



DIGBY WELLS
ENVIRONMENTAL



Grootegeluk Coal Mine New Gate Area Clearing Activities

Heritage Watching Brief Report

Project Number:

EXX4453

Prepared for:

Exxaro Coal (Pty) Ltd

February 2017

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Project Name:	Grootegeluk Coal Mine New Gate Area Clearing Activities
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Name	Responsibility	Signature	Date
Jaco van der Walt Archaeologist ASAPA Member: 159	On-site Monitoring Report Compilation		January 2017
Justin du Piesanie Manager: HRM ASAPA Member: 270	Project Manager Technical Review Report Finalisation		February 2017
Brett Coutts	Review		February 2017

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1 Introduction

Exxaro Coal (Pty) Ltd (hereinafter Exxaro) is the proprietor of the Grootegeluk Coal Mine near Lephalale in the Limpopo Province. As part of the requirements of the granted Environmental Authorisation (EA) for the Grootegeluk Infrastructure Expansion Project, Exxaro requested Digby Wells Environmental (hereinafter Digby Wells) to undertake a Watching Brief (i.e. heritage monitoring) of ground clearing activities at the New Gate Area.

This report summarises the methodology and findings of the Watching Brief completed from 11 – 12, and 20 January 2017.

1.1 Project background

Exxaro owns multiple mining operations, including Grootegeluk Coal Mine (hereafter Grootegeluk). Grootegeluk is located approximately 20 km outside of Lephalale and is currently contracted to supply coal to Eskom’s Matimba power station and the Medupi power station. Project specific location details are summarised in Table 1-1:

Table 1-1: Grootegeluk Coal Mine location details

Name of property	Grootegeluk Coal Mine
Erf or farm numbers	The farm Daarby 458 LQ; and The farm Enkelbult 562 LQ.
Coordinates of approximate centre of project area	S -23.642847°
	E 27.558117°
District Municipality	Waterberg District Municipality
Local Municipality	Lephalale Local Municipality
Nearest town	Lephalale
Current use	Open cast coal mining
Predominant land use/s of surrounding properties	Mining / Game Farming

Operations at the Exxaro Grootegeluk Coal Mine commenced with the approval of the Environmental Management Plan (EMP) by the Department of Minerals and Energy (DME) in 1982. Subsequently, Exxaro submitted an application to the Department of Mineral Resources (DMR) to expand certain infrastructure within the mine boundary, authorised by the Limpopo Department of Economic Development, Environment and Tourism (LEDET) (Ref. No. 12/1/9/1-W89) in October 2014 and the DMR in August 2015.

The Infrastructure Expansion Project was undertaken to include the following activities and expansions within the mine boundary:

- Expansion of the railway loop, load out stations and associated infrastructure;

- Expansion of the existing coal stockyard and stockpiles;
- Expansion of the fuel storage depot;
- Expansion of beneficiation plants and associated infrastructure;
- New road and conveyors to the fines recovery area;
- New gate and hard park area; and
- Expansion of ancillary infrastructure and new 33 kV power line.

In support of the Infrastructure Expansion Project, specialist Heritage Resources Management (HRM) process was undertaken. The HRM process entailed the submission of a Notification of Intent to Develop (NID) to the South African Heritage Resources Agency (SAHRA) and Limpopo Provincial Heritage Resources Authority (LIRHA) for adjudication in terms of Section 38(8) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA). In response, SAHRA issued Statutory Comment on 18 August 2014 stating the following:

Due to the nature of the area of the proposed development, as mentioned in the heritage report above, the SAHRA Archaeology, Palaeontology & Meteorites (APM) Unit does not object to the proposed expansion project on condition that:

- *During ground clearance for the parking lot and gate infrastructure, which are the two areas where no disturbance has occurred yet, a professional archaeologist must be on site to make sure that there is no heritage that is impacted on.*

This report complies with the specific requirements of SAHRA presented above.

1.2 Terms of reference

The authorised EMP, in accordance with the Statutory Comment issued by SAHRA (Case ID: 5935¹), required the appointment and presence of a qualified and accredited archaeologist during ground clearing activities of the New Gate Area.

1.3 Scope of work

To complete the Watching Brief, and comply with the aforementioned Terms of Reference (ToR), the following activities were completed as part of the Scope of Work:

- On-site monitoring;
- On-site debriefing; and
- Reporting for submission to SAHRA and LIHRA for noting².

¹ Available at the following link: <http://www.sahra.org.za/sahris/cases/exx2678-exxaro-grootegeluk-expansion-project>

² Submission of this report was via SAHRIS on the existing Case ID: 5935 for noting only.

1.4 Expertise of the specialist

The expertise of the heritage specialists are summarised in the table below:

Table 1-2: Expertise of the specialists

Team Member	Bio Sketch
<p>Jaco van der Walt</p> <p>ASAPA Member 195 AMAFA Registered</p> <p>17 Years' Experience:</p>	<p>Jaco van der Walt conducted the on-site Monitoring and assisted with report compilation for this project.</p> <p>Jaco has been actively involved as a professional archaeologist within the heritage management field in Southern Africa for the past 17 years. Jaco obtained his Master's degree in Archaeology from the University of the Witwatersrand in 2012 and is enrolled for his PhD at the University of Johannesburg. Jaco is an accredited member of the Association of Southern African Professional Archaeologist (ASAPA Member #159) and acted as council member for SADC countries in the Cultural Resource Management (CRM) portfolio for two years (2011 – 2012). Jaco worked at various universities and in the private sector providing him with an excellent balance between academia and the challenges that development poses on our non-renewable heritage resources. Jaco has more than 17 years' experience conducting heritage assessments, grave relocation projects, heritage mitigation and management projects. Jaco has extensive experience working with projects complying with IFC Requirements. Jaco has worked in South Africa, Lesotho, Zambia, Zimbabwe, Mozambique, Botswana, the Democratic Republic of the Congo and in Tanzania. He is well respected in his field and published in peer reviewed journals and presented his findings on various national and international conferences.</p>
<p>Justin du Piesanie</p> <p>ASAPA Member 270 AMAFA Registered ICOMOS Member 14274</p> <p>Years' Experience: 11</p>	<p>Justin du Piesanie completed the technical review of the Watching Brief and finalised the report. Justin is the HRM Manager at Digby Wells. Justin joined the company in August 2011 as an archaeologist and was subsequently made the HRM manager in the Social and Heritage Services Department. He obtained his Master of Science (MSc) degree in Archaeology from the University of the Witwatersrand in 2008, specialising in the Southern African Iron Age. Justin also attended courses in architectural and urban conservation through the University of Cape Town's Faculty of Engineering and the Built Environment Continuing Professional Development Programme in 2013. Justin is a professional member of the Association of Southern African Professional Archaeologists (ASAPA), and accredited by the association's Cultural Resources Management (CRM) section. He is also a member of the International Council on Monuments and Sites (ICOMOS), an advisory body to the UNESCO World Heritage Convention. He has over 10 years combined experience in HRM in South Africa, including heritage assessments, archaeological mitigation, grave relocation, and NHRA Section 34 application processes. Justin has gained further generalist experience since his appointment at Digby Wells in Botswana, Burkina Faso, the Democratic Republic of Congo, Liberia and Mali on projects that have required compliance with IFC requirements such as Performance Standard 8: Cultural Heritage. Furthermore, Justin has acted as a technical expert reviewer of HRM projects undertaken in Cameroon and Senegal. Justin's current focus at Digby Wells is to develop the HRM process as an integrated discipline following international HRM principles and standards. This approach aims to provide clients with comprehensive, project-specific solutions that promote ethical heritage management and assist in achieving strategic objectives.</p>

2 Legislative framework

The Watching Brief was governed primarily by the NHRA. A brief summary of the relevant sections of the Act is presented in the table below:

Table 2-1: Applicable legal framework

Applicable NHRA Sections	Reference where applied
<p><u>National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA)</u></p> <p>The NHRA is the overarching legislation that protects and regulates the management of heritage resources in South Africa, with specific reference to the following Sections:</p> <ul style="list-style-type: none"> ▪ 5. General principles for HRM; ▪ 6. Principles for management of heritage resources; ▪ 7. Heritage assessment criteria and grading; and ▪ 38. Heritage resources management. <p>The Act considers various heritage resources as forming part of the national estate as contemplated in Section 3. Furthermore, certain other categories are afforded general protection with reference to the following Sections:</p> <ul style="list-style-type: none"> ▪ 34. Structures with demonstrable cultural significance or older than 60 years; ▪ 35. Archaeological and Palaeontological resources; ▪ 36. Burial grounds and graves; and ▪ 37. Public Monuments and Memorials. 	<p>The Watching Brief and Report compilation considered the general principles outlined in the NHRA, as well as the heritage resource categories that are afforded general protection.</p> <p>These principles and protections informed and guided the on-site monitoring process.</p>

3 Methodology

The Watching Brief was undertaken from 11 - 12 January 2017, and 20 January 2017 by Jaco van der Walt during ground clearing activities at the New Gate Area.

Project personnel were briefed on the 11th of January 2017 prior to the initial ground clearing activities of the potential of exposing unidentified heritage resources within the New Gate Area footprint, and their obligations and protocol in the case of accidental discovery. Personnel were further informed of Chance Find Protocols (CFPs) on the 12th of January 2017 to guide the removal of soil heaps and vegetation in the absence of the archaeologist.

Earthworks consisted of initial “strip clearing” where transects of vegetation were mechanically removed using a bulldozer. The archaeologist walked in proximity to removal equipment to view subsurface deposits as they are exposed, and communicated with the operator to ensure adequate opportunity for observation and documentation of areas of possible interest.

A final survey and examination of the New Gate Area was undertaken on the 20th of January 2017 after all soil and vegetation were removed, and ground levelling was completed.

4 Results

The ground clearing activities demonstrated the site comprised a simple stratigraphy of deep sand deposits. No heritage resources were observed or recorded during the ground clearing activities at the New Gate Area.



Figure 4-1: General conditions prior to earthworks



Figure 4-2: Initial strip clearing



Figure 4-3: Clearing of vegetation



Figure 4-4: Site after clearing and levelling

5 Discussion

The ground clearing activities associated with the New Gate Area covered an areal extent of 1.6 hectare. Primary earthwork were completed over a two day period during which all vegetation and topsoil was removed (Figure 4-2, Figure 4-3). Clearing of the soil heaps and vegetation, and final levelling of the site took place in the absence of the archaeologist (Figure 4-4). A final examination of the cleared and levelled New Gate Area was completed on the 20th of January 2017.

During the on-site monitoring, no cultural deposits or subsurface features were identified and recorded.

6 Conclusion and recommendations

Digby Wells completed a Watching Brief of ground clearing activities at the New Gate Area of Exxaro Grootegeeluk Coal Mine to ensure compliance with the requirements of the Exxaro Grootegeeluk Coal Mine EMP and Statutory Comments issued by SAHRA.

On-site monitoring was undertaken from the 11 – 12 January 2017 during primary earthworks. A final survey and examination of the New Gate Area was completed on the 20th of January 2017 once site clearing and levelling was completed.

No heritage resources were identified during the on-site monitoring, or final inspection. Digby Wells is of the opinion that Exxaro Grootegeluk Coal Mine has complied with the requirements of the Exxaro Grootegeluk Coal Mine's EMP and Statutory Comments issued by SAHRA.

Final recommendations include the following:

- No further heritage mitigation measures are required for the construction of the New Gate Area; and
- Commensurate to the recommendations of the heritage study of the Exxaro Grootegeluk Coal Mine Infrastructure Expansion Project and the Statutory Comments issued by SAHRA (Case ID 5935), an integrated set of CFPs must be implemented in the event that heritage resources are exposed during ground clearing activities for any new infrastructures.

Heritage Watching Brief Report

Grootegeeluk Coal Mine New Gate **Area Clearing Activities**

EXX4453



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Appendix A: Specialist CV

Jaco van der Walt

Archaeologist

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Education:

Particulars of degrees/diplomas and/or other qualifications:

Name of University or Institution:	University of Pretoria
Degree obtained:	BA Heritage Tourism & Archaeology
Year of graduation	2001
Name of University or Institution:	University of the Witwatersrand
Degree obtained:	BA Hons Archaeology
Year of graduation	2002
Name of University or Institution:	University of the Witwatersrand
Degree obtained:	MA (Archaeology)
Year of graduation	2012
Name of University or Institution:	University of Johannesburg
Degree obtained:	PhD
Year of graduation	Currently Enrolled

EMPLOYMENT HISTORY:

2011 – Present:	Owner – HCAC (Heritage Contracts and Archaeological Consulting CC).
2007 – 2010:	CRM Archaeologist , Managed the Heritage Contracts Unit at the University of the Witwatersrand.
2005 - 2007:	CRM Archaeologist , Director of Matakoma Heritage Consultants
2004:	Technical Assistant , Department of Anatomy University of Pretoria
2003:	Archaeologist , Mapungubwe World Heritage Site
2001 - 2002:	CRM Archaeologists , For R & R Cultural Resource Consultants, Polokwane
2000:	Museum Assistant , Fort Klapperkop.

Countries of work experience include:

Republic of South Africa, Botswana, Zimbabwe, Mozambique, Tanzania, The Democratic Republic of the Congo, Lesotho and Zambia.

SELECTED PROJECTS INCLUDE:

- Heritage Impact Assessment Proposed Discharge Of Treated Mine Water Via The Wonderfontein Spruit Receiving Water Body Specialist as part of team conducting an Archaeological Assessment for the Mmamabula mining project and power supply, Botswana
- Archaeological Impact Assessment Link Northern Waterline Project At The Suikerbosrand Nature Reserve
- Archaeological Impact Assessment Medupi – Spitskop Power Line,
- Archaeological Impact Assessment Karoshoek Solar Project
- Archaeological Impact Assessment Nelspruit Road Development Archaeological Impact Assessment Mmamethlake Landfill
- Archaeological Impact Assessment Libangeni Landfill
- Relocation of graves and site monitoring at Chloorkop as well as permit application and liaison with local authorities and social processes with local stakeholders, Gauteng Province.
- Relocation of the grave of Rifle Man Maritz as well as permit application and liaison with local authorities and social processes with local stakeholders, Ndumo, Kwa Zulu Natal.
- Relocation of the Magolwane graves for the office of the premier, Kwa Zulu Natal
- Relocation of the OSuthu Royal Graves office of the premier, Kwa Zulu Natal

MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS:

- Association of Southern African Professional Archaeologists. Member number 159
 - Accreditation:
 - Field Director Iron Age Archaeology
 - Field Supervisor Colonial Period
 - Archaeology, Stone Age Archaeology and Grave Relocation
- Accredited CRM Archaeologist with Amafa
- Co-opted council member for the CRM Section of the Association of Southern African Association Professional Archaeologists (2011 – 2012)

PUBLICATIONS AND PRESENTATIONS

- A Culture Historical Interpretation, Aimed at Site Visitors, of the Exposed Eastern Profile of K8 on the Southern terrace at Mapungubwe.
 - J van der Walt, A Meyer, WC Nienaber
 - Poster presented at Faculty day, Faculty of Medicine University of Pretoria 2003
- 'n Reddingsondersoek na Anglo-Boereoorlog-ammunisie, gevind by Ifafi, Noordwes-Provinsie. South-African Journal for Cultural History 16(1) June 2002, with A. van Vollenhoven as co-writer.
- Fieldwork Report: Mapungubwe Stabilization Project.
 - WC Nienaber, M Hutten, S Gaigher, J van der Walt
 - Paper read at the Southern African Association of Archaeologists Biennial Conference 2004
- A War Uncovered: Human Remains from Thabantšho Hill (South Africa), 10 May 1864.
 - M. Steyn, WS Boshoff, WC Nienaber, J van der Walt
 - Paper read at the 12th Congress of the Pan-African Archaeological Association for Prehistory and Related Studies 2005
- Field Report on the mitigation measures conducted on the farm Bokfontein, Brits, North West Province.
 - J van der Walt, P Birkholtz, W. Fourie
 - Paper read at the Southern African Association of Archaeologists Biennial Conference 2007
- Field report on the mitigation measures employed at Early Farmer sites threatened by development in the Greater Sekhukhune area, Limpopo Province. J van der Walt
 - Paper read at the Southern African Association of Archaeologists Biennial Conference 2008

- Ceramic analysis of an Early Iron Age Site with vitrified dung, Limpopo Province South Africa.
 - J van der Walt. Poster presented at SAFA, Frankfurt Germany 2008

- Bantu Speaker Rock Engravings in the Schoemanskloof Valley, Lydenburg District, Mpumalanga (*In Prep*)
 - J van der Walt and J.P Celliers

- Sterkspruit: Micro-layout of late Iron Age stone walling, Lydenburg, Mpumalanga. W. Fourie and J van der Walt. A Poster presented at the Southern African Association of Archaeologists Biennial Conference 2011

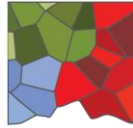
- Detailed mapping of LIA stone-walled settlements' in Lydenburg, Mpumalanga. J van der Walt and J.P Celliers
 - Paper read at the Southern African Association of Archaeologists Biennial Conference 2011

- Bantu-Speaker Rock engravings in the Schoemanskloof Valley, Lydenburg District, Mpumalanga. J.P Celliers and J van der Walt
 - Paper read at the Southern African Association of Archaeologists Biennial Conference 2011

- Pleistocene hominin land use on the western trans-Vaal Highveld ecoregion, South Africa, Jaco van der Walt.
 - J van der Walt. Poster presented at SAFA, Toulouse, France. Biennial Conference 2016

REFERENCES:

1. Prof Marlize Lombard Senior Lecturer, University of Johannesburg, South Africa
E-mail: mlombard@uj.ac.za
2. Prof TN Huffman Department of Archaeology Tel: (011) 717 6040
University of the Witwatersrand
3. Alex Schoeman University of the Witwatersrand
E-mail: Alex.Schoeman@wits.ac.za



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Mr. Justin du Piesanie
Unit Manager: Heritage Resources Management
Social and Heritage Services Department
Digby Wells Environmental

1 Education

Date	Degree(s) or Diploma(s) obtained	Institution
2015	Continued Professional Development, Intermediate Project Management Course	PM.Ideas: A division of the Mindset Group
2013	Continued Professional Development Programme, Architectural and Urban Conservation: Researching and Assessing Local Environments	University of Cape Town
2008	MSc	University of the Witwatersrand
2005	BA (Honours) (Archaeology)	University of the Witwatersrand
2004	BA	University of the Witwatersrand
2001	Matric	Norkem Park High School

2 Language Skills

Language	Written	Spoken
English	Excellent	Excellent
Afrikaans	Proficient	Good

3 Employment

Period	Company	Title/position
2016 to present	Digby Wells Environmental	Unit Manager: Heritage Resources Management
2011-2016	Digby Wells Environmental	Heritage Management Consultant: Archaeologist
2009-2011	University of the Witwatersrand	Archaeology Collections Manager
2009-2011	Independent	Archaeologist
2006-2007	Maropeng & Sterkfontein Caves UNESCO World Heritage Site	Tour guide

4 Experience

I joined the company in August 2011 as an archaeologist and was subsequently made unit manager in the Social and Heritage Services Department in 2016. I obtained my Master of Science (MSc) degree in Archaeology from the University of the Witwatersrand in 2008, specialising in the Southern African Iron Age. I further attended courses in architectural and urban conservation through the University of Cape Town's Faculty of Engineering and the Built Environment Continuing Professional Development Programme in 2013. I am a professional member of the Association of Southern African Professional Archaeologists (ASAPA), and accredited by the association's Cultural Resources Management (CRM) section. I am also a member of the International Council on Monuments and Sites (ICOMOS), an advisory body to the UNESCO World Heritage Convention. I have over 10 years combined experience in HRM in South Africa, including heritage assessments, archaeological mitigation, grave relocation, and NHRA Section 34 application processes. I gained further generalist experience since my appointment at Digby Wells in Botswana, Burkina Faso, the Democratic Republic of Congo, Liberia and Mali on projects that have required compliance with IFC requirements such as Performance Standard 8: Cultural Heritage. Furthermore, I have acted as a technical expert reviewer of HRM projects undertaken in Cameroon and Senegal. My current focus at Digby Wells is to develop the HRM process as an integrated discipline following international HRM principles and standards. This approach aims to provide clients with comprehensive, project-specific solutions that promote ethical heritage management and assist in achieving strategic objectives.



5 Project Experience

Please see the following table for relevant project experience:

Project Title	Project Location	Date:	Description of the Project	Name of Client
Klipriviersberg Archaeological Survey	Meyersdal, Gauteng, South Africa	2005 2006	Archaeological surveys	ARM
Sun City Archaeological Site Mapping	Sun City, Pilanesberg, North West Province, South Africa	2006 2006	Phase 2 Mapping	Sun International
Witbank Dam Archaeological Impact Assessment	Witbank, Mpumalanga, South Africa	2007 2007	Archaeological survey	ARM
Archaeological Assessment of Modderfontein AH Holdings	Johannesburg, Gauteng, South Africa	2008 2008	Heritage Basic Assessment	ARM
Heritage Assessment of Rhino Mines	Thabazimbi, Limpopo Province, South Africa	2008 2008	Heritage Impact Assessment	Rhino Mines
Cronimet Project	Thabazimbi, Limpopo Province, South Africa	2008 2008	Archaeological surveys	Cronimet
Eskom Thohoyandou SEA Project	Limpopo Province, South Africa	2008 2008	Heritage Statement	Eskom
Wenzelrust Excavations	Shoshanguve, Gauteng, South Africa	2009 2009	Phase 2 Excavations	Heritage Contracts Unit
University of the Witwatersrand Parys LIA Shelter Project	Parys, Free State, South Africa	2009 2009	Phase 2 Mapping	University of the Witwatersrand
Transnet NMPP Line	Kwa-Zulu Natal, South Africa	2010 2010	Heritage survey	Umlando Consultants
Archaeological Impact Assessment – Witpoortjie Project	Johannesburg, Gauteng, South Africa	2010 2010	Archaeological Impact Assessment	ARM
Der Brochen Archaeological Excavations	Steelpoort, Mpumalanga, South Africa	2010 2010	Phase 2 Excavations	Heritage Contracts Unit
De Brochen and Booyensdal Archaeology Project	Steelpoort, Mpumalanga, South Africa	2010 2010	Phase 2 Mapping	Heritage Contracts Unit
Eskom Thohoyandou Electricity Master Network	Limpopo Province, South Africa	2010 2010	Heritage Statement	Strategic Environmental Focus
Bathlako Mine Expansion	North-West Province, South Africa	2010 2010	Phase 2 Mapping	Heritage Contracts Unit
Kibali Gold Project Grave Relocation Plan	Oriental Province, Democratic Republic of Congo	2011 2013	Grave Relocation	Randgold Resources
Kibali Gold Hydro-Power Project	Oriental Province, Democratic Republic of Congo	2012 2014	Heritage Impact Assessment	Randgold Resources
Everest North Mining Project	Steelpoort, Mpumalanga, South Africa	2012 2012	Heritage Impact Assessment	Aquarius Resources
Environmental Authorisation for the Gold One Geluksdal TSF and Pipeline	Gauteng, South Africa	2012 2012	Heritage Impact Assessment	Gold One International
Platreef Burial Grounds and Graves Survey	Mokopane, Limpopo Province, South Africa	2012 2012	Burial Grounds and Graves Survey	Platreef Resources
Resgen Boikarabelo Coal Mine	Limpopo Province, South Africa	2012 2012	Phase 2 Excavations	Resources Generation
Bokoni Platinum Road Watching Brief	Burgersfort, Limpopo Province, South Africa	2012 2012	Watching Brief	Bokoni Platinum Mine



Project Title	Project Location	Date:	Description of the Project	Name of Client
SEGA Gold Mining Project	Burkina Faso	2012 2013	Socio Economic and Asset Survey	Cluff Gold PLC
SEGA Gold Mining Project	Burkina Faso	2013 2013	Technical Reviewer	Cluff Gold PLC
Consbrey and Harwar Collieries Project	Breyton, Mpumalanga, South Africa	2013 2013	Heritage Impact Assessment	Msobo
New Liberty Gold Project	Liberia	2013 2014	Grave Relocation	Aureus Mining
Falea Uranium Mine Environmental Assessment	Falea, Mali	2013 2013	Heritage Scoping	Rockgate Capital
Putu Iron Ore Mine Project	Petroken, Liberia	2013 2014	Heritage Impact Assessment	Atkins Limited
Sasol Twistdraai Project	Secunda, Mpumalanga, South Africa	2013 2014	Notification of Intent to Develop	ERM Southern Africa
Daleside Acetylene Gas Production Facility	Gauteng, South Africa	2013 2013	Heritage Impact Assessment	ERM Southern Africa
Nzoro 2 Hydro Power Project	Orientele Province, Democratic Republic of Congo	2014 2014	Social consultation	Randgold Resources
Eastern Basin AMD Project	Springs, Gauteng, South Africa	2014 2014	Heritage Impact Assessment	AECOM
Soweto Cluster Reclamation Project	Soweto, Gauteng, South Africa	2014 2014	Heritage Impact Assessment	Ergo (Pty) Ltd
Klipspruit South Project	Ogies, Mpumalanga, South Africa	2014 2014	Heritage Impact Assessment	BHP Billiton
Klipspruit Extension: Weltevreden Project	Ogies, Mpumalanga, South Africa	2014 2014	Heritage Impact Assessment	BHP Billiton
Ergo Rondebult Pipeline Basic Assessment	Johannesburg, South Africa	2014 2014	Heritage Basic Assessment	Ergo (Pty) Ltd
Kibali ESIA Update Project	Orientele Province, Democratic Republic of Congo	2014 2014	Heritage Impact Assessment	Randgold Resources
GoldOne EMP Consolidation	Westonaria, Gauteng, South Africa	2014 2014	Gap analysis	Gold One International
Yzermite PIA	Wakkerstroom, Mpumalanga, South Africa	2014 2014	Palaeontological Assessment	EcoPartners
Sasol Mooikraal Basic Assessment	Sasolburg, Free State, South Africa	2014 2014	Heritage Basic Assessment	Sasol Mining
Everest North Mining Project	Steelpoort, Mpumalanga, South Africa	2012 2015	Heritage Impact Assessment	Aquarius Resources
Oakleaf ESIA Project	Bronkhorstspuit, Gauteng, South Africa	2014 2015	Heritage Impact Assessment	Oakleaf Investment Holdings
Rea Vaya Phase II C Project	Johannesburg, Gauteng, South Africa	2014 2014	Heritage Impact Assessment	ILISO Consulting
Imvula Project	Kriel, Mpumalanga, South Africa	2014 2015	Heritage Impact Assessment	Ixia Coal
Sibanye WRTRP	Gauteng, South Africa	2014 2016	Heritage Impact Assessment	Sibanye
VMIC Vanadium EIA Project	Mokopane, Limpopo, South Africa	2014 2015	Heritage Impact Assessment	VM Investment Company



Project Title	Project Location	Date:	Description of the Project	Name of Client
NLGM Constructed Wetlands Project	Liberia	2015 2015	Heritage Impact Assessment	Aureus Mining
ERPM Section 34 Destruction Permits Applications	Johannesburg, Gauteng, South Africa	2015 2015	Section 34 Destruction Permit Applications	Ergo (Pty) Ltd
JMEP II EIA	Botswana	2015 2015	Heritage Impact Assessment	Jindal
Gino's Building Section 34 Destruction Permit Application	Johannesburg, Gauteng, South Africa	2015 2016	Heritage Impact Assessment and Section 34 Destruction Permit Application	Bigen Africa Services (Pty) Ltd
EDC Block Refurbishment Project	Johannesburg, Gauteng, South Africa	2015 2016	Heritage Impact Assessment and Section 34 Permit Application	Bigen Africa Services (Pty) Ltd
Namane IPP and Transmission Line EIA	Steenbokpan, Limpopo Province, South Africa	2015 2016	Heritage Impact Assessment	Namane Resources (Pty) Ltd
Temo Coal Road Diversion and Rail Loop EIA	Steenbokpan, Limpopo Province, South Africa	2015 2016	Heritage Impact Assessment	Namane Resources (Pty) Ltd
Groningen and Inhambane PRA	Limpopo Province, South Africa	2016 2016	Heritage Basic Assessment	Rustenburg Platinum Mines Limited
NTEM Iron Ore Mine and Pipeline Project	Cameroon	2014 2016	Technical Review	IMIC plc
Palmietkuilen MRA	Springs, Gauteng, South Africa	2016 2016	Heritage Impact Assessment	Canyon Resources (Pty) Ltd
Copper Sunset Sand Mining S.102	Free State, South Africa	2016 2016	Heritage Basic Assessment	Copper Sunset Sand (Pty) Ltd
Exxaro Belfast GRP	Belfast, Mpumalanga, South Africa	2013 2017	Grave Relocation	Exxaro
Grootvlei MRA	Springs, Gauteng, South Africa	2016 2016	Notification of Intent to Develop	Ergo (Pty) Ltd
Lambda EMP	Mpumalanga, South Africa	2016 2016	Palaeontological Impact Assessment	Eskom Holdings SOC Limited
Kilbarchan Basic Assessment and EMP	Newcastle, KwaZulu-Natal, South Africa	2016 2016	Heritage Basic Assessment	Eskom Holdings SOC Limited
Grootegeeluk Amendment	Lephalale, Limpopo Province, South Africa	2016 2016	Notification of Intent to Develop	Exxaro
Eskom Northern KZN Strengthening	KwaZulu-Natal, South Africa	2016 2017	Heritage Impact Assessment	ILISO Consulting
Garsfontein Township Development	Pretoria, Gauteng, South Africa	2016 2016	Notification of Intent to Develop	Leungo Construction Enterprises



Project Title	Project Location	Date:	Description of the Project	Name of Client
Massawa EIA	Senegal	2016 2017	Technical Reviewer Heritage Impact Assessment	Randgold Resources
Louis Botha Phase 2	Johannesburg, Gauteng, South Africa	2016 2016	Phase 2 Excavations	Royal Haskoning DHV
Beatrix EIA and EMP	Welkom, Free State, South Africa	2016 2017	Heritage Impact Assessment	Sibanye Gold Ltd
Sun City Heritage Mapping	Pilanesberg, North-West Province, South Africa	2016 2016	Phase 2 Mapping	Sun International
Sun City Chair Lift	Pilanesberg, North-West Province, South Africa	2016 2017	Notification of Intent to Develop	Sun International
Hendrina Underground Coal Mine EIA	Hendrina, Mpumalanga, South Africa	2016 2016	Heritage Impact Assessment	Umcebo Mining (Pty) Ltd
Elandsfontein EMP Update	Clewer, Mpumalanga, South Africa	2016 2017	Heritage Impact Assessment	Anker Coal

6 Professional Registrations

Position	Professional Body	Registration Number
Member	Association for Southern African Professional Archaeologists (ASAPA); ASAPA Cultural Resources Management (CRM) section	270
Member	International Council on Monuments and Sites (ICOMOS)	14274
Member	Society for Africanist Archaeologists (SAfA)	N/A

7 Publications

Huffman, T.N. & du Piesanie, J.J. 2011. Khami and the Venda in the Mapungubwe Landscape. *Journal of African Archaeology* 9(2): 189-206