Curriculum Vitae – Bradly Thornton

Director



Professional Registration

 South African Council for Natural Science Professionals (SACNASP) - Pending

Qualifications

- Management
 Development Program,
 University of
 Stellenbosch Business
 School Executive
 Development, 2012
- B.SC. Hons Environmental Management, RAU, 2004
- B.Sc. Geography & Geology, RAU, 2003

Languages

- English Fluent
- Afrikaans Average

Countries Worked in

- South Africa
- Botswana
- Namibia
- Malawi
- Democratic Republic of Congo
- Sierra Leone

Bradly is the Director of Kongiwe Environmental (Pty) Ltd. He has 13 years' work experience in Environmental Management and Geographic Information Systems (GIS). His roles include the executive management responsibilities of Kongiwe Environmental, project management of client projects, client and business development, marketing and quality assurance and corporate compliance.

His skills include:

- ▶ Proven track record in project management of environmental projects to required quality standards, timeframes and budgets.
- **▼** Executive experience in business management and business development.
- ▼ Exceptional client relationship and managerial skills.
- ▼ Proactive leader and team player, flexible and versatile.
- ▼ 13 Years work experience in Environmental Management and Geographic Information Systems (GIS).



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value		
Environmental Authorisations									
Environmental Authorisations for the proposed Umsimbithi Belfast Project	2017- current	Mpumalanga, South Africa	Umsimbithi Mining (Pty) Ltd	Environmental Authorisations for the proposed Umsimbithi Belfast Project	Project Director	Project management of EIA process			
Lephalale Coal and Power Project	2017- current	Limpopo, South Africa	Dedicoal (Pty) Ltd	Environmental Authorisations for the proposed Lephalale Coal & Power Project	Project Director	Project management of EIA process			
EIA for Road Re- Alignment at Tweefontein Phase 2	2015	Mpumalanga, South Africa	Glencore	EIA for Road Re- Alignment at Tweefontein Phase 2	Project Director				
Songwe Hill Rare Earth Project	2014	Malawi	Mkango Resources Ltd.	Songwe Hill Rare Earth Project ESHIA and input for Prefeasibility Report for stock exchange.	Project Manager				



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Klipspruit Mine Extensions: Environmental Authorisations	2014	Mpumalanga, South Africa	South 32 (BHP Billiton Energy Coal South Africa)	Klipspruit Mine Extensions: Environmental Authorisations	Project Manager		
EIA for proposed Solar Power Plants	2012	Wes tern & Northern Cape, South Africa	BSG Resources Ltd / Orlight SA (Pty) Ltd.	EIA for proposed Solar Power Plants	Consultant	Supervision of Visual Impact Assessments as specialist study component of the EIA, Input into EIA and GIS	
ERGO EMPR upgrade	2008	Gauteng, South Africa	Crown Gold Recoveries / DRD Gold / ERGO Mining	ERGO EMPR upgrade	Project Manager	Project management of EMPR upgrade for Ergo gold processing plant	
EMPR amendment for Mimosa Colliery	2008	Mpumalanga, South Africa	Northern Coal	EMPR amendment for Mimosa Colliery	Project Manager	Project Management of EMPR amendment	
Closure Costing							
Annual Closure Cost Assessment	2013	Mpumalanga, South Africa	Glencore	Annual Closure Cost Assessment	Project Director		
Environmental Contro	l Officer						



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Raising of Tzaneen Dam	2016 - current	Limpopo Province, South Africa	Lepelle Northern Water Board	Raising of Tzaneen Dam wall to increase the dam's storage capacity	Environmental Control Officer	Environmental Officer duties which include environmental compliance site visits, managing of contractors and their procedures as per the EMP	
Auditing							
Environmental Audit	2017	Mpumalanga, South Africa	Glencore	Environmental Audit of all Glencore operations	Project Director		
Environmental Audit	2015	Mpumalanga, South Africa	Glencore	Environmental Audit	Project Director		
Due Diligence							
Environmental Liability	2014	Mpumalanga, South Africa	Xstract Mining Consultants	Environmental liability statement for Mineral Experts Report in support of demerger of an international mining company.	Project Manager		



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
GIS							
Acid Mine Drainage project - Witwatersrand	2012	Gauteng, Johannesburg	TCTA	Acid Mine Drainage project - Witwatersrand	GIS Consultant	Supervision of GIS	
Environmental services for Ivanplats mine.	2011	Limpopo, South Africa	Ivanplats	Environmental work for Ivanplats mine.	GIS Consultant	Supervision of GIS on various projects	
Nzoro Hydropower Stations	2011	Democratic Republic of Congo	Randgold Resources	Nzoro Hydropower Stations	GIS Consultant	Supervision of GIS.	
Hyperspectral Remote Sensing	2011	Limpopo, South Africa	Xstrata Coal South Africa	Hyperspectral Remote Sensing	Project Manager	Project management of remote sensing project to identify alien vegetation, hydrocarbon spillages and assessment of vegetation health.	
Site Selection: Matla Coal	2010	Mpumalanga, South Africa	Exxaro Resources	Site Selection: Matla Coal	GIS Consultant	GIS: Site selection of suitable location for new brine ponds	



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Koidu Mine Expansion	2010	Sierra Leone	Koidu Holdings	EIA for Koidu mine expansion	GIS Consultant	GIS support	
Kibali Mining Project	2010	Democratic Republic of Congo	Randgold Resources	EIA for Kibali Mining Prject	GIS Consultant	GIS support	
Biodiversity Land Management Plans	2010	Mpumalanga, South Africa	Xstrata Coal South Africa	Biodiversity Land Management Plans	GIS Consultant	GIS supervision in development of GIS based biodiversity management plans	
Thermal Remote Sensing	2010	Mpumalanga, South Africa	Xstrata Coal South Africa	Thermal Remote Sensing	Project Manager	Project management, thermal remote sensing for detection of spontaneous combustion on coal discard dumps	
Khutala Lightning strike risk analysis	2009	Mpumalanga, South Africa	BHP Billiton Energy Coal South Africa	Khutala Lightning strike risk analysis	GIS Consultant	GIS based lightning risk analysis	
Mmamabula Energy Projects	2009	Botswana	CIC Resources	Mmamabula Energy Projects	GIS Consultant	Supervision of GIS and technical inputs	
EIA for Valencia Mine	2008	Namibia	Valencia Uranium	EIA for Valencia Mine	GIS Consultant	GIS and Visual Impact Assessment	



Curriculum Vitae – Gerlinde Wilreker





Professional Registration

- South African Council for Natural Science Professionals (SACNASP) - 2009

Qualifications

- Diploma Environmental Law, University of Johannesburg, 2005
- M.Sc. Environmental Management, RAU, 2004
- B.SC. Hons Environmental Management, RAU, 2002
- B.Sc. Earth Sciences, RAU, 2001

Languages

- English Fluent
- French Fluent
- German Fluent
- Afrikaans Average

Countries Worked in

- South Africa
- Democratic Republic of Congo
- Mauritania

Gerlinde is an Environmental Consultant with over ten years' work experience, predominantly in the mining industry. Her practical experience in the mining and construction industry has given her a depth of knowledge regarding project processes from pre-feasibility phases through to implementation. She is adept at working in different contexts, and problem-solving with her team to meet client needs. She has particular expertise in relation to Environmental Authorisation Processes in terms of the South African legal regime.

Her skills include:

- Project Management;
- **▼** Environmental Authorisations;
- Environmental Auditing;
- ▼ Environmental Control Officer; and
- **▼** Gap analyses and Due Diligences.



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Environmental Author	orisations						
Exxaro Coal Underground Coal Gasification Project	October 2015 – May 2016:	Limpopo Province, South Africa	Exxaro Coal	Environmental Impact Assessment process for an underground coal gasification project	Project Manager	Project Manager. Managing specialists undertaking the specialist studies for the Environmental Impact Assessment	R5 million
Fumani Gold Mine	2013 -2015	Limpopo Province, South Africa	Corridor Mining Resources	Environmental Impact Assessment process for the proposed Fumani gold mine	Project Manager	Managing consultants undertaking the EIA for the proposed Fumani gold mine	R2 million
Kambove Coper Processing Plant	2013	Democratic Republic of Congo	Gécamines	Environmental, Social and Health Impact study (ESHIA) for the processing plant and tailings facilities	Project Manager	Managing consultants undertaking the Environmental, Social and Health Impact study (ESHIA)	R 20 million



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
PV Pant Authorisation	2012	KwaZulu Natal Province, South Africa	GX Energie	Basic assessment process for a PV plant.	Environmental Consulting	Assisting with BA compilation and public participation	Not disclosed
Fumani Mine	2009 - 2011	Northern Cape Province, South Africa	Minéro	Environmental Impact Assessment process for the proposed Reivilo lead and Zinc mine	Environmental Consulting	Compiling Scoping and EIA reports, public participation	Not disclosed
Exxaro Coal Belfast Project	2008 -2011	Mpumalanga Province, South Africa	Exxaro Coal	Environmental authorisation process for the proposed Belfast Coal Mine	Environmental Consulting	Compiling Scoping and EIA reports, public participation	Not disclosed
Closure Costing							
Total Coal Mine Closure Application	July 2015 – June 2016	KwaZulu-Natal, South Africa	Total Coal	Mine closure application and Basic Assessment for the closure of the Steincoalspruit Coal Mine	Project Manager	Project Manager, review of mine closure application document and Basic Assessment, client and authority liaison	R 500 000.00
Diesel Storage Facilities	2011	South Africa	Basil Read	EMP and closure costings for the installations of various diesel	Project Manager	EMP and closure costing	Not disclosed



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
				storage facilities throughout South Africa.			
Environmental Cont	rol Officer						
Black Rock Expansion Project - Environmental Control Officer	2013 – 2015	Northern Cape Province, South Africa	Assmang Black Rock	Black Rock Expansion Project	Environmental Control Officer	Environmental Officer duties which include environmental compliance site visits, managing of contractors and their procedures as per client's EMS	Not disclosed
Sishen Ramp-Up Projects – Bucket & Bowl, Life of Mine and various Housing Projects	2011 – 2013	Northern Cape Province, South Africa	Kumba Iron Ore	Bucket & Bowl, Life of Mine and various Housing Projects	Environmental Control Officer	Environmental Officer duties which include environmental compliance site visits, managing of contractors and their procedures as per client's EMS	Not disclosed
Sishen Ramp-Up Projects – Diesel Tanks 5 & 6, Aldag 1 extension,	2011 – 2013	Northern Cape Province, South Africa	Kumba Iron Ore	Diesel Tanks 5 & 6, Aldag 1 extension, Lakutshona and	Environmental Control Officer	Environmental Officer duties which include environmental	Not disclosed



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Lakutshona and Sesheng Housing Projects				Sesheng Housing Projects		compliance site visits, managing of contractors and their procedures as per client's EMS	
Auditing							
Cronimet Legal Compliance	2012-2013	Limpopo Province, South Africa	Cronimet	Legal compliance auditing of Cronimet mine	Environmental auditor	Monthly environmental auditing of chrome mine facilities	Not disclosed
PPC Legal Compliance	2005 - 2008	South Africa	PPC	Legal compliance auditing of various quarries across South Africa	Environmental auditor	Monthly environmental auditing of chrome mine facilities	Not disclosed
Due Diligence							
Eastplats Due Diligence	2014	North West Province, South Africa	Eastplats	An environmental legislative overview with an associated environmental site assessment, which in turn assessed the availability and status of the various environmental	Environmental Consultant	Compiling environmental due diligence	Not disclosed



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
				authorizations, permits and licenses required for legislative compliance at the Eastern Plat Asset.			
PTM Waterberg Project Concept Study	2013	Limpop Province, South Africa	Platinum Group Metals	Concept study for Platinum mine in the Waterberg.	Environmental Consultant	Environmental input into the Preliminary Economic Assessment	Not disclosed

Curriculum Vitae – Ashleigh Blackwell

Environmental Consultant



Professional Registration

- Candidate for the South African Council for Natural Science Professionals (Cand.Sci.Nat)- 2017

Qualifications

- LLB Environmental Law, UNISA, 2017
- B.SC. Hons Conservation Ecology, 2015

Languages

- English Fluent
- Afrikaans Fluent

Countries Worked in

- South Africa

Ashleigh is the and Environmental Consultant with one and a half years' experience working in the Environmental Sector, predominantly in the Renewable Energy sector. Being multiskilled within her role, Ashleigh is responsible for undertaking Environmental Impact reporting, Soils reporting, legal permitting and licencing, as well as Public Participation. She was schooled in Ecology and Soil Science at the University of Stellenbosch where passion for environmental protection and sustainability was cemented. Ashleigh Is currently completing her LLB through the University of South Africa, and uses her knowledge to produce work that is in line with current legislation, and responds to all legal requirements within the environmental sector.

Her skills include:

- Project Management;
- ▼ Environmental Authorisations;
- ▼ Environmental Impact Reporting
- ▼ Environmental Control Officer; and
- ▼ Soils, Land Use and Agricultural Reporting



Project	Project Status / Date	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Approximate Contract Value
Environmental Auth	orisations						
Olifantshoek Substation and Powerline	Ongoing	Olifantshoek, Northern Cape Province	Eskom	Environmental Impact Assessment process for an underground coal gasification project	Environmental Consultant	Compile Basic Assessment Report, public participation, project management	Not Disclosed
REDISA Pre- processing Waste Tyre Depot	2017	Mpumalanga, KwaZulu-Natal, Nelspruit Provinces, South Africa	The Recycling and Economic Development of South Africa	Environmental Impact Assessment process for the proposed Fumani gold mine	Environmental Consultant	Compile Basic Assessment Report, public participation, project management	R 300 000,00
Scuitdrift Solar Energy Facility	2017	Scuitdrift, Northern Cape Province	Building Energy	Basic assessment process for watercourse crossing and intended road upgrades to the Klawer Wind Energy Facility	Environmental Consultant	Compile Basic Assessment Report, public participation, project management	R 110 900,34
Klawer Watercourse Crossings	2017	Klawer, Western Cape	Building Energy	Basic assessment process for watercourse crossing and intended road upgrades to the Klawer Wind Energy Facility	Environmental Consultant	Compile Basic Assessment Report, public participation, project management	R 72 330,72



Project	Project Status / Date	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Approximate Contract Value
Lehae Training Academy and Fire Station	Ongoing	Lehae, Gauteng Province	Delta BEC on behalf of the JDA	Basic Assessment Process	Environmental Consultant	Compile Basic Assessment Report, public participation, project management	R 285 832.11
Soils Reporting							
H2 Energy Power Station	2017	Mpumalanga Province, South Africa	H2 Clean Energy (Pty) Ltd	Soil, Land-Use and Agricultural Potential Reporting	Soils Specialist	Completion of a Soils Scoping report	Not Disclosed
Orkney Solar Farm	2016	North West Province, South Africa	Genesis Orkney Solar (Pty)	Soil, Land-Use and Agricultural Potential Reporting	Soils Specialist	Completion of a Soils Scoping report	Not Disclosed
Richards Bay Gas to Power	2016	Richards Bay, Kwa-Zulu Natal Province	Eskom	Soil and Agricultural Screening Study	Soils Specialist	Completion of a Soils Scoping report	Not Disclosed
Various Applications							
Section 53 Application for the Suurplaat Wind Energy Facility	2016	Northern and Western Cape Provinces, South Africa	Moyeng Energy (Pty) Ltd	Compilation of the Section 53 Application	Environmental Consultant	Compilation of the Section 53 Application, Client Liason and Authority Liason	Not Disclosed
Section 53 Application for the Tshivhaso Coal-	2016	Lephalale, Limpopo Province	Exxaro	Compilation of the Section 53 Application	Environmental Consultant	Compilation of the Section 53 Application, Client Liason and Authority Liason	Not Disclosed



Project	Project Status / Date	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Approximate Contract Value
Fired Power Station, Limpopo							
Section 53 Application Thabametsi Coal water pipeline, Limpopo	2017	Lephalale, Limpopo Province	Exxaro	Compilation of the Section 53 Application	Environmental Consultant	Compilation of the Section 53 Application, Client Liason and Authority Liason	Not Disclosed
Section 24G Ramification Application for Hossam Soror	Ongoing	Randburg, Gauteng Province	Soror Language Services cc	Compilation of the Section 24 G Application	Environmental Consultant	Compilation of the Section 24 G Application, Client Liason and Authority Liason	Not Disclosed
Due Diligence							
Review of a Water Use License	2016	Gauteng Province	Joburg Property Company	Review of the WUL	Environmental Consultant	Review of the WUL, Identification of conformances and non- conformances, advisory	Not Disclosed
GIS Mapping							
Hopetown 75MW PV facility	2016	Northern Cape Province, Gauteng Province	Not Disclosed	GIS Mapping	Environmental Consultant	Locality Mapping and Site mapping	Not Disclosed
Richards Bay Gas to Power Facility	2016	Richards Bay, Kwa-Zulu Natal Province	Eskom	GIS Mapping	Environmental Consultant	Locality Mapping and Site mapping	Not Disclosed



Project	Project Status / Date	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Approximate Contract Value
Skuitdrift Solar Project	2016	Scuitdrift, Northern Cape Province	Building Energy	GIS Mapping	Environmental Consultant	Locality Mapping and Site mapping	Not Disclosed
Orkney Solar Facility Soil and Agricultural Report	2016	North West Province, South Africa	Genesis Orkney Solar (Pty)	GIS Mapping	Environmental Consultant	Locality Mapping and Site mapping	Not Disclosed
Palese Soil and Agricultural Scoping Report	2016	Mpumalanga Province, South Africa	H2 Clean Energy (Pty) Ltd	GIS Mapping	Environmental Consultant	Locality Mapping and Site mapping	Not Disclosed
Richards Bay Gas to Power Soil and Agricultural Screening Study	2016	Richards Bay, Kwa-Zulu Natal Province	Eskom	GIS Mapping	Environmental Consultant	Locality Mapping and Site mapping	Not Disclosed

Curriculum Vitae - Nokuthula Ndala





Professional Registration -South African Geomatics Council (SAGC) - 2016

Qualifications

- Bsc Geoinformatics, University of Pretoria,2013

Languages

- English Fluent
- Isindebele Fluent
- Setswana- Fluent

Countries Worked in

- South Africa
- Madagascar
- Ivory Coast
- Namibia

Nokuthula has worked in a consulting environment since having graduated with a Bsc degree in Geoinformatics from University of Pretoria in 2013. Her main focus is providing specialist GIS consulting services that have been primarily for the mining and exploration industries, specifically for environmental management, engineering, locational planning and management objectives.

Her skills include:

- Creating and updating the GIS database
- ▼ Liaise with Data suppliers (locally and other African Countries)

 Data broking- sourcing of geological and satellite imagery
 remotely
- Map Production of IWULA, EIAs, Geophysics studies
- Report writing and Proposal writing
- **▼** Input into specialist reports and assessments
- ▼ Site Visits for VIA assessment



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Visual Impact Assess	ments						
Eloff Mining Company (Pty) Ltd	April 2015 – May 2016:	Mpumalanga Province, South Africa	Eloff Coal Mine	Environmental Impact Assessment for the extension of the Eloff mine	GIS Technologist	Site visit and visual impact analysis of the proposed extension.	R98 000
Reitkuil Mine	2013 -2015	Mpumalanga Province, South Africa	Reitkuil Mine	Environmental Impact Assessment process for the proposed extension of the Reitkuil Mine	GIS Technologist	Receptor identification using Google Earth pro within 10km buffer of the site, identify landscape characteristics of the site, Site visit to validate desktop study results (in-situ data collection)	R120 000
Exxaro Coal Belfast Project	2014 -2016	Mpumalanga Province, South Africa	Exxaro Coal	Environmental authorisation process for the proposed Belfast Coal Mine	GIS Technologist	Compiling Scoping and EIA reports, public participation maps	Not disclosed
Closure Costing							



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Total Coal Mine Closure Application	July 2015 – June 2016	KwaZulu-Natal, South Africa	Total Coal	Mine closure application and Basic Assessment for the closure of the Steincoalspruit Coal Mine	GIS Technologist	Closure cost infrastructure mapping and calculations.	R 500 000.00
Scropion Zinc Financial Provision	2013	South Africa	Scorpion Zinc	Closure cost calculations of existing mine in South Africa.	GIS Technologist	EMP and closure costing mapping and infrastructure calculations	Not disclosed
Groundwater and Su	ırface water						
Oumjarane Dewatering	2014 – 2016	Morocco, North Africa	Oumjarane	Groundwater hydrology investigation	GIS Technologist	Mapping Hydrocensus Boreholes.Hydrology map which includes DEM, Maider Basement Catchment delineation. Mapping temperature and conductivity points for the Hydrocenus points of the site	Not disclosed



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Exxaro Leeuwpan Groundwater and Surface water Study	2013 – 2016	Mpumalanga Province, South Africa	Exxaro Mine	Groundwater and surface water investigation for the proposed Exxaro Mine expansion	GIS Technologist	Floodline Mapping and sub-catchment mapping	Not disclosed
Site Selection							
Molo Granite	2014-2015	Madagascar, southeast coast of Africa	DRA	Site selection for proposed Granite Mine	GIS Technician	Site selection analysis and specialist mapping	Not disclosed
HCV and HCS Project	Current	Ivory Coast	Montrose Environmental	HCV and HCS Screening of 3 sites	GIS technologist	Aerial Imagery sourcing, Mapping of HCV and HCS assessment results	Not disclosed
Contamination							
Transnet Pipelines - Geohydrological and a contaminated land assessment - mapping for 30 Transnet Facilities	2014-2016	South Africa	Transnet	Geohydrological and a contaminated land assessment	GIS Technologist	Created Buffers zones around contaminated sites and mapping the sensitive maps.Database design and maintenance of depot metadata captured for all 30 sites. Merging old	Transnet Pipelines - Geohydrological and a contaminated land assessment - mapping for 30 Transnet Facilities



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
						version Boreholes with updated borehole data into one database.	

Curriculum Vitae – Michael Hennessy





Qualifications

- B.A. (English Literature and Philosophy), University of Natal, 1973
- LL.B., University of Natal, 1975
- B.Com. (Hons.), University of South Africa, 1984

Languages

- English Fluent
- Afrikaans Fluent
- Dutch Conversational

Countries Worked in

- South Africa
- UK (4 years)
- Work experience in Russia, China, Colombia, Japan, South Korea and various European countries

Michael has had more than 35 years' experience in the Resources industry, including coal and oil. He has run his own consultancy focussed on mining title and project development. His particular expertise lies in Mining and Environmental Law, in particular, the application of mining and environmental legislation to new prospecting and mining projects.

His skills include:

- Applications for Prospecting and Mining Rights;
- ▼ Environmental Authorisations;
- ▼ Legal Opinions on Mining and associated Projects; and
- Gap analyses and Due Diligences.



(Since 2011)

Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Prospecting Rights							
Gold tailings retreatment	Various applications between 2011 - 2015	Gauteng Province, South Africa	DRDGold	Applications for prospecting rights on tailings dams	Project Manager	Compilation of all documentation, submission of applications	+/- R2 million
Agnes Gold Mine	2011	Mpumalanga Province, South Africa	Galaxy Mining Resources	Application for two prospecting rights on greenfields areas	Project Manager	Compilation of all documentation, submission of applications	R0.5 million
Temo Coal	2013	Limpopo Province, South Africa	Namane Resources	Application for two prospecting rights on greenfields areas	Project Manager	Compilation of all documentation, submission of applications	R 0.8 million
Platinum	2015	Limpopo Province, South Africa	Anglo Platinum	Application for renewal of three prospecting rights	Project Manager	Compilation of all documentation, submission of applications	R0.5 million
Gold	2014	Gauteng Province, South Africa	DRDGold	Renewal of Prospecting Right	Project support	Submission of renewal application	R0.1 million



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Mining Rights							
Platinum project	2011 - 2013	Limpopo Province, South Africa	Plat Reef Resources	Application for mining rights on greenfields area	Project support	Compilation of all documentation, submission of applications	R2.0 million
Coal mine development	2011	Limpopo Province, South Africa	Namane Resources	Application for mining rights on Greenfields area	Project Support	Compilation of all documentation, submission of applications	R0.750 million
Coal mine development	2011	Limpopo Province, South Africa	Coal of Africa	Mining work programme	Project support		
Gold mine project	2015	Mpumalanga Province, South Africa	Galaxy Gold	Application for mining rights to re- develop historic gold mine	Project support	Compilation of all documentation, submission of applications	R1.5 million
Coal mine development	2011	Limpopo Province, South Africa	Resgen Resources	Application for mining rights on Greenfields area	Project Support	Compilation of all documentation, submission of applications	R1.0 million
Sand mine	2014	Free State Province, South Africa	Copper Sunset Sand	Application for mining right	Project Manager	Compilation of all documentation, submission of applications	R0.5 million



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Chrome and Platinum Project	2015	Limpopo Province, South Africa	VMIC	Application for mining rights on Greenfields area	Project Support	Compilation of all documentation, submission of applications	R2.0 million
Coal mine	2016	Gauteng Province, South Africa	Oakleaf	Application for mining rights on Greenfields area	Project Support	Compilation of all documentation, submission of applications	R1.0 million
Environmental Autho	orisations						
Agnes Gold mine	2016	Mpumalanga Province, South Africa	Galaxy Gold	Amended EIA/EMP for existing gold mine	Project support	Review of Specialist reports and final EIA/EMP	R1.5 million
			Oak Leaf	Full EIA/EMP for new mine	Project support	Review of Specialist reports and final EIA/EMP	R1.5 million
Lead/zinc mine	2015	Northern Cape Province, South Africa	Vedanta	Full EIA/EMP for new mine	Project support	Review of Specialist reports and final EIA/EMP	R1.8 million
Mawetse Gold project	2016	Limpopo Province, South Africa	Mawetse Mining	Full EIA/EMP for new mine	Project Manager	Co-ordinate specialist reports, Review final EMP	R0.5 million



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Sand mine	2016	Free State Province, South Africa	Copper Sunset Sand	Full EIA/EMP for extension to mining right area	Project support	Review final EMP	R0.5 million
Legal Opinions							
Rooikat	2013	Northern Cape Province, South Africa	Advisian	Opinion on application of MPRDA for mineral extraction	Project Manager	Draft and submit Legal Opinion on application of MPRDA for mineral extraction	R0.1 million
Waste licence	2016	Free State Province, South Africa	Muva Group	Opinion on application of NEMA and Listed Activities	Project Manager	Draft and submit Legal Opinion on application of NEMA	R0.1 million
Mining claims	2016	Limpopo Province, South Africa	Triangle City	Opinion on application of MPRDA to historic claims and tailings	Project Manager	Draft and submit Legal Opinion	R0.12 million
NEMA amendments	2014	Gauteng Province	Digby Wells	Analysis of 2014 NEMA Regulations	Project Manager	Draft and submit Legal Opinion	-
Application of NEMA Regulations to a powerline	2015	Gauteng Province	TCTA	Opinion on whether NEMA Regulations apply	Project Manager	Draft and submit Legal Opinion	R0.1 million



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
				to particular power line			
Variation of mining right	2015	Limpopo Province South Africa	Resgen Resources	Advice on application of Section 102 of MPRDA	Project Manager	Draft and submit Legal Opinion	R0.1 million
Auditing							
Coal mines	2014, 2015	Mpumalanga Province South Africa	Total Coal	Audit of compliance with permits and licences	Project support	Report review	R0.5 million
Power line	2016	Mpumalanga Province South Africa	Eskom	Audit compliance with EIA and water use licence	Project support	Compile EIA Report, review consolidated report	R0.1 million
Coal mines	2015, 2016	Mpumalanga Province South Africa	Exxaro	Audit of compliance with permits and licences	Project support	Report review	R0.5 million
Coal mines	2014, 2015	Mpumalanga Province South Africa	Glencore	Audit of compliance with permits and licences	Project support	Report review	R0.5 million
Due Diligence							



Project	Dates	Locations	Client	Project Description	Positions Held	Activities performed by the proposed candidate	Contract Value
Mining and environmental authorisations	2017	International project	Advisian	International project	Legal Adviser	Undertake legislative and regulatory review	Not disclosed
Mining and environmental authorisations	2017	International project	Advsian	International project	Legal Adviser	Undertake legislative and regulatory review	Not disclosed
Coal	2014	Limpopo Province, South Africa	Dedicoal	Verification of prospecting rights	Legal Adviser on mining title	Undertake review on validity of prospecting rights	Not disclosed

Dieter Oscar Kassier

Summarised Curriculum Vitae

Date of Birth:1981-09-15Profession:Wetland EcologistIdentity Number:810915 512 808 6Nationality:South AfricanPostal address:PO Box 72295Tel:(012) 349 2699Lynnwood RidgeFax:(012) 349 2993

 Lynnwood Ridge
 Fax:
 (012) 349 2993

 Pretoria
 Cell:
 076 403 2398

0040 E-mail: dieterk@wetcs.co.za

Academic History: 2012 – Honours B.Sc Environmental Science (Aquatic Ecosystem Health) (Distinction) - NWU

2006 - B.Sc Environmental Management (Zoology Stream) - UNISA

1999 – Matriculated from Hermannsburg School (IEB Exam)

Professional Affiliations: SACNASP: Environmental Science (400254/14)

South African Wetland Society (Reg. number R87XH0HU)

Additional Training: 2009 - Soil classification and wetland delineation (Terra Soil Science)

2009 - Rehabilitation of Mine Impacted Land (African Landuse Training)

2008 – Bringing data into ArcGIS (GIMS)

2007 - Wetland Delineation and Rehabilitation Course (University of Pretoria)

2004 - FGASA Level 1 and Trails Guide (FGASA)

Employment record:

2007 - Present day: Wetland Ecologist: Wetland Consulting Services (Pty.) Ltd.

2006 - 2007: Junior Environmental Consultant: WSP Environmental

2001 – 2006: Field Guid/Game Ranger: Makutsi Safari Farm, Karongwe Game Reserve

Publications:

 Wetland Rehabilitation in Mining Landscapes: An Introductory Guide. 2016. Macfarlane, D., Dlamini, B., Marneweck, G., Kassier D., Campbell, J., Young, A., Dini, J.A., Holness, S.D., de Klerk, A.R., Oberholster, P.J. and Ginsburg, A. WRC Report TT 658/16

Summarised project experience over the past 8 years

2016 Consulting Projects:

- 2. Olifants Letaba Reserve Project Review of existing information, gap analysis, field verification of wetlands, prioritisation of wetlands and compilation of management recommendations and eco-specs for wetlands
- 3. Impumelelo Mine Wetland baseline surveys (delineation and ecological assessment) for mine expansion activities over an area of over 8 000ha
- 4. Klipfontein Wetland Mitigation Strategy compilation of a wetland mitigation and rehabilitation strategy in terms of the wetland offset guidelines
- 5. Leeuwpan Monitoring Water Use License compliance monitoring for wetlands surrounding the Leeuwpan Mine
- 6. Riverfields wetland delineation and ecological assessment as part of environmental authorisation processes for three sites in the Ekurhuleni Metropolitan Municipality

2015 Consulting Projects:

- 1. Kendal Offset study compilation of a wetland offset strategy for the Kendal 30-year ash dam
- 2. Crown Mines Golf Course wetland delineation and assessment study for proposed developments on the Crown Mine Golf

Course

- 3. SANBI Guideline for Wetland Rehabilitation in Mining Landscapes co-author
- 4. Greenside Thadeka Shaft wetland delineation and impact assessment to support the various environmental authorisation applications required in terms of the MPRDA, NEMA and NWA
- 5. Compilation of a wetland management plan for the Stuart South Mine

2014 Consulting Projects:

- 1. Glencore Witbank Complex Wetland Management Strategy Compilation of a wetland management strategy for the Glencore Witbank group of mines, Mpumalanga Province
- 2. Wetland Management and Rehabilitation Plan for the Glencore iMpunzi Division
- 3. De Wittekrans Coal Mine Wetland delineation and assessment for the proposed De Wittekrans Coal Mine near Hendrina, Mpumalanga Province
- 4. Sishen Ramp-Up Project wetland delineation and water use risk assessment for the proposed relocation of a 275kV powerline near Sishen in the Northern Cape
- Clearwater Estates wetland delineation and impact assessment for a proposed residential development along the Clearwater Pan in Ekurhuleni, Gauteng Province

2013 Consulting Projects:

- 1. Kusile 60-year Ash Dam Wetland delineation assessment and site selection as part of the EIA/EMP and IWULA for the proposed Kusile 60-year Ash Dam
- 2. Mooifontein Uranium Wetland assessment as part of the EIA/EMP and IWULA for a proposed uranium mine in the southern Free State Province
- 3. Lydenburg Golf Course Phase 1 and 2 Wetland assessments as part of the environmental authorisation applications for proposed residential developments near Lydenburg, Mpumalanga
- 4. Du Toits Pan Kimberley Wetland delineation and ecological assessment of the Du Toits Pan, Kimberley Mines, Northern Cape
- 5. Kendal Continuous Ashing Project Wetland delineation and assessment for the Kendal Continuous Ashing Project

2012 Consulting Projects:

- 1. Ariesfontein Concentrated Solar Power Plant Wetland Assessment as part of the EIA/EMP for a CSP solar power facility near Danielskuil, Northern Cape
- 2. Kriel Beneficiation Plant Wetland Assessment as part of the EIA/EMP and IWULA for the Kriel Colliery Beneficiation Plant
- 3. Tweefonteinspruit Clean-up Project Ecological assessment to inform the proposed clean-up of the Tweefonteinspruit near Witbank
- Two Rivers Platinum Mine Wetland and Riparian assessment as part of the EIA/EMP and IWULA for a new tailings storage facility near Steelpoort
- 5. Braam Fischerville Wetland delineation and assessment as part of the EIA for a proposed commercial development in Soweto

2011 Consulting Projects:

- 1. Grass Valley Mine (Sylvania Resources) Wetland Assessment as part of the feasibility study and for the EIA/EMP for a proposed platinum mine on the bank of the Nylsvley.
- 2. New Clydesdale Colliery Wetland delineation and assessment as part of the consolidated EIA/EMP
- 3. Middelburg Eastern Bypass Wetland delineation and assessment as part of the EIA
- 4. Brits Waste Water Treatment Works Riparian delineation and assessment for the Basic Assessment
- 5. Waterfall Junction Pipeline Wetland delineation and assessment as part of the Basic Assessment

2010 Consulting Projects:

- 1. Tweefontein Optimisation Project (Xstrata) Wetland delineation as part of the EIA/EMP
- 2. Upington Shopping Centre Riparian delineation and assessment in support of a Water Use Licence Application for a proposed shopping centre in Upington
- 3. Glisa Colliery (Exxaro) Wetland delineation and assessment for the proposed expansion of the Glisa Colliery near Belfast.
- 4. Springlake Colliery (Exxaro) Wetland delineation and assessment for the proposed expansion of the Springlake Colliery near Dundee, KwaZulu-Natal
- 5. Bedford/Braamhoek Pumped Storage Scheme (Eskom) Assisted in a peat survey of the Bedford wetland.

2007 - 2009 Consulting Projects:

- 1. Cleanstream Pan A comparative assessment of various pans to determine the impact of urbanisation on pan habitat integrity using water quality and avifauna as indicators.
- 2. Brandspruit Mine, Impumelelo Shaft and Conveyor wetland delineation and impact assessment for a proposed coal mine and associated infrastructure near Secunda, Mpumalanga (18 000ha study area)
- 3. TCSA Dorstfontein Coal Mine wetland delineation and impact assessments for various proposed expansions to the Dorstfontein Coal Mine near Kriel (Ga-Nala), Mpumalanga
- 4. Steve Bikoville School baseline environmental assessment for the proposed Steve Bikoville School near Hammanskraal, Gauteng
- 5. Nelspruit Ring Road wetland delineation and impact assessment for the N4 Nelspruit Bypass, Nelspruit, Mpumalanga
- 6. Mine Waste Solutions: Re-working of Tailings Dams wetland delineation and impact assessment for the re-working of several tailings dams near Stilfontein, North-West
- 7. Goedgevonden Mine quarterly monitoring report for the Goedgevonden river diversions, Mpumalanga, South Africa
- 8. City of Johannesburg (COJ) desktop delineation for, and assisting in the compilation of, the COJ wetland and riparian protection and management plan, Gauteng, South Africa
- 9. Randjiesfiontein Powerline wetland delineation and assessment as part of the EIA for a proposed new Eskom powerline
- 10. Kusipongo wetland delineation and assessment for a proposed new opencast mine, conveyor and power station near Heyshope Dam in the Mpumalanga Province.



CURRICULUM VITAE

Jenna Lavin

Tel: 083 619 0854 (c); 021 013 0131 (w) E-mail address: jenna.lavin@ctsheritage.com ID number: 8512050014089

EDUCATION:

Tertiary

2014 - M.Phil in Conservation of the Built Environment (University of Cape Town)

Ongoing - expected to graduate in 2017

2011 - Continued Professional Development Course in Urban Conservation

Management (University of Cape Town) Part I and Part II

2010 M.Sc. with Distinction in Archaeology (University of Cape Town)

Title: Palaeoecology of the KBS member of the Koobi Fora Formation: Implications for

Pleistocene Hominin Behaviour.

2007 B.Sc. Honours in Archaeology (University of Cape Town)

Title: The Lost Tribes of the Peninsula: An Investigation into the historical distribution

of Chacma baboons (Papio ursinus) at the Cape Peninsula, South Africa.

Koobi Fora Field School, Rutgers University (U.S.A.)/ National Museums of Kenya

2006 B.Sc. Archaeology (University of Cape Town)

B.Sc. Environmental and Geographic Science (University of Cape Town)

Secondary

1999-2003 Rustenburg High School for Girls

Firsts in English, Afrikaans, Mathematics HG, Biology HG, History HG, Entrepreneurship.

EMPLOYMENT HISTORY:

PROFESSIONAL DEVELOPMENT

Environmental and Heritage Management:

Director: Heritage for CTS heritage and member of OpenHeritage NPC.
 July 2016 to present

I am responsible for project management and quality control on all of our heritage-related projects. I provide specialist heritage expertise when required and assist with the drafting of management plans, impact assessments and other specialist reports. I liaise with clients, authorities and other specialists to ensure the highest quality product from CTS Heritage. In addition, I manage a specialist team of two archaeologists.



Assistant Director for Policy, Research and Planning at Heritage Western Cape (HWC).
 August 2014 to June 2016

Responsibilities include drafting of new heritage related policy, the grading and declaration of Provincial Heritage Sites, the development of Conservation Management Plans, facilitating the development of inventories of heritage resources through local authorities as well as managing the development of the Western Cape's Heritage Information Management System (HIMS). I was also responsible for managing the project to nominate the Modern Human Origins proposed World Heritage Site.

I performed the role of Acting Deputy Director for HWC from April to December 2015.

 Heritage Officer for Palaeontology and for the Mpumalanga Province at the South African Heritage Resources Agency (SAHRA).
 January 2013 to June 2014

Responsibilities include dealing with palaeontological permit applications in terms of Section 35 of the NHRA and development applications in terms of Section 38 of the NHRA. Projects included the development of a National Palaeotechnic Report identifying significant palaeontological deposits throughout SA, as well as developing professional relationships between SAHRA and the Palaeontological Society of South Africa (PSSA) and the Geological Society of South Africa (GSSA). During this time, I was part of the team that developed the digitised National Palaeontological Sensitvity Map (http://www.sahra.org.za/about/news/nov2013/palaeosensitivitymap), the first of its kind in the world.

• Heritage Officer for Archaeology, Palaeontology and Meteorites at Heritage Western Cape (HWC).

September 2010 to December 2012

HWC is a Public Entity that forms part of the Heritage Resource Management Component of the Provincial Governments' Department of Cultural Affairs and Sport (DCAS). Projects included the declaration of Pinnacle Point and the West Coast Fossil Park as Provincial Heritage Sites (PHS), the management of the development of the Baboon Point PHS Conservation Management Plan as well as an educational outreach program as part of the DCAS MOD Centre Project.

- Heritage Officer for the Archaeology, Palaeontology and Meteorites Unit of the South African Heritage Resources Agency (SAHRA) as part of a three month contract. January 2010 to March 2010
- Environmental Control Officer, Amathemba Environmental Management Consulting Part time: 2007 to 2009



Other

My private experience as a traveler in South Africa, Tanzania, Kenya, Namibia, Zambia, Malawi and Mozambique has inspired a passion for the conservation of environmental and heritage resources. I am passionate about sustainable living, with my Bachelor of Science in Environmental and Geographical Science providing a framework on which to base my values.

With a friend, I established the fundraising initiative, Chicks4Change, through which we managed to organize a number of successful events and raise R40 000 for Project Rhino to assist with anti-poaching initiatives.

In 2013 I was asked to join the panel of judges for the Ministerial awards for Heritage in the Western Cape. From 2013 to July 2014, I was a member of the Heritage Western Cape Archaeology, Palaeontology and Meteorites Committee and I currently sit on the Heritage Western Cape Inventories, Gradings and Interpretations Committee.

In November 2013, I was awarded a bursary from the Department of Arts and Culture to complete a Masters in Philosophy in Conservation of the Built Environment through the UCT Faculty of Engineering and the Built Environment in 2014 and 2015. I am in the process of finalising this degree in 2017.

I am a paid up member of the Association for Southern African Professional Archaeologists (ASAPA), the Association of Professional Heritage Practitioners (APHP) and I sit on the Executive Council of APHP. I am a member of the Palaeontological Society of South Africa (PSSA) and ICOMOS South Africa, for which I am Vice-President of the Board. I am also a member of the International Committee for Archaeological Heritage Management (ICAHM), a committee of UNESCO.



EAP Details:

E-mail:

Date: 28 June 2017

AFFIRMATION BY ENVIRONMENTAL ASSESSMENT PRACTIONER

Basic Assessment Report: As required in terms of Appendix 1, subsection (r) of GN982, as amended in April 2017

The Tanganani Extension 7 Bulk Water Supply Pipeline

Consultant:	Kongiwe Environmental (Pty) Ltd			
Contact Person:	Ashleigh Blackwell			
Postal address:	PostNet Suite no 163, Private Bag X21, Bryanston			
Postal code	2021	Cell:	079 895 1456	
Telephone:	+27 (10) 140 6508	Fax	+27 (86) 476 6438	

- I, Ashleigh Blackwell, the appointed EAP confirm through this affirmation (as required in terms of Appendix 2 subsection (j) and (k) of GN982) that
 - i. To the best of my knowledge the information provided in this report is factually correct;

ablackwell@kongiwe.co.za

- ii. To the best of my knowledge all relevant project information which has been provided to stakeholders and interested and affected parties is correct.
- iii. All comments and inputs received from stakeholders / interested and affected parties, prior to submission of the Basic Assessment Report, have been included as part of the Tanganani Extension 7 Bulk Water Supply Pipeline Basic Assessment Report and addressed where necessary.
- iv. All responses provided to comments received from stakeholders and interested and affected parties are the unbiased opinion of the EAP and are based on factually correct information.
- v. The level of agreement between the EAP and interested and affected parties on the plan of study for the undertaking of the environmental impact assessment has been agreed upon.

KONGIWE ENVIRONMENTAL (PTY) LTD.

Company Name

ASHLEIGH BLACKWELL

Name of the Environmental Assessment Practitioner

28 June 2017

Date

Kongiwe Environmental (Pty) Ltd.

Reg No 2016 / 135562 / 07

Directors: BJ Thornton. PE Sodi.

Tel: +27 (10) 140 6508 | Email: info@kongiwe.co.za

223 Cube Workspace, 1 Wedgewood Link, Bryanston, Sandton, 2191, South Africa.

PostNet Suite no 163, Private Bag X21, Bryanston, 2021, South Africa.

www.kongiwe.co.za