

TECHNICAL MEMORANDUM

RAZORBACK RESOURCE DISCUSSION – JUNE 2019

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Stellar Resources have requested a brief review/discussion of the potential to mine the top part of the historic Razorback Mine remnant resource and the requirements to estimate a probable reserve.

PREVIOUS WORK

A compilation and review of the Razorback data and resource potential was completed by Resource and Exploration Geology in February 2018. Data location, including underground development and sampling is poor and requires rigorous validation.

Extensive drilling and underground exploratory development of the Razorback Mine was undertaken by Placer Prospecting P/L in the period 1964-66 (Clarke, 1965). Placer withdrew after outlining reserves of 195,000 tonnes of 0.83% Sn (oxide ore) and 394,000 tonnes of 0.86% Sn (sulphide ore) defined from underground drilling and bulk sampling programs. Minops operated a small open cut mine between 1975 and 1978 extracting 180,000 tonnes of oxide ore grading 0.6% Sn and producing 53t of tin in concentrate. On closure Minops completed a seven hole drilling program looking for extensions with CRA drilling a further 5 holes until 1982.

MINABLE RESOURCE

A rough ID₂ block modeled Sn estimation was run in 2018 to assess the resource/exploration target below the razorback Open Pit. The estimation was completed on poorly validated data and did not include recent channel samples (unavailable at the time of reporting) or Placer underground sampling (poor location and outside the scope of works). The blockmodel contains mineralisation in the order of 180-220kt @ 0.8 – 1.0% above 180m RL and a Sn cutoff of 0.3% Sn.

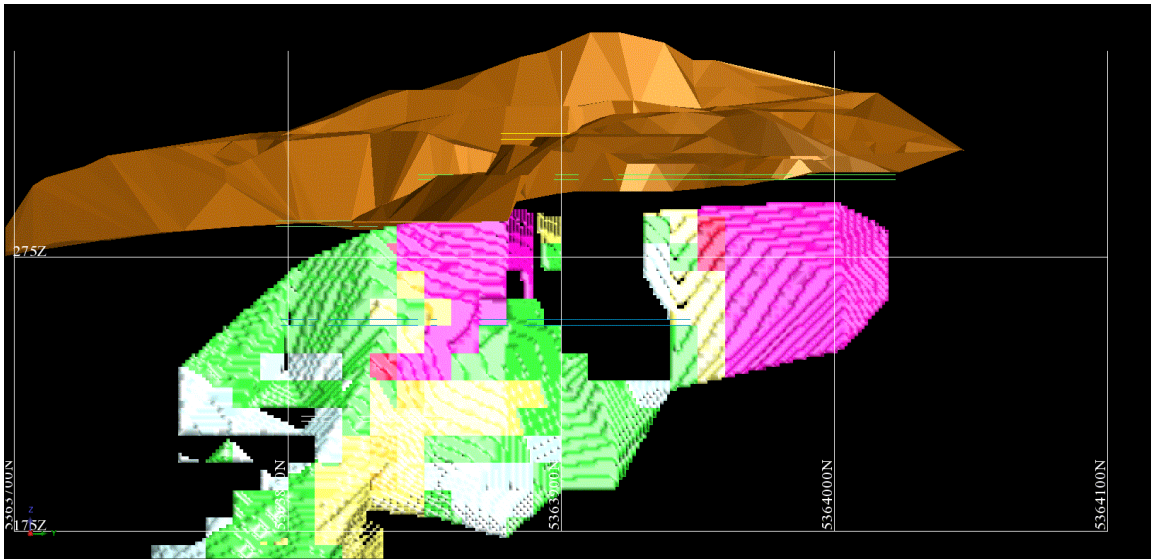


Figure 1. Razorback ID2 estimation, 180-220Kt A 0.8 – 1.0% above 0.3 Sn cut and above 180mRL

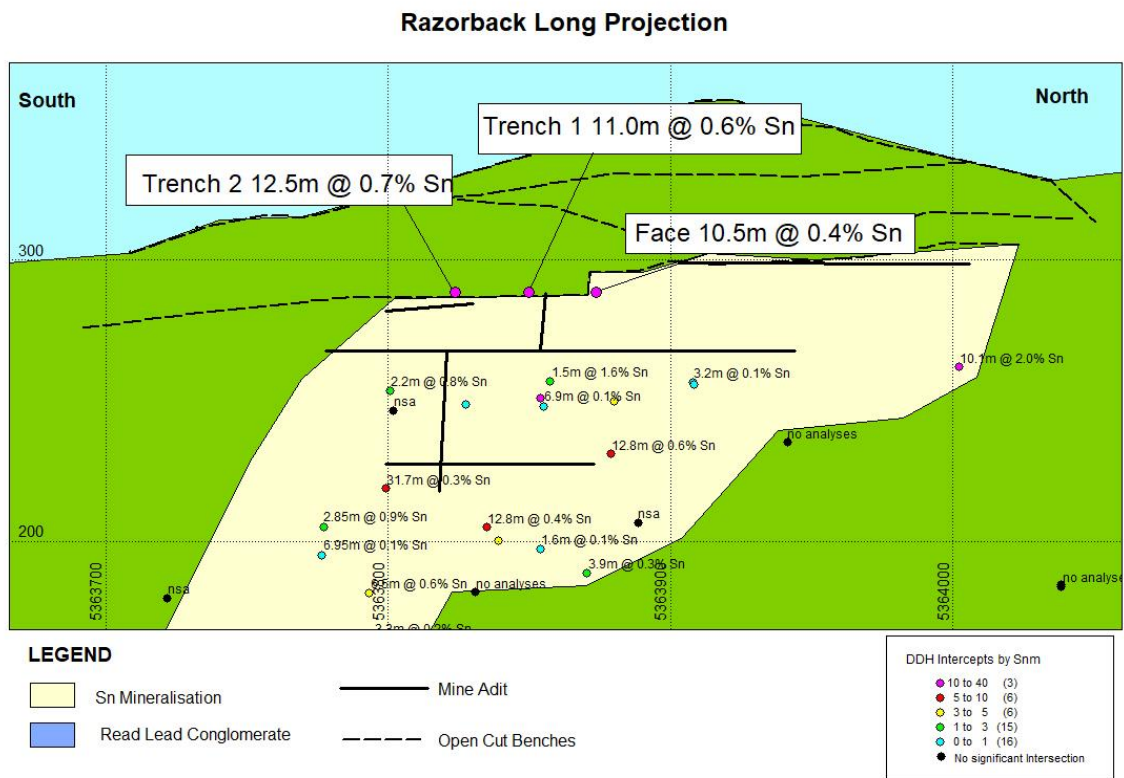


Figure 2. Razorback Long Projection. UR series holes are generally incomplete intersections testing mineralisation in the footwall and hangingwall of mine development. Mine bulk samples could be used for resource estimation once properly located.

The estimate is biased by the lack of infill data close to northern drillhole MD2 which may result in an over estimation of the grade. Although of poor quality, the ID₂ estimate tonnes and grade is in line with the previous Placer and Minops estimations. It is unclear how much of the mineralisation is oxide and sulphide but sulphur assays in the channel

samples would suggest that much of the remainder would be mainly sulphide. Minops estimated a remnant reserve of 80,000t of oxide at 0.75% Sn and 120,000t @ 0.9% Sn of sulphide ore.

A list of drill intercepts within the mineralisation shell are presented in Table 1. The average unweighted intercept grade is 0.65% Sn. Many of the intercepts are incomplete.

The area of the resource is likely to be 150 to 200m in strike length 10m thick at the surface narrowing to 2-3m at depth although this is based on poorly located and incomplete data.

Deposit dimensions and indicative grades above 180mRL all support a potential minable resource in line with the ID₂ and previous estimates.

To obtain an estimation that could be classified according to the guidelines of the 2012 edition of the JORC Code data location would need to be improved. The inclusion of the underground bulk samples would assist. In addition, an estimated 8 diamond drillholes of 80 to 100m length, approximately 700m total would be required to define a probable reserve.

Hole Id	Y	X	Z	From	To	Length	Sn%
MD1	5363836	369363.3	248.277	59.44	67.45	8.01	0.5497
MD2	5364003	369334.4	263.628	59.4	69.5	10.1	1.9877
R1	5363839	369376.8	200.152	89.9	94.5	4.6	0.8012
R12	5363870	369370.1	188.883	112.5	116.4	3.9	0.2583
RZS1	5363793	369390.3	181.585	92	98.5	6.5	0.5832
RZS4	5363777	369377.1	199.332	78.6	95.7	17.1	0.2382
UR10	5363909	369343.1	249.869	0	3.2	3.2	0.1486
UR11	5363886	369360.2	200.241	51.8	53.3	1.5	0.0398
UR12	5363909	369342.8	249.476	1.4	2.12	0.72	0.63
UR13	5363852	369372.5	191.715	59.4	61	1.6	0.1083
UR14	5363856	369369.6	246.979	6.81	12.22	5.41	0.0385
UR16	5363800	369365.1	247.038	3.05	6.1	3.05	0.5951
UR18	5363799	369367	212.25	22.9	54.6	31.7	0.3317
UR19	5363827	369364.3	242.162	7.6	10.7	3.1	0.148
UR22	5363855	369370	250.272	7.6	9.1	1.5	1.5295
UR3A	5363925	369339.3	251.215	1.45	3.48	2.03	0
UR4	5363925	369339.6	249.779	1.83	4.42	2.59	0.0359
UR5	5363878	369370	224.534	21	33.8	12.8	0.5987
UR6	5363945	369333.7	250.27	7.62	9.14	1.52	0.89
UR8	5363854	369376.3	244.432	2.6	11	8.4	3.6874

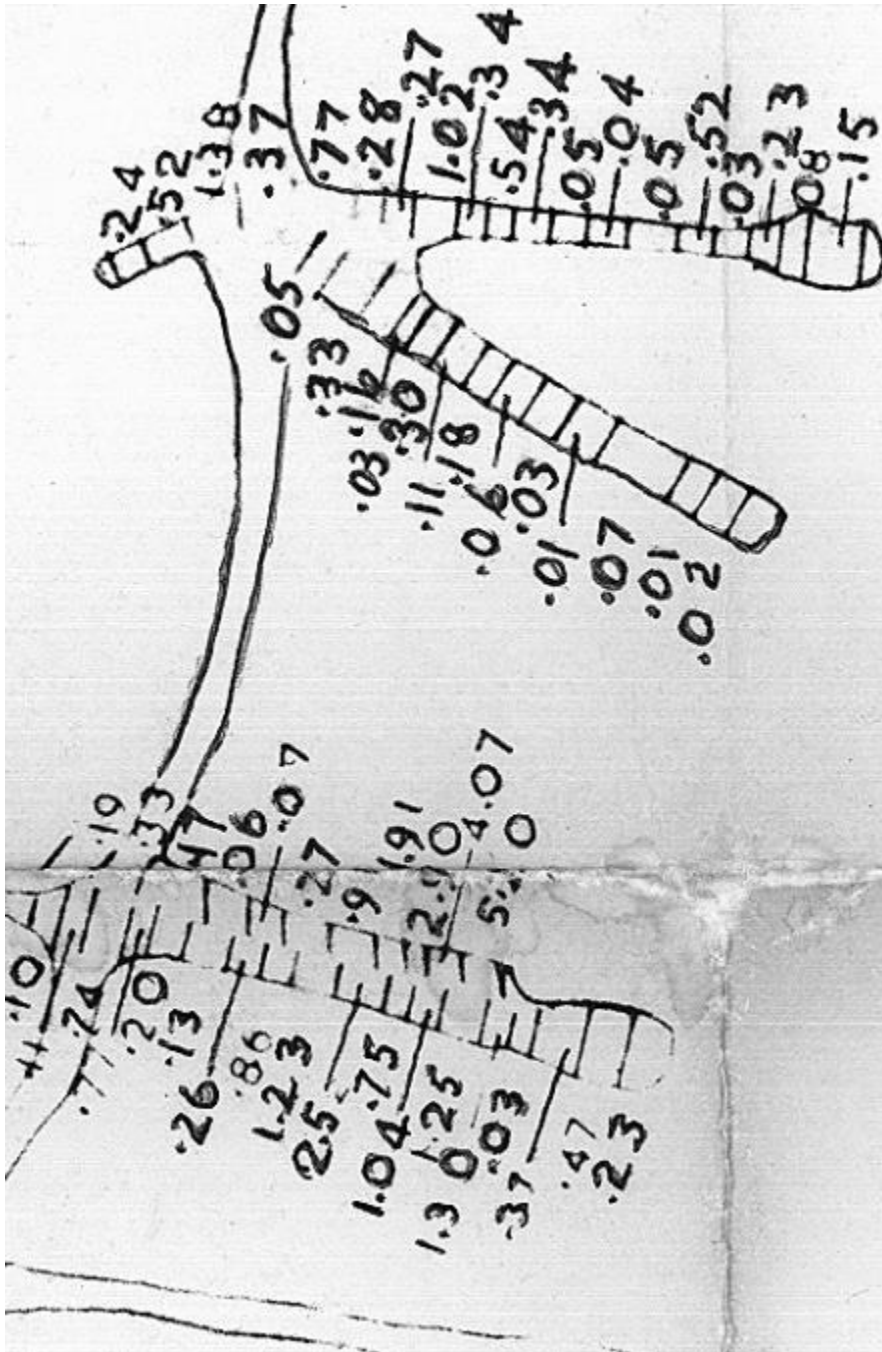


Figure 3. Example of 720 level bulk/chip Sampling.

PROPOSED MINE DEVELOPMENT

A retreat Avoca style stope leaving a glory hole below the current pit would be the preferred mining method. An aggressive pit design with a 60° total batter angle, no benches or ramp from the 580 level (210mRL) to surface contains approximately 150kt of resource at 1% Sn and 3.2Mt of waste with a stripping ratio in the order of 1:22 t/t. The Avoca style retreat stope would clearly be lower cost and have less environmental impact, recovering approximately the same resource.

The 720 level was accessed from the bottom of the valley with a slight incline for drainage. The deeper 580 level was developed by a winze from the 720 level. A 200m 3.5x4.0m decline could be developed from the valley floor, 245m RL to around 210m RL (approx 580 level), accessing the top 60-70m of the remnant resource. If a sub level was required (30m stope heights) total development would be in the order of 500m including level development for a capital cost of approximately \$1.5M. Smaller equipment may be able to be used depending on the required production rates, decreasing capital cost.