REPORT ON THE MAZVAKE 500 BLACK GRANITE CLAIMS- MT DARWIN, ZIMBABWE

Background

The Mazvake 500 block of claims, covering 80 hectares, was pegged and registered by Chinda Resources (Private) Limited in February 2017 to evaluate a type of black granite known commercially on the international market as ”African Galaxy”. The black granite claims are located in the Chesa area of Mount Darwin District, 187 kilometres north east of Harare.

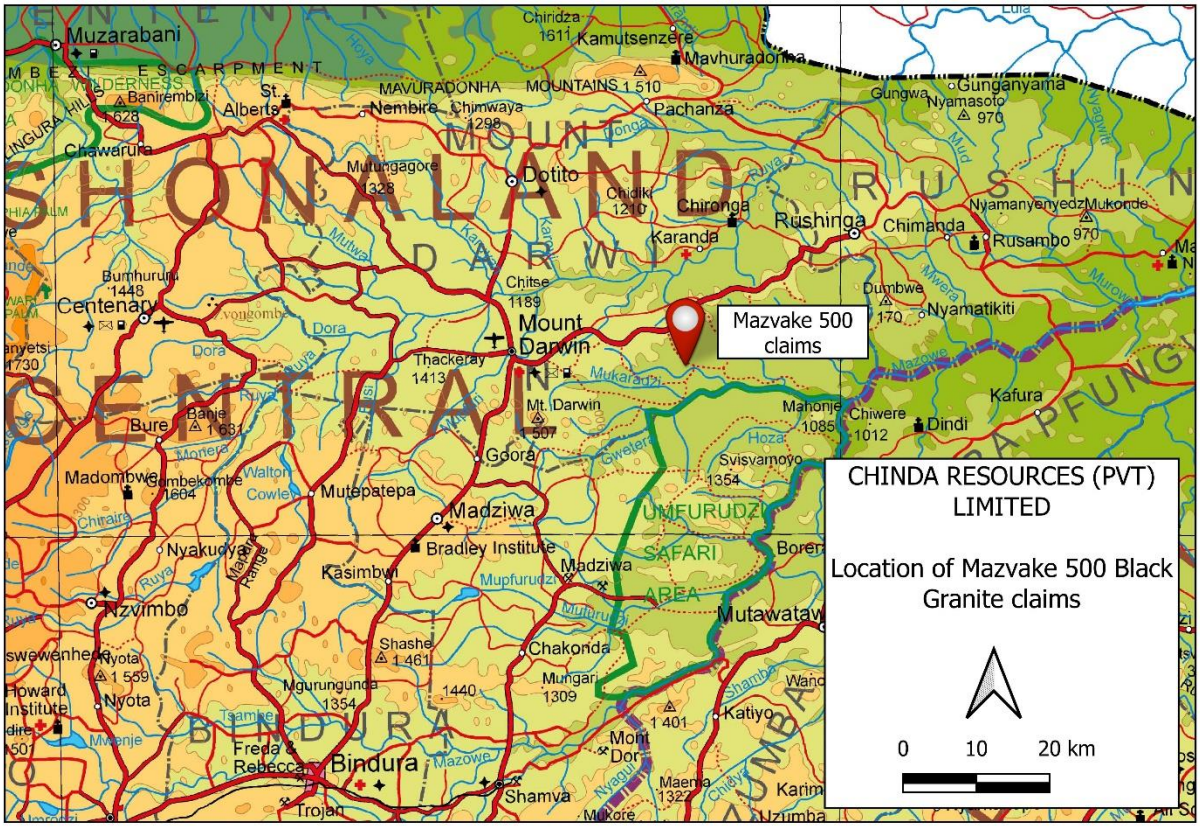
The “African Galaxy” black granite is currently very popular on the world market. Europe (mainly Italy, France and Switzerland), USA, Far East countries (Japan, Singapore) and South Africa are the main importers of Zimbabwean black granites. Generally demand is strong in all industrialised countries.

Commercial production of black granite in Zimbabwe commenced in the early 1970s in the Mutoko area, which is still today the most important area of production of the famous “Zimbabwe Black”. After a stop in quarrying in the late 1970s due to the liberation war, production restarted in the early 1980s when South African and Italian companies started new projects and exploration campaigns. Black granite quarrying has over the years become one of the most important and attractive sectors of the mining industry. The majority of the quarrying activities are concentrated in three areas that roughly define a triangle: Mutoko, Murehwa and Mutawatawa areas in north east Zimbabwe.

In 1997 quarrying of a new attractive black granite, called “African Galaxy” that is very similar to the Indian “Black Galaxy”, was started in the Mount Darwin area by Manwick (Pvt) Limited and Quarrying Enterprises (Pvt) Limited. Several other quarrying operations mining this type of black granite were later opened up by companies that include Natural Stone Export Company (Pvt) Limited and Keeley Granite (Pvt) Limited.

Location and access to the Mazvake 500 black granite claims

The Mazvake 500 claims are located in the Chesa area of Mount Darwin District approximately 187 kilometres north east of Harare by road. The claims can be reached from Harare by taking the Harare-Bindura road, then the Bindura-Mount Darwin road, and in Mount Darwin taking the Rushinga road for 28 km before turning left into a gravel road that is followed for 2 km to reach the claims. Only 2 km of the total distance is gravel road with the rest being wide tarred roads in good condition.



Mineral property rights

Chinda Resources (Pvt) Limited is the registered holder of the Mazvake 500 block of claims covering the "African Galaxy" black granite deposit. The claims cover a total area of 80 hectares. Coordinates for corners of the block of claims are shown below.

Corner	Easting	Northing
1	373000	8147780
2	376600	8147780
3	376600	8149640
4	372970	8149640
5	373210	8148850
6	373000	8148400

Regional geology

Regional geological mapping for the area was carried out by the Zimbabwe Geological Survey under Short Report No. 53 entitled "The Geology of the Country around Centenary and Mount Darwin". The predominant rocks in the Mount Darwin area are those of the Ruya Granitic Gneiss unit of the Older Gneiss Complex, which is intrusive

into the Mount Darwin Greenstone Belt. The unit varies in composition from granodiorite to granite, and its texture has been altered by regional metamorphism and intense folding into poorly to strongly foliated gneiss. The Ruya Granitic Gneiss includes small intrusions of Younger Granite, dolerite dykes and sills, late granites and quartz veins. Numerous xenoliths (inclusions) of amphibolite, tremolite schist, calc-silicate rock and granulite also occur within these gneisses.

The Mazvake 500 claims Black Granite deposit geology

On the southern end of the claims block the gabbroic dolerite sill forms a boulder-strewn conical hill that rise about 60 metres above the surrounding rocks. The presence of fairly large boulders on the round hill is indicative of widely-spaced fractures, which favours the extraction of large-sized black granite blocks. Most of the claims area is characterized by flat lying ground covered by dark red soils with many gabbro outcrops indicating that the soil cover is thin.

The gabbroic dolerite is a massive dark grey to black, medium- to coarse-grained rock with granoblastic and ophitic texture comprising mainly pyroxene, hornblende and labradorite, and minor actinolite. Labradorite is speckled in these gabbroic rocks giving an attractive shining effect on polished slabs while pyroxene and actinolite imparts a dark grey colour to the rocks. On the conical hill there are two types of black granites based on grain size: the medium- to coarse-grained and the coarse-grained material. The best quality material most sought after is the coarse material with labradorite laths. The finer material is darker than the coarser material but with lesser shining effect.

Black granite resource evaluation

Black granite resource was estimated in two parts: 1) the conical hill on the southern end of the claims block from an elevation of 1,000 to 880 metres, and 2) from elevation of 880 to 850 metres for the whole length of the claims block.

1) Conical hill (From 980 to 900 m elevation)

The radius (R) of base (B) of conical hill is 230 metres and height (H) is 80 metres.

Volume = $(B \times H) \div 3$
= $(\pi R^2 \times H) \div 3$
= $(3.1416 \times 230 \times 230 \times 80) \div 3$
= $4{,}431{,}750\ m^3$

2) Whole claims block (From 880 to 850 m elevation)

Volume = $L \times W \times H$
= $1{,}500 \times 50 \times 30$
= $2{,}250{,}000\ m^3$

Total black granite resource = 4,431,750 + 2,250,000
= **6,681,750 m³**

Only about 40 % of the total black granite resource calculated above, equivalent to **2,672,700 m³**, will be extracted as exportable blocks. Most of the material will be lost for falling to meet the required standard due to rapid variations in colour and grain size, and defects such as fractures, faults, white and blue lines, holes and white eyes.

Quality features and defects

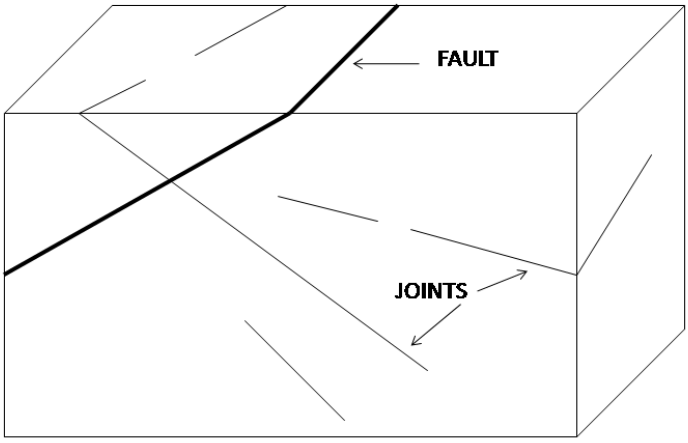
Requirements for overseas market

- Block dimension — For modern multi-blade gang-saws to cut a block into slabs economically, the block must have a minimum dimension of 2.2 x 1.2 x 1.2 metres.
- Block shape — Blocks must be very regular to reduce transport costs and amount of waste material produced during cutting and polishing.
- Homogeneity — The block must be homogeneous in grain size and colour and must be free of faults ,joints and other defects.

Block defects

The most common defects in blocks, which must be absolutely avoided, are listed below. These defects strongly reduce the value of polished slabs or result in the total condemnation of blocks.

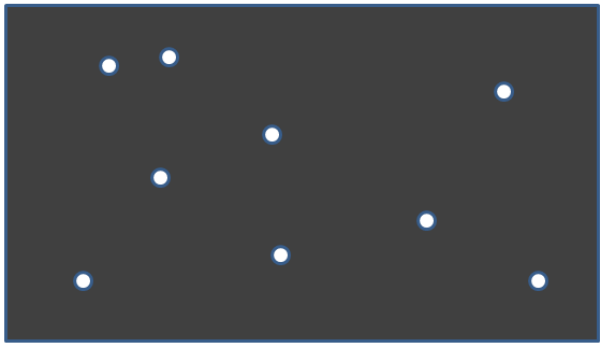
- Faults and joints
- Blue-green lines — These form as a result of alteration caused by fluids passing through faults and joints.
- White lines — Quartz and calcite veins.
- White eyes — Oval-shaped spaces filled by quartz or calcite.
- Small holes — These holes are formed by alteration and successive detachment of small crystals of pyrite and iron oxides.



A – FAULT AND JOINTS

B – WHITE LINES

C – WHITE EYES



D – SMALL HOLES

Marketing and competitors

Market analysis

"African Galaxy" black granite is in high demand on the world market because of its uniqueness (shining effect), and it provides variety to the true black granites such as the "Zimbabwe Black". Because of the reasons below, demand for the "African Galaxy" undoubtedly will always outstrip supply.

- Black granite bodies with huge reserves and capable of furnishing large blocks that are homogeneous in colour and grain size, as requested by the market, are very rare and the "African Galaxy" is one of the few exceptions.

- Large extractable block dimensions: boulders lying on the black granite hills are very large and indicate the wide-spaced nature of fractures, which enables extraction of large-sized blocks. The major importing companies now request large-sized blocks, following the present features of modern gang saws which require blocks of a certain minimum size for them to operate in an economic way.

- Competitive price.

- Commercial agreements with big companies with established markets.

- Constant good quality of delivery.

- Large and continuously increasing demand failing to satisfy the market.

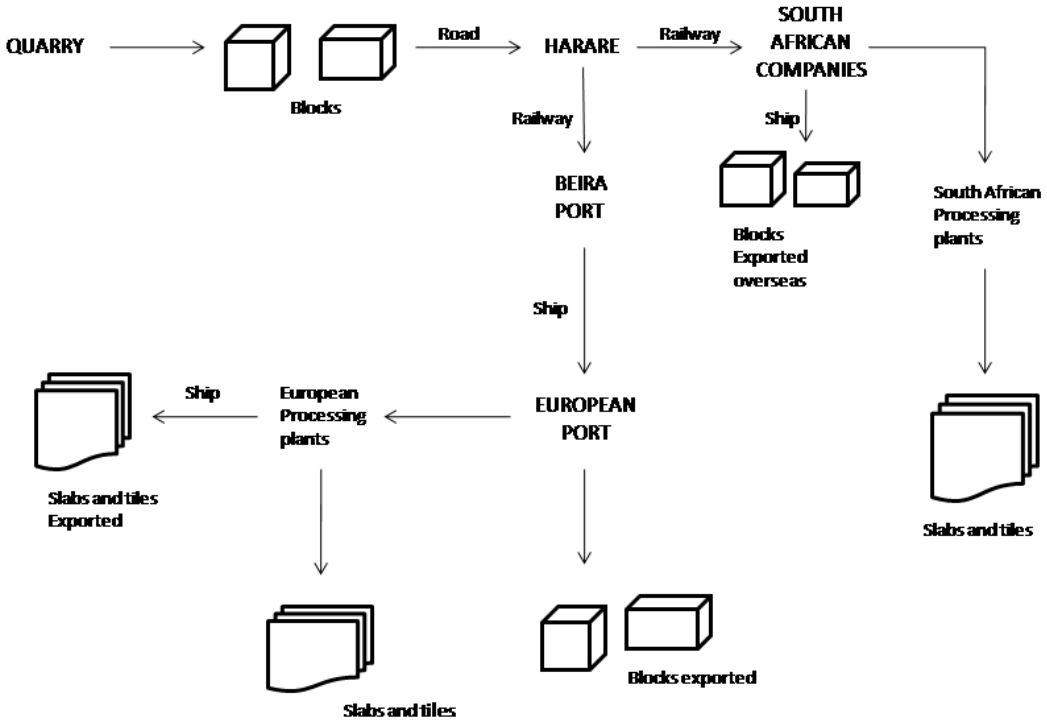
Competitors

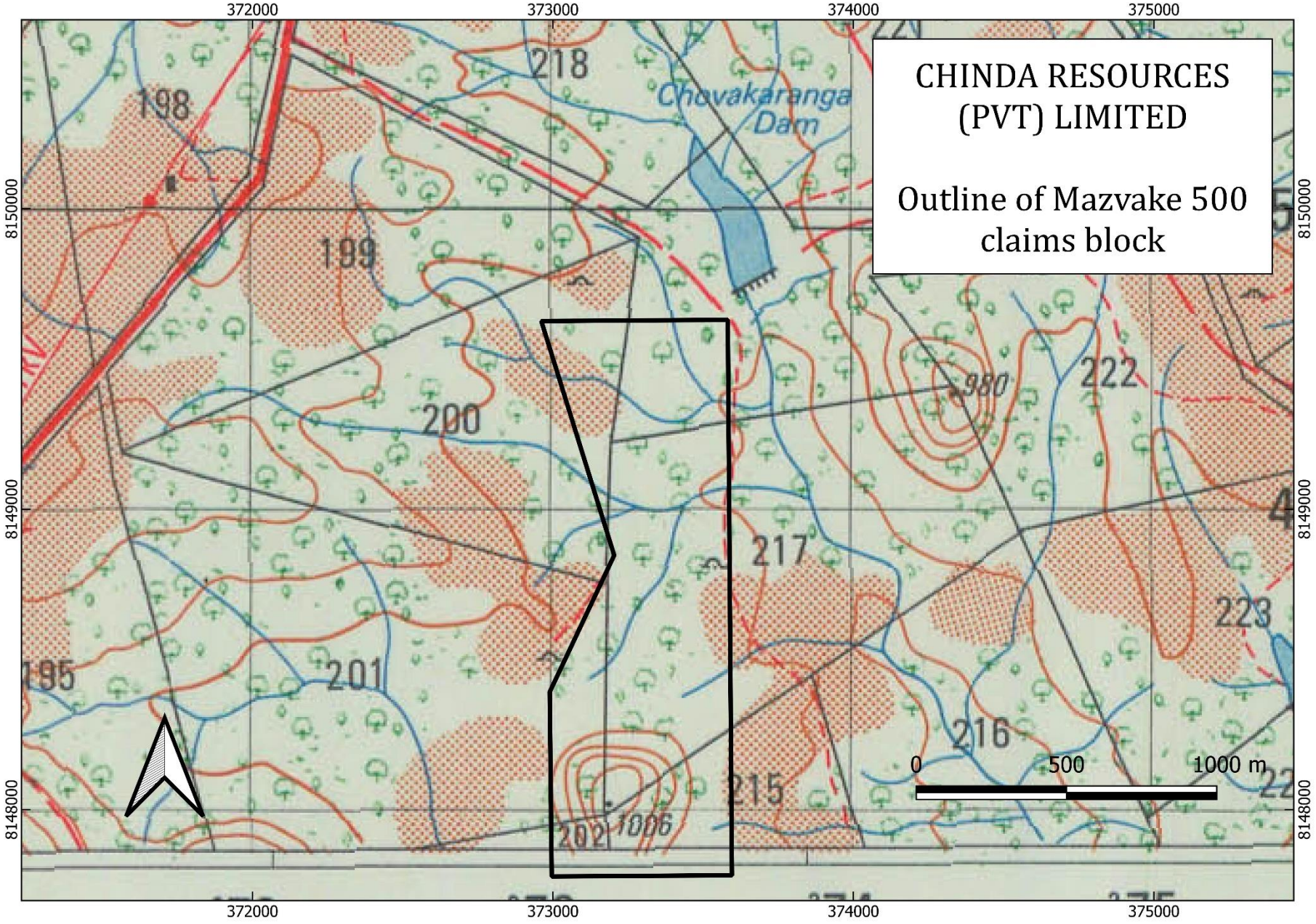
The main competitor of the "African Galaxy" is the "Black Galaxy" black granite from India. It is an intrusive mafic rock with a particular golden spotty brightness due to the presence of bronzite. This feature is unique and for this reason the "Black Galaxy" is highly priced, at US$ 900 per cubic metre (FOB). The "African Galaxy" commands prices lower than its main competitor and hence is more competitive on the world market.

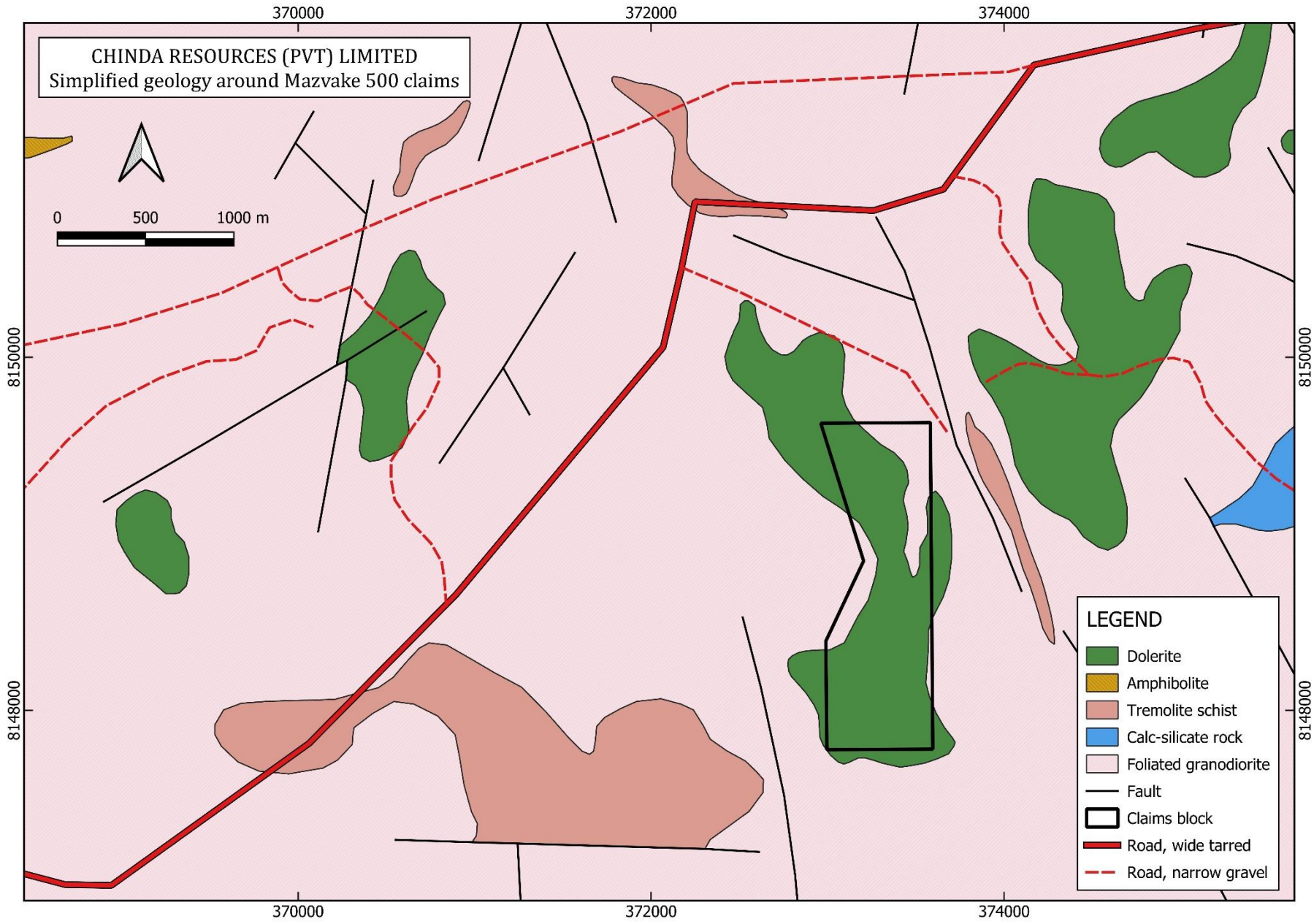
Distribution channels

The blocks are transported by local trucks from the quarries to Harare and from there to Beira and South Africa by railway. Blocks are exported to northern and western Europe, and USA eastern coast via the port of Durban. Those through Beira go to Mediterranean ports, Asia, Australia and USA western coast.

Typical distribution channel for Zimbabwe granites




CHINDA RESOURCES
(PVT) LIMITED
Outline of Mazvake 500
claims block
372000
373000
374000
375000
8150000
8149000
8148000
198
218
Chovakaranga
Dam
199
200
222
980
217
223
195
201
216
215
202
1006
0
500
1000 m


CHINDA RESOURCES (PVT) LIMITED
Simplified geology around Mazvake 500 claims
0
500
1000 m
370000
372000
374000
8150000
8148000
LEGEND
Dolerite
Amphibolite
Tremolite schist
Calc-silicate rock
Foliated granodiorite
Fault
Claims block
Road, wide tarred
Road, narrow gravel

MINES AND MINERALS ACT
Certificate of Registration

68481-4
Form M.M.8

Registered No. 41440BM

Amount Paid $400

Mining Commissioner's Office

MINISTRY OF MINES AND MINING DEVELOPMENT ADMINISTRATION
24 FEB 2017
P.O. BOX 1012, BINDURA
ZIMBABWE TEL: 0271-7220

№ 031564 DA

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THIS IS TO CERTIFY that CHINDA RESOURCES (Pvt) Ltd

..... is the Registered Holder

of a block consisting of 80 (EIGHTY) BLACK GRANITE ..... claims,

named MAZVAKE 500 ..... the situation of which is indicated to be

The claim is located in Mt Darwin, Chesa area 9,9km South of trig beacon 846/S.

(Mt Darwin)

Licence No. 049725

Mining Commissioner