

Completion of Orinoco's Maiden Sertão Drilling Campaign

Drilling identifies extensive high-grade ore shoot

Highlights

- Drilling over 915m of strike shows consistent hydrothermal alteration.
 - Best results from drilling of the Mining Lease to date include:
 - **0.5m @ 7.33g/t** (STO_004: from 141.5-142.0m)
 - o 1.82m @1 3.55g/t (STO_005: from 130m)
 - o 0.65m @ 13.05 g/t (STO_005: from 126.2m)
 - o 0.46m @ 21.40g/t (STO_005: from 131m)
 - o 0.5m @ 46.8g/t (STO_022: from 150.2m)
- Hole collared on boundary of Mining Lease by neighbouring explorer deviated into Sertão Mining Lease to intercept mineralisation 1.6km down plunge from the abandoned Sertão open pit:
 - 2m @ 18.7g/t Au (SRT001 from 541m vertical depth)
- Recognition of first high-grade shoot structure potentially extending over more than 1.6kms down plunge from the base of the open pit to the Mining Lease Boundary.
- New interpretation of structural controls on shoot geometry is expected to lead to definition of further high grade shoots with further geophysical work and drilling.
- Assays received for fresh rock mineralisation only assays pending for stage 2 holes targeting shallow oxide mineralisation around the shallow previous producing pit (256Koz @ 25g/t Au).

Orinoco Gold Limited (ASX: **OGX**) is pleased to advise that it has completed its maiden drilling at the 100%-owned **Sertão Gold Mine**, a key regional growth opportunity for Orinoco located 28km from its flagship **Cascavel Gold Mine** in central Brazil.

Whilst assays for near surface mineralisation remain pending, the drill campaign has already achieved several key aims. Orinoco has now been able to re-interpret the structural controls on the fresh rock mineralisation at Sertão and identify the down plunge continuity of the southernmost high-grade ore shoot mined by Troy. A review and reinterpretation of historical geophysical surveys along with data from the historic open pit mine indicates that there is excellent potential to delineate additional high-grade ore shoots at Sertão.

Regionally, these shallow plunging Archean gold systems have demonstrated a very significant down plunge extent (e.g. Anglo Gold Ashanti's Serra Grande Mine and Yamana Gold's Pilar Mine). Similarly

at Sertão, a hole drilled by the neighbouring explorer deviated 50m into the Sertão Mining Lease to intercept the mineralised zone approximately 1.6km down plunge from the floor of the abandoned open pit (figure 1). Cascavel, 20km to the North along the same shear zone structures, also demonstrates significant down plunge extent with visible gold in the deepest hole drilled to date (CDP002 – 0.5m @ 2.5g/t Au ~720m down dip from the current mining area).

Whilst assays for all fresh rock mineralisation have been received, assays are pending for the stage 2 drilling following up positive shallow historical drill results recorded near the location of the previous processing plant including:

- o 2.65m @ 22.43 g/t Au from 6m (GVD185)
- o 7.00m @ 4.85 g/t Au from 8m (SRB87)
- o 6.00m @ 6.64 g/t Au from 12m (SRC134)

The drilling results received to date demonstrate the opportunity to define the continuity of the Sertão mineralised zone over a significant area and the now identified hydrothermal alteration assemblage associated with the mineralisation will facilitate the use of geophysics in future exploration .A follow up exploration program will be planned following the receipt of the assays from the Stage 2 drilling.

The Managing Director, Mr Mark Papendieck, commenting on the success of the initial drill campaign said "We are very excited about the potential of Sertão to host significant high grade ounces on an existing Mining Lease. With an increased understanding of Sertão we are already thinking about next steps that may include new detailed geophysical studies and further drilling as we work towards Sertão becoming part of our regional production profile."

TECHNICAL INFORMATION

The Sertão Mine -History

Sertão Mine was operated by Troy Resources between 2003 and 2006 and processed 320 kt of ore at a grade of 24.95g/t producing 256,800 ounces of gold, from an open pit that exploited the shallow (10° -15°) west dipping oxidised mineralised horizons. Geological mapping during the operation documented high-grade gold mineralisation associated with intense quartz sulphide veining and silica, sericite and ankerite alteration that is broadly parallel to the regional layering.

Orinoco Drilling

Orinoco's exploration team completed a twenty-three hole, 3200m, two-stage diamond drilling program. Stage one was designed to test for extensions of previously mined mineralisation at Sertão, and further to follow up on historic drilling such as 0.7m @ 48.2g/t gold (~ 30m down dip from Sertão open pit in hole GVD029) and 0.33m @ 119.6g/t gold (~650m down dip from Sertão open pit in hole GVD080). Stage two was designed to test for extensions of the system along strike to the north and near surface mineralisation around the site of the previous processing plant.

Full results for all holes drilled are presented in Appendix 1.

Figure 1 shows the collar positions of all the recently completed holes in relation to the local "mine scale geology

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the NW. Note STR-001 is an Exploration hole that was collared outside the Sertao Boundary but intercepted the mineralised horizon 50m within Orinoco's ground. SRT_001 intercepted 2m @ 18.7 g/t from a vertical depth of 541m.

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Mine Sequence

A thick package of iron rich limestones interbedded with carbonaceous horizons and Banded Iron Formations (BIF) host the mineralisation at Sertão. The mine sequence dips shallowly to the west in to the north of the mine and shallowly northwest in the area of the open pit. The rocks of the mine sequence are intensely penetratively deformed and a strong schistosity and abundant boudinaged quartz veins are developed parallel to the regional layering.

Fresh rock gold mineralisation at Sertão is related to a broadly layer-parallel zone of shearing within the mine sequence that is interpreted to represent a major west to north west dipping thrust fault. The geometry and timing of the faults within the structural history is identical to the faults at Cascavel that host the gold mineralisation there. The mineralised fault zone at Sertão usually occurs close to the contact of the carbonates and carbonaceous zones and a strong mineral stretching lineation defined by elongated fuchsite and sericite is well developed, the lineation consistently plunges shallowly west north west (285° -Figure 2.)

Detailed logging of the alteration has revealed a consistent pattern of hydrothermal minerals around the main gold ore system at Sertão that culminates in the Main Hydrothermal Alteration (MHA) zone that is spatially associated with the gold mineralisation that is readily recognisable by the exploration team during logging. The MHA, which is effectively the ore zone, comprises quartz veinlets/veins with sericite, pyrite, chalcopyrite, pyrrhotite and arsenopyrite. The presence of arsenopyrite is seen to be the best predictor of the potential of the zone.



Ore Shoot Geometry

During mining of the open pit between 2003 and 2006 public reports by Troy clearly indicated a strong shoot geometry of the high-grade zones which were shown plunging shallowly towards the west. Detailed analysis of all of the historic Troy data including drilling and open pit grades along with new information collected by the Company from mapping the old pit and, this program and re-interpreted geophysical data have led to a slight change in Orinoco's interpretation.

The Orinoco exploration team now believe that the ore shoots in the unweathered deeper parts of the ore body plunges shallowly to the west-north west (285°) and are developed parallel to an intense mineral stretching lineation that is well developed and spatially and chronologically associated with the gold mineralisation. A further factor in gold distribution which may also be important is the interpreted ramp and flat geometry of the major ore hosting structures which can create dilatant zones.



Figure 3. A. Schematic diagram of classic thrust fault system. The main system dips 15 degrees to the left but within the system subsidiary fault and shear typically form a "ramp and flat" geometry. In the case of the reverse movement interpreted here (at Sertão) that results in the "flats" being zones of dilation and additional alteration whereas the "ramps" are compressional and tend to have less alteration and mineralisation. Importantly these processes tend to occur at a variety of scales and can be seen both in the drill core, mapping of the abandoned pen pit and on the map scale when assessing the entire mineralisation dataset. **B**. Equal area stereonet illustrating the contoured measured poles to the schistosity which has an average orientation of 32° towards 270°. **C**. Equal area stereonet that plots contours of the mineral stretching lineation – average orientation 15° towards 285°.

Based on analysis of the grades intersected in historic and current drilling when combined with the structural models summarised above the Exploration team has interpreted the occurrence of a high grade shoot that extends out the base of the old open pit and continues down plunge for at least 600m where high grade intercepts in hole in Troy hole GVD 080 and clearly indicates the continuation of the shoot. SRT001 is also modelled to occur within this shoot structure a further 1km down plunge.

-ENDS-

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Forward-Looking Statements:

This Announcement includes "forward-looking statements" as that term within the meaning of securities laws of applicable jurisdictions. Forward-looking statements involve known and unknown risks, uncertainties and other factors that are in some cases beyond Orinoco Gold Limited's control. These forwardlooking statements include, but are not limited to, all statements other than statements of historical facts contained in this presentation, including, without limitation, those regarding Orinoco Gold Limited's future expectations. Readers can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "forecast," "intend," "may," "plan," "potential," "predict," "project," "risk," "should," "will" or "would" and other similar expressions. Risks, uncertainties and other factors may cause Orinoco Gold Limited's actual results, performance, production or achievements to differ materially from those expressed or implied by the forward-looking statements (and from past results, performance or achievements). These factors include, but are not limited to, the failure to complete and commission the mine facilities, processing plant and related infrastructure in the time frame and within estimated costs currently planned; variations in global demand and price for coal and base metal materials; fluctuations in exchange rates between the U.S. Dollar, the Brazilian Real and the Australian dollar; the failure of Orinoco Gold Limited's suppliers, service providers and partners to fulfil their obligations under construction, supply and other agreements; unforeseen geological, physical or meteorological conditions, natural disasters or cyclones; changes in the regulatory environment, industrial disputes, labour shortages, political and other factors; the inability to obtain additional financing, if required, on commercially suitable terms; and global and regional economic conditions. Readers are cautioned not to place undue reliance on forward-looking statements. The information concerning possible production in this announcement is not intended to be a forecast. They are internally generated goals set by the board of directors of Orinoco Gold Limited. The ability of the company to achieve any targets will be largely determined by the company's ability to secure adequate funding, implement mining plans, resolve logistical issues associated with mining and enter into any necessary off take arrangements with reputable third parties. Although Orinoco Gold Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

Competent Person's Statement:

The information in this presentation that relates to Exploration Results is based on information compiled by Dr Klaus Petersen who is a member of the Australasian Institute of Mining and Metallurgy and CREA and Dr. Marcelo Juliano de Carvalho who is member of the Australasian Institute of Mining and Metallurgy. Dr Klaus Petersen and Dr. Marcelo Juliano de Carvalho are employees of Orinoco Gold Limited and have sufficient experience, which is relevant to the style of mineralisation under consideration and to the activity that they are 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. Dr Klaus Petersen and Dr. Marcelo Juliano de Carvalho consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Appendix 1 Drill Results Results above 0.2g/t highlighted

Collar Location and Orientation							Intersection > 0.2 g/t			
HOLE	х	Y	Z	AZIMUTH	DIP	DEPTH(m)	From (m)	To (m)	Interval (m)	Au (ppm)
STO_001	576204	8271271	535.0	90	-70	149.9	115.00	116.00	1	0.36
							118.00	119.00	1	1.51
STO_002	576093	8271272	511.0	90	-70	144.1		No Signifi	cant results	
STO_003	576307	8271395	550.0	90	-70	160.7		No Signifi	cant results	
STO_004	576050	8271332	537.0	90	-70	154.5	141.5	142	0.5	7.33
STO_005	576252	8271332	543.0	90	-70	142.8	126.2	126.9	0.6	13.05
							128.2	128.7	0.5	2.75
							128.2	129.2	1	0.97
							130.2	130.7	0.5	3.87
							130.7	131.1	0.5	21.4
STO_006	576138	8271318	550.0	90	-70	170.1	138	139	1	1.11
							139	140	1	0.28
							140	141.1	1.1	5.05
STO_007	576415	8271445	553.0	90	-70	127.1	No Significant results			
STO_008	576415	8271445	553.0	270	-70	172.0	119.9	120.4	0.6	0.74
							122.1	122.6	0.5	0.29
							144.7	145.1	0.5	0.21
STO_009	576489	8271518	544.0	90	-70	125.9	115	116	1	0.36
STO_010	576489	8271518	544.0	270	-70	166.9	94.6	95.1	0.5	0.98
							164.2	165	0.8	0.43
STO_011	576166	8271436	598.0	90	-70	241.1	204.6	205.1	0.5	2.25
							205.1	205.6	0.5	1.73
							205.6	206	0.4	0.23
							206	206.5	0.5	1.75
							206.5	207	0.5	2.65
							207	207.5	0.5	0.32
STO_012	576714	8271885	525.0	90	-70	76.5	72.9	73.4	0.5	0.22
STO-013	576708	8271611	516.0	90	-70	82.2	No Significant results			
STO-014	576692	8271780	519.0	90	-70	67.5		No Signifi	cant results	
STO_015	576608	8271600	519.3	90	-70	85.5	43	43.5	0.5	1.22
STO_016	576652	8271697	522.0	90	-70	107.8		No Signifi	cant results	
STO-017	576604	8271633	529.0	90	-70	85.6	60	60.6	0.6	0.5
STO_018	576595	8271792	553.0	90	-77	182.3		No Signifi	cant results	
STO_019	576252	8271332	543.0	10	-68	186.4	No Significant results			
STO_020	576690	8272040	513.0	92	-70	92.4	No Significant results			
STO_021	576761	8272188	516.0	90	-70	102.7	No Significant results			
STO_022	576138	8271318	550.0	23	-65	211.7	150.2	150.7	0.5	46.8
							153.7	154.2	0.5	0.43
							154.2	154.7	0.5	2.39
STO_023	575700	8271394	578.0	90	-70	300.0	?			

Hole Drilled by neighbouring explorer (deviated 50m into the Sertão Mining Lease)

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Hole	х	У	Z	depth	AZ	DIP	Composite
SRT_001	575031	8271456	684	601.22	90	-80	2.0 m @ 18.73 g/t Au (541 to 543 m)

JORC TABLES TABLE 1 & 2

Section 1 Sampling Techniques and Data

Criteria	Commentary								
Sampling techniques	All data is stored in the database following appropriate QA/QC procedures.								
Drilling techniques	All drilling was HQ and NQ diamond drilling.								
Drill sample recovery	 Drill recoveries were logged throughout the entire program and were consistently above 95%. 								
Logging	All drill core is qualified expl	s geologically oration geolo	/ loggec ogists.	l for; geolog	y; alteratio	n and stru	icture by		
Sub-sampling techniques & preparation	 Prospective z while the othe core at each is (code:PREP-Pulverize (10) 90% passing taken and pulmesh) screer Analysis: Fire Spectroscopy oxide, sodium inquarted with metal bead. The digested mineralized wagainst matrix Analytical Metho bead is fu The digested mineralized wagainst matrix Analytical Methrough a 100 remaining on by fire assay The material homogenized AAS finish (A is taken and n in calculating The gold valu reported toge total gold con Metho Elem d Code ent Au- Gold AA25 Au- Gold AA26 	ones are saver half is retain 20m. Blank and 33D): <u>Fine Sine</u> 33D): <u>Fine Sine</u> 33D): <u>Fine Sine</u> 33D): <u>Fine Sine</u> 33D): <u>Fine Sine</u> 300 g) The end a 2 mm (Tyle verized to be a 2 mm (Tyle content of some content of the sine and two sub and two sub and two sub and two sub and two sub and two	wn into fined in the and start ample if the same set 10 me entires and the same set 10 me entires and the same set is appressive and the same set is appressive and the same set is a sa	V2 core and the core tray idards at ea <u>Preparation</u> : hple is dried esh) screen n 95% pass propriate for A25 and Au- sample is fu silica and oth ilver and the in 0.5 mL d trated hydro microwave iluted to a tr by atomic at s. <u>Screen Fi</u> he sample p sh) stainless nm is retain th and repor screen () 1 es (50g) are 6D). The av) fraction re content of th 00 and (-) 1 of each frace Sample Weight (g) 30 30	one ½ is c /. Duplicate ch 30m. Sa Dry, Crush and crush . A split of ing a 106 f rock chip of -AA26) Atc used with a her reagen en cupelled bilute nitric chloric acid at a lower otal volume bsorption s re Assay (6 oulp (up to s steel scree ed and ana ted as the 00 mm frage e analyzed rerage of th sult. All thr ne plus and 00 micron ction as we Lower Limit 0.01 0.01	ollected for e sample: ample pre- h, Split an ed to bett up to 100 micron (T) or drill sar mic Abso mixture of ts as requ d to yield a acid in the d is then a power se e of 10 mL pectrosco code: Au- 1000g) is een. Any n alysed in i Au (+) fra ction) is by fire as the two AA ee values I minus fra fractions a I as the c Upper Limit 100	pr assay 1⁄4 of the paration 1/4 of the paration 1/4 of the paration 1/4 of the paration 1/6 paration 1/6 paration 1/		

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Criteria	Commentary
Quality of assay data and laboratory tests	 All samples are analysed by screen-fire assay Standard QAQC is performed by insertion of standards and blanks as well as standards and blanks used by the laboratory.
Verification of sampling and assaying	 Standards: (insertion of 1 known standards in each 20 samples approximately): If less than 10% of samples are outside of the expected mean + 2x Std. Dev, the results are validated. If less than 10% of the samples report results outside the Mean + 3x Std. Dev, but there are standards between the first and these two points - the results are validated, but the Lab is notified. If more than 10% is outside the Mean + 3x Std. Dev, the batch (40 samples) is rejected, an investigation is required and a re-analysis of the batch is made; Blanks (1 blank insertion in each 20 samples approximately): If less than 5% are above 5x the detection limit of the Lab, the results are validated. If more than 5% is above 5x the detection limit, the Lab is notified and the batches with failure are re-analysed; Duplicates (insertion in each 20 samples – Bias control): Project Duplicates.
Location of data points	 Collars were surveyed using a Total Station Survey by a qualified land surveyor. The grid system used is UTM South American 1969 - Zone 22 S; The topography crew uses surveyed base stations to guarantee the quality of their surveying.
Data spacing and distribution	See figure 1 in body of report.
Orientation of data in relation to geological structure	 Drill holes are angled 60 which effectively intercepts the shallowly dipping orebody at right angles ensuring reported thicknesses are very close to true thicknesses
Sample security	 Samples are stored in plastic sample bags, stored in a dedicated secure facility on site prior to transport to the lab. All laboratory pulps are stored in the storage facility onsite in boxes supplied by the labs, stacked in dry places.
Audits or reviews	 No audit or review has been undertaken regarding the results reported in this announcement.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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Criteria	Commentary
Mineral tenement and land tenure status	 The Faina Goldfield project is 70% owned by Orinoco do Brasil Mineração Ltda, which in turn is 100% owned by Orinoco Gold Ltd. The 30% partners are free carried during the exploration stage until a decision to mine. The Sertão and Antena mining leases are owned 100% by Orinoco.
Exploration done by other parties	 The area has previously been explored by WMC in the 1990's Sertão Mine was operated by Troy Resources between 2003 and 2006 and processed 320 kt of ore at a grade of 24.95g/t producing 256,800 ounces of

Criteria	Commentary
	gold, from an open pit,
Geology	 Sertão is best characterised as an Archean shear hosted Orogenic gold system. Refer to body of report for a description of the geology and Figure 1
Drill hole Information	Supplied in Figure 1 and Appendix 1.
Data	Minimum thickness used is 0.4m
aggregation methods	Results over 0.5m @ 0.25 g/t are reported
Relationship between mineralisation widths and intercepts	 Drill holes are angled 60 which effectively intercepts the shallowly dipping orebody at right angles ensuring reported thicknesses are very close to true thicknesses
Diagrams	Diagrams are attached to the current announcement.
Balanced reporting	• This announcement is a comprehensive report of the results covered by this announcement.
Other exploration data	None relevant.
Further work	A follow up drilling program is in planning.

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