



CURRICULUM VITAE

PETER WALDRON

PERSONAL DETAILS

Date of Birth : 17th November 1951
Nationality : South African
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Languages : English - Home Language, Afrikaans - Fluent
: German, French – enough to survive.

Professional Affiliations : Project Management Association of South Africa, Member of the Society of Exploration Geophysicists, Member of the Namibian Geological Society, Member of the International Association of Hydrogeologists.

Professional Status : Pr.PMSA Professional member of the Project Management Association of South Africa.

EDUCATION AND QUALIFICATIONS

Matriculated from East London Technical High School in 1969.

Graduated with a National Diploma in Technology (NHDT) in Geophysics in 1972.

SUMMARY OF WORK EXPERIENCE

As illustrated by the following list of work experiences, I am well versed in all aspects of ground and airborne geophysical exploration for mineral resources and groundwater development projects in all regions of Africa as well as Canada & the USA, Brazil, the Middle East, Australia, Asia and the Pacific Rim regions. I have project managed very large groundwater development programmes and developed implementation strategies in KwaZulu, Natal and in Guyana, South America which had multi-million US\$ budgets and also exposed me to the importance of community participation in private sector funded projects in remote rural and peri-urban areas with significant groups of low income customers

WORK EXPERIENCE

In 1972, I began work with Falconbridge Nickel Mines of Canada based in Namibia and involved in various in-house geophysical exploration programmes. During this period (1973), I wrote a technical paper - *Waldron, P.T. (1973) The Effective use of Frequency Domain Induced Polarisation Systems. Falconbridge Nickel Mines of Canada.*

In 1974, I joined **Geoterrex** Limited, a large international firm providing contract geophysical services. I was initially deployed in the field on several large-scale airborne and ground geophysical surveys and then became involved in the production of interpretative reports as well as research and development into airborne geophysical equipment, while based in Ottawa, Canada.

My research and development activities were related to the design and construction of microprocessor based aircraft magnetic compensation devices for high-sensitivity magnetic surveys using optically pumped caesium vapour and proton precession magnetometers. I was also engaged in the in-house development of geophysical data acquisition systems using state of the art LSI technology. Further R & D work was done on Pulse Transient Electromagnetics for airborne applications based on the Barringer INPUT concept.

While working for Geoterrex, I worked in many different countries and climatic conditions and count the following contracts as highlights of my geophysical experiences :-

Canadian Arctic - Several hundred-thousand line kilometres surveyed using 256 multi-channel differential Spectrometer systems coupled with high resolution magnetics as part of an airborne regional mapping project for the Canadian Geological Survey.

Canada/United States/Mexico/Australia - Many large airborne geophysical surveys undertaken for mining and exploration as well as for off-shore hydrocarbon deposits. The geophysical techniques used varied according to exploration needs. For base mineral exploration, Induced Pulse Transient Electromagnetics coupled with magnetics were generally used while for hydrocarbon investigations, high sensitivity Scintrex caesium vapour optically pumped magnetometers were used with sensitivities in the order of 0.05nT.

Most of the airborne magnetic data was interpreted by matching field anomalies with geometrical shapes. Downward continuation and second derivative techniques were also used. The former was not suitable for complex, shallow anomalies but of more use in High Sensitivity magnetics in estimating thickness of sedimentary formations encountered in petroleum surveys.

During this period I co-authored a technical paper - *Waldron, P.T. & Williams L.C (1987) Three Axis Active Magnetic Compensator Techniques for Fixed Winged Aircraft. Geoterrex Limited.*

In 1991 I relocated to Namibia as the **Principal Consulting Geophysicist** to an International Consulting firm, Parkman and Associates, and was involved extensively

in groundwater exploration, drilling and project management of large scale programmes both for Government and the Private sector.

I was responsible for several of the Namibian Drought Relief Programmes in Namibia with overall responsibility for geophysical borehole siting, drilling target selection, project management of earth sciences personnel and drilling crews as well as co-author of final technical reports to Government. I had similar responsibilities in the

Emergency Water for Grazing Programme as well as many regional large-scale groundwater investigation and exploration programmes for the EU and other international donors.

During the Owambo Groundwater Research Programme in Namibia (Phase II), I was responsible for data collection, collation and interpretation over most of the area investigated (several 1000km²) using EM and resistivity. I was also appointed as the senior geophysicist responsible for the high-resolution, trilinear airborne magnetic survey flown for the Department of Water Affairs in Namibia to locate magnetic anomalies associated with lineaments under thick Kalahari Sediments in eastern Namibia.

I moved back to South Africa in 1997 as the **Associate Director** and head of the Earth Science Division of **Jeffares & Green**, Consulting Engineers, based in Pietermaritzburg, Natal.

I was involved in the National Reconstruction & Development Programme in KwaZulu-Natal, South Africa, managing groundwater projects with total budgets exceeding US\$25 million. As Head of the Earth Sciences Division, I successfully managed all of the Rudimentary Water Supply Programmes and all of the groundwater protocols for sanitation projects undertaken by the AquAmanzi BoTT Consortium. During this period I developed several innovative initiatives including the use of Playpumps, funded by the World Bank and other NGO donors.

The aim of the Rudimentary Water Supply Programme was to supply a basic level of water service to some 2.5 million rural inhabitants of the KZN province. I had oversight of a team of skilled professionals and field workers who managed the Programme through the phases of:

- Data gathering and Hydrocensus,
- Needs assessment and groundwater exploration programmes
- Implementation
- Sustainability options

Schemes and techniques implemented as part of the RWSP include rainwater harvesting in particularly remote areas, as well as more conventional reticulated networks based on groundwater supply.

Specific technical responsibilities included:

- Managing groundwater development teams including exploration teams using applied geophysical techniques,
- Advice on operational matters,

- Establishing new water utility organizations for the ongoing operations and maintenance of the infrastructure.

As part of the project management function, a tracking and database system was developed and implemented around a GIS-based platform to help district municipalities manage, monitor and sustain their groundwater based water supply and sanitation projects.

In October 2006 I was invited to join my three colleagues in forming VP3 Geoservices and am currently the Managing Director. Since forming the company I have undertaken Groundwater surveys for the Rani Resorts at Pemba Beach and on their Matemo and Medjumbe Islands off Pemba beach. In 2007 and 2008, I completed two regional Groundwater investigation programmes for the Sugar Industry Trust Fund for Education in search of locations suitable for Playpump installations.

In 2007 and 2008, I was involved in regional exploration programmes to locate REE minerals in the Namib Desert in Namibia followed by a regional sampling programme for diamond indicator minerals near Kimberley in South Africa.