21 January 2019

ASX ANNOUNCEMENT

HIGH GRADE GOLD ASSAYS AT THETA HILL

Theta Gold Mines Limited ("Theta Gold" and "Company") (ASX: TGM) is planning on recommencing mining activities at the historical TGME mine in South Africa's Eastern Goldfields. The Company continues to make good progress with ongoing resource infill classification drilling and plans to issue a revised resource and reserve statement together with a Feasibility Study in early 2019.

The Company is pleased to report there was high level of activity at the project over the past month and drilling at Theta Hill deposit for Indicated and Measured resources is now nearing completion for Mining Right, MR83. Additionally, the Feasibility Study work during the quarter included site visits from contractors and engineering groups to ensure independence and to support the costing for financial models.

HIGHLIGHTS

- **First phase drilling at Theta Hill near completion**.
- **High grade assays returned from the December quarter program.**
- **Feasibility Study and Mining Reserve in progress.**
- Notable intersections at **Theta Hill** from December quarter program include:
  - **11m @ 2.1g/t Au from 8m in DG4RCWAD16, including 1m @ 9.5g/t Au**
  - **1m @ 27.5g/t Au from 8m in DG4RCWAD20**
  - **2m @ 5.9g/t Au from 24m in DG4RCWAD21**
  - **1m @ 5.2g/t Au from 57m in RCBH73**
  - **8m @ 1.8g/t Au from 22m in RCBH24**
  - **3m @ 3.4g/t Au from 84m in RCBHTN124, including 1m @ 8.3 g/t Au**
- **A Reverse Circulation (RC) drilling** program is also completing resource delineation on satellite opencasts targets (within 2km of the TGME Plant) and will provide additional resources for the updated feasibility study resource estimate planned for Q1 2019.
- **2019 drill program has recommenced at Columbia Hill.**
- At **Columbia Hill** follow-up Phase 2 intersections have confirmed more high grade shallow gold intersections on the Bevetts and Rho reefs, with notable results including:
  - **1m @ 10.1g/t Au from 18m in RCBHI41**
  - **1m @ 5.6g/t Au from 68m in RCBHI44**
  - **1m @ 7.5g/t Au from 31m in RCBHI45**
  - **10m @ 1.9g/t Au from 36m in RCBH46**
- At **Scammells** (satellite target) an initial phase of drilling managed a number of significant intersections, although ground conditions were very broken, and a number of boreholes still require deepening to reach target. Notable results included:
  - **1m @ 5.6g/t Au from 18m in RCBHSC3**
  - **1m @ 13.8g/t Au from 20m in RCBHSC9**

Theta Gold Mines Limited ABN 30 131 758 177
Level 18, 111 Pacific Highway, North Sydney NSW 2060
Tel: +61 2 9460 2021 Email: info@thetagoldmines.com
www.thetagoldmines .com

Chairman, Bill Guy commented: "*The last of 2018 drill assays for Theta Hill are showing continued good grades which is causing much excitement in the team. Just 3km to the west of the TGME Plant, Columbia Hill continues to show good potential, so much so that additional drilling is now underway to build up the geological model for that deposit".*

"As part of the Feasibility Study, the TGM Board will develop more clearly delineated timelines and work schedules to bring the existing TGME plant back into production. The on-site team is back at work and the 2019 work program has begun with environmental studies to support the permitting process for open cut developments," Mr Guy said.

SUMMARY

The Company drilled over 7,400m during Q4 2018, and since the last resource update **(*26 September 2018 ASX: Theta Hill Open Cut Grows JORC Resources to 5.8 Moz*)**. The team in country continues to use two reverse circulation (RC) drill rigs that worked up to Christmas 2018, with one being recommissioned on Columbia Hill.

Since the Theta Hill drill program began over 13,000m of drilling has been completed using 297 vertical boreholes (Diamond/RC). The drilling spacing is now nominal 45m forming systematic grid. Over 14,300 samples have been dispatched for assay at SGS Laboratories at Barberton.

During Q4 2018 the RC infill resource drilling was completed at Theta Hill. Evaluation was initiated on a number of other targets on 83MR (vis Columbia Hill, Day Mine and Scammells - Figure 1). At Columbia Hill initial resource estimations will be completed during February 2019.

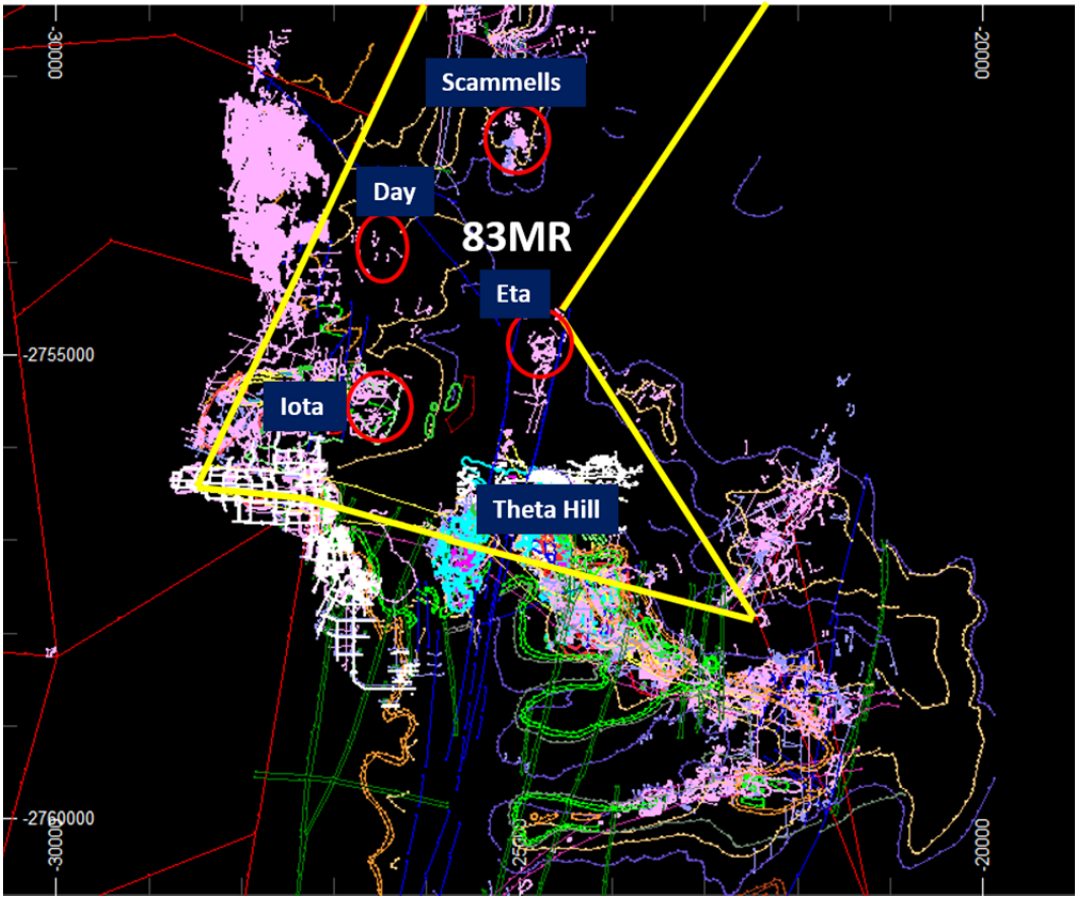


Figure 1: Locality of Opencast Targets on 83 MR

(Historical underground working pink & white, yellow MR 83 Farm boundary)

Theta Hill Indicated Resource Drilling

Resource drilling at **Theta Hill** (Figures 2 & 3) has now been completed. During Q4 2018, a further infill program was completed at Theta North to bring the Lower Theta (Block 7) and the Beta Reef (Blocks 6 & 10) into an Indicated resource category.

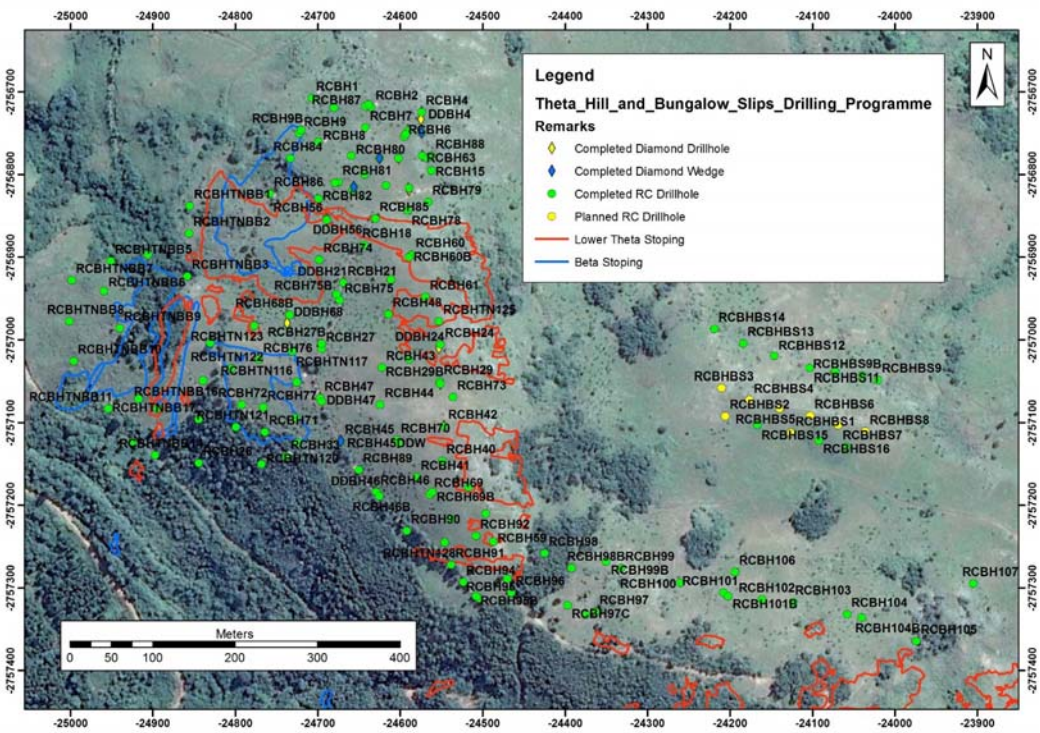


Figure 2: 31st December 2018 Distribution of Boreholes at Theta Hill North

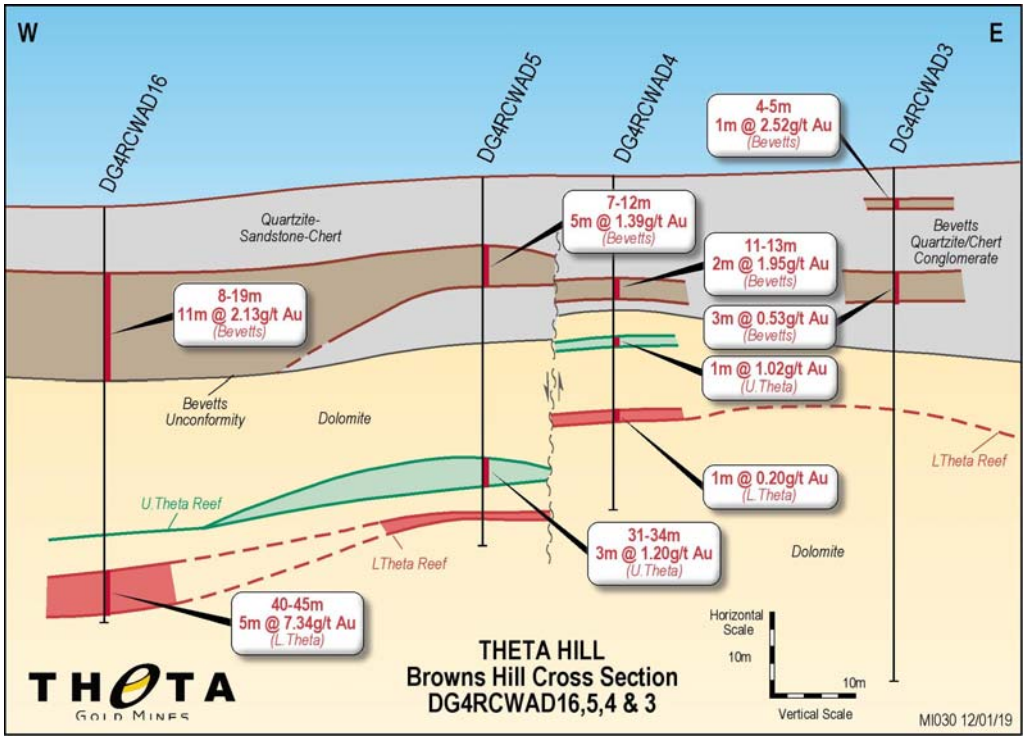


Figure 3: Theta Hill cross section looking north showing thick Bevetts / lense development and Upper and Lower Theta mineralized zones.

All assays have been returned for December 2018 drilling (Table 1), and a further phase of shallow drilling was completed testing continuity of stratigraphically higher level Bevetts and U Theta

mineralisation previously delineated by Lower Theta drilling and Bevetts trenching and RC drilling. The distribution of drilling is shown in Figure 2. Currently the geological model is being updated, and incremental resources estimated.

Table 1: Theta Hill - intersections (> 1 g/t Au)

BHID	From	To	Width	Au g/t	Au Comments	Au Content	Back calc in situ Reef	EOH Comments
THETA DG4	m	m	m			Cm.g/t	g/t over 25cm	
DG4RCWAD3	4.00	5.00	1.00	2.52	Bevetts	252	10.08	DG4 Bevetts & U Theta
DG4RCWAD4	11.00	13.00	2.00	1.95	Bevetts	389	7.78	DG4 Bevetts & U Theta
DG4RCWAD5	7.00	12.00	**5.00**	1.39	Bevetts	697	5.58	DG4 Bevetts & U Theta
DG4RCWAD5 incl	*7.00*	*8.00*	*1.00*	***4.45***	*Bevetts*	*445*	*17.80*	*DG4 Bevetts & U Theta*
DG4RCWAD5	31.00	34.00	**3.00**	1.20	U Theta	359	4.79	DG4 Bevetts & U Theta
DG4RCWAD5	36.00	37.00	1.00	1.23	L Theta	123	4.92	DG4 Bevetts & U Theta
DG4RCWAD7	35.00	37.00	2.00	1.87	L Theta	373	7.46	DG4 Bevetts & U Theta
DG4RCWAD15	14.00	16.00	2.00	1.55	Bevetts	309	6.18	DG4 Bevetts & U Theta
DG4RCWAD16	8.00	19.00	**11.00**	2.13	Bevetts	2,343	8.52	DG4 Bevetts & U Theta
DG4RCWAD16 Incl	*8.00*	*9.00*	*1.00*	***9.52***	*Bevetts*	*952*	*38.08*	*DG4 Bevetts & U Theta*
DG4RCWAD16	40.00	45.90	**5.90**	**7.34**	L Theta	4,331	29.36	DG4 Bevetts & U Theta
DG4RCWAD17	7.00	8.00	1.00	2.10	Bevetts	210	8.40	DG4 Bevetts & U Theta
DG4RCWAD17	17.00	18.00	1.00	1.19	U Theta?	119	4.76	DG4 Bevetts & U Theta
DG4RCWAD18	9.00	10.00	1.00	0.61	U Theta?	61	2.44	DG4 Bevetts & U Theta
DG4RCWAD20	8.00	9.00	1.00	**27.50**	Bevetts	2,750	110.00	DG4 Bevetts & U Theta
DG4RCWAD21	16.00	17.00	1.00	2.27	U Theta	227	9.08	DG4 Bevetts & U Theta
DG4RCWAD21	24.00	26.00	2.00	**5.92**	L Theta	1,184	23.68	DG4 Bevetts & U Theta
BHID	**From**	**To**	**Width**	**Au g/t**	**Au Comments**	**Au Content**	**Back calc in situ Reef**	**EOH Comments**
THETA N BLK 10	m	m	m			Cm.g/t	g/t over 25cm	
RCBHTNBB10	8.00	9.00	1.00	2.88	Beta?	288	11.52	Theta N Beta Block 10
RCBHTNBB14	21.00	23.00	2.00	2.88	L Theta	576	11.52	Theta N Beta Block 10
RCBHTNBB16	31.00	34.00	3.00	1.03	Bevetts	310	4.13	Theta N Beta Block 10
RCBHTNBB16	50.00	52.00	2.00	1.58	L Theta?	316	6.32	Theta N Beta Block 10
RCBHTNBB17	12.00	13.00	1.00	1.35	Bevetts	135	5.40	Theta N Beta Block 10
RCBHTNBB17	35.00	36.00	1.00	**2.95**	L Theta?	295	11.80	Theta N Beta Block 10
RCBHTNBB2	2.00	4.00	2.00	1.42	Bevetts/U Theta	283	5.66	Theta N Beta Block 10
BHID	**From**	**To**	**Width**	**Au g/t**	**Au Comments**	**Au Content**	**Back calc in situ Reef**	**EOH Comments**
THETA NORTH	m	m	m			Cm.g/t	g/t over 25cm	
RCBH73	29.00	30.00	1.00	1.02	Quartz in Shale	102	4.08	Theta N Bevetts & U Theta
RCBH73	57.00	58.00	1.00	**5.25**	Bevetts	525	21.00	Theta N Bevetts & U Theta
RCBH73	60.00	61.00	1.00	1.50	Bevetts	150	6.00	Theta N Bevetts & U Theta
RCBH92	50.00	51.00	1.00	1.22	Bevetts	122	4.88	Theta N Bevetts & U Theta
RCBH13	26.00	28.00	2.00	1.07	L Theta	213	4.26	Theta N Bevetts & U Theta
RCBH24	22.00	30.00	**8.00**	1.77	Bevetts/U Theta	1,415	7.08	Theta N Bevetts & U Theta
RCBH24	34.00	38.00	**4.00**	1.51	L Theta	605	6.05	Theta N Bevetts & U Theta
RCBHTN122	10.00	16.00	6.00	1.05	Quartz in shale	630	4.20	Theta N Bevetts & U Theta
RCBHTN122	39.00	40.00	1.00	3.35	U Theta	335	13.40	Theta N Bevetts & U Theta
RCBHTN123	18.00	19.00	1.00	4.74	Quartz in shale	474	18.96	Theta N Bevetts & U Theta
RCBHTN124	84.00	87.00	3.00	**3.40**	Bevett's / U Theta	1,019	13.59	Theta N Bevetts & U Theta
RCBHTN124 incl	*84.00*	*85.00*	*1.00*	***8.27***	*Bevett's / U Theta*	*827*	*33.08*	*Theta N Bevetts & U Theta*
RCBHTN125	66.00	67.00	1.00	2.63	Bevett's / U Theta	263	10.52	Theta N Bevetts & U Theta
RCBHTN126	-	5.00	5.00	1.78	Quartz in shale	891	7.13	Theta N Bevetts & U Theta
RCBHTN127	37.00	38.00	1.00	1.19	Bevetts	119	4.76	Theta N Bevetts & U Theta

Theta Hill Geology

Theta Hill is a significant historic gold producer in the Pilgrim's Rest area with production from mostly Lower Theta and Beta Reefs totalling 500koz Au from previous underground operations. The geological setting of the area includes a capping of Pretoria Group shales, pyroxenite sill and the Bevetts quartzite and conglomerate which rest on the Bevetts angular unconformity. This sequence is underlain by the Eccles Formation of the Malmani dolomites, which comprises fluctuating shallow water dolomites with interbedded narrow shale horizons that mark packages of cyclic sedimentation (deep water to tidal deposition). Within this package are a number of regional stratigraphic markers - namely the Giant Chert, Middle Chert and the Beehive Chert. The general attitude of the rock sequence is 7 degrees dip to the south west.

Gold mineralisation at Theta Hill has mostly developed on the bedding plane parallel thrusts hosting Beta, Lower Theta and Upper Theta "flat reefs", as well as within the Bevetts thrust packages, and quartz veining in the Pretoria shales which is controlled by the thrust related structures and splays.

Structural features of the area include:

- bedding plane thrusts on the intercalated shale horizons in the dolomites, which are host to "flat reef" gold mineralisation;
- Thrusting with a SE vergence around the Bevetts Unconformity, which leads to localised repetition of the Giant Chert - Bevetts Conglomerate/Quartzite;
- Post mineralisation subvertical faulting trending NNW-SSE and NNE-SSW. The Fraser Morgan Graben is a conspicuous NNE trending feature that separates Theta Hill and Browns Hill with a down throw of over 150m.

Columbia Hill and Scammells Reverse Circulation Drilling

The second rig has been progressing investigations on satellite opencast targets on 83MR. Phase 1 drilling at the Scammells workings was completed and the rig is currently in progress on Phase 2 at Columbia Hill Mine (see Figure 1). In total a further 1,216m RC drilling was completed at Columbia Hill over 17 holes during December 2018. This follows on from previous drilling during Q4 2018 that had encouraging Rho Reef intersections.

At Columbia Hill (Figure 4), the Iota (Rho Reef) underground workings are located on the eastern extension and the current RC drilling is targeting ground peripheral to these zones. In total 18 RC boreholes have been completed for 890m (2017-2018). The target mineralisation zones embrace the Bevetts thrust and Lense style reefs plus the underlying Rho Reef (Figures 5 & 6 Columbia Hill cross-section).

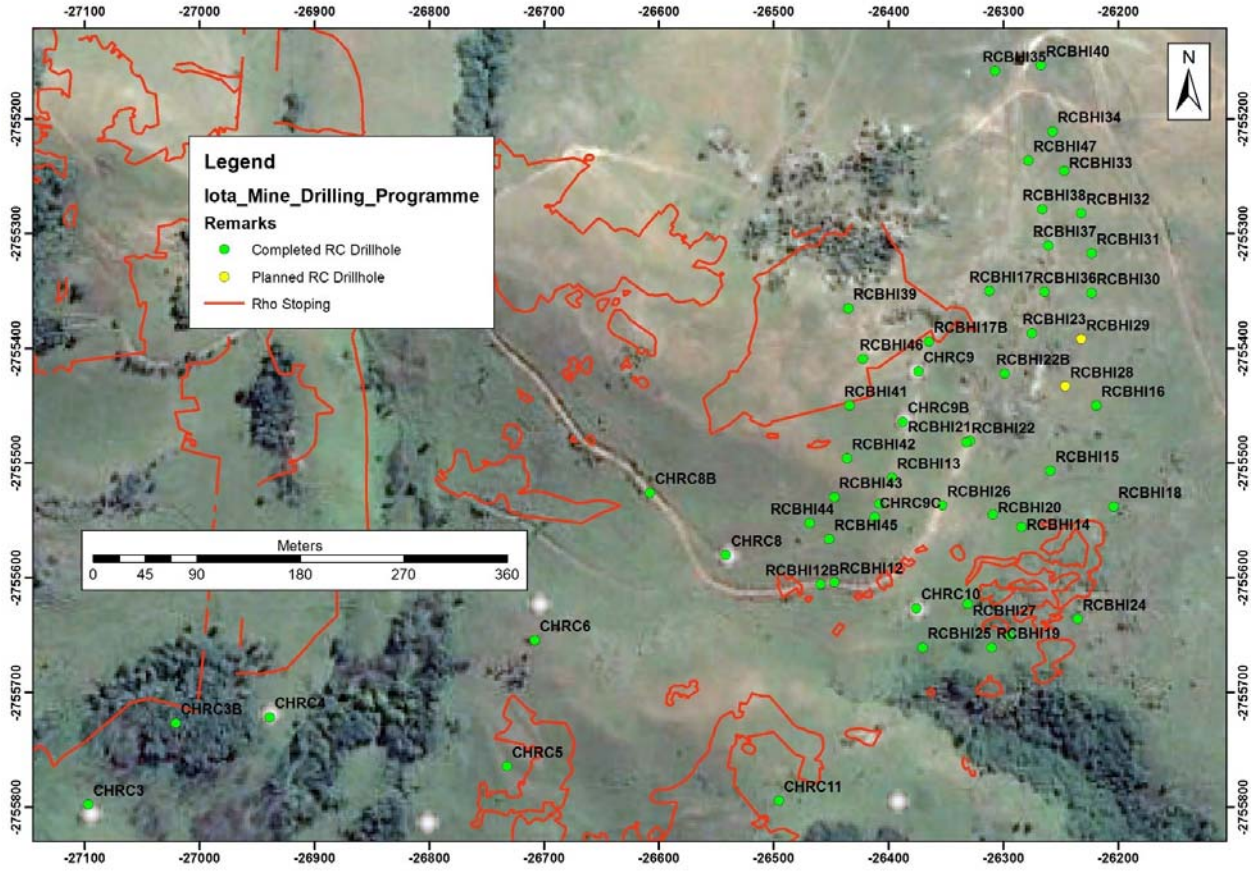


Figure 4: December 31st 2018 distribution of RC drilling at Columbia Hill (Iota Mine workings)

Columbia Hill continues to demonstrate good potential as a satellite resource. Columbia Hill is similar to Theta Hill in mineralization and geometry, with a thrusted “lense” package located around the Bevetts unconformity, and a flat to shallowly dipping Rho reef system in the Malmani dolomite footwall. At Columbia Hill, the Rho Reef mineralization is hosted in bedding plane shears with the gold associated

with quartz and oxidized sulphides. Columbia Hill (Iota Mine) results > 1 g/t Au from assays received to date for Phase 1 are encouraging, and are shown below in Table 2.

Table 2: Columbia Hill (Iota) Q4 2018 Phase 1 RC drilling results > 1 g/t Au

BHID	From	To	Width	Au g/t	Au Comments	Au Content	Back calc in situ Reef	EOH Comments
	m	m	m			Cm.g/t	g/t over 25cm	
RCBHI12B	43.00	61.00	**18.00**	**2.81**	Bevetts / Lense	5,057	11.24	Iota Mine P1
RCBHI12B incl	*47.00*	*59.00*	***12.00***	***3.65***	*Bevetts / Lense*	*4,384*	*14.61*	*Iota Mine P1*
RCBHI12B	76.00	77.00	1.00	**8.76**	Rho	876	35.04	Iota Mine P1
RCBHI14	-	1.00	1.00	1.09	Quartz in shale	109	4.36	Iota Mine P1
RCBHI14	16.00	17.00	1.00	2.20	Bevetts	220	8.80	Iota Mine P1
RCBHI14	28.00	33.00	**5.00**	**3.69**	Rho	1,843	14.74	Iota Mine P1
RCBHI14 incl	*28.00*	*31.00*	***3.00***	***5.93***	*Rho*	*1,778*	*23.71*	*Iota Mine P1*
RCBHI15	29.00	30.00	1.00	1.23	Bevetts	123	4.92	Iota Mine P1
RCBHI15	35.00	39.00	4.00	**10.31**	Rho	4,126	41.26	Iota Mine P1
RCBHI15 incl	*37.00*	*39.00*	***2.00***	***19.76***	*Rho*	*3,953*	*79.05*	*Iota Mine P1*
RCBHI16	-	6.00	6.00	2.32	Bevetts	1,393	9.29	Iota Mine P1
RCBHI16 incl	*-*	*4.00*	***4.00***	***3.19***	*Bevetts*	*1,274*	*12.74*	*Iota Mine P1*
RCBHI17	9.00	10.00	1.00	1.45	Quartz in shale	145	5.79	Iota Mine P1
RCBHI17	53.00	54.00	1.00	4.08	Bevetts?	408	16.32	Iota Mine P1
RCBHI17B	58.00	69.00	**11.00**	0.91	Rho	999	3.63	Iota Mine P1
RCBHI17B incl	*58.00*	*63.00*	***5.00***	***1.29***	*Rho*	*647*	*5.18*	*Iota Mine P1*
RCBHI18	16.00	17.00	1.00	1.07	Bevetts	107	4.28	Iota Mine P1
RCBHI19	1.00	13.00	**12.00**	2.53	Bevetts / Lense	3,036	10.12	Iota Mine P1
RCBHI19 incl	*1.00*	*8.00*	***7.00***	***3.50***	*Bevetts / Lense*	*2,448*	*13.99*	*Iota Mine P1*
RCBHI19B	21.00	22.00	1.00	**19.40**	Bevetts	1,940	77.60	Iota Mine P1
RCBHI19B	38.00	39.00	1.00	4.79	Rho	479	19.16	Iota Mine P1
RCBHI20	41.00	62.00	**21.00**	**3.61**	Bevetts Lense	7,581	14.44	Iota Mine P1
RCBHI20 incl	*46.00*	*57.00*	***11.00***	***5.95***	*Bevetts Lense*	*6,545*	*23.80*	*Iota Mine P1*
RCBHI20	67.00	68.00	1.00	5.12	Rho	512	20.48	Iota Mine P1
RCBHI21	19.00	25.00	**6.00**	**5.17**	Rho	3,102	20.68	Iota Mine P1
RCBHI22	-	1.00	1.00	1.57	Quartz in shale	157	6.28	Iota Mine P1
RCBHI22B	7.00	8.00	1.00	1.42	Bevetts	142	5.68	Iota Mine P1
RCBHI24	-	4.00	4.00	1.25	Bevetts Lense	500	5.00	Iota Mine P1
RCBHI24	19.00	24.00	5.00	1.99	Rho	995	7.96	Iota Mine P1
RCBHI26	46.00	48.00	2.00	**4.89**	Bevetts	978	19.56	Iota Mine P1
RCBHI26	62.00	68.00	6.00	1.79	Rho	1,073	7.15	Iota Mine P1
RCBHI26 incl	*63.00*	*65.00*	***2.00***	***3.89***	*Rho*	*777*	*15.54*	*Iota Mine P1*
RCBHI9C_1	-	1.00	1.00	1.17	Quartz in shale	117	4.68	Iota Mine P1

Table 4 illustrates a number of significant thicker intersections (up to 21m; vis RCBI12b and RCBHI20) which have intersected Bevetts thrust controlled Lense deposits. The geometry of these intersections is being interpreted, but brings a significant exploration potential into play going westwards. Current Rho Reef intersections are supporting a split (Upper and Lower Rho) reef. Effectively the Rho Reef bedding plane shear locates on 2 “bounding” structures, leading to drill intercepts collectively being up to 6m wide (eg RCBHI21and RCBHI15; Figures 5 and 6).

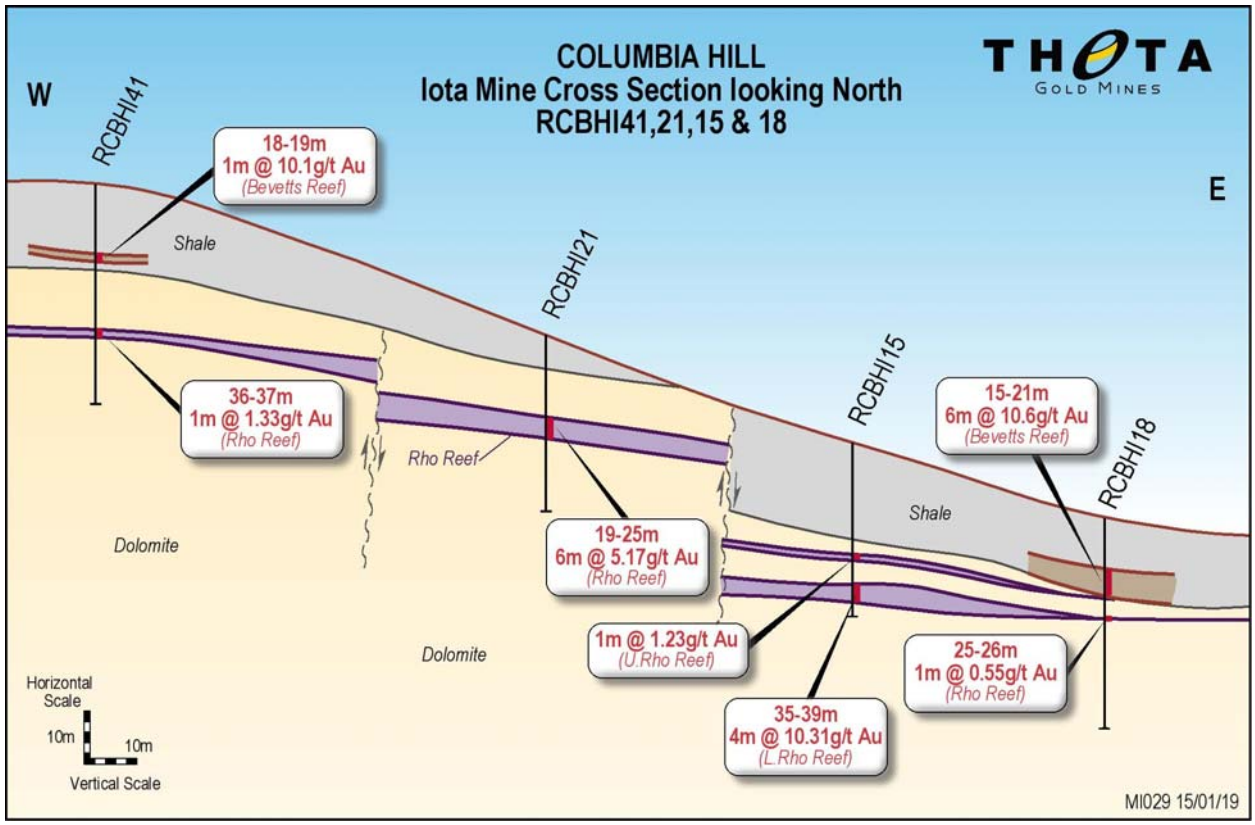


Figure 5: Columbia Hill (Iota Mine) Cross Section RCBHI41-I18 looking north

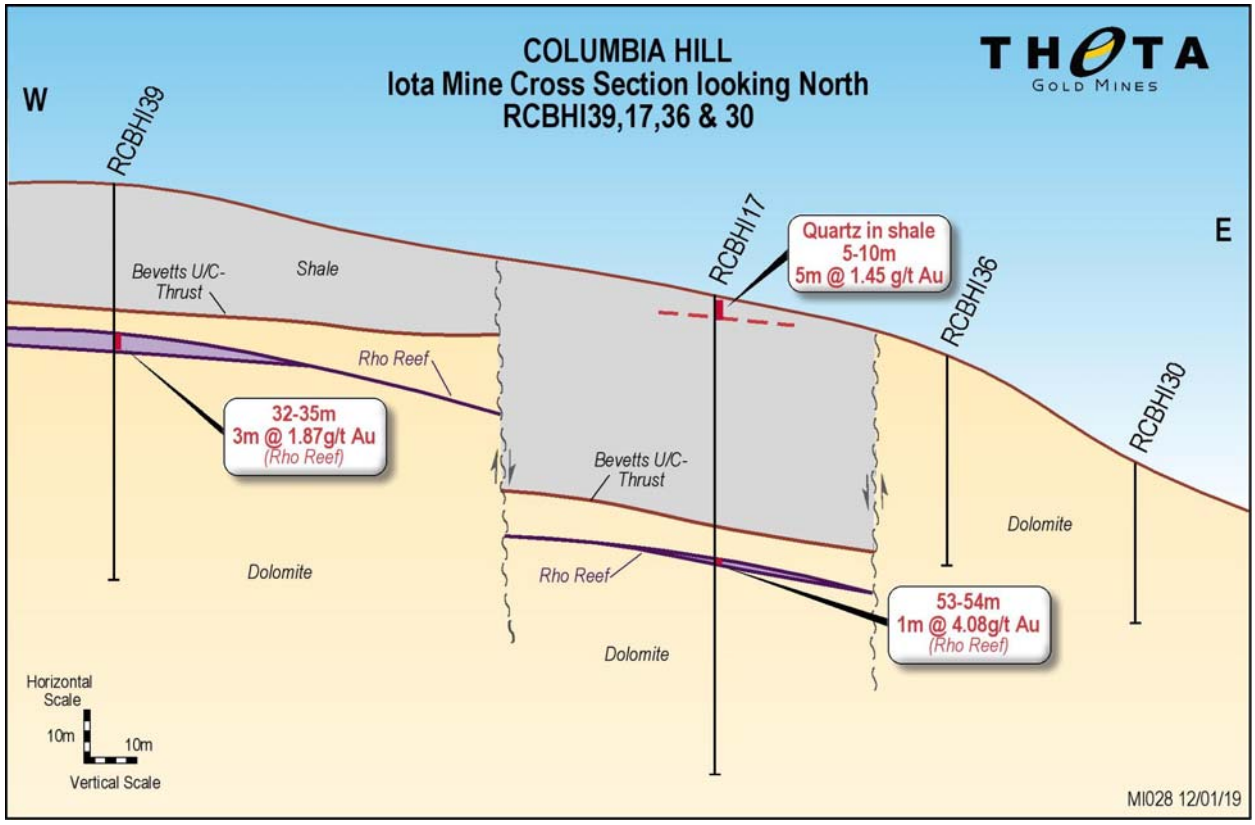


Figure 6: Columbia Hill (Iota Mine) Cross Section RCBHI39-I30 looking north

Combined with the Lense style and Rho Reef intersections all above 80m below surface the opencast target is taking shape. As a consequence, a follow up Phase 2 programme is underway and is increasing the footprint of opencastable mineralisation. Table 5 shows the Phase 2 intersections > 1g/t Au to 31st December 2018:

Table 5: Columbia Hill (Iota) December 2018 Phase 2 RC drilling results > 1 g/t Au

BHID	From	To	Width	Au g/t	Au Comments	Au Content	Back calc in situ Reef	EOH Comments
	m	m	m			Cm.g/t	g/t over 25cm	
RCBHI32	8.00	9.00	1.00	3.71	Bevetts Thrust	371	14.84	Iota Mine P2
RCBHI32	65.00	66.00	1.00	1.33	Rho ?	133	5.32	Iota Mine P2
RCBHI34	1.00	2.00	1.00	2.91	Quartz in Shale	291	11.64	Iota Mine P2
RCBHI34	26.00	27.00	1.00	1.24	U Rho?	124	4.96	Iota Mine P2
RCBHI34	36.00	37.00	1.00	1.26	L Rho?	126	5.04	Iota Mine P2
RCBHI34	77.00	78.00	1.00	2.44	?	244	9.76	Iota Mine P2
RCBHI39	32.00	35.00	**3.00**	1.87	Bevetts	560	7.47	Iota Mine P2
RCBHI41	18.00	19.00	1.00	**10.10**	Bevetts	1,010	40.40	Iota Mine P2
RCBHI41	36.00	37.00	1.00	1.58	Rho	158	6.32	Iota Mine P2
RCBHI43	7.00	8.00	1.00	1.18	Quartz in Shale	118	4.72	Iota Mine P2
RCBHI43	70.00	71.00	1.00	**3.88**	Rho	388	15.52	Iota Mine P2
RCBHI44	4.00	5.00	1.00	1.03	Bevetts	103	4.12	Iota Mine P2
RCBHI44	66.00	69.00	**3.00**	**3.34**	Rho	1,001	13.34	Iota Mine P2
RCBHI44 incl	*68.00*	*69.00*	*1.00*	***5.99***	*Rho*	*599*	*23.96*	Iota Mine P2
RCBHI45	-	1.00	1.00	1.10	Surficial	110	4.40	Iota Mine P2
RCBHI45	31.00	32.00	1.00	**7.51**	Rho	751	30.04	Iota Mine P2
RCBHI46	28.00	29.00	1.00	1.34	U Rho	134	5.36	Iota Mine P2
RCBHI46	36.00	46.00	**10.00**	1.93	L Rho	1,927	7.71	Iota Mine P2

Results and geology of the **Scammells** drilling (see Figures 1 and 7) are still being processed, and will be published later in Q1 2019, after reaming and deepening of 8 boreholes that had collapsing ground issues have been completed. Figure 7 (below) shows the distribution of Scammells RC drilling collars.

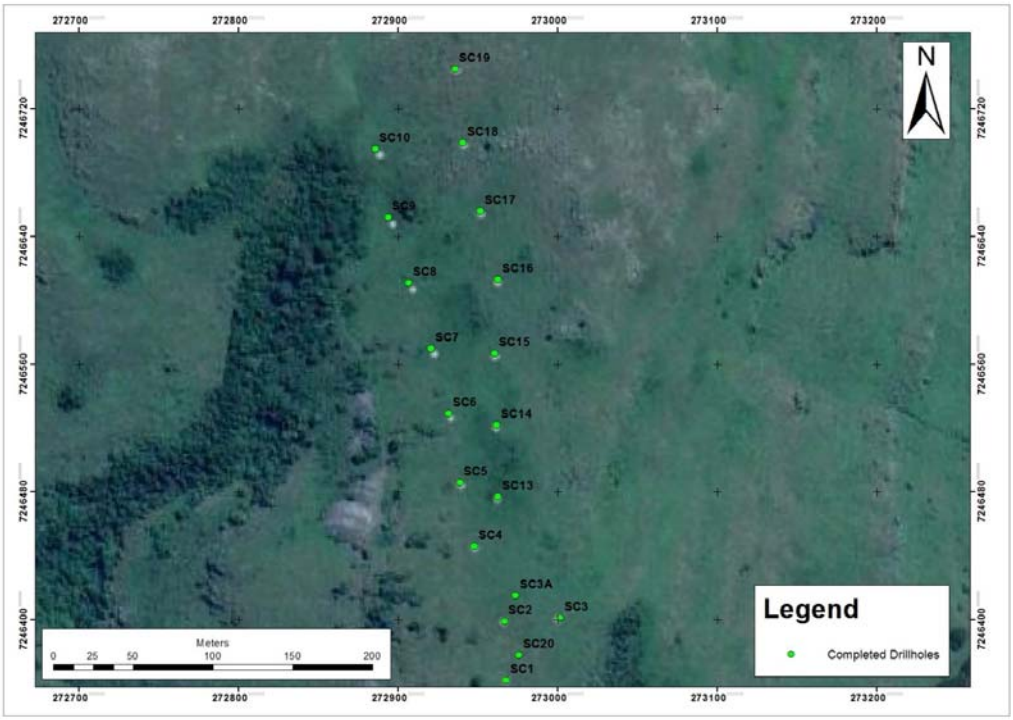


Figure 7: Scammells Reef distribution of RC boreholes as at 31st December 2018

For more information please visit www.thetagoldmines.com or contact:

General Enquiries
Rob Thomson, Managing Director
Theta Gold Mines Limited
M: +61 409 843 963
robt@thetagoldmines.com

or

Investor Enquiries
Bill Guy, Chairman
Theta Gold Mines Limited
T: + 61 2 9460 2021
billg@thetagoldmines.com

Competent Persons Statement

Theta Hill, Columbia Hill (Iota Mine) and Scammells Drilling Results
The information n in this report relating to the Theta Hill and 83MR drilling results is based on, and fairly reflects, the information and supporting documentation compiled by Mr Phil Bentley (MSc (Geol), MSc (MinEx), Pr.Sci.Nat. No. 400208/05, FGSSA), a consultant to the Company and a member of the South African Council for Natural Scientific Professions.

Mr Bentley has sufficient experience that is relevant to the style of mineralisation under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bentley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Mineral Resources
The information in this report relating to Mineral Resources is based on, and fairly reflects, the information and supporting documentation compiled by Mr Uwe Engelmann (BSc (Zoo. & Bot.), BSc Hons (Geol.), Pr.Sci.Nat. No. 400058/08, MGSSA), a director of Minxcon (Pty) Ltd and a member of the South African Council for Natural Scientific Professions.

The original report titled "Theta Hill Open Cut Grows JORC Resources to 5.8 Moz" was dated 26 September 2018 and was released to the Australian Securities Exchange (ASX) on that date. The Company confirms that –

- it is not aware of any new information or data that materially affects the information included in the ASX announcement; and
- all material assumptions and technical parameters underpinning the estimates in the ASX announcement continue to apply and have not materially changed.

ABOUT THETA GOLD MINES LIMITED

Theta Gold Mines Limited (ASX: TGM) is a gold development company that holds a range of prospective gold assets in a world-renowned South African gold mining region. These assets include several surface and near-surface high-grade gold projects which provide cost advantages relative to other gold producers in the region.

Theta Gold Mines core project is TGME, located next to the historical gold mining town of Pilgrim's Rest, in Mpumalanga Province, some 370km east of Johannesburg by road or 95km north of Nelspruit (Capital City of Mpumalanga Province). Following small scale production from 2011 – 2015, the Company is currently focussing on the planned refurbishment of the existing CIL plant and nearby mines/prospects with the intention of resuming gold production and is considering open pit mining where it has identified mineral resources amenable to open pit production. The Company is presently concluding a detailed feasibility study and is also in the process of seeking approvals for open pit mining on the existing mining licences held.

The Company aims to build a solid production platform to over 100kozpa based primarily around shallow, open-cut or adit-entry hard rock mining sources. Theta Gold Mines has access to over 43 historical mines and prospect areas that can be accessed and explored, with over 6.7Moz of historical production recorded.

ANNEXURE 1

MINERAL RESOURCES, SEPTEMBER 2018

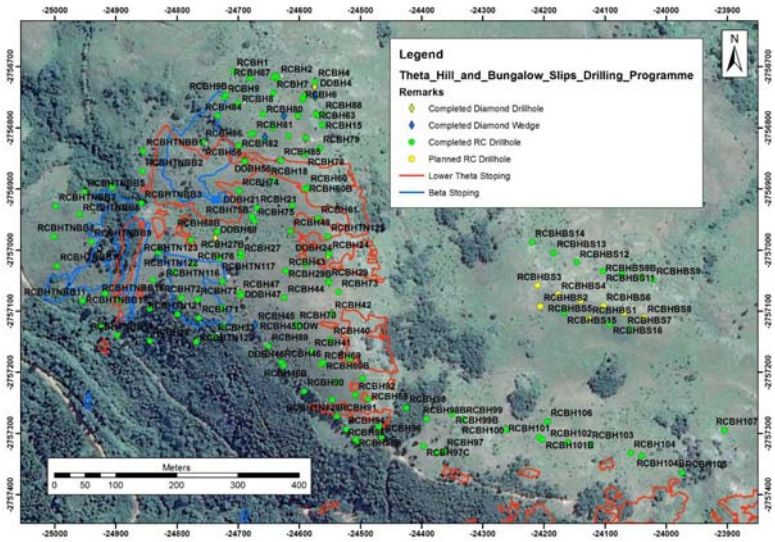
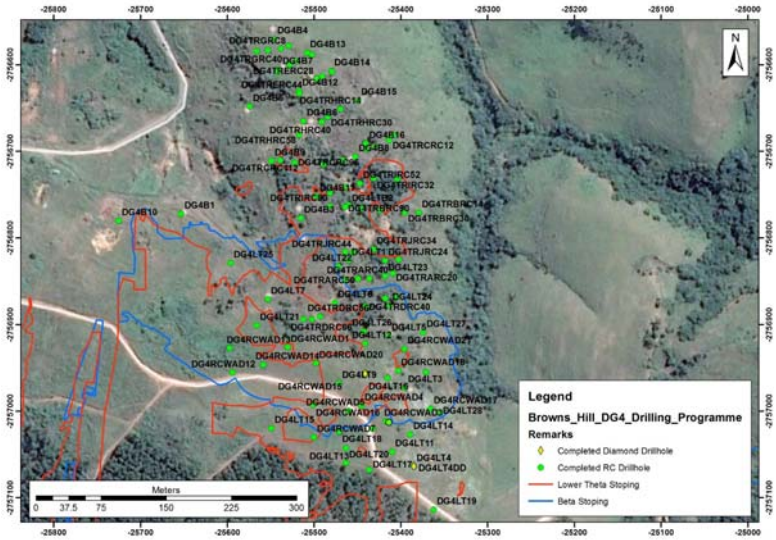
Resource Classification	Type of Operation	Tonnage	Gold Grade	Gold Content	
		Mt	g/t	Kg	koz
Measured	Underground	0.09	5.37	489	15.7
Total Measured		**0.09**	**5.37**	**489**	**15.7**
Indicated	Underground	4.77	6.21	29,661	953.7
	Open Pit	2.72	2.44	6,644	213.6
	Tailings	5.24	0.83	4,373	140.6
Total Indicated		**12.74**	**3.19**	**40,678**	**1,307.8**
Inferred	Underground	21.45	5.22	111,880	3597
	Open pit	4.72	5.40	25,472	819
	Tailings	0.02	0.57	13	0.4
	Rock Dump	0.12	1.64	199	6.4
Total Inferred		**26.32**	**5.23**	**137,564**	**4,422.7**
Grand Total		**39.14**	**4.57**	**178,732**	**5,746.3**

Note:

1. Gold price used = USD 1,500/oz
2. Depletions have been applied
3. Geological losses of 5% for Indicated and 10% for Inferred were applied

ANNEXURE 2

Table 1: JORC Checklist – Table 1 Assessment and Reporting Criteria

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
Sampling techniques	Nature and quality of sampling (e.g. 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.	Surface exploration over the Q4 2018 period has involved Reverse Circulation ("RC") drilling. The RC drilling has focussed on resource delineation of Indicated resources at the Theta Hill project (Theta North and the DG4 area on Browns Hill) and Columbia Hill (Iota Mine). ***Theta N Drilling as at Dec 31 2018***  ***Theta Hill DG4 Drilling as @ 31 Dec 2018***  The drilling has supported the completion of a scoping study and initiation of a feasibility study on the viability of opencasting target reefs including the Bevetts Reef, Upper Theta Reef, Lower Theta Reef and Beta Reef. The reef widths are generally between 20 cm and 40 cm but the RC drilling at 1 m interval samples was utilised optimise recoveries to test the mineralisation and position of the potential reefs in the Project Area. During December 2018 a total of 2,088 RC rock chip samples were sent for analysis; of these, 209 were QAQC samples. All samples were sent to an accredited laboratory in Barberton, South Africa.
	Include reference to measures taken to ensure	The gold bearing reefs have a fairly flat geometry, with an average westerly dip of approximately 8 degrees. The -90 holes therefore allowed for the samples to be

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
	sample representivity and the appropriate calibration of any measurement tools or systems used.	taken normal to the reef. At this stage, the 1 m sample will dilute the reef grade and will not provide true reef thicknesses but is deemed to be sufficient for this drilling programme. The plan below shows the initial drilling completed in relation to the total drilling plan.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	The RC drilling samples were taken in 1 m intervals. The entire drillhole was sampled. Each sample was weighted and then quartered by means of a riffle splitter to collect a sample, which is stored at the Sabie core yard for future testwork if required. This sample is between 2 kg and 6 kg in weight. Another 2 kg sample is collected for analysis at the accredited laboratory. The 2 kg sample is used to produce a 50 g aliquot for the fire assay.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).	Torque Africa Exploration (Pty) Ltd is doing the reverse circulation (RC) drilling on site using a track-mounted and a 6x6 truck mounted Thor drilling machines with cyclone. RC drilling was utilised during the initial drilling phase. The drillhole was not surveyed down the hole as maximum depth of the drilling is 132 m. The collar positions were initially determined with a Garmin 78s handheld GPS, and finalised with a Trimble differential GPS survey.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	The RC chips were weighed before splitting and compared to an estimated weight for the 1 m sample if there was 100% recovery in the dolomites. A density of 2.84 t/m^3 was used for the dolomite in the weight estimate. Owing to the natural cavities occurring in the dolomites, the recoveries were monitored to note the natural cavities or, possibly, an area of historical mining. This was crucial as one of the aims of the drilling programme was to test for the extent of historical mining stopes.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The RC rock chips were collected via a cyclone directly into a sample bag in order to collect the maximum sample. Care was taken by the drillers to drill slower through areas which had bad ground conditions. In order to ensure the representative nature of the drilled intersections and due to the dip of the reef being very shallow at around 3° to 9° to the west, drillholes were drilled vertically in order to obtain an intersection as close to normal as possible.
	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.	Sample recovery versus grade has not been assessed to date. However, it has been noted that grade has been observed in higher and lower chip recovery samples. Further diamond drilling will assist in this respect.
Logging	Whether core and chip samples have been geologically and geotechnically logged	All drilled and completed drillholes have been geologically logged in field on the drilling site. Geological logging of rock chips is done "on the go" as soon as sample bags containing rock chips are obtained from the drillers. Geological logging is

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
	to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	done on a standard log sheet in the field and the data is captured on computer onto an MS Excel spreadsheet. Using a sieve, the geologist scoops a portion of the sample and cleans it in a bucket of water until the rock chips are free of dust, mud or clay. The geologist uses a hand lens to check the lithology types and alteration and mineralisation such as pyrite, arsenopyrite, chalcopyrite, sericite etc. All identified minerals, alterations and lithologies are then captured onto a geological log sheet for the particular drillhole. The cleaned rock chips are then put in a sample-chip tray in order of drill depths. Initial geotechnical logging or studies have been completed at this stage.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	The rock chip logging is both qualitative and quantitative. The drillhole logs are captured in StudioEM™ for electronic logs and the rock chips are stored in chip trays and stored at the Sabie core yard as well as photographed for electronic filing.
	The total length and percentage of the relevant intersections logged.	Project to date 284 RC boreholes have been completed totalling 11,483 metres, and all the rock chips have been logged and sampled.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Project to date 18 Diamond core boreholes have been completed, totalling 485 metres. The core was largely broken, and sampling consisted of either split recovered broken core or split by diamond saw.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	The 1 m samples were collected via a cyclone and the total sample was collected. The sample was quartered by means of a riffle splitter and one quarter was kept for achieving purposes at the Sabie core yard. The remaining sample was then split further until a sample of approximately 2 kg was collected for assay purposes. The remainder of the sample was discarded.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample type is deemed to be appropriate for this initial drilling programme as the aim was to test the presence of the various reefs and the indicative grade. This sampling has given TGME an indication of what the grades may be expected over assumed reef widths, which is based on the previous work completed for the exploration targets.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	The sample is first weighed, so that the recoveries can be noted, and then split be means of the riffle splitter to acquire representative sub-samples. A quarter is archived and the sample for assaying purposes is riffle split further to a weight of 2 kg. The riffle splitter is also cleaned between each 1 m sample to avoid contamination.
	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.	Even though the reef is narrow ranging between 20 cm and 40 cm (determined from previous work), the 1 m sample will provide a grade over 1 m. This allows for the estimation of the cm.g/t which can be used to estimate a grade over an assumed narrower *in situ* reef width. This sample is therefore representative of *in situ* mineralisation. Duplicates are requested as part of the assaying protocols as part of the QAQC.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Diamond core drilling has proved difficult in terms of getting full core recoveries in the highly broken ground. *i.e.* to test the presence of the reef and indicative grades, the RC drilling and sampling methodology are considered to be appropriate. Future drilling will include diamond core wedging over RC intersections and sampling of the reef only, *i.e.* undiluted.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	All RC samples are sent to SGS Barberton which is an accredited laboratory (for the determination of Au by Lead Fusion followed by Atomic Absorption Analysis or Gravimetric) as accredited by SANAS for ISO 17025. Sample Preparation: - • The sample is weighed when received. • The sample is dried. • Crushed to 80% passing 2 mm. • 500 g split by rotary splitter. • 500 g split of 2 mm material pulverised to 85% passing 75 µm in a LM2 puck pulveriser. Analysis:- • Determination of Au by fire assay, AAS/Gravimetric finish (50 g aliquot). • All samples that exhibit a gold concentration of >10 g/t via the AAS finish (M702) are re-assayed via the gravimetric finish (M701). This sample preparation and analysis is according to best practices for this type of mineralisation.
	For geophysical tools, spectrometers,	No assay methods other than those conducted by laboratories as mentioned above were utilised in the generation of the sampling database.

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
	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.	
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	The following applies to both Trench and RC / DD drill sampling. As part of the QAQC protocol blank, duplicates and certified reference material (CRMs) from African Mineral Standard are introduced into the sampling stream. Every 20th sample is either a blank, duplicate or CRM. Each drillhole sampling begins with a blank and ends in a blank with every 20th sample being a QAQC sample. In the case of short holes (shorter than 20 m), the hole starts and ends with a blank and a CRM or duplicate is inserted in the sample batch. The QAQC material utilised is as follows: - • Blank: silica sand; • Duplicate: a request for another sample either before or after the duplicate sample to be duplicated; • CRM - AMIS0023: This standard was made of feed material sourced from the Anglo Gold Ashanti Mponeng Gold Mine in South Africa. It represents Ventersdorp Contact Reef ore with diluting Ventersdorp Lava hanging wall and quartzitic footwall from routine underground mining operations. (certified grade is 3.57 g/t with a two-standard deviation of 0.26 g/t). This data is graphed on a continual basis to monitor the assay quality. In cases where the QAQC samples fail the batch is re-assayed.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	No verification of assay results has taken place as yet. The use of umpire laboratories will be introduced in the next phase of drilling.
	Discuss any adjustment to assay data.	No adjustments have been applied to the assay data. TGME will, however, review the sample grades over 1 m and conduct in-house calculations to get an understanding as to what the grade would be over a narrower reef width, which will be assumed from the previous work conducted on the historical mining data that assisted in determining the initial exploration targets.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Geological logging of trench samples and RC rock chips is done “on the go” as soon as sample bags containing rock chips are obtained from the samplers/drillers. Geological logging is done on a standard log sheet in the field and the data is captured on computer onto an excel spreadsheet. The MS Excel database is also entered into StudioEM™ for the digital capture of the drillhole logs. Here it is verified for overlaps and gaps as well as visual checks. Photographs are taken of all the chip trays (chip trays are stored at the Sabie core yard). In addition to this, representative samples of each metre are taken and place in order on a sheet of plastic and photographed. The archive sample that is collected at the rig is also stored at the Sabie core yard. The samples were also captured in a sample submission form detailing all the information of the sample, *i.e.* type, QAQC details, ID and *from* and *to*.
	The use of twinned holes.	No twinned holes were drilled.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	A Garmin 78s handheld GPS was utilised for the purpose of recording trench positions, as well as locating historical adits and mine entrances, which in turn have been utilised in positioning the historical underground workings in 3D. The new drillhole collar positions have also been marked using the handheld GPS. It is Minxcon’s opinion that the positional accuracy would be within 5 m to 10 m which is within acceptable limits for this initial drilling phase. The collar positions will be surveyed in during the follow up drilling phase.
	Specification of the grid system used.	The grid system used is Hartebeeshoek 1994, South African Zone WG31.
	Quality and adequacy of topographic control.	Minxcon utilised the GPS co-ordinates provided by Theta Gold Mines for the adit positions, as well as ventilation openings to assist in verifying and fixing the workings in 3D space. Very good correlation between the digital topography and the underground mining profiles was found.

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Phase 1 drilling programme was designed on a 50 m x 50 m grid. The initial drilling for Phase 1 and phase 2 is however only a selection of these holes and range from a spacing of about 50 m to 250 m spacing. This phase of drilling was not conducted on a specific grid as the focus was on determining the potential of the exploration targets and verifying the current geological model for the Project. The DG4 trenching was generally conducted on an east-northeast trend and were spaced at between 30 to 60 m relative to each other. The trenching was focussed on obtaining initial grade indications for the surficial material in the area, with the intention of conducting in-fill trenching in the event that promising results were obtained. The trenching has been followed up by shallow RC drilling in order to test the depth to which the mineralisation persists (see above).
	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.	It is Minxcon's opinion that the RC drillhole and sample spacing is adequate for the purpose of conducting meaningful calculations for an Exploration Target in and around stoping areas and for the verification of the current geological model. The trenching as conducted at DG4 is only intended for initial testing and is not considered appropriate and has not been included for the purposes of calculating Mineral Resource or ranged Exploration Target estimates.
	Whether sample compositing has been applied.	All samples within the new drilling database represent 1 m "diluted" samples due to the narrow reef in the Project Area. All DG4 trench samples each constituted vertical full sampling width composites of the full trench depth, with each sample being taken from top to bottom at 2 m intervals along each trench.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The reefs are near horizontal and as such dip at between 3° to 9° to the west and strike in a north–south direction. Drillholes were drilled vertically (-90° dip) to intercept the mineralised shear zones at a near perpendicular angle so that the sampling of the drill rock chips minimises the sampling bias. It is Minxcon's view that sampling orientation has attempted to reduce sample bias with respect to angle of intersection.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have	Available information indicates that the drilling orientation provides reasonably unbiased sampling of the mineralisation zones.
Sample security	The measures taken to ensure sample security.	Minxcon site geologists were responsible for the security of all the samples. The site geologists transported the samples to the TGME plant facility, which is in close proximity to the drilling, for safe keeping (overnight) if the samples were not taken directly to the Sabie core yard. At the Sabie core yard, the Minxcon geotechnician signed the samples in and checked their quality. Once accepted, the samples were stored here and QAQC samples introduced before transporting them to the SGS Laboratory in Barberton.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Minxcon reviewed all historical datasets attributed to the Bentley Project (Theta Hill), as well as digital plans (scanned DXF plans of sampling plans) and found that captured sample positions had good agreement with those in the digital dataset. However, the recent drilling data trenching data has not been through any reviews or audits.

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
Mineral tenement and land tenure status	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.	Theta Gold Mines holds a 74% shareholding in Transvaal Gold Mining Estates Limited (TGME) (which wholly owns mines reporting to the Bentley Project) and Sabie Mines Proprietary Limited (Sabie Mines), the balance is held by Black Economic Empowerment (BEE) entities. This is in line with the requirements of the South African Mining Charter. The South African Mining Charter requires a minimum of 26% meaningful economic participation by the historically disadvantaged South Africans, *i.e.* black South Africans (HDSA). The mineral rights as applicable to the Bentley Project are summarised in the following item below.
	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.	The Bentley Exploration Target resource drilling (phase 1 to 3) spans over the farms Grootfontein 562 KT and Ponieskrantz 543 KT. However, the current drilling is only on the farm Ponieskrantz 543 KT. • Grootfontein 562 KT was previously held under 404PR by TGME. This right, was renewed, expired in February 2017. Application has been submitted for conversion of this 404PR into a mining right under 10167MR. The acceptance letter of this 10167MR excludes Grootfontein 562 KT. • An application has been submitted for a mining right 330MR to encompass Grootfontein 562 KT and Grootfonteinberg 561 KT. Theta Gold Mines has indicated that the right has been granted by the DMR but not yet executed. Due to administrative complications at the DMR offices, no written documentation is available in this regard as yet. • Ponieskrantz 543 KT is held under mining right 83MR issued to TGME for gold, silver and copper ore, as well as stone aggregate. The right is valid to 15 October 2023. • Theta Gold Mines has indicated that the farm Grootfontein 562 KT is additionally covered in one 341MR, the details of which are unknown to Minxcon. It is highlighted that it is unlawful, in accordance with the MPRDA, to issue multiple mineral rights over the same property for the same mineral and for the same or overlapping period. It is recommended that this be resolved with the DMR.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Acknowledgement is hereby made for the historical exploration done by TGME, Simmer and Jack, and other possible unknown historical parties who conducted historical drilling on the properties.
Geology	Deposit type, geological setting and style of mineralisation.	The Bentley Project Gold Mine orebodies are shear hosted quartz-carbonate vein mesothermal gold deposits, with the exception of the Bevetts lithologies which are thought to represent a later erosional surface which impinged on the other reefs and was later the loci of a regional thrusting event which controlled emplacement of the Bevetts Reef. It is thought that the gold mineralisation emplacement is mostly associated with the Bushveld Igneous event in South Africa. Pressure and temperature estimates indicate that the ore fluids of the Sabie-Pilgrims Rest Goldfield were similar to other typical mesothermal gold deposits. The mineralisation in the area of interest is principally “flat” bedding parallel shears located mainly on shale partings within Malmani Dolomites. However, mineralisation also occurs in other formations of the Transvaal Supergroup. The ore bodies occur as narrow quartz-carbonate veins (reefs), which occupy bedding parallel faults and shears, and generally conform to the shallow regional dip of the strata. Gold mineralisation is accompanied by various sulphides of Fe, Cu, As and Bi.
Drillhole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: * easting and northing of the drillhole collar	A total of 42 RC drillholes for approximately 1818 m were completed to the 31st December 2018 on Theta Hill and Columbia Hill which forms part of the Bentley Project. The detailed collar summaries of December 2018 RC drillholes are presented below.

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
	* elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar * dip and azimuth of the hole * down hole length and interception depth * hole length.	***Dec 2018 Theta North Drilling*** BHID | RIG No. | YCOLLAR | ZCOLLAR | GPS_Elevation | Survey System | AZIM | DIP | SOH | EOH | Type | Date Started | Date Complete | Project Area | Drilling Status WGS84 UTM Zone 36S | m | ° | ° | m DG4RCWAD1 | B08 | 272488 | 7242315 | 1362 | Garmin 78s | 0 | -90 | 0 | 23 | RC | 05-Dec-18 | 05-Dec-18 | Browns Hill DG4 | Completed DG4RCWAD12 | B08 | 272425 | 7242285 | 1368 | Garmin 78s | 0 | -90 | 0 | 39 | RC | 03-Dec-18 | 03-Dec-18 | Browns Hill DG4 | Completed DG4RCWAD13 | B08 | 272421 | 7242313 | 1364 | Garmin 78s | 0 | -90 | 0 | 30 | RC | 03-Dec-18 | 03-Dec-18 | Browns Hill DG4 | Stopped due to rods getting stuck as a result of cavities (Total Air Loss) DG4RCWAD14 | B08 | 272460 | 7242295 | 1363 | Garmin 78s | 0 | -90 | 0 | 33 | RC | 04-Dec-18 | 04-Dec-18 | Browns Hill DG4 | Hole Abandoned. Intersected Metal DG4RCWAD17 | B08 | 272654 | 7242247 | 1381 | Garmin 78s | 0 | -90 | 0 | 35 | RC | 06-Dec-18 | 06-Dec-18 | Browns Hill DG4 | Completed DG4RCWAD18 | B08 | 272616 | 7242290 | 1381 | Garmin 78s | 0 | -90 | 0 | 15 | RC | 06-Dec-18 | 06-Dec-18 | Browns Hill DG4 | Completed DG4RCWAD20 | B08 | 272521 | 7242297 | 1372 | Garmin 78s | 0 | -90 | 0 | 30 | RC | 05-Dec-18 | 05-Dec-18 | Browns Hill DG4 | Completed DG4RCWAD21 | B08 | 272623 | 7242315 | 1339 | Garmin 78s | 0 | -90 | 0 | 30 | RC | 06-Dec-18 | 06-Dec-18 | Browns Hill DG4 | Completed DG4RCWAD7 | B08 | 272520 | 7242212 | 1387 | Garmin 78s | 0 | -90 | 0 | 49 | RC | 06-Dec-18 | 07-Dec-18 | Browns Hill DG4 | Completed RCBH107 | B08 | 274118 | 7241974 | 1523 | Garmin 78s | 0 | -90 | 0 | 39 | RC | 10-Dec-18 | 10-Dec-18 | Theta Hill North | Stopped due to rods getting stuck as a result of cavities (Total Air Loss) RCBHBS10 | B08 | 273947 | 7242224 | 1469 | Garmin 78s | 0 | -90 | 0 | 10 | RC | 17-Dec-18 | 17-Dec-18 | Bungalow Slip | abandoned, Hole Collapsing, Rods Getting Stuck RCBHBS11 | B08 | 273916 | 7242228 | 1460 | Garmin 78s | 0 | -90 | 0 | 38 | RC | 17-Dec-18 | 18-Dec-18 | Bungalow Slip | abandoned, Hole Collapsing, Rods Getting Stuck RCBHBS12 | B08 | 273873 | 7242242 | 1469 | Garmin 78s | 0 | -90 | 0 | 18 | RC | 19-Dec-18 | 19-Dec-18 | Bungalow Slip | abandoned, Hole Collapsing, Rods Getting Stuck RCBHBS13 | B08 | 273836 | 7242257 | 1468 | Garmin 78s | 0 | -90 | 0 | 12 | RC | 19-Dec-18 | 19-Dec-18 | Bungalow Slip | abandoned, Hole Collapsing, Rods Getting Stuck RCBHBS14 | B08 | 273800 | 7242274 | 1468 | Garmin 78s | 0 | -90 | 0 | 12 | RC | 20-Dec-18 | 20-Dec-18 | Bungalow Slip | abandoned, Hole Collapsing, Rods Getting Stuck RCBHBS15 | B08 | 273854 | 7242160 | 1463 | Garmin 78s | 0 | -90 | 0 | 27 | RC | 14-Dec-18 | 14-Dec-18 | Bungalow Slip | Stopped due to rods getting stuck as a result of hole collapse RCBHBS16 | B08 | 273929 | 7242145 | 1453 | Garmin 78s | 0 | -90 | 0 | 60 | RC | 13-Dec-18 | 14-Dec-18 | Bungalow Slip | Stopped due to rods getting stuck as a result of hole collapse RCBHBS17 | B08 | 273965 | 7242135 | 1488 | Garmin 78s | 0 | -90 | 0 | 88 | RC | 12-Dec-18 | 12-Dec-18 | Bungalow Slip | Stopped due to rods getting stuck as a result of hole collapse RCBHBS9 | B08 | 273999 | 7242215 | 1465 | Garmin 78s | 0 | -90 | 0 | 2 | RC | 17-Dec-18 | 17-Dec-18 | Bungalow Slip | Abandoned. Intersected Metal RCBHBS9B | B08 | 273980 | 7242220 | 1468 | Garmin 78s | 0 | -90 | 0 | 12 | RC | 18-Dec-18 | 18-Dec-18 | Bungalow Slip | abandoned, Hole Collapsing, Rods Getting Stuck
	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.	***Dec 2018 Columbia Hill (Iota Mine) Drilling*** BHID | RIG No. | YCOLLAR | ZCOLLAR | GPS_Elevation | Survey System | AZIM | DIP | SOH | EOH | Type | Date Started | Date Complete | Project Area | Drilling Status WGS84 UTM Zone 36S | m | ° | ° | m RCBH30 | B12 | 271770 | 7243876 | 1423 | Garmin 78s | 0 | -90 | 0 | 31 | RC | 20-Dec-18 | 20-Dec-18 | Iota Mine | Completed RCBH31 | B12 | 271770 | 7243913 | 1413 | Garmin GPS60 | 0 | -90 | 0 | 76 | RC | 17-Dec-18 | 17-Dec-18 | Iota Mine | Completed RCBH32 | B12 | 271762 | 7243953 | 1415 | Garmin 78s | 0 | -90 | 0 | 85 | RC | 15-Dec-18 | 15-Dec-18 | Iota Mine | Completed RCBH33 | B12 | 271750 | 7243990 | 1416 | Garmin 78s | 0 | -90 | 0 | 47 | RC | 14-Dec-18 | 14-Dec-18 | Iota Mine | Completed RCBH34 | B12 | 271738 | 7244021 | 1411 | Garmin 78s | 0 | -90 | 0 | 94 | RC | 13-Dec-18 | 14-Dec-18 | Iota Mine | Completed RCBH35 | B12 | 271690 | 7244073 | 1418 | Garmin 78s | 0 | -90 | 0 | 97 | RC | 12-Dec-18 | 13-Dec-18 | Iota Mine | Completed. Stopped 6m into Dolerite. Hole had started to collapse and drill rig also started losing air. RCBH36 | B12 | 271730 | 7243880 | 1433 | Garmin 78s | 0 | -90 | 0 | 41 | RC | 07-Dec-18 | 07-Dec-18 | Iota Mine | Completed RCBH37 | B12 | 271734 | 7243921 | 1437 | Garmin 78s | 0 | -90 | 0 | 81 | RC | 07-Dec-18 | 07-Dec-18 | Iota Mine | Completed RCBH38 | B12 | 271728 | 7243952 | 1436 | Garmin 78s | 0 | -90 | 0 | 97 | RC | 08-Dec-18 | 10-Dec-18 | Iota Mine | Completed RCBH40 | B12 | 271723 | 7244077 | 1414 | Garmin 78s | 0 | -90 | 0 | 86 | RC | 11-Dec-18 | 12-Dec-18 | Iota Mine | Completed RCBH41 | B12 | 271562 | 7243778 | 1473 | Garmin GPS60 | 0 | -90 | 0 | 52 | RC | 03-Dec-18 | 03-Dec-18 | Iota Mine | Completed RCBH42 | B12 | 271561 | 7243732 | 1472 | Garmin GPS60 | 0 | -90 | 0 | 55 | RC | 03-Dec-18 | 04-Dec-18 | Iota Mine | Stopped due to rods getting stuck as a result of cavities and hole collapse RCBH43 | B12 | 271550 | 7243698 | 1476 | Garmin 78s | 0 | -90 | 0 | 90 | RC | 05-Dec-18 | 05-Dec-18 | Iota Mine | Completed RCBH44 | B12 | 271529 | 7243675 | 1476 | Garmin 78s | 0 | -90 | 0 | 91 | RC | 06-Dec-18 | 06-Dec-18 | Iota Mine | Stopped in a Cavity RCBH45 | B12 | 271546 | 7243662 | 1467 | Garmin 78s | 0 | -90 | 0 | 70 | RC | 06-Dec-18 | 06-Dec-18 | Iota Mine | Completed RCBH46 | B12 | 271574 | 7243820 | 1472 | Garmin GPS60 | 0 | -90 | 0 | 56 | RC | 03-Dec-18 | 03-Dec-18 | Iota Mine | Completed RCBH47 | B12 | 271714 | 7243994 | 1424 | Garmin 78s | 0 | -90 | 0 | 67 | RC | 10-Dec-18 | 10-Dec-18 | Iota Mine | Completed All the drillholes that were sampled are being utilised to test the current geological model and grade estimates.
Data aggregation methods	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.	All the sampling data is based on the 1 m sample interval. Therefore, all the grades are representative of the full 1 m sample. No top cuts or bottom cuts have been applied. The sample represents a “diluted” in situ grade due to the fact that the reefs are narrow (between 20 cm and 40 cm) and the sample includes hanging wall and footwall dolomite dilution.
	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.	There is no aggregation of sampling data.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents were calculated.
Relationship	If the geometry	All sample lengths are down hole lengths. All drilling was conducted near normal to

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
between mineralisation widths and intercept lengths	of the mineralisation with respect to the drillhole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	bedding, thus reef width would be very closely related to the intersection length due to the low dip of the orebody and the vertical orientation of the drillholes. It must be noted that the sample is a "diluted" grade as it contains hanging wall and footwall dolomite that is not part of the reef. The actual reef width is unknown at this stage and only assumptions can be made in this respect based on the previous work completed for the exploration targets that was based on historical data.
Diagrams	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 drillhole collar locations and appropriate sectional views.	Below is a plan showing the location of the drilling at Theta North to November 17 2018. Sections are to follow once the data has been incorporated into the current geological model.
Balanced reporting	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.	The range of grades intersected during the reported drilling period (Q4 2018), range from detection limit to intervals such as 4m @ 10.31g/t Au, 2m @ 19.76 g/t Au, and 1m @ 19.40 g/t Au for the RC drilling. The table below is a selection of significant mineralised intersections that could be correlate with potential reefs per drillhole. This is a "diluted" grade and the grade would be higher over the reef width only.

SECTION 2: REPORTING OF EXPLORATION RESULTS

Criteria	Explanation	Detail

BHID	From	To	Width	Au g/t	Au Comments	Au Content	Back calc in situ Reef	EOH Comments
	m	m	m			Cm.g/t	g/t over 25cm	
DG4RCWAD3	4.00	5.00	1.00	2.52	Bevetts	252	10.08	DG4 Bevetts & U Theta
DG4RCWAD4	11.00	13.00	2.00	1.95	Bevetts	389	7.78	DG4 Bevetts & U Theta
DG4RCWAD5	7.00	12.00	**5.00**	1.39	Bevetts	697	5.58	DG4 Bevetts & U Theta
DG4RCWAD5 incl	*7.00*	*8.00*	*1.00*	***4.45***	*Bevetts*	*445*	*17.80*	*DG4 Bevetts & U Theta*
DG4RCWAD5	31.00	34.00	**3.00**	1.20	U Theta	359	4.79	DG4 Bevetts & U Theta
DG4RCWAD5	36.00	37.00	1.00	1.23	L Theta	123	4.92	DG4 Bevetts & U Theta
DG4RCWAD7	35.00	37.00	2.00	1.87	L Theta	373	7.46	DG4 Bevetts & U Theta
DG4RCWAD15	14.00	16.00	2.00	1.55	Bevetts	309	6.18	DG4 Bevetts & U Theta
DG4RCWAD16	8.00	19.00	**11.00**	2.13	Bevetts	2,343	8.52	DG4 Bevetts & U Theta
DG4RCWAD16 Incl	*8.00*	*9.00*	*1.00*	***9.52***	*Bevetts*	*952*	*38.08*	*DG4 Bevetts & U Theta*
DG4RCWAD16	40.00	45.90	**5.90**	**7.34**	L Theta	4,331	29.36	DG4 Bevetts & U Theta
DG4RCWAD17	7.00	8.00	1.00	2.10	Bevetts	210	8.40	DG4 Bevetts & U Theta
DG4RCWAD17	17.00	18.00	1.00	1.19	U Theta?	119	4.76	DG4 Bevetts & U Theta
DG4RCWAD18	9.00	10.00	1.00	0.61	U Theta?	61	2.44	DG4 Bevetts & U Theta
DG4RCWAD20	8.00	9.00	1.00	**27.50**	Bevetts	2,750	110.00	DG4 Bevetts & U Theta
DG4RCWAD21	16.00	17.00	1.00	2.27	U Theta	227	9.08	DG4 Bevetts & U Theta
DG4RCWAD21	24.00	26.00	2.00	**5.92**	L Theta	1,184	23.68	DG4 Bevetts & U Theta

BHID	From	To	Width	Au g/t	Au Comments	Au Content	Back calc in situ Reef	EOH Comments
	m	m	m			Cm.g/t	g/t over 25cm	
RCBHI12B	43.00	61.00	**18.00**	**2.81**	Bevetts / Lense	5,057	11.24	Iota Mine P1
RCBHI12B	76.00	77.00	1.00	**8.76**	Rho	876	35.04	Iota Mine P1
RCBHI12B incl	*47.00*	*59.00*	***12.00***	***3.65***	*Bevetts / Lense*	*4,384*	*14.61*	*Iota Mine P1*
RCBHI14	-	1.00	1.00	1.09	Quartz in shale	109	4.36	Iota Mine P1
RCBHI14	16.00	17.00	1.00	2.20	Bevetts	220	8.80	Iota Mine P1
RCBHI14	28.00	33.00	**5.00**	**3.69**	Rho	1,843	14.74	Iota Mine P1
RCBHI14 incl	*28.00*	*31.00*	***3.00***	***5.93***	*Rho*	*1,778*	*23.71*	*Iota Mine P1*
RCBHI15	29.00	30.00	1.00	1.23	Bevetts	123	4.92	Iota Mine P1
RCBHI15	35.00	39.00	4.00	**10.31**	Rho	4,126	41.26	Iota Mine P1
RCBHI15 incl	*37.00*	*39.00*	***2.00***	***19.76***	*Rho*	*3,953*	*79.05*	*Iota Mine P1*
RCBHI16	-	6.00	6.00	2.32	Bevetts	1,393	9.29	Iota Mine P1
RCBHI16 incl	-	*4.00*	***4.00***	***3.19***	*Bevetts*	*1,274*	*12.74*	*Iota Mine P1*
RCBHI17	9.00	10.00	1.00	0.82	Quartz in shale	82	3.28	Iota Mine P1
RCBHI17	53.00	54.00	1.00	4.08	Bevetts?	408	16.32	Iota Mine P1
RCBHI17B	58.00	69.00	**11.00**	0.91	Rho	999	3.63	Iota Mine P1
RCBHI17B incl	*58.00*	*63.00*	***5.00***	***1.29***	*Rho*	*647*	*5.18*	*Iota Mine P1*
RCBHI18	16.00	17.00	1.00	1.07	Bevetts	107	4.28	Iota Mine P1
RCBHI19	1.00	13.00	**12.00**	2.53	Bevetts / Lense	3,036	10.12	Iota Mine P1
RCBHI19 incl	*1.00*	*8.00*	***7.00***	***3.50***	*Bevetts / Lense*	*2,448*	*13.99*	*Iota Mine P1*
RCBHI19B	21.00	22.00	1.00	**19.40**	Bevetts	1,940	77.60	Iota Mine P1
RCBHI19B	38.00	39.00	1.00	4.79	Rho	479	19.16	Iota Mine P1
RCBHI20	41.00	62.00	**21.00**	**3.61**	Bevetts Lense	7,581	14.44	Iota Mine P1
RCBHI20 incl	*46.00*	*57.00*	***11.00***	***5.95***	*Bevetts Lense*	*6,545*	*23.80*	*Iota Mine P1*
RCBHI20	67.00	68.00	1.00	5.12	Rho	512	20.48	Iota Mine P1
RCBHI21	19.00	25.00	**6.00**	**5.17**	Rho	3,102	20.68	Iota Mine P1
RCBHI22	-	1.00	1.00	1.57	Quartz in shale	157	6.28	Iota Mine P1
RCBHI22B	7.00	8.00	1.00	1.42	Bevetts	142	5.68	Iota Mine P1
RCBHI24	-	4.00	4.00	1.25	Bevetts Lense	500	5.00	Iota Mine P1
RCBHI24	19.00	24.00	5.00	1.99	Rho	995	7.96	Iota Mine P1
RCBHI26	46.00	48.00	2.00	**4.89**	Bevetts	978	19.56	Iota Mine P1
RCBHI26	62.00	68.00	6.00	1.79	Rho	1,073	7.15	Iota Mine P1
RCBHI26 incl	*63.00*	*65.00*	***2.00***	***3.89***	*Rho*	*777*	*15.54*	*Iota Mine P1*
RCBHI9C_1	-	1.00	1.00	1.17	Quartz in shale	117	4.68	Iota Mine P1

BHID	From	To	Width	Au g/t	Au Comments	Au Content	Back calc in situ Reef	EOH Comments
	m	m	m			Cm.g/t	g/t over 25cm	
RCBHI32	8.00	9.00	1.00	3.71	Bevetts Thrust	371	14.84	Iota Mine P2
RCBHI32	65.00	66.00	1.00	1.33	Rho ?	133	5.32	Iota Mine P2
RCBHI34	1.00	2.00	1.00	2.91	Quartz in Shale	291	11.64	Iota Mine P2
RCBHI34	26.00	27.00	1.00	1.24	U Rho?	124	4.96	Iota Mine P2
RCBHI34	36.00	37.00	1.00	1.26	L Rho?	126	5.04	Iota Mine P2
RCBHI34	77.00	78.00	1.00	2.44	?	244	9.76	Iota Mine P2
RCBHI39	32.00	35.00	**3.00**	1.87	Bevetts	560	7.47	Iota Mine P2
RCBHI41	18.00	19.00	1.00	**10.10**	Bevetts	1,010	40.40	Iota Mine P2
RCBHI41	36.00	37.00	1.00	1.58	Rho	158	6.32	Iota Mine P2
RCBHI43	7.00	8.00	1.00	1.18	Quartz in Shale	118	4.72	Iota Mine P2
RCBHI43	70.00	71.00	1.00	**3.88**	Rho	388	15.52	Iota Mine P2
RCBHI44	4.00	5.00	1.00	1.03	Bevetts	103	4.12	Iota Mine P2
RCBHI44	66.00	69.00	**3.00**	**3.34**	Rho	1,001	13.34	Iota Mine P2
RCBHI44 incl	*68.00*	*69.00*	*1.00*	***5.99***	*Rho*	*599*	*23.96*	*Iota Mine P2*
RCBHI45	-	1.00	1.00	1.10	Surficial	110	4.40	Iota Mine P2
RCBHI45	31.00	32.00	1.00	**7.51**	Rho	751	30.04	Iota Mine P2
RCBHI46	28.00	29.00	1.00	1.34	U Rho	134	5.36	Iota Mine P2
RCBHI46	36.00	46.00	**10.00**	1.93	L Rho	1,927	7.71	Iota Mine P2

BHID	From	To	Width	Au g/t	Au Comments	Au Content	Back calc in situ Reef	EOH Comments
	m	m	m			Cm.g/t	g/t over 25cm	
RCBHSC1	Nil		-	-		-	-	Scammells
RCBHSC10	23.00	24.00	1.00	0.50	Scammels	50	2.00	Scammells
RCBHSC13			-	-		-	-	Scammells
RCBHSC14	24.00	25.00	1.00	0.85	Scammells	85	3.40	Scammells
RCBHSC15	Deepen					-	-	Scammells
RCBHSC16	Deepen					-	-	Scammells
RCBHSC17	37.00	38.00	1.00	0.50	Scammells	50	2.00	Scammells
RCBHSC18	39.00	40.00	1.00	1.31	Scammells	131	5.24	Scammells
RCBHSC19	2.00	3.00	1.00	0.56	?	56	2.24	Scammells
RCBHSC2	18.00	19.00	1.00	0.43	Scammells	43	1.72	Scammells
RCBHSC20	Nil		-	-		-	-	Scammells
RCBHSC3	18.00	19.00	1.00	**5.58**	Scammells	558	22.32	Scammells
RCBHSC3A	19.00	20.00	1.00	1.57	Scammells	157	6.28	Scammells
RCBHSC4			-	-	Scammels	-	-	Scammells
RCBHSC5			-	-	Scammels	-	-	Scammells
RCBHSC6			-	-	Scammels	-	-	Scammells
RCBHSC7			-	-	Scammels	-	-	Scammells
RCBHSC8	32.00	33.00	1.00	0.93	Scammels	93	3.72	Scammells
RCBHSC9	20.00	21.00	1.00	**13.80**	Scammels	1,380	55.20	Scammells

BHID	From	To	Width	Au g/t	Au Comments	Au Content	Back calc in situ Reef	EOH Comments
	m	m	m			Cm.g/t	g/t over 25cm	
RCBHTNBB10	8.00	9.00	1.00	2.88	Beta?	288	11.52	Theta N Beta Block 10
RCBHTNBB14	21.00	23.00	2.00	2.88	L Theta	576	11.52	Theta N Beta Block 10
RCBHTNBB16	31.00	34.00	3.00	1.03	Bevetts	310	4.13	Theta N Beta Block 10
RCBHTNBB16	50.00	52.00	2.00	1.58	L Theta?	316	6.32	Theta N Beta Block 10
RCBHTNBB17	12.00	13.00	1.00	1.35	Bevetts	135	5.40	Theta N Beta Block 10
RCBHTNBB17	35.00	36.00	1.00	**2.95**	L Theta?	295	11.80	Theta N Beta Block 10
RCBHTNBB2	2.00	4.00	2.00	1.42	Bevetts/U Theta	283	5.66	Theta N Beta Block 10

Other substantive exploration data	Other exploration data, if meaningful and material, should be reported	No other exploration data other than the historical data captured for the exploration target estimation is available. This is historical underground channel sampling and drilling data that was captured by Minxcon previously and can now be verified with the more recent RC drilling of this drilling phase.

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
	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; potential deleterious or contaminating substances.	No metallurgical data nor bulk density data is available for Theta Hill. Historical density figures are being used for density. A historical regional geophysical survey was conducted in 2008 over Browns Hill and Theta Hill North, but requires interpretation and reconciliation with regards geological structure and underground workings.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	At this stage the total planned drilling programme in 2019, which target other opencast targets approximately 17 000m RC plus 2000m of diamond core drilling. The diamond core drilling has struggled to deliver adequate recovered core, and there has been a commensurate shift to RC drilling evaluation.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The potential for the Bentley Project at Theta Hill is associated with the unmined areas in the two hills, including potential surficial material which is tested by means of trenching prior to follow-up RC drilling. This is what is currently being evaluated. The drilling for Phases 1 to 3 is only targeting 83MR occurrences, and there is additional potential in peripheral areas that have future drilling planned.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
Database integrity	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.	Minxcon reviewed all historical datasets attributed to the project, as well as digital plans (scanned DXF plans of sampling plans) and found that captured sample positions had good agreement with those in the digital dataset. The additional drillholes were added to the database and checked for errors.
	Data validation procedures used.	Minxcon reviewed all historical datasets attributed to the Project and found that captured sample positions had good agreement with those in the digital dataset. Different versions of the underground sampling plans were found and cross-validated to test for data changes or eliminations over the years. The additional drillholes were checked for duplicated and errors in overlaps.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Minxcon personnel have consistently visited the gold properties held by Theta Gold Mines in the Sabie- Pilgrims Rest area, including Project Bentley, since 2009 when they took on the role of Competent Persons. Most recently, the Competent Person, Mr Uwe Engelmann, undertook a site visit to the TGME Properties on 23 November 2017 and 21 September 2018. Accompanied by Theta Gold Mines personnel, Mr Engelmann inspected the RC drilling operations and sampling procedures on Theta Hill .
	If no site visits have been undertaken indicate why this is the case.	See above.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The geological reef wireframes for Theta Hill were constructed by a Minxcon geologist and are based upon mine development plans and historical surveyed peg files (honouring the on-reef development) provided by Theta Gold Mines. Additional drilling was used to improve the geological model as well as confirm the historical geological interpretation. Minxcon is of the view that the confidence in the geological wireframes is such that it supports the declaration of an Indicated Mineral Resource where current drilling has taken place and where only historic information is available an inferred Mineral Resource as defined by the JORC Code. The recent drilling was focused on confirming the current geological model.
	Nature of the data used and of any assumptions made.	Scanned plans were digitised to generate development strings. These were coordinated and repositioned relative to underground plans and survey pegs. A geological contour plan was also used in conjunction with limited underground geological mapping as well as underground survey pegs were used in the generation of the geological model. Geological interpretation of the current drillholes is based on field logging of the diamond drillholes and RC drilling.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Minxcon did not investigate alternative interpretations with respect to the geological model due to the addition of the current drilling and field logging. Minxcon recommends that further geological work is undertaken to enhance the geological interpretation.
	The use of geology in guiding and controlling Mineral Resource estimation.	The geological reef wireframes for Theta Hill were constructed by a Minxcon geologist and are based upon mine development plans and historical surveyed peg files (honouring the on-reef development) provided by Theta Gold Mines. With the addition of current drilling and field logging of the diamond and RC drillholes the geological reef wireframes have been improved and refined. The resultant geological wireframes were then utilised as a closed volume to constrain the volume and spatial estimation of the Theta Hill Mineral Resource.
	The factors affecting continuity both of grade and geology.	The Project Mineral Resource has been restricted to the hard boundaries defined in the geological interpretation in the form of faulting and outcrop lines.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
Dimensions	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.	The orebodies consist of five near-horizontal shear zones varying in width from 25 cm to approximately 1 m in width and have been modelled to a strike length of approximately 2,500 m. The orebodies have been wireframed to an average depth of 110 m below surface, of which a maximum of approximately 200 m is achieved at Theta Hill South.
Estimation and modelling techniques	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.	Estimation of the reef width and gold content (cm.g/t) based on a 1m stope width was carried out using ordinary kriging. The content (cm.g/t) was calculated based on a capped Au value. The estimation utilised a minimum of three samples and a maximum of 20 samples in the point assay estimate. The range for the inferred resource was set to three times the variogram range for each domain based on the shortest range, which was the cm.g/t range. The maximum range Beta Reef was 315m while the Theta Reefs had a maximum range of 270m for the inferred resource estimation. The search parameters for the estimation are based on the range of the variograms and a minimum of three drillholes or sample points and a maximum of 20. The Mineral Resource was then depleted with the mining voids. The estimation techniques applied are considered appropriate. Datamine Studio™ was utilised for the statistics, geostatistics and block model estimation.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	No compliant historical Mineral Resource estimates have been estimated for Theta Hill to Minxcon's knowledge. The Mineral Resource estimate utilises the cm.g/t content as well as reef width (cm) and geologically modelled thicknesses and is modelled in 3D. No previous electronic Mineral Resource exists. Therefore, the only check that can be conducted is with some of the historical manual ore resource blocks that have been found and compare the block grades with the kriged estimation. It was found that there was a good correlation. Minxcon also conducted swath plots to verify the model to the sampling data.
	The assumptions made regarding recovery of by-products.	No investigation has been conducted with regards secondary mineralisation or correlation to by-products.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No assumptions or determinations pertaining to deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation) have been conducted.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	A block model was produced in Datamine Studio™ consisting of a cell size of 20 m x 20 m x 10 m in the X, Y and Z dimensions respectively for the point data estimate. The single cell in the Z direction was utilised. The final estimated model was projected into the reef plane based on the structural interpretation. Block size was determined by means of kriging neighbourhood analysis.
	Any assumptions behind modelling of selective mining units.	No assumptions were made in terms of selective mining units with respect to the cell size selected.
Estimation and modelling techniques (continued)	Any assumptions about correlation between variables.	Grade content (cm.g/t) and reef width was estimated – cm.g/t was used as a fixed apparent stoping width of 1m was applied
	Description of how the geological interpretation was used to control the resource estimates.	The Mineral Resource has been restricted to the hard boundaries encompassed by the geological wireframe.
	Discussion of basis for using or not using grade cutting or capping.	The Au g/t and reef width cm values were considered for capping as the log normal distribution showed a number of outliers. A cumulative co-efficient of variation plot was generated from the raw data and viewed with respect to the percentile distribution and inflection points. The Au

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
		assay values for the Lower Theta Reef points were capped at 145 g/t and 233 g/t for the Browns hill and Theta hill respectively. No capping of the reef width was seen as necessary. The Beta Reef was capped at 140 g/t and 6.7 g/t for the Browns Hill and Theta Hill, respectively. No capping of the reef widths was seen as necessary. The estimation cm.g/t was based on these capping techniques.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Swath analysis of the Theta Reefs and Beta Reefs were conducted in the east-west and north-south directions in order to check correlations between the block modelled grades and the raw sampled values. Swath analysis shows a good correlation with the sample grade. In addition, correlation between the estimate and the average value of a block was investigated.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The density is based on a dry rock mass as utilised in neighbouring project areas which are based on historical data. A density of 3.6t/m^3 has been used for the reef and 2.84 t/m^3 for the waste dilution. The modelled density over the 1m sample length is approximately 3.1 t/m^3. However, in the newly RC drilled area, the density has been reduced by 5% based on the poor ground conditions encountered. Density test work is currently being conducted to improve the confidence in the density.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The following parameters were used for the declaration and cut-off grade calculation: Gold price, % MCF, dilution, plant recovery factor, mining cost and total plant cost. Only open pit Mineral Resources have been declared at the Theta Hill project. The declared Mineral Resources are therefore confined to within the resource pit shell. The open pit resource is based on the open cast pit that resulted from the pit optimisations in Datamine Maxipit. The parameters used for the open pit are a gold price of USD1,500/oz, a mining cost of USD 1.00/t and a processing cost of USD15.55/t. The resource falling within the pit was declared as the open pit Mineral Resources at a cut-off of 0.35 g/t.
Mining factors or assumptions	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.	Due to the conditions of the ground there will be limited blasting and the majority of the reef mining will be done with continuous miners. This has largely contributed to the lower mining cost as defined in the scoping study. The scoping study is based on extracting the 1m diluted cut which the resource has been declared on. There is however upside in terms of possibly reducing the mining cut to less that 1m which would improve the grade as well as the overall mining cost. The Mineral Resource was optimised by means of Datamine Maxipit software to determine the reasonable prospects of eventual economic extraction. Only the resource falling within the pit has been declared as an inferred Mineral Resource. Geological losses of 10% for inferred and 5% for indicated have been applied to the Mineral Resource.
Metallurgical factors or assumptions	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	For the purpose of the RPEEE a plant recovery of 92% was assumed utilising BIOX which is in line with current industry achievements. However, in February 2018, TGME conducted sampling at the historical workings at the Neck Section, of the Vaalhoek Mine, to determine the possible recoveries for the potential open pit resources. They took four samples with the results averaging a 92 % theoretical recovery from the bottle roll test work. The four bottle roll results supplied to Minxcon are as follows:- 86.34%, 91.04%, 96.16% and 94.48%.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES		
Criteria	**Explanation**	**Detail**
	with an explanation of the basis of the metallurgical assumptions made.	These samples were milled to a P80 of 80 microns and then subjected to bottle roll tests for a period of 24 hours. The Vaalhoek Reef returned an average gold recovery of 90.4% while the Thelma Leader returned an average gold recovery of 93.6%.
Environmental factors or assumptions	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.	No environmental factors or assumptions were applied to this inferred Mineral Resource.
Bulk density	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.	Bulk density for the reefs was assumed at 3.6 t/m³ based upon historical data and estimates for the reef shear zones. A density of 2.84 t/m³ based on typical industry dolomite densities was utilised for waste. Bulk density tests are currently being conducted to improve on the density database. The diluted reef density for the recent RC drilled area has also been reduced by 5% to take into account the friable ground conditions encountered.
	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.	No bulk densities were taken and only historic densities were available. Density test work is however being conducted to improve on the density assumptions.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	See above.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The Mineral Resource has been declared as an inferred and indicated Mineral Resource. The indicated Mineral Resource has only been declared where current drilling took place and has passed QAQC. The indicated Mineral Resource has be declared based on the data density and variogram ranges. The recent RC drilling has proved continuity of the Upper Theta, Lower Theta and Beta reefs and therefore the inclusion of a indicated Mineral Resource has been declared.
	Whether appropriate account has been taken of all relevant factors (i.e. 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).	The recent RC drilling has confirmed the reef continuity to allow for an indicated and inferred Mineral Resource. The drilling also confirms some of the historical block grades on the historical plans and the extent of the mining on the historical survey plans.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	It is the Competent Person's opinion that the Mineral Resource estimate as conducted by Minxcon is appropriate and presents a reasonable result in line with accepted industry practices.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Minxcon, as well as the Competent Person, conducted internal reviews of the Mineral Resource estimate, geological modelling and the data transformations from 2D to 3D.