

Name of Firm : Johann van der Merwe (Pty) Ltd
 Name of Staff : Johann van der Merwe
 Profession : Engineering Geologist
 Date of Birth : 20 October 1946
 Years with Firm/Entity : 31 years
 Nationality : South African
 Permanent residence : 289 Polaris Avenue, Waterkloof, Pretoria, RSA
 Proposed Position : Geotechnical Expert
 Detailed Tasks assigned : Geotechnical Investigations and Appraisal & Geo-hydrological Survey



Education:

Years	Institution	Degree/Diploma
1974	University of Pretoria	B.Sc Geology
1975	University of Pretoria	B.Sc (Hons) Geology
1977	University of Durham, England	M.Sc. Engineering Geology

Employment Record:

1984-present Johann van der Merwe (Pty) Ltd: Director and Engineering Geologist
1978-1984 John M Weaver, Consulting Engineering Technologist: Associate
1974-1978 BKS Inc, Pretoria: Engineering Geologist
1970-1974 VKE Consulting Engineers, Pretora: Geological Technician

Professional Organisations:

- Member of South African Institute of Engineering Geologist (SAIEG)
- Member and past Chairman of Engineering Geologist (AEG-SA)
- Member of South African Council for Natural Scientist (SACNES)
- Member of the Ground Water Division of the Geological Society of South Africa

1. KEY QUALIFICATIONS RELATED TO THIS PROJECT

Foundation Investigations & Site Investigations

Recent major projects include foundation investigations for multi-storey structures, bridges, roads, proposed tunnels and dams across South Africa, Botswana, Swaziland, Lesotho and Mozambique.

Foundations for a cement new factory at Dwaalboom in the North West Province

New Missile Testing Range near Bredasdorp in the Southern Cape

Ngwenya Dam in Swaziland

Mutshedi Dam in Limpopo Province, RSA

Proposed new Haul Roads at Arnot and Optimum Coal Mines

Numerous Service Station Investigations

Involved with surface and underground joint mapping for the Katse Dam in Lesotho

Reconnaissance engineering geological investigation carried out for eight proposed dam sites in the Sabie River Catchment Area in Mpumalanga

In excess of 1300 site investigations for mobile phone towers and pay TV stations across South Africa, Botswana, Zimbabwe, Namibia, Malawi, Mozambique, Uganda, Nigeria, Sierra Leone, Liberia, Tanzania and Zambia.

Numerous Phase 1 and 2 geotechnical investigation for proposed new townships on dolomite and non-dolomite land incorporating gravity surveys, percussion drilling, test pitting by machine, soil sampling and testing in order to produce reports suitably for NHBRC enrolment purposes.

Soil Engineering

Sampling of the ocean floor off Mossel Bay for the underwater gasline to Mossgas

Location of construction materials for roads, railwaylines, dam sites and a new haul road link to the proposed Ntimbali Dam in the Tati River in Francistown in Botswana

Successful location of construction material for the proposed Road TR14/02 from Otjinene to Grootfontein for upgrading to bitumen standard. The location of the material was determined by using aerial, geobotanical and photographic interpretation, an aerial survey by helicopter and physical examination on the ground using a small diameter hand auger followed by detailed exploration with a machine.

Locating materials for the Namaqua Sands Project near Koekenaap in the Western Cape

Ground Water Exploration

Siting of and Supervision of drilling and pump testing for water boreholes for Domestic Purposes in Madikwe, Northwest Province

Zaaiplaats, Mpumalanga, using geological, remote sensing, geophysical and geobotanical techniques

Pollution Investigations

Involved since 1990 with pollution investigations at Shell, Engen, BP, Caltex, Total and Zenex fuel depots and service stations across South Africa, Botswana and Zimbabwe.

Assisted environmental companies from Australia and the United Kingdom in doing field work and assessment of various factory sites where asbestos and hazardous chemicals and fuel have been used in their manufacturing processes in the past.

Project Administration and Quality Control

Involved with the compilation of specifications, drawing up tender documents, setting out drilling contracts, supervision of drilling and subsequent administration of ground investigations.

Controlling a drilling contract for the proposed Knysna Bypass, Harrismith Bypass and the N17 Toll Road near Krugersdorp.

Ongoing geological input for a new cement factory at Dwaalboom whilst under construction covering piling, large open excavations, shallow foundations and silo structures.

Recently involved with SNA Civil and Development Engineers with the Maputo Corridor (N4 Toll Road) dealing with slope stability problems of road cuttings.

Economic Geology

Locating of sand for construction purposes, refractory clays, coal, manganese and gold deposits, limestone deposit for a cement factory at Changalumi Quarry in Malawi, location of dimension stone in the Belfast area.

The above and numerous other projects have been investigated by using some of the following techniques:

- Aerial photographic interpretation
- Field Mapping
- Soil Profiling
- Geobotanical techniques
- Large diameter auger drilling
- Diamond drilling core logging
- Percussion drilling
- Seismic survey
- Magnetometer surveys
- Remote sensing
- In situ soil and laboratory testing

2. KEY QUALIFICATIONS RELATED TO OTHER PROJECTS

Practicing as an independent engineering geological consultant since May 1984.
Since 1990 carried out numerous contamination investigations for Kantey and Templer in Gauteng, Free State, Botswana and Zimbabwe.

3. KEY QUALIFICATIONS IN OTHER ENGINEERING FIELDS

See experience record

Experience Record:

1984-present : Director in charge of various aspects of engineering and environmental geology. Responsible for client liaison, field work and reporting on site and foundation investigations.

1978-1984 : Engineering geologist and later associate in the firm John M Weaver, Consulting Engineering Geologist. Responsible for client liaison, field work and reporting on foundation investigations.

1974-1978 : Geological technician and later engineering geologist with BKS Inc in Pretoria. Responsible for site investigations and report preparation.

1970-1974 : Geological technician with VKE Consulting Engineers in Pretoria. Responsible for setting out boreholes, drilling supervision, surveying and general technical work associated with a civil engineering firm.

LANGUAGE	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Mother tongue	Excellent	Excellent