



## **Executive Summary**



Aligning with the Afarak Group strategy to increase its measured mineral resource base, the aim of this document is to provide a Mineral Resource and Mineral Reserve Statement at 31 December 2018 for:

- (i) Chromitite for Mecklenburg, Stellite and Vlakpoort Mines respectively;
- (ii) Platinum Group Metals (PGM), specifically Platinum, Palladium and Gold, in the Chromitite seams for Stellite and Vlakpoort Mines. Mecklenburg Mine is excluded due to the fact that the Platinum Group Metals (PGM) rights at Mecklenburg Mine do not belong to Afarak and therefore do not satisfy the all the requirements for reporting.

The **Chromitite Mineral Resources** for Mecklenburg, Stellite and Vlakpoort declared in 31 December 2018 decreased by **1.120 million tonnes** compared to those declared in December 2017, mainly due to depletion.

The **Chromitite** Mineral Resources for Mecklenburg, Stellite and Vlakpoort as 31 December 2018, decreased from that declared in December 2017 from **44.861** to **43.741 million tonnes** mainly due to depletion.

The **Chromitite** exploration results reported at Vlakpoort Mine remained the same at **1.947** million tonnes. Mining at Vlakpoort commenced during the second quarter of 2018 subsequent to the granting of a new-order mining right for Vlakpoort Mine by the Department of Mineral Resources. A Phase 2 exploration program is planned during Q1 of 2019 to extend the mineral resources towards the South-Western side of the exiting mining area.

The combined **PGM Mineral Resources** for Stellite and Vlakpoort declared at 31 December 2018, decreased from that declared in December 2017, by **0.079 million tonnes** from 26.165 to 26.086 million tonnes, which resulted in PGM 2E+Au ounces decreasing by 0.870 million ounces from 1.257 million to 1.256 million ounces.

The decrease in **PGM Mineral Resources** from December 2018 as compared to December 2017 can be ascribed to Vlakpoort LG1-3 and LG6 depletion in the respective open pits.

The baseline summary of Stellite **PGM** Mineral Resources was based on the Venmyn Deloitte (Pty) Ltd Competent Persons report for June 2017. No Mineral Reserves could be declared for Stellite yet as the feasibility study to extract PGM's, are still in progress.

## **Stellite Mine**

### **Chromitite Mineral Resource for Stellite Mine**

The Chromitite Mineral Resource for Stellite declared in 31 December 2018 decreased by **0.865** million tonnes from **29.617** to **28.752** million tonnes compared to those declared in December 2017 mainly due to due to depletion.

Stellite LG6-MG4 tailings mineral reserve and resource decreased from **0.700** to **0.225** million tons whereas the chrome grade and Cr to Fe ratio remained the same at **24.10** % and **1.14** respectively

	Tonnage (kt)	Cr <sub>2</sub> O <sub>3</sub> (%)	Cr:Fe ratio		Tonnage (kt)	Cr <sub>2</sub> O <sub>3</sub> (%)	Cr:Fe ratio
PROVED:		2 3 * *		MEASURED:		2 3 * *	
Stellite: Tailings				Stellite: Tailings			
LG6-MG4	225	24.1	1.14	LG6-MG4	225	24.1	1.14
Stellite: Open Pit				Stellite: Open Pi	t		
MG4	1,111	30.39	1.2	MG4	1,306	31.86	1.22
MG3	674	30.64	1.18	MG3	788	31.68	1.19
MG2	346	35.98	1.32	MG2	405	37.20	1.32
MG1	598	37.72	1.4		700	39.00	1.4
LG6+6A	103	33.68		LG6+6A	120	38.11	1.46
Stellite: Undergro				Stellite: Undergr	ound		
MG4				MG4	1,211	33.59	1.24
LG6 + 6A	2,702	34.98	1.36	LG6 + 6A	4,222	37.7	1.41
Total Proved Reserves	5,759	33.48	1.30	Total Measured Resources	8,977	35.51	1.33
PROBABLE:	0,101			INDICATED:	9,111		
Stellite: Open Pit				Stellite: Open Pi	t		
MG4	3,015	30.75	1.2	•	3,526	32.25	1.23
MG3	1,276	30.82	1.16	MG3	1,492	31.68	1.19
MG2	948	36.08	1.28	MG2	1,109	37.30	1.31
MG1	1,914	37.53	1.38	MG1	2,239	38.80	1.41
LG6+6A	239	33.88	1.43	LG6+6A	280	38.54	1.46
Stellite: Undergro	ound			Stellite: Undergr	ound		
MG4	262	32.69	1.22	MG4	306	33.8	1.25
LG6 + 6A	3,628	34.26	1.38	LG6 + 6A	4,243	37.5	1.41
Total Proved Reserves	11,282	33.60	1.30	Total Indicated Resources	13,195	35.58	1.33
Total Proved & Probable Reserves	17,041	33.56	1.30	Total Measured & Indicted Resources	22,172	35.55	1.33
				INFERRED			
				Stellite: Open Pi	1,440	33.18	1.24
				MG3	2,110	32.64	1.26
				MG2	1,920	37.10	1.32
				MG1	1,070	38.90	1.41
				LG6+6A	40	37.82	1.44
able 1: Shows th	ne Chromitite Min	eral Reserves		Total Inferred Resources	6,580	35.11	1.30
and Resources fo December 2018.	or Stellite Mine as	at 31		Total Resources	28,752	35.45	1.32

## **PGM Mineral Resource**

### for Stellite Mine

No Mineral Reserves or Measured Mineral resources could be declared for Stellite yet as the feasibility study to extract PGMs, are still in progress.

The **Indicated and Inferred PGM Mineral Resources** for Stellite as declared at 31 December 2018, remained the same as that declared in December 2017, namely **18.642 million tonnes**. The resulting PGM resources declared in 2E+Au ounces are **0.927 million ounces** 

The total declared PGM mineral resource remain the same due to the fact that PGM mineral resources for Stellite are declared in only the **Indicated and Inferred Mineral Resource reporting categories.** 

Mineral Reserves (RC	•	0==		ical Losses Ap	-	
Tonnage (kt)	2E + Au	Ozs	MEAGURER	Tonnage (kt)	2E+Au	Ozs
PROVED:			MEASURED:			
Stellite: Open Pit			Stellite: Open Pi			
MG4			MG4	-	-	-
MG3			MG3	-	-	
MG2			MG2	-	-	-
MG1			MG1	-	-	
Stellite: Underground			Stellite: Underg	round		
MG4			MG4	-	-	
MG4			MG3	-	-	
MG4			MG2	-	-	-
MG4			MG1	-	-	-
Total Proved			Total Measured Resources	_	_	_
PROBABLE:			INDICATED:			
Stellite: Open Pit			Stellite: Open Pi	t		
MG4			MG4	952	1.40	42,855
MG3			MG3	440	1.78	25,183
MG2			MG2	698	1.73	38,828
MG1			MG1	722	0.84	19,501
Stellite: Underground			Stellite: Underg	round		
MG4			MG4	-	-	-
MG4			MG3	-	-	-
MG4			MG2		_	-
MG4			MG1	_		
			Total Indicated	2 012	1.40	124 747
Total Probable  Total Proved & Probable Reserves			Resources Total Measured & Indicted Resources	2,812	1.40	126,367 126,367
110001100			INFERRED			
			Stellite: Open Pi	+		
			MG4	5,710	1.38	253,370
			MG3	3,950	2.13	270,531
			MG2	2,740	2.06	181,492
			MG1	3,430	0.86	94,849
			Total Inferred Resources	15,830	1.57	800,241
			Total Resources	18,642	1.55	926,608

## Mecklenburg Mine

The Mineral Reserve for Mecklenburg underground declared in 31 December 2018 remained the same at **7.27 million tonnes** compared to those declared in December 2017. No underground mining was conducted during 2017.

The Chromitite Mineral Reserves for Mecklenburg declared for open-Pit (65m high-wall) as at 31 December 2018, decreased from that declared in December 2017 from **0**, **25** to **0.074 million tonnes** mainly due to depletion.

Mineral Reserves (ROM Feed Numbers)				Mineral Resources (Geological Losses Applied)				
	Tonnage (kt)	Cr <sub>2</sub> O <sub>3</sub> (%)	Cr:Fe ratio		Tonnage (kt)	Cr <sub>2</sub> O <sub>3</sub> (%)	Cr:Fe ratio	
PROVED:				MEASURED:				
Mecklenburg: C	)pen Pit			Mecklenburg: O	pen Pit			
LG6+6A	61	40.76	1.58	LG6+6A	73.91	44.10	1.64	
Mecklenburg: Underground				Mecklenburg: Underground				
LG6+6A	2,682	41.85	1.57	LG6+6A	4,190	43.66	1.59	
Total Proved Reserves	2,743	41.83	1.57	Total Measured Resources	4,264	43.67	1.59	
PROBABLE:				INDICATED:				
Mecklenburg: U	Inderground			Mecklenburg: U	nderground			
LG6+6A	1,924	41.83	1.57	LG6+6A	3,006	43.37	1.59	
Total Proved & Probable Reserves		41.83	1.57	Total Measured & Indicted Resources	7,270	43.54	1.59	
				INFERRED				
				Mecklenburg: U	nderground			
				LG6+6A	1,142	43.41	1.59	
				Total Resources	8,412	43.53	1.59	

Table 2. Shows the Chromitite Mineral Reserves and Resources for Mecklenburg Mine as at 31 December 2018.

The chrome grade and Cr to Fe ratio remained the same at 43.67 % and 1.59 respectively since there was no sampling done in 2018. Underground mining scheduled in 2020 financial year whereas Open-cast life of mine end Dec 2019.

## **Vlakpoort Mine**

Mining at Vlakpoort commenced during the second quarter of 2018 subsequent the granting of a new-order mining right for Vlakpoort Mine by the Department of Mineral Resources. The Chromitite Mineral Resources for Vlakpoort decreased by **0.07** million tonnes from **4.698** to **4.630 million tonnes** from that declared in December 2017 from mainly due to depletion.

The exploration results reported at Vlakpoort Mine remained the same at **1.947 million tonnes**. A Phase 2 exploration program is planned during Q1 of 2019 to extent the mineral resources towards the South-Western side of the exiting mining area.

Mineral Reserves (ROM Feed Numbers)				Mineral Resources (Geological Losses Applied)			
	Tonnage (kt)	Cr <sub>2</sub> O <sub>3</sub> (%)	Cr:Fe ratio		Tonnage (kt)	Cr <sub>2</sub> O <sub>3</sub> (%)	Cr:Fe ratio
PROVED:				MEASURED:			
Vlakpoort: Oper	n Pit			Vlakpoort: Ope	n Pit		
LG1-3	0	37.30	1.74	LG1-3	0	41.57	1.82
LG5	18	39.12	1.52	LG5	42	38.77	1.55
LG6	55	36.72	1.51	LG6	140	36.85	1.53
MG1-4	52	29.72	1.25	MG1-4	131	30.01	1.29
UG1-2	101	22.40	1.14	UG1 -2	164	21.46	1.12
Vlakpoort: Underground				Vlakpoort: Und	erground		
LG6	0			LG6	398	33.32	1.59
UG2	0			UG2	754	19.65	1.06
Total Proved Reserves	226	34.16*	1.40**	Total Measured Resources	1,629	33.73*	1.52**
PROBABLE:				INDICATED:	.,		
Vlakpoort: Ope	n Pit			Vlakpoort: Ope	n Pit		
LG1-3	4	37.93	1.78	LG1-3	17	41.57	1.86
LG5	3	35.01	1.45	LG5	10	39.92	1.55
LG6	37	31.25	1.63	LG6	64	33.95	1.58
MG1-4	16	30.52	1.36	MG1-4	75	29.92	1.35
UG1-2	9	27.09	1.22	UG1-UG2	24	27.61	1.25
Vlakpoort: Und	erground			Vlakpoort: Underground			
LG6	0			LG6	793	33.92	1.58
UG2	0			UG2	421	19.83	1.06
Total Probable Reserves	69	31.69*	1.56**	Total Indicated Resources	1,404	33.81*	1.57**
Total Proved & Probable Reserves	295	33.58	1.44	Total Measured & Indicted Resources	3,033	33.76	1.54

INFERRED			
Vlakpoort: Open-Pit			
LG1 -3	41	41.55	1.79
LG5	0		
LG6	1	28.61	1.59
MG1 -4	119	33.67	1.30
UG1 -2	0		
Vlakpoort: Undergrour	ıd		
LG6	1,321	33.67	1.59
UG2	115	20.27	1.08
Total Inferred Resources	1,597	33.88*	1.57**
Total Resources (Excl Exploration Results)	4,630	33.81	1.55
EXPLORATION RESULTS			
Vlakpoort: Open-Pit			
LG1 -3	50	36.86	1.82
LG6	365	33.55	1.60
MG1 & MG3	25	33.60	1.65
MG4 & MG4a	264	29.70	1.23
Vlakpoort; Undergrour	nd		
LG6	1,243	34.16	1.60
Total exploration Results	1,947	33.50	1.56
Total Resources (Incl Exploration Results)	6,577	33.72*	1.55**

### NOTES:

Table 3. Shows the Chromitite Mineral Reserves and Resources for Vlakpoort Mine as at 31 December 2018.

<sup>\*</sup> Excluding Cr2O3 % of UG1, UG2 and MR \*\* Excluding Cr:Fe (ratio) of UG1, UG2 and MR

# **Combined Chromitite Mineral**

### **Resource and Reserve Statemente**

Mineral Reserves (ROM Feed Numbers)				Mineral Resources (Geological Losses Applied)				
	Tonnage (kt)	Cr <sub>2</sub> O <sub>3</sub> (%)	Cr:Fe ratio		Tonnage (kt)	Cr <sub>2</sub> O <sub>3</sub> (%)	Cr:Fe ratio	
PROVED:				MEASURED:				
Stellite Tailings				Stellite Tailing	s			
LG6 - MG4	225	24.1	1.14	LG6 - MG4	225	24.1	1.14	
Stellite: Open Pi	t			Stellite: Open-	-Pit			
MG4	1,111	30.39	1.20	MG4	1,306	31.86	1.22	
MG3	674	30.64	1.18	MG3	788	31.68	1.19	
MG2	346	35.98	1.32	MG2	405	37.20	1.32	
MG1	598	37.72	1.40	MG1	700	39.00	1.40	
LG6 + 6A	103	33.68	1.37	LG6 + 6A	120	38.11	1.46	
Stellite: Undergr	ound			Stellite: Under	ground			
MG4				MG4	1,211	33.59	1.24	
LG6 + 6A	2,702	34.98	1.36	LG6 + 6A	4,222	37.7	1.41	
Mecklenburg: O	pen Pit			Mecklenburg:0	Open-Pit			
LG6 + 6A	61	40.76	1.58	LG6 + 6A	73.91	44.10	1.64	
Mecklenburg: Ur	nderground			Mecklenburg:	Underground			
LG6 + 6A	2,682	41.85	1.57	LG6 + 6A	4,190	43.66	1.59	
Vlakpoort: Open Pit				Vlakpoort: Open-Pit				
LG1 -3	4	37.93	1.78	LG1 -3	0	41.57	1.82	
LG5	3	35.01	1.45	LG5	42	38.77	1.55	
LG6	37	31.25	1.63	LG6	140	36.85	1.53	
MG1 -4	16	30.52	1.36	MG1 -4	131	30.01	1.29	
UG1 -2	9	27.09	1.22	UG1 -2	164	21.46	1.12	
Vlakpoort: Unde	erground			Vlakpoort: Underground				
LG6	0			LG6	398	33.32	1.59	
UG2	0			UG2	754	19.65	1.06	
				Total				
Total Proved Reserves	9 F71	36.14*	1.39**	Measured		37.02÷	1.41**	
PROBABLE:	8,571	36.14"	1.39**	Resources	14,870	37.92*	1.41**	
Stellite: Open Pi				Stellite: Open-	-Pit			
MG4	3,015	30.75	1.20	MG4	3,526	32.25	1.23	
MG3	1,276	30.82	1.16	MG3	1,492	31.68	1.19	
MG2	948	36.08	1.28	MG2	1,109	37.30	1.31	
MG1	1,914	37.53	1.38	MG1	2,239	38.80	1.41	
LG6 + 6A	239	33.88	1.43	LG6 + 6A	280	38.54	1.46	
Stellite: Undergr	ound			Stellite: Under	ground			
MG4	262	32.69	1.22	MG4	306	33.8	1.25	
LG6 + 6A	3,628	34.26	1.38	LG6 + 6A	4,243	37.5	1.41	
Mecklenburg: Ur	nderground			Mecklenburg:	Underground			
LG6 + 6A	1,924	41.83	1.57	LG6 + 6A	3,006	43.37	1.59	

Vlakpoort: Open Pit				Vlakpoort: Open-Pit				
LG1 -3	4	37.93	1.78	LG1 -3	17	41.57	1.86	
LG5	3	35.01	1.45	LG5	10	39.92	1.55	
LG6	37	31.25	1.63	LG6	64	33.95	1.58	
MG1 -4	16	30.52	1.36	MG1 -4	75	29.92	1.35	
UG1 -2	9	27.09	1.22	UG1 -2	24	27.61	1.25	
Vlakpoort: Undergrou	ınd			Vlakpoort: Undergr	ound			
LG6	0			LG6	793	33.92	1.58	
UG2	0			UG2	421	19.83	1.06	
T ID				Total				
Total Probable Reserves	13,275	34.78*	1.34**	Indicated Resources	17,605	36.81*	1.38**	
				Total	,,,,,			
Total Proved				Measured				
& Probable Reserves	21,846	35.32	1.36	& Indicated Resources	32,475	37.31	1.40	
				INFERRED				
				Stellite: Open-Pit				
				MG4	1,440	33.18	1.24	
				MG3	2,110	32.64	1.26	
				MG2	1,920	37.10	1.32	
				MG1	1,070	38.90	1.41	
				LG6 + 6A	40	37.82	1.44	
				Mecklenburg: Under	rground			
				LG6 + 6A	1,142	43.41	1.59	
				Vlakpoort: Open-Pi				
				LG1 -3	41	41.55	1.79	
				LG5				
				LG6	1	28.61	1.59	
				MG1 -4	119	33.67	1.30	
				UG1 -2	0			
				Vlakpoort: Undergr	ound			
				LG6	1,321	33.67	1.59	
				UG2	115	20.27	1.08	
				Total Inferred				
				Resources	9,319	35.94*	1.38**	
				Total Resources				
				(Excl				
				Exploration Results <sup>2</sup> )	41,794	37.01	1.39	
				EXPLORATION RESU		37.01	1.57	
				Vlakpoort: Open-Pi				
				LG1 -3	50	36.86	1.82	
				LG6	365	33.55	1.60	
				MG1 & MG3	25	33.60	1.65	
				MG4 & MG4a	264	29.70	1.23	
				Vlakpoort: Undergre			1.23	
				LG6	1,243	34.16	1.60	
				Total	-,- 10	29		
				Exploration Results	1,947	33.50	1.56	
"NOTES:				Total Resources (Incl				
"NOTES: * Excluding Cr2O3 % of UG1, UG2 and MR ** Excluding Cr:Fe (ratio) of UG1, UG2 and MR"				Exploration Results <sup>2</sup> )	43,741	36.85*	1.40**	

 $<sup>^{\</sup>star}$  Excluding Cr2O3 % of UG1, UG2 and MR  $^{\star\star}$  Excluding Cr:Fe (ratio) of UG1, UG2 and MR  $^{\prime\prime}$ 

## **Combined PGM Mineral**

### **Resource and Reserve Statemente**

Minei	Mineral Reserves (ROM Feed Numbers)			Mineral Resources (Geological Losses Applied)			
	Tonnage (kt)	Cr <sub>2</sub> O <sub>3</sub> (%)	Cr:Fe ratio		Tonnage (kt)	Cr <sub>2</sub> O <sub>3</sub> (%)	Cr:Fe ratio
PROVED:				MEASURED:			
Vlakpoort: Open	Pit			Vlakpoort: Oper	n-Pit		
LG1 -3	-	-	-	LG1 -3	0	0.18	0
LG5	-	-	-	LG5	42	0.74	999
LG6	-	-	-	LG6	140	0.46	2,066
MG1 -4	-	-	-	MG1 -4	131	1.13	4,760
UG1 -MR	159	1.4	7,158	UG1 -MR	205	1.77	11,667
Vlakpoort: Underground				Vlakpoort: Unde	erground		
LG6	-	-	-	LG6	398	0.43	5,503
UG2	-	-	-	UG2	754	4.04	97,947
MR	-	-	-	MR	618	2.15	42,723
Total Proved Reserves	159	1.40	7,158	Total Measured Resources	2,288	2.25	165,666
PROBABLE:			77.00	INDICATED	_/		100/000
Stellite: Open Pit				Stellite: Open Pi	t		
MG4				MG4	952	1.40	42,855
MG3				MG3	440	1.78	25,183
MG2				MG2	698	1.73	38,828
MG1				MG1	722	0.84	19,501
Vlakpoort: Open	Pit			Vlakpoort: Oper	n-Pit		
LG1 -3	-	-	-	LG1 -3	17	0.22	120
LG5	-	-	-	LG5	10	0.66	212
LG6	-	-	-	LG6	64	0.40	823
MG1 -4	-	-	-	MG1 -4	75	0.85	2,050
UG1 -MR	9	0.19	55	UG1 -MR	24	0.31	239
Vlakpoort: Unde	rground			Vlakpoort: Unde	erground		
LG6	-	-	-	LG6	793	0.43	10,964
UG2	-	-	-	UG2	421	4.45	60,240
MR	-	-	-	MR	208	2.96	19,797
Total Probable				Total Indicated			
Total Proved	9	0.19	55	Resources Total Measured	4,424	1.55	220,813
& Probable Reserves	168	1.34	7,213	& Indicated Resources	6,712	1.79	386,479
			, -	INFERRED			
				Stellite: Open-P	it		
				MG4	5,710	1.38	253,370
				MG3	3,950	2.13	270,531
				MG2	2,740	2.06	181,492
				MG1	3,430	0.86	94,849

Vlakpoort: Open-Pi	t		
LG1 -3	41	0.23	303
LG5	0	-	
LG6	1	0.42	14
MG1-4	119	1.00	3,820
UG1 -MR	0	-	
Vlakpoort: Undergr	ound		
LG6	1,321	0.42	17,84
UG2	115	4.78	17,67
MR	-	-	
Total Inferred			
Resources	17,427	1.50	839,89
Total Resources (Excl Exploration			
Results <sup>2</sup> )	24,139	1.58	1,226,37
EXPLORATION RESU	ILTS		
Vlakpoort: Open-Pi	t		
LG1	10	0.30	9
LG2	7	0.17	3
LG3	33	0.27	28
LG6	365	0.42	4,92
MG1	20	0.85	54
MG3	5	1.67	26
MG4 + 4a	264	0.87	7,38
Vlakpoort: Undergr	ound		
LG6	1,243	0.41	16,38
Total			
exploration			
Results Total	1,947	0.48	29,93
Resources			
(Incl			
Exploration			
Results)	26,086	1.50	1,256,31

Table 5. Shows the Chromitite Mineral Reserves and Resources for Vlakpoort Mine as at 31 December 2018.

## **Historical Information**

The information in this statement that relates to Exploration Results and Mineral Resources is based on the Mineral reserve and resource report and information compiled by Hermanus Berhardus Swart, a Competent Person who is a Professional Natural Scientist registered with the South African Council for Natural Scientific Professions accredited (No. 400101/00) and a Member of the Geological Society of South Africa, each of which is a "Recognised Professional Organisation" (RPO) that is included in a list that is posted on the ASX website from time to time. Hermanus Berhardus Swart, the Competent Person is employed by Dunrose Trading 186 (PTY) Ltd trading as Shango Solutions, which provides services as geological consultants. The Competent Person has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined by the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves in the United Kingdom, Ireland and Europe (IMMM) as well as the 2007 edition of the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC). The Competent Person consents to the inclusion of the matters based on his information in the form and context in which it appears.

## **Competent Persons**

The information in this statement that relates to Exploration Results and Mineral Resources is based on the Mineral Reserve and Mineral Resource report and information compiled by:

1. Daniel Thenga: Senior Geologist, Afarak SA Mining,

Pr.Sci.Nat (reg nr: 114738), BSc Hons (Mining & Geology, Blasting Cert, MGSSA

2. Cuan Berner Kloppers: Chief Consulting Geologist, Afarak SA Mining,

Pr.Sci.Nat (reg no:400092/04), EDP (UNISA SBL), NDip (Geology), NHDip, Geotechnology, MTech

Research (Industrial Minerals), MGSSA, MSAAG, MSAQS

Both the people named above are Competent Persons who are both Professional Natural Scientists registered with South African Council for Natural Scientific Professions accredited and Members of the Geological Society of South Africa, each of which is a "Recognized Professional Organisation" (RPO) that is included in a list that is posted on the ASX website from time to time.

Both the Competent Persons, listed above, have sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined by the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC), the 2001 Code for reporting of Mineral Exploration Results, Mineral Resources and Mineral Reserves in the United Kingdom, Ireland and Europe (IMMM) as well as the 2007 edition of the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC). The Competent Persons consent to the inclusion of the matters based on his information in the form and context in which it appears.

Daniel Thenga

Cuan Kloppers