

## CURRICULUM VITAE

<b>Name:</b>	<b>Gideon Petrus Kriel</b>
Nationality:	South African
Date of Birth:	1 September 1983
Profession:	Environmental Scientist
Professional Qualification/ Training:	<p>M.Env.Sci Water Sciences; North West University (Potchefstroom Campus), 2008</p> <p>Implementation of Environmental Management Systems (ISO 14001); Centre for Environmental Management, North-West University (Potchefstroom Campus), 2007.</p> <p>Bringing Data Into GIS (ArcGIS); GIMS (now ESRI SA), 2008.</p> <p>Tools for Wetland Assessment; Rhodes University, 2013</p>
Professional Membership/ Registrations:	<p>Registered Professional Natural Scientist (SACNSP- #400202/09) – Environmental Sciences</p> <p>Water Institute of Southern Africa (WISA) Member (21161)</p>
Current Employer:	Environmental Impact Management Services (Pty) Ltd.

## KEY EXPERIENCE

GP holds an M.Env.Sci (Water Sciences) Cum Laude from the North-West University (Potchefstroom Campus). He has been employed as an Environmental Consultant since 2007 and is the East London office manager. He has delivered presentations locally and internationally concerning the use of bio-indicators for the determination of water quality, and has experience in a wide variety of environmental management projects including: Environmental Impact Assessments, Basic Assessments, Geographic Information Systems (GIS), Environmental Compliance Monitoring, Environmental Awareness Training, Aquatic Ecological Assessments, Drinking and Waste Water Treatment Process Audits, Wetland Delineation and Assessments, ISO 14001 Aspect Registers, Water Use Licence Applications, Waste Management Licence Applications and Integrated Waste and Water Management Plans (IWWMP).

## CAREER SUMMARY

<b>Period: July 2007- Current</b>	<b>Organisation: EIMS</b>	<b>Position: Senior Environmental Assessment Practitioner</b>
<b>Key Projects/Assignments</b>	<p><u>Office Manager:</u> Responsible for the technical management of the East London Office including the following aspects:</p> <ul style="list-style-type: none"> <li>• Technical review and direction;</li> <li>• Quality control and assurance;</li> </ul>	



- Client management; and
- Marketing and business development.

Project Experience:

- Environmental Impact Assessment for the proposed Zonk'izizwe Mixed Use Development in Midrand, Gauteng.
- Basic Assessments for the road upgrades for the Johannesburg Roads Agency (JRA).
- Environmental Impact Assessment for the proposed Thabeng Eco Reserve and Golf Estate, near Ohrigstad, Limpopo.
- Basic Assessment for the proposed TATA Steel KZN Clean Energy Project, Richards Bay, KwaZulu-Natal.
- Basic Assessment for the proposed IFM Clean Energy Project, Mooi Nooi, North-West Province.
- Compilation of ISO 14001 Aspect/Impact registers for Clover (Pty) Ltd.
- Basic Assessment for the proposed N17 Phase 2 project: Addition of Auxiliary Lanes Between the Rondebult Road Interchange and the Proposed Trichardts Road Interchange.
- Basic Assessment for the Proposed Early Warning System for the South African Nuclear Energy Corporation of South Africa (NECSA).
- Environmental Impact Assessment for the Proposed Water and Effluent Collection and Treatment Infrastructure Upgrade for the Nuclear Energy Corporation of South Africa (NECSA).
- Basic Assessment for the proposed Residential Development on Portions 16 & 17 of the Farm Wilgespruit 190 IQ, Wilgeheuwel, Roodepoort.
- Independent Environmental Control Officer for the Eye of Africa Golf Estate, Gauteng.
- Independent Environmental Control Officer for the Department of International Relations Head Office Construction, Pretoria.
- Water Use License Application for the Upgrade of the Low Level Bridge on Hyperion Drive, North Riding, Johannesburg.
- Diatom Water Quality Assessments for the Upgrade of the Low Level Bridge on Hyperion Drive, North Riding, Johannesburg.
- Basic Assessment for the Proposed Rand Water 1400mm diameter L17 Bulk Water Pipeline, Brakpan, Gauteng.
- Wetland Delineation for Anglo Platinum Potgietersrus Platinum Limited near Mokopane, Limpopo.
- Independent Environmental Control Officer for the Knock-down and Rebuild of the Shell Range River Service Station, Gillview, Johannesburg.



- Independent Designated Environmental Officer for the Refurbishment of the South African National Roads Agency Limited (SANRAL) Dalpark Operations Centre, Brakpan.
- Waste Licence Application for the Proposed Water and Effluent Collection and Treatment Infrastructure Upgrade for the Nuclear Energy Corporation of South Africa (NECSA).
- Prospecting Rights Applications on behalf of the African Exploration Mining and Finance Corporation (Pty) Ltd for a variety of projects in Limpopo, Free State and North-West Provinces.
- Environmental Impact Assessment and Waste Management Licence Application for the Lusikisiki Sewer and Sewer Treatment Plant, Lusikisiki, Eastern Cape.
- Diatom Monitoring for the Lusikisiki Sewer and Sewer Treatment Plant, Lusikisiki, Eastern Cape.
- Appointed as a Blue Water Services Inspector for the 2012 Blue Water Services Audits by the Department of Water Affairs.
- Basic Assessment for the formalisation of Masibambane, Masibulele, Ilinge, Dacawa Gwentshe, Velwano, Mathemba Vuso in Mdantsane for the Buffalo City Metropolitan Municipality.
- Environmental Impact Assessment for the Proposed Sunny South Housing Development for the Buffalo City Metropolitan Municipality.
- Basic Assessment and Water Use Licence for the Mqonjwana Access Road for the Mbizana Local Municipality.
- Independent Environmental Control Officer for the East London Industrial Development Zone (ELIDZ): Infrastructure Services for the Zone 1B West Residential Development.
- Heritage Impact Assessment and Public Participation for the Proposed Reconstruction of Fleet Street, East London for the Buffalo City Metropolitan Municipality.
- Environmental Monitoring (Water Quality) for Phase 2 CD of the Olifants River Water Resources Development Project for Basil Read.
- Basic Assessment and Water Use Licence Application for the Proposed Sidwadeni River Access Road near Mthatha, Eastern Cape on behalf of the South African National Roads Agency (SOC) Limited.
- Basic Assessment and Water Use Licence Application for the Proposed Mngazi River Access Road near Port St Johns, Eastern Cape on behalf of the South African National Roads Agency (SOC) Limited.
- Independent Environmental Control Officer for the East London Industrial Development Zone (ELIDZ): Proposed MMOEM Facilities.



- Amalinda Fairlands Feasibility Study for the Buffalo City Metropolitan Municipality (CS Consulting).
- Independent Environmental Control Officer for the Lusikisiki Sewer and Sewer Treatment Plant, Lusikisiki, Eastern Cape.
- Independent Environmental Control Officer for the Noblesfontein Wind Energy Facility near Victoria West, Northern Cape Province.
- Independent Environmental Control Officer for the Reconstruction of Fleet Street, East London, Buffalo City Metropolitan Municipality, Eastern Cape Province.
- Transnet Freight Rail NEMA Section 24G Rectification Application – Coega Station to Tankatara Level Crossing, Coega, Eastern Cape.
- Independent Environmental Control Officer for the Sunny South Housing Development for the Buffalo City Metropolitan Municipality.
- Vincent-Berea Local Spatial Development Framework, CS Consulting (Buffalo City Metropolitan Municipality), East London, Eastern Cape.
- Participatory Based Planning Support to Informal Settlements Upgrading Projects In Buffalo City Metropolitan Municipality, CS Consulting, Eastern Cape.
- Molopo Free State Wetland Delineations, Virginia, Free State.
- Puma Energy Fuel Depot Wetland Delineation, Nelspuit, Mpumalanga.
- Mdantsane Roads Cluster 2 Environmental Control Officer, Buffalo City Metropolitan Municipality.
- Giuricich Chemical Removal at Vodacom Site, East London.
- Internal Environmental Management System Audits (ISO 14001) for the East London Distribution Centre and Ladismith Plant for Parmalat South Africa.
- Environmental Control Officer for the Eskom Albany-Mimososa 66KV Distribution Line near Alicedale, Eastern Cape.
- Environmental Impact Assessment for the Proposed Algoa Basin Oil & Gas Production Project for Aberdeen Offshore Engineering.
- Basic Assessment for the Proposed Ablution Facilities Along the Coast for Nyandeni Local Municipality.
- Environmental Control Officer for the Eskom Wittekleibosch-Dieprivier 132kV Power Line and Switching Station, Tsitsikamma, Eastern Cape.
- Specialist Walkdown and Site Specific EMPR for the Eskom Ankerlig-Omega Power line, Western Cape.
- Wetland Assessment for the Lichtenburg Hospital Basic Assessment Process for PH Bagale (on behalf of the Department of Health).



- Update of the Integrated Waste and Water Management Plan Eskom Lethabo Power Station, Free State.
- Basic Assessment for the Upgrade of the Loop 16 (Gariep) Road for ACWA Power, Groblershoop, Northern Cape.
- Prospecting Rights Application and Basic Assessment for Black Mountain Mining, Aggeneys, Northern Cape.
- Basic Assessment for the Eskom Riverbank IPP Projects, Eastern Cape.
- Environmental Control Officer for the SANRAL N2 Section 15 from Buffalo River (km 2,94) to Breidbach Intersection (km 9,8) and the R63 from Alexandra Road (km 0) to Bhisho, Eastern Cape.
- Environmental Control Officer for the Greenfields section of the SANRAL N2 Wild Coast Toll Highway (Southern Section), Eastern Cape.
- Basic Assessment for the Upgrading to a Surface Standard Portion of Road DR08606 +1-12KM, Eastern Cape Department of Roads and Public Works, Eastern Cape.
- Transnet TM2 Aquatic Monitoring Programme.
- Prospecting Right Applications and Basic Assessment Processes for Black Mountain Mining near Aggeneys, Northern Cape.
- Eskom Amathole Stormwater Environmental Control Officer, Eastern Cape.
- Update of the ACWA Bokpoort Concentrated Solar Plant Integrated Waste and Water Management Plan, Northern Cape.
- Update of the Rirhanzdu Rehabilitation Strategy and Implementation Plan, Mpumalanga.
- Basic Assessment and Water Use Licence Application for the Proposed Megamor Park Extension, Meisieshalt, East London for Umbra Trading 11.
- Creation of the Ekurhuleni Metropolitan Municipality Parks GIS Layer.
- Enviro-legal review for Bax Kaplan Russel for a Waste Processing Facility in Wilsonia, East London.
- Enviro-Legal Review: Demonstration of On-Site Faecal Sludge Treatment In East London, Impilo Yabantu Services (Pty) Ltd.
- Umgeni Raw Water Management Audit for SizweNtsalubaGobodo, Pietermaritzburg.
- Umgeni Waste Water Management Audit for SizweNtsalubaGobodo, Pietermaritzburg.
- Competent Persons Report (Environmental) for the Ntshovelo Mining Resources (Pty) Ltd Welgemeend Colliery.



	<ul style="list-style-type: none"><li>• Umgeni Potable Water Management Audit for SizweNtsalubaGobodo, Pietermaritzburg.</li><li>• GIS work for a large amount of projects from 2007 - Present including the following: the identification and mapping of sensitivities and interested and affected parties, the delineation of site boundaries, the identification of alternative development sites, geo-referencing of old maps and technical drawings, production of informative maps for Basic Assessments, Environmental Impact Assessments and Environmental Compliance Monitoring.</li></ul>
--	---

### LANGUAGE CAPABILITY

Language	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

### DECLARATION

I confirm that the above information contained in the CV is an accurate description of my experience and qualifications at the time of signature.

Signature of Staff Member

18 October 2018

Date



NORTH-WEST UNIVERSITY  
 YUNIBESITI YA BOKONE-BOPHIRIMA  
 NOORDWES-UNIVERSITEIT

# MASTER OF ENVIRONMENTAL SCIENCES

in

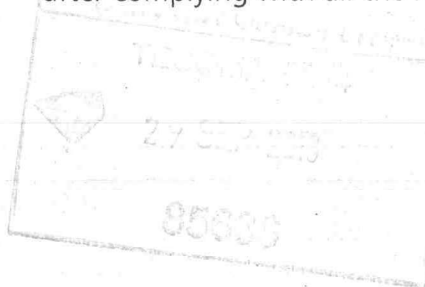
## ENVIRONMENTAL SCIENCES AND MANAGEMENT

awarded to

**GIDEON PETRUS KRIEL**

**CUM LAUDE**

after complying with all the requirements **CORRECT STAMP**

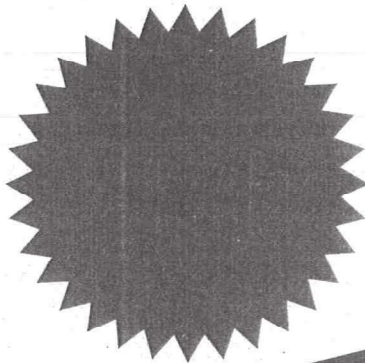


It is hereby certified that this is a true copy of the original document and that there is no indication that alterations have been made thereto by an unauthorized person.

Date: 27/09/08  
 Name: Gideon Petrus Kriel Rank: Telle  
 Signature: [Signature] Office: TECOMA

Vice-chancellor

**11 September 2008**



Registrar

University number: 12570303  
 Serial number: 10119



# SACNASP

South African Council for Natural Scientific Professions

herewith certifies that

Gideon Petrus Kriel

Registration number: 400202/09

is registered as a

Professional Natural Scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003  
(Act 27 of 2003).

in the following field(s) of practice (Schedule 1 of the Act)

Environmental Science

Effective 16 September 2009

Expires 31 March 2019



CERTIFIED CORRECT STAMP

It is hereby certified that this is a true copy of the original document and that there is no indication that alterations have been made hereon by an unauthorized person.

Date: 27/09/19  
MICMASA Rank: Tella  
Signature: [Handwritten Signature]  
Office: TECOMA

TECOMA  
27 SEP 2019  
8:55:05

*[Handwritten Signature]*

President

*[Handwritten Signature]*

Executive Director



## CURRICULUM VITAE

<b>Name:</b>	<b>Pieter Holtzhausen</b>
<b>Nationality:</b>	South African
<b>Date of Birth:</b>	29 February 1992
<b>Profession:</b>	Environmental Consultant
<b>Professional Qualification/ Training:</b>	MSc. Environmental Sciences (Hydrogeology); North-West University Potchefstroom, 2015-2017
	Hons. Environmental Sciences (Ecotoxicology); North-West University Potchefstroom, 2014
	BSc. Environmental and Biological Sciences (Zoology and Chemistry); North-West University Potchefstroom, 2011-2013
<b>Current Employer:</b>	Environmental Impact Management Services (Pty) Ltd.

## KEY EXPERIENCE

Pieter holds an M.Sc. in Environmental Sciences (Hydrology and Hydrogeology) from the North-West University (Potchefstroom Campus) and is currently employed as an Environmental Consultant with almost two years' experience in the environmental sector. His core expertise relates to the areas of spatial analysis and sensitivity mapping on Geographical Information Systems (GIS) for a wide array of projects ranging from risk assessments, audits, EIAs and BAs for mining, gas extraction, wetland rehabilitation, road upgrades, etc. He has taken part in numerous Public Participation Processes (PPP), water use license applications, water monitoring, soil sampling and risk assessment report writing. Pieter also has a year of experience in Airborne Remote Sensing relating to the field of Geophysics as a technician and data processor of Radiometrics, Magnetics, hyperspectral-, infrared-, thermal- and RGB photography.

## CAREER SUMMARY

<b>Period: March 2018 – Present</b>	<b>Organisation: EIMS</b>	<b>Position: Environmental Consultant</b>
<b>Key Projects/Assignments</b>	<ul style="list-style-type: none"> <li>• Bi-monthly monitoring and report writing of groundwater quality for the Molopo Water Monitoring Program in Virginia, Free State province.</li> <li>• GIS overall- and sensitivity mapping and spatial analysis for various projects such as: <ul style="list-style-type: none"> <li>➤ Ekurhuleni Wetland Rehabilitation;</li> <li>➤ Kalabasfontein EIA;</li> <li>➤ Spitzland EIA and;</li> <li>➤ Harmony ST Helena Closure Plan.</li> </ul> </li> </ul>	



	<ul style="list-style-type: none"> <li>• Technical assessment and review of municipal support plans w.r.t service delivery for the Municipal Infrastructure Support Agent (MISA).</li> <li>• Compilation of a risk assessment report for the cultivation of medicinal cannabis in Midrand.</li> <li>• Compilation of a contaminated land assessment report for the Harmony ST Helena shaft 10 closure plan.</li> <li>• ECO for a stretch water pipeline for the TCTA Mokolo Crocodile Water Augmentation project. This included monthly site audits and report writing on the rehabilitation of the constructed pipeline.</li> <li>• Assistance in IWULAs for multiple projects such as the: <ul style="list-style-type: none"> <li>➢ Vlakvarkfontein EIA extension;</li> <li>➢ Paardeplaats coal mine WULA and;</li> <li>➢ Ilima WULA.</li> </ul> </li> </ul>		
<b>Period: 2016-2017</b>	<table border="1"> <tr> <td><b>Organisation: GyroLAG</b></td> <td><b>Position: Data Processor/ Technician</b></td> </tr> </table>	<b>Organisation: GyroLAG</b>	<b>Position: Data Processor/ Technician</b>
<b>Organisation: GyroLAG</b>	<b>Position: Data Processor/ Technician</b>		
<b>Key Projects/Assignments</b>	<ul style="list-style-type: none"> <li>• Assembling of geophysical equipment onto aircraft (spectrometer, magnetometer, X-Cam (RGB, Thermal and Infrared), AG-NAV, GPS receiver and a laser altimeter).</li> <li>• Processing of radiation data from spectrometer and images from the X-Cam after flights.</li> <li>• Deployment of base of operations during site visits.</li> </ul>		

## LANGUAGE CAPABILITY

Language	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

## DECLARATION

I confirm that the above information contained in the CV is an accurate description of my experience and qualifications and that, at the time of signature.

\_\_\_\_\_  
Signature of Staff Member

2019/08/12 \_\_\_\_\_

Date



IT IS HEREBY CERTIFIED THAT THIS IS A TRUE COPY OF THE ORIGINAL DOCUMENT AND THAT THERE IS NO INDICATION THAT ALTERATIONS HAVE BEEN MADE THERETO BY AN UNAUTHORISED PERSON.  
DATE 2018-09-18  
NAME Leak Magoob  
RANK Lecturer  
SIGNATURE [Signature]  
OFFICE: Pinesowrie

**MASTER OF SCIENCE**  
in  
**ENVIRONMENTAL SCIENCES**



awarded to

**PIETER HENDRIK HOLTZHAUSEN**

after complying with all the requirements

**24 May 2018**

[Signature]

**Prof ND Kgwadi  
Vice-Chancellor**



[Signature]

**Prof M Verhoef  
Registrar**

University Number: 22796177  
Serial Number: 326522

This is an English translation of the content of the original certificate issued in Afrikaans and conferred at a graduation ceremony held on 24 May 2018

