

Value Engineering Study Completed

Sulphur Springs Zinc-Copper Project a Robust Development Opportunity

Highlights

- Base case 1Mtpa project delivers 32,000tpa zinc, 12,000tpa copper over 12 years
- Pre-tax NPV_{8%} of A\$338M and 52% IRR at study prices
- Peak Cash Draw of A\$183M
- Forecast life-of-mine pre-tax cash-flow of A\$601M; 1.6 year capital pay-back
- C1 cost US\$0.14/lb payable zinc
- Project significantly enhanced by potential to treat supergene mineralisation through proposed flotation plant
- Excellent exposure to strengthening zinc and copper prices
- Low capital option to increase production rate to 1.25Mtpa
- Further opportunities to add value through exploration

Based on these robust results the Company is progressing with amending the existing permits to reflect the changes to the project, infill drilling the supergene and discussions are underway with financiers and potential development partners.

Value Engineering Study Parameters - Cautionary Statement

The Value Engineering Study (VES) referred to in this announcement has been undertaken to reduce the risks associated with the implementation and operation of the Sulphur Springs Project and improve the value to stakeholders in the project when compared to the project contemplated in the Definitive Feasibility Study completed by Venturex in 2012. It is based on a comprehensive study that has determined an alternative open pit configuration and underground mining method to extract the minerals in the Sulphur Springs deposit and confirmed an effective method to process them. It includes a financial analysis based on assumptions on the Modifying Factors and the evaluation of other relevant factors estimated by a Competent Person to be at the level of a Pre-Feasibility Study.

The Value Engineering Study does not provide any assurance of an economic development case, does not provide certainty that the conclusions of the study will be realised, and is based on the material assumptions outlined below. These include assumptions about the availability of funding. While Venturex considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Value Engineering Study will be achieved.

To achieve the range of outcomes indicated in the Value Engineering Study, funding in the order of A\$200 million will be required. Investors should note that there is no certainty that Venturex will be able to raise that amount of funding when needed. The Company has conducted preliminary discussions with potential debt and equity providers and offtake and potential development partners, and will continue discussions to progress funding options. However, it is also possible that such funding may only be available on terms that are dilutive to or otherwise affect the value of Venturex's existing shares.

It is therefore possible that Venturex will pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Venturex's proportionate ownership of the Project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Value Engineering Study. The Production Target contained in the Value Engineering Study includes material classified as Ore Reserves and Inferred Resources. Material classified as Ore Reserves contributes ~66% of the material within the Production Target and Inferred Resources contribute ~34% of material included within the Production Target.

There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources or that the Production Target itself will be realised.

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The preliminary work schedule provided within this report is subject to, amongst others, the Company being able to successfully increase the geological confidence to convert Inferred Resources to Ore Reserves, secure required funding or a development partner as and when required to advance the project, and gaining the relevant amendments to existing permits. A delay in one or more of these items has the potential to delay the preliminary work schedule provided within this report and the corresponding information derived from the timeline.

The stated Production Target is based on Venturex's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that the Production Target will be met. Venturex has completed sensitivity analysis as set out below to satisfy itself that these Inferred Resources, particularly those early in the mine plan, do not determine the viability of the project.

Australian base metals developer Venturex Resources Limited (the "Company" ASX: VXR) is pleased to report highly encouraging results from a Value Engineering Study (VES) completed on its 100% owned **Sulphur Springs Zinc-Copper Project** in WA's Pilbara. The Sulphur Springs Project includes the Sulphur Springs and Kangaroo Caves deposits and the associated tenements covering 27 km of the highly prospective Panorama trend.

The VES represents a major advancement on the Feasibility Study completed by Venturex in December 2012 and a subsequent Optimisation Study in November 2015, outlining a robust development pathway with improved economics, a reduced risk profile and a lower capital cost.

A key enhancement outlined in the VES has been the identification of the ability to potentially process inferred supergene ore located at the top of the Sulphur Springs deposit through the proposed flotation plant. This opens up the opportunity to mine and process high-margin near-surface material at the front end of the production schedule, significantly improving project economics and capital payback.

The VES demonstrates that Sulphur Springs is a highly robust base metals project which is well positioned for development, particularly against the backdrop of improving zinc and copper prices.

Contributors to the Study and the respective areas are noted on page 19.

Key Outcomes of the Study

The Base Case derives a pre-tax NPV_{8%} of A\$338 million and an IRR of 52% from a 1Mtpa project with an initial mine life of 12 years, producing on average 32,000t zinc and 12,000t copper metal in concentrates annually.

The Base Case derives **A\$601** million of pre-tax cash flow over the project life with a **C1** cost of **US\$0.14** per pound of zinc. The maximum cash draw-down is estimated at A\$183 million.

The VES includes revised and more robust Resource models, more appropriate and lower cost mining methods and scheduling improvements that have resulted in operating and capital cost reductions. Table 1 summarises the key metrics of the study.

The Study has identified an opportunity to increase production to 1.25Mtpa and improve the pretax NPV_{8%} to A\$388 million. Details of this are shown in Table 1 below.



Table 1: Sulphur Springs Project Base and Higher throughput Cases- Key Summary Outcomes

| Metric | Unit | Base Case | | Higher throu | ighput option | |
|---------------------------|-------------------|----------------------------|----------------|----------------|--------------------|--|
| Throughput | | 1.00 | Mtpa | 1.25 Mtpa | | |
| Production target * | | 11.7Mt @ 3.69 | % Zn, 1.4% Cu, | 11.7Mt @ 3.6% | Zn, 1.4% Cu, 15g/t | |
| | | 15g/ | ∕t Ag | | Ag | |
| Peak cash draw | A\$ million | 18 | 83 | 1 | .94 | |
| Pricing and FX | | Study Prices | Spot | Study Prices | Spot | |
| | | Zn US\$1.15/lb | Zn US\$1.29/lb | Zn US\$1.15/lb | Zn US\$1.29/lb | |
| | | Cu US\$2.93/lb | Cu US\$2.72/lb | Cu US\$2.93/lb | Cu US\$2.72/lb | |
| | | A\$:US\$0.76 A\$:US\$0.754 | | A\$:US\$0.76 | A\$:US\$0.754 | |
| Pre-Tax NPV _{8%} | A\$ million | 338 | 402 | 388 | 460 | |
| C1 cost zinc | US\$ per lb | 0.14/lb | 0.16/lb | 0.09/lb | 0.11/lb | |
| Pay-back period | Years | 1.6 | 1.7 | 1.4 | 1.5 | |
| IRR | % | 52% 54% | | 60% | 63% | |
| Mine Life | Years | 12 | | | 10 | |
| Zinc production | Tonnes/year (Ave) | 32,000 | | 39 | ,000 | |
| Copper production | Tonnes/year (Ave) | 12, | 000 | 15 | ,000 | |

^{*} This Production Target must be read in conjunction with the cautionary statements on page 1 and Appendix 3 and the Material Assumptions set out in Appendix 2.

Project Overview

The Base Case development scenario for the Sulphur Springs Project is based on mining and processing ore at the rate of 1Mtpa from a **Production Target of 11.7 Mt at 3.6% zinc and 1.4% copper** to produce approximately **32,000** tonnes of zinc and **12,000** tonnes of copper in separate zinc and copper concentrates annually.

Mining will initially take place via an open pit followed by bulk underground mining using a core and shell method. A conventional sulphide flotation plant will be used to produce two high quality concentrates that will be trucked to Port Hedland and shipped in bulk to Asian ports.

Site infrastructure required for the Project is typical for a green-fields development project of this size and nature. Infrastructure required will include upgrading of the existing 6 km access road, construction of a sulphide processing plant, site administration/accommodation buildings, workshop, diesel-fired power station and water treatment plant.

Tailings are planned to be stored in a conventional valley-fill dam. The Tailings Storage Facility (TSF) is designed to meet Australian guidelines (which are generally consistent with international guidelines) and includes a combined HDPE and compacted sub-base liner.

The Project has granted mining permits already in place (refer ASX announcement 13 March 2014) for a development based solely on an underground operation.

The Company is currently engaging with the relevant government bodies to determine the approval pathway that is required to amend the existing permits to allow for the proposed open pit/underground development outlined within this report.

The low implementation and operating risk profile make the project robust. The combination of zinc and copper production makes the project particularly attractive against a backdrop of improving sentiment for both zinc and copper.



Project Background

The Sulphur Springs Project is a development-ready base metal project with an estimated 10 to 12-year life producing from the Sulphur Springs and Kangaroo Caves volcanogenic massive sulphide ("VMS")-style zinc-copper deposits.

The Project has a **substantial Resource base of 740,000t and 230,000t of contained zinc and copper** respectively (possible rounding) (refer ASX announcements 22 September 2015 and 11 May 2016) and an **Ore Reserve of 255,000t and 84,000t of contained zinc and copper** respectively (refer ASX announcement 1 July 2016). Further details of the Project's Mineral Resources and Ore Reserves can be found within this report under the sections titled "Geology and Resources", "Mining and Reserves" and "Material Assumptions".

The Project is located approximately 144km SSE of Port Hedland. Access is via the sealed Marble Bar Road for 82km and an existing unsealed haul road for 62km that runs to within 6km of the project site. The Project is located on granted Mining Leases with an existing Mining Agreement in place with the Njamal people. The Project is 100% owned by Venturex.

The Value Engineering Study is the culmination of optimisation studies that have been carried out on the Sulphur Springs Project since the release of the Definitive Feasibility Study ("DFS") in 2012 (refer ASX announcement 18 December 2012). Subsequent to the release of the DFS in 2012, further optimisation work has been completed on the project (refer ASX announcements 1 October 2015 and 4 November 2015).

Management Comment

Venturex's Managing Director, John Nitschke, said the highly successful Value Engineering Study had delivered a number of important outcomes which confirmed the robust nature of the Sulphur Springs Project.

"We already knew from the extensive work completed historically that Sulphur Springs ticked all the boxes as an attractive base metals development opportunity in a premier mining jurisdiction," he said.

"The work completed as part of the Value Engineering Study since the release of the DFS in December 2012 has further strengthened this work, with the recent identification of the potential to treat the supergene material through the proposed flotation plant representing another really important breakthrough for the Project.

This reduces the upfront capital cost and greatly simplifies the Project together with allowing early production from this high value material.

The next steps for this Project include progressing the required changes to existing permits and infill drilling various parts of the resource, in parallel with ongoing discussions with various parties with a view to identifying the best option available to the Company to progress the project through to production". he added.

"There is also still significant upside available from further exploration at both Sulphur Springs and Kangaroo Caves.

The study represents the culmination of some great technical work by our key consultants, Hardrock Mining Consultants, Entech Mining Consultants, Lycopodium, Knight Piesold and MBS.



With zinc and copper prices maintaining their recent upward trajectory, now is the time to be forging ahead with a quality base metals development project like Sulphur Springs. With a great resource in a premier mining jurisdiction and a low risk and financially robust development plan Sulphur Springs has all the attributes required to be a long-life, high margin base metals mine," Mr Nitschke said.

Key Components of the Study

Geology and Resources

The Sulphur Springs and Kangaroo Caves deposits are VMS zinc and copper deposits located in the central east of the Archean Pilbara Craton, in the north-west of Western Australia. The mineralisation lies within the Kangaroo Caves Formation of the Sulphur Springs Group of volcanic and sedimentary rocks. The regional metamorphic grade is low with many original volcanic and depositional features preserved.

The Sulphur Springs deposit is located wholly within Mining Lease M45/494, with associated infrastructure to be located on M45/653, M45/1001, L45/189, L45/173 and L45/170. The Kangaroo Caves deposit is located on Mining Lease M45/587. Venturex has a 100% interest in all tenements.

There is a high degree of confidence in the interpretation of the Sulphur Springs and Kangaroo Caves mineralisation as it is based on detailed surface mapping of the mineralisation which drilling has demonstrated to continue at depth.

The Sulphur Springs mineral deposit is a single stratabound VMS mineralising event which has been off-set into two massive sulphide lenses (East and West) by a post-mineralisation sub-vertical fault. The deposit has a strike length (east-west) of 500 metres with economic mineralisation up to 16 metres true width to a depth of 400 metres. Each lens dips to the north at approximately 45-55°. Underlying the massive ore is a volcanic rock sequence which contains disseminated copper mineralisation that will be recovered by the open pit and may contain economic grades.

The Kangaroo Caves Deposit, which lies 6km south-west of Sulphur Springs, is in the same stratigraphic position as Sulphur Springs and similar in character.

The Sulphur Springs Project is based on the Sulphur Springs and Kangaroo Caves Resources (*refer ASX announcements 22 September 2015 and 11 May 2016*). The Project has 740,000t of zinc and 230,000t of copper contained within Resources.

The Sulphur Springs Project Resources are provided in Table 2 below (are reported on a cut off of 0.4% Cu and less than 0.4% Cu and greater than 2% Zn).



Table 2: Sulphur Springs Project Resources

| Classification | Ore Type | Mt | Cu % | Zn % | Ag ppm | S % | | | |
|-----------------|-----------------|-------|-------|------|--------|-----|--|--|--|
| Sulphur Springs | Sulphur Springs | | | | | | | | |
| Indicated | Fresh | 6.7 | 1.3 | 4.3 | 17 | 25 | | | |
| | Transition | 1.6 | 1.5 | 4.1 | 18 | 27 | | | |
| Inferred | Fresh | 3.7 | 1.1 | 4.0 | 17 | 25 | | | |
| | Transition | 0.6 | 1.4 | 3.9 | 20 | 27 | | | |
| | Supergene | 0.8 | 4.2 | 0.8 | 23 | 28 | | | |
| Total | | 13.4 | 1.5 | 4.0 | 18 | 26 | | | |
| Metal | Contained | '000t | 195 | 527 | 7.8M* | | | | |
| Kangaroo Caves | | | | | | | | | |
| Indicated | Fresh | 2.25 | 0.93 | 5.7 | 14 | 12 | | | |
| Inferred | Fresh | 1.3 | 0.5 | 6.5 | 18 | 9 | | | |
| Total | | 3.6 | 0.77 | 6.0 | 15 | 11 | | | |
| Metal | Contained | '000t | 28 | 213 | 1.7M* | | | | |
| Grand Total | | 17.0 | 1.4 | 4.4 | 17 | | | | |
| Metal | Contained | '000t | 230 ¹ | 740 | 9.5M* | | | | |

^{*} Ounces

An improved resource model and estimate has been prepared for the Sulphur Springs Project which has provided better definition of the mineralisation types to be treated and waste products to be generated by the open pit. The improved Resource models have allowed for improved identification and domaining of ore types. The new Sulphur Springs Resource identified near surface high grade supergene copper mineralisation.

Historical assessment of the transitional mineralisation has indicated that any adverse effects on metallurgical performance may be limited to mineralisation within 20 to 30 metres of the oxide front and localised to deep seated weathering along the major faults of the deposit and resource tonnages affected will be limited, and identified and managed by the grade control processes in the open pit.

Significant exploration upside in the immediate area of both the Sulphur Springs and Kangaroo Caves area (*refer ASX announcement 17 May 2013, 4 November 2015 and 11 December 2015*) has been identified.

The recent success with downhole geophysics at the Company's Whim Creek Project gives confidence that the adoption of modern down-hole geophysical techniques and visualisation tools combined with sound geological models can identify prospective targets in the Sulphur Springs Project area.

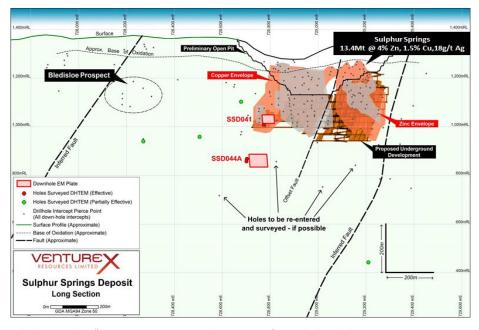


Figure 1: "Downhole TEM Plate" Representing potential extension of West lode Sulphur Springs

^{1.} The Indicated Resources within the Sulphur Springs deposit are inclusive of those Mineral Resources modified to produce the Ore Reserve. The Indicated Resources within the Kangaroo Creek deposit are additional to the Ore Reserve.



There are a number of advanced prospects that warrant further follow-up and evaluation to the south-east of the Sulphur Springs and Kangaroo Caves deposits along the 27km strike length of prospective stratigraphy (Figure 2) that makes up the Panorama trend. Prospects with ore grade intersections include the following:

- Breakers (25m @ 3.8% Zn, 9m @ 3.2% Zn);
- Man of War (4m @ 3.6% Zn, 23m @ 0.6% Zn; 17m @ 0.3% Cu) and
- Jamesons (6m @ 3.2% Zn, 3m @ 8.0% Zn).

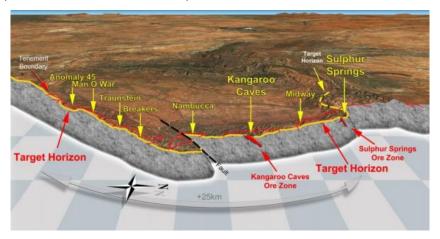


Figure 2: Schematic long section along the prospective contact

Mining and Reserves

The Sulphur Springs Project is to be mined by a combination of open pit and underground methods, using contractors, to extract the Production Target provided in Table 3.

Table 3: Sulphur Springs Project Production Target *

| | Material mined |
|-----------------------------|---------------------------------------|
| Sulphur Springs Open Pit | 5.0Mt @ 3.5% Zn, 1.8% Cu, 16.8 g/t Ag |
| Sulphur Springs Underground | 4.9Mt @ 3.7% Zn, 1.3% Cu, 16.7 g/t Ag |
| Kangaroo Caves Underground | 1.8Mt @ 3.8% Zn, 0.7% Cu, 10.4 g/t Ag |
| Total Production Target | 11.7Mt @ 3.6% Zn, 1.4% Cu, 15g/t Ag |

^{*} This Production Target must be read in conjunction with the cautionary statements on Page 1 and Appendix 3 and the Material Assumptions set out in Appendix 2.

The Sulphur Springs deposit has an existing open pit and underground Ore Reserve of 255,000t of contained zinc and 84,000t of contained copper see Table 4 and refer ASX announcement 1 July 2016.

Table 4: Sulphur Springs Ore Reserve used within the Study *

| Description | Category | Tonnes '000 | Cu (%) | Cu (t) | Zn (%) | Zn (t) | Ag(g/t) |
|-------------|----------|----------------|--------|--------|--------|---------|---------|
| Open pit | Proved | - | - | - | - | - | - |
| | Probable | 2,930 | 1.3 | 39,000 | 4.2 | 122,000 | 15.8 |
| | Total | 2,930 | 1.3 | 39,000 | 4.2 | 122,000 | 15.8 |
| | | | | | | | |
| Underground | Proved | - | - | - | - | - | - |
| | Probable | 4,350 | 1.0 | 45,000 | 3.1 | 133,000 | 13.5 |
| | Total | 4,350 | 1.0 | 45,000 | 3.1 | 133,000 | 13.5 |
| | | | | | | | |
| Total | Proved | - | - | - | - | - | - |
| | Probable | 7,280 | 1.2 | 84,000 | 3.5 | 255,000 | 14.4 |
| | Total | 7,280 | 1.2 | 84,000 | 3.5 | 255,000 | 14.4 |

^{*} This Reserve is a subset of the Resources in Table 2 (Sulphur Springs Project Resources)



Sulphur Springs - Open Pit

The open pit mine life is currently projected to be approximately 5.5 years with an ore production rate of 1.0Mtpa. This is at a stripping ratio of approximately 8.3:1, including pre-strip, and will result in mining approximately 17.4Mbcm of material from the final pit.

Ore will be transported to the ROM pad via a haul road, and waste rock will be hauled to a dump to the south of the pit. The open pit will be the source of all mill feed during the ramp-up phase and initial 5 years of processing.

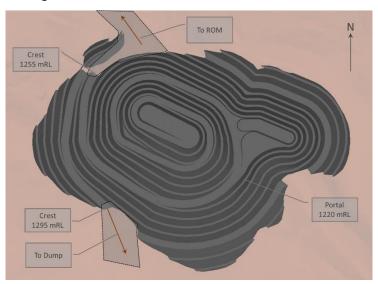


Figure 3: Sulphur Springs open pit design

Mine operating costs, covering direct mining costs and an allocation of indirect costs, total \$172.6M or \$34.46/t mill feed. Mining costs have been based on tendered rates received from an experience mining contractor. Capital costs for the open pit, including the establishment and development of the open pit mine, total \$16.9M or \$3.37/t mill feed.

Waste Management

Characterisation studies have been carried out on waste from the open pit and the distribution of potentially acid forming waste (PAF) is well defined. All pyritic PAF waste that is mined with the economic mineralisation will be disposed of in the underground. Less than 16% of the remaining waste rock from the open pit is PAF and this will be either placed underground or encapsulated in the waste rock dump.

Geotechnical

The expected underground geotechnical conditions are well understood. The Rock Mass Classification for host and orebody rocks is Very Good. Areas of poor rock mass conditions appear to be discrete and associated with local structures. The shallow depth of mining means that stress and seismicity risk is low.

Sulphur Springs - Underground Mining

Detailed mine sequencing shows that a minimum mine production rate of 1.0Mtpa mill feed can be produced from the Production Target in Table 3. Total mining operations including initial mine development and subsequent production will take place over a period of 6.5 years, with steady state production being achieved over three of those years.

A core and shell method will be used to mine the east lode below the open pit. This method involves the initial extraction of a core using conventional open stoping followed by mass blasting of the rib and floor pillars formed. Waste rock is introduced into void as ore is recovered providing support to the host rocks. This method has the advantage of low development costs, high productivity and low fill costs with over 50% of the ore being recovered in the core stopes without exposure to fill. Conventional open stoping will be used to extract the west lode.



Underground mine operating costs, covering direct mining costs and an allocation of indirect costs, are estimated to be \$181.9M or \$37.19/t mill feed. Capital costs, covering direct and indirect costs and mining-related project capital, total \$30.5M or \$6.23/t mill feed.

A decline will be mined from a mine portal established on the footwall side of the orebody in the open pit at the 1,220 mRL. The decline is positioned to allow good access to both the East and West lodes.

Mine development in both ore and waste areas will use fibrecrete support together with fully encapsulated resin rock bolt anchors to provide effective long term ground support. Provision has been made to support waste development intersections and ore development drives with cablebolts to support stope blocks if required.

Primary ventilation is based on a single surface exhaust fan. Fresh air will be drawn from a central intake raise as well as from the mine portal. The current mine design does not require cooling of the ventilation air.

Kangaroo Caves - Underground

Kangaroo Caves has been reviewed as a high-level study based on top-down longitudinal open stoping mining methods. The underground operation is assumed to be accessed via a portal and decline from surface. Due to the flat-dipping nature of the ore body longitudinal ore drives on 10m level intervals with two levels being mined off one level access have been selected resulting in level accesses off the decline designed on 20m level intervals. Kangaroo Caves provides the Production Target set out in Table 3 for the Sulphur Springs Project.

Underground mine operating costs, based on benchmarking, covering direct mining costs and an allocation of indirect costs are assumed to be \$108M or \$58.85/t mill feed. Capital costs, covering direct and indirect costs and mining-related project capital, total \$17.4M or \$9.48/t mill feed.

Processing and Metallurgy

Extensive metallurgical test work has been carried out. The proposed flowsheet is based on metallurgical test work programs carried out by Outotec in 2001/02 and GR Engineering Services in 2012. A conventional SAG Ball mill configuration milling ore 80% passing to 63 micron feeds a flotation plant where copper and zinc sulphides are sequentially floated into separate concentrates that are then thickened and filtered prior to trucking to Port Hedland.

The zinc concentrate produced from Sulphur Springs will have a high grade of 55% zinc with low iron and will be particularly attractive in the market. The copper concentrate produced will have a grade of 26% copper.

Test work has confirmed that the concentrates have good thickening, filtration and materials handling characteristics. Based on work completed the metallurgical assumptions presented in Table 5 have been used within the Study.

Table 5: Summary of Key Metallurgical Assumptions for the Sulphur Springs Project

| Parameter | Assumption |
|----------------------|------------|
| Plant throughput | 1mt / yr |
| Zn recovery | 93% |
| Cu recovery | 90% |
| Zn concentrate grade | 55% |
| Cu concentrate grade | 26% |
| Plant availability | 91.3% |



No metallurgical test work has been carried out on material from the Kangaroo Caves deposit. This deposit has similar mineralogy to the Sulphur Springs deposit and is therefore expected to have similar metallurgical performance.

The proposed process plant follows a simple layout based on widely used existing flotation techniques. The proposed flow sheet is provided in Figure 4.

Site Water Requirements

The water balance shows a make-up water requirement of up to 1,800 kl per day is required to meet the project's needs. Modelling indicates that the majority of this can be sourced from mine dewatering which is estimated to be capable of supplying 1,600 kl per day (reducing to 1,140 kl per day with time). Make-up water will be sourced from either the tailings dam return and existing or new bores. Mine water and any return from the tailings dam will be treated through a water treatment facility.

Infrastructure

Infrastructure required is typical for a new project of this size and scale. Required infrastructure includes; power station, communications, processing plant and buildings, accommodation village, raw and potable water and tails facility amongst others.

The Sulphur Springs site is located 6.1km from the haul road to the Atlas Iron Abydos mine. An agreement is in place for Venturex to use the haul road for access and trucking of concentrate upon payment of a share of the capital cost and ongoing maintenance on the road.

Power will be generated on-site via a diesel-fired power station with 10MW of installed capacity.

The Project site will be designed such that any contaminated water run-off or seepage will be collected and pumped to the TSF which is designed to contain a 1 in 100 year rainfall event.

A 200-room permanent village will be established on site and a 200-person camp will be rented to supplement this during construction. The Project will be operated on a drive-in/drive-out basis out of Port Hedland. It is expected that a significant portion of the workforce will live in Port Hedland with the remainder commuting from Perth and other centres.

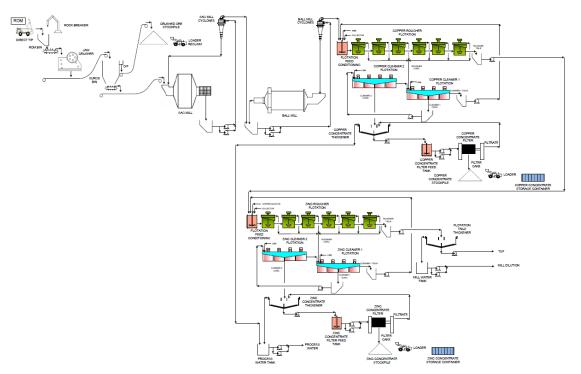


Figure 4: Sulphur Springs Project Processing Flowsheet



Environmental, Social & Heritage, Permitting

Permitting

A Clearing Permit, Mining Proposal and Mine Closure Plan for the Project were approved by the Department of Mines and Petroleum of Western Australia (DMP) in 2014 (*refer ASX announcement 13 March 2014*). This approval was granted based on the project being developed using only underground mining methods and dry stacking tailings.

These approvals need to be modified to reflect the use of an open pit to extract the top half of the Sulphur Springs deposit and the use of a conventional valley fill tailings dam. These changes have been referred to the West Australian Environmental Protection Authority (EPA) for determination of the level of assessment required to permit the changes. A decision on this is expected in early 2017. Secondary environmental approvals will be required under the Mining Act 1978 and Part V of the Environmental Protection Act. Permitting may take 6 to 15 months depending on the level of assessment determined by the EPA.

Venturex has received competent advice that with the application of good industry practice supported by appropriate investigation and design and on the basis of recent projects approved by the regulators that the amended project is likely to be approved.

Project Schedule

The preliminary work schedule in Figure 5 indicates that the Project could be in production by mid-2019.

| | CY 2016 | | CY 2 | 2017 | | CY 2018 | | | | CY 2019 | | |
|---------------------------------|------------|----|------|------|----|---------|----|----|----|---------|----|----|
| | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 |
| Project Referral | | | | | | | | | | | | |
| Mining Proposal Amendment | | | | | | | | | | | | |
| Supergene Drilling & Test-work | | | | | | | | | | | | |
| Water License & Works Approvals | | | | | | | | | | | | |
| Financing | | | | | | | | | | | | |
| Process Plant Construction | | | | | | | | | | | | |
| Plant Site Earthworks | | | | | | | | | | | | |
| Open Pit Development | | | | | | | | | | | | |
| Process Plant Commissioning | | | | | | | | | | | | |
| Production Ramp-up | | | | | | | | | | | | |
| Full Production | | | | | | | | | | | | |

Figure 5: Preliminary Project Work Schedule

* This work schedule must be read in conjunction with the cautionary statements on Page 1 and Appendix 3 and the Material Assumptions set out in Appendix 2.



Operating, Capital and Financial

Operating Cost

Based on the Production Target in Table 3 the average operating cost for the Base Case is estimated to be \$965M or \$82.23/t mill feed. Operating costs for the project include mining, processing, ore haulage and site overheads. The relative contribution to this estimate is provided in Table 6 below.

Table 6: LOM Operating Cost Summary (± 25%)

| Operating Costs Summary | A\$/t Mill Feed | Total Cost A\$M |
|------------------------------------|--------------------|-----------------|
| Open Pit Mining | 34.46 | 173 |
| Sulphur Springs Underground Mining | 37.19 | 182 |
| Kangaroo Caves Underground Mining | 58.85 | 108 |
| Processing | 35.58 | 418 |
| Road Maintenance | 3.07 | 36 |
| Site Overheads | 4.17 | 49 |
| Total Operating Costs | 82.23 | 965 |

Capital Cost

Pre-production capital for the Base Case is estimated at \$166 million, Peak Cash Draw \$183 million and life-of-mine capital \$288 million. Pre-production capital is inclusive of haul road establishment, process plant, tails storage, mining pre-strip and infrastructure, see Table 7 below.

Table 7: LOM Capital Requirements (± 25%)

| Capital Costs Summary | Year 1 Costs A\$M | Total Cost A\$M |
|---------------------------------|-------------------|-----------------|
| Mine Development | 13 | 51 |
| Process Plant (inc Phase 1 TSF) | 148 | 162 |
| Mining Infrastructure | 5 | 24 |
| Sustaining | - | 32 |
| Mine Closure (net of salvage) | - | 18 |
| Total Capital Costs | 166 | 288 |

Financial metrics

The metal price and exchange rate assumptions in the price deck are set out in Table 8.

The Base Case generates an NPV $_{8\%}$ of A\$338 million and an IRR of 52%. The estimated life of mine net revenue generated by the project is A\$1,854 million and the undiscounted pre-tax cash flow generated over the estimated life of 12 years is A\$601 million. Project payback is achieved 1.6 years after production commences.



Table 8: Sulphur Springs Key Financial Metrics

| Financial Parameter | Unit | Value |
|---------------------|------------|-------|
| Zinc price | US\$/t | 2,535 |
| Copper price | US\$/t | 6,450 |
| Silver price | US\$/oz | 19 |
| Exchange rate | A\$:US\$ | 0.76 |
| Project NPV | A\$M | 338 |
| Project IRR | % | 52% |
| Year 1 Cost | A\$M | 166 |
| Free cash flow | A\$M | 601 |
| Peak Cash Draw | A\$M | 183 |
| Payback Period | years | 1.6 |
| Cash Costs | | |
| Average C1 Costs | US\$/lb Zn | 0.14 |

Funding

The Company believes that reasonable grounds exist that funding for the project will be available as and when required by the production development schedule, on the following basis:

- The Company's Board of Directors has a financing track record and experience in developing projects.
- ▶ John Nitschke, Managing Director, is a mining engineer with over 30 years' experience in the evaluation, permitting, construction and optimisation of resource projects both in Australia and internationally. His experience spans both open cut and underground base and precious metal mines and associated processing and infrastructure facilities. This experience is directly relevant to the optimisation and development of the contemplated Sulphur Springs base metal open pit and underground mines.
- The zinc price is currently trading at approximately US\$1.29/lb which compares favourably to the Project's base case price assumption US\$1.15/lb. Furthermore, global consumption of zinc is forecast to grow at a CAGR of 2% over 2016-2020, with the strongest demand growth coming from China at 2% and also the US and India. Following recent mine closures and this increasing demand growth, the current zinc market is tight with declining global inventories and a supply deficit forecast in coming years. Zinc prices have responded accordingly rallying above the top of the global mine cost curve. The concentrate market also reflects this supply tightness, with smelters materially discounting treatment charges. The recent improvement in market conditions and an encouraging outlook for the global zinc market enhance the Company's view of the fundability of the Project.
- ➤ The Company has previously demonstrated its ability to raise exploration funding for the Company's Pilbara zinc-copper projects. In August 2016, the Company undertook a capital raising of \$5.1 million via a placement to sophisticated and professional investors and a pro rata rights issue to existing shareholders managed by Euroz Securities Limited, the sole book-runner and lead manager for the capital raising.
- The Company enjoys excellent support from its current shareholder base and other investors. Additionally, Euroz Securities Limited remains strongly supportive of the Company and has advised that while the project might be fundable through traditional debt and equity sources it may be on terms that are dilutive to or otherwise effect the value of Venturex's existing shares.
- It is therefore possible that Venturex will pursue other "value realisation" strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Venturex's proportionate ownership of the Project.



- ➤ The Company has conducted preliminary discussions with potential debt and equity providers and offtake and potential development partners, and will continue discussions to progress funding options.
- The Company is debt free with cash as at 31 December 2016 of approximately A\$2.7 million.
- The Company has a total of 41,666,671 class A options exercisable at 1.5 cents before 3 August 2017, 174,518,142 class A options exercisable at 1.5 cents before 31 August 2017, 41,666,671 class B options exercisable at 3 cents before 3 August 2018, and 174,626,992 class B options exercisable at 3 cents before 3 August 2018. These options, if fully exercised, would yield approximately A\$9.7 million, which could be applied to the project funding requirement.
- The strong production and economic outcomes delivered in the Value Engineering Study are considered by the Company's Board of Directors to be sufficiently robust to provide confidence in the Company's ability to procure debt, equity and/or offtake funding arrangements to raise the necessary funds as and when required.

Sensitivities

A sensitivity analysis demonstrates that the project is sensitive to factors common to these types of projects including, commodity prices, exchange rates, operating and capital costs. The results are shown in Table 9.

Table 9: Project Sensitivity to Movements in Key Assumptions

| Duningt NDV Adm | Dana Assumentian | Relative Movement | | | | | |
|-----------------------|------------------|-------------------|-------|-----|-------|------|--|
| Project NPV A\$m | Base Assumption | -20% | -10% | 0% | +10% | +20% | |
| Zinc price | US\$2,535/t | 214 | 276 | 338 | 400 | 462 | |
| Copper price | US\$6,450/t | 189 | 264 | 338 | 412 | 486 | |
| A\$:US\$ | 0.76 | 690 | 494 | 338 | 210 | 103 | |
| OPEX | A\$82.23 | 455 | 396 | 338 | 279 | 221 | |
| CAPEX | A\$288m | 385 | 361 | 338 | 314 | 291 | |
| Dura in at AIDM A Cas | Dana Annumation | Relative Movement | | | | | |
| Project NPV A\$m | Base Assumption | -5% | -2.5% | 0% | +2.5% | +5% | |
| Zn recovery | 93% | 313 | 325 | 338 | 350 | 363 | |
| Cu recovery | 90% | 301 | 320 | 338 | 356 | 374 | |

Sensitivity to the percentage of inferred mineralisation in the Production Target.

Approximately 34% of the Production Target is based on Inferred Resources.

The sensitivity of the viability of the Project to the proportion of Inferred Resources in the Production Target was tested in the Sulphur Springs Reserve Update (see ASX Announcement 1 July 2016) by assuming all the inferred material, including the supergene, had a nil value. This case still represented a viable project.

The Company is therefore satisfied that the proportion of Inferred Resources is not a determining factor for project viability.

Sensitivity to the Supergene mineralisation

There is a high proportion of Inferred Resource in the first two years of the Production Target which is largely the inferred supergene resource. The sensitivity of the Base Case in the event that only 50% of the supergene material converts to Ore Reserve was tested. In addition the sensitivity in the event that none of the supergene converts was tested. In both of these cases the Project is still viable as shown in Table 10.



Table 10: Sensitivity to the Level of Supergene Included

| Amount of Supergene included | 100% | 50% | 0% |
|------------------------------|------|-----|-----|
| Project NPV A\$ million | 338 | 278 | 205 |

The Company is satisfied that the inferred supergene resource is not a determining factor for project viability.

Next Steps

Next steps which will be pursued in parallel are:

- Infill drilling of the Supergene Inferred Resource;
- Preparation of relevant permitting and approval studies; and
- Ongoing discussions on funding of the Project.

Overview of the Study

The VES covers the construction of a sulphide processing facility and infrastructure at the Sulphur Springs Project. The VES incorporates optimisation work that has been carried out in 2015 and 2016. The following external consultancies have contributed to the results presented within the VES.

Table 11: Contributors to the VES

| Area | Contributor |
|---|-------------------------------------|
| Geology and Resources | Hardrock Mining Consultants Pty Ltd |
| Mine planning and Reserves | Entech Mining |
| Metallurgy, process design and infrastructure | Lycopodium |
| Environmental | MBS Environmental |
| Tails characterisation and dam design | Knight Piesold |



Table 12: Sulphur Springs Production Forecast

| Activity | Units | Total | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 | Year 11 | Year 12 | Year 13 |
|---|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| Sulphur Springs Open Pit - Ore ² | '000t | 5,009 | - | 918 | 1,000 | 986 | 1,002 | 1,000 | 103 | - | - | - | - | - | - |
| Copper Grade | % | 1.8% | - | 3.5% | 1.7% | 1.1% | 1.2% | 1.5% | 1.6% | - | - | - | - | - | - |
| Zinc Grade | % | 3.5% | - | 1.0% | 2.9% | 5.0% | 3.5% | 4.5% | 6.4% | - | - | - | - | - | - |
| - Waste | '000t | 41,734 | 3,999 | 10,411 | 10,126 | 10,162 | 6,306 | 709 | 22 | - | - | - | - | - | - |
| Strip Ratio (Total Ore) | | 8.3 | - | 11.3 | 10.1 | 10.3 | 6.3 | 0.7 | 0.2 | - | - | - | - | - | - |
| Sulphur Springs Underground ³ | '000t | 4,892 | - | - | - | - | - | 143 | 693 | 1,023 | 989 | 1,031 | 762 | 250 | - |
| Copper Grade | % | 1.3% | - | - | - | - | - | 1.6% | 1.4% | 1.6% | 1.3% | 1.2% | 1.3% | 1.2% | - |
| Zinc Grade | % | 3.7% | - | - | - | - | - | 3.3% | 4.1% | 4.0% | 3.8% | 3.8% | 3.2% | 2.0% | - |
| Development | m | 7,325 | - | - | - | - | - | 2,922 | 2,958 | 1,125 | - | - | - | - | - |
| Kangaroo Caves Underground ⁴ | '000t | 1,835 | - | - | - | - | - | - | - | - | 193 | 442 | 433 | 430 | 337 |
| Copper Grade | % | 0.7% | - | - | - | - | - | - | - | - | 0.6% | 0.7% | 0.8% | 0.7% | 0.6% |
| Zinc Grade | % | 3.8% | - | - | - | - | - | - | - | - | 4.7% | 4.1% | 3.7% | 3.0% | 4.1% |
| Development | m | 10,134 | - | - | - | - | - | - | - | 180 | 3,860 | 5,306 | 788 | - | - |
| Ore Processed (Sulphide) | '000t | 11,736 | - | 887 | 1,000 | 1,003 | 1,000 | 1,000 | 956 | 1,003 | 1,000 | 1,000 | 1,000 | 1,003 | 885 |
| Copper Head Grade | % | 1.4% | - | 3.4% | 1.8% | 1.1% | 1.2% | 1.4% | 1.5% | 1.6% | 1.3% | 1.2% | 1.2% | 0.8% | 0.7% |
| Zinc Head Grade | % | 3.6% | - | 1.0% | 2.8% | 4.9% | 3.5% | 4.1% | 4.6% | 4.0% | 3.8% | 3.9% | 3.4% | 3.3% | 3.8% |
| Copper Recovery | % | 90 | | | | | | | | | | | | | |
| Copper Concentrate Grade | % | 26 | | | | | | | | | | | | | |
| Zinc Recovery | % | 93 | | | | | | | | | | | | | |
| Zinc Concentrate Grade | % | 55 | | | | | | | | | | | | | |
| Concentrate Produced and Shipped | | | | | | | | | | | | | | | |
| Copper | '000 wmt | 619 | - | 114 | 65 | 41 | 46 | 53 | 52 | 59 | 47 | 44 | 44 | 31 | 22 |
| Zinc | '000 wmt | 774 | - | 16 | 52 | 90 | 63 | 76 | 81 | 74 | 69 | 71 | 62 | 60 | 62 |
| Payable Cu in con (96.5%) | '000t | 144 | - | 26 | 15 | 10 | 11 | 12 | 12 | 14 | 11 | 10 | 10 | 7 | 5 |
| Payable Zn in con (85%) | '000t | 335 | - | 7 | 22 | 39 | 27 | 33 | 35 | 32 | 30 | 31 | 27 | 26 | 27 |

Detailed breakdown of Resource categories is shown in Appendix 9.1 This Production Target must be read in conjunction with the cautionary statements on page 1 and Appendix 3 and the Material Assumptions set out in Appendix 2.

²Resource Recovery of 95% at 10% dilution

³Resource Recovery of 80 to 95% at 10 to 25% dilution

⁴Resource Recovery of 95% at 10% dilution



%

Years

52%

1.6

Project IRR

Payback

| | | Total | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 | Year 11 | Year 12 | Year 13 |
|--|------------|------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|---------|---------|---------|
| Capital – Life of Mine | | \$'000 | | | | | | | | | | | | | |
| Process Plant and Infrastructure | | 162,449 | 147,864 | 14,585 | - | - | - | - | - | - | - | - | - | - | - |
| Mine Infrastructure | | 23,957 | 5,383 | 2,304 | 2,304 | 2,304 | 6,031 | 2,050 | 1,269 | 768 | 648 | 470 | 31 | 19 | 377 |
| Mine Development | | 51,255 | 13,157 | - | - | - | 2,243 | 12,614 | 7,369 | 1,101 | 10,671 | 4,100 | - | - | - |
| Sustaining | | 31,939 | - | 550 | 3,210 | 2,390 | 3,217 | 3,518 | 2,563 | 4,118 | 2,608 | 4,658 | 2,608 | 2,499 | - |
| Rehabilitation (net of salvage) | | 18,479 | - | - | - | - | 346 | 346 | 346 | 1,150 | 1,150 | 1,150 | 642 | - | 13,349 |
| Total Life of Mine Capital | | 288,079 | 166,405 | 17,438 | 5,514 | 4,694 | 11,836 | 18,528 | 11,547 | 7,137 | 15,078 | 10,378 | 3,281 | 2,518 | 13,725 |
| Peak Cash Draw | | 183,251 | | | | | | | | | | | | | |
| Operating Costs | \$ / ore t | \$'000 | | | | | | | | | | | | | |
| SS Open Pit | 34.46 | 172,641 | - | 36,236 | 41,218 | 41,503 | 35,717 | 15,639 | 2,326 | - | - | - | - | - | - |
| SS Underground | 37.19 | 181,931 | - | - | - | - | 825 | 22,633 | 39,547 | 36,557 | 26,863 | 25,271 | 21,570 | 8,665 | - |
| KC Underground | 58.85 | 107,989 | - | - | - | - | - | - | - | 121 | 16,086 | 38,827 | 21,781 | 19,523 | 11,652 |
| Processing and G&A | 39.75 | 466,474 | - | 35,247 | 39,746 | 39,855 | 39,746 | 39,746 | 37,998 | 39,855 | 39,746 | 39,746 | 39,746 | 39,855 | 35,189 |
| Conc. Transport, Treatment & Royalties | 49.97 | 581,417 | - | 49,597 | 48,029 | 55,681 | 46,016 | 53,725 | 55,575 | 54,744 | 48,833 | 48,478 | 44,619 | 39,411 | 36,708 |
| Total Operating Costs (Ave) | 129.13 | 1,510,452 | - | 121,080 | 128,993 | 137,040 | 122,305 | 131,743 | 135,446 | 131,276 | 131,529 | 152,322 | 127,71 | 107,45 | 83,548 |
| Copper C1 Cost | US\$/lb | 0.58 | | | | | | | | | | | | | |
| Zinc C1 Cost | US\$/lb | 0.14 | | | | | | | | | | | | | |
| Copper C1 Cost (exc by-products) | US\$/lb | 1.49 | | | | | | | | | | | | | |
| Zinc C1 Cost (exc by-products) | US\$/lb | 0.72 | | | | | | | | | | | | | |
| Revenue (Price Deck) | \$M | 2,400 | - | 253 | 210 | 217 | 187 | 220 | 226 | 227 | 199 | 195 | 181 | 152 | 134 |
| Cash flow (Price Deck) | \$M | 601 | -166 | 114 | 75 | 75 | 53 | 69 | 79 | 89 | 52 | 32 | 50 | 42 | 37 |
| | | Price Deck | Spot | | | | | | | | <u> </u> | | I | | 1 |
| Project Pre-Tax NPV8 | \$M | 338 | 402 | | | | | | | | | | | | |

54%

1.7

¹ This Production Target must be read in conjunction with the cautionary statements on page 1 and Appendix 3 and the Material Assumptions set out in Appendix 2.

² Price Deck Zn US\$1.15/lb; Cu US\$2.93/lb; FX US\$0.76 Zinc TC US\$235/tonne Copper TC/RC US\$92.5/US\$0.0925 8% moisture ³Spot Prices (February 2017) Zn US\$1.29/lb; Cu US\$2.72/lb; FX US\$0.754 Zinc TC US\$170/tonne Copper TC/RC US\$92.5/US\$0.0925 8% moisture

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About Venturex Resources Limited

Venturex Resources (ASX: VXR) is a rapidly growing Australian zinc company which is focused on the exploration and development of its two advanced zinc-copper projects located near Port Hedland in the premier Pilbara mining province of Western Australia. After recently completing a \$5 million capital raising, Venturex has embarked on a major new drilling program aimed at further expanding its resource inventory, which comprises more than 792,000t of contained zinc and 288,000t of contained copper.

Its initial exploration focus is on extending the existing high-grade zinc, copper and lead resources at the Whim Creek Project, where it has identified a range of targets adjacent to the Salt Creek and Mons Cupri deposits. In 2016 drilling at Salt Creek successfully extended the down plunge extent of the existing mineralisation. The successful extension of the known Resources at Whim Creek will result in a project that is compelling at spot prices. The existing infrastructure at Whim Creek means that any such project could be producing zinc, copper and lead concentrates during the first half of calendar 2018.

Venturex is continuing to progress permitting and pre-development activities for its Sulphur Springs Project, one of the most significant undeveloped zinc deposits in Australia. On-going value engineering of the 2013 Feasibility Study has resulted in a potential low-risk copper-zinc project with attractive economics.

Venturex also receives an ongoing income stream from a profit share in an SX/EW heap leach operation recovering copper from the heap leach dumps at Whim Creek. Venturex received \$780,000 in FY2016 from 991t of copper metal production.

About Zinc

Zinc is a blue-grey metal which readily forms alloys with metals including copper, aluminium and magnesium. Zinc is primarily used for its corrosion resistance in galvanising which accounts for approximately half of global zinc consumption. Galvanised materials (commonly iron and steel) are used extensively in transport, construction and appliance manufacturing purposes. Metallic zinc is also used in dry cell batteries, die-casting, roof cladding and in the production of zinc oxide

Zinc demand is dominated by China at 6.9Mt or 49%. Global consumption is forecast to grow at a CAGR of 2% over 2016-2020, with the strongest demand growth coming from China at 2% and also the US and India. Following recent mine closures and this increasing demand growth, the current zinc market is tight with declining global inventories and a supply deficit forecast in coming years. Zinc prices have responded accordingly rallying above the top of the global mine cost curve. The concentrate market also reflects this supply tightness, with smelters materially discounting treatment charges.



Appendix 1 - Competency and Compliance Statements

Competent Person Statements for Mineral Resources Used Within the Study

The information in this report that relates to the Sulphur Springs and Kangaroo Caves Mineral Resources is based on information compiled or reviewed by Mr David Milton, Hardrock Mining Consultants Pty Ltd who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Milton has sufficient experience relevant to the style of mineralisation, type of deposit under consideration and to the activity being undertaking to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources". Mr Milton consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information contained in this report that relates to Mineral Resources was previously released to the market in announcements tilted "Sulphur Springs Resource Update" and "Kangaroo Caves Resource Upgrade" on 11 May 2016 and 22 September 2015 respectively.

Competent Person Statements for Ore Reserves Used Within the Study

The information in the report that relates to the Sulphur Springs Open Pit and Underground Ore Reserve is based on information compiled or reviewed by Mr Daniel Donald, of Entech Mining Pty Ltd who is a member of the Australasian Institute of Mining and Metallurgy. Mr Donald has sufficient experience relevant to the style of mineralisation, type of deposit under consideration and to the activity being undertaken to quality as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Reserves". Mr Donald consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information contained in this report that relates to the Sulphur Springs Reserve was previously released to the market in an announcement tilted "Updated Sulphur Springs Ore Reserve: New mine plan achieves significant capital and operating cost savings" on 28 June 2016.

Competent Person Statement for Metallurgy

The information in the report that relates to interpretation of metallurgical test work and process plant design is based on information compiled or reviewed by Mr Aidan Ryan an employee of Lycopodium Minerals Pty Ltd. Mr Ryan is a member of the Australasian Institute of Mining and Metallurgy. Mr Ryan has sufficient experience relevant to the style of mineralisation, type of deposit under consideration and to the activity being undertaken to quality as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Reserves". Mr Ryan consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

No New Information or Data

This announcement contains references to exploration results and Mineral Resource and Ore Reserve estimates, which have been cross referenced to previous market announcements. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and that all material assumptions and technical parameters underpinning those estimates in the relevant market announcements continue to apply and have not materially changed.



Appendix 2 – Material Assumptions

| Criteria | Commentary / Assumption | | | | | | | | |
|--|--|--|---|--|--|--|--|--|--|
| Mineral Resources and | | | target within this report were first reported | | | | | | |
| Reserves underpinning the | on the 22 September 2015 and 11 May 2016 respectively. The estimates were prepared by a Compe | | | | | | | | |
| study | Person in accordance with | JORC Code2012. | | | | | | | |
| | | | | | | | | | |
| | Ore Reserves within this report were first reported on 28 June 2016. The Ore Reserves were prepared by a Competent Person in accordance with JORC Code2012. | | | | | | | | |
| | Competent reison in accordance with Jone Code2012. | | | | | | | | |
| | The reported Production Target is 11.7Mt @ 3.6% Zn, 1.4% Cu, 15.8g/t Ag. | | | | | | | | |
| | Annrovimately 66% of the | 66% of the Production Target is based on material classified Ore Reserve and approximately | | | | | | | |
| | 34% of the Production Target is based on material classified as Inferred Resources. | | | | | | | | |
| | | | | | | | | | |
| | The relative proportion of Resources is as follows. | material within the Production Tar | rget sourced from Ore Reserves and Inferred | | | | | | |
| | | | | | | | | | |
| | Year | % Contribution from Reserves | % Contribution from Inferred Resources | | | | | | |
| | 1 | 0% | 0% | | | | | | |
| | 2 | 13% | 87% | | | | | | |
| | 3 | 58% | 42% | | | | | | |
| | 4 | 76% | 24% | | | | | | |
| | 5 | 63% | 37% | | | | | | |
| | LOM | 66% | 34% | | | | | | |
| | | | | | | | | | |
| | A sensitivity analysis has been carried out to determine the impact of removing the Sulphur Springs | | | | | | | | |
| | Inferred Supergene material from the Production Target. The project remains economically viable in the | | | | | | | | |
| | event future exploration and Resource conversion drilling does not improve geological confidence on the | | | | | | | | |
| Cita Visita and kay study | status of the Inferred Supe | - | and and a | | | | | | |
| Site Visits and key study contributors | 1 · · · · · · · · · · · · · · · · · · · | ide by the following internal and ext | · · · · · · · · · · · · · · · · · · · | | | | | | |
| | Hardrock Mining Consultants Pty Ltd – David Milton: Resource estimates for Sulphur Springs and Kangaroo Cayes | | | | | | | | |
| | Kangaroo Caves Entech Mining – Stuart Swapp, Daniel Donald: mine design, planning, scheduling and Reserves | | | | | | | | |
| | Lycopodium – Mark Giddy, Aidan Ryan: metallurgy, process design, site layout and infrastructure | | | | | | | | |
| | requirements | | | | | | | | |
| | · · | MBS – Kristie Sell: environmental and heritage | | | | | | | |
| | Knight Piesold – Dave Morgan: tailings management, tails dam design and layout | | | | | | | | |
| Study Status | The Production Target and financial information in this release is based on previous studies completed by Venturex. Relevant market releases are dated 18 December 2012, 1 October 2015, 4 November 2015, and | | | | | | | | |
| | 28 June 2016. The study referred to in this announcement continues to build upon these earlier studi | | | | | | | | |
| | The Production target and financial information is based on a moderate to high level of economic assessments. The study relies on previously released Mineral Resources and Ore R | | | | | | | | |
| | | | | | | | | | |
| Cut off parameters | A cut off of 0.4%Cu and less than 0.4%Cu and greater than 2% Zn was used for reporting of Resources | | | | | | | | |
| Mining factors or assumptions | The Production Target is planned to be mined through a combination of open pit and underground mining | | | | | | | | |
| used within the study | methods. Open pit mining is anticipated to occur for approximately 5 years followed by a further 8 years of underground mining. | | | | | | | | |
| | The mining rate is 100th/re will food which is matched to plant a processing plant and the plant and | | | | | | | | |
| | The mining rate is 1Mt/yr mill feed which is matched to planned processing plant capacity. Open pit mining is assumed to be by conventional blast – load – and haul. Ore grade material will be stockpile on | | | | | | | | |
| | _ | | - | | | | | | |
| | the ROM ahead of processing. Openpit mining is planned to take place around 190t class excavators a 100t dump trucks. Underground operations use rubber tyred diesel equipment, 1:7 decline, 50t cl trucks. | | | | | | | | |
| | | | | | | | | | |
| | trucks. | | | | | | | | |
| | Open pit mining blocks have been diluted by 10%. Underground stopes were diluted by the following factors according to stope type | | | | | | | | |
| | factors according to stope type - Long hole open stope 10% | | | | | | | | |
| | - Long note open stope 10% - Core and shell rib 10% | | | | | | | | |
| | - Core and shell rib 10% - Core and shell sill 25% | | | | | | | | |
| | Mining recovery of 95% was assumed for the open pit. Underground mining recovery factors were | | | | | | | | |
| | specified by stope type. | | - , | | | | | | |
| | - Long hole open | stope 95% | | | | | | | |
| | - Core and shell rib 80% | | | | | | | | |
| | Core and shell s | ill 80% | | | | | | | |



| | tary / Assumption | | | | | | | |
|--|--|---|--|--|--|--|--|--|
| Ore will be processed at a rate of 1Mt/yr on onsite through a conventional sulphide processing plant. A conventional flow sheet of crush, grind and flotation to produce saleable separate copper and zinc concentrates. The process plant will use sulphide floatation techniques to produce separate copper and zinc concentrates. | | | | | | | | |
| The following key metallurgical assumptions have been used within the study | | | | | | | | |
| Copper Concentrate - Copper recovery 90% | | | | | | | | |
| - Copper concentrate grade 26% Zinc Concentrate | | | | | | | | |
| nc recovery 93% | | | | | | | | |
| - Zinc concentrate grade 55% Concentrate moisture content of 10% | | | | | | | | |
| Springs project will be a greenfields n of a project based solely on underg currently liaising with the relevant th way to seek mining approvals but I proposed activities are located with | round mining methods and government bodies (DMP pased on a combination o | dry stacking of tailings. P and EPA) to determine the f open pit and underground | | | | | | |
| A range of flora and fauna studies have been undertaken for the Project. The proposed site lay out and operational footprint has taken the findings of these studies into account so as to minimise any potential impact on the environment. | | | | | | | | |
| the processing plant are expected to linto a combines and compacted clay | v lined valley filled storage a | rea. | | | | | | |
| The Sulphur Springs project is located approximately 150km south east of Port Hedland in the Pilbara region of Western Australia. | | | | | | | | |
| s readily accessible by road through ess to the project area is by track and | • | | | | | | | |
| commence. Other required infrastructure is described within the body of this report. | | | | | | | | |
| All operating costs in the estimation of the Production Target and associated financial information have been estimated to a pre-feasibility level of accuracy (+/-25%). | | | | | | | | |
| Mining operation costs have been derived by Entech on a first principals basis / or from Entech's database of similar size and scale operations. Site infrastructure and process plant operation costs where derived by Lycopodium and were based on a | | | | | | | | |
| combination of first principal cost build up / or based on Lycopodium's database for similar sized operations | | | | | | | | |
| ting Costs Summary | A\$/t mill feed | | | | | | | |
| <u> </u> | | | | | | | | |
| n Pit Mining | 34.46 | | | | | | | |
| nderground Mining | 37.19 | | | | | | | |
| nderground Mining | 58.85 | | | | | | | |
| ssing | 35.58 | | | | | | | |
| Maintenance | 3.07 | | | | | | | |
| verheads | 4.17 | | | | | | | |
| | | | | | | | | |
| Total Operating Costs 82.23 | | | | | | | | |
| vernment royalties of 5% have been a | | | | | | | | |
| All capital costs in the estimation of the Production Target and associated financial information have been estimated to a pre-feasibility level of accuracy (+/-25%) | | | | | | | | |
| Mining capital costs have been derived by Entech on a first principles basis / or from Entech's database of similar size and scale operations. Mining capital largely relates to the purchase of mobile equipment and the initial pre-strip associated with the open pit | | | | | | | | |
| Site infrastructure and process plant capital costs where supplied by Lycopodium and were based on a combination of first principal cost build up / or based on Lycopodium's database for similar sized operations | | | | | | | | |
| 11 | nd scale operations. Mining capital strip associated with the open pit cture and process plant capital cos | nd scale operations. Mining capital largely relates to the purch- strip associated with the open pit cture and process plant capital costs where supplied by Lyco | | | | | | |



| Criteria | Comme | entary / Assumption | | | | | | |
|-------------------|--|--|---|--|--|--|--|--|
| | Capital Costs | Units | 3Q15 | | | | | |
| | Treatment Plant (inc first TSF lift) | A\$M | 98 | | | | | |
| | Infrastructure (inc Haul Road) | A\$M | 44 | | | | | |
| | Mining Sulphur Springs Open Pit | A\$M | 17 | | | | | |
| | Mining Sulphur Springs Underground | A\$M | 30 | | | | | |
| | Mining Kangaroo Caves Underground | A\$M | 17 | | | | | |
| | Sustaining Capital (inc TSF lifts) | A\$M | 31 | | | | | |
| | Rehabilitation & other | A\$M | 37 | | | | | |
| | Owner's costs up to production | A\$M | 11 | | | | | |
| | Owner's Contingency | A\$M | 20 | | | | | |
| | Salvage | A\$M | -17 | | | | | |
| | Total Capital | A\$M | 288 | | | | | |
| | | | | | | | | |
| | Pre-Production Capital | A\$M | 166 | | | | | |
| | Maximum cash draw down | A\$M | 183 | | | | | |
| | Treatment and Refining charges Item Cu Concentrate | Unit Cost | | | | | | |
| | | | | | | | | |
| | Treatment Charges | US\$92.5/wmt con US\$0.0925/lb Cu, | | | | | | |
| | Refining Charges (Cu,Ag) | US\$0.0475/oz Ag | | | | | | |
| | Zn Concentrate | 0340.0173702718 | | | | | | |
| | Treatment Charges | US\$235/wmt con | | | | | | |
| | Concentrate transport | | | | | | | |
| | Item | Unit Cost | | | | | | |
| | Cu Concentrate | | | | | | | |
| | Transport | AU\$71.55/wmt | | | | | | |
| | Royalties | 5.60% | | | | | | |
| | Zn Concentrate | | | | | | | |
| | Transport | AU\$71.55/wmt | | | | | | |
| | Royalties | 5.60% | | | | | | |
| | Silver | | | | | | | |
| | Royalties | 3.10% | | | | | | |
| | Concentrate is assumed to be sold to Toho Zinc who has an existing agreement to purchase concentrate from the Sulphur Springs project. | | | | | | | |
| Market assessment | Both the zinc and copper markets are well producers, buyers and sophisticated investors. daily pricing for copper and zinc can be sourced. The supply and demand fundamentals for both from industry analysts. | Pricing for both copper and I from market participants su | I zinc is openly transparent ch at the LME. | | | | | |



| Criteria | Commentary / Assumption |
|------------------------------|---|
| Economic evaluation | The project has been modelled on a real pre-tax cash flow basis using a 8% discount rate. The key revenue, |
| | operating cost, capital cost and mine schedule provided within this report form the basis of the economic metrics reported. |
| Heritage | The project has existing heritage agreements in place with the relevant Njamal indigenous groups that provide for access to the project area. |
| Funding | The company believes that due to a combination of factors, including though not limited to, favourable supply / demand fundamentals and project economics that reasonable grounds exist to assume that funding for the Project will be available. The Company has held preliminary discussions with potential financiers regarding financing options. At the time of release though no material or binding agreements had been entered into. Securing financing though for the project may not be possible on acceptable terms and as such financing remains a risk to achieving the outcomes presented in this report. |
| Other considerations | |
| Relative accuracy and review | No external audits have been undertaken. The work completed within the VES is at the level of Pre- Feasibility accuracy. |



Appendix 3 – Forward Looking Statements and Reasonable Basis

Statements regarding plans with respect to the Company's mineral properties are forward looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as expected. There can be no assurance that the Company will be able to confirm the presence of mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties.

Forward-looking information includes, among other things, statements with respect to pre-feasibility and definitive feasibility studies, the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses.

Generally, 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', 'evolve' and similar expressions. Persons reading this are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward looking information.

This announcement has been prepared in compliance with the JORC Code 2012 Edition. The 'forward-looking information' contained here is based on the Company's expectations, estimates and projections as of the date on which the statements were made. The Company disclaims any intent or obligations to update or revise any forward looking statements whether as a result of new information, estimates or options, future events or results or otherwise, unless required to do so by law.

The Company believes that it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any mining of mineralised material, modifying factors, production targets and operating cost estimates. The following information is specifically provided;

- The key components of the Value Engineering Study were completed by independent specialist consultants with oversight provided by the Company- see page 15 and Appendix 2
- As demonstrated by the Company's sensitivity analyses on pages 14 and 15 and in Appendix 2, notwithstanding that approximately 34% of the material sources for the Production Target is comprised of Inferred Resources:
 - o 66% of the material within the Production Target is sourced from Ore Reserves;
 - the company is satisfied that the proportion of Inferred Resources is not a determining factor for project viability;
 - while the inferred resources do feature as a significant proportion early in the mine plan it not a determining factor for project viability
- For the reasons set out on pages 12 to 14 of this announcement, the board believes that there is a "reasonable basis" to assume that future funding will be available and securable.
- Board and Management have been responsible for the exploration and evaluation of several diverse mining and exploration projects in Australia and elsewhere in the world. See funding page 13. In summary, Board and management has a sound track record of technical and financial capability to identify, discover, acquire, define and progress quality mineral assets.