

1 February 2022

**Shanta Gold Limited**  
("Shanta Gold", "Shanta" or the "Company")

**Gold Reserves Mined in 2021 Replaced at New Luika Gold Mine**

**Year End 2021 NLGM Reserves & Resources Statement**

Shanta Gold (AIM: SHG), the East Africa-focused gold producer, developer and explorer, is pleased to announce a reserves and resources update for its projects in Tanzania as at 31 December 2021.

**Eric Zurrin, Chief Executive Officer, commented:**

*"Shanta has once again replaced all annually mined ounces in 2021 with new reserves, as well as extending the mine life at New Luika Gold Mine to at least the end of 2026. This marks the third consecutive year in which we have replaced mined reserves across our portfolio through successful exploration which remains key to unlocking long-term, sustainable returns for our shareholders.*

*During 2021, we invested US\$4.4 million in exploration, with the 31,600 metres drilled in Tanzania returning 110,000 ounces of new reserves whilst also expanding our regional resources outside of the New Luika mine plan. The upgrading of approximately 80,000 oz grading 4.31 g/t to the Proven Reserve category from Probable following grade control drilling also significantly contributed to the de-risking of our 12-month production outlook.*

*Longevity across our prospective portfolio of mining and exploration licences is a core value lever and we look forward to sharing our West Kenya resource estimate at the end of February."*

**Highlights:**

- 3rd consecutive year that all mined ounces have been replaced during the year with newly defined reserves;
- Total JORC 2012 compliant gold reserves of 645,000 ounces ("oz") grading 3.04 g/t across the Company's two projects in Tanzania, an increase of 20,000 oz net of depletion;
- Newly defined reserves of 110,000 oz added in 2021, before depletion, predominantly from the Luika Underground project;
- A total of 80,000 oz, grading 4.31 g/t, have been upgraded from Probable to Proven Reserves following grade control drilling de-risking the 12-month production outlook;
- Reserve-based mine life extended again, now to end of 2026 at NLGM and unchanged to end of 2029 at Singida;
- Total resources of 2.01 million oz grading 2.40 g/t across both projects in Tanzania (JORC 2012 compliant);
- No change in Singida reserves & resources;
- Updated West Kenya resource estimate expected at the end of February 2022.

## Breakdown of New Reserves Increase in 2021

New reserves by deposit added during 2021<sup>1</sup> are given below:

Deposit	Reserves Dec 2020 (koz)	Ounces Added (koz)	Ounce Depletion (koz)	Resource Optimisation (koz)	Reserves Dec 2021 (koz)
Luika	138	87	(23)	(9)	193
Bauhinia Creek	63	12	(34)	(2)	39
Ilunga	43	-	(18)	-	25
BC North	31	-	(3)	(5)	23
Shamba	6	-	(3)	-	3
Elizabeth Hill	61	-	(6)	-	55
Black Tree Hill	40	-	-	-	40
BC East	-	29	(3)	-	26
<b>Total</b>	<b>382</b>	<b>128</b>	<b>(90)</b>	<b>(16)</b>	<b>404</b>

## NLGM Reserves

The total reserves position for NLGM as of 31 December 2021<sup>1</sup> is given below:

Deposit and classification	PROBABLE RESERVES		
	Ore tonnes (kt)	Ore grade (g/t Au)	Contained Ounces (koz)
Ore Reserves – Underground	2,598	3.59	300
Ore Reserves – Open Pit	1,519	2.13	104
<b>Total Ore Reserve</b>	<b>4,117</b>	<b>3.05</b>	<b>404</b>

Note: 1. Reserves are reported in accordance with the JORC Code 2012.

## NLGM Underground Reserves<sup>1,2,3,4</sup>

The underground probable reserve statement is shown below:

Deposit	PROBABLE RESERVES			
	Cut-off grade (“COG”) (g/t)	Ore tonnes (kt)	Ore grade (g/t Au)	Contained ounces (koz)
Luika	1.6	1,843	3.25	192
Ilunga	2.0	169	4.53	25
BC North	1.9	185	3.03	18
BC	1.9	182	6.59	39
BCE Area 1	1.9	220	3.69	26
<b>Total Ore Reserve - Underground</b>		<b>2,598</b>	<b>3.59</b>	<b>220</b>

Note: 1. Proved Reserve is 578kt @ 4.31g/t equivalent to 80koz.

Note: 2. Reserves are reported in accordance with the JORC Code 2012.

Note: 3. Reserve estimates assume application of long-hole open-stoping. Economic evaluations are at a gold price of US\$1,350 /oz. An assumed gold recovery of 90% has been applied.

Note: 4. JORC Code 2012 disclosures for these reserves are appended to this statement.

### **NLGM Open Pit Ore Reserves**

The open pit probable reserve statement is shown below:

<b>Deposit</b>	<b>PROBABLE RESERVES</b>			
	<b>COG (g/t)</b>	<b>Ore tonnes (kt)</b>	<b>Ore grade (g/t Au)</b>	<b>Contained Ounces (koz)</b>
Black Tree Hill	0.6	580	2.12	40
Elizabeth Hill	0.6	808	2.16	56
Shamba	0.7	58	2.01	4
Bauhinia Creek North	0.6	73	1.96	4
<b>Total Ore Reserve - Open Pit</b>		<b>1,519</b>	<b>2.13</b>	<b>104</b>

Note: 1. Reserves are reported in accordance with the JORC Code 2012.

Note: 2. Economic evaluations are at a gold price of US\$1,350 /oz. An assumed gold recovery of 90% has been applied.

Note: 3. JORC Code 2012 disclosures for these reserves are appended to this statement.

**NLGM Deposits - Resources Outside Mine Design<sup>1</sup> as of 31 December 2021 (1.0 Au g/t COG OP, 1.0 Au g/t COG UG)**

Resources are reported in accordance with the JORC Code 2012.

	Deposit <sup>1</sup>	JH	SH	EH	BTH	IL	LK	BC	BCEA1	BCN	BCE	LS	BTHN	PS	Total	
Open Pit	Ore kt (Measured)	-	-	60,780	12,213	-	28,111	-	-	-	-	-	-	-	101,104	
	Grade (Au g/t)	-	-	1.75	1.98	-	3.17	-	-	-	-	-	-	-	2.17	
	Contained ounces (koz)	-	-	3,426	776	-	2,864	-	-	-	-	-	-	-	7,066	
	Ore kt (Indicated)	585,333	9,111	249,765	156,723	137,558	225,979	-	<b>36,862</b>	24,915	94	118,350	114,012	986,015	2,644,717	
	Grade (Au g/t)	1.76	1.41	1.74	1.66	3.27	3.58	-	<b>1.95</b>	2.23	3.76	3.65	1.78	2.15	2.23	
	Contained ounces (koz)	33,169	412	13,977	8,345	14,459	26,042	-	<b>2,306</b>	1,787	11	13,881	6,525	68,296	189,210	
	Ore kt (Inferred)	37,147	89,251	52,154	9,261	10,255	108	-	-	-	1,413	42,579	37,423	851,860	1,131,451	
	Grade (Au g/t)	1.45	1.60	1.29	1.34	1.49	5.23	-	-	-	3.39	3.17	1.40	1.68	1.70	
	Contained ounces (koz)	1,737	4,578	2,160	399	493	18	-	-	-	154	4,342	1,684	46,108	61,672	
Total Open Pit	<b>Ore kt</b>	<b>622,480</b>	<b>98,362</b>	<b>362,699</b>	<b>178,197</b>	<b>147,813</b>	<b>254,198</b>	-	<b>36,862</b>	<b>24,915</b>	<b>1,507</b>	<b>160,929</b>	<b>151,435</b>	<b>1,837,875</b>	<b>3,877,272</b>	
	<b>Grade (Au g/t)</b>	<b>1.74</b>	<b>1.58</b>	<b>1.68</b>	<b>1.66</b>	<b>3.15</b>	<b>3.54</b>	-	<b>1.95</b>	<b>2.23</b>	<b>3.41</b>	<b>3.52</b>	<b>1.69</b>	<b>1.94</b>	<b>2.07</b>	
	<b>Contained ounces (koz)</b>	<b>34,906</b>	<b>4,990</b>	<b>19,563</b>	<b>9,520</b>	<b>14,952</b>	<b>28,924</b>	-	<b>2,306</b>	<b>1,787</b>	<b>165</b>	<b>18,223</b>	<b>8,208</b>	<b>114,404</b>	<b>257,948</b>	
Underground	Deposit	JH	SH	EH	BTH	IL	LK	BC	BCEA1	BCN	BCE	LS	BTHN	PS	Total	
	Ore kt (Measured)	-	-	-	-	-	108,146	-	-	-	-	-	-	-	108,146	
	Grade (Au g/t)	-	-	-	-	-	2.76	-	-	-	-	-	-	-	2.76	
	Contained ounces (koz)	-	-	-	-	-	9,609	-	-	-	-	-	-	-	9,609	
	Ore kt (Indicated)	22,086	-	914,846	122,070	168,341	163,196	335,038	86,770	10,197	-	-	-	-	1,822,544	
	Grade (Au g/t)	3.08	-	1.81	2.60	2.55	2.77	3.36	3.01	4.40	-	-	-	-	2.44	

	Contained ounces (koz)	2,189	-	53,212	10,224	13,777	14,559	39,105	8,401	1,442	-	-	-	-	142,909
	Ore kt (Inferred)	722,699	7,032	2,185,812	8,326	79,140	135,215	355,581	48,768	25,894	-	136,164	-	-	3,704,631
	Grade (Au g/t)	1.63	1.59	1.51	2.04	4.43	2.02	2.33	3.37	4.28	-	3.14	-	-	1.80
	Contained ounces (koz)	37,791	360	106,270	546	11,276	8,762	26,687	5,288	3,565	-	13,730	-	-	214,275
<b>Total Underground</b>	<b>Ore kt</b>	<b>744,785</b>	<b>7,032</b>	<b>3,100,658</b>	<b>130,396</b>	<b>247,481</b>	<b>406,557</b>	<b>690,619</b>	<b>135,538</b>	<b>36,091</b>	<b>-</b>	<b>136,164</b>	<b>-</b>	<b>-</b>	<b>5,635,321</b>
	<b>Grade (Au g/t)</b>	<b>1.67</b>	<b>1.59</b>	<b>1.60</b>	<b>2.57</b>	<b>3.15</b>	<b>2.52</b>	<b>2.96</b>	<b>3.14</b>	<b>4.31</b>	<b>-</b>	<b>3.14</b>	<b>-</b>	<b>-</b>	<b>2.02</b>
	<b>Contained ounces (koz)</b>	<b>39,980</b>	<b>360</b>	<b>159,482</b>	<b>10,770</b>	<b>25,053</b>	<b>32,930</b>	<b>65,792</b>	<b>13,689</b>	<b>5,007</b>	<b>-</b>	<b>13,730</b>	<b>-</b>	<b>-</b>	<b>366,793</b>
<b>Open Pit + Underground</b>	<b>Deposit</b>	<b>JH</b>	<b>SH</b>	<b>EH</b>	<b>BTH</b>	<b>IL</b>	<b>LK</b>	<b>BC</b>	<b>BCEA1</b>	<b>BCN</b>	<b>BCE</b>	<b>LS</b>	<b>BTHN</b>	<b>PS</b>	<b>Total</b>
	Ore kt (Measured)	-	-	60,780	12,213	-	136,257	-	-	-	-	-	-	-	209,250
	Grade (Au g/t)	-	-	1.75	1.98	-	2.85	-	-	-	-	-	-	-	2.48
	Contained ounces (koz)	-	-	3,426	776	-	12,473	-	-	-	-	-	-	-	16,675
	Ore kt (Indicated)	607,419	9,111	1,164,611	278,793	305,899	389,175	335,038	123,632	35,112	94	118,350	114,012	986,015	4,467,261
	Grade (Au g/t)	1.81	1.41	1.79	2.07	2.87	3.24	3.63	2.69	2.86	3.64	3.65	1.78	2.15	2.31
	Contained ounces (koz)	35,358	412	67,189	18,569	28,236	40,601	39,105	10,707	3,229	11	13,881	6,525	68,296	332,119
	Ore kt (Inferred)	759,846	96,283	2,237,966	17,587	89,395	135,323	355,581	48,768	25,894	1,413	178,743	37,423	851,860	4,836,082
	Grade (Au g/t)	1.62	1.60	1.51	1.67	4.09	2.02	2.33	3.37	4.28	3.39	3.14	1.40	1.68	1.77
Contained ounces (koz)	39,528	4,938	108,430	945	11,769	8,780	26,687	5,288	3,565	154	18,072	1,684	46,108	275,947	
<b>Total OP+UG</b>	<b>Ore kt</b>	<b>1,367,265</b>	<b>105,394</b>	<b>3,463,357</b>	<b>308,593</b>	<b>395,294</b>	<b>660,755</b>	<b>690,619</b>	<b>172,400</b>	<b>61,006</b>	<b>1,507</b>	<b>297,093</b>	<b>151,435</b>	<b>1,837,875</b>	<b>9,512,593</b>
	<b>Grade (Au g/t)</b>	<b>1.70</b>	<b>1.58</b>	<b>1.61</b>	<b>2.05</b>	<b>3.15</b>	<b>2.91</b>	<b>2.96</b>	<b>2.89</b>	<b>3.46</b>	<b>3.41</b>	<b>3.35</b>	<b>1.69</b>	<b>1.94</b>	<b>2.04</b>
	<b>Contained ounces (koz)</b>	<b>74,886</b>	<b>5,350</b>	<b>179,045</b>	<b>20,290</b>	<b>40,005</b>	<b>61,854</b>	<b>65,792</b>	<b>15,995</b>	<b>6,794</b>	<b>165</b>	<b>31,953</b>	<b>8,209</b>	<b>114,404</b>	<b>624,741</b>

Note: 1. Resources Outside of the Mine Design exclude reserves and exclude resources that do not meet a minimum cut-off grade for economic viability.

Deposit glossary:

**JH** – Jamhuri

**SH** - Shamba

**EH** – Elizabeth Hill

**BTH** – Black Tree Hill

**IL** - Ilunga

**LK** - Luika

**BC** – Bauhinia Creek

**BCEA1** – Bauhinia Creek East Area 1

**BCN** - Bauhinia Creek North

**BCE** - Bauhinia Creek East

**LS** – Luika South

**BTHN** – Black Tree Hill North

**PS** – Porcupine South



<b>Open Pit + underground</b>	Ore kt (Indicated)	205	166	660	221	540	405	72	2,269
	Grade (Au g/t)	1.95	1.75	1.90	1.65	2.94	1.52	2.34	2.06
	Contained ounces (koz)	13	9	40	12	51	20	5	150
	Ore kt (Inferred)	216	1,212	4,230	315	722	635	182	7,513
	Grade (Au g/t)	2.43	2.10	2.03	1.65	2.95	1.90	2.42	2.12
	Contained ounces (koz)	17	82	276	17	68	39	14	513
<b>Total OP+UG</b>	<b>Ore Tonnes (Ind+Inf)</b>	<b>421</b>	<b>1,379</b>	<b>4,890</b>	<b>537</b>	<b>1,261</b>	<b>1,040</b>	<b>254</b>	<b>9,781</b>
	<b>Grade (Au g/t)</b>	<b>2.19</b>	<b>2.06</b>	<b>2.01</b>	<b>1.65</b>	<b>2.95</b>	<b>1.75</b>	<b>2.39</b>	<b>2.11</b>
	<b>Contained ounces (koz)</b>	<b>30</b>	<b>91</b>	<b>317</b>	<b>28</b>	<b>119</b>	<b>59</b>	<b>20</b>	<b>664</b>



**New Luika Gold Mine**  
**Mineral Resource Estimate (MRE) inclusive of Reserves – 31 December 2021 – COG 1.0 g/t**  
**(December 2021)**  
**JORC 2012 Classification**

Deposit	Measured			Indicated			Inferred			Total Resource		
	Tonnes (kt)	Grade (Au_g/t)	Ounces (koz)	Tonnes (kt)	Grade (Au_g/t)	Ounces (koz)	Tonnes (kt)	Grade (Au_g/t)	Ounces (koz)	Tonnes (kt)	Grade (Au_g/t)	Ounces (koz)
Jamhuri	-	-	-	613	1.82	36	760	1.62	40	1,373	1.71	76
Shamba	-	-	-	65	2.26	5	104	1.61	5	169	1.86	10
Elizabeth Hill	-	-	-	1,940	1.96	122	2,242	1.51	109	4,182	1.72	231
Black Tree Hill	-	-	-	1,255	2.00	81	506	1.26	20	1,761	1.79	101
Ilunga	20	3.38	2	549	3.93	69	105	3.66	12	674	3.87	83
Luika	192	2.96	18	2,185	3.66	257	137	2.04	9	2,514	3.52	284
Bauhinia Creek	209	7.25	49	291	2.43	23	357	2.34	27	857	3.57	99
Bauhinia Creek East Area 1	242	4.64	36	11	4.90	2	26	3.95	3	279	4.57	41
Bauhinia Creek North	-	-	-	221	3.25	23	36	4.38	5	257	3.41	28
Bauhinia Creek East	-	-	-	-	3.19	0	1	3.12	0	1	3.13	0
Luika South	-	-	-	118	3.67	14	178	3.15	18	296	3.35	32
Black Tree Hill North	-	-	-	114	1.78	7	37	1.40	2	151	1.69	9
Porcupine South	-	-	-	986	2.15	68	852	1.68	46	1,838	1.94	114
<b>Grand Total</b>	<b>663</b>	<b>4.94</b>	<b>105</b>	<b>8,348</b>	<b>2.63</b>	<b>707</b>	<b>5,341</b>	<b>1.73</b>	<b>296</b>	<b>14,352</b>	<b>2.40</b>	<b>1,108</b>

## Singida Reserves and Resources

The total probable reserves position for Singida as of 31 December 2021 is given below:

**Singida Gold Project Tanzania**  
**JORC 2012 Reserve<sup>1</sup>**  
**(26 May 2020)**  
**JORC 2012 Classification**

Deposit	COG (g/t)	PROBABLE RESERVES			
		Ore tonnes (kt)	Ore grade (g/t Au)	Contained Ounces (koz)	Recoverable Ounces (koz)
Cornpatch	0.79	134	1.88	8	8
Cornpatch West	0.78	295	3.46	34	29
Gold Tree	0.74	1,342	3.40	147	132
Gustav	0.78	129	1.7	7	6
Jem	0.74	324	2.86	30	27
Kaizer Chief	0.78	142	1.65	8	7
Vivian	0.74	125	2.38	10	9
<b>Grand Total</b>	<b>0.75</b>	<b>2,491</b>	<b>3.02</b>	<b>242</b>	<b>218</b>

Note 1. Reserves are reported in accordance with the JORC Code 2012.

**Singida Gold Project Tanzania**  
**Mineral Resource Estimate (MRE) inclusive Reserve**  
**(31<sup>st</sup> December 2021)**  
**JORC 2012 Classification**

Deposit	MEASURED			INDICATED			INFERRED			TOTAL RESOURCES		
	TONNES (kt)	GRADE g/t	OUNCES (koz)	TONNES (kt)	GRADE g/t	OUNCES (koz)	TONNES (kt)	GRADE g/t	OUNCES (koz)	TONNES (kt)	GRADE g/t	OUNCES (koz)
CORNPATCH	117	2.00	8	336	1.98	22	517	2.36	39	970	2.18	69
CORNPATCH WEST	-	-	-	824	2.52	67	565	1.87	34	1,389	2.26	101
GOLD TREE	1,115	3.74	136	1,294	2.39	100	3,274	2.02	213	5,683	2.43	449
GUSTAV	-	-	-	148	1.49	7	783	1.85	47	932	1.79	54
JEM	376	2.99	36	542	2.67	46	532	2.92	50	1,451	2.84	132
KAIZER CHIEF	-	-	-	475	1.67	25	354	1.98	22	828	1.80	47
VIVIAN	-	-	-	405	2.97	38	125	3.40	14	529	3.07	52
<b>TOTAL</b>	<b>1,608</b>	<b>3.39</b>	<b>180</b>	<b>4,024</b>	<b>2.36</b>	<b>305</b>	<b>6,150</b>	<b>2.12</b>	<b>419</b>	<b>11,782</b>	<b>2.39</b>	<b>904</b>

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## **About Shanta Gold**

Shanta Gold is an East Africa-focused responsible gold producer, developer and explorer. The company has an established operational track record, with defined ore resources on the New Luika and Singida projects in Tanzania, with reserves of 645 koz grading 3.04 g/t, and exploration licences covering approximately 1,100 km<sup>2</sup> in the country. Alongside New Luika and Singida, Shanta also owns the West Kenya Project in Kenya with defined inferred resources of 1.2 Moz grading 12.6 g/t and licences covering approximately 1,162 km<sup>2</sup>. With a strong balance sheet, a growing diversified portfolio and a maiden dividend paid in 2021, Shanta offers a resilient investment opportunity for the near and long-term. Shanta is quoted on London's AIM market (AIM: SHG) and has approximately 1,048 million shares in issue.

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulation (EU) No. 596/2014 as amended by The Market Abuse (Amendment) (EU Exit) Regulations 2019.

### **Competent Person Statement**

The technical information contained within this announcement has been reviewed by Juma Kisunda (the Company's Technical Services Manager), Paul W. Mbuya (the Company's Exploration Manager) and Jackson Kikota (the Company's Chief Mining Engineer), who are Members of The Australasian Institute of Mining and Metallurgy (Aus.I.M.M). They have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' and for the purposes of the AIM Guidance Note on Mining and Oil & Gas Companies dated June 2009.

## Glossary

### Glossary of Technical Terms

"Au"	chemical symbol for gold
"cut off grade" (COG)	the lowest grade value that is included in a resource statement. It must comply with JORC requirement 19: " <i>reasonable prospects for eventual economic extraction</i> " the lowest grade, or quality, of mineralised material that qualifies as economically mineable and available in a given deposit. It may be defined on the basis of economic evaluation, or on physical or chemical attributes that define an acceptable product specification
"g/t"	grammes per tonne, equivalent to parts per million
"Inferred Resource"	that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability
"Indicated Resource"	that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed
"JORC"	The Australasian Joint Ore Reserves Committee Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (the "JORC Code" or "the Code"). The Code sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves
"koz"	thousand troy ounces of gold
"Measured Resource"	that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through

appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity

"Mineral Resource"	a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories when reporting under JORC
"Mt"	million tonnes
"oz"	troy ounce (= 31.103477 grammes)
"Reserve"	the economically mineable part of a Measured and/or Indicated Mineral Resource
"t"	tonne (= 1 million grammes)

## APPENDIX 1: SAMPLING TECHNIQUES AND DATA

<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond drilling 1m samples</li> <li>• Reverse circulation (RC) drilling was used to obtain 1 m samples from which 3 kg of material was sent for analysis</li> <li>• Drilling sampled on a maximum of 1 m downhole</li> <li>• Samples were not composited</li> <li>• Samples were submitted to the SGS Laboratory in Mwanza for analysis</li> <li>• At least 3kg sample pulverized and a 50g charge fire assayed with AAS or aqua regia finish for gold</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond core drilling; NQ core size</li> <li>• RC Drilling</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Core sample recoveries routinely measured and recorded in spreadsheet database</li> <li>• Samples split half core perpendicular to strike of mineralized zones</li> <li>• RC samples recovered from on-site cyclone</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Logging of geology, alteration and geotechnical aspects recorded in drill logs for diamond core drilling</li> <li>• Logging is qualitative; All drill core is photographed</li> <li>• Entire intervals that were drilled and/or trenched were logged</li> </ul>

<p><b>Sub-sampling techniques and sample preparation</b></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Half core taken; Sawn</li> <li>• RC samples riffled and sub-sample; Submitted for analysis</li> <li>• For trench samples, the entire sample for the respective interval aggregated, not riffled or split</li> <li>• Aggregated half core; Entire 3kg sample pulverized at laboratory prior to fire assay in order to minimize bias</li> <li>• Drilling and channels planned orthogonal to the strike of structures/lithologies in order to maximize representivity</li> <li>• Field duplicates sampled at appropriate intervals</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Fire assay is appropriate for the nature of gold mineralization being assayed</li> <li>• No geophysical tools used to generate exploration results</li> <li>• Registered reference material inserted at the interval of 20 samples</li> <li>• Levels of accuracy and precision (detection limit) for gold is 0.01 ppm which is suitable for the level of assays reported</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No twinning of drillholes</li> <li>• Primary data was logged onto paper and later transferred into database, verified by a Senior Geologist and stored in electronic database that is regularly backed up</li> <li>• Database is verified and compared with standard assays stored using established company protocols</li> <li>• No adjustments have been made to assay data</li> </ul>
<p><b>Location of data points</b></p>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drillholes and trenches were accurately surveyed using Trimble DGPS survey equipment</li> <li>• Drillholes and trenches surveyed in UTM Coordinates System Arc 1960</li> <li>• Topographical surveys were done using Aerial Lidar Survey</li> </ul>
<p><b>Data spacing and distribution</b></p>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drillhole spacing was generally at 50m along strike of the targets with a vertical spacing of approximately 40 to 50m</li> </ul>

	<ul style="list-style-type: none"> <li>• Whether sample compositing has been applied.</li> </ul>	
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• Drilling and trenching planned perpendicular to the interpreted strike of lithological units and geological structures</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples secured by senior personnel on site and transported directly by company vehicle to the laboratories (Quality Labs in NLGM and SGS in Mwanza)</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• Internal reviews are regularly completed but no external audits were carried out for the currently reported results</li> </ul>

## APPENDIX 2: REPORTING OF EXPLORATION RESULTS

<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>• ML 408/2010 valid until 20 Sep 2030</li> <li>• ML 518/2014 valid until 30 Jan 2024</li> <li>• ML 519/2014 valid until 30 Jan 2024</li> <li>• ML 456/2012 valid until 19 Jan 2032</li> <li>• ML 455/2012 valid until 19 Jan 2032</li> <li>• ML 457/2012 valid until 19 Jan 2032</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>• Historical colonial exploration and mining works</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• Underlain by a complex association of high grade metamorphic- and intrusive lithologies, commonly intruded by dykes of variable composition. Modally, granodioritic and granitic lithologies are most commonly encountered.</li> <li>• These granodiorites and granites have been interpreted as late-orogenic intrusive phases associated with gold mineralisation in the area. Subordinate diorite, porphyroblastic hornblende gabbro, quartzo-feldspathic felsite and migmatite are also regularly observed.</li> <li>• Dyke intrusives include dolerite, pegmatite and common aplite and alaskite, seemingly randomly crosscutting major lithologies, and therefore regarded as younger than the country rock.</li> </ul>



<p><b>Drill hole Information</b></p>	<ul style="list-style-type: none"> <li>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>• Relevant tables included summarizing drill holes and trenches locations, RL, azimuth, length/depth, and significant intersection intervals</li> </ul>
<p><b>Data aggregation methods</b></p>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results from drilling and trench sampling have been weighted by interval</li> <li>• High-grade caps have been applied</li> <li>• Lower cut-off grade of 0.5 g/t Au has generally been applied to significant intersections</li> <li>• Aggregate drilling and trenching intervals do not incorporate longer lengths of low-grade results</li> <li>• No metal equivalent reported</li> </ul>
<p><b>Relationship between mineralisation widths and intercept lengths</b></p>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes and trenches have been drilled/excavated as perpendicular as possible to the general strike of the mineralized zones and structures so that the intersected lengths are close to true widths</li> </ul>
<p><b>Diagrams</b></p>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• Maps and sections are being generated</li> </ul>
<p><b>Balanced reporting</b></p>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• All significant drilling and trench results have been reported</li> </ul>
<p><b>Other substantive exploration data</b></p>	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics;</li> </ul>	<ul style="list-style-type: none"> <li>• Metallurgical studies of the ore from potential five pits were conducted and completed by SGS in South Africa in 2009. The ore mineralogy variability is insignificant but relatively coarse gold grain was observed</li> <li>• The relatively coarse nature of much of the gold provides reason for</li> </ul>

	<i>potential deleterious or contaminating substances.</i>	an upfront gravity circuit to recover coarse gold prior to cyanidation. An overall gold recovery of 90% can be achieved through gold dissolution by direct cyanidation and the gravity concentrator.
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drilling to be continued to test along strike and the down-dip continuity of the delineated mineralization</li> </ul>

### APPENDIX 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES

<b>Database integrity</b>	<ul style="list-style-type: none"> <li><i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></li> <li><i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>The data capturing Access database is linked to a superseding Access database on the geological server</li> <li>Queries allow specially selected information from the captured data and create core data sheets which include Collar, Survey, Lithology and Assay logs. These Logs are finally displayed in the mining software</li> <li>An independent validation process is run for each log sheet in Micromine by Shanta. Should there be any queries, a report file is created and exported to excel. The report will be mailed to the personnel responsible for data capturing to correct on the original data</li> <li>Once confirmation is given of the updates, all databases are refreshed and the validation process in Micromine repeated with the use of form sets</li> <li>Once all data validates, a number for the tear of validation is indicated in the collar file of the superseding database</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>Dr Corné Koegelenberg, assisted by Mr Jonathan Gloyn-Jones, visited the property from the 14 – 20th of February 2020 to conduct a drill core investigation of macrostructural and gold mineralization features. Mr Ken Lomberg joined the site visit from the 19 – 20th of February 2020</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li><i>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</i></li> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Diamond drilling was done perpendicular to the strike of the ore body at a dip designed to give a true intersection width of the mineralized body at a spacing less than 42m</li> <li>The downhole survey was done at every 15m</li> <li>Core meter marking, geological logging, structural interpretation,</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>core sampling, Data validation and QAQC analysis was done by competent and experienced geologists</p> <ul style="list-style-type: none"> <li>• Only samples submitted to the accredited laboratory (SGS Mwanza) are used in the estimate</li> <li>• The limits of the structural features hosting the mineralized zone was interpreted by overlaying the assays against geological logging section by section using section strings</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole spacing is generally between 25 to 42m along with a vertical spacing of approximately 20 to 38m in the upper to mid-level portions of the mineralized zones. This drilling spacing combined with the surface exposures and trench sampling, along with the geophysical data, permits the assumption that both the mineralized structures are continuous and persistent, and the mineralization within the structures has the continuity necessary to consider these deposits as Mineral Resources</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Compositing data into regular composite intervals was performed to moderate the presence of extreme short sample interval grade values in the data, by combining them with adjacent data to form the composite</li> <li>• A combination of several methods was used to decide what constitutes an appropriate capping value. The spatial position of outlier values, as well as coefficient of variation plots, lognormal probability plots and decile analysis, were used in the determination of capping values</li> <li>• Scatter plots of the gold grade composites versus location were generated, to assess any potential non-stationarity in the data</li> <li>• Block models were created to represent the mineralized body contained within the wireframe solids for each target. Cell sizes were chosen based on the average drillhole spacing</li> <li>• Geostatistics was performed using Micromine software to determine the estimation parameters</li> <li>• The mineralized targets were modelled for gold grade using Ordinary Kriging, with the shell of the wireframe solid as a hard boundary. Only data within the solid was used in the estimate</li> <li>• The Estimation process used Micromine software for all block grade estimates</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tonnages are reported on a dry basis</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A simple financial assessment was undertaken to ascertain whether they fulfil the criteria of “reasonable prospects for eventual economic extraction” using current operating costs</li> </ul>

<p><b>Mining factors or assumptions</b></p>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>The mineral resource was deemed amenable to extraction by open pit mining method and were declared at a cut-off of 1.0g/t</li> </ul>
<p><b>Metallurgical factors or assumptions</b></p>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Shanta commissioned the first of a series of gold deportment and metallurgical studies on mineralized material from potential pits in 2009. Reverse circulation drill chips from five mineralised targets were submitted for gold deportment studies in order to understand the mode of gold occurrence, and to ascertain possible cost effective and practical process routes.</li> <li>Further metallurgical studies commissioned on mineralized material from the Gold Tree (Tree Top and Tree Bottom) deposit in 2011 support initial gold deportment findings. A report from Mintek summarized that the ore contains coarse gold which should be recovered prior to the leaching process with an overall gold recovery 90% - Mintek External Report No: 5887 of February 2011).</li> </ul>
<p><b>Environmental factors or assumptions</b></p>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Shanta Mining Company Limited is fully permitted mining operation under Tanzanian law with the prerequisite Environmental Impact Assessments (EIA) issued in 2019.</li> </ul>
<p><b>Bulk density</b></p>	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Density determinations have been carried out on the diamond cores.</li> </ul>

<b>Classification</b>	<ul style="list-style-type: none"> <li>• The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>• Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>• Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>• The resources have been classified as Measured, Indicated and Inferred based primarily on sample spacing as determined by drilling density and proximity to informing data as well as the grade distribution of the supporting data including geology. For the resource classification, a solid shape was constructed around the parts of the mineralised body where most estimates were informed by data not more than 30m from the estimated block, are estimated within the primary search volume, and where the estimates have been interpolated rather than extrapolated. All blocks located within these areas were classified as Measured and Indicated resources. All blocks located outside of these areas, around the periphery of the drilling were classified as Inferred resources</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>• Only internal audit completed</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>• Refer Estimation and modelling techniques comments above</li> </ul>

## APPENDIX 4: ESTIMATION AND REPORTING OF ORE RESERVES.

<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>• Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul style="list-style-type: none"> <li>• Measured and indicated only are being used for the purpose of classifying ore reserves sitting within the design</li> <li>• Mineral resources are reported inclusive of the Ore reserves; however outside mine plan resources is also being prepared to represents resources that are sitting outside the mine plan</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>• If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>• Regular site visits are being by Competent personnel and other Senior personnel for various factor's adjustment when deemed necessary</li> </ul>

<b>Study status</b>	<ul style="list-style-type: none"> <li>• <i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></li> <li>• <i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i></li> </ul>	<ul style="list-style-type: none"> <li>• An extensive optimization study used to prepare or establish minable shells and followed by proper that can be used for the purpose of reporting ore reserves, but only for measured and indicated material</li> <li>• Various study were done in relation to the reserves reporting practices that includes feasibility studies, etc.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A simple financial assessment was undertaken to ascertain whether they fulfil the criteria of “reasonable prospects for eventual economic extraction” using current operating costs</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• <i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></li> <li>• <i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></li> <li>• <i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i></li> <li>• <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li>• <i>The mining dilution factors used.</i></li> <li>• <i>The mining recovery factors used.</i></li> <li>• <i>Any minimum mining widths used.</i></li> <li>• <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> <li>• <i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Method and assumptions were applied based on the type of the ore body and or deposits. Appropriate factors were also applied during preparation of the optimal shells or structures required for the purpose of designs, Some deposits were deemed potential for just Open pit and others were potential for both Open pit and Underground mining method.</li> <li>• Mining designs were completed and reviewed internally</li> <li>• Geotechnical assumptions were based on the various geotechnical drilling and studies done internally and externally i.e. using a third party.</li> <li>• Material were deemed to be potential economical if grade is above Cut-off grade and within the deposits wireframes.</li> <li>• For both dilution and recovery were applied for each deposits based on experience and or outcomes on the reconciliation</li> <li>• Applied differently depending on the mining methods for each deposits.</li> <li>• Inferred mineral resources are being treated as mineralized waste and not being reported as part of ore reserves.</li> <li>• Infrastructures of some of the deposits are in-place, and the rest will be extended and or constructed depending on the LoM required; mainly with an intention of not tying the capital requirement.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>• <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li>• <i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li>• <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li>• <i>Any assumptions or allowances made for deleterious elements.</i></li> <li>• <i>The existence of any bulk sample or pilot scale test work and the degree to which such</i></li> <li>• <i>samples are considered representative of the orebody as a whole.</i></li> <li>• <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications</i></li> </ul>	<ul style="list-style-type: none"> <li>• Shanta commissioned the first of a series of gold deportment and metallurgical studies on mineralized material from potential pits in 2009. Reverse circulation drill chips from five mineralised targets were submitted for gold deportment studies in order to understand the mode of gold occurrence, and to ascertain possible cost effective and practical process routes.</li> <li>• Further metallurgical studies commissioned on mineralized material from the Gold Tree (Tree Top and Tree Bottom) deposit in 2011 support initial gold deportment findings. A report from Mintek summarized that the ore contains coarse gold which should be recovered prior to the leaching process with an overall gold recovery 90% - Mintek External Report No: 5887 of February 2011).</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>• <i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the</i></li> </ul>	<ul style="list-style-type: none"> <li>• Shanta Mining Company Limited is fully permitted mining operation under Tanzanian law with the prerequisite Environmental Impact Assessments</li> </ul>

	<i>consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i>	(EIA) issued in 2019.
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li><i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></li> </ul>	<ul style="list-style-type: none"> <li>Major are structures are available and or under construction is some of the area/deposits. Appropriate mining licenses are in-place that guarantee the mining activities.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li><i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li><i>The methodology used to estimate operating costs.</i></li> <li><i>Allowances made for the content of deleterious elements.</i></li> <li><i>The source of exchange rates used in the study.</i></li> <li><i>Derivation of transportation charges.</i></li> <li><i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li> <li><i>The allowances made for royalties payable, both Government and private.</i></li> </ul>	<ul style="list-style-type: none"> <li>Depending on the mining methods applicable for each deposits, then a capital estimate were established in relation to the works required and or available quotes.</li> <li>Operating costs were established partially using the existing actual information and where deemed necessary then the first principle of establishing costs were used.</li> <li>Exchange rates were being established based on the current trends and or existing information from the major financial institutions.</li> <li>Transportation charges were based on the existing condition and or regulations requirement.</li> <li>The rest are based on the regulation requirements on their estimation and consideration.</li> </ul>
<b>Revenue Factors</b>	<ul style="list-style-type: none"> <li><i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i></li> <li><i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li> </ul>	<ul style="list-style-type: none"> <li>High NPV was used for the purpose of the same</li> <li>Rate based on trends and or as applicable or advised by the management which needs to be in-line with the market trend and or various commitments</li> </ul>
<b>Market Assessment</b>	<ul style="list-style-type: none"> <li><i>The demand, supply and stock situation for the particular commodity, consumption trends</i></li> <li><i>and factors likely to affect supply and demand into the future.</i></li> <li><i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li><i>Price and volume forecasts and the basis for these forecasts.</i></li> <li><i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li> </ul>	<ul style="list-style-type: none"> <li>Based on market and operation requirements</li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li><i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i></li> <li><i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li> </ul>	<ul style="list-style-type: none"> <li>Based on assumptions and advise</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li><i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></li> </ul>	<ul style="list-style-type: none"> <li>Various agreements in place, on-going or established CSR program and many others as supported by various laws and or regulations.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li> <li><i>Any identified material naturally occurring risks.</i></li> </ul>	<ul style="list-style-type: none"> <li>As required by laws and or regulation of the country; no special mining development agreement has been considered.</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>The status of material legal agreements and marketing arrangements.</i></li> <li>• <i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></li> </ul>	
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> <li>• <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Results presented, appropriately reflects the Competent Person's view of the deposits.</li> <li>• Only Measured and Indicated material were considered for the purpose of Ore reserves reporting</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Ore Reserve estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Only internal audit and review completed</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i></li> <li>• <i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should</i></li> </ul>	<ul style="list-style-type: none"> <li>• Refer above statements.</li> </ul>

**ENDS**