

# Redmoor Project Update

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#### **HIGHLIGHTS**

- Preliminary mining study recently completed with encouraging results for both high grade and bulk mining options
- Preliminary mineral processing study recently completed highlighting that Redmoor is a coarse grained, simple to process ore with expected high recoveries and low processing costs
- An evaluation of the Redmoor Project has recently been completed internally by NAE based on the results of the mining and mineral processing studies with encouraging results for both stand alone and toll processing development options
- An exploration drilling program has been planned aimed at conversion of the Exploration Target to
   Inferred Resource and also at improving resource confidence to Indicated Resource status
- Phase 1 of the exploration drilling program comprises of 29 holes (11,920m) and could be split over several stages

#### Introduction

New Age Exploration Limited ("NAE" or "the Company") is pleased to announce that, following the identification of a number of high grade tungsten-tin lodes and an updated Inferred Mineral Resource and Exploration Target being defined in late 2015, further technical studies have now been completed on the development of the Company's 100% owned Redmoor Tungsten-Tin Project in Cornwall, UK ("Redmoor") with encouraging results.

### Redmoor Preliminary Mining Study

A preliminary mining study was recently completed by technical consultants, Mining One. The study included stope optimisation, high level underground mine design and high level capital and operating costs estimates for a bulk mining option and a high grade mining option.

High level mine designs for both options included a simple decline, sumps, stockpiles, ventilation system, escape way and ore access along with a crown pillar from the surface to prevent surface subsidence. The following assumptions were used for both options:

- 1.5m minimum stope width / 25m max stope width
- 15m level spacing between development roadways
- 10% stope mining dilution, 90% stope mining recovery

The underground mining method assumed in the study is bench stoping with backfill (rock fill in conjunction with a form of cemented fill where required).

#### **BULK MINING OPTION**

The bulk mining option was based on the Redmoor Inferred Mineral Resource defined by SRK after the application of a 0.40% SnEq cut-off grade, targeting an Inferred Resource of 8.1Mt at 0.67% SnEq<sup>1</sup> before stope optimization and application of mining dilution and recovery factors. The bulk option has an average stope width of 6 metres.

The bulk option high level mine design includes the majority of the high grade lodes (Johnsons Lode and Great South Lode) and Sheeted Vein System material above the cut-off grade as shown in Figure 1.

#### HIGH GRADE MINING OPTION

The high grade mining option was based on the Redmoor Inferred Mineral Resource defined by SRK after the application of a 0.50% SnEq cut-off grade, targeting an Inferred Resource of 3.5Mt at 0.99% SnEq<sup>1</sup> before stope optimization and application of mining dilution and recovery factors. The high grade option has an average stope width of 3 metres.

The high grade option high level mine design includes the majority of the high grade lodes (Johnsons Lode and Great South Lode) however much less of the Sheeted Vein System material falls above the higher cut-off grade than it does for the bulk option (see Figure 2).

<sup>&</sup>lt;sup>1</sup> NAE Announcement, 15 December 2015 ("Redmoor Resource Update")



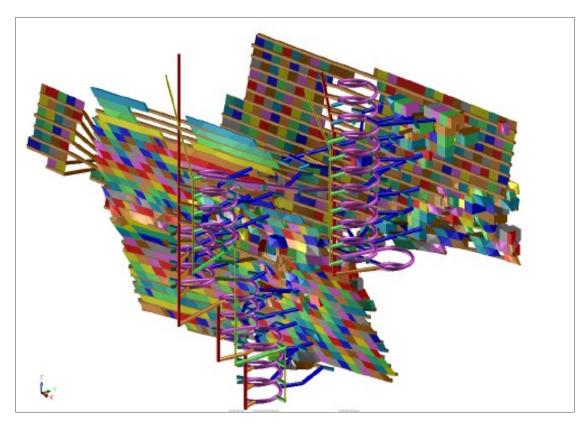


Figure 1: Bulk Mining Option – Preliminary Mine Design (3D View looking NW)

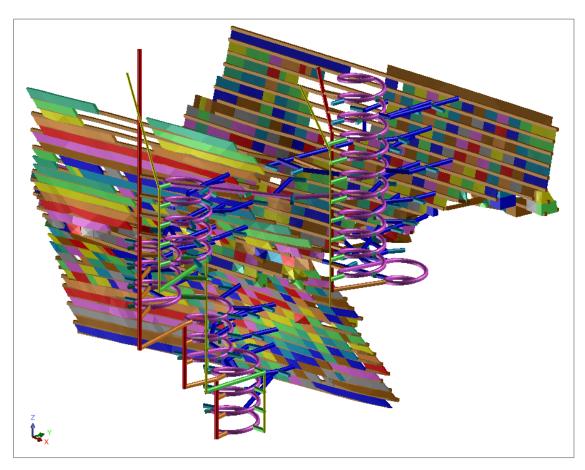


Figure 2: High Grade Mining Option – Preliminary Mine Design (3D View looking NW)



### Redmoor Preliminary Mineral Processing Study

A preliminary mineral processing study was recently completed by metallurgical consultant, Ron Goodman, and included a preliminary metallurgical flowsheet design, capital and operating cost estimates.

The preliminary mineral processing study focused on a review of metallurgical testwork on composited drill core samples undertaken by South West Metallurgical Services (Penzance, Cornwall) and by Robertson Research International (North Wales) commissioned by South West Minerals Ltd ("SWM") in the early 1980's. These studies included determination of a metallurgical flowsheet, expected recoveries and equipment selection for the processing plant. Furthermore, SWM undertook engineering design for a processing plant at Redmoor which has formed the basis for capital and operating cost estimates undertaken as part of the preliminary mineral processing study.

The key findings from the processing study are as follows:

- Tin and Tungsten are present almost entirely in oxide mineral form (Cassiterite and Wolframite). Minor amounts of sulphides (e.g. Chalcopyrite, and pyrite) are also present.
- A pre-concentration stage (Jigs or HMS) can be incorporated on crushed ore to reject ~40% of ROM before grinding with only small metal losses.
- Sulphide minerals, primarily copper, can be relatively easily recovered using flotation after grinding to <300um.
- Tin and Tungsten concentrates of saleable quality (55% Sn in tin concentrate and 60% WO<sub>3</sub> in tungsten concentrate) can be produced by further gravity separation (spirals and tables) followed by concentrate dressing.
- Expected overall process recoveries are 68% Sn recovery and 72% WO<sub>3</sub> recovery
- Recovery of copper is dependent on which stage of the process sulphide flotation is incorporated (35% to 85%).
- Conceptual flowsheet design, capital and operating cost estimates have been completed. Processing
  costs are expected to be low as Redmoor ore is coarse grained, simple to process and has high
  recoveries.
- It is possible to produce just a pre-concentrate on site at Redmoor for further processing at an existing nearby concentrator.

### **Internal Project Evaluation**

An evaluation of the Redmoor project has recently been undertaken by NAE based on the results of the mining and processing studies. The results of both stand-alone Redmoor development cases and toll processing options have been encouraging.

## **Exploration Program**

A 3-Phase Redmoor exploration program has been designed aimed primarily at converting Exploration Target to Inferred Resource and also at improving resource confidence to Indicated Resource status.



#### PHASE 1

Phase 1 of the proposed exploration drilling program is the largest of the three phases and comprises of 29 holes for 11,920m. Key objectives of the Phase 1 drilling program include;

- Targeting along strike and depth extensions of Great South Lode, and Johnson Lode, particularly in the interpreted high grade zones
- Targeting Kelly Bray Lode extensions along strike and at depth below historic workings
- Confirming accuracy of SWM historic drilling, sampling and analysis
- The Phase 1 program could be divided into several stages with first stage focusing on highest potential holes

#### **PHASES 2 AND 3**

Phases 2 & 3 are to follow a successful Phase 1 program and include further extensions along strike and also testing other potential lodes.

Table 1: Redmoor Planned Drilling Program - Phases 1, 2 and 3

	Johnsons Lode		Great South Lode		Kelly Bray Lode		Other Lodes		Total	
	Holes	Metres	Holes	Metres	Holes	Metres	Holes	Metres	Holes	Metres
Phase 1	10	3,795	15	6,705	4	1,420	0	0	29	11,920
Phase 2	6	1,755	7	3,050	2	970	0	0	15	5,775
Phase 3	3	440	2	1,050	2	350	3	600	10	2,440
Totals	19	5,990	24	10,813	8	2,740	3	600	54	20,135



### Competent Person's Statement

The information in this report that relates to Exploration Results and also the Exploration Target and Inferred Mineral Resource is based on information compiled and reviewed by Dr Mike Armitage, who is the Chairman and Principal Geologist of SRK Global and SRK Consulting (UK) Ltd and is a Member of the Institute of Materials, Minerals and Mining (MIMMM), a Fellow of the Geological Society of London (FGS), a Chartered Geologist of the Geological Society of London (CGeol) and a Chartered Engineer, UK (CEng). Dr Armitage has sufficient experience which is relevant to the style of mineralisation and 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'. Dr Armitage has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### **Forward Looking Statements**

This report contains "forward-looking information" that is based on the Company's expectations, estimates and forecasts as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, objectives, performance, outlook, growth, cash flow, earnings per share and shareholder value, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses, property acquisitions, mine development, mine operations, drilling activity, sampling and other data, grade and recovery levels, future production, capital costs, expenditures for environmental matters, life of mine, completion dates, commodity prices and demand, and currency exchange rates. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as "outlook", "anticipate", "project", "target", "likely", "believe", "estimate", "expect", "intend", "may", "would", "could", "should", "scheduled", "will", "plan", "forecast" and similar expressions. The forward looking information is not factual but rather represents only expectations, estimates and/or forecasts about the future and therefore need to be read bearing in mind the risks and uncertainties concerning future events generally.

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