



MERAFE
R E S O U R C E S
L I M I T E D



**APPENDIX 1 Mineral Resources and Mineral Reserves
Statement 31 December 2023**

MINERAL RESOURCES AND MINERAL RESERVES STATEMENT

INTRODUCTION

The purpose of this report is to document the Mineral Resources and Mineral Reserves of Merafe Resources Limited (Merafe) which is done in accordance with the requirements of The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (The SAMREC Code) 2016 Edition and where applicable the relevant provisions of Section 12 of the JSE Listings Requirements and The SAMREC Code and parts of Table 1 requirements. Merafe's operations are part of a pooling and sharing venture (PSV) with Glencore Operations South Africa (Pty) Ltd (hereafter called the Venture). Merafe has a 20.5% participation interest in the Mineral Resources and Mineral Reserves of the Venture. The estimates in this document are as at the 31st December 2023 and reported on a total basis with the attributable beneficial interest percentage disclosed below. The mined-out limits have been surveyed as at the 30th June 2023. To arrive at a Mineral Resources and Mineral Reserves estimate for 31st December 2023, the re-adjusted production for July 2023 to December 2023 has been deducted from the total estimates. The Mineral Resources and Mineral Reserves information in the tables on the following pages is based on information compiled by Competent Persons (as defined by The SAMREC Code). The references in the side column refers to the applicable paragraph of the JSE Listings Requirements, Section 12 (Mineral Companies).

12.13 (i)(2)

12.13 (i)(3)

12.13(i)(4)

STATEMENT BY COMPETENT PERSON

The Mineral Resources and Mineral Reserves statement has been reviewed and the relevant data extracted and compiled by Sulayman Yousuf Vaid (SYV). SYV is the Lead Competent Person, registered with the South African Geomatics Council (SAGC, P.O Box 752799, Garden View, 2047), Reg. No. -GT gMS 0114 and holds a National Diploma in Mine Surveying. SYV is a Mine Surveyor with 30 years' experience in Mine Survey, Mine planning and resource and reserve estimations and is directly linked to the mining industry and currently a full-time employee of Glencore Operations South- Africa. The Company declares that it has written confirmation from the Lead Competent Person that the information disclosed in terms of these paragraphs compliant with The SAMREC Code and, where applicable, the relevant Section 12 and Table 1 requirements and that it may be published in the form and context in which it was intended.

12.13 (i)(5)

12.13 (i)(6)

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DEFINITIONS

The following definitions have been applied in estimation and categorisation of the Mineral Resources and Mineral Reserves disclosed within this document.

A **'Mineral Resource'** is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

An **Inferred Mineral Resource** is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An **Indicated Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

A **Measured Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Mineral Reserve or to a Probable Mineral Reserve.

A **Mineral Reserve** is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

A **Probable Mineral Reserve** is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proved Mineral Reserve.

A **Proved Mineral Reserve** is the economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the Modifying Factors.

BRIEF DESCRIPTION OF EXPLORATION ACTIVITIES

The Venture's exploration activities aim to increase geological knowledge and confidence in its Mineral Resource base and to comply with legislative requirements. Exploration is done on two fronts; exploration drilling ahead of operations in current mining areas to support the mining activities, and secondly project areas are explored to define and quantify new resources.

12.13 (iii)(1)

Exploration is carried out on an annual basis, primarily through the drilling of vertical exploration drillholes. Geophysical surveys (mainly airborne magnetic surveys) have been conducted on all major operating mines and projects. The bulk of the exploration drillholes are drilled, as far as possible, on a pre-determined grid whilst further drillholes are drilled to target geological anomalies and to provide geological and geotechnical information to support effective mine planning.

A total of 21 diamond core drillholes were drilled in FY2023 with a total meterage of 8 019m and at a cost of R10.709m. Assay expenditure amounted to R0.154m. The exploration drilling is outsourced to a third party and all assay work is done by a SANAS accredited 3rd party laboratory. Of all the holes drilled no inconsistency was found when compared to the block model and no new geological disturbances or areas of concern were identified.

12.13 (iii)(1)

12.13 (iii)(1) and (9)

No feasibility studies were conducted during the reporting period on any of the Venture's mines or projects.

GEOLOGICAL SETTING AND GEOLOGICAL MODEL

The Venture's chrome ore-bodies occur in the Bushveld Complex and its silica deposit occurs in the Magaliesberg Formation of the Transvaal Super Group (Figure 1). Both these geological occurrences are found in South Africa. Chrome ore is mined from both underground (mostly) and opencast workings, whilst silica is mined opencast only. The Venture's operations are indicated below.

12.13 (iii)(2)

12.13 (iii)(12)

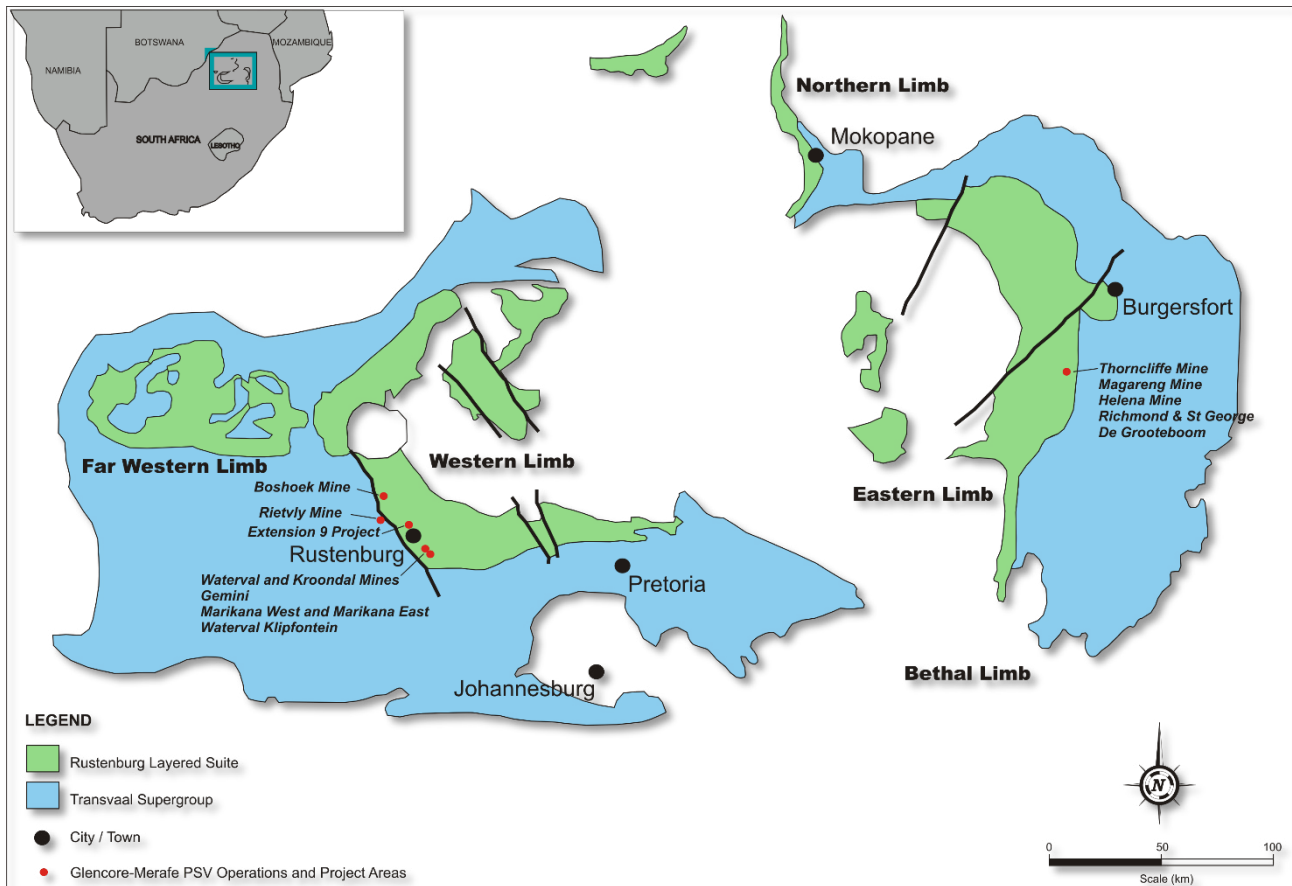


Figure 1: Location of the Venture's Operations

The Bushveld Complex

The 2 billion year old Bushveld Complex ("the Complex") is the world's largest known layered igneous intrusion and covers an area of 65 000km². The Complex is host to the majority of the world's PGM, chromite and vanadium resources.

The Complex is divided into five compartments; the western limb, the eastern limb, the northern limb, the far western limb and the Bethal limb (Figure 1). Merafe has operations on the Eastern - and Western Limbs of the complex. The Bushveld Complex is divided vertically into four suites of rocks; the Rooiberg Group, the Rustenburg Layered Suite, the Rashoop Granophyre Suite and the Lebowa Granite Suite. The mafic Rustenburg Layered Suite hosts the chromite deposits of the complex in the highly continuous chromitite layers of the Critical Zone. The complex reaches a vertical thickness of up to 9 000m. The Critical Zone contains 14 individually recognisable chromitite layers with varying thicknesses and grades.

The primary chromitite layers targeted for chromite extraction are the LG6A and LG6 Chromitite Layers, usually mined as a package, and the MG1 Chromitite Layer. The LG6 Package consists of the lower LG6 Chromitite Layer, which is separated from the LG6A Chromitite Layer by a pyroxenite (waste) middling. The

MG1/2 Chromitite Layers consists of a single chromitite layer, with occasional discontinuous internal waste lenses.

The lithological units comprising the chromitite layers are modelled separately in terms of tonnage and grades for the purposes of mine planning and resource and reserve estimation.

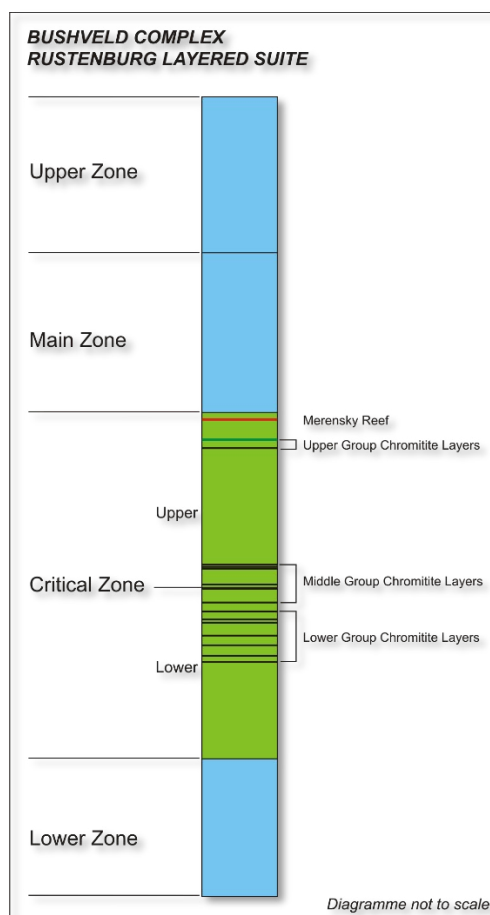


Figure 2: Schematic stratigraphy of the Rustenburg Layered Suite with special reference to the chromitite layers.

Magaliesberg Formation

The Magaliesberg Formation is made up of a package of individual layers of shale, quartzite and hornfels, which form a sub-formation of the Pretoria Group of the Transvaal Supergroup. The quartzite layers of the formation were formed by the deposition of sandstone sediments into the Transvaal Basin around 2.2 billion years ago. The Magaliesberg Formation is a massive sequence of quartzite and minor hornfels lithologies reaching a few hundred meters in thickness. The predominantly quartzite rocks form a prominent topographical ridge (mountain range) around the rim of the Bushveld Complex.

The Rietvly deposit is situated just to the west of Rustenburg town. The ore-body strikes north-south and dip towards the east at dip angles varying between 32° and 62°. Jointing throughout the formation is prominent. The quartzite is very pure, with an average SiO₂ content of over 90%. There are no indications on surface of major geological disturbances. The Rustenburg Fault is developed to the southeast of the mine (just off the mine property).

TYPE OF MINING AND MINING ACTIVITIES

12.13 (iii)(3)

The Venture has chrome mining operations along the Western - and Eastern Limbs of the Bushveld Complex. The operations along the Western Limb of the Bushveld Complex comprise the Waterval - and Kroondal Mines. Kroondal started in the early 80's with production and Waterval started off as a merger of the Purity and Cashan Mines in 1989 with the addition of Waterval West area. The Waterval Mine has been placed on care and maintenance during 2020. The LG6 Package is mined at Kroondal Mine employing a trackless mining method on a Bord-and-Pillar lay-out. Kroondal is targeting a production rate of 146ktpm.

Boshoek Mine is 20km north-west of Rustenburg. The MG1, LG5 and LG6 Chromitite Layers have been mined in several open pits. The opencastable ore has almost been depleted and the mine has been put on care and maintenance.

Townlands Extension 9 is an exploration project. A Retention Permit has been applied for in November 2017. The DMRE accepted the application and the Venture is awaiting the granting and execution of the retention application. No exploration costs have to be expanded on the project from the date of execution of the application for the subsequent 3 years. Pending the outcome of the application no 3rd party may legally apply for a Prospecting Right over this property.

Thorncliffe -, Magareng - and Helena Mines are situated along the southern portion of the Eastern Limb of the Bushveld Complex. The MG1 plus MG2 Chromitite Layer is being mined underground using trackless mining methods on a Bord-and-Pillar mining lay-out. Thorncliffe Mine started mining in March 1997, building up to a steady state production of 116ktpm ROM (current 3-year budget). Helena Mine started producing in November 2008 and Magareng in October 2010. Both Magareng and Helena Mines are currently producing at a steady state of ~114ktpm of ROM (current 3-year budget). Thorncliffe, Magareng and Helena Mines are situated within the same Mining Right area but are situated on different farm properties. St George and Richmond farm areas are now part of the Eastern Chrome Mines Mining Rights area. The Mineral Resources and Mineral Reserves for the Eastern Mines Complex are reported per farm area.

The Venture's silica deposit lies 15km west of Rustenburg. Rietvly Silica is an opencast mine that started mining in 1979. The quartzite is mined mainly to supply the Venture's furnaces with silica. The budget production rate is 39.45ktpm.

ORE PRODUCTION

The Venture has mined 5.552Mt ROM ore from 1st January 2023 to 31 December 2023 against a budget of 5.849Mt. The main ROM production losses for 2023 were due to conveyor breakdowns, geological conditions, key labor resignations. ROM production for the 2022 financial year was 5.638Mt.

12.13 (iii)(4)

Saleable chrome concentrate amounted to 3.403Mt against a budget of 3.735Mt. This lower than budget figure is directly linked to the lower than budget ROM production.

The estimates in this statement reflect the Mineral Resources and Mineral Reserves as at the 31st December 2023.

LEGAL ENTITLEMENT

The Venture has the legal entitlement to the minerals being reported on and there are no legal proceedings or other material conditions that may impact on the Venture's ability to continue mining.

12.13 (iii)(5)

Certain Section 102 and Section 11 applications under the MPRDA (Minerals and Petroleum Resources Development Act) remain in the ordinary administrative process, and the Venture has little reason to believe these will not be granted in due course.

12.13 (iii)(10)

No material risks are known which can negatively impact the Mineral Resources and Mineral Reserves Statement.

DESCRIPTION OF THE METHOD AND ASSUMPTIONS MADE TO ESTIMATE MINERAL RESOURCES AND MINERAL RESERVES

Chrome

Raw geological data is validated through various steps and routines before finally being compiled into a final corporate network based database. The database data is statistically and geostatistically analysed to determine the inherent characteristics and variability of the data. The ore-body characteristics that are analysed are the distribution and variability of the thickness and SG's of the various chromitite layers as well as all the critical grade elements (Cr_2O_3 , FeO total and SiO_2). The results of the geostatistical analysis are used as input parameters for the creation of grade and thickness block models covering the entire mining or project areas. The block models form the basis from which the tonnage and grades are reported for the various Mineral Resources and Mineral Reserves blocks and categories.

12.13 (iii)(7)

The Mineral Resource categories are based on the data point density as well as the structural geology. A data point density of approximately 200m x 200m and less is used for the classification of Measured Mineral Resources. For Indicated Mineral Resources a density of between 200m and 400m is used. Inferred Mineral Resources is classified where the sample point density is wider than 400m x 400m, but within 800m from existing drillhole intersections. Geologically complex areas where high variability is anticipated, are downgraded to reflect the confidence in the geoscientific knowledge and certainty. In certain cases the mining extraction and geological loss rates are increased to reflect the anticipated mining and geological complexities. The geostatistical analysis of the exploration data in all the mines and projects have indicated semi-variogramme ranges varying from 250m to 2 000m for the various reef parameters. Geological structural characteristics are used in addition to support the drilling density. Geologically complex areas are drilled at denser drill spacing's. Other factors that are taken into consideration are regional geology and the proximity of other operating or work-out mines and projects. All the non-mineralised areas, and areas that may not be mined for various legislative or other reasons are excluded from the Mineral Resources, e.g. boundary pillars, crown pillars, large potholes, transgressive geological bodies, fault zones, etc.

The Mineral Reserves are estimated by applying modifying factors to convert the Indicated Mineral Resources to Probable Mineral Reserves and the Measured Mineral Resources to Proved Mineral Reserves. The following modifying factors are used; - an estimated geological loss factor (determined by losses in historically mined-out areas and projected forward), the predetermined mining extraction rate as supplied by the Rock Engineering practitioners, ore losses and ore contamination resulting from mining over break. All Modifying factors are reviewed annually and are adjusted if required.

The Mineral Reserve areas are restricted to the 5-year detailed mine plan footprint, except in some instances of Thorncliffe and Kroondal mining areas. In these cases portions of the Mineral Reserves fall outside the 5 year mining footprint.

The Mineral Resources and Mineral Reserves are reported per Mining Right and/or farm boundary areas and not necessarily per mine as some of the mines straddle more than one Mining Right.

Silica

The silica Mineral Resources are estimated by modelling the quartzite hill that is being mined. The volume of the quartzite hill is determined from the 1340m level (amsl) to the topographical surface as at the end of June every year. During 2023 the mined surface was surveyed on the 30th June 2023. The remaining topographical surface is reconstructed every year by removing the mining depletion. The remaining volume represents the remaining in-situ quartzite resources.

The quartzite is exposed by the opencast mine workings as well as along the original slopes of the hill. The exploration core drillholes, the beneficiation process, the quartzite exposed along the slopes of the hill as well as rock exposures due to mining activities have been used as criteria for classifying the deposit as an Indicated Mineral Resource. The Mineral Reserves have been declared for an opencast mining period of 5 years.

COMPARISON OF MINERAL RESOURCES AND MINERAL RESERVES ESTIMATES WITH THE PREVIOUS YEAR'S ESTIMATES

12.13 (iii)(8)

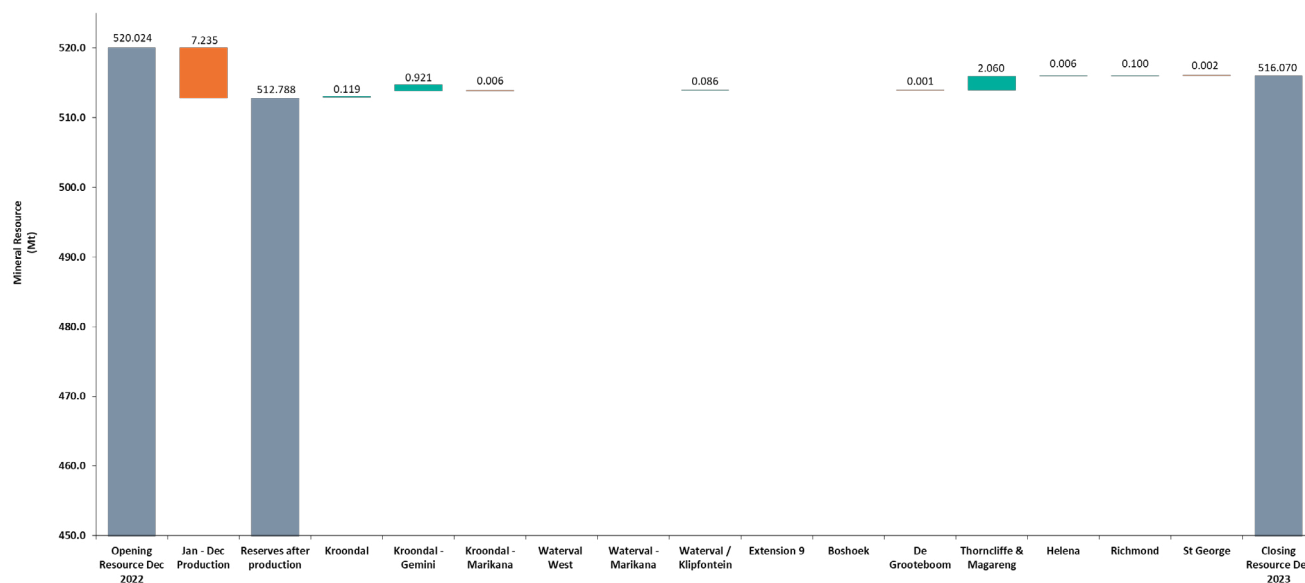
The annual Mineral Resources and Mineral Reserves estimates are compared with the previous year's statement and reconciled each year after the estimates have been finalised. Changes in the year-on-year tonnage and grade estimates are mainly due to mining depletion and changes in the Mineral Resources and Mineral Reserves tonnages and grades due to additional geological information. In addition, disposed or lapsed rights will also impact total resources and reserves.

Mineral Resource Reconciliation

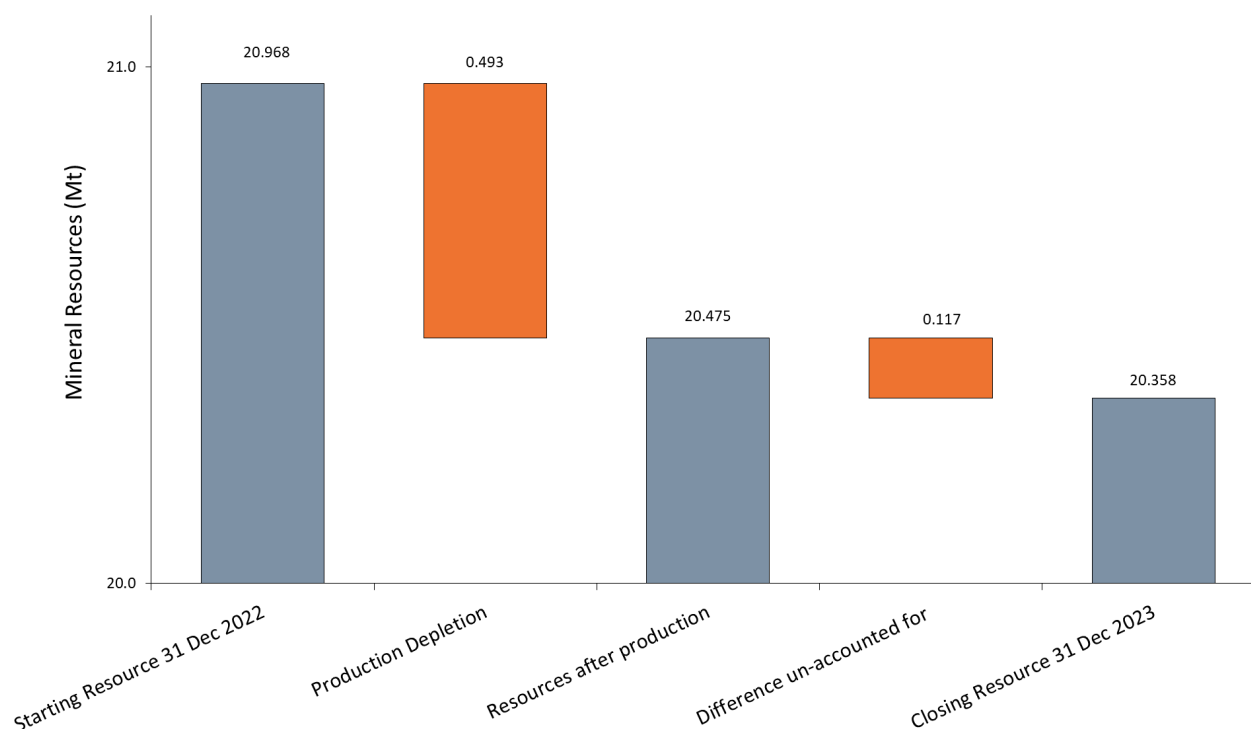
The biggest impact to the year-on-year changes in the Mineral Resources tonnages for the Venture is mainly due to mining depletion of 7.235Mt. There is a gain of 2.060 Mt at Thorncliffe and Magareng mainly due to the addition of pillars and a gain at Kroondal Gemini of 0.921 Mt due to the addition of pillars.

The net movement after mining depletion is a gain of 3.282Mt.

The graphs below indicate the year-on-year net Mineral Resource movements.



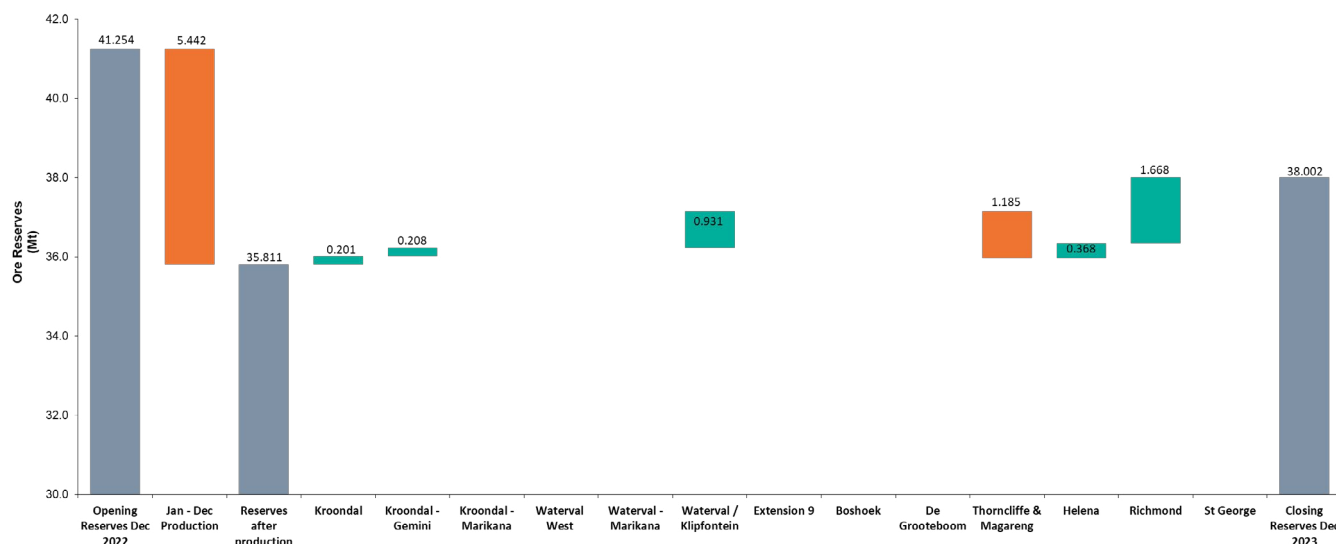
There is no material difference in the silica Mineral Resource estimate from December 2022 to December 2023 and the change is mostly attributed to mining depletion. The graph below shows the year-on-year Mineral Resource movement of Rietvly Silica.



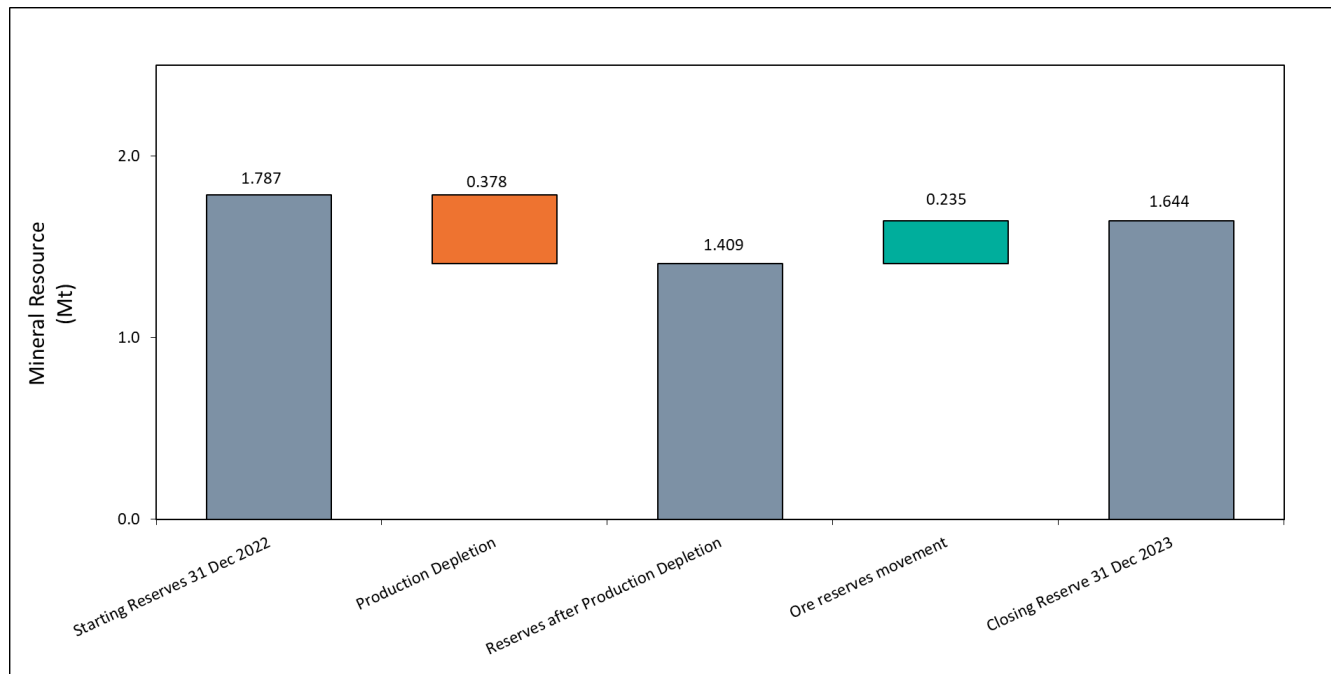
Mineral Reserve Reconciliation

The most significant changes in the year-on-year estimation of the Mineral Reserves is due to the mining depletion of 5.442Mt of ROM. The net change excluding mining depletion is an increase of 2.191Mt. There is a gain at Klipfontein and Richmond mainly due to a change in the 5 year mining plan.

The graphs below indicate the year-on-year Mineral Reserve movements.



The change in the Mineral Reserves for Rietvly is mainly as a result of mining depletion. The graph below shows the year-on-year Mineral Reserve movement for the Rietvly Silica operation. There is a gain of 0.235Mt due to change in the 5-year plan.



AUDITING

An internal audit was conducted on the 2023 resource and reserves estimation process during November 2023. A few minor issues were identified. All these findings have been addressed and corrected for the final estimation report. The internal audit focused mainly on the calculations of the estimation process.

T7.1

STATEMENT REGARDING INFERRED MINERAL RESOURCES AND FEASIBILITY STUDIES

No feasibility studies were conducted during the reporting period on any of the mines or projects and hence no Inferred Mineral Resources have been included in any feasibility studies.

12.13 (iii)(1)

No Inferred Mineral Resources have been modified to Mineral Reserves for the stated final Mineral Reserves. The 30-year Life of Mine (LOM) plans which is used internally for financial purposes include Inferred Mineral Resources.

12.13 (iii)(9)

MATERIAL RISK FACTORS

There are no foreseen material risk factors that could affect the validity of the current Mineral Resources and Mineral Reserves statement. All the legislative requirements have been met with respect to the rights to mining and prospecting for which the Mineral Resources and Mineral Reserves have been reported. All the operating mines are mining under new order, executed, Mining Rights. The Prospecting Rights of all the prospecting areas have been converted to new order Prospecting Rights.

12.13 (iii)(10)

SUMMARY OF ENVIRONMENTAL FUNDING AND MANAGEMENT

All Venture operations have developed and implemented their own environmental management programs (EMP), and systems which are fully aligned with ISO 14001 and the ICMM principles of sustainable development.

12.13 (iii)(13)

Baseline environmental, biodiversity and landscape function studies are conducted at the feasibility or exploration phase of projects and environmental risk assessments associated with impacts on environment, biodiversity and landscape functions are undertaken for new operations or major changes to existing operations. Information from these studies is used, in consultation with the affected parties and concerned external stakeholders, for the development and implementation of environmental, biodiversity and landscape function management systems and programmes.

All operations report in a centralised database on all the Global Reporting Index (GRI4) requirements, which include energy consumption, water, waste, soil and air emissions. Various audits are conducted across the operations. These range from internal audits to third party external audits which includes legal compliance. The Venture also makes use of specialist reports where necessary.

The Venture sets targets and effectively measures environmental performance against such targets and benchmarks their performance against leading practices in

the industry. Such targets and performances are reviewed at regular intervals to ensure continual improvement of environmental performance. The Venture has introduced KPI's on the implementation of water and energy management plans.

All employees are coached and trained regarding the efficient use of natural resources, reducing input material and waste.

All mining operations closure plans and quantified closure cost were originally estimated by an external consultant as per the DMR Quantum Regulations.

Merafe Ferrochrome and Mining (Pty) Ltd 20.5% share of the Venture's provision for rehabilitation is set out in note 16 in the Merafe 2023 Annual Financial Statements on page 51. The Merafe 2023 Annual Financial Statements are available on the Merafe website and/or from the Company Secretary of Merafe.

The Closure and Rehabilitation plans for all operations were updated during 2022 to determine the associated closure cost and required provision for rehabilitation. The updates are conducted on a 3-year cycle by a third-party specialist. However, the financial provisions were adjusted internal in 2023. The adjusted provisions have been audited by an external auditor during 2023.

MINERAL RESOURCES AND MINERAL RESERVES STATEMENT

The reporting date for the Mineral Resources and Mineral Reserves is the 31st December 2023.

12.13 (iii)(6)

The Mineral Resources and Mineral Reserves are reported as ROM (pre beneficiation plant) on a total basis with the attributable beneficial interests indicated.

12.13 (i)(2)

Chrome Mineral Resources

				Measured Mineral Resources		Indicated Mineral Resources		Measured and Indicated Resources		Inferred Mineral Resources			
Name of operation	Attributable Portion	Mining method	Commodity	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22	Competent Perso	
BUSHVELD COMPLEX - WESTERN LIMB													
WESTERN CHROME MINES - LG6 Chromitite Package													
Waterval	20.50%	UG	Ore (Mt)	16.231	16.231	1.03	1.03	17.257	17.26	0.675	0.7	MM/DR	
			Cr ₂ O ₃ (%)	41.31	41.31	42.59	42.6	41.4	41.4	43	43		
Marikana West	20.5%	UG	Ore (Mt)	2.974	2.974	1.69	1.69	4.67	4.67	-	-	MM/DR	
			Cr ₂ O ₃ (%)	42.43	42.43	42.60	42.6	42.5	42.5	-	-		
Kroondal	20.5%	UG/OC	Ore (Mt)	9.279	9.104	0.53	0.65	9.810	9.76	-	-	MM/DR	
			Cr ₂ O ₃ (%)	42.69	42.72	41.46	41.5	42.6	42.6	-	-		
Kroondal Gemini	20.5%	UG/OC	Ore (Mt)	11.483	12.544	0.73	0.80	12.210	13.35	-	-	MM/DR	
			Cr ₂ O ₃ (%)	42.09	42.09	41.03	41.2	42.0	42.0	-	-		
Marikana East	20.5%	UG	Ore (Mt)	4.591	4.593	0.53	0.53	5.117	5.12	-	-	MM/DR	
			Cr ₂ O ₃ (%)	42.23	42.24	41.81	41.9	42.2	42.2	-	-		
Klipfontein/Waterval	20.5%	UG	Ore (Mt)	17.017	13.105	27.97	29.90	44.988	43.00	90.818	92.7	MM/DR	
			Cr ₂ O ₃ (%)	42.01	42.01	41.98	42.0	42.0	42.0	42	42		
Boshhoek	20.5%	OC/UG	Ore (Mt)	-	-	17.09	17.09	17.093	17.09	-	-	MM/DR	
			Cr ₂ O ₃ (%)	-	-	40.53	40.5	40.5	40.5	-	-		
Townlands Extension 9	20.5%	UG	Ore (Mt)	-	-	12.94	12.94	12.945	12.94	-	-	MM/DR	
			Cr ₂ O ₃ (%)	-	-	41.39	41.4	41.4	41.4	-	-		
Total			Ore (Mt)	61.575	58.551	62.51	64.64	124.09	123.19	91.5	93.4		
			Cr ₂ O ₃ (%)	41.98	41.98	41.5	41.5	41.7	41.7	42	42		
BUSHVELD COMPLEX - EASTERN LIMB													
EASTERN CHROME MINES - MG1 Chromitite Layer													
Thorncliffe	20.5%	UG/OC	Ore (Mt)	37.367	39.329	3.37	3.55	40.734	42.88	-	-	LUN/DR	
			Cr ₂ O ₃ (%)	40.39	40.39	40.7	40.7	40.4	40.4	-	-		
Helena	20.5%	UG/OC	Ore (Mt)	21.096	21.312	11.36	11.38	32.455	32.69	8.278	8.3	LUN/DR	
			Cr ₂ O ₃ (%)	39.91	39.88	38.6	38.5	39.4	39.4	38	38		
De Grooteboom	20.5%	UG/OC	Ore (Mt)	1.037	1.037	0.50	0.50	1.541	1.54	-	-	LUN/DR	
			Cr ₂ O ₃ (%)	40.22	40.22	40.3	40.3	40.2	40.2	-	-		
Richmond	20.5%	UG	Ore (Mt)	7.041	7.461	19.22	17.28	26.263	24.74	24.572	26.5	LUN/DR	
			Cr ₂ O ₃ (%)	40.62	40.53	40.8	40.8	40.8	40.7	41	41		
St George	20.5%	UG	Ore (Mt)	0.715	0.716	4.73	4.73	5.440	5.44	13.442	13.4	LUN/DR	
			Cr ₂ O ₃ (%)	40.41	40.41	39.4	39.4	39.5	39.5	39	39		
Total - MG1			Ore (Mt)	67.257	69.855	39.18	37.44	106.43	107.29	46.3	48.3		
			Cr ₂ O ₃ (%)	40.26	40.24	40.0	39.9	40.2	40.1	40	40		
EASTERN CHROME MINES - MG2 Chromitite Layer													
Thorncliffe	20.5%	UG/OC	Ore (Mt)	-	-	18.29	17.64	18.288	17.64	32.0	32.5	LUN/DR	
			Cr ₂ O ₃ (%)	-	-	35.1	35.1	35.1	35.1	36	36		
Helena	20.5%	UG/OC	Ore (Mt)	-	-	-	-	-	-	49.02	49.2	LUN/DR	
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	40	40		
De Grooteboom	20.5%	UG/OC	Ore (Mt)	-	-	-	-	-	-	-	-	LUN/DR	
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	-	-		
Richmond	20.5%	UG	Ore (Mt)	-	-	-	-	-	-	31.0	30.96	LUN/DR	
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	36	36		
St George	20.5%	UG	Ore (Mt)	-	-	-	-	-	-	17.52	17.52	LUN/DR	
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	39	39		
Total - MG2			Ore (Mt)	-	-	18.3	17.639	-	18.3	17.639	129.5	130.3	
			-	-	-	35	35.10	-	35	35.10	38	38	
Total - MG1 and MG2			Ore (Mt)	67.257	69.855	57.46	55.08	124.72	124.93	175.8	178.5		
			-	40.26	40.24	38.4	38.4	39.4	39.4	38	38		
BUSHVELD COMPLEX - TOTAL													
Total Chrome - East and West		Chrome Ore (Mt)		128.832	128.406	119.98	119.72	248.81	248.12	267.3	271.9		
				41.08	41.04	40.0	40.1	40.6	40.6	40	40		

Chrome Ore Reserves

Name of operation	Attributable Portion	Mining method	Commodity	Proved Ore Reserves		Probable Ore Reserves		Total Ore Reserves		Competent Perso
				31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22	
BUSHVELD COMPLEX - WESTERN LIMB										
WESTERN CHROME MINES - LG6 Chromitite Package										
Waterval	20.5%	UG	Ore (Mt)	-	-	-	-	-	-	MM/DR
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	
Marikana West	20.5%	UG	Ore (Mt)	-	-	-	-	-	-	MM/DR
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	
Kroondal	20.5%	UG/OC	Ore (Mt)	2.321	2.078	0.510	0.609	2.83	2.69	MM/DR
			Cr ₂ O ₃ (%)	28.67	29.19	27.9	28.2	28.5	29.0	
Kroondal Gemini	20.5%	UG/OC	Ore (Mt)	5.394	6.632	0.593	0.654	5.99	7.29	MM/DR
			Cr ₂ O ₃ (%)	30.69	30.52	29.7	29.9	30.6	30.5	
Marikana East	20.5%	UG	Ore (Mt)	-	-	-	-	-	-	MM/DR
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	
Klipfontein/Waterval	20.5%	UG	Ore (Mt)	0.244	0.075	0.854	0.092	1.10	0.17	MM/DR
			Cr ₂ O ₃ (%)	28.13	28.21	28.3	28.0	28.2	28.1	
Boshhoek	20.5%	UG/OC	Ore (Mt)	-	-	0.58	0.58	0.58	0.58	MM/DR
			Cr ₂ O ₃ (%)	-	-	26.1	26.1	26.1	26.1	
Townlands Extension 9	20.5%	UG	Ore (Mt)	-	-	-	-	-	-	MM/DR
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	
Total			Ore (Mt)	7.958	8.786	2.54	1.94	10.50	10.72	
			Cr ₂ O ₃ (%)	30.02	30.19	28.0	28.1	29.5	29.8	
BUSHVELD COMPLEX - EASTERN LIMB										
EASTERN CHROME MINES - MG1 Chromitite Layer										
Thornccliffe	20.5%	UG/OC	Ore (Mt)	14.910	17.552	2.37	2.54	17.28	20.09	LUN/DR
			Cr ₂ O ₃ (%)	35.42	34.71	33.8	33.2	35.2	34.5	
Helena	20.5%	UG/OC	Ore (Mt)	1.499	1.506	-	-	1.50	1.51	LUN/DR
			Cr ₂ O ₃ (%)	29.19	32.46	-	-	29.2	32.5	
De Grooteboom	20.5%	UG/OC	Ore (Mt)	-	-	-	-	-	-	LUN/DR
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	
Richmond	20.5%	UG/OC	Ore (Mt)	3.524	3.745	2.943	1.46	6.47	5.20	LUN/DR
			Cr ₂ O ₃ (%)	35.66	35.40	33.3	33.5	34.6	34.9	
St George	20.5%	UG	Ore (Mt)	-	-	-	-	-	-	LUN/DR
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	
Total - MG1			Ore (Mt)	19.933	22.803	5.31	4.00	25.25	26.80	
			Cr ₂ O ₃ (%)	35.00	34.67	33.5	33.3	34.7	34.5	
EASTERN CHROME MINES - MG2 Chromitite Layer										
Thornccliffe	20.5%	UG/OC	Ore (Mt)	-	-	2.26	3.59	3.59	-	LUN/DR
			Cr ₂ O ₃ (%)	-	-	26.7	26.9	26.9	-	
Helena	20.5%	UG/OC	Ore (Mt)	-	-	-	-	-	-	LUN/DR
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	
De Grooteboom	20.5%	UG/OC	Ore (Mt)	-	-	-	-	-	-	LUN/DR
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	
Richmond	20.5%	UG/OC	Ore (Mt)	-	-	-	-	-	-	LUN/DR
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	
St George	20.5%	UG	Ore (Mt)	-	-	-	-	-	-	LUN/DR
			Cr ₂ O ₃ (%)	-	-	-	-	-	-	
Total - MG2			Ore (Mt)	-	-	2.26	3.59	2.26	3.59	-
			Cr ₂ O ₃ (%)	-	-	26.7	26.9	26.7	26.9	

Total - MG1 and MG2		Ore (Mt)	19.933	22.803	7.57	7.59	27.51	30.39
		Cr ₂ O ₃ (%)	35.0	34.7	31.5	30.3	34.5	33.6
BUSHVELD COMPLEX - TOTAL								
Total - Chrome		Chrome Ore (Mt)	27.891	31.588	10.11	9.52	38.00	41.11
		Cr ₂ O ₃ (%)	33.58	33.43	30.6	29.8	32.8	32.60

BUSHVELD COMPLEX - WESTERN LIMB												
WESTERN CHROME MINES - Tailings												
Kroondal Dam	20.5%	Tailings	(Mt)	-	-	-	-	-	-	1.96	1.89	MM
				Cr ₂ O ₃ (%)	-	-	-	-	-	17.3	17.2	
Waterval East Dam	20.5%	Tailings	(Mt)	-	-	-	-	-	-	0.05	0.60	MM
				Cr ₂ O ₃ (%)	-	-	-	-	-	22.3	14.9	
Waterval West Dam	20.5%	Tailings	(Mt)	-	-	-	-	-	-			MM
				Cr ₂ O ₃ (%)	-	-	-	-	-			
Cashan Dam	20.5%	Tailings	(Mt)	-	-	-	-	-	-	0.04	0.03	MM
				Cr ₂ O ₃ (%)	-	-	-	-	-	16.9	16.9	
Subtotal		Tailings (Mt)		-	-	-	-	-	-	2.04	2.52	
		Cr ₂ O ₃ (%)		-	-	-	-	-	-	17.4	16.7	

BUSHVELD COMPLEX - EASTERN LIMB												
EASTERN CHROME MINES - Tailings												
Thorncliffe Dam	20.5%	Tailings	(Mt)	-	-	-	-	-	-	5.09	4.88	SYV
				Cr ₂ O ₃ (%)	-	-	-	-	-	18.8	18.9	
Helena Paste	20.5%	Tailings	(Mt)	-	-	-	-	-	-	0.09	0.16	SYV
				Cr ₂ O ₃ (%)	-	-	-	-	-	17.2	17.2	
Subtotal		Tailings (Mt)		-	-	-	-	-	-	5.17	5.04	
		Cr ₂ O ₃ (%)		-	-	-	-	-	-	18.8	18.8	

Notes :

Tonnages are quoted as million metric dry tonnes for the chromitite layers.

Grades are quoted as %Cr₂O₃.

The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce Mineral Reserves.

No cut-off grades are applied to the chromitite layers currently being mined. The chromitite layers show exceptional regional grade consistency and continuity.

The Mineral Resources are estimated as chromitite tonnages and grades to reflect the grades of the various individual chromitite layers. Both the LG6 and MG1 Chromitite Layers which the Venture is currently mining, is discrete solid chromitite layers. Along the Western Limb of the Bushveld Complex, the LG6 Chromitite Package is mined on the Waterval and Kroondal properties. The Klipfontein/Waterval property is an extension area for both the Waterval and Kroondal Mines. Thorncliffe, Magareng and Helena Mines, along the Eastern Limb of the Bushveld Complex are mining the MG1 Chromitite Layer.

Changes in the year-on-year Mineral Resource tonnage and grade estimates are mainly due to mining depletion and changes due to additional geological information gained through exploration.

The Mineral Reserves are estimated and declared for a mining footprint of 5 years. Some areas have footprints that extend beyond 5 years. The LOM periods for the operating mines based on all the Mineral Resources (excluding Inferred Mineral Resources) converted to Mineral Reserves vary from 13 years to over 30 years. The Mining Rights expire from 2022 to 2039 for the various operating mines.

Merafe and Glencore have entered into an agreement for the treatment of Current and historical tails at the Western and Eastern operations for extraction of PGM's. PGM values of the historic tails are not available as when deposition occurred no analysis on PGM grades were required the current tailings has been analysed over the last 2-3 years and is averaging a PGM 4E grade of 5.15 g/t in the East and 3.1g/t in the West.

Competent Persons:

SYV – Sulayman Yousuf Vaid, Glencore Operations SA, (Professional Affiliation: SAGC Reg. No. -GT gMS 0114). Highest qualification ND Mine Survey and 30 years of experience. Lead Competent Person responsible for Mineral Resources and Mineral Reserves.

MM – Mogomotsi Maputle, Glencore Operations SA, Western Chrome Mines, (Professional Affiliation: SACNASP – 400071/14). Highest qualification Bsc Hons Geology. 21 years of experience. Responsible for Mineral Resources and Mineral Reserves.

LUN – Lindiwe Unity Nkambule, Glencore Operations SA, Eastern Chrome Mines, (Professional Affiliation: SACNASP – 121635). Highest qualification Bsc Hons Geology. 8 years of experience. Responsible for Mineral Resources and Mineral Reserves.

DR –Dean Richards, Obsidian Consulting Services (Professional Affiliation: SACNASP – 400190/08). Highest qualification Bsc Hons Geology. 33 years of experience. Responsible for geostatistical analysis of data, Mineral Resource classification and construction of tonnage and grade block models and reporting of tonnage and grades from block models.

Chrome Mineral Reserve Statement**Notes:**

Tonnages are quoted as million metric dry tonnes for the chromitite layers.

Grades are quoted as %Cr₂O₃

No cut-off grades are applied to the chromitite layers currently being mined due to the exceptional regional grade consistency and continuity. A minimum mining cut of 1.8m is applied to the Mineral Reserve tonnage to accommodate the mechanised mining equipment employed by the underground mining operations. External waste is included to make up the minimum cut where applicable.

The chromitite layers are mined mainly underground using trackless mechanised mining methods on a board-and-pillar mine lay-out design.

Changes in the year-on-year Mineral Reserves tonnage and grade estimates are mainly due to mining depletion and changes due to additional geological information gained through exploration.

Competent Persons:

SYV – Sulayman Yousuf Vaid, Glencore Operations SA, (SAGC Reg. No. -GT gMS 0114). Lead Competent Person responsible for Mineral Resources and Mineral Reserves.

MM – Mogomotsi Maputle, Glencore Operations SA, Western Chrome Mines, (SACNASP – 400071/14). Responsible for Mineral Resources and Mineral Reserves.

LUN – Lindiwe Unity Nkambule, Glencore Operations SA, Eastern Chrome Mines, (SACNASP – 121635). Responsible for Mineral Resources and Mineral Reserves.

DR –Dean Richards, Obsidian Consulting Services (SACNASP – 400190/08). Responsible for geostatistical analysis of data, Mineral Resource classification and construction of tonnage and grade block models and reporting of tonnage and grades from block models.

Silica Mineral Resources

				Measured Mineral Resources		Indicated Mineral Resources		Measured and Indicated Resources		Inferred Mineral Resources		Competent Person
Name of operation	Attributable Portion	Mining method	Commodity	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22	
MAGALIESBERG QUARTZITE FORMATION												
Rietvly Silica Mine - Quartzite												
Rietvly	20.5%	OC	Ore (Mt)	-	-	20.97	20.97	20.97	20.97	-	-	MM
			SiO ₂ (%)	-	-	90.76	90.76	90.76	90.76	-	-	
Total				-		20.97		20.97		-		
			Ore (Mt)	-	-	-	-	-	-	-	-	
			SiO ₂ (%)	-	-	90.76	90.76	90.76	90.76	-	-	
Stockpiles												
Rietvly	20.5%		Product (Mt)	0.09	0.10	-	-	-	-	-	-	MM
			SiO ₂ (%)	90.76	90.76	-	-	-	-	-	-	
Total				0.09		0.10		-		-		
			Product (Mt)	0.09	0.10	-	-	-	-	-	-	
			SiO ₂ (%)	90.76	90.76	-	-	-	-	-	-	
Grand Total				0.09		0.10		20.97		20.97		-
			SiO ₂ (%)	90.76	90.76	90.8	90.8	90.8	90.8	-	-	

Silica Mineral Reserves

Name of operation	Attributable Portion	Mining method	Commodity	Proved Ore Reserves		Probable Ore Reserves		Total Ore Reserves		Competent Person
				31.12.23	31.12.22	31.12.23	31.12.22	31.12.23	31.12.22	
MAGALIESBERG QUARTZITE FORMATION										
Rietvly Silica Mine - Quartzite										
Rietvly	20.5%	OC	Ore (Mt)	-	-	1.79	1.79	1.79	1.79	MM
			SiO ₂ (%)	-	-	91	91	91	91	
Total			Ore (Mt)	-	-	1.79	1.79	1.79	1.79	
			SiO ₂ (%)	-	-	91	91	91	91	
Stockpile										
Rietvly	20.5%		Product (Mt)	-	-	-	-	-	-	MM
			SiO ₂ (%)	-	-	-	-	-	-	
Total			Product (Mt)	-	-	-	-	-	-	
			SiO ₂ (%)	-	-	-	-	-	-	
Total			Ore (Mt)	-	-	1.79	1.79	1.79	1.79	
			SiO ₂ (%)	0.00	0.00	90.8	90.8	90.8	90.8	

Notes:

Tonnages are quoted as million metric dry tonnes

Grades are quoted as %SiO₂.

The Rietvly silica ore is mined through opencast mining methods and the ROM (Run-of-Mine) ore is crushed, washed and sized on site to produce a final sized and quality graded product. No silica cut-off grades are applied to the Mineral Resource estimation. The quartzite is mined mainly to supply the Ventures furnaces with silica.

Changes in the year-on-year tonnage and grade estimates are mainly due to mining depletion, reclassification of the Mineral Resource categories and changes in the Mineral Resource tonnages and grades due to additional geological information gained through exploration.

No significant changes have been recorded in the year-on-year Mineral Resource estimation.

The LOM for Rietvly Silica is 5 years based on the declared Mineral Reserves and a production rate of ~39.45ktpm Plant Feed. The Mining Right expires in 2037.

Competent Persons:

SYV – Sulayman Yousuf Vaid, Glencore Operations SA, (SAGC Reg. No. -GT gMS 0114). Lead Competent Person responsible for Mineral Resources and Mineral Reserves.

MM – Mogomotsi Maputle, Glencore Operations SA, Western Chrome Mines, (SACNASP – 400071/14). Responsible for Mineral Resources and Mineral Reserves.

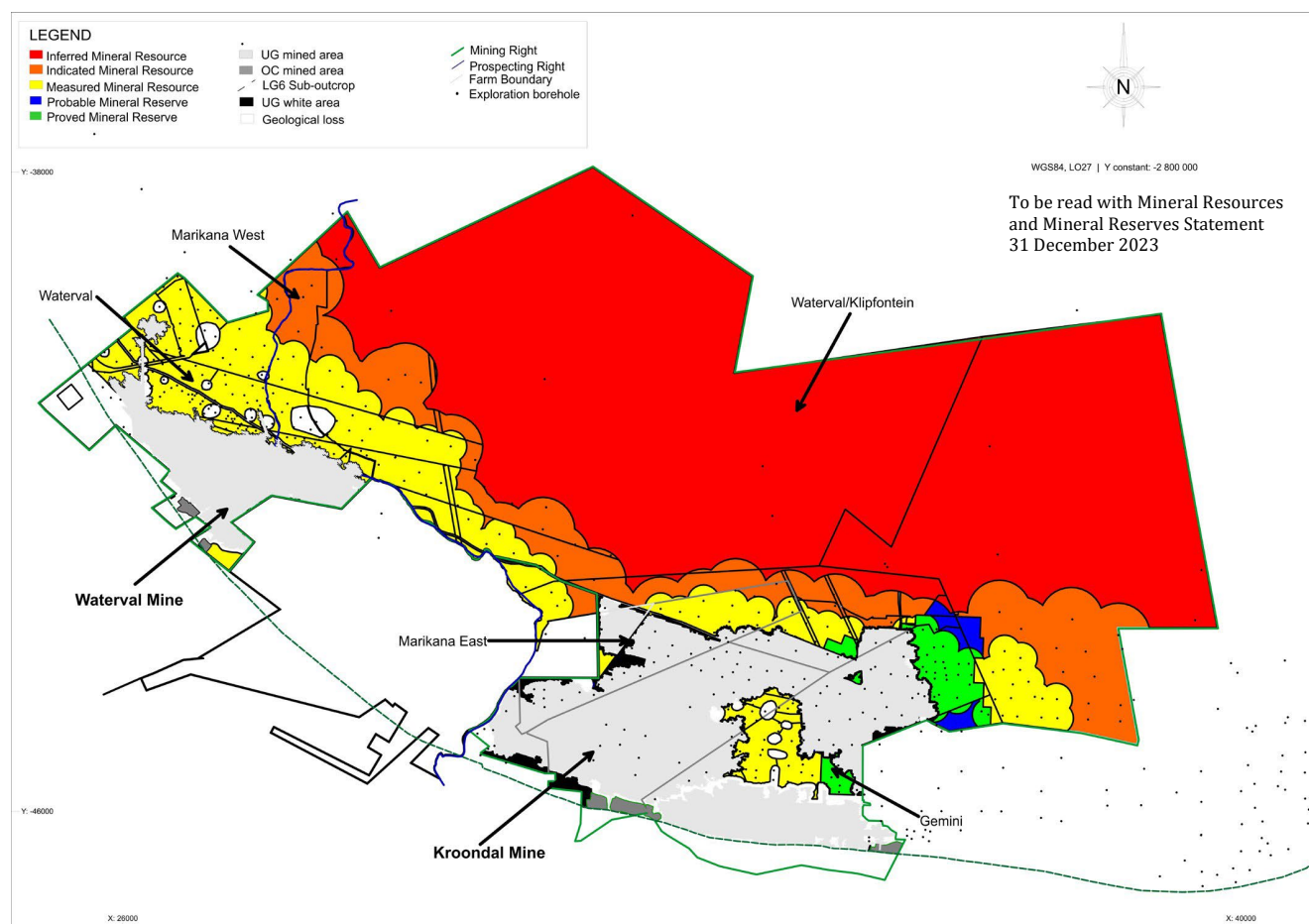
MINERAL RESOURCES AND MINERAL RESERVES MAPS

The plans below indicate the various Mineral Resources and Mineral Reserves categories of the Venture.

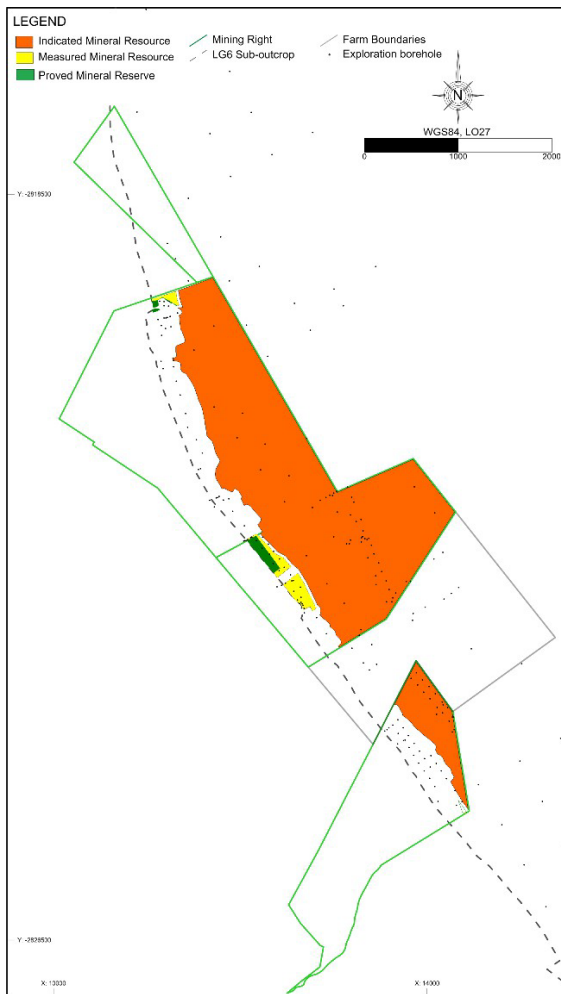
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Chrome - Bushveld Complex, Western Limb.

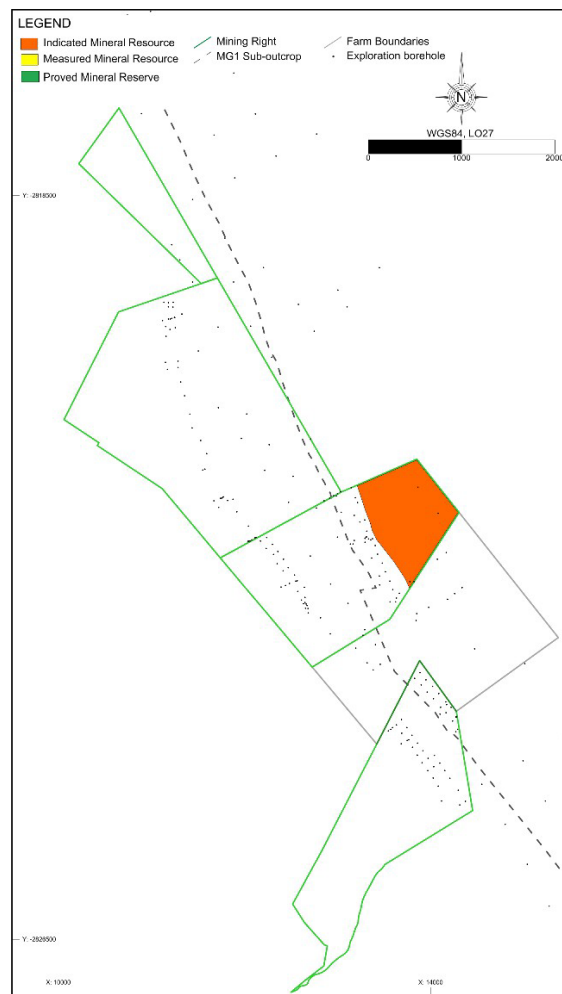
Waterval and Kroondal Mines - LG6 Chromitite Package Mining.

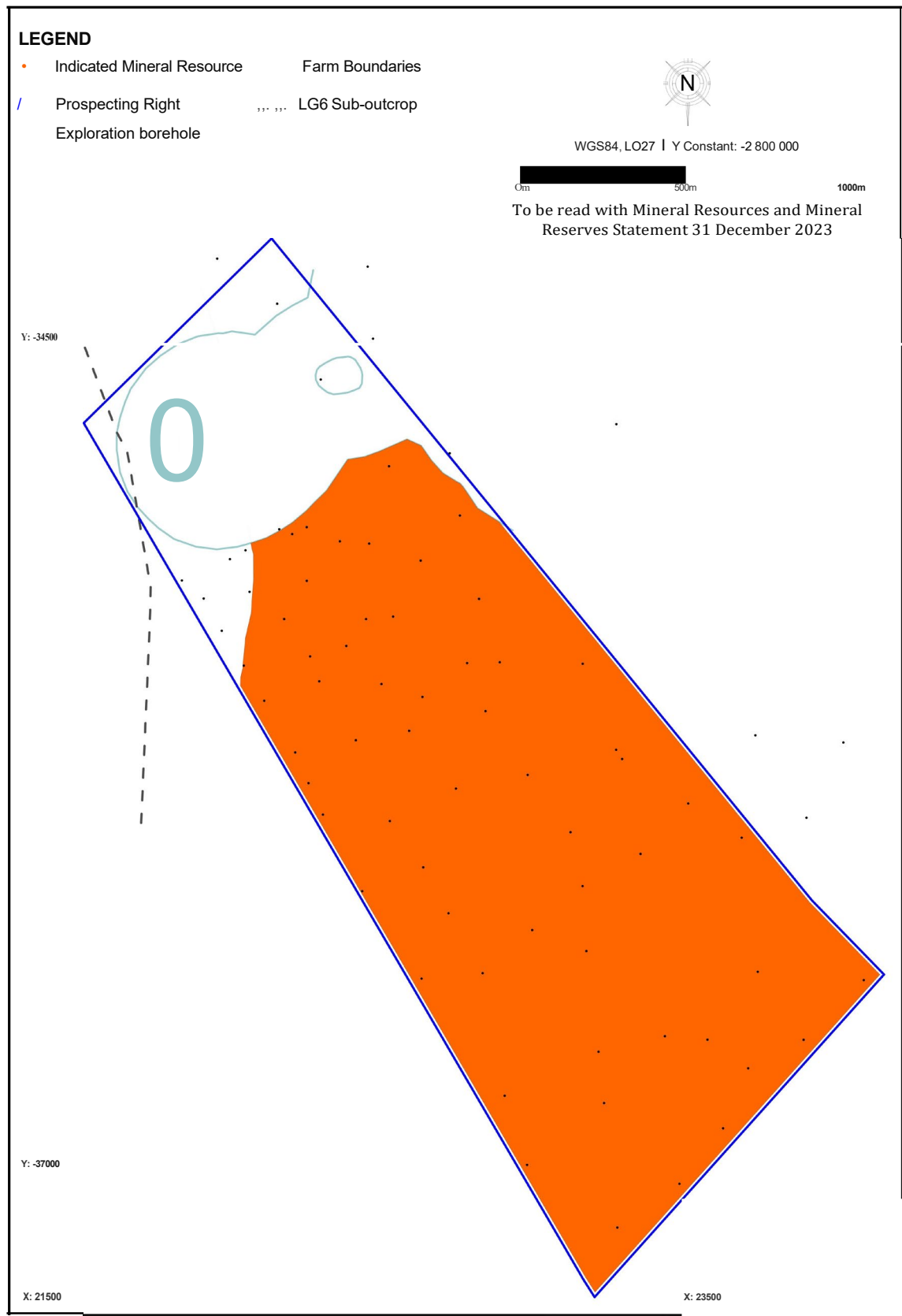


Boshoek Mine- LG6 Chromitite Layer.



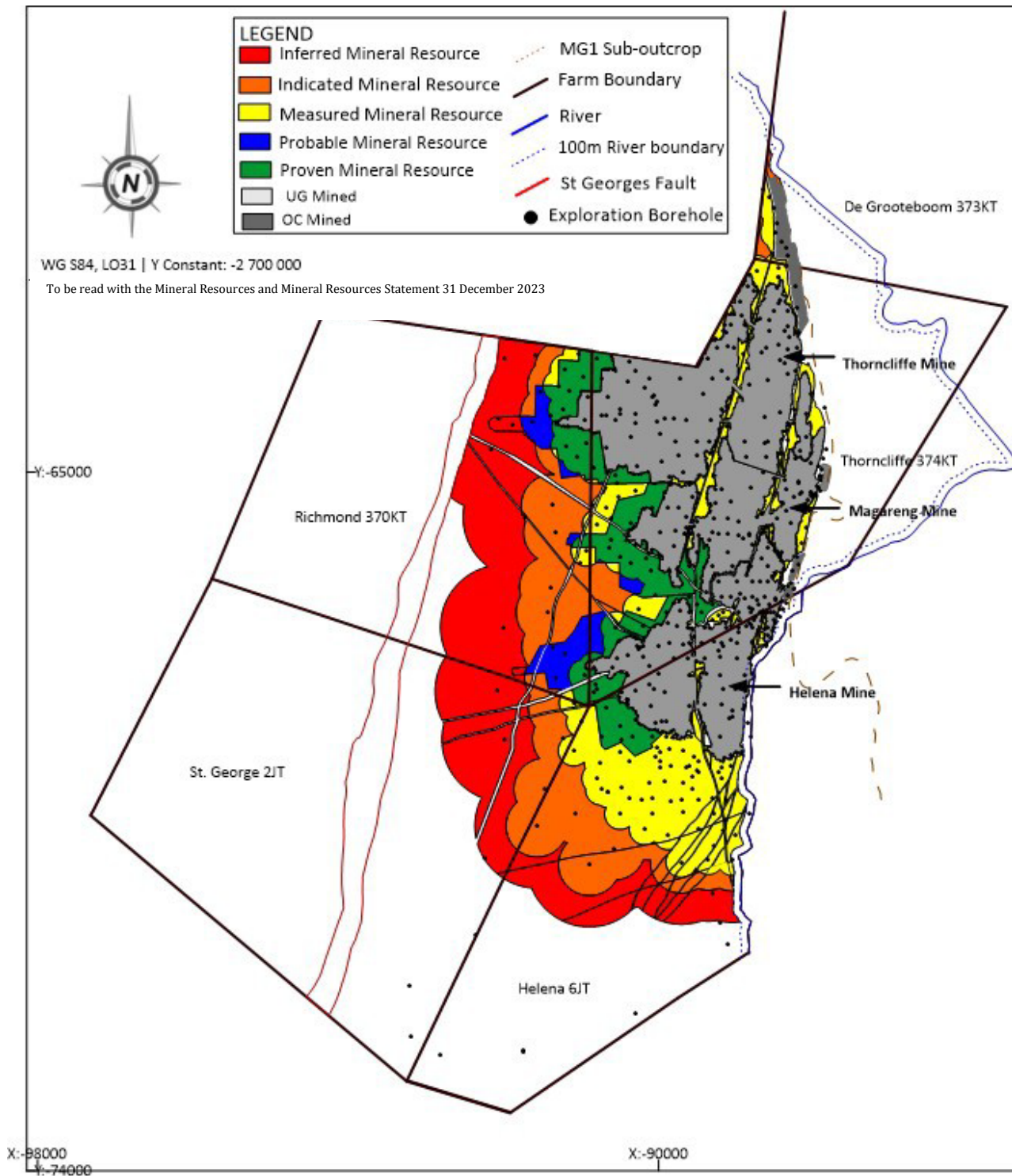
Boshoek Mine - MG1 Chromitite Layer.



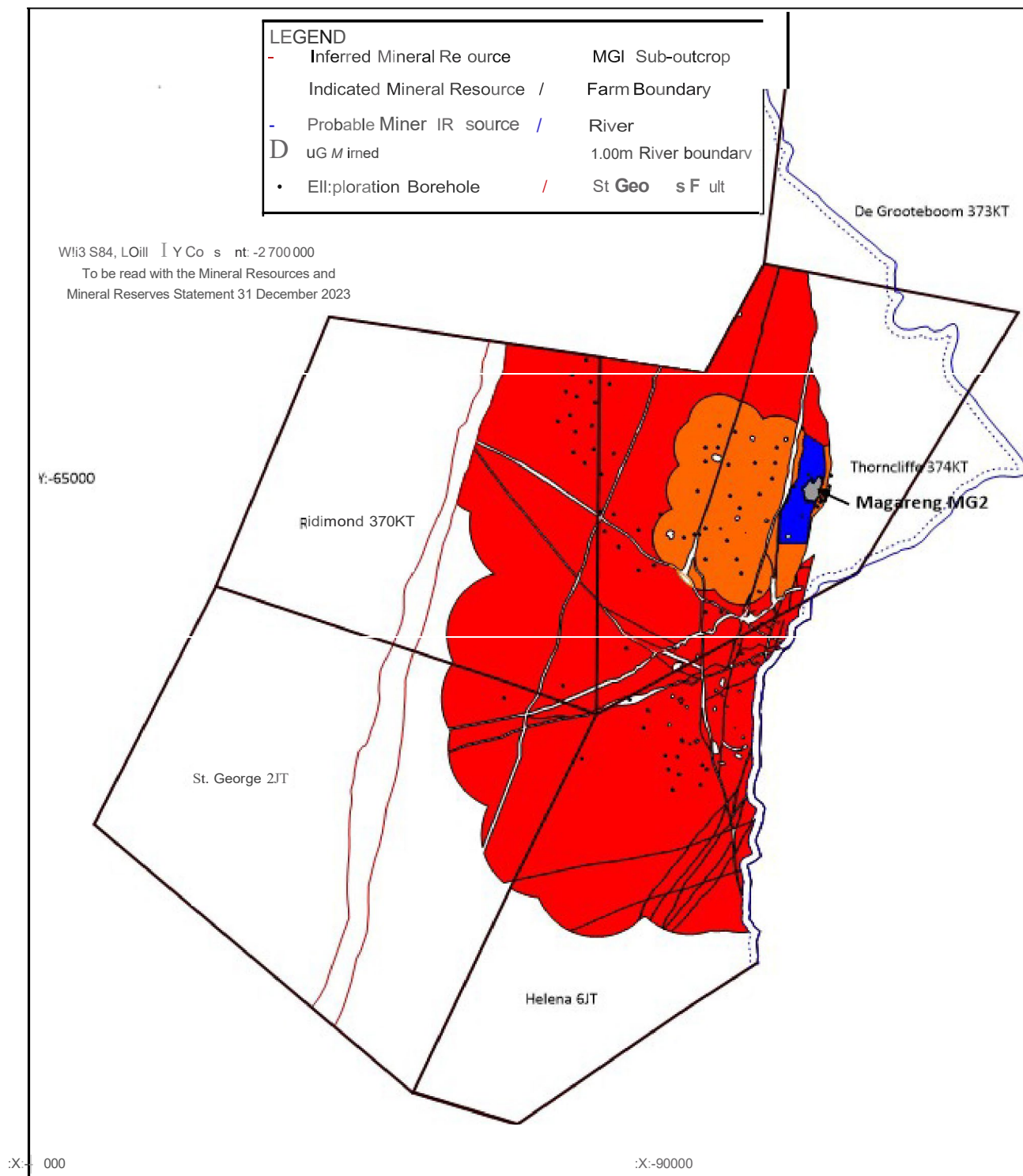


Chrome - Bushveld Complex, Eastern Limb

Thorncliffe, Magareng and Helena Mines – MG1 Chromitite Layer Mining.



Thorncliffe, Magareng and Helena Mines – MG2 Chromitite Layer Mining



Silica

Rietvly Silica Mine

