

**Prepared for:**

**SLR Consulting (Africa) (Pty) Ltd**

**Johannesburg 2060**

**Tel 0114670945**

**Fax 0114670978**

**LETTER FOR EXEMPTION FOR A PHASE I HERITAGE IMPACT  
ASSESSMENT STUDY FOR THE BASIC ASSESSMENT AND  
ENVIRONMENTAL MANAGEMENT PROGRAMME FOR THE  
CLOSURE OF THE DOORNSPRUIT AND ROODEKRAALSPRUIT  
PROSPECTING RIGHT NEAR RUSTENBURG IN THE NORTH WEST**

**Prepared by:**

**Dr Julius CC Pistorius**

**Archaeologist & Heritage Consultant**

**Member ASAPA**

**8 5<sup>th</sup> Avenue Cashan x 1**

**Rustenburg 0299**

**PO Box 1522 Bela Bela 0480**

**Cell 0825545449**

**July 2019**

## CONTENTS

<b>1</b>	<b>DETAILS OF THE SPECIALIST</b>	<b>3</b>
<b>2</b>	<b>DECLARATION OF INDEPENDENCE</b>	<b>4</b>
<b>3</b>	<b>INTRODUCTION</b>	<b>5</b>
3.1	Background and context	5
3.2	Aims with the report	6
3.3	Assumptions and limitations	6
<b>4</b>	<b>THE DOORNSPRUIT AND ROODEKRAALSPRUIT PROSPECTING AREAS</b>	<b>7</b>
4.1	Description of prospection area	7
4.2	Location of the prospecting area	8
4.3	The nature of the concluded prospecting activities on Doornspruit and Roodekraalspruit	8
4.3.1	Prospecting activities	8
4.3.2	Decommissioning and rehabilitation of disturbed areas	9
4.3.3	Aftercare and maintenance	9
4.4	Types and ranges of heritage resources	10
4.5	Summary	10
<b>5</b>	<b>CONCLUSION AND RECOMMENDATIONS</b>	<b>12</b>
<b>6</b>	<b>BIBLIOGRAPHY RELATING TO EARLIER HERITAGE STUDIES</b>	<b>13</b>

## 1 DETAILS OF THE SPECIALIST

**Profession:** Archaeologist, Museologist (Museum Scientists), Lecturer, Heritage Guide Trainer and Heritage Consultant

**Qualifications:**

BA (Archaeology, Anthropology and Psychology) (UP, 1976)

BA (Hons) Archaeology (distinction) (UP, 1979)

MA Archaeology (distinction) (UP, 1985)

D Phil Archaeology (UP, 1989)

Post Graduate Diploma in Museology (Museum Sciences) (UP, 1981)

**Work experience:**

Museum curator and archaeologist for the Rustenburg and Phalaborwa Town Councils (1980-1984)

Head of the Department of Archaeology, National Cultural History Museum in Pretoria (1988-1989)

Lecturer and Senior lecturer Department of Anthropology and Archaeology, University of Pretoria (1990-2003)

Independent Archaeologist and Heritage Consultant (2003-)

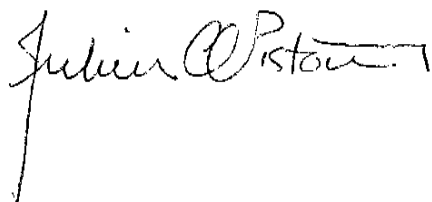
**Accreditation:** Member of the Association for Southern African Professional Archaeologists. (ASAPA)

**Summary:** Julius Pistorius is a qualified archaeologist and heritage specialist with extensive experience as a university lecturer, museum scientist, researcher and heritage consultant. His research focussed on the Late Iron Age Tswana and Lowveld-Sotho (particularly the Bamalatji of Phalaborwa). He has published a book on early Tswana settlement in the North-West Province and has completed an unpublished manuscript on the rise of Bamalatji metal workings spheres in Phalaborwa during the last 1 200 years. He has excavated more than twenty LIA settlements in North-West and twelve IA settlements in the Lowveld and has mapped hundreds of stone walled sites in the North-West. He has written a guide for Eskom's field personnel on heritage management. He has published twenty scientific papers in academic journals and several popular articles on archaeology and heritage matters. He collaborated with environmental companies in compiling State of the Environmental Reports for Ekurhuleni, Hartebeespoort and heritage management plans for the Magaliesberg and Waterberg. Since acting as an independent consultant he has done approximately 800 large to small heritage impact assessment reports. He has a longstanding working relationship with Eskom, Rio Tinto (PMC), Rio Tinto (EXP), Impala Platinum, Angloplats (Rustenburg), Lonmin, Sasol, PMC, Foskor, Kudu and Kelgran Granite, Bafokeng Royal Resources, Pilanesberg Platinum Mine (PPM) etc. as well as with several environmental companies.

## 2 DECLARATION OF INDEPENDENCE

I, Dr Julius CC Pistorius declare the following:

- I act as an independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even, if this result in views and findings that are not favourable for the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialists report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the applications;
- I will comply with the Act, Regulations and other applicable legislation;
- I will consider, to the extent possible, the matters listed in Regulation 13;
- I understand to disclose to the applicant and the competent authority all material information in my possession
- All the particulars furnished by me in this form are true and correct that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority; and
- I realise that a false declaration is offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



1 July 2019

### **3 INTRODUCTION**

#### **3.1 Background and context**

The Royal Bafokeng Resources Platinum (Pty) Ltd / Impala Platinum Limited Unincorporated Joint Venture (RBRP/Impala JV) hold a prospecting right MPT number 497/2007 PR (DMR reference number NW 30/5/1/1/2/878 (10369) PR) for platinum group metals (PGMs), silver, gold ore, cobalt, chrome ore, copper ore, nickel ore, iron ore, vanadium ore and sulphur (in pyrite) on a portion of the farm Doornspruit 84 JQ (Doornspruit) as well as the remaining extent of the farm, portion 2, the remaining extent of portion 6, portion 8, a portion of portion 3, a portion of portion 4 and a portion of portion 5 of the farm Roodekraalspruit 113 JQ (Roodekraalspruit).

The prospecting right area is located approximately 22 km north east of Rustenburg in the Rustenburg Local Municipality and the Bojanala Platinum District Municipality in the North West Province. A description of the property is outlined in Table 1; the regional setting is illustrated in Figure 1 and the location of the exploration drill holes and heritage resources identified on these properties in Figure 2.

Between September 2006 and August 2014, Impala on behalf of the RBRP/Impala JV, undertook prospecting activities on the farms Doornspruit and Roodekraalspruit, during which time fourteen approved exploration drill holes were drilled (Figure 2).

Impala has faced tremendous economic and financial challenges throughout the last few years. The RBRP/Impala JV thus proposes to close the Doornspruit and Roodekraalspruit prospecting right.

SLR Consulting (Africa) (Pty) Ltd (SLR), an independent firm of environmental assessment practitioners (EAP), has been appointed by Impala on behalf of the RBRP/Impala JV to manage the environmental authorisation processes associated with the closure of the Doornspruit and Roodekraalspruit prospecting right.

### **3.2 Aims with the report**

This brief report serves as motivation that earlier heritage surveys for the Doornspruit and Roodekraalspruit prospecting areas were undertaken and that all heritage sites encountered on these farms were recorded and reported (Part 6, 'Bibliography relating to earlier heritage studies'). This brief report therefore serves as letter of exemption for a Phase I heritage survey for the Basic Assessment and Environmental Management Programme compiled by SLR for the closure of prospecting activities on these farms.

### **3.3 Assumptions and limitations**

It is possible that the earlier heritage survey of Doornspruit 84JQ and Roodekraalspruit 113JQ may have missed heritage resources as heritage sites may be covered with grass or vegetation whilst others may be located below the surface of the earth and may only be exposed once development commences. It is also possible that heritage resources may simply have been missed as a result of human failure to detect them.

## 4 THE DOORNSPRUIT AND ROODEKRAALSPRUIT PROSPECTING AREAS

### 4.1 Description

A description of the Doornspruit and Roodekraalspruit prospecting areas on the farms Doornspruit 84JQ and Roodekraalspruit 113JQ is provided in Table 1.

Description	Details
Farm Name	Doornspruit 84 JQ and Roodekraalspruit 113 JQ
Closure application area (ha)	2603 ha
Magisterial district	The Prospecting Right area is located within the Rustenburg Magisterial District and in the Bojanala Platinum District Municipality.
Distance and direction from nearest town	The proposed project site is located approximately 22 km north west of Rustenburg.
21-digit Surveyor General Code for each farm portion	Portion of the farm Doornspruit 84 JQ - B0JQ0000000008400000 Remaining extent of the farm Roodekraalspruit 113 JQ - B0JQ00000000011300000 Portion 2 of the farm Roodekraalspruit 113 JQ - B0JQ00000000011300002 The remaining extent of portion 6 of the farm Roodekraalspruit 113 JQ - B0JQ00000000011300006 Portion 8 of the farm Roodekraalspruit 113 JQ - B0JQ00000000011300008 Portion of portion 3 of the farm Roodekraalspruit 113 JQ - B0JQ00000000011300003 Portion of portion 4 of the farm Roodekraalspruit 113 JQ - B0JQ00000000011300004 Portion of portion 5 of the farm Roodekraalspruit 113 JQ - B0JQ00000000011300005
Co-ordinates	North eastern corner: 27°13'44.932"E; 25°22'9.659"S South eastern corner: 27°17'0.364"E; 25°26'17.601"S South western corner: 27°13'56.367"E; 25°26'41.063"S North western corner: 27°13'17.588"E; 25°23'29.402"S

**Table 1- Description of the prospecting areas (above).**

## 4.2 Location of the prospecting area

The regional location of the Doornspruit and Roodekraalspruit prospecting areas is indicated in Figure 1.

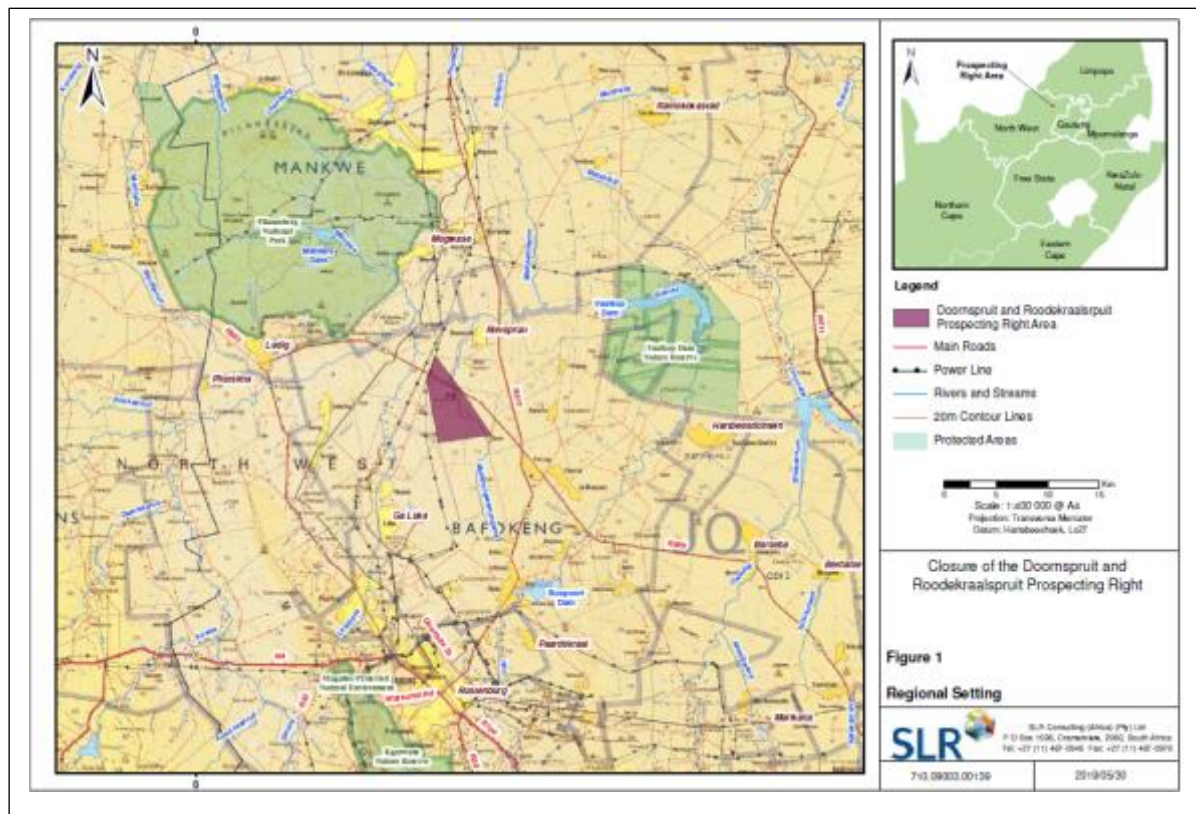


Figure 1- Regional location of the Doornspruit and Roodekraalspruit prospecting areas (above).

## 4.3 The nature of the concluded prospecting activities on Doornspruit and Roodekraalspruit

### 4.3.1 Prospecting activities

Prospecting activities undertaken between September 2006 and August 2014 included the following:

- Use of existing roads/ tracks (as far as possible).



- Establishment and use of new access tracks where prospecting related vehicles had to deviate from existing roads.
- Drilling of fourteen approved drill holes (BH7003, BH7024, BH7605, BH7606, BH7607, BH7796, BH7798, BH7801, BH7805, BH7843, BH7852, BH7960, BH8012 and BH8107 (Figure 2)
- Establishment and use of site equipment and support facilities (drill rigs, trucks, compressor, plastic lined drilling water containment facility (sump), water cart, core sample trays) and portable chemical toilets etc.

#### **4.3.2 Decommissioning and rehabilitation of disturbed areas**

Decommissioning and rehabilitation took place immediately after exploration work at each drill site was completed. This usually took between one and three days. Decommissioning and rehabilitation activities at each site included the following steps:

- Removal of all equipment, structures and materials;
- Removal of any waste and disposal at an appropriately permitted waste site;
- Sealing and capping of all drill holes and installation of a 0.8 x 0.8 x 0.8 m concrete block and stand pipe for easy identification.
- Replacing and levelling topsoil (where removed);
- Scarifying/ripping areas where soils have been compacted; and
- Areas were left to naturally re-vegetate.

#### **4.3.3 Aftercare and maintenance**

Typically, a period of aftercare and maintenance is applied to each rehabilitated drill site to ensure closure objectives are being met. Given the nature of the prospecting activities, a 2 to 3-year period of maintenance and aftercare is usually applied. For the drill sites the aftercare and maintenance activities included the monitoring of erosion and vegetation establishment and control and eradication of alien invasive plants.

Progressive rehabilitation took place as prospecting activities advanced. Rehabilitation commenced as each drill site was completed and decommissioned. Rehabilitation activities were aligned with RBRP/Impala JV's approved EMP and closure objectives.

A site visit was conducted on 24 April 2019 and it was noted that thirteen of the drill sites had vegetation re-established to a satisfactory level (BH7003, BH7024, BH7605, BH7606, BH7607, BH7796, BH7798, BH7801, BH7805, BH7843, BH7852, BH8012 and BH8107).

Drill site BH7960 showed a patch of land where vegetation has not re-established. The over-use of the area by cattle hampered re-vegetation at this site. However, re-vegetation of the site progressed over time. No further mitigation or monitoring is deemed necessary.

#### **4.4 Types and ranges of heritage resources**

Earlier heritage surveys for Impala for various mining related projects as well as for prospecting activities revealed the presence of two graveyards in the Doornspruit and Roodekraalspruit prospecting area (see Part 6, 'Select Bibliography relating to earlier heritage studies', particularly bolded reports) (Figure 2).

#### **4.5 Summary**

It is clear from Figure 2 that none of the prospecting drill holes coincided with the graveyards or other possible heritage resources. Consequently, prospecting activities in the Doornspruit and Roodekraalspruit prospecting area did not impact on any of the heritage resources (graveyards) recorded in this area. Both graveyards are currently still in use by the community. No management measures therefore needed to be applied to these two graveyards as they are under the care of local communities.

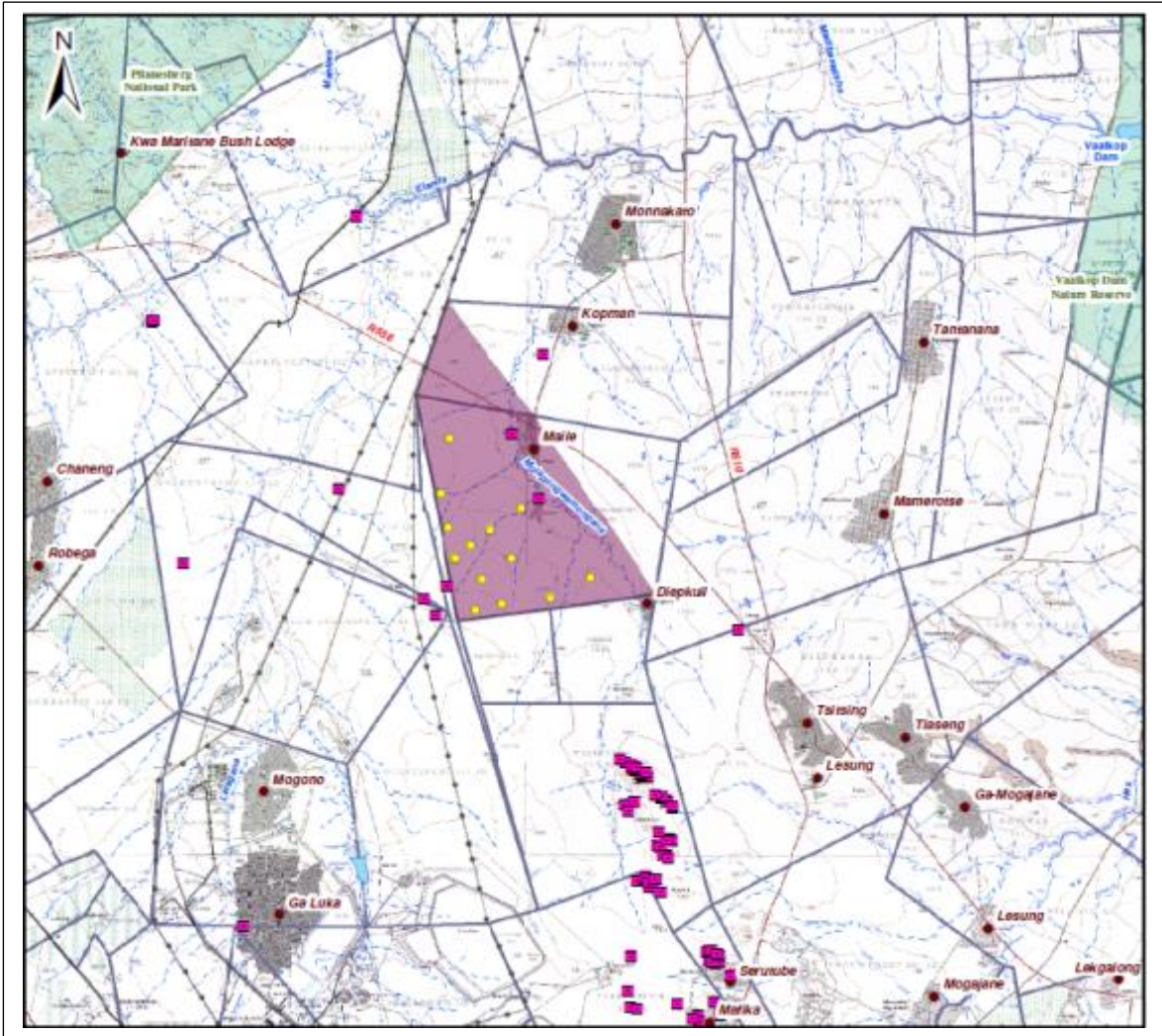


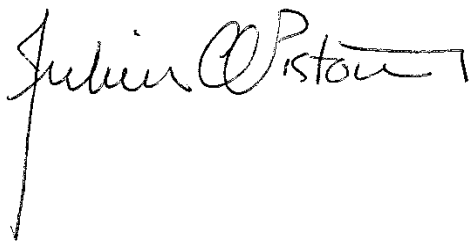
Figure 2- Composite map for Doornspruit and Roodekraalspruit prospecting area reveals the presence of two heritage sites (graveyards) and the location of fourteen prospecting drill holes (above).

## 5 CONCLUSION

It is clear from Figure 2 that none of the prospecting drill holes coincided with the graveyards recorded in the Doornspruit and Roodekraalspruit prospecting area.

Consequently, prospecting activities in the Doornspruit and Roodekraalspruit prospecting area did not impact on any of the heritage resources (graveyards) recorded in this area. Both graveyards are currently in use by the community. No management measures therefore needed to be applied to these two graveyards as they are under the care of the local community.

The closure of the prospecting site therefore does not require any physical activities to take place on site and no further disturbance will be occurring at the prospecting areas for closure of the prospecting right.

A handwritten signature in black ink, reading "Julius CC Pistorius". The signature is written in a cursive style with a long vertical line extending downwards from the end of the name.

**DR JULIUS CC PISTORIUS**  
**Archaeologist & Heritage Consultant**  
**Member ASAPA**

## **6 BIBLIOGRAPHY RELATING TO EARLIER HERITAGE STUDIES**

Pistorius, J.C.C. 2004. A Heritage Impact Assessment (HIA) study for Impala Platinum's proposed new No 16 Shaft Complex on the farm Reinkoyalskraal 278JQ in the Bojkone-Bothlaba District Municipality of the North-West Province. Unpublished report prepared for Ground Water Consulting Services CC.

Pistorius, J.C.C. 2005. Results on a Phase II Heritage Impact Assessment study. An investigation of a Late Iron Age site on the farm Reikoyalskraal 287JQ in the Bankeveld of North-West Province of South Africa. Unpublished report prepared for Ground Water Consulting Services CC.

**Pistorius, J.C.C. 2006. A Phase I Heritage Impact Assessment (HIA) study for Impala Platinum's Exploration activities near Rustenburg in North-West Province of South Africa. Unpublished report Impala Platinum.**

Pistorius, J.C.C. 2006. A Phase I Heritage Impact Assessment (HIA) study for the Impala Platinum Shaft 17 Complex on the farm Vlakfontein 276JQ near Rustenburg in the North-West Province of South Africa. Unpublished report for Golder Associates and for Impala Platinum.

Pistorius, J.C.C. 2006. A Phase 2 Heritage Impact Assessment (HIA) study for the Impala Platinum Shaft 17 Complex on the farm Vlakfontein 276JQ near Rustenburg in the North-West Province of South Africa. Unpublished report for SAHRA and for Impala Platinum.

Pistorius, J.C.C. 2007. Preliminary report on a heritage survey for the Ga-Nape Late Iron Age Complex on Welbekend 117 in the Rustenburg (Bafokeng) District in the North-West Province of South Africa. Unpublished report prepared for Royal Bafokeng Resources.

Pistorius, J.C.C. 2008. A Phase I Heritage Impact Assessment for the Chaneng sewer treatment plant and sewer pipelines in the Rustenburg (Bafokeng) District in the

North-West Province of South Africa. Unpublished report prepared for Naledzi Environmental Consultants and the Royal Bafokeng Administration.

**Pistorius, JCC 2008. Report on the results of monitoring heritage resources during a seismic survey for Impala Platinum on various farms in the Rustenburg (Bafokeng) District of North West. Unpublished report for Impala Platinum.**

**Pistorius, J.C.C. 2010. Report on a preliminary Heritage Survey for Impala Platinum's proposed new Shaft 18 complex on Toulon 111JQ and Roodekraalspruit 113JQ in the Rustenburg District of the North-West Province of South Africa. Unpublished report prepared for Impala Platinum Mine.**

**Pistorius, J.C.C. 2011. A survey and assessment of heritage resources and proposing the implementation of a cultural heritage management program in the Impala Platinum (Implats) mine lease area in the Rustenburg (Bafokeng) District in the North-West Province. Unpublished report prepared for Impala Platinum Mine.**

**Pistorius, J.C.C. 2011. A Phase I Heritage Impact Assessment (HIA) study for Impala Platinum Limited Rustenburg (Implats) proposed new Shaft 18 and Shaft 19 in the Rustenburg (Bafokeng) District in the North-West Province. *Unpublished report for Implats.***

**Pistorius, J.C.C. 2016. A Heritage assessment study for Impala Platinum Limited's (Impala) proposed prospecting drill holes on the farm Diepkuil 116JQ in the Rustenburg District in the North West. Unpublished report for SLR Consulting.**