7th March 2014

# Revision and clarification of reported exploration target

On the 25th February 2014 the Company released a report titled "QBL secures control of close to port coal project in Mozambique". In that report the company presented an exploration target of 262m tons of coal.

The Company has since revised the exploration target to be in a range of 137m tons to 650m tons of coal and hereby provides further information to comply with Clause 17 of the 2012 JORC code. Further details of the revised exploration target can be found in the amended report below.

# **QBL** secures control of close to port coal project in Mozambique

# **Highlights of 4453L**

- 191km² licence secured containing 100km² of Lower Karoo geology
- Located just 250km from the Palma and Pemba Ports
- Historical drilling intersected 3 metre coal seams within the top 40m
- Significant prospectivity at depth yet to be tested
- Relatively low ash content (23.4%), low sulfur content (0.76%) and low  $H_20$  values (between 3-4%)
- Large areas of potential mineralisation
- Coking coal potential to be tested in upcoming exploration program

Queensland Bauxite Limited ("QBL" or "Company") is pleased to advise that, through its JV partner Regius Coal Pty Ltd ("Regius"), a further coal project has been secured in Mozambique with potentially significant market advantages. QBL is earning up to a 51% interest in Regius as previously announced to the market. Regius has now signed an agreement to acquire 80% of License 4453L in Mozambique from Mr Raimundo Azarias Ingles who owns 100% of the title in 4453L. Regius acquires the 80% effective immediately for taking the responsibility to fund development of the project. Regius can withdraw from the JV at any time by handing back the 80% without any further penalty. QBL is funding Regius under the terms of the previously announced deal to earn a 51% interest in Regius Coal Pty Ltd.

QBL sees this project as one of the most prospective of Regius' current significant portfolio of Coal projects with the potential to fast track production as there is relatively minimum overburden on the reported identified coal seams and the product could potentially be economically trucked to port.

# 1. Coal Concessions held by Regius Exploration



Figure 1. The coal concessions held by Regius Coal

#### 1.1. License 4453L

License 4453L, which is highly prospective for coal, is located in the Cabo Delgado Province of Mozambique. This narrow basin is of Karoo age (Permian – Triassic) and was targeted by Regius as coal occurrences had been previously reported in the sediments.



Figure 2. License 4453L in northern Mozambique

#### 1.2. Historical Reports

The first report indicating the presence of coal in the area was by Hasslagher in 1931. Hasslagher mentioned a number of outcrops of coal on Makaaitule Island in the Lugenda River (Kimopax, 2012). The geologist described a 15 m carboniferous layer with 3 m non-pure coal and 5 to 30 cm of pure coal layers. These layers are covered by ferruginous sandstone and clay as well as sandstone containing plant fossils. This coal belongs to the Karoo Supergroup and air-dried analyses indicate the lower quality coal consists of 35% to 40% ash whereas the higher quality coal has only 18.5% ash.

A report compiled by Gouveia (1974) describes two coal zones that outcrop in the Lugenda River. He has reported that the carboniferous horizons are less than half a meter thick. Fieldwork completed by Technosynethesis in 1978 and 1979 mentions the

presence of Karoo sediments which were plotted on a 1:250 000 scale map (Kimopax, 2012).

Although coal is reported to occur at two localities within the lower parts of the Lugenda Basin, these reports are limited to only two visits - one in the early 1900's and the second in 1980/1981 (Vernier, 1981)

## 1.3. Geology of 4453L

The geology of License 4453L is dominated by the Phanerozoic Karoo Supergroup, particularly the Ecca group. The older Mesoproterozoic Marrupa Supergroup, primarily the granitic gneiss ( $1005 \pm 19$  Ma, U-Pb) forms the basement (Map Series 1238 Xixano) The Karoo rocks cover around 225 km² on both sides of the Lugenda River. The sediments from the Lugenda River form a floodplain consisting of the eroded Karoo and basement materials.

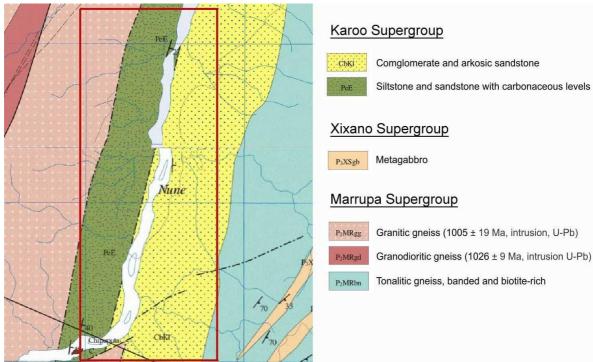


Figure 3. License 4453L seen on the Geological Map Series, Sheet No. 1138 and 1238, Negomane and Xixano respectively

The Karoo within License 4453L is exposed within a very narrow basin bound by faults and partly covered by later Quaternary alluvium and colluvium. Previously it has been suggested that the Karoo sediment package is over 2 000 m thick (Vernier, 1981) however, more recent reports are skeptical regarding this amount of sediment.

The exposed areas of Karoo rocks are limited to the Lugenda River area where the basin is about 2 to 3 km wide. The apparent length is about 35 km. The Upper Karoo, as defined by Thatcher (2006), can be identified on the Landsat image and is more common on the western side of the River.

The sedimentary bedding can be seen on the Landsat image. The dips appear shallow (generally < 25%) and it is not expected that a very thick sequence of Karoo sediments is present.

The contact between the Precambrian rocks and the Karoo sediments is marked as a fault on many geological maps and in the satellite interpretations but it does not form any significant geomorphological feature (such as an escarpment) on the ground. Only changes in soil and vegetation mark the difference between the two terrains.

## 1.4. Coal Outcrop

The two known coal occurrences are located in two separate islands at the middle of the Lugenda River, namely: Makaa-itule (Figure 4) and Chipuputa (Figure 5). Even though there are only two places that the coal outcrops, it is believed that there is more coal beneath the quaternary sediments that have been exposed in the Lugenda River. The bedding strike was measured to be about ENE-WSW (020°), with a dip of no more than 30°, towards ESE in Makaa-itule and Chipuputa (Kimopax, 2012).

A distance of about 33 km separates the two islands, and the only rocks visible along the entire Lugenda River are sandstones, well-bedded, oriented between ENE-WSW and SE-SW, dipping gently towards ESE and SE, respectively.

#### 1.4.1. Makaa-itule Coal Outcrop

Makaa-itule island is approximately 400m in length and 50m wide. The first documented outcrop area, which consists of a sequence of coal and other rocks, is 19m thick with a total of 7.87 m coal (±40% of the sequence).



Figure 4. General view of Makaa-itule island

- Coal layers thicker than 10 cm: 3.46 m.
- Layers thicker than 30 cm thick: 2.5 m.
- One layer of coal which is 0.77 m.

#### 1.4.2. Chipuputa Coal Outcrop

The second area that has been documented to have outcropping coal is on Chipuputa island. During the visit by Kimopax geologists, the coal outcrops were below the water level. The carboniferous sequence is approximately 16.5 m thick with the sum total of coal which forms seams thicker than 5 cm being about 2 m. Coal layers thicker than 10 cm total about 1.8 m. There are only two layers which are greater than 30 cm.



Figure 5. General view of Chipuputa island

Due to the fact that the majority of the outcrop is below the water level, it is difficult to map. From outcrop which can be studied, the strike is 20° to the east-southeast. To the south of the coal outcrop, a 1.4 m thick dolerite sill was observed below the coal layers. No other intrusions were observed.

## 1.5. Prospectivity of the area

The area of prospectivity within License 4533L is seated in the Karoo siltstone and sandstone with elevated carbonaceous levels. This coal bearing Supergroup is unconformably overlying the Precambrian basement followed by younger lacustrine

and/or fluvial sediment. The license area has almost 6 200 Ha of the Karoo carbonaceous layer at surface.

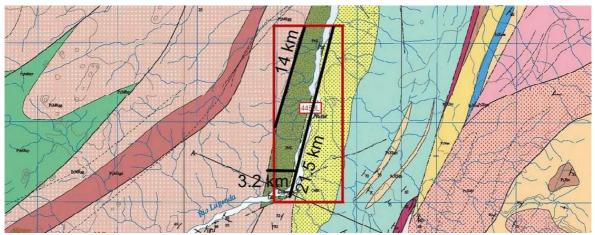


Figure 6. Relative lengths and width of the coal bearing sequence

As seen in the Figure 7, the carbonaceous sequence on the western side of the river has a minimal overburden which will need to be removed to mine the coal. On the eastern side of the river, the carbonaceous material has been covered by younger conglomerate and sandstone, beneath which coal is expected to be found.

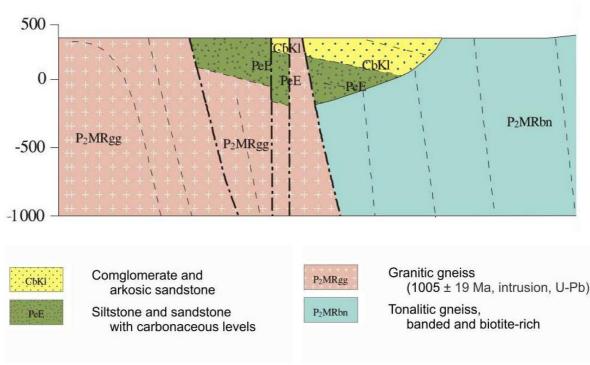


Figure 7. Expected profile as per the Geological Map Series 1238 Xixano

## 1.6. Coal Analysis and Core Logging

Previous drilling and trenching has been reported in the vicinity of Licence 4453L (Kimopax, 2012, Table 1). One is able to compare those results with the results published by Vasconcelos (2009) from different Licenses in Tete (Table 1 and Table 2 respectively).

The coal water ( $H_2O$ ) or moisture values reported by Kimopax (2012) are rather consistent and vary between 3 and 4%, whereas the  $H_2O$  values for the Tete region are highly variable and range between 0.6 to 11.9 %, depending on the deposit.

The ash content of coal is the residual which is left after the coal has been burnt. This non-combustible matter represents the bulk matter after oxygen, carbon, water and sulfur is burnt off during the coal combustion. The ash content reported by Kimopax (2012) is considerably lower than that of the Tete coal, the average being 23.4 % whereas the average for the coal in Tete is 37.7 %.

The volatile matter within the coal refers to the components except for water which is liberated in an absence of air at high temperature. The volatile percentage is very similar and both are within the low 20's.

The sulfur within coal is determined by the amount of iron content within the coal, this iron is usually a direct result of the presence of pyrite (iron sulfide;  $FeS_2$ ). The sulfur percentage is regarded as low and desirable within the Tete Province, with an average of approximately 0.97 %. However the results reported by Kimopax (2012) have a considerably lower sulfur percentage at 0.76 %.

Reports from Vasconcelos (2009) rank the coal from Tete from bituminous to anthracite. The results from the analysis give promise of the existence of high quality coal in License 4453L.

The core logs presented in Kimopax's report appendix (2012) indicate there are two main horizons of coal. The first horizon is at an approximate depth of 20m, the thickness of this coal seam ranges from 1.85 to 2.78 m. There is a second seam which continually occurs at approximately 33 m which is between 0.55 and 1.03 m thick. There is occasionally a third seam in the around 37m depth which ranges in thickness from 0.71 to 0.88 m. The Kimopax (2012) report indicates that the drilling only went down to 40 m depth, leaving further prospectivity at depth.

It is QBL's intention to drill the tenement to verify the above results and with the goal of proving a mineable and economic JORC resource, in order to fast track production and export.

Table 1. Coal analysis from License 4453L (Kimopax, 2012)

BH ID	SEAM ID	THICKNESS (M)	SAMPLE ID	In H2O	Ash	Vols	F/C	CV	T. Sulphur
JC 001	2	1.85	JC001 TOP	4.1	19.8	24.0	52.1	24.66	0.79
JC 002	2	2.10	JC002 TOP	3.4	22.3	25.5	48.8	24.03	0.38
003	2	2.52	JC003 TOP	3.7	22.5	25.3	48.5	23.32	0.78
JC 004	2	2.38	JC004 TOP	3.7	24.0	25.0	47.3	22.81	0.78
JC 005	2	2.07	JC005 TOP	3.9	22.0	23.7	50.4	24.70	0.88
900 1C	2	2.78	JC006 TOP	4.2	23.3	22.8	49.7	23.00	0.41
JC 007	2	2.78	JC006 TOP	4.2	23.3	22.8	49.7	23.00	0.41
008	2	2.23	JC008 TOP	4.5	23.8	22.9	48.8	24.80	0.70
JC 001	1	0.62	JC001 BOTTOM	3.2	26.5	22.1	48.2	21.62	1.05
JC 002	1	0.72	JC002 BOTTOM	3.1	25.6	23.7	47.6	21.71	0.58
JC 003	1	0.63	JC003 BOTTOM A	3.2	27.3	21.9	47.6	22.14	1.11
	1	0.88	ЈС003 ВОТТОМ В	3.1	24.6	22.9	49.4	23.69	0.52
JC 004	1	0.58	JC004 BOTTOM A	3.8	24.9	21.3	50.0	22.96	0.87
	1	0.78	ЈС004 ВОТТОМ В	3.3	26.9	21.6	48.2	21.62	1.05
JC 005	1	0.67	JC005 BOTTOM	3.1	27.0	22.5	47.4	22.01	1.09
JC006	1	1.03	JC006 BOTTOM	3.7	27.4	23.1	45.8	21.96	1.06
JC 007	1	1.03	JC006 BOTTOM	3.7	27.4	23.1	45.8	21.96	1.06
JC 008	1	0.55	JC008 BOTTOM A	3.1	26.6	21.2	49.1	22.16	0.85
	1	0.71	JC008 BOTTOM B	3.3	27.1	21.0	48.6	22.01	0.92

Table 2. Coal analysis from a number of different Licenses in Tete (Vasconcelos, 2009)

D i	1	CI-	H20	Ash	Volatile	GCV	Sulfur
Basin	Locality	Sample	(%, ad)	(%, ad)	(%, ad)	(MJ/kg, ad)	(%, ad)
Metangula		range of 27 samples	1,8-2,6	31,6-85,2	n.d.	14,78-26,48	0,30-3,50
Chicôa-	Mucangádzi	range of 27 samples	5,9-11,5	16,4-45,1	19,7-28,4	14.61 - 23.91	0.49-3.90
Mecúcoè	Vúzi	range of 28 samples	2,4-15,9	9,4-34,8	24,0-33,0	16.08 - 29.64	0.58-2.66
	Bohozi	range of 36 samples	1,3-14,2	12,7-35,2	21,0-28,6	11.26 - 29.35	0.77-5.93
	Massinduè	range of 18 samples	2,7-16,0	11,0-30,8	21,3-28,0	13.36 - 25.50	0.47-1.29
	Mucanha	range of 5 samples	1,0-1,8	13,8-33,0	19,5-26,1	21.77 - 30.60	0.74-1.82
	Luångua	range of 56 samples	0,8-11,2	13,8-37,7	14,9-28,2	16.04 - 30.44	0.42-2.88
Sanângoè	License 871L	Zone 8	4,2	52,9	14,9	13,25	1,06
		Zone 7	4	42,5	21,9	17,3	1,24
		Zone 6 Upper	3,7	35,1	25,1	20,28	1,06
		Zone 6 Lower	3,2	41,6	23,5	18,25	1,23
		Zone 5	3,2	45,7	21,5	16,16	1,01
		Zone 4 Upper	3,9	34,5	25,6	22,07	1,25
		Zone 4 Lower	2,6	48,6	21,7	17,3	1,28
Moatize-	Moatize	Lower Chipanga 25 x 10 mm	0,6	43,3	13,7	18,64	1,01
Minjova	Section 1	Lower Chipanga 10 x 0,5 mm	0,6	29,8	13,5	24,19	0,96
		Upper Chipanga 25 x 10 mm	0,6	43,1	15,5	18,9	0,88
		Upper Chipanga 10 x 0,5 mm	0,6	29,7	17,8	24,36	0,91
	Moatize	Lower Chipanga 25 x 10 mm	0,7	42,5	17	18,76	0,69
	Section 2A	Lower Chipanga 10 x 0,5 mm	0,8	32,3	19,2	22,97	0,86
		Upper Chipanga 25 x 10 mm	0,9	48,1	14,8	16,52	0,89
		Upper Chipanga 10 x 0,5 mm	0,9	38,3	16,6	20,52	1,03
	Moatize	Chipanga/Chipanga 3 Mine	0,9	13,7	17,2	29,98	0,74
		Chipanga/Chipanga 8 Mine	0,6	17,6	17,1	29,66	0,5
	Minjova	ROM 20 × 5	1,3	27,2	18,5	n.a.	n.a.
		ROM 10 × 0,5	1,3	18,5	20,5	n.a.	n.a.
		ROM 5 x 0,5	1,2	23,4	18,9	n.a.	n.a.
		ROM -0,5	1,5	16,7	20,6	n.a.	n.a.
	Mutarara	Boreholes (range 171 samples)		33,5-89,8	4,1-35,5	2,78-22,8	0,03-2,53

# Coal potential

An exploration target for the coal potential within 4453L is presented based on the drilling data from eight exploration holes JC001 to JC008 carried out in the vicinity of the Makaa-itule and Chipuputa coal outcrops within 4453L. Each of the two or three coal seams found in each hole was measured, sampled and analyzed once, giving a total of 19 samples analysed as shown in Table 1 from Kimopax 2012. The exact location of the drill holes or their spacing is not known; this information was not available to the competent person. The exploration target calculations are based on these drill data as these are the only exploration activity known to have been carried out, however it must be remembered that the potential quantity, quality and grade figures presented in the target modelling is conceptual in nature as there has been insufficient exploration to estimate a mineral resource and that it is uncertain if further exploration will result in the estimation of a mineral resource.

The model parameters for the exploration target have been calculated as follows:

- a) Coal grade: Based on the analyses conducted on the 19 samples and listed in Table 1, the potential range of parameters that define type and quality used for modelling coal within the tenement are; ash content 19.8-27.4%; volatile matter 21.0-25.5%, total sulpher 0.38-1.11%; fixed carbon 47.3-52.1% and inherent moisture 3.1-4.5%. These parameters allow the coal analysed to be classified as a medium volatile bituminous coal and assume that this coal is likely to have an average bank density of 1.3 tonnes per cubic metre.
- b) Coal thickness: The thickness of the upper coal seam encountered in each of the 8 holes (Top, Table 1) varies between 1.85 and 2.78m, while the thickness of the lower seam varies between 0.55 and 1.03m (Bottom A, Table 1). A third layer (Bottom B, Table 1) exists only in holes JC003, 004 and 008; it has a thickness of 0.71 to 0.88m and this thickness will not be included. Therefore using the upper two layers only, the minimum coal seam total thickness expected will be 2.4 m and the maximum thickness expected will be 3.8 m.
- c) Coal extent: The coal is found within the Lower Karoo unit (the green unit exposed on the western side of the river as shown on Figures 6 and 7. It has an area of approximately 63 km2 (6,300 Ha). On the eastern side of the river, the green unit is seen to dip below the yellow unit in the geological cross section presented in Figure 7. and covers an an additional 100 km2 here beneath overburden. For the purposes of building the exploration model, it is assumed that the coal seam described above exists throughout the entire area of the Lower Karoo unit contained within the tenement as outlined in Figure 8 (both exposed and beneath overburden) as has been reported from the limited historical drilling discussed above. That is, it is assumed that coal exists within a total area of Lower Karoo of 163 km2, and that it will be accessible within, at least, the area of exposed Lower Karoo of 63 km2.

# Calculating the exploration target

The exploration target tonnage is therefore calculated by multiplying the coal thickness (minimum 2.4m to maximum 3.8m) by the coal extent (minimum 63 km2 to maximum 163 km2, and multiplying by the average bank density for bituminous coal of 1.3, and then factoring a loss of 30%. This calculation gives an exploration target that ranges between 137 million and 650 million tons coal where the term 'exploration target' is defined under Clause 17 of the 2012 JORC Code as being 'a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate quoted as a range of tonnes and a range of quality, relates to mineralization for which there has been insufficient exploration to define a Mineral Resource'. The above calculation is only to give an indication of what type and size of resource may be found in such a tenement with exploration success, and why we are targeting exploration on this tenement. It is the intention of QBL to drill this target area over the 2014 drilling season with the aim of defining a JORC compliant resource should one exist in the tenement.

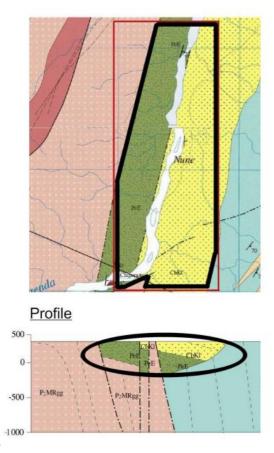


Figure 8. Maximum modelled aerial extent of the coal-bearing Lower Karoo unit within 4453L

#### Infrastructure: Within Mozambique

In the last 15 years the country's economy has grown steadily at an impressive 7.7 % per year, this increase has been driven largely by agriculture, light industry and the service sector (Dominguez-Torres and Briceño-Garmendia, 2011). This growth in the economy is expected to continue and even increase due to the large investments that have been undertake by the private sector in association with the exploitation of Mozambique's natural resources which the country is well endowed in. The infrastructure within Mozambique is currently undergoing significant expansion and major rehabilitation with a minimum forecast of US\$34 billion being invested in the country's infrastructure over the next decade. The boom in the country's mining industry has been the driving force in the development in the transport and energy infrastructure.

With the increasing mining activity within the Mozambique, there has been a call for power to supply these mining houses. A number of existing power stations such as the Chicamba and Mavuzi will be upgraded to increase their generating capacities, to help with the power need, a number of new power stations have been proposed, namely the Ncondezi power project in Tete and the gas fired power station in the Chokwe district. Ncondezi will be a coal fired power plant, and in its first phase it will supply 300 MW of power with the ultimate goal of 1800 MW.Construction of the plant is planned for 2015, with the power plant targeting commission in 2017 and commercial operations in 2018 (Ncondezi Energy, 2013). The proposed gas fired station in the Gaza province will have the gas supplied from the Temane gas fields in Inhambane, and the power station installed will have a capacity of 40MW. The project involves investments up to US\$ 98.6 million which will be finalised by 2015, with commercial operation of the power station beginning in 2016.

Mozambique's port, railway and energy infrastructure has been developing over the last few years and will continue to do so. New ports have be planned, with the Mozambican Government inviting bids for a US\$ 2 billion port and railway development to specifically boost coal exports. The Palma port is a key element in the promotion of the development in the hinterland development corridor. There is a new port that has been planned for Palma to support the liquefied natural gas (LNG) industry. The coal from License 4453L would be transported along the main road to the Palma port and then exported.

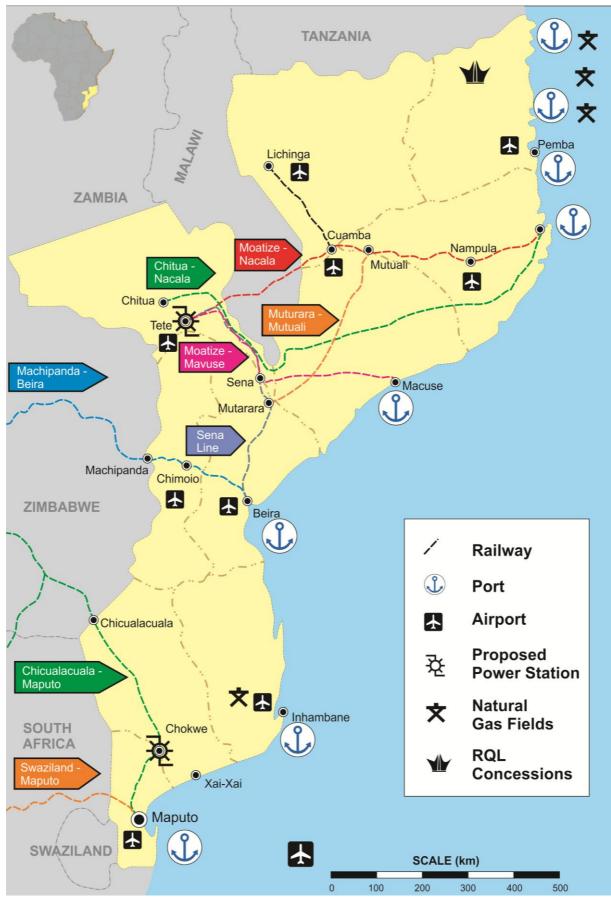


Figure 8. Mozambique's major railways, ports, airports, power stations and natural gas fields in relation to License 4453

#### Consents

The information in this report that relates to Exploration Results, Exploration Targets, Mineral Resources or Ore Reserves is based on information compiled by Sara J Turnbull (B. Sc. Geology Honours) and Dr Robert Coenraads (BA Hons, MSc, PhD). Dr Coenraads is a fellow of the Australasian Institute of Mining and Metallurgy.

Dr Coenraads contracts services to QBL. Sara J Turnbull is an employee of Regius Exploration in Pretoria, South Africa.

Dr Coenraads has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking and to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources or Ore Reserves".

Dr Coenraads consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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