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Independent Technical Review

The Luanshya West Copper Project, Zambia.

For

Deep-South Resources Inc.
2906 West Broadway, Suite 162,
Vancouver, BC. Canada V6K 2G8

Prepared by

Qualified Person: –

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Effective Date: 11th February 2022

Report Date: 5th February 2022

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1. SUMMARY

1.1 Property Description, Location, Ownership and Access

This independent Technical Report has been prepared at the request of Deep-South Resources Inc (TSXV – DSM) ("DSM or The Issuer") which is listed on the TSX Venture Exchange (the "Exchange").

DSM has entered into an exclusive option agreement with a Zambian public company, World Class Mineral Ventures Limited ("WCMV"), which holds the exploration rights to the Luanshya West copper project ("the project or subject property") on the Large Exploration Licence 23246 - HQ – LEL in the Copper Belt of Zambia near to the town of Kitwe (see Figures 1.1, 4.1 & 4.2 below). The option agreement allows for DSM to acquire an 80% majority shareholding in WCMV over a period of five (5) years with first rights of refusal on the remaining 20% of shares and is subject to fulfilling obligations in respect to exploration expenditure and payments to WCMV shareholders. DSM are the appointed exploration managers and operators over the subject property.

The project prospectivity is based on the location of the subject property over the unconformable contact zone between basement granites and Lower Roan Group sediments where most copper belt mines in both Zambia and the Democratic Republic of Congo (the "DRC") are located. This prospectivity is reinforced by a positive series of coincident soil geochemical anomalies over the contact zone.

Access to the project is via gravel roads and tracks from the town of Kitwe and is passable in the dry season to conventional cars but probably more safely accessed with 4x4 vehicles, particularly in the wet season. The subject property is within a rural subsistence farming area with numerous tracks and trails to all parts of the site. The tracks are largely sand and lesser gravel and can be deeply eroded in places. The general topography is flat with tropical forest in patches not cleared for small-scale subsistence farming. The project area is within the equatorial region with an average elevation of 1 250m AMSL [(1)] and enjoys a tropical climate with little seasonal variation in daylight hours, and seasonal daytime temperatures which range between 23 ^{0} and 34 ^{0} C. The summer rainy season is from November to March with average 10mm rain per day. [(2)]

The project area is close to established copper / cobalt mines with Chibuluma mine some 35Km to the north-east, Chambishi mine 41Km north-north-east, N'changa mine 53Km north-north-west and Luanshya mine (was previously called Roan Antelope) some 40Km east-southeast from the centre of the project area.

1.2 History and Source of Data

This report is based on a review of historical and currently available data concerning the project area obtained from WCMV, review reports of previous licence holders, and from the Zambian mining geo-cadastral office as well as publicly available technical articles, journals and books as listed in the References and Bibliography section of this report.

Figure 1.1: Location Map – *(red dot is the location of the subject property)*

1.3 Exploration Rights

The exploration rights and obligations over the subject property are held by WCMV under exploration licence 23246 – HQ – LEL, with an area of 5 463.26 Ha. granted on 3rd February 2020 for a period of 4 years until 2nd February 2024. (See Appendix 1, and reference 3). The licence is currently held for Cobalt, Copper, Gold, Lead, Manganese, Nickel, Silver and Zinc but additional elements can be added if required.

1.4 Geology and Mineralisation

The subject property is located within the Zambian Copper Belt, which forms a major part of the Central African Copper Belt which extends into the DRC and is the largest source of copper ("Cu") and cobalt ("Co") in the world.

The more siliciclastic sediments of the Roan Group proximal to the underlying basement 'granites' often dominate the stratabound ore horizon on the Zambian side.

The Central African Copperbelt thus appears to be a diagenetic to late diagenetic orebody, with a very strong lithological control governing its geological locality and distribution. The main exploration target for primary Cu-Co Copperbelt deposits in Zambia remains the Lower Roan where it overlies basement granite "highs".

The subject property is located over the unconformable contact between basement granite and the Lower Roan sediments and is therefore highly prospective for Cu-Co mineralisation. This prospectivity is reinforced by coincident Cu-Co soil geochemical anomalies over the contact area.

1.5 Exploration Status

Exploration data, from previous holders of the grant area and from the Geological Survey of Zambia, over the subject property have been compiled by WCMV onto a geographical information system ("GIS") and the funding for a field programme as described in this report has now been secured through the option agreement with DSM. Although there are unverified soil sampling geochemical anomalies over the contact zone between basement granites and Lower Roan sediments, these have not yet been converted to targets for drill evaluation and the proposed exploration programme addresses this situation.

1.6 Qualified Person's Conclusions and Recommendations

In my opinion it can be concluded that DSM and WCMV have a property of merit which deserves to enjoy the further exploration as proposed by them to show the presence (or absence) of copper-cobalt mineralisation and its tenor and to determine if this mineralisation is economic or not. I therefore recommend the initiation of the proposed exploration programme over the subject property.

2. INTRODUCTION

2.1 Scope of Work, Terms of Reference and Purpose of the Report

The mandate given to P&E Walker Consultancy cc ("P&E") is to provide the Board of Directors of DSM ("The Board") with an independent technical review of the exploration status of the Luanshya West project over the 23246 -HQ –LEL property which is held by their optioned partners, World Class Mineral Ventures Limited and to comment on the efficacy of the further exploration programme proposed by DSM and WCMV. The report is to be used by DSM to show that they have a property of merit.

This independent Technical Report has been prepared at the request, on 13th December 2021, of Mr. P. Léveillé, President and CEO of DSM. The fee for the preparation of this Report is being paid by DSM and is not dependant on the outcome of any capital raising exercise by DSM.

2.2 Principal Sources of Information

The Report was completed by P&E and relies extensively on information, materials, representations, and exploration data provided by historical and more modern data records obtained from DSM and WCMV, the Zambian Mining Cadastre Office and the Zambian Geological Survey.

This Report has undergone extensive review by Directors and professional advisors to both DSM and WCMV to ensure that the information and representations contained in the Report are current, accurate, correct, and complete and that there are no material omissions of information that would affect the conclusions contained in the Report.

The Technical Report is to be read as a whole and sections or parts of it should not be read or relied upon out of context. This notice, which is an integral part of the Report, must accompany every copy of the Report.

This entire Report is subject to the scope of work conducted as well as the assumptions made and to all other sections of this Report.

The effective date of this report is 11th February 2022. The Qualified Person and author of this Report and his business entity have no direct or indirect interest in the subject or any nearby mineral property and are entirely independent of DSM, WCMV and their shareholders.

2.3 Site Inspections

Peter Walker, the author of this report, visited the Luanshya West Project site described in this report between 10th and 14th January 2022 in the company of Mr. V. Stuart-Williams, technical director of DSM and Mr. N. Sabao, technical director of WCMV. No further field work or material change has occurred at the Luanshya West project site since our visit.

3. RELIANCE ON OTHER EXPERTS

This report has been prepared under the guidelines of Companion Policy 43-101CP to National Instrument 43-101 Standards of Disclosure for Mineral Projects (as at 25th February 2016) and Form 43_101F1 (as of 30th June 2011) and is to be submitted as a Technical Report to the TSX Venture Exchange ("TSX") in support of DSM's claim to having an exploration property of merit.

The author is reliant on the expertise and integrity of the authors of the technical reports, journal articles, review reports and data obtained from the technical directors of WCMV and DSM who provided most of the data used to compile this report.

The author reviewed the records in the Zambian Ministry of Mines Cadastre Office on 14th January 2022 and believes that the Large Exploration Licence is in good standing; furthermore, the author was able to obtain a copy of the Certificate of Grant and the accompanying terms and conditions of grant. The location of the grant area, registered holders of the licence, and the commodities included in the exploration grant are available on-line at https://portals.landfolio.com/zambia/ and then entering the licence number into the search box. (See also Appendix 1).

The opinion of the author regarding the validity of WCMV's rights to 23246-HQ-LEL as presented in this report is wholly conditional upon the accuracy and completeness of the information supplied by those references named above. The author reserves the right, but will not be obliged, to revise this report if additional information becomes known to the author after the effective date of this report. Please note that the author is not qualified to express a legal opinion on the validity of the legal documents shown to him by the representatives of WCMV and the officials of the Zambian Ministry of Mines Cadastre Office.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 The Exploration Licence and WCMV's Rights & Obligations

In Zambia an exploration licence is granted in terms of the Mines and Minerals Development Act (Act 11 of 2015) [8] read together with the terms and conditions set out in the Mines and Minerals Development (General) Regulations of 2016 [7] which require a written application plus a list of co-ordinates marking the boundary of the licence area applied for. The application is submitted, together with the relevant fees, to the Director of the Mining Cadastre Office, for approval by the Mining Licence Committee. Once granted, the licence holder must submit to the Director of the Geological Survey and the Director of Mines Safety, on a quarterly basis, a comprehensive report in both electronic and paper format which details progress made in exploration of the licence as well as an annual report of progress which must include details of compliance with employment and local development programmes.

World Class Mineral Ventures Limited were granted a Large Exploration Licence ("LEL") over the subject property which measures 5 463,26 hectares in extent for a period of four (4) years beginning on 3rd February 2020 and expiring on 3rd February 2024. The file in the Cadastre office indicates that the terms and conditions to date have been complied with and that the licence is currently valid. The LEL was issued for exploration for Copper, Cobalt, Gold, Lead, Manganese, Nickel, Silver and Zinc. Additional elements may be added on request. The licence may be renewed for two further 3-year periods on application and by permission for further periods thereafter; the area of the LEL will be reduced by 50% at each renewal.

WCMV must pay annual fees of Zambian Kwacha (ZMW) 6 555.91 per annum and has agreed to the following (summarized here) terms and conditions of grant: -

1. Spend an amount of US$185 000 on exploration over the four-year period in preparation (data gathering), camp building, airborne geophysics, data interpretation, and drilling. Exploration programme to begin within 6 months of obtaining the grant.
2. Observe and report on Environmental matters, such as disposal of chemicals, fuels, prevention of soil erosion, vegetation protection measures, rehabilitation, decommissioning of structures and machinery and a closure plan.
3. Ensure preferential employment and training of local legal surface occupants and of Zambian citizens.
4. Promote local business by the preferential use of local suppliers and contractors.
5. Respect and communicate with all affected parties with documentation of agreements reached with surface occupants and their accepted leaders and representatives.

4.2 Surface Rights and Legal Access

The surface rights of the property are owned by the State and occupied by subsistence farmers. The Licence holder is obliged to meet with and record in writing any interaction with the occupiers, the local headmen and tribal chiefs. Compensation for occupancy lost or impacted on is by agreement with the interested and affected parties. Preferential development, skills training, hiring and use of labour is extended to local parties. The Conditions of grant include a clause which states, "*The holder shall not exercise a right under this licence without the prior consent of the legal occupiers of the land and / or local chiefs*". (7)

4.3 LEL Licence Boundaries

The Licence boundaries have not been surveyed or physically beaconed but the current corner coordinates (see Appendix 1) have been provided by the Mining Cadastre Office and are available for on-line inspection by entering the licence number, 23246 into the search box at the Cadastre official site https://portals.landfolio.com/zambia/. There is no obligation on a holder of an LEL to beacon or survey the licence until conversion to a mining right is granted.

4.4 Environmental Obligations

I am not aware of any environmental obligations or liabilities except those listed in the Grant Application document and the Regulations which undertakes to abide by an Environmental Management Plan covering aspects of: -

i. Conservation of water resources by ensuring the safe disposal of any chemicals and their containers.
ii. The prevention of soil erosion.
iii. The construction of impervious sumps to contain spillage of chemicals, fuels, and oils.

Page 166 of the Mines and Minerals (General) Regulations (7) lists under paragraphs 1.c. "*The holder must execute the agreed Environmental Management Plan"*, and under 1(i) "*Permanently preserve or make safe any water boreholes and surrender water rights on expiry of the licence*", and under 1(k) "*Make good any damage caused by removal within 60 days of expiry of the licence any camp, temporary building, or machinery*." Clause 3 states that "*the holder shall be held liable for any harm or damage caused by exploration operations and shall compensate a person to whom such harm or damage is caused*."

The Mines and Minerals Development Act (Act11 of 2015, Part III, paragraph 12(2) (8) states that: "*A person shall not undertake exploration, mining, or mineral processing activities without obtaining the prior*

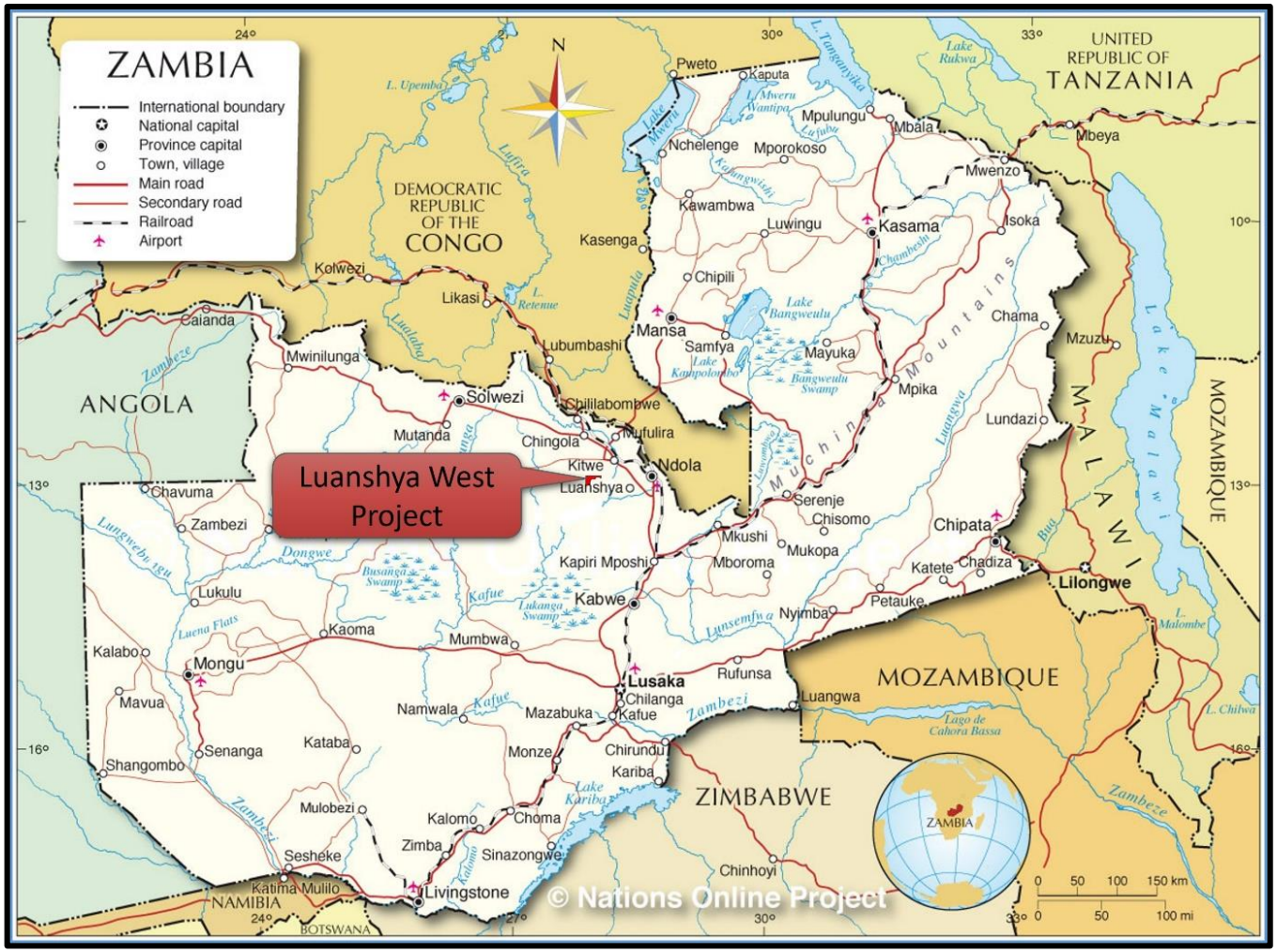
written approval of the environmental impact assessment relating to the exploration, mining or mineral processing operations by the Zambia Environmental Management Agency as provided under section twenty-nine of the Environmental Management Act, 2011".

An environmental impact assessment will be required and approved by the Environmental Management Agency before any planned field work on the subject property is undertaken.

I am not aware of any additional permits required in respect of exploration activities on the property.

Figure 4.1: Location Map – Luanshya West Project on Licence 23246 HQ_LEL

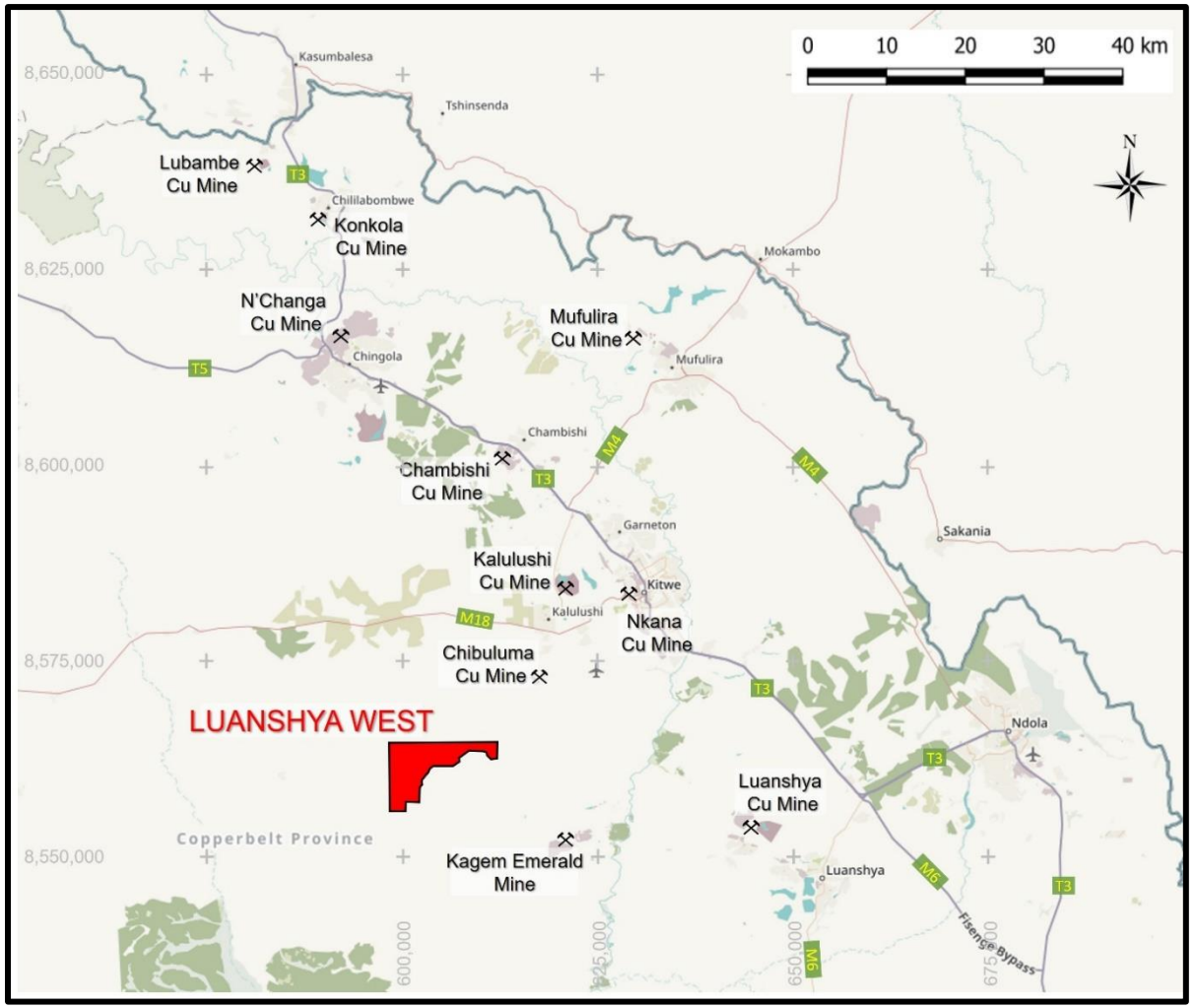
Note: - Location relative to the Railway and major roads



Walker, P W A: The Luanshya West Copper Project, Zambia: Technical Report, January 2022

Figure 4.2: Location of the Luanshya West Project in the Copperbelt

Note the proximity of existing mining infrastructure



Walker, P W A: The Luanshya West Copper Project, Zambia: Technical Report, January 2022

Table 4.1: LOCATION OF LARGE EXPLORATION LICENCE 23246 HQ with co-ordinate list

Form XXIX
(Regulation 58 (3))

REPUBLIC OF ZAMBIA

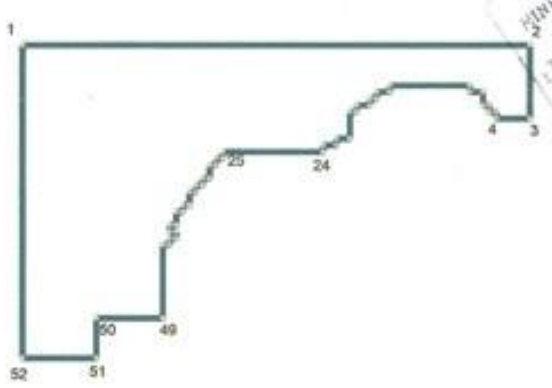
The Mines and Minerals Development Act, 2015
(Act No. 11 of 2015)

The Mines and Minerals Development (General) Regulations, 2016

PEGGING CERTIFICATE

Side	Distance (Metres)	Angles of Direction (deg, min, sec)	CO-ORDINATES SYSTEM: Geographical Coordinates Systems			
			Point	Latitude	Longitudes	Diagram No. 025/2022
				SEE ATTACHED COORDINATES	SEE ATTACHED COORDINATES	Approved by: Sign: Date: 27/1/2022

Scale:1:100000



REPUBLIC OF ZAMBIA MINES DEVELOPMENT 27 JAN 2022 SURVEY SECTION P.O. BOX 31665, 10101, LUSAKA

FIGURE: 1-2-3-4-5-6-7-8-9-10-.....52-1 REPRESENTS 5463.2589 HECTARES OF LAND
FOR World Class Mineral Venture Limited SITUATED IN Lufwanyama DISTRICT
OF Copperbelt PROVINCE OF ZAMBIA.

SURVEYOR: Albert Mwambwa DATE: Jan. 2022 SIGN:

EXAMMINER: Jethro L. Kazuma DATE: SIGN:

LICENCE NO: 23246-HQ-LEL BEACONS DESCRIPTION: Poles painted blue

Geographical Co-ordinates of Luanshya West Project
Licence 23246-HQ-LEL

REPUBLIC OF ZAMBIA

The Mines and Minerals Development Act, 2015
(Act No. 11 of 2015)

The Mines and Minerals Development (General) Regulations, 2016

PEGGING CERTIFICATE

Geographical coordinates for licence 23246-HQ-LEL

STN	DEG	MIN	SEC	N/S	DEG	MIN	SEC	E/W
1	12	58	48	S	27	54	24	E
2	12	58	48	S	28	2	0	E
3	12	59	54	S	28	2	0	E
4	12	59	54	S	28	1	30	E
5	12	59	48	S	28	1	30	E
6	12	59	48	S	28	1	24	E
7	12	59	42	S	28	1	24	E
8	12	59	42	S	28	1	18	E
9	12	59	30	S	28	1	18	E
10	12	59	30	S	28	1	6	E
11	12	59	24	S	28	1	6	E
12	12	59	24	S	27	59	54	E
13	12	59	30	S	27	59	54	E
14	12	59	30	S	27	59	42	E
15	12	59	36	S	27	59	42	E
16	12	59	36	S	27	59	36	E
17	12	59	42	S	27	59	36	E
18	12	59	42	S	27	59	24	E
19	12	59	48	S	27	59	24	E
20	12	59	48	S	27	59	18	E
21	13	0	12	S	27	59	18	E
22	13	0	12	S	27	59	6	E
23	13	0	18	S	27	59	6	E
24	13	0	18	S	27	58	54	E
25	13	0	24	S	27	58	54	E
26	13	0	24	S	27	57	24	E
27	13	0	30	S	27	57	24	E

28	13	0	30	S	27	57	18	E
29	13	0	36	S	27	57	18	E
30	13	0	36	S	27	57	12	E
31	13	0	48	S	27	57	12	E
32	13	0	48	S	27	57	6	E
33	13	0	54	S	27	57	6	E
34	13	0	54	S	27	57	0	E
35	13	1	0	S	27	57	0	E
36	13	1	0	S	27	56	54	E
37	13	1	12	S	27	56	54	E
38	13	1	12	S	27	56	48	E
39	13	1	18	S	27	56	48	E
40	13	1	18	S	27	56	42	E
41	13	1	30	S	27	56	42	E
42	13	1	30	S	27	56	36	E
43	13	1	36	S	27	56	36	E
44	13	1	36	S	27	56	42	E
45	13	1	42	S	27	56	42	E
46	13	1	42	S	27	56	36	E
47	13	1	48	S	27	56	36	E
48	13	1	48	S	27	56	30	E
49	13	2	54	S	27	56	30	E
50	13	2	54	S	27	55	30	E
51	13	3	30	S	27	55	30	E
52	13	3	30	S	27	54	24	E

4.5 Location

Details of the location are given in the above list of corner co-ordinates and shown on the Locality Maps, Figures 4.1 & 4.2 above, while Appendix 1 is a copy of the documents granting the exploration licence to WCMV.

The licence area lies within the Zambian Copper Belt near to the towns of Kitwe and N'dola the second and third largest towns in Zambia by population after the capital, Lusaka (see Location Maps, Figures 4.1 & 4.2).

The project area is close to established copper / cobalt mines with Chibuluma mine some 35Km to the north-east, Chambishi mine 41Km north-northeast, N'changa mine 53Km north-northwest and Luanshya mine (was previously called Roan Antelope) some 40Km east-southeast from the centre of the project area. There is also a large emerald mine, the Kagem mine, located some 10Km. southeast of the project area.

4.6 QP Comment

I am not aware of any significant factors or risks other than loss of the LEL due to non-compliance with the terms and conditions of grant which would affect access, title, or the right to perform exploration over the subject property.

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE & PHYSIOGRAPHY

5.1 Accessibility

The main tarred road from Lusaka, via N'dola to Kitwe (the T3 highway) lies some 35Km. to the east of the subject property and there is an international airport at N'dola with regular flights from Johannesburg, South Africa and Nairobi, Kenya as well as domestic flights from Lusaka.

The property lies some 38Km southwest of the centre of Kitwe and is accessed via a series of gravel roads and tracks branching from the main gravel road from Kitwe to the Kagem emerald mine property. The property is some 70Km west of N'dola town centre. It is feasible that a standard 2-wheel drive vehicle could be used for most of the year, but it is recommended that 4-wheel drive vehicles with adequate clearance be used, particularly during the summer rainy season, between November and March when the tracks are rutted and in poor condition.

Zambia Railways is the national railway of Zambia, one of the two major railway organisations in Zambia, the other being the binational Tazara Railway that interconnects with the Zambian railway at Kapiri Mposhi, some 135Km southeast of Kitwe and provides a link to the Tanzanian port of Dar es Salaam, the major port of Tanzania. Kitwe lies at the end of the passenger services from Livingstone and Lusaka, but freight lines continue to the DRC and south to Zimbabwe and South Africa [25] (See Figure 4.1).

Since the surface rights are granted to subsistence farmers, with relatively small and unfenced farms, there is an abundance of narrow tracks and paths giving access to the entire LEL.

The climate being tropical but at a relatively high elevation above sea level, the natural vegetation can be dense, however farming activities over the entire property results in relatively open ground for access by foot and field work could proceed with relative ease.

5.2 Climate

The climate is classified as being tropical but because of the elevation it is a mild, warm, temperate climate with summer rainfall. Temperatures average 21^0C ranging between 12^0C and 30^0C and there is little variation in temperature or daylight hours over a year. Rainfall averages 1 154mm per annum, largely between November and March, the summer months. [9, 10]

Kitwe lies 12^0 49' south of the equator and falls within the UTC+2-hours' time zone. [10]

The climate allows an uninterrupted operating season for both exploration and mining activities.

5.3 Local Resources and Infrastructure

The subject property lies close to the major Copperbelt towns and mines and there is an abundance of local resources relevant to the mining industry. Kitwe has numerous schools, shops, a university, and well-developed industries to supply mining related goods and services. Health services, both State and private are readily available in Kitwe and or N'dola. The long history of mining in the area means that well-educated and trained personnel are readily available for both exploration and mining activities. [10]

Copperbelt Energy Corporation Plc (CEC) is a Zambian electricity generation, transmission, distribution and supply company listed on the Lusaka Stock Exchange. CEC owns and operates an electricity transmission network in the Copperbelt area with 246 km of 220kV power lines and 678 km of 66kV lines. The company purchases electricity from ZESCO, the national power utility, and sells this across its transmission network to 8 Zambian mining customers with a combined demand of 520MW. CEC is a member of the Southern African Power Pool (SAPP) and trades and wheels power within the pool.[13]

The Zambian Ministry of Energy and Water Development is responsible for the overall management of water supply in the country. [14] In accordance with the Local Government Act, the National Water Policy and the Water Supply and Sanitation Act No. 28 of 1997, the Ministry of Local Government and Housing ("MLGH") and the Local Authorities have the responsibility for Water Supply and Sanitation (WSS) – both urban and rural. MLGH provides policy

guidance, technical and financial control, and facilitates mobilisation of foreign and local funds for capital development. [14]

The National Water Supply and Sanitation Council ("NWASCO") is responsible for regulation of water supply and sanitation service providers. The Ministry of Health is responsible for water quality regulation and the Zambia Environmental Management Agency (ZEMA) is responsible for environmental protection. [14]

There are currently two types of Water Supply and Sewerage service providers for the urban areas in Zambia. These are Commercial Utilities, formed by joint ventures among Local Authorities and Private Schemes formed by companies supplying water and sewerage services as a fringe benefit to employees. Eleven Commercial Utilities and 6 Private Schemes are currently licensed by NWASCO. [14]

5.4 Physiography

The region lies in the East-central African plateau with gently undulating terrain in the district surrounding the subject property. The property itself is relatively flat, with some minor streams and valleys seldom exceeding 50m elevation change over the entire property. The highest point within the property is at 1 250m AMSL. [11]

The most widespread vegetation unit is the Zambezian miombo open forest, more precisely the western group of the wet miombo subtype, with some gallery forests. On the metalliferous soil, steppes, steppe-savannas, or even grasslands are observed. The presence of copper-cobalt mineralization in outcrop or very near-surface can be expressed through steppe-savanna, shrubby savanna and tree savanna types. [12]

A large part of the original natural vegetation has been removed by subsistence farmers and charcoal burning home industries, so probably >75% of the surface area is now either secondary growth or being used for crops.

Photograph 5.1: The photograph illustrates the gravel / sand tracks through the property and a surviving section of Miombo woodland.

5.5 Sufficiency of Surface Rights

Suitable and sufficient areas for open pit mining, tailings dams, recovery plant, waste dumps and heap leach pads are available within the subject property, but the chosen sites will be dependent on the eventual mine and plant design. Since use of these areas will be subject to negotiation and compensation of the current occupants, the QP is not able to accurately assess any risk factors in this regard except to point out that mines have been developed with relative frequency in the Copperbelt Province and it is not expected that insufficiency of surface land will become an impediment to any mine development within the subject property.

6. HISTORY

The history of the subject property is best described by first describing the history of base metal exploration in Zambia since this provides the context for the Historical Exploration Data (Item 9) as well as the Interpretation and Conclusions Section (Item 25) of this report.

6.1 Sources of Historical Exploration Data

The author draws his knowledge for this section largely from the referenced reports and publications as set out below.

6.2 Early Exploration and Mining (taken from J.W. Arthurs – ref.4)

The first European prospectors to arrive in northern Zambia in the 1890's found that many copper deposits had already been mined by ancient local workers. Although they recognized that the mineral potential of the region was huge, the area was considered very remote with no infrastructure and extensive prospecting did not really begin until 1922.

The British South Africa Company, which claimed a vast region of southern Africa including this one, issued mining concessions within what was called the Rhodesia Congo Border Concession (RCBC). Three companies were granted concessions within this large and virtually unmapped region. A hand-painted index map stored in the offices of the Geological Survey of Zambia shows the distribution of the concessions. The Rhokana Corporation Ltd held a 404,000 sq.km concession over what was to become the Zambian Copperbelt and the North-Western Province. In the period between 1926 and 1940 Rhokana geologists carried out the world's first systematic exploration programme. (4)

Rock exposures are generally scarce in this concession area and the method used was very labour-intensive. A geologist walked on a compass bearing accompanied by an assistant pushing a survey wheel and lines of labourers on either side searching for rock outcrop on a front at right angles to the traverse direction. The survey lines were a mile apart so that almost all the ground between traverse lines was inspected. In addition to outcrops, the RCBC surveys also located the great majority of the surficial mineralised occurrences known today. The survey results were collated as a set of hand-drawn maps at a scale of half-inch to one mile (1:126,720), copies of which were recently re-located in the Geological Survey of Zambia. (4)

6.3 The post-1945 Period (from J.W. Arthurs, ref.4)

Following the Second World War, prospecting in what was then Northern Rhodesia was opened to investors. Subsidiary companies of Rhodesian Selection Trust (later

Roan Selection Trust or RST) held the great majority of the former RCBC Rhokana Concession. Between 1947 and 1971 RST, and others working elsewhere in Zambia, built up huge exploration data sets, remnants of which are now stored in the archives of the Chamber of Mines in Kalalushi.

In 1955 a research group from Imperial College London lead by Prof. J.S. Webb pioneered geochemical sampling and rapid analytical methods in Zambia, one of the earliest developments in geochemical surveying in the world. RST used what were then state-of-the art techniques derived from this research to carry out regional stream sediment surveys over a very large region of the Zambian Copperbelt.
The RST companies experimented extensively with geophysical methods without anything other than local technical success. Elsewhere, companies in the Anglo-American group tried airborne electro-magnetic methods, again without unequivocal success. Garlick and Gane, 1965 [(6)] concluded that the challenge to geophysics is largely caused by the masking effect of the weathered profile of variable thickness over the various formations.

6.4. The Geological Survey of Zambia (from J.W. Arthurs, ref.4)

Between 1962 and 1964 the Geological Survey of Zambia mapped the geology based on detailed traversing and photogeological interpretation; Earlier, during the 1950s, RST geologists had realised that geological boundaries were often mirrored by vegetation changes which could be seen on black and white aerial photographs. Disruption to the vegetation by deforestation and bush clearing for subsistence farming have now rendered modern imagery of lesser use.

6.5 Anglovaal Mining Ltd and Teal Exploration & Mining Inc. (from J.W. Arthurs, ref. 4)

In 1972 the mining industry in Zambia was nationalised and exploration ceased. Virtually no further records of prospecting are available for the period from the late 1970s until 1995 when the industry was re-privatised. In April 1995 the Minister of Lands & Mines for Zambia awarded Anglovaal Mining Ltd (abbreviated to "Avmin") a prospecting licence (PLLS100) immediately west of the Zambian Copperbelt which became known as Area 4 covering some 182 294ha in extent (see Figure 6.1 below). In 2004 various Avmin assets, including Area 4, were unbundled and merged with assets of other companies to put into the newly formed African Rainbow Minerals ("ARM"). In 2005, ARM separated its exploration division from the rest of the company and listed it as Teal Exploration & Mining Inc on the Johannesburg and Toronto stock exchanges. At that time Area 4 was re-assigned to a subsidiary company, Teal Zambia Ltd. ("Teal").

In 2008 Teal relinquished their Area 4 licence to concentrate on their Konkola north project which is the current Lubambe mine.

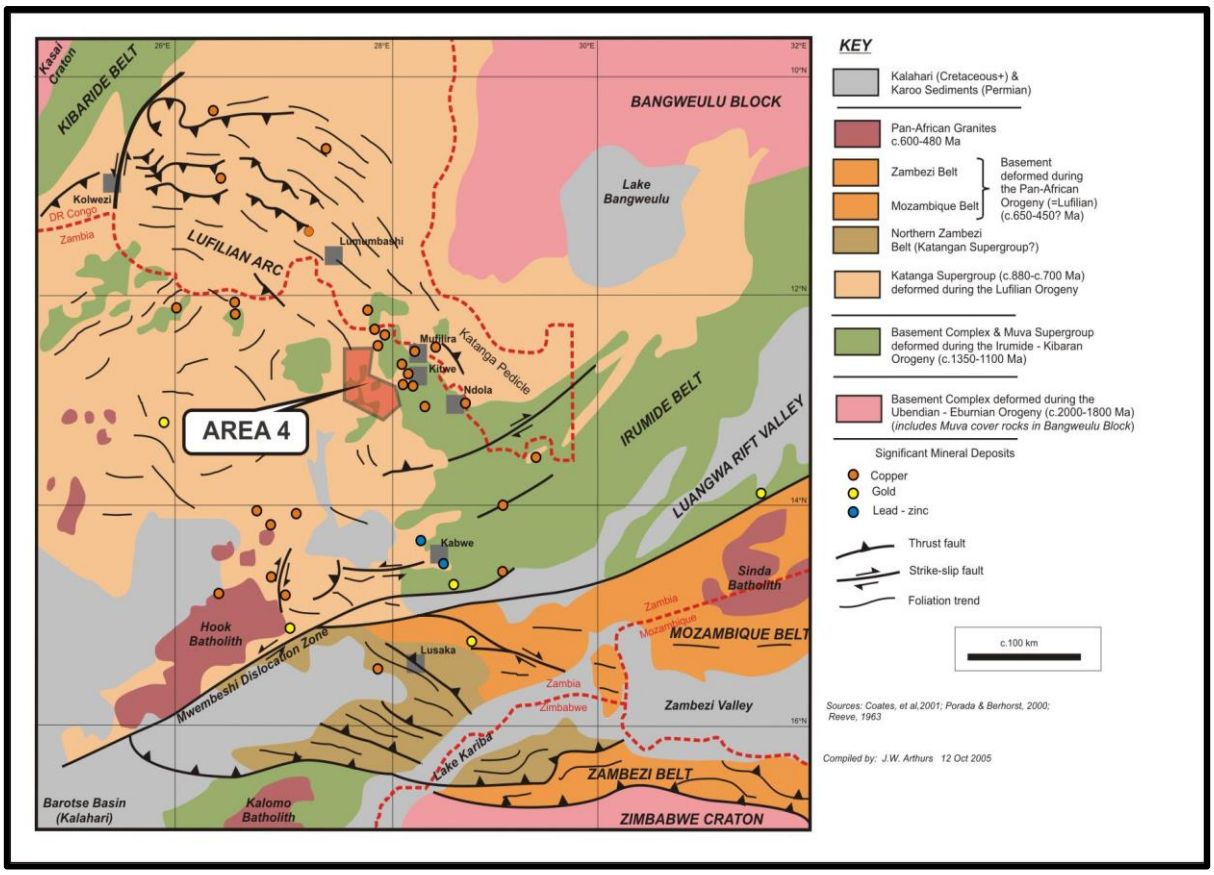


Figure 6.1: Location of Area 4 in relation to the regional geology of Zambia

(from J.W. Arthurs, A review of the Regional Geology and Exploration Targets of Area 4, Oct.2008)

Work completed by Avmin and Teal included regional and follow-up exploration activities in Area 4. In 1995 Avmin commissioned a high-resolution aeromagnetic survey (see Figure 6.2 below). The results showed that previous geological interpretations needed to be revised. The new interpretations would need to include structural control by two sets of major lineaments - NNE and NW – not hitherto recognised, and also magnetic textures reflecting rock types not conforming to the published geological maps.

In 1996 J.C. McMaster wrote a historical review of Avmin's previous exploration [15]. Target generation and progress was described in two further reports in 1998. The following exploration criteria were used to generate targets for follow-up:

- Suitable host rock - Lower Roan and carbonaceous shales in the Mwashia/Lower Kundelungu,
- Regional scale structures – including continuity with known deposits, fault intersections and folds providing dilational structures,
- Mineral occurrences and geochemical anomalies,
- Magnetic anomalies – inferred to be faults or magnetite horizons.

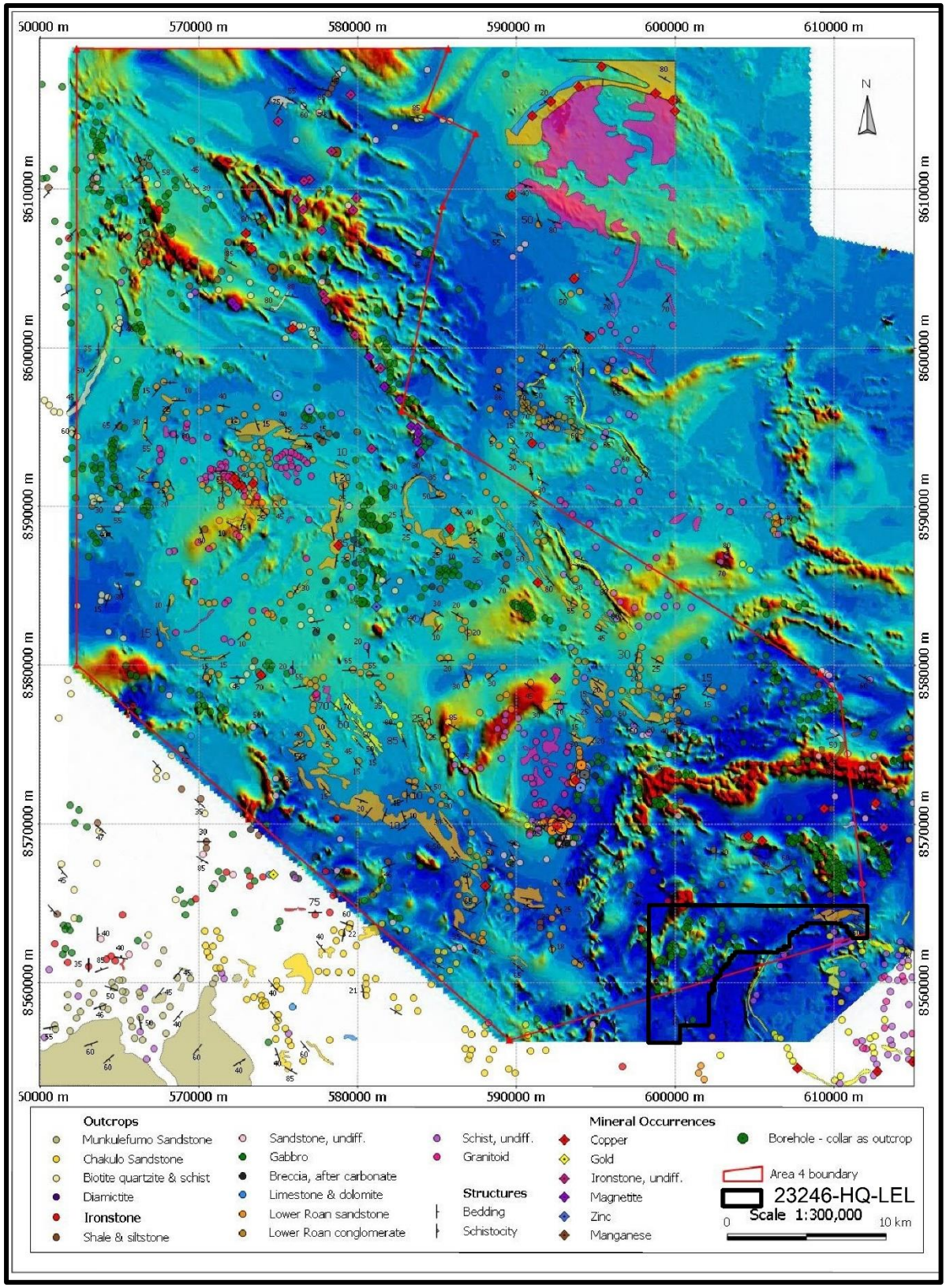


Figure 6.2: The Teal aeromagnetic survey (1995) in reduced-to-pole transform overlaid with outcrops digitised from the RCBC geological survey maps (1930s) & the Location of Subject Property

From J.W. Arthurs – Reference 4)

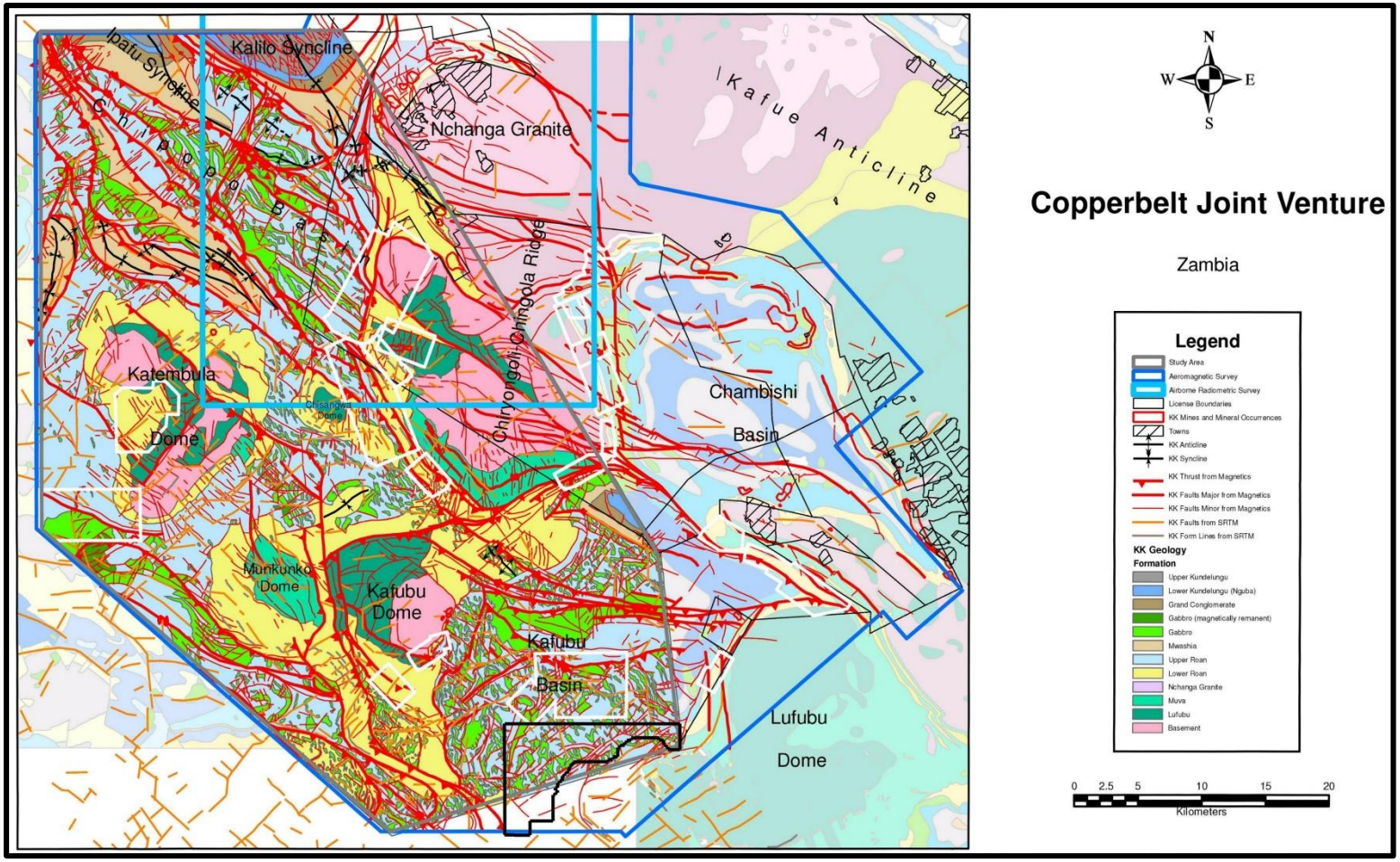


Figure 6.3: Regional Geology of Teal's Area 4 with Exploration Targets outlined in white and the subject property in black *(From K.P. Knupp reference 17).*

In 2006 Marek Rydzewski, Teal Senior Geologist, acquired much of the RST data set for Teal from the Chamber of Mines and catalogued and extracted the stream sediment geochemistry data for Teal. (4)
In 2006 geophysical consultant Klaus Knupp re-interpreted the aeromagnetic survey data and produced a new geological interpretation in a GIS format and recommended further exploration on several new targets (see Figure 6.3 above) (4, 17).

As a result of the above work, Teal selected two target areas for further work – priority was given to the **Kabula Prospect**, first discovered by RST and drilled in the 1970's and again in 2007 (a total of 6 255m diamond drilling is reported) resulting in localized high-grade Copper (best intersection of 18m @ 6.4% Cu) but was deemed to be too patchy and small for further consideration. The Kabula mineralisation, estimated in 2008 to be some 3.2Mt @2.3% Cu using a 0.5% Cu cut-off, is geochemically distinct from the classic Copperbelt ores. Multi-element assays show only background cobalt, but have good correlations with Bi, Ba and Ag with variably elevated background levels of Au. (26) *The Kabula Prospect lies some 7.5Km west of the subject property and is located over similar geology.*

The other Teal target now forms the subject property and was explored using geochemical soil sampling on a grid as described in section 9.1.2. below. No further work or licence holders are known since 2008 when Teal relinquished their Area 4 concession which included the subject property. On 3rd February 2020 WCMV acquired the exploration rights to the subject property. WCMV have not done any further field work on the property.

7. GEOLOGICAL SETTING AND MINERALISATION

7.1 Regional Geology (5)

The Neoproterozoic sediments of the Katanga Supergroup are widespread and economically very significant in Central Africa as the host rocks of the Central African Copperbelt. The Katanga rests unconformably on Meso- and Palaeoproterozoic aged Basement Complex rocks, largely granites.

7.1.1 The Basement Complex

7.1.1.1 The Lufubu Metamorphic Complex

The Lufubu Metamorphic Complex comprises what earlier geologists called the Lufubu Schists, gneisses, and older granites. Its protolith was derived from long-lived calc-alkaline magmatic arc sequences. The arcs are believed to have collided with the Tanzanian craton during the Ubendian Orogeny, between 2.05 and 1.85 Ga, and accreted onto the Congo craton during the Kibaran Orogeny, between 1.4 and 1.0 Ga (18).

Garrard [19] describes soft grey quartz mica schists, locally with garnets, biotite gneisses interbedded with grey granite and hornblende gneiss, locally with relic gabbroic textures, in the Katembula Dome. Pale grey quartzites in the south of the Katembula Dome and in the Mwambashi Dome are ascribed to the Lufubu but could also belong to the Muva Supergroup.

There are numerous acid and intermediate plutonic rocks outcropping in the Basement Complex. Garrard [19] describes grey granites, ranging from alkali granite through adamellite to granodiorite intruding the Lufubu schists but not the Muva quartzites. Schistose, leuco- and micro-granite varieties are recorded. Recent petrographic work on the grey granitoid in the Basement beneath the Kabula prospect shows it to be tonalite.

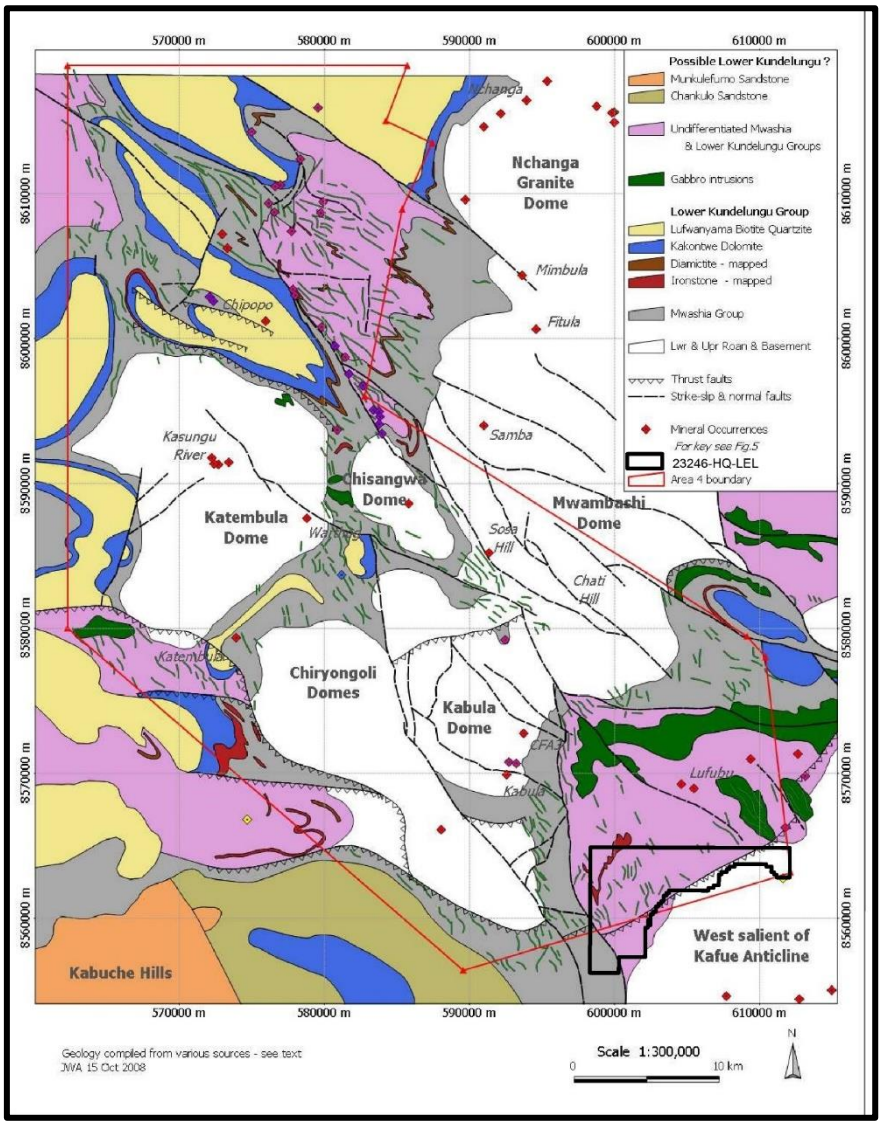


Figure 7.1: Geology of Teal's Area 4 (red outline) and location of the Subject Property (black outline)

(a geological compilation map from various sources as compiled by J.W. Arthurs [4]

7.1.1.2 The Muva Supergroup

Daly and Unrug [20] defined the Muva Supergroup as the post-Ubendian (2 100 – 1 800 Ma) and pre-Irumide (1 300 – 1 100 Ma) sedimentary rocks of northern, eastern and southern Zambia.

The ridge-forming quartzites commonly found in the Basement of the Copperbelt, are correlated with those in the Eastern Province and with the relatively undeformed siliciclastic successions of the Northern Province. The typical Muva Quartzite is a sugary re-crystallised orthoquartzite or sericite quartzite outcropping in narrow ridges which can be traced for many kilometres along strike.

Quartz mica schists are known to lie between the quartzites although they are rarely seen in outcrop. Criteria for the distinction between the Muva schists and the Lufubu schists are not well developed and the mutual boundaries on the map may eventually prove to be somewhat inaccurate.

7.1.1.3 Younger Granites

The Nchanga Red granite outcrops extensively around Chingola and south of it. The granite intrusion forms a striking elliptical feature on the aeromagnetic survey. The Nchanga Granite is coarse grained with large euhedral microcline phenocrysts and has been dated at 883 +/- 10 Ma. [21] . This date is important not only because it is post-Muva and post-Irumide but also because it provides an older constraint on Katangan sedimentation.

There may be other younger granite bodies in the district, but they are not distinguished separately on the RCBC outcrop maps and are not shown separately from other granites on the present map.

7.1.2 The Katanga Supergroup

There are two schemes of stratigraphic nomenclature presently in use for the Katanga Supergroup, but this report uses the traditional nomenclature as used by Selly, *et.al.,* [22].

7.1.2.1 The Lower Roan Group

The Lower Roan Group is formally divided into the Mindola Clastics Formation at the base and the Kitwe Formation which overlies it. The Lower Roan is economically the most significant stratigraphic unit in the Copperbelt because it hosts the major stratiform copper orebodies.

The Mindola clastics are texturally immature coarse clastics deposited in fluvial, aeolian and fan delta environments. Arkosic sandstones are a characteristic feature. Thickness variations are common, the result of deposition in small fault-bounded basins. Average thicknesses are generally 200 – 300m. [22]

The lowest unit of the Katanga is a boulder conglomerate which rests directly on the Basement. It is found NE of the Katembula Dome, NE of the Kabula Dome, S of the Chiryongoli Domes and in the Mimbula syncline. Distinct Lower Roan sequences have been identified around each of the domes [19]. The best exposed is around the northern rim of the Katembula Dome where Garrard [19] has described the following succession:

Top- contact with carbonates

- Schistose quartzite
- Ridge-forming quartzite
- Schistose quartzite
- Ridge-forming quartzite
- Schistose quartzite
- Aeolian cross-bedded quartzite
- Pebble conglomerate
- Boulder Conglomerate

Bottom - unconformity

In the well-studied sections of the Copperbelt Mines east of the subject property the Kitwe Formation begins with a mineralised siltstone, the Ore Shale or the Copper Orebody Member. This is followed by cycles of sandstones, siltstones and occasional thin dolomites laid down in a marginal marine environment.

7.1.2.2. The Upper Roan Group

The Upper Roan Group is predominantly carbonate and, as such, is not well exposed. In the Copperbelt the first significant dolomite unit is taken as the base of the Upper Roan Group. Low ground, reddish soils or black and peaty gley soils in dambos (grassy clearings around headwater swamps) are characteristic. Some schistose sugary dolomites can be seen in drill cores. Such exposures as can be found are often of dolomitic breccia with unsorted angular and rounded polylithic fragments in a massive grey matrix. Its origin is debated but it is commonly thought to be derived by exsolution of evaporites. Thicknesses vary considerably.

7.1.2.3 The Mwashia Group

In the classic Copperbelt successions, the Mwashia Group is the laminated shale-siltstone succession lying directly above the Upper Roan carbonates. The top of the Mwashia is characterised by carbonaceous shales.

Gerrard's map [19] shows ironstone outcropping in several places as thin folded bands. It is described as dark brown or grey quartz-haematite-magnetite ironstone with well-defined streaky banding. A massive magnetite-rich variety is also described. Although alternative interpretations are possible, it seems most likely that these are sedimentary ironstones forming part of the Mwashia Group.

Their exact stratigraphic position is not clear, although the interpretation on the map suggests they are discontinuous bands near the top of the Mwashia succession. The ironstone on Barungu Hill in the extreme south-west of the area is described by Garrard as heterogeneous with pale and dark laminae which could be streaked out fragments of different rock types. It is therefore interpreted as an "Ironstone tillite".

7.1.2.4 The Lower Kundelungu Group – Grand Conglomerat

The marker horizon for the base of the Lower Kundelungu everywhere in the Katanga Supergroup in Zambia and in the DRC is the Grand Conglomerat. This is a diamictite consisting of unsorted polylithic fragments in a carbonaceous shaley matrix which is commonly pyritic. Its stratigraphic significance lies in its interpretation as a tillite and correlated with the Sturtian episode of world-wide glaciation, dated elsewhere at 740 Ma. Outcrops of diamictite are rare although it seems possible that detailed re-examination of the Mwashia carbonaceous shales could reveal occasional clasts to prove the presence of diamictite.

7.1.2.5 The Lower Kundelungu Group – Kakontwe Dolomite Formation

The typical Kakontwe Dolomite above the Grand Conglomerat is fine-grained, blue grey to white, massive and laminated. Its more homogeneous appearance distinguishes it in outcrop and in drill core from the more varied dolomites, dolomite breccias and dolomite schists which are typical Upper Roan.

7.1.2.6 The Lower Kundelungu Group – Lufwanyama Biotite Quartzite Formation

The upper parts of the Lower Kundelungu Group consist of argillaceous quartzites and shales which have long been known to have a distinctive "peppercorn" texture on aerial photographs [23]. The Lufwanyama Biotite Quartzite rests on the Kakontwe Dolomite.

7.1.3 Intrusive Gabbro

Metagabbro is found throughout the district as low mounds of spheroidal-weathered rounded boulders of a very hard dense rock, often with small clots of amphibole and epidote. Garrard [19] describes a range of compositions from fresh gabbro through various stages of alteration to completely altered amphibole-scapolite-epidote rock. In drill core it can be seen to be intrusive with narrow chilled margins. The gabbros typically intrude Upper Roan, but also cross-cut Mwashia and Lower Kundelungu groups and are dated at 765 to 735Ma.

The aeromagnetic survey by Teal has a large number of high amplitude anomalies, many of which correlate with known outcrops of gabbro. Knupp's [17] geophysical interpretation shows a great many basic intrusions, far more than has ever been shown elsewhere in the Copperbelt. Many of the gabbros are highly magnetic

which produce dis-proportionately large anomalies. Most of the magnetic anomalies are clusters of small linear features mainly oriented NE. It seems likely that they represent a dyke swarm. There are also a few examples of much larger magnetic anomalies covering many sq.km, notably in the SE. It is suggested that these are sills [4].

7.2 Local Geology

The subject property is entirely soil covered with no known outcrop. The soils are largely residual but there are certainly signs of some transported soil (see photographs 2 & 3 below) horizons with rounded quartz pebble layers in the soil profile probably signifying a flood event.

Photograph 7.1: Road borrow pit showing a soil horizon marked by rounded quartz pebbles

Photograph 7.2: Close-up view of the pebble layer in the borrow pit

The subject property has been selected primarily because the interpretation of sub-surface geology, mostly on the evidence of black and white photogeological interpretations backed up by airborne magnetic surveys, indicates the presence of the unconformable contact between basement granites and the Lower Roan Group sediments with several interpreted faults (See Figure 7.2 below).

No known mineralisation has been identified in either outcrop or by means of drillholes or other sub-surface excavations.

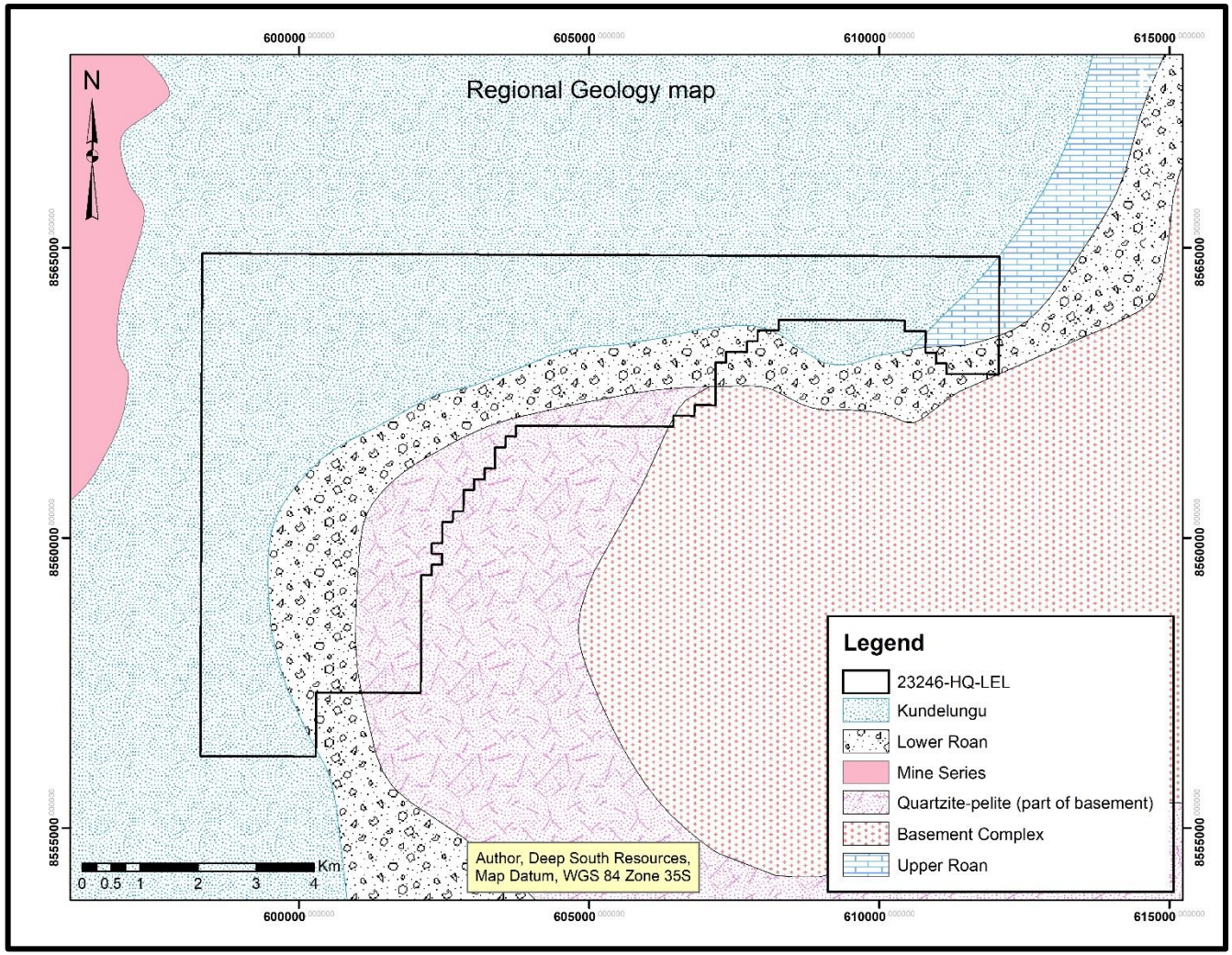


Figure 7.2: Interpreted Geology of the Subject Property

Walker, P W A: The Luanshya West Copper Project, Zambia: Technical Report, January 2022

8. DEPOSIT TYPE

The Central African Copperbelt is the world's largest sediment-hosted stratiform Cu-Co province. The ore deposits occur within the Roan Supergroup of the Neoproterozoic Katangan Sequence (~880 and ~600 Ma). Over the past 80 years, a syngenetic-diagenetic origin of the ores has been favoured, but an epigenetic (hydrothermal) model for the mineralisation has also been proposed.

This idea is being re-evaluated in recent studies, which have important applications for regional exploration programmes looking for new deposits. Based on the tectonic setting within the Pan-African Lufilian fold belt, the geological characteristics of mineralisation (stratiform as well as cross-cutting epigenetic vein styles of mineralisation), the super-large dimension (500x100 km), and enormous Cu-Co resources (>190 Mt Cu metals), it is suggested that basin-wide brines were responsible for the mineralisation. However, the regional fluid characteristics are still poorly known, and ore genesis models still require extensive further study. (24)

Currently, a major project to study fluid inclusions from Cu-Co deposits in the Zambian Copperbelt is being carried out by researchers at the Witwatersrand Economic Geology Research Institute to document physico-chemical conditions of fluid evolution in the Copperbelt. The preliminary results indicate that H_2O-NaCl fluids predominated in early-stage veins, whereas CO_2-bearing brines are the major fluids associated with post-depositional mineralised veins. The latter may either represent a discrete event of mineralisation, or the remobilisation of early stratiform mineralisation. (24)

The presence of K-feldspar, biotite/phlogopite, muscovite and an associated 'enrichment' in potassium often led workers to believe that these may represent signs of hydrothermal K-metasomatism related to later metal-bearing epigenetic fluids. These are, however, all of sedimentary origin. The basement provenance from which these sediments originated is of an alkali granite/granitoid composition, possible very similar to those associated with Ernest Henry/Olympic Dam-type Fe-Cu (Co)-U±Au deposits. These may have been the original source of the Cu-Co±U, now concentrated within the Copperbelt 'ore shale'. (5)

Signs of evaporitic precursors are sporadically present on the Zambian side, with dolomite the most common. However, as the more basement-distal sabkha-type evaporitic chemical sediments start to dominate on the DRC side of the border, the complete picture of a 'Kupferschiefer-type' deposit emerges. Here sabkha conditions prevailed across a wide carbonate inner ramp, with coastal sabkhas and alternating shallow marine incursions. Evaporitic dolostones formed during dry cycles and siltstones during wet ones. Anoxic conditions prevailed within the sabkha lagoons – often cut off from fresh sea water influx during dry cycles. This led to the preservation of organic carbon and the formation of syngenetic to early diagenetic pyrite. (5)

Carbonatization and dolomitization of evaporites results in the creation of increased secondary porosity (up to a maximum of 22%). The presence of magnesite indicates that late-stage subsurface dolomitization occurred at greater depth and higher temperatures. Thermochemical sulphate reduction ("TSR") and/or bacterial sulphate reduction ("BSR") and associated dissolution of evaporitic sulphates subsequently occurred ($2CH_2O + SO_4^{2-} = 2HCO_{3-} + H_2S$). Organic carbon is needed for BSR, with CO_2 and H_2S being produced. This CO_2 can also cause carbonate dissolution, which can further increase the porosity. The pores are thus filled with reducing H_2S- and CO_2-rich fluids. 'Secondary' diagenetic carbonates and Fe sulphides can be formed. Introduction of an oxidizing Cu-Co metal-bearing brine must have taken place before secondary porosity and permeability were destroyed by subsequent metamorphic events. This is effectively a mixing of two fluids – (1) a reducing H_2S-rich pore fluid residing within the host rocks and (2) an oxidizing Cu -Co metal-bearing fluids originating from basinal brines due to dewatering of the underlying siliciclastic filled basin. Hydrothermal phases then fill the secondary porosity, namely (i) Cu- and Co-sulphides, (ii) quartz, and (iii) dolomite. This diagenetic mineralization event was later overprinted by greenschist facies regional metamorphism, which resulted in some localized remobilization of precursor phases. [(4)]

The stratigraphic position of Cu-Co mineralization is controlled by the inherent characteristics of the host sedimentary rocks. There is thus a very strong lithological control on the Cu-Co mineralization. This lithological control was governed by the sedimentary and physiochemical characteristics of the reducing 'grey bed' host rock and underlying oxidized 'red bed' sediments and alkali granitoid basement, namely:

- Stratabound nature
- Basin-wide occurrence
- Evaporitic sulphates
- Organic carbon
- Dolomitization
- Bacterial reduction (BSR) and/or thermochemical sulphate reduction (TSR)
- Increased secondary porosity and permeability
- Oxidizing metal-rich footwall rocks
- Mixing of two fluids
- Reducing H_2S +CO_2 pore fluids in host rock
- Oxidizing Cu-Co-bearing brines intruding from underlying footwall rocks at low temperatures (±100°C to ~200°C).

Later remobilization of the sulphides and associated gangue phases into discordant-concordant veins during the Lufilian orogeny tectonic and metamorphic event is evident throughout the Copperbelt. This event is characterized by higher metamorphic temperatures (up to 420°C) and with copper solubilities: 150°C, 25 eq. wt.% NaCl, pH=4.5, S=0.001 mol.

The Central African Copperbelt deposits thus appear to be diagenetic to late diagenetic orebodies, with a very strong lithological control governing their geological locality and distribution. The main exploration target for primary Cu-Co Copperbelt deposits remains the Lower Roan (Zambia) and equivalent evaporitic horizon in the DRC. [4]

9. EXPLORATION

The Issuer (DSM) and their joint venture partner, WCMV, have obtained whatever geological and exploration data is available from previous holders of grants over the subject property and also various publications of the Zambian Geological Survey and compiled this data in a GIS database.

No field work has yet begun, and it is the intention of the joint venture partners to accelerate exploration by giving effect to the proposed exploration programme as outlined in Section 26 (Recommendations) below.

9.1. Teal's Regional Geophysical Exploration Data

The data was described and evaluated for Teal by geophysical consultant K.P. Knupp [17] as follows: -
"The main airborne magnetic grid had been merged from several surveys by Geodass (Pty) Ltd., however the main portion covering Area 4 was acquired for ARM Exploration (Zambia) Limited in 1995.

All anomaly traces and faults were then superimposed on the existing geology data of the study area. The most detailed regional geological coverage available was the map of the Chingola Area (Garrard P. 1995) supplied by ARM Exploration (Zambia) Limited. Interpretations of the ARM Exploration ground geophysical data were also available and were studied to provide an understanding firstly of the geophysical signatures of lithologies, and secondly of the confidence level of the understanding of these signatures. The geophysical responses over the mapped geology were thus closely inspected, and a simplified stratigraphy subsequently chosen which forms the best framework for the regional interpretation of the study area.

Using the characteristics established above, the extent of the lithologies was mapped systematically over the study area. Unfortunately the availability of aeromagnetics and SRTM (Shuttle Radar Topography Mission) coupled only with limited extent of low quality radiometrics limits the confidence level and resolution of the lithological interpretation. As a result, for instance, the Lower Roan Group

could not be subdivided further and was mapped only as a single unit due to its overall magnetically quiet signature."

Knupp's interpreted lithologies are shown in Figure 7.1 and the interpreted geology of the subject property as shown in Figure 7.2 is largely derived from the airborne magnetic data. Note that no field ground truthing was undertaken to confirm these lithological interpretations.

Knupp concludes that sediment-hosted stratiform Cu-Co deposits of the Copperbelt type are notoriously difficult to detect remotely using geophysical techniques. Their mineralisation consists mainly of disseminated copper and cobalt sulphides occurring together with pyrite, all of which are chargeable, but non-magnetic and, in disseminated form, essentially non-conductive. These sulphides are difficult to separate geophysically from host rock signatures even on the ground. The interpretation of airborne geophysical data over the Copperbelt Joint venture area has confirmed complex fold-thrust tectonics of Lufilian age and younger, possibly late metamorphic brittle faulting. The lithological interpretation is of a somewhat lower confidence level compared to the structural interpretation due to the availability only of aeromagnetics and DEM (Digital Elevation Modelling), augmented by relatively low-quality airborne radiometrics in the north-east.

Knupp notes that induced polarization (IP) has historically been the most successful tool for direct detection, with gravity and magnetics only used indirectly to map the host rock formations and genetically significant structures such as syn-sedimentary growth faults.
Knupp identified a total of 11 exploration targets for strata-bound vein-hosted Cu (Pb, Zn, Co, Ni, Cd, Ag +-Au) mineralisation and 1 target for stratiform Cu-Co mineralisation were identified for further follow-up (See Figure 6.3 above).

Knupp states – "The following follow-up recommendations are made for the single stratiform Cu-Co target:

i. The target area should be assessed on the ground for the best application of geochemical surveys (soil geochemistry versus auger geochemistry or RAB etc) and the appropriate geochemical surveys should then follow.
ii. Prospective soil anomalies should be followed up with IP/resistivity for direct detection of sulphides, and
iii. Drilling to confirm sulphides and their extent and tenor."

9.2 Teal's Soil Geochemical Grid Survey

The geochemical soil sampling survey over the majority of the subject property is apparently the result of follow up work resulting from an interpretation of the RST stream sediment sampling results and K.P. Knupp's recommendations. A N-S grid measuring some 13,5 Km x 4 Km was laid out with lines 500m apart and sampling stations every 100m along the lines.

It seems that very little is known about the date when the samples were collected (possibly 2007?) and the method used to collect the samples, but it is speculated that Teal sampled the B soil horizon and sieved each sample to collect the -80# fraction which was analysed by XRF (X-ray fluorescence). A total of 850 samples were collected and parts per million (p.p.m.) determinations for As, Ca, Co, Cr, Cu, Fe, Hg, K, Mn, Ni, Pb, Rb, S, Se, So, Sr, Th, Ti, U, W, Zn and Zr were obtained. The Cu and Co results are shown in Figures 9.1 and 9.2 below and the author performed a simplistic statistical analysis to determine a Chalcophile Index (Figure 9.5) from the Cu, Co, Zn (Figure 9.3) and Ni (Figure 9.4) results. The basic statistics for the chalcophile Index elements are shown in Table 9.1 below.

Table 9.1: Basic Statistics of the Soil Geochemistry Results for selected elements

Element	A. Mean	Maximum	Minimum	Std.Dev.
Cu	64.6	718	18	40.8
Co	55.5	466	41	57.6
Ni	60.8	254	34	34.8
Zn	15.3	55.6	9	8.3
Chalc. Index	1.6	13	0	1.6

Arthurs [4] review report for Teal comments about the efficacy of soil geochemistry data sets as follows: -

"Both the historic and the recent geochemical data sets suffer from the constraint that only near surface mineralisation can be identified. Even then the soil profiles must be suitable. All exploration programmes so far have investigated the most obvious geochemical anomalies to a greater or lesser extent. Mineralisation which occurs either at depth or beneath blanketing superficial cover of a kind which does not show geochemical anomalies will almost certainly be encountered in due course. Since geophysical techniques cannot be relied upon to identify such mineralisation directly (see Knupp's comments above), the only course open to exploration is drilling. Exploration budgets should therefore be managed to maximise drilling in the knowledge that many holes will have to be drilled simply to obtain geological information. In general, the greater and more accurate the local geological knowledge, the better will be the chances for an economic discovery."

It should be noted here that Carrollite ($CuCo_2S_4$) is the principal cobalt mineral found in the Copperbelt mines while Chalcocite (Cu_2S), Bornite (Cu_5FeS_4) and Chalcopyrite (Cu_2Fe_2S) are the principal copper minerals [27].

QP Comments: - During the field visit (see paragraph 7.2 above) it was noted that although the soils appear to be largely residual, there are also areas where transported soils are present. It is likely that a number of factors influence the efficacy of soil geochemistry surveys in the Copperbelt as an indicator or pathfinder for Cu-Co mineralisation: - the ratio of residual vs transported soils (residual soils may reflect the underlying rock geochemistry but transported soils will mask them), the amount of bioturbation (greater bioturbation may enhance underlying rock chemistry in soils), development of highly absorbent clays / laterite and very leached soils in the tropical climate will adsorb / absorb Cu / Co. Given that there are several negative factors, if there are ANY anomalies under such conditions, then one had better follow up with further exploration. Especially if the anomalies are co-incident for both Cu and Co (which tends to be more mobile than Cu).

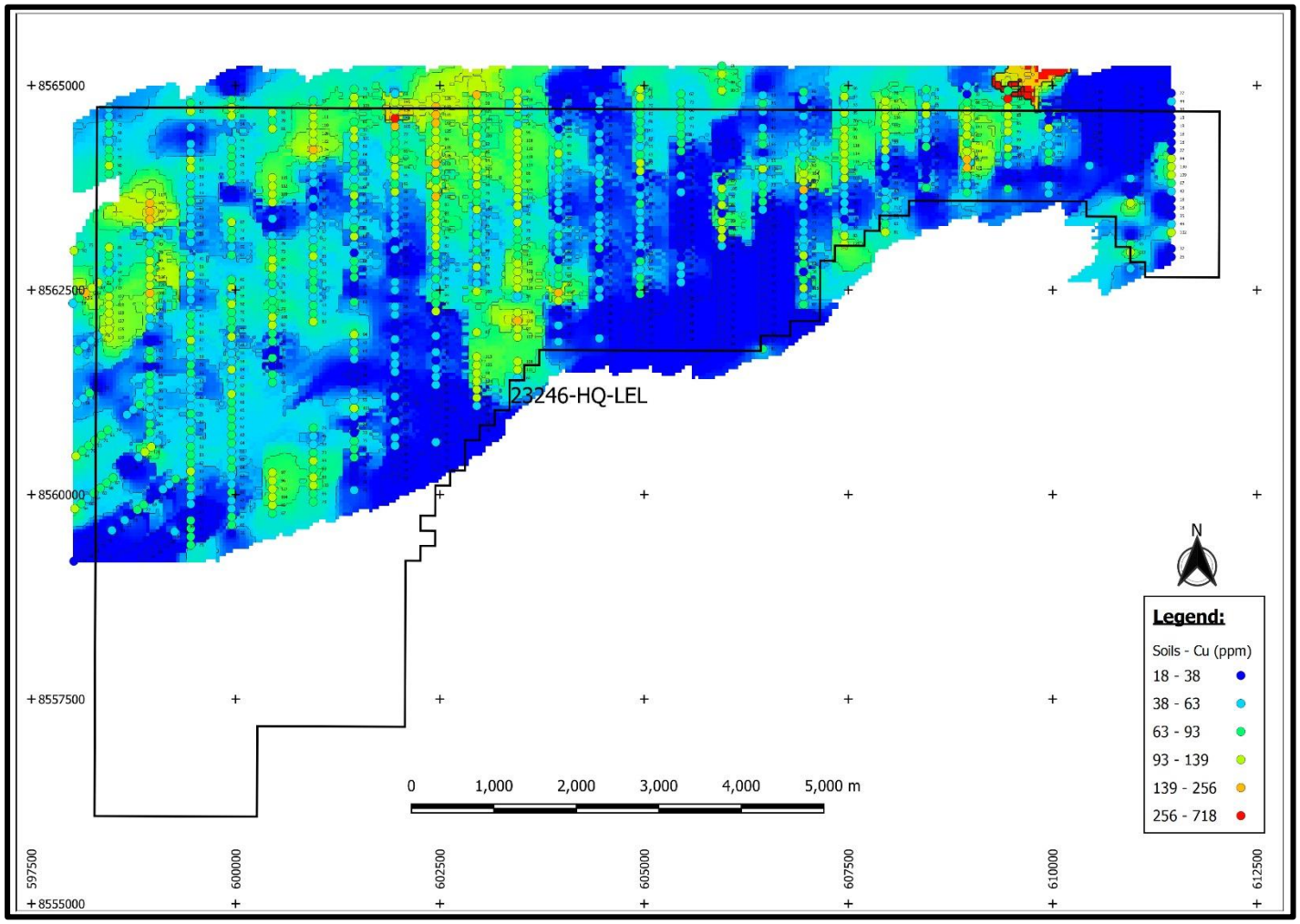


Figure 9.1: Copper in soil geochemistry

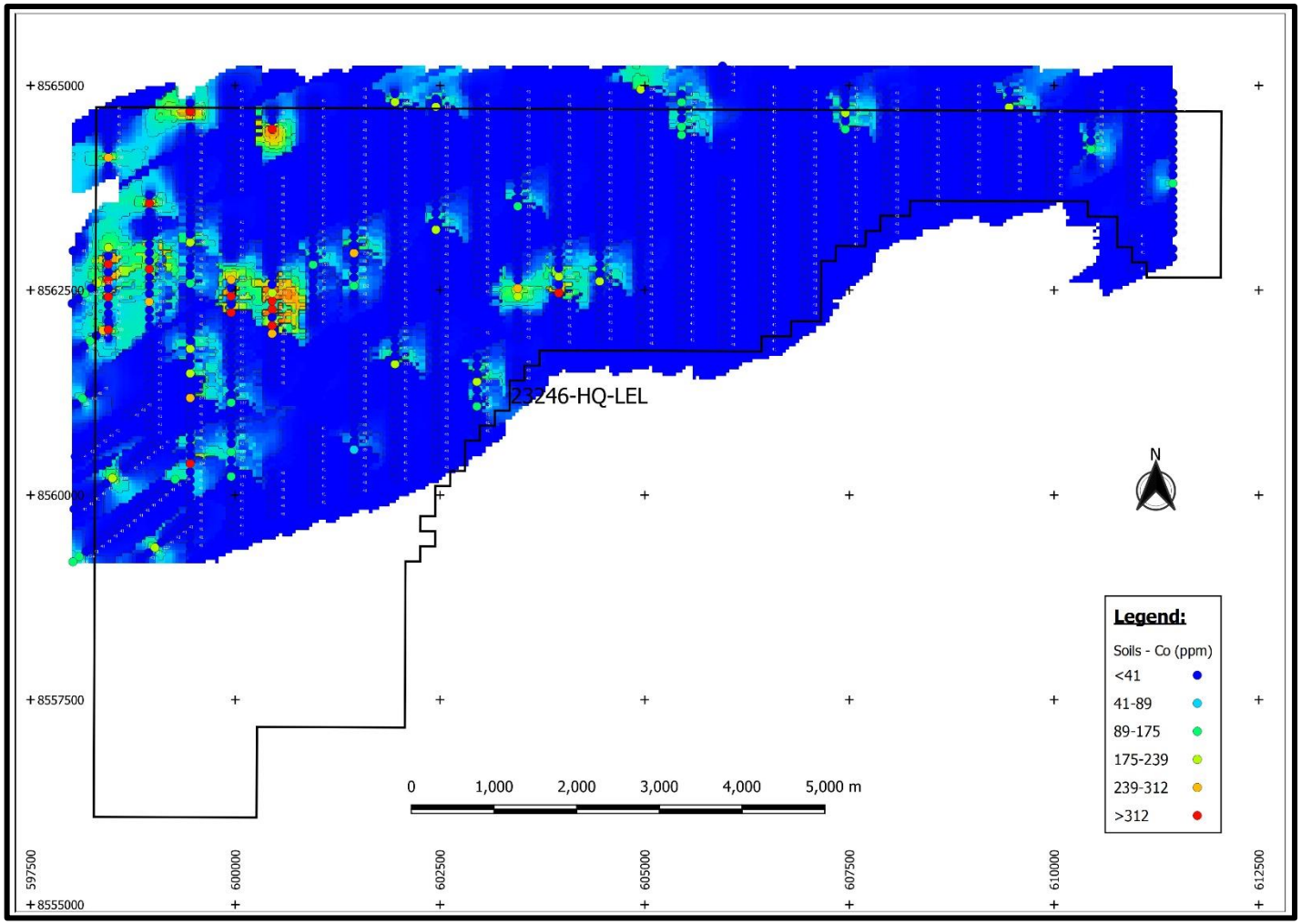


Figure 9.2: Cobalt in soil geochemistry

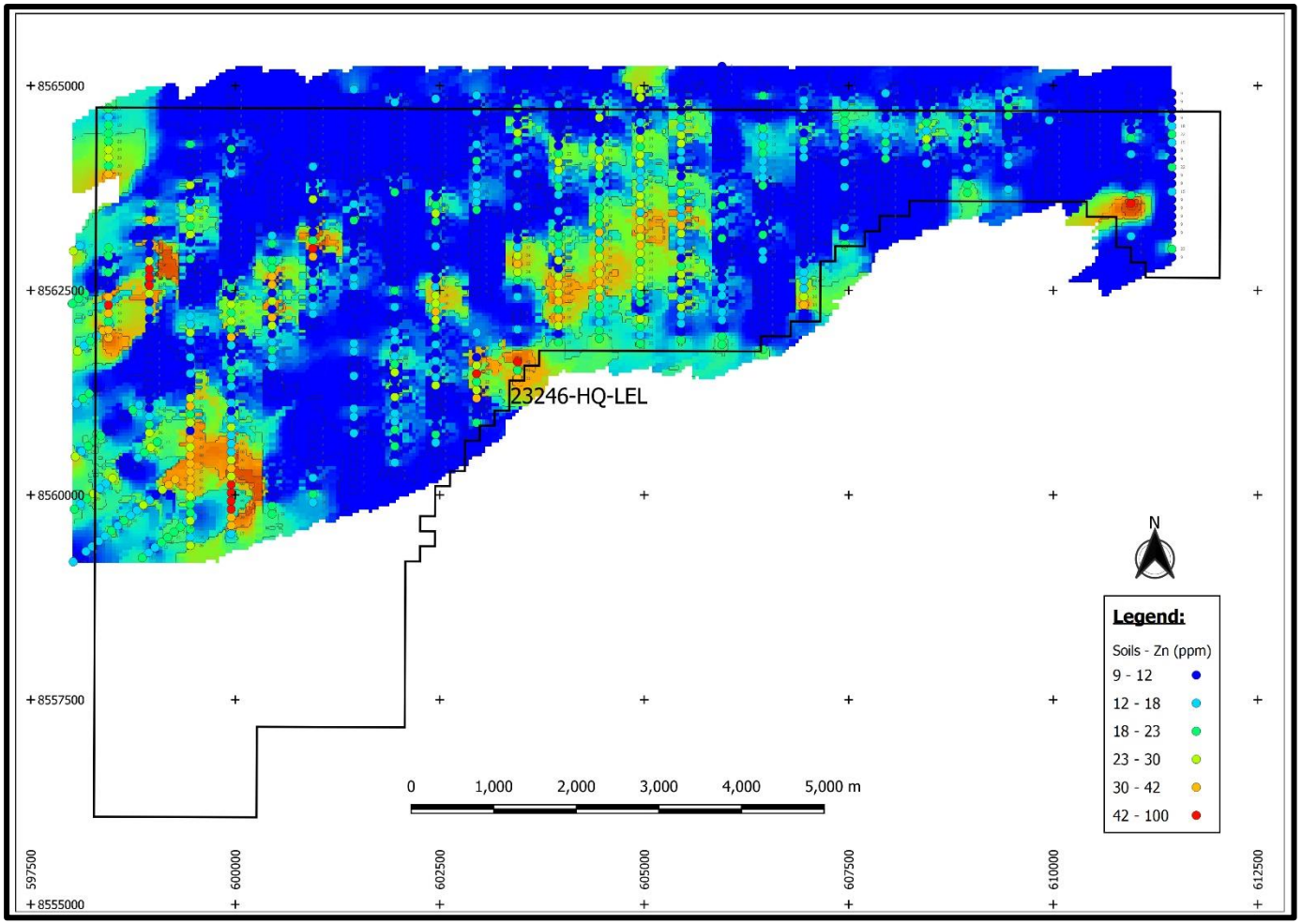


Figure 9.3: Zinc in soil geochemistry

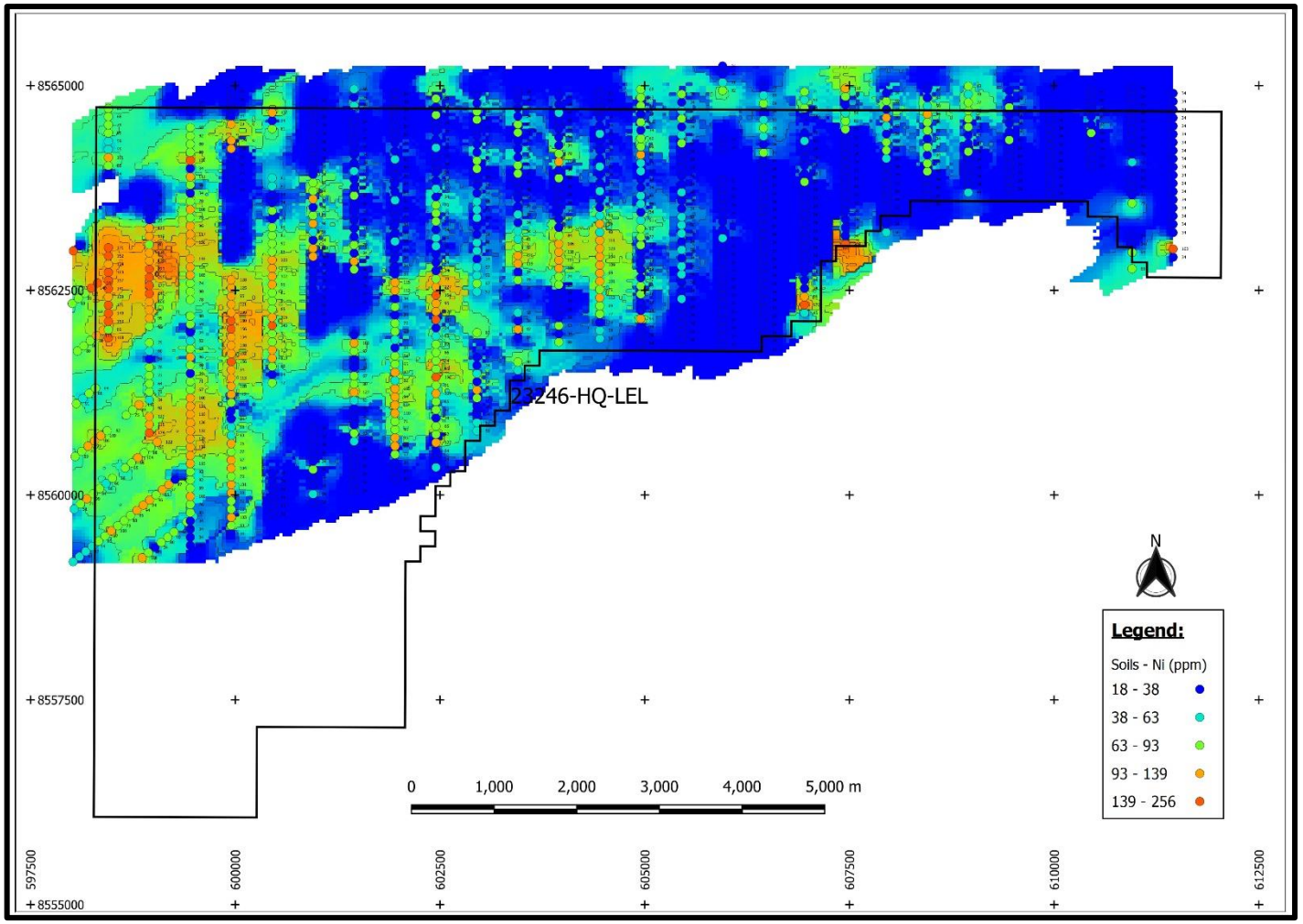


Figure 9.4: Nickel in soil geochemistry

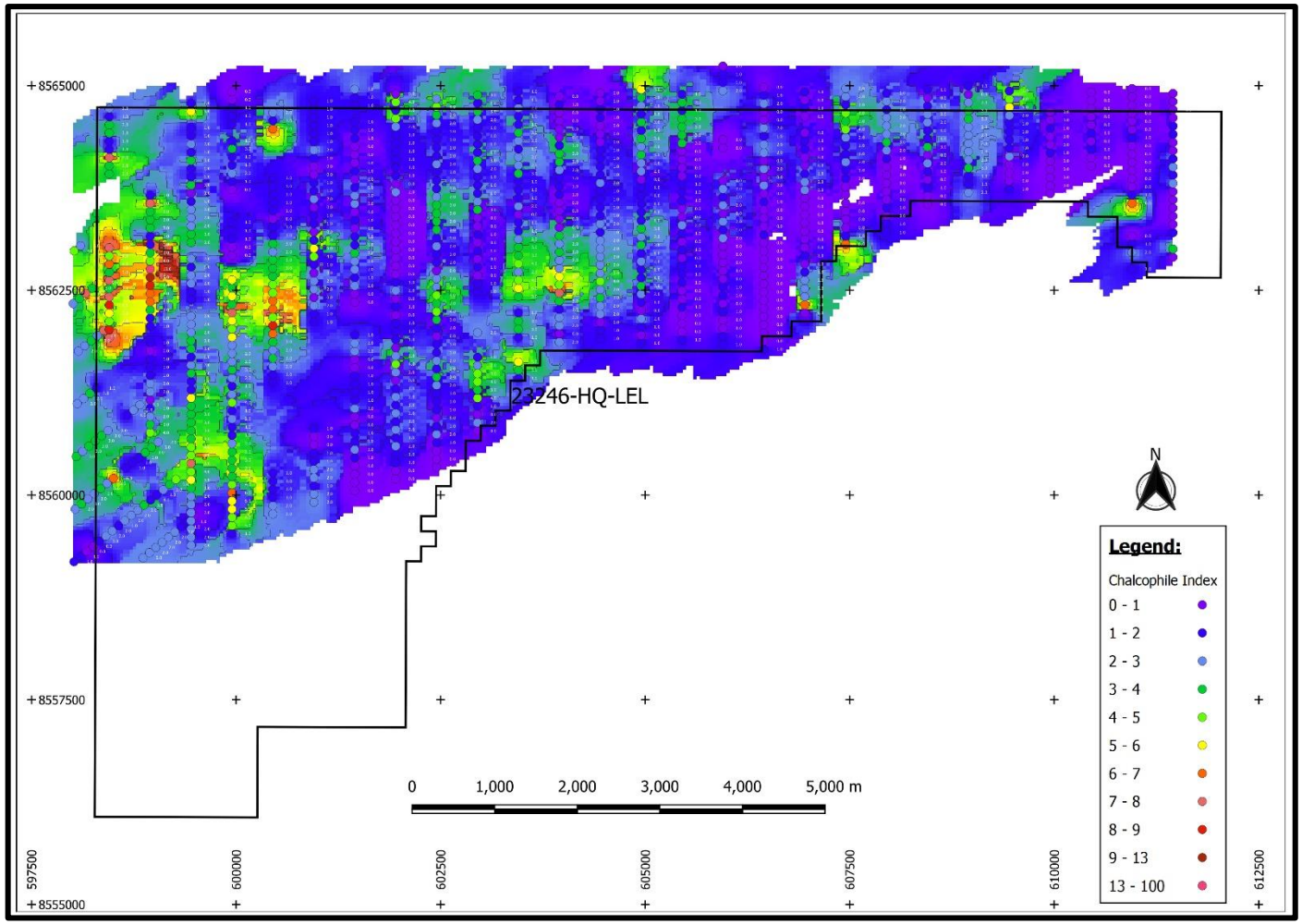


Figure 9.5: Chalcophile Index soil geochemistry

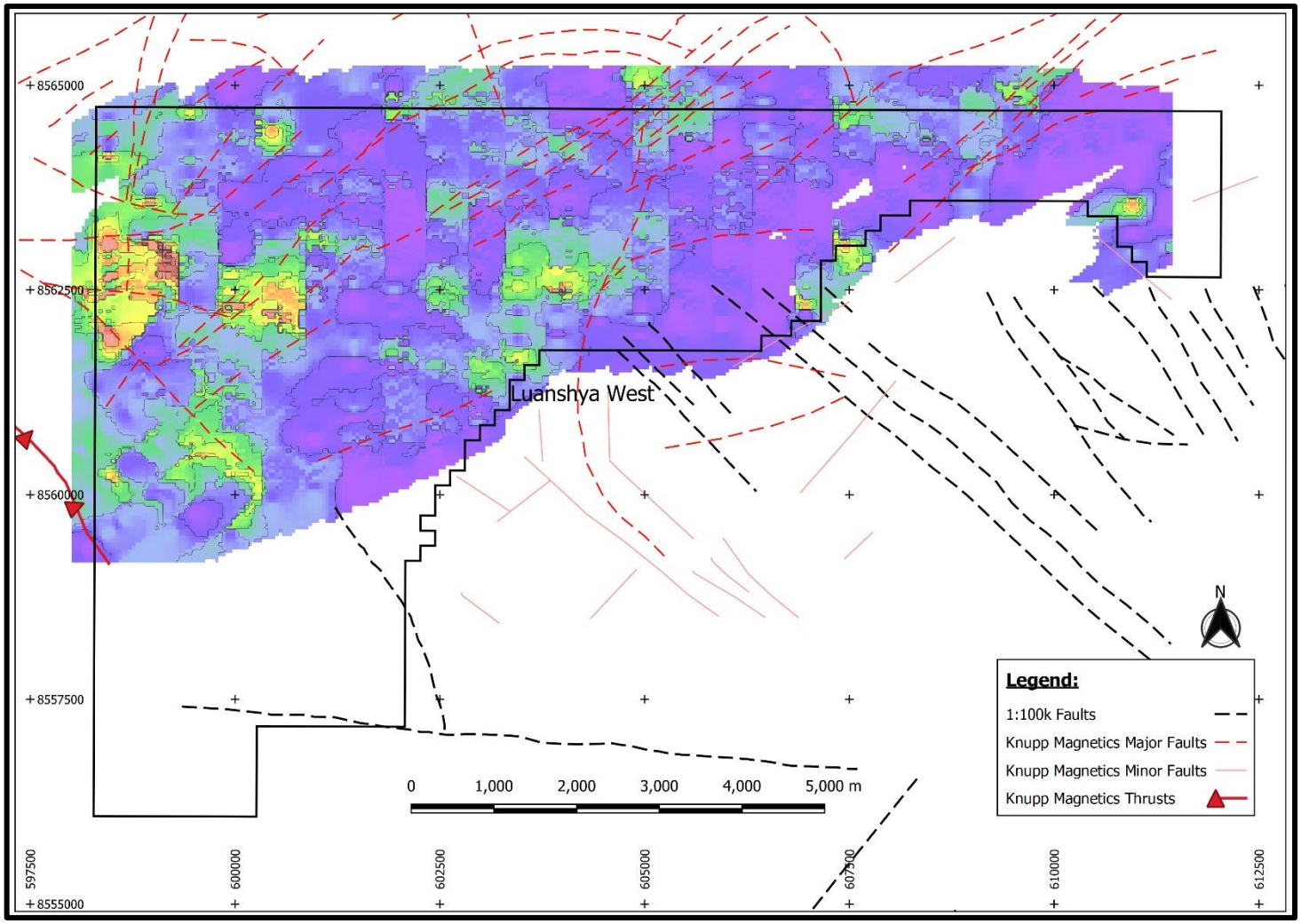


Figure 9.6: Chalcophile Index contours with superimposed faults

10. DRILLING

No drilling of any kind is known at the subject property.

11. SAMPLING PREPARATION, ANALYSIS AND SECURITY

No core or RC samples have been recovered from the subject property. Little is known about the soil sampling described in paragraph 9.2 above and the author is unable to make any comments about either the sampling, the analysis or the security of the samples after collection.

12. DATA VERIFICATION

The QP has not been able to verify the geochemical data obtained by WCMV from Teal and has only been provided with copies of the various technical reports of relevance to the subject property and which are quoted in this report and is therefore unable to verify any of the data relevant to the subject property. Please note the comments in Item 25 of this report regarding verification of soil geochemistry data.

The data regarding the licence and WCMV's title as illustrated in Appendix 1 was copied from the records of the Zambian Cadastre Office during a visit to their office by the QP and is therefore adequately verified for the purposes of this report, however, the QP is not qualified to comment on the legal status of this data.

13. MINERAL PROCESSING & METALLURGICAL TESTING

No mineral processing or metallurgical testing studies have been done in the subject property.

14. MINERAL RESOURCE ESTIMATES

There are no mineral resource estimates.

23. ADJACENT PROPERTIES

All of the information regarding the properties and mineral rights' holders adjacent to the subject property have been obtained from the on-line Zambian Mining Cadastre portal, https://portals.landfolio.com/zambia/. The qualified person has been unable to verify the information and that the information is not necessarily indicative of the mineralization on the property that is the subject of this technical report.

There are several large properties currently held by other exploration companies that adjoin the subject property to the north while to the south and east there are many small exploration and mining licences granted for Beryl, Emerald and Tourmaline which are all within the Restricted Ndola Area. To the west, there is one adjoining

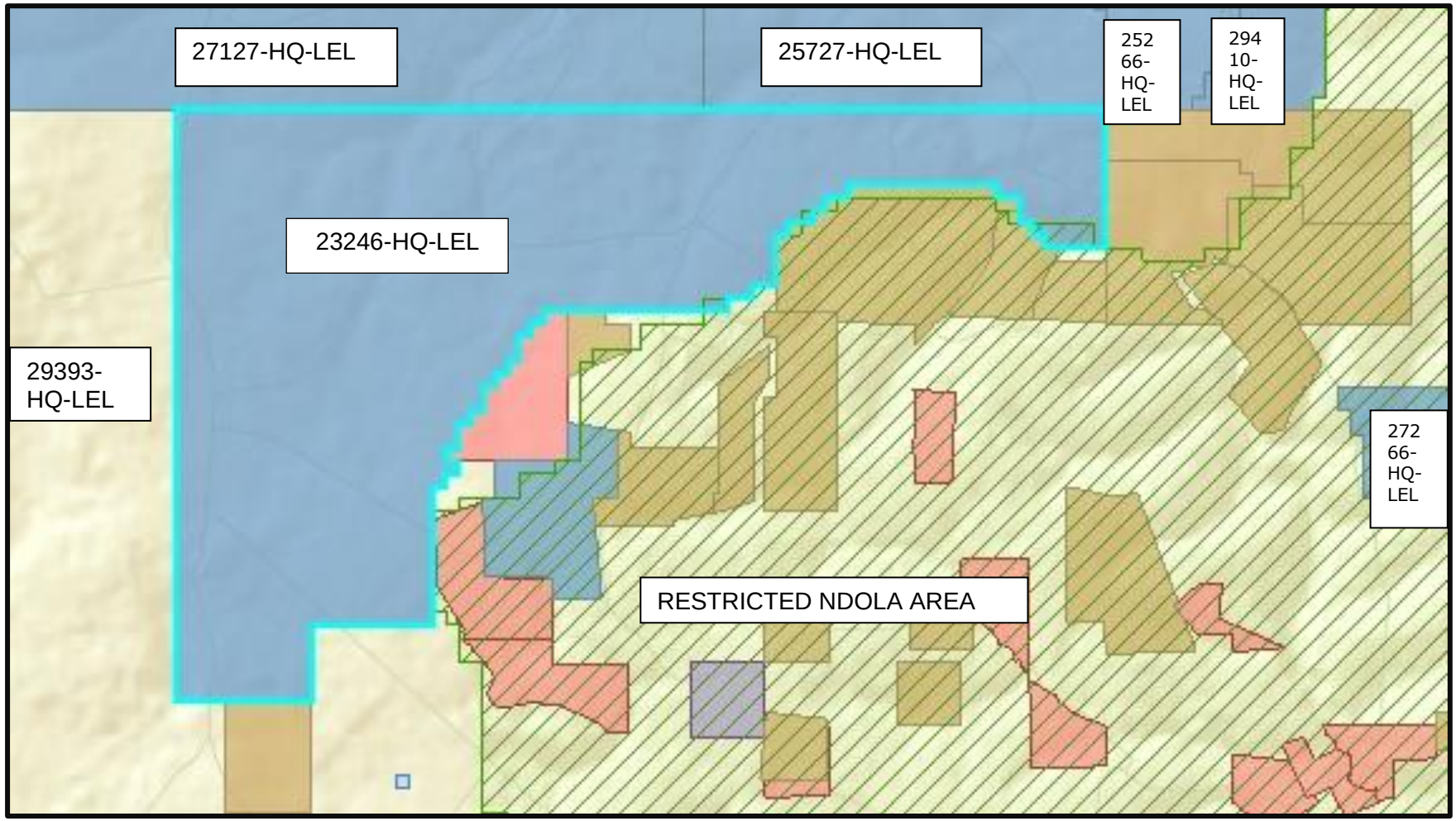
grant. These are shown in Figure 23.1 below. The larger, adjacent base metal exploration grants to the north and west of the subject property are tabulated below (See Table 23.1).

Table 23.1. List of Properties and Holders Adjacent to the Subject Property [3]

LEL No.		
27127 HQ LEL 27 127ha	Licence Holder	Mukulu Mining Investments Ltd
	Date Granted	August 2020
	Minerals	Cu, Co, Au, Fe, Mn, Ni, Ag, Zn.
	Expiry Date	August 2024
25727 HQ LEL 7 452ha	Licence Holder	Chifrica Resources Group Ltd.
	Date Granted	Jan 2020
	Minerals	Cu, Co, Au, Fe, Pb, Mn, Zn, Gemstones
	Expiry Date	Jan 2024
25266 HQ LEL 8 923ha	Licence Holder	Chibuluma Mines plc.
	Date Granted	Feb 2020
	Minerals	Cu, Co, Au, Ni, Zn.
	Expiry Date	Feb 2024
29410 HQ LEL 5 809ha	Licence Holder	African Garden Raw Farm Ltd
	Date Granted	July 2021
	Minerals	Co, Cu, Au, Fe, Mn, Ni, Ag, U, Zn
	Expiry Date	July 2025
22776 HQ LEL 1 152ha	Licence Holder	Kagem Mining Ltd
	Date Granted	April 2018
	Minerals	Emerald
	Expiry Date	April 2022
Restricted Ndola Area	Licence Holder	Various small exploration and mining licence holders
	Date Granted	Various
	Minerals	Emerald and other precious stones
	Expiry Date	Various
29393-HQ-LEL 40 376ha	Licence Holder	African Metals and Mining Ltd
	Date Granted	July 2021
	Minerals	Co, Cu, Emerald, Au, Fe, Pb, Limestone, Ni, Ag, U, Zn
	Expiry Date	July 2025

N.B. *The above licence details were correct on the Cadastre site as of 1st February 2022.*

Figure 23.2: Location of Adjacent Properties



24. OTHER RELEVANT DATA AND INFORMATION

The recent change of government after elections in August 2021 has resulted in a change in Royalty and taxes. [28] Royalties on copper are calculated on a sliding scale as shown in Table 24-1 below and royalties on Cobalt sales are calculated at 8%. The substantial change to the taxation regime was that royalty payments became a tax-deductible expense. Company tax is currently 30%, VAT is calculated at 16% and there are no withholding taxes on mining company dividend payments.

Table 24.1: Copper Royalties

Normative Copper Price (US$)	Royalty %
<4500	5.5%
4500 to 5999	6.5%
6000 to 7499	7.5%
7500 to 8999	8.5%
>=9000	10%

25. INTERPRETATION AND CONCLUSIONS

25.1 General Conclusions

Recent research work on the mineralisation model for the Zambian Copperbelt Cu-Co deposits indicates that they are diagenetic to late diagenetic orebodies, with a very strong lithological control governing their geological locality and distribution. The main exploration target for primary Cu-Co Copperbelt deposits remains the Lower Roan Group sediments. [4]

Photogeological interpretations, backed up by geophysical interpretations indicate that the subject property covers an extensive section of the unconformity between the Lower Roan Group sediments and the basement granite with several faults and thrusts providing pathways for mineralising fluids. Teal's soil geochemical results indicate that Cu-Co mineralisation may well be present beneath the soil cover, and this elevates the property to a property of merit status.

QP Comment: Please note that the Kabula Prospect, with defined Cu-Co mineralisation, lies some 7.5Km west of the subject property and is located over similar geology.

QP Comment: Given the lack of knowledge surrounding the soil geochemistry data and our inability to verify the results, it is recommended that check sampling of the B soil horizon, taking the -80# fraction and using XRF analysis be completed over the anomalous parts of the grid, as an example, say samples from coordinates line 598450/8562020 to 598450/8564720 (27 samples) and line 598950/8562160 to 598950/8563660 (15 samples) and line 599450/8560085 to 599450/8563385 (33 samples) at 100m intervals to determine the veracity and reproducibility of the results before doing any further exploration of the subject property.

25.2 Significant Risks and Uncertainties

- Resampling sections of the Teal soil sampling grid to verify soil sample results may show that the anomalies outlined in Figures 9.1 to 9.6 do not exist and a decision about further exploration of the subject property will then be required.

- The political, economic, commodity market and technical risks and uncertainties which may affect the successful development of the property are reasonably well known and understood but future changes may impact substantially, in either positive or negative ways.

25.3 QP's Comments

It must be noted that I have not been able to verify the geochemical data provided to me by WCMV and the data may not be indicative of the mineralisation on the subject property.

Although I have not been able to adequately verify the geochemical data, DSM and WCMV are exploring a section of the Zambian Copperbelt where large volume copper-cobalt mines are located in similar geological settings to their exploration property. The location in terms of infrastructure is excellent and projections for future demand of both copper and cobalt is positive.
The verification of the sub-surface geology and the soil geochemical results will greatly increase the prospectivity of the property and should be the initial objective of the further exploration programme.

26. RECOMMENDATIONS

26.1 Recommended Exploration Programme

This is an early-stage exploration property and exploration is contingent at each stage on results of previous stages.

The Issuer in consultation with WCMV has proposed the following exploration programme be initiated on the subject property: -

Phase 1- (March 2022 to March 2023)

1. Environmental Management Plan and Impact Assessment: Engage a suitably qualified environmental consultant to visit the site and prepare an environmental management plan and environmental impact assessment for the proposed field programme and submit these to the Zambian Environmental Management Agency for approval.
2. Ground Truthing of Geochemistry: Collect additional soil samples over soil anomalies generated by the Teal soil sampling programme. It is estimated that an additional 150 samples of B-horizon soils, sieved to -80# with XRF determinations

of the same suite of elements as the Teal programme will be required to adequately verify their results. Given that the soil geochemical results adequately show similar anomalous values to the Teal survey, then a decision to proceed will be made.

3. Determine the best geophysical survey method: As noted by Teal's consultant, K.P. Knupp, airborne magnetometer and radiometric surveys are not efficacious in the search for Copperbelt mineralisation. Knupp further recommends trial ground electro-magnetic ("EM") and induced polarisation ("IP") surveys to test their efficacy. An allowance of 3 000-line metres of trial survey over the verified geochemical anomalies is proposed.

4. Once the results of ground surveys have been received and debated with a geophysical consultant, plan and budget for an airborne survey using magnetic, radiometric, and VTEM (versatile time domain EM) which will also produce AIIP effects (airborne inductive IP). Budget for modelling of geophysical anomalies.

Phase 2 Assuming that the results of Phase 1 are positive, then –

5. Anomaly Follow-up: Decide on an initial verification programme of geochemical and/or geophysical anomalies by considering various drilling methods – using either small percussion drills or larger RC (reverse circulation) drilling or diamond drilling.

26.2. QP Comments

The mineralisation model for Zambian Copperbelt sediment hosted stratiform Cu-Co deposits accords with the location of the subject property over Lower Roan sediments lying unconformably on basement granites. The recommended further exploration of the subject property is therefore justified by the inferred sub-surface geology, the geophysical interpretations of the presence of substantial faulting, and the coincident Cu/Co soil geochemical anomalies all of which require verification to develop mineralized targets for resource evaluation.

Table 26.1: - Summary of Estimated Programme Costs for the period March 2022 to March 2023.

ACTIVITY	***ESTIMATED COST US$***
Phase 1: March 2022 to March 2023	
1.Environmental Assessment, plan & report	25 000
2.Verification of soil geochemical anomalies	10 000
3.Ground geophysical trial surveys	65 000
4.Airborne geophysical survey & interpretation	200 000
5.Consultants, management, labour & vehicles	150 000
6.Renewal reporting	50 000
TOTAL	**US$500 000**

27. REFERENCES & BIBLIOGRAPHY

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QUALIFIED PERSON CERTIFICATE

I, Peter W.A. Walker, B.Sc. (Hons) Geology, M.B.A., Pr. Sci. Nat., as the principal author of this report titled "The Luanshya West Copper Project, Zambia" with a report date of 5th February 2022, do hereby certify that:

1. I am an independent Consulting Geologist conducting work under the auspices of P&E Walker Consultancy cc of 41 Dennekamp, Main Road, Kenilworth 7708. Republic of South Africa. Tel: +27 (21) 762 1915 Cell: +27 (72) 411 1108 e-mail: elipet@mweb.co.za

2. I graduated with a Bachelor of Science (Hons.) degree in Geology in 1972 and an MBA in 1982, both from the University of Cape Town, South Africa.

3. I am a Professional Natural Scientist registered with the South African Council for Natural Scientific Professions, registration No.400064/99.

4. I have worked as a geologist for a total of 50 years since my graduation from university. My relevant experience for the purposes of this Technical Report is:

- Seven years (1971 – 1978) as an exploration geologist in South Africa engaged in the mapping, drilling and evaluation of base metal deposits.

- Five years (1978 – 1982) as an exploration geologist in South Africa engaged in the exploration for Uranium and Tungsten deposits. During this period, I had mine visits to Climax Molybdenum mine amongst others in the USA, Australia, Canada and Brazil and also worked for three years on the discovery and evaluation of the Riviera porphyry Tungsten – Molybdenum deposit in the South-Western Cape, South Africa.

- Six years (1989 – 1995) as a senior exploration geologist in Namibia in the exploration, drilling and evaluation of gold and base metal deposits.

- Seven years (1995 – 2002) as exploration manager for first Trans Hex International Ltd and then Group exploration manager for Trans Hex Group, engaged in the valuation and assessment of new alluvial and kimberlite diamond projects, their exploration and management through to production.

- Three years as an independent, sole practitioner consultant (2002 – 2004) advising and writing competent person reports for exploration & mining companies.

- Thirteen years (2004 – present) as Principal of P&E Walker Consultancy cc, an independent geological consulting closed corporation engaged in advising and writing competent person reports for exploration and mining companies.

5. I have read the definition of a "Qualified Person" as set out in NI 43-101 as amended on June 30, 2011 and certify that by reason of my education, 50-years of experience in exploration geology, mining, and affiliation with a professional

association I fulfill the requirements to be a "Qualified Person" for the purpose of preparing this Report.

6. I am responsible for writing all sections of this independent technical review report and am solely responsible for any comments and opinions which are expressed in the report where indicated and the Interpretations, Conclusions and Recommendations sections of the report.

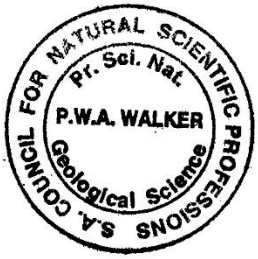
7. I visited the Luanshya West Project site described in this report between 10th and 14th January 2022. I have had no previous involvement with the property or the exploration licence holders, World Class Mineral Ventures Ltd.

8. As of the date of this certificate, to the best of my knowledge, information and belief, the report contains all scientific and technical information that is required to be disclosed to make the report not misleading.

9. In terms of section 1.5 of NI 43-101 "Standards of Disclosure for Mineral Properties" I am independent of the commissioning entities, Deep South Resources Incorporated applying all of the standard tests of independence; P&E Walker Consultancy cc is also independent of the commissioning entities and the Issuer, their directors, senior management, and advisors.

10. I have read NI 43-101 as amended on June 30, 2011 and confirm that this Technical Review Report has been prepared in compliance with the Standards and Guidelines as set out in that document.

P.W.A. WALKER *B.Sc. (Hons.) MBA Pr. Sci. Nat. MSAGS MGSN.*
Dated: 11th February 2022.



APPENDIX 1

Details of the World Class Mineral Ventures Ltd

23246 – HQ – LEL Large Exploration Licence

First Granted 3rd February 2020

Expiring 2nd February 2024

Subject to 2 - three-year renewal periods

Lufwanyama

REPUBLIC OF ZAMBIA

The Mines and Minerals Development Act, 2015
(Act No. 11 of 2015)
The Mines and Minerals Development (General) Regulations, 2016

LICENCE NO. **23246-HQ-LEL**

LARGE SCALE EXPLORATION LICENCE

(Section 23 of the Mines and Minerals Development Act, No. 11 of 2015)

Holder's name: **World Class Mineral Venture Limited**

Address: **P.O. Box 50685 Ridgeway, Lusaka**

The Prospecting area shall be the area described in the Schedule and annexed hereto and bordered **Blue** on the Plan.

The licence relates to the following minerals: **Cobalt, Copper, Gold, Lead, Manganese, Nickel, Silver and Zinc**

The licence is granted for a period of **4 Years** commencing on the **3rd** day of **February, 2020**

The conditions of grant of the licence are as shown in the Annexures attached hereto.

Issued at **Lusaka** this **13th** day of **February, 2020**.

.....

M. Chibonga
Director

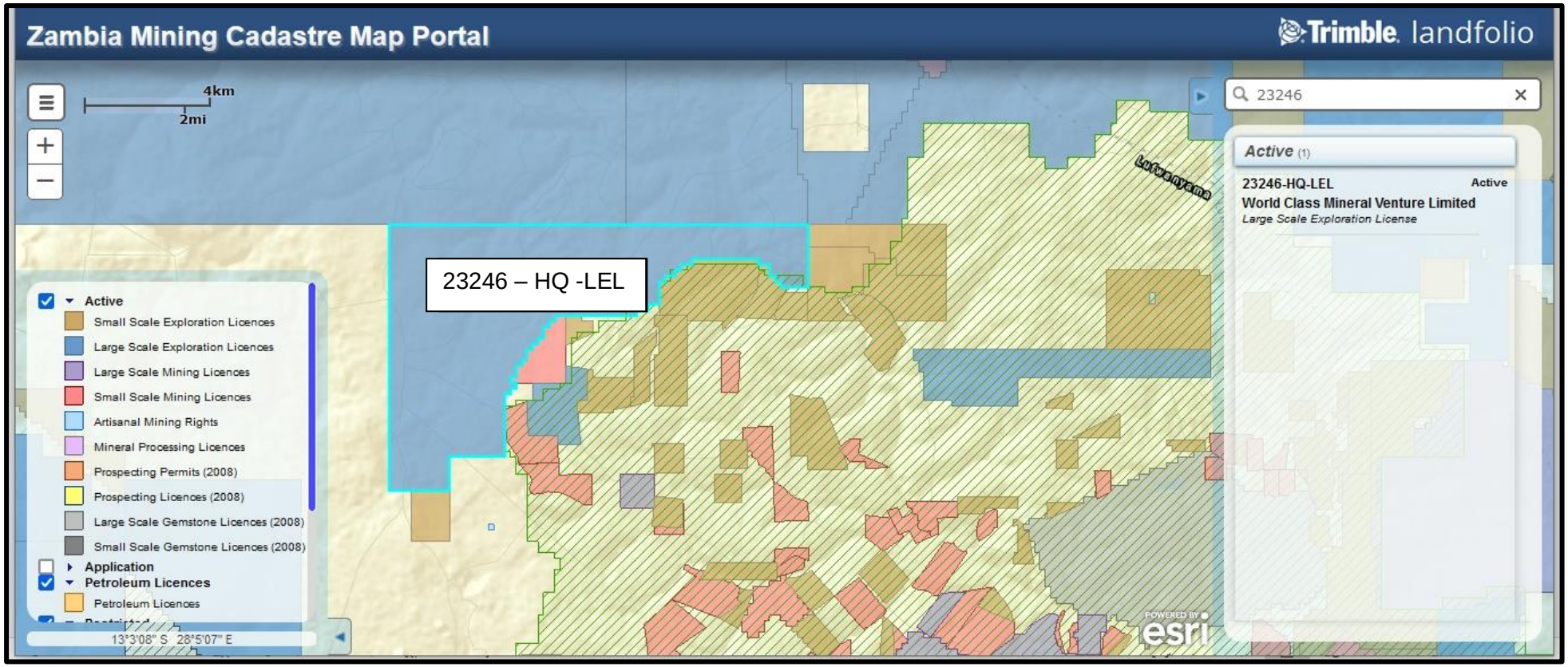
ENDORSEMENT OF REGISTRATION

This **Large Scale Exploration License** has on this **3rd** day of **February, 2020** been registered in the Register.

.....

M. Chibonga
Director

APPENDIX 1: CERTIFICATE OF GRANT



APPENDIX 1: MAP SHOWING LOCATION OF LICENCE 23246 – HQ – LEL
(From: - https://portals.landfolio.com.zambia)

Form XXIX
(Regulation 58 (3))

REPUBLIC OF ZAMBIA

The Mines and Minerals Development Act, 2015
(Act No. 11 of 2015)

The Mines and Minerals Development (General) Regulations, 2016

PEGGING CERTIFICATE

Side	Distance (Metres)	Angles of Direction (deg, min, sec)	CO-ORDINATES SYSTEM: Geographical Coordinates Systems			
			Point	Latitude	Longitudes	Diagram No. 025/2022
				SEE ATTACHED COORDINATES	SEE ATTACHED COORDINATES	Approved by: Sign: Date: 27/1/2022

Scale: 1:100000

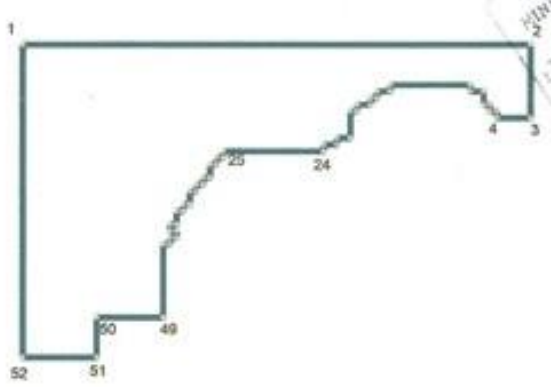


FIGURE: 1-2-3-4-5-6-7-8-9-10-.....52-1 REPRESENTS 5463.2589 HECTARES OF LAND
FOR World Class Mineral Venture Limited SITUATED IN Lufwanyama DISTRICT
OF Copperbelt PROVINCE OF ZAMBIA.

SURVEYOR: Albert Mwambwa DATE: Jan. 2022 SIGN:

EXAMMINER: Jethro L. Kazuma DATE: ..... SIGN:

LICENCE NO: 2324o-HQ-LEL BEACONS DESCRIPTION: Poles painted blue

Appendix 1: Pegging Certificate Diagram

REPUBLIC OF ZAMBIA

The Mines and Minerals Development Act, 2015
(Act No. 11 of 2015)

The Mines and Minerals Development (General) Regulations, 2016

PEGGING CERTIFICATE

Geographical coordinates for licence 23246-HQ-LEL

STN	DEG	MIN	SEC	N/S	DEG	MIN	SEC	E/W
1	12	58	48	S	27	54	24	E
2	12	58	48	S	28	2	0	E
3	12	59	54	S	28	2	0	E
4	12	59	54	S	28	1	30	E
5	12	59	48	S	28	1	30	E
6	12	59	48	S	28	1	24	E
7	12	59	42	S	28	1	24	E
8	12	59	42	S	28	1	18	E
9	12	59	30	S	28	1	18	E
10	12	59	30	S	28	1	6	E
11	12	59	24	S	28	1	6	E
12	12	59	24	S	27	59	54	E
13	12	59	30	S	27	59	54	E
14	12	59	30	S	27	59	42	E
15	12	59	36	S	27	59	42	E
16	12	59	36	S	27	59	36	E
17	12	59	42	S	27	59	36	E
18	12	59	42	S	27	59	24	E
19	12	59	48	S	27	59	24	E
20	12	59	48	S	27	59	18	E
21	13	0	12	S	27	59	18	E
22	13	0	12	S	27	59	6	E
23	13	0	18	S	27	59	6	E
24	13	0	18	S	27	58	54	E
25	13	0	24	S	27	58	54	E
26	13	0	24	S	27	57	24	E
27	13	0	30	S	27	57	24	E

Appendix 1: Pegging Certificate List of Co-ordinate Points (page 1)

28	13	0	30	S	27	57	18	E
29	13	0	36	S	27	57	18	E
30	13	0	36	S	27	57	12	E
31	13	0	48	S	27	57	12	E
32	13	0	48	S	27	57	6	E
33	13	0	54	S	27	57	6	E
34	13	0	54	S	27	57	0	E
35	13	1	0	S	27	57	0	E
36	13	1	0	S	27	56	54	E
37	13	1	12	S	27	56	54	E
38	13	1	12	S	27	56	48	E
39	13	1	18	S	27	56	48	E
40	13	1	18	S	27	56	42	E
41	13	1	30	S	27	56	42	E
42	13	1	30	S	27	56	36	E
43	13	1	36	S	27	56	36	E
44	13	1	36	S	27	56	42	E
45	13	1	42	S	27	56	42	E
46	13	1	42	S	27	56	36	E
47	13	1	48	S	27	56	36	E
48	13	1	48	S	27	56	30	E
49	13	2	54	S	27	56	30	E
50	13	2	54	S	27	55	30	E
51	13	3	30	S	27	55	30	E
52	13	3	30	S	27	54	24	E

Appendix 1: Pegging Certificate List of Co-ordinate Points (page 2)

C. **CONDITIONS OF GRANT OF A PROSPECTING LICENCE**

1. The holder shall-

   (a) Pay the relevant taxes under the Income Tax Act, Cap. 323;
   (b) Promote local business development;
   (c) Execute the environmental management plan and operations shall only commerce upon grant of Environmental Project Brief (EBP) Decision Letter by the Zambia Environmental Management Agency (ZEMA);
   (d) Employ and train Zambians;
   (e) Execute the programme of exploration;
   (f) Commence the exploration operations within ninety days of grant of the licence;
   (g) Give notification of any discovered minerals or commercial deposits within thirty days of the discovery;
   (h) Give preference to Zambian products and services;
   (i) Permanently preserve or make safe any water boreholes and surrender water rights on expiry of licence;
   (j) Surrender to Government the drill cores and other mineral samples;
   (k) remove, within sixty days of the expiry, cancellation or termination of the prospecting licence, any camp, temporary buildings or machinery and repair or make good any damage as required under the Mines and Minerals Development Act, 2015;
   (l) Keep and preserve such records as the Minister may prescribe in relation to the environment;
   (m) Submit quarterly reports to the Director of Geological Survey, Director of Mines and Director of Mines Safety in both hard and electronic copies;
   (n) Keep full and accurate records of the prospecting operations, at the holder's office;
   (o) Contribute to the Environmental Protection Fund as required under the Mines and Minerals Development Act, 2015;
   (p) Obtain appropriate insurance for all phases of its operations;
   (q) Submit a Pegging Certificate for approval within three months of grant of the licence; and
   (r) Comply with the provisions of the Mines and Minerals Development Act, 2015 and other relevant laws of Zambia.

2. No illegal exploration and trade are permitted in the exploration area.

3. The holder shall not enter into any agreements or transfer the licence without prior consent of the Director.

4. The holder shall be liable for any harm or damage caused by the prospecting operations and shall compensate any person to whom any harm or damage is caused.

M. Chibonga
MINING CADASTRE DEPARTMENT

REPUBLIC OF ZAMBIA
MINISTRY OF MINES AND MINERAL DEVELOPMENT
13 FEB 2020
THE DIRECTOR MINING CADASTRE
MINING CADASTRE DEPARTMENT
P.O. BOX 1959, LUSAKA

APPENDIX 1: CONDITIONS OF GRANT page 1

(k) remove, within sixty days of the expiry, cancellation or termination of the exploration licence, any camp, temporary buildings or machinery and repair or make good any damage as required under the Mines and Minerals Development Act, No. 11 of 2015 ;

(l) keep and preserve such records as the Minister may prescribe in relation to the environment;

(m) submit reports to the Director of Geological Survey, Director of Mines and Director of Mines Safety in both hard and electronic copies;

(n) keep full and accurate records of the prospecting operations at the holder's office;

(o) obtain appropriate insurance for all phases of its operations;

(p) submit a pegging certificate for approval within one hundred and eighty days of grant of the licence;

(q) comply with the provisions of the Mines and Minerals Development Act, No. 11 of 2015 and other relevant laws of Zambia

2. The holder shall-

(a) expend on exploration operations each year, not less than the minimum annual exploration expenditure set out in the Second Schedule, failing which the holder commits an offense and liable, on conviction, to a fine-

i) equal to the difference between the minimum annual exploration expenditure and the amount actually expended on exploration operations in that year if less than five hundred thousand penalty units; or

ii) of five hundred thousand penalty units if the difference between the minimum annual exploration operations in that year exceeds the equivalent of five hundred thousand penalty units; and

b) submit annual exploration expenditure statements accompanied by copies of relevant transaction documents to the Director of Geological Survey.

3. The holder shall be liable for harm or damage caused by the exploration operations and shall compensate a person to whom harm or damage is caused.

4. The holder shall not exercise a right under the licence without the prior consent of the legal occupiers of the land or local chiefs.

5. Other terms and conditions are as follows:

APPENDIX 1: CONDITIONS OF GRANT page 2

(a) Apply for renewal of the Large Scale Exploration Licence six (6) months before expiry of the licence;

(b) Pay annual area charges on or before the anniversary of grant of the licence;

(c) Your application has been approved for a period of **four (4)** years pursuant to Section 24 of the Mines and Minerals Development Act No. 11 of 2015

In terms of the Mines and Minerals Development Act No. 11 of 2015, you will be require
K6, **555.91** as area charges and **Nil** Licence fee within **30 days** of this offer as acknowled
of acceptance of the above conditions. Upon payment of the stated fees the licence
released.

The acceptable mode of payment shall be by cash, Bank Transfer or Bank Certified C
avoid surcharge/penalty for a bouncing company/individual cheque. Also note th
payment of the stated fees, you shall be required to prepare and submit an Environment
Brief to the Zambia Environmental Management Agency for approval before you can c
exploration operations.

Failure to comply with the conditions stated in this letter shall render your offer **null**

Dated this **31st** day of **July,** 2019

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Alfred Phiri
Chief Registrar of Mining Rights
For/ Director of Mining Cadastre

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