

RAINBOW
RARE EARTHS

MAJA
MINING
LIMITED

Technical Report on the Gakara REE Project, Burundi

EXPLORATION TARGET UPDATE

EFFECTIVE DATE: 31st August 2020

PREPARED BY: Maja Mining Limited for Rainbow Rare Earths Limited

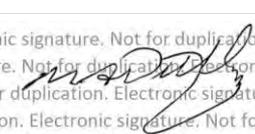
COMPILED BY: Malcolm Titley (Competent Person)

OUR MISSION

Our mission is to become an integrated Rare Earth producer, supplying Rare Earth oxides and to be part of diversifying the Rare Earth supply chain to support International Markets.





Report title	Technical Report on the Gakara REE Project, Burundi	
Date	6th October, 2020	
Revision number	Final Report with JORC Table 1	
Status	Final	
Author	Malcolm Tittley	<p>Electronic signature. Not for duplication. Electronic signature. Not for duplication.</p>  <p>Signature</p>
Reviewer	David Dodd	 <p>Signature</p>
Approved	George Bennett	 <p>Signature</p>

1 EXECUTIVE SUMMARY

This report presents:

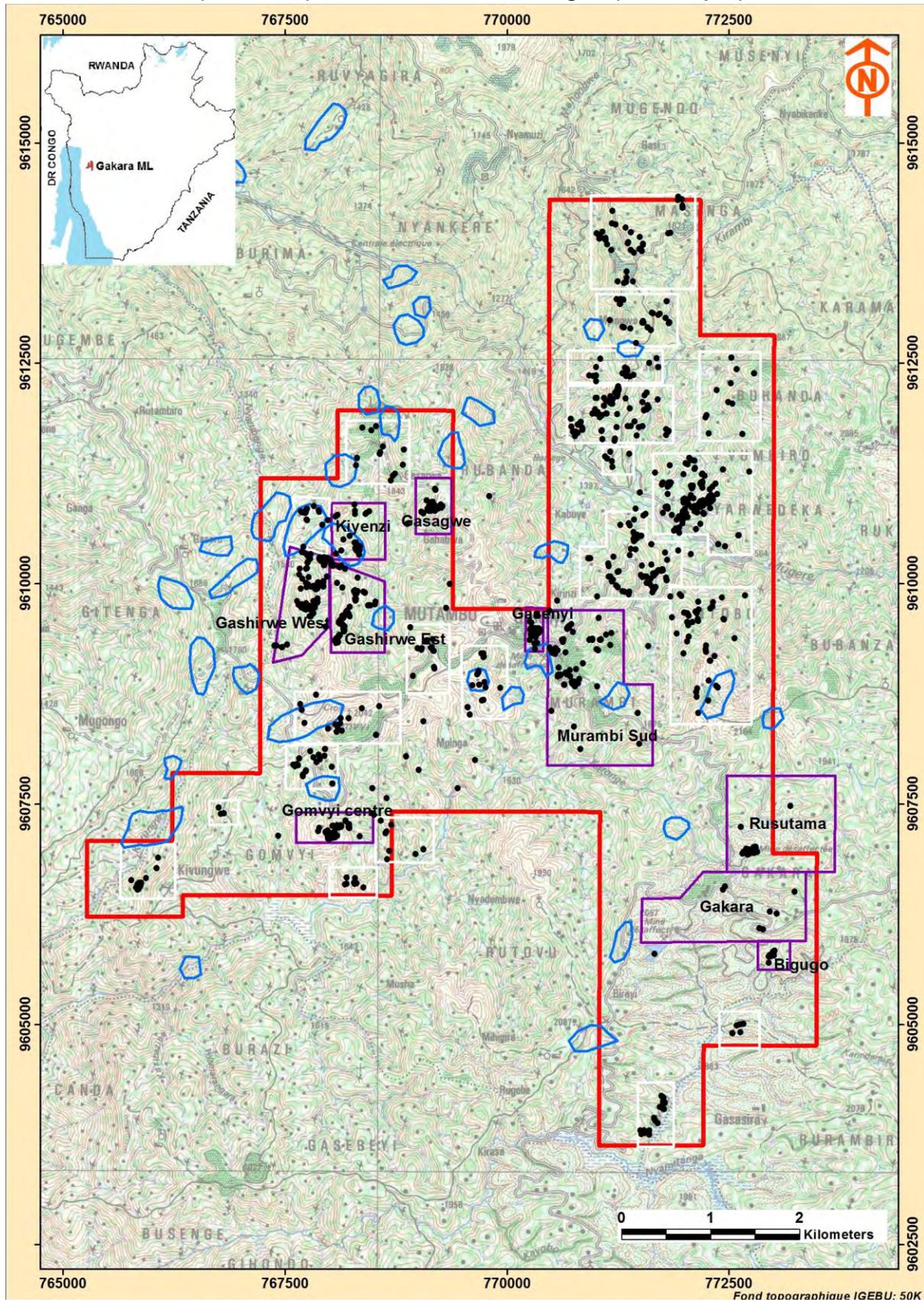
- An updated Exploration Target for Rainbow’s Gakara Rare Earth Element (“REE”) deposit (the “Project”) located in western Burundi.
- The planned exploration program to convert the Exploration Targets to Inferred Mineral Resources, which will allow completion of a preliminary technical study on the feasibility of developing a full scale commercial mine at the Gakara project to be completed.
- The results of a regional structural study by TECT Geological Consultants which supports existing exploration defined REE deposits and identifies new vein and breccia hosted REE anomalies.

The Project is defined by a 39 km² Mining Licence, valid until 2040, with 10-year renewal increments available. REE mineralisation has been identified in 32 areas from Rainbow exploration activity and historical mining, with additional targets identified from the recent TECT study, which confirmed the presence of at least three large carbonatites which are the most likely source of the rich rare earth mineralisation. Of the 57 REE targets identified by the TECT analysis, 15 of these overlap and support the mineralisation confirmed in the existing 32 Rainbow deposits already identified. 17 of the existing 32 Rainbow deposits were not identified in the TECT study indicating the importance of using multiple exploration techniques in the ongoing exploration discovery process. The Exploration Target estimated in this report is based on 10 of the 32 of the deposits identified. It is likely that additional growth in the Exploration Target is likely as the exploration activity continues.

The Project contains two styles of known mineralisation, locally termed vein hosted and breccia hosted. Both mineralisation styles contain the same basket of rare earth minerals and produce an identical quality concentrate, based analysis of the 64 twenty five tonne batches sold commercially over the past 2 years of pilot plant production. The updated JORC Exploration Target, quoted as a range of tonnes and grade, relates to nine vein hosted deposits and one breccia hosted deposit summarised below:

Rainbow Exploration Target as at 31 st August 2020	Lower estimate		Upper estimate	
	Tonnes	TREO %	Tonnes	TREO %
Vein Hosted Mineralisation				
Murambi South	36,000	7%	52,000	12%
Gasagwe	27,000	7%	39,000	12%
Rusutama	23,000	7%	33,000	12%
Gakara	61,000	7%	87,000	12%
Gomvyi Central	15,000	7%	22,000	12%
Gashirwe West and East	45,000	7%	64,000	12%
Bigugo	8,000	7%	11,000	12%
Gasenyi	47,000	7%	67,000	12%
Vein Hosted Exploration Target	262,000	7%	375,000	12%
Breccia Hosted Mineralisation				
Kiyenzi grade tonnage model	98,000	1%	132,000	1.5%
Kiyenzi depth extension	60,000	1%	82,000	1.5%
Kiyenzi lateral extension	94,000	1%	128,000	1.5%
Breccia Hosted Exploration Target	252,000	1%	342,000	1.5%

The majority of the JORC Exploration Target is the higher grade vein hosted mineralisation, readily identified across the licence area by surface mapping and sampling. The Figure below presents the 10 Exploration Targets (purple shapes) showing the surrounding identified surface REE mineralisation (black dots) and Tier 1 and 2 TECT targets (blue shapes).



Some of the TECT targets in the figure above are outside the current ML. An updated EL application is in place which includes the targets outside of the existing ML.

An exploration programme costing US\$3.2 million has been designed to upgrade the nine vein hosted mineralisation Exploration Targets to a Mineral Resource. The work is expected to take approximately 15 months.

Limited drilling has been undertaken at the Project to date. Rainbow has taken the approach since 2017 to utilise trial mining and trial processing to better understand the geometry of the mineralisation and at the same time fulfil the "reasonable prospects for eventual economic extraction" requirements of Mineral Resources disclosure planned for the future.

Trial mining and exploration bulk samples are processed through a 5 tonnes per hour pilot gravity separation plant. The pilot plant has exceeded 73% recovery of the contained TREOs with a concentrate grade greater than 57% TREO. The trial mining and exploration bulk samples processed from across the ML display a similar response to gravity separation.

Several mining methods have been trialled, with mixed results in the management of waste dilution and mineralisation loss. The preferred method, focused on delivering plant feed at approximately 10% TREO, has waste bulk mined by a larger excavator at low cost, whilst high grade veins with a selvedge of low grade mineralisation and/or waste are selectively mined by a smaller excavator to minimise mineralisation loss and dilution. This mining method is considered optimal for the vein hosted mineralisation and future plant designs may be based upon this.

Improved mine planning and the purchase of an owner's mining fleet has seen a steady increase in trial mining and trial processing to approximately 65 tonnes per month of REE concentrate. A second mining fleet has been ordered and trial mining will extend to Gasenyi Central deposit once the new equipment arrives on site. Concentrate production is expected to increase to 100+ tonnes per month at a grade exceeding 54% TREO through the current pilot plant with the addition of a concentrate drying system.

Plans to increase the concentrate production towards 5,000 tpa will require a new process plant most likely to be installed at the mine site. The new plant will probably utilise Dense Media Separation (DMS) for the coarse concentration and Spiral Concentrators (Spirals) for the fines concentration in place of the current low-capacity jig and tables. The plant is likely to be a modular design allowing cost effective expansion to produce 10,000+ tonnes of concentrate per annum. Test work using a mix of REE mineralisation from across the ML has commenced to optimise the design of the higher capacity process plant.

The breccia hosted mineralisation may form a parallel, lower grade production strategy. Near-term exploration will continue to identify, using the results of the TECT structural study, areas of breccia hosted mineralisation for future mineral resource definition.

This Report was prepared by Maja Mining Ltd for Rainbow Rare Earths Limited in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code, 2012 Edition. The information, conclusions and estimates are based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Report is intended for use by Rainbow for public declaration of an Exploration Target.

2 CONTENTS

1	EXECUTIVE SUMMARY	i
2	CONTENTS	i
3	SUMMARY	1
3.1	Introduction	1
3.2	Material changes from last public report	1
3.3	Mineral tenure and ownership	2
3.4	Property description and location	2
3.5	Geology and mineralisation	2
3.6	Status of exploration	3
3.7	4	
3.8	Drilling.....	4
3.9	Geophysical and structural analysis.....	4
3.10	Exploration target	5
3.11	Previous mining and current trial mining	8
3.11.1	Historical mining	8
3.11.2	Trial mining.....	8
3.12	Mineralised material processing and metallurgy	10
3.12.1	Current trial mineralised material processing	10
3.12.2	Future mineralised material – Bulk sample performance tests.....	10
3.12.3	Plant feed grades and trial mineralised material processing	10
3.12.4	Trial process plant planned upgrade.....	10
3.13	Recommendations	12
4	INTRODUCTION.....	13
4.1	Scope of work.....	13
4.2	Principal sources of information	13
4.3	Qualifications, experience and independence	13
4.4	Reliance on other experts	14
5	PROPERTY DESCRIPTION AND LOCATION.....	15
5.1	Location	15
5.2	Mineral tenure, permitting, rights and agreements.....	15
5.3	Burundi mineral legislation.....	18
6	ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY	19

6.1	Accessibility	19
6.2	Physiography and climate.....	19
6.3	Local resources and infrastructure	21
7	HISTORY	22
7.1	Historical summary	22
8	GEOLOGICAL SETTING AND MINERALISATION	29
8.1	Regional geology	29
8.2	Local geology	31
8.3	Mineralisation	31
8.4	Structural controls on REE mineralisation	36
8.5	Geochronology.....	36
9	DEPOSIT TYPE	37
9.1	Definition	37
9.2	Implications for Mineral Resource Estimation	38
10	EXPLORATION	39
10.1	39	
10.2	TECT structural study and target generation	40
10.3	Cleaning and mapping of historical Belgian open-pit mines	47
10.4	Exploration and bulk sampling of REE veins	49
10.4.1	Gashirwe West and East.....	51
10.4.2	Gasenyi	51
10.4.3	Murambi North.....	52
10.4.4	Kiyenzi.....	52
11	DRILLING	54
12	DATA VERIFICATION	55
13	EXPLORATION TARGET.....	56
13.1	Exploration Target methodology	56
13.2	Exploration Target	67
13.3	Exploration and mineral resource development strategy	67
14	HISTORICAL MINING AND CURRENT TRIAL MINING	69
14.1	Historical mining	69
14.2	Trial mining.....	69
14.3	Trial mining production	71
15	MINERAL PROCESSING, METALLURGY	75

15.1	Current trial mineralised material processing	76
15.2	Future mineralised material – Bulk sample performance tests	76
15.3	Pilot plant feed and trial mineralised material processing	78
15.4	Trial pilot plant planned upgrade.....	78
16	CONCENTRATE SALES.....	79
16.1	Product offtake agreement.....	79
16.2	Uranium and Thorium.....	79
17	ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT	81
17.1	Statutory requirements.....	81
18	INTERPRETATION AND CONCLUSIONS.....	83
18.1	Geology and mineralisation	83
18.2	TECT structural study.....	83
18.3	Exploration Target update.....	83
18.4	Planned exploration program	84
18.5	Trial mining.....	84
18.6	Mineralised material processing and product offtake	85
19	RECOMMENDATIONS	86
19.1	Geology and mineralisation	86
19.2	TECT structural study.....	86
19.3	Exploration Target update.....	86
19.4	Planned exploration program	86
19.5	Trial mining.....	86
19.6	Mineralised material processing and product offtake	87
19.7	Feasibility study	87
20	REFERENCES.....	88

LIST OF TABLES

Table 1: Summary of exploration, 2011 – June 2020	3
Table 2: Summary of diamond core drilling	4
Table 3: Rainbow Exploration Target as at 31 st August 2020	6
Table 4: Other contributing experts/consultants/services	14
Table 5: Coordinates of the ML (WGS 84, decimal degrees, UTM zone 35S).....	16
Table 6: Summary of historical mining	23
Table 7: Summary of exploration programs completed from 2011 to mid-2019	39

Table 8: Summary of exploration completed from mid-2019 to June 2020.....	39
Table 9: Historical Belgian mines currently being explored by Rainbow	48
Table 10: MVO at Gashirwe West and East.....	51
Table 11: MVO at Gasenyi	51
Table 12: MVO at Murambi North.....	52
Table 13: Rainbow REE deposit status	57
Table 14: Vein hosted mineralisation - Combined tonnes of mineralisation plus associated waste used as input to derive an Exploration Target	63
Table 15: Vein hosted mineralisation Exploration Target as at 31st August 2020	63
Table 16: Kiyenzi breccia hosted mineralisation grade tonnage estimate from DD drilling including potential depth and lateral extensions derived from exploration	64
Table 17: Kiyenzi breccia hosted mineralisation Exploration Target	64
Table 18: Rainbow Exploration Target as at 31st August 2020	67
Table 19: Estimated exploration costs to convert Exploration Target to MRE.....	68
Table 20: Mining and processing parameters used in determination of the Exploration Target	70
Table 21: Pilot plant performance	76
Table 22: Results obtained from the tests performed on Gomvyi.....	77
Table 23: Results obtained from the tests performed on Kiyenzi Sample 1	77
Table 24: Results obtained from the tests performed on Kiyenzi Sample 2.....	77
Table 25: Summary U and Th assays from 620 drill and channel samples	79

LIST OF FIGURES

Figure 1: Plan showing Exploration Targets (purple), REE mineralisation (black) and TECT targets (blue)	7
Figure 2: Waste production from June to August 2020.....	9
Figure 3: Mineralised material production from June to August 2020	9
Figure 4: Location of Rainbow's property	15
Figure 5: Rainbow ML corner points and topography.....	17
Figure 6: Location of ML and roads proximal to the Project.....	20

Figure 7: Gakara mine plan prior to 1971 (Aderca & Van Tassel, 1971)	24
Figure 8: Topography and mining plan of the Gasenyi mine (from BGR, 1985).....	28
Figure 9: Simplified geology map of the Karagwe-Ankole Belt (KAB) and regional geology (Tack et al., 1994; Fernandez-Alonso, 2007)	30
Figure 10: Geological map of Central Africa showing Precambrian and Cenozoic formations and structures	31
Figure 11: Paragenetic sequence of Gakara mineralisation (Ntiharirizwa et al).....	32
Figure 12: Schematic model of carbonatite REE mineralisation, including “Breccia style mineralisation” (Red Circle).....	37
Figure 13: TECT key structures and carbonatites	41
Figure 14: TECT structural interpretation of airborne magnetic data (70% ENE 1VD over gradient enhanced RP magnetics)	42
Figure 15: TECT REE targets	44
Figure 16: Additional structures interpreted from August 2020 follow-up field work.....	46
Figure 17: Rainbow ML, historical and current mining and exploration sites; 1 Gakara; 2 Rusutama; 3 Bigugo; 4 Gasenyi; 5 Gasagwe	47
Figure 18: Locations of MVO (1 Gashirwe West & East; 2 Gasenyi; 3 Murambi North; 4 Kiyenzi)	50
Figure 19: Kiyenzi showing REE outcrop or float, trenches and drillhole collars	53
Figure 20: Location of Rainbow deposits showing surface REE outcrop or float	59
Figure 21: Gasagwe 3D. Top image showing 'As Mined' surface with mapped REE veins. Bottom image showing 3D model blocks - purple (Mined) and yellow (Unmined)	60
Figure 22: Murambi South 3D. Top image showing 'As Mined' surface with mapped REE veins. Bottom image showing 3D model blocks - purple (Mined) and yellow (Unmined)	61
Figure 23: Gomvyi Central 3D. Top image showing 'As Mined' surface with mapped REE veins. Bottom image showing 3D model blocks - purple (Mined) and yellow (Unmined)	62
Figure 24: Kiyenzi 3D. Topography, REE outcrop in purple, DD drillhole collars in yellow	65
Figure 25: Kiyenzi 3D, DD drillhole REE composites coloured by TREO%, REE surface occurrences in purple.....	65
Figure 26: Kiyenzi 3D, DD drillholes and 3D grade tonnage model coloured by TREO%	66
Figure 27: Kiyenzi 3D, Landslide (inverted purple triangle) and Exploration Target lateral and depth extensions coloured by TREO%	66
Figure 28: Estimated timeline to convert Exploration Target to MRE	68

Figure 29: Trial mining waste movement.....	73
Figure 30: Trial mining mineralised material production	74
Figure 31: Rainbow processing pilot plant flowsheet	75
Figure 32: U & Th ppm and US CFR 173.434 equivalent ppm value by Rainbow concentrate batch number	80

LIST OF PLATES

Plate 1: Historical photo of the Gakara mine in 1957 (Thoreau et al., 1958)	25
Plate 2: Historical photo of part of the Rusutama mine (Aderca and Van Tassel, 1971)	25
Plate 3: Historical Bigugo mine after clearing in 2020.....	26
Plate 4: Plan of the Gasagwe mine, as reported in BGR study (1983).....	27
Plate 5: Photographs of Gakara rocks (a) Bastnaesite from Kivungwe; (b &c) Automorphic Quartz crystals with Monazite from Gasagwe	33
Plate 6: Microphotographs (a) Bastnaesite (Bst) breccia texture with fractures filled by Monazite (Mnz) and Quartz (Qz). (b) Monazite (Mnz) and Quartz crystals (Qz)	33
Plate 7: Microphotograph of Aplite (drill hole GAK-DD-029), white and grey colours are Fsp+Qz showing Bastnaesite vein with Monazite alteration at its edges and in the Aplite	34
Plate 8: Microphotograph of a Gneiss with Biotite [Bt] and Muscovite [Ms] showing Monazite [Mnz] invading the Gneiss (Felspar [Fsp] and Quartz [Qz])	34
Plate 9: Microphotograph of Breccia showing phenocrysts of Bastnaesite (Bst) within a matrix of Monazite (Mnz) and dissolution voids filled with Quartz (Qtz)	35
Plate 10: Microphotograph of Biotite Gneiss (Bt) with Sericitic alteration	35
Plate 11: Cleaning of historical mines; Gakara	48
Plate 12: Cleaning of historical mines; Rusutama	48
Plate 13: Cleaning of historical mines; Bigugo	49
Plate 14: Showing waste mining using the excavator loading 25 t capacity trucks and selective mining with the TLB.....	72
Plate 15: Showing bulk waste mining and selective mechanical mineralised material mining .	72
Plate 16: Gravel haul road	72
Plate 17: Rainbow’s processing pilot plant (looking south)	76

APPENDICES

Appendix 1: JORC Table 1

Appendix 2: Summary Qualifications of Rainbow Senior Technical Staff

ACRONYMS AND ABBREVIATIONS

AusIMM	Australasian Institute of Mining and Metallurgy
AIG	Australian Institute of Geologists
BEE	Bureau pour les Evaluations Environnementales
Bst	Bastnaesite (Bst)
Bt	Biotite [Bt]
CP	Competent Person
CPR	Competent Person's Technical Report
CFR	US Department of Transport - requirements related to radiation levels in goods
DD	Diamond drilling
DMS	Dense Media Separation
ED	Eastern Domain
EGEE	Environnementale, Géologie, Energie et Eau
EL	Exploration License
ESIS	Environmental and Social Impact Studies
Fsp	Felspar [Fsp]
GPR	ground penetration radar
JORC	Joint Ore Reserve Committee (Australia)
IAEA	International Atomic Energy Agency
KAB	Karagwe-Ankole Belt
KB	Kibaran Fold Belt
ML	Mining License
Mnz	Monazite
Ms	Muscovite
MRE	Mineral Resource Estimate
MVO	Massive Vein Mineralised Material
NGO	Non-Governmental Organisation
PAR	Plan d'Action de Réinstallation
Qz	Quartz
REE	Rare Earth Element
RIR	Rainbow International Resources Limited
ROM	Run of Mine (comparable with Plant Feed)
TECT	TECT Geological Consultants
TK	ThyssenKrupp Material Trading
TREO	Total Rare Earth Oxide generally designated as a concentration in % or ppm
Th	Thorium
US\$ or USD	United States of America Dollars
WD	Western Domain
U	Uranium

UNITS AND SYMBOLS

°	Degrees
°C	Degrees Celsius
%	per cent
% w/w	weight to weight ratio, percentage by weight
g	gram
GJ/h	gigajoules per hour
ha	hectare
kg	kilogram
kL	kilolitre
km	kilometre
km ²	square kilometre
kV	kilovolt
kW	kilowatt
kWh	kilowatt hour
L	litre
L/s	litres per second
m	metre
mamsl	metres above mean sea level
masl	metres above sea level
mbgl	metres below ground level
µg	microgram
µm	micrometre
mg	milligram
mg/L	milligram per litre
mm	millimetre
m ²	square metre
m ³	cubic metre
Mm ³	million cubic metres
mS	millisiemens
mS/m	millisiemens per metre
mSv	millisieverts
Mt	million tonne
MW	megawatt
ppm	concentration in parts per million
t	tonne
t/h or tph	tonnes per hour
t/m or tpm	tonnes per month
t/m ³	tonnes per cubic metre
t/y or tpa	tonnes per year
y	year

3 SUMMARY

3.1 Introduction

Maja Mining Ltd (“Maja”) was commissioned by Rainbow Rare Earths Limited (“Rainbow” or the “Company”) to compile a Competent Person’s Technical Report (the “Report” or “CPR”) in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the “JORC Code” or the “Code”), 2012 Edition.

Rainbow is presently exploring, trial mining and trail processing the Gakara Rare Earth Element (“REE”) deposit (the “Project”) located in western Burundi.

The Project contains two styles of known mineralisation locally termed vein hosted and breccia hosted. Both mineralisation styles contain the same basket of REE minerals and produce an identical quality saleable concentrate, based on the 64 twenty five tonne batches of concentrate sold during the past 2 years as at end of July 2020.

This Report presents:

- An updated Exploration Target for vein hosted REE mineralisation located within the historical and current mining areas, using the results of exploration mapping and sampling completed as at 30th June 2020.
- The results of a regional structural study by TECT Geological Consultants which supports existing exploration defined REE deposits and identifies new vein and breccia hosted REE anomalies.
- Results and conclusions from additional sample analysis, 3D modelling and metallurgical test work from the Kiyenzi diamond drilling program completed in 2018
- The planned exploration program to convert the Exploration Targets to Inferred Mineral Resources and to test the new TECT defined REE targets, including the exploration budget and schedule.

This Report is intended for use by Rainbow for a public announcement of the updated vein hosted Exploration Target, the new and confirmed TECT structural REE targets, and the strategy for conversion of these targets to Mineral Resources. It is not known whether continued exploration work will result in a Mineral Resource.

3.2 Material changes from last public report

The last Public Report published by Rainbow was the “Technical Report on the Gakara REE Project” compiled by The MSA Group (Pty) Ltd (“MSA”) and dated 4th June 2019.

The following work has been completed since June 2019:

- Completion of PhD geology thesis on the Gakara REE deposits.
- Structural review and regional REE target generation by TECT Geological Consultants.
- Further drill core analysis, geological modelling and metallurgical test work on the Kiyenzi deposit 2018 diamond drill core.
- Increased mechanisation of trial mining activities including trial mining of a second deposit.
- Improvements to the pilot processing plant including ability to treat lower grade vein and breccia hosted mineralisation while producing consistent saleable quality REE concentrate.

- Field exploration activities including identification, mapping, sampling, trenching and bulk sampling of historical and new near surface REE mineralisation.
- Development of 3D Exploration Target conceptual models focused on areas of current and historical mining.

3.3 Mineral tenure and ownership

The Gakara REE Project is defined by a 39 km² Mining Licence (“ML”) which is valid until 2040, with 10-year renewal increments available. The most prospective parts of the previous Exploration Licence (“EL”) were converted to the ML on 27th March 2015. The remainder of the EL expired in July 2018 and additional prospective areas contiguous to the ML have been applied for as an EL.

Rainbow Rare Earths Limited (“Rainbow”) owns 90% of the ML in partnership with the Burundi state which owns the remaining 10%.

3.4 Property description and location

The Gakara REE Project is in the Bujumbura Province in Western Burundi approximately 20 km south-southeast of Bujumbura. A base camp has been established at the Gasenyi Catholic Mission in the village of Mutambu, a local administrative centre located in the north-central part of the ML. The REE pilot processing plant is 15 km south of Bujumbura adjacent and to the west of the N3 tar road at Kabezi.

The Project is located on the eastern escarpment of the Lake Tanganyika Graben within a rugged topography with deep V-shaped valleys and a well-developed erosional drainage system. The Project lies at an altitude of between 1,500 and 2,000 m and is intensely cultivated with subsistence plantations.

Burundi has a humid, equatorial climate with a rainy season from October to May. The dry season is normally from June to September. The average annual rainfall for Burundi is around 1,300 mm per year.

Modern facilities, goods and services are available from Bujumbura, with basic food supplies available in Mutambu. Bujumbura is served by daily commercial flights from Nairobi and Kigali. Cellular phone coverage is available over most parts of the Project. The 8-megawatt Mugere River hydroelectric plant, the main power supplier to Bujumbura, is situated approximately 3km north of Mutambu and is a potential source of long-term electricity to the Project. Currently Rainbow provides electricity to the Kabezi trial processing plant using its own power generators.

Rainbow exports its concentrate product due east to the ports Dar es Salaam in Tanzania and Mombasa in Kenya using the tarred road network.

3.5 Geology and mineralisation

The Project is situated within the northeast trending Kibaran Fold Belt (“KB”) which stretches across Burundi from the eastern Democratic Republic of Congo to western Tanzania. The KB in Burundi consists of a highly deformed sequence of Mesoproterozoic granites, granitoids and amphibolite-greenschist facies metasedimentary and metavolcanic rocks, referred to as the Burundi Supergroup.

The REE deposits are located near Lake Tanganyika, on the western branch of the East African rift. REE mineralisation is related to carbonatitic and/or peralkaline magmas emplacement. The carbonatites and the associated REE mineralisation have been dated around 600-700 Ma. The REE mineralisation is hosted in Mesoproterozoic rocks composed of metasediments and orthogneisses intersected by pegmatites which have been dated 969 Ma. The Project is mainly composed of rocks formed during the Mesoproterozoic, Kibaran orogenic event between 1,375 Ma and 985 Ma.

The REE mineralisation identified so far occurs as discrete veins or within breccia zones.

Vein hosted mineralisation occurs as centimetre to decimetre vein stockworks which are mainly coarse grained, locally brecciated, metasomatised bastnaesite and monazite. The gangue material consists of quartz, biotite, barite, microcline, pyrite and galena.

Breccia hosted mineralisation consists of the same REE minerals and gangue material, with the mineralogy mixed by intensive brecciation, resulting in an heterogenous and chaotic breccia in which the matrix includes bastnaesite and monazite.

Alteration mainly related to intense deep weathering has resulted in goethitisation and kaolinitisation (breakdown to clay minerals) of the host rocks. The REE minerals (bastnaesite and monazite) are less affected by the weathering and stand out as more competent units within the weathered matrix, facilitating selective mining and concentrate production by simple washing and gravity methods.

3.6 Status of exploration

The exploration programs completed by Rainbow between 2011 and June 2020 are summarised in Table 1.

Table 1: Summary of exploration, 2011 – June 2020	
Activity	Details
Pitting and trenching	Pre-2019: 85 pits (75 at Gasagwe and 10 at Kiyenzi); 34 trenches in 8 targets From 2019: two trenches (total 285m) excavated on top of Kiyenzi hill target to establish REE mineralisation extent beyond drilled-out resource
Geological mapping	7,956 geological observation points acquired including 1,529 REE occurrences of which 1,136 are <i>in situ</i> veins
Rock grab sampling	632 sites sampled and analysed by Niton hand-held XRF; 150 rock grab samples analysed by ALS Chemex, South Africa
Soil sampling (orientation survey)	591 samples from three blocks (500m x 500m); all analysed by Niton and ALS Chemex, SA 2,906 samples from 4 geophysical grids collected and analysed by Niton only
Ground gravity (orientation survey)	3.6 line km on 7 selected sites
Ground magnetic (orientation survey)	10 line km on 7 selected sites
Airborne geophysical survey	High-resolution, helicopter-borne, magnetic and radiometric survey flown over 130km ² area, at 50m line spacing, and comprising of a total of 2,969 line km
TECT Geology Consultants Structural geology mapping and targeting	Structural and lithological interpretation of high-resolution geophysical data followed by the generation of new exploration targets using a mineral systems approach 36 Tier-1 and Tier-2 targets as well as 3 large 'carbonatite-type' bodies. This includes 17 new targets not previously identified by Rainbow.
Exploration and bulk sampling of "large REE veins"	35 "large REE veins" (>10cm thick) exposed over various lateral and depth extents, at Gashirwe West and East, Gasenyi, Murambi North and Kiyenzi

Cleaning and mapping of historical Belgian open-pit mines	The following historical Belgian mine pits were cleaned and mapped and all REE veins recorded: Rusutama, Bigugo and Gakara (ongoing)
---	--

3.7

3.8 Drilling

Diamond drilling (“DD”) was carried out by Rainbow between February and September 2018. This was the only drilling completed on the Project. The program was completed in 2 phases and addressed the objective described in Table 2.

Drilling Objective	No. of targets drilled	No. of holes drilled	Total metres drilled
Gasagwe: establishing depth continuation of REE veins	1	3	150.0
Airborne magnetic targets testing	4	4	437.0
Airborne radiometric targets testing	2	2	100.0
Kiyenzi: drilling a ground gravity anomaly	1	6	464.6
Kiyenzi: delineating potential tonnage and grade	1	24	963.9
TOTAL	9	39	2,115.5

3.9 Geophysical and structural analysis

Dr Ian Basson and Dr Corné Koegelenberg of TECT Geological Consulting (“TECT”) were contracted to undertake a structural and lithological re-interpretation of high-resolution geophysical data including integration of all RMB geological observations gathered over the past 10 years. This analysis was used to define new REE targets using a mineral systems approach.

The TECT analysis confirmed the presence of at least three large carbonatites, distributed along a major NNE-trending structure, with the southernmost carbonatite (with a diameter of approximately 2.6km) underlying a large proportion of the mapped and mined REE-bearing veins. This body has been identified by TECT as the potential source of REE-rich, mineralising fluids in the western section of the Project. Additional potentially deeper (lower intensity magnetic signature) carbonatites are postulated in the centre of the project supporting the recognised REE mineralisation.

The applied mineral systems approach uses a data-driven algorithm based on the co-incidence of the following: i) presence of a suitable source intrusion; ii) the effects and extent of the mineralising fluid; iii) and the regional structural permeability and iv) the small-scale structures that host REE-bearing veins. These areas were ranked resulting in a total of 36 Tier-1 and Tier-2 targets and 21 Tier-3 targets for field mapping and further exploration. These targets are sites where REE mineralisation, in the form of vein stockworks and/or breccias, is likely to be more intense.

3.10 Exploration target

JORC 2012 defines an Exploration Target as a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade, relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource.

The REE mineralisation identified in the Project is readily identified by surface mapping and sampling and is visible in the historical Belgian and current Rainbow open pit excavations and covers most of the Project ML. The delay in defining Mineral Resources is related to:

Understanding continuity and geometry (vein width) of the complex vein hosted mineralisation.

Limited exposure and difficulty in identification of breccia hosted mineralisation drill targets due to intense agricultural disturbance of the land surface.

Surface identification of the REE mineralisation structural controls (faults and dilation zones) required to better define drill targets.

Understanding the relationship of the presence of REE mineralisation to the requirement for Mineral Resources to satisfy criteria for potential economic recovery.

Knowledge of the depth of intense weathering which also impacts the requirement for potential economic recovery.

The REE mineralisation, although readily identified, is spread over large areas, which would require large drilling programs for conversion to Mineral Resources.

The Rainbow Exploration Target has been revised and updated using a robust approach based on integration of exploration surface mapping, historical Belgian and current Rainbow trial mining, exploration bulk sampling, trial processing REE recoveries and results from metallurgical test work.

Topographic and geological data was used to build 3D vein hosted mineralisation models of the Exploration Target using Datamine software for 5 historical Belgian and 2 Rainbow and Belgian mined deposits. A further 2 deposits were modelled using surface exploration data. Appropriate estimates of the parameters relating to depth of weathering and extent of REE mineralisation were applied.

A 3D block model was constructed for breccia hosted REE Kiyenzi deposit based on assay results obtained from the 2018 diamond core drilling program, and more recent assays completed in 2020. The interpretation of this 3D model provided key insights to the geological and grade characteristics of the breccia hosted mineralisation. A grade and tonnage range of potential extensions to the Kiyenzi deposit was developed based on additional exploration sampling and potential extensions of the down dip breccia hosted REE mineralisation continuity.

The Rainbow Exploration Target as a range of in-situ tonnes and grade of vein and breccia hosted mineralisation is presented in Table 3.

Figure 1 is a plan showing the 10 Exploration Targets together with existing REE surface outcrop and TECT REE mineralisation targets. Some of the TECT targets are show outside of the current Rainbow ML, these are included in the current updated EL application

Table 3: Rainbow Exploration Target as at 31st August 2020	Lower estimate		Upper estimate	
	Tonnes	TREO %	Tonnes	TREO %
Vein Hosted Mineralisation				
Murambi South	36,000	7%	52,000	12%
Gasagwe	27,000	7%	39,000	12%
Rusutama	23,000	7%	33,000	12%
Gakara	61,000	7%	87,000	12%
Gomvyi Central	15,000	7%	22,000	12%
Gashirwe West and East	45,000	7%	64,000	12%
Bigugo	8,000	7%	11,000	12%
Gasenyi	47,000	7%	67,000	12%
Vein Hosted Exploration Target	262,000	7%	375,000	12%
Breccia Hosted Mineralisation				
Kiyenzi grade tonnage model	98,000	1%	132,000	1.5%
Kiyenzi depth extension	60,000	1%	82,000	1.5%
Kiyenzi lateral extension	94,000	1%	128,000	1.5%
Breccia Hosted Exploration Target	252,000	1%	342,000	1.5%

Note: The potential quantity and grade of the Exploration Target is conceptual in nature, there being insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource. Numbers are rounded to appropriate levels commensurate with the level of accuracy of an Exploration Target. The Exploration Target was estimated as a range as required by the JORC Code (2012) and is based on data of varying quantity and quality, although is based largely on actual exploration, mining and processing results.

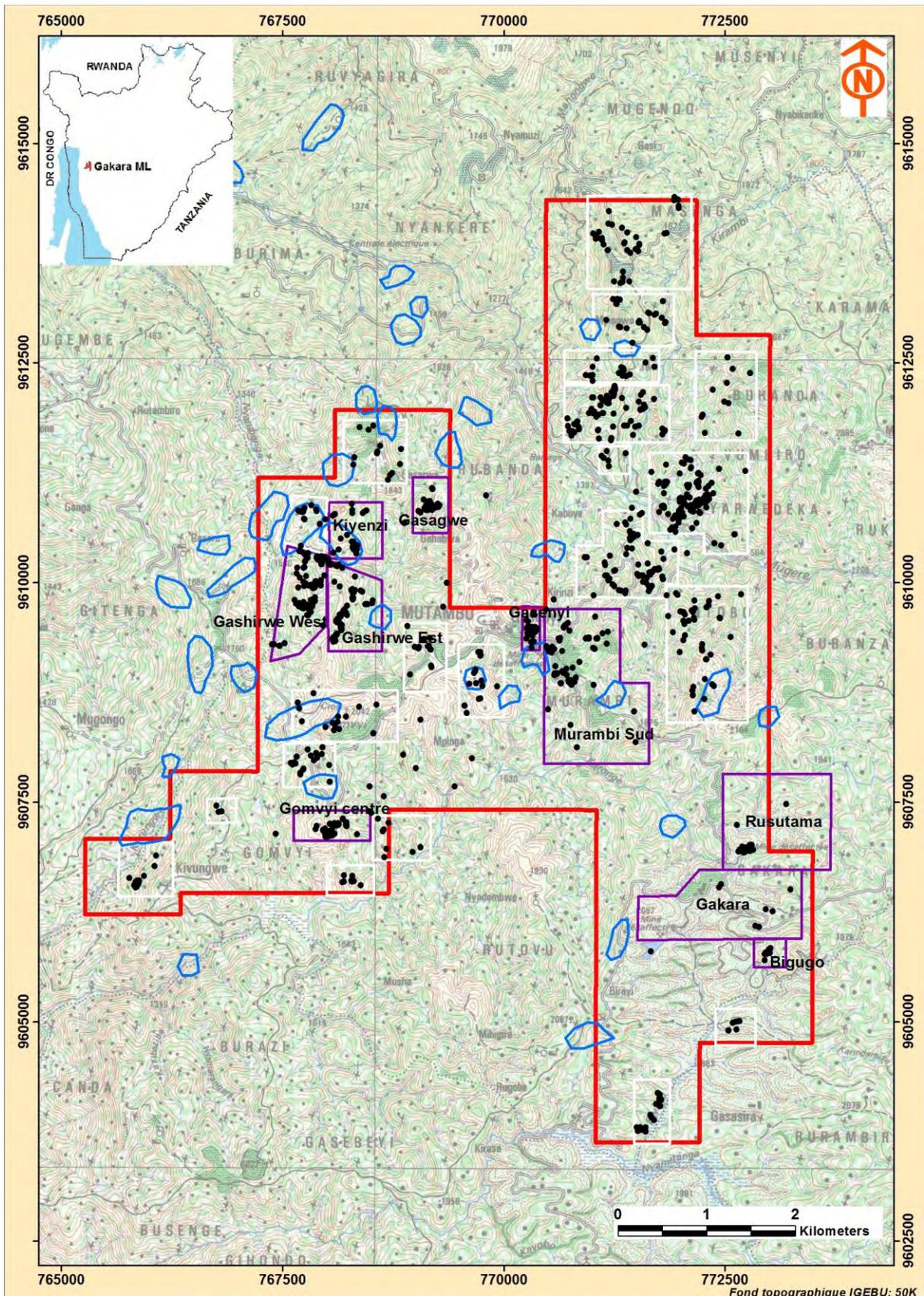


Figure 1: Plan showing Exploration Targets (purple), REE mineralisation (black) and TECT targets (blue)

3.11 Previous mining and current trial mining

3.11.1 Historical mining

The historical mining by the Belgians was manual. The high grade REE veins were initially exposed at surface and the waste removed by hand leaving the veins exposed. The REE veins were then extracted manually. This resulted in very high grade ore being produced which required minimal processing before shipment. Several vein hosted occurrences were exploited in this way. Approximately 5,000 tonnes of very high grade ore was extracted over a period of 30 years of intermittent mining (BGR, Thoreau).

3.11.2 Trial mining

Rainbow commenced trial mining at the Gasagwe vein hosted deposit during 2017. The initial mining method used excavators and trucks to remove waste and expose the high grade REE veins. The REE veins were then extracted manually resulting in a high grade mineralised material with a TREO grade of approximately 30% for delivery to the pilot processing plant at Kabezi. This method was effective but resulted in mineralised material loss of narrow veins and the mineralised selvedge which sometime exists around larger veins. Production at Gasagwe ceased when the veins appeared to narrow.

A second pit was opened during 2019 at the vein hosted Murambi South deposit which faced initial mineralised material production limitations due to the size of the available mining fleet, mainly related to the waste pre-strip requirements.

Once the Murambi South pit was established a change in mining method aimed at reducing mineralised material loss was trialled from late 2019. A bulk mining approach was applied to vein rich areas with 100% mechanical extraction. Although this approach reduced mineralised material loss, it resulted in too much dilution and a low TREO grade of <2% being delivered to the pilot plant. This overloaded the pilot plant in terms of fines and waste and was discontinued in early 2020.

To overcome the excessive dilution a hybrid method was introduced where waste is bulk mined mechanically by the larger excavator and trucks whilst mineralised material with a selvedge of mineralised low grade and/or waste is selectively mined by a smaller excavator and delivered to the plant. This method has reduced mineralised material loss and waste dilution and produces a quality grade REE mineralised material of approximately 10% TREO which is readily processed in the Kabezi pilot plant. A plant feed grade of around 10% TREO is one of the highest REE plant feed grades in the world.

The current hybrid trial mining method has successfully been employed at Murambi South from early 2020 and continues to be the preferred trial mining method for vein hosted orebodies. The hybrid method of bulk mechanical waste removal with selective mechanical vein mineralisation recovery is optimal for the vein hosted mineralised materials.

Improved mine planning and the purchase of an owner's trial mining fleet has seen a steady increase in trial mining and trial processing to produce approximately 65 tonnes per month of concentrate. A second trial mining fleet has been ordered and trial mining will extend to Gasenyi deposit once the new equipment arrives on site. Concentrate production is expected to increase to approximately 100+ tonnes per month at a grade exceeding 54% TREO.

The soft, friable nature of the weathered vein hosted mineralised material coupled with a downhill haul for the bulk waste to adjacent dumps results in a very low mining cost despite a high strip ratio ranging from approximately 100 to 70:1

The planned trial mining targets around 700 tpm of ROM vein mineralisation at approximately 10% TREO at an average stripping ratio of 100:1 during the dry season. During the rainy season this is expected to drop to around 500 tpm of ROM vein mineralisation. The trial mine production results compared to planned for the past three months are presented in Figure 2 and Figure 3 which demonstrate increasing confidence in the trial mining approach.

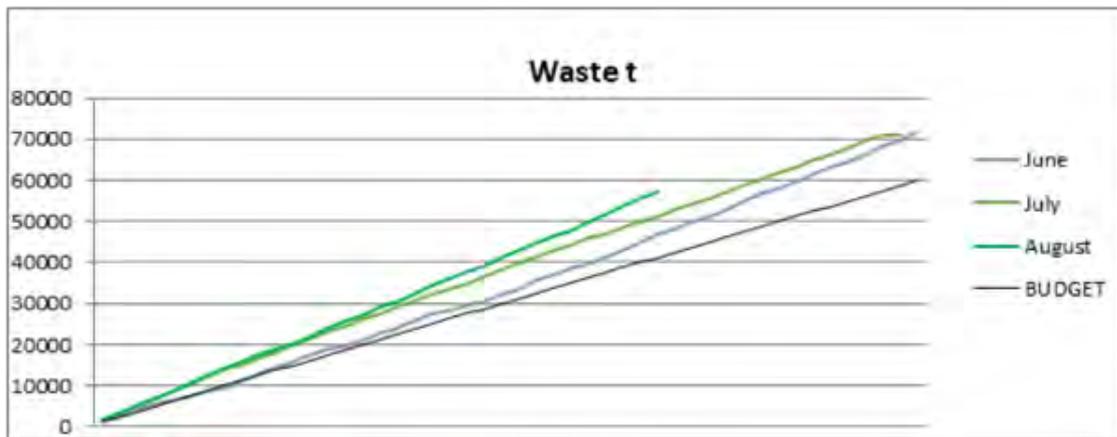


Figure 2: Waste production from June to August 2020

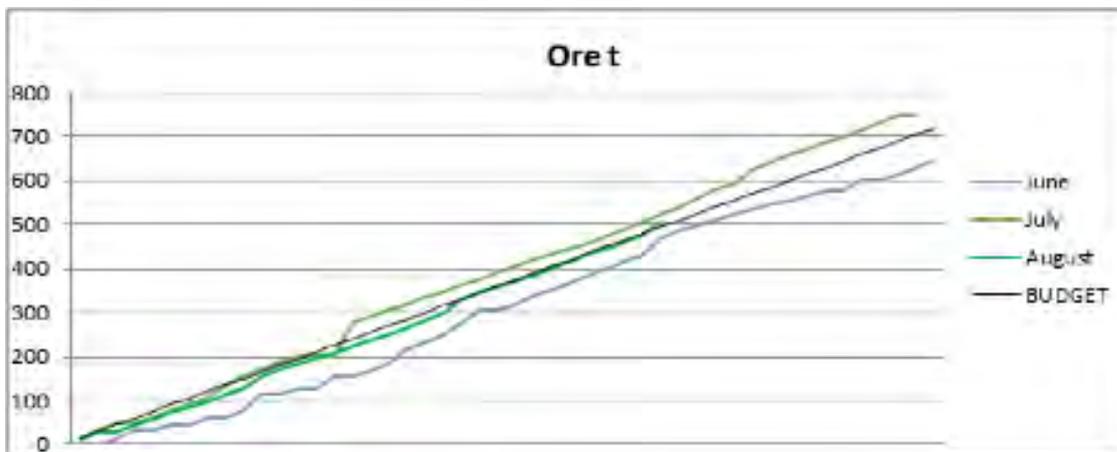


Figure 3: Mineralised material production from June to August 2020

The current mining fleet comprises of:

- 1 x JCB JS205 20t Excavator
- 2 x JCB 4CX TLB's
- 5 x Howo 25t 6x4 Tipper Trucks
- 1 x SDLG Grader
- 1 x Dozer

To increase trial mining / processing to achieve 100+ tonnes of concentrate per month the following mining equipment is being procured:

- 1 x Hyundai 340L 34t Excavator
- 2 x Howo 25t Tipper Trucks

3.12 Mineralised material processing and metallurgy

Initial metallurgical testing of samples of mineralised material from Rainbow’s Gakara property in Burundi demonstrated that the Project mineralised material upgrades readily through simple gravity techniques, producing a very high grade concentrate of more the 54% TREO. This test program provided the basis for the design of Rainbow’s pilot plant which was commissioned in Q1 2018 and has been in continuous trial production mode since commissioning.

The pilot plant was constructed near the town of Kabezi, located 15km south of Bujumbura, between Lake Tanganyika to the west and the N3 road to the east. The location near the capital city and the national road offers many logistical advantages.

3.12.1 Current trial mineralised material processing

The pilot plant has primarily treated mineralised material produced from trial mining at the Gasagwe and Murambi South deposits. Over 9000 tonnes of mineralised material from these deposits has been treated achieving an overall recovery of more than 73% of the contained TREOs whilst yielding a concentrate grade of more than 57% TREO.

Approximately 200 tonnes of mineralised material has been processed from exploration bulk samples to evaluate metallurgical properties of the other deposits. All have displayed similar excellent response to gravity separation.

3.12.2 Future mineralised material – Bulk sample performance tests

Rainbow’s pilot plant has also been used to carry our performance tests on mineralised materials from future new mining sites, namely Gomvyi and Kiyenzi. This facility is of paramount importance for the exploration and development of potential future mine sites. These bulk samples have performed well in the pilot plant with good recoveries and high concentrate grades.

3.12.3 Plant feed grades and trial mineralised material processing

The initial plant design catered for a head feed grade of 30% TREO as achieved from the initial trial mining. There have been no significant modifications to the plant even though the feed grade of the mineralised material has varied considerably as different mining methods were tested.

The attempt at processing bulk mined mineralised material at significantly lower feed grades for a couple of months did show that the pilot plant has its limits. The capacity to process –1 mm material was a constraint and the system quickly became overloaded and uneconomic. The feed grades at this stage was sub 2% TREO which impacted on the recovery, although a 54% TREO concentrate grade was still achieved.

After the bulk mining trial a move towards lower waste dilution trial mining has resulted in the current ROM grade of approximately 10% TREO, which is readily processed in the pilot plant.

3.12.4 Trial process plant planned upgrade

Currently the REE concentrate is air/sun dried before bagging. This will become a bottleneck as production continues to rise. A rotary drier and dust collection system is being procured and will be installed and commissioned shortly.

Apart from the concentrate drying issue, the existing pilot plant has the capacity produce 100+ tonnes per month.

Future plans to increase the concentrate production rate towards 5,000 tpa will require a new process plant most likely to be installed at the mine site. This plant will probably utilise Dense Media Separation (DMS) for the coarse concentration and Spiral Concentrators (Spirals) for the fines concentration, in place of the low-capacity jig and tables. This type of plant is readily expanded on a modular basis to meet the anticipated subsequent expansion to 10,000+ tonnes of concentrate per annum. A program of test work for the different mineralised material types has been commenced to optimise the production plant process.

3.13 Recommendations

- Continue to advance geology and mineralisation understanding through a collaborative approach involving existing key players. Namely site exploration geologists, Seconde Ntiharirizwa and TECT Geological Consulting. A site based workshop is recommended.
- Exploration field work is required to further develop and fine tune the existing TECT Tier-1 and Tier-2 targets. An appropriate feedback loop between the Rainbow geologists and TECT is recommended, with TECT taking an active role in reviewing results from field observations and updating the TECT REE target locations. The focus should be on designing an optimum drill program to maximise chances of significant discovery.
- Historical and earlier Rainbow exploration has been dominated by visual recognition of vein hosted mineralisation. A greater understanding of the nature, scale and quality of breccia hosted mineralisation is required. Breccia hosted mineralisation may have greater concentrations of REE mineralisation and if high enough grade, be simpler and more profitable to mine and process.
- Complete the exploration work required to convert the Exploration Target to Mineral Resources, which includes 16,200 m of diamond core drilling, with appropriate feasibility studies to develop a mine plan to justify the financing required to increase mining capacity and build a processing plant.
- Purchase a site based containerised sample preparation and REE sample analysis laboratory to reduce overall sample analysis costs and sample turnaround time.
- Purchase of a JCB/Excavator to improve both the quality and productivity of exploration trenching and surface sampling.
- Approve the exploration budget of US\$3.2 million required for the next 12 months of work.
- Continue with the mining method for vein hosted REE mineralisation whereby waste is stripped mechanically by a bulk fleet of excavator and trucks, whilst veins and adjacent selvedge low grade and/or waste are mined by a smaller excavator and trucks delivering to the plant. The target is to produce a ROM grade of approximately 10% TREO which is readily processed in the Kabezi pilot plant.
- Implement the second mining fleet to extend trial mining to the Gasenyi Central deposit to ensure concentrate production exceeds 100 tonnes per month at a grade of greater than 54% TREO.
- Concentrate produced from the pilot plant has proven to be commercially viable. Ensure concentrate quality is maintained or improved to continue to provide sales revenue to support ongoing exploration and project development.
- Review the existing offtake agreement to maximise concentrate sale revenue.
- Complete ongoing analysis to understand the variables which impact the U and Th grades in the final saleable concentrate. Devise a trial mining blending strategy to maintain the existing low U and Th radiation average.
- Install a rotary drier and dust collection system to avoid any bottleneck for the pilot plant as concentrate production is increased to 100+ tonnes per month, particularly during the rainy season.
- Implement feasibility studies including metallurgy and processing test work to optimise plant design to increase production to 5,000 of concentrate per annum. Ensure the plant design incorporates a modular design philosophy to meet the anticipated later expansion to 10,000+ tonnes of concentrate per annum.

4 INTRODUCTION

4.1 Scope of work

Maja Mining Ltd (Maja) was commissioned by Rainbow Rare Earths Limited (Rainbow) to compile a Technical Report in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 Edition (JORC 2012).

This Report presents an updated Exploration Target, results of the structural and geological review by TECT Geological Consulting and the results of exploration, trial mining and mineralised material pilot plant processing up to June 2020. This Report is intended for use by Rainbow for a public announcement of the updated Exploration Target and forthcoming program of works.

The metric system is used for all length, weight and capacity measurements and monetary figures expressed in this Report are in United States of America Dollars (US\$ or USD). A glossary of technical terms and abbreviations is included after the Table of Contents.

4.2 Principal sources of information

This Report has been prepared on information available up to and including 30th June 2020 (with some exploration results and TECT analysis as at 31st August 2020). Maja has endeavoured, by making all reasonable checks, to confirm the authenticity and completeness of the technical data upon which this report is based. A final draft of the report was provided to Rainbow, along with a written request to identify any material errors or omissions.

4.3 Qualifications, experience and independence

Maja Mining Limited is a UK based Mining and Geological consulting company, which has been providing services and advice to the international mineral industry worldwide since 2013.

This Report has been compiled by Malcolm Titley who is a Competent Person as defined by the JORC Code 2012 Edition, having a total of 38 years continuous experience in the mining industry and at least 5 years' experience that is relevant to REE mineralisation style and deposit type described in the Report. Malcolm Titley is a Member of both the Australasian Institute of Mining and Metallurgy ("AusIMM") and Australian Institute of Geologists ("AIG"). Malcolm Titley has been consulting to Rainbow since 1st September 2019 with a primary focus on providing a strategy to develop the Rainbow Exploration Targets with a view to estimating Mineral Resources. Malcolm Titley visited the Rainbow exploration properties, including areas of trial mining and the Kabezi pilot processing plant during the period 12 to 15th January 2020. Malcolm Titley is Independent of Rainbow, does not hold shares or other interests in Rainbow except for his consulting contract with Rainbow as an employee and director of Maja.

The Rainbow technical team comprises Dr Gilbert Midende (General Manager), Mr Cesare Morelli (Chief Geologist), Mr Joël Ntungwanayo (Project Geologist), Mr Chris Attwood (Mine Manager) and Dave Dodd (Technical Director). The former three have been involved in the exploration and development of the Project from its inception in 2011 and they have provided the technical input and the project data required for the compilation of this CPR. Mr Attwood was appointed Mine Manager at Rainbow Mining Burundi in September 2019.

Summary of the experience and qualifications of the key Rainbow staff are presented in Appendix 2.

4.4 Reliance on other experts

In preparing this Report, the Competent Person has relied on technical input and the provision of data from Experts others than those working for Rainbow. Other experts who have contribute to the provision of relevant data for the compilation of this report are listed in Table 4.

The geological, mineralogical and petrographic sections of this Report have been largely compiled by Seconde Ntiharirizwa, a Burundian student who has completed a PhD at the Geosciences Laboratory, University of Rennes 1 in France. The title of her PhD thesis, which was partly sponsored by Rainbow is: “The REE mineralisation of the Gakara area (Burundi): structural controls, petrological and geochemical characterisation and metallogeny model”. A paper ensuing from her PhD has been published in Minerals (Vol.8, Issue 9), titled: “Geology and U-Th-Pb Dating of the Gakara REE Deposit, Burundi”.

Table 4: Other contributing experts/consultants/services	
Expert	Services Provided
<i>ALS Chemex (Johannesburg)</i> <i>ALS Canada (Vancouver)</i>	Geochemical analyses of all Rainbow samples (rocks, channel, drill, soil etc.)
<i>CSA Global</i>	Management of a Datashed database for the Kiyenzi diamond drillholes, location and assays from field bulk and grab REE sampling and for channel sampling programs. Site visit from 3 to 5 th October 2019 primarily focused on a review the Murambi trial mining and the Kiyenzi and Gashirwe breccia and vein hosted mineralisation.
<i>TECT Geological Consulting</i>	Structural and lithological study based on airborne geophysical data and the Rainbow geological and REE occurrence data
<i>Dr Ir Bernard Sindayihebura (independent consultant)</i>	Environmental and Social Impact Studies

5 PROPERTY DESCRIPTION AND LOCATION

5.1 Location

The Gakara REE Project is in the Bujumbura Province in Western Burundi (Figure 4), approximately 20 km south-southeast of Bujumbura. The Project is defined by a 39 km² Mining Licence (“ML”) which is valid until 2040, with 10 year renewal increments available.

An exploration and mining operation camp has been established at the Gasenyi Catholic Mission in the village of Mutambu, a local administrative centre located in the central part of the ML. A trial mineralised material processing plant (Kabezi) was constructed 15 km south of Bujumbura, adjacent and to the west of the N3 tar road (Figure 4).

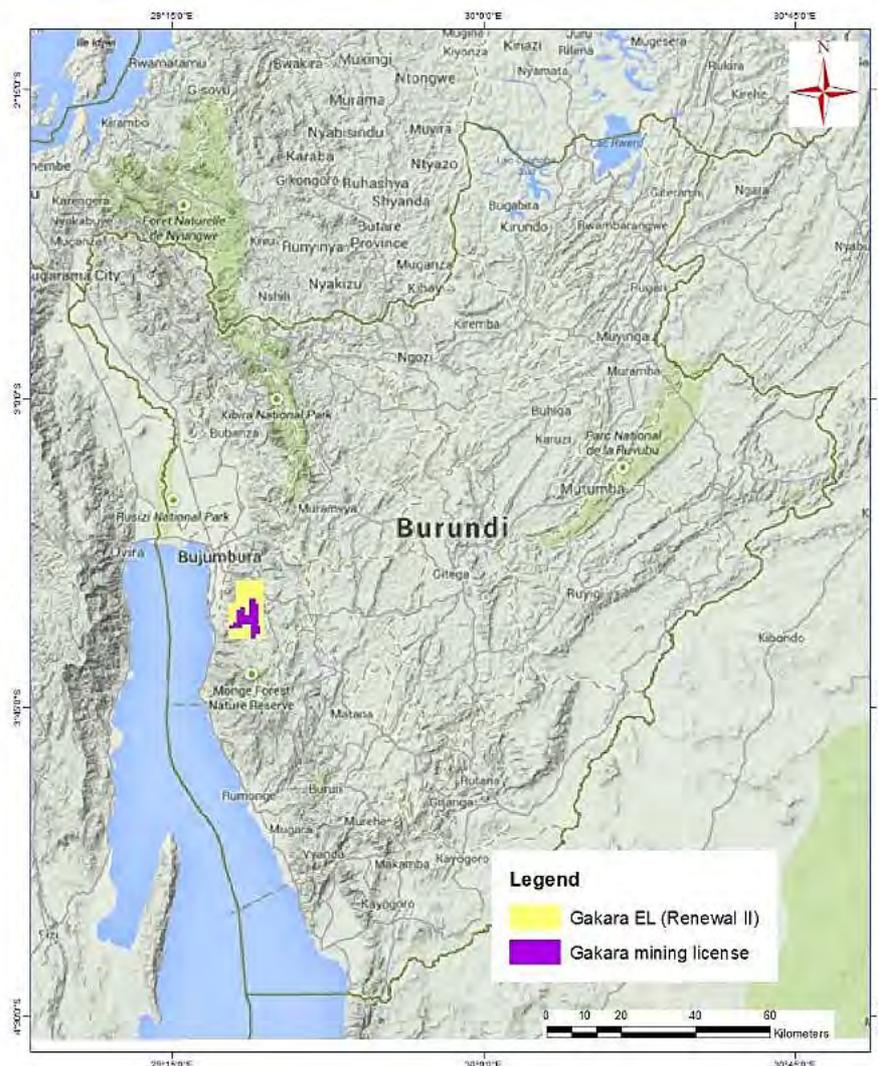


Figure 4: Location of Rainbow's property

5.2 Mineral tenure, permitting, rights and agreements

Rainbow International Resources Limited (“RIR”), which is 100% held by Rainbow Rare Earths Limited was granted its EL (in French “Permis de Recherche”) for REE and associated minerals in the Gakara region by Presidential Decree No. 100/141 of 16 May 2011. The Decree was based on the Mineral Agreement (“Convention de Recherche Minière”), dated 9 May 2011, between the

State of Burundi and RIR. The EL was valid for an initial period of three years and was renewed twice for periods of two years each time. The last renewal was granted to RIR in July 2016 (by Decree No. 100/174) with a reduced area of 96 km².

The Project is currently defined by the 39 km² Mining Licence which is valid until 2040, with a 10-year incremental renewal options. The most prospective parts of the previous Exploration Licence were converted to the ML on 27th March 2015. The remainder of the EL expired in July 2018 and additional prospective areas contiguous to the ML have been applied for as a new EL.

Rainbow Rare Earths Limited owns 90% of the ML in partnership with the Burundi state which owns the remaining 10%.

Table 5: Coordinates of the ML (WGS 84, decimal degrees, UTM zone 35S)

Corner Point	Longitude East	Latitude South
G	29,45	-3,58
H	29,46	-3,57
I	29,45	-3,57
J	29,46	-3,55
K	29,46	-3,55
L	29,46	-3,50
M	29,45	-3,50
N	29,45	-3,49
O	29,43	-3,49
P	29,43	-3,53
Q	29,42	-3,53
R	29,42	-3,51
S	29,41	-3,51
T	29,41	-3,51
U	29,41	-3,51
V	29,41	-3,54
W	29,40	-3,54
X	29,40	-3,55
Y	29,39	-3,55
Z	29,39	-3,56
AA	29,40	-3,56
BB	29,40	-3,56
CC	29,42	-3,56
DD	29,42	-3,55
EE	29,44	-3,55
FF	29,44	-3,58

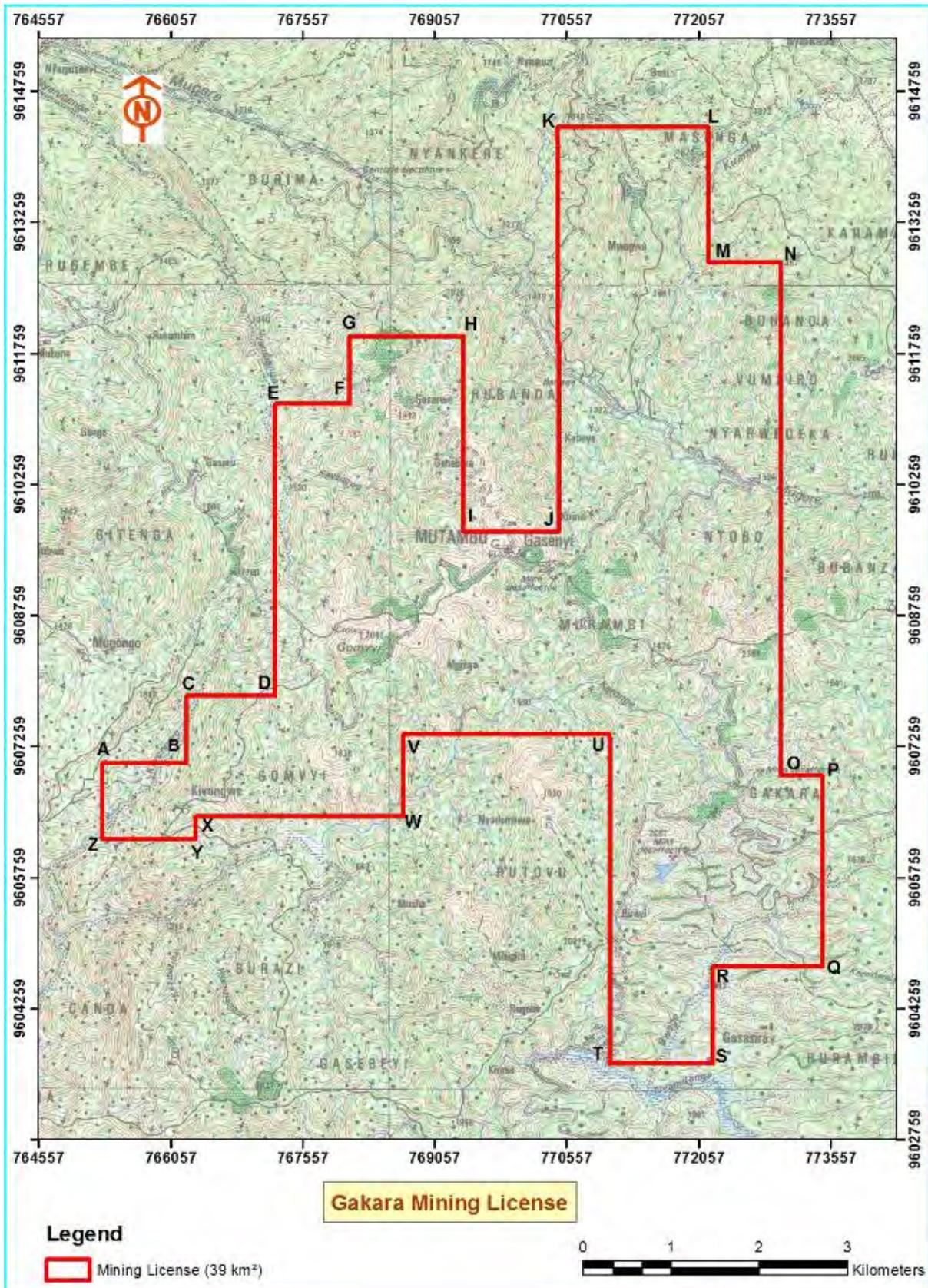


Figure 5: Rainbow ML corner points and topography

5.3 Burundi mineral legislation

The Mining Code of Burundi was enacted by President Pierre Nkurunziza on 15 October 2013 as Law No 1/21. The Mining Code 2013, which deals only with the mining sector, replaces the previous Mining Code which was in force in the country since 1976.

Rainbow is the first, and currently the only industrial-scale trial mining operation in Burundi. Since the commencement of the trial mining and pilot plant processing in early 2017, the Company has had no issues related to the application of the Mining Code.

6 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

6.1 Accessibility

Access to the Property from Bujumbura is by tarred road via the N3 in a southerly direction along the eastern coastline of Lake Tanganyika. The tarred road connects to an all-weather dirt road to the local administrative centre of Mutambu, located in the central part of the Mining Licence. Rainbow has an exploration camp within the Gasenyi Catholic Mission premises, with accommodation, storage facilities, water, electricity and communication. The total distance by road from Bujumbura to Mutambu is 40 km and takes about 90 minutes.

The Project area is served by variably maintained dirt roads, which, due to the rugged terrain, can become difficult to negotiate during the rainy season(s). The dirt roads or tracks usually follow local watersheds, with access to valley bottoms and/or primary and secondary drainages via local footpaths that are extensively developed throughout the Project area.

6.2 Physiography and climate

The Project is located on the east escarpment of the Lake Tanganyika Graben in the Mirwa Mountains area. The topography is rugged with deep V-shaped valleys and a well-developed erosional drainage system. The main rivers in the Project area are the Mugere and the Karonge Rivers which flow into Lake Tanganyika 12 to 15 km away with a vertical drop of approximately 1,500 m.

The Project lies at an altitude of between 1,500 and 2,000 m. The Gomvyi Mountain (2,040 m) is the highest point in the region. The eastern part of the Project marks a transition to the Congo-Nile ridge and plateau and is characterised by steep slopes and convex-shape valleys. The Heha Mountain (2,670 m) which is the highest peak in Burundi is approximately 5 km to the southeast of the Project.

The Project has undergone significant and deep weathering, which results in a paucity of hard-rock outcrops, the vast majority of which can only be observed along road cuts or along stream beds.

The Project is intensely cultivated with subsistence plantations (manioc, vegetables, coffee, maize, trees etc.). Remaining areas of natural vegetation are being cleared to make way for the expanding subsistence agricultural needs, and to supply local building requirements.

Burundi has an equatorial climate influenced by the rift altitude, with a rainy season from October to May. There is a period of reduced rainfall in December to January. The dry season lasts from June to September. The average annual rainfall for Burundi is 1,300 mm. Temperatures are relatively moderate, varying between 17°C and 23°C on the plateau. Above 2,000m, the average winter minimum temperature is 6°C.

6.3 Local resources and infrastructure

Burundi has a significant rural population with a density of around 470 inhabitants per square kilometre. Modern facilities, goods and services are available from Bujumbura. Food supplies are available in Mutambu. Bujumbura is served by daily commercial flights from Nairobi and Kigali (Kenya Air and Rwandair). Cellular phone coverage is available over most parts of the Project.

The 8 megawatt Mugere River hydroelectric plant, the main power supplier to Bujumbura, is situated approximately 3 km north of Mutambu and has been identified as a potential source of electricity to the Project. Currently Rainbow provides electricity to the Kabezi processing plant using its own generators.

The nearest rail link can be accessed by road and/or by boat on Lake Tanganyika down to the port of Kigoma (Tanzania), which is linked by rail to the port of Dar es Salaam in Tanzania. Rainbow exports its final concentrate product to the ports of Dar es Salam (Tanzania) and Mombasa (Kenya) using the tarred road network.

7 HISTORY

A comprehensive and detailed account of the history of the Project was compiled by MSA in their CPR "JORC Competent Person's Report for the Gakara REE Project" dated September 2016. The MSA report included reviews of all historical reports and data, from the 1930's up to the mid 1980's, gathered by Rainbow from various sources including the Tervuren Central Africa Museum in Belgium and from the Bundesanstalt für Geowissenschaften und Rohstoffe ("BGR") in Germany.

MSA updated their CPR on in June 2019, with a trial mining plan and an Exploration Target. This report uses the historical and recent data to further update the Exploration Target.

7.1 Historical summary

The Project was explored and mined from the 1930's to the 1970's by the Belgian company SOMUKI (Société Minière de Muhinga et de Kigali) and later by SOBUMINES, (51% owned by the Belgian Société Minière de Karonge and 49% by the Government of Burundi) (Ntungwanayo et al., 2013).

REE mineralisation was discovered in the Project in 1936 when SOMUKI found bastnaesite in alluvial deposits. From 1941 to 1942 research into the bastnaesite vein occurrences resumed and mining from alluvial deposits and in-situ REE veins at Gakara was initiated. Mining was suspended due to unfavourable market conditions associated with the Second World War.

An increase in REE prices from 1947 to 1957 resulted in renewed mining activities at Gakara and Rusutama deposits with a total of 2,137 tonnes of bastnaesite produced from these two deposits. A further two discoveries of bastnaesite mineralisation were made at Gasenyi and Murambi, with the bastnaesite mineralisation occurring in a network of thin veins and stockworks. Exploration and mining stopped in 1957 due to a fall in the global REE prices. The historical REE was used to produce Cerium and Lanthanum.

Burundi achieved independence in 1962 and SOBUMINES returned to mining the Gakara area in 1965, by which time the general understanding of the geochemistry, mineralogy and metallurgical characteristics of REE had advanced. Improved separation techniques resulted in higher purity of concentrates and better processing technology assisted in the extraction of individual REE oxides. In the 1970's exploration and mining operations were extended to new sites including Gasenyi, Murambi, Gasagwe and Mugere. Mining operations until 1978 comprised open pits (terraces and galleries) for all deposits except Mugasenyi and Murambi, where underground mining was conducted. In 1978 SOBUMINES stopped all operations due to a decline in REE prices.

During the 30 years of intermittent mining, approximately 5,000 tonnes of high grade (around 60% TREO) bastnaesite/monazite mineralised material was extracted, processed and exported with the majority derived from the Gakara mine (BGR, 1983).

From 1981 to 1985 BGR, under cooperation between the Burundian and the German governments, completed exploration and reserve estimation on six REE-bearing sites. Their "Feasibility Study" (BGR, 1985) reported an estimated 5,000 tonnes of REE material at a grade of 50% TREO available for mining at these six deposits. The Gasagwe deposit alone was estimated by BGR to contain approximately 2,800 tonnes of REE material (BGR, 1985).

Prior to the granting of the Gakara EL to Rainbow, no other exploration or mining licences have been awarded since the cessation of mining activities in the late 1970's.

The historical mining estimates are summarised in Table 6.

Table 6: Summary of historical mining				
Deposit Name	Exploration and Mining Works	Historical Production (t)	Mineralised material Type	Maximum Vein Thickness Seen or Exploited (cm)
Gasagwe (SOBUMINES, 1977)	Pits, trenches, galleries (150 m)	27	Bastnaesite-Monazite	50
Gasagwe (BGR, 1983-85)	Pits (1500 m; ave.=20 m depth), 7 trenches & 13 galleries (556 m)	n/a	Bastnaesite-Monazite	40
Mugere 1	17 pits, 9 trenches, 2 galleries	n/a	Bastnaesite	4
Mugere 2	29 pits, 4 trenches	1.5	Bastnaesite	8
Nyamikole	8 pits, 14 trenches, 1 gallery	n/a	Bastnaesite	10
Rugembe (Gomvyi N)	18 pit, 7 trenches	1.5	Bastnaesite	15
Murambi Sud	36 pit, 2 trenches, 3 galleries	n/a	Bastnaesite-Monazite; eluvium and veins	7
Murambi	Pit, 2 galleries	n/a	Bastnaesite-Monazite	5
Rusutama	Benches, galleries	500	Monazite; irregular stockwork type veinlets	15
Gasenyi	Pits, 9 galleries	504	Bastnaesite: 3 veins exploited	15
Gakara	Benches, galleries	3465	Bastnaesite: massive and breccia types with large lenticular veins	10
Misugi	Pits, trenches	1	Eluvial monazite	n/r
Bigugo	1 gallery	16	Monazite; 3 lenticular veins in gneiss, max. 10 depth	20-30
Nyabigati Nord & Sud	Trial quarry	13	Monazite	n/r
Karinzi	Trial quarry, pits	1	Bastnaesite & Monazite	n/r
Kigunguzi	Gallery, trenches	5.5	Monazite	10
Zinga	Small scale quarry	1.6	Bastnaesite & Monazite: lenticular vein	12

The information in Table 6 was compiled from various historical reports including Aderca and Van Tassel (1971), Thoreau et al. (1958) and the BGR (1983, 1985) and from the photos and diagrams presented in these reports. These records provide invaluable descriptions of the dimensions of historical mines, depth of excavations, lateral extent of REE veins and information on average widths, type of mineralisation and vein types.

Gakara Historical Mine

A copy of the Gakara mine plan is published in Aderca and Van Tassel (1971) (Figure 7).
 Note:

- Gakara pit was excavated to a depth of at least 80 m, with benches of between 1.5 m to 2 m (Figure 7 and Plate 1).
- Approximately thirty veins were mined over a lateral extent of 180 m, with reports of some single veins continuous over strike lengths of up to 60m.
- The vein system is reported to continue beneath the abandoned mine floor.
- 3,465 tonnes of final export product (grading >55% TREO) is reported to have been extracted from this deposit.

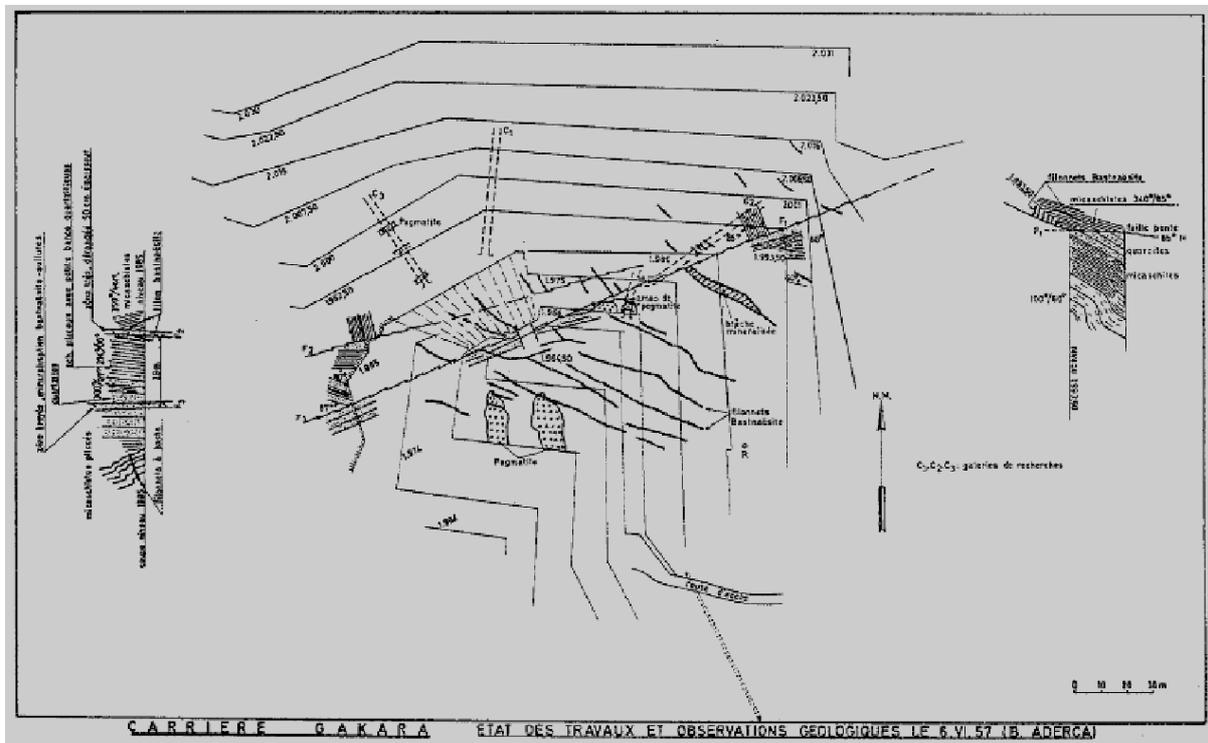


Figure 7: Gakara mine plan prior to 1971 (Aderca & Van Tassel, 1971)



Plate 1: Historical photo of the Gakara mine in 1957 (Thoreau et al., 1958)

Rusutama Historical Mine

The historical records (Aderca & Van Tassel, 1971) available for the Rusutama mine show:

The lateral extent of the mine was c.150 m and the vertical height c.50-60 m.

Approximately 30 benches of 1.5-2 m height were excavated by hand.

The orebody consisted of a very irregular stockwork of thin but numerous veins, often brecciated as well, with the largest veins being c.15 cm wide.

Around 500 tonnes of ore were extracted and produced from this site.



Plate 2: Historical photo of part of the Rusutama mine (Aderca and Van Tassel, 1971)

Bigugo Historical Mine

The Bigugo mine recently cleared by Rainbow (Plate 3) shows 10 benches of 2 m height each for a total depth of excavation of 20m. The selected veins mined at Bigugo are reported to have been an average of 20-30 cm thick.



Plate 3: Historical Bigugo mine after clearing in 2020

Gasagwe Historical Mine

The Gasagwe deposit was only sporadically mined by the Belgians before the operation closed in the mid 1970's, with less than 30 tonnes reportedly produced. However, BGR undertook an intensive exploration and resource estimate program at Gasagwe (1983-85), culminating in the delineation of an estimated 2,700 tonnes of extractable mineralisation. The detailed historical exploration plans and sections (Plate 4) provide detailed information on the orebody characteristics, already observed at the other historical mines, namely:

Vein stockwork extension over 40 m.

Continuation of the vein system at depth.

Stacking of sub-parallel veins, the thickest of which was reported to be 50 cm wide.

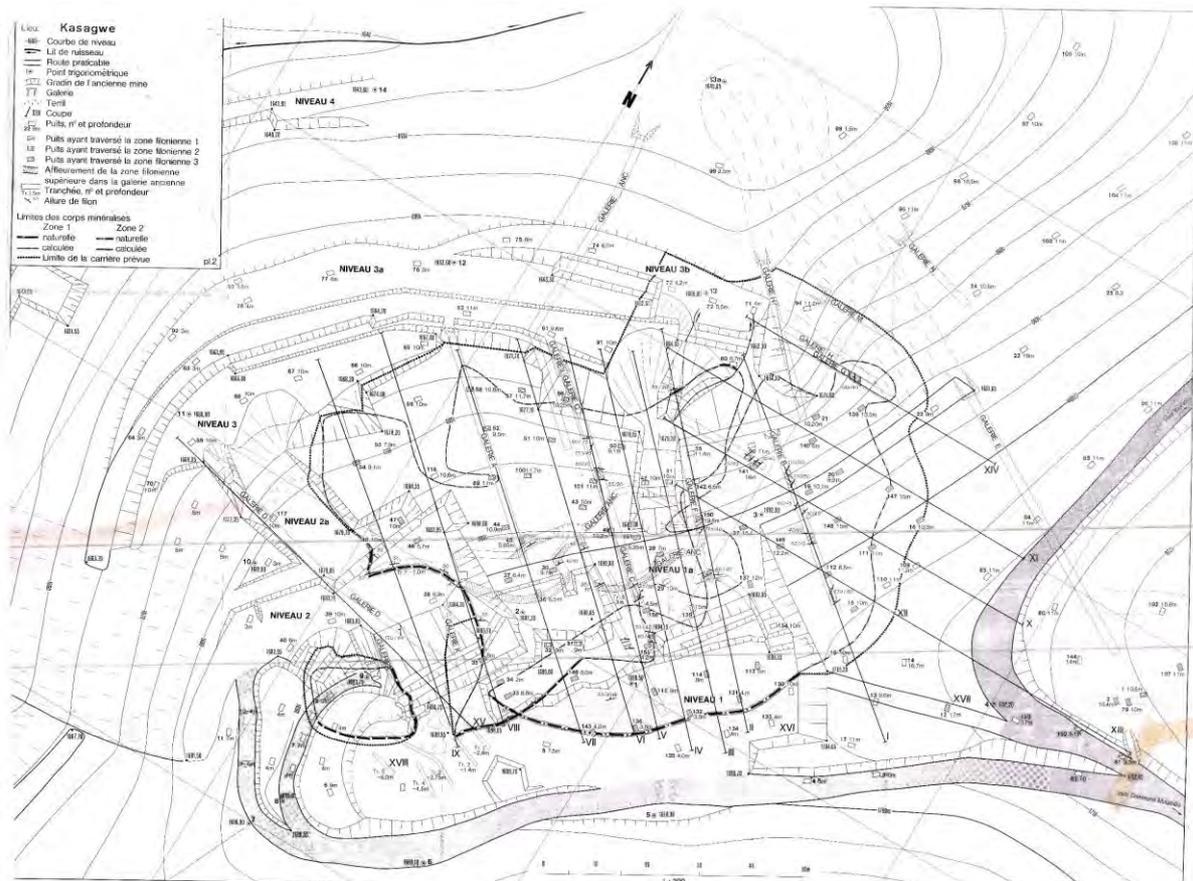


Plate 4: Plan of the Gasagwe mine, as reported in BGR study (1983)

Gasenyi Historical Mine

The Gasenyi mine site is situated between the town of Mutambu and the Murambi South mine site. Around 500 tonnes of concentrate were extracted from this relatively small location which comprised an open-cast terraced pit with a series of underground tunnels and an alluvial mining area (Figure 8). Historical Belgian reports indicate that most of the production was derived from the mining of 3 large (15 cm) REE veins. Recent exploration by RMB has exposed 4 veins on the Gasenyi hill which have thicknesses between 13 and 16 cm.

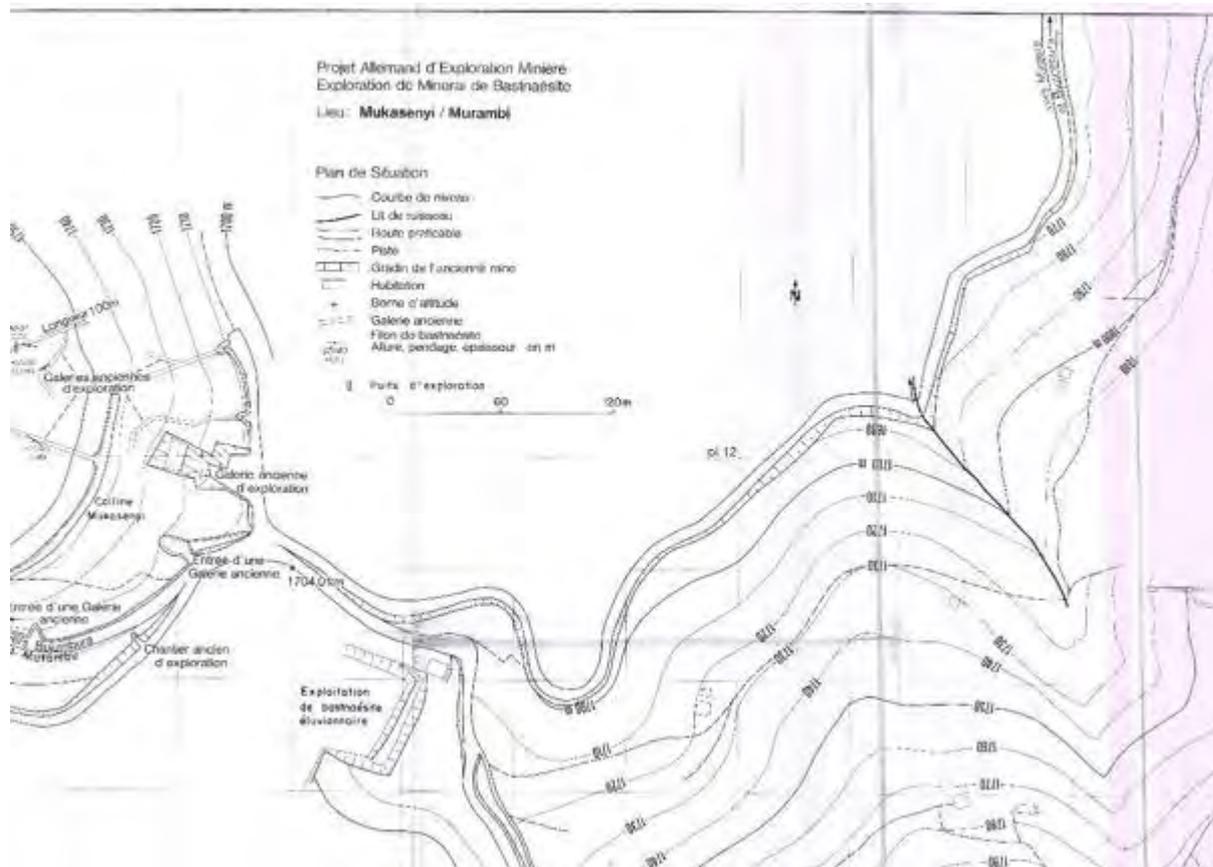


Figure 8: Topography and mining plan of the Gasenyi mine (from BGR, 1985)

8 GEOLOGICAL SETTING AND MINERALISATION

8.1 Regional geology

The regional geology of Burundi is dominated by the north-eastern trending Kibaran Fold Belt, commonly named the Karagwa-Ankole Belt (“KAB”) (Tack et al., 2010) (Figure 9). The KAB is subdivided into a Western Domain (“WD”) and an Eastern Domain (“ED”). The ED is less deformed and metamorphosed and is thrust over the Neoproterozoic-age continental sedimentary and volcanic rocks which rest upon the Archaean Tanzanian Craton (Deblond and Tack, 1999; Duchesne et al., 2004). The WD consists of a highly deformed sequence of Mesoproterozoic granites, granitoids and amphibolite-greenschist facies metasedimentary units and metavolcanic rocks, referred to as the Burundi Supergroup (Deblond and Tack, 1999; Tack et al., 2010). The granitoids are commonly associated with metasedimentary inclusions, mainly quartzite and have ages between 1.37 Ga to 1.38 Ga (Tack et al., 2010), coinciding with extensional deformation and peak thermal metamorphism in the KAB.

The Burundi Supergroup is believed to have accumulated in shallow basins during an early rifting phase of the Kibaran orogeny (Pohl, 1994; Deblond and Tack, 1999) and is intruded by a series of mafic and ultramafic complexes (the Kabanga–Musongati belt) and two types of granites and granitoids classified as A-type and S-type (Tack et al., 1994).

The north-easterly aligned Kabanga–Musongati belt (Figure 9) is located along the interface between the Kibaran orogen to the west and its foreland basin sediments overlying the Tanzanian Craton in the east (Tack et al., 2010). Granitic rocks are more concentrated in the western part of the Kibaran Belt where they form extensive and complex intrusions which are frequently associated with smaller mafic intrusions of amphibolite-bearing dolerite and gabbro (Klerk et al., 1987). The geology and tectonic framework of Burundi and adjacent countries have been strongly influenced by repeated episodes of rifting along existing structural trends (Lehmann et al., 1994).

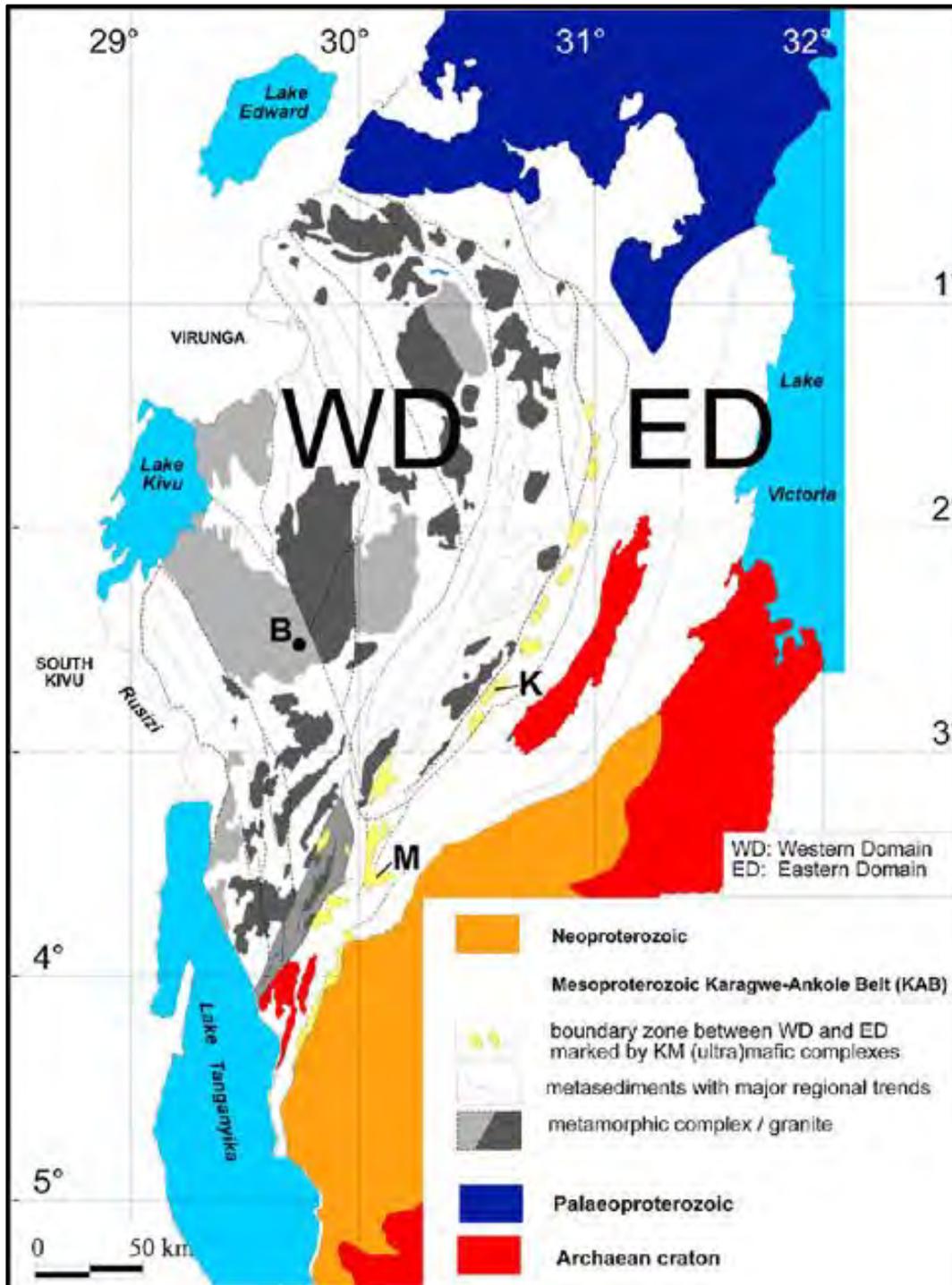


Figure 9: Simplified geology map of the Karagwe-Ankole Belt (KAB) and regional geology (Tack et al., 1994; Fernandez-Alonso, 2007)

Note structural domains within the KAB: Western Domain separated from the Eastern Domain by a boundary zone, comprising the Kabanga-Musongati (K,M) alignment of mafic and ultramafic layered complexes; K: Kabanga Massif; M: Musongati Massif

8.2 Local geology

The REE deposits are located near Lake Tanganyika, on the western branch of the East African rift (Figure 10). REE mineralisation is typically related to carbonatitic and/or peralkaline magmas emplacement. The carbonatites and associated REE mineralisation has been dated to around 600-700 Ma. Except for the Archean Mugere complex (Figure 10), the REE mineralisation is hosted in Mesoproterozoic rocks belonging to the Karagwe-Ankole polymetamorphic belt composed of metasediments and orthogneisses. The mineralisation is hosted in the Karinzi Formation, consisting of metaquartzites and metapelites intruded by Kibaran granitoids (Klerk et al., 1984), (Figure 10). These units are intruded by a dense network of Kibaran pegmatites and aplite (Lehmann et al., 1994). REE veins crosscutting host rocks have been dated 600 to 700 Ma (Ntiharizwa's PhD and Nakai et al., 1988). This mineralisation is likely to be Panafrican in age and postdates from around 400 Ma the last events of the Kibaran orogen.

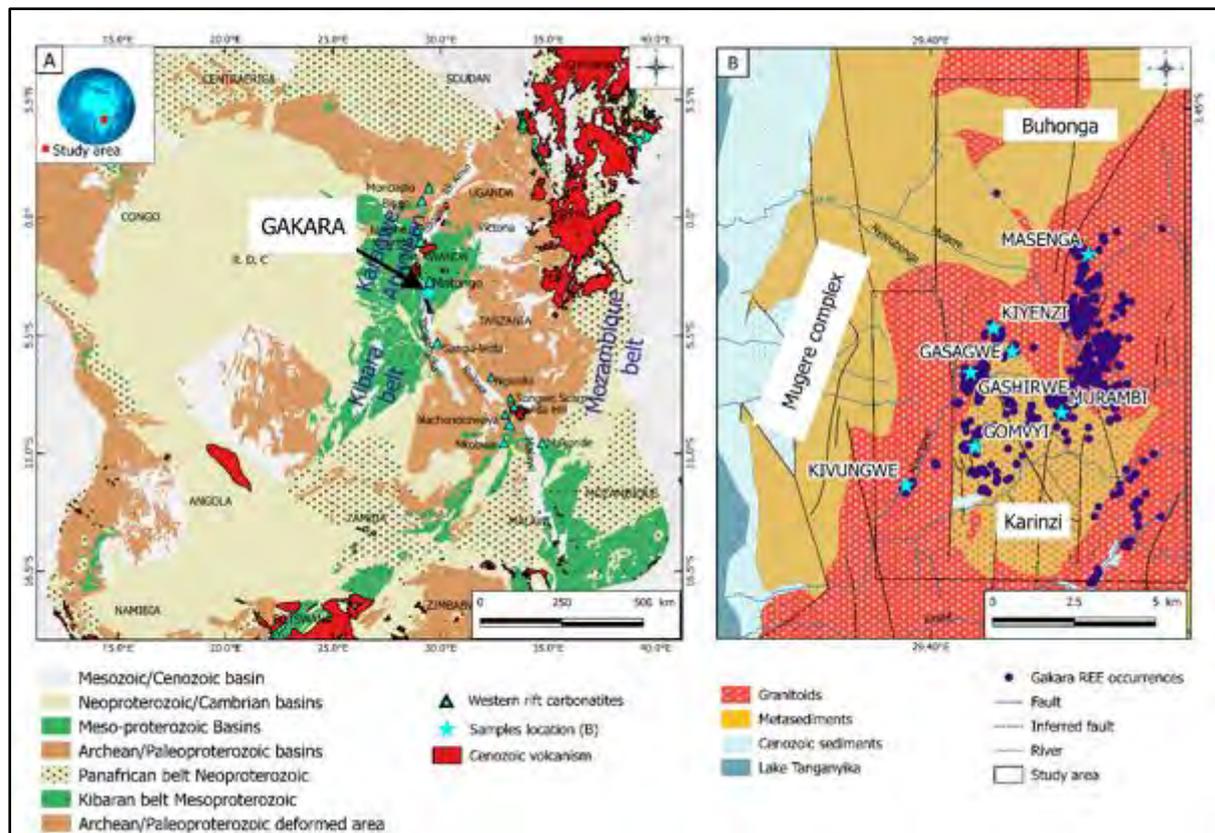


Figure 10: Geological map of Central Africa showing Precambrian and Cenozoic formations and structures

A - Location of the Project in part of the Western Branch of the East African Rift.

B - Geological map of the study area showing occurrences of REE mineralisation

8.3 Mineralisation

The REE mineralisation occurs as either vein or breccia hosted. Description of the mineralisation is summarised from the PhD study by Ms Seconde Ntiharizwa.

The vein hosted mineralisation consists of centimetre to decimetre vein stockworks of coarsely grained, locally brecciated, metasomatised bastnaesite and monazite. The gangue

accompanying the mineralisation consists of quartz, biotite, barite, microcline, pyrite and galena

The breccia hosted mineralisation is likely associated with tectonic venting of fluid creating a pipe like formation. The mineral assemblage is identical to the vein hosted mineralisation, however, the REE is distributed throughout the breccia matrix as bastnaesite / monazite minerals. In some deposits vein and breccia hosted mineralisation co-exist.

Later stage supergene alteration alters the REE assemblage to rhabdophane, cerianite, crandallite-florencite.

The paragenetic sequence (Figure 11) shows that the genesis of the mineralisation took place in three (3) successive stages:

The first stage consists in depositing the primary mineralisation comprising bastnaesite, barite, biotite, galena and quartz (Qz 1).

The second stage begins with the formation of monazite (Ce-rich) and quartz (Qz 2).

And the third stage is the formation of monazite (La-rich), cerianite and rhabdophane associated with supergene alteration. (Thoreau et al., 1958; Aderca and Tassel, 1971; Van Wambeke, 1977, Ntiharirizwa et al.).

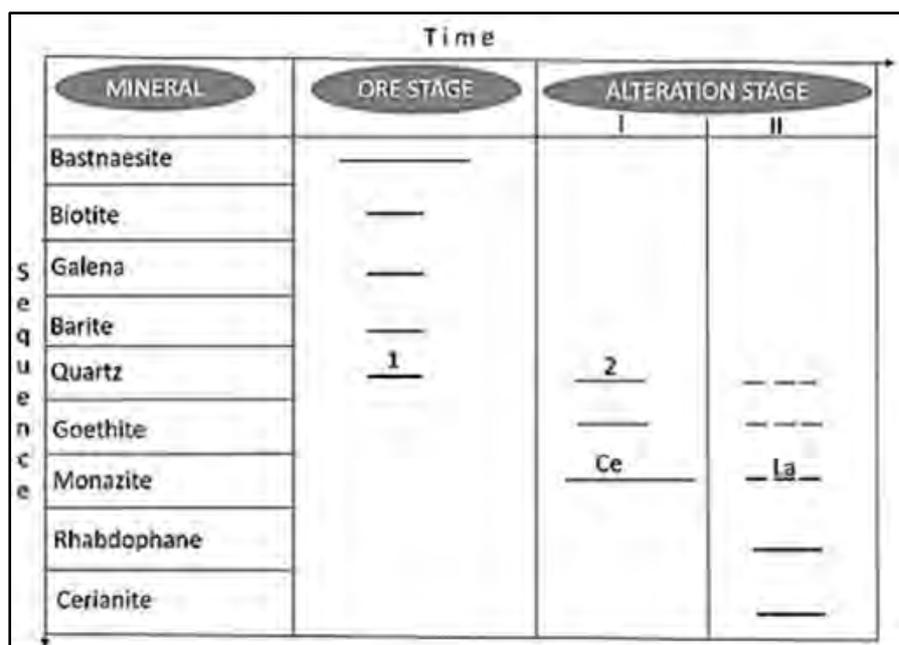


Figure 11: Paragenetic sequence of Gakara mineralisation (Ntiharirizwa et al)

Intense weathering to depths as deep as 50 to 80 m breaks down the host rocks to a goethite and kaolinite saprolite. The weathering has less effect on the Bastnaesite and Monazite veins, which are partially weathered but still maintain the REE basket of products. The differential in weathering between the 'waste' and 'mineralised material' has facilitated the historical mining process allowing for 'nearly clean' extraction of the REE mineralised veins. This weathering is still important in reducing both mining mineralised material loss and dilution and simplifying the trial processing facility resulting in reduced CAPEX and OPEX.

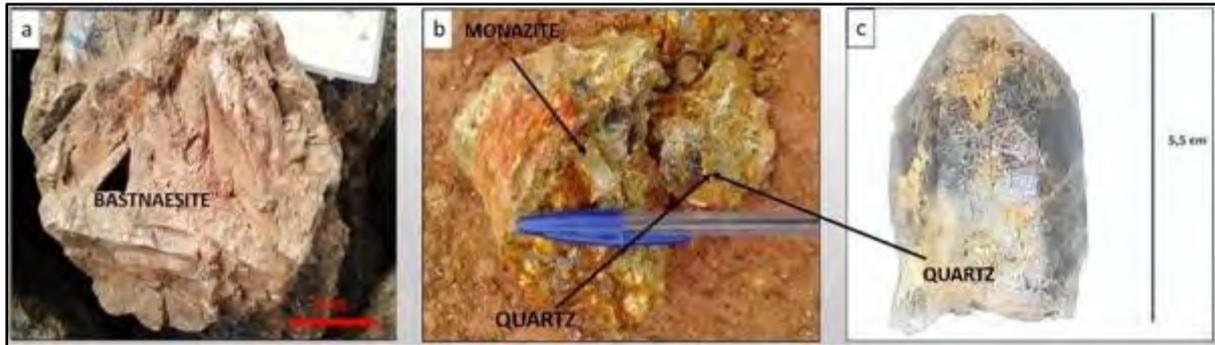


Plate 5: Photographs of Gakara rocks (a) Bastnaesite from Kivungwe; (b &c) Automorphic Quartz crystals with Monazite from Gasagwe

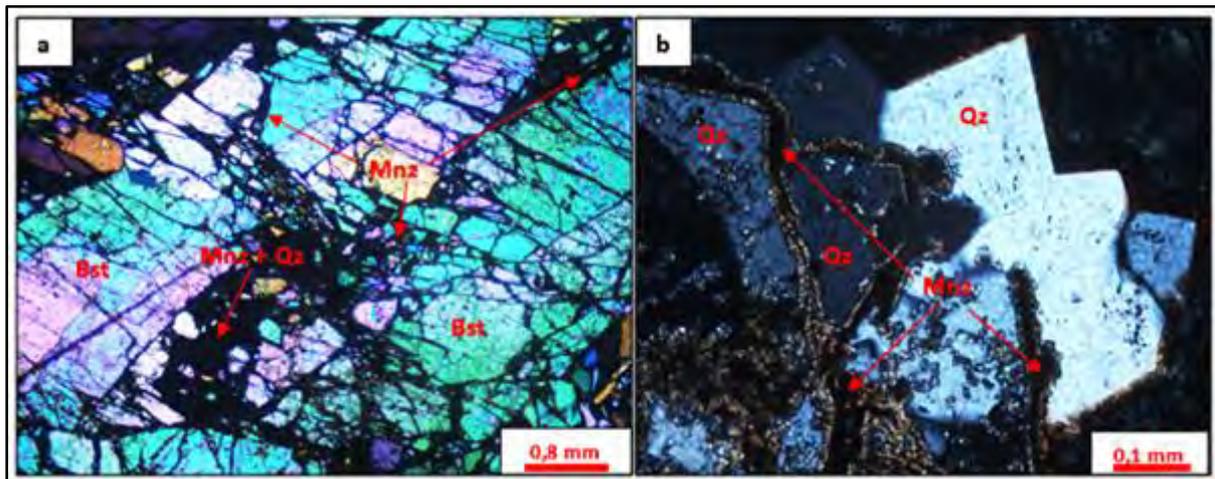


Plate 6: Microphotographs (a) Bastnaesite (Bst) breccia texture with fractures filled by Monazite (Mnz) and Quartz (Qz). (b) Monazite (Mnz) and Quartz crystals (Qz)

Twenty-four (24) samples from the Kiyenzi core were collected for petrographic work (Ntiharirizwa, 2018). They included samples from breccias (9), from aplites (2), from gneisses (4), mafic rocks (4) and various contacts between these rocks (5). The key findings of this study are the following:

The aplites and gneisses, at the contacts with the breccias, contain REE mineralisation in the form of bastnaesite and monazite veinlets as well as large phenocrysts or xenocrysts (Plate 7 and Plate 8).

The monazite appears to occur as a secondary alteration of the bastnaesite; the monazite being found on the rim of the bastnaesite crystals as well as inside those crystals (Plate 9).

One of the gneiss samples presents a strong schistosity and very rich in biotite. Strong sericitisation alteration has affected this rock. Sericitisation is a hydrothermal alteration which occurs close to carbonates;

One of the mafic rocks has been identified as a metamorphic rock very rich in alkaline and calco-alkaline amphiboles. This rock, together with aplite, which contain an abundance of alkaline minerals (albite and microcline in the aplite; glaucophane and hornblende in the mafic rock) are strong evidence of the presence of alkaline (viz carbonatitic) formations.

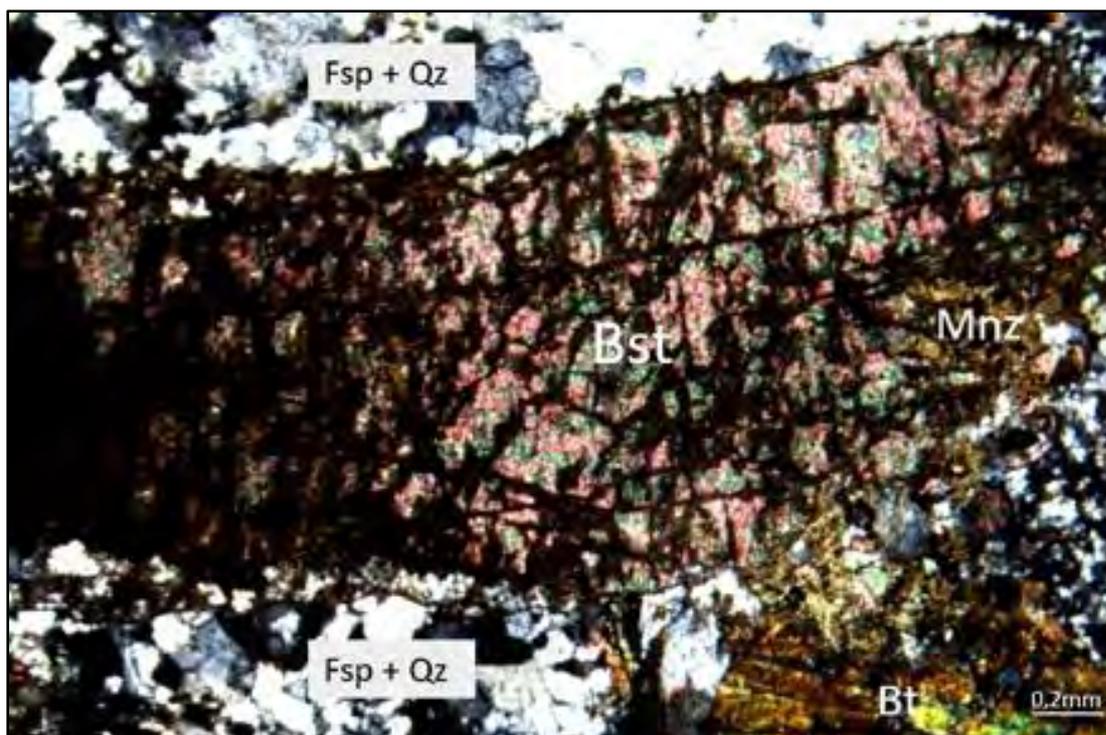


Plate 7: Microphotograph of Aplite (drill hole GAK-DD-029), white and grey colours are Fsp+Qz showing Bastnaesite vein with Monazite alteration at its edges and in the Aplite

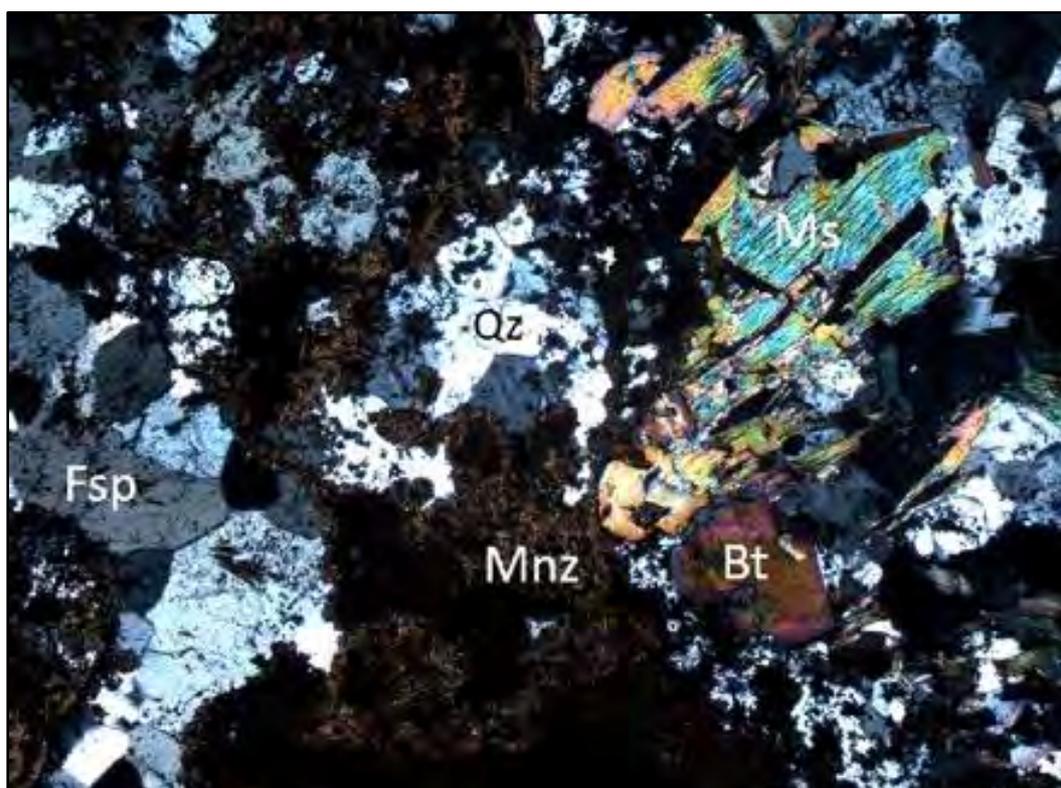


Plate 8: Microphotograph of a Gneiss with Biotite [Bt] and Muscovite [Ms] showing Monazite [Mnz] invading the Gneiss (Felspar [Fsp] and Quartz [Qz])

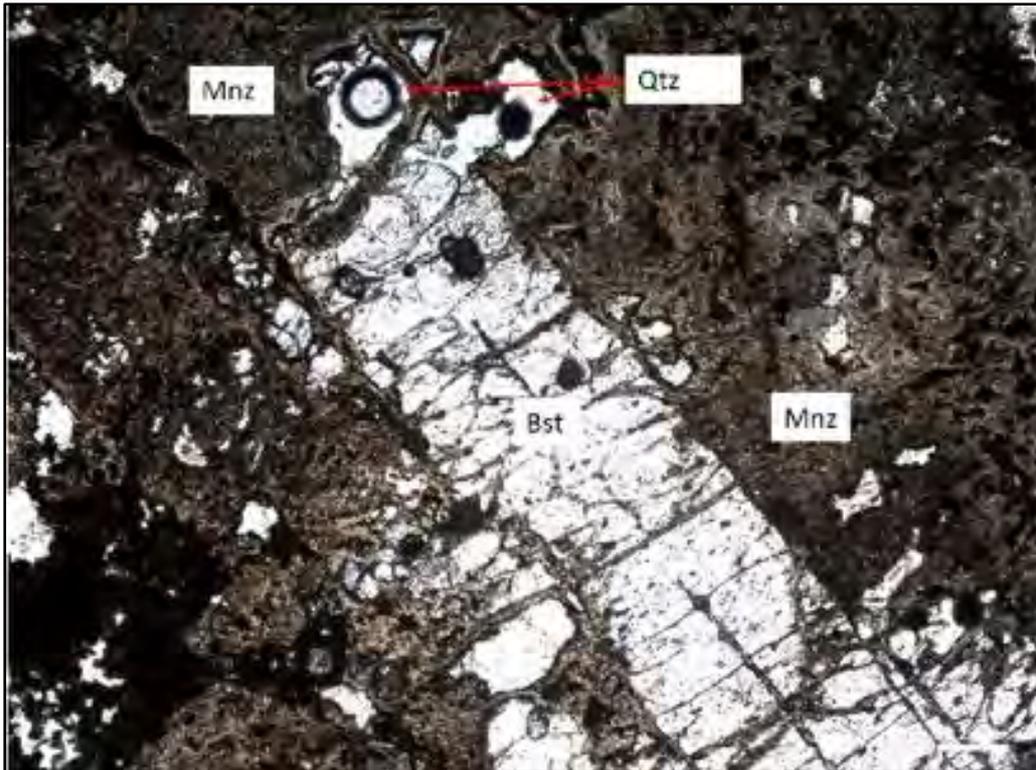


Plate 9: Microphotograph of Breccia showing phenocrysts of Bastnaesite (Bst) within a matrix of Monazite (Mnz) and dissolution voids filled with Quartz (Qtz)



Plate 10: Microphotograph of Biotite Gneiss (Bt) with Sericitic alteration

8.4 Structural controls on REE mineralisation

The REE vein mineralisation formed in a brittle regime of deformation exploiting the heterogeneity properties of the gneissic and granitic host rocks. The fragmentation of the host rocks is enhanced by hydraulic fracturing, with probable supra-hydrostatic fluid pressures which might indicate a pulsatile character during bastnaesite deposition.

The tectonic evolution with the formation of the D1 and D2 deformation structures of the KAB occurred over a Meso- to early Neoproterozoic period (1,400-1,000 Ma). These structures are E-W to NW-SE contraction with intermittent extension (Koegelenberg and Kisters, 2014, Koegelenberg et al., 2015; Debruyne et al., 2015). D3 deformation was from tectonothermal and/or structural reactivation from major far-field stresses. Two theories are: (1) intra-cratonic extensional setting, with intermittent closure/compression within the larger Proto-Congo Craton (Tack et al., 2010; Fernandez-Alonso et al., 2012) or; (2) subduction collision.

8.5 Geochronology

Initial geochronological analysis on bastnaesite by Nakai et al in 1988 using the ^{138}La - ^{138}Ba isochron method obtained a Pan-African age of 586.8 ± 3.7 Ma.

In her PhD study, Ntiharirizwa has used the U-Th-Pb dating technique for bastnaesite and monazite. U-Th-Pb geochronology of bastnaesite and monazite grains from the Gakara deposit was conducted by Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS) at Géosciences Rennes Laboratory in France. The age of around 600 Ma suggests that white aplite is co-genetic with the primary bastnaesite mineralisation.

The geochronological sequence of events that explain the REE mineralisation are:

- At c.600 Ma, a massive intrusive igneous event resulted in the emplacement of the aplites within gneiss/granite host rocks;
- Nearly contemporaneously, the bastnaesite mineralisation occurred with injection of hot fluids in the form of veins and/or in breccias deposits;
- Finally, at c.588 Ma (i.e. some 10-15 million years after the emplacement of the aplites and the bastnaesite mineralisation), the monazite mineralisation occurred, reusing the fracturing in the host rocks caused by the previous magmatic intrusions.

9 DEPOSIT TYPE

9.1 Definition

REE mineralisation is related to carbonatitic and/or peralkaline magma emplacement. Carbonatite is an intrusive or extrusive igneous rock defined by mineralogy consisting of greater than 50% carbonate minerals.

Carbonatites usually occur as small plugs within zoned alkaline intrusive complexes, or as linear dykes, arcuate dykes (also referred to as ‘ring dykes’ or ‘cone sheets’), sills, breccias, and veins. Carbonatite complexes are built from several intrusive phases. These igneous intrusions are characteristically rimmed by metasomatised country rocks creating a “fenitised aureole” with either or both sodium (Na) and potassium (K) dominated alteration.

Carbonatites are almost exclusively associated with continental rift-related tectonic settings, which is the dominant geological setting of the Project area. Similar magmatic and mineralised styles have been identified along the western branch of East African rift, about 60 km northward from Gakara in the alkaline complex of the Matongo carbonatite (Midende, 1984, Midende et al., 2014; Decrée et al., 2015).

A schematic model of REE mineralisation settings is presented in Figure 12.

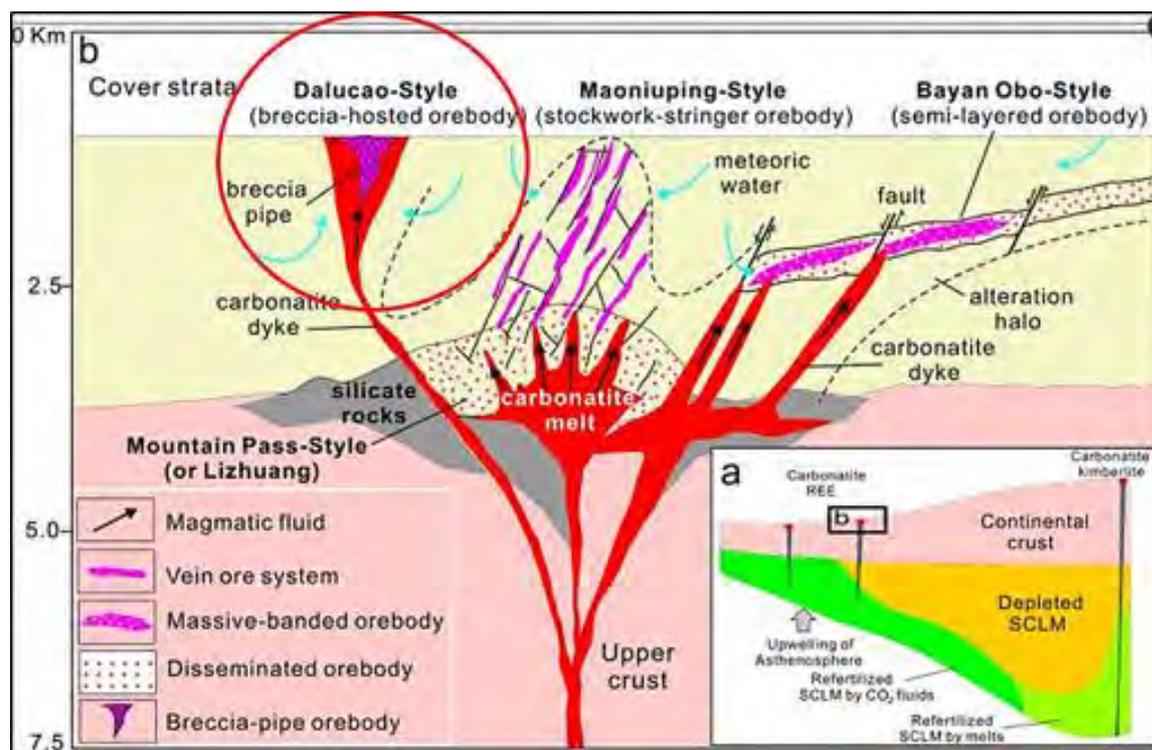


Figure 12: Schematic model of carbonatite REE mineralisation, including “Breccia style mineralisation” (Red Circle)

REE mineralisation can occur in varied forms from the source carbonatite melt. These include vein hosted stockwork mineralisation (Maonluping style - Figure 12), breccia hosted mineralisation (Dalucao style) and massive and disseminated orebodies Bayan Obo style). Currently vein and breccia hosted REE mineralisation have been observed in the Project.

The composition of the fluids contained in the bastnaesites as well as the isotopic signatures show that the mineralisation precipitated from a brine exsolved from a carbonatitic magma, with a low salinity fluid added later to the mineralisation. The age (around 600 Ma) obtained for aplites from Gashirwe and Kiyenzi link the REE mineralisation to carbonatite intrusives. The presence of aplite is a regional indicator of potential REE mineralisation.

Cenozoic rifting affected the whole area with a general uplift. Normal faults accommodating this rifting are not clearly identified, however some large blocks are likely to have been tilted during these extensional tectonics. There is evidence of deformation post-REE mineralisation (e.g. Kiyenzi). This occurs along fault zones reactivated by each tectonic event which can be observed in deformed pegmatites and foliation. Consequently, continuity of REE-veins can be interrupted forming discontinuous lenticular clasts with varying offsets.

9.2 Implications for Mineral Resource Estimation

As discussed in Section 9.1 vein and breccia hosted REE mineralisation have been observed in the Project. These styles of mineralisation pose different challenges for estimation of mineral resources.

Breccia hosted mineralisation is currently observed at Kiyenzi. As shown in Figure 12 the mineralisation is hosted in a pipe like structure which has a defined geometry and once the breccia hosted mineralisation is identified by exploration, it can be drill tested using a grid of drillholes to define both the shape of the breccia pipe and the REE grade distribution. The mineralisation grade distribution is then relatively simply estimated using conventional grade estimation techniques.

Vein hosted mineralisation is currently the dominant style recognised throughout the Project. This style of mineralisation has been historically mined by the Belgians and is currently undergoing trial mining and trial processing by Rainbow.

The REE vein hosted mineralisation identified in the Project is readily identified by surface mapping and sampling and is visible in the historical Belgian and current Rainbow open pit excavations. Rainbow's mining of the Gasagwe and Murambi South deposits since mid-2017 has corroborated the morphological characteristics of the REE orebodies historically reported, such as vein lateral and depth continuity, vein thickness variations and consistency of REE grades.

The challenges to defining vein hosted Mineral Resources are related to:

- Understanding continuity and geometry (vein width) of the vein hosted mineralisation.
- Understanding the relationship of the presence of REE mineralisation to the requirement for Mineral Resources to satisfy criteria for potential economic recovery.
- Knowledge of the depth of intense weathering which also impacts the requirement for potential economic recovery.

The vein hosted REE mineralisation is spread over numerous deposits. Rainbow has taken the approach since 2017 to utilise trial mining and pilot plant processing to better understand the geometry of the mineralisation and at the same time fulfil the "reasonable prospects for eventual economic extraction" requirements of Mineral Resources disclosure planned for the future. Definition of inferred mineral resources will be achieved by relatively wide spaced drilling (approximately 50 x 50 m spacing) to define the 'limits' of vein hosted mineralisation and depth of weathering.

10 EXPLORATION

Exploration completed by Rainbow between 2011 and mid-2019 is detailed in MSA's CPR dated 04 June 2019 and is summarised below in Table 7.

Table 7: Summary of exploration programs completed from 2011 to mid-2019	
Activity	Details
Pitting and trenching	85 pits (75 at Gasagwe and 10 at Kiyenzi); 34 trenches in 8 targets
Geological mapping	7,956 geological observation points acquired including 1,529 REE occurrences of which 1,136 are <i>in situ</i> veins
Rock grab sampling	632 sites sampled and analysed by Niton hand-held XRF; 150 rock grab samples analysed by ALS Chemex, South Africa
Soil sampling (orientation survey)	591 samples from three blocks (500m x 500m); all analysed by Niton and ALS Chemex, SA 2,906 samples from 4 geophysical grids collected and analysed by Niton only
Ground gravity (orientation survey)	3.6 line km on 7 selected sites
Ground magnetic (orientation survey)	10 line km on 7 selected sites
Airborne geophysical survey	High-resolution, helicopter-borne, magnetic and radiometric survey flown over 130km ² area, at 50m line spacing, and comprising of a total of 2,969 line km

The exploration work which represents Material Changes to the previous technical reports is summarised in Table 8.

The material changes are:

Improvements to the geological knowledge of the existing Exploration Targets to prepare for potential ongoing trial mining activity by Rainbow.

Completion of exploration bulk sampling programs of vein hosted mineralisation demonstrating the consistency in metallurgical and mineralogical properties across the Project.

Identification of regional structural mineralisation drivers to find new REE mineralisation or to extend existing deposits.

Table 8: Summary of exploration completed from mid-2019 to June 2020	
Activity	Details
Structural geology study and targeting by TECT Geological Consulting	Structural and lithological interpretation of high-resolution geophysical data, followed by the generation of new exploration targets using a mineral systems approach 36 Tier-1 and Tier-2 targets as well as 3 large 'carbonatite-type' bodies
Cleaning and mapping of historical Belgian open-pit mines	The following historical Belgian mine pits were cleaned and mapped and all REE veins recorded: Rusutama, Bigugo and Gakara (ongoing)
Kiyenzi in-fill drill core assay analysis	An additional 1,306 Kiyenzi drill samples were assayed, made up of 1,174 in-fill core samples - sampling of gaps between original higher grade mineralisation intercepts - and 132 QAQC samples
Exploration and bulk sampling of "large REE veins"	35 "large REE veins" (>10cm thick) exposed over various lateral and depth extents, at Gashirwe West and East, Gasenyi, Murambi North and Kiyenzi
Trenching on Kiyenzi target	2 trenches, for a combined length of 285m, excavated on top of the Kiyenzi hill to determine if the REE mineralisation extend beyond the area that was drilled out in 2018

10.1

10.2 TECT structural study and target generation

TECT Geological Consulting (“TECT”) were contracted to undertake a structural and lithological re-interpretation of high-resolution geophysical data as well as of all the RMB geological data gathered in the past 10 years.

The TECT study was based on the following data and process:

Compilation of available data sets in ArcView/QGIS: helicopter-borne high-resolution magnetic and radiometrics data; Local ground magnetic data; REE occurrence database; Vein locations and orientations; RMB geological mapping database; Published geological maps; RMB soil geochemistry data.

Review of technical reports and thesis; sourcing and review of available literature (Scopus, Science Direct).

Structural interpretation of high-resolution helimag, radiometrics and local ground mag datasets; definition and digitisation of fabric; interpretation of folds, contacts and major ductile structures; interpretation of late-kinematic, brittle-ductile to brittle overprint; delineation of geophysical domains based on geophysical response and texture; creation of shapefiles or shapefile equivalent layers.

Preliminary structural analysis, based on available data across deposits and updated geophysical data interpretation; summary and linking of documented regional deformation events and kinematics to those indicated in the available data and the updated geophysical data interpretation; identification of key contacts or alteration trends; stereonet-based analysis; establishment of preliminary model or models for field testing.

Preparation of layered, georeferenced maps, draped on DTM, for use on mobile devices. Plotting of structural data in ArcView/QGIS and on stereonets; comparison of new structural data to historical mapping to establish/confirm structural sets; identifying prospect and deposit scale structural controls on mineralisation, alteration and fluid movement patterns and trends.

The analysis and interpretation of lithological data has revealed three key conclusions mainly drawn from plots of rock types and structural features. The first of these is that granite-gneiss and mafic units are widespread and ubiquitous across the license area. Metasediments are constrained to a handful of localities and do not appear to support the regional maps which delineate an area of approximately 6 km x 6 km, apparently coincident with REE mineralisation. The second observation is that a plot of quartzite, mica quartzite, mica schist and quartz mica schist seem to delineate a coarse “lattice” with two main trends at NNE and NE, but also one at NW, which emerge as the dominant trends of the structural network and preferential distribution of mineralisation loci from Fry analysis. And thirdly, features that denote a regional “permeability”, including breccias, hematization, fault zones, aplites, REE veins and quartz veins, while more limited in their distribution, show “bracketing” within a wedge-shaped area, with a NNE-trending northern margin and NE-trending southern margin and with a “lattice” of shorter NW and NE trends occurring in the northern half of the license area.

These lithology features point to the exploitation of a pre-existing or established foliation and fault geometry by fluids, several of which were mineralising (thus confirming the models of Ntiharirizwa et al., 2019 and Branquet, 2018) (Figure 13).

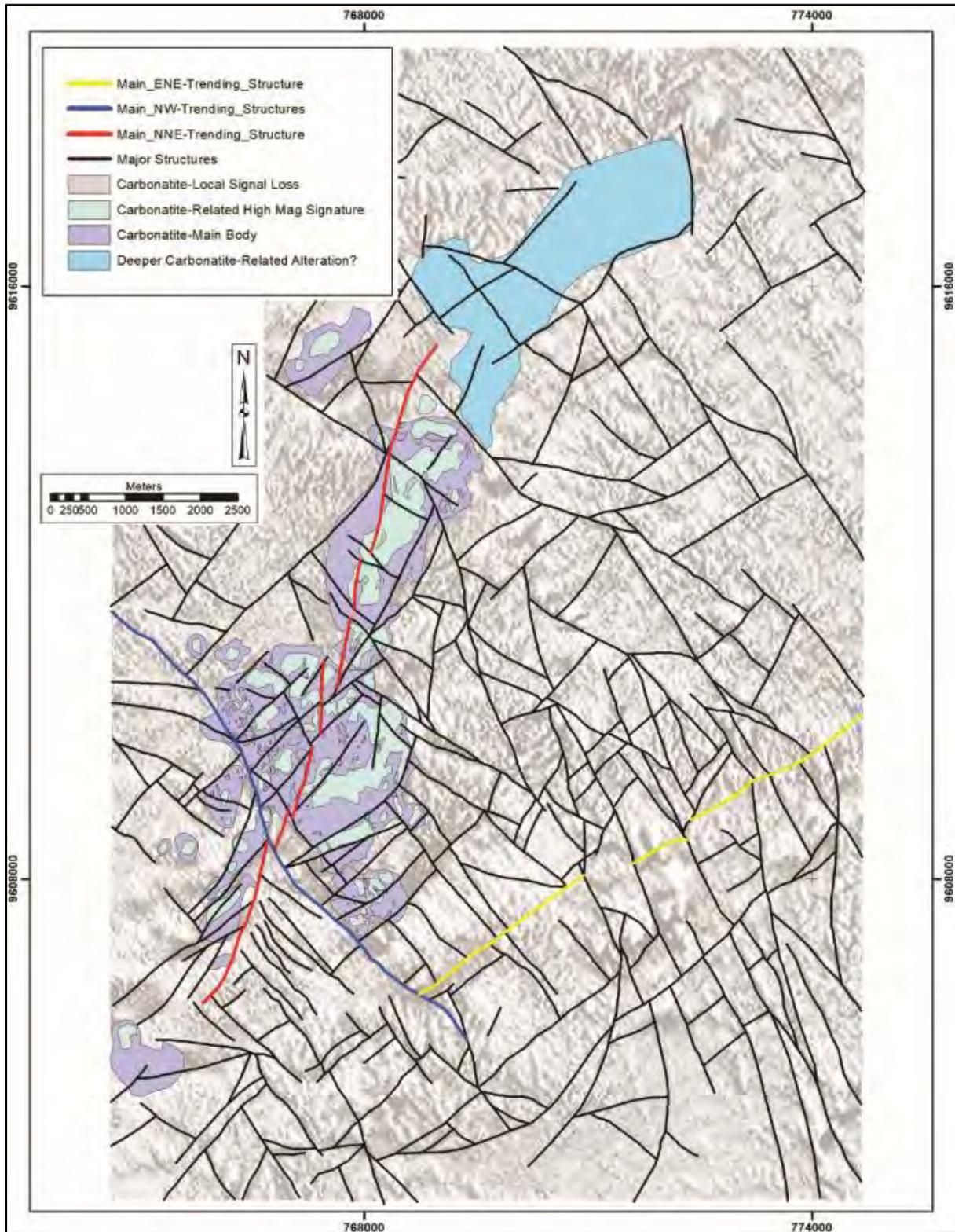


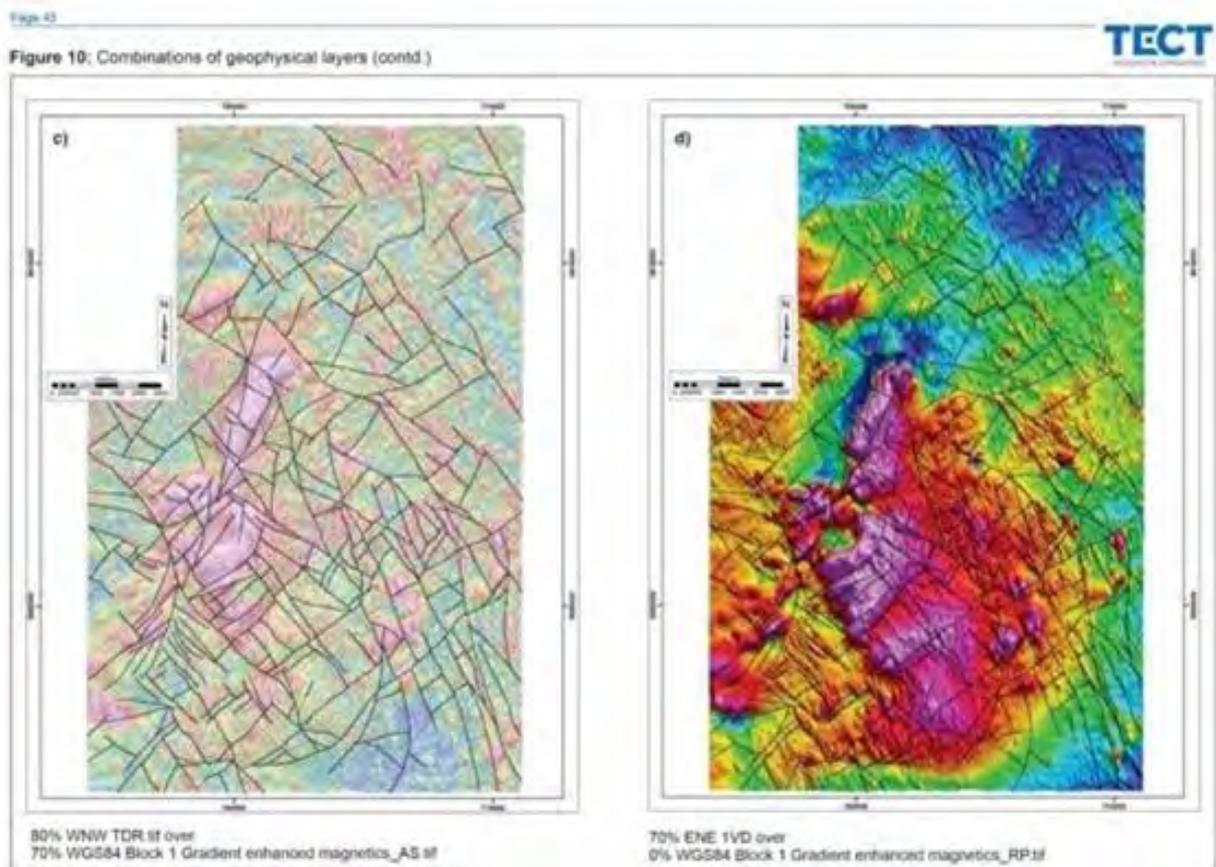
Figure 13: TECT key structures and carbonatites

The interpretation presented by Basson et Koegelenberg of TECT Geological Consulting (2020) which includes concepts from Miller et al. (2007), Chauvet, (2019), Branquet (2018) and Funedda et al. (2018) shows REE vein emplacement from a carbonatite, hosted by a major NNE-trending structure, along a contact or discontinuity, then into a pre-existing fabric at two scales, namely short-strike-length, mutually-crosscutting faults, followed by fractures or jointing associated with pervasive folding.

The structural analysis shows that the kinematics of the system suggest upwards movement (intrusive force, volatiles, fluids) beneath a terrain that has a strong, pre-existing anisotropy at several scales. The pre-existing anisotropy that veins occupy at the local scale is due to flexural slip folding, which also implies numerous, possibly low-angle zones of dislocation. In addition to this there is a larger-scale permeability provided by very short-strike-length faults that are interpreted from the geophysical data. There are also signs of fluid movement along a low-angle structure or lithological contact.

TECT’s interpretation of geophysical data from New Resolution Geophysics (NRG1725 Burundi) commenced with testing combinations of various image or filter overlays, which were useful in delineating short-strike-length structures with dominant orientations aligned to NNE, NE and NW. These structures show mutually cross-cutting relationships (Figure 14). This pattern shows the extensive tectonic history of the area and the effects of an underlying, possibly blind, carbonatite system or complex that occupies the western half of the license area (confirming previous interpretations by Benu, 2017, and Xcalibur, 2018). A series of interpreted faults collectively constitute a large, NNE-trending structure with a strike length of 9.4 km to 13.1 km (Figure 14). This is intersected, towards its southern portion, by an 8.8 km long, NW trending structure and several other NW-trending structures to the NE.

Using the geophysical images, the short-strike-length structures which run through the interpreted carbonatite bodies, were interpreted. There appears to be a correlation between “strings” of REE vein occurrences and the interpreted structures and a correlation between intersections of interpreted structures and REE vein clusters.



Analysis included the generation of new exploration targets using a mineral system ranking algorithm. This approach considers a) the presence of a suitable source intrusion, b) the effects and extent of the mineralising fluid, c) the regional structural permeability and d) small-scale structures that host REE-bearing veins.

Geophysical data, combined with the comprehensive mapping database accumulated by RMB over several years, allowed these primary controls to be quantified and input into a scoring grid across the license area. The result is a data-driven, objective appraisal of areas that show a co-incidence of these features. These areas were ring-fenced and ranked, resulting in a total of 36 Tier-1 and Tier-2 targets and 21 Tier-3 targets for follow-up and ground-truthing (Figure 15). These targets are expected to be sites where REE mineralisation, in the form of vein stockworks and/or breccias, is likely to have been more intense.

The TECT analysis also confirmed the presence of at least two large carbonatites, with a third, deeper carbonatite discernible further to the north (though with a more subtle, fainter signature) (Figure 15). The delineated carbonatites are distributed along a major NNE-trending structure. The southernmost carbonatite, with a diameter of approximately 2.6 km, underlies a large proportion of mapped and mined REE-bearing veins and has been identified as the main source of REE-rich, mineralising fluids in the license area.

When the results are further filtered to show only higher scores (of 6 and above), then it becomes apparent that the limits of the middle and southern carbonatites and the structural lattice exert the dominant controls on prospective areas, several of which show reasonable overlap with those delineated by Xcalibur (2018) and Benzu (2017). As these are the source of the fluids and therefore mineralisation, it is advisable that these targets are tested first, particularly those over the southern carbonatite.

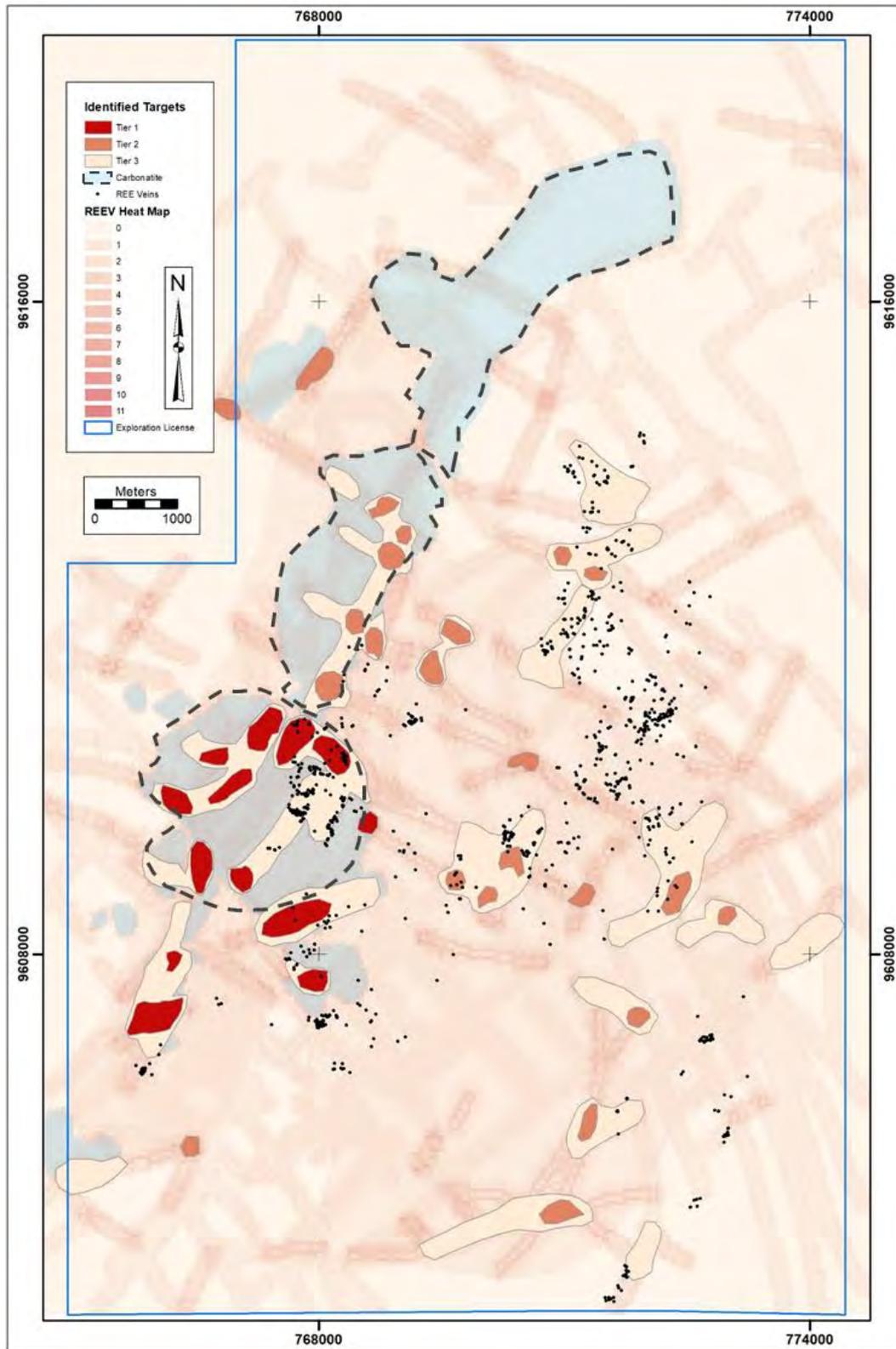


Figure 15: TECT REE targets

As at 31st August 2020 Rainbow has undertaken follow-up fieldwork on all high-priority Tier-1 targets. These occur predominantly within the outline of a large, circular carbonatite body, with a diameter of approximately 2.6 km. This intrusion, and those to the north of it, have been instrumental in the introduction of REE-rich fluids into the overlying fabric and fault system, which constitutes a regional permeability network for vein-hosted REE-rich mineralisation.

The results of Tier-1 target mapping over this circular carbonatite highlights the following:

- A significant number of quartz-rich mica schist occurrences directly above an interpreted feeder fault that trends NNW through the carbonatite, denoting a site of increased fluid permeability.
- A concentration of REE vein occurrences within the portion of the circular carbonatite that occurs to the east of this strike-extensive NNE-trending structure. This may be interpreted as differential uplift, where the REE-mineralised carbonatite contact has been exposed in the east. This allows Rainbow to focus their exploration efforts on the eastern part of the carbonatite and indicates that the boundary of Rainbows mining licence is ideally placed.
- An emerging relationship between REE-mineralised veins and a sub-zone of the circular carbonatite, which has been classified as “Carbonatite-Related High Mag Signature” based on the re-interpretation of the high-resolution geophysical data. The extent of this sub-zone southwards from the Gashirwe West and Gashirwe East REE deposits adds an area of approximately 800m x 700m that, based on this new analysis, is deemed highly prospective for hosting further REE mineralisation.
- A pattern is emerging regarding the distribution of REE veins and aplite occurrences in linear arrays and at structural intersections. There are several 010° trending arrays of REE veins and aplites, in the compiled dataset, which coincide with primary structural trends. One of these structures, which transects Gashirwe East, shows consistent REE vein occurrences within the delineated “Carbonatite-Related High Mag Signature”, while pegmatites without REE occur along the same trend outside of this structure.
- Based on these patterns and the topography in the area, a network of projected structures, with the same trends as mineralised structures to the north, has been delineated for the next round of fieldwork (Figure 16).

In parallel with focussed exploration efforts on the main carbonatite, the high-resolution geophysical data over the eastern portion of the prospecting area is being reprocessed and decluttered to resolve what may be two further buried carbonatite bodies, with approximate dimensions of 3km x 800m, distributed along an 010° trend. These buried carbonatite bodies are inferred to underlie the Masenga-Kigina and Murambi-Nyarwedeka REE vein clusters.

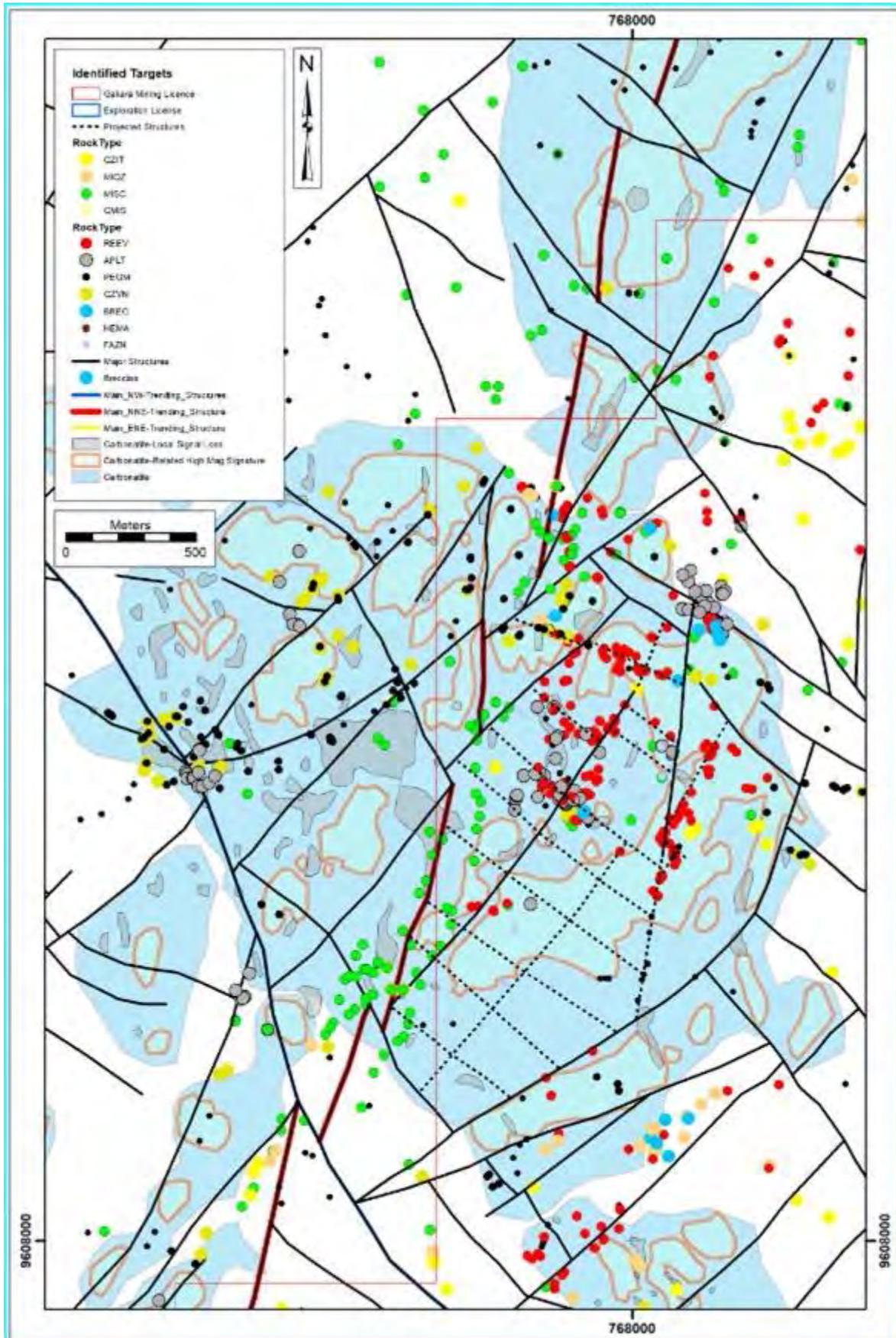


Figure 16: Additional structures interpreted from August 2020 follow-up field work

10.3 Cleaning and mapping of historical Belgian open-pit mines

In October 2019 Rainbow continued mapping and cleaning the historical Belgian open-pit mines which occur in the southern part of the ML (Figure 17). The objective of this work, which remains ongoing at the time of compiling this Report, is to assess the potential for these historical Belgian mine sites to host REE resources that could be mined using Rainbows more systematic selective mechanical mining method. Based on Rainbows trial mining experience, which has successfully taken place on or near historical mine sites, the likelihood of additional REE mineralisation associated with the other historical mines is high.

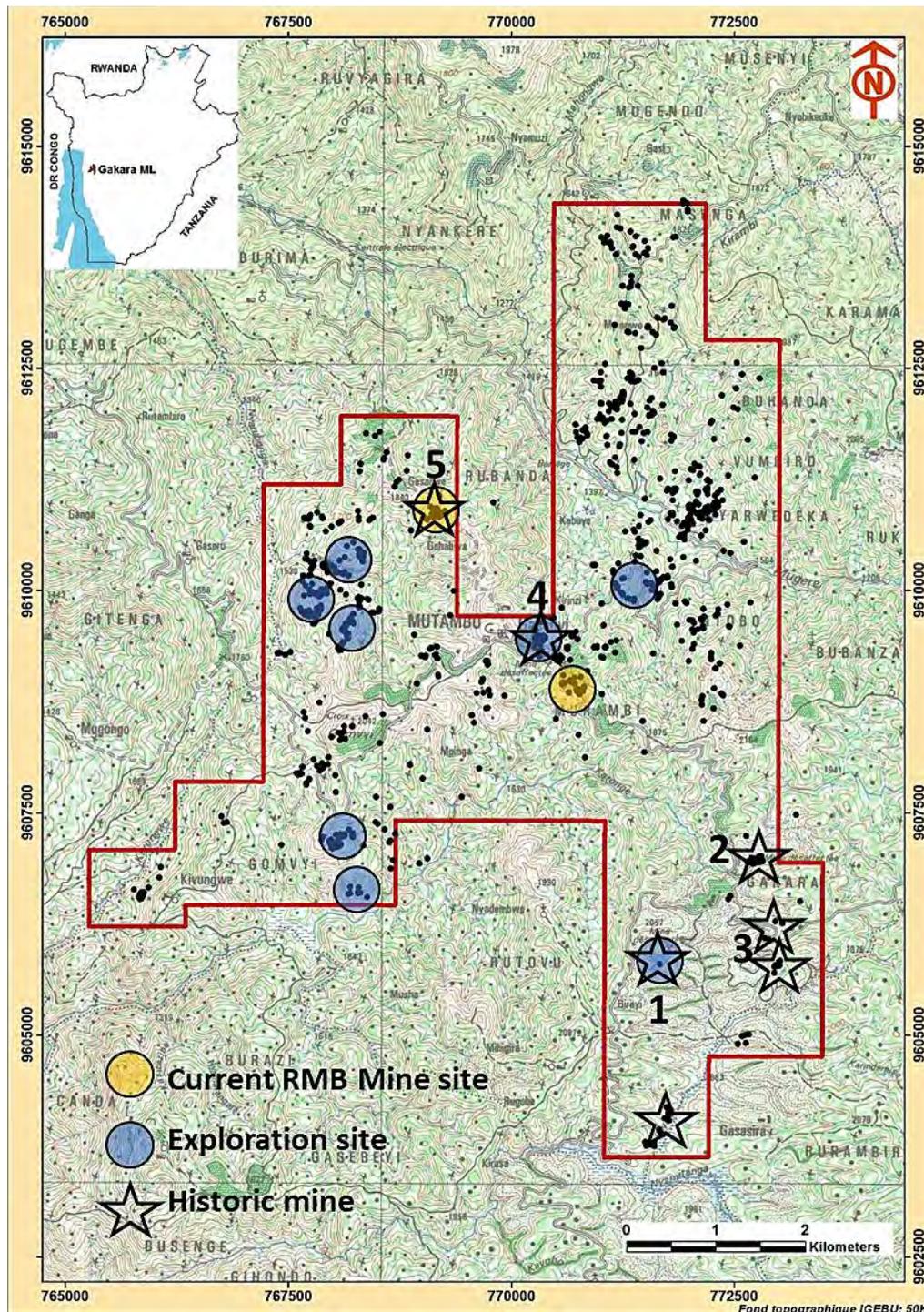


Figure 17: Rainbow ML, historical and current mining and exploration sites; 1 Gakara; 2 Rusutama; 3 Bigugo; 4 Gasenyi; 5 Gasagwe

The historical mines cleaning program includes the following:

Clean-up of mine bench faces and floors from overgrown vegetation.

Mapping and sampling of all visible REE veins.

Trenching, when required, to expose REE veins.

Topographic survey of the pit, benches, REE veins and immediate surrounding area.

Prospecting of areas immediately surrounding the old pits, to evaluate the potential for the REE vein system to extend laterally.

As at the date of compiling this Report the following historical mine pits have been explored refer to Table 9.

Table 9: Historical Belgian mines currently being explored by Rainbow		
Mine Site Name	No. of REE veins mapped	Thickest REE vein mapped
Gakara (ongoing, 25% done)	20	20 cm
Rusutama	34	10 cm
Bigugo	48	10 cm



Plate 11: Cleaning of historical mines; Gakara



Plate 12: Cleaning of historical mines; Rusutama



Plate 13: Cleaning of historical mines; Bigugo

During the cleaning up of the Gakara mine, RMB discovered an abandoned REE mineralised stockpile, probably dating back to the final years of the Belgian activities during 1977-78. The stockpile is situated near the former processing plant area where derelict remnant of treatment plant infrastructure is still visible and where fine-grain waste tailing dumps have been identified. Stockpile tonnage and TREO grade have not yet been estimated.

10.4 Exploration and bulk sampling of REE veins

The Exploration team re-opened selected exploration trenches containing known vein occurrences in January 2020 and began bulk sampling using manual extraction. Sufficient quantities of Massive Vein mineralised material (“MVO”) were and are still being extracted to provide geological information regarding vein continuity. The bulk sample MVO is processed at the Kabezi pilot plant to provide further metallurgical confidence in the vein quality.

MVO is defined as REE veins that are generally >10cm in thickness, but narrower veins with good continuity are also included in the MVO category. Apart from the Murambi, Gasagwe and Gasenyi mine sites (already mined or being mined by RMB), the exploration mapping database shows that there are at least 100 in situ REE veins that have a reported thickness >10cm within the ML. Figure 18 presents the main locations where MVO exists outside the current Rainbow trial mining areas.

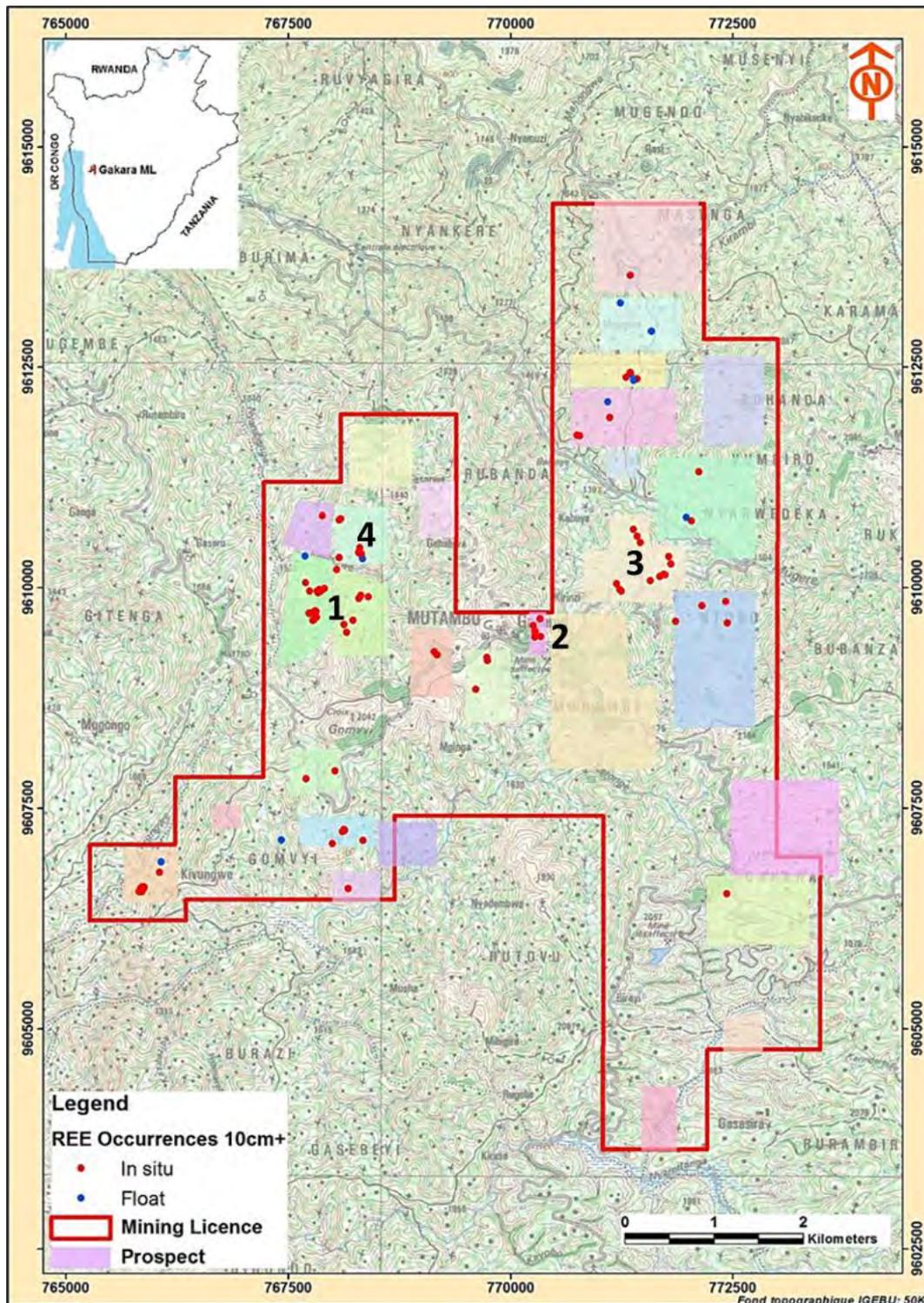


Figure 18: Locations of MVO (1 Gashirwe West & East; 2 Gasenyi; 3 Murambi North; 4 Kiyenzi)

10.4.1 Gashirwe West and East

20 REE veins have been bulk sampled on the Gashirwe West and East deposits. The vein thicknesses varies from 5 cm up to 15 cm (Table 10). Four of the veins were excavated over a lateral extent of more than 20 m.

NB	Vein ID	Target	Average Thickness (cm)	Lateral length exposed/mined (m)	Strike	Dip
1	V1	Gashirwe East	8.5	7.6	N55	45W
6	V2	Gashirwe East	10.0	5.1	N50	33W
2	V3	Gashirwe East	11.0	11.0	N15	32E
8	V4	Gashirwe East	10.0	2.1	N35	45W
3	V5	Gashirwe East	6.0	4.0	N10	8E
7	V6	Gashirwe East	5.0	2.3	N55	40W
5	V7	Gashirwe East	8.5	8.6	N53	45W
4	V11	Gashirwe East	5.0	3.2	N45	40W
9	V15	Gashirwe East	10.0	20.1	N30	40W
10	V8	Gashirwe West	16.0	8.0	N90	60E
11	V9_1	Gashirwe West	12.0	23.1	N132	51W
12	V9_2	Gashirwe West	5.0	10.7	N125	60W
13	V10	Gashirwe West	6.0	38.4	N126	60W
14	V12	Gashirwe West	5.0	4.7	N135	30W
15	V13	Gashirwe West	15.0	4.4	N60	45W
16	V14	Gashirwe West	11.0	21.1	N155	52W
17	V16	Gashirwe West	7.0	12.2	N150	40W
18	V17	Gashirwe West	13.5	7.3	N172	37W
19	V18	Gashirwe West	6.5	4.2	N162	50W
20	V19	Gashirwe West	7.0	4.3	N120	54W

In total 33.3 tonnes of MVO were gathered and processed through the Kabezi pilot plant. Most of the veins are massive containing a large proportion of bastnaesite/monazite. Some occurrences of breccia style mineralisation have also been bulk sampled. The host rock lithologies were mostly gneiss, but also hard and competent aplites and pegmatites in the Gashirwe West area. Most of the Gashirwe East veins are hosted in oxidised saprolitic gneiss.

10.4.2 Gasenyi

4 large REE veins were bulk sampled on the Gasenyi Target. The vein thickness varied from 13 cm up to 16 cm (Table 11).

Nb	Vein ID	Target	Average Thickness (cm)	Lateral length exposed/mined (m)	Strike	Dip
1	GSY_V1	Gasenyi	13	10	N25	20W
6	GSY_V2	Gasenyi	13.5	5	N135	45E
2	GSY_V3	Gasenyi	15	10	n/a	n/a
8	GSY_V4	Gasenyi	16	17.5	N137	46E

As at 30th June 20, 18 tonnes of MVO were bulk sampled and processed through the Kabezi pilot plant. Most of the "veins" appear to be zones of breccia hosted mineralisation within oxidised saprolitic gneiss.

10.4.3 Murambi North

11 large REE veins have been manually mined on the Murambi North Target. The vein thickness varied from 3 cm up to 15 cm (Table 12).

Nb	Vein ID	Target	Average Thickness (cm)	Lateral length exposed/mined (m)	Strike	Dip
1	V1	Murambi North	4	11.5	N30	80E
6	V2	Murambi North	4	9.3	N165	10W
2	V3	Murambi North	5	3	N170	50E
8	V4	Murambi North	3	2	N80	30W
3	V5	Murambi North	6	3	N120	60W
7	V6	Murambi North	8	15	N130	20W
5	V7	Murambi North	9	10	N110	32W
4	V8	Murambi North	15	7	N110	60W
9	V9	Murambi North	8	5.5	N130	20W
10	V10	Murambi North	Fragments only	6	N 70	n/a
11	V11	Murambi North	5	8	N170	50W

A total of 9.8 tonnes of MVO have been collected from Murambi North. Most of the Murambi North veins appear to be broken-up and discontinuous, irregular in thickness and width, splitting into several veinlets and also brecciated. The host rock lithologies were mostly hard and competent gneiss, but also aplites and pegmatites. While Murambi North hosts many REE occurrences, the nature of the veins and of the dominantly un-weathered host rock make mining more challenging.

10.4.4 Kiyenzi

Kiyenzi is the only deposit which has partly been drilled. This Target is characterised by the breccia hosted REE mineralisation. The breccia hosted mineralisation is readily recognised in the drill core and are also observed outcropping at several sites on the southern flank of the hill (Figure 19).

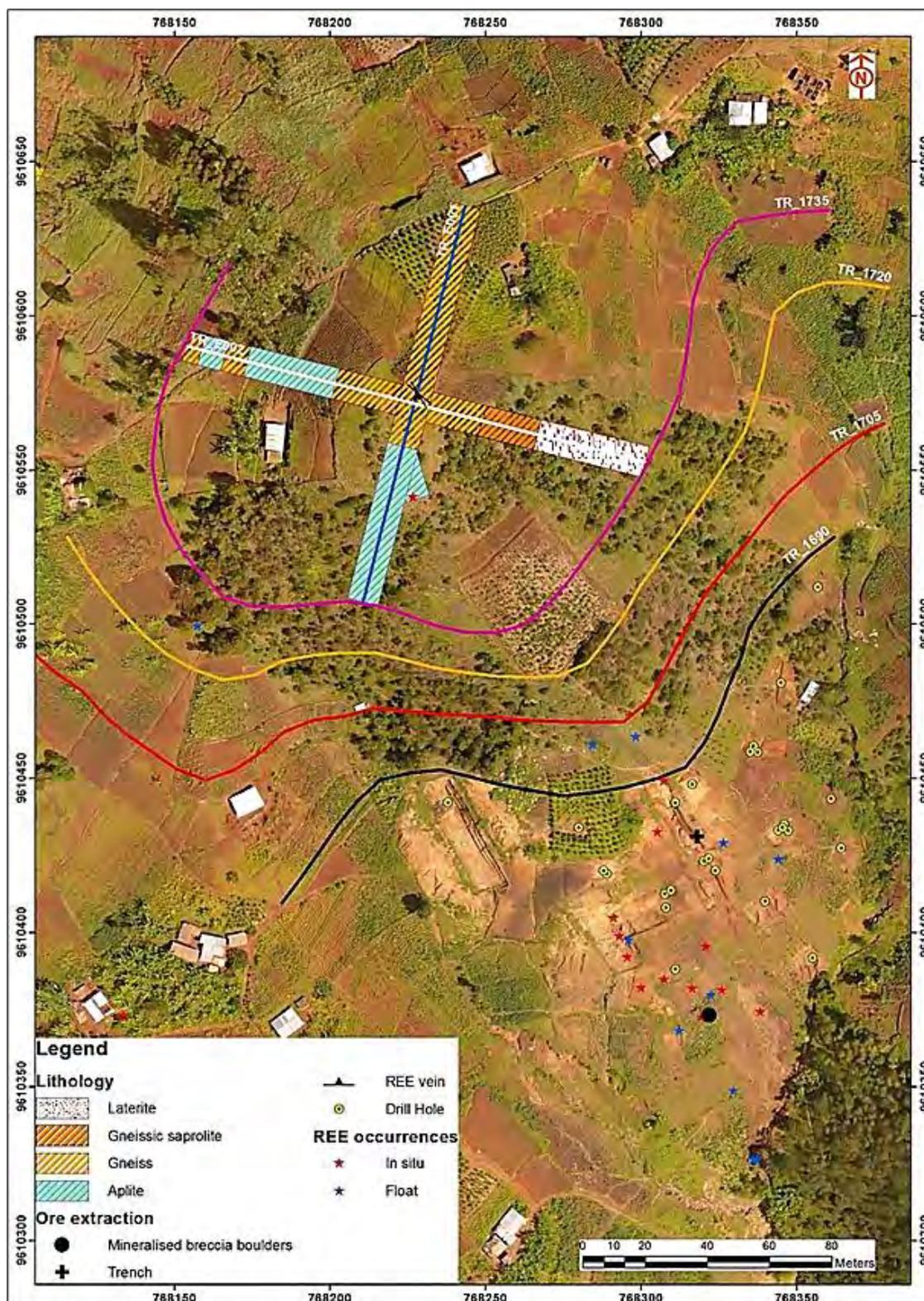


Figure 19: Kiyenzi showing REE outcrop or float, trenches and drillhole collars

In total 56.7 tonnes of breccia boulders have been bulk sampled from surface outcrop at Kiyenzi between September 2019 and June 2020 and processed through the Kabezi pilot plant. The work is ongoing.

11 DRILLING

Diamond drilling (“DD”) was carried out by Rainbow between February and September 2018. This is the only drilling program undertaken on the Project as at July 2020. The program was designed to achieve the following:

- Gasagwe Mine: to test the possibility of using drilling as a method for establishing continuation of known/mined REE veins at depth.
- To investigate the magnetic and radiometric anomalies source selected from the airborne geophysical survey (See section 8.2).
- To establish the source of ground gravity anomaly at the Kiyenzi target.
- To better understand the geometry and grade and tonnage distribution of breccia hosted mineralisation at Kiyenzi.

The drilling procedures, results and QAQC are presented in the MSA Technical Report on the Gakara REE project, dated the 4th June 2019 and in Appendix 1 - JORC Table 1. The CP has reviewed the drilling data and has agreed that the drilling information available is suitable for compilation of an Exploration Target.

12 DATA VERIFICATION

Verification activities were conducted by the Competent Person (“CP”) during his site visit in January 2020. Key activities included:

- Inspection of drilling results, core logging and related sampling.
- Inspection of trenching, mapping and related channel sampling.
- Review of sample data capture and recorded information.
- Review of the project database for consistency, completeness and accuracy.
- Review of sample submission and QA/QC procedures.
- Field traverse and assessment of data required to compile the Exploration Target.
- Review of trial mining at Murambi and trial processing at the Kabezi plant.

The CP consider the data to be of sufficient quality to be used in an Exploration Target estimate.

13 EXPLORATION TARGET

13.1 Exploration Target methodology

The Rainbow Exploration Target has been updated for 10 of the 32 recognised deposits within the ML. The Exploration Target could potentially increase materially as the remaining 22 deposits host similar style REE mineralisation within the same geological setting. The next stage of Rainbow's exploration is to convert the Exploration Target to a Mineral Resource to complete feasibility studies with relevant mine planning, metallurgical and other studies to build a REE producing mine.

The Rainbow Exploration Target has been updated using the following steps:

- Compilation of historical tonnes of REE concentrate trial mined, trial processed and sold, to inform the consideration of grade ranges set out in the Exploration Target disclosure.

- 3D plot of exploration mapped and sampled REE vein occurrences at the selected historically mined pits.

- Completion of a 3D topographic survey of 'As Mined' surfaces of the selected historical and current Rainbow mined pits as at end of May 2020.

- Using historical and recent photographs and other surface data, created 'best fit' pre-mined original 3D topography surfaces.

- Interpreted zones of REE vein hosted mineralisation based on pit exposures, trial mining and exploration data.

- Interpreted potential depth and lateral extensions of vein hosted REE mineralisation, limiting the Exploration Target to the estimated depth of the strongly weathered oxide profile (except for parts of Gashirwe West and East which include fresh rock).

- Constructed a 3D volume block model of the zones of REE mineralisation and flagged areas as either 'trial or historically mined' or 'unmined' based on the intersection of the original and 'As Mined' topography surfaces.

- Assigned an oxide rock insitu dry bulk density factor of 1.8 tonnes per cubic meter based on estimates derived from mining truck factors and trial process plant bulk samples.

- Using the estimated worst and best values from the trial mining strip ratio, determined the tonnage of potential vein hosted mineralised material in the 'unmined' volume.

The list of Rainbow deposits divided into those used in the Exploration Target, those historically mined and new deposits identified by Rainbow by exploration sampling and trenching are presented in Table 13.

Figure 20 presents the location of the deposits listed in Table 13, showing the Rainbow ML boundary.

Table 13: Rainbow REE deposit status

Deposits used in Exploration Target estimation			
Count	Deposit	Status	Comments
1	Murambi Sth (+ Zinga)	Active trial mining by RMB, Zinga small scale mining by SOBUMINES	Trial mined and processed through Rainbow plant
2	Gasagwe	Mined by SOBUMINES and trial mined by RMB	Historical mining by SOBUMINES and recent mining by Rainbow
3	Rusutama	Mined by SOBUMINES	Stockwork veinlets
4	Gakara	Mined by SOBUMINES, RMB bulk sampled historical stockpile	Bastnaesite veins – Massive and lenticular
5	Gomvyi Centre	Bulk sampled by RMB and sent to process plant	Bastnaesite veins – Massive and lenticular
6	Bigugo	Mined by SOBUMINES	Lenticular veins
7	Gasenyi	Mined by SOBUMINES. Selective veins bulk sampled by RMB	Bastnaesite veins – 15 significant size veins
8-9	Gashirwe West & East	Bulk sampled by RMB and sent to process plant	Hard relatively unweathered rock on top and side of hill, oxide in valleys
10	Kiyenzi	Diamond drill completed – drill core sampled and submitted for metallurgy test work, bulk sampling of lateral veins and breccia by RMB	Dominantly breccia hosted mineralisation. Grade tonnage and exploration target modelled in 3D using conventional resource estimation methods
Deposits historically mined, not yet explored by Rainbow			
Count	Deposit	Status	Comments
11	Mugere 1/ Masenga Centre	Resource estimated by BGR	Bastnaesite veins
12	Mugere 2/ Nyarwedek a	Mined by SOBUMINES	Bastnaesite veins
13	Nyamikole	Resource estimated by BGR	Bastnaesite veins
14	Rugembe/ Gomvyi North 1	Mined by SOBUMINES, and RMB	Gomvyi North - Bastnaesite
15	Misugi	Mined by SOBUMINES	Alluvial monazite
16 & 17	Nyabigati N & S/ Rusutama	Mined by SOBUMINES	Monazite Veins
18	Karinzi	Mined by SOBUMINES	Bastnaesite - Monazite
Deposits identified by Rainbow with sampled vein outcrop			
Count	Deposit	Status	Comments
19	Murambi North	Veins bulk sampled sent to RMB pilot plant	Large REE veins within un-weathered, hard gneiss host rock, 10 tonne bulk sample by RNB
20	Gomvyi South	Veins bulk sampled and sent to RMB pilot plant	Single large REE vein within weathered, oxide gneiss host rock, 5 tonne bulk sample by RNB
21	Gomvyi North 2	Outcrop mapping and vein sampling	
22	Masenga North	Outcrop mapping and vein sampling	
23	Masenga South	Outcrop mapping and vein sampling	
24	Kigina	Outcrop mapping and vein sampling	

25	Kigina North	Outcrop mapping and vein sampling	
26	Kivungwe 1	Outcrop mapping and vein sampling	
27	Kivungwe 2	Outcrop mapping and vein sampling	
28	Gomyi South-East	Outcrop mapping and vein sampling	
29	Buhanda	Outcrop mapping and vein sampling	
30	Ntobo	Outcrop mapping and vein sampling	
31	Burima	Veins bulk sampled sent to RMB pilot plant	Single large REE vein within weathered, oxide gneiss host rock, 2.5 tonne bulk sample by RMB
32	Kyenzi North	Outcrop mapping and vein sampling	

Figure 20 and Table 13 demonstrate the potential scale of the Rainbow REE mineralisation. The Exploration Target estimated in this report is based on only 10 of the 32 of the deposits identified.

Figure 21 to Figure 23 present 3D views of the Gasagwe, Murambi and Gomvi showing the results of the 3D modelling used to estimate the Exploration Target.

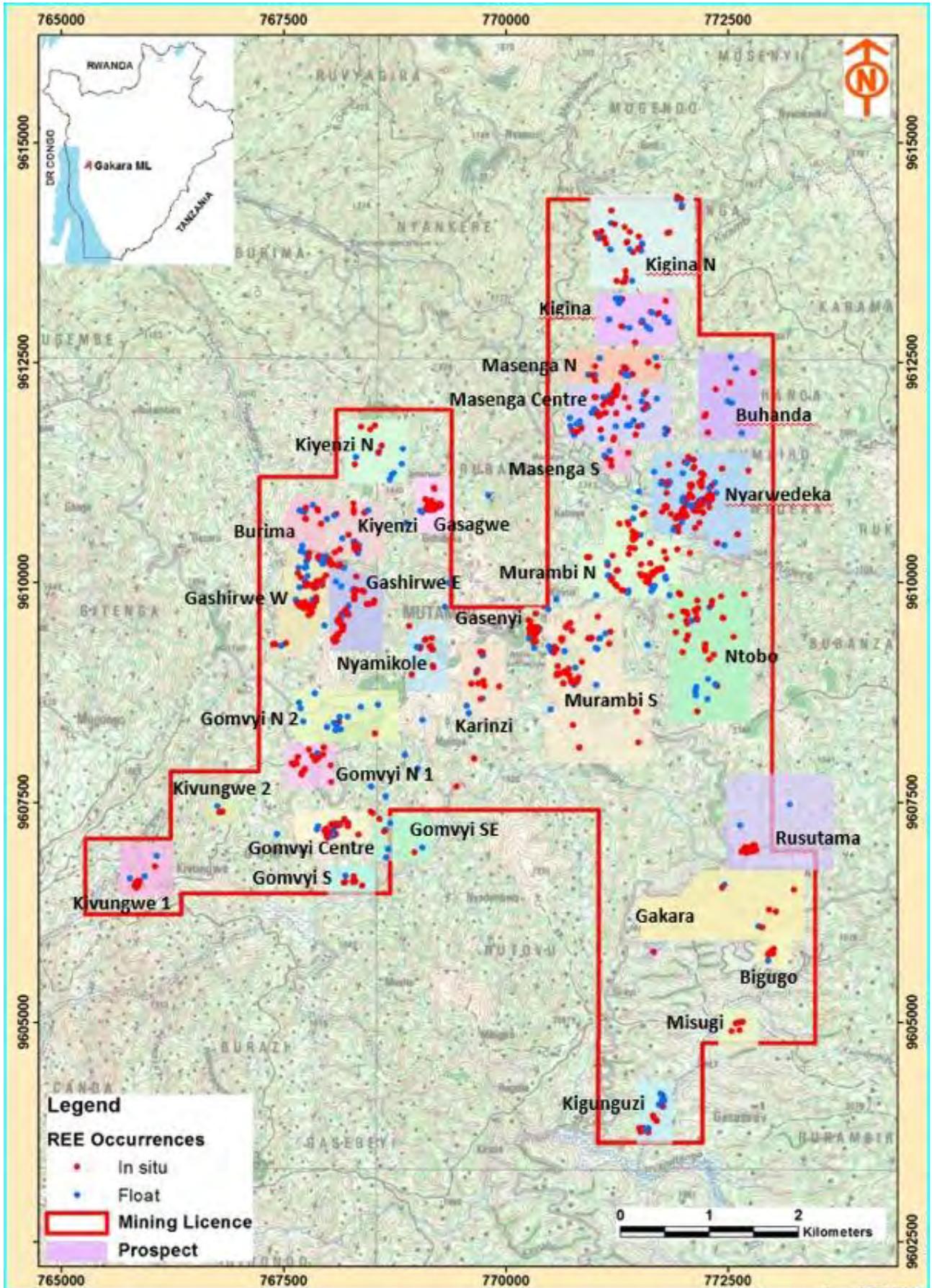


Figure 20: Location of Rainbow deposits showing surface REE outcrop or float

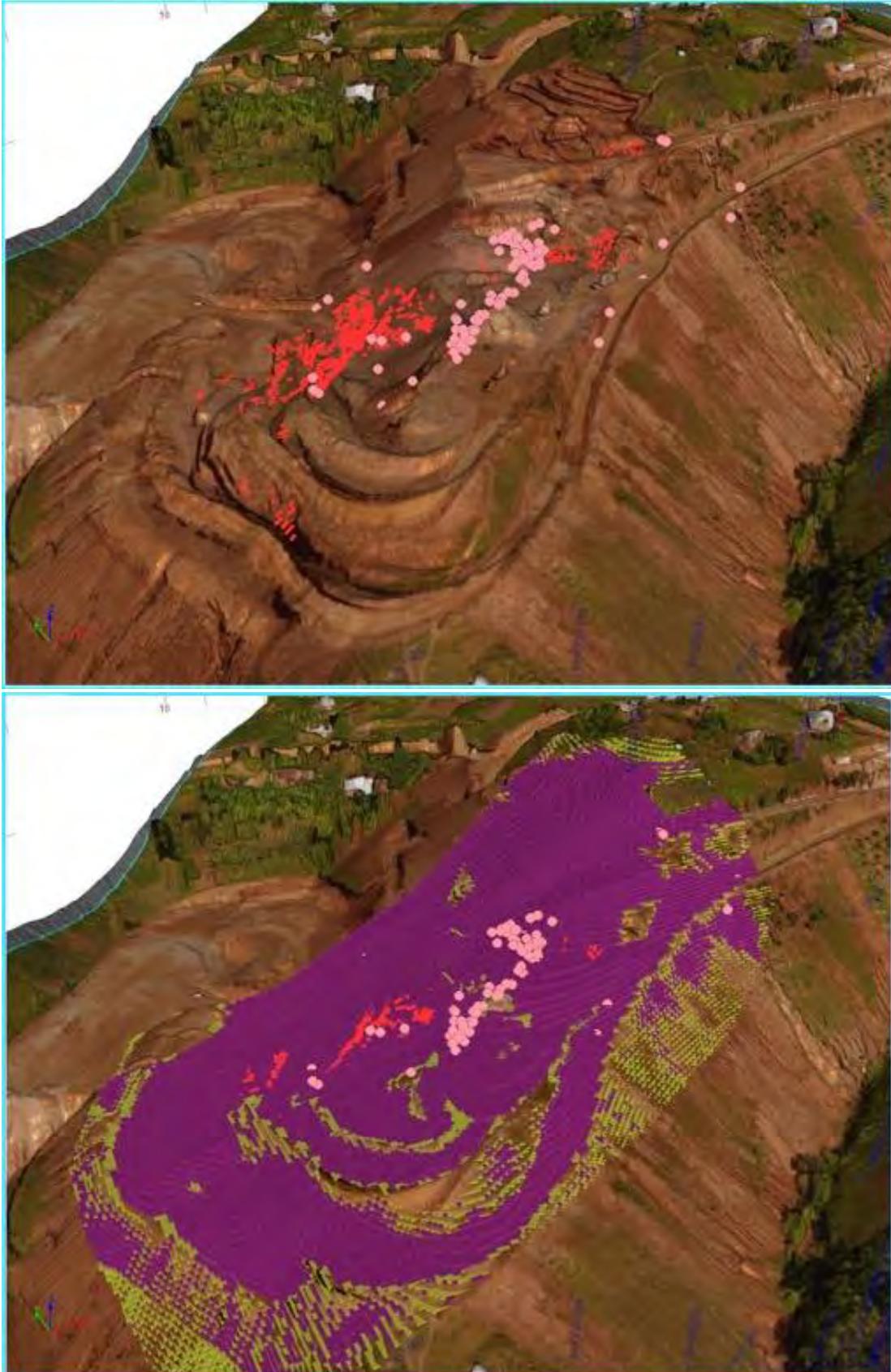


Figure 21: Gasagwe 3D. Top image showing 'As Mined' surface with mapped REE veins. Bottom image showing 3D model blocks - purple (Mined) and yellow (Unmined)

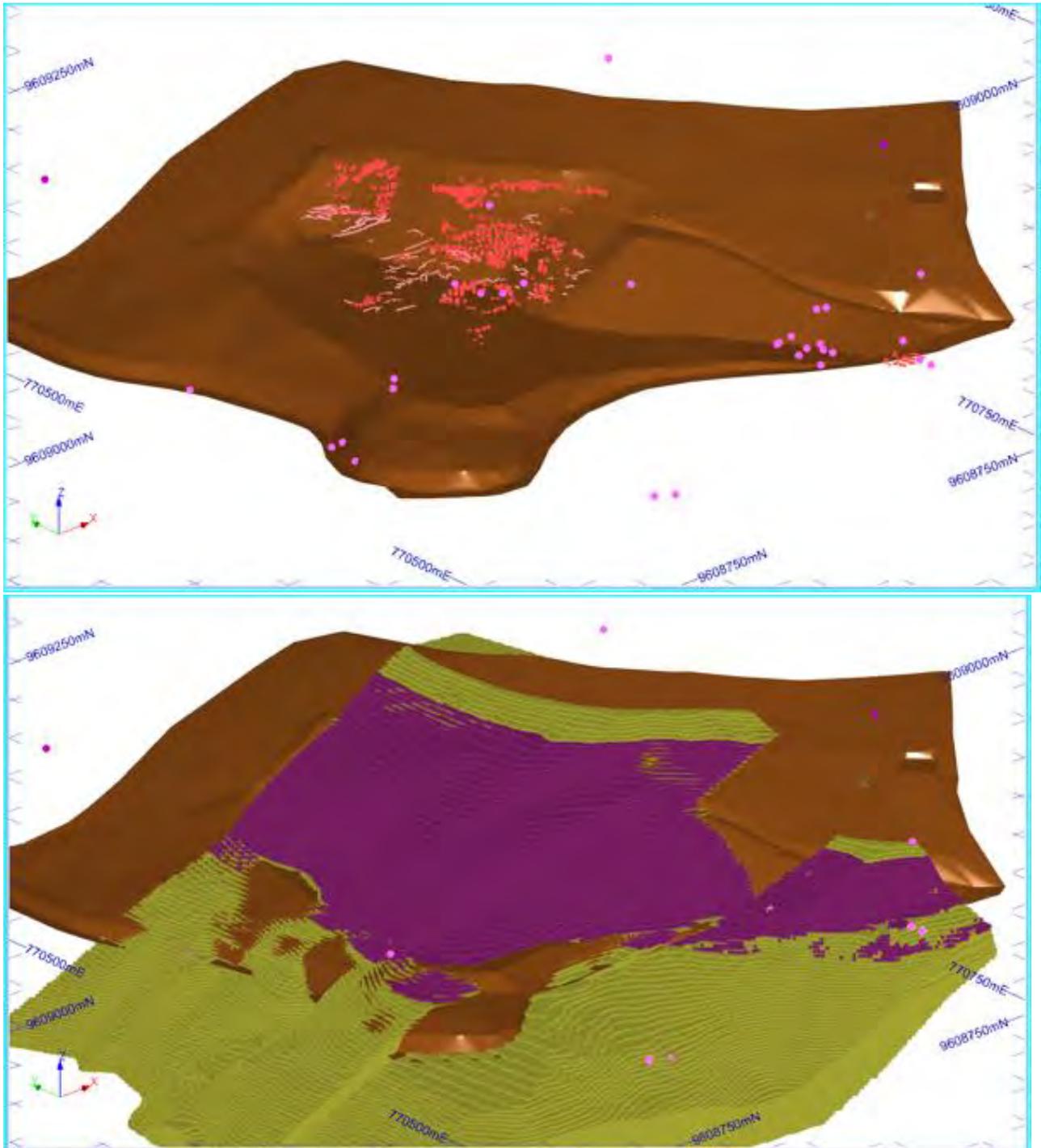


Figure 22: Murambi South 3D. Top image showing 'As Mined' surface with mapped REE veins. Bottom image showing 3D model blocks - purple (Mined) and yellow (Unmined)

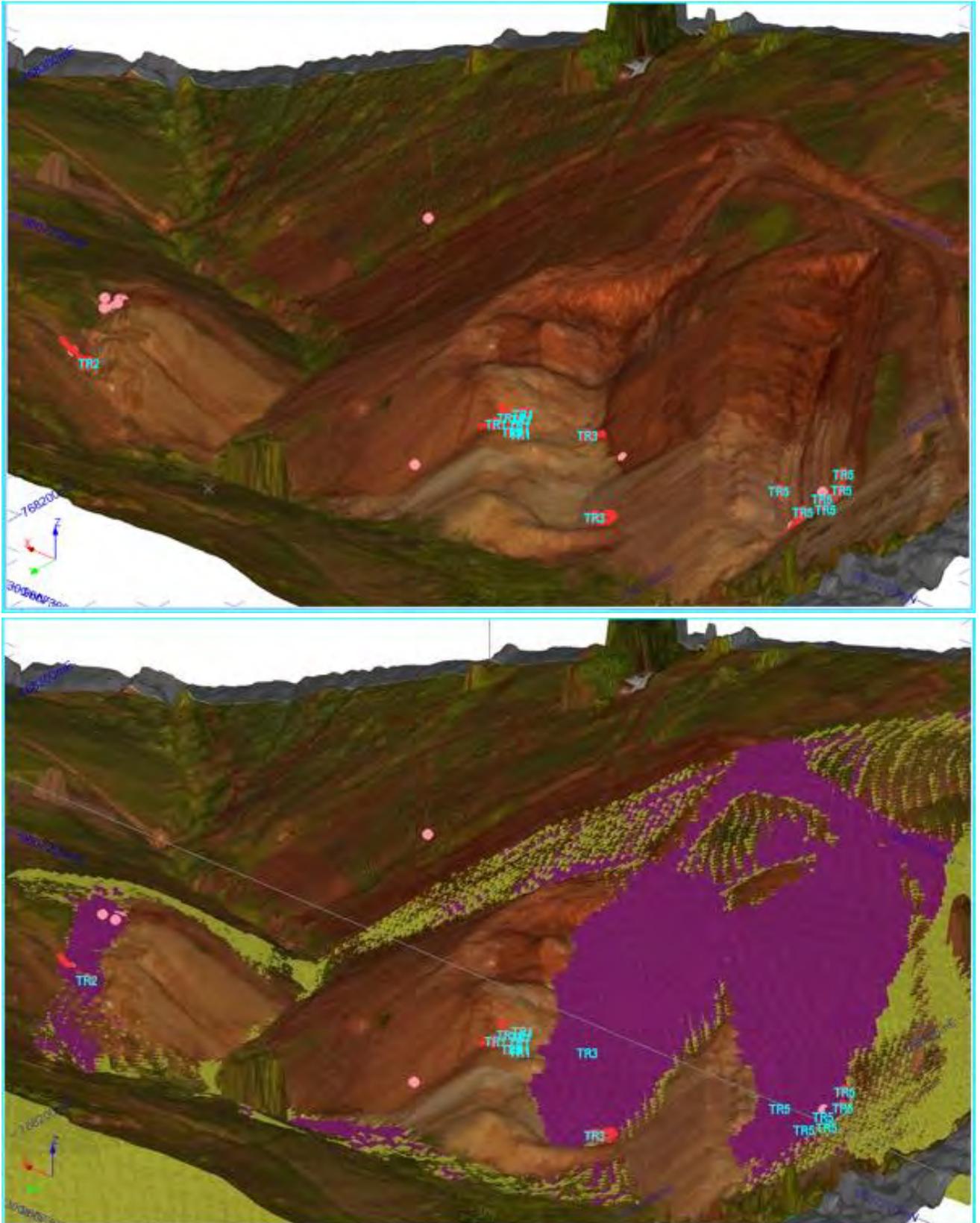


Figure 23: Gomvyi Central 3D. Top image showing 'As Mined' surface with mapped REE veins. Bottom image showing 3D model blocks - purple (Mined) and yellow (Unmined)

Table 14 presents the tonnes of vein hosted mineralisation together with associated waste material within the interpreted vein mineralisation volume. Note that these volumes are projected to the estimated base of intense weathering and oxidation. The depth of weathering is untested by drilling but expected to average between 30 to 50m below the natural topographic surface based on historical mining and existing trial mining exposures.

Table 14: Vein hosted mineralisation - Combined tonnes of mineralisation plus associated waste used as input to derive an Exploration Target		
Deposit	Tonnes of Rock	In-situ dry Bulk Density
Murambi South	3,624,000	1.8
Gasagwe	2,702,000	1.8
Rusutama	2,300,000	1.8
Gakara	6,110,000	1.8
Gomvyi Central	1,507,000	1.8
Gashirwe West and East	4,475,000	1.8
Bigugo	805,000	1.8
Gasenyi	4,702,000	1.8
TOTAL	26,225,000	1.8

Note 1: Gashirwe includes some fresh rock – BD of 1.8 likely conservative for Gashirwe

Note 2: Tonnes are estimated and used as inputs to derive an Exploration Target REE mineralisation range from the range of trial mining strip ratios observed.

Table 15 presents the vein hosted mineralisation Exploration Target. The Exploration Target range was derived from estimating a range of strip ratios observed from both historical mining and Rainbow trial mining as an indicator of average REE mineralisation volume within the overall rock mass containing the REE mineralisation presented in Table 14.

Table 15: Vein hosted mineralisation Exploration Target as at 31st August 2020				
Estimated as a range of vein hosted REE mineralisation tonnes and grade using historical mining and trial mining strip ratio and pilot plant feed grade ranges				
Vein Hosted Mineralisation	Lower Estimate		Upper Estimate	
Deposit Name	Tonnes	TREO %	Tonnes	TREO %
Murambi South	36,000	7%	52,000	12%
Gasagwe	27,000	7%	39,000	12%
Rusutama	23,000	7%	33,000	12%
Gakara	61,000	7%	87,000	12%
Gomvyi Central	15,000	7%	22,000	12%
Gashirwe West and East	45,000	7%	64,000	12%
Bigugo	8,000	7%	11,000	12%
Gasenyi	47,000	7%	67,000	12%
Vein Hosted Exploration Target	262,000	7%	375,000	12%

Assay results for all drillhole core intervals within the breccia mineralisation zone were used to create a 3D breccia hosted REE mineralisation interpretation for the Kiyenzi deposit. Details on the drillhole data, sampling method and QAQC are presented in the Appendix 1 - JORC Table 1.

The results from the TECT structural study supports a possible extension of the breccia mineralisation below the base of the Kiyenzi DD drilling. An Exploration Target was defined 50m below the existing interpretation.

During May 2020, a small landslide to the south of the existing drilling exposed a significant zone of breccia hosted mineralisation. This supports a possible extension of mineralisation to the south which has been added as a lateral extension and classified as an additional Exploration Target.

Table 16 presents the rough tonnage and TREO% grade estimate determined from interpretation of the Kiyenzi 2018 DD drilling including the possible depth and lateral extensions discussed above.

Table 16: Kiyenzi breccia hosted mineralisation grade tonnage estimate from DD drilling including potential depth and lateral extensions derived from exploration			
Kiyenzi Area	Tonnes	TREO %	In-situ dry Bulk Density
DD Drilling	115,000	1.2%	2.71
Depth Extension	71,000	1.2%	2.71
Lateral Extension	111,000	1.2%	2.71
TOTAL	297,000	1.2%	2.71

The tonnes and grade in Table 16 were used to develop the Exploration Target tonne and grade range presented in Table 17.

Figure 24 to Figure 27 show 3D views of the Kiyenzi breccia hosted mineralisation showing the 3D grade tonnage conceptual model plus the Exploration Target depth and the lateral extensions.

Table 17: Kiyenzi breccia hosted mineralisation Exploration Target	Lower estimate		Upper estimate	
	Tonnes	TREO %	Tonnes	TREO %
Breccia Hosted Mineralisation				
Kiyenzi grade tonnage conceptual model	98,000	1%	132,000	1.5%
Kiyenzi possible depth extension	60,000	1%	82,000	1.5%
Kiyenzi possible lateral extension	94,000	1%	128,000	1.5%
Breccia Hosted Exploration Target	252,000	1%	342,000	1.5%

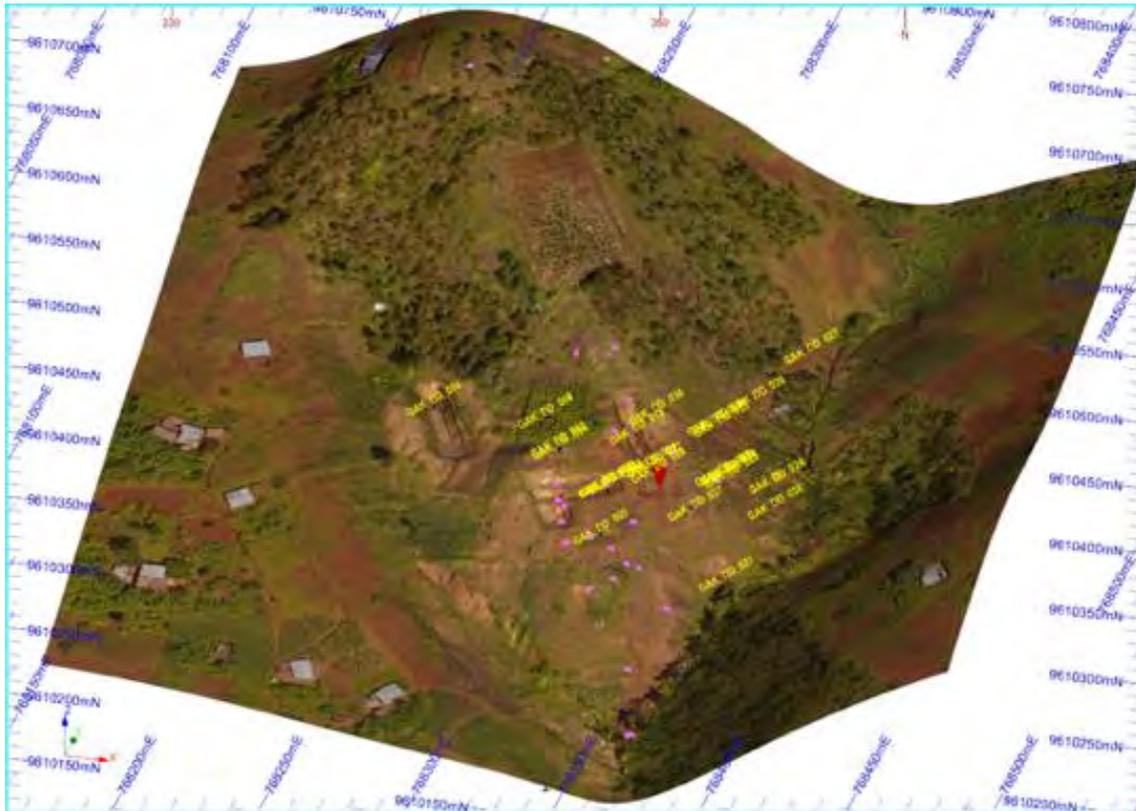


Figure 24: Kiyenzi 3D. Topography, REE outcrop in purple, DD drillhole collars in yellow

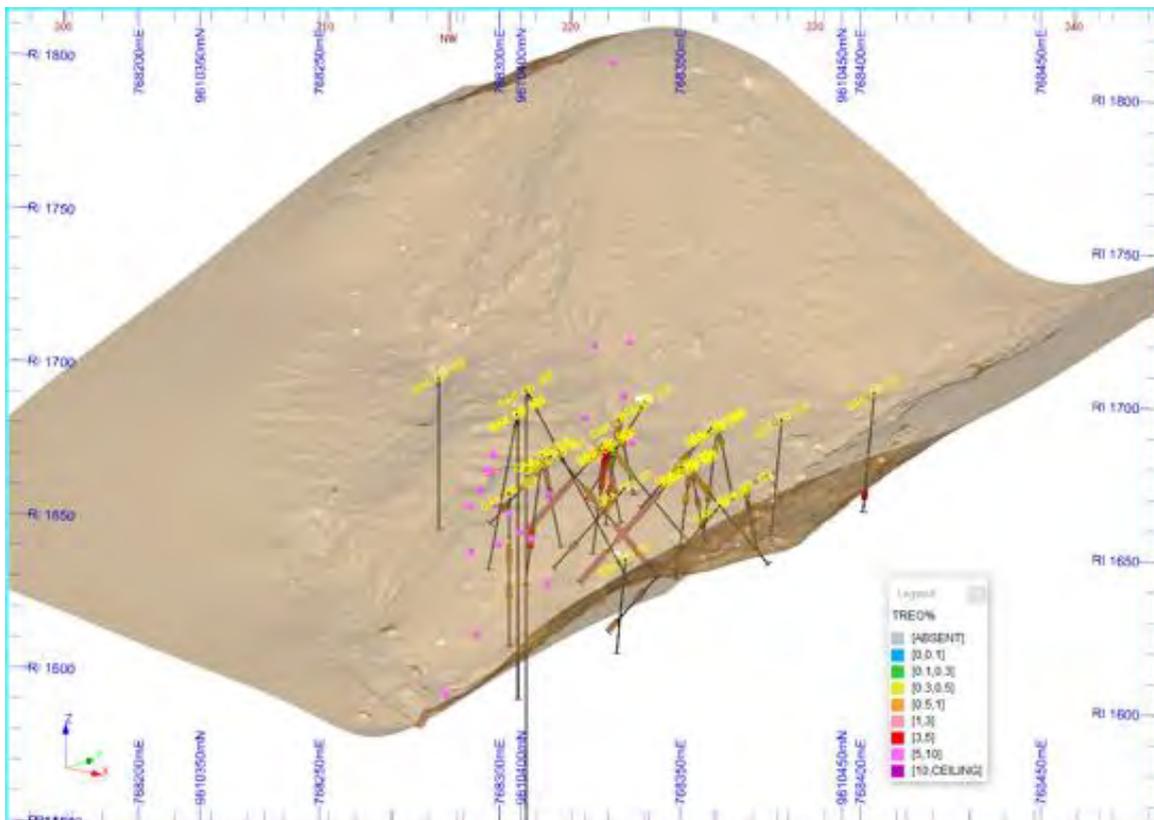


Figure 25: Kiyenzi 3D, DD drillhole REE composites coloured by TREO%, REE surface occurrences in purple

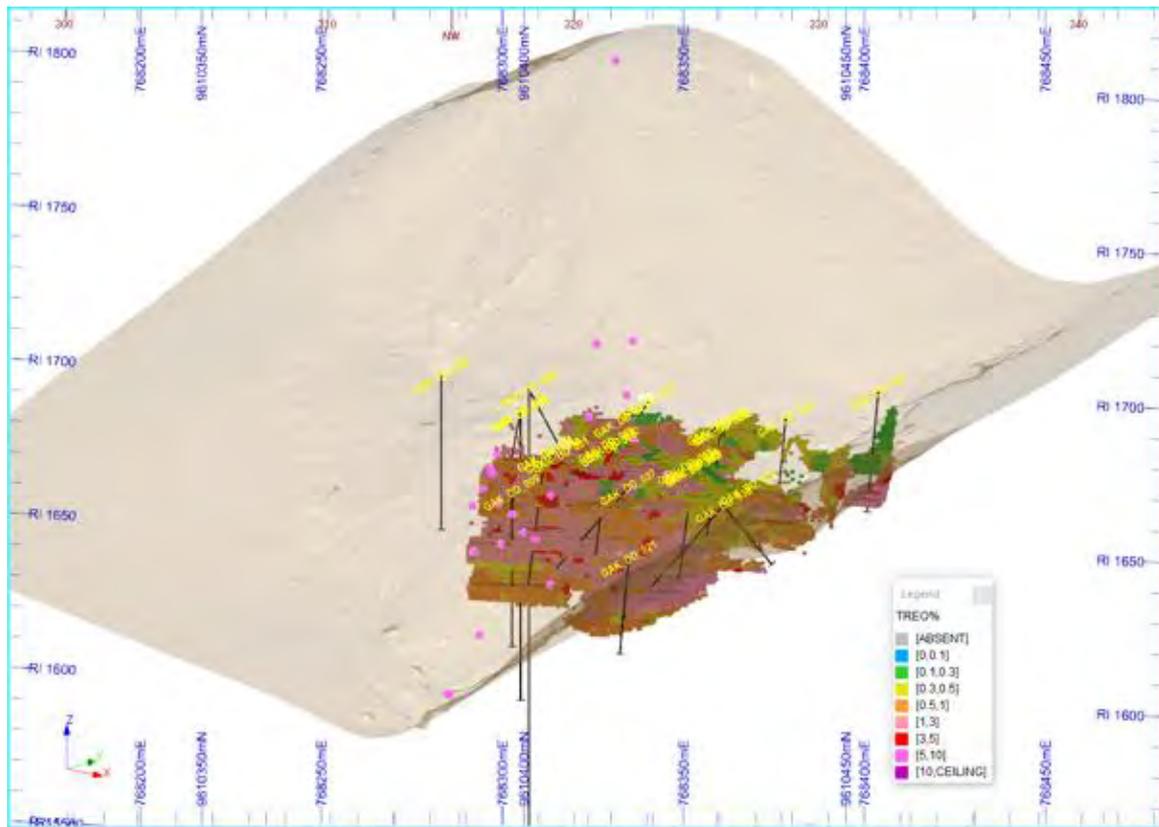


Figure 26: Kiyenzi 3D, DD drillholes and 3D grade tonnage model coloured by TREO%

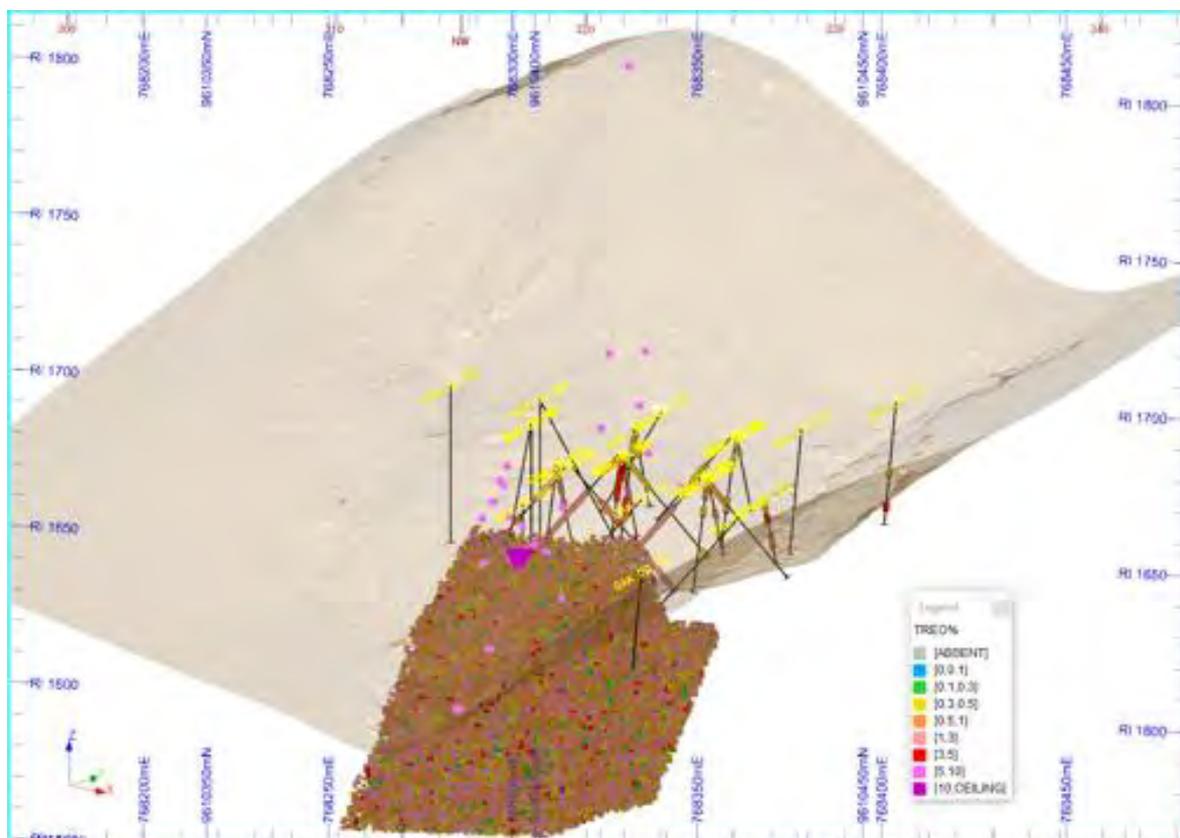


Figure 27: Kiyenzi 3D, Landslide (inverted purple triangle) and Exploration Target lateral and depth extensions coloured by TREO%

13.2 Exploration Target

Consolidation of the data and results discussed above are presented in Table 18 as the Exploration Target for Rainbow REE mineralisation as at 31st August, 2020.

Table 18: Rainbow Exploration Target as at 31 st August 2020	Lower estimate		Upper estimate	
	Tonnes	TREO %	Tonnes	TREO %
Vein Hosted Mineralisation				
Murambi South	36,000	7%	52,000	12%
Gasagwe	27,000	7%	39,000	12%
Rusutama	23,000	7%	33,000	12%
Gakara	61,000	7%	87,000	12%
Gomvyi Central	15,000	7%	22,000	12%
Gashirwe West and East	45,000	7%	64,000	12%
Bigugo	8,000	7%	11,000	12%
Gasenyi	47,000	7%	67,000	12%
Vein Hosted Exploration Target	262,000	7%	375,000	12%
Breccia Hosted Mineralisation				
Kiyenzi grade tonnage model	98,000	1%	132,000	1.5%
Kiyenzi depth extension	60,000	1%	82,000	1.5%
Kiyenzi lateral extension	94,000	1%	128,000	1.5%
Breccia Hosted Exploration Target	252,000	1%	342,000	1.5%

Note:

This exploration target is based on work completed on less than 30% of the Rainbow identified deposits within the mining license area

Totals have been rounded to reflect the level of accuracy of the Exploration Target range

13.3 Exploration and mineral resource development strategy

Conversion of the Exploration Target to a Mineral Resource Estimate will be completed by:

- Continued trial mining and pilot plant processing to confirm vein continuity and concentrate quality.
- Continued exploration mapping, sampling and bulk sampling to expand the near surface mineralisation footprint and to confirm vein geometry and metallurgical properties.
- An exercise to trial ground penetration radar (GPR) as a method of 'mapping' vein geometry at 5 to 20 m depths below the current topography of active mining surfaces within the highly weathered saprolite zone.
- Complete a program of diamond drilling to test the depth of weathering and the continuation of vein / breccia style mineralisation defined in the exploration target 3D models, using DD drilling 60 degree angled holes on a nominal 50 x 50 m grid.
- Continue exploration mapping to test and improve the structural interpretation of the REE mineralising controls defined by TECT during Q1 2020 study.

Table 19 presents the estimated exploration costs over the next 12 to 15 months to convert the 9 vein hosted REE mineralisation Exploration Targets to a Mineral Resource Estimate (MRE). Figure 28 presents the estimated timeline for completion of the required exploration activities. In the opinion of the CP the planned exploration activities, associated costs and proposed timeline is a reasonable estimate and should be achievable.

Table 19: Estimated exploration costs to convert Exploration Target to MRE		
15 Month Exploration Budget to Convert vein hosted Exploration Targets to MRE		
Activity	Cost USD	Comments
Field checking of Phase 1 TECT targets	\$43,943	TECT consulting support
On-going field sapling of RMB vein-hosted deposits	\$7 250	RMB local staff
Trial Orientation GPR survey	\$28 520	Southern Geoscience quotation
DD Drilling of 9 vein hosted Exploration Targets	\$2 282 005	1,800m/target. Estimate 16,200m of HQ oxide DD drilling
Sample assaying (RMB field lab PEX and commercial lab QAQC)	\$221 130	Independent laboratory QAQC of assays
Purchase Field laboratory - CAPEX	\$155 078	As per METCC quotation
Mineralogy/metallurgy analysis and testwork	\$25 000	Based on historical spend at Geolabs
Purchase Excavator/JCB - CAPEX	\$50 000	2 nd hand for use by exploration team
Mineral Resource Estimation and Reporting	\$100 000	Independent Consultant
Overheads for 15 months exploration staff and office	\$276 098	Includes expat chief geologist support
TOTAL (Rounded up)	\$3 200 000	

Exploration Program - vein hosted Exploration Targets to MRE	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15
15 Month Exploration Schedule															
Field checking of Phase 1 TECT targets															
On-going field sapling of RMB vein-hosted deposits															
Trial Orientation GPR survey															
DD Drilling of 9 vein hosted Exploration Targets															
Sample assaying (RMB field lab PEX and commercial lab QAQC)															
Purchase Field laboratory - CAPEX															
Mineralogy/metallurgy analysis and testwork															
Purchase Excavator/JCB - CAPEX															
Mineral Resource Estimation and Reporting															

Figure 28: Estimated timeline to convert Exploration Target to MRE

14 HISTORICAL MINING AND CURRENT TRIAL MINING

14.1 Historical mining

The mining method employed by the Belgians was entirely manual. The high grade REE veins were initially exposed at surface and the waste removed and dumped leaving the veins exposed. The REE veins were then extracted manually. This resulted in very high grade mineralised material being produced which required minimal processing before shipment. Several vein hosted occurrences were exploited in this way at a low production rate. Approximately 5,000 tonnes of very high grade mineralised material was extracted over a period of nearly 30 years of intermittent mining since the 1930's.

14.2 Trial mining

Rainbow has been mining REE mineralisation on a trial mining basis since mid-2017.

Following an initial program of exploration, Rainbow determined that the Project geology is complex and does not lend itself to conventional resource evaluation. Rainbow elected to develop a trial mining and pilot plant processing approach to evaluate the Project deposits. Samples of REE mineralisation were delivered to Metanza's metallurgical laboratory in South Africa where a program of metallurgical test work was completed in 2016. This provided the basis for the design of trial processing plant installed at Kabezi to process mineralised material delivered from the mining program.

Rainbow constructed a mine at the Gasagwe site, acquiring and renting all the earthmoving equipment, building support infrastructure and compensating the local population. Rainbow also commenced maintenance of the gravel road between the mine site and the plant, a mountain road of approximately 25km. Trial mining commenced during 2017.

The initial mining method used excavators and trucks to remove waste and expose the high grade REE veins. The REE veins were extracted manually resulting in a high grade mineralised material with a TREO grade of approximately 30% for delivery to the pilot plant at Kabezi. This method proved effective but probably resulted in mineralised material losses and production rates declined when the veins became narrower.

A second pit was opened during 2019 at the vein hosted Murambi South deposit. Initial production rates were constrained by high waste strip ratio and limitations of the mining fleet. A change in mining method was trialled from late 2019 at Murambi South to reduce mineralised material losses. Bulk mining using mechanical equipment was instituted in vein rich areas of the pit. Although this approach was successful in reducing mineralised material losses, it resulted in high dilution and a low TREO grade of <2% being delivered to the pilot plant. This overloaded the plant in terms of fines and waste and was discontinued in early 2020.

The current trial mining method has successfully been employed at Murambi South from early 2020 and continues to be the preferred mining method for vein hosted orebodies. Waste is stripped mechanically by a bulk fleet of excavator and trucks whilst veins and adjacent low grade selvedge and/or waste are mined by a smaller excavator and trucks delivering to the plant. This has reduced the mineralised material losses and the waste dilution and produces a grade of approximately 10% TREO which is readily processed in the Kabezi pilot plant. *Note: A plant feed grade of 10% TREO makes Rainbow one of the highest REE grade deposits in the world.*

Improved mine planning and the arrival of an owner’s mining fleet has seen a steady increase in mining production which is now limited by the current mining fleet at approximately 65 tonnes per month of concentrate.

The soft, friable nature of the weathered vein hosted mineralised material coupled with a downhill haul for the bulk waste to adjacent dumps results in a sustainable mining cost despite a high strip ratio of approximately 100:1. Current total trial mining cost ranges from 65 to 79 US cents per tonne which equates to around US\$65 to US\$79 per mineralised material tonne.

The current bulk mechanical waste mining and selective mechanical mining method is optimal for the vein hosted mineralised materials. A second mining fleet has been ordered and trial mining will continue at Murambi South and be extended to Gasenyi once the new equipment arrives on site. Concentrate production is expected to exceed 100 tonnes per month at a grade of greater than 54% TREO.

The use of trial mining and pilot plant processing data has been key in determining an Exploration Target. The relationships between concentrate produced and average pilot plant recovery have allowed estimation of average pilot plant feed grade. Knowing the plant feed grade has allowed estimation of the Exploration Target ranges of possible mineralisation mining grade. Estimation of the total volume of material moved (within the areas where mineralisation was mined) combined with the estimated pilot plant feed tonnes has allowed estimation of mining strip ratio range used to estimate Exploration Target mineralisation tonnes.

Table 20 presents the mining and processing parameters derived from analysis of the 'as mined' material.

Table 20: Mining and processing parameters used in determination of the Exploration Target						
Deposit	Concentrate tonnes produced	Concentrate Grade TREO%	Pilot Plant Feed Tonnes	Pilot Plant Feed Grade	Tonnes Mined including Waste	Back Calculated Strip Ratio
Murambi South	429.2	54.0	5,707	4.1	463,970	80
Gasagwe	1,206.4	54.0	2,507	26.0	200,920	79
Rusutama	499.5	54.0	2,697	10.0	174,794	64
Gakara	3,465.0	54.0	18,711	10.0	594,072	31
Gomvyi Centre	20.0	54.0	108	10.0	44,395	410
Bigugo	16.0	54.0	86	10.0	36,185	418
Gasenyi	504.0	54.0	2,722	10.0	35,905	12
TOTAL	6,140.1	54.0	32,538	10.2	1,550,241	47

Note: Feed grades in Red are estimated based on current mining experience

The description of the fields in Table 20 follow:

Concentrate Tonnes Produced - derived from SOBUMINES and Rainbow published records.

Concentrate Grade - Minimum TREO% grade of concentrate expected to be produced.

Process Feed Tonnes - Rainbow mining records for Murambi South and Gasagwe; Back calculated for historical deposits with tonnes used as an indicative number to estimate the mining strip ratio based on current Rainbow mechanised mining methods.

Process Feed Grade - Actual Rainbow recorded grades for Murambi Sth and Gasagwe;

Note: Numbers in Red are the average current Rainbow mining grade applied to

historical deposits to allow theoretical estimation of process feed tonnes using Rainbow mining methods.

Tonnes Mined including Waste - is the total tonnage of waste and mineralisation mined in the 'zone of vein mineralisation'. The tonnes are based on volume difference between original topography and end of May 2020 as mined surface using an in-situ dry bulk density factor of 1.8 tonnes per cubic.

Back calculated strip ratio - derived from 'As mined' tonnes and 'Process Feed Tonnes'.

Note: Strip ratio for Gomvyi and Bigugo are significantly overestimated as most of the tonnes 'mined' was material moved in an exploration effort to uncover and map near surface veins. No production historical mining was carried out on those deposits.

Based on the information presented in Table 20, the CP chose the strip ratio range from 100 (lower) to 70 (upper) to estimate Exploration Target tonnes and the pilot plant feed TREO% grade ranges as 7% (lower) and 12% (upper) as the Exploration Target TREO%.

14.3 Trial mining production

The first mineralised material was excavated from the Gasagwe site in May 17 with steady increases in production to first mineralised material in September 2017 with a trial mining production peak of 238 tonnes in August 2018.

The open pit bench mining method adopted at Gasagwe and Murambi South is generally the easiest form of mining for small-scale mining operations as the mineralised veins are outcropping. Bench mining offers a simple and safe method to exploit a deposit, but this method requires a systematic approach and for waste and mineralised material to be removed in a specific sequence.



Plate 14: Showing waste mining using the excavator loading 25 t capacity trucks and selective mining with the TLB



Plate 15: Showing bulk waste mining and selective mechanical mineralised material mining



Plate 16: Gravel haul road

Currently the strip ratio at Murambi South is around 100:1 for a plant feed grade of around 10% TREO. The average historical stripping ratio at Gasagwe, which was mined from August 2017 to August 2019 was 202:1. However, the plant feed grade during this mining phase was around 30% TREO so this high waste:'ore' strip ration cannot be compared to conventional open pit mining.

Geotechnical

No geotechnical work has been conducted to date. Based on on-site observations it is apparent that ground conditions are stable.

Hydrological

No hydrological work has been conducted to date. The water table is below the mining depth and the mine is free draining being located high on the side of a hill. The key risk to production is the rainy season, which affects the months from September to May. The vein and waste production have been planned at 30% less from October to April than other months by Rainbow to allow for stoppages and delays due to the rain. Haul roads have been constructed with good roadbed material and drainage installed to prevent damage to the roads affecting production during the rainy season.

Mining production rates

The planned monthly production rate is around 700 tonnes of ROM vein material of approximately 10% TREO at a strip ratio of 100:1 during the dry season. During the rainy season this is expected to drop to around 500 t/month of ROM vein



Figure 29: Trial mining waste movement

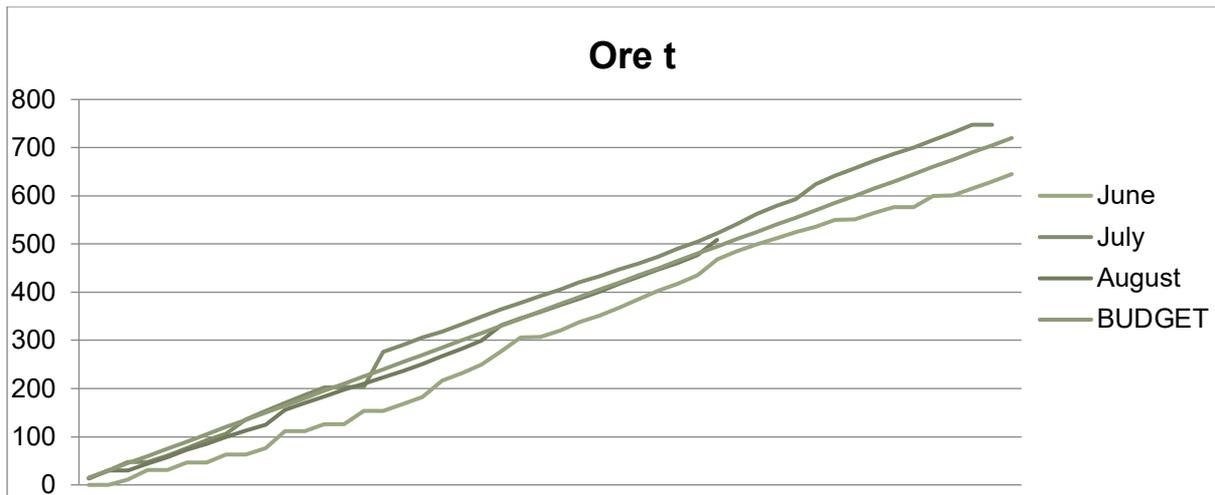


Figure 30: Trial mining mineralised material production

Mining Equipment

The current mining fleet comprises of

- 1 x JCB JS205 20t Excavator
- 2 x JCB 4CX TLB's
- 5 x Howo 25t 6x4 Tipper Trucks
- 1 x SDLG Grader
- 1 x Dozer

This fleet is currently achieving the plan but to double production and achieve 100+ tonnes of concentrate per month the following will be added

- 1 x Hyundai 340L 34t Excavator
- 2 x Howo 25t Tipper Trucks



Plate 17: Rainbow’s processing pilot plant (looking south)

15.1 Current trial mineralised material processing

The pilot plant has primarily treated mineralised material produced from trial mining at the Gasagwe and Murambi South deposits. Exploration bulk samples (MVO) have generally been blended with the ROM mineralisation. A batch of 208 tonnes of MVO from selected exploration deposits was tested separately. The respective ROM, MVO and resultant concentrate tonnes are presented in Table 21. The REE concentrate is an average of 57.2% TREO, derived from hand-held Niton XRF analysis, for the 1,800 tonnes of concentrate produced to date (Dec 2017 to Jul 2020).

Table 21: Pilot plant performance				
	Total	Gasagwe	Murambi South	Exploration (MVO)
Feed (tonnes)	9,265	2,001	7,056	208
Feed (%TREO)	13.2	36.5	6.3	23.6
Concentrate (Tonnes)	1,808	1,169	555	85
Concentrate (%TREO)	57.2	59.5	53.0	52.6
Recovery (%)	73.2	95.2	66.4	90.8
Yield (%)	19.5	58.4	7.9	40.8

Note: The hand-held Niton XRF used on site under-reports true TREO% grade as it only measures 5 REE elements: Ce, La, Nd, Pr and Y. The remaining REEs make up 1%, to 2% of the Rainbow TREO basket. The average audited concentrate export grade from Rainbows 1,600 tonnes shipped to date is 59.4% TREO.

15.2 Future mineralised material – Bulk sample performance tests

Rainbow’s pilot plant has also been used to carry out Performance Tests on mineralised materials from future new mining sites, namely Gomvyi and Kiyenzi. This facility is of paramount

importance for the exploration and development of future mine sites. Table 22, Table 23 and Table 24 below show the performance results obtained from the tests performed on Gomvyi and Kiyenzi samples respectively. Note the high feed grades were made up of visually identifiable veins that were bulk sampled by the exploration team. The response to gravity separation was very positive. The potential for retreating middlings streams was also highlighted in these tests as there are significant grades in the middlings and tailings streams. Further liberation and processing could possibly see better recoveries achieved.

The exploration bulk sample MVO has generally been blended with the mineralised material mined from Murambi South. No specific batch test work has been completed, however, the quality and recovery of concentrate produced has demonstrated that the MVO is of consistent quality comparable with the mineralised material trial mined from Gakara and Murambi South. It is proposed to campaign additional bulk samples from other deposits through the pilot process plant to provide additional metallurgical data.

Table 22: Results obtained from the tests performed on Gomvyi

Feed and final products	Mass (Kg)	Mass (%)	Grade (% TREO)	Recovery (%)
ROM mineralised material	9,025	100.0	38.6	100.0
Jig concentrate produced	3,546	39.3	54.6	55.5
Shaking table concentrate produced	688	7.6	59.8	11.8
Shaking table tails produced	1,320	14.6	14.5	5.5
Material in thickener	987	10.9	12.9	3.7
Non re-processes material	2,484	27.5	33.0	23.5
Total concentrate	4,234	46.9	55.4	67.3
Total tails	4,791	53.1	23.8	32.7
	9,025	100.0	38.6	100.0

Table 23: Results obtained from the tests performed on Kiyenzi Sample 1

Feed and final products	Mass (Kg)	Mass (%)	Grade (% TREO)	Recovery (%)
ROM mineralised material	14,600	100.0	46.8	100.0
Jig concentrate produced	8,380	57.4	53.3	65.4
Shaking table concentrate produced	3,156	21.6	55.8	25.8
Shaking table tails produced	826	5.7	19.1	2.3
Material in thickener	2,238	15.3	20.0	6.6
Total concentrate	11,536	79.0	54.0	91.1
Total tails	3,064	21.0	19.8	8.9
	14,600	100.0	46.8	100.0

Table 24: Results obtained from the tests performed on Kiyenzi Sample 2

Feed and final products	Mass (Kg)	Mass (%)	Grade (% TREO)	Recovery (%)
ROM mineralised material	9,360	100.0	48.7	100.0
Jig concentrate produced	6,710	71.7	55.7	82.0
Shaking table concentrate produced	940	10.0	54.3	11.2
Shaking table tails produced	700	7.5	29.8	4.6
Material in thickener	1,010	10.8	10.0	2.2
Total concentrate	7,650	81.7	55.6	93.2
Total tails	1,710	18.3	18.1	6.8
	9,360	100.0	48.7	100.0

15.3 Pilot plant feed and trial mineralised material processing

Although the initial pilot plant design catered for a head feed grade of 30% TREO, there has been no significant modifications to the plant even though the weighted average feed grade for Murambi South (which is and has been the main source of mineralised material since Jul/Aug 2019) is approximately 10% TREO. The plant is effective at gravity separation even at these below specification feed grades.

The attempt at processing bulk mined mineralised material at significantly lower feed grades for a couple of months did however show that the plant has its limits. The capacity to process sub 1 mm material was a constraint and the system quickly became overloaded and uneconomic. The feed grades at this stage were sub 2% TREO which impacted on the recovery, but a 54% TREO concentrate grade was still achieved.

After the low grade trial a move towards cleaner mining has resulted in the current average ROM feed grade of approximately 10% TREO, which is readily processed in the pilot plant.

15.4 Trial pilot plant planned upgrade

The drying of concentrate will become a bottle-neck for the plant as concentrate production is increased above 100 tonnes per month, particularly during the rainy season. Currently the concentrate is air/sun dried before bagging. A rotary drier and dust collection system is being procured and will be installed and commissioned shortly.

Apart from the concentrate drying issue the existing plant has the capacity for the short-term production increase to 100+ tonnes per month currently being instituted.

Future plans to increase the concentrate production rate towards an initial 5,000 tpa will require a new process plant most likely to be installed at the mine site. This plant will probably utilise Dense Media Separation (DMS) for the coarse concentration and Spiral Concentrators (Spirals) for the fines concentration in place of the low-capacity jig and tables respectively. This type of plant is readily expanded on a modular basis to meet the anticipated subsequent expansion to 10,000+ tonnes of concentrate per annum. A program of test work for the different mineralised material types has been commenced to optimise the bulk production plant process.

16 CONCENTRATE SALES

16.1 Product offtake agreement

Rainbow has a Distribution and Offtake agreement with ThyssenKrupp Material Trading (“TK”) to act as a sales agent for the entire production of rare earth concentrates from Rainbow’s mines. As at end June 2020 64 batches of 25 tonnes each have been successfully exported and sold to TK with an average total rare earth content of 59.4% TREO.

Neodymium and Praseodymium comprise 19.1% of the total rare earth oxide content of the exported product, making up most of the value of the exports.

16.2 Uranium and Thorium

All historical reports by SOBUMINES and BGR as well as Mariano (2011) state that the Project REE vein mineralisation is characterised by relatively low concentrations of the radioactive elements Uranium (U) and Thorium (Th).

Geochemical analyses carried out on 620 drill and channel samples from 4 deposits (Gasagwe, Kiyenzi, Murambi South and Gomvyi Centre) confirm that the levels of U and Th are generally low. Table 25 and shows an average of 84 ppm for U and 287 ppm for Th.

Element	Minimum (ppm)	Maximum (ppm)	Mean (ppm)	Mean (%)	STD Dev (ppm)
Uranium (U)	0	3,535	84	0.008	11.25
Thorium (Th)	<BLD*	4,520	287	0.03	20.8

* *Below Detection Limits*

International transport of radioactive material is based on the guidance presented in the International Atomic Energy Agency (“IAEA”) Safety Series No. SSR-6 entitled “Regulations for the Safe Transport of Radioactive Materials” with the latest version issued in 2018.

The IAEA, USA, and Canada exempt natural material and ores which contain less than 10 Bq/g of radioactive material. This criterion applies to the radionuclides (uranium and thorium isotopes) at the top of their respective decay chains, i.e. U-238 and Th-232. The combined natural U and natural Th activity must be less than 10 Bq/g. This standard expressed in units of ppm as per the US Department of Transportation regulations No. 49 CFR 173.434 is:

$$3.06 \times U(\text{ppm}) + \text{Th}(\text{ppm}) < 2469$$

Figure 32 presents the geochemical analyses carried out on all concentrate batches exported from 2017 until end of July 2020, with the Red Line showing the US CFR guidance threshold value.

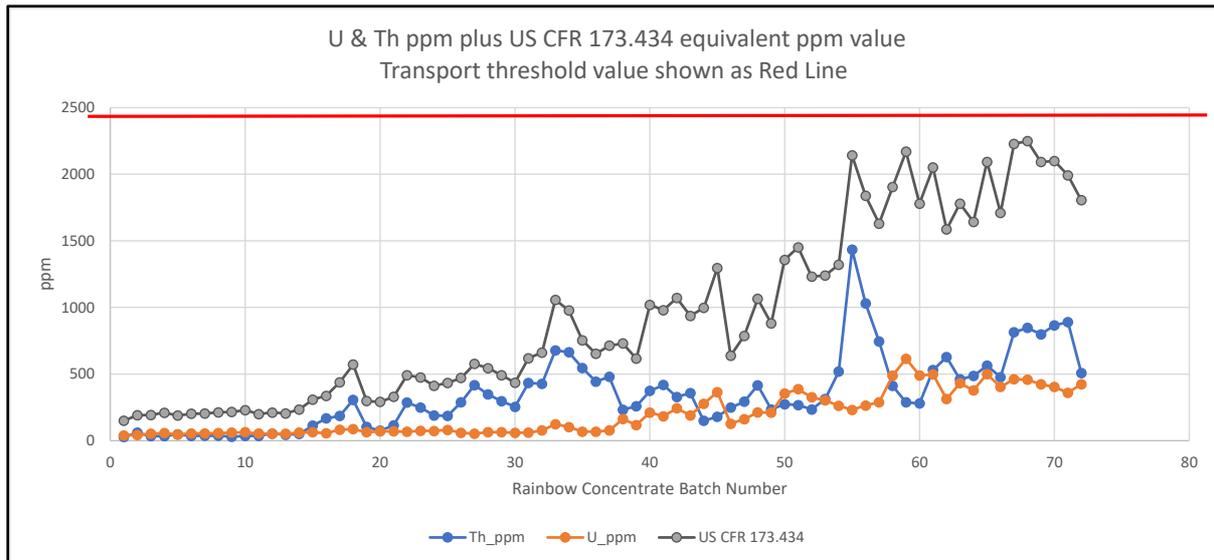


Figure 32: U & Th ppm and US CFR 173.434 equivalent ppm value by Rainbow concentrate batch number

There are no batches of concentrate that exceeded the CFR threshold of 2,469 (equivalent to 10Bq/g). The concentrate U and Th grades average 181 and 322 ppm, respectively. This gives an average CFR number of 876 which is around 1/3 of the allowed CFR threshold.

The trends in U and Th are related to different mineralised material feedstock. Up to batch #30 mineralised material was derived 100% from the Gasagwe deposit which is predominantly Bastnaesite. Batches #30 to #57 have increasing proportions of Murambi South mineralised material which contains a higher Monazite content. Batch #57 onwards are 100% Murambi South. It is likely that the higher U and Th levels are related to: Intensity of supergene alteration which increases the proportion of monazite (higher Th and U values); intensity of weathering which may lower Th and U values; and deposit specific characteristics.

Based on the U and Th concentrations observed in the trial processing concentrate sales it is unlikely Rainbow concentrate would ever exceed the US CFR limits. It is acknowledged that in some cases blending between deposits or mining depths (weathering intensity) will be required during mining to ensure a mix of mineralised material is delivered to the process plant to maintain the existing low Th and U average.

An average three-fold increase in the average U and Th concentrations would be required to exceed the US CFR level.

Currently there are no special requirements for the shipment of the concentrate with respect to its radioactivity. The concentrate may be simply packaged and manifested in whatever manner is required for dispatch for sale.

17 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

17.1 Statutory requirements

Work at the Project follows Environmental and Social laws and regulations defined in Burundi:

- The Environmental Code of Burundi, Law No. 1/010 (dated June 2000).
- The Decree N°100/22 of 7 October 2010 pertaining to the application of the Environmental Code regarding the process to establish environmental impact studies.
- The national strategy on the environment in Burundi (2002).
- The scope of environmental and social impact assessments.
- The Mining Code of Burundi (Law No. 1/21 of October 2003) and its Regulations in respect of matters related to environment.

Rainbow submitted Environmental and Social Impact Studies (“ESIS”) to the Ministry of Environmental Affairs for all its operations:

ESIS in respect of the exploration activities in the EL and ML.

ESIS in respect of the development of the Gasagwe trial mining site.

ESIS in respect of the construction of the Kabezi trial processing plant.

ESIS in respect of the development of the Murambi South trial mining site.

The ESIS were compiled by Bureau pour les Evaluations Environnementales (“BEE”) and/or by Evaluation Environnementale, Géologie, Energie et Eau (“EGEE”), two independent Burundian certified environmental firms. The ESIS always comprise of two statutory documents in accordance with the Burundi Environment Code and Decree No.100/22 and its application decree:

- An environmental and social impact assessment (“ESIA”).
- A social impact management plan (“Plan d’Action de Réinstallation” or “PAR”).

The PAR’s were completed as social and community development plans on issues such as the legal and fair compensation for the loss of goods and assets caused by the mining expropriation, as well as the economic assistance for the displacement and the improvement of social conditions of the affected local parties. The structure of the PAR includes:

An assessment of the socio-economic condition of the area affected by mining.

A plan to minimise expropriation, when unavoidable.

The identification of affected parties and persons.

An estimate of the potential losses and of the potential compensations.

The public participation and communication strategy.

The implementation plan of the PAR.

The legal procedures for litigations and objections.

Following submission of the various ESIS discussed above, Rainbow has obtained the following compliance certificates from the Ministry of Environment, thus allowing Rainbow to proceed with the trial mining and trial processing operations:

Certificate No. 007/2015 (4 March 2015) for Gasagwe Mine site.

Certificate No. 010/2015 (30 March 2015) for the ML.

Certificate No. 180/2017 (1 August 2017) for the Kabezi pilot plant.

Certificate No. 395/2018 (7 December 2018) for the mining of the Murambi South site.

The expropriation and compensation processes follow the statutory laws on these matters. A committee has been created that deals with such issues. The committee includes:

- Members of Rainbow management.
- President of the Mutambu Communal Council.
- Administrator of Mutambu.
- Priest of the Gasenyi Catholic mission.
- A judge from the region.
- The Chiefs of the zones concerned by the mining activities.

The compensation fees are calculated and paid out in strict accordance with the statutory laws on this matter.

In respect of the ESIS for the Gasagwe Mine, a large part of the mining area had already been expropriated by the Government of Burundi as “an area for public utilisation” being the area covered by the former SOBUMINES mine.

In respect of the ESIS for the Kabezi plant, special attention was given to the potential impact of such facility on the nearby Lake Tanganyika. This assessment, prepared by EGEE, was presented at a public meeting involving the Ministry of Mines and Energy and various interested parties (NGOs).

Rainbow compiles an annual social and environmental impact studies report, with any revised assessments to the statutory reports, to the Ministry of Mines and Energy, as per requirements of articles 205 and 206 of the Burundi Mining Regulations.

The 2019 year end annual report was prepared by independent environmental consultant Dr Bernard Sindayihebura in March 2020. The report concluded that the Rainbow mining operations (including processing plant) has had no major negative impact on the environment nor on the health and safety of the workforce and the communities.

18 INTERPRETATION AND CONCLUSIONS

18.1 Geology and mineralisation

- A PhD study (partly supported by Rainbow) has confirmed that the source of the Project vein and breccia hosted REE mineralisation is a carbonatite located at depth.
- The metallogenic model indicates that the mineralisation emplacement took place in 2 stages: firstly, the formation of aplites and contemporaneously the emplacement of the primary bastnaesite mineralisation; secondly, the monazitic mineralisation.
- Mineralogical analysis indicates that all REE mineralisation currently identified within the Project ML contains the same REE "basket" with Neodymium and Praseodymium being dominant at >19%.

18.2 TECT structural study

- A complete review of the Project geology and structure was completed by TECT Geological Consultants, using all available geophysical surveys and Rainbow exploration data sets.
- Dominant structures are aligned NNE, NE and NW with cross cutting relationships. These structures are probably related to the tectonic effects of the underlying intrusives including the carbonatites interpreted at depth below the existing REE mineralisation. A series of interpreted faults collectively constitute a large NNE trending structural zone of 9.4 to 13.1 km in length which is intersected in the southern portion by an 8.8 km long NW trending structure and several other NW trending structures to the NE.
- The short-strike-length structures which run through the interpreted carbonatite bodies correlate with the surface mapped REE occurrences, which appear to be dominant where structures intersect.
- TECT analysis included the generation of new exploration targets using a mineral system ranking algorithm. This approach considers a) the presence of a suitable source intrusion, b) the effects and extent of the mineralising fluid, c) the regional structural permeability and d) small-scale structures that host REE-bearing veins.
- A total of 36 Tier-1 and Tier-2 targets and 21 Tier-3 targets for follow-up and ground-truthing were interpreted. These targets are expected to be sites where REE mineralisation, in the form of vein stockworks and/or breccias, is likely to have been more intense. The Rainbow exploration team has started follow-up ground truthing on the Tier-1 targets providing mapping and structural information to TECT who are refining the targets to prioritise areas for drill testing. Note that many of the TECT targets correlate with existing 'deposits' already identified by Rainbow and historical mining.
- Of the 57 REE targets identified by TECT, 15 of these overlap and support the mineralisation confirmed in the existing 32 Rainbow deposits already identified. 17 of the existing 32 Rainbow deposits were not identified in the TECT study indicating the importance of using multiple exploration techniques in the discovery process.

18.3 Exploration Target update

- The Rainbow Exploration Target has been revised and updated using a robust approach based on integration of exploration surface mapping, historical Belgian and current

Rainbow trial mining, exploration bulk sampling, pilot plant processing REE recoveries and results from metallurgical test work.

- Topographic, geological and mining data was used to build 3D vein hosted mineralisation Exploration Target block models using Datamine software for 5 historical Belgian and 2 Rainbow and Belgian mined deposits. Additionally 2 surface deposits were modelled based on exploration bulk sampling data. Appropriate estimates of the parameters relating to depth of weathering, extent of REE mineralisation and mining waste to mineralisation strip ratios were applied.
- A conceptual 3D model was produced for Kiyenzi based on assay results obtained from the 2018 diamond core drilling program. An Exploration Target of potential extensions to the Kiyenzi deposit was developed based on lateral exploration sampling and TECT analysis potential extensions of the down dip breccia hosted REE mineralisation continuity.
- The Rainbow vein hosted mineralisation Exploration Target ranges from 262,000 to 375,000 tonnes at a grade range of 7 to 12% TREO.
- The Rainbow breccia hosted mineralisation Exploration Target for Kiyenzi ranges from 252,000 to 342,000 tonnes at a grade range of 1 to 1.5% TREO.

18.4 Planned exploration program

- Exploration activity for the next 15 months is planned to convert the vein hosted mineralisation Exploration Target to a Mineral Resource. The exploration program includes field work to further fine tune the TECT Tier-1 and Tier-2 targets to deliver drill targets to be completed after the Mineral Resource drilling.
- Around 16,200 m of diamond core drilling is planned on the vein hosted Exploration Target deposits. The drilling will mainly be HQ diameter triple tube oxide diamond core drilling.
- Purchase of a site based containerised sample preparation and sample analysis laboratory is required to reduce overall costs and sample turnaround time.
- Purchase of a JCB/Excavator is required to improve both the quality and productivity of exploration trenching and surface sampling.
- The total cost of exploration for the next 15 months is estimated at around US\$3.2 million.

18.5 Trial mining

- Rainbow has been trial mining REE mineralisation since mid-2017 at the Gasagwe and Murambi South deposits.
- A number of mining methods for vein hosted REE mineralisation were trialled with mixed results. The current trial mining method has been used at Murambi South from early 2020 and continues to be the preferred mining method for vein hosted orebodies. Waste is stripped mechanically by a bulk fleet of excavator and trucks whilst veins and adjacent low grade and ore waste selvedge are mined by a smaller excavator and trucks delivering to the plant. This has reduced the mineralised material losses and the waste dilution and produces a grade of approximately 10% TREO which is readily processed at the Kabezi pilot plant.
- A second mining fleet has been ordered and trial mining will continue at Murambi South and extend to the Gasenyi deposit once the new fleet arrives on site. Concentrate

production is expected to exceed 100 tonnes per month at a grade of greater than 54% TREO.

18.6 Mineralised material processing and product offtake

- Metallurgical testing of samples of mineralised material the Property demonstrated that the vein hosted mineralisation upgrades readily through simple gravity techniques, producing a very high-grade concentrate of more the 54% TREO. The work was the basis for the design of Rainbow's pilot processing plant which was commissioned in Q1 2018 and has been in production since then.
- Rainbow's pilot plant has been used to carry out Performance Tests on ores from future new mining sites, namely Gomvyi and Kiyenzi. The response to gravity separation was very positive. The potential for retreating middlings streams were also highlighted in these tests as there are significant grades in the middlings and tailings streams.
- The drying of concentrate will become a bottle-neck for the plant as concentrate production is increased to 100+ tonnes per month, particularly during the rainy season. Currently the concentrate is air/sun dried before bagging. A drier and dust collection system is being procured and will be installed and commissioned shortly.
- Future plans to increase the concentrate production rate towards 5,000 tpa will require a new process plant most likely to be installed at the mine site. This plant will probably utilise Dense Media Separation (DMS) for the coarse concentration and Spiral Concentrators (Spirals) for the fines concentration. This type of plant is readily expanded on a modular basis to meet the anticipated subsequent expansion to 10,000+ tonnes of concentrate per annum.
- Rainbow has a Distribution and Offtake agreement with ThyssenKrupp Material Trading ("TK") to act as a sales agent for the entire production of rare earth concentrates from Rainbow's mines. As at end June 2020 64 batches of 25 tonnes each have been successfully exported and sold to TK with an average total rare earth content of 59.4% TREO. Neodymium and Praseodymium comprise 19.1% of the total rare earth oxide content of the exported product, making up most of the value of the exports.
- The U and Th concentrations analysed in the concentrate sold, demonstrate that on average the Rainbow concentrate is well below the allowable radiation transportation limits at around 1/3 of the threshold value. Different deposits have different ranges of U and Th which are likely related to the proportion of monazite and probably the intensity of weathering. Rainbow recognise that in some cases blending will be required during mining to ensure a mix of highly weathered and less weathered material are delivered to the process plant to maintain the existing low U and Th average.

19 RECOMMENDATIONS

19.1 Geology and mineralisation

- Continue to advance geology and mineralisation understanding through a collaborative approach involving existing key players. Namely site exploration geologists, Seconde Ntiharirizwa and TECT Geological Consulting. A site based workshop is recommended.

19.2 TECT structural study

- Exploration field work is required to further develop and fine tune the existing TECT Tier-1 and Tier-2 targets. An appropriate feedback loop between the Rainbow geologists and TECT is recommended, with TECT taking an active role in reviewing results from field observations and updating the TECT REE target locations. The focus should be on designing an optimum drill program to maximise chances of significant discovery.
- Historical and earlier Rainbow exploration has been dominated by recognition of vein hosted mineralisation. A greater understanding of the nature, scale and quality of breccia hosted mineralisation is required. Breccia hosted mineralisation may have greater concentrations of REE mineralisation and if high enough grade, be simpler and more profitable to mine and process.

19.3 Exploration Target update

- Complete the exploration work required to convert the Exploration Target to a Mineral Resource allowing completion of feasibility studies, development of a mine plan and justification of the financing required to take the project to commercial production.

19.4 Planned exploration program

- Complete the planned 16,200 m of diamond core drilling to convert the vein hosted Exploration Target to a Mineral Resource.
- Purchase a site based containerised sample preparation and sample analysis laboratory to reduce overall sample analysis costs and sample turnaround time.
- Purchase of a JCB/Excavator to improve both the quality and productivity of exploration trenching and surface sampling.
- Approve the exploration budget of US\$3.2 million required for the next 12 months of work.

19.5 Trial mining

- Continue with the mining method for vein hosted REE mineralisation whereby waste is stripped mechanically by a bulk fleet of excavator and trucks, whilst veins and adjacent waste are mined by a smaller excavator and trucks delivering to the plant, to produce a grade of approximately 10% TREO which is readily processed in the Kabezi pilot plant.
- Implement the second mining fleet to extend trial mining to the Gasenyi deposit to ensure concentrate production exceeds 100 tonnes per month at a grade of greater than 54% TREO.

19.6 Mineralised material processing and product offtake

- Concentrate produced from the pilot plant has proven to be commercially viable. Ensure concentrate quality is maintained or improved to continue to provide sales revenue to support ongoing exploration and project development.
- Review the existing offtake agreement to maximise concentrate sale revenue.
- Complete ongoing analysis to understand the variables which impact the U and Th grades in the final saleable concentrate. Devise a mining blending strategy to maintain the existing low U and Th radiation average.
- Install a drier and dust collection system to avoid any bottle-neck for the plant as concentrate production is increased to 100+ tonnes per month, particularly during the rainy season.
- Continue metallurgy and processing test work to optimise plant design to increase production to 5,000 of concentrate per annum. Ensure the plant design incorporates a modular design philosophy to meet the anticipated subsequent expansion to 10,000+ tonnes of concentrate per annum.

19.7 Feasibility study

- Undertake a feasibility study with the goal of developing a commercial mining and processing facility with a capacity of 5,000 tonnes per annum concentrate production, with the ability to expand to 10,000 tonnes per annum.

20 REFERENCES

- Aderca, B.-M., and Van Tassel, R. (1971). Le gisement des terres rares de la Karonge (République du Burundi). Académie Royale des Sciences d'Outre-Mer. Classe Sciences Naturelles et Médicales, N.S., XVIII-5, pp. 1-117.
- BGR (1983): Project d'Exploration Minière: Rapport d'Exploration des Terres Rares – Région de Gakara. Partie 1 – Texte, Tableaux, Figures. Cooperation Technique No du Projet: 81.2026.3. Bundesanstalt für Geowissenschaften und Rohstoffe, Hannover-Bujumbura. Compiled by Brinkmann, J. and Lehmann, B., pp 169 and annexes.
- BGR (1985): Etude économique de bastnaesite-monazite dans la région de Gakara (Karonge). Internal report. Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), Hannover.
- BGR (1985): Rapport sur les études et les essais pour une réhabilitation des gisements de bastnaesite de Gakara (Karonge) au Burundi. Internal report. BGR, Hannover.
- Branquet, Y. (2018). Geological and structural controls of the REE mineralisation in the Gakara Licence, Rainbow RE. Expertise report. Institut des Sciences de la Terre d'Orléans/Géosciences Rennes, 26p.
- Deblond, A. and Tack, L. (1999). Main characteristics and review of mineral resources of the Kabanga-Musongati mafic-ultramafic alignment in Burundi. *Journal of African Earth Sciences* 29 (2), pp. 313-328.
- Decrée, S., P. Boulvais, C. Cobert, J.-M. Baele, G. Midende, V. Gardien, L. Tack, G. Nimpagaritse, and D. Demaiffe, (2015). Structurally-controlled hydrothermal alteration in the syntectonic Neoproterozoic Upper Ruvubu Alkaline Plutonic Complex (Burundi): Implications for REE and HFSE mobilities: *Precambrian Research*, v. 269, p. 281–295, doi:10.1016/j.precamres.2015.08.016.
- Duchesne, J.-C., J.-P. Liégeois, A. Deblond, and L. Tack, (2004). Petrogenesis of the Kabanga–Musongati layered mafic–ultramafic intrusions in Burundi (Kibaran Belt): geochemical, Sr–Nd isotopic constraints and Cr–Ni behaviour: *Journal of African Earth Sciences*, v. 39, no. 3, p. 133–145, doi:10.1016/j.jafrearsci.2004.07.055.
- Fernandez-Alonso, M., H. Cutten, B. De Waele, L. Tack, A. Tahon, D. Baudet, and S. D. Barritt, (2012). The Mesoproterozoic Karagwe-Ankole Belt (formerly the NE Kibara Belt): The result of prolonged extensional intracratonic basin development punctuated by two short-lived far-field compressional events: *Precambrian Research*, v. 216, p. 63–86, doi:10.1016/j.precamres.2012.06.007.
- Klerk, J., J. Lavreau, J. P. Liégeois, and K. Theunissen, (1984). Granitoides kibariens précoces et tectonique tangentielle au Burundi. Magmatisme bimodal lié à une distension crustale., in *Géologie africaine-African geology: Tervuren*, Klerk, J., Michot, J. (Eds).
- Lehmann, B., Nakai, S., Höhndorf, A., Brinkmann, J., Dulski, P., Hein, U.F., and Masuda, A., (1994). REE mineralisation at Gakara, Burundi: Evidence for anomalous upper mantle in the western Rift Valley. *Geochimica et Cosmochimica Acta* 58 (2), pp. 985-992.
- Mariano (2011). Notes from a field visit and recommendations for future work on the Gakara Project. Internal Report for Rainbow. 2 p.
- Midende, G., P. Boulvais, L. Tack, F. Melcher, A. Gerdes, S. Dewaele, D. Demaiffe, and S. Decrée, (2014). Petrography, geochemistry and U–Pb zircon age of the Matongo carbonatite Massif (Burundi): Implication for the Neoproterozoic geodynamic evolution of Central Africa: *Journal of African Earth Sciences*, v. 100, p. 656–674, doi:10.1016/j.jafrearsci.2014.08.010.
- Ntiharirizwa, S. Les minéralisations en terres rares de la région de Gakara (Burundi): contrôle structural, caractérisation pétrologique et géochimique, modèle métallogénique. PhD Thesis, Laboratoire Geosciences, Université de Rennes 1, France.

Ntiharirizwa, S., Boulvais, P., Poujol, M., Branquet, Y., Morelli, C., Ntungwanayo, J., Midende, G. (2018). Geology and U-Th-Pb Dating of the Gakara REE Deposit, Burundi. *Minerals*, 8(9), 394.

Ntungwanayo, J., Midende, G and Morelli, C. (2013). Gakara REE Project, Burundi; Technical Report for the Period June 2011 to April 2013; Rainbow Internal Report, 139 pp and annexes.

Nakai, S., A. Masuda, and B. Lehmann, (1988). La-Ba dating of bastnaesite: *Chemical Geology*, v. 70, no. 1, p. 12, doi:10.1016/0009-2541(88)90211-2.

Tack, L., J. P. Liégeois, A. Deblond, and J. C. Duchesne, (1994). Kibaran A-type granitoids and mafic rocks generated by two mantle sources in a late orogenic setting (Burundi): *Precambrian Research*, v. 68, no. 3, p. 323–356, doi:10.1016/0301-9268(94)90036-1.

Tack L., Wingate, M., De Waele, B., Meert, J., Belousova, E., Griffin, B., Tahon, A., and Fernandez-Alonso, M., (2010). The 1375 Ma "Kibaran Event" in Central Africa: Prominent emplacement of bimodal magmatism under extensional regime, *Precambrian Research* 180 (1-2), pp. 63-84.

Thoreau, J., Aderca, B., and van Wambeke, L., (1985). Le gisement de terres rares de Karonge (Urundi). *Bulletin des Séances de l'Académie Royale des Sciences d'Outre Mer (ARSOM)*, pp. 684-715.

Van Wambeke, L. (1977). The Karonge Rare Earth Deposits, Republic of Burundi: New Mineralogical-Geochemical Data and Origin of the Mineralisation. *Mineralium Deposit* 12, pp. 373-380.

Appendix 1 - JORC Table 1

JORC Table 1 - Section 1: Sampling Techniques and Data

JORC Code explanation	Commentary
<p>Sampling Techniques</p> <p><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>All sampling undertaken by Rainbow adheres to written procedures.</p> <p>Grab/rock chip sampling: Individual REE veins are exposed over a strike length of at least 1 metre. Where possible, a structural measurement of dip and direction is recorded. Between 1kg and 3kg of outcropping/sub-outcropping material is collected per sample and transported in numbered bags to the Mutambu field office. The material is then broken into smaller chips with a geological pick and approximately 750g are put into cloth sacks, a sample ticket inserted and the sample number written on the bag with a permanent marker pen. Excess material is bagged in labelled sacks. All samples thus collected are transported to Rainbow’s Bujumbura office where they are stored in a locked and secure room.</p> <p>Channel sampling: Once a REE vein is exposed by pitting or trenching, the geologist delineates a sampling line on the outcrop. The channels, which are 10cm wide and 2-3cm deep, are then cut by hand using a chisel and hammer. A sample of the chipped-out material is collected every 1 metre channel length. Two to 4 kg of sample are collected and put in a pre-numbered calico bag and transferred to the Mutambu base camp. The sample size is reduced through a manual quartering protocol to produce a sample of 1kg.</p> <p>Soil samples: soil samples were collected by rainbow during exploration in the past, however the results are not relevant to this Report.</p>
<p>Drilling techniques</p> <p><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p>Diamond drilling</p> <p>Cores were not orientated</p> <p>HQ and NQ core sizes, depending on the hole depth and hardness of the lithologies encountered downhole. HQ size was mainly utilized in approximately the top 50m where the lithologies are highly fractured and with hardness ranging between soft and moderately hard. The NQ core size was utilized on drill holes that exceeded 50m depth and encountered more competent/hard rock. Standard core barrels were used in both core size.</p>

JORC Code explanation	Commentary
<p>Drill sample recovery</p> <p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>Core recovery was measured.</p> <p>No relationship between sample recovery and grade is established.</p>
<p>Logging</p> <p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>Lithological logging (including radiometric detection using a handheld Polymaster).</p> <p>RQD measurements made on the cores.</p> <p>All cores were logged.</p> <p>Logging at Kiyenzi is appropriate to support geological interpretation for 3D model creation.</p>
<p>Sub-sampling techniques and sample preparation</p> <p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to</i></p>	<p>Channel Samples: The channel samples selected for laboratory analyses were sub-sampled using a manual quartering method to achieve a weight of approximately 1,000g per sample.</p> <p>Grab samples: samples weighing between 1kg and 3kg of material are collected and transported in numbered bags to the Mutambu field office. The material was then broken into smaller chips with a geological pick and approximately 750 g was filled into cloth sacks.</p> <p>Core samples - half core cut with diamond saw. All sample submitted for analysis.</p> <p>A sample ticket inserted and the sample number written on the bag with a permanent marker pen. These samples were sent for analysis at ALSC in Johannesburg. On request by Rainbow ALSC insert certified reference material (“CRM”) and duplicates into the batch of 150 rock grab samples for REE ICP-MS and ICP-AES analyses. In total three AMIS185, three certified blanks and six duplicates (three inserted by Rainbow and three splits by ALSC) were inserted into the sample stream and were assigned specified sample numbers, using the sample number sequence of the field samples. In addition, ALSC inserted their own certified</p>

JORC Code explanation	Commentary
<p><i>the grain size of the material being sampled.</i></p>	<p>blank samples and duplicates as part of their internal quality assurance and quality control (“QAQC”) process.</p> <p>Analysis of duplicate samples has shown that sampling is representative of the in-situ material collect.</p> <p>The vein material sampled is predominantly bastnaesite and monazite. The TREO grades have proved to be very consistent with low variability indicating that sample size is appropriate relative to the grain size of the material being sampled.</p>
<p>Quality of assay data and laboratory tests</p> <p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></p>	<p>ALSC is an independent and accredited analytical facility in accordance with the recognised international standard ISO 17025:2005 for laboratory analysis, including the management requirements of ISO 9001:2008</p> <p><u>Grab samples</u></p> <p>Rainbow instructed ALSC to insert certified reference material (“CRM”) and duplicates into the batch of 150 rock grab samples for REE ICP-MS and ICP-AES analyses. In total three AMIS185, three certified blanks and six duplicates (three inserted by Rainbow and three splits by ALSC) were inserted into the sample stream and were assigned specified sample numbers, using the sample number sequence of the field samples. In addition, ALSC inserted nine AMIS185, one SY-4, six certified blank samples and five duplicates as part of their internal quality assurance and quality control (“QAQC”) process.</p> <p>For major element analyses by XRF, ALSC inserted five NIST 694, five STSD-4, five certified blank samples and five duplicates as part of their internal QAQC procedure.</p> <p>African Mineral Standards (“AMIS”) in Johannesburg, South Africa, manufactures REE standard AMIS185 which was used as CRM. A total of three AMIS185 were randomly inserted into the batch of 150 samples. The results for all relevant rare earth elements were assessed and found to be within the accuracy limits specified by AMIS. The results for the nine AMIS185 standards inserted and analysed by ALSC, as part of their internal QAQC process, show acceptable accuracies for all relevant rare earth elements. ALSC inserted three OKA-2 and two TRLK certified standards as part of their internal QAQC procedure to monitor the accuracy of high Ce, La, Nd, Pr and Sm concentrations which were measured by ICP-AES analyses. The results for relevant rare earth elements show acceptable accuracies</p> <p>The results for the three certified blank samples inserted by ALSC on behalf of Rainbow and the six blanks analysed as part of ALSC’s routine QAQC procedure show no signs of contamination</p>

JORC Code explanation	Commentary
	<p>and the concentrations values for REE are within acceptable limits</p> <p>Three field duplicates were randomly inserted by Rainbow and the sample batch. The results for all relevant REE were assessed and found to be within acceptable precision limits. The results for the three duplicate pairs created by ALSC on behalf of Rainbow and the five duplicate pairs inserted and analysed by ALSC, as part of their internal QAQC process, show acceptable precisions for relevant rare earth elements</p> <p>Based on these results, it is concluded that the sampling and assay data are acceptable and sufficiently accurate.</p> <p><u>Diamond Drilling Samples – ALS</u></p> <p>The same laboratory procedures were used for the core samples as for the grab samples.</p> <p>Rainbow’s QAQC procedure consists of the insertion of one Certified Reference Material (“CRM”), one certified blank and one duplicate sample for every 50 samples submitted for analyses.</p> <p>ALS utilises its own internal QAQC procedures which involve the insertion of CRM and blank samples as well as the analyses of duplicate samples for every batch.</p> <p>For the Kiyenzi drill core samples, a total of 10 CRMs, 11 duplicates and 9 blank samples were inserted by Rainbow into the batches of samples that were dispatched to ALS for analysis. Control samples accounted for 5.6% of the Kiyenzi drill core samples submitted to ALS.</p> <p>Based on the results, it is concluded that the sampling and assay data are acceptable and sufficiently accurate.</p> <p><u>Diamond Drilling Samples – UIS</u></p> <p>A second batch of 1,306 core samples (all from Kiyenzi) were submitted by Rainbow to UIS in 2019-20.</p> <p>UIS Analytical Services is an ISO/IEC 17025 accredited laboratory based in Pretoria (RSA).</p> <p>The QAQC procedure for this batch of core samples was more stringent (than for the samples sent to ALS, see above) and consisted of the insertion of circa 1 CRM, 1 certified blank and 1 duplicate sample for every 30 samples.</p> <p>As such 42 CRM’s, 47 duplicate samples and 43 blank samples were inserted in the consignments to UIS, resulting in the QAQC samples accounting for 10% of the total samples analysed.</p>

JORC Code explanation	Commentary
	<p>Furthermore, UIS utilised their own internal QAQC procedures which involve the insertion of CRM and blank samples as well as the analyses of duplicate samples for every batch.</p> <p>Based on the results, it is concluded that the sampling and assay data for these core samples are acceptable and sufficiently accurate.</p>
<p>Verification of sampling and assaying</p> <p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>Verification activities were conducted by the Competent Person during the field visit and included:</p> <ol style="list-style-type: none"> 1. Inspection of selected observation and sampling points 2. Review of sample sheets and recorded information 3. Review of the project database for consistency, completeness and accuracy 4. Review of sample submission and QA/QC protocol 5. Review of QA/QC assay results 6. Review project database against original Assay Certificates 7. Inspection of the Kiyenzi cores and sample results 8. Inspection of trenching and related channel sampling 9. Inspection of REE vein exposures and the sampling thereof 10. Rainbow follows an auditable chain of custody which ensured security and integrity of the results <p>Twinned holes have not been drilled.</p> <p>All sampling data has been recorded in a DataShed database, hosted by CSA Global. Data entry validation procedures have been implemented.</p> <p>Assay data has not been adjusted.</p>
<p>Location of data points</p> <p><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>The position of all in-situ REE veins and float occurrences were recorded with a handheld GPS.</p> <p>The accuracy of a handheld GPS is sufficiently accurate for the purpose of the grab sample results in identification of broad areas of REE mineralisation.</p> <p>The position of most of the channel samples were surveyed with a cm-accuracy DGPS system.</p> <p>The position of all drillhole collars were surveyed with the DGPS system.</p> <p>Rainbow has also acquired high-resolution topographic data derived from drone-based surveys (2018-19); the 2 trial mines, Gasagwe and Murambi S, as well as key deposits, Kiyenzi,</p>

JORC Code explanation	Commentary
	<p>Gashirwe E and W, Gomvyi C, thus have cm-accurate topography data for the key deposits.</p> <p>The Targets explored in 2019-20, i.e. Gakara, Rusutama, Bigugo and Gasenyi, were surveyed by a Burundi topographer using a Leica DGPS system with cm accuracy.</p> <p>No downhole surveys were completed and the collar orientation was used down the entire length of the hole.</p> <p>Rainbow used UTM Zone 35S (WGS84 Datum) for all field measurements which were subsequently converted into geographic system (Long and Lat).</p> <p>The quality and accuracy of current topographic control is sufficient for the purposes of defining an Exploration Target</p>
<p>Data spacing and distribution</p> <p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p><u>Grab samples:</u></p> <p>Data points were located where fresh REE vein occurrences were present. The spacing does not follow a systematic grid and is dependent on the observed outcrop of REE veins.</p> <p><u>Soil samples:</u></p> <p>Collected at 25 m intervals along 500 m long lines which were spaced at 50 m apart. The soil sampling survey was not considered useful in identifying REE mineralisation, even though alternate tighter grid intervals were trialled.</p> <p><u>Channel samples:</u></p> <p>Undertaken mainly at Gasagwe, Murambi South, Gashirwe West, Gomvyi Centre, Kiyenzi</p> <p>Samples were taken at 1 or 2 m intervals. However only a selected number were submitted for assaying by ALSC, as the grade of the bastnaesite and monazite veins was very consistent. Identification of the location, width and geometry of veins is critical for generation of a geological model.</p> <p>The channel sample data at Gasagwe, Murambi South and Gomvyi Centre are suitable for the purposes of defining an Exploration Target.</p> <p><u>Drill core samples:</u></p> <p>The Kiyenzi drill holes are located on a variable grid of between 15 and 33 m.</p> <p>Samples were not composited.</p> <p>Half cores were collected to sample distinct lithological units, with a sample length never exceeding 1 metre.</p>

JORC Code explanation	Commentary
	<p>Where brecciated units, believed to be highly mineralised, were logged, such intersections were carefully and separately sampled, even if they were only centimetres wide.</p> <p>Diamond drilling at Kiyenzi is sufficient to construct a 3D geology and grade model.</p>
<p>Orientation of data in relation to geological structure</p> <p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<p>Grab samples were taken where REE veins were exposed on the surface</p> <p>The grab sampling procedure ensured maximum extraction of clean vein material. Vein thickness, continuity and strike and dip measurements were recorded where possible.</p> <p>The channel sampling was completed based on 2 different requirements:</p> <ol style="list-style-type: none"> 1. To obtain adequate "bulk" sample of vein material, by constructing the channel along the strike of the vein and carefully collecting all visually obvious bastnaesite or monzonite rich vein material - ignoring all visual "waste" material. 2. Regular cross sections through the vein material, with the channel constructed to sample visual "waste" and visual selvedge either side of the observed vein. This was an attempt to understand the extent of REE mineralisation at the edges of the visual vein material and to determine if REE mineralisation is present, but not visible at naked eye, in the host rock between REE veins <p>Diamond drilling at Kiyenzi was completed using multiple orientations. The understanding of the orientation of mineralisation at Kiyenzi is insufficient to establish the relationship between drilling directions and mineralisation trends.</p>
<p>Sample security</p> <p><i>The measures taken to ensure sample security.</i></p>	<p>Standard operating procedures ("SOP") were used for the handling and transportation of samples to ensure a secure and auditable chain-of-custody from the field to the laboratory. Local sample transport was exclusively handled by Rainbow staff. Local courier companies, Brucargo or DHL, were responsible for shipment to ALS (SA and Canada) and SGS SA (sample for metallurgical test work).</p> <p>All analysed sample data has been verified and security maintained by loading into a Datashed database hosted by CSA Global.</p>
<p>Audits or reviews</p> <p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<p>Sample collection, submission, QA/QC protocol and assay database were reviewed by the Competent Person and were determined to be appropriate for estimation of an Exploration Target.</p>

JORC Table 1 - Section 2: Reporting of Exploration Results

JORC Code explanation	Commentary
<p>Mineral tenement and land tenure status</p> <p><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <p><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></p>	<p>A 'Permis d'Exploitation' (Mining Licence) was lodged by RIR on 10 November 2014 and granted by the Burundi Ministries of Energy and Mining and Finance and Economic Development on 27 March 2015 and ratified by Presidential Decree No. 100/110 on 18 April 2015. The ML is valid for 25 years with 10 year renewal increments available.</p> <p>A further Decree, No. 100/194, was signed on 16 June 2015 stipulating that the State of Burundi has a 10 % interest in Rainbow Mining Burundi; the balance, 90%, being held by the parent company, RIR.</p> <p>Rainbow does not own the surface rights covered by the ML but has free and unrestricted access to the entire Project area, following consultation with the local communities.</p> <p>Rainbow submitted Environmental and Social Impact Studies to the Ministry of Environmental Affairs and obtained compliance certificates (No. 007/2015) on 30 March 2015 (No. 010/2015) for the ML.</p>
<p>Exploration done by other parties</p> <p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<p><u>1936-1957</u></p> <p>In 1936, SOMUKI discovered bastnaesite in alluvial deposits in the Gakara area, which was confirmed by analysis at laboratories in Entebbe (Uganda), Liverpool (England) and Leuven (Belgium).</p> <p>From 1941 to 1942, research into the bastnaesite occurrences continued and the first mining tests were undertaken. Approximately 14 tonnes of bastnaesite material were produced from in-situ veins at Gakara.</p> <p>The increase in REE prices from 1947 to 1957 resulted in renewed mining activities at the Gakara and Rusutama deposits from 1948 onwards. In total, 2,137.3 tonnes of bastnaesite was reported to have been produced from these two deposits - SOBUMINES and BGR reports.</p> <p>Thoreau et al. (1958) published an article on the Karonge deposit (Gakara) detailing results of a geological survey of the deposit. Initially they postulated that the REE mineralisation was only associated with the quartzites, until the excavation of the Rusutama quarry near Gakara, along strike from the Gakara mineralisation revealed that REE vein mineralisation at Rusutama occurs in gneiss and schists.</p> <p>A further two discoveries of bastnaesite mineralisation were made at Gasenyi and Murambi, in a different geological context to the initial discovery. The bastnaesite mineralisation occurs in a network of veins and stockworks (5 cm to 15 cm thick)</p>

JORC Code explanation	Commentary
	<p>associated with pegmatites. The mineral paragenesis is: bastnaesite, quartz, barite and sulphides (pyrite and galena).</p> <p>In the late 1950s, genetic similarities between the REE mineralisation at Gakara and Mountain Pass, California, were recognised, although the absence of carbonatites at Gakara and the generally more complex mineral assemblage at Mountain Pass were noted.</p> <p>Exploration and mining stopped in 1957, with a fall in the global REE prices.</p> <p><u>1965-1978</u></p> <p>Sobumines returned to the Gakara area in 1965, by which time the general understanding of the geochemistry, mineralogy and metallurgical characteristics of REE had advanced.</p> <p>From 1966 to 1969, mining of the Gakara and Rusutama deposits intensified. In 1968, exploration work and geological mapping was undertaken at Gasenyi and several other known REE occurrences. Various types of mineralisation were noted, identifying the need for detailed studies to facilitate the treatment and purification of the material to produce the required concentrate.</p> <p>Aderca and Tassel undertook detailed studies of the Gakara deposit in 1971. Their work focussed on various aspects of REE mineralisation, and mineral types and associations, from samples obtained from various operational pits.</p> <p>From 1972 to 1978, research was conducted by several Sobumines geologists and engineers. More than 30 REE occurrences were investigated as part of their exploration campaign for bastnaesite.</p> <p>Exploration and mining operations were extended to the other sites including Gasenyi, Murambi, Gasagwe and Mugere. Mining operations until 1978 comprised open pits and occasional galleries for most deposits.</p> <p>In 1978 Sobumines stopped all operations due to a fall in global REE prices which rendered mining in the Gakara area uneconomical.</p> <p><u>1981-1985</u></p> <p>From 1981-1985 Germany Bundesanstalt für Geowissenschaften und Rohstoffe (“BGR”), undertook an exploration and evaluation programme on six selected REE-bearing sites, within a framework of bilateral cooperation with the Burundi Government. An estimated 5,000 tonnes of REE material at a grade of 50% TREO was postulated for the six sites.</p>

JORC Code explanation	Commentary
	<p>The Gasagwe deposit alone was estimated by BGR to contain approximately 2,800 tonnes.</p> <p>In 1985, the BGR undertook metallurgical test work on the Gakara REE mineralisation as part of their planning to resume small-scale mining at the Gakara deposit and to comply with REE concentrate specifications as required by the international market in the mid 1980's. The BGR study concluded that the tested bastnaesite/monazite mineralisation could be upgraded on site to a marketable product.</p>
<p>Geology</p> <p><i>Deposit type, geological setting and style of mineralisation.</i></p>	<p>The Project area is situated within the northeast-trending Kibaran Fold Belt ("KB") which stretches across Burundi from the eastern Democratic Republic of Congo ("DRC") to western Tanzania. The KB in Burundi consists of a highly deformed sequence of Mesoproterozoic granites, granitoids and amphibolite-greenschist facies metasedimentary and metavolcanic rocks, referred to as the Burundi Supergroup.</p> <p>The geology and tectonic framework of Burundi and neighbouring countries have been strongly influenced by repeated episodes of rifting along existing structural trends. This resulted in the emplacement of numerous carbonatites and alkaline complexes, spanning a broad range in age from Late Proterozoic to Cenozoic.</p> <p>The Property geology is dominated by the Mugere granitoids which contain numerous inclusions of metasedimentary rocks such as the Karinzi and Makara "fragments" which are commonly fault bounded at the contacts with the granitoids. These granitoids are the dominant host rocks for the bastnaesite/monazite mineralisation in the Project area.</p> <p>REE mineralisation is hosted within a network of bastnaesite/monazite-bearing veins and veinlets which range in thickness from a few centimetres to a few tens of centimetres. The veins exhibit variable orientations and attitudes, although there appears to be a broad correlation with regional structures and dominant trends.</p> <p>The REE mineralisation at Kiyenzi is thought to be within a breccia pipe. The interpretation of the detailed geology is ongoing.</p>
<p>Drill hole Information</p> <p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <p>11. <i>easting and northing of the drill hole</i></p>	<p>The Kiyenzi drillhole collar information and REE intercept grades and intervals are presented at the end of Section 2</p>

JORC Code explanation	Commentary
<p><i>collar</i></p> <p>12. <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></p> <p>13. <i>dip and azimuth of the hole</i></p> <p>14. <i>down hole length and interception depth</i></p> <p>15. <i>hole length.</i></p> <p><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></p>	
<p>Data aggregation methods</p> <p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <p><i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>Exploration results are reported in the form of an Exploration Target.</p> <p>The Exploration Target ("ET") is subdivided into Vein Hosted or Breccia Hosted REE mineralisation.</p> <p>For the Vein Hosted REE the ET was based on 3D modelling of the zone of potential mineralisation defined by either historical mining, current trial mining, exploration bulk sampling or exploration grab and/or trench samples. The tonnage of potential mineralisation was extrapolated based on a range of waste:ore strip ratios estimated from the historical and RMB trial mining data. The grade range was estimated from the current pilot plant trial mining feed grade.</p> <p>For the Breccia Hosted REE at Kiyenzi the ET was based on a 3D model using the 2018 diamond drilling data to define a grade tonnage distribution. This distribution was extrapolated to include areas at depth where the breccia pipe is expected to be mineralised and laterally to an area of mineralisation defined by exploration sampling.</p> <p>No aggregation of assays was used for the Vein Hosted ET</p> <p>The Kiyenzi drilling was composited to 1m downhole lengths for use in the grade tonnage model.</p> <p>No metal equivalent value was used.</p>
<p>Relationship between mineralisation widths and intercept lengths</p> <p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p>	<p>The relationship between Breccia Hosted mineralisation at Kiyenzi and the orientation of drillhole samples is not yet clearly understood. The mineralisation is assumed to be contained within a breccia pipe created by exhalative extrusion from a carbonatite source.</p> <p>The relationship between down hole mineralisation intercepts and true mineralisation width is not known.</p>

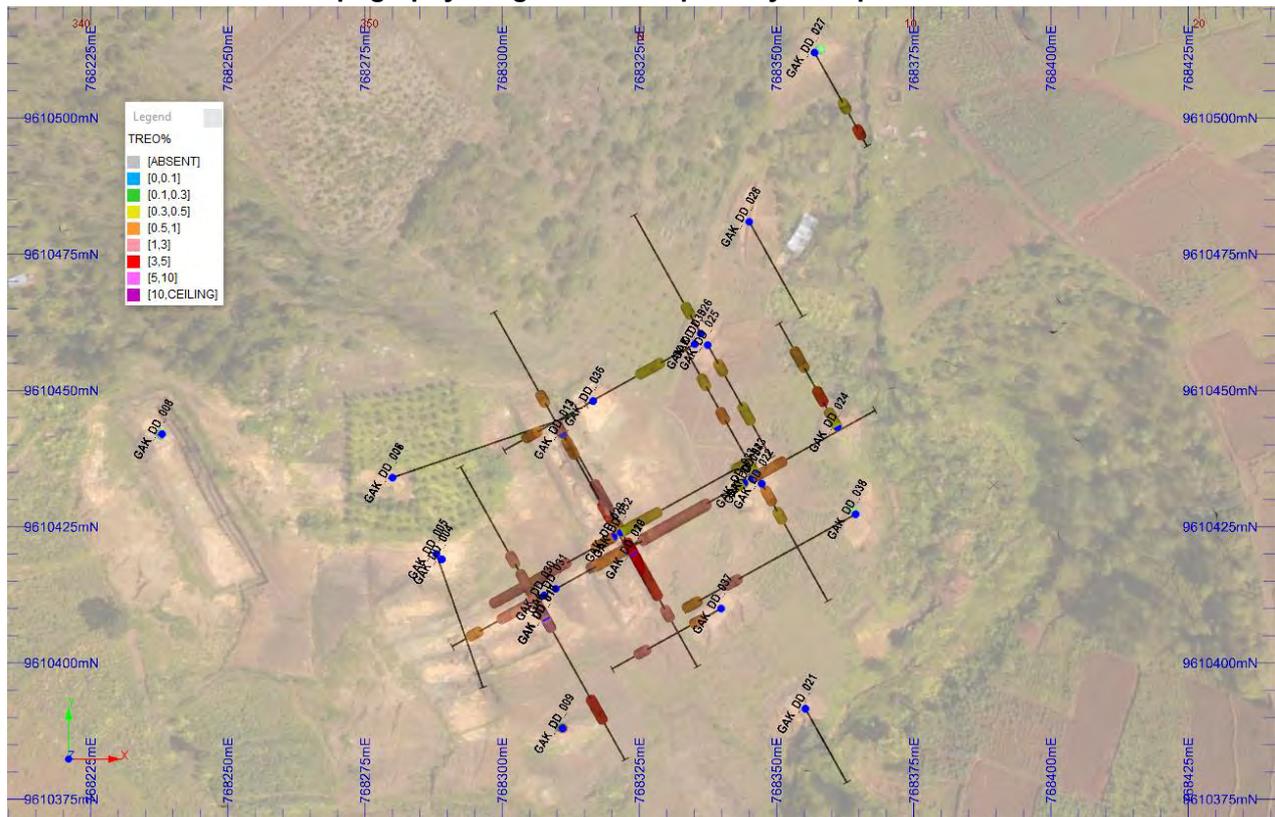
JORC Code explanation	Commentary
<p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).</i></p>	
<p>Diagrams</p> <p><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></p>	<p>The Kiyenzi diagrams are presented at the end of Section 2</p>
<p>Balanced reporting</p> <p><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>	<p>The Kiyenzi intercept widths are presented at the end of Section 2</p>
<p>Other substantive exploration data</p> <p><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	<p>Further development of exploration knowledge and REE target generation was completed by TECT Geological Consultants. Refer to the Technical Report for details on the work completed by TECT.</p>
<p>Further work</p> <p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p>Evaluation of the REE occurrences through surface exploration mapping and sampling is ongoing, work includes:</p> <ol style="list-style-type: none"> 1. Cleaning and sampling of additional historical mining open pits. 2. Follow-up on new REE targets identified by the TECT geological study. 3. 16,200 m of diamond core drilling to convert the 9 defined vein hosted Exploration Targets to a Mineral Resource during the next 15 months. 4. Continue trial mining and production of concentrate with the pilot plant to assist with defining a Mineral Resource <p>Diagrams of the Exploration Targets are presented in the Technical Report.</p>

JORC Table 1 - Section 2 Tables and Figures

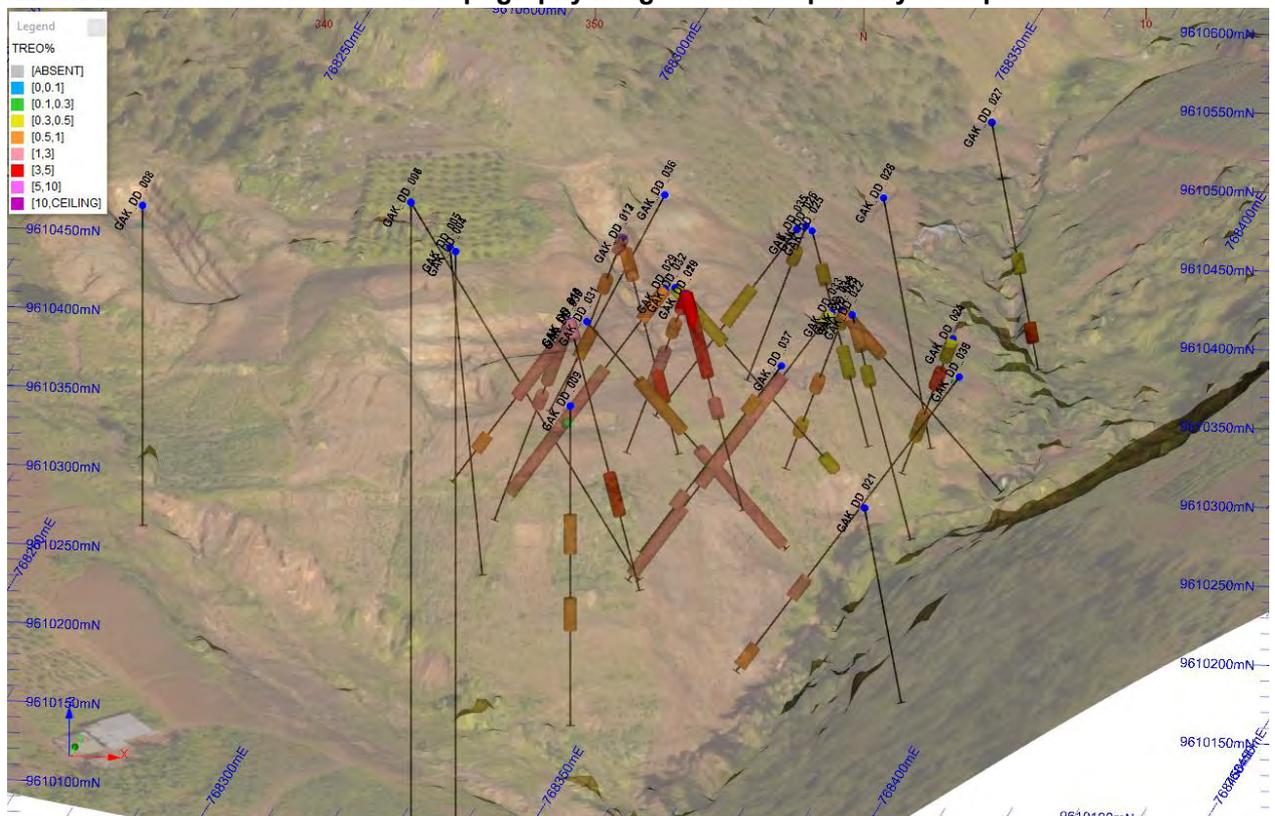
Kiyenzi diamond core drillhole collar data						
<i>Note: Drillholes 001, 002, 003, 014 and 018 were not drilled into the Kiyenzi REE breccia</i>						
Drillhole	Hole Type	Total Depth	Easting	Northing	Elevation	Completed
GAK_DD_001	DDH	50.0	769,158.8	9,610,889.2	1,726.3	16/02/18
GAK_DD_002	DDH	50.0	769,158.8	9,610,889.2	1,726.3	18/02/18
GAK_DD_003	DDH	50.0	769,158.8	9,610,889.2	1,726.3	21/02/18
GAK_DD_004	DDH	92.8	768,289.0	9,610,419.0	1,682.7	03/03/18
GAK_DD_005	DDH	52.0	768,288.0	9,610,420.0	1,683.1	10/03/18
GAK_DD_006	DDH	149.8	768,280.0	9,610,434.0	1,686.5	17/03/18
GAK_DD_007	DDH	70.0	768,280.0	9,610,434.0	1,686.5	21/03/18
GAK_DD_008	DDH	50.0	768,238.0	9,610,442.0	1,682.6	24/03/18
GAK_DD_009	DDH	50.0	768,311.0	9,610,388.0	1,666.9	31/03/18
GAK_DD_010	DDH	50.0	768,308.0	9,610,408.0	1,675.0	07/04/18
GAK_DD_011	DDH	46.0	768,308.0	9,610,408.0	1,675.0	13/04/18
GAK_DD_012	DDH	40.0	768,311.0	9,610,442.0	1,680.0	17/04/18
GAK_DD_013	DDH	37.0	768,311.0	9,610,442.0	1,680.0	19/04/18
GAK_DD_014	DDH	147.0	768,248.0	9,610,170.0	1,573.0	29/04/18
GAK_DD_015	DDH	150.0	768,092.0	9,609,510.0	1,737.0	11/05/18
GAK_DD_016	DDH	60.0	772,139.0	9,607,947.0	1,908.0	30/05/18
GAK_DD_017	DDH	80.0	766,053.0	9,607,447.0	1,518.0	08/06/18
GAK_DD_018	DDH	50.0	769,071.0	9,610,906.0	1,692.0	13/06/18
GAK_DD_019	DDH	40.0	768,324.0	9,610,420.0	1,677.0	10/07/18
GAK_DD_020	DDH	37.0	768,324.0	9,610,420.0	1,677.0	13/07/18
GAK_DD_021	DDH	31.1	768,355.3	9,610,391.6	1,651.6	16/07/18
GAK_DD_022	DDH	38.5	768,347.3	9,610,432.9	1,671.5	18/07/18
GAK_DD_023	DDH	40.0	768,346.0	9,610,434.9	1,671.7	21/07/18
GAK_DD_024	DDH	34.0	768,361.1	9,610,443.3	1,665.8	25/07/18
GAK_DD_025	DDH	37.0	768,337.5	9,610,458.3	1,678.2	27/07/18
GAK_DD_026	DDH	39.0	768,336.2	9,610,460.4	1,678.4	29/07/18
GAK_DD_027	DDH	39.5	768,356.9	9,610,512.0	1,682.8	01/08/18
GAK_DD_028	DDH	40.0	768,345.0	9,610,481.0	1,678.1	09/08/18
GAK_DD_029	DDH	39.0	768,320.3	9,610,423.1	1,677.0	16/08/18
GAK_DD_030	DDH	30.0	768,307.6	9,610,412.4	1,673.6	27/08/18
GAK_DD_031	DDH	50.0	768,309.7	9,610,413.6	1,673.8	03/09/18
GAK_DD_032	DDH	40.5	768,321.7	9,610,424.0	1,677.0	06/09/18
GAK_DD_033	DDH	51.0	768,344.1	9,610,433.0	1,671.8	11/09/18
GAK_DD_034	DDH	40.0	768,345.6	9,610,433.9	1,671.9	13/09/18
GAK_DD_035	DDH	35.5	768,335.1	9,610,458.5	1,678.3	15/09/18
GAK_DD_036	DDH	37.3	768,316.6	9,610,448.0	1,685.5	18/09/18
GAK_DD_037	DDH	35.5	768,339.9	9,610,410.0	1,668.8	21/09/18
GAK_DD_038	DDH	56.0	768,364.4	9,610,427.3	1,663.8	24/09/18
Total Metres		2,065.5				

Kiyenzi diamond core drillhole intercepts					
TREO % \geq0.3% over 3m minimum downhole length					
<i>Note: TREO % Cut is based on a 10 % TREO top cut applied to 1m downhole composites</i>					
Drillhole	From	To	Length	TREO % Cut	TREO % Uncut
GAK_DD_009	17.0	23.0	6.0	0.71	0.71
	30.0	35.0	5.0	0.61	0.61
GAK_DD_010	0.0	15.0	15.0	1.53	1.53
	18.0	21.0	3.0	1.29	1.29
GAK_DD_011	0.0	3.0	3.0	1.30	1.30
	26.0	33.0	7.0	3.47	3.83
GAK_DD_012	0.0	3.0	3.0	1.57	1.57
	10.0	13.0	3.0	0.67	0.67
GAK_DD_013	2.0	7.0	5.0	0.93	0.93
	23.0	28.0	5.0	3.74	5.82
GAK_DD_019	0.0	4.0	4.0	3.84	4.29
	7.0	10.0	3.0	0.64	0.64
	14.0	23.0	9.0	1.58	2.02
GAK_DD_020	0.0	14.0	14.0	3.48	4.69
	18.0	21.0	3.0	1.15	1.15
GAK_DD_022	2.0	6.0	4.0	0.54	0.54
	9.0	12.0	3.0	0.37	0.37
GAK_DD_023	0.0	4.0	4.0	0.36	0.36
	17.0	20.0	3.0	0.54	0.54
	28.0	31.0	3.0	0.33	0.33
GAK_DD_024	0.0	5.0	5.0	0.44	0.44
	8.0	12.0	4.0	3.58	5.13
	19.0	25.0	6.0	0.59	0.59
GAK_DD_025	6.0	9.0	3.0	0.45	0.45
	20.0	25.0	5.0	0.41	0.41
GAK_DD_026	6.0	9.0	3.0	0.39	0.39
GAK_DD_027	21.0	24.0	3.0	0.30	0.30
	32.0	35.0	3.0	3.07	3.07
GAK_DD_029	0.0	6.0	6.0	0.82	0.82
	15.0	39.0	24.0	2.68	3.01
GAK_DD_030	4.0	14.0	10.0	1.02	1.02
	21.0	24.0	3.0	0.78	0.78
GAK_DD_031	13.0	24.0	11.0	0.53	0.53
	28.0	49.0	21.0	2.47	2.53
GAK_DD_032	0.0	12.0	12.0	0.42	0.42
	37.0	40.0	3.0	0.42	0.42
GAK_DD_033	0.0	3.0	3.0	0.32	0.32
	12.0	33.0	21.0	1.73	1.73
	37.0	50.0	13.0	1.20	1.20
GAK_DD_034	0.0	10.0	10.0	0.72	0.72
GAK_DD_035	11.0	18.0	7.0	0.38	0.38
GAK_DD_036	23.0	28.0	5.0	0.63	0.63
GAK_DD_037	6.0	9.0	3.0	0.51	0.51
	24.0	27.0	3.0	1.36	1.36
GAK_DD_038	38.0	42.0	4.0	1.44	1.44
	51.0	55.0	4.0	0.59	0.59
Total Length and average TREO %			300.0	1.48	1.65

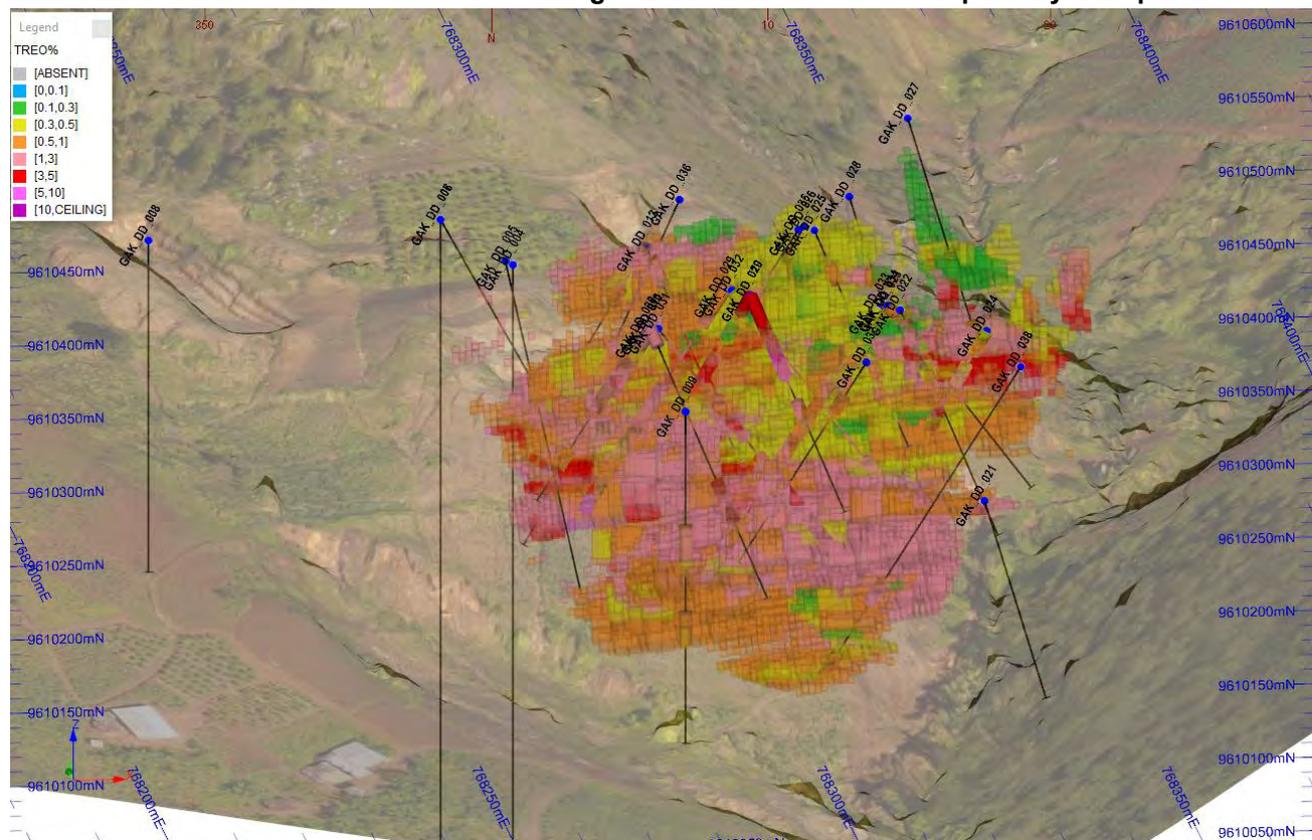
Plan View of Kiyenzi diamond core drilling, with intercepts $\geq 0.3\%$ TREO over a minimum downhole width of 3m. Topography image shown as partially transparent



3D View looking North of Kiyenzi diamond core drilling, with intercepts $\geq 0.3\%$ TREO over a minimum downhole width of 3m. Topography image shown as partially transparent



3D View looking North of Kiyenzi diamond core drilling, with intercepts $\geq 0.3\%$ TREO over a minimum downhole width of 3m. Grade tonnage 3D block model shown as partially transparent



Appendix 2 - Qualifications and experience of Rainbow staff

Gilbert Midende (Burundian) obtained his Doctorate in Geological Science in 1984 at the Université Libre de Bruxelles, Belgium. His PhD thesis was on the Matongo REE carbonatite in central Burundi. He was appointed Burundi Director General of Geology and Mines in 1987 and was Minister of Mines between 1988 and 1993. He has been a consultant to the World Bank since 2007. From 1996 to 2001, he was Principal of the University of Burundi and Minister of Higher Education and is currently Professor in Economic Geology at the University of Burundi. Gilbert is responsible for all of the Rainbow's administration and Government relations in Burundi, and also has a vast knowledge about REE mineralisation and deposit style described in this Report.

Cesare Morelli (Italian) is a Competent Person as defined by the JORC Code 2012 Edition, having nearly nine (9) years' experience that is relevant to the REE mineralisation style and deposit type described in the Report. Cesare Morelli is a Fellow member of the Geological Society of South Africa as well as a member of the South African Council for Natural Scientific Professions (SACNASP 400304/11). Mr Morelli (Italian) has over 33 years' experience in minerals exploration in Africa including 18 years in diamond exploration with De Beers, managing projects in south, west and central Africa. Following his time with De Beers, he spent four years with BHP Billiton as Minerals Exploration Manager for Africa. At BHP Billiton he directed exploration projects in a variety of commodities, namely iron ore, aluminium bauxite, manganese, copper and base metals, nickel and potash. In 2009 Cesare founded Benu Minerals (Pty) Ltd, a minerals exploration and resource consulting firm based in South Africa, which has been providing services and advice to the international mineral industry, focussing on Africa, since its inception. Cesare has been involved in the exploration and development of several world-class projects such as: Desert Lion Energy, the first Li concentrate producing mine in Namibia; and a series of Au, Fe, Cu-Co, and REE exploration ventures in countries like Tanzania, Ethiopia, Burkina Faso, Uganda, Togo, DRC and Zambia.

Joël Ntungwanayo (Burundian) has over 30 years' experience in applied geology and minerals exploration, Joël graduated with Honours in geology and mineralogy at the Université Libre de Bruxelles, Belgium, in 1985. He started his career at the Burundi geology survey where he gained experience in mapping gold, tin and wolframite deposits. Between 2007 and 2009 he was appointed project geologist with BHP Billiton on the Muremera Nickel exploration project. He was recruited as Chief Geologist in 2011 by Rainbow where he is currently overseeing all geological and technical programs. He is member of the Burundian Association of Environmental Impacts Assessment Studies and with his 7 years' experience at Rainbow he qualifies as a Competent Person as defined by the JORC Code.

Chris Attwood (British) is an internationally experienced mining engineer with more than 20 years' experience in mining and extractive industries. Chris has led operations up to 35MTPA successfully in a number of countries including Australia, Uzbekistan, South Africa, Algeria, Tunisia, UK, Senegal and Eritrea which include gold (CIL plants and civil infrastructure), copper transition phase, lead (floatation plant and infrastructure).

Dave Dodd (British) is a project metallurgist with 45 years of experience, primarily in the design and commissioning of mineral processing plants internationally. He has been involved in over 200 metallurgical projects covering most minerals including REE. His geographical experience is mostly throughout Africa but includes projects in Europe, Central Asia, Russia and South America.