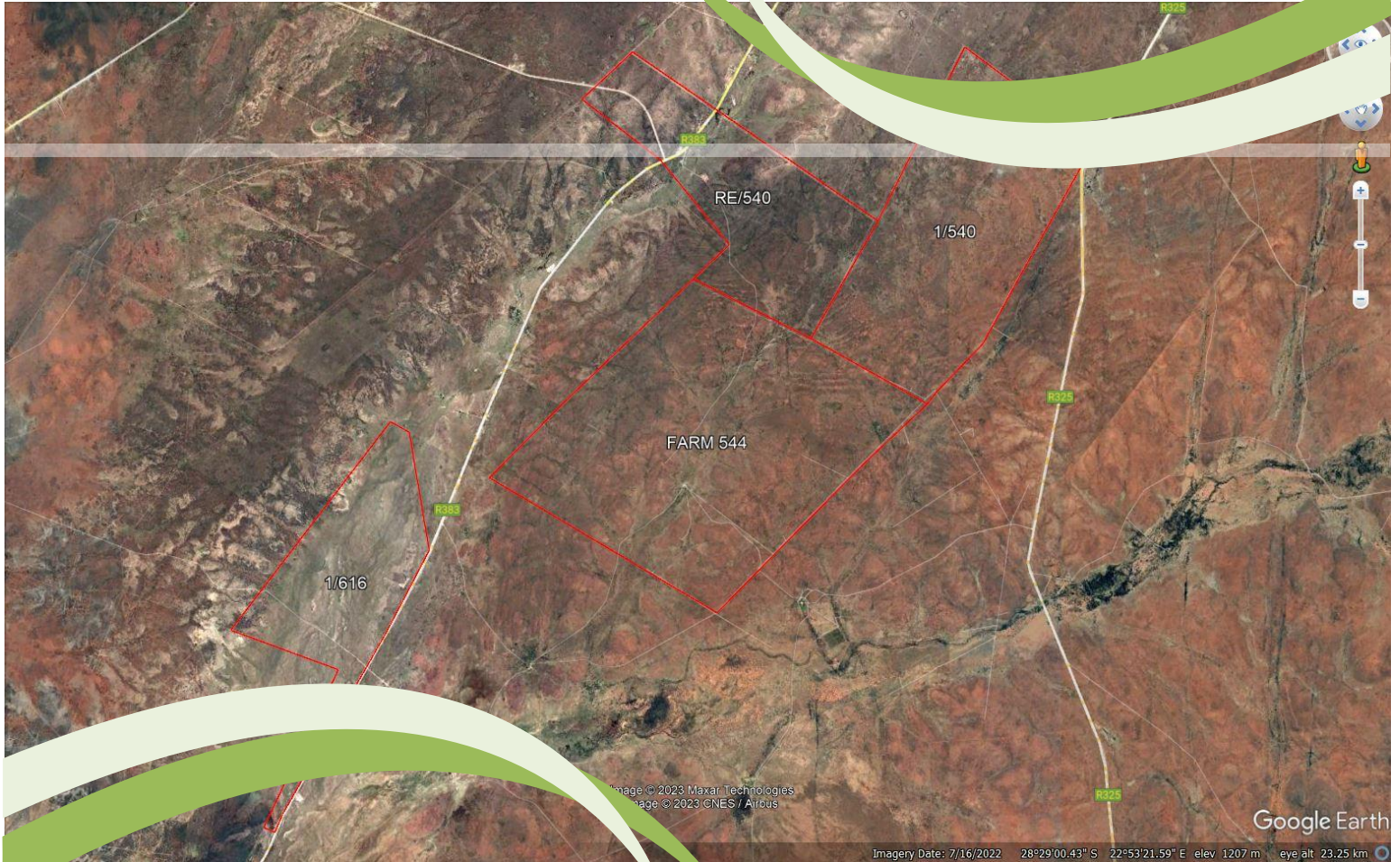


# BACKGROUND INFORMATION DOCUMENT

## XHARIEP PLANT AND MINING (PTY) LTD



Prospecting Right application over:

Remaining Extent and Portion 1 of Consolidated Farm Kappies Kareeboom 540, Remaining Extent of the Farm 544 and Portion 1 of the Farm 616, Hay District, Northern Cape Province

Prepared by:



May 2023

## BACKGROUND

M and S Consulting (Pty) Ltd (“M&S”) as an independent company of consultants has been appointed by Khariiep Plant and Mining (Pty) Ltd (“Khariiep”) to conduct the Prospecting Right application process in terms of the Mineral and Petroleum Resources Development Act, 2002 (No. 28 of 2002) as amended (“MPDRA”) and in terms of the National Environmental Management Act, 1998 (No. 107 of 1998) as amended (“NEMA”) on Khariiep’s behalf.

Khariiep intends to prospect for Iron Ore and Manganese Ore over the Remaining Extent of Consolidated Farm Kappies Kareeboom 540, Portion 1 of Consolidated Farm Kappies Kareeboom 540, Remaining Extent of the Farm 544 and Portion 1 of the Farm 616, situated in the Hay District, Northern Cape Province (“PR Area”).

The application for the Prospecting Right has been accepted by the Department of Mineral Resources and Energy (“DMRE”) on the 12<sup>th</sup> of May 2023 under application reference number (NC) 30/5/1/1/2/13478 PR.

## LOCALITY

The PR Area is situated approximately 12km south-west of the town of Postmasburg in the Northern Cape Province.

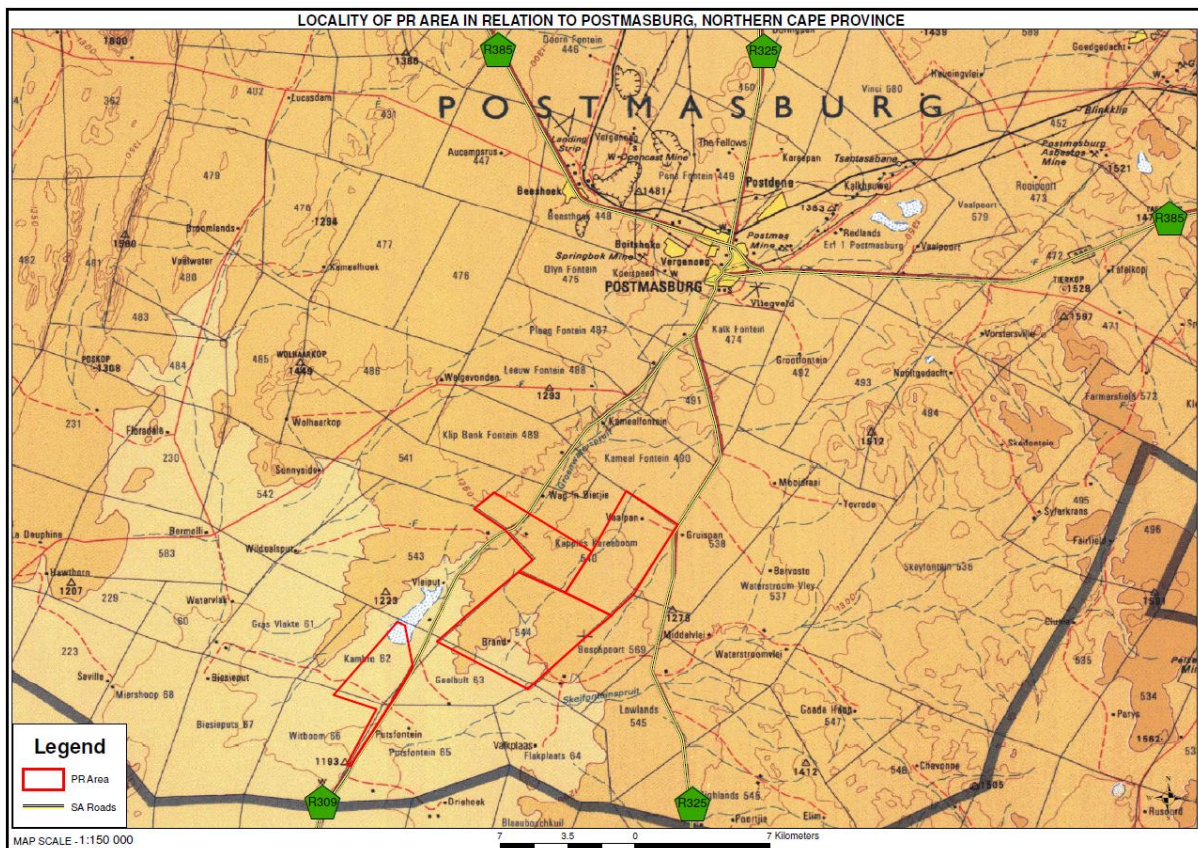


Figure 1 – Locality Map

PROPOSED ACTIVITY

Khariep’s prospecting activities are planned to be conducted in phases over a period of five years.

Phase	Activity  (what are the activities that are planned to achieve optimal prospecting)	Skill(s) required  (refers to the competent personnel that will be employed to achieve the required results)	Timeframe  (in months) for the activity)	Outcome  (What is the expected deliverable, e.g. Geological report, analytical results, feasibility study, etc.)	Timeframe for outcome  (deadline for the expected outcome to be delivered)	What technical expert will sign off on the outcome?  (e.g. geologist, mining engineer, surveyor, economist, etc)
1	<b>Non-invasive Prospecting</b> Reconnaissance visit	Geologist	Month 1	Memorandum to address any problems	Month 2	Geologist
2	<b>Non-invasive Prospecting</b> Review of historical activities; Desktop study; and Geological Mapping	Geologist	Month 2 - 12	Map & Report	Month 13	Geologist
3	<b>Invasive Prospecting</b> Phase 1 Percussion drilling	Geologist & Drilling contractor	Month 13 - 24	Drill logs	Month 24	Geologist
4	<b>Non-invasive Prospecting</b> Analysis of drill samples	Laboratory	Month 13 – 24 (Concurrent with drilling)	<ul style="list-style-type: none"> <li>• Analyses sheets</li> <li>• Laboratory report</li> <li>• Map</li> <li>• Report</li> </ul>	Month 24	Laboratory & Geologist
5	<b>Invasive Prospecting</b> Phase 2 Percussion drilling	Geologist & Drilling contractor	Month 25 – 36	Drill logs	Month 36	Geologist
6	<b>Non-invasive Prospecting</b> Analysis of drill samples	Laboratory	Month 25 – 36 (Concurrent with drilling)	<ul style="list-style-type: none"> <li>• Analyses sheets</li> <li>• Laboratory report</li> <li>• Map</li> <li>• Report</li> </ul>	Month 36	Laboratory & Geologist
7	<b>Invasive Prospecting</b> Phase 3 Percussion drilling	Geologist & Drilling contractor	Month 37 - 48	Drill logs	Month 48	Geologist
8	<b>Non-invasive Prospecting</b> Analysis of drill samples	Laboratory	Month 37 - 48 (Concurrent with drilling)	<ul style="list-style-type: none"> <li>• Analyses sheets</li> <li>• Laboratory report</li> <li>• Map</li> <li>• Report</li> </ul>	Month 48	Laboratory & Geologist
9	<b>Non-invasive Prospecting</b> Consolidation and interpretation of results / data	Geologist	Month 49 - 60	Feasibility Report	Month 60	Geologist & CEO

(i) **DESCRIPTION OF PLANNED NON-INVASIVE ACTIVITIES:**

(These activities do not disturb the land where prospecting will take place.)

**Phase 1:**

A site investigation of the application area will be undertaken to identify infrastructure and determine any potential problems that may need to be addressed.

**Phase 2:**

In order to direct the exploration programme in an efficient manner, there will be a review of all available information and data. A desktop study will be undertaken of the metal potential of the area.

Any anomalous features identified will be mapped in detail. The various rock types and their contacts will also be mapped.

**Phases 4, 6 and 8:**

Drill samples will be collected in one-meter intervals and logging will be done by a qualified geologist who will record the lithology, mineralogy, degree of

mineralization and structural features. Mineralized samples will be analyzed at an internationally recognized (ISO certified) laboratory.

**(ii) DESCRIPTION OF PLANNED INVASIVE ACTIVITIES:**

(These activities result in land disturbances.)

**Phases 3, 5 and 7: Percussion drilling**

Percussion drilling will be used to identify the position of a suspected base metal deposit. The position of the boreholes is dependent on the results of the review of historical activities, geological mapping, desktop study and reconnaissance visit.

Thirty boreholes, approximately 50m deep each (can be more or less depending on results), are planned. The collar position of all boreholes will be surveyed. All drilling will be short term and undertaken by a contractor using truck-mounted equipment.

Angled percussion holes are planned to locate and intersect the mineralization. A traverse line or grid drilling is used to identify and define the extent of any mineralization. The sizes of the boreholes drilled will be determined by such factors as cost, proposed sampling, availability of drilling machines and the volume of sample required, among others.

Each drill site will be rehabilitated. The boreholes will be filled with drill chips and covered with topsoil.

**(iii) DESCRIPTION OF PRE-/FEASIBILITY STUDIES**

**Phase 9:**

All the drill sampling data will then be modeled to obtain a final interpretation of the potential of the deposit. A detailed feasibility report will be compiled after drilling operations have been completed to evaluate the economic viability of the project.

## SITE DESCRIPTION

A temporary site shall be established at each drilling site consisting of the following:

- Drill rig.
- Water tank for domestic use.
- Chemical toilets.

Each drilling site shall be rehabilitated before a new drilling site is established.

Xhariep shall make use of offices in the city of Kimberley for its administrative needs and contractors shall reside off-site in a nearby town (i.e. Postmasburg) during the invasive prospecting phases.

## PUBLIC PARTICIPATION PROCESS

The purpose of this document is to inform the surface owners, surrounding surface owners and other interested and/or affected parties of the proposed prospecting activities planned to be undertaken by Xhariep and to ensure that the rights and needs of all parties are taken into account.

Registering as an Interested and/or Affected Party ("IAP") will ensure that you are placed on a database of persons to be informed of any progress regarding the proposed activity. Copies of all relevant documentation will be made available to registered IAPs.

Attached to the Notification Letter find a Response Form for completion and comment by IAPs. Please complete this form and direct any comments, concerns or queries to:

M and S Consulting (Pty) Ltd  
Ms. T. Jooste  
P.O. Box 2473  
Kimberley  
8300  
Tel: 053 861 1765  
Fax: 086 636 0731  
E-Mail: [ms.consulting@vodamail.co.za](mailto:ms.consulting@vodamail.co.za)

## BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

The purpose of the Basic Assessment Report and Environmental Management Programme Report ("BAR/EMPr") is to detail findings from a desktop analysis of the receiving environment that may be affected by the proposed prospecting activities.

The report gives an overview of the anticipated impacts expected from the prospecting operations and whether feasible alternatives and/or mitigations could be implemented to minimize such impacts to acceptable standards.

The analysis of the receiving environment before any invasive prospecting activities takes place shall provide a baseline against which impacts will be measured. The receiving environment shall be determined as follows:

- Desktop analysis.
- Information obtained through the public participation process.
- Site visit to the properties.

The BAR/EMPr is available to all registered IAPs, upon written request thereof, for perusal and comment before submission thereof to the DMRE.

## PROJECT TEAM

**Applicant:**

Xhariep Plant and Mining (Pty) Ltd

Mr. T. Ruiters

P.O. Box 1776

Kimberley

8300

Cell: 083 516 1231

E-Mail: tyron.ruiters@gmail.com

**Environmental Assessment Practitioner:**

M and S Consulting (Pty) Ltd

Ms. T. Jooste

P.O. Box 2473

Kimberley

8300

Tel: 053 861 1765

E-Mail: ms.consulting@vodamail.co.za

## WAY FORWARD

A Meeting will be scheduled with the surface owners to discuss the proposed prospecting activities and potential impact on the properties. Other Interested and Affected Parties wishing to comment on the proposed activity or requesting a one-on-one meeting are requested to register as an IAP and to forward their written comments (with reasons) to M and S Consulting (Pty) Ltd.

A copy of the BAR/EMPr is available to all registered interested and/or affected parties, upon written request thereof, for perusal and comment before submission thereof to the DMRE.

All comments received will be incorporated into the BAR/EMPr. The BAR/EMPr will then be submitted to the DMRE for their review and comments. The public participation process will continue throughout the application process.