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Projects
Collurabbie:
Nickel, copper, PGM's
Fraser Range:
Nickel, copper, PGM's
Polar Bear:
Nickel, PGM's
Lawlers:
Nickel
Youanmi:
PGM's, copper, zinc, gold
Lake Wells:
Uranium, iron, gold

POLAR BEAR GOLD EXPLORATION UPDATE

- **Several extensive gold-arsenic anomalies confirmed in previous reconnaissance drilling**

- **Gold mineralised rockchips at surface at the Snout anomaly**

Following a detailed compilation and review of historic drilling data and field sampling at its 100% owned Polar Bear project, Sirius Resources (ASX:SIR) advises that it has identified several zones of gold-arsenic anomalism in RAB/aircore drilling and confirmed a zone of gold mineralisation in surface rockchip sampling at one of these.

A compilation of the gold exploration results obtained by numerous different owners over a period of several decades has highlighted the presence of several gold-arsenic trends in reconnaissance drilling. Four broad arsenic trends have been identified in historic RAB and aircore drilling (Figure 1) and these trends contain discrete gold anomalies defined by maximum drillhole values greater than 1g/t gold and 100ppm arsenic. Based on the current wide spaced driiling, the arsenic anomalies extend up to 5km along strike and the gold anomalies extend up to 1km along strike. Better intersections from these anomalies are summarised below and listed in Table 1:

- **19m@0.9g/t Au** from 8m (including **3m@3.4g/t Au from 24m to the end of hole**) in drillhole PBAC71 at the Yogi anomaly.

- **9m@2.23g/t Au** from 4m (including **4m@4.3g/t Au** from 4m) in drillhole PBAC165 at the Yogi anomaly.

- **2m@24.3g/t Au** from 20m in drillhole PP-05 at the Yogi anomaly.

- **6m@1.6g/t Au** from 44m in drillhole PBAC287 at the Earlobe anomaly.

These anomalies largely correspond to the location of newly identified shear zones, which form part of the major system of shear zones striking southeast from Higginsville, through the Polar Bear project and onwards to Avoca's Musket prospect some 20 kilometres to the southeast. Sirius' Polar Bear project occupies a significant part of this gold mineralised corridor otherwise largely owned by Avoca.

Follow up of previous anomalous samples collected from part of one of these anomalies has defined outcropping gold mineralisation at the Snout anomaly on the edge of Lake Cowan (Figures 1 and 2). This zone

comprises strongly sheared, hydrothermally altered mafic rocks with gossanous quartz stringers exposed over a strike length of 30 metres. It is elsewhere obscured by overlying granite and the sediments of Lake Cowan, so it is not possible to estimate the likely extent of the mineralisation within the underlying mafic rock at this stage. **The 17 samples collected from this outcrop and from nearby quartz veins grade between 1.06g/t Au and 28.47g/t Au and average 6.25g/t Au** (Table 2 and Figure 2). Although there has been some previous shallow RAB and aircore drilling in this general area, the gold bearing structure does not appear to have been drilled because of the barrier created by the overlying granite.

Further sampling and geological mapping is planned prior to follow up drilling.

Mark Bennett
Managing Director and CEO
Sirius Resources NL

Prospect	Drillhole	Northing	Easting	From, m	To, m	**Width, m**	**Gold, g/t**	Comments
Yogi	PBAC64	6466057	390337	28	32	**4**	**2.05**	
Yogi	PBAC71	6456857	389837	8	27	**19**	**0.90**	To end of hole
Including				24	27	**3**	**3.40**	To end of hole
Yogi	PBAC165	6466257	389788	4	13	**9**	**2.23**	
Including				4	8	**4**	**4.30**	
Yogi	PBRC4	6465857	389657	93	94	**1**	**5.80**	
Yogi	PBRC6	6466057	389737	23	24	**1**	**18.50**	
Yogi	PP-05	6466061	388993	20	22	**2**	**24.30**	
Earlobe	PBAC287	6471623	387236	44	50	**6**	**1.60**	
Earlobe	PBAC306	6470815	387833	68	71	**3**	**1.64**	
Bindi	PBAC408	6469157	396337	10	11	**1**	**25.00**	
Bindi	PBAC432	6470757	395337	47	48	**1**	**2.30**	
Snout	90PBAC507	6472096	391549	9	10.5	**1.5**	**1.3**	

Table 1. Significant intersections in previous Polar Bear reconnaissance drillhole.

Sample	Northing	Easting	**Gold, g/t**	Sample	Northing	Easting	**Gold, g/t**
805109	6472507	391078	**13.75**	PB0425	6472502	390950	**3.71**
RA51694	6472627	391148	**5.50**	PB0426	6472506	390949	**1.54**
RA51695	6472627	391148	**1.10**	PB0427	6472495	390950	**2.40**
PB0242	6472502	390948	**28.47**	PB0428	6472517	390950	**1.73**
PB0420	6472505	390950	**9.17**	PB0429	6472516	390950	**3.39**
PB0421	6472506	390950	**3.48**	PB0430	6472518	390949	**2.35**
PB0422	6472506	390952	**3.94**	PB0431	6472543	390944	**1.06**
PB0423	6472503	390951	**10.02**	10MB0008	6472505	390949	**4.67**
PB0424	6472503	390951	**9.95**				

Table 2. Rockchip samples from the Snout prospect.

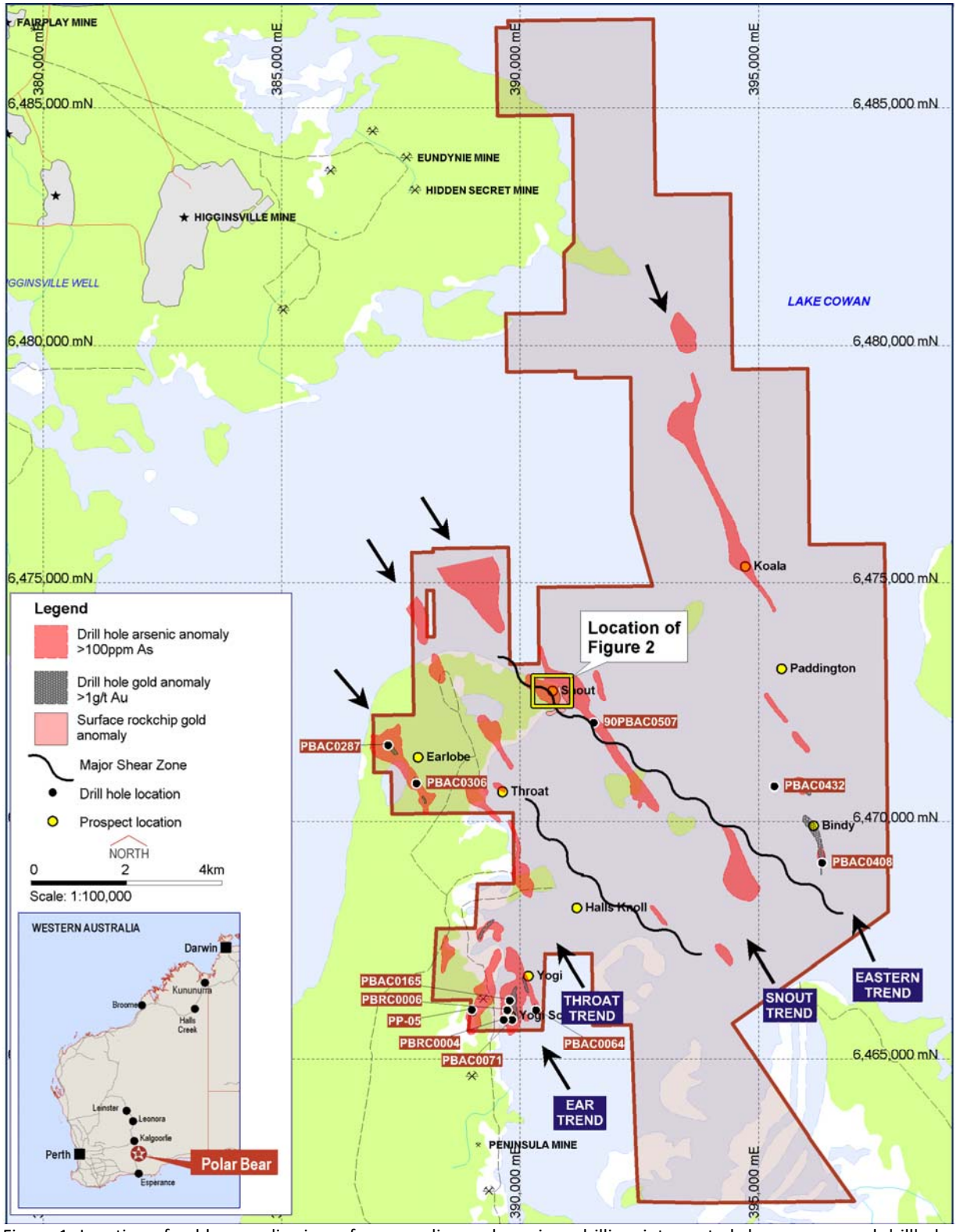

Figure 1. Location of gold anomalies in surface sampling and previous drilling, interpreted shear zones, and drillholes with significant gold intersections (see Table 1 for details of drillholes).

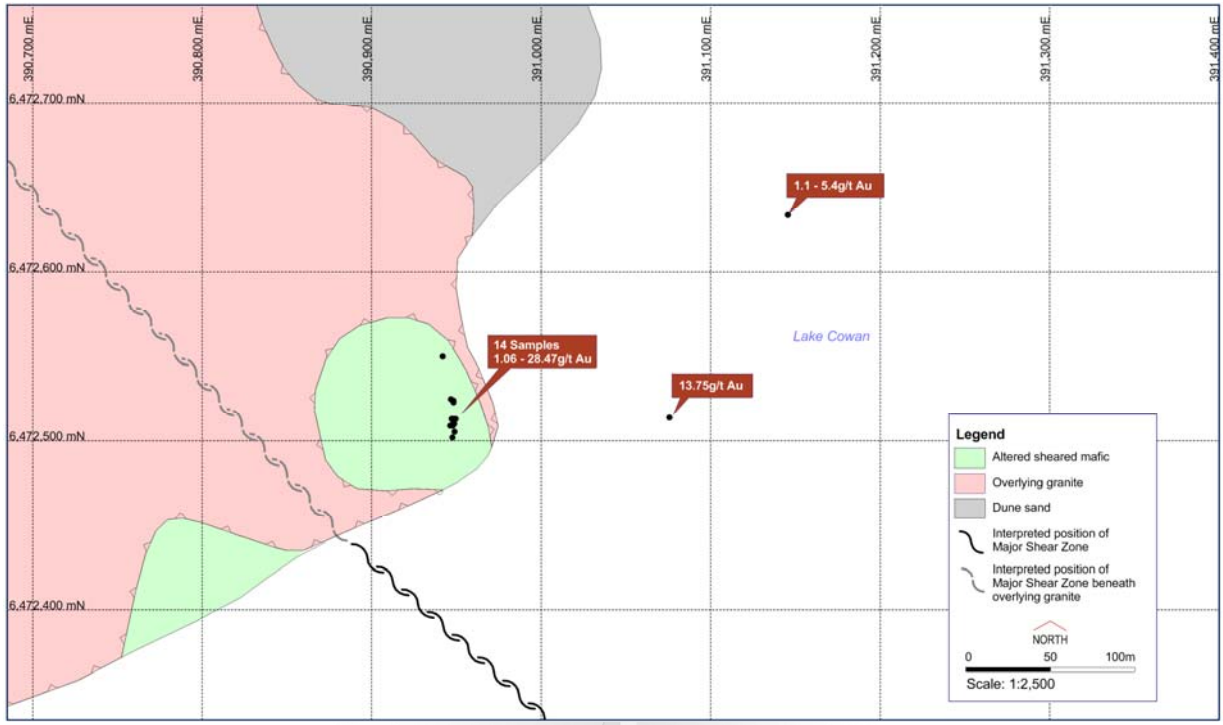

Figure 2. Location of gold mineralised rockchip samples at the Snout prospect, showing overlying granite, dune and salt lake sediment cover, and position of interpreted shear zone.

Competent Persons statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Dr. Mark Bennett, who is an employee of the company. Dr Bennett is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Bennett consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Exploration results are based on standard industry practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. Reverse circulation (RC), aircore and rotary air blast (RAB) drilling samples are collected as 1 metre samples and composited where stated. Core samples are taken as half core sampled to geological boundaries where appropriate. PGM assays in this report are based on lead and nickel sulphide collection fire assay digests, and ICP finish. Base metal assays in this report are based on four acid digest and inductively coupled plasma mass spectrometry (ICPMS), inductively coupled optical emission spectrometry (ICPOES) and atomic absorption spectrometry (AAS) finish at Genalysis Laboratory in Perth, Western Australia. The accuracy and precision of analytical results is monitored by the use of internal laboratory procedures and certified standards and subsequent statistical analysis to ensure that results are representative. Sampling and drilling undertaken by previous companies is of a varied nature and cannot be subjected to the same levels of QAQC.