

ICSID Case No. ARB/20/46

Lupaka Gold Corp.

CLAIMANT

v.

Republic of Peru

RESPONDENT

FIRST QUANTUM EXPERT REPORT OF
ISABEL SANTOS KUNSMAN AND ALEXANDER LEE

Dated: 24 March 2022

AlixPartners

WASHINGTON DC

24 MARCH 2022

Table of Contents

- I. SCOPE OF WORK AND QUALIFICATIONS 1**
- II. EXECUTIVE SUMMARY 3**
 - A. ACCURACY’S QUANTIFICATION OF DAMAGES IS FUNDAMENTALLY FLAWED..... 3
 - B. DAMAGES UNDER THE 590T/DAY SCENARIO ARE OVERSTATED 4
 - C. DAMAGES UNDER THE 355T/DAY SCENARIO ARE OVERSTATED 5
 - D. USING ALTERNATIVE PRE-AWARD INTEREST RATES REDUCES DAMAGES 5
 - E. ACCURACY’S OTHER INDICATORS OF VALUE ARE NOT RELEVANT IN THIS ARBITRATION..... 6
- III. BACKGROUND RELEVANT TO THE QUANTIFICATION OF DAMAGES..... 6**
 - A. CHARACTERISTICS OF A TYPICAL MINING PROJECT 6
 - B. BACKGROUND OF THE INVICTA PROJECT 18
 - C. THE DISPUTE 33
- IV. SUMMARY OF ACCURACY’S DAMAGES CALCULATION..... 36**
- V. FUNDAMENTAL FLAWS WITH ACCURACY’S DAMAGES ANALYSIS..... 39**
 - A. REMOVING THE AUTHORITIES’ MEASURES WOULD NOT RESOLVE THE ACCESS ROAD
PROTEST..... 39
 - B. ACCURACY DOES NOT ACCOUNT FOR REMAINING SOCIAL LICENSE RISK..... 40
 - C. CLAIMANT MAY HAVE DEFAULTED ON ITS EXISTING AND ANTICIPATED DEBT FINANCING
ABSENT THE MEASURES 43
 - D. ACCURACY DOES NOT ACCOUNT FOR DIFFICULTIES IN REFINANCING 46
 - E. CONCLUSION ON FUNDAMENTAL FLAWS 47
- VI. OUR OPINION OF ACCURACY’S 590T/DAY SCENARIO 48**
 - A. ACCURACY PROVIDED NO EVIDENCE FOR HOW THE MALLAY PLANT TRANSACTION WOULD BE
FINANCED 49
 - B. OPINIONS ON ACCURACY’S CHANGES TO RED CLOUD MODEL FOR THE 590 T/DAY
SCENARIO 50
 - C. CONCLUSION ON THE 590T/DAY SCENARIO 54
- VII. OUR OPINION OF ACCURACY’S 355T/DAY SCENARIO 55**
 - A. VALUATION DOES NOT ACCOUNT FOR UNRESOLVED PRODUCTION ISSUES 55
 - B. OPINIONS ON ACCURACY’S CHANGES TO SRK MODEL 57
 - C. CONCLUSION ON THE 355T/DAY SCENARIO 58
- VIII. OUR OPINION ON THE CALCULATION OF PRE-AWARD INTEREST..... 59**
- IX. ACCURACY’S OTHER INDICATORS OF VALUE ARE NOT RELEVANT 61**
 - A. ACCURACY’S MARKET CAPITALIZATION APPROACH INFLATES THE VALUE OF IMC..... 61
 - B. SUNK COSTS IGNORES SOCIAL LICENSE RISKS 66
 - C. MARKET TRANSACTIONS 68
 - D. SRK MODEL AND RED CLOUD MODEL..... 70
- X. EXPERT DECLARATION 71**

Figures

Figure 1 - Typical Evolution of a Mining Project	8
Figure 2 - Relationship between Mineral Resources and Mineral Reserves	12
Figure 3 - Relationship between Mineral Resources and Mineral Reserves	13
Figure 4 - Valuation Approaches per CIMVAL Standards	13
Figure 5 - Preliminary Economic Assessment, Pre-feasibility Study and Feasibility Study	15
Figure 6 - The Invicta Project and Local Communities	19
Figure 7 - Invicta Mine Site, Mally Plant and Coriland plants, and Huambo and Sayan towns Map	20
Figure 8 - Timeline of Key Events	21
Figure 9 - Quantity of Gold to be Sold in Each Month	24
Figure 10 - Historical Ore Mining Levels: Budgeted vs. Actuals	28
Figure 11 - Historical Ore Processing Levels: Budgeted vs. Actuals	28
Figure 12 - Payable Gold Quantity and Grade: Budgeted vs. Actuals	29
Figure 13 - Accumulated Payable Gold per SRK Model, per the Gold Sales Obligation, and Based on Actual Production	31
Figure 14 - Accuracy's Damages Conclusions (US\$ millions)	38
Figure 15 - Comparison of Quantity of Gold to be Sold in Each Month (PLI Loan Agreement vs Draft 3 rd Amendment)	44
Figure 16 - Timeline of Contemplated Events	45
Figure 17 - Invicta Project Decision Tree (PLI Loan Agreement Not Settled)	48
Figure 18 - Invicta Project Decision Tree (PLI Loan Agreement Settled)	48
Figure 19 - Accuracy's Metal Grades Assumption vs. Actual Metal Grades	51
Figure 20 - Illustration of FCFF, Enterprise Value and Damages	53
Figure 21 - Revised Damages under the 590t/day Scenario (US\$ millions)	54
Figure 22 - Revised Damages under the 355t/day Scenario (US\$ millions)	59
Figure 23 - Revised Damages plus Pre-award Interest: 590t/day Scenario (US\$ millions)	60
Figure 24 - Revised Damages plus Pre-award Interest: 355t/day Scenario (US\$ millions)	61
Figure 25 - Damages Calculated Under Accuracy's Market Capitalization Approach	62
Figure 26 - The Performance of Lupaka's Stock Price and GDXJ on Selected Dates	63
Figure 27 - Lupaka's Actual Market Capitalization Compared to the Implied Market Capitalization under Accuracy's Methodology (US\$) between January 2013 and October 2018	64
Figure 28 - Lupaka's Actual Market Capitalization Compared to the Implied Market Capitalization under Accuracy's Methodology (US\$) between March and October 2018 ..	65
Figure 29 - Revised Transaction Multiple (US\$/oz)	69
Figure 30 - Implied Values (US\$/oz)	70

Glossary

Term	Description
2010 Optimi[z]ed Feasibility Study	A study performed by SRK on the resources present at the Project
Access Road Protest	The protest set up by the Parán Community on the access road to the Project on 14 October 2018
Actual Scenario	The "Actual Situation" occupied by Claimant incorporating the impact of the Measures
AAG	Andean American Gold Corp.
Accuracy	The consulting firm engaged by Claimant to quantify the alleged damages in connection with Claimant's Investment
Accuracy Report	The expert report by Mr. Erik van Duijvenvoorde and Mr. Edmond Richards of Accuracy dated 1 October 2021
Arbitration	Lupaka Gold Corp. v. Republic of Peru (ICSID Case No. ARB/20/46)
Authorities' Measures	Alleged acts and omissions committed by the Peruvian regional and central state authorities (excluding acts and omissions by Parán Community members allegedly attributable to Peru)
Buenaventura	Compañía de Minas Buenaventura S.A.A.
But-For Scenario	The "But-For Situation" that Claimant would have occupied absent the impact of the Measures
CIM	The Canadian Institute of Mining Metallurgy and Petroleum
CIMVAL	The Special Committee of the Canadian Institute of Mining, Metallurgy & Petroleum on the Valuation of Mineral Properties
Claimant's Memorial	Claimant's Memorial dated 1 October 2021
Contract Quantity	The amount of gold Lupaka was required to sell at a discount to PLI under the PLI Loan Agreement
Counsel	Arnold & Porter
CR Team	IMC's community relations team
CSRI	The Corporate Social Responsibility Initiative of the Harvard Kennedy School
CSRМ	Centre for Social Responsibility in Mining at the University of Queensland's Sustainable Mineral Institute
DCF	Discounted Cash Flow – a method within the income approach whereby the present value of future expected net cash flows is calculated using a Discount Rate.
DIO	Days Inventory Outstanding
DPO	Days Payables Outstanding
Draft Third Amendment to PLI Loan Agreement	Draft Amendment and Waiver No. 3 to the PLI Loan Agreement
DSO	Days Sales Outstanding
EIA	Environmental Impact Assessment
FCFF	Free Cash Flow to the Firm

FMV	Fair Market Value – the (highest) price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arms-length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.
FTA	Free Trade Agreement between Canada and Peru
GDXJ	VanEck Vectors Junior Gold Miners ETF
Gold Prepayment Amount	The disbursement of US\$7.0 million in three tranches from PLI to Lupaka
IMC	Invicta Mining Corp. S.A.C.
Investment	Claimant’s 100% shareholding in the Invicta Project
Invicta Project or Project	The Invicta gold mine project located in Peru’s Huaura province
Lonely Mountain	Lonely Mountain Resources S.A.C.
Lupaka or Claimant	Lupaka Gold Corporation
Mallay Plant	The Mallay processing plant
Mallay Purchase Agreement	Draft Mallay Purchase Agreement between Buenaventura and IMC
Measures	Alleged acts and omissions the Claimant claims amount to a breach of the FTA, comprising the Authorities’ Measures and the Parán Community Measures
MINEM	The Ministry of Energy and Mines of Peru
NPV	Net Present Value – the value, as of a specified date, of cash inflows less all cash outflows over a period of time, calculated using an appropriate Discount Rate.
OEFA	Agency for Environmental Assessment and Control (Organismo de Evaluacion y Fiscalizacion Ambiental) of Peru
Pandion	Pandion Mine Finance LLC
Parán Community Measures	Alleged acts and omissions committed by the Parán Community
PEA	Preliminary Economic Assessment
Peru or Respondent	The Republic of Peru
PLI	PLI Huaura Holdings L.P.
PLI Loan Agreement	Second Amended and Restated Pre-Paid Forward Gold Purchase Agreement between Lupaka and PLI dated 2 August 2017
Primary Approach	Accuracy’s calculation of the FMV of the Project using the DCF approach
Red Cloud	Red Cloud Klondike Strike
Red Cloud Model	An updated version of the SRK Model prepared by Red Cloud to reflect the impact of a purchase of the Mallay Plant
Respondent’s Memorial	Respondent’s Memorial dated 24 March 2022

Sell or Sale	Lupaka's requirement to sell to PLI a set amount of gold each month after the grace period for each tranche at a discounted price, viz., market price less US\$500/oz
SLO	Social License to Operate
SOFR	Secured Overnight Financing Rate
SRK	SRK Consulting (Canada) Inc.
SRK Model	The valuation model prepared by SRK in February 2018
SRK PEA	The preliminary economic assessment prepared by SRK in early 2018
UST	One-Year U.S. Treasury Bill
Valuation Date	26 August 2019
WACC	Weighted Average Cost of Capital – the cost of capital (Discount Rate) determined by the weighted average, at market value, of the cost of all financing sources in the Business Enterprise's capital structure.

I. Scope of Work and Qualifications

1. The Republic of Peru ("**Peru**" or "**Respondent**"), through its counsel Arnold & Porter ("**Counsel**"), has asked us to prepare this expert report in relation to the arbitral proceeding ("**Arbitration**") that Lupaka Gold Corporation ("**Lupaka**" or "**Claimant**") initiated against Peru, under the Free Trade Agreement between Canada and Peru (the "**FTA**"). Lupaka is a Canadian mineral exploration and mining company.
2. The investment at issue in this arbitration ("**Investment**") is Claimant's 100% shareholding in the Invicta gold mine project located in Peru's Huaura province ("**Invicta Project**" or the "**Project**"). Lupaka held its shareholding in the Project through its wholly owned Canadian subsidiary, Andean American Gold Corp. ("**AAG**"), and AAG's 99.99% owned Peruvian subsidiary, Invicta Mining Corp. S.A.C. ("**IMC**").¹
3. We understand Claimant claims that alleged acts and omissions ("**Measures**"), as summarized in its Memorial dated 1 October 2021 ("**Claimant's Memorial**"), should be considered Peru's breaches of the FTA.²
4. Claimant retained Mr. Erik van Duijvenvoorde and Mr. Edmond Richards of the consulting firm Accuracy ("**Accuracy**") to quantify the alleged damages to Claimant's Investment resulting from the Measures. Accuracy presents its opinions in an expert report dated 1 October 2021 appended to Claimant's Memorial ("**Accuracy Report**"). Counsel asked us to review the Accuracy Report and offer our independent expert opinion on whether and to what extent its calculations correctly measure Claimant's alleged damages as a result of the Measures. We understand that our report will be appended to the Respondent's Memorial dated 24 March 2022 ("**Respondent's Memorial**").
5. I, Isabel S. Kunsman, am a Managing Director at AlixPartners LLP. I have built my experience in finance, economics, and business administration starting in 1997. Since 2004, I have worked exclusively as a consultant on financial analyses, valuations, damages quantification, and economic matters in the context of bilateral investment treaty arbitrations, international commercial disputes, and domestic regulatory proceedings. I have carried out over 100 substantive valuations and financial analyses involving contentious and non-contentious matters worldwide. I have

¹ Claimant's Request for Arbitration dated 21 October 2020, ¶ 4; Claimant's Memorial, ¶¶ 22-26.

² Claimant's Memorial, ¶¶ 266, 312.

worked in more than 40 international disputes including more than 35 international arbitrations and more than 25 investor-state arbitrations under various forums, including ICSID and the ICC. I have been retained as a financial, valuation, and quantum expert in several arbitrations and domestic proceedings relating to investments in Latin America. I hold an MBA degree with the highest distinction from Georgetown University's McDonough School of Business and a Bachelor of Science in Economics and Finance degree from Georgetown University's Walsh School of Foreign Service.

6. I, Alexander Lee, am a Director at AlixPartners LLP. Since 2011, I have specialized in business valuation and damages quantification and have led teams over multiple jurisdictions in preparing expert reports for commercial and investor-state disputes. I have experience conducting valuation and damages quantification engagements in a wide variety of industries including mining, energy, banking, commodities trading, and real estate development. I hold both the Master of Accounting and Bachelor of Accounting and Financial Management degrees from the University of Waterloo and am a Chartered Professional Accountant, Chartered Accountant, and Chartered Business Valuator.
7. Our curricula vitae are included as **Appendix 1** to this report.
8. Several of the documents we reviewed to prepare this report are in Spanish. I, Isabel Kunsman, am fluent in Spanish and English. I, Alexander Lee, do not speak or write in Spanish. Accordingly, I, Alexander Lee, have relied upon translations of these documents, translation by members of my team, or representations from Counsel that are fluent in Spanish. The original of this report is in English. **Appendix 2** contains the list of documents that we reference in this report.
9. Nothing in our conclusions or opinions in this report is intended to address the Parties' respective legal arguments. This report does not contain any opinions on matters of law that would require legal expertise.
10. We are independent from the Parties, their legal advisors, and the Arbitral Tribunal. The opinions and analyses contained in this report are ours and represent our considered views in light of our education and experience.
11. This report has been prepared to conform with the Practice Standards of the Chartered Business Valuators Institute. The relevant Practice Standards for this report are those governing the preparation of expert reports (Practice Standards 310, 320, and 330). The Practice Standards can be found at <https://cbvinstitute.com/members-students/standards-ethics/>.

II. Executive Summary

12. We were asked to review the expert report and damages calculations prepared by Accuracy and offer our independent expert opinion on whether and to what extent its calculations correctly measure Claimant's alleged damages as a result of the Measures. Having performed this review, we summarize our comments as follows.
13. Accuracy estimated damages based on two different production scenarios, 590t/day and 355t/day, with each scenario assuming, as a matter of law, that Peru is liable for a total loss of Claimant's investment (which we understand Peru contests on various legal grounds).
14. Claimant's claim for damages is predicated on the 590t/day scenario, which assumed that it successfully reached an agreement with the Parán Community, terminated its existing and anticipated debt, refinanced the Project under more favorable terms than the previous debt, and acquired a suitable processing plant.
15. Before pre-award interest, Accuracy concluded that damages would be US\$47.7 million and US\$28.3 million under the 590t/day and 355t/day scenarios, respectively.

A. Accuracy's Quantification of Damages is Fundamentally Flawed

16. In this report we highlight several fundamental flaws with the But-For Scenario that forms the basis of Accuracy's Primary Approach. These fundamental flaws, if unresolved, each would render IMC's shares in the Invicta Project worthless.
 - a) Intervention by the police appears to have been unlikely to permanently resolve the conflict with the Parán Community or the Access Road Protest, which therefore would have remained an obstacle to Claimant's ability to perform its obligations under the PLI Loan Agreement;
 - b) Accuracy failed to consider and incorporate any social license risk in its valuation analysis to account for the continued conflict between IMC and the Parán Community as of the Valuation Date;
 - c) Neither Claimant nor Accuracy has demonstrated that, absent the Measures, Lupaka could have complied with the re-negotiated terms of a new loan agreement given the contemporaneous conditions of the Project under either of its production scenarios, including the unavailability of a processing plant with adequate capacity, and the actual performance of the Invicta Project prior to the Measures. Given the risky provisions in the PLI Loan Agreement, such as the 15-month grace period to begin the Sale of the Contract Quantity of gold,

any interruption to the operations due to these risks could result in its termination and the foreclosure proceedings, notwithstanding the Measures.

- d) Accuracy did not address the financing risk associated with Claimant's existing debt as well as the anticipated amendment to the PLI Loan Agreement absent the Measures. In fact, Accuracy ignored the risk associated with the PLI Loan Agreement entirely by making several debt financing assumptions in the But-For Scenarios without providing logic or evidence to support them. Accuracy's approach assumed that the Project was no different than any generic gold mine with an average risk profile and readily available financing to settle existing debts, including the payment of early termination penalties. The Invicta Project was subject to social license risk, execution risk, and regulation risk, which any reasonable lender would take into account. By ignoring these potential refinancing difficulties, Accuracy's assumption that Claimant would have been able to resolve its production issues and follow the schedules in either of its production scenarios is unjustified. Therefore, Accuracy's damages are overstated and should not be relied upon by the Tribunal.

B. Damages Under the 590t/day Scenario are Overstated

17. Accuracy's 590t/day scenario is based on the Red Cloud Model, which Claimant acknowledges had not been subject to the same detailed technical and financial analysis as the SRK Model, and the assumption that Claimant could terminate the PLI Loan Agreement and acquire the Mallay Plant at or before the Valuation Date with favorable debt terms. It would then begin production almost immediately thereafter, ignoring the fundamental flaws discussed above. Neither Claimant nor Accuracy have provided the logic, basis, or evidence to support the assumption that a new investor would have funded the Project with financing terms friendlier to the borrower.
18. In addition, Accuracy's 590t/day scenario overstates damages due to these three specific shortcomings:
 - a) The removal of cash flows from the Mallay Plant and associated G&A expenses;
 - b) The omission of US\$13.0 million additional debt required to acquire the Mallay Plant; and,
 - c) The failure to consider the fundamental flaws mentioned above in the project-specific risk premium included in the WACC.

19. Correcting Accuracy's calculation for these three issues would reduce Claimant's damages claim from US\$47.7 million to US\$21.3 million. We note that damages should be reduced further considering the fundamental flaws discussed above.

C. Damages Under the 355t/day Scenario are Overstated

20. In contrast to the 590t/day scenario, in the 355t/day scenario Accuracy assumed that Claimant would not acquire the Mallay Plant and instead Claimant would be able to find a third-party processing company that can process ore at an average of 355t/day over the life of the Project. Claimant did not rely on Accuracy's 355t/day scenario for its damages claim. However, we do not think the Tribunal should rely on it as an alternative to award damages because neither Claimant nor Accuracy have provided the evidence to support the fundamental assumption that the deficiencies of the third-party processing plants identified before the Measures would be resolved at no additional cost or delay or, alternatively, that IMC would find a ready substitute for these third-party processing facilities.
21. In addition, Accuracy's 355t/day scenario overstates damages due to these specific shortcomings:
 - a) The removal of contingent cash flows related to closure costs;
 - b) The failure to consider the fundamental flaws mentioned above in the project-specific risk premium included in the WACC.
22. Correcting Accuracy's calculation for these two issues would reduce damages based on the 355 t/day scenario from US\$28.3 million to US\$23.2 million. Again, we note that damages could be reduced further still considering the fundamental flaws discussed above.

D. Using Alternative Pre-Award Interest Rates Reduces Damages

23. Accuracy calculated pre-award interest using a LIBOR+2% rate that was compounded annually. We note that LIBOR has been effectively retired as a basis for contracts in the United States and that publication of rates will be discontinued as of 30 June 2023.
24. We recalculated pre-award interest based on SOFR+2%, a potential replacement for LIBOR, or UST+2%, which represents the risk-free rate. While we provide the recalculated pre-award interest based on these alternatives in this report, the fundamental flaws with Accuracy's damages estimates mean the FMV of the Project could reasonably be nil as of the Valuation Date. Therefore, it may be appropriate to award no pre-judgement interest.

E. Accuracy's Other Indicators of Value are not Relevant in this Arbitration

25. Accuracy also referred to four other indicators of value that allegedly support its damages conclusions. These indicators of value, however, are either inaccurate or do not demonstrate the reasonableness of Accuracy's quantifications of damages:
- a) The indication of value based on Claimant's market capitalization is an inappropriate benchmark because it is materially impacted by factors that are unrelated to the value of the Project, is highly volatile depending on the measurement period selected by the expert, and includes adjustments made by Accuracy that unduly inflate the result;
 - b) The indication of value based on sunk costs is an inappropriate benchmark because it is not recommended for a Development Property under CIMVAL, ignores the fundamental flaws discussed above, and does not represent the amount that a willing buyer would pay as of the Valuation Date;
 - c) The indication of value based on transaction multiples in gold mining projects is an inappropriate benchmark because it also ignores the fundamental flaws with the Project and because Accuracy's scope of benchmark transactions is overly broad. Focusing the scope on transactions that are more similar to the Project demonstrates that Accuracy's conclusion on damages is overstated;
 - d) The indication of value based on the valuation results from the SRK Model and the Red Cloud Model are also inappropriate benchmarks because they don't account for the adjustments Accuracy implements in their valuation of the Projects under the 590 t/day and 355 t/day scenarios and because they don't account for the fundamental flaws mentioned above.
26. Therefore, the indicators of value Accuracy presents are not relevant benchmarks to demonstrate the reasonableness of Accuracy's quantifications of damages.

III. Background Relevant to the Quantification of Damages

27. We understand that the factual issues of this dispute are well known to the Tribunal and will therefore only summarize the facts that are relevant to the opinions in this report.

A. Characteristics of a Typical Mining Project

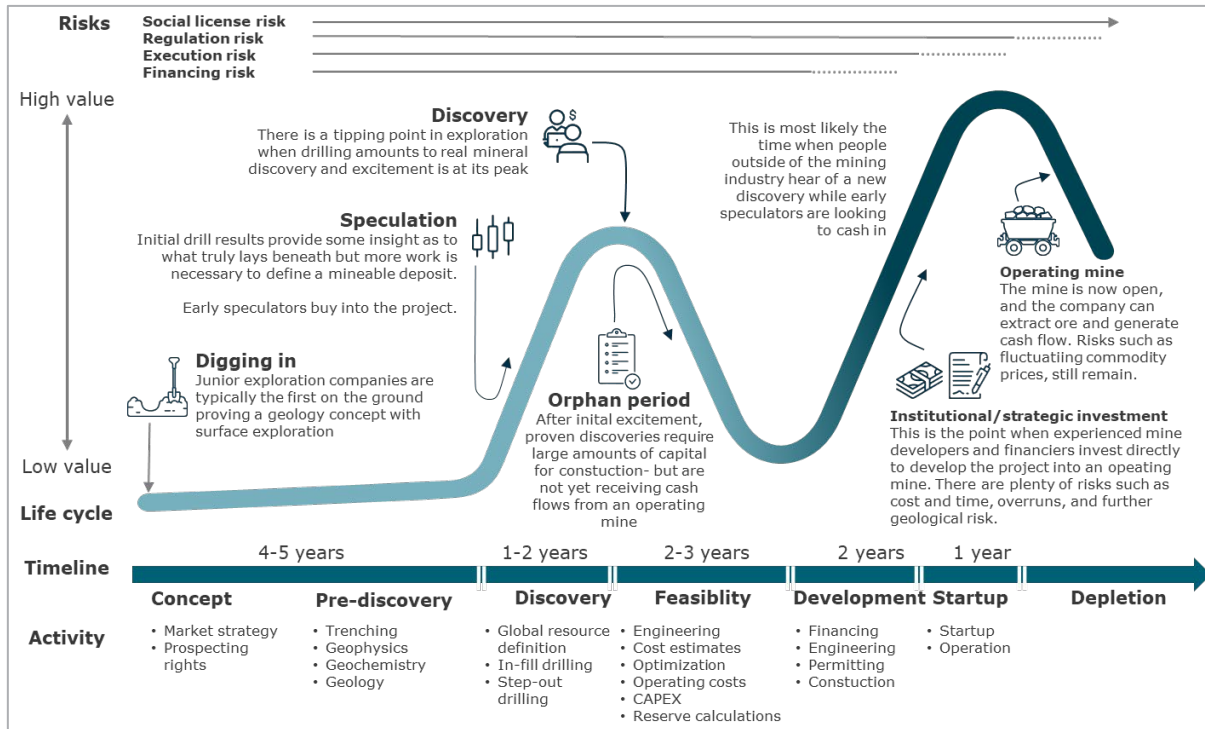
28. A typical mining project involves extracting ore from the earth and refining desired minerals, removing impurities, and concentrating minerals for sale. Due to the nature of the industry, there are certain shared characteristics among most mining projects:

- a) They have high upfront cost with potentially long lead times before they generate revenue.
- b) Obtaining approval from key stakeholders, known in the industry as obtaining the social license to operate (“**SLO**”) is critical; failure to obtain the SLO can be fatal to projects.
- c) Due to the environmental, social, and economic impact of these projects on local areas and communities, these projects typically have high regulatory and environmental burdens.
- d) Due to the global nature of the industry, mining projects use industry-specific metrics based on international standards of resource measurement and reporting to standardize disclosures for the international market.

i. Lifecycle of a Gold Mining Project

- 29. Gold is a scarce element and to make the extraction economically viable, it is necessary to spend considerable resources during the early phases of a gold mining project: concept, pre-discovery, and discovery. **Figure 1** shows an indicative evolution of a generic mining project.

Figure 1 - Typical Evolution of a Mining Project³



30. The chart in **Figure 1** is a typical evolution of a mining project. First, gold explorers use subsurface exploratory methods (trenching, geophysics, and geochemistry) and other geological surveys to find mineral concentrations “1,000 times higher than normal” in an area of geological interest.⁴ These activities would be analogous to the concept, pre-discovery, and discovery phases in the figure above. After a potential site is selected, a feasibility study is usually prepared to demonstrate that the site has economic value to the company. The feasibility study includes engineering, establishing cost estimates, and recommending further optimization among other analyses to estimate the future profit of the project. The next phase, development, requires that mining companies seek and obtain the approval of the impacted communities, national, and local governments, environmental agencies, and other stakeholders that regulate the industry in the country.⁵ Developers must also raise financing during this phase, typically in the form of debt from financial institutions or equity from direct investment. Next, the startup phase, relates to the efficient extraction of the ore at the planned rate, waste rock and water management, and

³ Updated and modified the lifecycle chart from the original version found on <<https://www.visualcapitalist.com/visualizing-the-life-cycle-of-a-mineral-discovery/>> [AP-0001]

⁴ Reddy, Rohan. “Gold, Explained”. Global X. 14 March 2019. [AP-0002]

⁵ Reddy, Rohan. “Gold, Explained”. Global X. 14 March 2019. [AP-0002]

progressive reclamation. Finally, at the end of the lifecycle of the mine, in the depletion phase, the site needs to be cleaned-up, rehabilitated, and maintained after the closure.

31. In Peru, throughout these phases of development, the mining company needs to obtain licenses, permits, approvals, etc. before ore extraction can begin and needs to maintain them for operations to remain active and to conclude without post-closure liability.⁶ These include,

- a) Surface rights: Investors must acquire the rights over the surface area where the mining activities will be carried out. In Peru, if the selected site is vacant, the company will need to follow the administrative procedures established for national assets, i.e., those assets owned by the national government.⁷
- b) Mining concession: In some countries such as Peru, all underground natural resources are considered as property of the nation, and anyone who wants to perform exploration and/or exploitation activities must obtain a mining concession title. The mining concession is considered a real estate interest distinct and separate from the surface land where the concession area is located.⁸
- c) Environmental impact assessment: For the development of a mining project, investors are required to conduct an environmental impact assessment ("**EIA**") which encompasses the impact of all activities to be carried out for the project, as well as the environmental mitigation measures that will be adopted to counter their impacts, amongst other things. Investors then use the EIA to request approval from the applicable regulator.⁹
- d) Authorization to start exploration activities: Before mining exploration activities may begin, it is necessary to carry out an evaluation to determine if carrying out the activities would affect the collective rights of rural, indigenous, or native

⁶ Pachas Perez, Diego. "La exploración minera en el Perú: Un breve alcance sobre las principales autorizaciones para el desarrollo de exploración en el Perú." "Mining exploration in Peru: A brief overview of the main authorizations for the development of exploration in Peru.". *Derecho & Sociedad* 42. 2014. pp. 321-328. [AP-0003]

⁷ Pachas Perez, Diego. "La exploración minera en el Perú: Un breve alcance sobre las principales autorizaciones para el desarrollo de exploración en el Perú." "Mining exploration in Peru: A brief overview of the main authorizations for the development of exploration in Peru.". *Derecho & Sociedad* 42. 2014. pp. 323-324. [AP-0003]

⁸ Pachas Perez, Diego. "La exploración minera en el Perú: Un breve alcance sobre las principales autorizaciones para el desarrollo de exploración en el Perú." "Mining exploration in Peru: A brief overview of the main authorizations for the development of exploration in Peru.". *Derecho & Sociedad* 42. 2014. p. 323. [AP-0003]

⁹ Pachas Perez, Diego. "La exploración minera en el Perú: Un breve alcance sobre las principales autorizaciones para el desarrollo de exploración en el Perú." "Mining exploration in Peru: A brief overview of the main authorizations for the development of exploration in Peru.". *Derecho & Sociedad* 42. 2014. pp. 324-325. [AP-0003]

communities, through a prior consultation process. In Peru, once the authorization for the start of exploration activities has been obtained, the owner of the mining exploration project must communicate in writing to regulators and other stakeholders the intended start date of the activities.¹⁰

e) Water use authorization: If the mining exploration project requires the use or collection of water from a natural source, the project must obtain a water use authorization.¹¹

f) Other permits: In addition to the permits described above, it is common to require a license to acquire and store explosives, and certificates of absence of archeological remains within the mining area.¹²

32. A mining project can take years and even decades to evolve from a geological concept with surface exploration to an extractive operation that earns cash flows. As a result of the inherent volatility of the cash flows generated over a single mine's typical lifecycle, "major" mining companies will usually own multiple projects under development.¹³ These projects will often be staggered in their development lifecycle to smooth out the company's income over time.

33. In contrast, smaller companies are referred to as "junior miners", although that designation does not have a standardized meaning.¹⁴ Junior miners typically operate one or a small number of projects that are either in the exploration or early development phases. As junior miners grow and their projects become commercialized, they can grow to become majors or are acquired by existing majors.

ii. International Standards of Resource Measurement and Reporting

34. The Canadian Institute of Mining Metallurgy and Petroleum ("**CIM**") is one of several organizations that are responsible for developing mineral reporting standards and

¹⁰ Pachas Perez, Diego. "La exploración minera en el Perú: Un breve alcance sobre las principales autorizaciones para el desarrollo de exploración en el Perú." "Mining exploration in Peru: A brief overview of the main authorizations for the development of exploration in Peru." *Derecho & Sociedad* 42. 2014. pp. 325-327. [AP-0003]

¹¹ Pachas Perez, Diego. "La exploración minera en el Perú: Un breve alcance sobre las principales autorizaciones para el desarrollo de exploración en el Perú." "Mining exploration in Peru: A brief overview of the main authorizations for the development of exploration in Peru." *Derecho & Sociedad* 42. 2014. p. 327. [AP-0003]

¹² Pachas Perez, Diego. "La exploración minera en el Perú: Un breve alcance sobre las principales autorizaciones para el desarrollo de exploración en el Perú." "Mining exploration in Peru: A brief overview of the main authorizations for the development of exploration in Peru." *Derecho & Sociedad* 42. 2014. pp. 327-328. [AP-0003]

¹³ Hamilton, Adam. "Junior Gold Producers". *Mining.com*. 1 October 2010. [AP-0004] Major or senior gold miners must produce at least 1% of the global mined supply of gold.

¹⁴ Hamilton, Adam. "Junior Gold Producers". *Mining.com*. 1 October 2010. [AP-0004] Junior gold miners produce less than 200 thousand oz of gold per year.

guidelines across the world.¹⁵ Measuring the Mineral Resources and Mineral Reserves within a particular project is vital to effectively demonstrate the economic potential of a given project.¹⁶ Mineral Resources are established by performing a detailed evaluation of the mining area, which includes drilling programs and testing to demonstrate whether a deposit contains sufficient quantities of desired minerals of a suitable quality. The portion of the Mineral Resource that has subsequently been evaluated with a feasibility study and deemed commercially viable to exploit is designated as a Mineral Reserve.

35. CIM provides a framework within which to report Mineral Resources as follows:

"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. [...] An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource [defined below] and must not be converted to a Mineral Reserve."¹⁷

"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. [...] An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve."¹⁸

36. The classification of Mineral Resources and Mineral Reserves as well as their conversion from one classification to another is summarized in **Figure 2**.¹⁹

¹⁵ CIM and other major organizations from around the world form the International Council of Mining & Metals which, among other guidance, issue Committee for Mineral Reserves International Reporting Standards. For purposes of this report, we refer to the CIM guidance as Lupaka is a Canadian mining company.

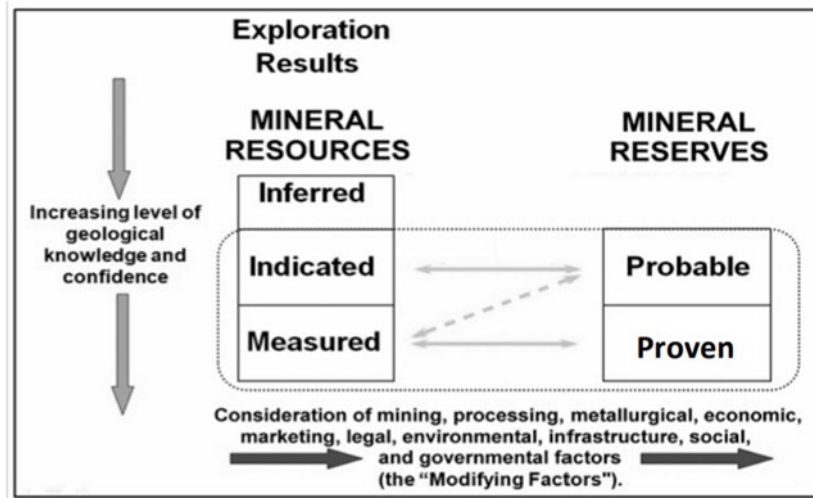
¹⁶ CIM Definition Standards for Mineral Resources & Mineral Reserves, pp. 4, 6. [AP-0005] CIM defines Mineral Resource as "a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction." CIM defines Mineral Reserve as "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."

¹⁷ CIM Definition Standards for Mineral Resources & Mineral Reserves, p. 4. [AP-0005]

¹⁸ CIM Definition Standards for Mineral Resources & Mineral Reserves, p. 5. [AP-0005]

¹⁹ CIM Definition Standards for Mineral Resources & Mineral Reserves, pp. 7-8. [AP-0005]. The Y axis represents the level of confidence on the mineral availability. The grey arrows represent that "the level of geoscientific confidence for probable mineral reserves is the same as that required for the in situ determination of indicated mineral resources and for proven mineral reserves is the same as that required for the in situ determination of measured mineral resources." The X axis demonstrates

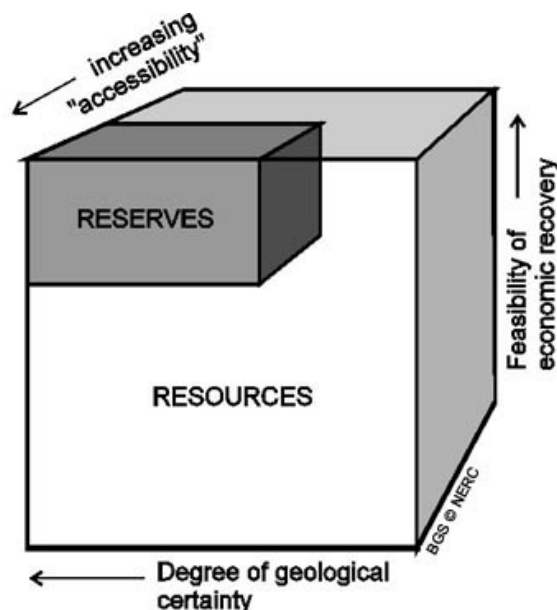
Figure 2 - Relationship between Mineral Resources and Mineral Reserves



37. **Figure 3** shows this relationship in relative terms as Mineral Reserves form just an economically feasible portion of a project’s overall Mineral Resources. Economic feasibility is based on accessibility, geological certainty, and feasibility of economic recovery.

that Mineral Reserves are a “modified sub-set of the indicated and measured mineral resources,” and “require consideration of modifying factors affecting profitable extraction. Additional test work is required to reclassify a resource as a reserve.” The dotted grey arrow represents that in “certain situations, measured mineral resources could convert to probable mineral reserves because of uncertainties associated with the modifying factors that are taken into account in the conversion from mineral resources to mineral reserves.”

Figure 3 - Relationship between Mineral Resources and Mineral Reserves²⁰



38. The Special Committee of the CIM on the Valuation of Mineral Properties (“**CIMVAL**”) prepared another set of guidelines, which provide guidance for the valuation of mineral properties based on the reliability of the information available about the mining project as well as the expected time and effort required to begin commercial production.
39. CIMVAL recommends that valuers select from among certain valuation approaches depending on the development stage of the subject project, as follows in **Figure 4** below:²¹

Figure 4 - Valuation Approaches per CIMVAL Standards

Valuation Approach	Exploration Properties	Mineral Resource Properties	Development Properties	Production Properties
Income	No	In some cases	Yes	Yes
Market	Yes	Yes	Yes	Yes
Cost	Yes	In some cases	No	No

40. Among the four development stages referenced in CIMVAL, “Mineral Resource Properties” and “Development Properties” are relevant for purposes of this Arbitration. A Mineral Resource Property is a property which contains a:

²⁰ BGS, Minerals UK. “What is the difference between resources and reserves?”. [AP-0006]

²¹ CIMVAL Standards (2019), p. 16. [AP-0007]

*"Mineral Property that contains a Mineral Resource as defined in the CIM Definition Standards, as defined in National Reporting Standards, or other estimates of quantity and grade of mineralization that are reconciled the with the CIM Definition Standards."*²²

41. In contrast, a Development Property is a Mineral Property that:

*"a Mineral Property that contains Mineral Reserves and/or Mineral Resources and for which economic viability has been demonstrated by a Feasibility Study or Pre-Feasibility Study and includes a Mineral Property that has a Current positive Feasibility Study or Pre-Feasibility Study but that is not yet in production."*²³

42. Among the differences between a Mineral Resource Property and a Development Property is whether a project has been subject to a feasibility study or a pre-feasibility study. A feasibility study includes a detailed assessment of all the operating factors to demonstrate that extraction is "reasonably justified (economically mineable)" and the results of a feasibility study may:

*"reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project."*²⁴

43. A pre-feasibility study "is at a lower confidence level" than a feasibility study due to smaller sampling rates and certain untested assumptions, amongst other factors.²⁵ A pre-feasibility study is used to:

*"determine if all or part of the Mineral Resource may be converted to a Mineral Reserve at the time of reporting."*²⁶

44. As the first signal to the market that a mineral project has potential viability, a preliminary economic assessment has a lower degree of accuracy compared to the pre-feasibility study and feasibility study issued in a later stage of the development. The comparison among a preliminary economic assessment, pre-feasibility study and feasibility study is summarized below:

²² CIMVAL Standards (2019), p. 36. [AP-0007]

²³ CIMVAL Standards (2019), p. 32. [AP-0007]

²⁴ CIMVAL Standards (2019), p. 33. [AP-0007]

²⁵ CIMVAL Standards (2019), p. 36. [AP-0007]

²⁶ CIMVAL Standards (2019), p. 36. [AP-0007]

Figure 5 - Preliminary Economic Assessment, Pre-feasibility Study and Feasibility Study²⁷

Item	Preliminary Economic Assessment	Pre-feasibility Study	Feasibility Study
Objective	an economic analysis of the <u>potential viability</u> of Mineral Resources	a comprehensive study of a range of options for the technical and <u>economic viability</u> of a mineral project	reasonably serve as the <u>basis for a final decision</u> to proceed with, or finance, the development of the project.
Mineral estimate input	Inferred / indicated / Measured Mineral Resources	Indicated / Measured Mineral Resources	Indicated / Measured Mineral Resources
Mineral estimate output	Inferred / indicated / Measured Mineral Resources	Probable / Proven Mineral Reserves	Probable / Proven Mineral Reserves
Confidence level	Lower than pre-feasibility study	Lower than feasibility study	High
Cost Accuracy ²⁸	+/- 30~40%	+/- 20~25%	+/- 15%

iii. Risks in a Mining Project

45. Having reviewed the lifecycle and a set of reporting standards that typical mining projects use, we now turn to the risks that these projects face. As presented in **Figure 1**, the risk profile and associated value of a mining project varies significantly over the life of the mine. This section presents some typical risks that mining projects face, but it is not meant to be exhaustive as individual projects can face unique risks. Typical risks in a mining project include but are not limited to: social license risk, regulatory risk, execution risk, and financing risk.

a. Social License Risk

46. The Project’s social license, also known as its SLO, is defined as:

“the acceptance of society to conduct its activities. [...] It can only come from the acceptance granted by your neighbors. Such acceptability must be achieved on many levels, but it must begin with, and be firmly grounded in, the social acceptance of the resource development by local communities.”²⁹

47. Obtaining and maintaining a project’s social license is a critical step for mining companies to develop and operate their mining projects. For example, Dr. Robert Boutilier, formerly of Simon Fraser University in Canada and recently a visiting professor at the University of Eastern Finland, performed a study of the evolution of

²⁷ CIMVAL Standards (2019), pp. 33, 36. [AP-0007]; CIM Definition Standards for Mineral Resources & Mineral Reserves, May 2014, p. 3. [AP-0005]

²⁸ Lewis, William. Micon International Limited. “Technical and Economic Evaluation of Mineral Deposits”. 12 December 2019. [AP-0008]

²⁹ Boutilier, Robert. “A Measure of the Social License to Operate for Infrastructure and Extractive Projects”. 2017. p. 1. [AP-0009]

the definition of social license and its importance to infrastructure and extractive projects, which highlighted that the process of obtaining a project's social license is ongoing and needs to be managed prior to, during, and after mining operations.³⁰ Also, Dr. Boutilier modeled and described the SLO concept, outlining that an effective campaign to maintain a project's social license requires that the stakeholder perceives the following four components:

- *"the project/company offers a benefit;*
- *the project/company contributes to the well-being of the region, respects the local way of life, meets expectations about its role in society, and acts according to stakeholders' view of fairness;*
- *the company and its management listens, responds, keeps promises, engages in mutual dialogue, and exhibits reciprocity in its interactions; and,*
- *the relation between their institutions (e.g., the community's representative organizations) and the project are based on an enduring regard for each other's interest."³¹*

48. Failing to obtain and maintain the approval of local community stakeholders can lead to conflict, project delay, and unplanned cost. Without effective stakeholder engagement strategies, mining operations face the risk of shutdown or disruption due to stakeholder actions.³² Experienced mining companies understand this. In 2020, Ernst & Young published the results of a recent survey of executives from the global mining and metal sector. This report highlights that 44% of the survey's respondents recognized social license risk as the biggest risk for mining companies, noting that:³³

"seeing it [social license] as a soft issue or allocating it to one section of the business will directly threaten your ability to operate, and

³⁰ Boutilier, Robert, "A Measure of the Social License to Operate for Infrastructure and Extractive Projects". 2017. p. 2. [AP-0009] "The common thread in all these definitions is ongoing acceptance or approval by the community for the company's activities."

³¹ Boutilier, Robert. "Modelling and Measuring the Social License to Operate: Fruits of a Dialogue Between Theory and Practice". 2011. pp. 3-4, and Table 1. [AP-0010]

³² Boutilier, Robert. "A Measure of the Social License to Operate for Infrastructure and Extractive Projects". 2017. p. 2. [AP-0009] "the social license presumes that stakeholders have the power and influence, either alone or in coalitions, to either stop projects or impose severe cost upon them."

³³ EY. "Top 10 Business Risks and Opportunities – 2020". p. 4. [AP-0011] "EY survey of over 130 executives from the global mining and metals sector."

*underestimating the power of even a single stakeholder would be a mistake.*³⁴

b. Regulation Risk

49. As discussed in **Paragraph 28**, due to the inherently hazardous and destructive nature of mining operations, a typical mining project is subject to a relatively high regulatory burden. These regulations can cover a wide spectrum of issues such as the environmental impact of the project, carbon reduction, health and safety, labor, corruption, and financial disclosure. Failing to understand and comply with the regulations national and local governments impose on mining projects can affect and delay commercialization, even causing the shutdown of a mine.³⁵

c. Execution Risk

50. Execution risk is defined as the risk that arises from three main drivers: the availability of critical resources (funding, workforce, talent, and data and systems), stakeholder commitment and alignment, and emotional/social resistance.³⁶ In the mining industry, one of the critical resources to manage is the availability of suitable processing plant capacity to allow a project to reliably achieve the budgeted level of production. If this processing capacity is not available, production goals or forecasts will not be met.
51. Execution risk is closely linked to the accessibility of the infrastructure that allows the successful development of the project.³⁷ This type of risk is a source of potential delays and operating issues inherent to the mining industry.³⁸ For example, the maintenance cost of having only one access road that suffers mudslides during a rainy season, can hold up the completion of development milestones or make a mining project unfeasible.

d. Financing Risk

52. Finally, financing risk is the risk that:

³⁴ EY. "Top 10 Business Risks and Opportunities – 2020". p. 4. [AP-0011]

³⁵ KPMG. "Mining Risk and Assurance – A Survival Strategy". 2014. p. 19. [AP-0012]

³⁶ Deloitte. "Execution risk: Stepping over 12 common hurdles". CFO Insights. January 2017. p. 1. [AP-0013]

³⁷ Mazumdar, Joe. "Fatal Flaws in the Junior Mining Sector". Exploration Insights. [AP-0014]

³⁸ O'Donnell, Oliver. "PYX Resources". VSA Capital. 16 November 2021. [AP-0015]

*"future investors will not fund a firm at its next stage even if the NPV [net present value] of the project, if fully funded, has not changed, leading a viable firm with good fundamentals to go bankrupt."*³⁹

53. In other words, it is the risk that a given company is unable to obtain future funding necessary to sustain a project. Obtaining funding for a project is a significant hurdle particularly for junior gold miners.⁴⁰ Among junior miners, the difficulties in raising further capital to grow is ranked as the number 5 overall risk in the survey the Global Impact Investing Network conducted.⁴¹

B. Background of the Invicta Project

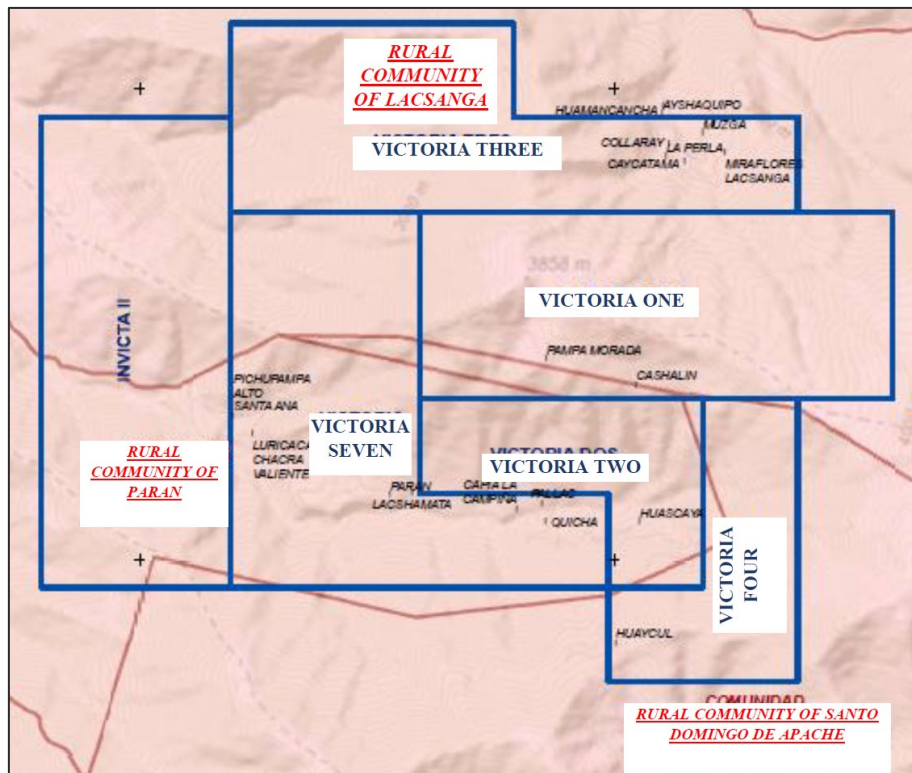
54. The Invicta gold mine is located in the province of Huaura, situated approximately 120 kilometers to the northeast of Lima, Peru. We understand that the property (comprising six concessions) sits within the boundaries of the Parán, Lacsanga and Santo Domingo de Apache Rural Communities (in Spanish, *comunidades campesinas*). The Santo Domingo de Apache and Parán Communities are in the district of Leoncio Prado, while the Lacsanga Community is in the district of Paccho. As shown in **Figure 6** the Invicta Project mining easement (in Spanish *servidumbre minera*) is located inside the Lacsanga Community land, and part of the Victoria Uno concession.

³⁹ Nanda, Ramana, et al. "Financing Risk and Innovation". Harvard Business School. 5 March 2014. p. 4. [AP-0016]

⁴⁰ Mazumdar, Joe. "Fatal Flaws in the Junior Mining Sector". Exploration Insights. [AP-0014]

⁴¹ Planet Gold. "Unlocking Finance for Artisanal and Small-Scale Gold Mining, A frontier Investment Sector." March 2020. Page 31. [AP-0017]. The Global Impact Investing Network is a "nonprofit organization dedicated to increasing the scale and effectiveness of impact investing." p. 54 and "the global champion of impact investing, dedicated to increasing its scale and effectiveness around the world." About the GIIN. p. 1 [AP-0018]

Figure 6 - The Invicta Project and Local Communities⁴²



55. In Peru, the state has full rights to all minerals below the ground and this right can be granted via concessions to private companies.⁴³ As shown in the **Figure 6** above, the Invicta Project is located within one of the six concessions granted to IMC by the Peruvian government, the Victoria Uno concession. Victoria Uno is related to other five concessions (Victoria Dos, Victoria Tres, Victoria Cuatro, Victoria Siete and Invicta II) as well as a 1.2-kilometer mining tunnel covering a total area of 4,700 hectares.⁴⁴ The six Invicta mining concessions overlapped with parts of the Parán, Santo Domingo and Lacsanga Communities' territories.
56. As explained in **Paragraph 31(b)**, separate from obtaining a concession with rights over the underground minerals, Lupaka was also required to obtain the right to use any surface land where Lupaka intended to operate to access underground minerals.⁴⁵ In this case, the Invicta Project was located in the territory of Lacsanga

⁴² Respondent's Memorial, Section II.C.2.a. R-0166-ENG.

⁴³ Respondent's Memorial, Section II.A.3.a. R-0004, General Mining Law, Art. 9. R-0005, Civil Code of Peru, 24 July 1984 ("Civil Code"), Art. 954.

⁴⁴ AC-0002, pp. iv, 9. Witness Statement of Gordon Ellis, ¶ 14.

⁴⁵ Respondent's Memorial, Section II.C.2.a. R-0004, General Mining Law.

Community. The map below shows the location of the Invicta Project relative to nearby processing plants and the nearest town.

Figure 7 - Invicta Mine Site, Mally Plant and Coriland plants, and Huambo and Sayan towns Map⁴⁶



57. Lupaka was incorporated in Canada on 3 November 2000, and is in the business of acquiring, exploring, and developing Mineral Resources properties.⁴⁷ In October 2012, Lupaka acquired a 100% interest in the Invicta Project through its acquisition of AAG.⁴⁸ Of the total acquisition price of CAD 26.7 million, CAD 10,252,445 (US\$10.4 million)⁴⁹, approximately 38.5%, was allocated to the Invicta Project’s mineral properties as of 1 October 2012.⁵⁰ The other 61.5% (CAD 16.4 million, US\$16.6 million) of the total acquisition price was attributable to cash assets, other current assets and liabilities, Investment in Southern Legacy Minerals, and plant & equipment owned by AAG.⁵¹ In July 2010, SRK Consulting (Canada) Inc. (“**SRK**”) performed a study on the resources present at the Project (“**2010 Optimi[z]ed Feasibility Study**”) and found indications of:

⁴⁶ Retrieved from Google Maps on 23 February 2022. Locations are approximated and marked based on Google Maps research of the cities around the Project site. The Coriland plant located in Caral, Lima (Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶ 86), and the Mally Plant located in the province of Oyón (C-0048 Draft Mally Purchase Agreement between Buenaventura and IMC, 21 September 2018 ¶ 1.47).

⁴⁷ Lupaka. “Condensed Interim Consolidated Financial Statements for the three and nine months ended September 30, 2021 and 2020”. p. 7. [AP-0019]

⁴⁸ AC-0003, pp. 9 and 24.

⁴⁹ Monday 1 October 2012. CAD 1 = USD\$ 1.0184. [AP-0020]

⁵⁰ AC-0048, p. 18. (10,252,445/26,662,811 = 38.5%)

⁵¹ AC-0048, p. 18.

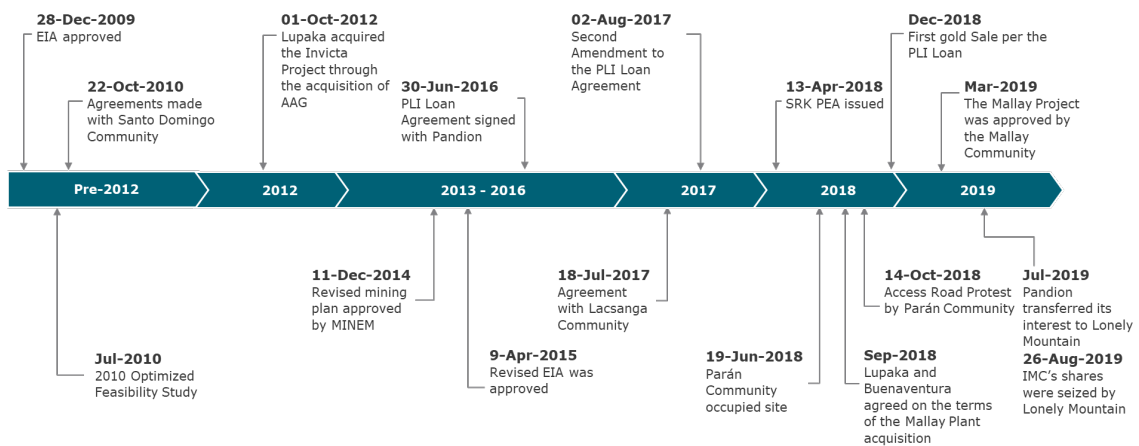
"extensive mineralization and very high metallurgical recovery rates for gold and silver".⁵²

58. The 2010 Optimized Feasibility Study outlined the requirements for the processing plant and assumed that it would be located about 2.3km from the Parán Community territory.⁵³ In regards of the SLO, the study assumed that IMC:

"has acquired the authorization for mining exploration operations from the Communities of Parán [and] reached agreements with the ... Rural Community of Parán for the use of surface lands where the adit and camp are located", [and stated that the majority of the community is] "in favor of the development of the Project."⁵⁴

59. A timeline of key events is presented in **Figure 8** below.

Figure 8 - Timeline of Key Events⁵⁵



60. According to the witness statement of Mr. Gordon Ellis, Lupaka's co-founder as well as its chairman of its board, CEO, and president as of the Valuation Date, between 2012 and 2015, IMC's and Lupaka's management performed the following development activities:⁵⁶

- a) Mapped the Project to locate mineralization (Feasibility activity);
- b) Identified processing plant options (Development activity);

⁵² Witness Statement of Gordon Ellis, ¶ 15. Invicta Gold Project Optimized Feasibility Study. July 2010 [C-0035]

⁵³ C-0035. p. 90.

⁵⁴ C-0035. pp. 92-94, 96.

⁵⁵ Claimant's Memorial, Table of Defined Terms, ¶¶ 42, 80, 81, 92, 94, 97, and 194; Accuracy Report, ¶¶ 3.18 and 3.21.

⁵⁶ Witness Statement of Gordon Ellis, ¶ 24.

- c) Searched for co-investors to help back the development of the Project (Development activity);
 - d) Upgraded the access road and logistics (Development activity); and,
 - e) Put in place all the regulatory approvals needed to initiate mine development (Development activity).
61. Between 2012 and 2017, IMC obtained several regulatory and community approvals needed to initiate development of the Project. By the end of 2012, the Ministry of Energy and Mines ("**MINEM**") granted IMC a two-year extension to initiate development activities, from 28 December 2012 to 29 December 2014.⁵⁷ On 11 December 2014, MINEM approved IMC's revised mining plan.⁵⁸ On 16 March 2015 IMC secured the permit for the use and storage of explosives for civil use, and on 9 April 2015, MINEM approved the Project's updated environmental impact assessment.⁵⁹
62. Between 2014 and 2015, Lupaka negotiated with the Compañía de Minas Buenaventura S.A.A. ("**Buenaventura**") the acquisition of the Mallay Processing Plant ("**Mallay Plant**").⁶⁰ This negotiation was discontinued in early 2015 because the Mallay Plant's owner was:
- "only interested in selling the whole mining unit, including the mining concession and related assets, not just the processing plant."⁶¹*
63. IMC's community relations team ("**CR Team**") and Mr. Castañeda did additional work with the Lacsanga, Santo Domingo and Parán Communities between 2014 and 2018.⁶² On 31 March 2015, the CR Team secured both a settlement agreement and a surface agreement on 18 July 2017 with the Lacsanga Community.⁶³

i. The PLI Loan Agreement

64. In order to fund the development of the Project, Claimant was required to raise capital from both equity and debt sources. On 30 June 2016, Lupaka and PLI Huaura

⁵⁷ Witness Statement of Gordon Ellis, ¶ 26. On 28 December 2009, MINEM approved the EIA. This approval loses its validity if within a period of three years after its issuance, IMC does not start developing activities. This period may be extended one time for up to two additional years. [C-0008-ENG-SPA]

⁵⁸ Witness Statement of Gordon Ellis, ¶ 26.

⁵⁹ Witness Statement of Gordon Ellis, ¶ 29.

⁶⁰ See **Section III(B)(iii)**.

⁶¹ Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶ 84.

⁶² Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶¶ 40, 48, 55.

⁶³ Witness Statement of Gordon Ellis, ¶ 30. Additionally, IMC signed an agreement with the Santo Domingo Community on 22 October 2010.

Holdings L.P. ("**PLI**"), a subsidiary of Pandion Mine Finance L.P. ("**Pandion**"), executed a definitive Pre-Paid Forward Gold Purchase Agreement.⁶⁴ On 2 August 2017, Lupaka and PLI entered into the Second Amended and Restated Pre-Paid Forward Gold Purchase Agreement ("**PLI Loan Agreement**").⁶⁵ Under this agreement, Lupaka received from PLI US\$7.0 million, divided in three tranches (collectively, "**Gold Prepayment Amount**"): ⁶⁶

- a) US\$2.5 million in August 2017 (US\$1.6 million net of the upfront fee of US\$0.9 million to lender);
- b) US\$2.0 million in November 2017; and,
- c) US\$2.5 million in February 2018.

65. The term for each tranche was 60 calendar months, with the first month counted after an initial grace period of 15 calendar months.⁶⁷ To repay the loaned principal, Lupaka agreed to sell to PLI a set amount of gold each month ("**Contract Quantity**") after the grace period for each tranche for which PLI would pay a discounted price, market price less US\$500/oz ("**Sale**" or "**Sell**").⁶⁸ The total Contract Quantity Lupaka had to Sell was 22,680oz, over the full term of the loan according to the schedule shown in **Figure 9** below.

⁶⁴ Witness Statement of Gordon Ellis, ¶ 32. C-0044.

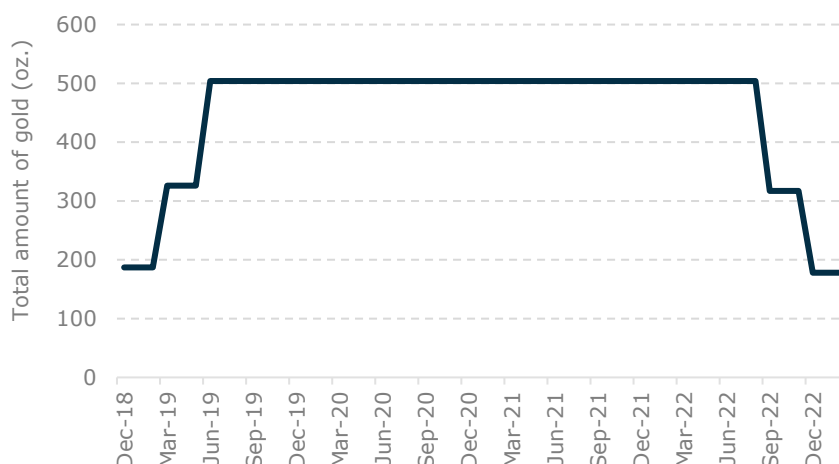
⁶⁵ AC-0004.

⁶⁶ AC-0005, p. 4.

⁶⁷ AC-0004. See definitions of "Scheduled Delivery Months" and "Scheduled Monthly Quantify".

⁶⁸ AC-0004. pp. 3-4. "**Contract Quantity**" means a total of 22,680 Ounces of Gold to be sold at a discount as follows: (a) 0 Ounces of Gold for each of the 15 calendar months following the calendar month in which the Gold Prepayment Amount is paid on the First Effective Date [August 2017] and 187 Ounces of Gold for each of the 45 calendar months thereafter; (b) 0 Ounces of Gold for each of the 15 calendar months following the calendar month in which the Gold Prepayment Amount is paid on the Second Effective Date [November 2017] and 139 Ounces of Gold for each of the 45 calendar months thereafter (which, for the avoidance of doubt, shall be in addition to the 187 Ounces of Gold listed in subclause (a) hereof); (c) 0 Ounces of Gold for each of the 15 calendar months following the calendar month in which the Gold Prepayment Amount is paid on the Third Effective Date [February 2018] and 178 Ounces of Gold for each of the 45 calendar months thereafter (which, for the avoidance of doubt, shall be in addition to the 187 and 139 Ounces of Gold listed in subclauses (a) and (b), respectively, hereof); and (d) any Ounces of Gold to be delivered pursuant to Section 7(3) under this Agreement."

Figure 9 - Quantity of Gold to be Sold in Each Month⁶⁹



66. The Sale of 22,680oz of gold with a discount of US\$500/oz resulted in an aggregate discount of approximately US\$11.3 million, representing US\$7.0 million of principal repayment and \$4.3 million of interest.⁷⁰
67. The PLI Loan Agreement also specified an additional benefit sharing mechanism in favor of PLI in the event that commodity prices rise above certain benchmarks indicated in the PLI Loan Agreement. Under the upside participation clause, Lupaka was required to pay PLI an excess amount calculated as the product of:⁷¹
- "...(a) 30% of the Monthly Payable Production of such Covered Metal and (b) an amount equal to the price as determined pursuant to the Mineral Offtake Agreement for such Covered Metal for the corresponding Monthly Payable Production minus the Base Spot Price for such Covered Metal..."⁷²*
68. Lupaka estimated that the clause would be triggered if the market gold price rose above US\$1,200/oz.⁷³ In September 2019, IMC estimated the value of PLI's upside

⁶⁹ Accuracy Report, ¶ 3.21.

⁷⁰ 22,680oz x US\$500 = US\$11.3 million.

⁷¹ AC-0004, pp. 27-28, section 7(4).

⁷² AC-0004, pp. 3, 4, 9, 10 and 17. **"Base Spot Price"** means, with respect to each Covered Metal, the lower of the average of the Settlement Prices for the month of January 2017 or the five (5) lowest Settlement Prices from January 31, 2017 to and including the day prior to the First Effective Date, each as reasonably determined by the Buyer. **"Covered Metal"** means gold, silver, lead, copper and zinc. **"Mineral Offtake Agreement"** means any agreement entered into by any Obligor, including all Depositors, with an Offtaker that includes: (a) the sale of all gold containing concentrate produced by the Depositors to an Offtaker; or (b) the smelting, refining or other beneficiation of Produced Gold by an Offtaker for the benefit of any Obligor, as the same may be supplemented, amended, restated or superseded from time to time and is otherwise substantially compliant with the requirements set forth on Schedule E hereto. **"Monthly Payable Production"** means the quantity of each Covered Metal produced from the Mine and paid for by or on behalf of the Obligors for each calendar month, determined in accordance with the relevant Mineral Offtake Agreement. **"Settlement Price"** means, with respect to gold, the LBMA Gold Price PM; with respect to silver, the LMBA Silver Price; with respect to copper, lead or zinc, the Official LME Cash Settlement Price for copper, lead or zinc, respectively.

⁷³ AC-0005, p. 6. Lupaka does not estimate the trigger price for the other metals produced by the Project.

participation benefit to be approximately US\$4.6 million.⁷⁴ However, Lupaka described the upside participation benefit as:

"very speculative as it is based on the difficult to forecast prices of commodities over the term of the loan".⁷⁵

69. The PLI Loan Agreement defined several events of default including: the failure or delay to Sell the Contract Quantity gold, failure to pay amounts due, and the "expropriation, condemnation, annulment, cancellation or abandonment" of the Project, among others.⁷⁶ Lupaka would be deemed in default of the agreement if it failed to Sell the Contract Quantity gold according to the agreed schedule or failed to remedy the deficiency within a 15-day grace period.⁷⁷ Should Lupaka then be deemed to be in default, PLI was able to demand payment of the Early Termination Amount or enforce against the Collateral (i.e., Lupaka's shares in IMC).⁷⁸ The Early Termination Amount was specifically defined in the PLI Loan Agreement and was based on a calculation of the amount of unsold gold updated for certain adjustments.⁷⁹
70. The first Sale of the Contract Quantity gold was scheduled for December 2018, but Claimant never fulfilled this obligation. We understand that Claimant claims that this was due to the Measures.

ii. The SRK Model

71. Months after signing the PLI Loan Agreement, Claimant again engaged SRK in November 2017 to prepare a preliminary economic assessment with estimates of the future yearly cash flows for the mine based on assumptions regarding pricing, production, processing, operating cost, capital, and tax ("**SRK Model**").⁸⁰ The SRK Model was incorporated into the preliminary economic assessment SRK prepared which was issued and dated 13 April 2018 ("**SRK PEA**"), which provided a preliminary view of the potential viability of the Project's Mineral Resources.⁸¹

⁷⁴ AC-0005, p. 6.

⁷⁵ AC-0005, p. 6.

⁷⁶ AC-0004, p. 52-56, section 13(1)(a)-(s).

⁷⁷ AC-0004, p. 52, section 13(1)(a).

⁷⁸ AC-0004, p. 56, section 14(4).

⁷⁹ AC-0004, pp. 23-24, section 5(8).

⁸⁰ AC-0002, p. iv. AC-0029, "Title" and "preface" tabs.

⁸¹ Claimant's Memorial, ¶ 342. AC-0002. AC-0029.

72. Assuming an average peak steady state production rate of 355t/day, SRK estimated that the post-tax net present value ("**NPV**") of the Invicta Project was US\$43.4 million using a discount rate of 5.0% (and US\$40.6 million applying a discount rate of 8.0%).⁸² However, SRK acknowledged that the economic analysis in the SRK PEA prepared in early 2018 was subject to uncertainty associated with the lower precision of a preliminary economic assessment relative to a pre-feasibility study or feasibility study:

*"This preliminary economic assessment is, however, not adequate to confirm the economics of the study. A preliminary-feasibility study, or feasibility study, as defined in Canadian Securities Administrators National Instrument 43-101, containing mineral reserve estimates is required for this purpose."*⁸³

73. The SRK Model was based on underground extraction of Inferred Mineral Resources and Indicated Mineral Resources. Due to the nature of Inferred and Indicated Mineral Resources, SRK urged caution before using a preliminary economic assessment based on Inferred and Indicated Mineral Resources to evaluate the economic viability of a mine and to reach a mine production decision:

*"A mine production decision that is made without a feasibility study carries additional potential risks which include, but are not limited to, the inclusion of Inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Mine design and mining schedules, metallurgical flow sheets and process plant designs may require additional detailed work and economic analysis and internal studies to ensure satisfactory operational conditions and decisions regarding future targeted production."*⁸⁴

"There is no certainty that the Inferred mineral resources will be converted to the Measured and Indicated categories, that the Measured and Indicated mineral resources will be converted to the proven or probable mineral reserves and there is no certainty that this preliminary economic assessment will be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability; the estimate of mineral

⁸² AC-0002, p. x. American Institute of CPAs ("**AICPA**"). "International Valuation Glossary – Business Valuation". 14 December 2020. [AP-0021] NPV is defined as "the value, as of a specified date, of cash inflows less all cash outflows over a period of time, calculated using an appropriate Discount Rate."

⁸³ AC-0002, p. xi.

⁸⁴ AC-0002, p. 121.

resources in this report may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.”⁸⁵

74. SRK assumed that third-party processing companies were going to be used to process the ore; this assumption apparently was made before the processors were proven to be adequate during the Project’s pre-commercialization production.⁸⁶ In 2015, Lupaka used two plants to treat samples of the Invicta Project’s ore, the SJE-Huari industrial plant and the Minex Plant.⁸⁷ The configuration of these plants was included in Sections 12.6 and 12.7 of the SRK PEA. Chemical analysis was carried out at each plant to identify the characteristics of the sample materials provided.⁸⁸
75. According to the October 2018 Lupaka Monthly Report, Lupaka had planned to start mining and processing in February and March 2018, respectively.⁸⁹ However, mining was delayed to April 2018 and processing did not begin until June 2018. By October 2018 the Invicta Project was behind budget in the following three respects.
76. First, Lupaka had budgeted that by October 2018, 60,500t of ore would be mined. However, by October 2018, only 14,770t were mined, equivalent to 24.4% of the budget.⁹⁰ In fact, as shown in **Figure 10** which compares the budgeted and actual volumes mined by month, Lupaka did not mine any ore in October 2018 even though the Access Road Protest, as defined in **Paragraph 89**, did not start until 14 October 2018:

⁸⁵ AC-0002, p. 121.

⁸⁶ AC-0002, p. 10. “Invicta Mining does not have a mineral processing concession”.

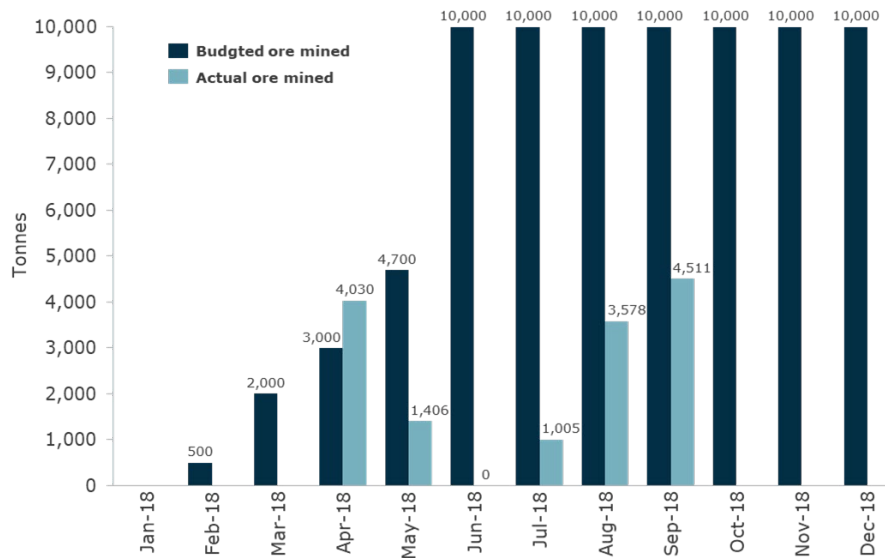
⁸⁷ AC-0002, pp. 89-93.

⁸⁸ AC-0002, Tables 53 and 56, pp. 89, 92.

⁸⁹ AC-0010, p. 11.

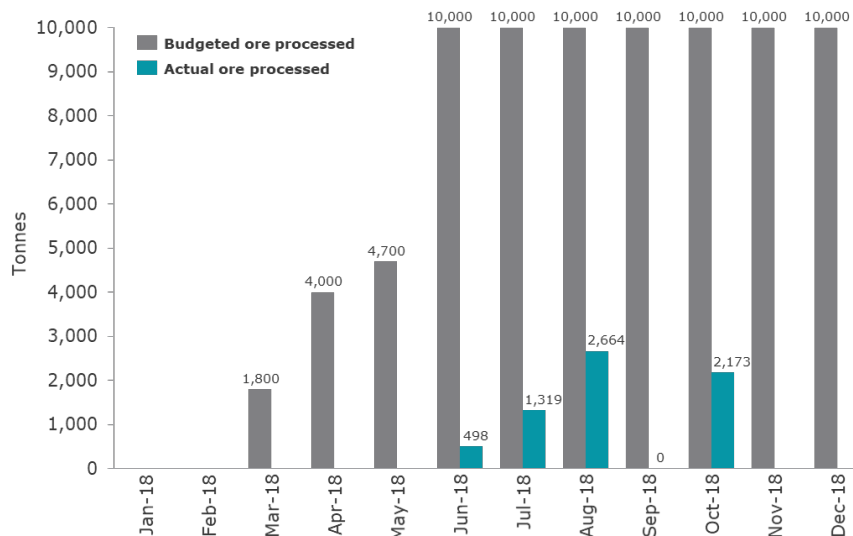
⁹⁰ AC-0010, p. 10.

Figure 10 - Historical Ore Mining Levels: Budgeted vs. Actuals⁹¹



77. Second, Lupaka had budgeted that by October 2018, 60,500t of ore would be processed. However, by October 2018, only 6,654t were processed, equivalent to 11.0% of the budget.⁹² **Figure 11** compares the budgeted and actual volumes processed by month:

Figure 11 - Historical Ore Processing Levels: Budgeted vs. Actuals⁹³



78. The Accuracy Report noted that the February to June 2018 delay in ore volumes mined and processed was due to problems with third-party processing (i.e., using an

⁹¹ AC-0010, p. 11. We note that the chart in Lupaka’s monthly report shows 60,200t rather than 60,500t per the actual budget.

⁹² AC-0010, p. 10.

⁹³ AC-0010, p. 11.

unrelated company with specialized machinery to finish raw or semi-finished products, in this case processing of mined ore).⁹⁴ According to Mr. Julio Félix Castañeda Mondragón, the former President of Lupaka and General Manager of IMC, IMC reviewed its outsourcing options for the processing of the ore and tested three third-party processing plants. However, the tests were not successful and revealed certain problems:

"For instance, Coriland, which was the closest to the Site (besides Mallay), lacked a cyanidation treatment option in its tailings facility, which meant potentially losing recoverable gold; San Juan Evangelista also lacked a cyanidation treatment option and had piles of mineral accumulated due to processing commitments with other mining companies; and Huancapeti II needed to postpone works due to unexpected mechanical failures."⁹⁵

79. According to Mr. Castañeda Mondragón, due to the mechanical failures and unsatisfactory experiences with the third-party processing plants, IMC restarted negotiations with Buenaventura in 2018 for potential acquisition of the Mallay Plant in 2018.⁹⁶ These negotiations had originally started in 2014 but were discontinued in early 2015.⁹⁷ Claimant stated that these renewed negotiations were likewise unsuccessful, this time allegedly due to the Measures that affected the mining activity at the Project.⁹⁸
80. Third, Lupaka had budgeted that by October 2018, the year-to-date payable gold would be 7,727 oz. However, by October 2018, the Invicta Project had only produced 269 oz of payable gold, equivalent to 3.0% of the budget. As shown in **Figure 12** below, the grade of the payable gold was also less than half of the expected grade.⁹⁹

Figure 12 – Payable Gold Quantity and Grade: Budgeted vs. Actuals¹⁰⁰

Item	YTD Actual	YTD Budget	% of YTD Budget
Payable Gold (After Deductions) (oz.)	269	7,727	3.0%
Milled Ore Grade (g/t)	2.25	4.83	46.6%

⁹⁴ Accuracy Report, ¶ 3,37.

⁹⁵ Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶ 88.

⁹⁶ Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶¶ 88-89.

⁹⁷ Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶¶ 82, 84.

⁹⁸ Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶ 79.

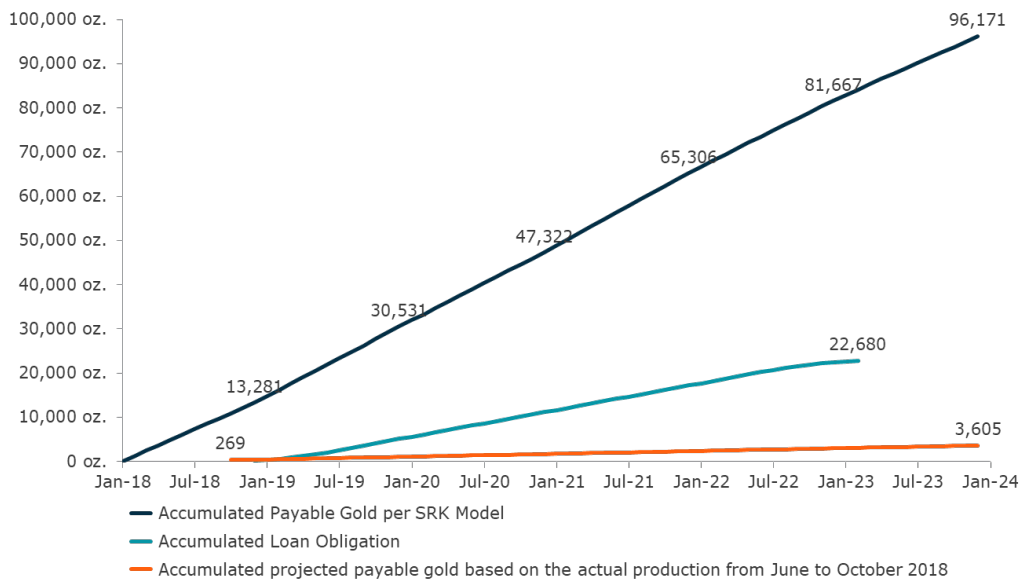
⁹⁹ AC-0010, p. 10.

¹⁰⁰ AC-0010, p. 10.

81. It is unclear that, at this performance level (i.e., lacking a competent third-party processing plant), Lupaka could have reached a resolution with the third-party processing companies that would enable it to produce and Sell the Contract Quantity of gold under the PLI Loan Agreement (187oz/month for Tranche 1 starting December 2018, an additional 139oz/month for Tranche 2 starting March 2019, and then a further additional 178oz/month for Tranche 3 starting June 2019). Based on the 269 oz gold produced between June 2018 and October 2018, the Invicta Project was producing 53.8 oz payable gold per month at most, which is only 28.8% of the monthly Contract Quantity of gold required to Sell starting December 2018, and 16.5% of the monthly Contract Quantity of gold required to Sell starting March 2019.¹⁰¹
82. The figure below summarizes the production level anticipated by the SRK Model and Claimant's gold Sales obligations under the PLI Loan Agreement:

¹⁰¹ AC-0010, p. 10 (YDT "Payable Metal"). AC-0004, p.16 ("Scheduled Monthly Quantity"). The SRK Model only provided an annual production plan. For comparison purposes, we assume the annual production is evenly distributed in each month. The production is assumed to begin in February 2018. Actual YTD payable gold by October 2018 is sourced from AC-0010. Claimant commenced mining activities in April 2018 and processing did not begin until June 2018. By October 2018, Claimant produced 269 oz of payable gold. Using its actual production, Claimant could produce 53.8 oz payable gold per month at most. $53.8 = 269 / 5$. $28.8\% = 53.8 / 187$. $16.5\% = 53.8 / (187+139)$.

Figure 13 – Accumulated Payable Gold per SRK Model, per the Gold Sales Obligation, and Based on Actual Production¹⁰²



iii. Acquisition of the Mally Plant

- 83. In 2014, IMC had identified the Mally Plant as a prospective acquisition because of its proximity to the project.¹⁰³ As mentioned above, the negotiation process was halted in early 2015 because Buenaventura, owner of the Mally Plant, was not willing to sell the Mally Plant on a standalone basis from other assets that Claimant did not want to purchase.¹⁰⁴
- 84. As discussed in **Paragraph 79**, following Claimant’s failure to achieve its production and processing targets, Claimant again approached Buenaventura to acquire the Mally Plant. An agreement on terms was reached on 21 September 2018 for Claimant to purchase the Mally Plant at a price of US\$10.4 million.¹⁰⁵ According to Claimant, the final agreement was planned to be signed on 15 October 2018.¹⁰⁶
- 85. According to Mr. Castañeda Mondragón, IMC intended to finance the acquisition of the Mally Plant using a loan of approximately US\$13.0 million from PLI as a third

¹⁰² AC-0010, p. 10 (YDT “Payable Metal”). AC-0004, p.16 (“Scheduled Monthly Quantity”). AC-0029 “fin_lupaka” tab, “Payable Au”, row 206. The SRK Model only provided an annual production plan. For comparison purposes, we assume the annual production is evenly distributed in each month. The production is assumed to begin in February 2018. Actual YTD payable gold by October 2018 is sourced from AC-0010. Claimant commenced mining activities in April 2018 and processing did not begin until June 2018. By October 2018, Claimant produced 269 oz of payable gold. Using its actual production, Claimant could produce 53.8 oz payable gold per month at most. $53.8 = 269 / 5$.

¹⁰³ Witness Statement of Gordon Ellis, ¶ 27.

¹⁰⁴ Witness Statement of Gordon Ellis, ¶ 28.

¹⁰⁵ Witness Statement of Gordon Ellis, ¶ 40. Draft Mally Purchase Agreement between Buenaventura and IMC, 21 September 2018 [C-0048].

¹⁰⁶ Witness Statement of Gordon Ellis, ¶ 52. Lupaka Board Meeting Minutes, 27 September 2018, [C-0051].

amendment to the PLI Loan Agreement (“**Draft Third Amendment to PLI Loan Agreement**”).¹⁰⁷ The loan amendment Claimant submitted is in draft form and we understand that it was never signed.¹⁰⁸ According to the draft, the “Contract Quantity” of gold to be sold would increase from 22,680oz to 64,630oz starting as early as September 2019.¹⁰⁹

iv. The Red Cloud Model

86. In May 2018, to estimate the impact of the potential acquisition of the Mallay Plant, Claimant engaged Red Cloud Klondike Strike (“**Red Cloud**”) to prepare an updated version of the SRK Model (“**Red Cloud Model**”), which Accuracy used for its calculation of damages under the 590t/day scenario.¹¹⁰ The Red Cloud Model was prepared to a lower level of sophistication than the SRK Model (with the SRK Model having been a preliminary economic assessment).
87. The main assumptions that Red Cloud changed from the SRK Model were:¹¹¹
- a) The average peak steady state rate increased from 355t/day to 590t/day and would occur over a period of 7 years instead of 6 years;
 - b) Total capital expenditures increased from US\$12.7 million to US\$41.4 million to reflect the potential purchase of the Mallay Plant, including the additional capital expenditure required for an increase in production and processing capacity from 355t/day to 590t/day. The additional US\$28.7 million was broken down as follows: Mallay purchase: US\$10.7 million, Mallay sustaining capital: US\$4.4 million, Mallay closure bond: US\$5.0 million, additional infrastructure: US\$3.0 million, and additional capital development: US\$5.6 million (additional infrastructure capital and capital development costs related to the increase in tons produced);¹¹²
 - c) Operating expenses decreased from US\$143.34/t to US\$81.33/t;
 - d) Deduction from the cash flow of the costs related to the Draft Third Amendment to the PLI Loan Agreement and the upside calculation¹¹³;

¹⁰⁷ Witness Statement of Julio Castaneda, ¶ 99.

¹⁰⁸ C-0050.

¹⁰⁹ C-0050, pp. 6-7, 12, schedule P-2. The first gold delivery is scheduled after a grace period of nine calendar months, with the first month counted after the Fifth Effective Date (anticipated to be November 2018). The Fifth Effective Date is when the Mallay Purchase Agreement is closed.

¹¹⁰ AC-0015.

¹¹¹ AC-0015. AC-0029. Accuracy Report, Appendix 3.

¹¹² AC-0015. AC-0029.

¹¹³ Accuracy Report, Appendix 3, ¶ A3.27(iii)

e) US\$2.5 million “Mallay Cash Flow” in first two years, totaling US\$5.0 million cash inflow (it is not clear whether these projected cash flows derive from the Project’s mining operations or from alternative revenue sources); and,¹¹⁴

f) Additional “Head Office [General & Administrative]” expense of US\$13.5 million.¹¹⁵

88. Based on those changes the NPV of the project increased by 92.4%¹¹⁶ to US\$78.1 million using 8.0% discount rates and by 98.8%¹¹⁷ to US\$86.3 million using 5.0% discount rates.

C. The Dispute

89. It is our understanding that the Parán Community members occupied the Project on 19 June 2018, and that this event lasted less than a day.¹¹⁸ Four months later, on 14 October 2018, the Parán Community set up a continuing impediment on the Lacsanga Community’s road, which was an access road to the Project (the “**Access Road Protest**”).¹¹⁹ As of October 2018, the Project had at least six outstanding items to enter the exploitation phase and commence operations:

a) MINEM’s approval of an amendment to the mine closure plan.¹²⁰

b) MINEM’s inspection of the development work in accordance with the mining plan and subsequent approval of a Certificate for the Start of Exploration and Exploitation Activities and a Fuel Storage Authorization.¹²¹

c) The approval of a supplemental technical report that would allow for the installation of a necessary water management system at the mine.¹²²

d) The amendment to the PLI Loan Agreement for the purchase of the Mallay Plant.

¹¹⁴ Accuracy Report, ¶¶ 6.19 (c). “In the absence of additional information as to what these cash flows represent, we [Accuracy] exclude both the ‘Mallay Cash Flow’ and ‘Head office G&A’ line items added by Red Cloud to the SRK Model.”

¹¹⁵ Accuracy Report, ¶¶ 6.19 (c). “In the absence of additional information as to what these cash flows represent, we [Accuracy] exclude both the ‘Mallay Cash Flow’ and ‘Head office G&A’ line items added by Red Cloud to the SRK Model.”

¹¹⁶ Calculated as US\$78.1 million / US\$40.6 million - 1 = 92.4%

¹¹⁷ Calculated as US\$86.3 million / US\$43.4 million - 1 = 98.8%

¹¹⁸ Witness Statement of Gordon Ellis, ¶ 41.

¹¹⁹ Witness Statement of Gordon Ellis, ¶ 43.

¹²⁰ Witness Statement of Julio Castaneda, ¶ 21.

¹²¹ Witness Statement of Julio Castaneda, ¶ 22. Respondent’s Memorial, Section II.F.1.a.

¹²² Respondent’s Memorial, Section II.F.1.a.

- e) Obtain approval from the Mallay Community to transfer the Mallay Plant from Buenaventura to Lupaka.¹²³
- f) The agreement to purchase the Mallay Plant ("**Mallay Purchase Agreement**") in mid-October 2018 and closing three months after.¹²⁴
90. The first Sale of the Contract Quantity of gold was due in December 2018, two and a half months after the start of the Access Road Protest on 14 October 2018. The required quantity to be Sold was 187 oz. Lupaka did not Sell the 187 oz as scheduled and according to its 2018 financial statements Lupaka was
- "technically in default as of January 2019. The Company is also in breach of a minimum liquidity covenant and the requirement to maintain a fully executed mineral offtake agreement at all times."¹²⁵*
91. Pandion did not demand from Lupaka payment of the Early Termination Amount or enforce against the Collateral. Instead, Pandion informed Lupaka that on 1 July 2019 it had transferred its rights under the PLI Loan Agreement to Lonely Mountain Resources S.A.C. ("**Lonely Mountain**"), a Peruvian mining consortium. The next day, Lonely Mountain requested payment of the Early Termination Amount equal to US\$15.6 million as of 2 July 2019 due to Claimant's failure to meet its obligation to Sell the Contract Quantity of gold under the PLI Loan Agreement in addition to other breaches of the PLI Loan Agreement. Lonely Mountain recalculated the Early Termination Amount as US\$15.9 million on 24 July 2019.¹²⁶ Lonely Mountain then foreclosed on the PLI Loan Agreement's Collateral on 26 August 2019, seizing the shares of IMC.¹²⁷
92. Claimant alleges that its investment in IMC (and its interest in the Invicta Project) was lost due to the Measures and seeks to recover the full value of IMC as of the Valuation Date through an award of damages in this Arbitration. The Measures in this case fall into two categories: acts of Parán Community members ("**Parán Community Measures**") and the acts and omissions of Peru's regional and central state authorities ("**Authorities' Measures**").

¹²³ Witness Statement of Julio Castaneda, ¶ 101. Claimant's Memorial, ¶ 94. This was later approved as of March 2019.

¹²⁴ C-0051, p. 2.

¹²⁵ AC-0003, p. 21.

¹²⁶ Accuracy Report, ¶¶ 3.50-3.53.

¹²⁷ Accuracy Report, ¶ 3.52.

93. We understand that in relation to Parán Community Measures, Claimant's position is that the Parán Community's Access Road Protest amounted to a direct expropriation of Lupaka's investment in breach of Peru's obligations under the FTA.¹²⁸
94. We understand that in relation to the Authorities' Measures, Claimant's position is that the following seven alleged acts and omissions amounted to an indirect expropriation of Lupaka's investment in breach of Peru's obligations under the FTA:¹²⁹
- a) The failure of the police and other state authorities to prevent the occupation of the Project by Parán Community members in June 2018;
 - b) The failure of the police and other state authorities to end the occupation and prevent Parán Community members from damaging Lupaka's property and abusing Lupaka's personnel in June 2018;
 - c) The failure by the police and other state authorities to sanction Parán Community members for the acts on 19 June 2018;
 - d) The failure of the police and other state authorities to prevent the occupation of the Project and the Access Road Protest of the Lacsanga road by Parán Community members on 14 October 2018;
 - e) The ongoing failure (since 14 October 2018) by the police and other state authorities to remove the Access Road Protest, notwithstanding its numerous complaints;
 - f) The failure by the police and other state authorities to sanction Parán Community members for abuse of Claimant's representatives, including on 14 October 2018, 20 March 2019 and 14 May 2019; and,
 - g) The state authorities' alleged support of Parán Community members' actions during the negotiations with Parán's Community members following the Access Road Protest.
95. We understand that Peru is submitting its response to Claimant's position in Peru's Counter-Memorial and that it disputes Lupaka's claims and characterization of the facts in the Arbitration.

¹²⁸ Claimant's Memorial, ¶¶ 237, 266, 312.

¹²⁹ Claimant's Memorial, Sections 4.2 and 4.3, ¶ 266.

IV. Summary of Accuracy's Damages Calculation

96. Claimant's counsel asked Accuracy to quantify Claimant's alleged damages as a result of the Measures as of 26 August 2019 ("**Valuation Date**") under the fair market value ("**FMV**") standard in line with Article 812 of the FTA.¹³⁰ Accuracy indicated that they calculated Claimant's alleged damages as the difference between:

"Claimant's economic position in the But-For Situation and its economic position in the Actual Situation."¹³¹

97. Accuracy premised its damages calculation on the value of Claimant's economic position in the "Actual Situation" ("**Actual Scenario**") being zero since Claimant lost all of its shares in the Invicta Project.¹³² We understand that Peru considers that, as a legal matter, the actions of Claimant's lender PLI, including the foreclosure of Claimant's shares under the PLI Loan Agreement, cannot be attributable to Peru.¹³³ If Peru is correct, then the value of the shares at the time of foreclosure would be relevant to calculating Claimant's damages, and we understand that proximate to the Valuation Date, an independent valuation appraised the value of the IMC shares at approximately US\$13.0 million.¹³⁴

98. Claimant's economic position in the "But-For Situation" ("**But-For Scenario**"), according to Accuracy, is equivalent to "the FMV of the Invicta Project which, materially, is equivalent to the value of Claimant's shares in IMC"¹³⁵ less the debts IMC would have settled with PLI absent the Measures.¹³⁶

99. It appears that Accuracy was valuing Claimant's shares in IMC relying on the "indirect" method. The indirect method involves valuing the anticipated Free Cash Flows to the Firm ("**FCFF**"), in this case IMC, and subtracting the value of the IMC debt to determine the value of Claimant's equity in IMC. As we explain in **Section VI(B)**, it is not clear that Accuracy is relying on the "indirect" method since they did not subtract all of IMC's debt to determine the value of Claimant's equity in IMC.

¹³⁰ CLA-1, Article 812. AICPA. "International Valuation Glossary – Business Valuation". 14 December 2020. [AP-0021] FMV is defined as "the (highest) price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arms-length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts." Accuracy Report, ¶ 1.18.

¹³¹ Accuracy Report, ¶ 4.34.

¹³² Accuracy Report, ¶ 4.35.

¹³³ Respondent's Memorial, Section V.B.1.c.

¹³⁴ AC-0055, p. 22.

¹³⁵ Accuracy Report, ¶ 4.36.

¹³⁶ Accuracy Report, ¶ 4.37.

100. As discussed above, CIMVAL provides guidance on the appropriate valuation approach to apply depending on the development stage of a given mining project. The Accuracy Report included some discussion about the appropriate classification for the Project but did not clearly conclude what stage the Project should be classified as.¹³⁷ Accuracy only stated the following:

*"Accordingly, whilst the Invicta Project did not have proven reserves or a (pre-) feasibility study, we consider that it was at a more advanced stage than a typical Mineral Resource Property."*¹³⁸

101. While Accuracy stated that they consider the Project to be at a more advanced stage than a Mineral Resource Property, they still refer to a cost approach as an indicator of value, which is contrary to CIMVAL's guidance for a Development Property as presented in the Accuracy Report.¹³⁹

102. In general, the CIMVAL standards contemplate that a "Development Property" will have already been subject to a favorable pre-feasibility study or feasibility study.¹⁴⁰ A property that has not been subject to a favorable pre-feasibility study or feasibility study generally would be classified as a "Mineral Resource Property" to reflect greater uncertainty. However, although the Project was not subject to a pre-feasibility study or feasibility study, we agree with Accuracy that the Invicta Project could be classified as a Development Property under the CIMVAL standards as of the Valuation Date since it included Mineral Resources, had a preliminary economic assessment, and was proceeding towards commercialization. Therefore, although the Invicta project does not satisfy a typically important definitional criterion to qualify as a Development Property, it is reasonable and consistent with the CIMVAL standards to use the income and market approaches to determine its FMV.¹⁴¹

103. Accuracy calculated the FMV of the Invicta Project using the discounted cash flow ("DCF") methodology ("**Primary Approach**") under two different production scenarios: (a) 355t/day and (b) 590t/day.¹⁴² Accuracy used the assumptions set out in the SRK PEA as the basis for the 355t/day scenario and used the assumptions set out in the Red Cloud Model as the basis for the 590t/day scenario. Accuracy's But-

¹³⁷ Accuracy Report, ¶ 4.31.

¹³⁸ Accuracy Report, ¶ 4.31.

¹³⁹ Accuracy Report, ¶ 4.32-4.33.

¹⁴⁰ See **Paragraph 41**.

¹⁴¹ See **Figure 4**.

¹⁴² AICPA. "International Valuation Glossary – Business Valuation". 14 December 2020. [AP-0021] DCF is defined as "a method within the income approach whereby the present value of future expected net cash flows is calculated using a Discount Rate."

For Scenario in both cases assumed that the PLI Loan Agreement was terminated as of the Valuation Date and that any subsequent debt comes from unnamed, generic lenders. Accuracy’s damages conclusions are summarized in the table below:¹⁴³

Figure 14 - Accuracy’s Damages Conclusions (US\$ millions)

Item	355t/day Scenario	590t/day Scenario
FMV as of Valuation Date	44.2	63.6
+ Debt to be settled with PLI	(15.9)	(15.9)
= Total Damages as of Valuation Date	28.3	47.7
+ Pre-award Interest Claim	1.7	2.8
= Total Damages, pre-award interest incl.	29.9	50.5

104. As will be discussed later in **Section IX**, in addition to its Primary Approach to calculating damages, Accuracy presented several alternative analyses as indicators of value, calculations that allegedly demonstrate the reasonableness of their damages conclusions under the Primary Approach.
105. Even though Accuracy’s Primary Approach contained two alternative scenarios, Claimant relied upon the 590t/day scenario of US\$47.7 million as the basis for its claim for damages.¹⁴⁴ Ultimately, Claimant’s Memorial included a request for relief in the amount of US\$47.7 million plus pre-award interest at a rate of LIBOR + 2% compounded annually from the Valuation Date to the date of payment of the award.¹⁴⁵
106. We note that Accuracy did not calculate a loss for each Measure that Claimant alleges to be in breach of the FTA. Instead, Accuracy's analysis was an “all or nothing” approach. Consequently, Accuracy's damages calculation may not be applicable if the Tribunal determines that Respondent is not liable for an expropriation.
107. In **Section V** we present the fundamental flaws with the underlying methodology and assumptions Accuracy used in the Primary Approach. Then we discuss the flaws in the damages calculation under the 590t/day scenario in **Section VI** and then under the 355t/day scenario in **Section VII**. In **Section VIII**, we address Accuracy’s calculation of pre-award interest. Finally, in **Section IX**, we show why Accuracy’s

¹⁴³ Accuracy Report, Table 9.1.

¹⁴⁴ Claimant’s Memorial, ¶ 363. The Early Termination Amount payable does not include any of the additional capital required to purchase the Mally Plant as assumed under the 590t/day scenario.

¹⁴⁵ Claimant’s Memorial, ¶ 374(d).

alternative analyses as indicators of value do not demonstrate the reasonableness of the damages conclusions under the Primary Approach

V. Fundamental Flaws with Accuracy's Damages Analysis

108. Accuracy's underlying methodology and assumptions used to calculate the damages Claimant allegedly suffered contain five fundamental flaws. Each of these fundamental flaws, if unresolved, would render IMC's shares in the Invicta Project worthless. We explain these fundamental flaws in more detail in the following subsections.

A. Removing the Authorities' Measures Would Not Resolve the Access Road Protest

109. Absent the Authorities' Measures, Claimant's failure to obtain the SLO still would have delayed any processing of ore. Instead, Lupaka continually sought police intervention to remove the Access Road Protest.¹⁴⁶ We understand that use of force by police was unlikely to be a long-term solution to the conflict.¹⁴⁷

110. Claimant was aware that the consent of the local communities was required for the success of the Project. In 2012, SRK stated that:

"[n]egotiations regarding surface rights agreements are ongoing with the communities of Parán and Lacsanga as agreements with all three communities are required to initiate construction and operation."¹⁴⁸

111. However, the Agency for Environmental Assessment and Control (Organismo de Evaluación y Fiscalización Ambiental - "OEFA") noted in a resolution dated 17 December 2019, that IMC had breached four of its obligations noted in Lupaka's EIA (section Community Relations Plan - "Plan de Relaciones Comunitarias") with all three local Communities:

"(i) To the Local Personnel Temporary Hiring Program; (ii) actions to support or improve services, health equipment and campaigns on health and nutrition issues in the 2016 periods (...); (iii) Actions to support or improve services, education equipment, school campaigns, teacher training and environmental education activities in the 2016 period (...); and (iv) actions to support sustainable development through Participatory

¹⁴⁶ Claimant's Memorial, ¶¶ 99, 144.

¹⁴⁷ Respondent's Memorial, Section II.B. Witness statement of Luis Miguel Incháustegui, ¶ 38. Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶ 74.

¹⁴⁸ Technical Report on Resources, Invicta Project, SRK Consulting, 6 April 2012, p. i. [C-0058]

*Development Workshops or alliances with communities in the 2016 period (...).*¹⁴⁹

112. The OEFA resolution also noted that given the Parán Community's opposition to the Project and subsequent Access Road Protest, IMC had:

*"pointed out that it is not possible to comply with the corrective measure [...] Therefore, it has proceeded to reformulate the management and social responsibility policies with various actors in the [Project's] area of influence [...] in order to recover the communication channel and resume dialogue in the area."*¹⁵⁰

113. The report noted that the breaches were for 2016 and 2017, and that there was no evidence that IMC complied with those obligations in either 2018 or 2019.¹⁵¹

114. Claimant also recognized that dialogue was the most viable means to solving the issues raised by the Parán Community. According to Mr. Castañeda Mondragón, even if Lupaka was successful on their request for police assistance to regain access to the Project, the:

*"Parán representatives would not be deterred for long and that once the Police had left, the Site would again be at risk of invasion."*¹⁵²

115. Therefore, intervention by the police appears to have been unlikely to permanently resolve the conflict with the Parán Community or the Access Road Protest, which therefore would have remained an obstacle to Claimant's ability to perform its obligations under the PLI Loan Agreement.

B. Accuracy does not Account for Remaining Social License Risk

116. Accuracy's But-For Scenario fails to consider and incorporate any social license risk in its valuation analysis to account for the continued conflict between IMC and the Parán Community as of the Valuation Date. Accuracy makes several unsupported assumptions in its But-For Scenario:

¹⁴⁹ Organismo de Evaluación y Fiscalización Ambiental – OEFA. Resolución Directoral RD No. 02050-2019-OEFA/DFAI. 17 Diciembre 2019. ¶ 83. [AP-0022]

¹⁵⁰ Organismo de Evaluación y Fiscalización Ambiental – OEFA. Resolución Directoral RD No. 02050-2019-OEFA/DFAI. 17 Diciembre 2019. ¶ 88. [AP-0022] "a fin de recuperar el canal de comunicación y retomar el dialogo en la zona."

¹⁵¹ Organismo de Evaluación y Fiscalización Ambiental – OEFA. Resolución Directoral RD No. 02050-2019-OEFA/DFAI. 17 Diciembre 2019. ¶¶ 83, 111. [AP-0022]

¹⁵² Witness Statement of Julio Félix Castaneda Mondragón (translation), ¶ 74.

- a) No further social license risk would exist even though Claimant's relationship with the Parán Community was poor and showed little indication, if any, that it was improving; and,
 - b) No additional costs would be incurred to resolve the conflict and obtain the SLO or to attempt to suppress the conflict with additional security measures.
117. Although Accuracy did not provide an estimate for the time required to resolve the Access Road Protest and broader social conflict, they assumed that Claimant's efforts towards starting production would resume immediately on the Valuation Date under both of its scenarios, and that ore production would begin approximately 10 months after the start of the protest.¹⁵³ Accuracy has not provided the logic, basis, or evidence to support this assumption. If the Access Road Protest and broader social conflict would have required additional time to resolve or if beginning production would have required a period longer than 10 months (e.g., due to regulatory matters or operational requirements), this would at the very least delay the Project's cash flows and thus reduce Claimant's damages.
118. For the 590t/day scenario, Accuracy also assumed that Claimant would have been able to establish and maintain an SLO with the Mallay Community, which we understand was necessary to finalize the transaction for the Mallay Plant.¹⁵⁴ Although this initial approval was expected by Claimant in October 2018, it did not actually come until March 2019.¹⁵⁵ Accuracy and Mr. Castañeda Mondragón provided no information as to why the approval was delayed and if this delay was due to issues that could be classified as social license risk and potentially impact future dealings between Claimant and the Mallay Community.
119. These assumptions are not borne by the facts and Accuracy's failure to account for these ongoing issues, among other things, results in their damages conclusions being overstated. In fact, IMC's failure to reach long-term and sustainable agreements with the rural communities could reasonably be expected to result in the failure of the Project and the reduction of the FMV to *nil* in this case.
120. Failure to address company-community conflicts can bring significant costs to investors. According to a study by Rachel Davis of the Harvard Kennedy School's Corporate Social Responsibility Initiative ("**CSRI**") and Daniel Franks from the Centre

¹⁵³ See **Paragraph 94**. 14 October 2018 to 26 August 2019.

¹⁵⁴ C-0051. p. 2.

¹⁵⁵ Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶ 101; Claimant's Memorial, ¶ 94.

for Social Responsibility in Mining (“**CSR**”) at the University of Queensland’s Sustainable Mineral Institute, lost productivity due to project delay is the most frequent unexpected cost seen by mining companies. One example shows that a world-class mining project with a projected US\$3-5 billion in capital expenditures suffered costs of US\$20 million per week from delayed production. The study indicates that in some cases, construction costs need to include a 50% margin to cover additional costs for delays due to community conflict.¹⁵⁶

121. Arbitral tribunals have accounted for issues related to the SLO and social license risk in their quantification of damages in investment arbitration cases involving mining projects that were subject to social opposition. In *Copper Mesa v. Ecuador*, the tribunal found that claimant’s involvement in the social conflict contributed to the unstable SLO for the project and therefore reduced the compensation awarded to claimant by 30%.¹⁵⁷ In *Bear Creek v. Peru*, the tribunal acknowledged that:

*“even though the concept of ‘social license’ is not clearly defined in international law, all relevant international instruments are clear that consultations with indigenous communities are to be made with the purpose of obtaining consent from all relevant communities”.*¹⁵⁸

122. In determining the value of the Santa Ana Project that was the subject of the *Bear Creek* case, the tribunal concluded that “there was little prospect for the Project to obtain the necessary social license to allow it to proceed to operation” and therefore profitable operations of the project could not be expected in the foreseeable future.¹⁵⁹ Thus, the project was deemed “too speculative and uncertain” and ultimately the DCF approach was therefore not applicable in that case.¹⁶⁰ As an alternative, the tribunal concluded that the damages should be based on the amount claimant actually had invested.¹⁶¹

123. As demonstrated above, maintaining positive relationships with local communities and an ongoing SLO play a crucial role in realizing value in mining projects. Company-community conflicts can impose significant risks and costs to the development and operations of a project, jeopardizing the project’s profitability.

¹⁵⁶ Davis, Rachel and Daniel M. Franks. “Costs of Company-Community Conflict in the Extractive Sector.” Corporate Social Responsibility Initiative Report No. 66. Cambridge, MA: Harvard Kennedy School, 2014. p. 19. [AP-0023]

¹⁵⁷ Rigaudeau, Baptiste, et al. “Social License to Operate”. JUS Mundi. 11 February 2022. [AP-0024]

¹⁵⁸ *Bear Creek v. Peru*, Award, ¶ 406. [AP-0025]

¹⁵⁹ *Bear Creek v. Peru*, Award, ¶¶ 600-603. [AP-0025]

¹⁶⁰ *Bear Creek v. Peru*, Award, ¶ 604. [AP-0025]

¹⁶¹ Accuracy Report, Appendix 6, “fin_lupaka”, cell E263 and E265.

C. Claimant May have Defaulted on its Existing and Anticipated Debt Financing Absent the Measures

124. Accuracy did not address the financing risk associated with Claimant’s anticipated amendment to the PLI Loan Agreement absent the Measures. In fact, Accuracy ignored this financing risk entirely by making several debt financing assumptions in the But-For Scenarios without providing the logic or evidence to support them as we discuss in **Section V(E)**.
125. Lupaka and Buenaventura reached a preliminary agreement to purchase the Mallay Plant in September 2018 and planned to sign the final version of the agreement in October 2018.¹⁶² We understand that in order to finalize the transaction for the Mallay Plant, Lupaka needed to establish and maintain a SLO with the Mallay Community and that initial approval was only achieved in March 2019.¹⁶³
126. If Lupaka and PLI had concluded the Draft Third Amendment to the PLI Loan Agreement and Lupaka and Buenaventura had reached an agreement on the terms of the Mallay Purchase Agreement, PLI was expected to provide additional funding of US\$13.0 million in two tranches.¹⁶⁴
127. Under the Draft Third Amendment to the PLI Loan Agreement, and the Mallay Purchase Agreement, in addition to the amount of gold that Claimant was already required to Sell to PLI (22,680oz of gold), Lupaka would have to Sell an additional 41,950oz of gold, in a term of 60 calendar months, starting after an initial grace period of nine calendar months.¹⁶⁵ **Figure 15** compares the monthly requirements with and without the Draft Third Amendment to the PLI Loan Agreement.

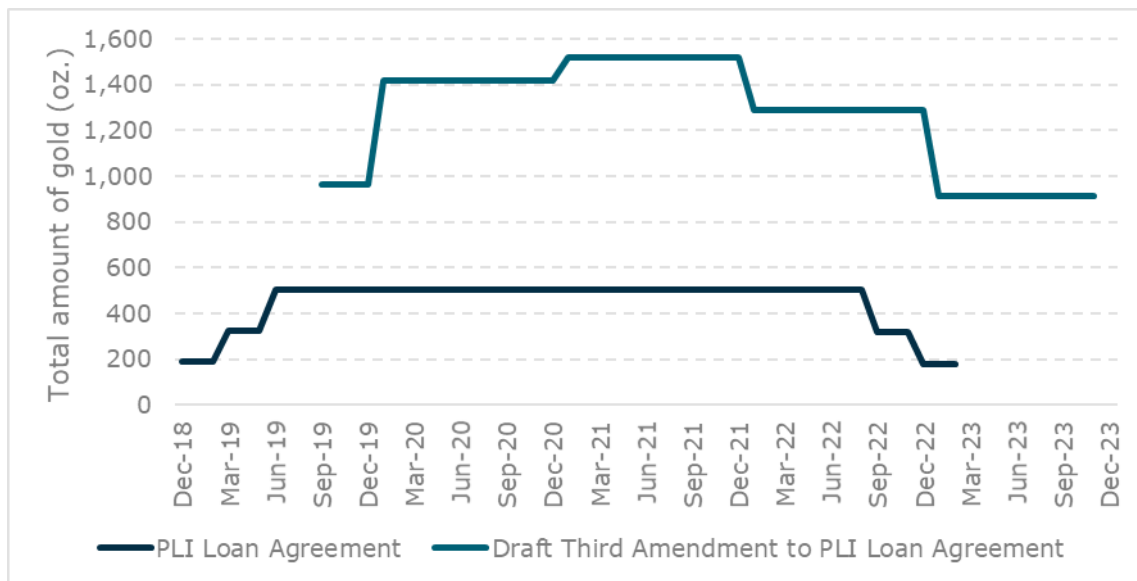
¹⁶² Witness Statement of Gordon Ellis, ¶ 51. C-0051. p. 2.

¹⁶³ Claimant’s Memorial dated 1 October 2021, ¶ 94.

¹⁶⁴ C-0050, pp. 4, 8. “Fifth Effective Date” and “Fourth Effective Date”, and “Gold Prepayment Amount”. C-0048

¹⁶⁵ C-0050, p. 12. “Contract Quantity” (a)

Figure 15 - Comparison of Quantity of Gold to be Sold in Each Month (PLI Loan Agreement vs Draft 3rd Amendment)¹⁶⁶



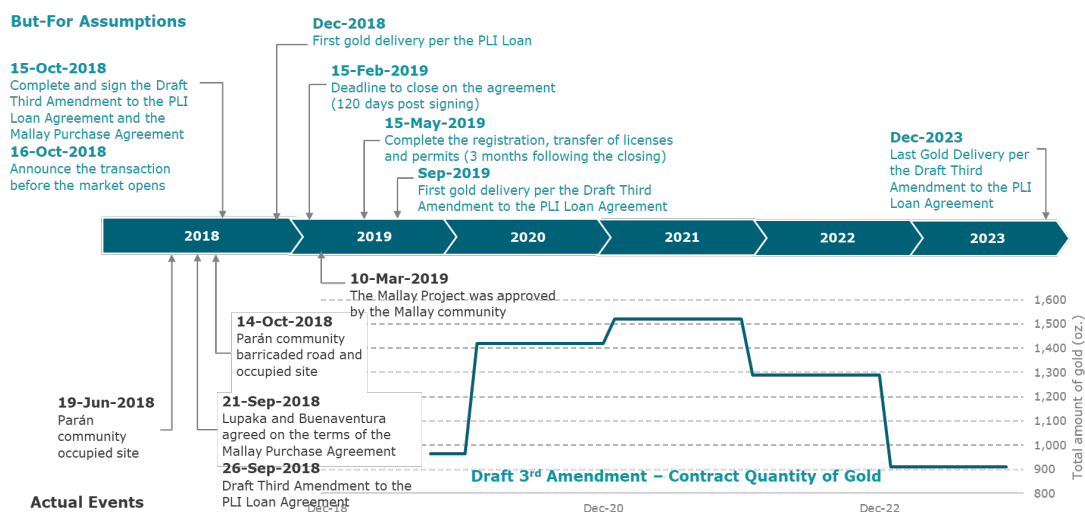
128. We understand that the close of the Draft Third Amendment to the PLI Loan Agreement and the Mallay Purchase Agreement had to be completed by 15 February 2019.¹⁶⁷ However, we do not believe that this timeline, detailed in **Figure 16** below, was feasible for the following three reasons.

- a) First, the Mallay Community only provided approval for the transaction in March 2019, after the latest potential closing date (15 February 2019). This delayed approval apparently could have prevented the Third Draft Amendment to the PLI Loan Agreement from being finalized and thus could have prevented Claimant from acquiring the Mallay Plant;
- b) Second, Claimant has provided no evidence of alternative financing arrangements or remedies for a failure to close the transaction on time; and,
- c) Third, without the Mallay Plant, Lupaka faced a high risk of default due to its inability to access adequate third-party processing, which in turn would be essential to Claimant's ability to Sell the Contract Quantity of gold under the existing terms of the PLI Loan Agreement.

¹⁶⁶ C-0050, pp. P-1-1 – P-2-1. Schedule P1 and P2.

¹⁶⁷ C-0051. p. 2.

Figure 16 - Timeline of Contemplated Events¹⁶⁸



129. As described in **Paragraph 69**, the PLI Loan Agreement provided for the failure or delay to Sell the Contract Quantity of gold within a 15-day grace period to be a cause of default.¹⁶⁹ Based on the 269 oz gold produced between June 2018 and October 2018, the Invicta Project was producing 53.8 oz payable gold per month at most, which is only 28.8% of the monthly Contract Quantity of gold Lupaka would have been required to Sell starting December 2018, and 16.5% of the monthly Contract Quantity of gold required to Sell starting March 2019.¹⁷⁰ Thus, actual processing using third-party processing companies was far behind budgeted levels so it appears that, as of October 2018, Lupaka would have defaulted on the PLI Loan Agreement even if it could have extracted additional ore from the ground (i.e., even absent the Access Road Protest), entitling PLI to demand payment of the Early Termination Amount or foreclose against the collateral (i.e., Lupaka’s shares in IMC).¹⁷¹
130. In conclusion, in the But-For Scenario where the Access Road Protest was promptly lifted by force, neither Claimant nor Accuracy has demonstrated that Lupaka could have fulfilled the re-negotiated terms of a loan given the contemporaneous conditions

¹⁶⁸ C-0051, p. 2. C-0050, pp. P-1-1 – P-2-1. Schedule P1 and P2. Events described in black font (beneath the time arrow) are factual events. Events described in blue font (above the time arrow) are planned events that did not occur.

¹⁶⁹ AC-0004, p. 52, section 13(1)(a).

¹⁷⁰ AC-0010, p. 10 (YDT “Payable Metal”). AC-004, p.16 (“Scheduled Monthly Quantity”). The SRK Model only provided an annual production plan. For comparison purposes, we assume the annual production is evenly distributed in each month. The production is assumed to begin in February 2018. Actual YTD payable gold by October 2018 is sourced from AC-0010. Claimant commenced mining activities in April 2018 and processing did not begin until June 2018. By October 2018, Claimant produced 269 oz of payable gold. Using its actual production, Claimant could produce 53.8 oz payable gold per month at most. $53.8 = 269 / 5$. $28.8\% = 53.8 / 187$. $16.5\% = 53.8 / (187 + 139)$.

¹⁷¹ AC-0004, p. 56, section 14(4). Accuracy Report, Figures 3.2 and 3.3.

of the Project, including the unavailability of a processing plant with adequate capacity, and the actual performance of the Invicta Project prior to the Measures.

D. Accuracy does not Account for Difficulties in Refinancing

131. Accuracy's But-For Scenarios ignored the actual financing issues that the Project faced. In the But-For Scenarios, Accuracy assumed that on 26 August 2019, the Valuation Date, Claimant paid the early termination fee to settle the PLI Loan Agreement.¹⁷² Without discussing or incorporating any terms of an alternative financing arrangement that would be required to pay for the settlement as well as the Invicta Project's ongoing operations, Accuracy assumed away Claimant's potential refinancing risks asserting that:

"the project would be financed by a hypothetical investor using a mixture of equity and debt."¹⁷³

132. In making this assumption, Accuracy failed to provide any evidence that Claimant had secured any new financing, nor does it assess the likelihood that Claimant would be able to obtain alternative financing.¹⁷⁴ They do not address how this financing would be obtained in the absence of a prefeasibility study, a feasibility study, or defined Mineral Reserves at the Project.
133. Accuracy have not provided the logic, basis, or evidence to support this assumption. In fact, when assessing the Project, any potential lenders or investors would factor in the risks resulting from the unresolved conflict between Claimant and the Parán Community. Accuracy have not indicated how Claimant would be able to obtain additional financing and under what terms and conditions this financing would be available, including a timeline of the necessary steps to achieve this task. Given the social license and execution risks the Project faced, it is reasonable to expect that a new lender, if any, would require even stricter loan provisions to account for the higher risks it would have to bear relative to the existing PLI Loan Agreement that was agreed to prior to the Access Road Protest or the discovery that the third-party processing facilities in the area were inadequate. On the contrary, Accuracy assumed the terms from the hypothetical new lender would be friendlier to Claimant by

¹⁷² Accuracy Report, ¶ 5.48.

¹⁷³ Accuracy Report, ¶ 5.48.

¹⁷⁴ Accuracy Report, Section 7.

completely ignoring the upside participation clause that is defined in the PLI Loan Agreement.¹⁷⁵

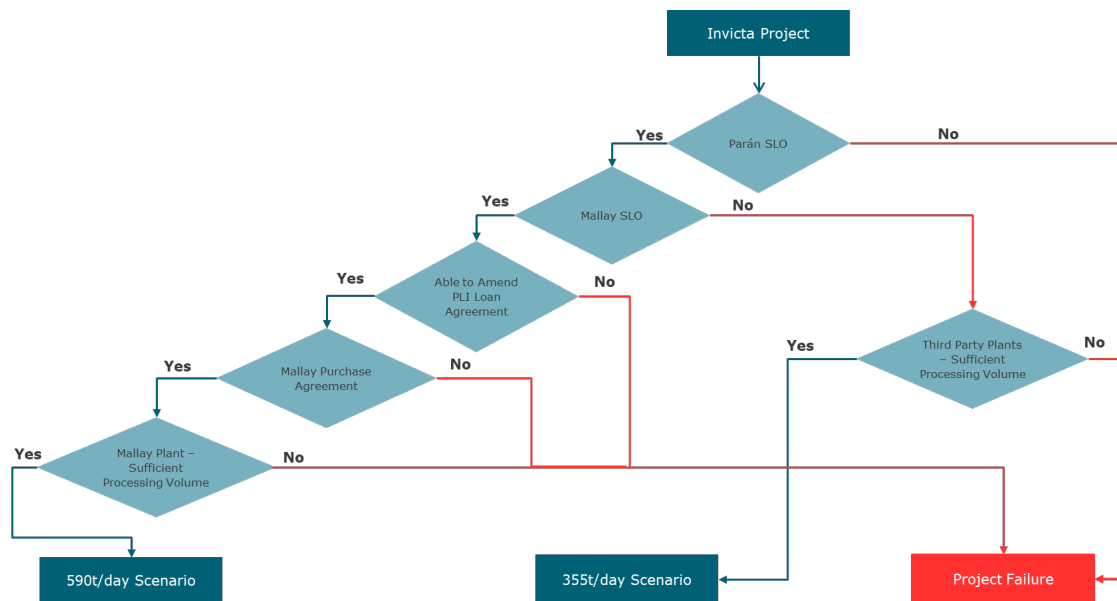
134. To summarize, Accuracy's approach assumed that the Invicta Project was no different than any generic gold mine with an average risk profile and readily available financing to settle existing debts, including the payment of early termination penalties. As demonstrated above, the Invicta Project was subject to social license risk, execution risk, and regulation risk, which any reasonable lender would take into account. By ignoring the refinancing difficulties, Accuracy's assumption that Claimant would have been able to acquire the Mallay Plant is unjustified and Accuracy's damages are therefore overstated and should not be relied upon by the Tribunal.

E. Conclusion on Fundamental Flaws

135. As demonstrated above, Accuracy underestimates or ignores the risks the Invicta Project still faced absent the Measures. Given the risky provisions in the PLI Loan Agreement, such as the 15-month grace period to begin the Sale of the Contract Quantity of gold, any interruption to the operations due to these risks could result in its termination and the foreclosure proceedings, notwithstanding the Measures. If those risks materialized, the FMV of the Project and the resulting damages would be *nil*.

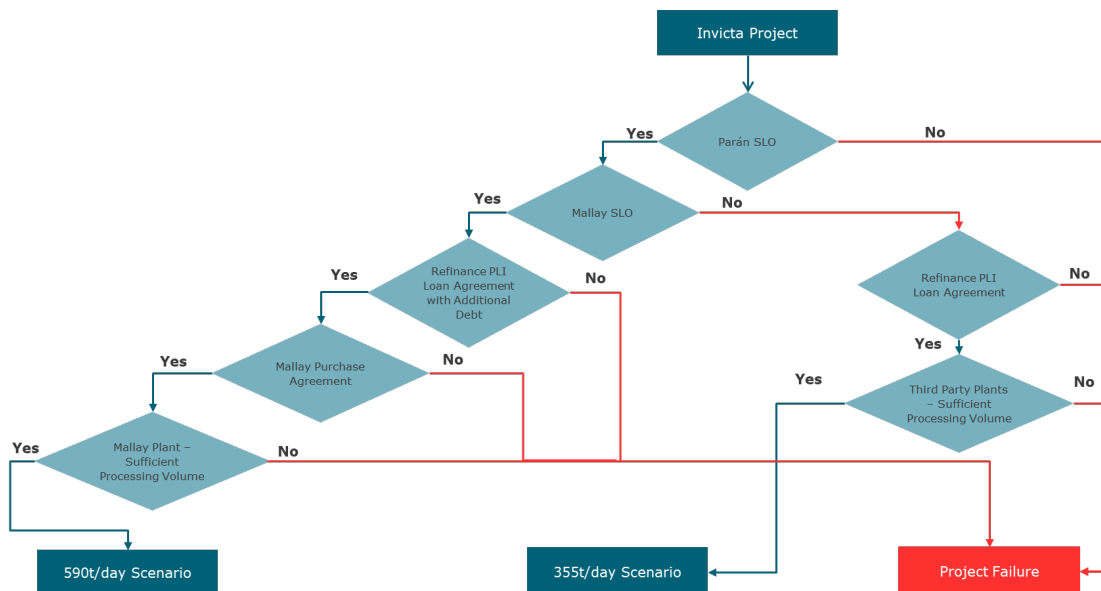
¹⁷⁵ Accuracy Report, ¶ 8.31, A4.18, Table A4.1. Accuracy's estimate of the effective interest rate of the PLI Loan Agreement is 10.1%, which is higher than its assumed cost of debt of 6.2%.

Figure 17 – Invicta Project Decision Tree (PLI Loan Agreement Not Settled)



136. Even under Accuracy’s But-For Scenario, where the PLI Loan Agreement was assumed to have been settled by Claimant, the FMV of the project and the resulting damages could be *nil* if any disruptions occur and/or Claimant fails to refinance.

Figure 18 – Invicta Project Decision Tree (PLI Loan Agreement Settled)



VI. Our Opinion of Accuracy’s 590t/day Scenario

137. Even if one assumes that Claimant would have resolved all the fundamental flaws, including early termination of the PLI Loan Agreement and obtaining new financing from a hypothetical lender, there remain problems with the assumptions in

Accuracy's valuation under the 590t/day scenario which Claimant relied upon for its damages claim.

A. Accuracy Provided no Evidence for how the Mallay Plant Transaction would be Financed

138. As discussed in **Paragraphs 131 to 134**, Accuracy's DCF models are premised on the unsupported assumption that Claimant would be able to settle the early termination of the PLI Loan Agreement and obtain a new loan from a hypothetical lender. According to Accuracy, the new loan would provide friendlier terms to Claimant, including but not limited to:
- a) Cost of debt is 6.2% whereas the effective interest rate under the PLI Loan Agreement is 10.1%; and,
 - b) No upside participation under the new loan arrangement.
139. Neither Claimant nor Accuracy provided evidence to validate this expectation. Any knowledgeable investor would account for the ongoing social license risk, execution risk, and regulatory risk when assessing the investment. In reality, a hypothetical, rational lender would demand terms more favorable to the lender than the terms of the PLI Loan Agreement, if any lender were willing to expose its capital to such risk at all.
140. Further, Accuracy failed to explain how Claimant would have funded the acquisition of the Mallay Plant if Claimant had terminated the PLI Loan Agreement. The initial capital expenditure associated with the Mallay Plant was assumed to be US\$10.4 million by Claimant.¹⁷⁶ Further, the Claimant would pay US\$4.6 million for its closure plan and a VAT of US\$1.9 million.¹⁷⁷ In order to fund the transaction, Claimant planned to borrow an additional US\$13.0 million from PLI under the Draft Third Amendment to the PLI Loan Agreement as discussed in **Paragraph 126**.
141. However, Accuracy assumed that the PLI Loan Agreement would have been terminated and the whole Project would be funded by a mix of equity and debt without providing any evidence as to how Claimant would raise more capital, either as equity or debt. Accuracy's 590t/day scenario is not feasible without a realistic and

¹⁷⁶ Accuracy Report, ¶ 3.40. We understand that in the Red Cloud Model, the total "Mallay Mill Purchase" was US\$10.7 million as shown in Accuracy Report, Appendix 6, "fin_lupaka", cell E263, including US\$10.4 million in YR1 and US\$0.4 million in YR2.

¹⁷⁷ Accuracy Report, ¶ 3.40. We understand that in the Red Cloud Model, there is a line item "Mallay Mill Closure Bond" of US\$ 5.0 million as shown in Accuracy Report, Appendix 6, "fin_lupaka", cell E265.

substantiated financing arrangement. As a result, the Tribunal should not rely on Accuracy's 590t/day scenario.

B. Opinions on Accuracy's changes to Red Cloud Model for the 590 t/day Scenario

142. Accuracy changed several assumptions in the Red Cloud Model, mainly, but not limited to metal price expectations, the status of pre-production works, working capital, and discount rate assumptions.¹⁷⁸
143. While some of Accuracy's adjustments such as metal prices, capital expenditures, contingencies to infrastructure costs and the working capital calculation may not be unreasonable, they do not appear to have documentary support and typically have the effect of increasing its calculated FMV of the Invicta Project. These adjustments are detailed below:
- a) *Metal Prices:* Accuracy updated the metals prices to reflect prevailing market expectations as at the Valuation Date using monthly metal futures contract prices from CapitalIQ or, where monthly metal futures contract prices were not available, by applying the compound annual growth rate for metals based on historical data.
 - b) *Ore Grade:* Accuracy reduced the average grade of all metals produced to 6.93g/t because the assumed grades in the Red Cloud Model were higher than the average grades according to the SRK PEA.¹⁷⁹ This adjustment results in a reduction of total produced gold from 368 thousand oz to 305 thousand oz in the Red Cloud Model and Accuracy's revised model, respectively. As Accuracy did not have an explanation for Red Cloud's higher metal grade assumptions, reverting to the grades from the SRK PEA may be reasonable, but there is insufficient documentation or discussion on the matter in the Accuracy Report. Accuracy also does not reconcile the 4.85g/t gold grade assumed with the actual gold grade achieved as of October 2018 of 2.25g/t as presented in **Figure 19**.

¹⁷⁸ Accuracy Report, ¶¶ 2.8-2.9.

¹⁷⁹ Accuracy Report, ¶¶ 6.12-6.14.

Figure 19 – Accuracy’s Metal Grades Assumption vs. Actual Metal Grades¹⁸⁰

Metal	Accuracy’s Assumption	Actual
Gold (g/t)	4.85	2.25
Silver (g/t)	29.56	46.13
Copper (%)	0.71%	1.10%
Lead (%)	0.43%	1.17%
Zinc (%)	0.50%	1.10%

- c) *Unit Operating Costs:* Average unit operating costs under Accuracy were lowered to US\$80.93/t compared to operating costs from US\$81.33/t in the Red Cloud Model; the SRK Model had an average cost of US\$143.34/t. We understand that this flow-through adjustment was due to Accuracy adopting different a zinc grade assumption than the Red Cloud Model.
- d) *Capital Expenditures:* Accuracy also removed any pre-production and development capital expenditures they understood that the mine was substantially in working order and materially completed by September 2018.¹⁸¹ According to Mr. Ellis, the required development works had been completed by September 2018.¹⁸² This adjustment may be reasonable as the start date of the Red Cloud Model was the Valuation Date, i.e., the following year. However, we understand final inspection and several regulatory authorizations were pending and may have required additional capital expenditures and resulted in further delays.¹⁸³
- e) *Working Capital:* The Red Cloud Model did not consider any changes in project working capital in when projecting cash flows. Based on discussions with Lupaka, Accuracy assumed the following working capital requirements: (i) days sales outstanding (“**DSO**”) of 30 days for 90% of receivables and 60 days for the remainder; (ii) days payables outstanding (“**DPO**”) of 30 days and (iii) days inventory outstanding (“**DIO**”) of nil.¹⁸⁴ Aside from its communications with Claimant, Accuracy provided no supporting documents that would corroborate these working capital requirements.

¹⁸⁰ Accuracy Report, Table 6.3; AC-0010, p. 10.

¹⁸¹ Accuracy Report, ¶ 5.30.

¹⁸² Witness Statement of Gordon Ellis, ¶ 39.

¹⁸³ Respondent’s Memorial, Section II.F.1.a.

¹⁸⁴ Accuracy Report, ¶ 5.41.

- f) *Financing Cash Flows*: Accuracy excluded Red Cloud's cash flows related to additional financing from Pandion and upside participation under the PLI Loan Agreement as these were not considered cash outflows under the FCFF approach.
- g) *Cash flow from the Mallay Plant and General and Administrative ("G&A") Expenses*: Accuracy excluded projected cash flows from the Mallay Plant and head office expenses that were classified as G&A, which increased damages by US\$4.1 million merely on the basis of lacking "additional information as to what these cash flows represent".¹⁸⁵ These costs represent what Red Cloud estimated would be the additional G&A costs related to the acquisition of the Mallay Plant.¹⁸⁶ We believe it is self-serving to remove these costs without providing a more substantiated rationale. Therefore, we revert this adjustment and reduce damages by US\$4.1 million on a standalone basis.¹⁸⁷

144. Accuracy discounted the free cash flows using an estimate of the weighted average cost of capital ("**WACC**") of a hypothetical gold mining entity operating in Peru. Accuracy calculated the WACC to be 7.8%, using a U.S. sector average cost of capital and adding a 1.4% country risk premium for Peru. Accuracy further added a 6.9% additional risk premium to reflect a level of uncertainty applicable to "the 590t/day production scheduled modified by Red Cloud".¹⁸⁸

145. Accuracy stated that 6.9% is a premium "typically applied to mineral properties at the scoping level of study" but has not provided evidence to support the amount they included as a risk premium.¹⁸⁹ Accuracy recognized that the Red Cloud Model was not tested to the same level of precision as the SRK Model and that its 590t/day scenario is subject to higher degree of uncertainty since Accuracy made its adjustments without technical mining expertise.¹⁹⁰ Accuracy added an incremental premium to its discount rate to account for the:

¹⁸⁵ Accuracy Report, ¶ 6.19(c).

¹⁸⁶ Accuracy Report, Appendix 6, tab "fin_lupaka", row 252. We note that in the Red Cloud Model, fewer G&A costs were anticipated (US\$33.1 million) than those in the SRK Model (US\$42.1 million) even though production would be expanded from 6 years to 7 years after the acquisition of the Mallay Plant.

¹⁸⁷ Accuracy Report, Footnote 175.

¹⁸⁸ Accuracy Report, ¶ 6.19(d)(ii).

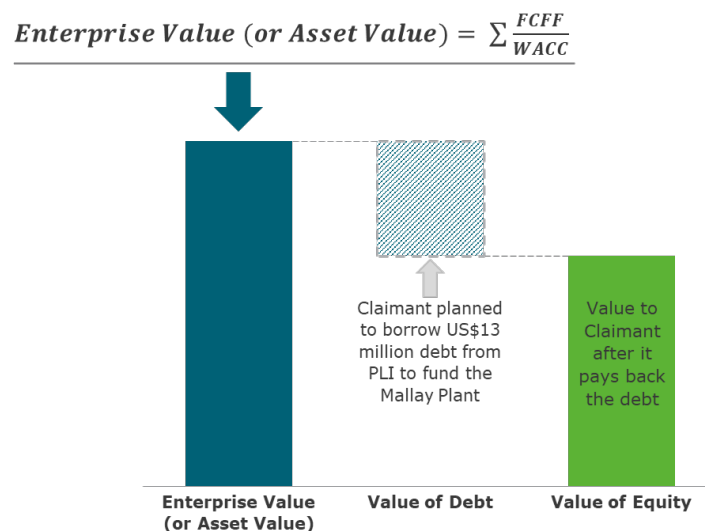
¹⁸⁹ Accuracy Report, A4.23(b).

¹⁹⁰ Accuracy Report, footnote 177.

"higher level of uncertainty attached to the 590t/day production schedule modelled by Red Cloud, which had not been subject to the same level of detailed technical and financial analysis as the PEA Mine Plan".¹⁹¹

146. As discussed in **Paragraph 143(f)**, Accuracy calculated the Project's FCFF and estimated a WACC in its DCF calculations.¹⁹² The NPV determined under this approach is the enterprise value (or the asset value in this case), which includes the value of equity (Claimant's equity interest) and the value of debt. In calculating Claimant's damages, Accuracy incorrectly uses the asset value of US\$63.6 million and ignores Claimant's obligation to pay back the debt that would have been used to fund the acquisition of the Mallay Plant. As a result, Accuracy has overstated the damages to Claimant by US\$13.0 million, as represented in the center column of **Figure 20**:

Figure 20 - Illustration of FCFF, Enterprise Value and Damages¹⁹³



147. Finally, Accuracy deducted US\$15.9 million from its FMV assessment of Lupaka's investment in Peru, which represents a contemporaneous indicator of the amount that Lupaka would have had to pay to PLI to settle the early termination of the PLI Loan Agreement.

¹⁹¹ Accuracy Report, ¶ 6.19(d)(ii).

¹⁹² AICPA. "International Valuation Glossary – Business Valuation". 14 December 2020. [AP-0021] WACC is defined as "the cost of capital (Discount Rate) determined by the weighted average, at market value, of the cost of all financing sources in the Business Enterprise's capital structure."

¹⁹³ Accuracy assumed the Project would be funded by a combination of debt and equity but provided no concrete refinancing plan as discussed in **Section V(D)**. We therefore assume the amount that Claimant anticipated borrowing from PLI as an approximation of the required additional debt.

C. Conclusion on the 590t/day Scenario

148. Neither Claimant nor Accuracy has provided the logic, basis, or evidence to support the assumption that a new investor would have funded the Project with friendlier financing terms. In particular, Accuracy fails to provide any evidence that Claimant would have a capital arrangement in place for the amount of investment required for the purchase of the Mallay Plant under the 590t/day scenario. Lacking such a financing arrangement to ensure the feasibility of the Project, the 590t/day scenario is subject to high uncertainty and should not be used as the basis for damages.
149. However, if the Tribunal were to accept the 590t/day scenario, the ongoing social license risk, difficulties in refinancing, and the uncertainty regarding the permits Claimant needed to obtain to commence exploitation activities should be considered and adjusted for. In **Figure 21**, we present the revised damages incorporating:¹⁹⁴
- The cash flow from the Mallay Plant and G&A expenses from the head office, which were projected by Red Cloud but excluded by Accuracy;
 - The value of debt that Accuracy fails to consider; and,
 - A sensitivity analysis that adds 1.0% to 5.0% over Accuracy's discount rate.

Figure 21 - Revised Damages under the 590t/day Scenario (US\$ millions)

Discount Rate	Premium to Discount Rate	FMV of Claimant's Investment at the Valuation Date	Value of Debt for Mallay Acquisition	Debts to be settled with PLI in the But-For Situation	Total Damages as of Valuation Date
Accuracy's Result					
14.7%	-	63.6	-	(15.9)	47.7
Revisions: Mallay Cash Flows and Deduction of Debt from Mallay Acquisition					
14.7%	-	59.5	(13.0)	(15.9)	30.5
Sensitivity Analysis					
15.7%	1.0%	57.4	(13.0)	(15.9)	28.5
16.7%	2.0%	55.5	(13.0)	(15.9)	26.6
17.7%	3.0%	53.6	(13.0)	(15.9)	24.7
18.7%	4.0%	51.9	(13.0)	(15.9)	22.9
19.7%	5.0%	50.2	(13.0)	(15.9)	21.3

¹⁹⁴ See **Appendix 3**. The value of debt (US\$13.0 million) and the debt to be settled with PLI (US\$15.9 million) are deducted from the post-tax NPV to arrive at the damages at the Valuation Date.

150. As discussed in **Paragraph 97**, if Peru is correct that PLI's actions are not attributable to it, the residual value of the IMC shares in the Actual Scenario could be approximately US\$13.0 million instead of nil. In that case, Claimant's damages would be reduced by a further US\$13.0 million to account for their residual value.

VII. Our Opinion of Accuracy's 355t/day Scenario

151. Claimant did not rely on Accuracy's 355t/day scenario for its damages claim. However, we do not think the Tribunal should rely on it as an alternative basis to award damages because in addition to the remaining social license risk discussed in **Section V(B)** and the financing risk discussed in **Section V(D)**, Accuracy's 355t/day scenario did not account for the unresolved third-party processing issues.

152. Accuracy's 355t/day scenario was based on the underlying assumption that the deficiencies of the third-party processing plants would be resolved at no additional cost or delay or, alternatively, that IMC would find a ready substitute for these third-party processing facilities.¹⁹⁵ This assumption is flawed as it ignores the third-party processing issues that arose prior to the Measures and contradicts Mr. Castañeda Mondragón's witness statement as we discuss below. As a result, Accuracy's 355t/day scenario did not account for the delay and/or additional operating costs that IMC would need to pay to solve the third-party processing failure that already existed by September 2018 (if a solution were technically feasible at all), nor do they adjust the discount rate to address this execution risk.¹⁹⁶

A. Valuation does not Account for Unresolved Production Issues

153. As discussed in **Paragraph 75**, the Invicta Project commenced mining only in April 2018 (2 months later than planned) and by October 2018 (i.e., before the Access Road Protest) actual production was far behind budgeted levels. For example, Lupaka had budgeted that by October 2018, 60,500t of ore would be processed, but only 6,654t were actually processed, equivalent to 11.0% of the budget. IMC's unsuccessful test of the three third-party processing plants it had identified prior to production revealed technical problems that caused the shortfall. According to Mr. Will Ansley, Lupaka's CEO as of 27 September 2018, none of the third-party processing plants were able to fulfill their contracts.¹⁹⁷

¹⁹⁵ Accuracy Report, ¶¶ 5.26 – 5.28.

¹⁹⁶ C-0051, p. 1.

¹⁹⁷ C-0051, p. 1.

154. Prior to the Access Road Protest, and due to the technical problems with the third-party processing plants, the Invicta Project only produced 269oz of gold in the seven months from April to October 2018 equivalent to 3.5% of the 7,747oz budgeted over the same period by SRK.¹⁹⁸

155. Mr. Castañeda Mondragón identified the following technical issues with each plant:¹⁹⁹

- a) Coriland: lacked a cyanidation treatment option in its tailings facility, potentially losing recoverable gold.
- b) San Juan Evangelista: lacked a cyanidation treatment option and lacked processing capacity.
- c) Huancapeti II: experienced unexpected mechanical failures and had to postpone works.

156. Accuracy stated that to try to solve the third-party processing issue:

"Claimant identified a number of potential additional processing facilities in the vicinity of the Invicta Mine, each with its own advantages and disadvantages, which were weighed carefully".²⁰⁰

157. This is inconsistent with Mr. Castañeda Mondragón's witness statement, which stated that the third-party processing plants were identified, reviewed and tested before production started and Lupaka was not able to identify additional third-party processing facilities to resolve their deficiencies.²⁰¹ In fact, the only proposed fix to the third-party processing problem was to restart negotiations to acquire the Mallay Plant in 2018, which had previously stalled in 2015. In Mr. Castañeda Mondragon's words:

"Based on the unsatisfactory results and experiences with Coriland, San Juan Evangelista and Huancapeti II, we decided to restart negotiations with Buenaventura."²⁰²

158. However, under the 355t/day scenario (which presumes that Claimant does not acquire the Mallay Plant), Accuracy simply assumed that an unnamed third-party processing plant would be able to meet the delayed SRK Model production schedule

¹⁹⁸ AC-0029. "fin_lupaka" tab. Cell E206. Production in the first year is 13,281oz per the SRK Model, equivalent to 1,107oz per month.

¹⁹⁹ Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶ 88.

²⁰⁰ Accuracy Report, ¶ 3.38.

²⁰¹ Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶¶ 85-89.

²⁰² Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶¶ 89.

used in the Accuracy Report without providing any evidence to support the existence, viability, or profitability of the assumed unnamed third-party processing plant.

B. Opinions on Accuracy's Changes to SRK Model

159. Accuracy made similar adjustments to the SRK Model that they made to the Red Cloud Model, including, but not limited to: metal price expectations, the status of pre-production works, closure costs, working capital, and discount rate assumptions.²⁰³
160. At this time, we have not identified material flaws with Accuracy's adjustments to metal prices, capital expenditures, and the calculation of working capital as detailed below:
- a) *Metal Prices*: Accuracy updated the metal prices to reflect prevailing market expectations as at the Valuation Date using the same methodology as the one used in the 590 t/d scenario.
 - b) *Capital Expenditures*: Accuracy removed any pre-production and development capital expenditure as they did in the 590t/day scenario. As noted, we understand final inspection and several regulatory authorizations were pending and may have required additional capital expenditures and resulted in further delays.²⁰⁴
 - c) *Working Capital*: While the SRK Model did not consider any changes in project working capital in calculating cash flows, based on discussions Accuracy had with Lupaka, they assumed working capital requirements using the same assumptions as the ones used in the 590t/day scenario. As noted, aside from its communications with Claimant, Accuracy provided no supporting documents that would corroborate these working capital requirements.
 - d) *Closure Costs*: Accuracy removed the 20% contingency in infrastructure costs, which included closure costs, from the SRK Model. According to Accuracy, the removal of the closure costs was due to the "relative certainty around the amounts under the 355t/day scenario".²⁰⁵ However, Accuracy failed to provide any evidence to support their opinion about this "relative certainty" and we understand the mine closure plan was pending approval.²⁰⁶ Therefore, we find

²⁰³ Accuracy Report, ¶ 2.8.

²⁰⁴ Respondent's Memorial, Section II.F.1.a.

²⁰⁵ Accuracy Report, footnote 153.

²⁰⁶ Respondent's Memorial, Section II.F.1.a. Witness Statement of Julio Félix Castañeda Mondragón (translation), ¶ 21.

Accuracy's removal of the 20% contingency unreasonable. The net impact of this assumption on damages is US\$0.1 million as shown in **Appendix 4**.

161. Accuracy discounted the free cash flow using an estimate of the cost of capital of a hypothetical gold mining entity operating in Peru. Using the same approach discussed in **Paragraph 144**, Accuracy calculated the WACC to be 11.1% by incorporating an average cost of capital of 7.8% (including country risk premium of 1.4%) and a 3.3% additional risk premium to reflect a level of uncertainty as production had not yet commenced when the SRK Model was prepared. Accuracy did not provide the calculation, logic, or evidence to support the 3.3% additional risk premium. Further, Accuracy's discount rate failed to account for the Project's ongoing social license and the financing risks.
162. Additionally, Accuracy deducted US\$15.9 million from their FMV assessment of Lupaka's investment in Peru, which represents a contemporaneous indicator of the amount that Lupaka would have had to pay to PLI to terminate the PLI Loan Agreement.

C. Conclusion on the 355t/day Scenario

163. Neither Claimant nor Accuracy has provided the evidence to support the fundamental assumption that third-party processing plants could be reconfigured to process the ore quantities assumed in the 355t/day scenario. Therefore, the profitability or even the viability of the Project under the 355t/day scenario is uncertain. In fact, Claimant's position appears to be that the only way to resolve this production issue was to purchase the Mallay Plant (i.e., the 590t/day scenario).²⁰⁷ Given this uncertainty, we believe that it is not appropriate to rely on the 355t/day to determine damages.
164. However, if the Tribunal were to accept the 355t/day scenario, the remaining uncertainty arising from the unresolved tension between Claimant and the Parán Community, the third-party processing issue, and the additional financing risk need to be accounted for in the damages. In **Figure 22**, we present the revised damages incorporating an additional risk premium of 1.0% to 5.0% over Accuracy's discount rate of 11.1%.

²⁰⁷ See **Paragraph 157**.

165. Incorporating the changes discussed above, we present the revised damages under the 355t/day scenario as follows:²⁰⁸

Figure 22 - Revised Damages under the 355t/day Scenario (US\$ millions)

Discount Rate	Additional Risk Premium	Post-tax NPV	Debts to be settled with PLI in the But-For Situation	Damages at Valuation Date
Accuracy's Result				
11.1%	0%	44.2	(15.9)	28.3
Revision: Contingency on Closure Costs				
11.1%	0%	44.1	(15.9)	28.2
Sensitivity Analysis				
12.1%	1%	43.0	(15.9)	27.1
13.1%	2%	42.0	(15.9)	26.1
14.1%	3%	41.0	(15.9)	25.1
15.1%	4%	40.1	(15.9)	24.1
16.1%	5%	39.2	(15.9)	23.2

166. As discussed in **Paragraph 97**, if Peru is correct that PLI's actions are not attributable to it, the residual value of the IMC shares in the Actual Scenario could be approximately US\$13.0 million instead of nil. In that case, Claimant's damages would be reduced by a further US\$13.0 million to account for their residual value.

VIII. Our Opinion on the Calculation of Pre-award Interest

167. Accuracy used LIBOR+2% on an annually compound basis as the pre-award interest rate from the Valuation Date to 1 October 2021, the date of the Accuracy Report. Pre-award interest was calculated as US\$1.7 million and US\$2.8 million under the 355t/day scenario and 590t/day scenario, respectively.²⁰⁹

168. There is no consensus on which interest rate should be applied to calculate pre-award interest and a wide range of interest rates have been applied in past investor-state cases.²¹⁰ Historically, the most commonly used variable interest rates were based on LIBOR and the One-Year U.S. Treasury Bill ("**UST**") rate, with a premium of 2%.

²⁰⁸ See **Appendix 4**. The debt to be settled with PLI (US\$15.9 million) is deducted from the post-tax NPV to arrive at the damages at Valuation Date.

²⁰⁹ Accuracy Report, Table 9.1.

²¹⁰ Credibility. "Study of Damages Awards in Investor-State Cases". 2nd Edition, January 2021, pp. 60 - 63. [AP-0026]

169. The UST rate is generally considered the risk-free rate, while the LIBOR represents a benchmark interest rate at which major global banks lend to one another in the international interbank market for short-term loans.
170. We note that LIBOR was being retired as a basis for contracts in the U.S. as of the end of 2021.²¹¹ Most of the GBP, EUR, CHF and JPY denominated LIBORs and USD 1-week and 2-month LIBORs were ceased on 31 December 2021. Other USD LIBORs (overnight, 1-month, 3-month, 6-month and 12-month) will be discontinued on 30 June 2023.²¹² In its place, several financial institutions recommend referring to the secured overnight financing rate (“**SOFR**”) as a suitable replacement when LIBOR otherwise would have been used.²¹³
171. We present the pre-award interest calculation using UST rate+2% and SOFR+2% as reasonable alternatives. **Figure 23** presents the damages plus the pre-award interest under the 590t/day scenario.

Figure 23 – Revised Damages plus Pre-award Interest: 590t/day Scenario (US\$ millions)

Discount Rate	Total Damages as of Valuation Date	Damages at Valuation Date, incl. interest (SOFR+2%)	Damages at Valuation Date, incl. interest (UST rate+2%)
Accuracy's Result			
14.7%	47.7	50.5	50.2
Revisions: Mallay Cash Flow and Deduction of Debt			
14.7%	30.5	32.3	32.1
Sensitivity Analysis			
15.7%	28.5	30.2	30.0
16.7%	26.6	28.1	27.9
17.7%	24.7	26.2	26.0
18.7%	22.9	24.3	24.1
19.7%	21.3	22.5	22.4

172. **Figure 24** presents the damages plus the pre-award interest under the 355t/day scenario.

²¹¹ J.P. Morgan, Leaving LIBOR: A Landmark Transition. [AP-0027]

²¹² J.P. Morgan, Leaving LIBOR: A Landmark Transition. [AP-0027]

²¹³ J.P. Morgan, Leaving LIBOR: A Landmark Transition. [AP-0027]

Figure 24 – Revised Damages plus Pre-award Interest: 355t/day Scenario (US\$ millions)

Discount Rate	Total Damages as of Valuation Date	Damages at Valuation Date, incl. interest (SOFR+2%)	Damages at Valuation Date, incl. interest (US treasury rate+2%)
Accuracy's Result			
11.1%	28.3	29.9	29.7
Revision: Contingency on Closure Costs			
11.1%	27.1	28.7	28.5
Sensitivity Analysis			
12.1%	27.1	28.7	28.5
13.1%	26.1	27.6	27.4
14.1%	25.1	26.6	26.4
15.1%	24.1	25.6	25.4
16.1%	23.2	24.6	24.5

173. As discussed in **Paragraph 97**, if Peru is correct that PLI's actions are not attributable to it, the residual value of the IMC shares in the Actual Scenario could be approximately US\$13.0 million instead of nil. In that case, Claimant's damages would be reduced by a further US\$13.0 million plus pre-award interest to account for their residual value.

IX. Accuracy's Other Indicators of Value are Not Relevant

174. Accuracy also presented four alternative analyses as indicators of value which allegedly demonstrate the reasonableness of their quantification of damages using the Primary Approach:

- a) Claimant's market capitalization;
- b) Sunk costs;
- c) Transaction multiples in gold mining projects; and,
- d) Valuation results per the SRK Model and the Red Cloud Model.

175. In this section, we review Accuracy's purported indicators of value and explain why these indicators are either inaccurate or do not demonstrate the reasonableness of Accuracy's quantification of damages under the Primary Approach.

A. Accuracy's Market Capitalization Approach Inflates the Value of IMC

176. While Lupaka's market capitalization may be relevant to valuing Lupaka directly, it is likely that the result does not represent the FMV of the Invicta Project. Accuracy's

first indicator attempted to benchmark total damages against Claimant’s market capitalization by performing an illustrative assessment of the value of the Invicta Project at the Valuation Date absent the Access Road Protest on October 2018.²¹⁴ Accuracy applied the percentage change in the VanEck Vectors Junior Gold Miners ETF (“**GDXJ**”) from 25 October 2018 to 26 August 2019 of 45.2% to Lupaka’s market capitalization as of 25 October 2018. Accuracy then added a control premium of 43.2% to Lupaka’s forecasted market capitalization. **Figure 25** summarizes Accuracy’s calculation.²¹⁵

Figure 25 - Damages Calculated Under Accuracy’s Market Capitalization Approach

Item	Calculation
Lupaka’s Market Capitalization on 25 October 2018	US\$16.3 million
The % change in GDXJ from 25 October 2018 to 26 August 2019	45.2%
Lupaka’s Implied Market Capitalization on 26 August 2019	US\$23.4 million
Control Premium	43.2%
Damages	US\$33.4 million

177. First, although the CIMVAL standards and guidelines published in February 2003 recognize market capitalization as a methodology that is considered a rule of thumb suitable to check primary methods of valuation, it is:

“[m]ore applicable to Valuation of single property asset junior companies than to properties.”²¹⁶

178. Second, Accuracy’s calculation implied that a 1% increase in the GDXJ index necessarily led to a 1% increase in the market capitalization of any individual company. This view is simplistic and inaccurate as market indexes are composites of various individual stocks and changes to the index reflect systematic changes in the industry being tracked (for example, junior gold miners in the GDXJ) rather than the risk of an individual stock. In this case, the change in Lupaka’s stock price may reflect investors’ sentiment on the social license, execution, regulatory, and financing risks that Lupaka was exposed to rather than the general sentiment among the companies tracked in the GDXJ.

²¹⁴ Accuracy Report, ¶ 8.13.

²¹⁵ Accuracy Report, Appendix 7.

²¹⁶ CIMVAL. “Standards and Guidelines”. February 2003, p. 23. [AP-0028] We note that the updated 2019 CIMVAL standards and guidelines do not include this additional commentary on the market capitalization approach.

179. Third, Lupaka’s historical stock price has not tracked the GDXJ index reliably and demonstrates that Accuracy’s analysis that focuses on one particular date is similarly unreliable. Accuracy claimed that there was a strong correlation between the GDXJ and Lupaka’s stock price, however, a closer look at the historical data reveals that selecting a single day and applying the index’ percentage change is incorrect as the variance between Lupaka’s stock price and the GDXJ index ranges from -26.6% to 39.1% as shown below.

Figure 26 - The Performance of Lupaka’s Stock Price and GDXJ on Selected Dates²¹⁷

Date	Lupaka	GDXJ	Variance
2-Jan-13	100.0%	100.0%	NA
12-Apr-13	51.7%	68.1%	-16.5%
10-Jun-13	96.7%	57.6%	39.1%
13-Jul-16	34.1%	60.7%	-26.6%
21-Feb-18	55.0%	38.4%	16.6%

180. The amounts calculated under this approach are speculative and are not relevant to the potential damages Claimant suffered. Accuracy’s methodology of calculating the implied market capitalization should not be relied upon by the Tribunal.

181. For instance, applying the percentage movement in GDXJ from 2 January 2013 to 10 June 2013 to Lupaka’s actual market capitalization on 2 January 2013 results in an implied market capitalization of US\$21.1 million as of 10 June 2013. The actual market capitalization as of 10 June 2013 was US\$36.7 million or a US\$15.7 million difference between Accuracy’s methodology of calculating the implied market capitalization and Lupaka’s actual market capitalization. The implied market capitalization calculated under this approach can also be larger than the actual market capitalization: on 11 July 2014, the implied market capitalization is US\$19.2 million, US\$5.4 million higher than the actual market capitalization of US\$13.8 million.²¹⁸

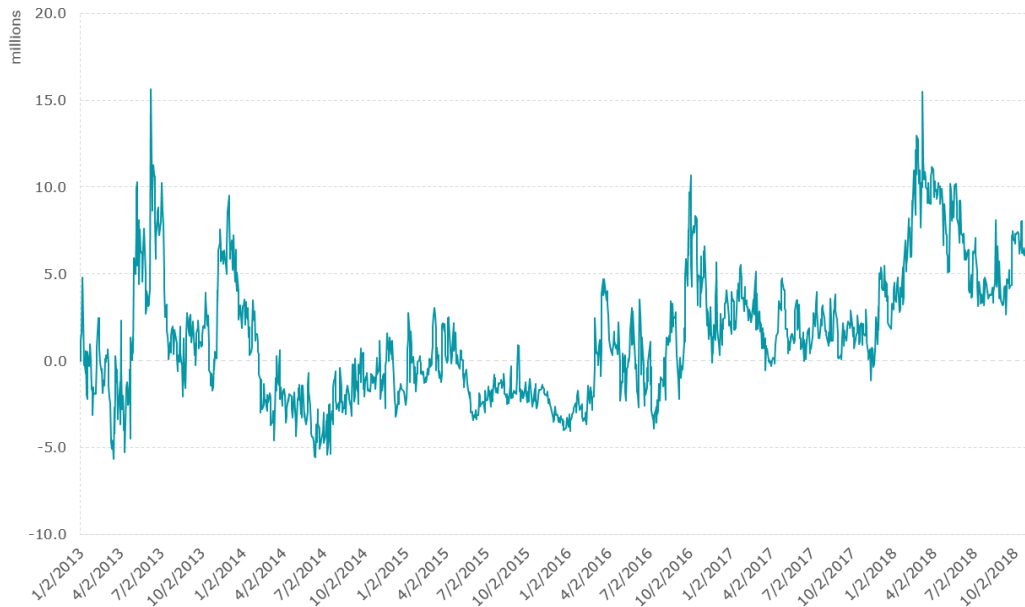
182. As our examples demonstrate the variability prior to the Measures, which Accuracy purports is the divergence point between Lupaka’s market capitalization and GDXJ, this analysis shows that factors other than systematic risk and the Measures can

²¹⁷ Accuracy Report, Appendix 7, tab “Figure 8.1”.

²¹⁸ See **Appendix 5**.

have a significant impact on the market capitalization of Lupaka.²¹⁹ **Figure 27** presents the difference between Lupaka’s actual market capitalization and the implied market capitalization using Accuracy’s approach for the period from January 2013 to October 2018.

Figure 27 - Lupaka’s Actual Market Capitalization Compared to the Implied Market Capitalization under Accuracy’s Methodology (US\$) between January 2013 and October 2018

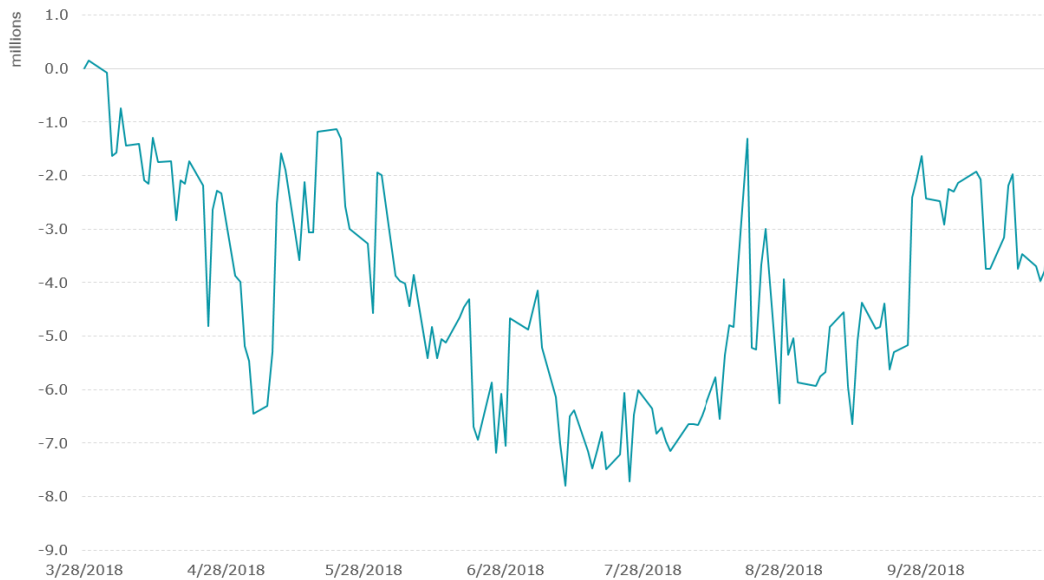


183. Further, if we only consider the period after 28 March 2018, when the option for the Josnitoro Gold Project was terminated by Hochschild, the implied market capitalization under Accuracy's approach is always lower than the actual market capitalization, contrary to the result calculated using the data from early 2013. **Figure 28** shows the difference between Lupaka’s actual market capitalization and the implied market capitalization for the period from March to October 2018.²²⁰

²¹⁹ See **Appendix 5**.

²²⁰ See **Appendix 5**. AC-0003, p. 15.

Figure 28 - Lupaka's Actual Market Capitalization Compared to the Implied Market Capitalization under Accuracy's Methodology (US\$) between March and October 2018



184. Fourth, the regression analysis based on the daily trading data from 1 January 2013 to 25 October 2018 shows that the coefficient between the daily change of Lukapa's share price and that of GDXJ is 0.3406, not 1 as implied in Accuracy's methodology (i.e. $\Delta P_{Lupaka} = \Delta P_{GDXJ}$).²²¹ Further, the R-squared under the least squares method is 1.8% (adjusted R-squared 1.7%), meaning the predictor variable (the daily change in GDXJ) can only explain 1.8% of the response variable (the daily changes in Lupaka's share price). Whereas the R-squared under Accuracy's methodology is even as low as *negative* 5.1%.²²²
185. Fifth, Accuracy also inflated the implied market capitalization by adding a control premium of 43.2% to reflect the additional consideration that a hypothetical investor would pay over a marketable minority equity value in order to own a controlling interest in Invicta.²²³ However, according to Professor Aswath Damodaran of New York University's Stern School of Business, acquirers in acquisitions tend to overpay due to a variety of reasons including, but not limited to, valuation mistakes, strategic considerations and synergies, plans to restructure poorly managed firms, and managerial self-interest and egos. These factors suggest that a control premium

²²¹ Wooldridge, Jeffrey. "Introductory Econometrics A Modern Approach". 5th Edition, 2012. pp. 22 – 24. [AP-0029]. The coefficient estimates the expected change per unit increase in the independent variable. Accuracy Report, ¶ 8.14. Accuracy's method that applying the change in GDXJ (45.2%) to Lupaka's market cap suggests a 1 to 1 relationship.

²²² It is possible to get a negative R-squared when the equation does not contain a constant term as in Accuracy's methodology.

²²³ Accuracy Report, ¶¶ 8.13 – 8.17.

artificially inflates the indicated value in ways not attributable to the economic value of the investment.²²⁴ Of the above, Professor Damodaran suggests that the only way to realize the value of a control premium is through restructuring a failing firm's operations to realize greater value. With this limitation in mind, there is little value to simply reviewing historical premiums and applying them blindly as not every "premium" actually represents the value of control.

186. Finally, Lupaka's market capitalization may not be relevant to the value of the Project as the stock price may be distorted due to liquidity issues. In August 2019, Lupaka's stock had an average daily trading volume of 85,000 shares out of its 149 million shares outstanding with a free float of 88%.²²⁵ This low trading volume suggests that market capitalization is not relevant to the value of the Project as a stock has to be "sufficiently active to give meaningful and realistic values for that company."²²⁶ In other words, low liquidity exacerbates market swings, meaning a small number of trades can move the price and if Claimant decides to buy back its shares in the market on a specific date or a short period of time, the share price may increase as the demand exceeds supply, rather than due to the economic value of the investment in Peru. Therefore, the market capitalization on that specific date is not always realizable.

B. Sunk Costs Ignores Social License Risks

187. Accuracy's second indicator is Lupaka's sunk costs. The categories of costs Accuracy included as sunk costs relate to the acquisition of the mineral property and any related exploration expenditures.²²⁷

188. According to the International Financial Reporting Standards ("**IFRS**"), specifically IFRS 6 which covers the presentation of exploration stage mining projects for financial reporting purposes, when an entity in the mining sector reports sunk costs, the entity shall specify which expenditures are recognized as exploration and evaluation assets and those should be measured at cost on the financial statements.²²⁸ The expenditures are considered to the degree to which they can be associated with finding specific mineral sources and include, for example: acquisition

²²⁴ Damodaran, Aswath. "The Value of Control: Some General Propositions". pp. 30-37. [AP-0030]; Damodaran, Aswath. "Investment Valuation". Second Edition (Pre-Publication). p. 981. [AP-0031]

²²⁵ CapitalIQ. Lupaka's Daily Trading Volume and Shares Outstanding in 2019. [AP-0032]

²²⁶ Hitchner, James R. "Financial Valuation: Applications and Models". p. 202. [AP-0033]

²²⁷ Exploration expenditures include camp, community relations and related costs; project administration; technical reports and assays; consulting and professional fees; transportation; and concession fees.

²²⁸ Deloitte. "IFRS 6 Exploration for and Evaluation of Mineral Resources". January 2005. p. 2. [AP-0034]

of rights to explore, geological studies, exploratory drilling, sampling, activities related to evaluating the technical feasibility and commercial viability, etc. In contrast, any expenditures related to the development of Mineral Resources should not be recognized as exploration and evaluation assets.

189. In its annual financial statements, Lupaka presented these costs as exploration expenditures for Invicta until July 2017.²²⁹ Starting in August 2017, once the first tranche of the PLI Loan Agreement was received, these costs were reclassified as “Mineral property under development”. Accuracy extracted these expenditures and categorized the entirety as sunk costs as presented on the financial statements, without consideration for any adjustments.²³⁰ We note however that Accuracy’s methodology does not account for the foreign exchange adjustments included in Lupaka’s financial statements and therefore does not reconcile to the disclosed balance. For example, the year-ended 31 December 2018 balance was CAD 22.1 million compared to Accuracy’s Appendix 8 which listed the balance as CAD 27.1 million.²³¹
190. In this case, “sunk costs” may no longer be contributing to the overall value of the Project and may not represent what a buyer would pay for the assets as of the Valuation Date. With that in mind, it is possible that some reduction is necessary with respect to Claimant’s historical costs to represent the true FMV of the Project as of the Valuation Date. For example, expenditures that date from more than five years prior the valuation date are usually excluded under the cost approach.²³²
191. Another aspect of this calculation is the 10.1% interest rate that Accuracy used to bring forward historical spending to the Valuation Date. The 10.1% rate is based on the interest paid on the PLI Loan Agreement’s principal and does not represent growth in the value of the Project’s historical costs going forward. The interest rate charged to Lupaka could be abnormally high due to the absence of a full feasibility study for the Invicta Project. In fact, compared to the cost of debt that Accuracy uses to determine its WACC, which ranges from 5.43% to 6.92%, the 10.1% interest rate is not representative of the rate of interest that a generic lender would expect to receive for a loan in line with the capital assumptions underpinning Accuracy’s WACC.

²²⁹ See, for example, AC-0003, pp. 7, 8, 16.

²³⁰ Accuracy Report, Appendix 8.

²³¹ AC-0003, p 16. Accuracy Report, Appendix 8, tab “Sunk Costs”.

²³² Spooner, Jane. “Mineral Property Valuation: Principles and Procedures 101”. Micon, 2 March 2018 [AP-0035].

192. We believe that it would be more appropriate to recognize Lupaka’s historical costs incurred at their actual dollar value, rather than with a grossed-up rate of return that may not represent the actual return on these expenditures. As an alternative to bring forward these expenses to the Valuation Date, it may be appropriate to add pre-award interest at UST+2% or SOFR+2% (which serves precisely to “bring forward” any historical expenditure).
193. As shown in **Figure 4**, CIMVAL does not recommend that a Development Property be valued using the cost approach. Furthermore, even if Accuracy had properly quantified sunk costs to determine the FMV of the Invicta Project with a cost approach, sunk costs only represent the amount of money that Claimant had spent in relation to the acquisition and exploration of the mine. Sunk costs cannot account for the uncertainty and risk arising from the social license and execution risks that have been discussed throughout this report. An objective and knowledgeable investor would certainly consider these risks when making a bid to acquire the Invicta Project.

C. Market Transactions

194. Accuracy’s third benchmark used recent gold industry transactions to estimate a range of values for the Invicta Project. Accuracy used CapitalIQ to identify a list of transactions over US\$1.0 million for a majority share of the company (i.e., over 50%) in the gold industry that closed within the five-year period prior to the Valuation Date.²³³ Accuracy only considered transactions with reported Proven and Probable gold Mineral Reserves in either the year of the transaction’s announcement or the preceding year. Accuracy compared their median and mean multiples of US\$229.48/oz and US\$357.06/oz, respectively, to their DCF conclusions under the 355t/day and 590t/day scenarios of US\$260.12/oz and US\$270.39/oz, respectively, and concluded that their Primary Approach was reasonable.²³⁴
195. Accuracy’s reference group is composed of 26 transactions between 2015 and 2019, in various locations across the world. When using the guideline transaction method, one should consider the comparability of the guideline companies to the subject company. The comparability of fundamental financial data may influence the use of or weight according to valuation multiples.²³⁵

²³³ Accuracy Report, ¶ 8.40

²³⁴ Accuracy Report, ¶ 8.53.

²³⁵ Pratt, Shannon. “Valuing a Business”. Fifth Edition. p. 321. [AP-0036]

196. Accuracy did not analyze the microeconomic factors that drive the value of the guideline companies and whether these factors are sufficiently similar to the microeconomic factors driving Lupaka. In addition, the transaction multiples range from US\$7.59/oz to US\$1,187.94/oz with a standard deviation of US\$352.42/oz. Given such a large standard deviation, Accuracy’s selected 26 transactions are not a reliable benchmark.
197. For example, Accuracy ignored any country-specific risks the acquired projects faced and the development stage of the mines. Out of the 26 transactions, 18 of the targets had at least one producing mine. For 16 of these 18 targets, each company had more than one mining project, with diversification leading to lower risk and increased multiples.²³⁶ For the other 8 transactions that had projects only in the development or exploration stages, the average indexed multiple was US\$123.12/oz and the median indexed multiple was US\$70.00/oz. Conversely, for the 18 transactions that had producing mines, the average indexed multiple was US\$461.02/oz and the median indexed multiple was US\$327.61/oz. This comparison shows that multiples for mines increase when a project moves from an exploration or development property to actual production.

Figure 29 - Revised Transaction Multiple (US\$/oz)²³⁷

Companies	# of Transactions	Median Indexed Multiple	Average Indexed Multiple	Range of Indexed Multiple
Accuracy	26	229.48	357.06	7.59 – 1,187.94
Lupaka per Accuracy	NA	260.12 – 270.39		
Companies with only pre-production projects	8	70.00	123.12	7.59 – 358.76
Companies with at least 1 producing mine	18	327.61	461.02	50.85 – 1,187.94

198. Furthermore, Latin America faces specific risks that other geographies may not face, including the frequency with which mining projects in that region are suspended due to community opposition, compared to any other factor.²³⁸ Looking only at the eight companies with development or exploration projects, the highest multiple of US\$358.76/oz was for Romarco Minerals Inc., a company with only one developing

²³⁶ The only 2 companies that had 1 producing mine were Avnel Gold Mining Limited, which had a multiple of 60.03/oz and St. Andrew Goldfields Ltd., which had a multiple of 201.97/oz. We note that both of these companies are outside the median to mean range of companies with at least 1 producing mine of 327.6/oz to 461.0/oz.

²³⁷ See **Appendix 6**.

²³⁸ Dr. Piet, Remi, et al. "Latam Mining in 2020: The Good, The Bad and The Ugly". 13 February 2020. [AP-0037]

mine in South Carolina, described as a “low-risk jurisdiction”.²³⁹ Removing Romarco Minerals Inc. from the sample, the median and mean drops to US\$66.00/oz and US\$89.46/oz.

199. Thus, upon considering the stage (development stage without a feasibility study) and the various microeconomic risks (unresolved conflict with the Parán Community, technical failures of the third-party processing plants, pending regulatory permits and the limited timeframe the PLI Loan Agreement created for Claimant to solve these issues), Accuracy’s market transactions approach is not a reliable benchmark for valuation of the Project. Even using the median and mean calculated based on the transactions involving only pre-production projects, shown below in **Figure 30**, overstates the Project’s FMV.

Figure 30 - Implied Values (US\$/oz)²⁴⁰

Item	Index Multiple (US\$/oz)	355t/day	590t/day
AuEQ Resources (thousand oz) ²⁴¹		184.71	304.53
<i>Companies with only pre-production projects (incl. Romarco)</i>			
Median	70.00	US\$12.9 million	US\$21.3 million
Mean	123.12	US\$22.7 million	US\$37.5 million
<i>Companies with only pre-production projects (excl. Romarco)</i>			
Median	66.00	US\$12.2 million	US\$20.1 million
Mean	89.46	US\$16.5 million	US\$27.2 million

200. As shown above, Accuracy’s US\$48.0 million valuation of the Project under the 355t/day scenario and the US\$82.3 million value under the 590t/day scenario are higher than the implied values the transactions indicate when the scope is limited to companies with only pre-production projects, even without accounting for the risks specific to the Project.

D. SRK Model and Red Cloud Model

201. Accuracy also compared the NPVs from the SRK Model and the Red Cloud Model to the damages calculated under the 355t/day scenario and 590t/day scenarios as a reasonableness check. We believe the NPVs under the SRK Model and the Red Cloud Model are not indicative of the damages due to the following reasons.

²³⁹ “OceanaGold Corp buys Romarco Inc for \$856 million, gains low-cost mine in low-risk area,” Financial Post, 30 July 2015. [AP-0038] Romarco Minerals Inc. has a “low-cost gold mine” being built in a “low-risk jurisdiction”.

²⁴⁰ Implied values calculated by multiplying the AuEQ resources per Accuracy to the index multiple.

²⁴¹ Accuracy Report, Table 8.4.

202. First, both the SRK Model and the Red Cloud Model were based on the SRK PEA and Mineral Resources estimates. As discussed in **Section IV**, the SRK PEA itself acknowledged that it is subject to higher risk than the pre-feasibility study or feasibility study, and there is no certainty that the preliminary economic assessment would be realized.
203. Second, both the SRK Model and the Red Cloud Model ignored or assumed away the social license risk that may hinder Claimant's ability to generate the cash flow as planned. Further, neither model considered the financial risks the PLI Loan Agreement presented, which may be triggered in the event that SLO issues or other factors delayed the Project.
204. Third, the SRK Model, which assumed a third-party processing plant would be employed, did not incorporate the fact that all the third-party processing plants Claimant identified failed the test conducted in the pre-production process, which had already caused delay.
205. Finally, the Red Cloud Model, as Accuracy acknowledged, was not as reliable as the SRK Model as some inputs were not subject to the same level of technical and financial analysis as the SRK PEA.
206. As a result, we consider the NPVs under the SRK Model and the Red Cloud Model are too speculative to be indicative of the damages awarded to Claimant.

X. Expert Declaration

207. We declare that:
 - a) We understand that our duty in giving evidence in this Arbitration is to assist the Tribunal in deciding issues in respect of which expert evidence is adduced. We have complied with, and will continue to comply with, that duty.
 - b) We understand that our expert report is to be objective and impartial and that it is to include everything we consider relevant to the expert opinions expressed.
 - c) We confirm that this is our own independent, objective unbiased opinion which has not been influenced by the pressures of the dispute resolution process or by any party to the arbitration.
 - d) We confirm that all matters upon which we have expressed an opinion is within our area of expertise.

- e) We confirm that we have referred to all matters which we regard as relevant to the opinion We have expressed and have drawn to the attention of the Tribunal all matters, of which we are aware, that might adversely affect our opinion.
- f) We confirm that, at the time of providing our written opinion, we consider it to be complete and accurate and constitute our true, professional opinion.
- g) We confirm that if, subsequently, we consider this opinion requires any correction, modification, or qualification, we will notify the Parties and the Tribunal forthwith.
- h) We confirm that we have made clear which facts and matters referred to in this report are within our knowledge and which are not. Those that are within our knowledge, we confirm to be true.



Isabel Santos Kunsman
Managing Director
24 March 2022



Alexander Lee
Director
24 March 2022

Appendix 1 – Isabel Kunsman CV

POSITION

Managing Director - AlixPartners, LLP, Washington D.C.

PROFESSIONAL HISTORY

Isabel Kunsman co-leads AlixPartners’ International Arbitration practice out of Washington, D.C. She is an experienced expert witness on quantum, valuation, and damages matters.

She has more than 20 years of experience in finance, including over 15 years in valuation and damages quantification in the context of international arbitrations, commercial disputes, and regulatory proceedings. She is regularly retained as a quantum and valuation expert to provide testimony in both English and Spanish in various jurisdictions including ICSID, UNCITRAL, the ICC, various local arbitration centers, and international domestic courts.

She is ranked as “highly recommended” by Leaders League in International Arbitration Ranking of Best Consultants in the USA and is listed by Who’s Who Legal: Expert – Financial Advisory and Valuation – Quantum of Damages.

Mrs. Kunsman holds an MBA degree with the highest distinction from Georgetown University and a Bachelor of Science in Economics and Finance degree, from Georgetown University’s Walsh School of Foreign Service. She is a dual Spanish and US citizen.

EXPERIENCE AS TESTIFYING EXPERT

Mrs. Kunsman has been retained as a quantum and valuation expert in the following cases and administrative proceedings:

- **Zurich Insurance Company (Switzerland) v. Bolivia**; Retained as financial expert to opine before the PCA on a pension fund’s investment portfolio in Bolivia and investments in bond STRIPs. [Engaged by Claimant - BIT Arbitration – Financial Services]
- **Gramercy (USA) v. Peru**; Engaged as damages and valuation expert by Peru to rebut USD 1.8 billion claim brought before ICSID by US investors. The claim relates to land reform bonds issued in the late 1960s acquired by Claimants. Presented oral and written testimony. [Engaged by Respondent - BIT Arbitration – Financial Instruments]
- **SEC investigation (US) of US Private Equity Fund (US)**; Engaged by a US investor to testify before regulator regarding the valuation of two portfolio companies: a Public Private Partnership in Latin America and a mid-stream oil company in the US; [Engaged by Respondent – Regulatory Investigation– Telecom and Oil & Gas]
- **Confidential (Spain) v. Confidential (Colombia)**; Engaged as damages and valuation expert by investor from Spain on contractual dispute before the **ICC** against a South American Company. The claim related to a maritime port dispute. Presented written testimony. Tribunal awarded damages to Claimant based on the exact amount I calculated. [Engaged by Claimant - ICC Arbitration – Ports / Infrastructure]
- **Central American Conglomerate v. Central American State**; Engaged as damages and valuation expert on behalf of Claimant, a Central American conglomerate, in an arbitration before ICSID. Dispute relates to the expropriation of several financial services and agro-

EXPERIENCE AS

**TESTIFYING
EXPERT**

(Continued)

- industrial businesses. [Engaged by Claimant – BIT Arbitration – Conglomerate]
- *Lupaka v. Peru*; Engaged as damages and valuation expert on behalf of *South American State* to rebut USD 50 million claim brought by a Canadian mining company before ICSID over a gold mining project halted by a rural community blockade. [Engaged by Respondent – BIT Arbitration – Mining]
 - *SMMCV v. Peru*; Engaged as damages and valuation expert on behalf of Respondent to rebut USD 180 million claim brought by an Asian mining company before ICSID over various royalty and tax assessments. [Engaged by Respondent – BIT Arbitration – Mining]
 - *Freeport v. Peru*; Engaged as damages and valuation expert on behalf of Respondent to rebut USD 900 million claim brought by a Canadian Investor before ICSID over various royalty and tax assessments. [Engaged by Respondent – BIT Arbitration – Mining]
 - *Investor v. European Bank*; Engaged as damages and valuation expert on behalf of US Investor, in a commercial arbitration before the ICC related to a breach of reps and warranties of a purchase agreement. [Engaged by Claimant – Commercial Arbitration – Banking]
 - Real Estate Development Project v. **Central American State**; Preliminary assessment of damages for potential arbitration related to beach front tourist resort. [Engaged by Claimant – pre-Arbitration Assessment – **Real Estate**]
 - *Futuro de Bolivia v. Autoridad de Control de Pensiones y Seguros de Bolivia*; Retained as damages and valuation expert by global insurance and pension company to rebut USD 300 million fine assessed by regulator. Presented oral and written testimony in Spanish. [Engaged by Respondent - Domestic Regulatory Dispute – **Financial Services**]
 - *Securiport (USA) v. Benin*; Engaged as damages and valuation expert by US investor on contractual dispute before the **ICC**. Tribunal awarded Claimants over USD 100 million for the early termination of a concession for the installation and operation of an immigration processing system at the airport. Presented written and oral testimony. [Engaged by Claimant - Commercial Arbitration - **Airports / Transportation**]
 - *Autoridad Portuaria De Manta (Ecuador) v. Hutchison Port Investments (Hong Kong)*; Engaged as damages and valuation expert on behalf of global port operator to rebut USD 200 million claim brought by the port authority before the Quito Chamber of Commerce. Presented oral and written testimony in Spanish. [Engaged by Respondent - Commercial Arbitration – **Ports / Infrastructure**]
 - *Lidercon (Spain) v. Peru*; Engaged as damages and valuation expert by Peru to rebut USD 300 million claim brought before ICSID by a Spanish investor. Dispute related to concession for construction and operation of several vehicle inspection centers. Presented written testimony.[Engaged by Respondent - BIT Arbitration - **Transportation**]
 - *Corporación Quito v. Contraloría General de Ecuador*; Engaged as finance expert by a multinational consortium in an investigation

**EXPERIENCE
AS
TESTIFYING
EXPERT**

(Continued)

brought by the comptroller. Dispute related to the expenses incurred under the concession contract for the construction, operation and maintenance of two airports in Quito. Presented written testimony. [Engaged by Respondent - Domestic Regulatory Dispute – **Airport / Infrastructure**]

- *Banco Central de la **Republica Dominicana** v. Oberthur Fiduciaire (**France**)*; Engaged as damages expert by a European printing company to rebut claim brought before the domestic civil court by the Central Bank. Dispute related to a contract for the printing of currency. Presented written and oral testimony in Spanish. [Engaged by Respondent - Domestic Court Litigation - Banking]
- *Confidential*; Damages quantification and valuation of silver and gold mine in **South America**. Engaged by Asian mining company in a dispute related to the quantification of damages and valuation of Claimant's investment after a change in local tax regulations. Dispute settled prior to filing. [Engaged by Claimant - pre-Arbitration Assessment - **Mining**]

Mrs. Kunsman has been retained as the leading advisor and consultant non-testifying quantum and valuation expert in the following cases and administrative proceedings:

**EXPERIENCE
AS NON-
TESTIFYING
EXPERT**

- *Kuntur Wasi v. Peru*; Engaged by **Peru** to provide advice on financing matters in a claim brought before ICSID by an Argentine investor. The dispute relates to a *40-year concession contract for the construction and operation of an airport near Cuzco*. [Engaged by Respondent - BIT Arbitration - **Airports**]
- *Confidential*; Engaged by **South American state** to provide advice on quantum matters in a claim brought before ICSID by a US investor. The dispute related to an investment in a smelter and copper mine in South America. [Engaged by Respondent - BIT Arbitration - **Mining**]
- *Confidential*; Engaged by European investor in a BIT arbitration before ICSID against **South American state**. Dispute related to valuation of 3 agricultural companies. [Engaged by Claimant - pre-Arbitration Assessment, **Agriculture**]
- *State General Reserve Fund of the Sultanate of Oman v. **Bulgaria***; Engaged by Bulgaria to rebut USD 95 million claim brought before ICSID by a Middle Eastern investor. Dispute related to a commercial bank failure in 2014 and the government's response to the country's banking crisis. [Engaged by Respondent - BIT Arbitration - Banking]
- *Marfin Investment Group, et al v. **Cyprus***; Engaged by *Cyprus*, to rebut € 1 billion claim brought before ICSID by a Southern European investor. Dispute related to the cause of a commercial bank failure in 2011. Analyzed in detail European sovereign debt crisis and regulatory standards on bank capital adequacy and liquidity. [Engaged by Respondent - BIT Arbitration - **Banking**]
- *HQ AB (**Sweden**) v. Mats Qviberg, et al*; Engaged by shareholders of a Swedish bank in a Breach of Fiduciary Duty dispute before the country's District Court. Dispute related to the valuations under IAS 39 and IFRS 7 and calculations of implied volatility of the bank's derivative trading portfolio. [Engaged by Claimant - Domestic Court Litigation - **Banking**]

**EXPERIENCE
AS NON-
TESTIFYING
EXPERT**

(Continued)

- *LSF-KEB, et. al v. Korea*; Engaged by Korea to rebut USD 4.6 billion claim brought before ICSID by a global investment fund. Dispute related to the government's alleged delayed approval of the sale of Claimant's investments and tax assessments. [Engaged by Respondent - BIT Arbitration - **Banking**]
- *Nova Scotia Power Inc. v. Venezuela*; Engaged by Claimant, a North American electricity generator on a breach of contract dispute before ICSID against a South American state. Dispute related to the value of Claimant's intangible rights in a long-term purchase agreement of coal from a mine in a South America. [Engaged by Claimant - BIT Arbitration - **Mining and Electricity**]
- *Novera v. Bulgaria*; Engaged by Bulgaria to rebut claim brought before ICSID by a Northern European Investor. Dispute related to early termination of multiple sanitation services concessions. [Engaged by Respondent - BIT Arbitration - **Service Concession**]
- *Renee Rose Levy de Levi and Gremcitel S.A. v. Peru*; Engaged by Peru to rebut USD 41 billion claim brought before ICSID by a European national. Dispute related to impact of the designation of certain lands as historical on the value an early-stage real estate project. [Engaged by Respondent - BIT Arbitration - **Real Estate**]
- *Tidewater v. Venezuela*; Engaged by Claimant, a US oil services company in an arbitration before ICSID against a South American state. USD 200 million claim related to the expropriation of an offshore supply vessel company. [Engaged by Claimant - BIT Arbitration - **Oil and Gas**]
- *Renee Rose Levy de Levi v. Peru*; Engaged by Peru to rebut USD 7.0 billion claim brought before ICSID by a European national. Dispute related to the cause of a bank failure in 2000 and the government's response to the country's banking crisis. [Engaged by Respondent - BIT Arbitration - **Banking**]
- *Convial Callao v. Peru*; Engaged by Peru to rebut USD 105 million claim brought before ICSID by a South American investor. Dispute related to the expansion of a toll road from downtown Lima to the airport. [Engaged by Respondent - BIT Arbitration - **Toll Road / Infrastructure**]
- *Confidential*; Engaged by European investor in a BIT dispute before ICSID against a Southern European State. Claim related to the valuation of Southern European bank. Dispute settled prior to filing. [Engaged by Claimant - pre- Arbitration Assessments - **Banking**]
- *Wood Group Engineering v. PDVSA Petroleo S.A.*; Engaged by Claimant in a breach of contract arbitration before the ICC against an oil services company in South America. USD 120 million claim related to long-term contract for water injection into oil wells and water treatment services. [Engaged by Claimant - Commercial Arbitration - **Oil and Gas**]
- *Concesionaria Dominicana de Autopistas y Carreteras, S.A. v. Dominican Republic*; Engaged by **Dominican Republic** to rebut USD 200 million claim brought before the ICC by a Southern European investor. Dispute related to construction delays for the expansion of

**EXPERIENCE
AS NON-
TESTIFYING
EXPERT
(Continued)**

toll road from the capital to the tourist resorts. [Engaged by Respondent - BIT Arbitration - **Toll Road / Infrastructure**]

- *I&I Beheer B.V. v. **Venezuela***; Engaged by Respondent to rebut USD 300 million claim brought before ICSID by a European entity. Dispute related to bonds allegedly issued by agricultural bank in the 1980s. [Engaged by Respondent - BIT Arbitration – **Financial Instruments**]
- *Electroandina S.A. (**Chile**) v. YPF S.A. (**Argentina**)*; Engaged by Claimant, an electricity generator in a breach of contract arbitration before the ICC against a South American oil company. USD 200 million claim related to an alleged breach of a long-term natural gas supply contract. [Engaged by Claimant - Commercial Arbitration - **Electricity**]
- *TSG5 L.P. (**USA**) v. Beauty Care Professional Products, S.A. (**Spain**)*; Engaged by Claimant, a US Private Equity Investor in a breach of contract arbitration before the ICC against a European beauty care company. USD 200 million claim related to sale of company to new investor. [Engaged by Claimant - Commercial Arbitration – **Retail**]
- *Confidential*; Engaged by Spanish engineering and construction company in an arbitration before ICSID against a South American state. USD 35 million claim related to the construction contract to upgrade the country’s largest oil refinery. Dispute settled prior to filing. [Engaged by Claimant - BIT Arbitration - **Oil and Gas**]
- *Confidential*; Engaged by oil company to quantify claim related to an alleged breach of supply contract for LNG from the Caribbean to Europe. Case settled before hearing. [Engaged by Claimant - Commercial Arbitration - **Oil & Gas**]
- *Duke Energy International **Peru** v. Peru*; Engaged by US investor in an arbitration before ICSID against Peru. USD 35 million claim related to the quantification of damages and valuation of Claimant’s investment in an electricity company after a change in tax regulations. [Engaged by Claimant - BIT Arbitration - **Electricity**]
- *QUIBORAX, et al v **Bolivia***; Engaged by Claimant, a South American mining company in an arbitration before ICSID against a South American state. USD 100 million claim related to the quantification of damages and valuation of Claimant’s investment in a Borax mine. [Engaged by Claimant - BIT Arbitration - **Mining**]
- *CIT Group, Inc. v. **Argentina***; Engaged by Claimant, a US financial services company in an arbitration before ICSID against a South American state. USD 100 million claim related to the value of leasing business after the economic crisis in the early 2000s. [Engaged by Claimant - BIT Arbitration - **Banking**]
- *Saluka Investments B.V., Nomura Principle Investment plc, v. the **Czech Republic***; Engaged by Czech Republic in a dispute related to the restructuring and valuation of a bank under the settlement terms agreed between the parties for submission to an arbitral tribunal. [Engaged by Respondent - BIT Arbitration - **Banking**]

RECOGNITIONS

- Ranked as “highly recommended” by Leaders League in International Arbitration Ranking of Best Consultants in the USA

**SPEECHES
/PUBLICATIONS
/INSTRUCTION**

- Ranked as “excellent” by Leaders League in Best International Litigation Support Firms Ranking in Peru
- Listed in The International Who’s Who of Global Leaders Arbitration 2021 – Expert Witnesses
- Listed in The International Who’s Who of Experts – Financial Advisory and Valuation – Quantum of Damages 2021.
- Washington Arbitration Week, Panelist on “Evidence in International Arbitration: The Latest Developments”, Virtual, November 2021
- World Arbitration Update 2021, Panelist on Assessing Damages in Non-Expropriatory Breaches, Virtual, October 2021
- Open de Arbitraje, Latest developments in investment arbitration in the energy sector panel, Madrid, October 2021
- ICC Institute Advanced Level Training on Assessment of Damages by Arbitrators, September 2021
- Fifteenth Annual Investment Treaty Arbitration: A Debate & Discussion, May 2021
- CLE: Accounting for Lawyers. Three session seminar. Instructor – White & Case Global, Virtual, Spring 2020
- Lexology’s Mining Practice Guide, Third Edition. Authored chapter titled “Covid-19’s Impact on Mine Valuations”, January 2021
- DCBAR, International Arbitration Podcast, The Tea on Damages, December 2020.
- Little Open, Asociación Europea de Arbitraje. Panelist: La financiación de disputas por terceros: ¿Una solución para empresas y despachos post COVID19?, June 2020.
- Dissecting Federal Actions for Main Street, PESA Member Webinar, April 2020.
- Fordham International Arbitration Conference – New York, November 2019. Panelist: “Economic Issues in International Arbitration: A Primer.”
- CLE: Accounting for Lawyers. Instructor – White & Case, NY, October 2019.
- Latin Lawyer - GAR Live 3rd Annual Arbitration Summit – Miami, April 2019. Panelist: “Energy: changing states and evolving disputes.”
- International Chamber of Commerce - IX Congreso de Arbitraje Internacional - Costa Rica, March 2018. Panelist: “Arbitraje, infraestructura y desarrollo.”
- APEC Capacity Building Workshop on Investor-state Dispute Settlement (ISDS) Prevention and Management. Washington DC, Oct 2017. Panelist: “Compensation, Damages and Non-Pecuniary Remedies.”
- American University DC Area High School Ethics Bowl. Washington DC, December 2016. Judge.
- Investment Treaty Arbitration Seminar at American University. Washington DC, November 2014. Lecturer: “The Valuation of

International Investments and Other Damages Issues for Investor-State Arbitrations.”

Appendix 1 – Alexander Lee CV

POSITION

Director - AlixPartners, LLP, New York City

PROFESSIONAL HISTORY

Alexander Lee specializes in business valuation and damages quantification and has led teams over multiple jurisdictions in preparing expert reports for commercial and investor-state disputes. He works with counsel and technical experts to develop economic models that assess and quantify damages to communicate those opinions to stakeholders.

He has experience in a wide variety of industries including energy, mining, banking, commodities trading, and real estate development. He also provides transaction advisory services such as valuation and bid strategy analysis. He also has expertise in the assurance, tax, and forensic audit sectors.

Mr. Lee holds a Master of Accounting degree from the University of Waterloo. He is a Chartered Professional Accountant, Chartered Accountant, and Chartered Business Valuator.

EXPERIENCE AS NON-TESTIFYING EXPERT

Mr. Lee has been retained as the leading advisor and consultant non-testifying quantum and valuation expert in the following cases and administrative proceedings:

- *Confidential*; Engaged by an American insurance firm to provide advice on quantum matters in a claim brought by an American manufacturing company. The dispute related to a business interruption claim arising from broken machinery that Plaintiff was insured for. [Engaged by Defendant – Litigation - Manufacturing]
- *Confidential*; Engaged by American IT services firm in a commercial arbitration before AAA brought by an American manufacturer. Dispute related to a lost profits claim arising from a cyberattack. [Engaged by Respondent – Commercial Arbitration - Manufacturing]
- *Mt. Labo v. Galeo*; Engaged by an **Mt. Labo** to provide advice on quantum matters in a claim brought before SIAC. The dispute related to an investment in a copper and gold mine in Asia. [Engaged by Claimant – Commercial Arbitration - **Mining**]

RECOGNITIONS

- Listed in The International Who’s Who of Future Leaders 2022 – Expert Witnesses
- Listed in The International Who’s Who of Experts – Mining – Quantum of Damages 2022

SPEECHES /PUBLICATIONS /INSTRUCTION

- Lexology’s Mining Practice Guide, Fourth Edition. Authored chapter titled “Energy Transition and Covid-19 Disruptions”, January 2022
- CLE: Accounting for Lawyers. Seminar three. Instructor – White & Case Global, Virtual, June 2021
- Lexology’s Mining Practice Guide, Third Edition. Authored chapter titled “Covid-19’s Impact on Mine Valuations”, January 2021
- New York Dispute Resolution Lawyer. Authored article titled “Risky Business: The Consequences of Counting on Liability Alone”, Spring 2019

- Practical Law Practice Note. Authored article titled "Discounted Cash Flow", 2019
- Practical Law Practice Note. "Valuation Calculations in Litigation and Arbitration", 2017

Appendix 2 - Scope of Review

Item	Title
AP-0001	Visualizing the Life Cycle of a Mineral Discovery
AP-0002	Reddy, Rohan. Gold, Explained. Global X. 14 March 2019.
AP-0003	Pachas Perez, Diego. La exploración minera en el Perú: Un breve alcance sobre las principales autorizaciones para el desarrollo de exploración en el Perú. Derecho & Sociedad 42. 2014.
AP-0004	Hamilton, Adam. Junior Gold Producers. Mining.com. 1 October 2010.
AP-0005	CIM Definition Standards for Mineral Resources & Mineral Reserves.
AP-0006	BGS, Minerals UK. What is the difference between resources and reserves?
AP-0007	CIMVAL Standards (2019).
AP-0008	Lewis, William. Micon International Limited. Technical and Economic Evaluation of Mineral Deposits. 12 December 2019.
AP-0009	Boutillier, Robert. A Measure of the Social License to Operate for Infrastructure and Extractive Projects. 2017.
AP-0010	Boutillier, Robert. Modelling and Measuring the Social License to Operate: Fruits of a Dialogue Between Theory and Practice. 2011.
AP-0011	EY. Top 10 Business Risks and Opportunities – 2020.
AP-0012	KPMG. Mining Risk and Assurance – A Survival Strategy. 2014.
AP-0013	Deloitte. Execution risk: Stepping over 12 common hurdles. CFO Insights. January 2017.
AP-0014	Mazumdar, Joe. Fatal Flaws in the Junior Mining Sector. Exploration Insights.
AP-0015	O'Donnell, Oliver. PYX Resources. VSA Capital. 16 November 2021.
AP-0016	Nanda, Ramana, et al. Financing Risk and Innovation. Harvard Business School. 5 March 2014.
AP-0017	Planet Gold. Unlocking Finance for Artisanal and Small-Scale Gold Mining. A frontier Investment Sector. March 2020.
AP-0018	About the GIIN.
AP-0019	Lupaka. Condensed Interim Consolidated Financial Statements for the three and nine months ended September 30, 2021 and 2020
AP-0020	Canadian Dollar to US Dollar Spot Exchange Rates for 2012
AP-0021	AICPA. International Valuation Glossary – Business Valuation. 14 December 2020.
AP-0022	Organismo de Evaluación y Fiscalización Ambiental – OEFA. Resolución Directoral RD No. 02050-2019-OEFA/DFAI. 17 Diciembre 2019
AP-0023	Davis, Rachel and Daniel M. Franks. 2014. Costs of Company-Community Conflict in the Extractive Sector. Corporate Social Responsibility Initiative Report No. 66. Cambridge, MA: Harvard Kennedy School.
AP-0024	Rigaudeau, Baptiste, et al. Social License to Operate. JUS Mundi. 11 February 2022.
AP-0025	Bear Creek v. Peru, Award.
AP-0026	Credibility, Study of Damages Awards in Investor-State Cases, 2nd Edition, January 2021.
AP-0027	J.P. Morgan, Leaving LIBOR: A Landmark Transition.
AP-0028	CIMVAL Standards and Guidelines, February 2003.
AP-0029	Wooldridge, Jeffrey. Introductory Econometrics A Modern Approach. 5th Edition, 2012
AP-0030	Damodaran, Aswath. The Value of Control: Some General Propositions.
AP-0031	Damodaran, Aswath. Investment Valuation, Second Edition (Pre-Publication)
AP-0032	CapitalIQ. Lupaka's Daily Trading Volume and Shares Outstanding in 2019.
AP-0033	Hitchner, James R. Financial Valuation: Applications and Models.

AP-0034	Deloitte. IFRS 6 Exploration for and Evaluation of Mineral Resources.
AP-0035	Spooner, Jane. Mineral Property Valuation: Principles and Procedures 101. Micon, 2 March 2018
AP-0036	Pratt, Shannon. Valuing a Business, Fifth Edition.
AP-0037	Dr. Piet, Remi, et al. Latam Mining in 2020: The Good, The Bad and The Ugly.
AP-0038	Financial Post. OceanaGold Corp buys Romarco Inc for \$856 million, gains low-cost mine in low-risk area, 30 July 2015.
AP-0039	Atlantic Gold Corporation, Unaudited Condensed Interim Consolidated Financial Statements for the three months ended 31 March 2019 and 2018.
AP-0040	Goldcorp Inc., Form 40-F for the year ended 31 December 2018.
AP-0041	Tahoe Resources, Condensed Interim Consolidated Financial Statements for the three and nine months ended 30 September 2018 and 2017.
AP-0042	Randgold Resources Limited, Form 6-K.
AP-0043	Klondex Mines Ltd., Form 10-K for the year ended 31 December 2017.
AP-0044	Brio Gold, Consolidated Financial Statements as at 31 December 2017 and 2016.
AP-0045	Primero Mining Corp, Consolidated Financial Statements for the years ended 31 December 2017 and 2016.
AP-0046	AuRico Metals, Management's Discussion and Analysis for the three and nine months ended 31 September 2017.
AP-0047	Richmont Mines Inc., Report to Shareholders Q2 2017.
AP-0048	Avnel Gold Mining Limited, Unaudited Interim Consolidated Financial Statements for the three month period ended 31 March 2017.
AP-0049	Newmarket Gold, Q2 2016 Financial Results, 29 July 2016.
AP-0050	Claude Resources Inc., Consolidated Financial Statements, 31 December 2015.
AP-0051	Lake Shore Gold Corp, Form 40-F for the year ended 31 December 2015.
AP-0052	SAS St Andrew Goldfields Ltd., 2014 Annual Report, Letter to Shareholders from the President and CEO.
AP-0053	Polyus Gold International, Annual Report 2014.
AP-0054	NWM Mining Corporation, Condensed Consolidated Interim Financial Statements, 31 March 2015.
AP-0055	Alamos Gold Inc., First Quarter 2015 Report.
AP-0056	Rio Alto Mining Limited Consolidated Financial Statements for the years ended 31 December 2014 and 2013.
AP-0057	Rio Novo Gold Inc., Condensed Interim Consolidated Financial Statements for the three and nine months ended 30 September 2017.
AP-0058	Bison Gold Resources Inc., Financial Statements. 30 June 2017.
AP-0059	Kula Gold Limited 2016 Annual Report.
AP-0060	Rio Novo Gold Inc., Condensed Interim Consolidated Financial Statements for the three and six months ended 30 June 2016.
AP-0061	Goldrock Mines Corp, Consolidated Financial Statements for the three months ended 31 March 2016 and 2015.
AP-0062	Goldcorp Kaminak Condensed Consolidated Interim Financial Statements for the three months ended 31 March 2016 and 2015.
AP-0063	True Gold Mining Inc., Consolidated Financial Statements for the year ended 31 December 2015.
AP-0064	Romarco Minerals Inc., Condensed Consolidated Interim Financial Statements for the three and six months ended 30 June 2015.
Other Documents Relied Upon	
Legal document	Claimant's Request for Arbitration dated 21 October 2020
Legal document	Claimant's Memorial dated 1 October 2021
Legal document	Respondent's Memorial dated 24 March 2022

Legal document	Witness Statement of Gordon Ellis dated 1 October 2021
Legal document	Witness Statement of Julio Félix Castañeda Mondragón dated 1 October 2021
Legal Document	Witness Statement of Luis Miguel Incháustegui dated 6 March 2022
C-0008	EIA
C-0035	Invicta Gold Project Optimized Feasibility Study. July 2010
C-0044	Pre-Padi Forward Gold Purchase Agreement dated 30 June 2016
C-0048	Draft Mallay Purchase Agreement between Buenaventura and IMC
C-0050	Amendment and Waiver No. 3 to the Second Amended and Restated Pre-Paid Forward Gold Purchase Agreement
C-0051	Lupaka Board Meeting Minutes, 27 September 2018
C-0058	Technical Report on Resources, Invicta Project, SRK Consulting, 6 April 2012
R-0004	General Mining Law
R-0005	Civil Code of Peru, 24 July 1984
R-0166	Map of the Concession, and Access Roads, 17 March 2022
AC-0002	SRK Consulting PEA dated 13 April 2018
AC-0003	Lupaka Gold Corp. financial statements for the year ended 31 December 2018
AC-0004	Second Amended and Restated Pre-Paid Gold Purchase Agreement dated 2 August 2017
AC-0005	Lupaka presentation Invicta Mining Suite for Difference dated September 2019
AC-0010	Invicta Project Monthly Report dated October 2018
AC-0015	Red Cloud Model
AC-0029	SRK Model
AC-0048	Lupaka Gold Corp. 2012 Annual Report