

**ASX ANNOUNCEMENT**

**28 February 2019**



**QUARTERLY ACTIVITIES REPORT -  
AMENDED**

**FOR THE QUARTER ENDED 31 DECEMBER 2018**

**HIGHLIGHTS**

- **Sherlock Bay Nickel-Copper-Cobalt and Gold Project, Pilbara, WA**
  - Mineral processing study completed as part of a review of previous feasibility
  - Processing flow sheet revised to produce nickel sulphide end product
- **Otavi Mountain Land Base Metal and Vanadium Project, Namibia**
  - On site assessment and ranking of vanadium and basemetal prospects conducted
- **West Australian Vanadium Projects**
  - Exploration to be focussed on the Speewah project following review

**SHERLOCK BAY PROJECT**

Sabre Resources Limited (ASX: **SBR** or the Company) holds a 70% interest in the Sherlock Bay Project located in the Pilbara region of Western Australia (refer to SBR announcement dated 29 January 2018). The Project is well-located, 12 km off Highway 1 with access to critical mining infrastructure. The Project tenements comprise two valid exploration licenses E47/1769 and E47/1770 and a mining lease M47/567 (Figure 1 and Appendix I).

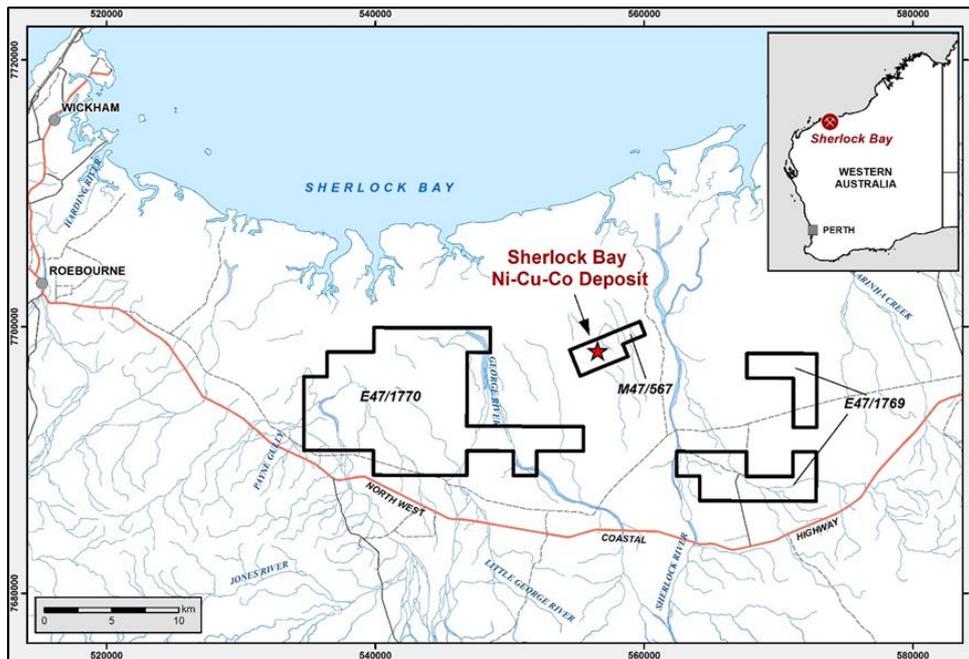


Figure 1: Location map of the Sherlock Bay Project in Western Australia

## Activities during the Quarter

### Mineral Processing Review

Following acquisition of the Sherlock Bay Project in January 2018, Sabre has conducted several studies to investigate development options including a mining study update by AMC Consultants Pty Ltd. This work continued during the December quarter. Mineralogical consultancy group Vintage94 Pty Ltd was engaged to review previous studies on metallurgical and mineral processing and to recommend alternative processing flowsheet options and ascertain the effect on CAPEX and OPEX costs.

Vintage94 has recommended producing nickel sulphide as the end product, rather than the more common nickel sulphate product, because it results in lower cost processing and is more marketable than nickel sulphate. Based on this revised mineral processing flowsheet, Vintage94 generated a life of mine financial model incorporating the updated mining cost estimates from AMC and nickel price forecasts. The financial model allows input costs and assumptions to be modified highlighting sensitivities and critical factors that will impact project development.

The Vintage94 study is part of SBR's review and update of the substantial feasibility study work that has previously been completed on the development of the Sherlock Bay deposit. The extensive information already available and the mining and processing studies that have been carried out by SBR will allow the Company to rapidly advance the evaluation of the project to feasibility stage.

### **OTAVI MOUNTAIN LAND PROJECT ("OML PROJECT")**

The Otavi Mountain Land is a highly prospective, underexplored area in northern Namibia (Figure 2) which has potential for high-value copper mineralisation, stratabound zinc-lead mineralisation and vanadium deposits. The project comprises two granted tenements, EPL 3540 (SBR 70%) and EPL 3542 (SBR 80%), which cover about 347km<sup>2</sup> of the 'Otavi Triangle' (Figure 3).

The Otavi Mountain Land contains numerous historic mines, including the Tsumeb copper-lead-zinc mine and smelter complex, plus the Kombat copper mine. These mines are currently on care and maintenance but the Tsumeb copper smelter remains one of only five operating copper smelters in Africa. The presence of these mines and other significant historical mining and processing operations has resulted in the provision of excellent infrastructure throughout the region.



Figure 2: Location of the Otavi Mountain Land Project in northern Namibia. Red lines are highways, black crossed lines are railways, black squares are towns and cities, and black star is the capital, Windhoek.

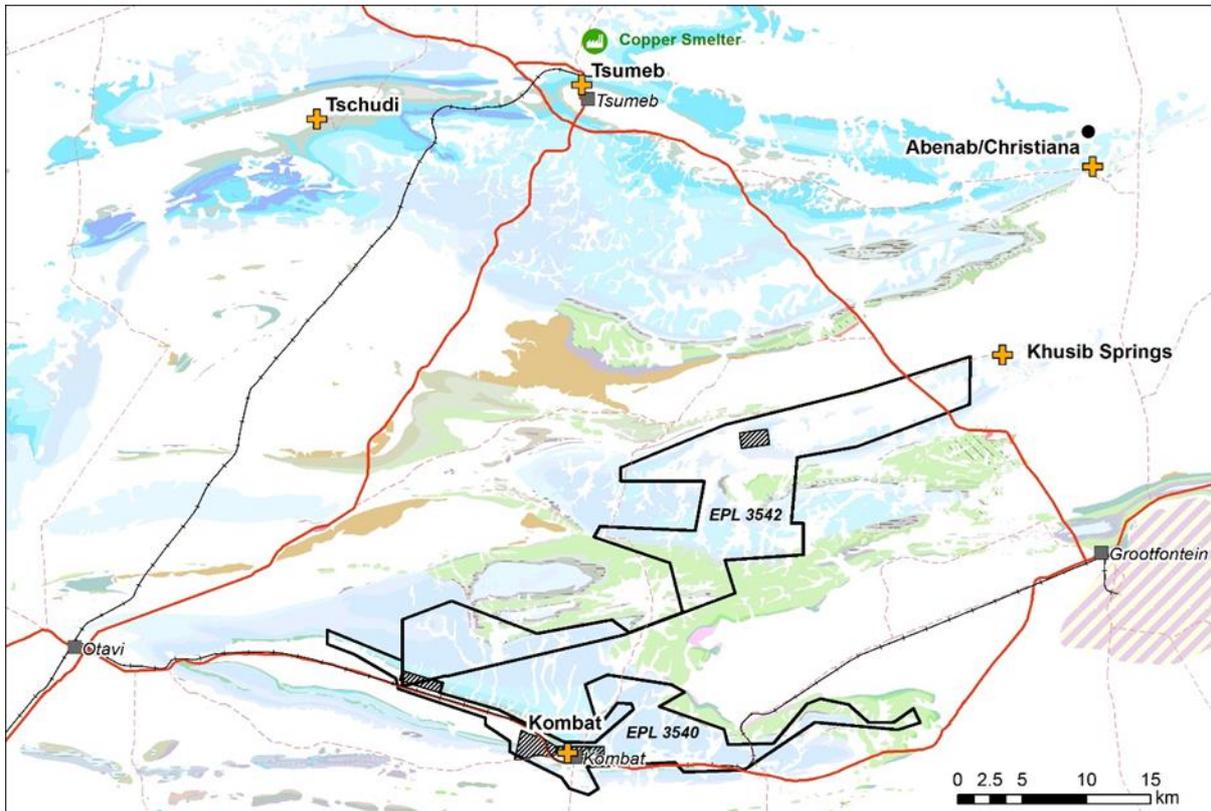


Figure 3: The Otavi Mountain Land, showing roads (red) railroads (black hatched), towns (black square), major mines and deposits (crosses) and the Tsumeb smelter complex. Sabre's two licences, EPL3540 and EPL3542, are located in the highly mineralised south of the area. Mining licences (grey cross-hatched) are not owned by Sabre and are excised from the licences.

## Activities during the Quarter

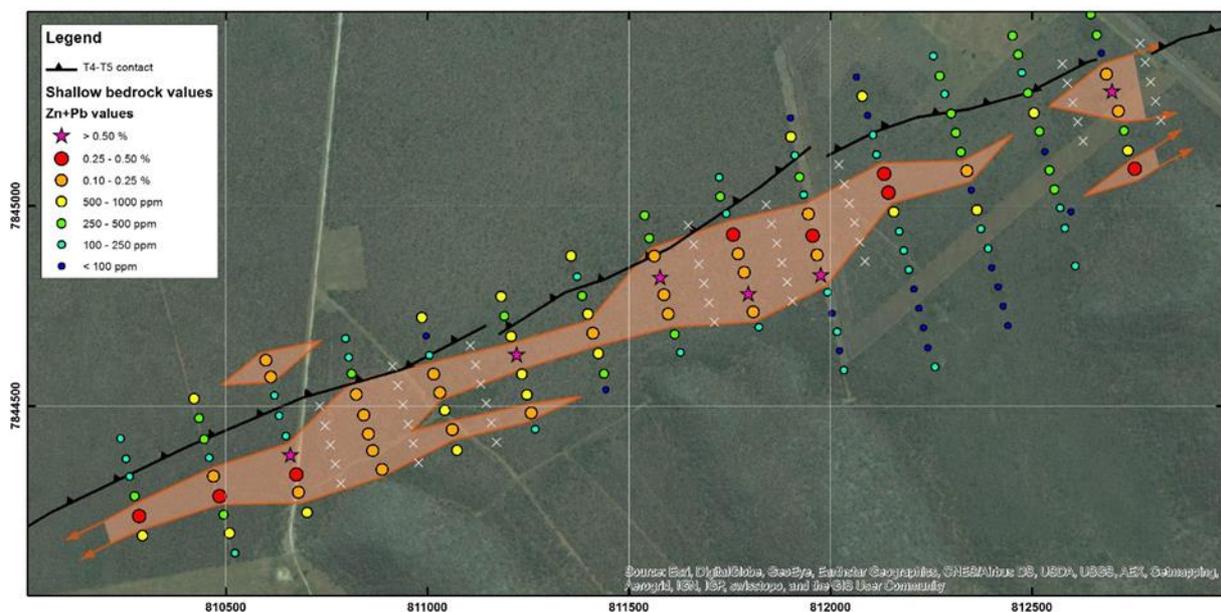
### Prospect Assessment and Prioritisation

During the quarter the main base metal and vanadium prospects on SBR's licences in Namibia were visited to assist with an assessment of the prospectivity and potential for project development. Meetings were also held with the Minister at the Namibian Ministry of Mines and Energy to present the status of exploration work and progress licence renewal applications.

Priority exploration targets are the Kaskara, Guchab, Border-Toggenburg and Driehoek prospects. All four prospects are at an advanced exploration stage following extensive previous exploration and drilling by the Company that resulted in resource estimates at Border and Driehoek.

**Border** is a carbonate-hosted lead-zinc deposit (MVT) within a mineralised trend that extends for 16km on EPL3542. An Inferred Mineral Resource of 16Mt @ 1.53% Zn, 0.59% Pb, 4.8g/t Ag has been reported at Border (SBR ASX announcement 16th October 2014) and the mineralisation is open along strike and at depth.

The Toggenburg prospect is located along strike to the east of the Border prospect on a prospective lead-zinc mineralised trend at the T4/T5 contact of the Elandshoek Formation within the Otavi Group. In February 2015, Sabre reported the results of shallow geochemical RC drilling along the trend (SBR ASX announcement 11th February 2015). The first phase of drilling at Toggenburg comprised 64 holes on a 200m x 50m grid. Holes were drilled through shallow cover of sand and silt penetrating into the top 2m of the oxidised and depleted bedrock. Portable XRF analysis of the drill samples revealed a coherent anomaly in the regolith and bedrock with elevated lead-zinc values extending for 1800m. Additional shallow RC drilling reported in July 2015 (SBR ASX announcement 15th July 2015) extended the lead-zinc anomaly to 2.8km by up to 250m wide (Figure 4).



**Figure 4: Top of bedrock maximum lead + zinc values at the Toggenburg prospect. Orange outline is greater than 0.1% lead + zinc**

The lead plus zinc anomaly at Border is 1.7km long by 80m wide compared to the anomaly at Toggenburg that is 2.8km by up to 250m wide. Based on the size of the anomaly at Toggenburg relative to Border the Exploration Target for the entire Border-Toggenburg trend is estimated to be approximately 40-50Mt at a grade of 1.5-2.5% lead-zinc combined. The potential quantity and grade is conceptual in nature because there is insufficient drilling to estimate a Mineral Resource and further exploration may not result in the estimation of a Mineral Resource. Deeper drilling is planned at Border-Toggenburg subject to renewal of the licences and availability of funds for drilling.

**Kaskara** is located on EPL3542 and was discovered by SBR in September 2009. The prospect is located on a circular hill with a vanadium mineralised breccia pipe at the centre (Figure 5). Surrounding the breccia pipe on the hills flanks are ferruginous veins containing lead-zinc-vanadium. Drilling by the Company intersected best results that included KKDD029 21.9m @ 0.45% Cu, 5.79% Pb, 1.81% Zn and 1.41% V<sub>2</sub>O<sub>5</sub>. It was suggested at the time that Kaskara is structurally and lithologically similar to the breccia pipe at the Tsumeb Mine that has produced 24.9Mt at 5.5% Cu, 11.5% Pb, 4.0% Zn and 172g/t Ag. A geophysical survey identified several chargeability anomalies at a depth of several hundred

metres below the hill that may be sulphide bodies similar to those at Tsumeb (Figure 6). The anomalies were not drill tested by SBR at the time.



Figure 5: Aerial view of the Kaskara prospect

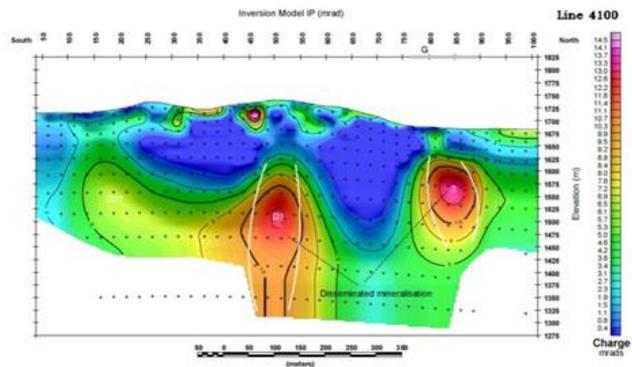


Figure 6: IP chargeability anomalies at Kaskara prospect

The **Guchab** prospect is located in the Otavi Valley to the east of the Kombat Mine that has produced 8.7Mt @ 3.1% Cu, 1.1% Pb and 26g/t Ag. Vein and breccia hosted copper mineralisation within silicified dolomite has been mined via several shallow pits, shafts and adits (Figures 7-9). Drilling by SBR intersected significant copper mineralisation including GCDD005 22.2m at 3.45% Cu, 29.7g/t Ag. Mineralisation appears to be hosted by a splay off the structure that hosts the mineralisation at Kombat. The strike and down plunge extension of the mineralisation has not been tested.



Figure 7: Guchab prospect – Historic workings at Guchab.



Figure 8-9: Vein and breccia style copper mineralisation at Guchab.



The Company's Namibian projects are prospective for lead-zinc, copper and vanadium mineralisation. Pending renewal of the licences by the Ministry additional exploration is considered to increase the existing resources or to locate new high-grade sulphide resources. The resistive dolomite host rocks make electromagnetic surveys (VTEM) an effective method to located large high-grade sulphide deposits at depth up to 400m. This technique could be applied at Kaskara and Guchab to locate new targets for drilling.

The Company is assessing options to generate the best value for shareholders from the projects in Namibia.

## WA VANADIUM PROJECTS

In August 2018, the Company settled the acquisition of 100% interest in Kinetic Metals Pty Ltd (refer to SBR announcement dated 15 August 2018) the holder of a 100% interest in three projects located in Western Australia (Figure 10) with potential for vanadium mineralisation.

A detailed review of the geological setting and previous exploration data for the three projects has been completed and as a result the prospectivity of E47/3985 (Balla Balla) and E57/1092 (Unaly) has been downgraded. Objections have also been received from Native Title parties that hold claims over the areas containing E47/3985 (Balla Balla) and E57/1092 (Unaly). As a consequence, the applications for E47/3985 and E57/1092 have been withdrawn allowing exploration to be focused on the more prospective E80/5219 (Speewah) project. E80/5219 is located in the Kimberley region near King River Copper Limited Speewah Dome vanadium project which hosts a JORC resource of 4.7Bt at 0.3% V<sub>2</sub>O<sub>5</sub>, 2% TiO<sub>2</sub> and 14.7% Fe.

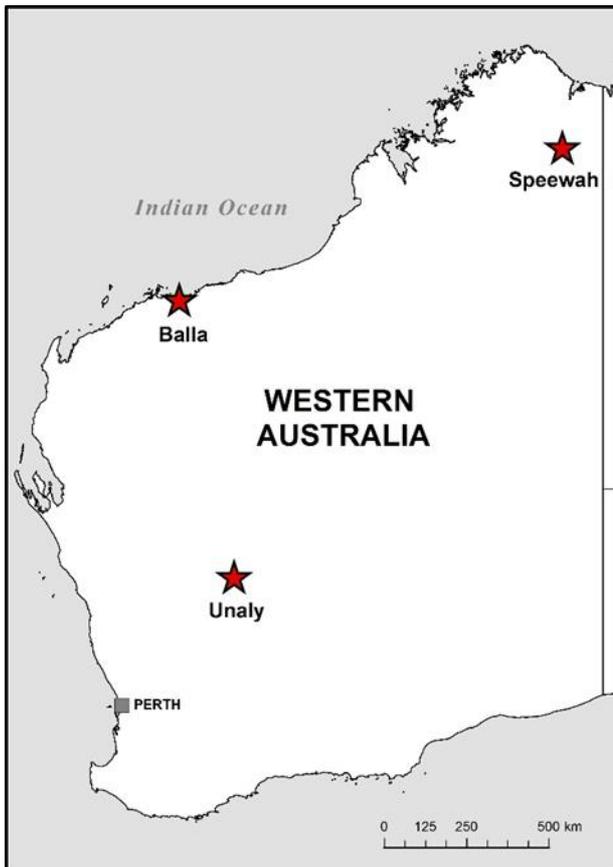


Figure 10: Location diagram of the Company's WA vanadium projects

ENDS

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Or consult our website:

[www.sabresources.com](http://www.sabresources.com)

### **Competent Person Declaration**

The information in this report that relates to Exploration Results, Exploration Targets and Mineral Resource or Ore Reserves is based on information compiled by Mr Martin Bennett, who is a consultant to Sabre Resources Ltd, and who is a Member of The Australian Institute of Geoscientists. Mr Bennett has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr Bennett consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

### **Forward-Looking Statements**

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Sabre Resources Ltd's planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Sabre 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.

## APPENDIX I – TENEMENT SCHEDULE

Country	State/Region	Project	Tenement ID	Area (km <sup>2</sup> )	Date Granted	Date Expires	Interest
Namibia	Otjozondjupa	Otavi Mountain Land	EPL3540	110.98	30/10/2006	29/10/2018	70%
			EPL3542	236.90	30/10/2006	29/10/2018	80%
Australia	WA	Sherlock Bay	M47/567	10.0	07/09/2004	22/09/2025	70%
			E47/1769	44.7	07/09/2009	06/09/2019	70%
			E47/1770	134.3	07/09/2009	06/09/2019	70%
		Speewah	E80/5219*	170.66	-	-	-

\* Exploration License Application

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