4 March 2019

ASX ANNOUNCEMENT

HIGH GRADE GOLD ASSAYS AT COLUMBIA HILL

Theta Gold Mines Limited ("Theta Gold" or "Company") (ASX: TGM, TGMO) is pleased to announce that the recent drilling programs have delivered strong and consistent thick gold reef intersections at Columbia Hill. Due to this success, the Columbia Hill drilling campaign has been extended into March 2019.

The Company is continuing to make good progress with ongoing open pit Indicated resource classification drilling. The Company will issue a revised resource and reserve statement together with the Theta Project Feasibility Study results in early second quarter 2019.

The Company is pleased to report there was a high level of activity at the project during February 2019, with drilling at Columbia Hill progressing Indicated resource delineation. The Feasibility Study work during Q1 2019 continued, including site visits from contractors and engineering groups to ensure independence and to support the costing for financial models.

HIGHLIGHTS

- The second phase of RC drilling at **Columbia Hill** has been extended into March 2019. High grade assays have been returned to date from the Q1 2019 drilling program, with results up to 13.5g/t Au across good widths.
- 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:
  - **3m @ 5.05 g/t Au** from 57m, incl 1m @ 10.40 g/t Au (RCBHI 48, Rho Reef)
  - **6m @ 2.11 g/t Au** from 38m (RCBHI 63, Bevetts) and 1m @ 10.40 g/t Au from 51m (Rho Reef)
  - **3m @ 4.82 g/t Au** from 33m, incl 1m @ 12.60 g/t Au (RCBHI 64, Rho Reef)
  - **4m @ 1.72g/t Au** from 25m, incl 1m @ 4.56g/t Au (RCBHI 66 Bevetts)
  - **1m @ 3.36 g/t Au** from 42m (RCBHI 70, Shale Reef) and **7m @2.75g/t Au** from 78m, incl **4m @ 4.00 g/t Au** (Rho Reef)
  - **1m @ 4.19 g/t Au** from 23m (RCBHI 75, Rho Reef)
  - **3m @ 7.24 g/t Au** from 42m (RCBHI 82, Rho Reef) and **2m @ 13.52 g/t Au** from 60m Upper Theta Reef)
- **Columbia Hill** included in Feasibility Study and Mining Reserve estimation.

Chairman, Bill Guy commented: "*The drilling program at Columbia Hill continues to give positive results, and the deposit is being incorporated into the Feasibility Study for the start up mining operation. The geological modelling and mineral resource estimation work is well advanced, and we are looking forward to the inclusion of a further open pit to the mine development strategy and releasing a maiden resource soon.*

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As part of the Feasibility Study, the TGM Board has now developed clear timelines and work schedules to bring the TGME plant back into production. Engineering and environmental studies to support the permitting process for open cut development are also well advanced." Mr Guy said.

SUMMARY

To date, in Q1 2019, the Company has drilled 39 RC boreholes for 2,302m. The team in country continues to use two reverse circulation (RC) drill rigs that have continued into the New Year with Columbia Hill being the focus.

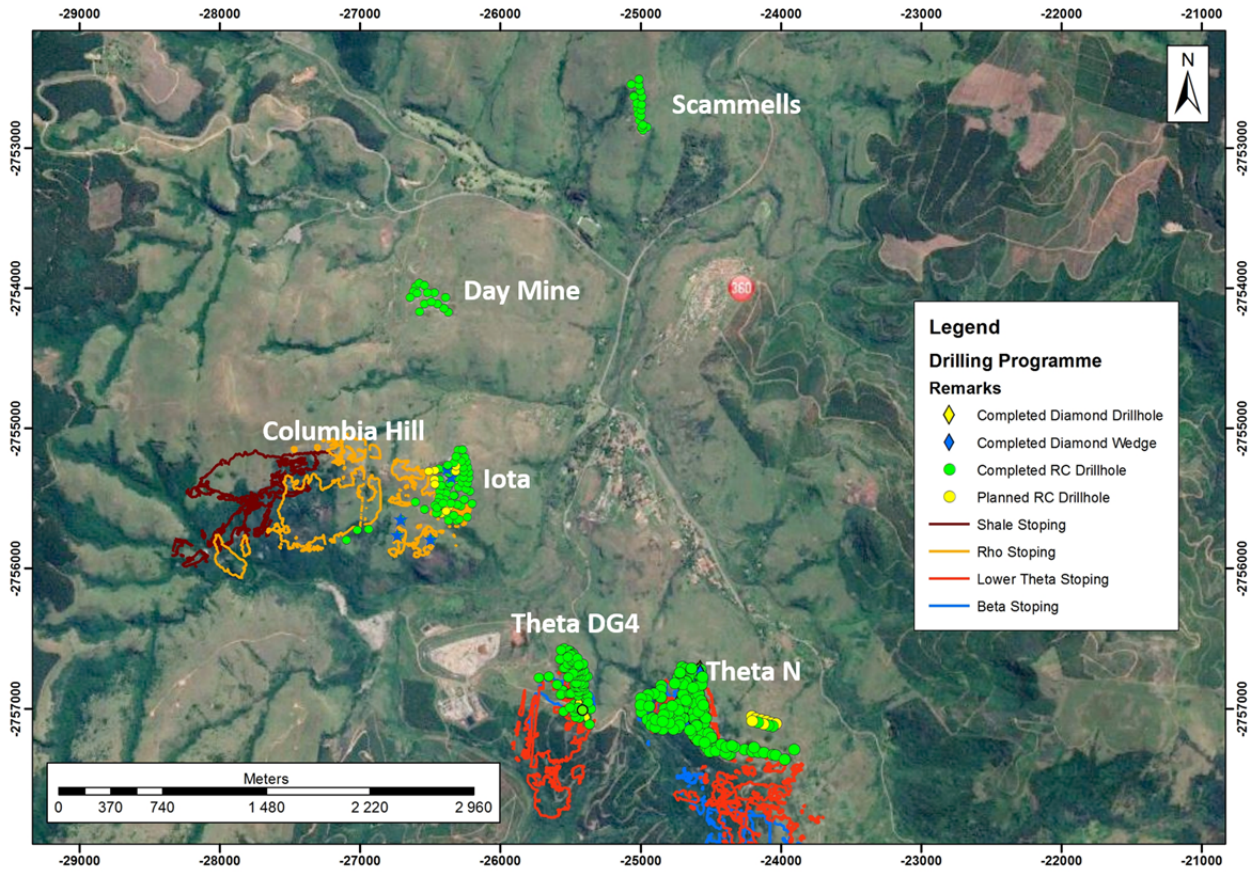


Figure 1: Locality of Opencast Targets and Drilling on MR83

Columbia Hill Reverse Circulation Drilling

Both the RC rigs have been progressing investigations on satellite opencast targets on MR83, and are currently focussed on completing Phase 2 at Columbia Hill Mine (see Figures 1 and 2). To date Q1 2019 a further 39 RC boreholes totaling 2,302 m have been completed at Columbia Hill. This follows on from previous drilling during Q4 2018 that had encouraging Rho Reef intersections.

At Columbia Hill (Figure 2), the Iota (Rho Reef) underground workings are located on the eastern extension and the current RC drilling is targeting ground peripheral to these zones. Since an initial phase in December 2017, a total of 99 RC boreholes have been completed for 5,819m (2017-2019). The target mineralisation zones embrace the Bevetts thrust and Lense style reefs plus the underlying Rho Reef (Figures 3 & 4 Columbia Hill cross-section).

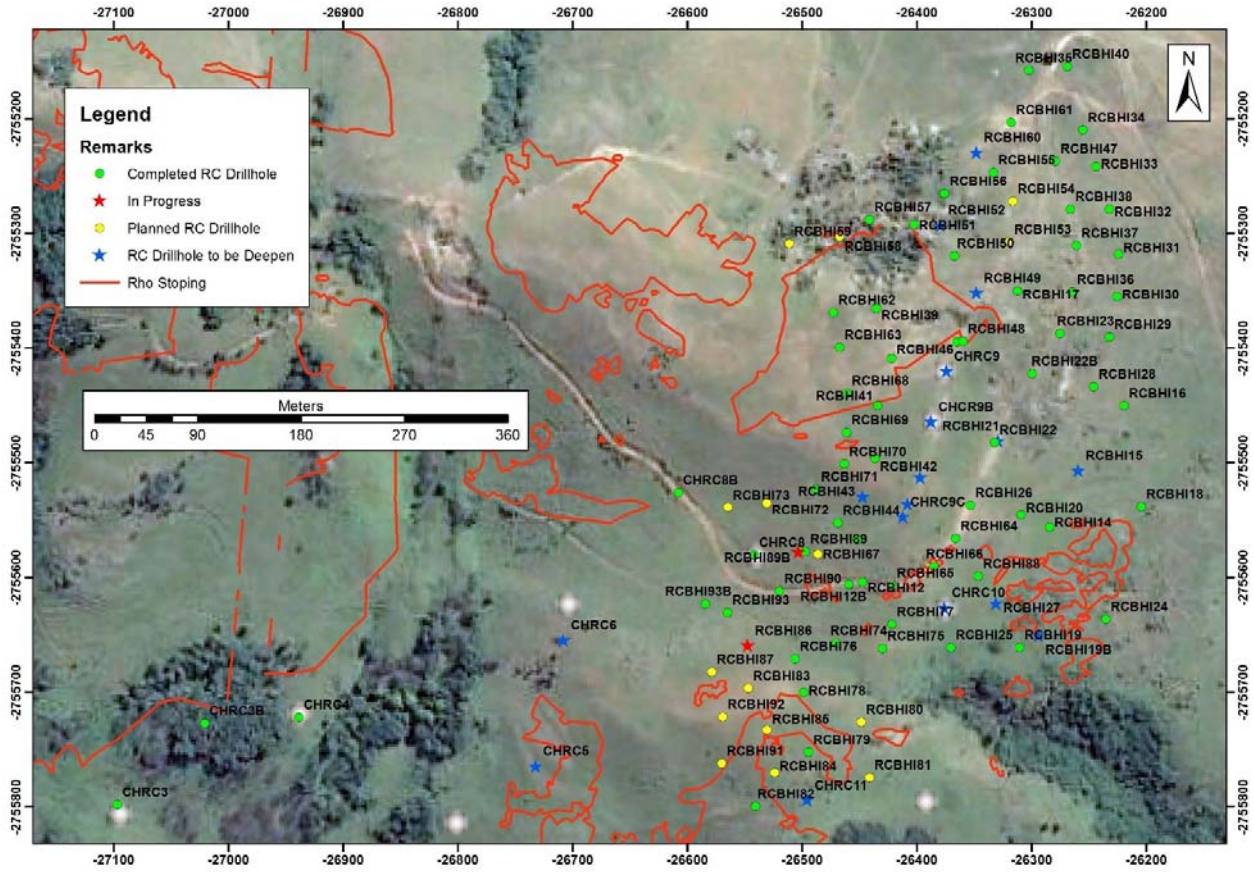


Figure 2: February 24th 2019 distribution of RC drilling at Columbia Hill (Iota Mine workings)

Columbia Hill continues to demonstrate good potential as a satellite resource. Colombia Hill is similar to Theta Hill in mineralisation and geometry, with a thrusted "lense" package located around the Bevetts unconformity, and a flat to shallowly dipping Rho reef system in the malami dolomite footwall. At Columbia Hill, the Rho Reef mineralization is hosted in bedding plane shears with the gold associated with quartz and oxidised sulphides. Columbia Hill (Iota Mine) results > 1 g/t Au from assays received to date are encouraging and are shown below in Table 1.

Table 1: Columbia Hill (Iota) Q1 2019 Phase 2 RC drilling results > 1 g/t Au

BHID	From	To	Width	Au g/t	Au Comments	Au Content	Back calc in situ
	m	m	m			Cm.g/t	Reef g/t over 25cm
RCBHI48	43.00	64.00	**21.00**	1.36	Bevetts/Rho	2,846	5.42
RCBHI48 incl	48.00	50.00	2.00	1.85	U Rho	370	7.40
RCBHI48 incl	49.00	50.00	1.00	2.67	U Rho	267	**10.68**
RCBHI48 incl	57.00	60.00	**3.00**	**5.05**	L Rho	1,516	**20.21**
RCBHI48 incl	57.00	58.00	1.00	**10.40**	L Rho	1,040	**41.60**
RCBHI61	82.00	83.00	1.00	1.61	Rho	161	6.44
RCBHI62	39.00	43.00	**4.00**	1.88	Bevetts	751	7.51
RCBHI63	35.00	37.00	2.00	1.09	Bevetts	217	4.34
RCBHI63	38.00	44.00	**6.00**	2.11	Bevetts	1,264	8.42
RCBHI63	51.00	53.00	2.00	**6.53**	L Rho	1,306	**26.12**
RCBHI63 incl	51.00	52.00	1.00	**10.40**	L Rho	1,040	**41.60**
RCBHI64	14.00	15.00	1.00	**3.23**	Bevetts	323	**12.92**
RCBHI64	28.00	29.00	1.00	1.36	U rho	136	5.44
RCBHI64	33.00	36.00	**3.00**	**4.82**	L Rho	1,446	**19.28**
RCBHI64 Incl	34.00	35.00	1.00	**12.60**	L Rho	1,260	**50.40**
RCBHI64	45.00	46.00	1.00	**3.82**	U Theta	382	**15.28**
RCBHI66	19.00	20.00	1.00	1.01	Bevetts	101	4.04
RCBHI66	25.00	29.00	**4.00**	1.72	Bevetts	688	6.88
RCBHI66 incl	27.00	28.00	1.00	**4.56**	Bevetts	456	**18.24**
RCBHI68	43.00	48.00	**5.00**	1.06	L Rho	530	4.24
RCBHI68 incl	*43.00*	*44.00*	*1.00*	*2.11*	*L Rho*	*211*	*8.44*
RCBHI69	61.00	68.00	**7.00**	1.82	L Rho	1,276	7.29
RCBHI69 incl	*66.00*	*68.00*	*2.00*	***3.61***	*L Rho*	*721*	***14.42***
RCBHI70	42.00	43.00	1.00	3.36	Quartz in Shale	336	**13.44**
RCBHI70	75.00	76.00	1.00	1.08	U Rho	108	4.32
RCBHI70	78.00	85.00	**7.00**	2.75	L Rho	1,924	**10.99**
RCBHI70 incl	*80.00*	*84.00*	***4.00***	***4.00***	*L Rho*	*1,600*	***16.00***
RCBHI71	66.00	68.00	2.00	1.77	Bevetts	354	7.08
RCBHI71	83.00	91.00	**8.00**	1.63	U Rho	1,301	6.51
RCBHI71 incl	85.00	89.00	**4.00**	**2.69**	U Rho	1,074	**10.74**
RCBHI71	96.00	97.00	**1.00**	1.35	L Rho	135	5.40
RCBHI74	46.00	50.00	**4.00**	1.35	L Rho	541	5.41
RCBHI74 incl	*47.00*	*49.00*	*2.00*	*2.08*	*L Rho*	*415*	*8.30*
RCBHI75	20.00	21.00	1.00	**3.73**	U Rho	373	**14.92**
RCBHI75	23.00	28.00	**5.00**	1.64	L Rho	822	6.58
RCBHI75 incl	*23.00*	*24.00*	*1.00*	***4.19***	*L Rho*	*419*	***16.76***
RCBHI76	20.00	21.00	1.00	1.10	Quartz in Shale	110	4.40
RCBHI76	46.00	51.00	**5.00**	0.91	Rho	454	3.63
RCBHI76 incl	*49.00*	*51.00*	*2.00*	*1.27*	*Rho*	*254*	*5.08*
RCBHI77	20.00	22.00	2.00	0.71	Rho	141	2.82
RCBHI78	37.00	38.00	1.00	1.83	Rho	183	7.32
RCBHI82	41.00	46.00	**5.00**	**4.56**	Rho	2,280	**18.24**
RCBHI82 incl	*42.00*	*45.00*	***3.00***	***7.24***	*Rho*	*2,173*	***28.97***
RCBHI82	60.00	62.00	2.00	**13.52**	U Theta	2,704	**54.08**
RCBHI88	16.00	25.00	**9.00**	1.07	L Rho	965	4.29
RCBHI88 incl	*21.00*	*23.00*	*2.00*	***2.77***	*L Rho*	*554*	***11.08***

The drilling to date is supporting in general five (5) zones of mineralisation, being –

1 Quartz in Shales;
2 Bevetts thrust and Lense deposits;
3 Upper and Lower Rho flat reef horizons; and
4 A hitherto undiscovered “Upper Theta” equivalent Reef below the Rho horizon.

The geometry of these intersections is now being modelled, and brings a significant exploration potential into play going westwards. Current Rho Reef intersections continue to support 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).

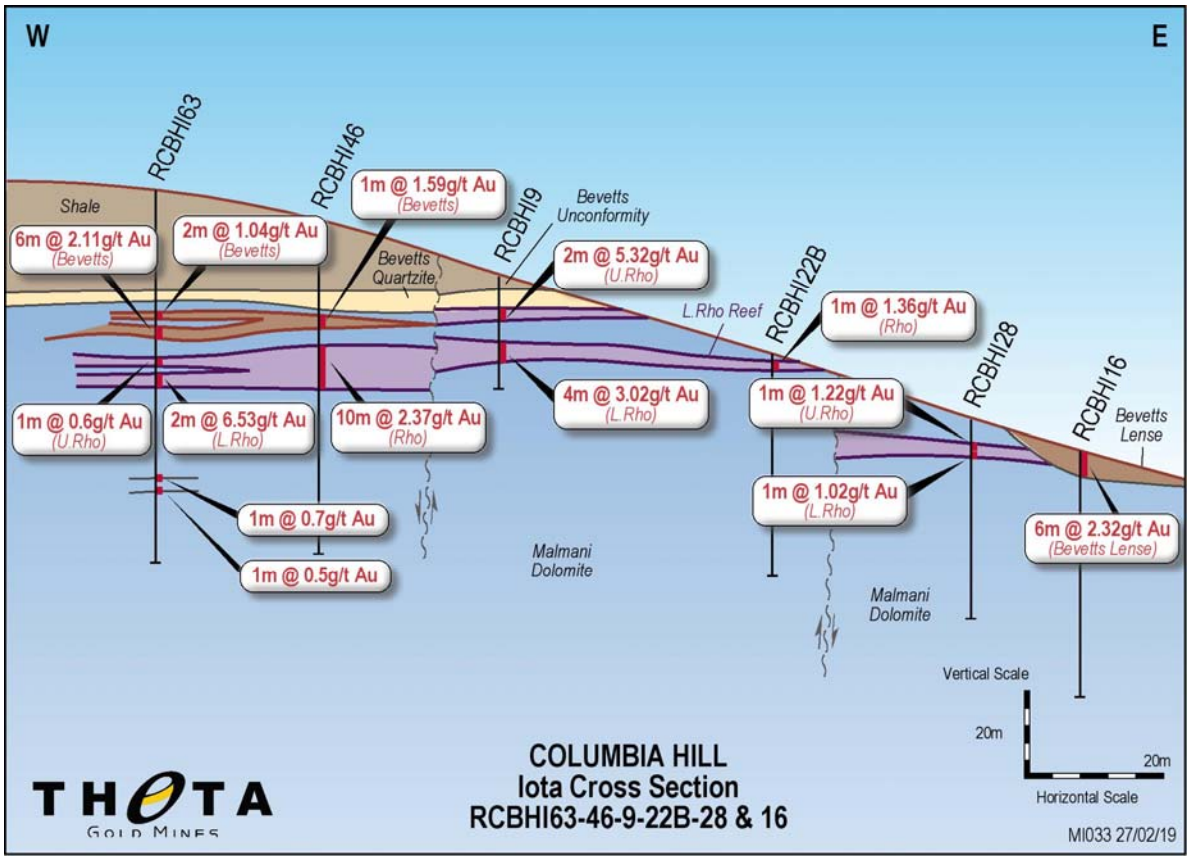


Figure 3: Columbia Hill Cross Section of RC boreholes I63-46-9-22B-16 looking north

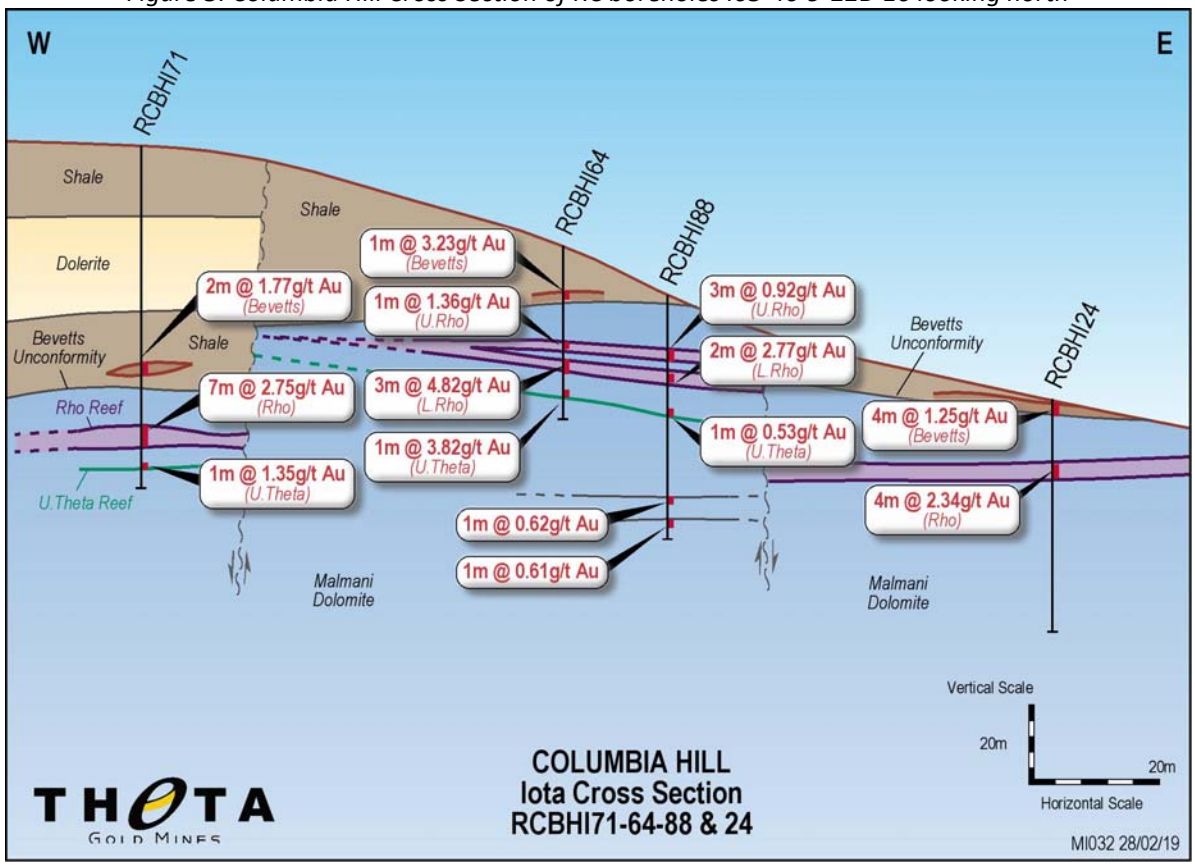


Figure 4: Columbia Hill Cross Section of RC boreholes I71-64-88-24 looking north

Combined with the Lense style and Rho Reef intersections all above 100m below surface the opencast target is taking shape. The follow up Phase 2 program will be completed during March 2019 and is increasing the footprint of open-castable mineralisation.

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

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Competent Person Statement

Columbia Hill (Iota Mine) Drilling Results

The information in in this report relating to the Columbia Hill 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.

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.

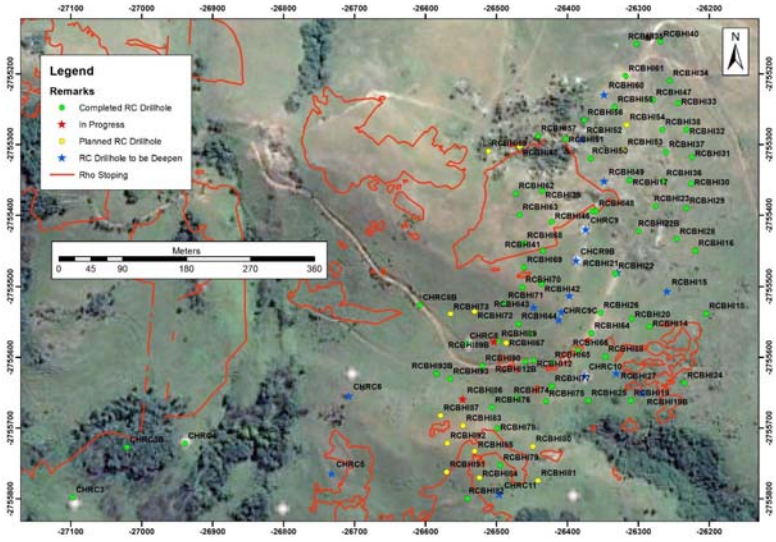
Theta Gold Mines core project is TGME, located next to the historical gold mining town of Pilgrim's Rest, in Mpumalanga Province, some 370km east of Johannesburg by road or 95km north of Nelspruit (Capital City of Mpumalanga Province). Following small scale production from 2011 – 2015, the Company is 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

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 period January-February 2019 has involved Reverse Circulation ("RC") drilling. The RC drilling has focussed on resource delineation of Indicated resources at Columbia Hill (Iota Mine). Columbia Hill drilling as @ 24th Feb 2019  The drilling is supporting a Feasibility Study on the viability of opencasting target reefs at Columbia Hill including the Bevetts Reef, Rho Reef and Upper Theta Reef. The Rho and Upper Theta reef widths are generally between 40 and 80 cm, and the Bevetts between 1 and 6 metres. 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 Jan-24th February 2019 a total of 2302 RC rock chip samples were sent for analysis; of these, 230 were QAQC samples. All samples were sent to an accredited laboratory in Barberton, South Africa.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	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 taken perpendicular to the reef. At this stage, the 1 m sample will in most cases dilute the reef grade and will not provide true reef thicknesses but is deemed to be sufficient for this drilling programme.
	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	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.

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
	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.	
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 to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	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 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 since Nov 2017 to date 414 RC boreholes have been completed totalling 19,810 metres, and all the rock chips have been logged and sampled.
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	Project since Nov 2017 to date 18 Diamond core boreholes have been completed, totalling 1,170 metres. The core was largely broken, and sampling consisted of either split recovered broken core or split by diamond saw.

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
sample preparation	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, 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.	No assay methods other than those conducted by laboratories as mentioned above were utilised in the generation of the sampling database.
	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;

SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
		• 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.
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.

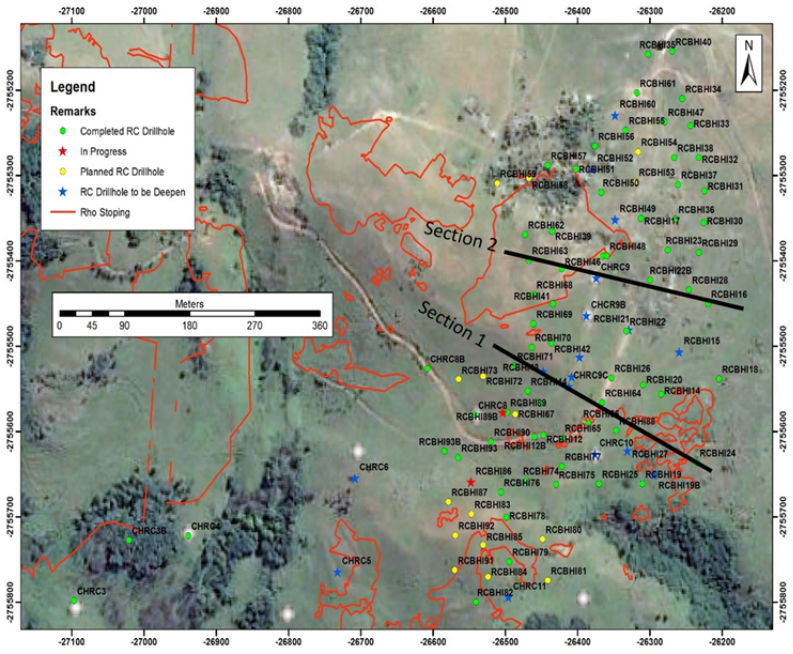
SECTION 1: SAMPLING TECHNIQUES AND DATA		
Criteria	**Explanation**	**Detail**
	Whether sample compositing has been applied.	All samples within the new drilling database represent 1 m “diluted” samples due to the narrow reef in the Project Area. All DG4 trench samples each constituted vertical full sampling 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.

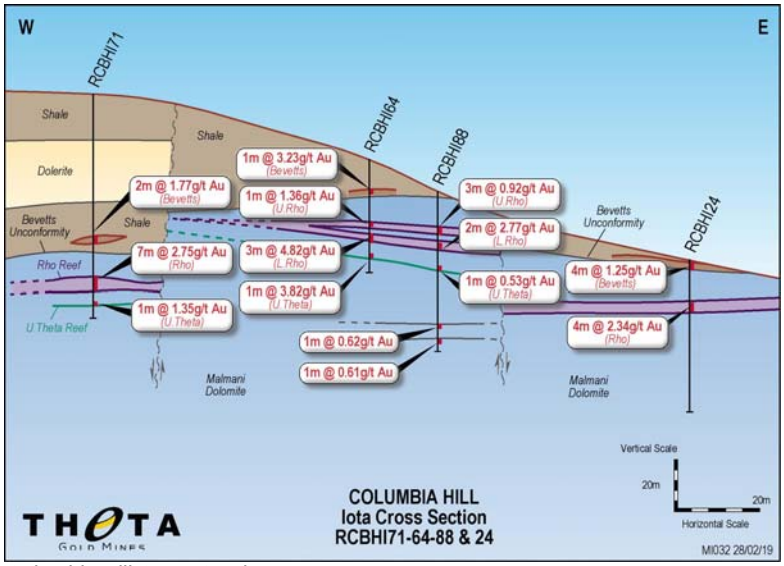
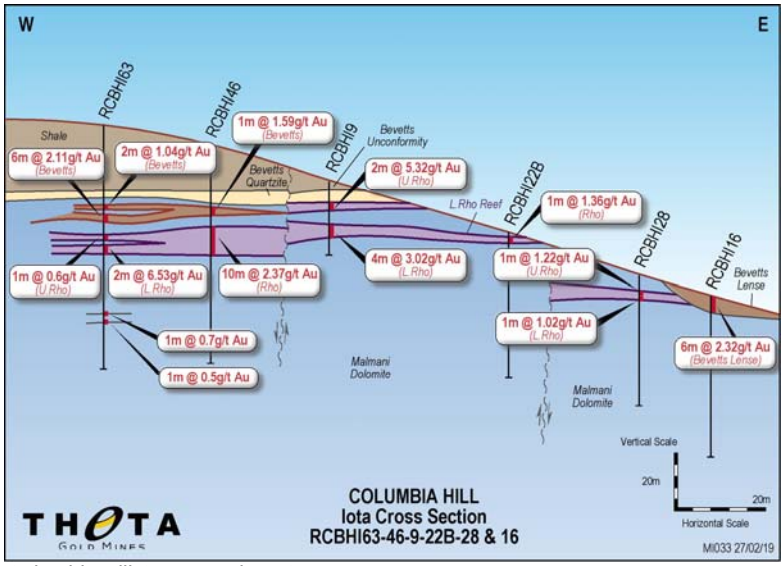
SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title 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 Project 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 Bevett's 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 Bevett's 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 39 RC drillholes for approximately 2,302 m were completed from 10th January to 24th February 2019 on Columbia Hill which forms part of the Bentley Project. The detailed collar summaries of January – 24th February 2019 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.	***Jan – 24th Feb 2019 Columbia Hill (Iota Mine) Drilling***

BHID	XCOLL	YCOLL	Elevati	EOI	Date Start	Date Completed	Date Sent to SGS	Number of Samples
RCBHI28	-26246	-2755433	1416	54	10-Jan-19	10-Jan-19	11-Jan-19	58
RCBHI29	-26232	-2755390	1414	25	10-Jan-19	10-Jan-19	11-Jan-19	28
RCBHI48	-26359	-2755394	1465	65	10-Jan-19	11-Jan-19	15-Jan-19	70
RCBHI50	-26367	-2755319	1464	31	11-Jan-19	11-Jan-19	15-Jan-19	34
RCBHI49	-26348	-2755352	1460	21	11-Jan-19	12-Jan-19	15-Jan-19	24
RCBHI51	-26402	-2755292	1457	99	12-Jan-19	14-Jan-19	15-Jan-19	105
RCBHI52	-26379	-2755293	1450	38	14-Jan-19	15-Jan-19	18-Jan-19	39
RCBHI49	-26348	-2755352	1445	24	15-Jan-19	15-Jan-19	18-Jan-19	6
RCBHI61	-26318	-2755203	1428	100	15-Jan-19	16-Jan-19	18-Jan-19	102
RCBHI56	-26376	-2755265	1450	54	16-Jan-19	17-Jan-19	18-Jan-19	58
RCBHI55	-26333	-2755246	1444	60	17-Jan-19	18-Jan-19	23-Jan-19	62
RCBHI57	-26441	-2755288	1455	50	18-Jan-19	18-Jan-19	23-Jan-19	54
RCBHI60	-26348	-2755230	1425	18	19-Jan-19	19-Jan-19	23-Jan-19	21
RCBHI64	-26366	-2755566	1443	50	21-Jan-19	22-Jan-19	23-Jan-19	54
RCBHI66	-26385	-2755590	1445	50	22-Jan-19	22-Jan-19	23-Jan-19	54
RCBHI65	-26421	-2755607	1446	60	23-Jan-19	23-Jan-19	25-Jan-19	64
RCBHI63	-26466	-2755401	1481	61	23-Jan-19	24-Jan-19	25-Jan-19	62
RCBHI62	-26472	-2755369	1476	61	24-Jan-19	24-Jan-19	25-Jan-19	64
RCBHI68	-26461	-2755439	1484	70	24-Jan-19	25-Jan-19	04-Feb-19	74
RCBHI69	-26461	-2755474	1482	90	28-Jan-19	29-Jan-19	04-Feb-19	88
RCBHI70	-26463	-2755501	1481	86	30-Jan-19	30-Jan-19	04-Feb-19	91
RCBHI62	-26472	-2755369	1476	104	01-Feb-19	01-Feb-19	04-Feb-19	35
RCRT3	-18881	-2777057	1074	232	23-Jan-19	29-Jan-19	04-Feb-19	47
RCBHI75	-26430	-2755662	1425	50	05-Feb-19	06-Feb-19	08-Feb-19	54
RCBHI77	-26421	-2755641	1434	38	06-Feb-19	06-Feb-19	08-Feb-19	40
RCBHI74	-26470	-2755657	1437	51	07-Feb-19	07-Feb-19	08-Feb-19	54
RCBHI76	-26506	-2755671	1442	80	07-Feb-19	08-Feb-19	12-Feb-19	85
RCBHI78	-26499	-2755700	1452	55	08-Feb-19	09-Feb-19	12-Feb-19	59
RCBHI79	-26494	-2755753	1453	70	09-Feb-19	11-Feb-19	12-Feb-19	75
RCBHI71	-26487	-2755523	1486	102	06-Feb-19	08-Feb-19	11-Feb-19	109
RCBHI82	-26539	-2755797	1458	76	11-Feb-19	13-Feb-19	18-Feb-19	81
RCBHI63	-26466	-2755401	1481	101	09-Feb-19	13-Feb-19	18-Feb-19	37
RCBHI46	-26422	-2755409	1472	92	13-Feb-19	13-Feb-19	18-Feb-19	34
RCBHI88	-26348	-2755603	1440	70	13-Feb-19	16-Feb-19	18-Feb-19	70
RCBHI93	-26566	-2755629	1414	55	18-Feb-19	18-Feb-19	22-Feb-19	59
RCBHI90	-26514	-2755611	1416	73	18-Feb-19	20-Feb-19	22-Feb-19	75
RCBHI42	-26436	-2755496	1472	96	18-Feb-19	18-Feb-19	22-Feb-19	39
RCBHI50	-26367	-2755319	1464	78	20-Feb-19	21-Feb-19	22-Feb-19	51
RCBHI93B	-26584	-2755623	1396	90	20-Feb-19	23-Feb-19	28-Feb-19	86

	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.	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	There is no aggregation of sampling data.

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
	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.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents were calculated.
Relationship between mineralisation widths and intercept lengths	If the geometry 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').	All sample lengths are down hole lengths. All drilling was conducted near normal to 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 Columbia Hill to 24th February 2019.  Schematic cross sections are included below.

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
		 *Columbia Hill Cross Section #1*  *Columbia Hill Cross section #2*
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 (Jan-Feb 2019), range from detection limit to intervals such as • **3m @ 5.05 g/t Au from 57m**, incl 1m @ 10.40 g/t Au (RCBHI 48, Rho Reef) • **6m @ 2.11 g/t Au from 38m** (RCBHI 63, Bevetts); and 1m @ 10.40 g/t Au from 51m (Rho Reef) • **3m @ 4.82 g/t Au from 33m**, incl 1m @ 12.60 g/t Au (RCBHI 64, Rho Reef) • **4m @ 1.72g/t Au from 25m**, incl 1m @ 4.56g/t Au (RCBHI 66 Bevetts) • **1m @ 3.36 g/t Au** from 42m (RCBHI 70, Shale Reef); and **7m @2.75g/t Au** from 78m incl **4m @ 4.00 g/t Au** (Rho Reef) • **1m @ 4.19 g/t Au** from 23m (RCBHI 75, Rho Reef) • **3m @ 7.24 g/t Au** from 42m (RCBHI 82, Rho Reef) and **2m @ 13.52 g/t Au** from 60m Upper Theta Reef) The table below is a selection of significant mineralised intersections > 1g/t Au 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
	m	m	m			Cm.g/t	Reef g/t over 25cm
RCBHI48	43.00	64.00	**21.00**	1.36	Bevetts/Rho	2,846	5.42
RCBHI48 incl	48.00	50.00	2.00	1.85	U Rho	370	7.40
RCBHI48 incl	49.00	50.00	1.00	2.67	U Rho	267	**10.68**
RCBHI48 incl	57.00	60.00	**3.00**	**5.05**	L Rho	1,516	**20.21**
RCBHI48 incl	57.00	58.00	1.00	**10.40**	L Rho	1,040	**41.60**
RCBHI61	82.00	83.00	1.00	1.61	Rho	161	6.44
RCBHI62	39.00	43.00	**4.00**	1.88	Bevetts	751	7.51
RCBHI63	35.00	37.00	2.00	1.09	Bevetts	217	4.34
RCBHI63	38.00	44.00	**6.00**	2.11	Bevetts	1,264	8.42
RCBHI63	51.00	53.00	2.00	**6.53**	L Rho	1,306	**26.12**
RCBHI63 incl	51.00	52.00	1.00	**10.40**	L Rho	1,040	**41.60**
RCBHI64	14.00	15.00	1.00	**3.23**	Bevetts	323	**12.92**
RCBHI64	28.00	29.00	1.00	1.36	U rho	136	5.44
RCBHI64	33.00	36.00	**3.00**	**4.82**	L Rho	1,446	**19.28**
RCBHI64 Incl	34.00	35.00	1.00	**12.60**	L Rho	1,260	**50.40**
RCBHI64	45.00	46.00	1.00	**3.82**	U Theta	382	**15.28**
RCBHI66	19.00	20.00	1.00	1.01	Bevetts	101	4.04
RCBHI66	25.00	29.00	**4.00**	1.72	Bevetts	688	6.88
RCBHI66 incl	27.00	28.00	1.00	**4.56**	Bevetts	456	**18.24**
RCBHI68	43.00	48.00	**5.00**	1.06	L Rho	530	4.24
RCBHI68 incl	*43.00*	*44.00*	*1.00*	*2.11*	*L Rho*	*211*	*8.44*
RCBHI69	61.00	68.00	**7.00**	1.82	L Rho	1,276	7.29
RCBHI69 incl	*66.00*	*68.00*	*2.00*	***3.61***	*L Rho*	*721*	***14.42***
RCBHI70	42.00	43.00	1.00	3.36	Quartz in Shale	336	**13.44**
RCBHI70	75.00	76.00	1.00	1.08	U Rho	108	4.32
RCBHI70	78.00	85.00	**7.00**	2.75	L Rho	1,924	**10.99**
RCBHI70 incl	*80.00*	*84.00*	***4.00***	***4.00***	*L Rho*	*1,600*	***16.00***
RCBHI71	66.00	68.00	2.00	1.77	Bevetts	354	7.08
RCBHI71	83.00	91.00	**8.00**	1.63	U Rho	1,301	6.51
RCBHI71 incl	85.00	89.00	**4.00**	**2.69**	U Rho	1,074	**10.74**
RCBHI71	96.00	97.00	**1.00**	1.35	L Rho	135	5.40
RCBHI74	46.00	50.00	**4.00**	1.35	L Rho	541	5.41
RCBHI74 incl	*47.00*	*49.00*	*2.00*	*2.08*	*L Rho*	*415*	*8.30*
RCBHI75	20.00	21.00	1.00	**3.73**	U Rho	373	**14.92**
RCBHI75	23.00	28.00	**5.00**	1.64	L Rho	822	6.58
RCBHI75 incl	*23.00*	*24.00*	*1.00*	***4.19***	*L Rho*	*419*	***16.76***
RCBHI76	20.00	21.00	1.00	1.10	Quartz in Shale	110	4.40
RCBHI76	46.00	51.00	**5.00**	0.91	Rho	454	3.63
RCBHI76 incl	*49.00*	*51.00*	*2.00*	*1.27*	*Rho*	*254*	*5.08*
RCBHI77	20.00	22.00	2.00	0.71	Rho	141	2.82
RCBHI78	37.00	38.00	1.00	1.83	Rho	183	7.32
RCBHI82	41.00	46.00	**5.00**	**4.56**	Rho	2,280	**18.24**
RCBHI82 incl	*42.00*	*45.00*	***3.00***	***7.24***	*Rho*	*2,173*	***28.97***
RCBHI82	60.00	62.00	2.00	**13.52**	U Theta	2,704	**54.08**
RCBHI88	16.00	25.00	**9.00**	1.07	L Rho	965	4.29
RCBHI88 incl	*21.00*	*23.00*	*2.00*	***2.77***	*L Rho*	*554*	***11.08***

Other substantive exploration data	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; potential deleterious or	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. 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.

SECTION 2: REPORTING OF EXPLORATION RESULTS		
Criteria	**Explanation**	**Detail**
	contaminating substances.	
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 also targets other opencast targets, is approximately 17,000m RC plus 2,000m 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 three hills, including potential surficial material which is tested by means of trenching prior to follow-up RC drilling. The current drilling strategy is targeting 83MR occurrences, and there is additional potential in peripheral areas that have future drilling planned.