

10 October 2019

# MINERAL RESOURCES AND ORE RESERVE STATEMENT

## **HIGHLIGHTS:**

- Smarts Probable Reserve of 447,000 tonnes @ 3.0 g/t Au for 42,700 contained ounces
- Hicks Probable Reserve of 165,000 tonnes @ 2.1 g/t Au for 11,000 contained ounces, with further work required
- Ohio Creek Maiden Inferred Mineral Resource of approximately 2.2 Mt @ 1.9 g/t Au for 134,000 contained ounces

Troy Resources Limited (ASX: TRY) (Troy or the Company) advises that it has completed its annual Mineral Resource and Ore Reserve Statement as of 30 June 2019.

The Karouni Resources and Reserve Statement has been updated to take into account mining depletion as well as design changes at Smarts. In addition, Ore Reserves have been included for the first time for the Larken deposit. Ohio Creek has also been included for the first time as an Inferred Mineral Resource.

The Ore Reserve Statement for Karouni as at 30 June 2019 is summarised in Table 1.

Table 1: Karouni Ore Reserves									
	Proved Reserves		Pr	Probable Reserves			Total		
	Tonnes	Grade (g/t)	Ounces	Tonnes	Grade (g/t)	Ounces	Tonnes	Grade (g/t)	Ounces
Smarts	-	-	-	447,000	3.0	42,700	447,000	3.0	42,700
Hicks	-	-	-	165,000	2.1	11,100	165,000	2.1	11,100
Spearpoint	-	-	-	167,000	1.8	9,600	167,000	1.8	9,600
Larken	31,000	3.0	2,900	9,000	1.9	600	40,000	2.7	3,500
Stocks	384,000	0.7	8,200	-	-	-	384,000	0.7	8,200
Total	415,000	0.8	11,100	788,000	2.5	64,000	1,203,000	1.9	75,100



The Mineral Resources Statement for Karouni as at 30 June 2019 (inclusive of Ore Reserves) is summarised in Table 2.

	Table 2: Karouni Mineral Resources (inclusive of Ore Reserves)												
		Meas	ured Resou	urces	Indica	ated Resou	ırces	Infer	red Resou	rces		Total	
	cut-off grade	Tonnes	Grade (g/t)	Ounces	Tonnes	Grade (g/t)	Ounces	Tonnes	Grade (g/t)	Ounces	Tonnes	Grade (g/t)	Ounces
Smarts	0.5	-	-	-	446,000	3.2	45,400	2,730,000	1.7	145,400	3,176,000	1.9	190,800
Hicks	0.5	-	-	-	2,468,000	1.5	115,300	168,000	1.3	6,900	2,636,000	1.4	122,200
Ohio Creek	0.5	-	-	-	-	-	-	2,226,000	1.9	134,300	2,226,000	1.9	134,300
Goldstar	0.5	-	-	-	-	-	-	620,000	1.3	25,500	620,000	1.3	25,500
Larken	0.5	48,000	2.4	3,800	78,000	1.8	4,500	13,000	2.0	800	139,000	2.0	9,100
Spearpoint	0.5	-	-	-	693,000	1.3	29,700	328,000	1.3	13,500	1,021,000	1.3	43,200
Smarts Deeps	1.0	130,000	3.4	14,600	930,000	3.7	109,500	1,940,000	2.6	163,500	3,000,000	3.0	287,600
Hicks Deeps	1.0	-	-	-	1,199,000	2.1	82,300	1,393,000	1.9	83,100	2,592,000	2.0	165,400
ROM Stocks	-	34,000	1.7	1,800	-	-	-	-	-	-	34,000	1.6	1,800
MW	-	350,000	0.6	6,400	-	-	-	-	-	-	350,000	0.6	6,400
Total		562,000	1.5	26,600	5,814,000	2.1	386,700	9,418,000	1.9	573,900	15,794,000	1.9	986,300

# **SMARTS**

Open pit mining commenced in April 2015, with ore processing commencing seven months later in November.

Mining progressed during the 2019 financial year in both Smarts 3 and Smarts 4.

Mining of Smarts 4 was completed to design during the year, with the pit now being utilised to dump waste from Stage 3.

As at 30 June 2019, Smarts 3 is interpreted to have an Ore Reserve of 447,000 tonnes at 3.0 g/t Au for 42,700 contained ounces, which forms part of a Total Mineral Resource of 190,800 contained ounces.

The current Ore Reserve incorporates a cut-back to Smarts 3 to enable the pit to be deepened to exploit additional mineralisation.

Mineral Resources last year were reported within a A\$2,000 pit shell at a cut-off grade of 0.5 g/t Au. Resources outside this pit shell are reported at a cut-off of 1 g/t Au.

Given the prevailing issues with pit wall stability, it was considered prudent to report resources based on the same pit shell this year rather than incorporate a lower cut-off grade of 0.5 g/t Au cut-off on a larger resource pit shell.

The Ore Reserve cut-off is 0.86 g/t Au for Smarts 3 (as it is for Ore Reserves for each of the other deposits), which is also currently used as the in-pit cut-off mining cut-off grade.

Figure 1 illustrates the ultimate Smarts 3 pit design highlighting remaining ore blocks at a cut-off grade of 0.86 g/t Au.



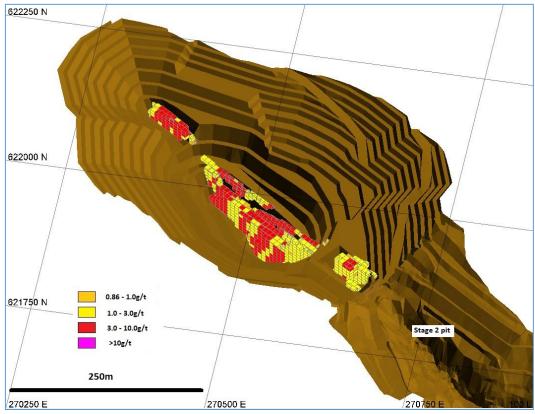
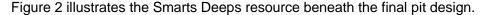


Figure 1: Smarts 3 pit highlighting remaining ore blocks at a cut-off grade of 0.86 g/t Au.

Resources outside the Smarts 3 pit based on a A\$2,000 pit shell are reported at a 1.0 g/t Au cutoff grade and are referred to as the Smarts Deeps resource.

As at 30 June 2019, Smarts Deeps is interpreted to have a Total Mineral Resource of 3 million tonnes at 3.0 g/t Au for 287,600 contained ounces.



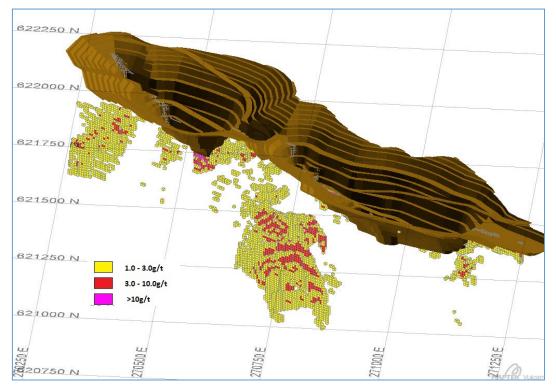


Figure 2: Smarts 3 Pit highlighting Smarts Deeps blocks at a cut-off grade of 1.0 g/t Au beneath the pit.



#### HICKS

During the year, mining continued in both the Hicks 1 and Hicks 2 pits.

The creek between Hicks 2 and the previously completed Hicks 3 pit has been diverted, enabling the Hicks 2 pit to be mined to its design, in so doing, exposing high grade ore that was previously inaccessible.

The Hicks 1 and Hicks 2 pits are nearing completion.

Recent reverse circulation drilling to the north of Hicks 1 has enhanced the mineral resource in this area resulting in an extension to the Hicks 1 pit, which the Company is referring to as the "Hicks 1 Extension".

As at 30 June 2019, Hicks is interpreted to have an Ore Reserve of 165,000 tonnes at 2.1 g/t Au for 11,100 contained ounces, most of which is in respect of the Hicks 1 Extension.

This Reserve forms part of a Total Mineral Resource of 122,200 contained ounces which reflects a contribution from each of the Hicks 1, 2 and 3 pits.

Mineral Resources are reported at a cut-off of 0.5 g/t Au above the -35 m RL equivalent to the base of the Hicks pits. Below this level, Resources are reported at a cut-off of 1 g/t Au, consistent with the Smarts deposit.

The grade of 0.5 g/t Au represents the current marginal cut-off grade used to stockpile mineralised waste for Hicks. The ore reserve cut-off is 0.86 g/t Au for the Hicks pits which is currently used as the in-pit cut-off.

The ultimate Hicks 1 Extension pit design highlighting ore blocks at a cut-off grade of 0.86 g/t Au is set out in Figure 3.

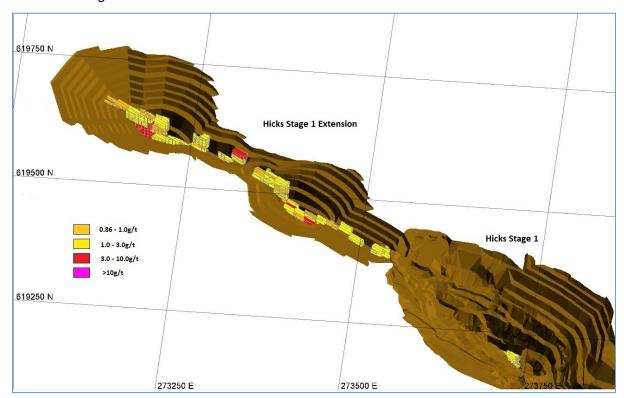


Figure 3: Hicks 1 Extension pit highlighting ore blocks at a cut-off grade of 0.86 g/t Au.

In respect of the Hicks 1 Extension, the latest drilling campaign was encouraging in that it delineated ore close to surface.



This shallow mineralisation has enabled the modelled pit to extend deeper to encompass previously delineated mineralisation at depth.

Additional drilling, particularly at shallow depths, is required along strike to the north-west of this poorly drilled part of the Hicks shear to fully assess the potential of the Hicks 1 Extension.

# **LARKEN**

Mining of the Larken deposit commenced during the first half of 2019. A slot was mined over the length of the high-grade shear zone confirming continuity of the mineralised structure.

A pit design and Ore Reserve have now been included in the Karouni mine plan.

As at 30 June 2019, Larken is interpreted to have an Ore Reserve of 40,000 tonnes at 2.7 g/t Au for 3,500 contained ounces, which forms part of a Total Mineral Resource of 9,100 contained ounces.

The Larken pit design highlighting remaining ore blocks at a cut-off grade of 0.86 g/t Au is set out in Figure 4.

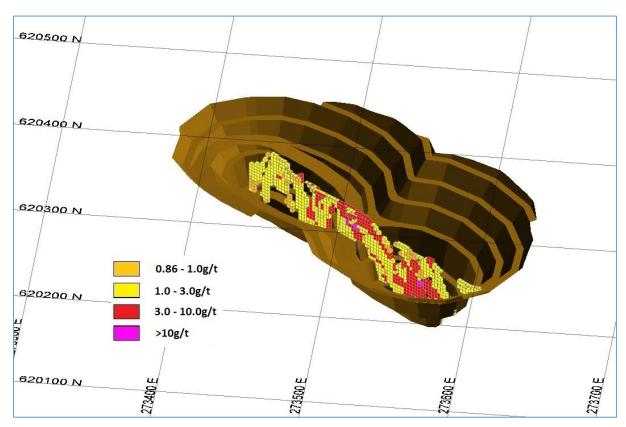


Figure 4: Larken Pit highlighting remaining ore blocks at a cut-off grade of 0.86 g/t Au.



#### OHIO CREEK

Since drilling commenced at Ohio Creek in September 2018, 25 diamond core holes have been completed for an aggregate 5,636 metres and 199 reverse circulation ("RC") holes have been completed for an aggregate 18,180 metres.

Drilling has identified a main mineralised corridor of approximately 950 metres in length which is open in all directions, as well as various other mineralised zones.

As at 30 June 2019, Ohio Creek is interpreted to have an Inferred Mineral Resource 2,226,000 tonnes at 1.9 g/t Au for 134,300 contained ounces.

The Ohio Creek Resource highlighting ore blocks at a cut-off grade of 0.86 g/t Au is set out in Figure 5.

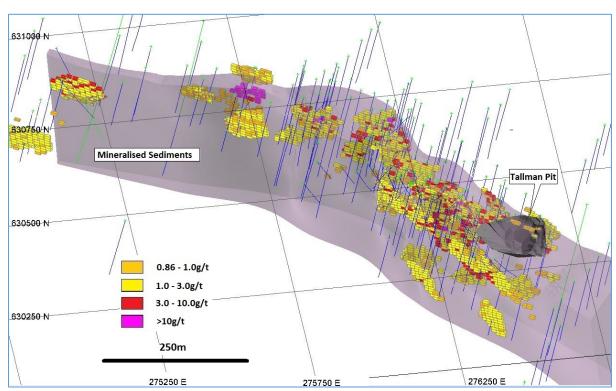


Figure 5: Ohio Creek Resource looking north highlighting ore blocks at a cut-off grade of 0.86 g/t Au.

As noted above, the Mineral Resource at Ohio Creek is currently categorised as Inferred, which is the lowest confidence level.

This categorisation reflects the fact that the controls on the very high-grade gold mineralisation are not well understood at this juncture.

Plans are in place to shortly commence mining a small test pit in the central part of the resource just to the north of the Tallman Pit where artisanal miners have previously mined high-grade structures utilising very small-scale mining methods.

As well as determining the optimal mining techniques in order to minimise dilution and ore loss on these high-grade veins, it is anticipated that mining of the test pit will increase the understanding of controls on mineralisation, which will enhance confidence levels in interpreting resources and reserves moving forward.



# **SPEARPOINT**

Infill drilling at Spearpoint has enabled a Mineral Resource and an Ore Reserve to be estimated last year. This has not changed for the current year.

Spearpoint is a south-east continuation of the Smarts deposit and displays similar geological characteristics. Two parallel shear zones were identified striking approximately south-east/ north-west. Between these shears a series of north-south quartz veins were also intersected with drilling. The drilling was orientated to intersect these veins in an optimal direction. Some drilling was directed to the north-east to intersect the main shear zones while the north-south veins were intersected with drilling oriented to the west. Similar to Smarts, the north-south veins at Spearpoint appear to be constrained to mafic units amenable to brittle deformation.

As at 30 June 2019, Spearpoint is interpreted to have an Ore Reserve of 167,000 tonnes at 1.8 g/t Au for 9,600 contained ounces, which forms part of a Total Mineral Resource of 43,200 contained ounces.

The Spearpoint pit design highlighting ore blocks at a cut-off grade of 0.86 g/t Au is set out in Figure 6.

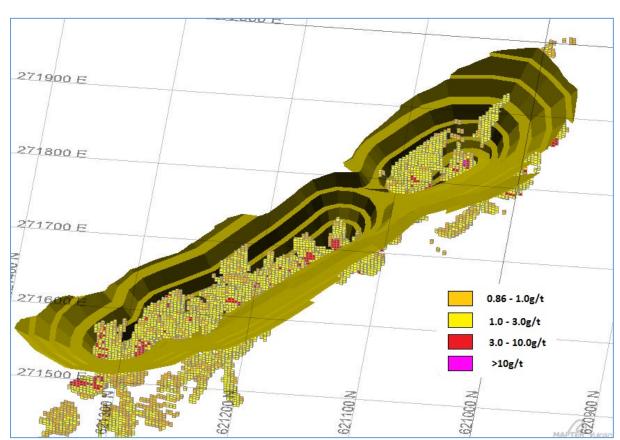


Figure 6: Spearpoint pit looking south-east highlighting remaining ore blocks at a cut-off grade of 0.86 g/t Au.



# **GOLDSTAR**

Drilling completed at Goldstar in 2016 and 2017 has been used to estimate a maiden Mineral Resource.

Notwithstanding that drilling is wide-spaced at up to 400 metres line spacing, a continuous mineralised zone has been delineated over several drill sections.

Infill drilling will be required to upgrade this resource.

As at 30 June 2019, Goldstar is interpreted to have an Inferred Mineral Resource of 620,000 tonnes at 1.3 g/t Au for 25,500 contained ounces.

The Goldstar Resource highlighting ore blocks at a cut-off grade of 0.86 g/t Au is set out in Figure 7.

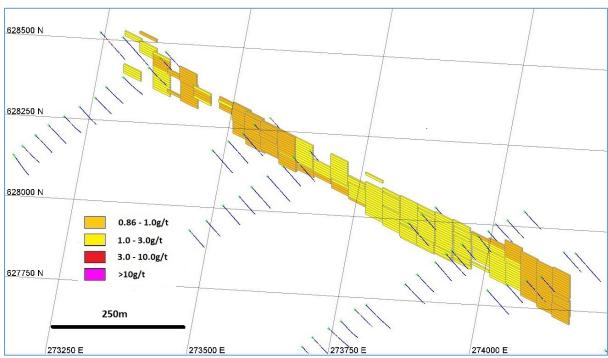


Figure 7: Goldstar Resource looking north-east illustrating wide spaced drilling and highlighting ore blocks at a cut-off grade of 0.86 g/t Au.



#### Additional notes to Resource and Reserve Estimates

As Goldstar and Spearpoint are being reported for the first time as Mineral Resources, the following information is included as per ASX Listing Rules 5.8.1 and 5.9.1.

#### Geology and Geological Interpretation

The mineralisation at the Smarts and Spearpoint is associated with shear zones that transect a sequence of mafic to intermediate volcanic, volcanoclastic and pyroclastic rocks. The shear zones dip steeply towards the southwest and strike northwest to southeast, and are characterised by intense brittle-ductile deformation and carbonate alteration plus quartz veining and abundant pyrite. The high grade gold mineralisation is usually associated with zones of dilation and stockworks of predominantly north-south quartz veining within and adjacent to the shear zone.

Mineralisation at Hicks is contained within the same shear zones as Smarts but intrusive porphyries contain much of the gold mineralisation. Felsic porphyries with quartz veining, minor sulphides and sericite alteration are the main target with minor gold mineralisation contained within the shear zones.

Larken is hosted by a steeply dipping, narrow (1-5m), shear zone. Mineralisation is related to quartz veining with associated sulphides, generally pyrite.

Goldstar mineralisation is contained in a wide (~20m) shear zone containing of quartz mineralisation in a brittle-ductile environment contained in a sequence of mafics and volcanoclastic sediments.

Ohio Creek mineralisation is contained within a series of narrow, high grade quartz veins hosted by a series of volcaniclastic sediments. Some mineralisation is also contained within sub-vertical shear zones that bound the main lithological units.

#### Sampling and sub-sampling techniques

Drilling at all deposits was sampled on 1m intervals. Samples were collected at the rig through a cyclone and then split through a rig mounted splitter or a portable three tier splitter depending on the rig. Samples were split to an approximate 3kg sub-sample which was submitted for assay. At the assay laboratory these samples were ground and then further split to a 50g used in the final assay procedure.

# **Drilling techniques**

Smarts, Hicks, Spearpoint and Larken were drilled primarily with RC drilling techniques in the open pit areas. Diamond drilling mainly targets deeper areas. At Ohio Creek diamond core and RC drilling has been drilled within the resource area. Goldstar has been drilled with RC drilling only.

#### Classification criteria

Classification was based on geological confidence in the geological interpretation. At Larken this was measured generally on drill density. The Larken Resource drilled on 10m spaced sections was classified as Measured, wider spacings were classified as Indicated or Inferred. At Spearpoint drilling on nominal 20m spacings were classified as Indicated. Drilling was carried out at different directions to accommodate the different directions of mineralised structures. Goldstar due to the wide spaced drilling was classified as Inferred. Mineralisation at Ohio Creek appears to be somewhat discontinuous and the current drill density necessitates an Inferred categorisation of the Mineral Resource. Hicks and Smarts have been actively mined for four years so geological controls, grade distribution and reconciliations are well known. These reserves have been categorised as Probable.



#### Sample analysis

All assaying was done at Actlabs in Georgetown, Guyana. Actlabs is an internationally accredited laboratory. Assaying was fire assay with a 50g charge and AAS finish. Some high grade assays were also done with a gravimetric finish.

#### Estimation methodology

Maiden Mineral Resources at Ohio Creek and resources at Spearpoint and Goldstar were estimated using inverse distance squared grade interpolation methods. At Goldstar a three dimensional shape was modelled from drilling and grades were estimated into this solid. At Spearpoint the hanging-wall and footwall shears were modelled and grades were estimated into these solid shapes. The mafic unit between these shears was interpreted to contain a series of north-south veins. These veins were not interpreted separately as solid shapes but search ellipses were oriented in the predominant direction of quartz veining as determined from diamond drill holes in the deposit.

# **Cut-off grades**

Cut-off grades for Mineral Resources are 0.5g/t. This is based on the marginal cut-off grade for mineralisation in the open pits. Material mined between 0.5g/t and 0.86g/t is stockpiled as mineralised waste. The Smarts Mineral Resources were reported in A\$2,000 optimised pit shells.

Due to the relatively smaller size of the Larken, Spearpoint, Ohio Creek and Goldstar deposits these were reported at a 0.5g/t cut-off grade only.

#### Mining and Metallurgical factors

Smarts Mineral Resources in 2018 were reported within a A\$2,000 pit shell. This pit shell was also used to constrain open pit resources this year. This pit shell was used as it corresponds closely to the current pit design; a larger pit shell based on higher gold prices was not considered practical as pit wall conditions are not conducive to mining a deeper pit. Therefore any additional resources outside of this pit have been reported at a higher cut-off grade of 1g/t to reflect potentially higher mining costs. Ore Reserves were estimated using current operating costs and parameters and a US\$1,400 gold price.

#### Resources

- 1. Resources for Smarts are calculated at a cut-off of 0.5 g/t constrained to a A\$2,000 pit shell
- 2. Resources for Hicks are calculated at a cut-off of 0.5 g/t constrained to a the -35m RL (being the base of the current pit designs).
- 3. Resources for Larken, Spearpoint and Goldstar are calculated at a cut-off of 0.5 g/t.
- 4. Resources for Smarts Deeps and Hicks Deeps are calculated at 1.00 g/t cut-off grade outside of the A\$2,000 pit shell for Smarts and below the -35mRL at Hicks.
- 5. Differences may occur due to rounding.

#### Reserves

- 1. Reserves calculated at a gold price of USD \$1,400 per ounce.
- 2. Reserves for Smarts are calculated at a cut-off of 0.86 g/t.
- 3. Reserves for Hicks are calculated at a cut-off of 0.86 g/t.
- 4. Ore loss attributed to both Hicks and Smarts of 5%.
- 5. Dilution of 10% at a gold grade of 0.00 g/t added to both Hicks and Smarts after ore loss.
- 6. Stockpiles include ROM and Fine Ore crushed as of June 30, 2019 based on survey and sampling. Due to increases in the gold price the Mineralised Waste stockpiles are now considered Ore Reserves.
- 7. Differences may occur due to rounding.



# RESERVE TO MINING RECONCILIATION

Table 3 summarises the reserve reconciled to mill production.

Table 3: Karouni Project-Reconciliation				
	Tonnes	Grade (g/t)	Ounces	
Reserve 30 June 2018	1 526 000	2.4	110.056	
Ore Reserve reported last year	1,536,000	2.4	119,956	
Mined in 2018-19	750,000	0.0	F0 200	
Mine production reconciled to mill production	750,000	2.2	52,300	
Processed 2018-19	888,000	2.1	60,200	
Change in Stock 2018-19	(133,000)	1.7	(7,400)	
Depleted from Models	(570,000)	2.7	(49,200)	
Model discrepancy	180,000	0.5	3,100	
Design changes	(24,000)	1.3	(1,000)	
Reserve 30 June 2019, excl MW stocks	854,000	2.5	68,700	

The Hicks pits produced significantly more than modelled while Smarts produced less, however overall production was 3,100oz greater than modelled.

#### **ENDS**

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## **Competent Persons Statement**

Information of a scientific or technical nature that relates to exploration results, Mineral Resources or Ore Reserves is based on, and fairly represents, information and supporting documentation prepared under the supervision of Mr Richard Maddocks. Mr. Maddocks has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a "competent person" as defined under the Australian JORC Code as per the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Maddocks has reviewed and approved the information contained in this announcement. Mr. Maddocks -

- Is a consultant to Troy Resources Limited
- Has sufficient experience which is relevant to the type of deposit under consideration and to the activity
  which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the
  'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'
- Is a Fellow of the Australasian Institute of Mining and Metallurgy
- Has consented in writing to the inclusion of this data

The information relating to exploration results for the Karouni project is extracted from various Troy ASX Announcements and Quarterly Reports previously released to the ASX.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements relating to drill results, mineral resource estimates or studies and that all material assumptions and technical parameters underpinning the drill results and estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented here have not been materially modified from the original market announcements.



# Appendix 1 – Assessment and Reporting Criteria - Karouni

	Section 1 Sampling Techniques a	and Data
Criteria	JORC Code Explanation	Commentary
Sampling Technique	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling	The area of the Smarts Resource was sampled using Reverse Circulation (RC) and Diamond Core drill holes (DC) on nominal 100m x 50m, 50m x 25m and 25m x 25m grid spacing. A total of 594 RC holes (46,954m) and 234 DC holes (45,661m) were drilled. Holes were angled towards 050° or 230° magnetic at declinations of between -050 and -60°, to optimally intersect mineralised zones. Spearpoint, Larken and Goldstar were drilled using RC drilling and sampled on 1m intervals
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	All RC samples were weighed to determine recoveries. All potentially mineralised zones were then split and sampled at 1m intervals using three-tier riffle splitters. Zones that appeared visually non-mineralised were sampled as 3m composites. Diamond core is a combination of PQ and HQ sizes and all Diamond Core was logged for lithological, structural, geotechnical, specific gravity and other attributes. Half-core sampling was completed at a maximum of 1m intervals in the mineralised zones, and 4m quarter-core composites in visually non-mineralised zones. QA/QC procedures were completed as per industry best practice standards (certified blanks and standards and duplicate sampling).  Samples were despatched to Actlabs in Georgetown, Guyana for sample preparation, where they were crushed, dried and pulverised to produce a sub sample for analysis. Prior to January 2012 this sub-sample was despatch to Actlabs in Santiago, Chile, where they were analysed for gold by 30g fire assay method with a gravimetric finish. Actlabs installed a fire assay facility in Georgetown in January 2012 where 30g fire assays, gravimetric finishes and screen fire assays have been conducted since
Drilling Techniques	Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	Diamond Core drilling in the Smarts Resource area comprises PQ and HQ sized core. Reverse Circulation "RC" Pre-collar depths range from 0m to 151m and Diamond Core "DC" holes are a combination of diamond tails (extensions of RC pre-collars) and diamond from surface with EOH depths ranging from 79m to 480m. The core was oriented using either an orientation spear, the Easymark system for the pre-2013 drilling. All the diamond drilling completed in 2013 utilized the ACTTM core orientation system. Reverse Circulation "RC" drilling within the resource areas of Smarts, Hicks, Spearpoint, Larken, Ohio Creek and Goldstar comprises 5.5 inch diameter face sampling hammer drilling and hole depths range from 36m to 199m. Core drilling at Ohio Creek was HQ size core.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative nature of the samples	Diamond Core and RC recoveries are logged and recorded in the database. Overall recoveries are >95% for the DC and >75% for the RC; there are no core loss issues or significant sample recovery problems. A technician is always present at the core-rig to monitor and record recovery and RQD data. DC is reconstructed into continuous runs on an angle- iron ledge at the core-yard for orientation marking.
	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.	Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers and the Company's geologists and technicians. RC samples were visually checked for recovery, moisture and contamination.
		The Smarts Resource is defined by DC and RC drilling, which have high sample recoveries. The style of mineralisation, with frequent high-grades and visible gold, require large diameter core and good recoveries to evaluate the deposit adequately. The consistency of the mineralised intervals is considered to preclude any issue of sample bias due to material loss or gain.
		Some zones within Ohio Creek were very wet and RC drilling was difficult. Some of these areas were re-drilled with diamond core.
		Drilling conditions at Larken and Goldstar were generally good with good sample recovery.



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.  Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.  The total length and percentage of the relevant intersections logged.	Geotechnical logging was carried out on all diamond drill holes for recovery, RQD and number of defects (per interval). Information on structure type, dip, dip direction, alpha angle, beta angle, texture, shape, roughness and fill material is stored in the structure/Geotech table of the database.  Logging of diamond core and RC samples recorded lithology, mineralogy, mineralisation, structural (DDH only), weathering, alteration, colour and other features of the samples. Core was photographed in both dry and wet form  All drilling has been logged to standard that is
		appropriate for the category of Resource which is being reported
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Core was cut in half on site using a CM core cutter. All samples were collected from the same side of the core
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were collected on the rig using a three tier riffle splitter. All samples were dry
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	The sample preparation for all samples follows industry best practice. Actlabs in Georgetown, Guyana for sample preparation, where they were crushed, dried and pulverised to produce a sub sample for analysis. Sample preparation involving oven drying, coarse crushing, followed by total pulverisation LM2 grinding mills to a grind size of 85% passing 75 microns.
	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.	Field QC procedures involve the use of certified reference material as assay standards, blanks, and duplicates for the RC samples only. The insertion rate of these averaged 2:20 for core and 3:20 for RC
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Field duplicates were taken on for both 1m RC splits and 3m composites for RC, using a riffle splitter. No field duplicates were collected from diamond core. Six pairs of twinned diamond and RC holes were drilled. These holes supported the location of the geological intervals intersected
		The sample sizes are considered to be appropriate to correctly represent the style of mineralisation, the thickness and consistency of the intersections
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and	The laboratory used an aqua regia digest followed by fire assay with an AAS finish for gold analysis
	whether the technique is considered partial or total.	No geophysical tools were used to determine any element concentrations used in this Resource Estimate
	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.  Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established	Sample preparation checks for fineness were carried out by the laboratory as part of their internal procedures to ensure the grind size of 85% passing 75 micron was being attained.
		Laboratory QA/QC involves the use of internal lab standards using certified reference material, blanks, splits and duplicates as part of the in house procedures.
		Certified reference materials, having a good range of values, were inserted blindly and randomly. Results highlight that sample assay values are accurate and that contamination has been contained.
		Repeat or duplicate analysis for samples shows that the precision of samples is within acceptable limits.
		Sample preparation and assaying conducted by Actlabs Guyana IncAssayed by 50g fire assay with gravimetric finish.
		QA/QC protocol: For diamond core one blank and one standard inserted for every 18 core samples (2 QA/QC samples within every 20 samples dispatched, or 1 QA/QC sample per 10 samples despatched) and no duplicates.
		QA/QC protocol: For RC samples we insert one blank, one standard and one duplicate for every 17 samples (3 QA/QC within every 20 samples or 1 every 8.5 samples).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Troy geologists and the competent person has visually verified significant intersections in diamond core and RC drilling as part of the Resource Estimation process
	The use of twinned holes  Discuss any adjustment to assay data	At Smarts six sets of twin diamond and RC drill holes have been drilled within 5m of each other. The consistency of the results are acceptable for this type of deposit containing abundant coarse gold.



		No adjustments or calibrations were made to any assay data used in this estimate. Two holes contained intersections at the end of hole that were excluded due to likelihood of downhole contamination, SRC319 and SRC660.  Primary data was collected using a set of company standard Excel templates on Toughbook laptop computers using lookup codes. The information was validated on-site by the Company's database technicians and then merged and validated into a final Acquire database by the company's database manager based in Georgetown, Guyana.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.  Specification of the grid system used  Quality and adequacy of topographic control	All drill holes have been located by DGPS in UTM grid PSAD56 Zone 21 North.  Downhole surveys were completed at the end of every hole where possible using a Reflex Gyro downhole survey tool, taking measurements every 5m.  Lidar data was used for topographic control.
Data spacing and distribution	Data spacing for reporting of Exploration Results 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. Whether sample compositing has been applied	The nominal drill hole spacing at Smarts and Hicks is 50m or 25m (northwest) by 50m or 25m (northeast).  At Larken the spacing is down to 10m and at Goldstar spacing is 200m to 400m between drill lines  The mineralised domains have demonstrated sufficient continuity in both geological and grade to support the definition of Mineral Resource and Reserves, and the classifications applied under the 2012 JORC Code.  Samples have generally been taken on one metre intervals, some areas logged as waste have had four or three meter composite samples taken.
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.  If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The majority of the data is drilled to either magnetic 050° or 230° orientations, which is orthogonal/perpendicular to the orientation of the mineralised trend. The bulk of the drilling is almost perpendicular to the mineralised domains. Structural logging based on oriented core indicates that the main mineralisation controls are largely perpendicular to drill direction.  No orientation based sampling bias has been identified in the data at this point.
Sample security	The measures taken to ensure sample security	Chain of custody is managed by Troy. Samples are stored on site and delivered by Troy personnel to Actlabs, Georgetown, for sample preparation.

	Section 2 Reporting of Exploration	n Results
Criteria	JORC Code Explanation	Commentary
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.  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 Karouni Project tenements cover an aggregate area of 253,538 acres (102,605ha), granting the holders the right to explore for gold or gold and diamonds.  The tenements have been acquired by either direct grant to Pharsalus Gold (25,990 acres /10,518ha) or by contractual agreements with tenement holders (227,548 acres 92,087ha). Apart from the Kaburi Agreement (29,143 acres 11,794ha), which provides for Pharsalus Gold to earn a 90% interest, all other vendor agreements provide Pharsalus Gold with the right to obtain an ultimate interest of 100%.  The Karouni Project comprises a single (large scale) mining license, 94 (small scale) claim licences, 217 (medium scale) prospecting and mining permits, and 6 (large scale) Prospecting Licences.  All licences, permits and claims are granted for either gold or gold and diamonds. The (large scale) prospecting licences include three licences won by Pharsalus Gold at open auction on 22 November 2007 (GS14: P-18, P-19 and P-20) which are owned 100% by Pharsalus Gold.  The various mining permits that cover the Smarts deposit were originally owned by L. Smarts and George Hicks Mining.  The permits were purchased by Pharsalus Gold (a wholly owned subsidiary of Troy Resources) in 2011.



		Troy Resources acquired the permits with the acquisition of Azimuth Resources in August 2013. All transfer fees have been paid, and the permits are valid and up to date with the Guyanese authorities.
		The payment of gross production royalties is provided for by the Act and the amount of royalty to be paid for mining licences 5%, however recent mineral agreements entered stipulate a royalty of 8% if the gold price is above US\$1,000 per ounce.
		The tenure and land status is in good condition,
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Very little exploration has been carried out over the tenement prior to Azimuth's involvement which commenced in 2011.
		Portions of the Karouni Project have been held more or less continuously by small family gold mining syndicates (locally termed 'Pork Knockers') since the 1960's. This situation persists to the present day.
		Portions of the current project area were variously held under option to purchase agreements by Cominco (1974-75), Overseas Platinum Corporation (1988) and Cathedral Gold Corporation (1993-2002).
		In 1999, Cathedral Gold joint ventured the property to Cambior, then owner and operator of the Omai Gold Mine located 40km to the east, with a view to processing the Hicks mineralisation through the Omai processing facility. Cambior intended to use its existing mining fleet, rather than road trains, to haul mill feed from the Hicks deposit. Execution of this approach proved uneconomic and disruptive to the mining schedule at Omai itself. No further work was undertaken and the joint venture was terminated in 2000.
		In 2002, Cathedral Gold became a service company to the oil and gas sector and spun its gold and base metals assets into a new company called Imperial Metals Inc. Imperial Metals has maintained an interest in the Hicks Project to the present day and, under its agreement with Pharsalus, still retain a 1% net smelter return (NSR) royalty in the project, applicable after the initial 200,000oz of gold production.
		Available historic records and data were reviewed by both Troy during Due Diligence prior to the takeover and as part of the Resource modelling and estimation work
Geology	Deposit type, geological setting and style of mineralisation.	Primary gold mineralisation is exposed at several localities within the Karouni Project, the most notable being the Hicks, Smarts and Larken Prospects along the northern extremity of the Project. Here the White Sand Formation cover has been removed by erosion to expose the underlying mineralised Paleoproterozoic Greenstone successions of the Trans- Amazonian Barama-Mazaruni Group.
		Extensive superficial cover of White Sand Formation within the central and southern portions of the Project tenements masks the basement lithology and conceals any gold mineralisation.
		The evaluation of airborne geophysical data has however indicated that the Barama-Mazaruni Greenstone Belts and associated syntectonic intrusives persist at shallow depth beneath this cover.
		The mineralisation at the Smarts and Hicks Zones is associated with a shear zone that transects a sequence of mafic to intermediate volcanic, volcaniclastic and pyroclastic rocks. The shear zone dips steeply towards the southwest, strikes northwest to southeast, and is characterized by intense brittle-ductile deformation and carbonate alteration plus quartz veining and abundant pyrite.
		The high grade gold mineralisation is usually associated with zones of dilational and stockworks quartz veining within and adjacent to the shear zone
		At Smarts and Spearpoint gold is hosted by a northwest trending, sub-vertical to steeply southwest dipping shear zone 2,800m in strike length and up to 60m wide. The shear zone has developed within basalts and andesites comprising the footwall greenstone succession along the north-eastern limb of a shallowly northwest plunging anticline. Auriferous mineralisation is also noted at the contacts of porphyry-granite



		intrusives. The shear zone is comprised of semi- continuous zones of quartz lenses and quartz- carbonate veining or brecciation.
		Numerous, moderately well-defined gold-rich lenses, up to 15m wide, occur within the shear zone and are characterized by anomalous quartz veining, quartz flooding, shearing, chloritization, sterilisation and pyritisation. Visible gold and the majority of gold values typically occur within and along margins of quartz veins, in silicified granitic dykes, and in adjacent, pyritic, often sheared meta-andesite. Pyrite is common at up to 3% by volume associated with auriferous quartz veins. Mineralisation is variously accompanied by silicasericite-chlorite-carbonate-pyrite-tourmaline alteration.
		Visible gold and the majority of gold values typically occur within and along margins of quartz veins, in silicified granitic dykes, and in adjacent, pyritic, often sheared meta-andesite. Pyrite is common at up to 3% by volume, with local, trace amounts of molybdenite, galena and sphalerite, associated with auriferous quartz veins. Mineralisation is variously accompanied by silicasericite-chlorite-carbonate-pyrite-tourmaline alteration, while fuchsite is developed within porphyry intrusives in contact with high magnesian basalts and along shear zones.
		Larken mineralisation is contained with a 1mto 5m wide spear zone contained in a sequence of mafics and volcaniclastic sediments. The shear zone strikes 305 and is sub-vertical. Mineralisation is associated with quartz veining and minor sulphides
Drill hole information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Significant intercepts that form the basis of this Resource estimate have been released to the ASX in previous announcements by Azimuth Resources and Troy Resources, with appropriate tables incorporating
	easting and northing of the drill hole collar	Hole ID, Easting, Northing, Dip, Azimuth, Depth and Assay data for mineralised intervals. Appropriate maps
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	and plans also accompany all previous exploration announcements.
	dip and azimuth of the hole	
	down hole length and interception depth	
	hole length.	
	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.	
Data aggregation methods	In reporting Exploration Results, weighting	All intersections are assayed on one meter intervals. No
	averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	top cuts have been applied to exploration results.  Mineralised intervals are reported with a maximum of 2m of internal dilution of less than 0.5a/t.
	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.	Mineralised intervals are reported on a weighted average basis
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results	The orientation of the mineralised zone has been established and the majority of the drilling was planned in such a way as to intersect mineralisation in a
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	perpendicular manner. However, due to topographic limitations some holes were drilled from less than ideal orientations.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
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 drill hole collar locations and appropriate sectional views.	The appropriate plans and sections have been included in the text of this document and previous releases.



Balanced reporting	Where comprehensive reporting of all Exploration Results is not practical, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The appropriate plans and sections have been included in the text of this document and in previous releases.
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 contaminating substances.	There is no other substantive exploration work to report
Further work	The nature and scale of planned further work (eg tests for lateral extensions or large scale step out drilling.  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 property is in production and no further work is necessary.

	Section 3 Estimation and Reporting of M	ineral Resources
Criteria	JORC Code Explanation	Commentary
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.  Data validation procedures used.	Field checks of drill hole collar position were conducted. Spot checks of database entries against original files were also conducted. An electronic database storage facility with restricted write access is used to store all drilling data.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	The Competent Person had visited the mine site and the deposits several times over the past 5 years.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.  Nature of the data used and of any assumptions made.  The effect, if any, of alternative interpretations on Mineral Resource estimation.  The use of geology in guiding and controlling Mineral Resource estimation.  The factors affecting continuity both of grade and geology.	The mineralised shear zone containing the Smarts and Hicks Deposits is a continuous zone that is traceable over many drill sections for several kilometres. Mineralised shapes are interpreted based on geology and are constrained to geological contacts. The distribution of some higher grade zones is controlled by the geometry of the main shear zone and subsidiary shears. Where this relationship is well understood resources have been categorised as Measured, where it is less understood or there is lower drill density resources have been categorised as Indicated, areas that are poorly understood have been classified accordingly as Inferred. A fault zone is interpreted to have caused a displacement between Hicks and Smarts Deposits. Subsequent to mining commencing the presence of an additional, previously unknown vein orientation was discovered. These veins are generally of a north-south strike with surface drilling at an oblique angle. These veins are constrained within bounding shears which represent the hanging and footwall of the majority of the Smarts mineralisation. Mineralisation at Spearpoint is essentially a continuation of Smarts to the SE.  Larken is interpreted as a single, sub-vertical shear about 1 to 5m wide. Grade estimation is limited to this shear zone.  Goldstar is interpreted as a zone of shearing up to 15m wide within a package of mafics and volcanoclastic sediments.
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 Smarts Mineral Resource estimate block model has the following extents: Along strike 2500m, across strike 270m and a vertical extent of 350 m extending to a depth of about 250 m below surface.  Hicks block model has following extents: along strike 1500m, across strike 150m and a vertical extent of 350m.  Larken block model extends for 500m along strike, 150m across strike and has a vertical extent of 300m



		Spearpoint block model has following extents; along strike 780m, across strike 600m and a vertical extent of
		250m  Goldstar block model has following extents: along strike 1360m, across strike 320m and a vertical extent of 160m
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domains, 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.  The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.  The assumptions made regarding recovery of by-products.  Estimation of deleterious elements or other nongrade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.  Any assumptions behind modelling of selective mining units.  Any assumptions about correlation between variables.  Description of how the geological interpretation was used to control the resource estimates.  Discussion of basis for using or not using grade cutting or capping  The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Multiple Indicator kriging was used for estimation of Smarts and inverse distance squared for Hicks Mineral Resources. The domains for the deposits were based on geological continuity of mineralised structures. Tog outs were applied based on statistical analysis of data within each domain. A top cut of between 10g/t and 100g/t was applied to each domain. Variography was used to determine search directions and extents. Some domains contained insufficient data to enable meaningful variograms, in such cases the smaller domains were assumed to have the same geostatistical parameters are the larger domain. The maximum search distance was 360m along strike however most mineralised domains do not have a strike length of this extent. For Measured and Indicated resources the maximum along strike search distance is 50m. North-south veins beneath the Smarts pit have been modelled as multiple solid shapes.  The Smarts Deeps resource is based on an ordinary kreiged model as the MIK model does not extend deep enough to include all the mineralisation.  No assumptions have been made regarding by-products. There are no material by-products assumed to be produced.  There has been no sampling of deleterious elements. Geological logging of RC chips and diamond drill core has indicated no such elements exist. Pyrite is the dominant sulphide in the mineralised zone and this will be processed and tails stored in a secure tailings facility.  The block size has been selected based on an approximate half drill spacing along strike with other dimensions selected to achieve adequate resolution of the geological interpretation. Nominal drill spacing is 100m x 50m, 50m x 25m or 25m x 25m. The block size within the pit is 7.5m x 7.5m x 5m for Smarts and to better represent the narrow nature of north-south veins in Hicks a minimum block size of 1m x 2m x 2m are taken. Composite bench elevations are created and two composites to represent a mining bench are used in the delineation of ore production polygons.  No assumptions have been made abou



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		deposits and mineral domains.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are determined on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	Cut off grades are quoted at 0.5g/t for open pit resources within a A\$2,000 pit shell for Smarts and 1g/t for resources outside the \$2,000 pit shells. The pit shell parameters and cut-off grades were based on current operating costs. Hicks used a 0.5g/t cutoff for resources above the -35mRL (the base of the pit) and 1g/t for resources beneath the -35mRL. Mineral Resources for Spearpoint, Goldstar, Larken and Ohio Creek are all reported sat a 0.5g/t cut-off grade. The cut-off for ore is 0.86 g/t for Hicks, Larken, Spearpoint and Smarts pits.
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.	Smarts, Hicks and Larken pits are in operation and mining factors and parameters from these operations have been used for estimating reserves.  Goldstar and Ohio Creek have been modelled with potential open pit extraction being considered.
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 with an explanation of the basis of the metallurgical assumptions made.	The Karouni project is in operation. All actual operating parameters and costs have been considered
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.	All operating permits have been received and the Company is in compliance.
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.  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.  Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Bulk densities were based on measurements taken from diamond drill core. Measurement was by the water immersion and displacement method. Several thousand measurements have been taken (4,366 in Smarts). Densities were assigned to weathering domains, Overburden (1.82t/m³), Oxidised (Mineralised 1.82t/m³, Waste 1.71t/m³) Transitional (Mineralised 2.29t/m³, Waste 2.43t/m³) and Fresh (Mineralised 2.76t/m³, Waste 2.86t/m³).  Goldstar, Larken, Ohio Creek and Spearpoint have used density data from similar rock types at Smarts. Oxidised material is 1.8t/m³, transitional 2.3t/m³ and fresh 2.7t/m³.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.  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	Classification is based on confidence of the geological interpretation. This is in turn based on confidence in the geological model and the drill spacing. Number of drill holes, number of samples and average distance of samples used in the estimation was also used as a consideration  Appropriate account has been taken of all relevant



	the data.	factors.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The result appropriately reflects the Competent Persons view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	The Hicks 1, 2, 3 and Smarts 3 was carried out and verified by Company personnel. Smarts 1, 2, & 4 was carried out by a consultant and verified by the Company
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.  The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.  These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The accuracy and confidence level of this Mineral Resource estimate for Smarts and Hicks deposits is evident in the classification and reporting as per the 2012 JORC Code and is deemed appropriate by the Competent Person.  The statement relates to global estimates. Relevant tonnages have been stated separately. Historically, the Hicks deposits have reconciled well with the estimates. On the other hand, the previous modelling of Smarts has underestimated the ounces and overestimated the tonnes by a significant amount on a consistent basis. The reconciliation in Smarts has however reversed in the first half of calendar 2018 with the pit producing more ounces than the model.

Section 4 Estimation and Reporting of Ore Reserves		
Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Mineral Reserve estimate is based on the Mineral Resource estimate, the details of which have been released with this announcement.
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	Mineral Resources are inclusive of Ore Reserves
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The competent person/s have visited the site numerous times and inspected the mine site area.
	If no site visits have been undertaken indicate why this is the case.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	Karouni is in operation
	The Code requires that a study to at least Pre- Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	Cut off grades for mining were determined from actual operating costs. These were based on operating experience Ore is above 0.86g/t and mineralised waste is above 0.5g/t.
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	Karouni is in operation. Results disclosed are based on actual mining and geotechnical parameters.
		Mining dilution is 10%
		Mining recovery is 95%
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre- strip, access, etc.	The minimum mining width considered was 2m
		Inferred Resources are not considered in mining.  All infrastructure is in-place.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre- production drilling.	
	The major assumptions made and Mineral	



	Resource model used for pit and stope optimisation (if appropriate).	
	The mining dilution factors used.	
	The mining recovery factors used.	
	Any minimum mining widths used.	
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	
	The infrastructure requirements of the selected mining methods.	
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	Karouni is in operation. The metallurgical performance of the plant has generally exceeded the pre-productions studies.
	Whether the metallurgical process is well-tested technology or novel in nature.	Metallurgical studies are ongoing at Ohio Creek. Zones of black carbonaceous shale are sometimes associated
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	with gold mineralization and the impact of this on processing is being investigated.  Actual operating costs and recoveries used in determining the cut-off.
	Any assumptions or allowances made for deleterious elements.	
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Site is in operation and has all permits required to operate. The operation is in compliance with all major permit requirements.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The infrastructure has been built.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.	Operating costs are based on historical costs.
	The methodology used to estimate operating	All costs are in US dollars
	costs.  Allowances made for the content of deleterious	An 8% NSR royalty is payable to the Government of Guyana. In addition some parts of the leases also have a 2% NSR royalty payable to other parties.
	elements.	Production has been shipped to refiners without any
	The source of exchange rates used in the study.	reported problems.
	Derivation of transportation charges.	
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	
	The allowances made for royalties payable, both Government and private.	
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	Reserves calculated at \$1,400 per ounce.
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co- products.	



Market assessment  Economic	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.  A customer and competitor analysis along with the identification of likely market windows for the product.  Price and volume forecasts and the basis for these forecasts.  For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.  The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.  NPV ranges and sensitivity to variations in the significant assumptions and inputs.	Sold is a fungible commodity. No assessment required.  No economic analysis provided. Project is in operation.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	No agreements required. Company enjoys excellent relationship with local communities.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:  Any identified material naturally occurring risks.  The status of material legal agreements and marketing arrangements.  The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	The site is in a tropical location with occasional very high rainfall. It is possible that heavy rain events could result in disruptions to mining outside of normally scheduled disruptions. The Company tries to maintain ore stockpiles at levels to minimise disruptions to processing should this occur.  All necessary permits and approvals have been received and are in good standing.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.  Whether the result appropriately reflects the Competent Person's view of the deposit.  The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	The Measured Mineral Resource estimate within the Open Pit has been converted to Proven Ore Reserves with the application of appropriate modifying factors. The Indicated Mineral Resources within the Open Pit have been converted to Probable Ore Reserves with the application of appropriate modifying factors. Inferred Mineral Resources have not been considered.  Ore stockpiles have been included as Proven Ore Reserves and Measured Resources. These reserves are based on actual tonnages and sampling.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates	Internal and external reviews have been carried out and agree with previous results. The new models have not been reviewed nor audited by independent consultants/experts.
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.  The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.  Documentation should include assumptions made and the procedures used.  Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material	The accuracy of the estimates is indicated by the Ore Reserve classification. Troy has drilled a considerable number of diamond and RC drill holes into the Open Pit areas and has defined high grade mineralisation for which there is a very good understanding of geological controls and grade distribution. High grade mineralisation had a high degree of predictability during the most recent drilling campaign. Several hundred measurements have been taken of bulk density of mineralisation of varying grades and waste rock of all types. The widths of the ore zones (generally >5m) and the dip (generally >60°) are such that dilution levels of 10% and ore mining loss of 5% are appropriate levels to apply.  The Smarts pit has experienced periods of poor reconciliation in the past. This has been caused by several factors including orientation of drill holes compared to high grade mineralised structures, difficult mining and grade control conditions caused by excessive water inflows into the pit. Recently as the





impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.  It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Smarts pit has progressed into fresh rock the reconciliation has significantly improved as mining conditions have also improved. Reconciliations for the 2018-19 year were good and within expected parameters.
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