ESM CULTURAL HERITAGE CONSULTANTS

Trading as ESM Trading cc.Reg no: cc/2013/05545
Email: esmowa@gmail.com Mobile: 0812066372.

PROJECT DETAILS

Title	**Heritage and Archaeological Impact Assessment (EIA) for the exploration of base and rare metals, dimension stones, industrial minerals, and precious metals on the eastern portion of EPL 5476 at farm Kompaneno in Omaruru district.**		
Report Status	*Final Report*		
Proponent	Royal Unity Mining cc		
Heritage Practitioner	ESM Cultural Heritage Consultants Trading as ESM TRADING cc Contact Person: Mr Eliot Mowa Contact Number: +264 (81) 206 6372 Email: esmowa@gmail.com		
Report date	27 June 2021		
	Name	**Signature**	**Date**
Author	Eliot Mowa		27 June 2021

ESM CULTURAL HERITAGE CONSULTANTS

Table of Contents

National Heritage Council of Namibia

52 Robert Mugabe Avenue • P/Bag 12043 • Ausspannplatz • Windhoek • Namibia
Tel: (061) 244 375 • Fax: (061) 246 872 • E-mail: johanna@nhc-nam.org

Secretariat

Receipt No. 5740

CASH RECEIPT

Customer

Date 06/07/2021

Name ROYAL UNITY MINING CC

Address BOX 24008, 7 NGUNI STREET

City WINDHOEK

Phone 087 810 119

Quantity	Description	Unit Price	TOTAL
1 X	APPLICATION FEES FOR EIA CONSENT, EPL 5476.		N$ 150-00
	2021-07-0[illegible]		N$ 150-00

Amount in Words: ONE FIVE ~~ZERO~~ N$ ONLY

Issued by:

studio print 22253

EPL 5476

National Heritage Council of Namibia
Technical Department
52 Robert Mugabe Avenue, Windhoek
Private Bag 12043, Ausspannplatz, Windhoek
Tel: (061) 244375 • Fax: (061) 246 872 • Email: info@nhc-nam.org

OFFICE OF THE DIRECTOR

APPLICATION FOR CONSENT

(Sections 53(7) and 55(8) of the National Heritage Act, 2004 (Act No.27 of 2004))

CONDITIONS AND INSTRUCTIONS

1. The receipt issued serves as a reference when making enquiries.

2. Works and activities applied for under section C, of this application, is subject to an environmental impact assessment at the applicant's expense.

3. Instructions for completion:

Applicants must complete the relevant parts of this application.

A. APPLICANT'S DETAILS

1. Name and address of applicant

Royal Unity Mining CC (CC/2019/02294)
P.O. Box 24008
No. 7 Nguni Street
Windhoek
Cell: +264 81 810 119
Contact Person: Otniel Kuojo
Email: greatkunene@gmail.com

2. Full name and designation of the person in charge of undertaking the works or activities:
Eliot Mowa

3. Full name and personal details of researcher, contractor or person in charge of the proposed works or activities:
ROYAL UNITY MINING CC

4. Academic qualifications, skills, occupation and competencies of the person in charge mentioned under A2 above.
____Master in Maritime Arhaeology (Bristol University) member of ASAPA,

5. Previous permits issued in Namibia: N/A

6. Period for which permit is required: From 12 MONTHS to

7. Date by which permit is required: 31 July 2021

B: WORKS OR ACTIVITIES

15. Geographic location and address (farm, village, settlement, town, region, magisterial district, constituency, Global Positioning System coordinates) of the site, protected place or protected object where works or activities are proposed:
FARM KOMPANEN0 104 (eastern portion)

20 Government Gazette 1 September 2005 No. 3490

16. Detailed description of the nature of works or activities for which the permit is applied for: (e.g. excavation, construction, filming etc) (*Attach additional and supporting information if the space on the form is insufficient.)*
EXPLORATION

C: UNDERTAKING BY APPLICANT

17. I MR LANG (the person in charge of undertaking the works or activities) and (where applicable) being head of the ROYAL UNITY MINING CC institute, hereby undertake to strictly observe the terms and conditions under which the National Heritage Council may issue the permit.

Signature RLLN dated 29/06/2021

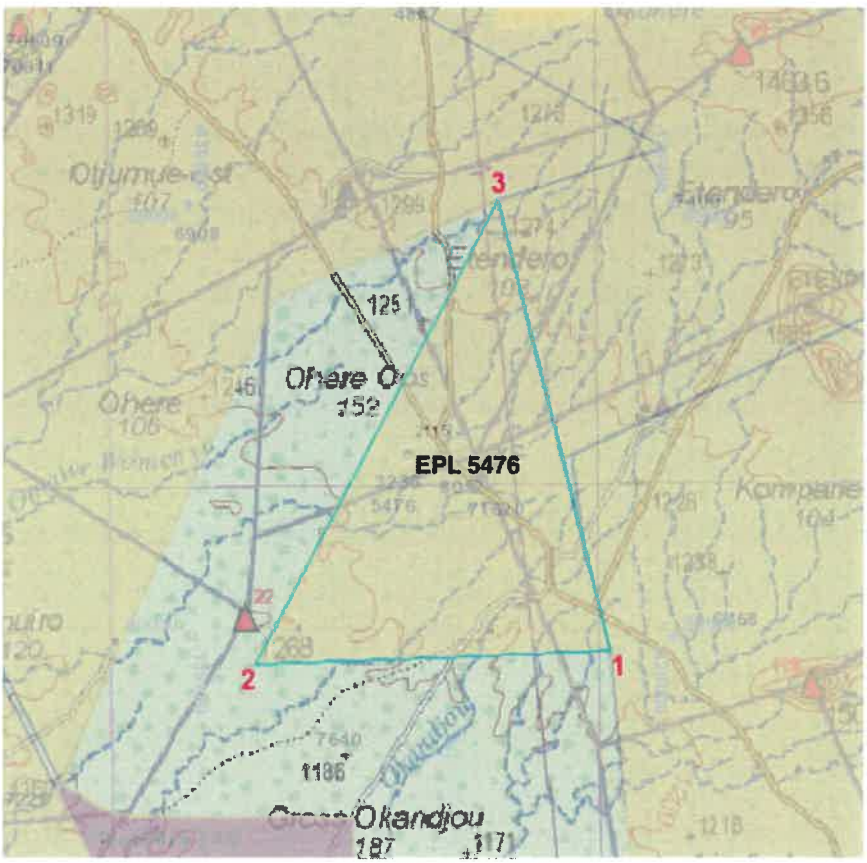
Consent No.....

(Consecutive number & year of issue)

CONSENT

1. Introduction

The Government of Namibia recognises that the exploration and development of its mineral wealth could best be undertaken by the private sector. It, therefore, focuses on creating an enabling environment through appropriate competitive policy and regulatory frameworks for the promotion of private sector investment coupled with the provision of national geo-scientific databases essential for attracting competitive exploration and mining (Draft Minerals Policy of Namibia, Ministry of Mines and Energy). This is because; mining is listed in the Environmental Management Act (2007) as an activity requiring environmental assessment and the issuance of an Environmental Clearance Certificate. It is with this background that Royal Unity Mining cc has decided to conduct exploration activities for the base and rare metals, dimension stones, industrial minerals, and precious metals on the eastern portion of EPL 5476. Information obtained from the Department of Mines in the Ministry of Mines and Energy (MME) indicated that EPL 5476 belonging to Royal Unity Mining CC - hereinafter referred to as the proponent has been active since 15 November 2013 and valid until 12 September 2021. It was granted mineral rights in respect to dimension stone, base and rare metals, industrial minerals and precious metal. The EPL is located within Farm Kompaneno No. 104 in Erongo region (**Map 1**) but transverse some portions of at least other neighbouring farms including Etendero, Ohere Oost and Gross Okandjou.



Map 1: Topographical map of EPL 5476 on Farm Kompaneno 104 in relation to other neighbouring farms (Source: E. Mowa).

In fulfilment of a Consent issued by the National Heritage Council in 2020, the proponent has then sub-contracted EMS Cultural Heritage Consultants to carry out heritage and archaeological impact assessment component as part of the Environmental Impact Assessment (EIA), required under the National Heritage Council (NHC) and the Environment Management Act of 2007 and it's Regulations of 2012. This is because a heritage impact assessment was omitted during the initial environmental assessments of the area.

The proposed project is likely to benefit the Namibian government through the payment of the annual license fees to the Ministry of Mines and Energy. Further, the project will likely provide contractual employment opportunities for the local communities in the Omaruru and Omatjete District. Unrestrained natural resource mining/excavation has resulted in undesirable environmental effects in some areas in the country. This has been largely attributed to the fact that people were under no obligation to rehabilitate the affected areas and thus left behind large open pits/quarries, which pose a danger to both humans and animals. From the point of view of the environmental impact created, Royal Unity Mining CC, objectives of a:

- **Heritage Impact Assessment (HIA) concerning the exploration of base and rare metals, dimension stones, industrial minerals, and precious metals on the eastern portion EPL 5476 at Farm Kompaneno 104, between Omaruru and Omatjete in the Erongo region.**

The objective of the intended Heritage & Archaeological Impact Assessment (HAIA) is thus needed to assess the potential heritage and archaeological impacts associated with the intended exploration and mining activities for dimension stone on EPL 5476. (**Map 1, Figure 1 and 2**) in the Erongo Region and also to formulate a site management plan (SMP) as stipulated under the National Heritage Act 27 of 2004 (Section 58) read together with the provisions of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012).

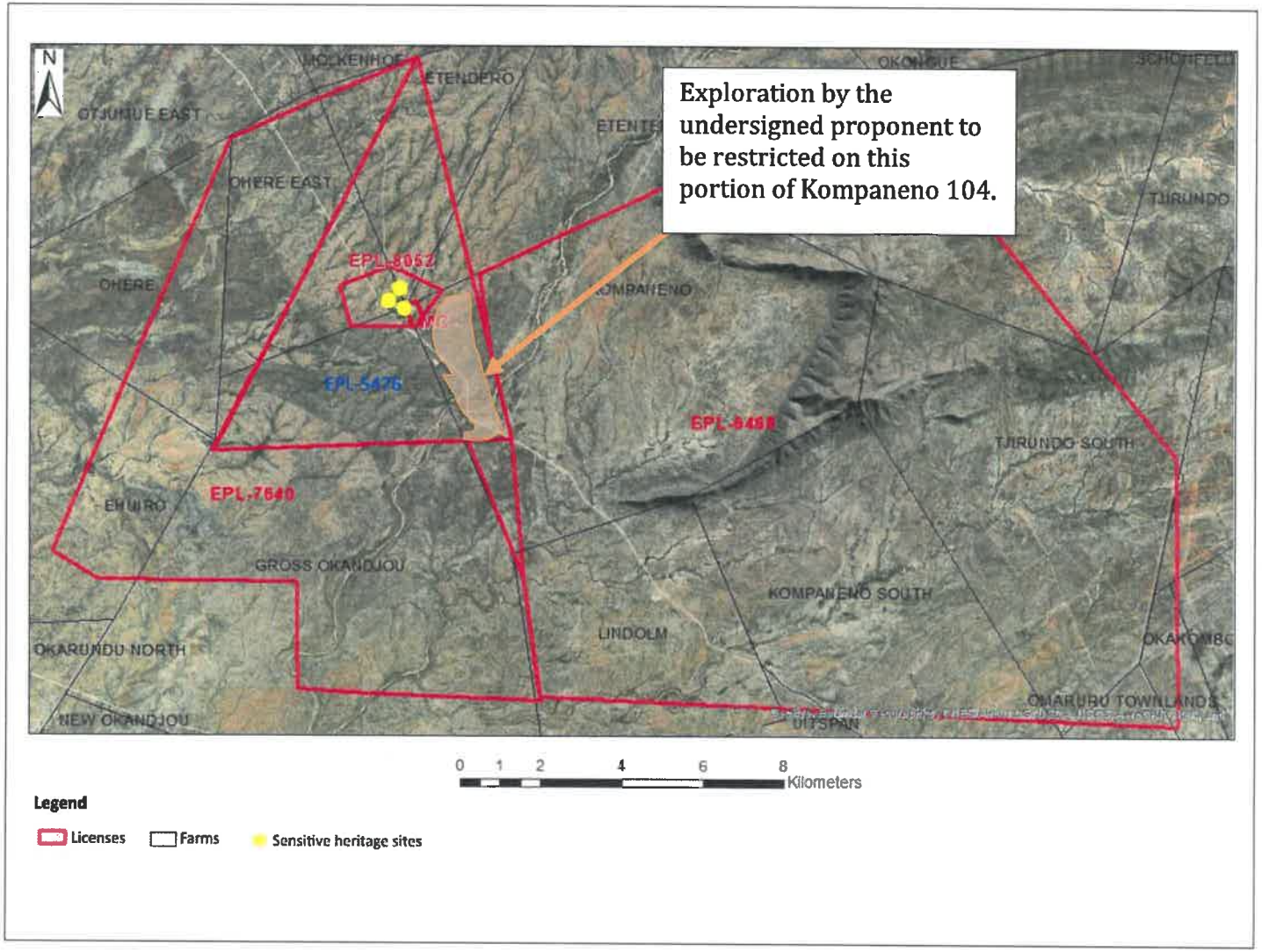


Figure 1: An edited satellite map of EPL 5476 and surrounding farms indicating archaeological resources identified by Nankela *et al*. (2020), also pinpointing the portion planned for mining exploration by the proponent.

2. Legal requirements

Heritage resources (geological and rare objects; paleontological; archaeological; ethnographic objects; historical objects/sites; maritime heritage; built monuments; historic mining sites as well as objects of scientific interests) as defined in section 1 of the National Heritage Act (No. 27 of 2004) are protected by the Act and remains properties of the State. While there are no regulations for the implementations of the National Heritage Act about heritage impact assessment, such assessments in Namibia take place under the activities of the Environmental Management Act (7 of 2007), which predominantly incorporates cultural heritage elements in its description of the environment. The List of activities that may not be undertaken without Environmental Clearance Certificate: Environmental Management Act, 2007 (Government Notice 29 of 2012), and the Environmental Impact Assessment Regulations: Environmental Management Act, 2007 (Government Notice 30 of 2012), which apply both to the management of impacts on heritage & archaeological remains whether these are considered in detail by the environmental assessment or not.

3. Approach to study

3.1 Terms of reference

A field survey was undertaken by the undersigned. The objectives of this heritage & archaeological impact assessment were to:

1. Identify and locate possible delicate heritage resources within the limit of EPL 5476 that could negatively be affected by the proposed exploration of dimension stone.
2. To establish heritage significances of possible resources and assess their vulnerability, estimates the extent of the possible impacts;
3. Ascertain cumulative impacts suggest practical management measures for the conservation of heritage resources *(if present)* to satisfy the requirements of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012), and those of the National Heritage Act (2004).

3.2 Methodology

This Heritage & Archaeological Impact Assessment was done using desktop-based assessments with a field survey. These methodologies are criterions for environmental assessment and the protocol developed for archaeological heritage assessment in Namibia, which are in line with international best practices. Desktop information was fashioned from current and existing heritage archives. These were taken from existing heritage records comprising those from National Heritage Council, archaeological GIS spatial data and record that has been substantially

exposed during the last decades, by a series of detailed archaeological assessments carried out during the mineral investigation and mining operations, and the development of infrastructure required by these operations. These sources were then supplemented by ESM's fieldwork within the eastern portion of EPL 5476 at Farm Kompaneno 104. Sensitivity and susceptibility rating scales, aimed at finding out the nature of vulnerability and sensitivity of heritage resources that are likely to be impacted by the exploration activities, were adopted as per assessment objectives. Their vulnerability to the disturbance in the course of exploration that includes drilling was evaluated according to parallel 0-5 scales, abridged in Table 2.

Table 1: Rating scales for the assessment of archaeological significance and vulnerability as developed by the QRN.

Significance Rating	
0	No heritage significance
1	Disturbed or secondary context, without diagnostic materials
2	Isolated minor find in undisturbed primary context, with diagnostic materials
3	Archaeological and paleontological site (s) forming part of an identifiable local distribution or group
4	Multi-component site (s), or central site (s) with high research potential
5	Major archaeological or paleontological site (s) containing unique evidence of high regional significances
Vulnerability Rating	
0	Not vulnerable
1	No threat posed by current or proposed development activities
2	Low or indirect threat from possible consequences of development (e.g. soil erosion)
3	Probable threat from inadvertent disturbance due to proximity of development
4	High likelihood of partial disturbance or destruction due to close proximity of development
5	Direct and certain threat of major disturbance or total destruction

Concerning each specific source of impact risk to heritage resources, the assessment methodology estimated the extent of the impact, the magnitude of impact, and the duration of these impacts. The scales of estimation are set out and explained in Table 2.

Table 2: Assessment criteria for the evaluation of cumulative impacts on archaeological sites developed by the QRN.

CRITERIA	CATEGORY	DESCRIPTION
Extent or spatial influence of impact	**National** **Regional** **Local**	Within Namibia Within the Region On site or within 200 m of the impact site impact
Magnitude of impact (at the indicated spatial scale)	**High** **Medium** **Low** **Very Low** **Zero**	Social and/or natural functions and/ or processes are severely altered Social and/or natural functions and/ or processes are notably altered Social and/or natural functions and/ or processes are slightly altered Social and/or natural functions and/ or processes are negligibly altered Social and/or natural functions and/ or processes remain unaltered
Duration of impact	**Short Term** **Medium Term** **Long Term**	Up to 3 years 4 to 10 years after construction More than 10 years after construction

3.3 Assumptions and limitations

This heritage impact assessment described here are both desktop studies and fieldwork-based assessments. It is possible to predict the likely occurrence of further archaeological sites with some accuracy and to present a general statement of the local archaeological site distribution. However, since the previous surveys in the area relied on limited to surface observations, it is necessary to caution the proponent that hidden, or buried archaeological remains might be exposed during the exploration of dimension stones, see management plan, especially Chance Finds Procedure (CFP) developed at the National Heritage Council of Namibia.

4. Environmental Settings

Farm Kompaneno 104 is located about 25km from Omaruru, in the Erongo region. The farm is accessed via roads C356 and thereafter D2344 towards Omatjete. It borders five private commercial farms in all directions. These include Gross Okandjou farm, Etendero No. 103 and 95 as well as Ohere oos No. 152 **(Map 1, Figure 1 & 2).** To the west is the dome-shaped Erongo Mountain and gently-sloping waste-floored plain, surmounted by occasional ranges of hills of characteristic jagged outline hills and outcrops standing out above the plains. The area is characterized by sand surface while shallow depressions mark the courses of dry-and-filled riverbeds. Since the area is a transitional belt, it is characterized by a gradual increase of vegetation. The outcrops of the underlying rocks become more

numerous with expanses of undulating shrub-steppe with zones of thicker vegetation of grass (**Figures 3**) and large trees such as *acacia albida, horrida, gir*affae and *tamarix*. The Omaruru River and its tributaries feed these dry river systems around Farm Komponeno. The rivers are not perennial streams and flow only after a substantial rainfall (Haughton *et al.* 1939).

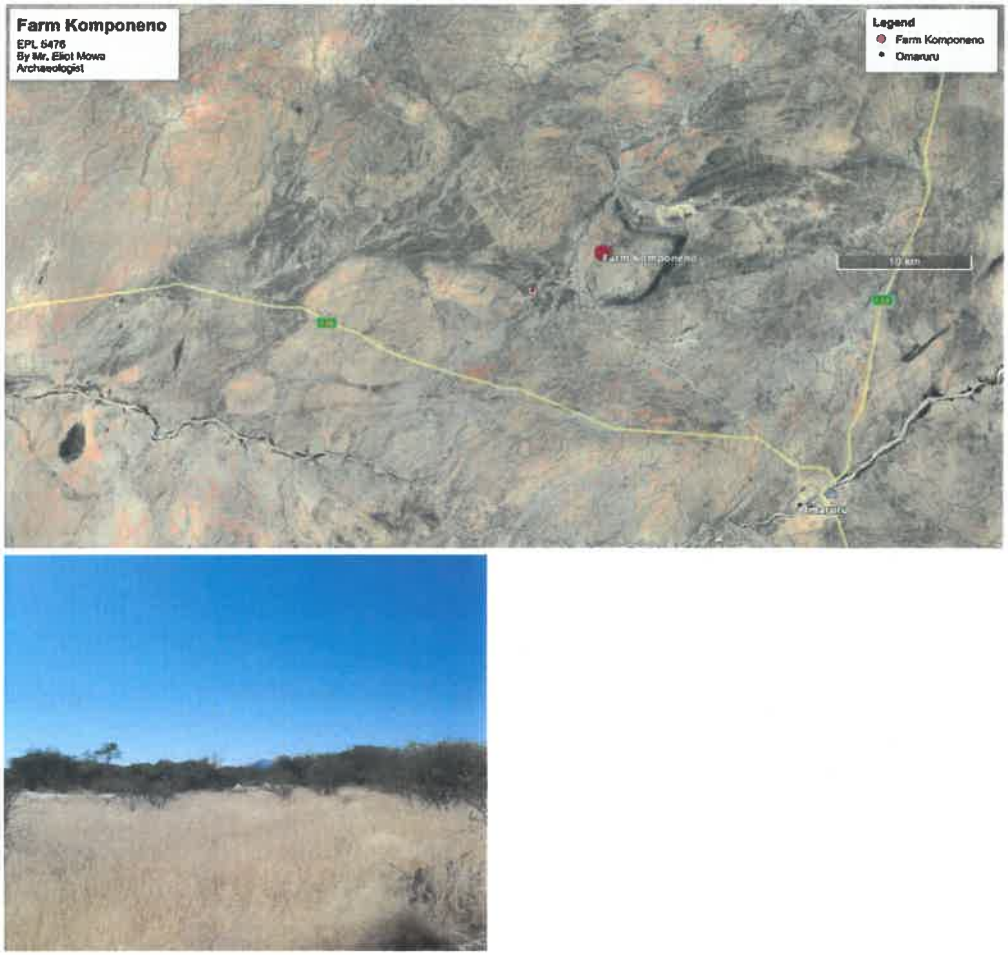


Figure 3: Above is the geographical location of Farm Kompaneno 104 while below is the environmental setting (Sources: Google Earth 2021 & E. Mowa).

5. Mining Settings

Farm Kompaneno has a total area of 3222.8 Ha and is located between Omaruru and Omatjete, 25km west of Omaruru. Recent information revealed that Kompaneno No. 104 borders at least five other farms (**Figure 1, 2 & 3**). An initial Environmental Impact Assessment of the EPL 5476 was carried out by an environmental consultants, with the report produced in April 2019 covering two farms (Kompaneno No. 104 and Etendero No. 95) as well as an Environmental Management Plan.

According to (Nankela *et al.* 2020), both reports omitted the heritage component which is required to fulfil both registrations (Environmental Management Act of 2007 and its Regulations of 2012 as well as the National Heritage Act of 2004 and its regulations 2006.

6. Geological settings

According to Haughton *et al.* (1939), the area in which the EPL 5476 is to be found is geologically characterised by the superficial deposits, both igneous and sedimentary rocks belonging to two widely separate geological periods. These are said to belong to the Damara Granite Group **(Figure 4)**. Information from the Geological Survey of Namibia states that the Damaraland Suite, the events that created the Erongo and its surrounding hills and outcrop features was made about 137 to 124 million years ago concerning the break-up of the Gondwana Supercontinent and the opening of the South Atlantic Ocean. The Erongo Mountains consist of an assemblage of both intrusive and extrusive rocks. Since the Erongo rocks as well as the surrounding rocks host a variety of minerals associated with the magmatic/volcanic activity such as tungsten, tin, fluorite and beryllium mineralization, these are said to have been exploited in many small diggings and larger-scale mining operations over the last three decades. The Kompaneno-Tjirundo Mountains, some 25 km north of Omaruru, are the most important mountain ranges in the area. Their structure is that of a compound dome of complex nature, made up of marbles, schists, and intrusive granites. Particularly prominent in the Erongo mountain range and its linked hills are weather-resistant granite and associated outcrops.

The area has the character of a gently-sloping waste-floored plain with sand, dominating the bush-clad plains with surface limestone most of which are filled river beds. Ridges of diabase, porphyritic and crystalline limestone, are numerous south in this area. Notwithstanding this, the area particularly the locality of EPL 5476` geological lithology is formed from Damara / Kuboos Bremen intrusive of the Cambrian formation. A greater section of EPL 5476 lithology is made of mica schist, quartzite and graphitic schist of the Kuiseb formation **(Figure 4 & 5)**.

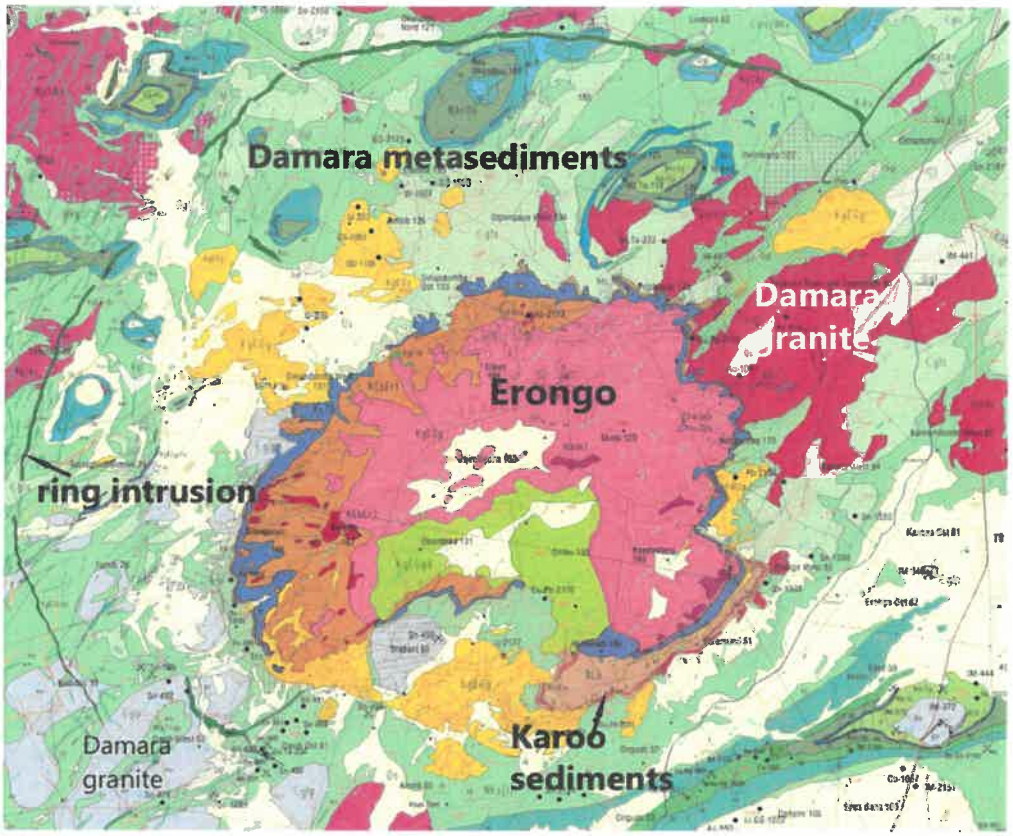


Figure 4: General geological insert map of Erongo Complex and surrounding hills and outcrops (Source: Geological Survey of Namibia) Accessed on: http://www.mme.gov.na/files/publications/c55_A4_Erongo_en.pdf.

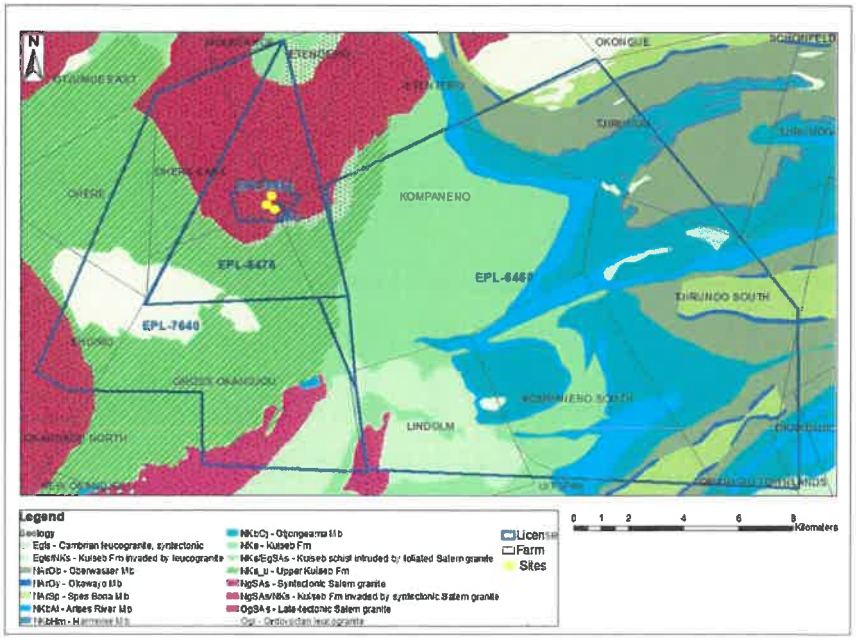


Figure 5: Localised geological map of EPL 5476 and surrounding farms 25 km west from the town of Omaruru.

7. Contexts of heritage in the Erongo region

According to Kinahan (2011), Erongo Region is a highly significant archaeological landscape in Namibia whose resources represent irreplaceable evidence of global importance **(Figure 6).** The region surrounding Erongo Mountains has been the focus of several archaeological research and surveys during the last decades (see Sherz 1959; Breuil 1960s; Clark *et al.* 2014; Pleaudeau 2012 and Nankela 2013; 2017; 2020). The wealth of other archaeological and historical data have been considerably recorded over the last decades, through various reconnaissance and detailed archaeological assessments conducted as a result of exploration and mining operations, and generally by the infrastructure-related development required by these operations. These archaeological records have helped to determine the local archaeological sequence and to establish the relationship between archaeological sites and in relations to their landscapes that characterize the area, including granite Mountains, hills, outcrops and the many dolerite ridges that crisscross the Erongo terrains.

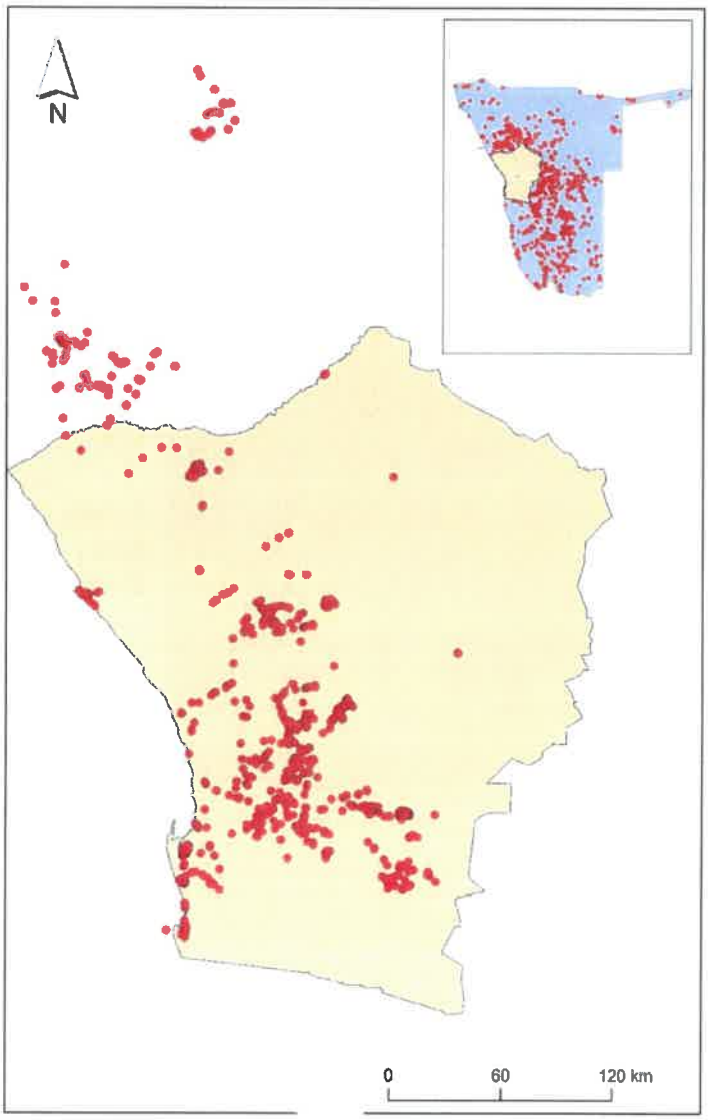


Figure 6: An edited map showing the distribution of archaeological sites (red dots) in Erongo Region, in relation to Namibia's distribution (insert). The data are produced from the Namib Desert Archaeological Survey (Source: Kinahan J, 2021:7).

Such data indicates that its archaeological chronology dates from the last 5000 years to 1000 years when significant changes in human settlement patterns and economic activities occurred in the immediate semi-desert hinterland. These are attributed to Hunter-Gatherers, Herder's economy and to some extent, Pastoralists. They include pieces of evidence are reflected in materials records such as surface scatters of stone tools, rock shelters with evidence of occupation, including of rock art, graves, stone features such as hunting blinds and huts, and more recent sites such as colonial battlefields, old road-works and historical mines (Kinahan 2012; Nankela *et al* 2021).

8. Localized Area

The area surrounding Farm Kompaneno is less explored archaeologically. The only existing data is from the joint monitoring assessment report of Nankela *et al.* (2021). However, such assessment was not detailed nor did it cover the entire outcrop but only concentrated on the reported known sensitive heritage sites **(see Fig. 1 and 5)**. The reported archaeological sites consisted of rock art sites, hunting blinds, a spear site and scatters of stone tools. These appear to be concentrated mainly on the top and western side of the granite outcrop.
Since an archaeological heritage resource is defined by its cultural setting, this shared granite outcrop can be classified as a cultural landscape whose significance is accurately defined (Nankela *et al.* 2021). Such significance is said to be linked to other granite outcrops recorded some time back in the vicinity of the current one (*rfc.* Nankela 2013).

A site visit was conducted, in June 2021 with the facilitation of the proponent and assistance of the proponent's associates. However, due to limited time allocated, the field assessment was only confined to the eastern portion of EPL 5476 at Farm Kompaneno 104. This is where the current mining activities are currently concentrated (**Figure 8**). Furthermore, archaeological sites reported by (Nankela *et al* 2021) were also confirmed (**Figure 7**).

Figure 7: Giraffe Rock painting within ML 148 Gross Okandjou side, some 500 to 1.5 kilometres from the boundaries with EPL 5476.

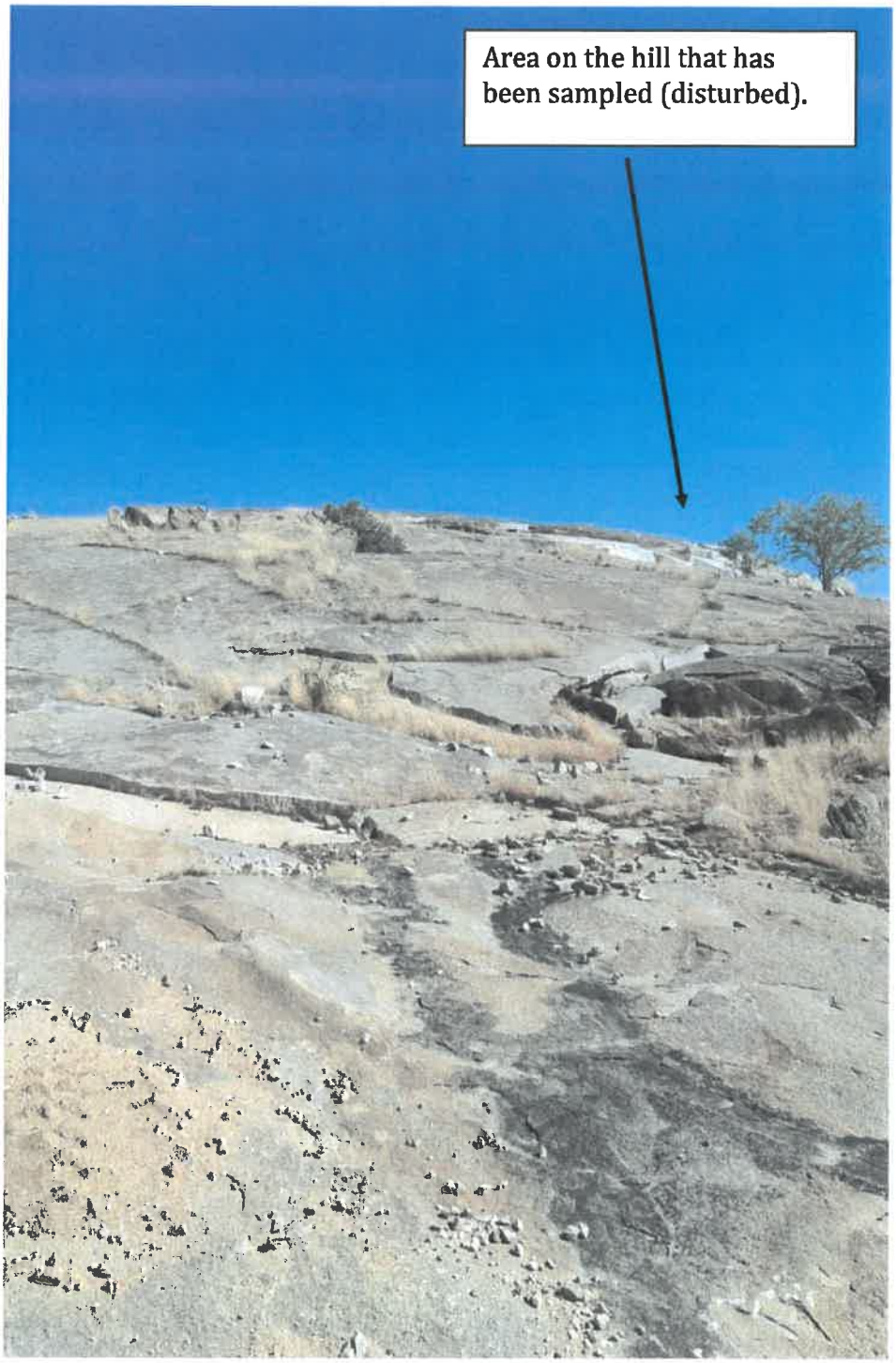


Figure 8: Locality of the portion of ML148 on the granite outcrop that has been excavated for bulk sampling.

9. Impact Assessment results

The fieldwork assessment results supplemented by a desktop research assessed in this report yielded no archaeological resources on the surveyed restricted area within the localised boundaries of the eastern portion of EPL 5476 at Farm Kompaneno 104. The entire EPL 5476 was not assessed since the proponent

indicated that only the current area is of mining interest on Farm Kompaneno 104. Therefore, the only known sensitive heritage resources are located between 500 meters to 1, 5 kilometres from the boundaries of EPL 5476 within ML148 see **(Figure 1 and 2)**.

Previous assessments carried out by Nankela *et al.* (2019) on Gross Okandjou farm indicated the presence of archaeological resources **(Figure 4 and Figure 8),** it was further reported that some proponents encroached into Farm Gross Okandjou there by damaging one of the archaeological resources there. It can thus be assumed that, as a consequence of this encroachment and subsequent damage to archaeological resources reported by Nankela *et al.(*2019), the farm owner of Gross Okandjou has suspended all mining exploration on the side of his farm. According to the proponents of EPL 5476 they have restricted all exploration activities to the eastern portion of EPL 5476 **(Figure 1 and 5).** As indicated the eastern portion of farm Kompaneno is approximately 500 to 1.5 kilometres from the archaeological resources at Gross Okandjou granite hill. The proponent indicated to the undersigned archaeologist that they will restrict exploration activities to farm Kompaneno 104. The physical assessment carried out by the undersigned relied on visual observation to identify archaeological artefact, such visual assessment yielded no archaeological resources on the eastern portion of EPL 5476 where the proponent indicated to the undersigned that exploration will be restricted. Furthermore the archaeologist interviewed the farm owner of Kompaneno 104, he indicated that there are no archaeological resources such as rock paintings, stone tools and shelters on his farm that he is aware of.

10. Management recommendations

The proponent is advised to implement the following management actions on the way forwards:

1. A detailed field survey within the EPL 5476 must be carried out in the entire EPL to establish if there are possible significant cultural and heritage features within and beyond the EPL in the near future, should they decide to expand the current exploration area.
2. If heritage resources occurs, a landscape approach of the project site must consider culture and heritage features in the overall planning of the project infrastructures management within and beyond the EPL boundaries;
3. The proponent is advised to make an application to the National Heritage Council for a Consent to allow field assessment of the area in relation to the proposed exploration activities in the future.
4. The proponent should engage an archaeologist to survey the area in advance before the issuing of Clearance for the explorations to proceed; and

5. If the Heritage Authority decides to issue the proponent with a Consent to proceed with mining activities on this "restricted area surveyed', we strongly advise the proponent to strictly adhere to and implement Chance Find procedures. As indicated in the result above, this study relied on surface-based visual observation, which means that there is a possibility that subsurface archaeological resources might be unearthed during the course of the explorations. According to the exploration method used by the proponent to sample granite blocks, include but is not limited to cutting granite rocks using a diamond saw blade. As such should any subsurface heritage resources be present the damage to archaeological resources will be extensive. Therefore the proponent is advised to implement the following management actions.

Chance Finds Procedure (CFP) management guideline:

For purposes of this EPL 5476 project, the client, onsite personnel and contractors should be made aware of the provisions of the National Heritage Act 2004; especially Section 55 (4). It sets out requirements that any heritage objects or human remains discovered in the course of explorations and related work should be reported to the contracted Archaeologist and thereafter, National Heritage Council as soon as possible. The following standardized archaeological "Chance Find Procedure" should be adopted and implemented throughout the explorations period. All onsite personnel and contractors must be sensitized to recognize "chance finds heritage" in the course of their work. The procedure set out here covers the reporting and management of such finds. The CFP covers the actions to be taken from the discovery of a heritage site or object to its investigation and assessment by a trained archaeologist. The CFP is intended to ensure compliance with the relevant provisions of the National Heritage Act (27 of 2004).

Responsibilities:

Operator To exercise due caution if archaeological remains are found
Foreman To secure site and advise management timeously
Superintendent To determine safe working boundary and request inspection
Archaeologist To inspect, identify, advice management, and recovers remain

A. Procedure:

Action by the person (operator) identifying archaeological or heritage material

- If operating machinery or equipment: **stop work;**
- Identify the site with flag tape;
- Determine GPS position if possible;
- Report findings to Foreman.

B. Action by Foreman:

- Report findings, site location and actions are taken to the

superintendent;
- Cease any works in the immediate vicinity.

C. Action by Superintendent:
- Visit the site and determine whether work can proceed without damage to findings;
- Determine and mark the exclusion boundary;
- Site location and details to be added to the Archaeological Heritage database system.

D. Action by Archaeologist
- Inspect site and confirm the addition to AH database system;
- Advise National Heritage Council and request a permit to remove findings;
- Recovery, packaging and labeling of findings for transfer to the National Museum.

E. In the event of discovering human remains:
- Actions as above;
- Field inspection by archaeologist to confirm that remains are human;
- Advise and liaise with NHC Guidelines; and
- Recovery of remains and removal to the National Museum or the National Forensic Laboratory, or as directed.

11. Conclusion

This archaeological assessment relied on a detailed desktop study that was supplemented by restricted field assessment. The results have been presented, the intended and envisaged area for exploration by the undersigned proponent is indicated on the maps. It is now up to the Heritage Authority to decide on the issuance of the Consent to allow the proponent to proceed with exploration based on the result presented in this report. However, given the sensitivity of the shared granite outcrop, it would be scientifically sound for all current proponents sharing the hill to conduct a systematic detailed investigation of the areas so that its heritage significance is well established.

Eliot S Mowa, (Archaeologist)
Member: Association of Southern African Professional Archaeologists (ASAPA)

9. References

1. Breuil Henri (1969). Anibib & Omandumba and Other Erongo Sites: Calouste Gulbenkian Foundation.

2. Clark Desmond & Wlaton James (2014). A Late Stone Age Site in the Erongo Mountains South West Africa; Proceedings of the Prehistoric Society 20:1-16.

3. Haughton, BA; Frommurze, SE; Gevers, M.A; Schwellnus, B and Rossouw,M (1939). The geology and mineral deposit of the Omaruru Area, South West Africa, Department of Mines, Union of South Africa: Pretoria.

4. Kinahan, J. (2011). From the beginning: the archaeological evidence. In Wallace, M. and Kinahan, J. A history of Namibia: from the beginning to 1990. London: Hurst & Co., pp 15-44.

5. Kinahan, John. (2012). Archaeological Guidelines for Exploration & Mining in the Namib Desert, the Namibia Archaeological Trust.

6. Kinahan John. 2021. Archaeological assessment of proposed mining license claims 71609-71617 located on farms Sukses and Hakskeen, and an area of interest located on farm Trekopje within EPL 5161, Erongo region, Namibia

7. Nankela, A; Simon J and Moongela (2021). Joint archaeological monitoring assessment report for Gross Okandjou and Otjohorongo Granite Hill. Unpublished *community repor*t by the National Heritage Council, the Ministry of Mines and Energy and the National Museum of Namibia.

8. Nankela, A. 2017. Rock art and landscape: An empirical analysis in the content, context and distribution of the rock art sites in Omandumba Farms - Erongo Mountains, Namibia. PhD Dissertation, Universidade de Trás-Os-Montes e Alto Douro: Vila Real.

9. Pleurdeau David; Emma Imalwa, Florent Détroit; Joséphine Lesur, Anzel Veldman, Jean-Jacques Bahain and Eugène Marai (2012); Of Sheep and Men": Earliest Direct Evidence of Caprine Domestication in Southern Africa at Leopard Cave (Erongo, Namibia).

10. National Heritage Act 27 of 2004.2004. Government Gazzete, Republic of Namibia.