeusser
The Nature of Chrysotile Asbestos Occurrences in Southern Africa :
A Review
August, 1974, 28 pp.
9. Information Circular No. 91
C.R. Anhaeusser
Archean Metallogeny in Southern Africa
September, 1974, 38 pp.
10. Information Circular No. 92
D.R. Hunter
Some Enigmas of the Bushveld Complex
September, 1974, 25 pp.
11. Information Circular No. 93
D.H. Lenthall
Tin Production from the Bushveld Complex
October, 1974, 15 pp.
12. Information Circular No. 94
C.R. Anhaeusser
The Geology of the Sheba Hills Area of the Barberton Mountain Land,
South Africa, with Particular Reference to the Eureka Syncline
November, 1974, 47 pp.

1975

1. Information Circular No. 95
D.A. Pretorius
The Depositional Environment of the Witwatersrand Goldfields :
a Chronological Review of Speculations and Observations
March, 1975, 30 pp.
2. Information Circular No. 96
A. Button
Stratigraphy and Attitude of the Floor of the Bushveld Complex
in the Eastern Transvaal
August, 1975, 13 pp.
3. Information Circular No. 97
A. Button
Geochemistry of the Malmani Dolomite of the Transvaal Supergroup
in the Northeastern Transvaal
October, 1975, 16 pp.

4. Information Circular No. 98

C.R. Anhaeusser

The Geological Evolution of the Primitive Earth : Evidence
from the Barberton Mountain Land

October, 1975, 22 pp.

5. Information Circular No. 99

D.H. Lenthall

Aspects of the Geochemistry of the Acid Phase of the Central
and Eastern Bushveld Complex

November, 1975, 20 pp.

1976

1. Information Circular No. 100

A. Button and R.G. Vos

Subtidal and Intertidal Clastic and Carbonate Sedimentation in
a Macrotidal Environment : an Example from the Lower
Proterozoic of South Africa

February, 1976, 17 pp.

2. Information Circular No. 101

C.R. Anhaeusser

The Nature and Distribution of Archaean Gold Mineralization
in Southern Africa

March, 1976, 39 pp.

3. Information Circular No. 102

C.R. Anhaeusser

A Bibliography of the Geology Relating to the Barberton Mountain
Land and Surrounding Granitic Terrane

June, 1976, 51 pp.

4. Information Circular No. 103

C.R. Anhaeusser

Geological and Geochemical Investigations of the Roodekrans
Ultramafic Complex and Surrounding Archaean Volcanic Rocks,
Krugersdorp District

July, 1976, 16 pp.

5. Information Circular No. 104

C.R. Anhaeusser and P.J. Ryan

"Barren" Massive Sulphide Deposits in the Mphoengs Schist Belt,
Rhodesia : a Case History

August, 1976, 26 pp.

6. Information Circular No. 105

R. Saager

Geochemical Aspects of the Origin of Detrital Pyrite in
Witwatersrand Conglomerates

October, 1976, 21 pp.

7. Information Circular No. 106

M.N. Womack and A. Button
Bibliography and Subject-Index of Brazilian Geology
(Languages Other than Portuguese)
October, 1976, 33 pp.

8. Information Circular No. 107

A. Button
Transvaal and Hamersley Basins : Review of Basin Development
and Mineral Deposits
November, 1976, 32 pp.

1977

1. Information Circular No. 108

A. Button
Stratigraphic History of the Middle Proterozoic Umkondo Basin
in the Chipinga Area, Southeastern Rhodesia
March, 1977, 32 pp.

2. Information Circular No. 109

A. Button
Correlation of the Godwan Formation Based on Stratigraphic Trends
in the Witwatersrand Basin
May, 1977, 7 pp.

3. Information Circular No. 110

D.H. Lenthall and D.R. Hunter
The Geology, Petrology, and Geochemistry of the Bushveld Granites
and Felsites in the Potgietersrus Tin-Field
May, 1977, 91 pp.

4. Information Circular No. 111

L.J. Robb
A General Geological Description of the Archaean Granitic Terrane
Between Nelspruit and Bushbuckridge, Eastern Transvaal
August, 1977, 12 pp.

5. Information Circular No. 112

T.S. McCarthy and L.J. Robb
On the Relationship Between Cumulus Mineralogy and Trace and
Alkali Element Chemistry in an Archaean Granite from the
Barberton Region, South Africa
August, 1977, 14 pp.

1978

1. Information Circular No. 113
D.A. Pretorius
The Broader Structural Aspects of the Gravity Field Over
Southern Africa
February, 1978, 10 pp.
2. Information Circular No. 114
R. Saager and R. Muff
Petrographic and Mineragraphic Investigations of the Archaean
Gold Placers at Mount Robert in the Pietersburg Greenstone
Belt, Northern Transvaal
February, 1978, 10 pp.
3. Information Circular No. 115
K.A. Eriksson
Alluvial and Destructive Beach Facies in the Archaean Moodies Group
of the Barberton Mountain Land
March, 1978, 18 pp.
4. Information Circular No. 116
C.R. Anhaeusser
Rodingite Occurrences in Some Archaean Ultramafic Complexes in the
Barberton Mountain Land, South Africa
March, 1978, 17 pp.
5. Information Circular No. 117
C.R. Anhaeusser
The Geology and Geochemistry of the Muldersdrif Ultramafic Complex,
Krugersdorp District
March, 1978, 14 pp.
6. Information Circular No. 118
C.F. Vermaak
Data Summaries of Key Commodities in the South African
Minerals Economy
April, 1978, 66 pp.
7. Information Circular No. 119
C.R. Anhaeusser
On an Archaean Marundite Occurrence (Corundum-Margarite Rock)
in the Barberton Mountain Land, Eastern Transvaal
May, 1978, 8 pp.
8. Information Circular No. 120
N. Tyler
The Stratigraphy of the Early-Proterozoic Buffalo Springs Group
in the Thabazimbi Area, West-Central Transvaal
June, 1978, 16 pp.

9. Information Circular No. 121
N. Tyler
Early-Proterozoic Meandering-Stream Sedimentation in the
Buffalo Springs Group of the Transvaal Supergroup,
West-Central Transvaal
July, 1978, 8 pp.
10. Information Circular No. 122
K.A. Eriksson
Marginal-Marine Depositional Processes in the Archaean Moodies
Group, Barberton Mountain Land
August, 1978, 19 pp.
11. Information Circular No. 123
A. Button
Diapiric Structures in the Bushveld, Northeastern Transvaal
August, 1978, 6 pp.
12. Information Circular No. 124
A. Button
Bedforms in the Braided, Algal-Colonized Sabie River,
Southeastern Rhodesia
August, 1978, 7 pp.
13. Information Circular No. 125
C.R. Anhaeusser and L.J. Robb
Regional and Detailed Field and Geochemical Studies of Archaean
Trondhjemitic Gneisses, Migmatites and Greenstone Xenoliths
in the Southern Part of the Barberton Mountain Land,
South Africa
September, 1978, 14 pp.
14. Information Circular No. 126
P.J. Ryan and G.G. Whitfield
Basin Analysis of the Eccra and Lowermost Beaufort Beds and
Associated Coal, Uranium and Heavy Mineral Beach Sand
Occurrences
November, 1978, 16 pp.
15. Information Circular No. 127
R. Saager and R. Muff
"Fly-Speck Carbon" in Conglomerates and Gold in Banded Iron-
Formations of the Pietersburg Greenstone Belt : Reflections
on the Formation of the Witwatersrand Deposits
November, 1978, 12 pp.
16. Information Circular No. 128
J.E. Zumberge, A.C. Sigleo, and B. Nagy
Molecular and Elemental Analyses of the Carbonaceous Matter
in the Gold- and Uranium-Bearing Vaal Reef Carbon Seams,
Witwatersrand Sequence
December, 1978, 24 pp.

1979

1. Information Circular No. 129

L.J. Robb
The Distribution of Granitophile Elements in Archaean Granites
of the Eastern Transvaal and Their Bearing on Geomorphological
and Geological Features of the Area
January, 1979, 14 pp.

2. Information Circular No. 130

N. Tyler
Stratigraphy, Origin, and Correlation of the Kanye Volcanic Group
in the West-Central Transvaal
January, 1979, 15 pp.

3. Information Circular No. 131

N. Tyler
Correlation, Stratigraphic Relations, and Geochemistry of the
Ventersdorp Supergroup in the Derdepoort Area, West-Central
Transvaal
February, 1979, 23 pp.

4. Information Circular No. 132

N. Tyler
Depositional Sedimentary Environments Within the Black Reef
Quartzite of the West-Central Transvaal
April, 1979, 11 pp.

5. Information Circular No. 133

A. Button
Early Proterozoic Weathering Profile on the 2 200 m.y.-old Hekpoort
Basalt, Pretoria Group, South Africa : Preliminary Results
June, 1979, 19 pp.

6. Information Circular No. 134

K. Thiel, R. Saager, and R. Muff
Uranium Distribution in Early Precambrian Gold-Bearing Conglomerates
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