



TROY RESOURCES LIMITED

# QUARTERLY REPORT

FOR THE THREE MONTHS ENDED 31 DECEMBER 2016

## HIGHLIGHTS

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- Attributable gold production for the Group totalled 20,033oz. Au\_Eq ~ 14,839oz. for Karouni and 5,194oz. Au\_Eq for our share of production from Casposo.
- Cash costs for the Quarter of US\$953/oz. and AISC of US\$1,352/oz. for Karouni.
- Group liquidity position of \$27.0 million following US\$10 million in debt repayments.
- Widespread anomalous gold mineralisation delineated with first pass drilling at the Goldstar, Mirror and Dominica targets.
- Further improvement in Plant performance with throughput exceeding 80,000 tonnes in both October and November.
- Independent Geotechnical assessment of the South wall failure in Smarts Stage 3 confirms that full scale mining operations can resume in February.
- Geophysical review initiated focussing on Induced Polarisation (IP) techniques to supplement existing exploration effort and near mine target generation.



## Overview

Commenting on the results, Troy CEO Martin Purvis said:

*"It is deeply disappointing for all stakeholders when unforeseen events disrupt operations to the extent that they nullify all the hard work and effort of everyone on site to get a new mine up and running in challenging conditions. The pit wall failure in Smarts Stage 3 interrupted a strong phase of improvement across all aspects of the mine and forced the management team to find alternative plans and solutions in short order to mitigate the impacts of the collapse.*

*It goes without saying that events of this nature will be assessed to the fullest extent possible to ensure that the safety of each and every employee is never compromised.*

*Whilst the results for the December Quarter fall short of expectations they still represent a measure of the determination necessary to overcome significant problems that form part and parcel of the inherent risks associated with mining operations.*

*With the "all clear" from the Geomechanics assessment now formalised, the next challenge is to regain the positive momentum and continuous improvement evident in the operation before the disruption occurred and this process - with measures such as RC drilling for grade control and rock sheeting of all the ramps and haul roads - is already underway."*

## RESULTS

### KAROUNI OPERATION, GUYANA

Operations	June 2016 Quarter	September 2016 Quarter	December 2016 Quarter
<b>Open Pit Mining</b>			
Total mined (t)	1,569,983	2,036,657	1,941,075
Ore Mined (t)	173,858	202,080	194,689
Mine Grade (g/t)	2.97	2.27	2.28
<b>Mill Production</b>			
Processed (t)	161,764	199,619	222,281
Head Grade Gold (g/t)	3.04	2.24	2.25
Recovery Gold (%)	92.0	92.8	92.5
Gold Produced (oz.)	14,545	13,329	14,839
Gold Sold (oz.)	12,703	15,211	13,925
Cash Cost (US\$/oz.)	658	923	953
AISC (US\$/oz.)	1,064	1,316	1,352
Gold Price Realised (US\$/oz.) <sup>(1)</sup>	1,261	1,337	1,229

(1) Before impact of hedging.

### Health and Safety

Seven lost time injuries and one medically treated injury were recorded during the December Quarter.

No environmental incidents were recorded. In keeping with its mandate, the EPA carried out inspections as part of its monitoring requirements and has confirmed continued compliance with the Company's obligations pursuant to its Environmental Permit.



## Open Pit Mining

Mining performance in the last Quarter of 2016 opened with a strong start in October, but the momentum was lost early in December when a failure occurred in the South wall of the Smarts Stage 3 Pit, restricting access to one of the higher grade sections of the mine throughout December and most of January 2017.

As a result of the failure, both the short and medium term mining schedules had to be rapidly revised in order to maintain a sufficient flow of ore to the mill. The majority of the fleet was deployed in Smarts 4 and Smarts 1 at the South-East end of the Pit where the mining team faced much higher stripping ratios and lower grade ore blocks due to the sub-cropping nature of the orebody in this area. Notwithstanding this challenging situation, the team still recorded the second highest production quarter for the calendar year with 1.94Mt of total material movements (Q3 CY16: 2.04Mt).

During the first few days of the failure, movement of partially liquefied sand and clay was carefully monitored in order to assess the operational risk associated with resuming limited mining activities in the Smarts 3 Pit. Unfortunately, the onset of the failure coincided with the seasonal increase in rainfall (see Figure 1) and this served to saturate the wall debris and increase the rate of flow onto the pit-floor working areas. This combination gave rise to heightened safety concerns due to potential mud-rush conditions and a further decision to restrict the workforce in the Pit to clean-up and essential pumping operations.

For most of December and the early part of January, a small team of experienced operators continuously removed the encroaching toe of the slumping material, removing approximately a third of the debris from the failure before a noticeable slow-down in the flow rate was observed. By this time it was also decided to use the opportunity (of reduced activity in Smarts 3) to commence an RC grade control programme in the Pit to better define the orebody geometry to assist with improved mining and blasting operations over the next 3 to 6 months. Prior to this approach all grade control work had been carried out by blast hole rigs with associated limitations. Furthermore, in order to prepare a stable platform in the Pit for the RC rigs to operate effectively, sections of waste rock were removed from the Smarts 3 floor and used to sheet the ramps and haul-roads in the broader operation which in turn noticeably improved the operating performance of the mining fleet in the rainy conditions.

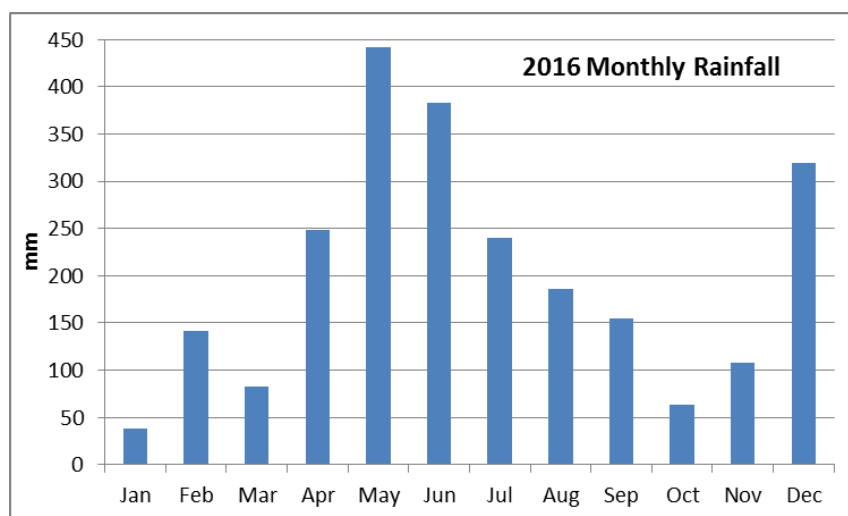


Figure 1 - Rainfall



On Monday 23 January 2017, Mr Peter O'Bryan, a leading international Consultant in Geomechanics, arrived on site to conduct a week long inspection and overview of how best to manage and remediate the wall failure in Smarts 3. Based on an initial Draft report received on 30 January, Mr O'Bryan has identified the following key factors:

- *The ingress and flow of ground water from several sources around the North-West pit crest is the primary factor in the development of the wall failure and ongoing movement of the failure debris*
- *The current slow movement of the failed mass makes it reasonable to operate at or near the toe of the slip. Accordingly activities, including extractive mining, can proceed while available operating space permits.*
- *In order to contain further creep of debris into the Pit, the toe should be cut back as far as possible and a retaining structure put in place. The retaining structure would be a bund formed using fresh waste rock, directly abutting the toe of the debris slope. To be functional the bund needs to be relatively large and keyed into a notch excavated in the floor. The bund should be >3m high and >5m wide (approx.50 tonnes per metre length).*
- *Subject to final pit design and the placement position of the retaining rock bund, it may not be possible to recover all the ore in the planned lower benches of Smarts Stage 3, which could reduce the likely mineable reserve by up to 10,000oz. In any event, further work will now be undertaken in order to optimise ore recovery from the pit in view of this constraint.*

Commensurate with this report, work on the remediation measures stated above, will commence straight away and as soon as the current RC grade control programme is completed (not more than another week), normal mining operations will be restarted in this Pit. Work will also commence on a revised production plan for the balance of FY17 that will take into account the impact of restrictions caused by the wall failure and whether or not increased production rates can be achieved (particularly in Smarts 4) in order to make up for some of these factors.

Total ore mined was 194,689 tonnes @ 2.28g/t, representing only a 4% reduction in tonnage compared with the September Quarter.

### Processing and Production

A total of 222,281 tonnes @ 2.25g/t were processed with an average recovery of 92.5%, resulting in 14,839oz. being recovered compared to 13,329oz. in the September Quarter.

This was a record quarterly throughput with the plant processing in excess of 80,000 tonnes in both October and November. In December throughput was restricted by the lack of availability of the secondary cone crusher which warranted the selected treatment of a softer blend of feed material. The problems with the crusher became apparent when flakes of metal were found in the oil filter at which time the secondary cone crusher was bypassed and stripped down for inspection. Once the cone and mantle were removed it was found that the upper bronze bush had sheared off all of its mounting bolts and had cracked in multiple locations. This issue has now been resolved with support from the manufacturer and the secondary cone crusher is now back on line. Renewed focus is being applied to training and development of the operators working in the plant.

Total production for the first calendar year of the operation was 62,908oz. at a cash cost of US\$705/oz. and AISC of US\$1,048/oz.



## Costs

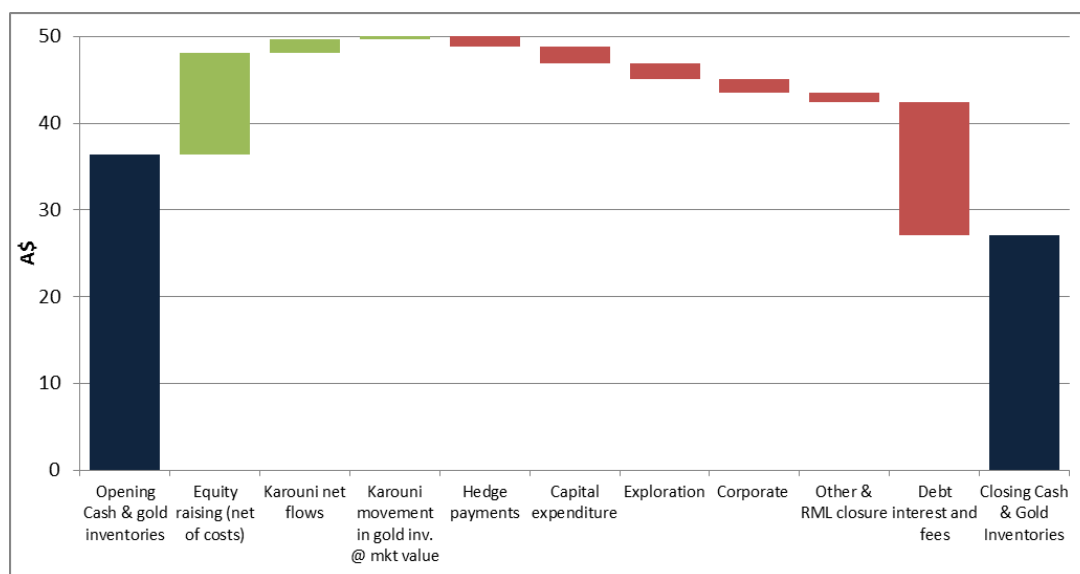
Cash costs for the Quarter were adversely affected by the direct and indirect impacts of the wall failure and particularly the restricted access to higher grade ore within Smarts 2 and 3. This in turn resulted in reduced volumes of lower grade feed being treated throughout most of December compared to plan. A large number of mining trucks also had to be serviced due to increased wear and tear in the wet season and one of the six Generators had to be given a major overhaul during the Quarter which increased AISC by US\$72/oz.

	June 2016 Quarter	September 2016 Quarter	December 2016 Quarter
	US\$/oz.	US\$/oz.	US\$/oz.
<b>C1 Cash Cost</b>	658	923	953
Refining and transport costs	7	5	5
Reclamation and remediation – amortisation	7	4	6
Royalties	97	143	100
Insurance	13	21	13
Exploration	91	93	91
Corporate general and administration costs	64	73	63
Capital equipment	127	54	121
<b>All-In Sustaining Cost (AISC)</b>	<b>1,064</b>	<b>1,316</b>	<b>1,352</b>

## FINANCE

The Company finished the Quarter with total liquidity of \$27.0 million, including available cash of \$20.1 million and gold inventories at market value of \$6.9 million. Key movements in cashflow are illustrated in the December Quarter cash movements.

The Company finalised its \$40.7 million equity raising following successful completion of its Retail Entitlement Offer which closed on 4 October. The Retail Offer raised a total of \$12.8 million (before costs) which was received during the Quarter. The balance sheet strength created through the raising has provided the Company with the financial support necessary to assist with the operational challenges faced during December and January.



**December Quarter cash movements**

**Notes:**

1. Key movements - unaudited
2. Liquid assets include cash, gold dore and GIC at market value

**Banking Facility**

The Company's original US\$71.6 million debt Facility with Investec currently stands at US\$29.2 million (A\$40.4 million) following repayment of US\$10.0 million (\$13.4 million) during the Quarter.

**Hedging**

A summary of the Company's gold hedging positions at 31 December 2016 are set out in the table below. The average monthly hedge commitment is 4,600 ounces through to October 2017.

Settlement Period	Gold oz.	US\$/oz.
Mar Qtr. 16	14,500	\$1,102.03
June Qtr. 17	13,500	\$1,103.50
Sept Qtr. 17	13,500	\$1,103.50
Dec Qtr. 17	4,500	\$1,103.50
<b>TOTAL</b>	<b>46,000</b>	<b>\$1,103.04</b>

**Exploration Expenditure**

Exploration expenditure incurred in relation to extension drilling at Karouni was \$1.8 million.

**Capital Expenditure**

Expenditure incurred in relation to the acquisition of property, plant and equipment and sustaining capital at Karouni was \$2.4 million.

**CASPOSO, ARGENTINA (Troy 49% - Austral Gold Limited (ASX:AGD) (Manager) 51%)**

The table below summarises the recent operating performance of Casposo:

	September 2016 Quarter	December 2016 Quarter
Ore processed (t)	68,055	66,328
Gold recovery (%)	90%	91%
Silver recovery (%)	78%	83%
Grade (g/t Au)	2.98	2.30
Grade (g/t Ag)	180.92	245.55
Gold produced (oz.)	4,457	4,489
Silver produced (oz.)	313,765	434,607
Gold equivalent produced (oz.)	9,071	10,599
Cash cost (US\$/oz. Au_Eq)	N/A <sup>1</sup>	969
AISC (US\$/oz Au_Eq)	N/A <sup>1</sup>	1,200

<sup>1</sup> During commissioning period.

Exploration activities around Casposo have recommenced with a detailed ground mag survey at Julieta covering a total area of 66.4 linear km. The data from the survey is currently being processed and is expected to be available shortly.

Consultants have also been engaged to undertake a review of the mineralisation events relating to Julieta, Casposo Norte, Cerro Norte, Aurora, Lucía, Mercado, Inca, B Vein and Aztec targets, including detailed mapping of these areas.

**EXPLORATION****KAROUNI, GUYANA (Troy 100% through Troy Resources Guyana Inc.)****Regional Exploration Drill Program**

During the Quarter, the key focus was on framework testing of the Mirror and Goldstar targets and testing of the Smarts Shear Zone south-east of the Hicks 3 Pit (Hicks SE Target) (see Figure 2). Drilling in both of these targets delineated gold anomalism over a significant area, up to 15km length in the case of Mirror. In both targets prospective geology and structure was intersected which augers well for future refinement of targeted drilling programs.

The drilling was wide spaced, up to several hundred meters, and has demonstrated that the favourable geological terranes that host both Smarts and Hicks deposits are widespread on Troy's tenement holding. Total drilling for the Quarter was 100 holes for 8,055m.

Subsequent to Quarter end, the RC rig has been relocated into the Smarts 3 pit to undertake RC grade control drilling.

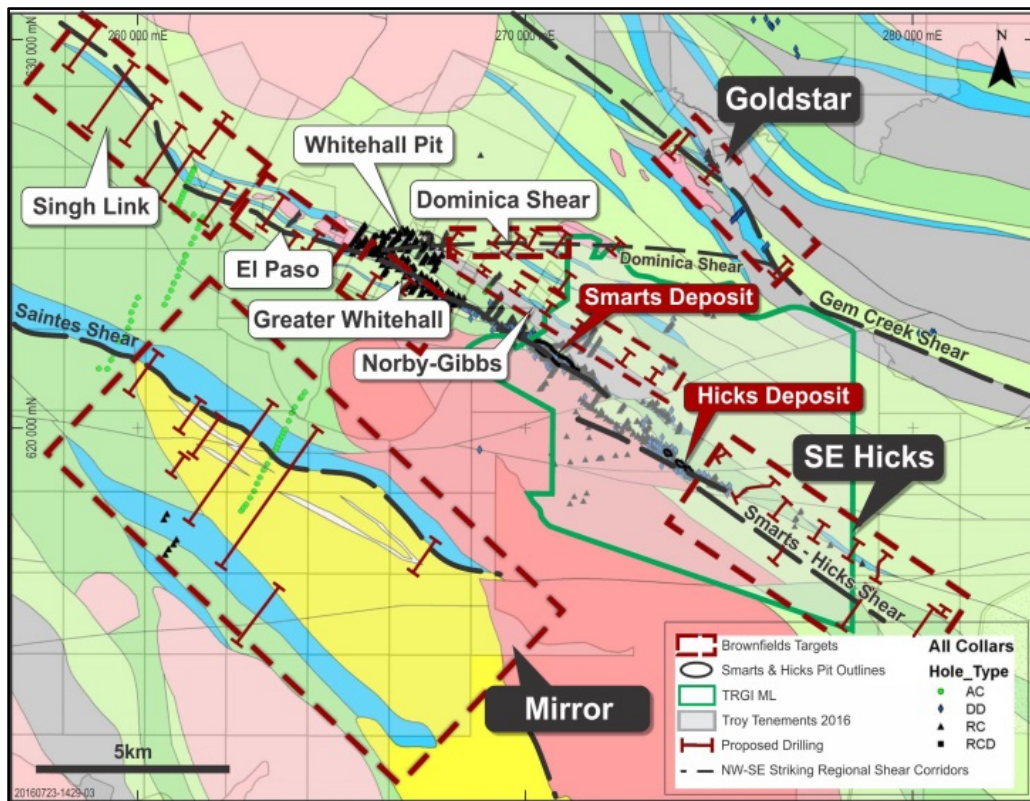


Figure 2: Brownfields Target Location Plan

### Goldstar Target

This target is a laterite, saprolite and sand covered 10km zone underlain by MgO “High Chrome” basalt bedrock corridor with outcropping quartz veins and significant alluvial workings. Prior to this drilling the target was completely untested.

The Stage 1 drilling consisted of four north-south oriented drill traverses followed by a number of infill section lines. A total of 59 holes were drilled totalling 4,753m (see Figure 3).

Drilling targeted the high chrome basalt corridor that has been intruded by narrow granitic and porphyritic intrusions.

All drill holes intersected a thick package of MgO basalt (“High Chrome” unit) as interpreted which is strongly foliated to variably sheared. The “High Chrome” unit contains variable intensities of quartz and quartz-carbonate veining with patchy disseminated pyrite. The north-east contact between “High Chrome” basalt and laminated sediments host several mineralised porphyry intrusions, whilst in the south-west contact of “High Chrome” corridor to basalts more intense quartz veining occur.



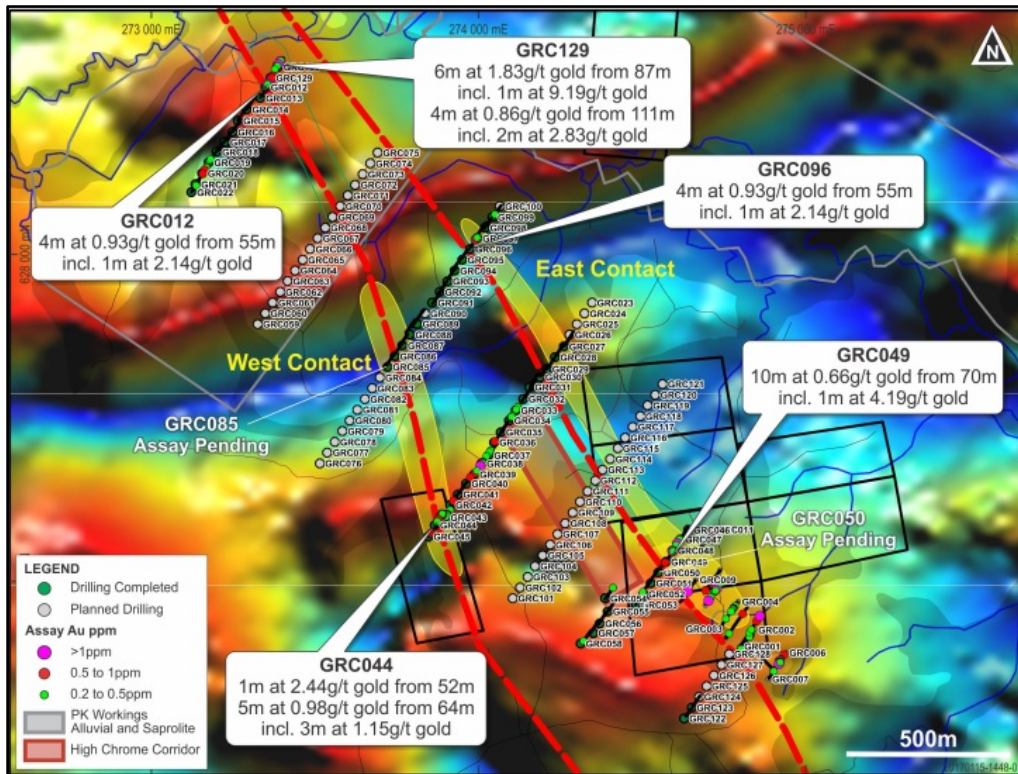


Figure 3: Goldstar Target Summary on Magnetics

Numerous intercepts of altered porphyries, quartz veining, pyrite alteration and shear zones were reported.

Assay highlights include:

- 26m at 0.46g/t from 44m including 1m at 2.44g/t from 52m and 5m at 0.98g/t from 64m;
- 6m at 1.83g/t from 87m including 1m at 9.19g/t from 87m;
- 10m at 0.66g/t from 70m including 1m at 4.19g/t from 70m;
- 15m at 0.42g/t from 5m including 2m at 1.44g/t from 18m
- 4m at 1.32g/t from 66m including 2m at 2.19g/t from 66m;
- 4m at 0.93g/t from 55m including 1m at 2.14g/t from 55m;
- 2m at 1.54g/t from 46m including 1 m at 2.83g/t from 46m;
- 2m at 0.66g/t from 23m;
- 4m at 0.85g/t from 111m including 1m at 2.83g/t from 111m;
- 15m at 0.42g/t from 5m including 2m at 1.44 g/t from 18m
- 4m at 0.39g/t from 51m including 1m at 0.69g/t from 51m;
- 13m at 0.31g/t from 70m including 5m at 0.47g/t from 75m;
- 17m at 0.27g/t from 8m including 2m at 0.52g/t from 8m and 1m at 1.08g/t from 16m;
- 10m at 0.25g/t from 61m including 2m at 0.53g/t from 68m;
- 17m at 0.22g/t from 15m including 2m at 0.58g/t from 17m.

A strong regional shear with anomalous gold in the favourable host rocks with the expected quartz-carbonate veining and associated pyrite alteration has been delineated in this wide spaced “first pass” program. Follow-up drilling is being planned to better define anomalous trends.



## Mirror Target

This single reconnaissance drill traverse was designed to quickly identify whether the 25km long magnetic anomaly coined the “Mirror Corridor” has the potential to host a prospective stratigraphic sequence. A line was planned with the following objectives:

- to test the fresh rock interface to collect a robust geochemical sample;
- presence or absence of prospective stratigraphic sequence;
- to test the validity of the geological model - confirm the Saintes Shear/ St Lucia Shear and de Grasse Corridor identified in regional magnetics.

During the Quarter, 21 holes for 1,557m were drilled (see Figure 4).

- Drilling successfully intercepted fresh rock and confirmed that the Mirror Target is a “mirror” of the Smarts-Hicks stratigraphic succession;
- Drilling confirms the presence of the Saintes Shear corridor and identified two parallel structures.
- Geochemical analysis used in lithochemical classification clearly confirms the presence of sediment, mafic and felsic lithologies. The geochemistry has identified at least two mafic packages.
- The presence of quartz veining and pyrite in MRC024 and MRC025A do indicate that the rocks have seen gold bearing fluids.
- Anomalous gold intercepts include:
  - 1m at 0.40g/t from 49m;
  - 1m at 0.27g/t from 49m;
  - 1m at 0.26g/t from 77m;
  - 1m at 0.24g/t from 44m;
  - 1m at 0.2g/t from 36m.
- This 15km long target warrants further drilling and a follow-up program is planned.

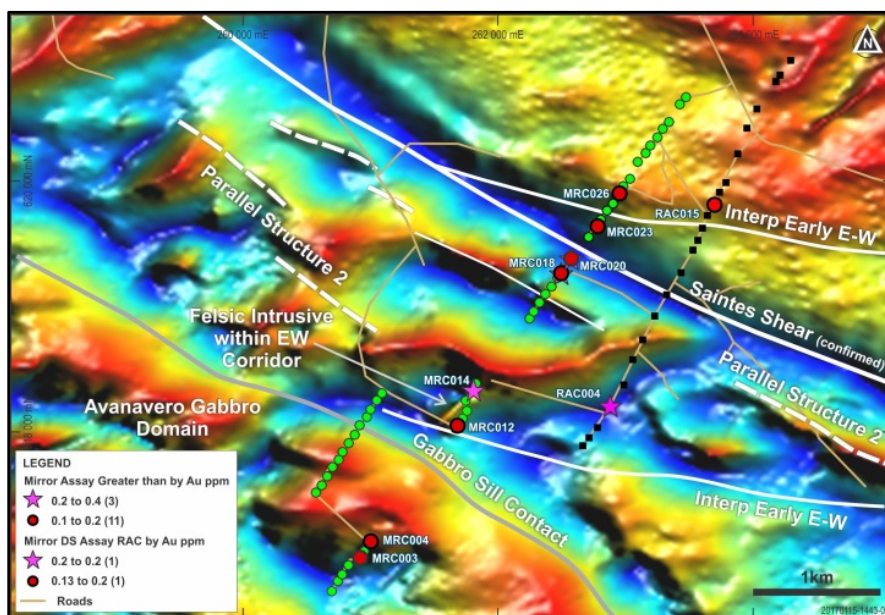


Figure 4: Mirror Target “End of Hole” Rock Type over Magnetics - Include RAC EOH in Saprolite on Magnetics



### **Hicks SE Target**

Drilling commenced in December on this sand covered 8.5km target that is the SE continuation of the Smarts-Hicks shear. Work to date has identified sinistral flexures in the magnetics with potential for "Porphyry Pods" similar to the Hicks deposit. The favourable host sequence for the shear - the "High Chrome" mafics has been identified in auger soil geochemistry.

The drilling was challenging in the cover (sand/clay layer) with up to 30m in thickness and casing was used.

The drilling intersected Hicks granite, Smarts shear zone, basalt, altered porphyry in saprolite and footwall sediments.

The Smarts shear zone was intersected in the expected position and consists of a narrow zone of minor pyrite alteration. The drilling intercepted the targeted Smarts shear zone which comprised of sheared zones of minor pyrite alteration that returned weakly anomalous gold results.

The mineralised intercepts included:

- **4m at 0.70g/t from 15m including 1m at 1.06g/t from 15m;**
- **14m at 0.11g/t from 22m including 1m at 0.35g/t from 22m;**
- **12m at 0.32g/t from 67m including 1m at 2.24g/t from 69m.**

### **Geophysical Review**

Subsequent to Quarter end, the Company announced the results of an independent geophysical review with the following outcomes:

- Work completed so far has identified 11 gold targets near the Karouni mine area ~ of particular interest is the Eldorado prospect and an interpreted IP target.
- The detailed review of previous, IP and geological data demonstrates that IP does assist in mapping basement geological features providing an additional tool to support the development of gold targets at Karouni.
- One key target identifies a chargeable zone approximately 1200m long and up to 150 metres wide. Drilling in one section of this target area near old, alluvial gold workings, is shown to contain gold.



## CORPORATE

### Capital Structure

Issued Capital (as at 31 January 2017)	
Ordinary Shares	453,822,307
Employee Share Appreciation Rights	963,000
Investec Bank Plc Options	10,000,000

For further information please contact:

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**Martin Purvis**, CEO

T: +61 8 9481 1277 | E: [troy@troyres.com.au](mailto:troy@troyres.com.au)

#### Directors

**Fred Grimwade**, Non-Executive Chairman

**Martin Purvis**, CEO and Managing Director

**Ken Nilsson**, Executive Director

**John Jones**, Non-Executive Director

#### Competent Person's Statements

*The information relating to exploration results from the Karouni Gold project is extracted from the announcement titled Exploration Update dated 23 January 2017 and available to view at [www.troyres.com.au](http://www.troyres.com.au).*

*The information relating to the results of the geophysical review for the Karouni Gold project is extracted from the announcement titled Independent Geophysical Review Identifies New Targets at Karouni dated 30 January 2017 and available to view at [www.troyres.com.au](http://www.troyres.com.au).*

*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 the drill results or geophysical review and that all material assumptions and technical parameters underpinning the drill results and geophysical review in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings as presented here have not been materially modified from the original market announcement.*