

**SPECIALIST REPORT ON THE DE WITTEKRANS ROCK ART SITE COMPLEX:  
DE WITTEKRANS PROJECT – MASHALA HENDRINA COAL MINE (PTY) LTD,  
LOCATED NEAR HENDRINA, MPUMALANGA PROVINCE**

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## I: INTRODUCTION AND SUMMARY

The impact of mining activity on a rock art site complex (**Site 9**) located on the farm **De Wittekrans 218 IS**, near Hendrina, Mpumalanga Province, was previously assessed. In light of the findings and recommendations of these impact assessments, the client—Canyon Coal—wants to develop a Conservation Management Plan (CMP) to protect the rock art at **Site 9** from any potential damage during the operational phase of the Mashala Hendrina Coal Mine. To this end, a site documentation and inspection were carried out by a rock art specialist, in **August 2023**, by appointment of G&A Heritage Properties, to gather sufficient information about the site to draw up a plan.

This report details the findings of the fieldwork carried out, and is meant to assist in developing the Conservation Management Plan (CMP) for **Site 9**, by:

- (i) reporting on the results of ground-truthing the landscape to identify all the rock paintings at **Site 9** and verifying the extent of the site complex,
- (ii) providing a documentation and description of the site's contents and their significance,
- (iii) reporting on the condition of the sites and identifiable threats at the time of inspection in August 2023,
- (iv) making recommendations on the steps to be taken to ensure the protection and preservation of the rock paintings identified.

The report thus forms part of the management plan for the De Wittekrans rock paintings, which itself forms part of the Environmental Management Plan (EMP).

It was found that **Site 9** consists of six (6) separate panels (sites), all of which are in good condition, but are affected by dust which has built up into dirt on some panels and may cause permanent damage over time. The rock paintings are also affected by weathering. Cracks on the rock surface were also identified, particularly at two of the sites—9a and 9b.

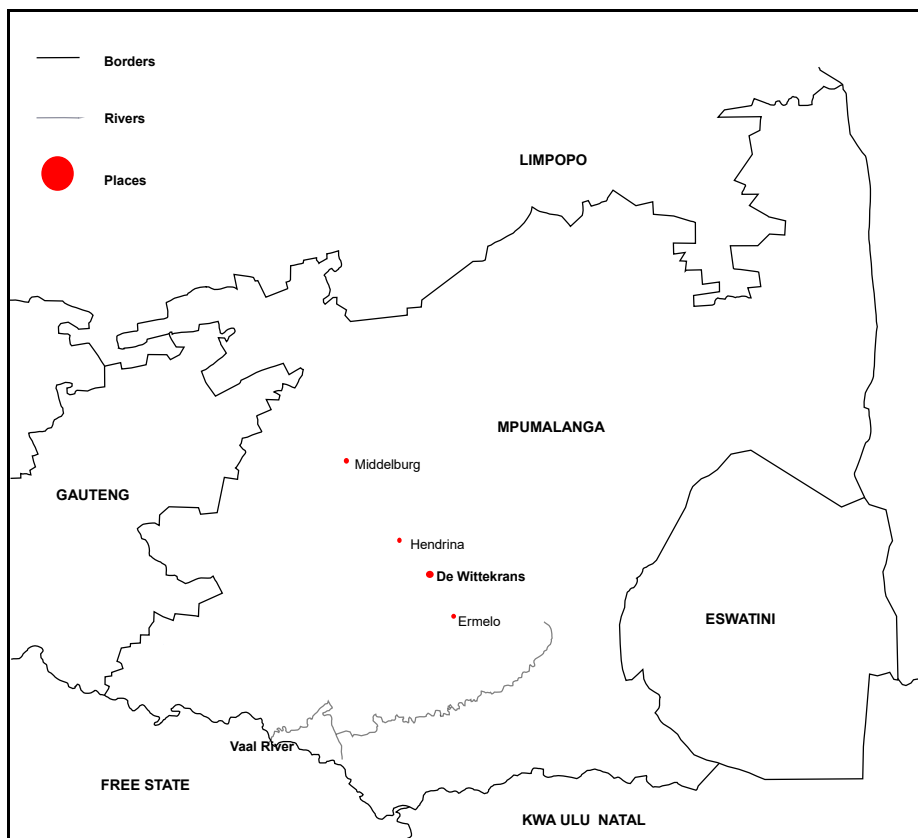
As a precautionary measure against the possible expansion of the mine (closer to **Site 9's** boundaries), it is recommended that full documentation and study of the identified rock art sites and associated archaeology is allowed before such expansion commences.

Previous recommendations to nominate the site as a heritage site of National Significance (Grade I) are endorsed.

## II: SITE DETAILS

### Site Location

The De Wittekrans Rock Art Site Complex (**S**: 26° 14' 44.9" **E**: 29° 48' 34.7") is located on the farm De Wittekrans, near the N11, between Ermelo and Hendrina, in central Mpumalanga Province. It is outside the eastern boundary of the De Wittekrans Colliery, across the Klein Olifants River.



*Figure 1: Map of north-eastern South Africa, showing the location of De Wittekrans.*

### Background

The De Wittekrans rock art first came to the knowledge of archaeologists in late 2008, when it was reported by the local community to the University of Pretoria (UP)'s Archaeology Department. A preliminary documentation of the site was thus done by UP Archaeology in early 2009 – a team led by Dr Sven Ouzman, an archaeologist and rock art specialist who was then lecturing at UP (see **Appendix 1** for the report). An archaeological report was then collated by Ouzman (2009), following this initial documentation, which preceded any Archaeological Impact Assessments.

Following the Ouzman (2009) report, two heritage assessment reports were collated in 2010 and 2014 by PGS Heritage (Fourie 2010, 2014), in response to the proposed expansion of mining activity at De Wittekrans. Also, in 2013, Digby Wells carried out a heritage assessment report for Msobo Coal (Pty) Ltd, which included De Wittekrans among the neighbouring farms, on which significant heritage sites also exist (see du Pisanie & Nel 2013).

Since the initial documentation by UP Archaeology, archaeological research has been undertaken sporadically at the site complex, with the more recent study being the MSc. dissertation of Mduduzi Maseko, which was completed in 2020 at the University of the Witwatersrand's Rock Art Research Institute. An excavation programme has also recently commenced at the site, by the University of the Witwatersrand's Archaeology Department, forming part of their Honours field school programme.

To date, at least six rock art sites have been identified in the area referred to as 'Site 9'. This number excludes two other rock art sites which are located in a different portion of the farm De Wittekrans, and within the development area. Identification and mitigation for these two other sites is unclear in the HIA reports, but they are recorded in Maseko (2020) as **WVL2** and **WVL3**, and shall be referred to again as such, later in this report (see **Figure 2** for the location of these sites, in relation to **Site 9**).

By 'style', the De Wittekrans rock paintings (Site 9, in particular)—most of which are of the 'geometric' rock art tradition (e.g., Smith & Ouzman 2004; Eastwood & Smith 2005; Hollmann 2007, 2014)—are related to other sites on the neighbouring farm Bosmanskrans (see du Pisanie & Nel 2013), and hence form part of a broader archaeological landscape. Ongoing archaeological research on this landscape considers the De Wittekrans rock paintings as offering clues to the material presence of incoming herding communities and their possible interactions with indigenous hunter-gatherers between 200 and 2000 years ago. The rock paintings, therefore, are of great scientific value and may offer new archaeological insights.

## Site description

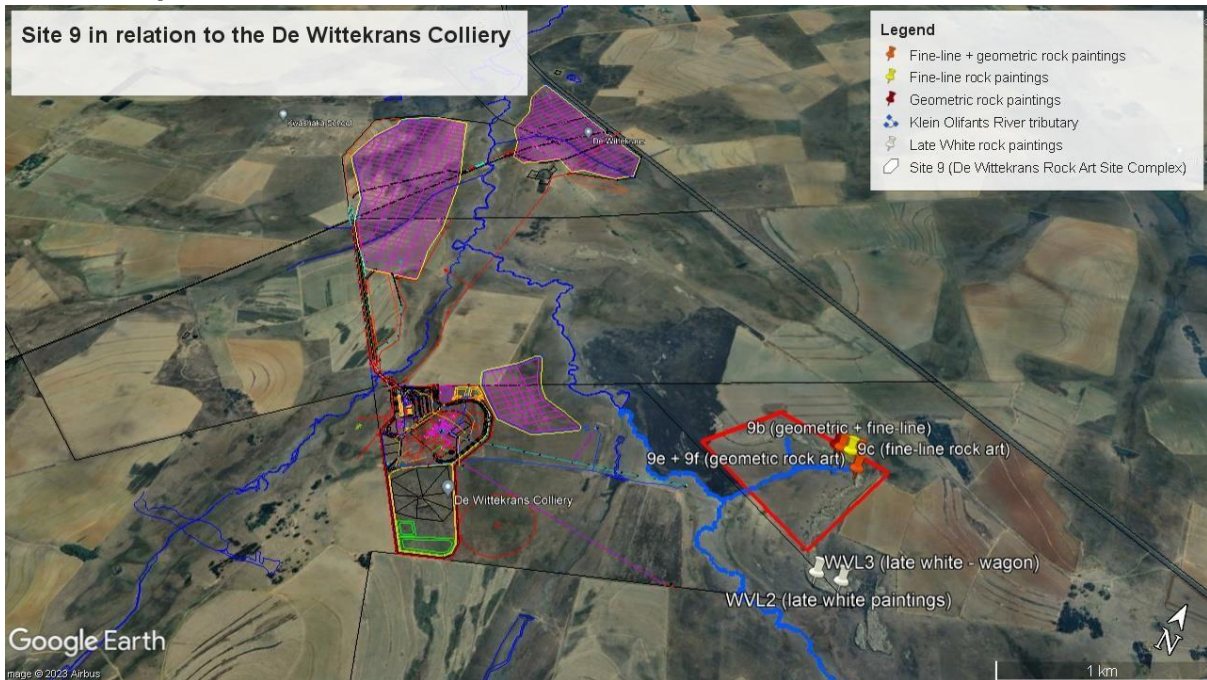


Figure 2: Map of study area, showing site location in relation to the De Wittekrans Colliery. WVL sites are separated from Site 9 by a fence.

**Site 9** consists of six discernible sites that were ground-truth(ed) during the inspection in August 2023. These sites are placed along a series of outcrops which stretch for more than half a kilometre. Rock paintings located here are on both sides of the Klein Olifants River, which is in the short walking distance. From the outcrops where the sites are located, the landscape slopes down to the river, and so the sites are at an elevated position from where the river is. The landscape can be described as undulating grassland, but it is mostly flat, which makes the outcrops stand out (see **Figures 28 30** in **Appendix 2** for landscape photographs). The outcrops are of sandstone. Vegetation sparsely surrounds the area where the sites are (demarcated in **Figures 1** and **2** with a red buffer), with a few trees directly in front of the shelters.

The first of the six painted sites, Site 9a (**Figure 3**), is a small shelter with not many images. It measures 11.5 metres along the dripline. The paintings here (though sparse), cover 10 metres across. There is a protruding step on the left-most part of the shelter, at about 1 metre high – the first few paintings are placed above this step. The most striking image on this part of the shelter is a depression on the rock which has



been filled with red paint, with 'rays' coming out of it as if to resemble sunrays or something similar (see **Figure 4**).



*Figure 3: Site 9a - photo taken from the left side of the shelter.*



*Figure 4: Images on the left-most part of Site 9a.*

Along the dripline, the ceiling of the shelter is 1.8 metres high from the left (to the right of the 'sunray' image), and 1.66 metres on the right-most part of the shelter, at 10 metres across. The height of the ceiling is approximately 1.56 metres in the middle of the shelter (5.5 metres across – shovel test at this point, as can be seen in **Figure 3**). At 11.5 metres across, the painted panel is 1.1 metres deep (inward/from the dripline); at 7.7 metres across, the back of the shelter is at 1.96 metres from the dripline; at 8.1 metres across, it is 1.9 metres from the dripline.

Other images at 9a are on a lower panel, to the right (**Figure 5**) - these are faded red finger dots (in a cluster of four rows of dots) and one dark-red abstract image in a slightly thicker and coarser pigment from the rest of the paintings on this panel. An identifiable object (perhaps a bag?) is painted to the left of the finger-dot cluster, in the same red pigment (see **Appendix 2**).



*Figure 5: Main panel at 9a. Image enhanced using GIMP to clearly show the paintings.*

The second, Site 9b, is located approximately 7.3 metres to the right of the 9a shelter, and the two shelters are separated by a tree in between them. It has a solid floor. It is

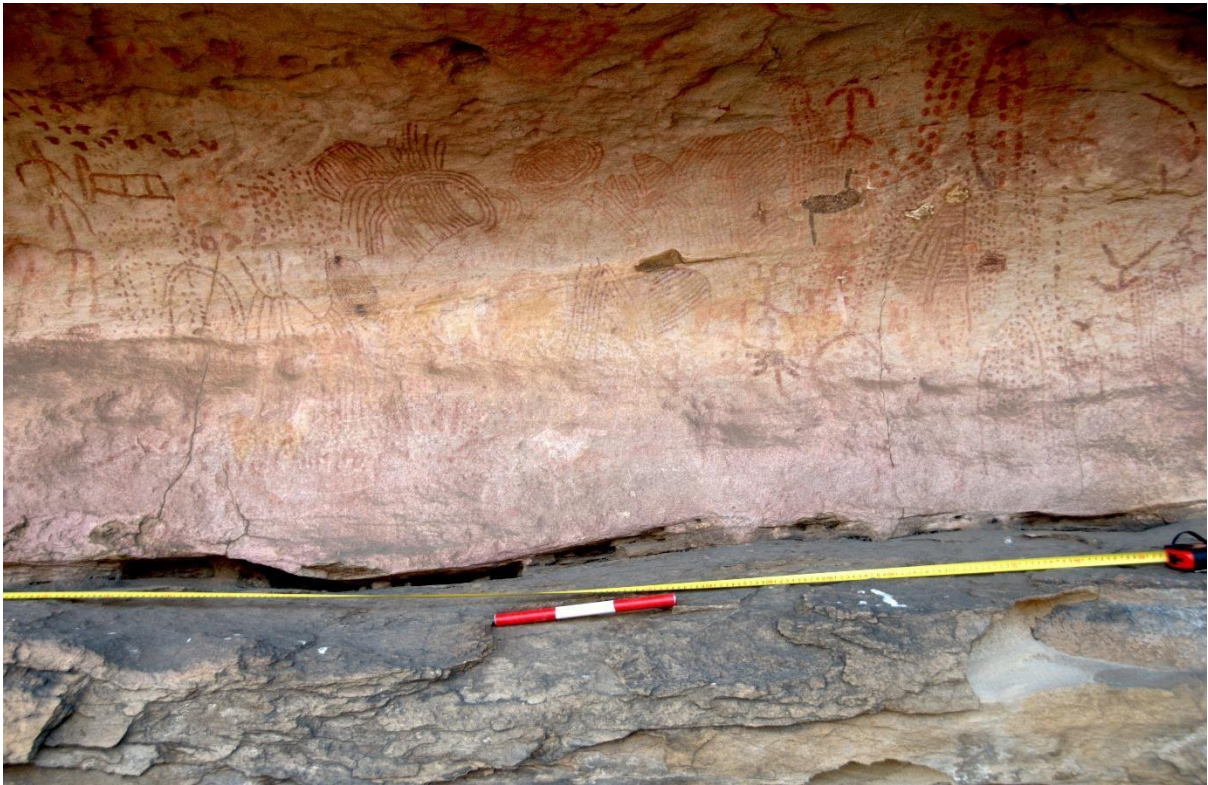
12.4 metres wide, with variable heights across from the ground to the ceiling. At the left-most opening, the shelter ceiling is 2.14 metres high, and 1.96 metres at the right most part of the shelter. In the middle part of the shelter, the ceiling is 1.69 metres high. The overhang curves in for up to 2.2 metres deep, with a sloping ceiling (**Figure 6**).

The panel is the most complex and most densely painted of all the shelters at De Wittekrans. Painted here are several 'geometric' designs of all kinds, including 'rayed' circles, finger dots in rows and some that are used to produce an image, some microdots seemingly painted in brush (in clusters), apron-like designs (see, for example, Hollmann 2014 for these kinds of images, and their interpretation), oval-like shapes with finger dots inside them, and concentric circles on the ceiling – painted in dark red pigment and executed by the finger (**Figures 7, see also Appendix 2**).



*Figure 6: The overhang shelter at Site 9b.*

These 'geometric' designs are all overlain over faded yellow and white fine-line images of animal figures, possibly bichrome eland, as can be seen at 9c (see below). The paintings cover a 7-metre distance across the panel. The most remarkable and unique thing about the rock art here is that some of the 'geometric' images are executed in fine-line, which is uncommon in South Africa, although similar fine-line 'geometrics' have been recorded in Mozambique (Decio Muianga, pers. comm.). Some of the images are painted inside hollows and depressions on the rock surface or painted in such a way as to 'interact with the rock face' (see Lewis-Williams & Dowson 1990 for an interpretation of this phenomenon; see also Maseko 2020: 113-115).



*Figure 7: Main panel at Site 9b, depicting fine-line and finger-painted 'geometric' paintings over fine-line animal figures. Dirt has accumulated on the panel, covering some of the images.*

Site 9c, located about 50 metres to the right of 9b, has multiple images, scattered over multiple panels (at different height levels) and on the ceiling. It is in the open, with a slight overhang, and leads to 9d to the right, which is the largest shelter in the De Wittekrans Site Complex. Images at 9c include monochrome human and animal figures painted in red pigment – most of the human and animal figures here are

miniature. On the ceiling are two animal figures (bovid-like) which are painted in a thin, yellow pigment and in a depression on the rock surface. On the left-most part of the shelter are two bichrome eland, painted in a yellow and white, chalky pigment (**Figure 8**).



*Figure 8: Bichrome eland at Site 9c.*

A similar chalky pigment is used to execute monochrome yellow animal figures with disproportionate bodily features at 9d, to the right. 9d is located near a waterfall and is the largest site in this vicinity (**Figure 9**). The shelter's ceiling is at an immeasurable height; horizontally, the 9d shelter extends for more than 25 metres, with fine-line, rough-brush and finger-painted (as well as brush-painted) 'geometric' images scattered across the panel. No image on this panel is like the other (**Figure 10**), except for a progression of baboons which are executed in a chalky red pigment, to the right of the yellow figures (see images in **Appendix 2**).



Figure 9: The Site 9d shelter. The main panel is to the left of the section covered by algae.



Figure 10: Left side of the panel at Site 9d, showing fine-line animal figures in a chalky pigment. Note the dust on the panel and the scratches on some of the images.

Two more rock painting sites are located across the river from 9d. They are small overhangs along the krans line, and at each site is a 'geometric' image executed in orange pigment and by the finger technique. 9e consists of only one small cluster of finger dots, to make a circular image/pattern. At 9f is painted a 'geometric' shape that resembles 'apron-like' images painted at 9b and 9d.

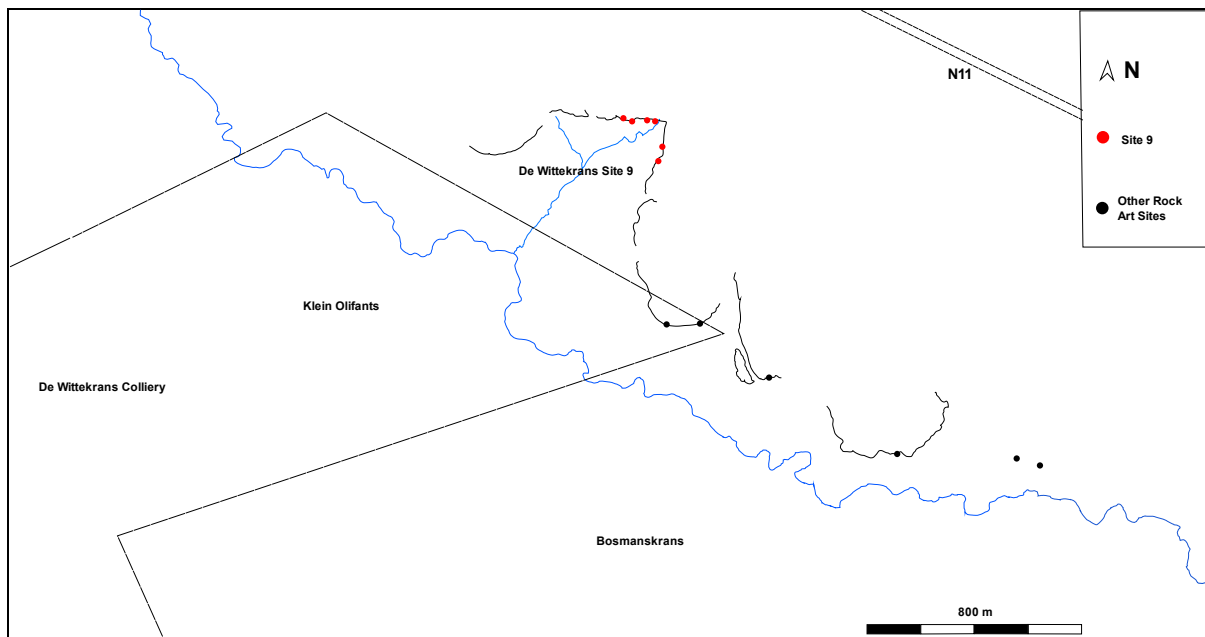


Figure 11: Distribution of rock art sites at De Wittekrans and along the Klein Olifants River.

### III: PREVIOUS FINDINGS AND RECOMMENDATIONS

Several recommendations have been made for the mitigation and preservation of the De Wittekrans rock paintings, some of which are yet to be implemented, despite the continuation of mining activity within the rock art's vicinity and cultural landscape. These recommendations are considered here, in conjunction with recent and ongoing academic research at the site.

#### **The Ouzman (2009) report**

The De Wittekrans rock paintings were described by Ouzman as “of **exceptional interest** to South African heritage in general and archaeology in particular” (pp. 1, emphasis in original). “At least four rock art sites” were reported, “which include the most complex Khoekhoen herder rock paintings yet found in Mpumalanga”, making this locale/site complex “a key site – one of the top 3 in South Africa – in terms of Khoekhoen herder art research” (pp. 1-7). Indeed, the De Wittekrans site complex is equal in significance to Gestoptefontein Hill in North-West Province (Hollmann 2007, 2014) and to Driekospeiland in the Northern Cape Province (Morris 2002, 2012). Moreover, the co-occurrence of at least two traditions of rock art at De Wittekrans was, according to Ouzman (2009: 7), evidence for possible interaction between hunter-gatherers and herders – ancestral to today's Khoe-San<sup>1</sup>. Added to this rock art evidence were surface finds of stone tools and pottery at and around all the sites.

On the downside, Ouzman's (2009) report noted that the rock paintings were affected by weathering, rock degradation and that they would be damaged by nearby mining activity, through dust, vibrations, and an increase in visitation numbers.

Given the rock art's great significance, and potential threats to it, Ouzman's (2009: 57) recommendations were as follows:

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<sup>1</sup> The term 'Khoe-San' is used in archaeology, particularly in the works of David Morris (2012) and Jeremy Hollmann (2014), to acknowledge the two millennia of interactions between Khoe and San communities, and the resulting contemporary identities and imbrication of belief systems.



- that mining plans be reviewed, and a number of alternatives be considered;
- that documentation and research on the rock paintings commences;
- that a site management plan be drawn up and adhered to, in consultation with landowners, developers and any other interested parties;
- that the rock paintings be preserved at all costs, and the site complex be nominated for National Heritage recognition, under the legislative framework of the National Heritage Resources Act (Act 25. of 1999).

### **The Heritage Impact Assessments**

Two HIAs were collated by PGS Heritage, in 2010 and 2014, regarding the potential threat by mining activity, to the De Wittekrans heritage sites. PGS Heritage identified 36 sites – 29 cemeteries, 6 farmsteads and “one rock art site” (complex) (Fourie 2014: 13).

The rock art site’s location, named **Site 9**, was reported to be in a 1km radius from the easternmost boundary of the study area, and 1.9km from the closest mining activity. The recommendations of the Ouzman (2009) report were noted and endorsed, but it was concluded, following an impact evaluation, that blasting from the mine would not cause destruction of the rock art.

By the standards of the South African Heritage Resources Agency (SAHRA) and approved by the Association of Southern African Professional Archaeologists (ASAPA), the rock art at De Wittekrans (**Site 9**) was classified by PGS Heritage as that of a Grade 1 rating, meaning that its heritage significance is of National status.

Thus, by that report’s recommendation, the site complex ought to be:

- conserved;
- monitored on a quarterly and annual basis, and;
- nominated as a heritage site of national significance.

**Maseko (2020) survey and rock art research**

Although other research has been conducted on the De Wittekrans rock paintings, the only study known to have been completed is that of Mduduzi Maseko (2020), which considered the De Wittekrans rock paintings amongst other rock art sites in central Mpumalanga. He first visited the site in January 2018 and surveyed the area around it in July 2018, with a team of staff and students from the University of the Witwatersrand.

Four separate panels of rock paintings were identified and documented during this time, and named **DWK1A**, **DWK1B**, **DWK2A**, and **DWK2B**. The paintings at these sites are consistent with what was reported by Ouzman (2009), nine years prior, consisting of fine-line images of animals and people, and fine-line and finger-painted 'geometric' designs of concentric circles, 'rayed' circles, rows of finger dots, microdots, diamond shapes and crosses, and also images which possibly resemble items of clothing (Maseko 2020: 81; see Hollmann 2014 for the interpretation of 'geometric' rock art designs).

Two other rock art sites were identified within the prospective area of the mining activity, named **WVL2** and **WVL3** (Maseko 2020: 78-79). These were previously unreported, perhaps owing to their being on another portion of the farm De Wittekrans. These paintings are of the 'late white' tradition (see Prins & Hall 1994; see also Hall & Mazel 2005 for similar imagery in the Western Cape) and depict material culture from the colonial period. At WVL3, a wagon is depicted among a small number of people and animals. Other undetermined remnants of white and (faded) red pigment were documented. At WVL2, a giraffe and a possible bushpig are depicted.

According to Maseko's (2020) research – together, all these rock art sites are from the contact period and are of significance to studying how different groups of incoming herders and farmers may have met and interacted with autochthonous huntergatherers on the central Mpumalanga landscape. As such, Maseko (2020: 144) recommended that the sites be excavated to answer future research questions surrounding these possible interactions.

## IV: FIELDWORK FINDINGS

### General observations and comments

Considering all the sources consulted and cited above, regarding the rock art at De Wittekrans, G&A Heritage appointed a rock art specialist to document (by photographic methods) the rock art complex referred to as **Site 9**.

**Site 9** was visited on the 26th, 27th and 28th of August 2023, by Mr Mduduzi Maseko. From around 10:51 on the morning of the 26th of August, an on-site inspection was conducted, which included walking the demarcated landscape on which **Site 9** is located. The weather was sunny, but windy, and dust was blowing from the southeastern to the north-western direction. All the outcrops within the De Wittekrans 215 IS property were inspected, which stretch many kilometres on both sides of the driedup Klein Olifants River. However, restrictions did not allow for the full documentation of all the sites identified – sufficient time and technical assistance is required to achieve this. The records obtained are, nonetheless, sufficient for drawing up a management plan.

It is noted that the client was under the impression that **Site 9** consists of only one rock art site, as was described in previous HIAs (perhaps owing to a difference in the definition for ‘site’); however, **Site 9** is a rock art complex, consisting of multiple sites – at least six of which have been identified to date. It follows, then, that the description of **Site 9** as “one rock art site” (Fourie 2014: 13) may be misleading and not fully capture the extent and significance of the rock art heritage present on this landscape.

Moreover, other rock art sites, namely **WVL2** and **WVL3** have previously been identified by archaeologists within the development area (see Maseko 2020). Therefore, to avoid confusion, while keeping consistency with previous reports, the six rock art sites named **Site 9** will be referred to, in this report and all future documentation in relation to it, as **Sites 9a 9f**. Any other sites yet to be identified will be named according to this order.

An additional two rock art sites were identified during the inspection, on the 26th of August, at 13:54 PM, which were previously unidentified and unreported in the sources cited above. These sites, which are on the opposite side of the river from the most densely painted sites, each consist of a few finger-painted images of dots and geometric designs, located on low panels, stretching not more than a few meters each. The images painted here are in orange pigment, similar to those found at 9a and 9b. The second of these sites was located near a beehive to its right, and a fenced cemetery (of the Mashiloane family) can be seen within a 200m distance from here.

Directly across Sites 9e and 9f, and the fenced grave site, but from an undetermined distance, an open cast mine can be clearly seen, visually impacting the cultural landscape. A Google-Earth calculation estimates this distance to be no more than 1.8km from the colliery.

Although there are more outcrops within the development area (on adjacent properties), such as where **WVL2** and **WVL3** are located, time constraints did not permit for these locations to be visited and inspected during this trip. Photographing all the rock art images was also not possible during this trip, due to several constraints, but a good representation of the rock art was captured.

### **Site conditions**

No excessive damage by human activity was observed. However, comparing the photographs of the site taken in August 2023 with older ones, it is apparent that more dust has accumulated over some of the panels, even in a considerably short period. It is almost unquestionable that the source of the dust on the rock art panels is the mine – especially the busy dirt road leading in and out of its premises. However, there may be other sources, such as foot traffic to the site. Multiple factors, including rainy weather, may lead, over time, to the dust solidifying and obscuring the images even more.



*Figure 12: Dust and graffiti on the panel of 9d, covering some of the images.*

At Site 9a, there are two intersecting cracks running through the right-most image (dark-red finger painting) on the right-most part of the panel. The image is of an abstract symbol (**see Figure 12**). Vertical cracks run through most parts of the panel, including where a cluster of finger dots and an orange ‘geometric’ image (possible clothing item – apron?) are placed. Altogether, five (5) of the 12 discernible images on this panel are placed on cracks (not to say that the cracks were there before the images were made).

There is rectangular hole in the ground at 9a, in the middle of the panel, suggesting that a shovel-test excavation was done (see image in **Appendix 2**).

Multiple cracks on the rock surface were also observed at 9b, with many of them occurring where images are placed. More concerning here is a long vertical crack that runs across the whole panel. It is important to note here that, possibly in relation to the beliefs of the people who made the rock paintings, where images were intentionally placed on features of the rock such as cracks, hollows and depressions, this is usually discernible (such as at 9a; see Maseko 2020: 113-115). This may be one way of

determining (or, at least, confidently speculating) where cracks occurred after images were made or not.



*Figure 13: Cracks on the rock surface, affecting the painted images.*

Bird droppings were noted on the right-most part of the 9b shelter, on a step in the rock and below the panel where images are placed.

A few of the images at 9b have been scratched by people. This was also observed at 9d. Other observations made at 9b:

- Nest in the ceiling, but not covering any of the paintings.
- Trees in front of the shelter, although it looks like that were more, that have been cleared.
- Site is exposed to wind (and hence the dust).

No observation of the site was made in rainy weather, but it is possible that water from rain does reach the panel.

An open archaeological excavation was observed between 9c and 9d – excavated trenches were left uncovered by the sandbags and a pile of sand (possibly the spoil heap) next to it. On 27 August 2023, the landowner—Vincent Schulze—expressed concern that the excavated pit may have been disturbed by trespassers who were curious what the excavation team had been doing there in previous weeks.



*Figure 14: Possibly disturbed excavation or left without backfill.*

Bird droppings cover some part of the rock face at 9d, but none of them cover any of the images. The panel at 9d is covered by dust, which appears to have solidified. There are algae on the floor of the panel, which is about a metre above ground level. To the right-most of the panel is a waterfall, which has now dried up, but possibly gets wet in rainy season.

There is graffiti on the top-right side of the shelter at 9d, and on the ceiling of 9c – the landowner confirmed on a previous visit to the site that he was aware of the markings, seemingly made by visitors to the site some years prior. When Maseko and his team recorded the site in 2018, these markings were already present, and so were they in

2009, apparently, when the Ouzman report was written. Possibly, then, they were left several decades ago, perhaps by visitors of the property owner.

No archaeological remains on the surface were recorded, except for a few undiagnostic pieces of debitage at 9a – this is a huge contrast as compared to Ouzman’s (2009: 5) identification of stone tools and pottery on the surface at “all of the sites”. It is possible that, over time, visitors to the site have picked up all the artefacts that were once recognisable on the surface.

A loud thud, possibly from an explosion at the mine (though undetermined), was heard from the site on the afternoon of the 28th of August.



## V: DISCUSSION AND RECOMMENDATIONS

The rock art at De Wittekrans—which consists of at least eight rock art sites, on which images of diverse rock art traditions are depicted—is unique and exceptional. It has great cultural and scientific value and, together with excavated material culture (which will likely result from current research) may answer archaeological research questions about interactions between autochthonous hunter-gatherers and food-producing communities within the last 2000 years. Plans to protect the rock paintings (and any associated archaeology) from damage should be adhered to at all costs. A more detailed approach should be followed in order to achieve full documentation of all rock art sites and associated archaeology which can be identifiable in and around **Site 9**, and within the area of interest for the De Wittekrans Colliery. It is the client's responsibility to ensure that all sites have been identified and fully documented before any plans to expand are made.

The De Wittekrans rock paintings show evidence of deterioration and especially impacted by dust, which has accumulated on the panels over an undetermined period, building up dirt, which obscures some of the paintings. There is high risk that, without intervention, the dirt might lead to the formation of crusts – this would be an irreversible condition (see McClintock 2021 for a study of the effects of dust on rock paintings). Cracks on the rock surface were also noted, especially at the most densely painted site (9b). The possibility that the site will, over time, be completely damaged, should be considered and acted upon.

The potential impact of there being an excavation at the site should be considered as an additional factor that may lead to the accumulation of dust on the rock art panels. As such, it should be ensured that buckets are sieved away from the rock art panels, perhaps down at the nearby river. Excavated sections should be backfilled at the end of the excavation season.

By the guidelines offered by SAHRA in the management of sites and places (**Appendix 3**), the following recommendations are made:

- (i) Considering the extent of the site complex, and that new sites are still being identified, a technical team should be assigned to assist the rock art specialist in producing a more detailed recording of the entire archaeological landscape within the area where **Site 9** is located, which should include detailed schematic drawings and tracings. A week-long trip should be planned for this. The client should give the archaeologists a reasonable budget for carrying out this fieldwork and producing reproductions;
- (ii) The two sites named here as **WVL2** and **WVL3**, within the development area, should be considered along with **Site 9** and included in the management plan;
- (iii) While cognisant of the sensitivity of the rock paintings, a cleaning procedure for the accumulated dust on the rock art panels should be devised – SAHRA can be contacted about guidelines regarding this;
- (iv) This procedure should be followed by nominating the site complex as a heritage site of National Significance (Grade I);
- (v) Plans to expand the mining area within a 2km distance from Site 9 should be communicated with SAHRA, and in consultation with the appointed archaeologists and other interested parties. Considering that such expansion may have further impact on the site, development should wait until full documentation and study of the archaeological sites has been completed. This may delay plans but is a necessary precaution.
- (vi) New findings from current archaeological research at De Wittekrans should be considered and, where possible, be used to inform and update the management plan;
- (vii) Visitation to the site should continue to be strictly managed, and a visitor's guide—in consultation with all stakeholders—must be drawn up and integrated into the management plan;
- (viii) A monitoring programme, which includes inspection of the rock art on a biannual basis, should make part of the Conservation Management Plan;

- (ix) Photographic images and all other records of the De Wittekrans rock paintings should, as a matter of urgency, be digitised and stored permanently on a national repository such as the Rock Art Research Institute's (RARI) African Rock Art Digital Archive ([www.sarada.co.za](http://www.sarada.co.za)). The site documentation records can be stored in RARI's archival storage.

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## VII: APPENDICES

### Appendix 1: The Ouzman report



Ouzman\_2009\_SA\_  
Mpumalanga\_DeWit

### Appendix 2: Photographic records of the De Wittekrans rock paintings and surrounds



*Figure 15: 'Geometric' images of different colours and pigments, at Site 9b.*



*Figure 16: 'Geometric' finger-painted image at Site 9a.*



*Figure 17: Hollow filled with red paint to produce an image – Site 9a.*



*Figure 18: Possible shovel-test excavation at Site 9a.*



*Figure 19: Finger-painted 'geometric' images on the left-side panel of Site 9b.*





*Figure 20: Main panel at Site 9b.*



*Figure 21: Site 9b from a side view.*



*Figure 22: Fine-line 'geometric' motif at Site 9b.*



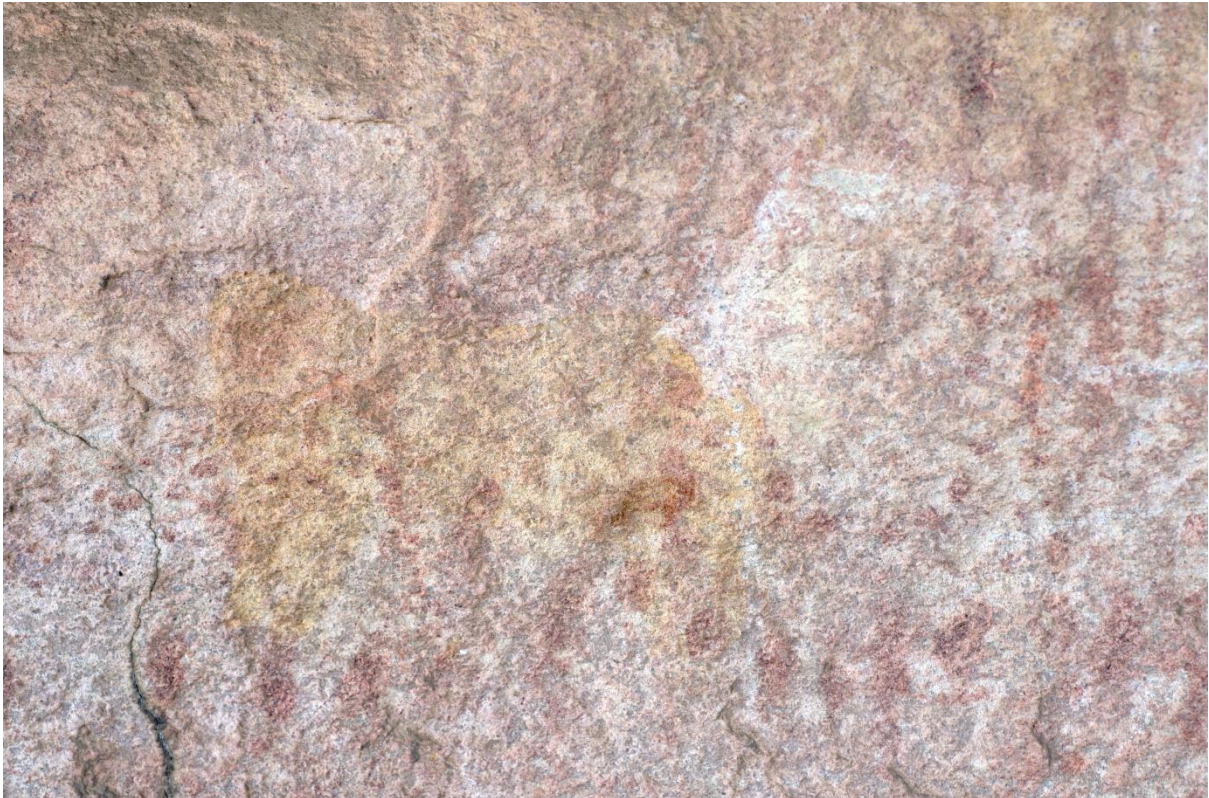
*Figure 23: 'Geometrics' in red pigment at Site 9b.*



*Figure 24: Orange and dark red 'geometric', finger-painted images on a crack rock surface.*



*Figure 25: Red concentric circle on the ceiling of Site 9b.*



*Figure 26: Bichrome eland overlain by red finger dots.*



*Figure 27: Monochrome red animal figure at Site 9c.*



*Figure 28: Rough brush-painted animal figures at Site 9d.*



*Figure 29: Landscape photo showing footpath leading to Site 9. Left-side of the photo is where the first painted surfaces are.*



*Figure 30: Sandstone outcrops where Site 9 is located.*



*Figure 31: Landscape photo showing a view of the Klein Olifants River and the De Wittekrans Colliery from Site 9.*

### **Appendix 3: SAHRA's guidelines for developing a Conservation Management Plan:**

## **5. STEPS TO BE FOLLOWED IN THE DEVELOPMENT OF SITE MANAGEMENT PLANS**

### **5.1. Step 1: Social Assessment, Identification of Stakeholders and Formation of Management Committee**

5.1.1. A team should be formed to initiate the project.

5.1.2. A project leader should be identified to lead the establishment of a management committee and to eventually coordinate such a committee. 5.1.3. All relevant stakeholders should be identified at this stage.

5.1.4 Information on the identity of the place (e.g. boundaries) should also be gathered at this stage.

5.1.5 The first stakeholders' meeting should be held to explain the intended plan and to assess their attitude.

### **5.2. Step 2: Documentation, Research and Investigation of the Identity of the Place.**

5.2.1 All available information about the place/site should be gathered (all documentation as well as oral history and intangible values).

5.2.2. All data that puts the place/site into context should be gathered (e.g. relevant legal documents and development plans).

5.2.3. A condition survey or the state of conservation of the place/site should also be investigated.

5.2.4. Information on the past and present management authorities and/ or owners should be gathered.

5.2.5. Information on the past and present interpretation, presentation and visitor management practices at the place/site should be gathered.

### **5.3. Step 3: Analysis of the Information Gathered**

5.3.1. Values of the place/site should be determined.

5.3.2. The cultural significance of the place should be determined.

5.3.3. Key Issues should be identified.

5.3.4. The authenticity and integrity of the place/site should be investigated.

5.3.5. Guiding principles should be determined.

5.3.6. A situational Analysis should be conducted at this stage (this can be by way of SWOT and/or other types of analysis).

5.3.7. Various types of responses should be explored and evaluated before appropriate ones are chosen.

5.3.8. A stakeholders' meeting should take place at this stage to discuss all gathered data with all stakeholders.

**5.4. Step 4: Development of Appropriate Responses.**

- 5.4.1. Specific Objectives should be developed.
- 5.4.2. Strategies for meeting the objectives should be designed.
- 5.4.3. An Action Plan should be developed.
- 5.4.4. An Implementation Plan should be developed.
- 5.4.5. A Monitoring and Evaluation strategy should be spelled out.
- 5.4.6. There should be an evaluation of the process thus far before implementation recommendations can be made.

**5.5. Step 5: Implementation Plan**

- 5.5.1. Short term and long term actions should be clearly spelled out.
- 5.5.2. Resources necessary for the implementation of the plan should be identified (this should include the institution or office to be tasked with the implementation of the plan).
- 5.5.3. The Management plan should be properly communicated to all stakeholders.
- 5.5.4. All actions must be documented.