ARBITRATION UNDER THE RULES OF THE INTERNATIONAL CENTRE FOR SETTLEMENT OF INVESTMENT DISPUTES
ICSID CASE NO. ARB/20/46

LUPAKA GOLD CORP.
vs
REPUBLIC OF PERU

EXPERT'S REPORT of MICON INTERNATIONAL LIMITED on the INVICTA PROJECT, PERU

Report Date: 21 September 2022

Prepared By:

Christopher Jacobs, CEng MIMMM

900 – 390 Bay Street, Toronto, Ontario, Canada M5H 2Y2
+1 416 362 5135 | www.micon-international.com

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Glossary

Adits	An opening driven horizontally into the side of a mountain or hill providing access to a mineral deposit.[1]
Backfill	Waste material used to fill the void left after the mining activity.
Block model	Database subdivided into regular three-dimensional cells and used to store estimates of the average grades, density, rock type or other variables assigned to each finite volume of material present in the ground.
Concentrate	Powdery metal-rich product resulting from an enrichment process (i.e., concentration), in which most of the valuable mineral has been separated from the deleterious.
Concentrator	See Processing Plant
Cross-cut	Horizontal development crossing an orebody perpendicular to its strike.
Crown Pillar	Pillar left as standoff from the surface topography.
Cut-off grade	Grade of mineralized rock, that determines whether or not it is economic to process. Refer to Table 4.6 – Break-even Cut-off Grade calculation for further details. This is the break point between ore and waste.
Decline	A sloping underground tunnel used to travel from one level to another. Also called a ramp.
Development	Underground work completed to gain access a mineral deposit. It includes adits, drifts, cross-cuts, raises, declines (ramps) and drawpoints.
Dilution	Waste material that is inadvertently or unavoidably mixed with ore, reducing the average grade of material processed.
Drawpoint	Opening at the bottom of a stope from which the broken ore is extracted.
Fines	Rock or mineral that has been broken or ground into small particles.
Footwall	Underlying side of an orebody.
Gangue	The worthless minerals in an ore deposit.

[1] MI-01, U.S. Securities and Exchange Commission Glossary of Mining Terms.
https://www.sec.gov/Archives/edgar/data/1165780/000116578003000001/glossary.htm

Gold Equivalent grade	A metric aggregating the grades for all recoverable metals (Gold-Au, Silver-Ag, Zinc-Zn, Copper-Cu, Lead-Pb). This considers the price and recovery factor for each metal in proportion to the price and recovery of Gold.
Hangingwall	Overlying side of an orebody.
Head grade	Quantity of each valuable metal or mineral per unit of dry mass of run-of-mine ore delivered to the processing plant, as determined by chemical analysis or assay of samples collected from the mined material or, alternatively, back-calculated from the quantities and grades of the products and waste produced during processing of the ore.
Level	Horizontal excavation that connects the decline to the drawpoint.
Mill-throughput	Quantity of mineralized ore processed over a given period of time.
Milling	General term used to describe the process in which the ore is crushed and subjected to physical and/or chemical treatment to extract the valuable metals to a concentrate.[2]
Mineral Resources	A concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated, or interpreted from specific geological evidence and knowledge, including sampling.[3] Mineral Resources are sub-divided, in order of increasing geological confidence, into inferred, indicated, and measured categories. An **Inferred** Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred

[2] MI-02, Law Insider, Definition of milling.: https://www.lawinsider.com/dictionary/milling#:~:text=Milling%20means%20a%20general%20term,a%20concentrate%20or%20finished%20product.

[3] MI-03,Canadian Institute of Mining, Metallurgy and Petroleum (CIM). Definition Standards for Mineral Resources & Mineral Reserves, 19 May 2014. Retrieved from https://mrmr.cim.org/media/1128/cim-definition-standards_2014.pdf

Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An **Indicated** Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource".

A **Measured** Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Mineral Reserves

The economically mineable part of a measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified."

Mineral Reserves are sub-divided in order of increasing confidence into Probable Mineral Reserves and Proven Mineral Reserves. A Probable Mineral Reserve has a lower level of confidence than a Proven Mineral Reserve. [4]

[4] MI-03, Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources & Mineral Reserves, 19 May 2014, p. 4.

Mining Horizon	Group of stopes that shares common attributes, size, timeline in the schedule.
Modifying Factors	Considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.[5]
Ore loss	That portion of payable material within a stope not recovered as part of the mining activity.
Ore Pass	Vertically or steeply inclined passage used for the transfer by gravity of broken ore to a lower level in the mine from where it is hauled to surface.
Ore	Material having an average grade above the break-even cut-off grade.
Outlier	Optimized mineable stope removed from mine plan after considering marginal development costs from the main orebody.
Overbreak	Supplementary amount of material coming into a stope as a result of the mining activity. When this overbreak is above the cut-off grade, it is qualified as ore gain. Otherwise, it falls under dilution.
Pillars	Section of the mineralized orebody left *in-situ* for a variety of reasons, usually to provide support for the surrounding mine workings.
Processing Plant	Facility designed to physically separate valuable products from gangue minerals in run-of-mine ore. Also known as a concentrator or beneficiation plant. Processing polymetallic ores such as those at Invicta typically involves multiple processing steps including crushing and grinding (milling) of ore to produce a pulp, partial recovery of gold using gravity separation and recovery from the pulp of base metal (copper, lead and zinc) sulphide minerals, along with the balance of the gold and silver, using several stages of froth flotation, leaving a waste stream for disposal as mine tailings. Concentrates are then dewatered by filtration, weighed, sampled for analysis and shipped to market.
Raise	Vertical or steeply inclined underground opening, conventionally mined from the bottom up.
Recovery (mining)	Proportion of the ore extracted during mining versus the *in situ* tonnage of resource.

[5] MI-03, Canadian Institute of Mining, Metallurgy and Petroleum (CIM). Definition Standards for Mineral Resources & Mineral Reserves, 19 May 2014, p. 6.

Recovery (process)	Proportion of valuable metal or mineral extracted from ore during processing versus the contained metal or mineral in the unprocessed ore.
Rib Pillar	Pillar between mineable stopes to ensure stability of the surroundings.
Run-of-Mine Ore	Typical ore produced by a mine, prior to processing.
Sill Pillar	Pillar used to separate mining horizons, usually at the end.
Stopes	Void created by mining activity in the vertical interval between access levels. The total sum of all stopes is the Life-of-Mine Plan.
Strike	The direction or a vein or bed of rock intersecting the horizontal plane.
Waste	Material with average grade below the cut-off grade.
Wireframes / 3D solids	Three-dimensional representation of the mineralized envelope. The wireframes serve as a basis for the block model programming.

1.0 INTRODUCTION

1.1 TERMS OF REFERENCE

1. Micon International Limited ("Micon") was retained to assist Lupaka Gold Corp. ("Lupaka") with respect to Lupaka's Request for Arbitration dated 21 October 2020 (the "Arbitration") concerning the Invicta Mining Corporation S.A.C ("Invicta") Project (the "Project") located in the Republic of Peru.

2. We have been instructed by LALIVE to:

   - Review the Preliminary Economic Assessment ("PEA") prepared by SRK Consulting (Canada) Inc. ("SRK") on the Project in 2018 as well as the subsequent work by Red Cloud Klondike Strike Inc. ("Red Cloud") and contemporaneous technical documents and reports pertaining to the Project;

   - Based on SRK's 2018 PEA and our review, adjust the PEA production and cost schedules to reflect the actual situation at Invicta Mine in October 2018;

   - Based on SRK's geological block model and Red Cloud's cashflow model for the Project, ascertain the validity of assumptions made by Red Cloud in its evaluation of a scenario in which Invicta Mine would produce 590 t/d mill-feed for an off-site processing facility;

   - Opine on the operational readiness of the Invicta Mine and its ability, but for the blockade, to meet its obligations in terms of the existing agreement with PLI Huaura Holding L.P., ("PLI") and a proposed amendment to that agreement; and

   - Opine on possible causes of the reported variance in grades seen in material mined during pre-production development of the mine in 2018 and the grades forecast by Lupaka.

1.2 QUALIFICATIONS OF MICON INTERNATIONAL LIMITED

3. Micon International Limited (Micon) is an independent firm of senior geologists, mining engineers, metallurgists, geostatisticians and mineral economists headquartered in Toronto, Ontario, Canada, and maintaining fully integrated offices in Vancouver, Canada and Norwich, United Kingdom, as well as retaining full-time consultants based in Russia and France.

4. Micon has provided consulting services to the world's mining industry since 1988. The firm comprises highly qualified and experienced professionals who are guided by the Company's principles of Integrity, Competence and Independence. Each member has extensive experience with mineral exploration, mining companies and leading consultant groups. Micon's professional staff have the experience, education and professional credentials to act as Qualified Persons and/or Competent Persons, as required by world-wide regulatory agencies.

5. Micon's clients include mining and mineral exploration companies, financial institutions and government agencies from around the world, including all of the major Canadian banks and investment houses. Micon's technical, due diligence and valuation reports are accepted by

regulatory agencies such as the US Securities and Exchange Commission, the Ontario Securities Commission, the Australian Stock Exchange and the London Stock Exchange.

6. Assignments have been carried out in almost every country for such commodities as precious and base metals, industrial minerals, diamonds and energy minerals. Particular expertise has been developed in the valuation of mineral properties, the estimation of mineral resources and mineral reserves, preparation of Technical Reports under NI 43-101 and Competent Person reports, preliminary economic assessments, preliminary feasibility studies and feasibility studies of proposed mining projects, mineral market analyses, comparative benchmarking, technical due diligence, ligation support and Independent Engineer services.

7. Micon's professional staff have broad experience in advising clients involved in disputes. Assignments undertaken in this area include technical assistance in disputes, economic and market analysis, advice on industry practice and providing expert witness services.

1.3 QUALIFICATIONS OF CHRISTOPHER JACOBS

8. Christopher Jacobs, CEng MIMMM, President of Micon International Limited, is the author of this report, which he has prepared with the assistance of other professionals employed by Micon, as listed below.

9. Mr. Jacobs graduated from the University of Reading, United Kingdom, in 1980 with a B.Sc. (Hons) degree in Geochemistry.

10. From 1980 until 2001, Mr. Jacobs worked in Zimbabwe for international mining companies exploring and mining for gold, chromite, nickel, and platinum group metals, in a series of increasingly senior roles including executive directorship of a publicly listed gold mining company, Cluff Resources Zimbabwe Limited, and operations director of the gold-mining subsidiary of Anglo American plc in Zimbabwe.

11. In 2001 Mr. Jacobs relocated to South Africa, where he was employed by Anglo American Platinum division as a strategic mine planning manager, responsible for the life-of-mine plans for a group of large operating mines and development projects.

12. While in South Africa, and with sponsorship from Anglo American plc, Mr. Jacobs studied at the Gordon Institute of Business Science within the University of Pretoria and in 2003 was awarded a Master's degree in Business Administration (MBA).

13. In 2004, Mr. Jacobs joined Micon's Canadian head office in Toronto where he remains employed as a senior consultant in mineral economics and served as a Vice President of the company from 2008 until his appointment as President in 2021.

14. At Micon, Mr. Jacobs has focused on the economic evaluation of mining operations and development projects, preparing preliminary economic assessments, pre-feasibility and definitive feasibility studies as well as taking part in due diligence investigations and in Micon's role as independent engineer on behalf of financial institutions lending to mining projects.

1.4 MICON EMPLOYEES

1.4.1 Abdoul Dramé

15. Abdoul Dramé, P.Eng., is a licensed professional mining engineer with over 5 years of industry experience, based in the Toronto head office. He has an operational background in underground hard rock mining, as well as project experience across a range of mining studies of varying complexity through scoping, pre-feasibility, feasibility, and operational phases. Abdoul possesses a firm understanding of mining methods, mine planning, and scheduling in conjunction with in-depth knowledge of underground drill and blast design and execution. He also has a proven track record in safety leadership and initiatives.

16. Mr. Dramé assisted in Micon's review of the mine plan that forms the basis of the 2018 PEA 355 t/d study by SRK and assisted in the preparation of an expanded mine plan to confirm the technical feasibility of the Red Cloud Model 590 t/d mine plan.

1.4.2 Alan J. San Martin

17. Ing. Alan J. San Martin, MAusIMM(CP), is a Mineral Resource and Mine Planning Specialist with Micon, located in Toronto. He has experience with mineral resource estimates and mining exploration data management, he is skilled in the use of mining and GIS software, as well as database and network administration. Prior to joining Micon, he worked in Ecuador on the Fruta del Norte gold project of Aurelian Resources Inc. (now part of Lundin Gold Inc.), where he also liaised with the Ecuadorian team on database and IT management issues and in implementing quality assurance/quality control systems.

18. Mr. San Martin's role was to ensure the integrity and consistency of the mineral resource and mine planning data used in Micon's work during its transfer between technical systems.

1.5 INDEPENDENCE

19. We confirm that we are aware of no issue that would constitute a conflict of interest or detract from providing a wholly independent opinion in relation to this matter. In particular, neither the author, Christopher Jacobs, nor Micon have not worked for the Parties prior to this current engagement.

1.6 SOURCES OF INFORMATION

20. In conducting our review, Micon has relied upon copies of technical reports, documents, digital 3D representations of the Invicta Mine development and a geological block model provided by Lupaka. Micon validated the geological model against published reports and found them to be consistent, but we have not independently reviewed SRK's estimation of the geological resource nor the exploration data underlying that estimate.

1.7 STRUCTURE OF THE REPORT

21. In this report, the topics discussed in the following sections are as follows:

Section	Heading	Remarks
2	Background to the Dispute	Brief outline of key events leading to the dispute.
3	Mineral Project Development	Discussion of a typical project development sequence
4	Invicta Project Description	Provides context for the stage of development of the Invicta
5	Mine Planning	Summary of SRK's 2018 PEA mine plan and Micon's critical review and suggested revisions to the Red Cloud model.
6	Ability of Lupaka to Meet its Gold Repayment Obligations	Factors impacting forecast gold repayments with and without the proposed acquisition of the Mallay Mill are discussed.
7.	Grade of Development Material	Identifies possible reasons for anomalous gold grades reported from development ore.
8	Conclusions	Brief summary of key findings
9	Expert's Declaration	
10	Index of Exhibits	

2.0 BACKGROUND TO THE DISPUTE

22. On 1 October 2012, Claimant acquired the Invicta Project, located in the Huaura province in Peru, through its acquisition of Invicta Mining Corporation ("IMC"). Over a number of years, Claimant obtained relevant authorisations and permits from the Peruvian authorities and completed development works with a view to commencing exploitation of the mine.

23. On 30 June 2016 (and subsequently amended in 2017 and 2018), Claimant entered into a loan agreement with PLI in order to fund the development of the Invicta Project through pre-paid gold forward purchase agreements ("PLI Loan").

24. In April 2018, SRK completed a PEA of the Invicta Gold Project for the Claimant. In its report, SRK concluded that the "*Invicta Gold Project is […] of considerable merit, which has demonstrated positive PEA results considering the conceptual extraction of a portion of the reported mineral resource*"[6]. SRK assumed a production rate of 355 t/d, with ore being treated at third-party toll mills.

25. In May, 2018, Red Cloud prepared a discounted cash flow (DCF) analysis of the economics of the Invicta Project ("the Red Cloud model")[7] based on a production rate of 590 t/d, in expectation of the project obtaining access to the Mallay processing plant owned by Compañía de Minas Buenaventura S.A.A. ("Buenaventura").

26. By 5 October 2018, Claimant had finalised the negotiations of a Purchase Agreement with Buenaventura and a Draft Amendment and Waiver No. 3 to the Second Amended and Restated Pre-Paid Forward Gold Purchase Agreement[8] with PLI that would refinance the Project to provide funding for the proposed acquisition of the Mallay Mill from Buenaventura and its modification to allow production of separate zinc, lead and copper concentrates from Invicta ore.

27. On 14 October 2018, the leaders of the Parán community directed its members to forcibly evict Claimant and its personnel from the premises of the Invicta Project, and blocked access to the mine ("Blockade"). The Blockade continued indefinitely and Claimant was unable to regain access to the site.

28. We understand that, at the time of the Blockade, Claimant had materially completed the development of the Invicta Mine and was close to commencing production. As a result of the Blockade, and the alleged failure of the Peruvian authorities to resolve the situation, Claimant was unable to produce gold and generate cash flows to enable it to fulfil its financial obligations to creditors, including to make gold repayments under the PLI Loan.

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[6] C-34, SRK PEA (2018), p. xi.

[7] AC-15 Red Cloud Model.

[8] MI-04 Draft Amendment and Waiver No. 3 to the Second Amended and Restated PPF Agreement (Final version)

29. Subsequently, on 26 August 2019, Claimant's shares in IMC were seized following the initiation of foreclosure proceedings by Lonely Mountain, which controlled PLI at this date.

30. Claimant's case is that Peru's acts and omissions in relation to the Invicta Project breached the FTA, and that these acts and omissions resulted in the unlawful expropriation of Claimant's investment.

3.0 MINERAL PROJECT DEVELOPMENT

3.1 MINERAL RESOURCE ESTIMATION

31. When publicly disclosing technical information about a mineral property, any company listed on a Canadian exchange must abide by the requirements of National Instrument 43-101 ("NI 43-101") which sets out the type of detailed information that must be disclosed. Reports written in accordance with NI 43-101 vary according to the amount of work that has been carried out on the property.

32. Initial reports may simply describe the occurrence of a mineral of economic interest that is worthy of further exploration.

33. Systematic exploration is then carried out, very often using specialised drills to recover a 'core' of rock from within a diamond-impregnated crown on a 'core-barrel' which is spun at high speed to cut down through the rock to depths of several hundred metres. Such 'diamond drill holes' are collared so as to provide systematic sampling across a deposit on section lines spaced along the strike length. The recovered core samples are then geologically logged to record rock type, structure and visible mineralization before being split and sampled, with measured intervals being sent to an accredited laboratory for analysis. Appropriate quality control measures are employed, including the use of blanks and standard reference material within each sample batch to ensure reliability of analytical results.

34. Where the mineralization has been exposed at surface or in underground workings, channel samples may also be collected that may significantly enhance confidence in the geological continuity of mineralization between drilled section lines.

35. Once sufficient analytical data has been gathered, the data are interrogated using specialist software to determine the geostatistical parameters that may be used in assigning rock types, grades, density and other variables (such as gold-equivalent grades) to each element of a three-dimensional model of the deposit. An appropriate cut-off grade is then applied to isolate the parts of the deposit with 'reasonable prospects for eventual economic extraction'. The estimation methodology employed is then set out in detail in a subsequent technical report that discloses the estimate of identified mineral resources using defined terms that reflect the degree of confidence in the estimate. NI 43-101 recognises the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards for Mineral Resources & Mineral Reserves[9], amongst others. The CIM definitions recognise three levels of confidence in mineral resource estimates, namely (in order of increasing confidence) Inferred, Indicated and Measured resource categories.

[9] MI-03, Canadian Institute of Mining, Metallurgy and Petroleum (CIM). Definition Standards for Mineral Resources & Mineral Reserves, 19 May 2014.

3.2 PRELIMINARY ECONOMIC ASSESSMENT

36. Based on a mineral resource estimate, the next stage of development typically involves preparation of a Preliminary Economic Assessment, or "PEA". At this stage of development, all three categories of mineral resource on the property may be considered. The intention of a PEA is to demonstrate that the deposit has the potential for economic development. Often, a PEA does not aim to fully evaluate a mineral property, since the deposit may not yet have been 'closed off' by drilling beyond the extent of the mineralization.

3.3 PRELIMINARY FEASIBILITY AND FEASIBILITY STUDIES

37. CIM Definition Standards require that engineering to at least the level expected of a Preliminary Feasibility Study ("PFS") has been carried out in order to disclose Mineral Reserves. Mineral Reserves require the underlying resources to have been classified as Measured or Indicated, and Inferred resources are ascribed no value in a PFS.

38. However, for a steeply dipping, vein-type deposit such as the Atenea vein and other structures at Invicta, it might not be cost-effective to core-drill from surface at sufficiently close intervals to demonstrate continuity in the mineralization that would warrant their inclusion in a PFS. Instead, a company may decide to expose the orebody continuously along strike by underground development, as appears to have been the case at Invicta. In this circumstance, gaining access to the mineralization through such exploratory development, and so demonstrating continuity of the mineralized structures, greatly reduces a key geological risk, but, in the absence of any operational cash flow, the cost of such development limits its usage.

39. After having developed access to the mineralization, further development of the property may then entail a decision to put the mine into operation at a lower rate of production than its resource potential might suggest, in order to fund ongoing development that could then be used to justify further expansion.

3.4 PROJECT EVALUATION

40. NI 43-101 technical reports that describe a PEA or more advanced study require disclosure of an annual cash flow forecast in order to demonstrate viability of the project. In general, the preparation of a cash flow model involves several steps, as described below.

41. The project life-of-mine plan is usually constructed that sets out the manner in which the mineral resource (or reserves) will be exploited. In the case of an underground mine, the plan will identify all the three-dimensional blocks of ground (stopes) that contain economic mineralization. In order to extract these blocks, physical access must be obtained through tunnels mined horizontally, vertically or at an incline (respectively referred to as drifts and cross-cuts, shafts and raises, and ramps/declines). Having laid out all the necessary infrastructure for the mine, a schedule is developed at an appropriate level of detail (annual, quarterly or monthly) to set out the development sequence and timing that will ensure adequate availability of stopes to sustain the planned rate of production.

42. The quantity and quality (tonnage and grade) available from each stope is determined by interrogation of the three-dimensional block model of the mineral resource, after applying modifying factors that account for inevitable losses of payable material and dilution of the 'ore' with waste rock through overbreak in the stopes or human error in materials handling.

43. The production of this material in each period is then tabulated to provide an overall mine plan that, for each period of the operation, describes the quantity (linear metreage) of each type of development, the ore production tonnage and grade and expected recovery of valuable metals into saleable concentrates.

44. Revenue forecasts are then generated based on the quantity of each payable metal in the saleable products, accounting for the expected cost of sales (concentrate transport, treatment and refining costs obtained from customers, and any royalties payable on production).

45. Operating and capital costs estimates are based on the equipment and manpower requirements of the development, mine production and processing operations, with suitable provision for general and administrative costs.

46. The project cash flow model is then compiled, and adjustments can be made as necessary for taxes and finance costs. The net cash flow is discounted to obtain measures of project viability that typically include net present value, internal rate of return, and payback period.

4.0 INVICTA PROJECT DESCRIPTION

47. The following description is largely based on SRK's 2018 PEA Technical Report, filed under Lupaka's profile on the Canadian System for Electronic Document Analysis and Retrieval (SEDAR.com) on 13 April 2018 and amended on 29 May 2018.

4.1 LOCATION OF THE PROPERTY

48. The Invicta property is located approximately 120 km northeast of Lima, Peru, and lies at an average elevation of 3600 metres above sea level (Figure 4.1).

Figure 4.1[10]
Location of the Invicta Project

49. The Invicta property comprises six mining concessions held by Invicta, a subsidiary of Lupaka and comprises a total area of 4,700 hectares. A plan showing the mining concessions is

[10] C-34, SRK PEA 2018, p. 6.

reproduced in Figure 4.2. The Invicta mine that Lupaka was developing in 2018 lies on the Victoria Uno concession, marked by an orange dot in the diagram.

Figure 4.2[11]
Invicta Mining Concessions, February 2018

4.2 HISTORY OF THE PROPERTY

50. Mineralization was first discovered in 1968 and the ground was explored by Pangea Peru S.A. ("Pangea") in the 1990's. After Barrick bought Pangea, the Invicta property was optioned by Andean American Gold Corporation ("Andean American") in 2005, which further explored the property until in 2012 Lupaka acquired Andean American.

51. In July 2007, Andean American published an estimate of Measured and Indicated ("M&I") resources totalling 4.7 million tonnes averaging 2.73 g/t Au, 18.36 g/t Ag and 0.45% Cu. No lead or zinc grades were quoted.

[11] C-34, SRK PEA 2018, p. 7.

52. In August 2008, based on additional diamond drilling by Andean American, an independent estimate by Discover Geological Consultants Inc. ("DGCI") identified a Measured and Indicated Resource of 7.9 million tonnes at 2.11 g/t Au, 19.19 g/t Ag, 0.52% Cu, 0.38% Pb and 0.35% Zn. Inferred resources of a further 11.7 million tonnes were identified. [12]

53. In June 2009, a feasibility study published by Lokhorst Group Ventures, Inc. ("Lokhorst") incorporated almost all the above Measured and Indicated resources into a Probable Reserve of 7.8 million tonnes at very similar grades.[13]

54. In November 2009, DGCI updated its resource estimate to account for additional exploration data.[14] Its estimate of Measured and Indicated Resources rose to 10.7 million tonnes at 2.05 g/t Au, 16.08 g/t Ag, 0.43% Cu, 0.32% Pb and 0.30% Zn. A further 14.23 million tonnes were Inferred.

55. In an updated feasibility study published in July 2010, Lokhorst estimated a Probable Mineral Reserve that appears identical to their 2009 estimate, being 7.8 million tonnes averaging 2.14 g/t Au, 18.76 g/t Ag, 0.52% Cu, 0.38% Pb and 0.30% Zn. The production rate was expected to be 3,000 t/d in Year 1 rising to 5,000 t/d in Year 3 onwards.

56. In April 2012, working on behalf of Andean American, SRK estimated the combined Measured and Indicated mineral resources at Invicta to be 8.64 million tonnes averaging 2.13 g/t Au, 15.90 g/t Ag, 0.43% Cu, 0.24% Pb and 0.29% Zn, using a cutoff of 1.3 g/t AuEq. Nearly all (98.5%) of this resource was classified as Indicated. A further 2.53 million tonnes were inferred using that cutoff grade.

57. Andean American proceeded to develop the underground mine workings. On the 3400 metre level, an adit was driven into the hillside. Two cross-cuts were then mined through the Atenea vein. From the cross-cuts, drives were developed along the strike of the vein and additional openings then exposed the full width of the mineralization on that level. Lupaka's March 2014 presentation (Figure 4.3) depicts the development on 3400 level existing at that time.

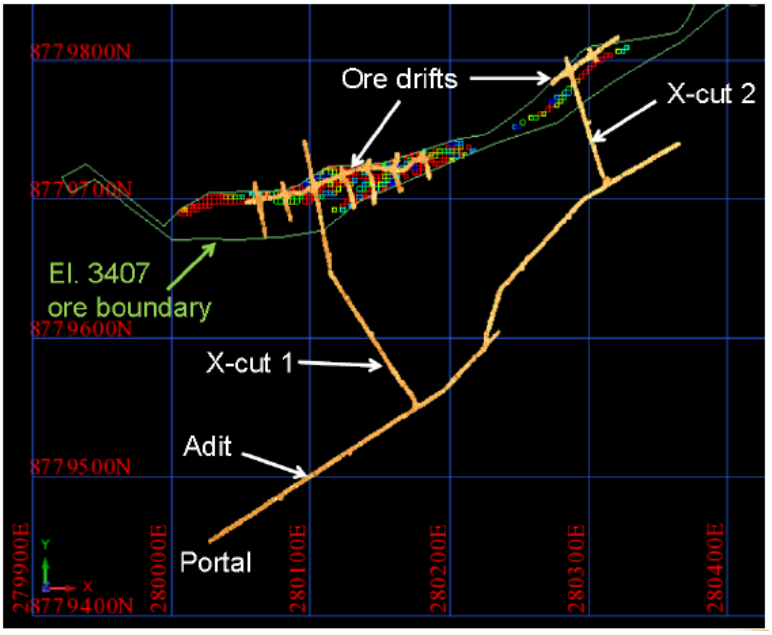
58. In April 2018, SRK completed work on a Preliminary Economic Assessment ("PEA") of the Invicta project on behalf of Lupaka. The PEA was filed on SEDAR in April 2018 and an amended copy was filed on SEDAR in May 2018. In SRK's 2018 study, the 2018 PEA marked a change of strategy for the project: instead of proposing a capital-intensive on-site mill having a throughput of several thousand tonnes per day and requiring a significant power and water supply, tailings storage facility and other infrastructure, the PEA depicted an alternative smaller, higher-grade project that could be developed without a mill or other heavy infrastructural requirements, instead contracting for toll-treatment of the mine's production.

[12] C-34, SRK PEA (2018), p. 23, Table 10.

[13] C-57, Invicta Mine Feasibility Study by Lokhorst, June 2009, p. 57, Table 5.5.

[14] C-34, SRK PEA (2018), p. 25, Table 16.

Figure 4.3[15]
Existing Underground Development, 3400 Level, March 2014 (Plan View)



59. For the PEA, SRK did not update its 2012 resource model for Invicta but recomputed the gold equivalent grade using contemporary price forecasts, reclassified the small amount of measured resource as Indicated and, in order to demonstrate reasonable prospects for economic extraction using underground mining methods with toll milling at the significantly lower rate of production of 355 t/d, SRK raised the cutoff grade from 1.3 to 3.0 g/t AuEq. The restated Indicated resource estimate was almost 3.0 million tonnes averaging 4.07 g/t Au, 24.81 g/t Ag, 0.60% Cu, 0.36% Pb and 0.42% Zn. A further 0.57 million tonnes were Inferred.

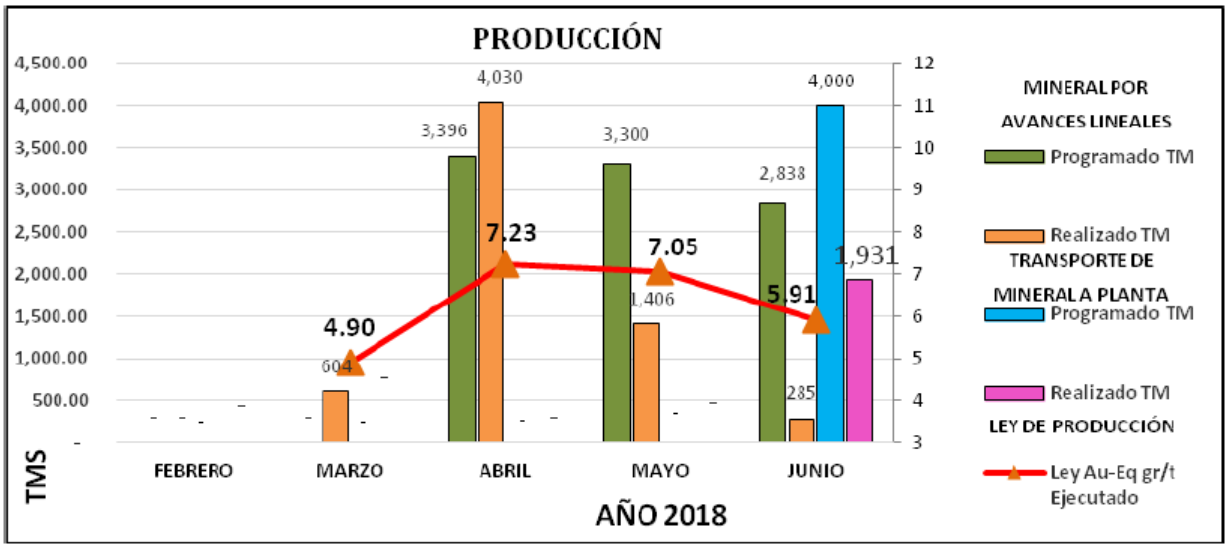
60. In May 2018, Red Cloud updated the cash flow model that SRK had prepared as part of its PEA. The Red Cloud model reflects the prospective purchase from Buenaventura of the Mallay Plant through which Lupaka planned to process 590 t/d of ore from the Invicta project. The Red Cloud model demonstrated an opportunity for Invicta to benefit from the economies of scale afforded by a higher rate of production without the need for a larger investment in infrastructure at Invicta.

61. Development of the underground mine progressed during the first half of 2018, with Invicta's monthly report for June 2018[16] showing that ore extracted during stope access preparation had generated a total of 6,325 tonnes (wet basis) at an average gold equivalent grade of 6.91 g/t as shown in Figure 4.4 and summarized in Table 4.1.

[15] C-69 Invicta Gold Project – Presentation, March 2014, p. 7.

[16] C-234, Invicta Mining Corp. Monthly Report June 2018, p 8 of 20. Graph No.1

Figure 4.4[17]
Chart showing Development Ore, March-June 2018



Source: C-234, Invicta Mining Corp. Monthly Report June 2018, p 8 of 20. Graph No.1

Table 4.1
Invicta Development Ore, March – June 2018

Month	Ore (wet tonnes)	Grade (g/t AuEq)
Mar-2018	604	4.90
Apr-2018	4,030	7.23
May-2018	1,406	7.05
Jun-2018	285	5.91
Total	**6,325**	**6.91**

Source: C-234, Invicta Mining Corp. Monthly Report June 2018, p 8 of 20. Graph No.1

62. Grades reported from mine development ore are derived from analyses performed on representative samples collected in situ and/or from material broken during blasting and stockpiled at the mine awaiting transport to the mill. It reflects the expected mill head grade for that material.

63. As shown in a diagram dated August 2018 (Figure 4.5)[18], by that time a second adit had been opened on the 3430 Level (i.e., at an elevation 30 metres above the 3400 level). The 3430 adit intersected the Atenea vein, and a drift on that level was mined along strike. The mining of four cross-cuts was in progress. The existence of the 3430 level adit was significant since it would provide:

[17] C-234, Invicta Mining Corp. Monthly Report June 2018, p 8 of 20. Graph No.1

[18] MI-05, Mining Sequence October (Atenea Underground Diagram) 2018.

- Physical access to the top of the first stopes for inspection and backfilling;
- A return airway for circulation of fresh air to ventilate the workings during production blasting;
- A second egress from the mine in the event the 3400 Level was inaccessible.

64. Figure 4.5 also shows that Lupaka's schedule called for the mine to begin long-hole drilling and blasting in some of the stopes immediately above the 3400 level within three months (i.e., in October 2018). The commencement of stoping typically marks the start of a ramp-up period in which the rate of production steadily increases up to design capacity.

65. By the end of September, 2018, a further 8,765 wet tonnes of development ore had been mined at an average gold equivalent grade of 6.33 g/t, as detailed in Table 4.2.

Figure 4.5
Mining Development Sequence, 2018 (Isometric View)

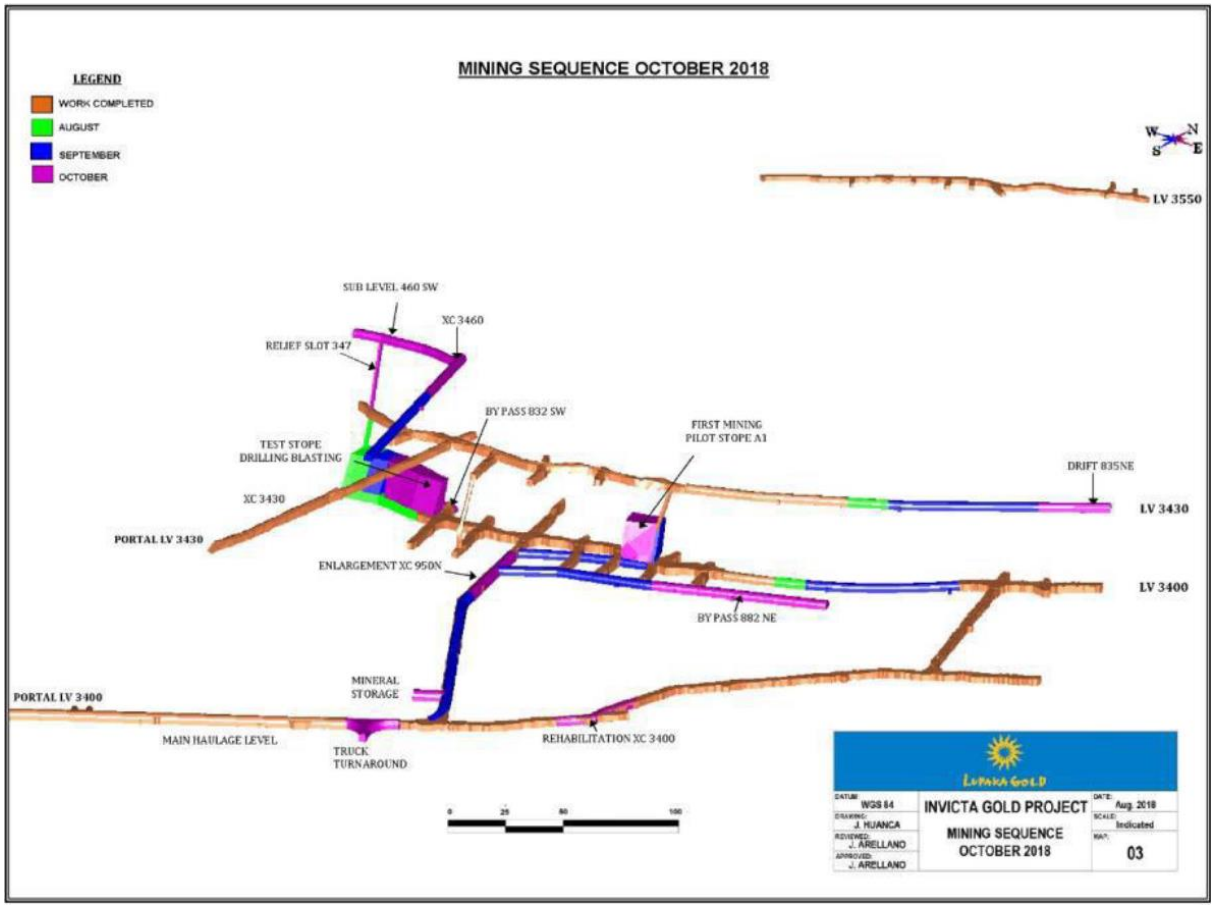


Table 4.2
Invicta Development Ore, Jul – Oct 2018

Month	Ore (wet tonnes)	Grade (g/t AuEq)
Jul-2018 [19]	1,005	5.53
Aug-2018 [20]	3,578	6.98
Sep-2018 [21]	4,182	5.96
Total	**8,765**	**6.33**

Source: * C-086, Invicta Mining Corp. Monthly Report Sep 2018, p7 of 13
Source: + C-087, Invicta Mining Corp. Monthly Report Oct 2018, p 6 of 14

66. In aggregate, the development ore mined though June 2018 (described in Table 4.1, above) together with the development ore mined in July-September 2018 (Table 4.2) exceeded 15,000 wet tonnes with an average gold equivalent grade of approximately 6.57 g/t.

67. Development of the mine ceased in October 2018 when the mine was blockaded.[22]

[19] C-86, Invicta Mining Corp. Monthly Report Sep 2018, p. 7

[20] Ibid, p. 7.

[21] C-87, Invicta Mining Corp. Monthly Report Oct 2018, p. 6.

[22] C-87, Invicta Mining Corp. Monthly Report October 2018, p 4 of 14.

5.0 MINE PLANNING

5.1 PEA MINE PLAN

68. In November 2017, Lupaka commissioned SRK as an independent consultant to compile a PEA level technical report for the Invicta Gold Project, following Canadian Securities Administrators' National Instrument 43-101 (NI 43-101) guidelines. This work resulted in a Technical Report completed in May 2018 (the 2018 PEA).

69. The 2018 PEA was based on a mineral resource estimate prepared by SRK in 2012, updated by applying revised gold equivalency factors and a reporting cut-off grade that reflected then-current market conditions.

70. As described in SRK's 2018 PEA, the Invicta Project aimed to exploit the Atenea vein, the highest grade of a number of mineralized quartz veins with associated minor stockwork veinlets carrying gold, pyrite, sphalerite, galena and chalcopyrite that are located on the property. SRK stated that "*The PEA considers only a small portion of the total mineral resource adjacent to the existing infrastructure at the Invicta Gold Project. The operating plan is based on the underground extraction from the Atenea vein, close to the existing 3400 Level adit, utilizing a sublevel long hole open stoping mining method, with waste rock as backfill, where possible*"[23]

71. SRK was also of the opinion that "*…the property has considerable potential for mineral resource expansion through exploration. Structural studies, geophysical and geochemical work conducted to date strongly suggest the potential for mineral resource expansion along existing mineralized structures. [...] It is strategically important that high grade mineralization be identified and delineated by drilling to potentially expand the life of mine.*"[24]

72. The PEA envisaged that the polymetallic ore from Invicta would be hauled by road to a third-party toll treatment facility where it would be milled and the valuable minerals would be recovered into saleable concentrates for shipment to the nearest port for export and final metal recovery in an offshore smelter.

73. Developing the Project in this manner would allow Invicta to "fast-track" the project into production without the need to build its own mill or tailings impoundment. The production rate of 355 t/d selected by SRK would allow for a six-year initial mine life.

74. In Micon's opinion, the exploration program recommended by SRK would likely have allowed for delineation of additional resources and further extension of the mine life.

[23] C-34, - SRK PEA (2018), p. x.

[24] Ibid, p. 168.

75. In total, SRK estimated an Indicated mineral resource on the property of almost 3.0 million tonnes above a cut-off grade of 3.0 g/t gold equivalent. SRK identified a further 577,000 tonnes of Inferred resource above that cut-off grade. Table 5.1 summarises SRK's 2018 resource estimate.[25]

Table 5.1
Summary of 2018 PEA Resource Estimate above 3.0 g/t AuEq Cut-off

Item	Units	Indicated Resource	Inferred Resource
Mineral Resource	tonnes (000)	2,999	577
Grade (Gold Equivalent)	g/t AuEq	5.78	5.29
Grade - gold	g/t Au	4.07	4.91
Grade - silver	g/t Ag	24.81	5.49
Grade - copper	% Cu	0.60	0.10
Grade - lead	% Pb	0.36	0.11
Grade - zinc	% Zn	0.42	0.15

Source: SRK 2018, Table 79

76. The 2018 PEA states that it "considers only a small portion of the total mineral resource adjacent to the existing infrastructure at the Invicta Gold Project"26 In fact, the 2018 PEA mine plan exploits less than 680,000 tonnes of mineral resource, all of which is from the Atenea vein structure, and did not consider the potential for mining another four mineralized zones identified on the property. The mine plan focuses on a sub-set of the identified mineral resource, applying a higher cut-off grade of 4.0 g/t AuEq.

77. Table 5.2 presents Micon's approximation of the 2018 Indicated Resource that was not included in SRK's 2018 PEA mine plan, by difference.[27]

78. It is apparent that only 22% of the mineral resource tonnage, or a weighted average of 33% of the gold equivalent ounces, were included in the PEA mine plan. Furthermore, this analysis indicates that 78% of the mineral resource tonnage, 70% of the contained gold and 67% of the contained gold equivalent ounces were excluded from the PEA mine plan, providing an attractive target for future mine expansion.

79. The mine plan presented in the 2018 PEA was confined to a vertical interval of 105 metres, from the elevation of the existing adit portal at 3400 metres up to 3505 metres elevation. In planning to mine only above the portal level, SRK aimed to utilize existing infrastructure, and so minimize the amount of additional pre-production development and capital expenditure required. The

[25] C-34, SRK (2018), p. 119, Table 79.

[26] C-34, SRK (2018). p.121.

[27] The approximation is due to an unspecified amount of Inferred resource that was included in SRK's mine plan.

upper elevation limit of 3505 metres appears to be a result of limiting the mine plan to an initial 6-year period, and does not represent an upper bound to the mineral resource.

Table 5.2[28]
Mineral Resource Included and Not Included in 355 t/d Mine Plan

	Indicated Resource		PEA Mine Plan			Excluded from PEA Mine Plan		
	Grade (g/t, %)	Mass (koz, kt)	Grade (g/t, %)	Mass (koz, kt)	Mass (%) in mine plan	Grade (g/t, %)	Mass (koz, kt)	Mass (%) not in PEA plan
Resource		2,999		670	22%		2,329	78%
Gold Equiv.	5.78	557	8.58	185	33%	4.97	373	67%
Gold	4.07	392	5.54	119	30%	3.65	273	70%
Silver	24.81	2,392	44.34	955	40%	19.19	1,437	60%
Copper	0.60	1,799	0.87	583	32%	0.52	1,217	68%
Lead	0.36	1,080	0.76	509	47%	0.24	571	53%
Zinc	0.42	1,260	1.02	683	54%	0.25	576	46%

Compiled from: SRK 2018, Table 79 and Table 80

80. A rule of thumb known in the mining industry as Taylor's Rule[29] is commonly used to provide an initial, order-of-magnitude estimate of the sustainable production rate of a mineral deposit. Taylor's Rule, originally published in 1978, relates daily production rate to the size of the deposit using the following formula:

$$C = [T^{0.75}] / 70$$

Where C is the capacity in tonnes per day, T is the resource tonnage, and 350 operating days per year are assumed. Applying Taylor's Rule to the (almost) three million tonnes of resource at Invicta above a cutoff grade of 3.0 g/t AuEq suggests the deposit could sustain a production rate of up to 1,000 t/d.

81. Micon notes that earlier studies, such as the 2009 Feasibility Study by Lokhorst[30], planned to produce more than 3,000 t/d, albeit based on a lower cutoff grade. The production rates of 355 t/d and 590 t/d applied in the 2018 PEA and Red Cloud models, respectively, are therefore conservative and readily achievable.

[28] C-34, SRK PEA (2018), p. 119 et seq., Table 79 and 80.

[29] MI-06, A simplified economic filter for underground mining of massive sulfide deposits, HK Taylor (1978) cited in USGS Open-File Report 00-349 [pubs.usgs.gov/of/2000/0349/report.pdf], p. 4 et seq.

[30] C-57 Invicta Mine Feasibility Study by Lokhorst, June 2009, p.15.

82. Table 5.3 summarises the 355 t/d mine plan as presented in SRK's 2018 PEA.

Table 5.3[31]
Summary of 2018 PEA Production and Grades

Item	Units	Value
Annual Mine Production	tonnes	669,813
Average Daily Production	t/d	355
Au-Eq Grade	g/t	8.58
Au Grade	g/t	5.54
Ag Grade	g/t	44.34
Cu Grade	%	0.87
Pb Grade	%	0.76
Zn Grade	%	1.02
Dilution	%	11
Mine Recovery	%	81
Au-Eq Produced Ounces	oz	184,708
Au-Eq Payable Ounces	oz	145,765

Source: SRK 2018, Table 80

83. To facilitate analysis of the PEA mine plan under a "but for" scenario in which Lupaka was allowed to continue its development of the Invicta mine, Micon has adjusted the PEA underground development and production schedules as follows:

    (i) Actual development of 861 linear metres achieved by Lupaka in 2018 prior to the blockade, as reflected in contemporaneous reports[32] and diagrams. This is treated as a sunk cost in Micon's analysis and hence is removed from the ongoing development plan. Consequently, whereas the PEA contemplated 6,192 metres of development over the life-of-mine, Micon's schedule reflects a total of 5,331 metres.

    (ii) Micon maintained SRK's assumptions regarding the percentage of life-of-mine development to be carried out each year, applying the corresponding percentage to the balance of 5,331 metres. For example, since the PEA assumed 1,870 metres of development in the first production year, or 30.3% of the life-of-mine total of 6,192 metres, Micon scheduled 30.3% of the remaining development to be carried out in the first year, totalling 1,617.8 metres.

    (iii) Micon has addressed Lupaka's need to identify reliable toll millers capable of routinely and efficiently processing 355 t/d and to implement closer supervision of toll milling operations, by limiting the forecast production tonnages to 100 t/d, 200 t/d and 300 t/d mined in November 2018, December 2018 and January 2019, respectively, with steady-state production of 355 t/d from February 2019 onward; and

[31] C-34, SRK PEA (2018), p. 122, Table 80.

[32] C-87, Invicta Mining Corp. Monthly Report October 2018, p. 5.

(iv) Restatement of the annualised schedules into project years commencing on 1 September and ending 31 August.

84. Table 5.4 presents the ongoing development requirements for the 355 t/d mine plan, after making the above adjustments.

Table 5.4[33]
355 t/d Development Plan (Project Years ending 31 August)

Type / dimensions	Unit	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Total
Declines 3.5 x 3.5	m	136.6	163.9	68.4	38.5	40.2	2.3	450.0
By Pass 3.5 x 3.5	m	46.7	56.1	23.4	13.2	13.8	0.8	154.0
Stope Prep 3.5 x 3.5	m	87.7	105.3	43.9	24.7	25.8	1.5	289.0
Vent Rse/Slot 1.5 x 2.4	m	235.2	282.4	117.8	66.3	69.3	4.0	775.0
Access Drift 3.0 x 3.0	m	205.8	247.0	103.1	58.0	60.6	3.5	678.0
Drawpoint 3.5 x 3.5	m	20.6	24.8	10.3	5.8	6.1	0.4	68.0
Gallery 3.5 x 3.5	m	766.9	920.7	384.3	216.1	226.0	13.1	2,527.0
Access of OP 2.0 x 1.5	m	33.1	39.7	16.6	9.3	9.7	0.6	109.0
Orepass 1.5 x 2.4	m	79.2	95.1	39.7	22.3	23.3	1.4	261.0
Orepass Pkt 2.0 x 2.0	m	6.1	7.3	3.0	1.7	1.8	0.1	20.0
Total Development	**m**	**1617.8**	**1942.2**	**810.6**	**455.9**	**476.7**	**27.7**	**5,331.0**

Source: 2018 PEA, Table 86 (modified by Micon)

85. Unit costs for underground development in the 2018 PEA were estimated at between $711/m and $1,245/m depending on the cross-sectional dimensions (width and height), to which SRK added allowances for maintenance (10%) and contingency (15%). Micon has maintained the same parameters and methodology as used by SRK in the 2018 PEA, so the estimated unit costs of development are unchanged. Table 5.5 presents the base unit rates, the application of a 10% provision for maintenance and finally a 15% contingency factor. The latter rates are applied in the cash flow forecast.

Table 5.5[34]
Unit Costs for Underground Development

Type / dimensions	Unit	Base Estimate	Add 10% maintenance	Including 15% contingency
Declines 3.5 x 3.5	$/m	1,245	1,370	1,575
Bypass 3.5 x 3.5	$/m	1,245	1,370	1,575
Stope Prep 3.5 x 3.5	$/m	1,245	1,370	1,575
Vent Rse/Slot 1.5 x 2.4	$/m	711	782	900
Access Drift 3.0 x 3.0	$/m	1,245	1,370	1,575
Drawpoint 3.5 x 3.5	$/m	1,170	1,287	1,480
Gallery 3.5 x 3.5	$/m	1,170	1,287	1,480

[33] C-34, SRK PEA (2018), p. 132, Table 86.

[34] C-34, SRK PEA (2018), p. 157, Table 104.

Type / dimensions	Unit	Base Estimate	Add 10% maintenance	Including 15% contingency
Access of OP 2.0 x 1.5	$/m	809	890	1,023
Orepass 1.5 x 2.4	$/m	809	890	1,023
Orepass Pkt 2.0 x 2.0	$/m	809	890	1,023

Source: 2018 PEA, Table 104

86. Table 5.6 presents the rescheduled ore production for the 355 t/d mine plan. In order to ensure the availability of adequate toll milling capacity, Micon has provided for a three-month ramp-up period commencing with production as follows:

- 100 t/d in November 2018
- 200 t/d in December 2018,
- 300 t/d in January 2019, and
- 355 t/d thereafter.

Table 5.6[35]
355 t/d Production Plan (Project Years ending 31 August)

Parameters	Unit	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Total
Ore mined/milled	t	92,550	127,800	127,800	127,800	127,800	66,063	669,813
Grade - AuEq	g/t	8.55	8.50	9.16	8.51	7.70	9.45	8.58
Grade - Au	g/t	5.69	5.34	5.23	5.53	5.31	6.79	5.54
Grade - Ag	g/t	39.96	44.81	57.07	50.90	39.31	21.95	44.34
Grade - Cu	%	0.72	1.02	1.23	0.95	0.65	0.30	0.87
Grade – Pb	%	0.89	0.69	0.83	0.48	0.59	1.44	0.76
Grade – Zn	%	1.08	0.88	1.20	0.83	0.80	1.68	1.02
Production – AuEq	oz	25,443	34,932	37,643	34,974	31,648	20,068	184,708
Sales (payable) Au-Eq	oz	20,057	27,632	29,607	27,706	25,052	15,712	145,765

Source: 2018 PEA, Table 87

87. Micon has reviewed the makeup of the 2018 PEA operating cost estimate and considers it to be reasonable and appropriate to the proposed scale of operation. The estimate includes provision for mine development and operation, as well as processing of the ore at a remote third-party toll mill. In this regard, the 2018 PEA states that: "*It is assumed for operating cost estimation that the toll treatment plant would be in Caraz, central Peru. Caraz is 413 kilometres from the Invicta Gold Project by national highway for feed transportation. The concentrate port of Callao is 484 kilometres from Caraz for concentrate transportation*."[36]

[35] C-34, SRK PEA (2018), p. 132, Table 87.

[36] C-34, SRK PEA (2018), p. 137.

88. Notwithstanding the issues Invicta experienced at the start of its toll milling campaign in 2018, Micon considers that, with the provision of the ramp-up period described above and the implementation of rigorous supervision of the toll-milling facilities, the processing cost and recovery assumptions in the 2018 PEA are reasonable and, given that several of the available toll milling plants were closer to Invicta than Caraz, the transport cost assumptions in the PEA were conservative.

89. Owing to the distance of the toll mill from the mine and from the port where the saleable products would be delivered, provision was made for ore transport costs of around $50.20/t milled and product transport costs of $51.35/t concentrate (including moisture). However, in SRK's cash flow model (opex tab, row 8), while the unit rate for concentrate transport was correctly applied to the zinc concentrate tonnage, it excluded the copper and lead concentrate tonnages. Micon has corrected this line item in its cost estimate.

90. SRK's cost estimate provides $700,000 per annum in respect of employee profit sharing. Micon retained this assumption but reduced the provision to $583,333 in respect of the first year (September 2018 to August 2019) pro-rata with operating for 300 days compared to 360 days thereafter. Life of mine total profit sharing ($3.766 million) remains the same as SRK's estimate in the 2018 PEA, being equivalent to 5.1% of pre-tax operating profits.

91. Micon adjusted the operating cost estimate periods to match the September-August project years in the production schedule. Therefore, while the parameters for other cost items were retained unchanged, costs in individual periods are not directly comparable. The overall total on-site cash operating costs of $96.04 million show a negligible difference to SRK's 2018 total.

92. Table 5.7 presents the operating costs schedule for the 355 t/d mine plan.

Table 5.7[37]
Operating costs – 355 t/d Mine Plan (Project Years ending 31 August)

Parameter	Unit	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Total
Mining Costs	$'000	4,042	5,324	5,324	5,324	5,324	2,776	28,112
Processing Costs	$'000	3,661	5,041	5,130	4,998	4,948	2,619	26,397
G&A Costs	$'000	1,177	1,413	1,413	1,413	1,413	735	7,564
Trucking to mill	$'000	4,646	6,416	6,416	6,416	6,416	3,316	33,625
Total op. costs	**$'000**	**13,526**	**18,193**	**18,282**	**18,150**	**18,100**	**9,446**	**96,697**
Offsite costs	$'000	1,073	1,862	2,231	1,737	1,440	869	9,213
Total costs	**$'000**	**14,599**	**20,056**	**20,513**	**19,887**	**19,540**	**10,315**	**104,910**

Source: 2018 PEA, Table 105, AC-29 (adjusted by Micon)

93. Table 5.8 presents the capital expenditure schedule for the 355 t/d mine plan. Capital expenditure on site roads and underground development for mine access and stope preparation carried out by Invicta prior to October 2018 has been excluded as it represents a

[37] C-34, SRK PEA (2018), p. 158, Table 105.

sunk cost. Consequently, life-of-mine capital expenditure of $9.76 million is expected to be almost $3.0 million less that the $12.75 million estimate in SRK's 2018 PEA. Capital development of the remaining mine infrastructure occurs mainly in the first three years of the plan and should all be classified as sustaining capital expenditure.

Table 5.8[38]
Capital Expenditure – 355 t/d Mine Plan (Project Years ending 31 August)

Parameter	Unit	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Total
Site Roads & Prep	$'000	0	72	72	72	72	72	360
Capital Develop't	$'000	2,249	2,701	1,127	634	663	38	7,412
Community Infra.	$'000	0	272	207	288	288	288	1,342
Enviro. & Closure	$'000	0	115	119	125	135	153	648
Total capital cost	**$'000**	**2,249**	**3,159**	**1,525**	**1,119**	**1,157**	**552**	**9,762**

Source: 2018 PEA, Tables 102, 103, with adjustments by Micon.

5.2 EXPANDED MINE PLAN

94. During 2018, Red Cloud Klondike Strike Inc. (Red Cloud) revised the Invicta economic model to provide an initial, conceptual evaluation of an increase in the proposed rate of production from 355 t/d to 590 t/d, on the basis that Lupaka intended to purchase the Mallay Processing Plant (Mallay) and treat Invicta material using that facility. This strategy would not only allow Invicta greater control of the ore processing but would afford the mine improved economies of scale and also eliminate the premium paid to operators of a toll milling facility. Had the Mallay transaction proceeded, Micon expects that Lupaka would have commissioned an independent update to the PEA mine plan on which to base its expanded operation, at a cost in the range of $0.1 to $0.2 million.

5.2.1 Assumptions in the Red Cloud Model

95. In adapting the 2018 PEA cash flow model to evaluate the Mallay opportunity, Red Cloud raised the production rate in the model from 355 t/d to 590 t/d, reflecting the greater capacity of the Mallay Mill compared to the 2018 PEA assumption regarding toll milling.

96. The grade profile in the Red Cloud model remained the same as in the 2018 PEA, with the exception of the final year in which an average resource grade was applied.

97. The costs of mine development in the Red Cloud model assumed the same average cost per tonne of production as in the 2018 PEA, so that the life-of-mine development cost increased in proportion to tonnes milled. Adjustments to the timing reflected a similar emphasis on production as was assumed in the 2018 PEA.

[38] C-34, SRK PEA (2018), p. 157, Table 102 and 103.

98. Micon understands Mallay to be approximately 75 km by road from Invicta, and approximately 225 km from the port of Callao. Consequently, the treatment of Invicta ore at Mallay would allow for a significant saving in the costs of transporting ore to the mill and concentrate to the point of sale when compared to the assumptions in the 2018 PEA.

99. In addition, the increased scale of operation (590 t/d vs 355 t/d) would allow the fixed component of operating costs to be spread over a greater tonnage, thereby reducing average unit costs and allowing for a reduction in the cut-off grade, as described below.

5.2.2 Limitations of the Red Cloud Model

100. In preparing its conceptual cash flow model for a 590 t/d scenario, Red Cloud made a number of assumptions and approximations which Micon's review suggests are optimistic:

i. Mine development costs were assumed to rise pro-rata with the increase in production rate from 355 t/d to 590 t/d. Micon tested this assumption by developing a mine layout to access sufficient stopes to support a 590 t/d plan and finds that an additional provision for development would be appropriate.

ii. Annual average ore grades were assumed to remain largely unchanged from SRK's 355 t/d plan, despite the inclusion of additional resource tonnage in the production schedule. Micon tested this assumption by scheduling production from stopes on an annual basis and has proposed adjustments to the grade profile in accordance with the diluted tonnage and grades reported from the resource block model.

iii. Red Cloud retained SRK's cost estimate of $700,000 per annum in respect of employee profit sharing. For the sake of prudence, Micon has increased this provision to $900,000 per annum so as to maintain the employees' share of profits at 5.1% of pre-tax operating profit, matching the rate provided for in the 2018 PEA. Nevertheless, Micon reduced this provision to $583,333 in respect of the first year (September 2018 to August 2019), pro-rata with operating for 300 days at 355 t/d compared to operating 360 days per year at 590 t/d thereafter.

iv. The unit cost of treating ore at the Mallay mill appears to have omitted the purchase cost of electrical energy for the operation. In line with an estimate made during due diligence investigation of the Mallay plant by Aminpro-Chile[39], Micon has adjusted the direct processing unit cost in the Red Cloud model from $20.00/t to $25.50/t.

v. The cost of delivering concentrate to port was unchanged from the 355 t/d plan, despite the Mallay plant being materially closer to the destination port. Accordingly, Micon has proposed a reduction in that cost item of $20.00/wmt (i.e., from $51.35/t concentrate to $31.35/t concentrate) to account for relative proximity of Mallay to Callao port when compared to Caraz. However, in Red Cloud's cash flow model (opex

[39] C-38, Aminpro Due Diligence Report for Lupaka Gold – Invicta, November 2014, p. 21.

tab, row 8), while the unit rate for concentrate transport was correctly applied to the zinc concentrate tonnage, it excluded the copper and lead concentrate tonnages. Micon has corrected this line item in its cost estimate.

vi. Within the first year of the schedule, Micon further adjusted the unit cost rates for processing and concentrate transport to reflect the continued use of toll mills during that period.

vii. In aggregate, the inclusion of a specific provision for power purchase, the reduction of concentrate transport costs from Mallay, and adjustments for toll milling in the first year, overall life-of-mine processing costs rise from $21.64/t in the Red Cloud model to $28.08/t.

viii. All other unit costs remain the same as presented in the Red Cloud estimate.

101. In aggregate, Micon considers that, as a result of implementing the suggested amendments, confidence in the resulting production plan and cost estimate has now been raised to a level comparable to the 2018 PEA prepared by SRK.

5.2.3 Methodology

102. In its review of the Red Cloud Model, Micon analysed the underlying block model of the deposit and developed a mining layout, development schedule and production plan that identifies specific stopes to be mined each year, in much the same way that SRK's 2018 PEA had identified the stopes to be mined in its 355 t/d plan.

103. Micon's approach to confirming the feasibility of a mine plan for 590 t/d of ore production comprised:

A. Run statistics checks on the final block model used by SRK in 2018.
File name: *"03_mb_idw_2018".*

i. In some cases (3,280 of a total 588,121 cells; 0.6% of the dataset) the gold equivalent field of the block model contained negative values, rendering them invalid.

ii. Wherever such negative AuEq values were found, Micon set the AuEq value to nil so those particular blocks would be treated as waste rock.

iii. Figure 5.1 (below) shows in black the cells with negatives values located at the extreme western part of the orebody. Given the number of cells and their location, the impact is considered to be negligible for the purposes of this exercise.

iv. The density field of the block model was found to be empty. The density field represents the dry mass of rock per cubic metre in the model.

v. In place of the missing density field, we applied a constant density of 2.73 t/m^3

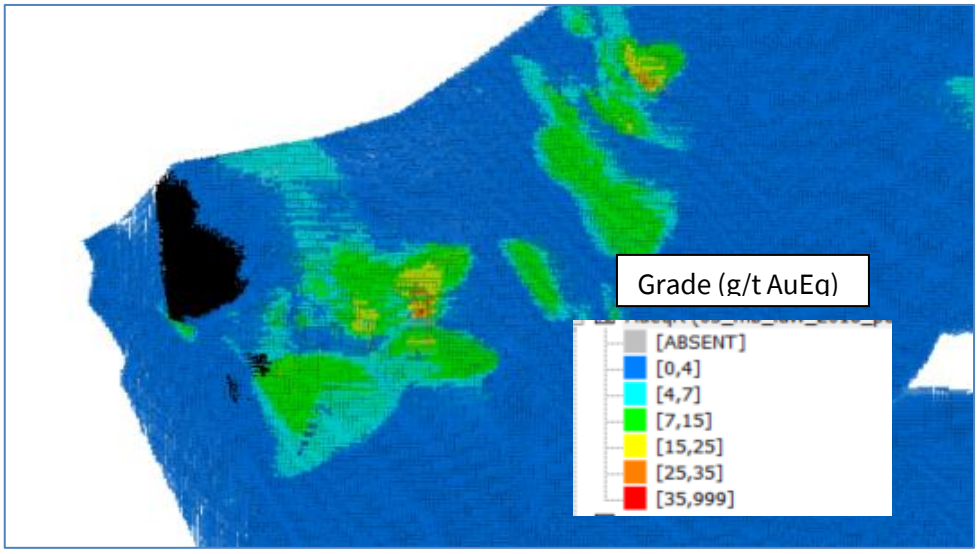
vi. The reason for using this constant is that this represents the average obtained from *Table 66: Summary of the Core Samples Specific Gravity, SRK (2018)*.

vii. The resource category field is used to identify Measured, Indicated and Inferred resource categories for material in the resource.

viii. In some instances, the resource category field was missing. In these cases, Micon assigned 16.1% of the material to the Inferred category and the balance to Indicated.

ix. This percentage is based on SRK's classification of reported resources in the 2018 PEA, in which 0.58 Mt were classified as Inferred while 2.99 Mt were classified as Indicated, such that Inferred comprises 16.1% of the total of 3.57 Mt.

Figure 5.1[40]
Block Model - Three-dimensional View Showing AuEq Grades (g/t)



B. Ensure, all three-dimensional wireframes ("solids"), topographic surfaces and mine design optimization files are readily useable. Files used for the 2018 PEA report by SRK to support the 355 t/d scenario were imported into Datamine® software and used as the starting point for Micon's review.

C. Review and, where appropriate, adjust the optimization parameters (metal prices, costs, cut-off grade, stope dimensions, dilution, recovery, pillars) to identify the optimal limits of mineable resources to support the 590 t/d scenario.

In line with the targeted increase in production rate, Micon reviewed the estimate of cut-off grade in line with the unit cost efficiencies that may be expected to be gained when

[40] Invicta 3D block model file '03_mb_idw_2018', screenshot by Micon using Datamine® software.

operating at a higher throughput. Recovery and dilution parameters were retained, in line with the findings of the 2018 PEA.

Gold-equivalent (AuEq) grade metric has been used for the cut-off estimate, consistent with the methodology used in the 2018 PEA.

Table 5.9 presents a comparison of the cut-off grade calculation using the SRK and Red Cloud estimates, respectively, and lastly using Red Cloud's results with adjustments made by Micon in order to conform with its review of input costs and the extended mine life.

Although Red Cloud does not expressly set out what its cut-off grade would be in the 590 t/day scenario, based on Micon's review it would have been appropriate to apply a cut-off grade of 3.0 g/t AuEq in a 590 t/d scenario.

Table 5.9[41]
Break-even Cut-off Grade Calculation

Parameters	Units	SRK 2018	Red Cloud	Micon
Production rate	t/d	355	590	590
Gold price	$/oz	1250	1,250	1,250
Mining Costs	$/t	42.95	35.48	37.07
Processing Costs	$/t	37.54	21.64	28.08
G&A Costs	$/t	12.66	6.20	6.98
Trucking to mill	$/t	50.20	18.00	19.64
Total op. costs	$/t	143.34	81.33	91.78
Mill Recovery	%	83	83	83
Dilution (%)	%	11	11	11
Cut-off grade (AuEq)	g/t AuEq	4.8	2.7	3.0

Source: 2018 PEA, Table 105

D. Table 5.10 presents a comparison of the design parameters for stopes on the Atenea Vein in the 2018 PEA and in the 590 t/d plan. Based on its review of the proposed mining method, Micon considers a minimum stope width of 3.0 m is appropriate for the selected mining method. Under the 590t/day scenario, all other design parameters would remain the same as in SRK's 2018 PEA.

E. Investigate and validate constraints in the 2018 PEA mine plan, such as not mining material above 3505 level and below 3400 level.

F. The 2018 PEA does not specify how SRK defined the stope outlines used in its 355 t/d mine plan. In preparing its review of the Red Cloud 590 t/d plan, Micon applied a Mining Shape Optimization (MSO) process using Datamine software to obtain the mineable resource tonnes, grades and location. The reported volumes include a 'skin' of diluting waste

[41] C-34, SRK PEA (2018), p. 158, Table 105.

material applied to the outer surface of each stope. This adjustment allows the planned grade of ore produced to be reported for each stope directly from the block model. This procedure differs slightly from the arbitrary addition of an 11% dilution estimate that was applied in the SRK and Red Cloud schedules.

Table 5.10[42]
Design Parameters of the Atenea Vein

Parameters	Units	SRK - 2018	Micon - 590 t/d
Cut-off grade (AuEq)	g/t AuEq	4.0	3.0
Stope length	m	40	40
Stope height	m	15	15
Stope width (min)	m	4	3
Dilution (m)	m	0.4 to 1.5	0.3 to 1.5
Minimum pillar	m	4 to 6	5 (avg.)
Mining From Elevation	m	3400	3400
Mining To Elevation	m	3505	3505

Source: 2018 PEA, Table 85

G. The results of this mine planning work are shown graphically in Figure 5.2 (over).

H. Non-recoverable resource material was excluded from the production plan. This excluded material includes resource material that must remain in place for the safety of the underground workings such as rib pillars (shown in blue), sill pillars (red), and the sub-surface crown pillar (brown) in line with recommendations outlined in section 15.5 of the 2018 PEA, as well as isolated or marginal stopes (black) that are considered sub-economic when development costs, mining dilution and recovery factors are taken into account.

I. Having identified the stopes that should form part of the production plan, development required for their extraction was then laid out using appropriate mine planning software, where necessary extending the design that supports the 355 t/d plan to ensure access to all planned stopes. Such additional development includes haulage ramps, drifts, cross-cuts, draw-points and raises required for safe and efficient operation of the mine. This mine design work was carried out at a level of detail commensurate with the 2018 PEA, sections 15.8 – 15.15.

J. The steps in conversion of the mineral resource to a mine plan are summarised in Table 5.11 (over).

[42] C-34, SRK PEA (2018), p. 128, Table 85.

Figure 5.2[43]
Layout for 590 t/d Mine Plan, Isometric View looking North

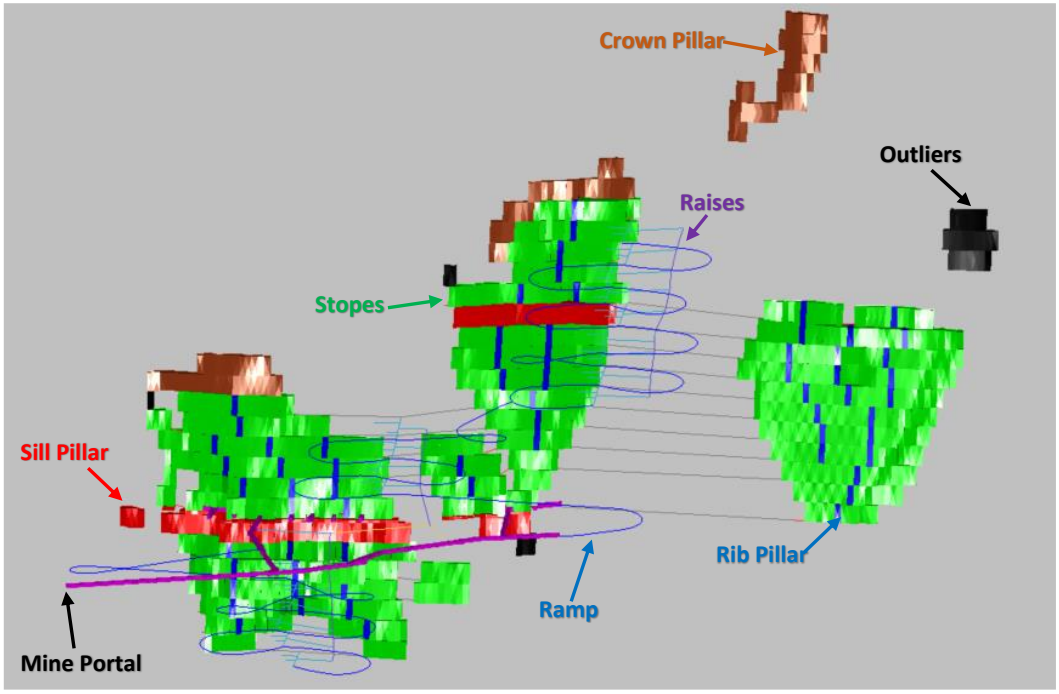


Table 5.11
Conversion of Resource to Mine Plan

Parameter	Unit	Indicated Resource (undiluted)	M.S.O. (incl. pillars)	Less Crown Pillar	Less Sill Pillars	Less Rib Pillars	Stopes (diluted)	Stopes (83% recov.)
Mineral Resource	t	2,999	2,717	(99)	(223)	(209)	2,185	**1,814**
Grade - AuEq	g/t	5.78	5.94	4.63	6.40	6.72	5.88	**5.88**
Grade - Au	g/t	4.07	4.10	3.74	3.64	4.80	4.10	**4.10**
Grade - Ag	g/t	24.81	26.85	16.19	38.87	27.82	26.02	**26.02**
Grade - Cu	%	0.60	0.56	0.26	0.85	0.57	0.54	**0.54**
Grade – Pb	%	0.36	0.61	0.27	0.90	0.65	0.59	**0.59**
Grade – Zn	%	0.42	0.49	0.22	0.73	0.52	0.47	**0.47**

K. Micon's review then proceeded to identify the logical sequence of mine development and production, ensuring that provision was made for adequate development ahead of production such that sufficient alternative working places are available to allow operational flexibility in the mine plan. It is customary to plan for such flexibility to allow for the installation of services (e.g,, ventilation fans and ducts, power cables or piping) or ground support, as and when required.

[43] Screenshot of Invicta mine plan for 590 t/d, prepared by Micon using Datamine® software.

L. Figure 5.3 and Figure 5.4 show plan and sectional views of the mine layout, respectively.

Figure 5.3[44]
Plan View of Typical Level Layout for 590 t/d Plan

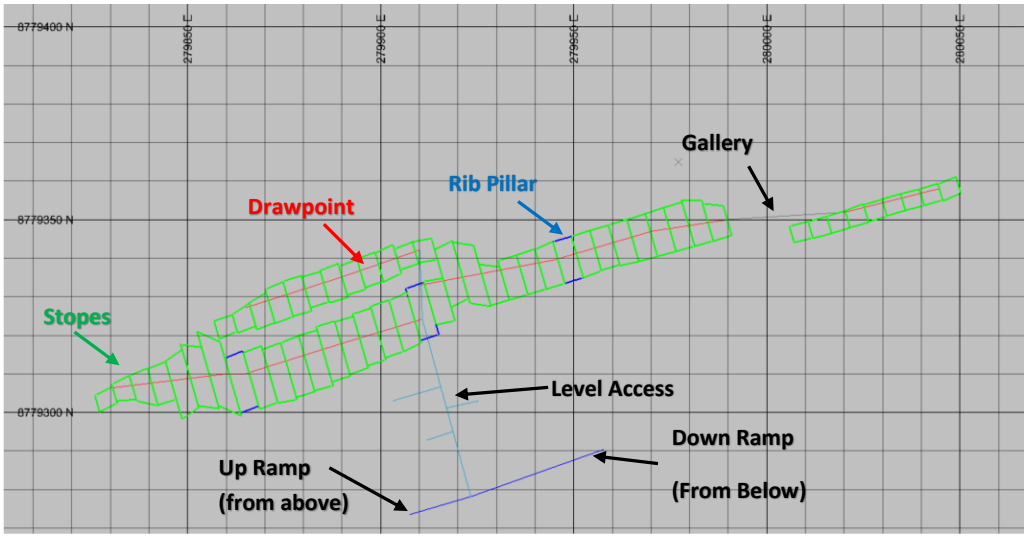
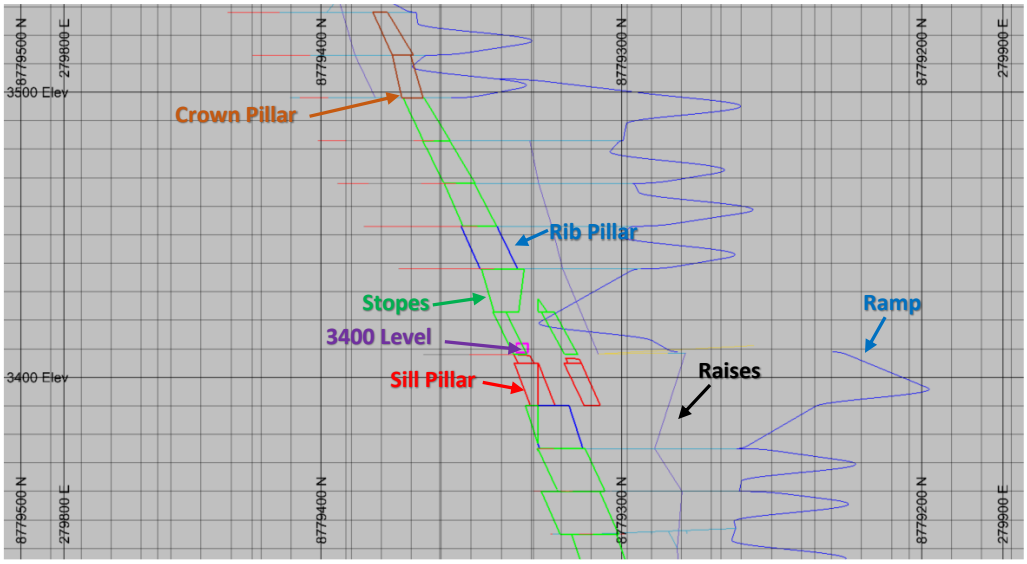


Figure 5.4[45]
Cross-Sectional View of Layout for 590 t/d Plan



M. The metreage of development and tonnage and grade of ore production were then reported from applying the schedule to the resource block model.

[44] Screenshot of Invicta mine plan for 590 t/d, prepared by Micon using Datamine® software.

[45] Screenshot of Invicta mine plan for 590 t/d, prepared by Micon using Datamine® software.

N. To facilitate analysis of the 590 t/d plan under a "but for" scenario in which Lupaka was allowed to continue its development of the Invicta mine, Micon adjusted the underground development and production schedules to reflect:

   (i) actual development of 831 linear metres achieved by Lupaka prior to the date of the Blockade;

   (ii) Lupaka's need to identify reliable toll millers capable of routinely processing 355 t/d for the period prior to commissioning of the Mallay Mill;

   (iii) a ramp-up period of two months during which deliveries to the Mallay Mill would commence, increasing gradually from 355 t/d to 590 t/d following commissioning of the Mallay Mill; and

   (iv) restatement of the schedules into project years commencing on 1 September and ending 31 August.

O. In its review, Micon accepted as reasonable and appropriate the estimates used by Red Cloud for the purchase and modification of the Mallay Mill, as well as the associated cost of a closure bond.

P. In line with the extension of the life of mine under Micon's revised plan, the annual provision of $150,000 for sustaining capital was extended by 3 years to cover the entire operating period.

Q. As previously described for the 355 t/d plan, in order to ensure the availability of adequate toll milling capacity, Micon has provided for a three-month ramp-up period commencing with production as follows:

   - 100 t/d in November 2018
   - 200 t/d in December 2018,
   - 300 t/d in January 2019, and
   - 355 t/d thereafter until commissioning of the Mallay Mill.

R. Ramp-up of the Mallay Mill was provided for as follows:

   - 355 t/d through August 2019
   - 450 t/d in September 2019,
   - 550 t/d in October 2019, and
   - 590 t/d thereafter.

S. Mining production will commence on the Level 3400 (Adit) and proceed upwards to level 3610 and downwards to Level 3300. The first 15 m will be drilled and blasted upside from level 3400. The following 15 m will be drilled and blasted from Level 3430 and extracted from the Level 3400. All other levels will be spaced at 15 m intervals. Stope width ranges from 4 m to 14 m wide and 40 m length with 5 m rib pillars along the strike. After extraction, the void will be filled with unconsolidated waste broken material from the development.

T. Sill pillars have been left to mitigate ground stress as the mining activity proceeds both upwards and downwards. Conservatively, no pillar recovery has been assumed in this production plan.

U. Based on the Red Cloud model, and SRK's contemporaneous estimates of unit cost, Micon then re-estimated annual capital and operating costs required for execution of the development and production plan, taking into account the equipment and personnel required to support the target level of production. This resulted in Micon adjusting the Red Cloud model in line with the engineered mine development and ore production schedule. We consider that these adjustments bring the level of confidence in the production and cost estimates in line with those of the SRK's 2018 PEA.

V. For example, in the Red Cloud Model, the LOM capital cost of development was pro-rated from SRK's estimate of $8.625 million for the 355 t/d plan to $14.197 million for the 590 t/d plan, maintaining the same average cost of development per tonne of ore processed. While this assumption is quite reasonable, Red Cloud's pro-rated estimate was not based on a specific mine layout, and Micon considers that its own estimate of $17.58 million for the 590 t/d plan is more precise, being based on a three-dimensional mine layout, development sequencing and analysis of annual development requirements, and takes into account the actual metreage of development mined prior to October 2018.

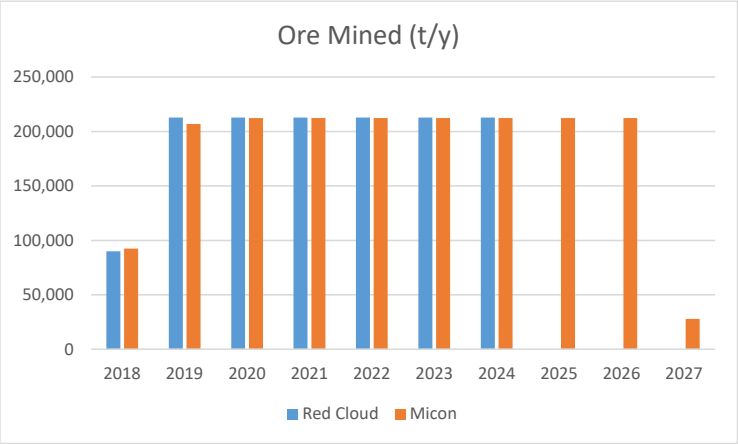
W. Similarly, adjustments to the unit costs and LOM period result in an increase in operating costs per tonne milled from $81.33/t in the Red Cloud Model to $92.33/t after Micon's review.

5.2.4 Red Cloud Model before and after Micon's Review

104. In this section of its report, Micon compares the results of its review with the Red Cloud model prepared in 2018. Note that Micon's review includes a change from calendar years to project years beginning on 1 September. However, for ease of comparison, project years beginning in a given calendar year are compared with the original plan for that year.

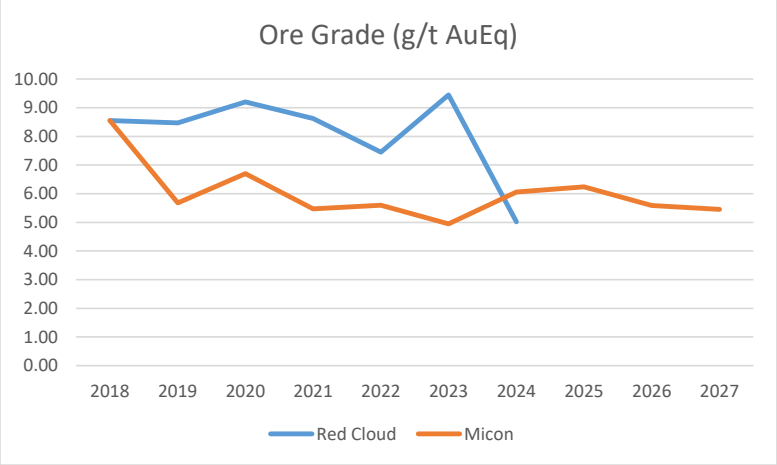
105. In its 590 t/d plan, Red Cloud assumed a 6-year period of steady-state production, in line with the life of mine reflected in the 355 t/d plan. Micon's review has shown that in fact there existed the potential for at least 8 years of steady-state production, as shown in the chart at Figure 5.5.

Figure 5.5
Tonnage Mined - Original and Amended 590 t/d Plan



106. While confirming the availability of additional tonnage, Micon's review has also shown Red Cloud's provisional grade assumptions were optimistic. Micon's more conservative estimate is given in the chart at Figure 5.6.

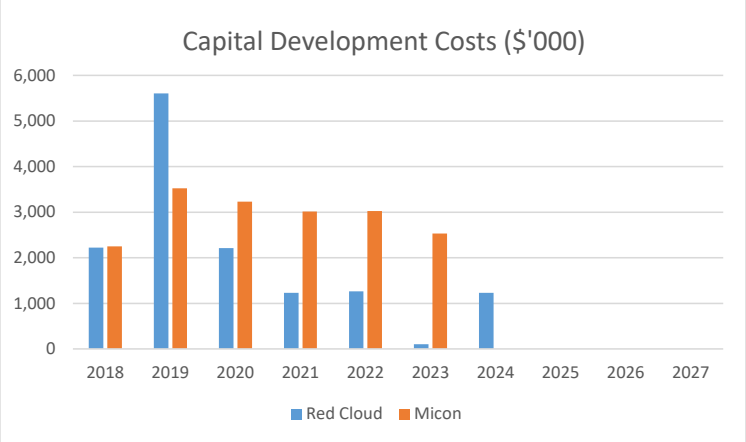
Figure 5.6
Gold Equivalent Grade Mined - Original and Amended 590 t/d Plan



107. Micon's review of the underground mine development costs suggests that Red Clouds' estimate is conservative in assuming the need for a very high rate of development in 2019 that Micon does not consider necessary. Overall, Micon adds more metres of development in later years to sustain the extended mine life.

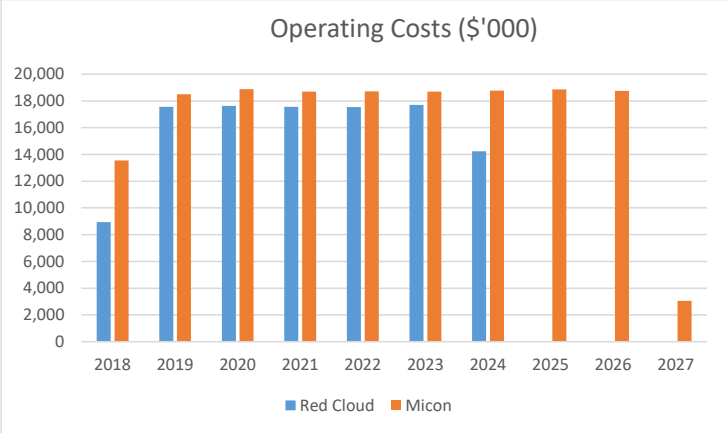
108. The unit cost for each type of development is determined by its cross-sectional dimensions (height and width). Micon retained the same unit costs for each development type estimated in the 2018 PEA, resulting in the mine development cost forecast shown in Figure 5.7.

Figure 5.7
Development Costs - Original and Amended 590 t/d Plan



109. Except for the changes outlined above, as a result of which cash operating costs would rise from $81.33/t to $92.33/t, Micon's review largely confirmed Red Cloud's estimates of unit operating cost. However, overall project costs would increase in line with the extended life of mine, as shown in the chart at Figure 5.8.

Figure 5.8
Operating Costs - Original and Amended 590 t/d Plan



5.2.5 Results

110. One of the simplifying assumptions made by Red Cloud was in the overall cost of mine development, which was assumed to rise pro-rata with tonnage milled. Micon's review quantified the amount of each type of development required to implement the 590 t/d plan. Applying SRK's 2018 estimate of costs per linear metre for each type of development provides the amended development cost estimate shown in Table 5.12, reflecting approximately $3.4 million in additional development costs compared to the original Red Cloud model.

Table 5.12[46]
590 t/d Development Plan

Parameters	Units	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Total
Declines 3.5 x 3.5	m	271	617	764	516	516	694	3,378
By Pass 3.5 x 3.5	m		142					142
Vent Rse/Slot 1.5 x 2.4	m	235	-	-	-	33	73	341
Access Drift 3.0 x 3.0	m	206						206
Drawpoint 3.5 x 3.5	m	21	311	363	500	398	578	2,171
Gallery 3.5 x 3.5	m	767	733	786	712	838	350	4,186
Access of OP 2.0 x 1.5	m	118	765	320	400	346	-	1,949
Total Development	m	1,618	2,569	2,234	2,127	2,130	1,695	12,372
Development Cost	**$'000**	$2,249	$3,524	$3,233	$3,015	$3,025	$2,533	**$17,579**
		2018	**2019**	**2020**	**2021**	**2022**	**2023**	**Total**
Red Cloud Model	$'000	$2,554	$5,605	$2,214	$1,229	$1,261	$102	$14,197

Updates: 2018 PEA, Table 86

111. Table 5.13 presents the ore production schedule for the 590 t/d mine plan. Whereas Red Cloud assumed a similar life of mine to the 2018 PEA, Micon's review identified sufficient mineral resource to sustain over 8 years of mining at the rate of 590 t/d, albeit that the grade of material is less than assumed in the Red Cloud model – a factor anticipated by Accuracy and adjusted for (on a broad-brush basis) in their first report.

112. Micon's review of operating costs largely confirmed the unit cost estimates originally made by SRK and applied by Red Cloud in its model. Micon identified the purchase cost of power at Mallay Mill as the only under-estimate in the Red Cloud model of any significance. The impact of that change is to increase process operating costs from $21.64/t to $28.08/t. Table 5.14 presents the operating costs schedule for the 590 t/d mine plan. Overall costs rise from $81.33/t to $92.33/t. Micon concludes that the Red Cloud model made reasonable simplifying assumptions and their first-order approximations do not deviate substantially from Micon's more accurate results.

113. Table 5.15 presents the capital expenditure schedule for the 590 t/d mine plan, excluding costs associated with the Mallay Mill site. The key difference between Red Cloud's original estimate of capital and Micon's review is the increase in development costs, as identified above. Over the life of mine period, Micon's more precise estimate results in the project's total capital cost estimate rising from $17 million to $21 million. Red Cloud's estimate was very conservative, though, in assuming that more than half the mine development would need to be completed by the end of year 2. Micon's schedule spreads this ongoing development over a longer period while maintaining adequate availability of production stopes.

[46] C-34, SRK PEA (2018), p. 132, Table 86, with revisions by Micon.

Table 5.13[47]
590 t/d Production Plan

Parameters	Unit	2018/ 19	2019/ 20	2020/ 21	2021/ 22	2022/ 23	2023/ 24	2024/ 25	2025/ 26	2026/ 27	2027/ 28	Total
Ore mined/ milled	kt	92.55	207.00	212.40	212.40	212.40	212.40	212.40	212.40	212.40	27.82	1814.17
Grade - AuEq	g/t	8.55	5.68	6.70	5.48	5.60	4.95	6.06	6.24	5.59	5.46	5.92
Grade - Au	g/t	5.69	3.09	4.06	4.34	4.21	3.74	4.43	3.88	4.23	4.42	4.09
Grade - Ag	g/t	39.96	31.40	38.37	17.40	27.66	21.53	23.97	27.49	15.70	12.81	25.97
Grade - Cu	%	0.72	0.79	0.90	0.35	0.40	0.34	0.43	0.75	0.33	0.19	0.54
Grade – Pb	%	0.89	0.84	0.75	0.30	0.36	0.35	0.60	0.80	0.58	0.52	0.59
Grade – Zn	%	1.08	0.71	0.44	0.27	0.31	0.30	0.46	0.57	0.46	0.44	0.47
Mine Production	AuEq oz	25,443	37,778	45,724	37,389	38,224	33,791	41,388	42,610	38,144	4,881	345,374
Sales (payable)	AuEq oz	20,057	29,669	36,283	29,932	30,503	26,952	32,902	33,715	30,331	3,888	274,231
		2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**Total**
Red Cloud Model Prod:	AuEq oz	24,723	57,942	62,962	59,014	50,967	64,652	34,358	-	-	-	368,319
Red Cloud Model Sales:	AuEq oz	19,487	45,848	49,496	46,745	40,426	50,620	37,948	-	-	-	290,569

Updates: 2018 PEA, Table 87

Table 5.14
Operating costs - 590 t/d Mine Plan

Parameters	Unit	2018/ 19	2019/ 20	2020/ 21	2021/ 22	2022/ 23	2023/ 24	2024/ 25	2025/ 26	2026/ 27	2027/ 28	Total
Mining Costs	$'000	4,042	7,763	7,915	7,915	7,915	7,915	7,915	7,915	7,915	1,037	68,249
Processing	$'000	3,661	5,798	5,930	5,748	5,767	5,754	5,819	5,918	5,797	754	50,947
G&A Costs	$'000	1,177	1,413	1,413	1,413	1,413	1,413	1,413	1,413	1,413	185	12,666
Trucking to mill	$'000	4,646	3,726	3,823	3,823	3,823	3,823	3,823	3,823	3,823	501	35,635
Total op. costs	**$'000**	13,526	18,700	19,082	18,900	18,919	18,906	18,971	19,069	18,949	2,477	167,498
Offsite costs	$'000	1,073	2,433	2,621	1,312	1,481	1,310	1,751	2,388	1,524	164	16,055
Total costs	$'000	14,599	21,133	21,702	20,211	20,400	20,216	20,721	21,457	20,472	2,640	183,553
		2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**Total**
Red Cloud Model		9,987	20,634	21,395	20,513	19,874	20,499	16,671	-	-	-	129,573

[47] C-34, SRK PEA (2018), p. 132, Table 87, with revisions by Micon.

Table 5.15
Capital Expenditure - 590 t/d Mine Plan

Parameters	Unit	2018/ 19	2019/ 20	2020/ 21	2021/ 22	2022/ 23	2023/ 24	2024/ 25	2025/ 26	2026/ 27	Total
Site Roads & Prep.	$'000	-	72	72	72	72	72	72	72	72	576
Capital Develop't	$'000	2,249	3,524	3,233	3,015	3,025	2,533	-	-	-	17,579
Community Infra.	$'000	0	272	207	288	288	288	288	288	288	2,206
Enviro. & Closure	$'000	0	115	119	125	135	153	-	-	-	648
Total capital cost	$'000	2,249	3,983	3,631	3,500	3,520	3,046	360	360	360	21,009
		2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Red Cloud Model	$'000	4,329	6,064	2,612	1,714	1,756	615	-	-	-	17,090

114. Having reviewed and, where appropriate, revised the 590 t/d production and cost forecast as described above, Micon considers the level of accuracy of the revised 590 t/d plan to be very similar to that achieved in the 355 t/d plan and that both plans are equally reliable.

115. Therefore, for the purposes of DCF valuation, Micon would consider the use of the same discount rate in the 355 t/d and 590 t/d scenarios to be appropriate.

116. The amended 590 t/d plan presented here does not deplete the entire mineral resource that SRK estimated at a cut-off grade of 3.0 g/t AuEq. Table 5.16 presents Micon's approximation of the Indicated Resource that is not included in the amended 590 t/d plan, by difference.

117. This analysis indicates that 40% of the mineral resource tonnage, 39% of the contained gold and 38% of the contained gold equivalent ounces are excluded, providing an attractive target for future mine expansion.

Table 5.16[48]
Mineral Resource Included and Not Included in 590 t/d Mine Plan

	Ind. Resource		Red Cloud/Micon Mine Plan			Excluded from Mine Plan		
	Grade (g/t, %)	Mass (koz, kt)	Grade (g/t, %)	Mass (koz, kt)	Mass (%) in mine plan	Grade (g/t, %)	Mass (koz, kt)	Mass (%) not In mine plan
Resource		2,999		1,814	60%		1,185	40%
Gold Equiv.	5.78	557	5.92	345	62%	5.56	212	38%
Gold	4.07	392	4.09	239	61%	4.03	154	39%
Silver	24.81	2,392	25.97	1,515	63%	23.03	877	37%
Copper	0.60	1,799	0.54	980	54%	0.69	820	46%
Lead	0.36	1,080	0.59	1,067	99%	0.01	12	1%
Zinc	0.42	1,260	0.47	859	68%	0.34	401	32%

Compiled from: SRK 2018, Table 79 and Micon, Table 5.13, above.

[48] C-34, SRK PEA (2018), p. 119, Table 79 and Micon.

6.0 ABILITY OF LUPAKA TO MEET ITS GOLD REPAYMENT OBLIGATIONS TO PLI

6.1 FORECAST GOLD REPAYMENT WITHOUT MALLAY PLANT

118. The equivalent quantity of gold available for repayment in any given period would be determined by the product of three factors namely (i) mill-feed tonnage; (ii) mill head grade; and (iii) process plant yield, such that:

Gold Eq. (ounces) = Mill feed (tonnes) x Mill Head Grade (g/t AuEq)/31.10348 x Process Plant Yield (%)

Where:

- the constant [31.10348] is the number of grams in 1 troy ounce and
- percentage "yield" takes into consideration both the recovery of metal into concentrate and the payability of that metal by a purchaser of the concentrate. In this case, yield is the Net Smelter Return divided by the gross metal value contained in ore milled, expressed as a percentage.

In the year to August 2019, the average yield is estimated to be 75.6%, compared to 75.1% averaged over the life of mine.

119. In addition, Micon is of the opinion that typically one calendar month would elapse between ore mining and receipt of concentrate sales proceeds. This is due to the time required to transport Invicta ore to a toll mill, process the ore, deliver the resulting concentrates to port and await confirmation of concentrate mass, moisture and metal content before the off-taker makes payment. Consequently, revenues from ore mined in November would only be available in December.

120. Micon understands that the terms of the PLI agreement obligated Lupaka to repay gold to PLI at the rate of:

- 187 oz per month from December 2018; increasing to
- 326 oz per month from March 2019 and increasing to
- 504 oz per month from June 2019.

121. In the revised 355 t/d plan presented in this report, during the first year ending August 2019, ore milled was expected to yield approximately 6.46 g AuEq per tonne milled[49].

122. Restated into the customary units used in the PLI agreement, this is equivalent to 0.208 troy ounces gold equivalent per tonne milled (i.e., 6.46 g/t AuEq converted at 31.10348 grams per troy ounce).

[49] Mill head grade 8.55 g/t AuEq x 75.6% yield to payable metal = 6.46 g/t AuEq yield grade.

123. Therefore, Micon calculates it would have been possible for Lupaka to meet its obligations to PLI by processing at least the following tonnages of ore:

- 900 tonnes per month (or 30 t/d) from November 2018 for repayment in December 2018 (i.e., 187 oz / 0.208 oz/t).
- 1,570 tonnes per month (53 t/d) from February 2019 for repayment in March 2019 (i.e., 326 oz / 0.208 oz/t) and
- 2,423 tonnes per month (81 t/d) from May 2019 for repayment in June 2019 (i.e., 504 oz / 0.208 oz/t).

124. As noted by Accuracy[50] and Alix Partners[51], Lupaka reports having mined 3,578 t and 4,511 t in August and September 2018, respectively[52]. It also reports 2,664 t and 2,173 t ore milled in August and October, 2018, respectively.

125. As more fully set out in Section 8, below, it is Micon's opinion that the gold grade shortfalls in development ore reported by Lupaka were the result of various factors that could have been overcome by early 2019 and, taking into account the previously recorded actual performance by Lupaka, Micon considers that, but for the Blockade that prevented access to and operation of the Invicta mine, Lupaka would otherwise have been able to produce the ore tonnages and grade required to service the PLI facility, to deliver and arrange treatment of this material at the Huancapeti and other third-party toll-treatment plants (e.g., Coriland, Huari)[53], and to ship the resulting concentrates to market in time to meet its obligations as set out above.

6.2 Forecast Gold Repayment With Mallay Plant

126. In the scenario envisaged as Lupaka's 590 t/d plan, the proposed further amendment of the agreement with PLI would, on closing of the Mallay transaction, have afforded Lupaka a 9-month grace period (i.e., December 2018 to August 2019, inclusive) during which no gold repayments were required. Micon understands this timetable was subject to Mallay Community approval, which was actually obtained in March 2019. Consequently, the first gold repayments would have been required from January 2020.

127. This grace period would have allowed Lupaka ample time to complete its pre-production development and any remaining infrastructural requirements, obtain agreement of

[50] Expert Report of Edmond Richards and Erik van Duijvenvoorde, Expert Report of Accuracy, 1 October 2021, p. 21.

[51] RER-0003, First Quantum Expert report, 24 March 2022, p. 28.

[52] C-87, Invicta Project Monthly Report October 2018, p. 10, Section 5.

[53] MI-07, EM 5137, Email from Will Ansley to Gordon Ellis, 19 October 2018, p. 1: "*We… have 2,000 tonnes… at [Huancapeti] and have paid 50% of the mill cost several weeks ago. […] Huari has ~750 tonnes remaining on site… Start date is predicted to be Oct 27.*"

the Mallay community to the transfer of ownership, and make the desired modifications to the Mallay flowsheet, including introduction of a copper-lead separation circuit[54]. Nevertheless, in its review of the Red Cloud model, Micon has assumed Lupaka would begin its ramp-up to full-scale production from the Invicta mine only in September 2019, reaching a full production rate of 590 t/d from November 2019.

128. In terms of the proposed amendment to the PLI agreement, Lupaka's gold repayment obligations would have increased to a total of 64,630 troy ounces, to be repaid from September 2019 to November 2023 inclusive.[55]

129. The draft agreement with PLI[56] sets out the revised gold repayment schedule as follows:

- 965 oz per month from September to December 2019 (4 months)
- 1,420 oz per month for 2020 (12 months)
- 1,520 oz per month for 2021 (12 months)
- 1,290 oz per month for 2022 (12 months)
- 910 oz per month for from January to November 2023 (11 months).

130. The revised 590 t/d schedule presented in this report forecasts an average yield of 73.6% from September 2019, for a yield grade of 4.18 g/t AuEq, or 0.134 troy oz per tonne.

131. At a yield of 0.134 oz per tonne, the minimum monthly tonnage to be milled would be approximately as follow:

- 7,200 tonnes per month (240 t/d) from August 2019 for repayment from September 2019 (i.e., 965 oz / 0.134 oz/t)
- 10,600 tonnes per month (353 t/d) during 2020 (i.e., 1,420 oz / 0.134 oz/t)
- 11,343 tonnes per month (378 t/d) during 2021 (i.e., 1,520 oz / 0.134 oz/t)
- 9,626 tonnes per month (320 t/d) during 2022 (i.e., 1,290 oz / 0.134 oz/t)

[54] MI-08, Study from ISC Group, "Processing of the ore from the Invicta Mine at the Mallay Plant", dated September 2018 (original file name "13.1 TRATAMIENTO DE MINERAL DE INVICTA Rev 3.pdf"), Ingenieria Servicios & Comercio [Undated]. [Provided to Micon 2022-07-05].

[55] C-51, Lupaka, Minutes of Board Meeting, 27 September 2018, p. 4.

[56] MI-04, Amendment and Waiver No.3 to the Second Amended and Restated Pre-Paid Forward Gold Purchase Agreement, Draft 2018-09-26, p. 12.

- 6,791 tonnes per month (226 t/d) January to November 2023 (i.e., 910 oz / 0.134 oz/t).

132. Micon notes that:

(i) the production requirement of 7,200 tonnes per month in 2019 equates to approximately 20 days production at 355 t/d, or less than 12 days production at the targeted rate of 590 t/d, and thus appears to be readily achievable during this phase of the Invicta Mine production ramp-up.

(ii) The peak repayment requirement of 1,520 oz in 2021 equates to the production of 11,343 tonnes per month in 2021, or approximately 19 days per month of production at the targeted rate of 590 t/d, and thus also appears to be readily achievable.

6.3 CONCLUSION

133. Based on the foregoing, it is Micon's opinion that Lupaka's gold repayment obligations were achievable, both under the 355 t/d plan and the 590 t/d plan presented herein.

7.0 GRADE OF DEVELOPMENT MATERIAL MINED AND TREATED DURING 2018

134. Alix Partners' report suggests that the low gold grade observed in development material sent for toll milling indicates that Invicta Mine was not ready to commence commercial production. Micon disagrees with this opinion, for the following reasons.

135. During 2018, Lupaka's monthly reports describe the preparation of Invicta Mine for commercial production[57]. This work involved development of the main haulage level, access drives, ramps and cross-cuts as well as slots preparatory to the start of full-scale production from long-hole stoping.

136. Lupaka's monthly report for October 2018, Section 5 tabulates the tonnage and grade of material milled at third-party toll mills, as shown in Figure 7.1. Micon notes that year-to-date grades for silver, copper, lead and zinc were all above budget, while gold alone is reported to be lower.

Figure 7.1[58]
Production versus Budget, October 2018

Lupaka Monthly Report **OCTOBER 2018**

5 Invicta Performance versus Budget

Input Current Month Beginning Date Oct-18
(Amounts in USD)

		Current Month			Year to Date		
Parameter	Units	Actual	Budget	Variance	Actual	Budget	Variance
Ore Tonnes Mined	dmt	0	10,000	-10,000	14,770	60,500	-45,730
Ore Tonnes Shipped	dmt	0	10,000	-10,000	7,754	60,500	-52,746
Ore Tonnes Milled	dmt	2,173	10,000	-7,827	6,654	60,500	-53,846
Milled Ore Grade							
Gold	g/t	1.45	5.32	-3.87	2.25	4.83	-2.58
Silver	g/t	37.48	41.65	-4.17	46.13	41.25	4.88
Copper	%	1.05%	0.95%	0.10%	1.10%	0.94%	0.16%
Lead	%	0.90%	0.54%	0.36%	1.17%	0.61%	0.56%
Zinc	%	0.92%	0.67%	0.25%	1.10%	0.81%	0.29%

Source: AC-10, p10.

137. By way of comparison, when using the PEA price and recovery assumptions, the Year to Date (YTD) actual grades reflected in Figure 7.1 equate to 5.92 g/t AuEq, against a YTD budget of 7.72 g/t AuEq. Notwithstanding the comparatively low gold grades, therefore, the achieved gold equivalent grade was at 77% of budget.

138. There are several possible reasons for the apparent anomaly in gold grades:

[57] For example, C-87, Invicta Project Monthly Report October 2018.

[58] C-87, Invicta Project Monthly Report October 2018.

a) Natural variability of *in situ* mineralization.

b) Dilution of *in situ* mineralization during mining.

c) Segregation of heavy particles enriched in gold during the blasting and loading of broken rock

d) Under-reporting of gold content by third-party toll-millers.

139. Natural variability: Inspection of the block model shows similarly low gold grades in otherwise payable material around 3400 level. Figure 7.2 shows that some material with low gold grades but payable gold-equivalent values occur near the 3400 m adit level where development was taking place.

140. Thus, material with actual gold grades well below average for the orebody could quite properly have been mined as payable ore based on its gold equivalent grade, owing to the contribution of copper, lead, zinc and silver to the value of the ore.

Figure 7.2 [59]
Schematic Longitudinal Section through Block Model

Gold Equivalent Average Grade (g/t AuEq) for blocks 50 x 50 m

Average of aueq20	Column Labels																			
Row Labels	279950	280000	280050	280100	280150	280200	280250	280300	280350	280400	280450	280500	280550	280600	280650	280700	280750	280800
3800											13.68	9.70			4.37	4.37		
3750									4.84	8.49	14.68	10.38			4.37	4.37	4.37	
3700									4.41	5.58	6.31	4.51				4.19	4.35	
3650							6.44	6.46	4.56	4.34	4.91	4.26		4.64	4.46	4.22	4.29	
3600							5.56	6.45	4.98				4.03	4.59	4.50		4.37	4.37
3550				4.97	4.59	4.47	6.01	5.38	4.29		4.99	5.30	5.46	5.26	4.18			
3500		8.83	7.65	7.00	5.72	5.02	8.35	6.69	4.37	4.10	5.07	5.49	5.75	5.42	4.19			
3450	5.24	9.13	7.36	7.01	10.58	8.16	7.50	7.84	5.05	4.13	5.27	5.71	5.72	4.87				
3400		8.39	7.17	8.14	9.60	7.43	6.00	7.55	5.10	4.02	5.06	5.26	5.33	5.64				
3350	4.80		5.97	8.33	7.10	6.63	5.02											
3300		6.22	4.80	4.76	4.68	5.05	4.47											

Elevation (m)

EASTINGS --->

Gold Average Grade (g/t Au) for blocks 50 x 50 m

Average of aucap	Column Labels																			
Row Labels	279950	280000	280050	280100	280150	280200	280250	280300	280350	280400	280450	280500	280550	280600	280650	280700	280750	280800
3800											12.83	9.05			4.27	4.27		
3750									4.31	7.83	13.75	9.69			4.27	4.27	4.27	
3700									3.71	4.96	5.70	4.00				3.97	4.25	
3650							5.55	5.62	3.54	3.67	4.17	3.63		3.52	3.38	4.09	4.19	
3600							4.50	5.53	4.29				3.21	3.57	3.55		4.27	4.27
3550				2.46	2.07	2.76	4.01	4.06	3.50		4.53	4.89	5.04	4.80	3.71			
3500		5.97	4.81	3.95	3.29	3.26	5.93	4.67	3.44	3.41	4.63	5.15	5.42	5.06	3.83			
3450	3.79	6.08	4.04	4.06	7.42	5.25	3.84	4.90	2.48	1.32	4.91	5.39	5.39	4.47				
3400		5.43	5.10	5.44	6.27	4.67	2.26	1.49	0.59	0.30	4.77	4.97	5.03	5.31				
3350	3.24		3.33	5.09	4.28	3.68	0.61											
3300		5.13	2.66	2.13	2.62	3.54	2.02											

Elevation (m)

EASTINGS --->

[59] Invicta Block Model, schematic sections showing gold-equivalent and gold block grade averages by Elevation and Eastings. Diagram prepared by Micon using data from SRK.

141. Dilution: Development of the decline ramp and other development was planned to be in waste rock, while stope access development was planned to be mostly in ore. During pre-production development these activities typically occur together, and hence rock being hauled to surface includes both ore and waste, which can become mixed during removal of this material from the mine. Accordingly, the average grade of development material is typically lower than that of run-of-mine ore generated during commercial production.

142. Segregation: Lupaka has reported that approximately 10 tonnes of fine material recovered from the floor of the 3400 level was analysed by ALS Laboratory and found to contain on average 63.1 g/t gold and 545.9 g/t silver, 5.1% copper, 2.2% lead and 1.7% zinc[60]. Thus, compared to the average grade of the Invicta resource[61], the fine material was highly enriched in precious metals while being somewhat less enriched in the base metals. Enrichment of the fines in precious metals would necessarily leave the remainder of the ore depleted in precious metals. Fortunately, once recognised, this problem is manageable. The footwall of a stope is washed down once all lump ore has been removed, leaving a heavy sludge that can be collected and transported to the processing plant for separation of the base metal concentrates.

143. *Scalping of Gravity Gold*: The gold grades reported are back-calculated from analysis of the saleable concentrates and mill tailings. However, during processing at third-party toll-treatment mills in the absence of close supervision, it is possible that a portion of the gold content of the ore was separated gravimetrically by the mill operators, leaving only that portion that was intimately mixed with sulphide minerals to be recovered into the base metal concentrates sold by Lupaka.

144. The significance of the gravity-separable gold at Invicta is evidenced by a contemporaneous report prepared in respect of the proposed Mallay plant modifications [62], which reproduces the following chart from ED and ED Metallurgical Test Final Report No. 04-IM-2010 (see Figure 7.3).

145. The chart indicates that between 56.5% and 63.0% of the contained gold reported to a gravity concentrate in these metallurgical tests. The same chart also indicates that between 22.9% and 30.9% of the contained gold is amenable to cyanidation, a process used to extract gold by leaching. For Invicta ore, this suggests there was potential to enhance overall gold recovery through the leaching of flotation tailings, subject to suitable modifications being made to the process flowsheet.

[60] MI-09, EM 5188, High Grade Fine Grained Material – 3400 Adit, October 2015.

[61] C-34, SRK 2018 PEA Indicated resource grades were 4.07 g/t Au, 24.81 g/t Ag, 0.60% Cu, 0.36% Pb and 0.42% Zn.

[62] MI-08, Study from ISC Group, “Processing of the ore from the Invicta Mine at the Mallay Plant”, dated September 2018 (original file name “13.1 TRATAMIENTO DE MINERAL DE INVICTA Rev 3.pdf”) p. 1

146. Micon notes also that in December 2015 a 520-tonne bulk sample from the Invicta Mine processed under supervision gave a gold head grade of 4.72 g/t Au, somewhat higher than the average Indicated resource grade (in 2018) of 4.07 g/t Au. The gold equivalent grade of this sample is estimated to have been approximately 8.6 g/t AuEq.

147. Processing of this bulk sample yielded 48 dry tonnes of concentrate containing approximately 79 oz payable gold, demonstrating the amenability of the ore to such processing when conducted under rigorous supervision, measurement and assaying.

148. This suggests that Lupaka would have benefited from close supervision of – and improved security at – third-party toll-milling operations, to avoid ongoing losses of gravity-separable gold.

Figure 7.3[63]
Chart showing Gold Recovery to Gravity Concentrate

TABLE N°F1.-T1A: SUMMARY TABLE OF RESULTS

TOTAL RECOVERIES						
METAL	Gravity	Cyanidation	Cu concentrate	Pb Concentrate	Zn Concentrate	Total Recovery %
GOLD	60.94	23.79	3.39	2.46		90.58
SILVER	27.97	10.82	4.63	40.96		84.38
COPPER			72.82	2.45	0.55	75.82
LEAD			3.29	78.99	0.40	82.68
ZINC			4.01	2.01	81.23	87.25

TABLE N°F1-T1B: SUMMARY TABLE OF RESULTS

TOTAL RECOVERIES						
METAL	Gravity	Cyanidation	Cu concentrate	Pb Concentrate	Zn Concentrate	Total Recovery %
GOLD	63.03	22.91	2.85	2.73		91.52
SILVER	26.20	9.90	4.13	44.22		84.44
COPPER			71.85	2.99	0.34	75.18
LEAD			3.92	80.14	0.32	84.38
ZINC			4.21	2.09	82.47	88.77

TABLE N°F1.-T1Y1: SUMMARY TABLE OF RESULTS

TOTAL RECOVERIES						
METAL	Gravity	Cyanidation	Cu concentrate	Pb Concentrate	Zn Concentrate	Total Recovery %
GOLD	56.52	30.94	2.96	1.44		91.86
SILVER	32.53	14.61	5.55	27.76		80.44
COPPER			76.08	2.75	0.71	79.54
LEAD			6.64	78.36	0.49	85.49
ZINC			4.23	1.24	83.57	89.04

TABLE N°F1-T1Y2: SUMMARY TABLE OF RESULTS

TOTAL RECOVERIES						
METAL	Gravity	Cyanidation	Cu concentrate	Pb Concentrate	Zn Concentrate	Total Recovery %
GOLD	58.61	27.84	2.85	1.96		91.25
SILVER	28.16	10.70	4.06	39.76		82.69
COPPER			73.29	4.63	0.47	78.39
LEAD			3.24	82.66	0.32	86.22
ZINC			2.60	1.90	85.19	89.69

7.1 CONCLUSION

149. Micon concludes that taken together, the onset of commercial production (stoping) operations, together with the systematic collection of sulphide-enriched sludge or other fines generated during mining, and the close supervision of toll-milling operations, it is likely that the grade shortfalls experienced during 2018 would have been overcome early in 2019.

[63] MI-08, Study from ISC Group, "Processing of the ore from the Invicta Mine at the Mallay Plant", dated September 2018 (original file name "13.1 TRATAMIENTO DE MINERAL DE INVICTA Rev 3.pdf"), Ingenieria Servicios & Comercio [Undated], p. 1.

8.0 CONCLUSIONS

Micon's key findings from its review of the 2018 PEA and the Red Cloud model are as follows:

8.1 2018 PEA MINE PLAN

150. Only 33% of the gold-equivalent ounces identified in SRK's mineral resource estimate were included in the mine plan for the 2018 PEA, the balance providing an attractive target for future mine expansion.

151. The rate of production of 355 t/d is significantly lower than the potential indicated by previous studies on the project (such as Lokhorst Group's 2009 feasibility study) and by an industry rule of thumb (Taylor's Rule) and is therefore very conservative and readily achievable.

152. A minor error in SRK's PEA cashflow model omitted the transport costs associated with copper and lead concentrate tonnages. Micon has corrected this line item in its cost estimate. Micon has also restated the annual schedules of underground development, production, operating cost and capital expenditure to reflect project years commencing 1st September.

153. Lupaka's monthly project reports indicate that it carried out 861 metres of development in 2018 after SRK's PEA was completed. Therefore, that development should be subtracted from the amount of development required as of October 2018, as it was a sunk cost. Micon has made that adjustment in updating the 355 t/d cashflow model.

154. The underground development carried out by Lupaka in 2018 meant that it was well placed to start its production ramp-up before the end of 2018, but needed to identify reliable toll millers capable of routinely and efficiently processing 355 t/d/ of Invicta ore, and implement closer supervision of toll milling operations. Accordingly, Micon has assumed only 100 t/d, 200 t/d, and 300 t/d production, respectively, in each of the three months commencing November 2018, with steady-state production of 355 t/d from February 2019 onward.

155. The 355 t/d development and production schedules shown in Table 5.4 and Table 5.6, respectively, and the corresponding operating and capital cost estimates shown in Table 5.7 and Table 5.8, respectively, present the PEA production plan with adjustments and corrections by Micon to reflect the actual situation in October 2018, as described above.

156. It is Micon's opinion that the gold grade shortfalls in development ore reported by Lupaka were the result of various factors that could have been overcome by early 2019 and, taking into account the previously recorded actual performance by Lupaka, Micon considers that, but for the blockade that prevented access to and operation of the Invicta mine, Lupaka would otherwise have been able to produce the ore tonnages and grade required to service the PLI facility, to deliver and arrange treatment of this material at the Huancapeti and other third-party toll-treatment plants (e.g., Coriland, Huari) , and to ship the resulting concentrates to market in time to meet its gold repayment obligations.

8.2 EXPANDED MINE PLAN

157. Micon's review of the Red Cloud model for a 590 t/d rate of production at Invicta resulted in a number of adjustments, as listed below:

- Life-of-mine development costs increased, although Red Cloud had been conservative in expecting much of this development to take place in the first few years.

- Red Cloud assumed annual average ore grades would remain largely unchanged from SRK's 355 t/d plan. Micon has proposed adjustments to the grade profile in accordance with the diluted tonnage and grades reported from the resource block model.

- Whereas Red Cloud retained SRK's cost estimate of $700,000 per annum in respect of employee profit sharing, Micon has increased this provision to $900,000 per annum so as to maintain the employees' share of profits at 5.1% of pre-tax operating profit, matching the rate provided for in the 2018 PEA. Nevertheless, Micon reduced this provision to $583,333 in respect of the first year (September 2018 to August 2019), pro-rata with operating for 300 days at 355 t/d compared to operating 360 days per year at 590 t/d thereafter.

- Red Cloud's estimate of unit cost for treating ore at the Mallay mill appears to have omitted the purchase cost of electrical energy for the operation. Micon has adjusted the direct processing unit cost in the Red Cloud model from $20.00/t to $25.50/t.

- Micon has proposed a reduction in concentrate transport cost of $20.00/wmt (i.e., from $51.35/t concentrate to $31.35/t concentrate) to account for the relative proximity of the Mallay mill to the port. Micon also corrected the Red Cloud model to include the transport costs for copper and lead concentrate, an error Red Cloud inherited from the PEA cash flow model.

- Within the first year of the schedule, Micon further adjusted the unit cost rates for processing and concentrate transport to reflect the continued use of toll mills during that period.

- In aggregate, the inclusion of a specific provision for power purchase, the reduction of concentrate transport costs from Mallay, and adjustments for toll milling in the first year, overall life-of-mine processing costs rise from $21.64/t in the Red Cloud model to $28.08/t.

- Micon has proposed a ramp-up period commencing September 2019 for an increase from 355 t/d to 400 t/d, then 500 t/d in October 2019 and 590 t/d from November 2019.

158. In aggregate, Micon considers that, as a result of implementing the suggested amendments, confidence in the resulting production plan and cost estimate has now been raised to a level comparable to the 2018 PEA prepared by SRK.

159. The 590 t/d development and production schedules shown in Table 5.12 and Table 5.13, respectively, and the corresponding operating and capital cost estimates shown in Table 5.14 and Table 5.15, respectively, have been restated to project years commencing on 1 September, and present Red Cloud's 590 t/d production plan with adjustments and corrections by Micon to reflect the actual situation in October 2018, as described above.

160. Renegotiation of the agreement with PLI would have afforded Lupaka a grace period of 9 months or more during which no gold repayments were required. This period would have allowed Lupaka ample time to prepare both the Invicta Mine and the Mallay Mill for a ramp-up period commencing September 2019, reaching a full production rate of 590 t/d from November 2019.

161. Based on the foregoing, it is Micon's opinion that Lupaka's gold repayment obligations were achievable, both under the 355 t/d plan and the 590 t/d plan presented herein.

162. Finally, Micon concludes that taken together, the onset of commercial production (stoping) operations, together with the systematic collection of sulphide-enriched sludge or other fines generated during mining, and the close supervision of toll-milling operations, it is likely that the grade shortfalls experienced during 2018 would have been overcome early in 2019.

9.0 EXPERT'S DECLARATION

163. I understand that my duty in giving evidence in this arbitration is to assist the Tribunal to decide the issues in respect of which expert evidence is adduced. I have complied with, and will continue to comply with, that duty. I confirm that this is my own, impartial, objective, unbiased opinion which has not been influenced by the pressures of the dispute resolution process or by any party to the arbitration.

164. I confirm that all matters upon which I have expressed an opinion are within my area of expertise.

165. I confirm that I have referred to all matters which I regard as relevant to the opinions expressed and have drawn to the attention of the Tribunal all matters of which I am aware which might adversely affect my opinion. I confirm that, at the time of providing this written opinion, I consider it to be complete and accurate and that it constitutes my true, professional opinion.

166. I confirm the attribution of the entirety of the report to myself as author.

167. I confirm that if, subsequently, I consider this opinion requires any correction, modification or qualification I will notify the parties to this arbitration and the Tribunal.

Christopher Jacobs
c/o Micon International Limited,
900 – 390 Bay St, Toronto, ON M4R 2C1, Canada

10.0 INDEX OF EXHIBITS

Index of Exhibits, Micon Report:

No.	Description	Exhibit No.
1	U.S. Securities and Exchange Commission Glossary of Mining Terms.	MI-01
2	Milling Definition, Law Insider	MI-02
3	Canadian Institute of Mining, Metallurgy and Petroleum (CIM). Definition Standards for Mineral Resources & Mineral Reserves, 19 May 2014	MI-03
4	Draft Amendment and Waiver No. 3 to the Second Amended and Restated PPF Agreement (Final version), dated 2018-10-05	MI-04
5	Mining Sequence October 2018 (Atenea Underground Diagram)	MI-05
6	HK Taylor (1978) cited in USGS Open-File Report 00-349 "A simplified economic filter for underground mining of massive sulfide deposits."	MI-06
7	Email from Will Ansley to Gordon Ellis, 19.10.2018	MI-07
8	Study from ISC Group, "Processing of the ore from the Invicta Mine at the Mallay Plant", dated September 2018 (original file name "13.1 TRATAMIENTO DE MINERAL DE INVICTA Rev 3.pdf")	MI-08
9	High Grade Fine Grained Material – 3400 Adit	MI-09

Exhibits already submitted in the arbitration (either as C-exhibit or AC-exhibit):

No.	Description	Exhibit No.
10	SRK PEA (2018)	C-34
11	Red Cloud Model	AC-15
12	Feasibility Study by Lokhorst, June 2009	C-57
13	Invicta Gold Project – Presentation, March 2014	C-69
14	Invicta Mining Corp. Monthly Report Sep 2018	C-86
15	Invicta Mining Corp. Monthly Report Oct 2018	C-87
16	Aminpro Due Diligence Report for Lupaka Gold – Invicta, 25 November 2014	C-38
17	Expert Report of Accuracy, 1 October 2021	Expert Report of Edmond Richards and Erik van Duijvenvoorde
18	First Quantum Expert report, 24 March 2022	RER-0003
19	Lupaka, Minutes of Board Meeting, 27 September 2018	C-51
20	Invicta Mining Corp. Monthly Report June 2018	C-234