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Expert Technical Report of SRK Consulting

October 6, 2015

Expert Report of Neal Rigby

Bear Creek Mining Corporation v. Republic of Peru ICSID Arbitration

Report Prepared by

srk consulting

SRK Consulting (U.S.), Inc.
SRK Project Number 477900.010
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1 Statement of Qualifications and Mandate

1.1 Qualifications

1. I, Neal Rigby, am a mining engineer with over 40 years of experience in the international mining industry. I began working for SRK Consulting, Inc. (SRK) starting in 1978 and served as the SRK Global Group Chairman for 15 years (1995-2010). SRK comprises over 1,600 professionals internationally in 50 permanent staffed offices in 23 countries on six continents, offering expertise in a wide range of mineral resource and engineering disciplines. SRK has undertaken independent assessments of resources and reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. SRK has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs including environmental and social impact assessments to comply with international standards.

2. The major focus of my consulting work for the past 25 years has been as a senior participant in major due diligence audits and reports supporting the rationalization, merger, disposal, and acquisition activities of international mining companies and mining finance institutions. As such, I have frequently evaluated the "bankability", *i.e.* the fundamental value, risks and opportunities of mining projects on behalf of financial institutions and other clients. I have undertaken projects in over 50 countries, including numerous gold and copper mining projects in Central America.

1.2 Terms of Reference

3. I was retained by Sidley Austin LLP (Sidley) to review, analyze and render considered opinions on a technical mining report from RPA and the damages report from FTI regarding the Corani and Santa Ana properties (The Projects), located in the country of Peru. This work and the opinions rendered herein are provided to inform the arbitration proceedings before the International Centre for Settlement of Investment Disputes (ICSID Case No. ARB/14/12). The scope of service requested by Sidley is within my experience and qualifications. A copy of my curriculum vitae (CV) is attached hereto as Appendix 1.

4. Neither SRK's nor my compensation is contingent upon the conclusions reached or ultimate resolution of this arbitration.

1.3 Sources of Information

5. A complete list of documents that I have relied upon as the basis for these opinions is attached hereto as Appendix 2.

2 Executive Summary

6. SRK has examined the various feasibility studies undertaken on the Santa Ana and Corani Projects and the RPA report entitled "Technical Report of the Santa Ana Project and Corani Project, Puno, Peru."

7. We summarize our findings below and discuss them in further detail within the context of this report.

Santa Ana Project

8. I believe that each of the mineral resource and reserve estimates upon which Bear Creek and its valuation experts (FTI) relied is overstated and quite substantially so. I conclude this because I reject the methodology applied by RPA in estimating these Mineral Resources and Mineral Reserves.

9. Specifically, RPA applied the wrong cut-off grade, *i.e*., the minimum ore concentration necessary for economic mining, when it determined the reserve and resource estimates for the RPA Revised Base Case and RPA Extended Case. Had RPA used an appropriate cut-off grade, the mineral reserve and resource estimates would have been considerably lower, as I demonstrate in this report. This, of course, would have reduced the value of the Santa Ana project.

10. I also disagree with RPA's use of a silver price of US$16.50/Oz and believe the US$13/Oz price used in the Updated Feasibility Study (FSU) was the correct price to apply at the time for the purposes of mine planning and design. RPA's use of a higher silver price overstates Santa Ana's Mineral Reserves and value.

11. In addition, I disagree with RPA's use of a contract mining cost of US$2.10 per tonne (/t) of material mined. I consider that a cost of US$2.50/t mined to have been more realistic at the time, given the relatively modest scale of the project and the difficult high Andes operating environment. The cost of US$2.50/t is at the upper end of the range suggested by RPA. Increasing mining costs would have lowered margins and reduced Santa Ana's value.

12. Furthermore, I disagree with RPA's use of a silver metallurgical recovery factor of 75%. The recovery factor RPA proposes was determined in a laboratory environment using more finely crushed ore samples. It is extremely difficult, if not impossible, to re-create field conditions in the laboratory. It is a prudent industry rule of thumb to deduct several percentage points of recovery (typically 3-5%) and to lengthen the metallurgical recovery time by approximately 30% from those determined in the laboratory. Making these adjustments would have reduced the profitability of the Santa Ana Project further.

13. Finally, I disagree with the construction and ramp-up schedule as presented in the RPA report and consider that had the Santa Ana Project proceeded, it would have taken at least a further twelve months to first silver production and potentially much longer. In addition to longer metallurgical processing and recovery times, I believe there was potential for delays due to outstanding permitting issues, social license to operate issues and procurement, logistics and construction issues due to a high Andes operating environment.

14. In sum, RPA makes a host of erroneous statements regarding Santa Ana, each of which serves to improperly inflate Santa Ana's value.

Corani Project

15. I consider the RPA technical review of the Corani Project to be high level (RPA's own words) and in many respects too superficial to be of use in these arbitration proceedings.

16. As with the Santa Ana Project, I consider the mineral resources and mineral reserves that Bear Creek projected for the Corani Project to have been overstated, and materially so. SRK undertook a re-estimation of the mineral resources and mineral reserves based on the information it received, and determined a mineral resource estimate for

Corani that was more than 35% below Bear Creek's estimate, and a mineral reserve estimate that was more than 24% lower. Applying these smaller resource and reserve estimates of course lowers the value of the Corani project.

17. In addition; the metals prices for silver, zinc and lead used to determine a net smelter return (NSR) cut-off for the estimation of mineral resources were much too high. This resulted in a grossly over-inflated mineral resource tonnage. What is potentially worse is the fact that at these high metals prices, the average grades for silver, zinc and lead in the mineral resources are so low that it may not be possible to produce marketable zinc and lead concentrates that global smelters and refiners would accept. This would disqualify this material from being classified as mineral resources further reducing the value of the Corani Project.

18. I also note that RPA makes several statements regarding not being provided with fundamentally important data and information for mineral resource estimation, and about not knowing certain statistics and search parameters. Yet, RPA goes on to state that it "was able to confirm the grades and tonnages of the mineral resource estimate as reported by GRE." With the absence of data and information so fundamental to mineral resource estimation, neither RPA nor anyone else could have confirmed the grades and tonnages of the mineral resource at Corani.

19. In addition, I note that, unlike Santa Ana, Corani will use owner mining (not contractors). The 2011 Feasibility Study projected a mining cost of US$1.34/t of material mined. I consider this to be too low and would recommend a mining cost of US$1.75/t mined, which would have been a more appropriate figure for mid-2011. While the annual tonnages to be mined are much larger at Corani than at Santa Ana, and some economies of scale could be expected, the high Andes operating environment would still present equipment and worker productivity challenges leading to higher mining costs. I note that the Corani Project is located at an altitude several hundred meters higher than the Santa Ana Project. The upward adjustment to mining costs that I recommend would further lower the profitability of the Corani Project.

20. The metallurgical testwork was undertaken on samples that were much higher grade than the average grade of the orebody with the potential to overstate metal recoveries. This is particularly relevant to the silver recovery in the lead concentrate. SRK therefore capped the silver recovery in the lead concentrate to 55%.

21. Finally, like Santa Ana, Corani could face similar issues with permitting, social license to operate (SLTO), procurement, logistics and construction challenges in a high Andes operating environment. I would therefore adjust RPA's proposed timeline to include an additional twelve months to first metal production and potentially much longer.

22. As was the case with Santa Ana, RPA made a series of serious errors in its analysis of the Corani Project. Once again, each of these errors serves to inflate the value of the asset to Bear Creek's benefit.

3 Overview of the Mining Lifecycle

23. An essential task for modern mining is the responsible exploration and economic extraction of minerals with minimal damage to the environment that provides benefit not only to the mining company, but also the local society in which the company operates. Mining projects go through several stages of evaluation, design and implementation and development before they can become operating mines. Generally, the mining life cycle may be divided into the following stages – exploration, evaluation and design, construction, extraction and processing, mine closure and reclamation.

3.1 Exploration

24. The process starts with the exploration phase whereby a mineral prospect is identified and various exploration techniques are applied to delineate the location and quantity of the mineral resources in the ground. Exploration techniques applied typically include remote sensing, geological mapping, geophysics, geochemistry, stream sediment sampling, rock outcrop sampling and ultimately drilling and bulk ore sampling.

25. Drilling is typically the last step in the exploration process whereby samples of rock beneath the earth's surface containing the minerals of economic interest are obtained and assayed (chemically analyzed) in an effort to accurately determine the size of the mineral deposit and metals content. The drilling is typically conducted on a predetermined geometrical grid and various statistical and geostatistical techniques are applied to establish the spatial relationship between drillhole samples in order to demarcate the distribution of the ore grades in the deposit. The results from the drilling and metallurgical assaying (i.e. the process for determining the precious and base metal content in the ore samples) together comprise the drillhole database.

26. From the drillhole database, a geological block model is produced. The geological block model is comprised of rectangular blocks that are each assigned a rock tonnage based on density determinations and a metal grade, which has been derived from interpolation of the assay grades in the drillhole database. The block model is used to estimate the mineral resource[1] and is typically reported as a rock tonnage and a suite of average metal grades. The mineral resources are then classified, in order of decreasing geological confidence, as either: Measured[2], Indicated[3] or Inferred[4] based on the geological certainty and estimation accuracy. This relationship is excerpted in the figure below from the CIM Definition Standards for Mineral Resources and Reserves, a standard guide to mineral resource and reserve measurement.

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[1] A Mineral Resource is "a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge." Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource. See, CIM Definition Standards for Mineral Resources and Reserves.

[2] Measured Mineral Resource' is "that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity." See, CIM Definition Standards for Mineral Resources and Reserves.

[3] An 'Indicated Mineral Resource' is "that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed." See, CIM Definition Standards for Mineral Resources and Reserves.

[4] An 'Inferred Mineral Resource' is "that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes." See, CIM Definition Standards for Mineral Resources and Reserves.

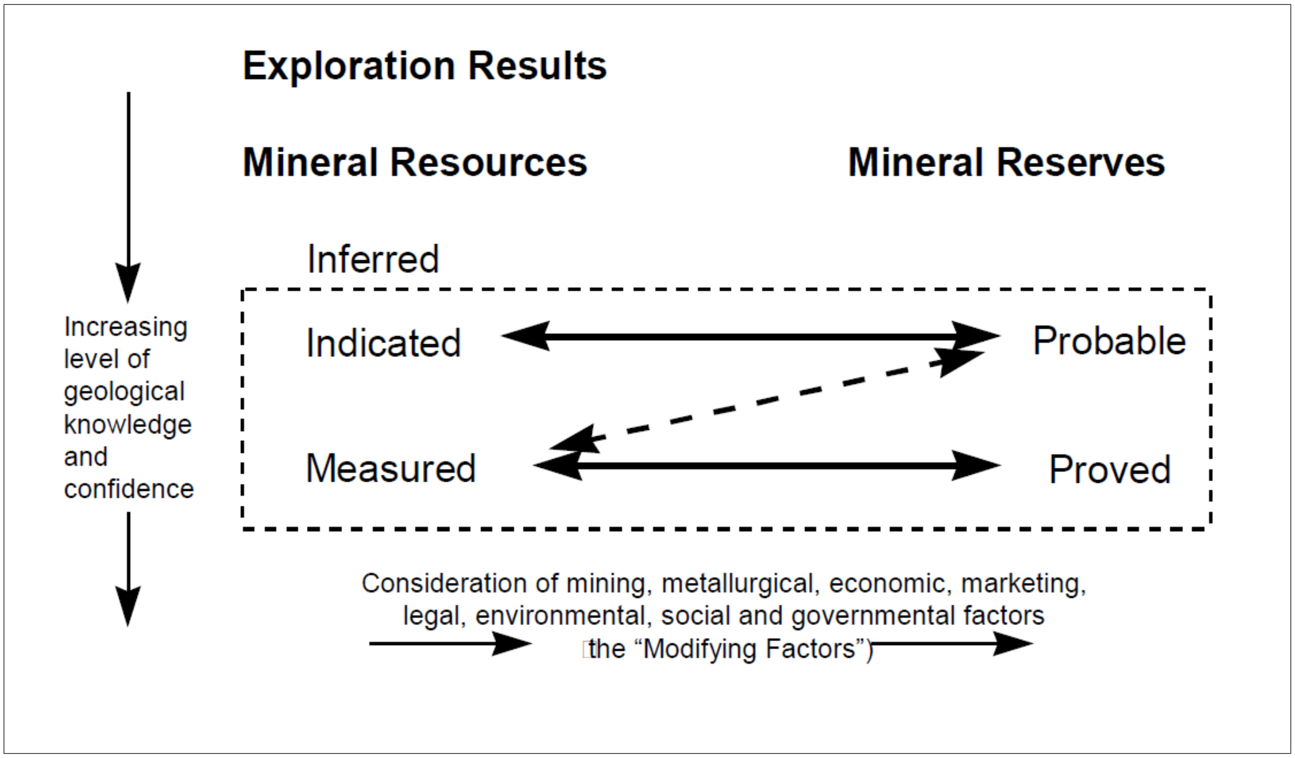


Figure 3-1: Relationship between Mineral Resources and Mineral Reserves[5]

3.2 Evaluation and Design

27. The geological block model usually contains fundamental data that underpins the assumptions regarding resource and reserve estimates and the size of the deposit, which in turn informs future mine design and planning. The model is typically imported into various mine design and pit optimization software which produce mine plans and production schedules designed to simulate the mining process. Design criteria and operating assumptions are applied to the pit optimization process to predict what would likely happen in an operating mine.

28. The evaluation and design process goes through various phases of study from conceptual or scoping, through preliminary feasibility, and final feasibility. These studies are in order of increasing certainty and accuracy as more investigations and testwork programs are completed and designs are refined. Basic engineering is undertaken for prefeasibility and feasibility studies and a proportion of detailed engineering is undertaken for feasibility studies. The accuracy of these studies can vary depending on the quality of input data, the level of detailed engineering completed, and other factors.

29. It merits reference here that very few exploration prospects advance to the status of Proven and Probable Reserves for purposes of CIM definition standards. Indeed several practitioners suggest that less than one in a thousand exploration prospects advance to reserve classification, and ultimately to operating mines.

30. Once evaluation and design is concluded, the focus shifts to final project design, construction and implementation. Throughout the evaluation and design process, a substantial body of work needs to be completed on environmental and social issues. Consultations with local authorities and communities on the environmental and social aspects

[5] CRIRSCO International Reporting Template, July 2006, Figure 1, pg. 7 (SRK-001)

related to the Project and environmental and social baseline studies (defining the state of the receiving environment) must be conducted in order to prepare an Environmental and Social Impact Assessment ("ESIA") report on the Project.

31. In addition, a suitably qualified environmental consulting firm is typically retained to devise an Environmental Management Plan ("EMP") to minimize and mitigate adverse impacts that may arise during the construction, operation and decommissioning of a project.

32. Throughout this period, various regulatory permit applications will be prepared and permit procurement will be sought. The procurement of necessary permits, licenses and consents is typically a condition precedent to securing external financing for mine development. At a minimum, lenders would almost certainly require all permits, licenses and consents to be in place prior to first loan drawdown.

33. If the sponsor of a mining project believes the project will achieve attractive returns on the capital cost or investment, and that financing can be arranged, the sponsor may decide to proceed with the project. In silver mining, the determination of an economic cutoff grade (i.e., level of contained mineral in an ore below which it is not economically viable to mine and process) is essential to determining whether to proceed to the construction phase. The cutoff grade itself is a function of the operating costs and revenue associated with mining, processing and product sale. In order to build a mine, the mineral deposit must be valuable enough to pay for the costs of design and construction (i.e., capital costs), the costs of mine operation (i.e., operating costs), and for mine closure and reclamation costs while generating an acceptable return on the capital invested, by way of a profit stream.

3.3 Construction

34. The construction phase is typically intense with potentially several hundred or over a thousand people being involved. This requires very comprehensive project management and reporting systems and great attention to detail. In a typical project, it is standard to prepare and submit bid and tender documents for the multitude of procurement, construction and installation contracts. The bid and tender system is critical to ensuring that the mining company will utilize independent sub-contractors and that their prices will reflect competition and downward pressure, as opposed to cost-inflation and overpayment.

35. In parallel with the various construction activities on the site, all of the plant and equipment items for the mine, ore processing facility, and infrastructure would undergo international procurement from an expansive range of suppliers and vendors. Delivery timelines have to be established and shipping and freight logistics put in place. Port arrival and customs release procedures have to be set up to help minimize delays in customs clearance, which is typically followed by road and/or rail transport to the mine site. This requires the preparation of bid/tender documents with tight technical specifications, adjudication of bids and contract award.

3.4 Commissioning & Ramp-up

36. Once the various elements of the project are constructed, a phase of testing known as commissioning (*i.e.*, first operations) and ramp-up (*i.e.*, progressive buildup in mine production and plant throughput) is conducted. Various operational tests are typically performed to refine the production process. Design deficiencies between the project components are addressed, the connections between components are established (*i.e.*, tie-ins) and the whole project becomes an integrated process for the first time. For some projects commissioning and ramp-up goes reasonably smoothly with relatively minor problems to address. For others more serious problems occur which take longer to resolve and could incur additional delays and capital cost overruns. The quality and experience of the management team and Engineering, Procurement and Construction Management (EPCM) contractors are critical during this phase, as they will need to address any issues that may arise, effectively and in a timely manner.

37. The commissioning, ramp-up and early operating experience at a new mine is a critical time in a mine's life. For the first time mine operators start to understand what the real orebody is as the processing plant receives its first ore feed from the mine. During this period, refinements to operating procedures and criteria are made in response to varying characteristics of the orebody, process plant feed and project component performance. Blending procedures for different ore types which previously were largely assumptions or estimates are refined on the basis of real ore characteristics and grade control data from the mine. The geological and resource models are adjusted to reflect the real orebody and reconciliation data between resource, mine and mill.

3.5 Production

38. A mine is a dynamic environment which has to be tightly managed, particularly at the production stage. During the operating life of a mine there will be unforeseen events or challenges and external factors, which will need to be managed. Equipment may have to be modified or changed and operating procedures may have to be amended based on operating experience. External factors such as changing metals prices, VAT charges and currency exchange rate fluctuations will have to be factored into the operating plans and budgets. To address such changes, most mines embark on an annual life of mine ("LoM") planning exercise typically undertaken several months before the start of the new financial year. The LoM Plan ("LoMP") accommodates operating experience, changing operating parameters, changing metals prices and resource depletion and replacement. Equipment used in the mine and process plant will have to be repaired, rebuilt and ultimately replaced during the mine life. Additional factors affecting the operation of the mine include how well the actual operating environment and criteria were estimated or developed at the feasibility phase, the quality and performance of management and the workforce, prevailing external factors, and metal prices.

39. Before a mining property reaches the production stage, it can typically take many years from the time of discovery of a mineralized target. In general, mine production involves the extraction of ore, processing and separation of minerals from that ore, disposal of waste, as well as the refinement and shipment of the processed minerals.

40. Mining of ore or waste involves first the drilling of vertical blastholes on a rectangular grid. The blastholes are charged with explosives and the rock is blasted. The blasted rock is loaded onto haul trucks by electro hydraulic shovels and hauled to either (i) the primary crusher in the case of hard rock ore, or (ii) the waste rock dumps in the case of waste. The hard rock ore is then crushed in the primary crusher from where it is transported by overland conveyor to a crushed ore stockpile located adjacent to the processing plant.[6]

41. Processing of the ore itself, may take numerous different forms depending on the type of mineral being mined and processed, and sophistication of the technology.

3.6 Closure

42. When the economic ore in the mine is exhausted or depleted the mine enters the closure phase. Although mine closure is the last phase of the mining lifecycle, it can last for several years. Long term remediation and rehabilitation may be required depending on the particular circumstances of the mine and the characteristics of the ore, tailings and waste materials, and post closure water quality. Closure and remediation is typically defined by a Mine Closure Plan with costs allocated to remediation. The Mine Closure Plan records the mine closure objectives, activities during the closure process and any on-going activities post closure.

[6] http://en.wikipedia.org/wiki/Merrill-Crowe_process (SRK-008)

43. Planning for closure is an ongoing process throughout the life cycle of the mine and cannot be left until the end of operations. For these reasons, regulatory authorities review closure plans at the permitting stages, because they do not wish to permit the initiation of mining activities without a high degree of confidence that the mine can physically and economically be closed without long term adverse effects to the community or the environment. Regulators typically need some form of assurance that the costs for mine closure have been reasonably estimated and are or will be adequately funded.

3.7 Mine Reclamation

44. Once closure plans have been developed and a decision made to close the facilities then all physical facilities are decommissioned, dismantled and removed from site. All mobile equipment is also removed from the site. In some cases, the equipment reverts to the host state under mining laws or the terms of the concession. Depending on the closure objectives tailings dams may be left as is or also rehabilitated with topsoil and vegetation cover.

4 Conversion of Mineral Resources to Reserves

4.1 Mineral Resource and Reserve Reporting Standards

45. Developing and maintaining international standards for the reporting of Mineral Reserves, Mineral Resources and Exploration Results is important. With an increasingly globalized mining industry, the commodity wealth of countries is attracting strong political attention and the impact that minerals extraction has on the financial, accounting and investment communities, the need for common terminology and understanding across country boundaries and language barriers has never been greater.

4.2 Reporting Standards

46. The historical evolution of reporting standards over the past 100 years or so inevitably reflects the varied influence of governmental institutions striving to derive a 'precise' standard, and professional institutions seeking to establish a technical basis for comparative assessments. From the 1990s onwards, the influences of the financial community, specifically regulatory bodies which govern the operation of international stock exchanges, has shaped both reporting standards as well as the requirements for on-going disclosure, capital raising and other related transactions.

47. The prevalence of reporting standards therefore necessitated a means for establishing direct comparison/translation between one standard and another. Accordingly the establishment of the Combined Reserves International Reporting Standards Committee ("CRIRSCO": www.crirsco.com) in 1994 under the auspices of the Council of Mining and Metallurgical Institutions ("CMMI")[7] led to the development of the CRIRSCO International Reporting Template, first published in 2006[8]. This is a document that represents the best of the CRIRSCO-style codes: reporting standards that are recognized and adopted world-wide for market-related reporting and financial investment. Accordingly any standard as developed by national reporting organizations which has been mapped

[7] Since 1994, the Council of Mining and Metallurgical Institutions (CMMI) has been working to create a set of standard international definitions for reporting Mineral Resources and Mineral Reserves, modelled on the existing JORC Code (the Australasian Code for Reporting of Mineral Resources and Ore Reserves). An ad-hoc CMMI Mineral Resources/Reserves International Reporting Standards Committee (CMMI – CRIRSCO) was formed, with representatives from mining and metallurgical institutions from the United States (SME), Australia (AusIMM - JORC), Canada (CIM), the United Kingdom (IMM, now the IMMM) and South Africa (SAIMM). Concurrently, and since 1992, the United Nations Economic Commission for Europe (UN-ECE) has been developing an International Framework Classification for Reserves/Resources - Solid Fuels and Mineral Commodities (the UNFC). In 1997, the CMMI - CRIRSCO reached a provisional agreement (the Denver Accord) on definitions of Mineral Resources and Mineral Reserves. At a joint meeting in Geneva in 1998 between the CMMI – CRIRSCO and the UN-ECE Task Force, agreement was reached to incorporate the CMMI – CRIRSCO standard reporting definitions for Mineral Resources and Mineral Reserves into the UNFC, thus giving truly international status to the CMMI – CRIRSCO definitions. ICMM Responsible Reporting of Mineral Assets, April 2013, pg 3. (SRK-003).
[8] CRIRSCO (Committee for Mineral Reserves International Reporting Standards) International Reporting Template, July 2006 (SRK-001).

against the CRIRSCO International Reporting Template may be defined as an Internationally Recognized Reporting Code ("IRRC").

48. The CRIRSCO International Reporting Template is also recognized by global organizations such as the International Accounting Standards Board ("IASB")[9], the United Nations Economic Commission for Europe ("UNECE")[10] and the International Council of Mining and Metals ("ICMM")[11], the latter is the key international organization representing the mining industry on issues relating to the classification and reporting of mineral assets.

4.3 Key Concepts

49. Reporting of Mineral Resources and Ore (Mineral) Reserves in accordance with an IRRC requires that the reporting party be a member of specific professional institutions that include an enforceable code of ethics within their articles of association. Accordingly each IRRC publishes from time to time a complete list of professional institutions in which membership thereof is acceptable for a reporting person under each IRRC separately. IRRC also endorses the principle of the Recognized Overseas Professional Organization ("ROPO")[12] system.

50. A further consideration which is unique to the minerals sector and so far, to the IRRCs, is that of the "Competent Person" or "Qualified Person". All of the IRRCs are based on principles that are designed to apply across commodities and throughout the development process of a mine from exploration through to production. Effective implementation of these reporting systems requires skilled and experienced people that can apply the mechanical parts of estimation while thinking clearly about the logic and the uncertainties in the process. Competent Persons or Qualified Persons must have a minimum of 5 years' experience relevant to the style of mineralization and type of deposit under consideration and, as mentioned above, be members of professional bodies with enforceable rules of conduct.

51. With respect to the requirements and responsibilities of the Competent or Qualified Person, the IRRCs respectively define the requirements for the core principles including competency, transparency and materiality. In this respect, authors are referred to the respective IRRC, specifically with respect to minimum competency requirements.

52. Accordingly the key considerations for mapping national reporting standards to the CRIRSCO International Reporting Template[13] are the embodiment of the following key concepts:

- Definition of a competent person and/or qualified person;

[9] The International Accounting Standards Board (IASB) is an independent, private-sector body that develops and approves International Financial Reporting Standards (IFRSs). The IASB operates under the oversight of the IFRS Foundation. The IASB was formed in 2001 to replace the International Accounting Standards Committee.

[10] http://www.unece.org/#, Report of the Task Force on Mapping of the United Nations Framework Classification for Fossil Energy and Mineral Resources, UNECE Ad Hoc Group of Experts on Harmonization of Fossil Energy and Mineral Resources Terminology, May 16, 2008 (SRK-002).

[11] http://www.icmm.com/ International Council on Mining & Metals. ICMM is a CEO-led industry group that addresses key priorities and emerging issues within the sector. It seeks to play a leading role by promoting good practice and improved performance internationally and across different commodities. ICMM provides a platform for industry and other key stakeholders to share challenges and develop solutions based on sound science and the principles of sustainable development. Its vision is for a respected mining and metals industry that is widely recognized as essential for society and as a key contributor to sustainable development. ICMM Responsible reporting of mineral assets, April 2013 (SRK-003).

[12] http://www.jorc.org/ropo.htm. Recognized Overseas Professional Organization ("ROPO") (SRK-004). JORC and its parents formed a ROPO Taskforce which prepared a list of criteria, signed off by the ASX, that ROPOs would need to satisfy to be recognized. A "recognized overseas professional organization" must:

1. *be a self-regulatory organization covering professionals in the mining and/or exploration industry;*
2. *admit members primarily on the basis of their academic qualifications and experience;*
3. *require compliance with the professional standards of competence and ethics established by the organization; and*
4. *have disciplinary powers, including the power to suspend or expel a member.*

[13] CRIRSCO (Committee for Mineral Reserves International Reporting Standards) International Reporting Template, July 2006 (SRK-001).

- Membership of recognized professional institutions which have an enforceable Code of Ethics;
- Reciprocity, specifically with respect to recognized overseas professional organizations; and
- Quality as reflected by the defining core principles of competency, transparency and materiality.

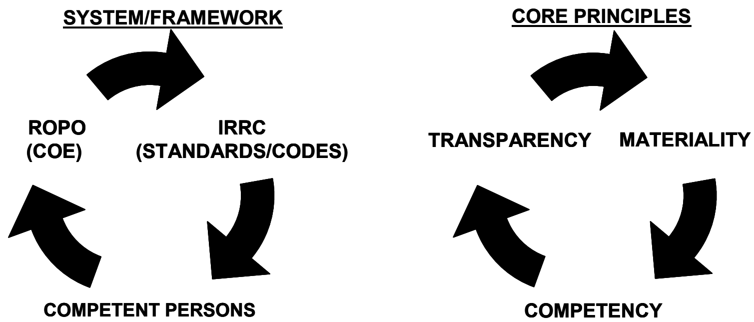


Figure 4-1: Internationally Recognized Reporting Codes

4.4 International Recognized Reporting Codes

53. The following reporting standards have all been mapped to the CRIRSCO International Reporting Template:

- The JORC Code (2012)[14];
- The SAMREC Code (2007)[15];
- The CIM Guidelines (2010)[16];
- The SME Code (2007)[17];
- The PERC Code (2013)[18];
- The Chile Code (2004)[19];
- The NAEN Code (2011)[20]; and
- The Peru Code (2003)[21].

54. Whilst the IRRCs have been largely incorporated within the listing requirements of various international stock exchanges, there also remain certain, standards which are in force, but not mapped to the CRIRSCO template. A

[14] http://www.jorc.org/. The JORC Code 2012. The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (SRK-005).
[15] http//www.samcode.co.za. The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves published by the South African Mineral Resource Committee under the joint auspices of the Southern African Institute of Mining and Metallurgy and the Geological Society of South Africa, 2007, as amended July 2009 (SRK-007).
[16] http//www.cim.org. The CIM Guidelines, 2010 are the various standards and guidelines published and maintained by the Canadian Institute of Mining, Metallurgy and Petroleum, CIM Definition Standards, November 27, 2010 (SRK-017). CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines, 5/30/2003-adopted 11/23/2003 (SRK-009). CIM Exploration Best Practices Guidelines (SRK-010).
[17] http://www.smenet.org/. A Guide for Reporting Mineral Exploration Information, Mineral Resources and Mineral Reserves prepared by the US Society for Mining, Metallurgy and Exploration, The 2007 SME Guide, 9/29/2007 (SRK-011).
[18] The Pan European Resources Code jointly published by the UK Institute of Materials, Minerals, and Mining, the European Federation of Geologists, the Geological Society, and the Institute of Geologists of Ireland. PERC Reporting Standard 2013 (SRK-012).
[19] http//www.minmineria.cl. The Mineral Resources Committee of the Institution of Mining Engineers of Chile (IIMCh), December 2004 Code for the Certification of Exploration Prospects, Mineral Resources and Ore Reserves as published by the Instituto de Ingenieros de Minas de Chile (SRK-013).
[20] Russian Code for the Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves prepared by the National Association for Subsoil Examination (“NAEN”) and the Society of Russian Experts on Subsoil Use (“OERN”). Russian Code for the Public Reporting of Exploration Results, Mineral Resources, Mineral Reserves (NAEN Code), 2011 (SRK-014).
[21] http://www.bvl.com.pe. A Code for reporting on Mineral Resources and Ore Reserves, established by the Joint Committee of the Venture Capital Segment of the Lima Stock Exchange (SRK-015).

notable example is the United States Securities and Exchange Commission ("SEC") Industry Guide 7 ("IG7")[22] including the terms and definitions as published in IG7 by the SEC in 2001.

4.5 Technical Study Standards

4.5.1 Introduction

55. The following section includes a broad summary of the typical types of technical study completed in respect of mineral assets as they progress through each development stage. Technical information expected in respect of exploration properties are discussed separately: this is generally focused on the development of exploration programs comprising: activities; schedules; and associated expenditures which are deemed warranted given the available geological information.

4.6 Technical Studies

56. The development of international technical study standards has to some degree lagged behind the more formal and structured processes established for development of Mineral Resource and Reserve reporting standards. Nevertheless, common usage has established common terminology where progression from conceptual/scoping, through pre-feasibility to feasibility largely parallels the development stage as the extent and influence of site specific information and level of engineering increases. Furthermore, and largely owing to an apparently broad spectrum for feasibility studies and the need for differentiation for project finance considerations, recent developments introduced the concepts of 'definitive feasibility studies' and/or 'bankable feasibility studies'.

57. The principal technical criteria to be addressed in the development of mineral assets, albeit to appropriate and different levels at each development stage, are noted in Table 4-1 below.

Table 4-1: Technical Study: Key Criteria Status

•Exploration •Geology and Mineral Resources •Mining Geotechnical •Hydrogeology/Hydrology •Mining Engineering •Mineral/Metallurgical Processing •Waste Management Facilities •Infrastructure and Services (mine-site) •Infrastructure (transport corridor/port)	•Human Resources •Occupational Health and Safety •Environmental and Social •Project Execution •Operating Expenditure •Capital Expenditure •Marketing •Legal (ownership, tenure, approvals) •Financial Analysis and Funding

58. Table 4-2 gives the definitions of the various Technical Studies as derived from various International Reporting Codes, for example, CIM and NI 43-101.

[22] United States Securities and Exchange Commission (SEC) Industry Guide 7 (IG7): Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations, 2001 (SRK-016).

Table 4-2: Typical Technical Study Definitions

Technical Study	Definition
Operation	A Life-of-Mine plan ("**LoMP**"), the scope of which is multi-disciplinary in nature, the foundations of which comprise: the annual Mineral Resource and Ore Reserve statements; mine to mill to saleable product production schedules; annual operating budgets; activity and element based operating expenditures; detailed on-going and project capital expenditure requirements; an integrated financial model to establish as a minimum post-tax pre-finance schedules In addition it is expected that the base case encompasses depletion of the Ore Reserves as well as all necessary considerations for additional infrastructure requirements, inter alia: waste deposition (mine waste and process plant residue); water management (dewatering/water treatment); off-mine infrastructure (transport corridors and port facilities); and mine closure considerations
EPCM Construction Commissioning	**Commissioning and turn-over to operations**: Vendor representatives and field engineering personnel take part in the formal completion of the project including proof of operability testing and acceptance by the Owner that the project construction and performance is as per the design and that t meets the required plant performance and safety requirements In parallel, the final operating control programs are completed, installed, and tested All final project information including final design packages, as-built drawings, contract packages and contract close-out documents, operations and maintenance manuals for equipment, quality assurance/quality control records, commissioning records, etc are assembled and formally turned over to the Owner **Site Construction**: During the course of construction, "home office" and field engineering will address construction change and drawing/specification clarification issues which arise during the course of construction, carry out inspections to confirm that construction is as per the design, and confirm adherence to appropriate quality control practices Site engineers may also be required to confirm appropriate as-built records are kept, assemble records of vendor documents (installation instructions, operating manuals, maintenance manuals), and other construction control activities **Detailed Engineering:** This stage includes completion of detailed designs based on the project scope and concept designs approved in the Feasibility Study, and the issuing of "for construction" designs, provision of construction and equipment specifications, scope of work packages for contract documents, definition of and procedures for construction quality control, etc The purchase of key plant equipment often occurs prior to or in parallel with this stage of design, as vendor drawings for equipment are required in order to complete the detailed engineering designs
Feasibility Study	A comprehensive study of a mineral deposit in which all geological, engineering, legal, operating, economic, social, environmental and other relevant factors are considered in sufficient detail so that it could reasonably serve as the basis for a final decision by a financial institution to finance the development of the deposit for mineral production For the avoidance of doubt, this would commonly ensure that the technical feasibility and economic viability of the mineral deposit has been demonstrated on a multi-disciplinary basis to what is commonly known as "bankable standards" In a Feasibility Study the declaration of Reserves would be expected and the economic viability of the mineral deposit could be demonstrated with sole eliance on the depletion of the Ore Reserves without inclusion of Mineral Resources In parallel to the development of the Feasibility Study it is normally expected that an Environmental and Social Impact Study would have been completed Typical contingencies included within the capital expenditure estimate range between 10% and 15% and accuracy ranges are typically ±15%
Pre-Feasibility Study	A comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral processing has been determined, and ncludes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors which are sufficient for a qualified person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Reserve For the avoidance of doubt this would commonly ensure that the technical feasibility and economic viability of the mineral project has been demonstrated on a multi-disciplinary basis to PFS levels and accordingly the declaration of Reserves would be expected SRK notes that such studies are not normally dependent on Inferred Mineral Resources to demonstrate economic viability and generally nclude appropriate contingencies (± 20% to 25%) with respect to capital expenditures to account for the lower amount of site specific engineering designs completed compared to that normally included in a Feasibility Study Furthermore it is also general industry practice to acknowledge that such studies in reflecting a lower degree of accuracy are accompanied by higher accuracy/sensitivity ranges (±20%) Key deliverables of a Pre-Feasibility Study would include a recommendation of a single and sufficiently positive technical and economic outcome such that advancement to Feasibility-Study level is warranted
Scoping study	A study that includes an economic analysis of the potential viability of mineral resources taken at an early stage of the project prior to the completion of a PFS A Scoping Study may be based on Measured, Indicated, or Inferred Mineral resources or a combination of any of these and include disclosure of forecast mine production rates and may contain capital costs to develop and sustain the mining operation, operating costs For the avoidance of doubt a Scoping Study would seek to establish the mining method and process route to establish the nature and scale of the mineral project A Scoping Study would have limited site specific data in respect of key operating assumptions and would only address certain disciplines on a high level fatal flaw basis Both the contingency (>30%) and accuracy/sensitivity (±30%) associated with key assumptions are generally higher than that assumed for PFSs Key deliverables of a Scoping Study would include the determination of sufficiently positive technical and economic outcomes such that advancement to PFS level is warranted A Scoping Study is preliminary in nature, in that it generally includes 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 Ore Reserves, and there is no certainty that the technical and economic aspects presented will be realized
Conceptual Study	A study that incorporates inherently lower level of accuracy and confidence with respect to technical and economic parameters normally included in a Scoping Study A Conceptual study may only include Inferred Mineral Resources and/or further assumptions regarding Exploration Targets Accordingly site specific data may be limited and reliance on generic assumptions derived from comparable situations is common

4.7 Exploration Properties

59. The advancement of exploration properties is largely effected through the development of well-defined exploration programs comprising scheduled activities, associated expenditures and targeted milestones. The overall process can be readily subdivided into three key areas which for grassroots exploration culminate in the delineation of Mineral Resources:

   - Regional Scale Area Selection: This is largely focused on geologically prospective areas in a mineral field, geological region or terrain. Specifically this combines ore genesis theories pertaining to known ore type occurrences and geological maps to make predictions and draw parallels between the physical forms of such occurrences and the unknown potential of identifying a 'lookalike' area of interest within the area selected. This process may also be supplemented by remote sensing data (aerial photography; satellite imagery) processing and analysis;

- Target Selection (mineral license scale): Following the identification of 'areas of interest' this typically involves geological investigations via site specific intrusive investigations including: geological mapping; large scale geophysics (airborne; satellite imagery) and geochemical investigations and/or intensive geophysical testing of the surface and sub-surface geology. In certain instances, specifically where the surface comprises, soil, alluvium and platform cover, exploration drilling may be performed directly as a mechanism for generating targets; and
- Definition drilling: On identification of specific local scale targets identified within exploration licenses, exploration activities extend to trenching and/or drilling to test outcrops and/or structural lineaments. The ultimate aim is to test and hopefully delineate an Exploration Target (as defined, for example, in JORC (2012)) with a quantifiable range of tonnage and grade/quality of a mineral occurrence. Typically this is achieved by execution of a detailed drilling program comprising a designed drilling grid, geological logging, sample collation and laboratory testing supplemented by appropriate quality assurance and quality control.

60. Typically, exploration programs are inexorably linked to specific legally binding commitments associated with the award of exploration licenses. Furthermore, it is generally accepted that unless results dictate otherwise, some degree of land relinquishment is expected on an agreed milestone/timeline basis. Accordingly development of a detailed and well managed exploration program is key to the management of stakeholder (investor, governmental, community) expectations.

5 Financing the Development of a Mining Project

5.1 Mining Finance: Technical Considerations

61. This section largely focuses on the acquisition of technical knowledge through the evolutionary development of mineral assets, specifically in the context of what is deemed appropriate for meeting expectations from the mining finance community.

5.2 Mineral Asset Development Stages

62. Mineral assets comprise all property including but not limited to real property, intellectual property, mining and exploration tenements held or acquired in connection with the exploration of, the development of and the production from those tenements together with all plant, equipment and infrastructure owned or acquired for the development, extraction and processing of minerals in connection with those tenements.

63. Most mineral assets can be classified as either:

- Exploration Property: properties where mineralization may or may not have been identified, but where a Mineral Resource has not been identified;
- Advanced Exploration Property: properties where considerable exploration has been undertaken and specific targets have been identified that warrant further detailed evaluation, usually by drill testing, trenching or some other form of detailed geological sampling. A Mineral Resource estimate may or may not have been made, but sufficient work will have been undertaken on at least one prospect to provide both a good understanding of the type of mineralization present and encouragement that further work will elevate one or more of the prospects to the resource category;
- Pre-Development Property: properties where Mineral Resources have been identified and their extent estimated (possibly incompletely), but where a decision to proceed with development has not been made. Properties at the early assessment stage, properties for which a decision has been made not to proceed with development, properties on care and maintenance and properties held on retention titles are included in this category if Mineral Resources have been identified, even if no further Valuation, Technical Assessment, delineation or advanced exploration is being undertaken;
- Development Property: properties for which a decision has been made to proceed with construction and/or production, but which are not yet commissioned or are not yet operating at design levels; and
- Operating Mines: mineral properties, particularly mines and processing plants that have been commissioned and are in production.

6 Rebuttal of RPA Expert Report on Santa Ana

6.1 Effective Valuation Date

64. RPA does not discuss the effective valuation date in its Technical Review Report on the Santa Ana project. Decree 032 was enacted on 24th June 2011 so the effective date to determine Fair Market Value (FMV) for the Santa Ana Project would be 23rd June 2011, the day before the license was revoked. An Updated Feasibility Study (FSU) for the Santa Ana Project was published in April 2011, some two months before Decree 032 was enacted. Thus, the FSU in principle provides a useful basis upon which to evaluate the FMV of the Santa Ana Project.

6.2 Mineral Resource

65. In the RPA report there are many inconsistencies and it could be argued contraventions of industry standard reporting protocols. One example of a mistake would be that Table 6-1 below from the FSU has incorrect information in the title block, since the cut-off grade for Mineral Reserves is variable between 34 and 24 g/t (not 27 and 24 g/t). The same comment applies to footnote 3 of Table 7-1 of the RPA report. The correct cut-off grades, which were actually applied, can clearly be seen in Table 7-2 of the RPA report[23].

Table 6-1: Mineral Reserves and Mineral Resources

Mineral Reserves (Cut-off Grade variable 27 to 24 g/t silver by year)					
Category	**kt**	**Silver (g/t)**	**Lead (%)**	**Zinc (%)**	**Contained Silver (million oz.)**
Proven	8,951	57.6	0.37	0.66	16.6
Probable	28,126	51.5	0.33	0.55	46.6
Proven+Probable	37,077	53.0	0.34	0.58	63.2
Mineral Resources in Addition to Reserves (Cut-off Grade = 15 g/t Silver)					
Measured	13,386	34.6	0.30	0.51	14.9
Indicated	51,337	35.1	0.30	0.50	57.9
Measured+Indictated	64,723	35.0	0.30	0.50	72.8
Inferred	21,632	40.6	0.32	0.49	28.2

Source: Table 1.1 Revised Feasibility Study, Santa Ana Project-Puno, Peru[24]

66. For the FSU it would have been more conventional to show the Santa Ana Mineral Resources (Inclusive of Reserves) followed by a table showing Santa Ana Mineral Reserves so that the reader can readily establish the quantum of Measured Mineral Resource which converted to Proven Reserve and the quantum of Indicated Mineral Resource which converted to Probable Reserve. By not doing this, in my opinion the FSU was somewhat misleading, as reporting additional mineral resources in a separate table implies considerable upside that was not justified at the prevailing silver prices at the time.

67. RPA repeats the Mineral Resource tables from the FSU. It is stated that the Mineral Resources were estimated within a pit shell at a cutoff grade of 15 g/t. This, in my view, is far too low since the true breakeven cutoff grade for

[23] RPA Expert Report, Dated May 29, 2015, §7, Table 7-2, pg. 7-3.
[24] Revised Feasibility Study, Santa Ana Project – Puno, Peru NI 43-101 Technical Report Update to the 21-Oct-2010 Report, dated 01 April 2011, Table-1.1, pg. 3 (C-0061).

resource to reserve conversion reported in the FSU is variable between 27 g/t and 34 g/t.[25] In my opinion, this results in a gross overstatement of Mineral Resources.

68. This conclusion that the resources are overstated is supported by the very low conversion rate of Measured resource to Proven reserve (40%) and Indicated resource to Probable reserve (35%). The Measured and Indicated resource, which did not convert to Proven and Probable reserve, is in the grade range between 15 g/t and 27 g/t (the latter being the internal cut-off grade used for determining material that would be sent to the low grade stockpile) and is uneconomic and much of which is outside the reserve pit shell. Further, this resource will remain uneconomic until such time as either the silver price increases and or operating costs reduce. To further illustrate this point SRK repeats Figure 6-1 below. Overstating the resource and reporting this formally potentially drives a market perception that the Santa Ana Project could be much bigger than demonstrated in the FSU.

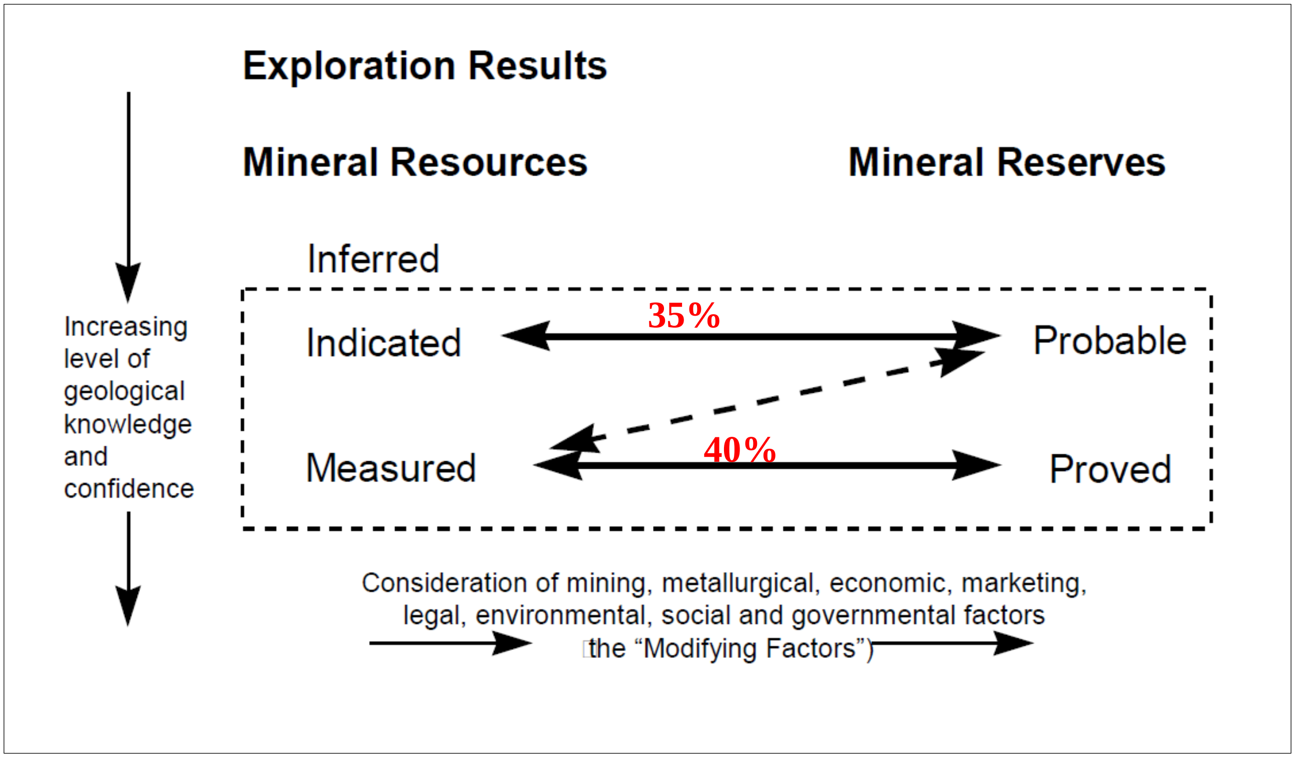


Figure 6-1: Relationship between Mineral Resources and Mineral Reserves[26] Showing 40% Measured converted to Proven and 35% Indicated converted to Probable

69. Figure 6-4[27] in the RPA Report illustrates why there is a very large difference between the Mineral Resource tonnes and Mineral Reserve tonnes. In the Figure, the Resource pit shell (the red line) encompasses a much larger area and sits at a significantly greater depth than the Reserve pit shell (the black line).

[25] Revised Feasibility Study, Santa Ana Project – Puno, Peru NI 43-101 Technical Report Update to the 21-Oct-2010 Report, dated 01 April 2011, Table-17.5, Pg 61-62 & 22.1.6.1-Description of Schedule ¶1, pg 87 (C-0061).
[26] CRIRSCO International Reporting Template, July 2006, Figure 1, pg. 7 (SRK-001)
[27] RPA Expert Report, dated May 29, 2015, Figure 6-4, Pg 6-10

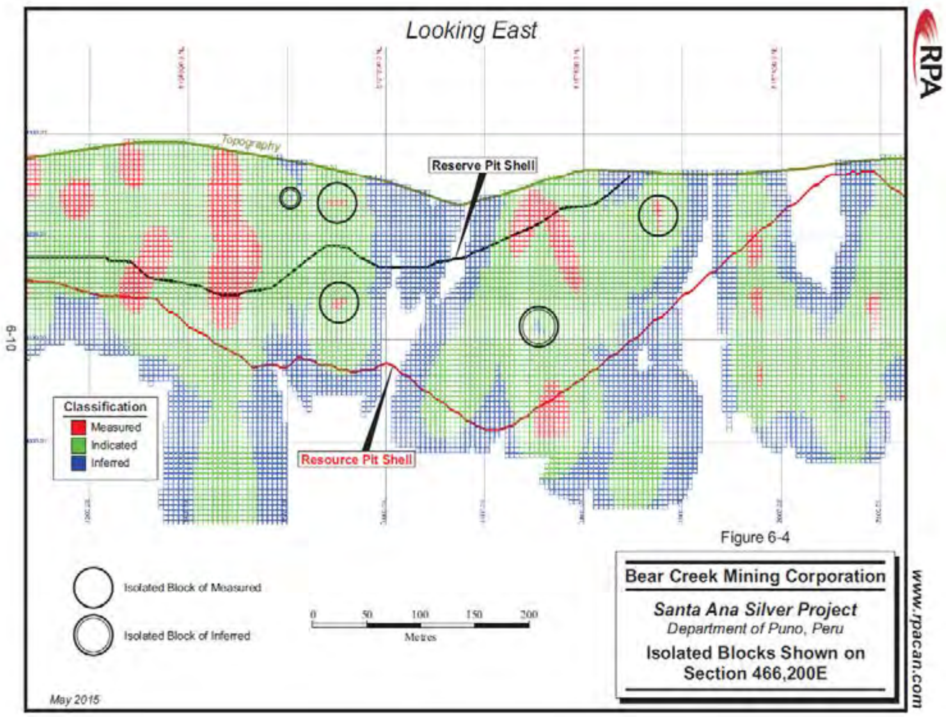


Figure 6-2: RPA's Sections through the Santa Ana Orebody Illustrating the Mineral Resource and Mineral Reserve Pit Shells

6.3 Cutoff Grade

70. RPA's justification for lowering the cutoff grade from 27 g/t and 24 g/t to 17.5 g/t is flawed[28]. There are inconsistencies and confusion regarding the application of cutoff grades both in the FSU and in the RPA report. The FSU applied a variable cutoff grade philosophy, which effectively high grades the orebody in years 1 to 5 by applying a higher than break-even cutoff grade and then reduces it in years 6 to 11. The FSU reports a true breakeven cutoff grade of 30 g/t, which was artificially increased to 34 g/t for years 1 to 5. This is a strategy often applied in the industry to maximize cashflow in the early years of a project and payback capital as soon as possible. RPA states in footnote 3 to Table 7-1 that a cutoff grade of 27 g/t silver is applied in years 1 through 5, which is reduced to 24 g/t for years 6 to 11[29]. This statement in and of itself is incorrect as these cutoff grades should apply to stockpile tonnes only.

71. Two types of industry standard cutoff grades are used; the true breakeven cutoff grade, which is the grade at which the value of the recovered metals and the costs to recover them are equal and the internal cutoff grade.

    The first cutoff grade is generally referred to as the ultimate pit cutoff grade, and it is defined as the breakeven grade that equates cost of mining, milling, and refining to the value of the block in terms of recovered metal and the selling price.

[28] RPA Expert Report, dated May 29, 2015, pg 7-7.
[29] RPA Expert Report, dated May 29, 2015, Table 7-1, pg.7-1.

Ultimate pit cutoff grade:

$$= \frac{\text{milling cost} + \text{mining cost}}{\big(\text{price} - (\text{refining cost} + \text{marketing cost})\big) x \text{ recovery}}$$

The second cutoff grade is referred to as the milling or internal cutoff grade and is defined as the breakeven grade that equates cost of milling, refining, and marketing to the value of the block in terms of recovered metal and the selling price.

Milling/Internal cutoff grade

$$= \frac{\text{milling cost}}{(\text{price} - \text{refining} + \text{marketing cost})) \; x \text{ recovery}}$$

72. In the calculation of the milling cutoff grade, no mining cost is included because this cutoff is basically applied to those blocks that are already "selected for mining" (by the first cutoff) to get to the higher-grade ore blocks and those blocks that the cost of mining will be incurred regardless of the action to be taken with respect to milling it. The first cutoff grade is used to ensure that no material (unless they are in the way of other high-grade blocks) is taken out of the ground unless all of the direct costs associated with "gaining" the metal can be recovered. This assurance is automatically built into the ultimate pit limit determination algorithms such as Lerchs-Grossmann and the floating cone. The second cutoff grade is used to ensure that any material that provides positive contribution beyond the direct milling, refining, and marketing costs will be milled.

73. The general characteristics of the traditional cutoff grades are that they:

- Are established to satisfy the objective of maximizing the undiscounted profits from a given mining operation;
- Are constant unless the commodity price and the costs change during the life of mine; and
- Do not consider the grade distribution of the deposit.[30]

74. Both the FSU and RPA report present contradictory language and it is extremely difficult to establish just what was done and what was concluded in both.

75. From the FSU it is stated that the true breakeven cutoff grade was 30 g/t silver but that a high grade philosophy was adopted for years 1 through 5 by increasing the breakeven cutoff grade from 30 g/t to 34 g/t. For the low grade stockpile material the internal cutoff grade of 24 g/t was used to determine whether material at or around this grade would be sent to the waste rock dump or low grade stockpile for subsequent heap leaching towards the end of the mine life. This was then increased to 27 g/t to include an additional US$0.88/t to rehandle this material and transport it from the stockpile to the crusher in the last two years of the operation[31]. In the RPA report they reduced the cutoff grade to 17.5 g/t arguing for an increased silver price from US$13.00 to US$16.50 and an increase in metallurgical recovery from 70 to 75%. Unfortunately, 17.5 g/t is the internal cutoff grade at the revised metal price and metallurgical recovery and not the breakeven cutoff grade which should have been used in the "revised" conversion of resources to reserves. RPA then determined revised mineral reserves at this (incorrect) internal cutoff grade of 17.5 g/t, which resulted in a 24% increase in tonnage. This is glaringly obvious in Table 7-5 of the RPA Revised COG[32], which fails to include the full mining costs for ore and waste which RPA themselves recommended should be increased. The alarm bells should have been ringing. How could such relatively modest changes to silver price and metallurgical recovery result in such a profound reduction in cutoff grade? This, in my

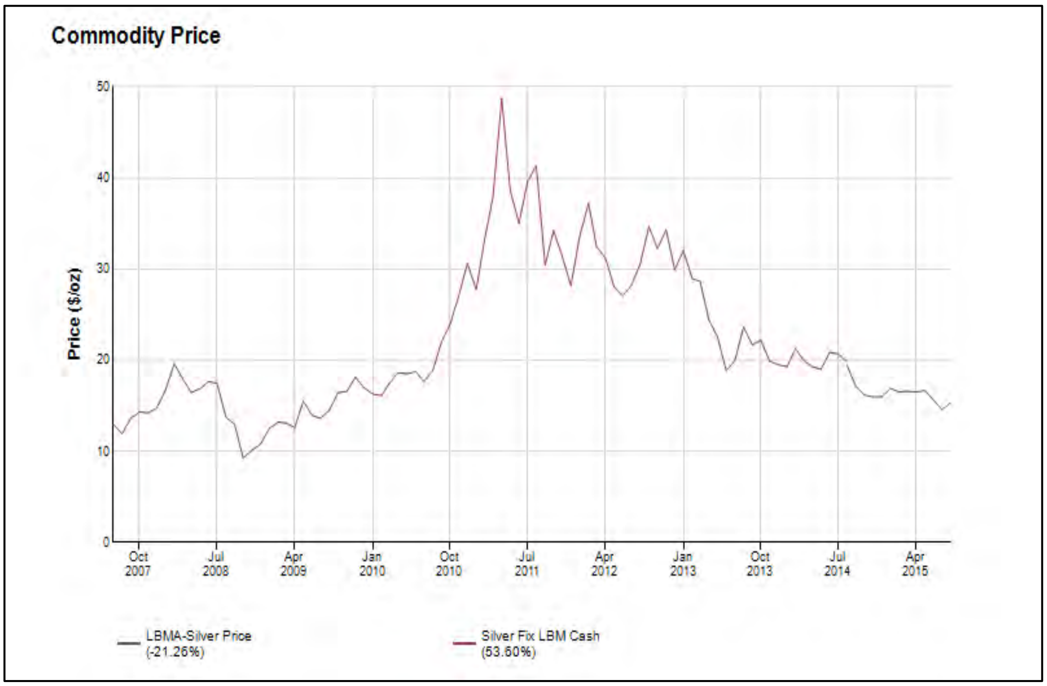
[30] SME Mining Engineering Handbook-Third Edition, Volume 1, 2011, Pg. 847 (SRK-018).
[31] RPA Expert Report, dated May 29 2015, §7, pg. 7-1.
[32] RPA Expert Report, dated May 29 2015, §7, Table 7-5, pg7-7.

opinion, is a gross error by RPA, is most unfortunate and results in a gross overstatement of reserves in the RPA Revised Case and subsequently the RPA Extended Case.

6.4 Silver Price

76. I find no justification for using a higher silver price for mine design and planning purposes than the price that appears in the FSU.

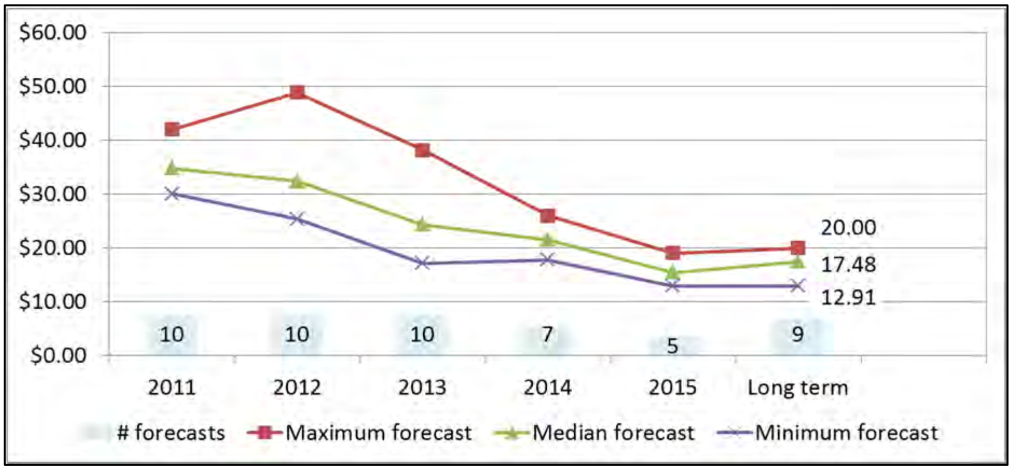
77. Figure 6-3 below shows the actual spot silver price from 2004 to 2015. Figure 6-4 shows the annual silver price projections from ten investment bank analysts from 2011 onwards (Figure 18 of the FTI report[33]). In my opinion, both of these curves—which show downward trending silver prices—support the adoption of modest silver prices in the design and planning of the Santa Ana Project. Given the expected timeline to first metal production, discussed further below, it is likely that had the Santa Ana project been developed, first metal production would likely have occurred in 2014. In the final paragraph on page 15-1 RPA states *"RPA's assumption of using $16.50 for silver cut-off grade calculation for Mineral Resource and Mineral Reserve estimation is not intended to be used as a basis for establishing the Fair Market value or Net Present Value of the Project. It is considered best practice for cut-off grade estimation to use a long term price that applies to the potential life of the Mineral Resources and Mineral Reserves"*. This is discussed further below.



Source: SRK Consulting

Figure 6-3: Silver Chart – October 2007 through April 2015

[33] FTI Expert Report, dated May 29, 2015, §7.42, Figure 18, pg 47.



Source: FTI Expert Report-Figure 18

Figure 6-4: Silver price forecasts produced during June 2011 (Real 2011 $ per ounce) [34]

78. The FSU, which was published in April 2011, used a base case silver price of US$13 per ounce. By adopting this silver price this must have reflected Bear Creek's and its consultant's view of silver prices going forward. Figure 6-4 (above) shows a consensus of ten mining analysts' projections of silver prices[35]. This consensus view proved to be remarkably accurate and gives further support to the use of a silver price of approximately US$13 per ounce for mine design and mine planning and Mineral Resource and Mineral Reserve estimation.

6.5 Mining Costs

79. RPA suggest increasing the mining cost from US$1.68 per tonne mined to between US$2.00 and US$2.50 per tonne mined but then settle on an increase of US$2.10[36]. They forget to mention that the mine will be operated by a contract miner. The contract miner will provide its own mining equipment with no capital cost to the project. The capital expenditure schedule in the FSU clearly shows no dollars opposite the Mining row.

80. Consequently the contract mining price charged by the mining contractor will have to cover the actual costs incurred, generate a return on the capital employed to purchase the equipment plus a fee or contractor profit. The figure of US$1.68 per tonne of material moved used in the Feasibility Study is therefore pitifully too low. While RPA are correct to recommend an increase, the basis for an increase to US$2.10 is not discussed by RPA other than a reference to a 25% increase. SRK would recommend a contract mining cost closer to US$2.50. Adopting this higher mining cost will increase both the breakeven and internal cutoff grades and would reduce the reserve quantum and shorten the mine life. In addition, the Santa Ana mine is located at an altitude between 4,300 m and 4,700 m above sea level (masl). These high altitudes can cause health problems to the workforce and can result in equipment problems. Both of these challenges will likely result in lower labor and equipment productivity which also supports the adoption of a higher operating cost. I can find no mention in the 2011 FSU about how these real challenges were factored into labor and equipment productivities. Therefore, I can only conclude that they weren't.

[34] FTI Expert Report, Dated May 29, 2015, page 47, Figure 18.
[35] FTI Expert Report, Dated May 29, 2015, Appendix 6, Figure 35, pg 97
[36] RPA Expert Report, Dated May 29, 2015, § 3-Operating Costs, pg 3-2.

6.6 Mineral Reserve

81. In both the 2011 FSU and the RPA report there are a number of inconsistencies and confusion over the application of cutoff grades. There is no discussion of the reasons for the very low conversion of mineral resources to ore reserves. In the FSU, it can be seen that only 40% of the Measured mineral resources convert to Proven reserves and only 35% of the Indicated mineral resources convert to Probable reserves. These very low conversion rates should have demanded further discussion both in the FSU and RPA reports but unfortunately they were not discussed. This lends further support to my opinion that mineral resources were grossly overstated.

82. I concur fully with RPA's recommendation of applying a mining recovery and dilution factor in the production quantum and reserve determination. However, the respective 95% and 5% factors are simply assumptions and have no basis in fact.[37] Equally applicable would be factors of 90% and 10% but similarly these have no basis in fact either. This was a material omission in the Updated Feasibility Study. Mining recovery and mining dilution are both intimately related to mining selectivity or how selective the orebody can be mined. This in turn is related to the selective mining unit or SMU, which is influenced by the characteristics of the orebody and the size of the equipment used to mine it. The FSU proposed to use a wheeled loader with a capacity of 8.6 m^3 to load 63 tonne capacity haul trucks[38]. An 8.6 m^3 loader has a bucket width of 4.5 m. Thus, it could be argued that the mining selectivity of this loader cannot be less than 4.5 m. Consequently, any waste with dimension less than 4.5 m would likely be mined as ore constituting dilution and any ore with dimension less than 4.5 m would likely be mined as waste constituting loss in mining recovery. In reality, a fair assessment of mining recovery and dilution would only be possible from actual operating experience of mining the real orebody. Until this is gained these factors can only be considered assumptions.

6.7 Metallurgical Recovery

83. RPA's argument for increasing the metallurgical recovery from 70% to 75% is flawed. All the metallurgical testwork conducted was a combination of bottle roll and column leach tests. The column leach testwork did indeed suggest that if a third stage of crushing was included and the ore was crushed down to 9.5 mm then silver recovery would be increased to 75%. However it is a prudent industry rule of thumb that column test results need to be factored downwards when scaling up to a full size heap operation to account for the very different conditions in a full scale heap to those in a column test. It is a prudent industry rule of thumb to reduce the projected recovery by 3% to 5% and increase the leach cycle time from that indicated from the column tests to a full scale heap operation. A leach cycle time of 180 days was projected from the column testwork and yet the column test was inexplicably terminated after 110 days. The following is excerpted from a paper by Randolf E Scheffel on Heap Leach Design and Practice. "…it is nearly impossible to combine and incorporate into a single column test the equilibrium conditions that will be achieved in the field. Additionally, changes in ambient conditions, such as temperature and altitude, cannot be attained unless the testwork is conducted on site. And even then, the ambient conditions within a column are not what are experienced under actual leach conditions."[39]

6.8 Use of Additional Resources (Extended Case)

84. RPA propose to use 75% of the Additional Measured, Indicated and Inferred Resources for a DCF cashflow projection in their RPA Extended Case. This defies all reason given that in the FSU only 40% of the Measured Resource converted to a Proven Reserve and only 35% of the Indicated Resource converted to a Probable Reserve.

[37] RPA Expert Report, Dated May 29, 2015, § 3, pg 3-1.
[38] Revised Feasibility Study, Santa Ana Project – Puno, Peru NI 43-101 Technical Report Update to the 21-Oct-2010 Report, dated 01 April 2011, §1.5 Mining Plan (C-0061).
[39] Mineral Processing Plant Design, Practice and Control Proceedings, SME, Volume 2, 2002, pg 1582 (SRK-021).

This is further compounded by my opinion that the Mineral Resources in totality were grossly overstated from the outset.

85. In the RPA Extended Case they applied a cut-off grade of 14 g/t and determined a new resource of a staggering 93Mt as shown in Table 14-2[40] and a new Mineral Potential of 81 Mt as shown in Table 14-3[41]. The reason that the term Mineral Potential is used rather than reserves is that the additional material has not been subjected to a proper mine design, assumes a much higher silver price and includes Inferred Mineral Resources. This is an effective conversion rate of 87% which, given the 40% and 35% conversion rates referred to above, is yet another gross overstatement.

86. But it gets worse, since the 93 Mt of new resource and 81Mt of new mineable material were both determined using internal cut-off grades and not true breakeven cut-off grades, which should have been used. By excluding ore mining and waste mining costs in the cut-off grade calculation and applying the RPA numbers in Table 14-1[42], SRK was able to replicate the 14 g/t number further confirming that this is indeed an internal cut-off grade. In Table 14-3,[43] the RPA Extended Life Mineral Potential is determined by adding the 46Mt from the RPA Revised Base Case plus 75% of the additional incremental resources (93 Mt-46 Mt=47 Mt*.75=35.25 Mt+46 Mt) giving the 81 Mt. This is a very odd way of determining the Mineral Potential quantum.

87. As a further exercise SRK evaluated what silver price would be needed to support a breakeven cut-off grade of 14 g/t and determined this to be US$29/oz. Table 6-3 shows how SRK replicated the RPA 14 g/t as an internal cut-off grade and how SRK determined that for a true breakeven cut-off grade of 14 g/t the Silver price would have to be US$29/oz.

Table 6-2: LoM Costs: Cut-off Grade Calculation Demonstrating Ag Price for 14g/t Breakeven COG

	Units	ROM Breakeven CoG
Assumptions		
Silver Price	**US$/oz**	$29.00
Silver Price	**US$/g**	$0.93
Smelting & Refining	**US$/oz**	$0.86
Royalty (NSR)	**%**	0%
Ag Grade	**gpt**	14.08
Ag Recovery	**%**	70.0%
Operating Costs		
Smelting & Refining	**US$/t ore**	$0.0000
Royalty	**US$/t ore**	$0.0000
Mining	**US$/t mined**	$2.5000
Processing	**US$/t ore**	$6.6900
HL Pad Costs	**US$/t ore**	$0.0000
Other Costs (e.g. Reclamation)	**US$/t ore**	$0.0000
G&A	**US$/t ore**	$0.0000
subtotal	**US$/t**	**$9.1900**
CoG - Head Grade	**gpt**	**14.081**
CoG - Recovered Grade	**gpt**	**9.857**

[40] RPA Expert Report, Dated May 29, 2015, §14, Table 14-2, pg 14-3.
[41] RPA Expert Report, Dated May 29, 2015, §14, Table 14-3, pg 14-3
[42] RPA Expert Report, Dated May 29, 2015, §14, Table 14-1, pg 14-1.
[43] RPA Expert Report, Dated May 29, 2015, §14, Table 14-3, pg 14-3.

88. In the RPA Extended Life cashflow model the 46Mt in the Revised RPA Base Case (which is flawed) is mined first from 2012 to 2026. The "Additional Extended Life" Mineral Potential (also flawed) is then mined for a further ten years at the average grade of 36.12 g/t and at the average stripping ratio of 0.81 waste/t ore. The tonnage, grade and stripping ratio are all simply held constant for the additional ten years, which is a far too simplistic. The reality is that a substantial proportion of the material to be mined in the extended ten year period is located within the initial pits and therefore could never be scheduled to be mined in the last ten years. This is physically impossible which further questions the credibility of this scenario. This can be seen in Figure 6-4 in the RPA Report.[44] Why RPA did not attempt to schedule their mining of this material properly they do not say.

89. RPA's approach tests the bounds of professional credibility and can only be interpreted as a deliberate strategy to inflate value.

6.9 Permitting Schedule

90. Over the past five years or so there has been a history of permitting delays for mining projects in Peru. Typically, permitting timelines have increased from 6 months to 12 months or even longer. Had the Santa Ana Project continued, it too likely would have experienced similar permitting delays. Peru has also experienced considerable public opposition to mining projects sometimes for genuine concerns and sometimes as a result of the actions of political activists or non-governmental organizations (NGO). Thus, the "Social License to Operate," i.e., building support among local communities and other stakeholders, is becoming an increasingly important consideration for the mining sector and equally so for the Santa Ana Project.

6.10 Construction and Ramp-up Schedules

91. The construction and ramp up schedule included in the April 2011 Updated Feasibility Study (and repeated in the RPA report[45]) is far too simplistic and high level to have any credibility or to support detailed scrutiny.[46] Compare and contrast this to the project construction and ramp-up schedule presented as a reasonably detailed Gantt chart in the 2015 Corani Feasibility Study.[47]

92. SRK consider that by factoring in likely delays in permitting, difficult logistics associated with procurement and construction in a high Andes environment and an increase in the leach cycle time, collectively these could lengthen the time from project inception (a Go decision) to first silver production by at least one year from that presented in the FSU. It could conceivably be much longer.

6.11 Discount Rate

93. The application of a 5% discount rate by both Bear Creek and RPA in the discounted cashflow (DCF) analysis is inconsistent with industry practice which typically applies the Capital Asset Pricing Model. The 5% rate underestimates the weighted average cost of capital (WACC), the permitting, construction, commissioning and operating risk and country risk which will all apply to the project. At the very least, SRK would recommend a discount rate of 10% with appropriate sensitivity analysis to show the impact of varying discount rates on project

[44] RPA Expert Report, dated May 29, 2015, §6, Figure 6-4, pg 6-10.
[45] RPA Expert Report, dated May 29, 2015, §13, Table 13-1, pg 13-1.
[46] Revised Feasibility Study, Santa Ana Project – Puno, Peru NI 43-101 Technical Report Update to the 21-Oct-2010 Report, dated 01 April 2011, §1.10 Project Execution (C-0061).
[47] Corani Feasibility Study, Dated July 2015, §21, Table 21-4, pg 253 (SRK-020).

NPV. The FSU has quite a comprehensive sensitivity analysis in the Economics section but sensitivity to discount rate is notably absent.

6.12 SRK Adjustments to Cashflow Model Inputs

94. SRK recommend the following adjustments to the evaluation of the Santa Ana project:

- Mining costs increased to US$2.50/t to account for use of contractor mining , relatively modest annual tonnage movement and a high Andes operating environment;
- Metallurgical recovery for silver held at 70% to account for laboratory bottle roll and column metallurgical testing shortcomings with respect to actual operating recoveries in a full scale heap; and
- Time to first metal production increased by one year to account for permitting delays, SLTO issues and site operating conditions (longer leach cycle time and a high Andes environment).

95. SRK re-ran the cut-off grade calculation and the Whittle Pit Optimization on the Block Model provided by Bear Creek with these revised input parameters and determined that this resulted in a reduction in the reserve tonnage from 37 Mt in the FSU and RPA report to 23.8 Mt at a higher average grade of 61.61 g/t silver. The SRK breakeven and internal cut-off grade determinations are shown in Table 6-3 above. At the projected annual production rate the substantially reduced tonnage would reduce the mine life from 11 to 7 years with a substantial negative impact on project economics. A mine life 4 years shorter essentially gives 4 years less positive cashflow to generate an investment return on the capital used to construct and operate the Project.

Table 6-3: LoM Costs: Cut-off Grade Calculation Demonstrating Ag Price for 14g/t Breakeven COG

	Units	ROM Breakeven CoG	ROM Internal CoG	Rehandle/ Stockpile CoG	Comments
Assumptions					
Gold Price	US$/oz	$13.00	$13.00	$10,000.00	
Gold Price	US$/g	$0.42	$0.42	$321.51	
Smelting & Refining	US$/oz	$0.40	$0.40	$10.00	
Royalty (NSR)	%	0%	0%	0%	
Au Grade	gpt	31.41	25.60	0.02	
Au Recovery	%	70.0%	70.0%	45.0%	
Operating Costs					
Smelting & Refining	US$/t ore	$0.0000	$0.0000	$0.0028	
Royalty	US$/t ore	$0.0000	$0.0000	$0.0000	
Mining	US$/t mined	$2.5000	$0.8000	$0.3000	For stockpile only use rehandle mining cost
Processing	US$/t ore	$6.6900	$6.6900	$1.6800	
HL Pad Costs	US$/t ore	$0.0000	$0.0000		
Other Costs (e.g. Reclamation)	US$/t ore	$0.0000	$0.0000		
G&A	US$/t ore	$0.0000	$0.0000	$0.8100	
subtotal	**US$/t**	**$9.1900**	**$7.4900**	**$2.7928**	
CoG - Head Grade	**gpt**	**31.411**	**25.601**	**0.019**	
CoG - Recovered Grade	**gpt**	**21.988**	**17.920**	**0.009**	

Source: SRK Consulting (U.S.), Inc.

96. In addition, the RPA Revised Case is flawed as it is based on the application of an Internal and not a Break-even cutoff grade. The RPA Extended Case is also flawed as it extends the flawed RPA Revised Case with the mining of 75% of the additional measured, indicated and inferred resources which are uneconomic at the metals prices used in the FSU and, in the case of inferred resources, too geologically uncertain to be safely used in a cashflow analysis. RPA also applied an Internal and not a break-even cut-off grade in the determination of these additional resources.

7 The Peruvian Government's Assessment of the Santa Ana EIA

97. SRK was also requested by Sidley Austin to review on a preliminary basis, the findings of Peru's Bureau of Environmental Mining Affairs' assessment of the Environmental Impact Assessment (EIA) on the Santa Ana Project submitted by Bear Creek Mining[48]. I set out my findings below.

98. The document starts with a high level summary of, inter alia:

- Citizen Participation Mechanisms;
- Summary of Content of the EIA:
  - Physical/Receiving Environment; and
  - Description of Project Activities.
- Environmental Management Plan:
  - Soil and Water Management;
  - Biological Management;
  - Supplies Management; and
  - Management of Solid Waste, Waste Waters and Hazardous Wastes.
- Archaeological Management:
  - Environmental Monitoring Program;
  - Community Relations Plan; and
  - Closure Plan.

99. This is followed by a section titled "Assessment" conducted by Peru's Bureau of Environmental Mining Affairs, (hereinafter referred to as the DGAAM).

100. DGAAM makes 156 Observations and requests of the title holder for clarification, further work, further detail, correction of errors etc.

101. In my opinion, the nature of the wording in the Observations and requests suggest that the five engineers and one attorney at the DGAAM who undertook the EIA assessment clearly knew their subject matter and appear to have had the required capacity to undertake the assessment.

102. Some of the requests required relatively simple clarifications or further information, while others could likely only be answered by undertaking additional fieldwork, testwork and analysis, the costs for which would be significant and likewise, time to complete.

103. Some of the more substantive items include eleven requests concerning the hydrology and hydrogeological modelling requiring substantive fieldwork and evaluation and much more detail on Soil and Rock Mechanics, Seismicity and Seismic Hazards, the Biological Assessment, Closure Plan and Cost/Benefit Analysis.

[48] 448-295 EIA Observations 04-19-2011

8 Rebuttal of RPA Expert Report on Corani

8.1 Effective Valuation Date

104. Assuming that the fate of the Santa Ana Project also impacted the Corani Project, the effective valuation date is the day immediately preceding the date of the enactment of Decree 032, which resulted in the expropriation of the Santa Ana Project. This would make the effective valuation date the 23rd June 2011 and yet inexplicably the RPA Expert Report for Corani is based on the Updated Feasibility Study for the Corani Project, which was published in July 2015, over four years later than the effective valuation date

105. This created challenges for SRK in terms of what to base its investigation on. SRK concluded that to prepare an appropriate rebuttal on the RPA report SRK would have to base its evaluation principally on the 2015 Updated Feasibility study but to apply mine operating costs, metals prices and metallurgical recoveries pertinent to the effective valuation date. However for completeness SRK makes several observations on the Corani Feasibility Study that was published in December 2011, some six months after the effective valuation date.

106. The RPA report on the Corani project starts with the following statement "RPA was requested to prepare a high level review of the information being used as a basis for the Corani Project Feasibility Study (FS), which is scheduled to be published in June 2015."[49] Apart from the 2015 FS being an inappropriate starting point, "a high level technical review" in my opinion is simply not good enough to underpin a US$250 million damages claim.

8.2 Mineral Resource and Mineral Reserves in 2011

107. Table 8-1 below presents the Mineral Resources and Mineral Reserves as reported in the Feasibility Study dated December 2011.

108. The Mineral Resource was estimated based on a net smelter return (NSR[50]) approach using metals prices of US$30/oz for silver and US$1/lb for lead and zinc. The Mineral Reserve was estimated also on an NSR basis using much lower metals prices of US$18/oz for silver and US$0.85 per pound for both lead and zinc. Therefore, as with the Santa Ana Mineral Resource, in my opinion the Additional Mineral Resource Statement for Corani materially overstates the Mineral Resource. Further as can be seen by comparing the Mineral Reserves with the Mineral Resources in addition to Reserves in Table 8-1, by applying such materially higher metals prices to the Mineral Resources the grade of the additional mineral resources drops alarmingly from 54 g/t to 20 g/t for silver, from 1.04% to 0.38% for lead and from 0.6% to 0.29% for zinc. In mineral processing of polymetallic ores like those at Corani, there is a direct relationship between mill feed or head grade, processed concentrate grade and metallurgical recovery. Invariably, as you push the concentrate grade up to try to achieve a marketable concentrate, this is at the expense of metallurgical recovery which drops. The converse also applies. Given the very low lead and zinc grades in the additional mineral resources, it is highly unlikely that marketable concentrates could be produced. Even in the unlikely event that marketable concentrates could be produced, the metallurgical recoveries for lead, zinc and silver would be so low that the economics simply would not work. Therefore, in my opinion a substantial proportion of the so called additional mineral resources could never be economic and by definition would not qualify as a mineral resource.

[49] RPA Expert Report, Dated May 29, 2015, §CORANI PROJECT, pg. 1-2.
[50] NSR is the net revenue (total revenue minus production costs) that the owner of a mining property receives from the sale of the mine's metal/non-metal products less transportation and refining costs. As a royalty it refers to the fraction of net smelter return that a mine operator is obligated to pay the owner of the royalty agreement.

Table 8-1: Mineral Reserves and Mineral Resources[51]

Mineral Reserves, $10.54 NSR cutoff									
					Contained Metal			Equivalent Ounces	
Category	**Ktonnes**	**Silver Gm/t**	**Lead %**	**Zinc %**	**Silver Million Ozs**	**Lead Million Lbs**	**Zinc Million Lbs**	**Eq. Silver Million Ozs**	**Eq. Silver Gm/t**
Proven	30,083	66.6	1.04	0.60	64.4	690.4	399.9	115.7	119.6
Probable	126,047	50.7	0.87	0.47	205.6	2,422.6	1,297.7	381.5	94.1
Proven + Probable	156,130	53.8	0.90	0.49	270.0	3,113.0	1,697.6	497.2	99.1

Mineral Resources in Addition to Reserves, $9.20 NSR cutoff									
					Contained Metal			Equivalent Ounces	
Category	**Ktonnes**	**Silver Gm/t**	**Lead %**	**Zinc %**	**Silver Million Ozs**	**Lead Million Lbs**	**Zinc Million Lbs**	**Eq. Silver Million Ozs**	**Eq. Silver Gm/t**
Measured	10,878	17.5	0.38	0.33	6.1	91.1	79.1	13.9	39.6
Indicated	123,583	20.8	0.38	0.29	82.6	1,035.3	790.1	166.7	42.0
Measured + Indicated	134,461	20.5	0.38	0.29	88.7	1,126.4	869.2	180.6	41.8
Inferred		30.0	0.46	0.28	48.0	509.4	305.2	86.2	53.9

8.3 Mineral Resources and Mineral Reserves in 2015

109. The Mineral Resources and Mineral Reserves as reported in the July 2015 Feasibility Study are shown below in Table 8-2.

Table 8-2: Mineral Reserves and Mineral Resources[52]

Mineral Reserves, variable $23.00-11.00 NSR cut-off							
Total	**Ktonnes**	**Silver gpt**	**Lead %**	**Zinc %**	**Silver Million oz**	**Lead million lb**	**Zinc million lb**
Proven	19,855	69.1	1.09	0.72	44.1	478.7	313.4
Probable	117,843	48.6	0.88	0.57	184.3	2289.2	1470.7
Proven & Probable	137,698	51.6	0.91	0.59	228	2,768	1,784

Mineral Resources in Addition to Reserves, $11.00 NSR cut-off, 15 g/tonne Ag cutoff (oxide)							
Total	**Ktonnes**	**Silver gpt**	**Lead %**	**Zinc %**	**Silver million oz**	**Lead million lb**	**Zinc million lb**
Measured	14,360	32.01	0.34	0.19	14.8	108.4	61.6
Indicated	83,749	25.37	0.37	0.28	68.3	682.2	512.8
M&I	98,109	26.34	0.37	0.27	83.1	790.6	574.4
Inferred	39,953	37.20	0.58	0.40	47.8	510.6	352.4

[51] Corani Feasibility Study, Dated December 2011, Table 15-3, pg. 124 (C-0066).
[52] Corani Feasibility Study, Dated December 2015, Table 1-8, pg. 17 & RPA Expert Report, Dated May 29, 2015, §16,Table 17-2, pg. 16-5 (SRK-020).

110. SRK completed a review of the Corani block model and application of the cut-offs to assist in evaluating the variation in Mineral Resources and Mineral Reserves reported by RPA with changes in the operating costs, metal prices and silver recovery. To complete the study SRK did the following:

- Imported the Corani Block Model into Datamine
- Recreated the NSR values (within a reasonable level of error) using the same assumptions as the RPA study. Note this assumes the 2015 FS prices, and smelter conditions:
  - AG: US$20/oz
  - PB: US$0.95/ lb
  - ZN: US$1.00/ lb
- Recalculated the NSR value to reflect the 2011 price assumptions as stated below:
  - AG: US$18 / oz
  - PB: US$0.85 / lb
  - ZN: US$0.85 / lb
- The other adjustment was to cap the silver recovery in the concentrates at 55%, and at 19% for both the Pb Concentrate and the Zn Concentrate respectively.

111. To compare the difference between the two models and to assess the material impact on the Mineral Resource and Mineral Reserve, SRK adjusted the model and filtered the model to only material within the Resource and Reserve shells. The current Mineral Resource is reported to be based on a single NSR cut-off of US$11/t. This is complicated in the current FS as the Mineral Resource has been reported exclusively from Mineral Reserves. The first stage of the process was to take the combined Mineral Resource plus Mineral Reserves, and compare these to the in-situ block estimates in the geological block model using the same classification.

112. On page 16-4 of the RPA report under RPA OBSERVATIONS AND CONCLUSIONS it states *"RPA was able to confirm the grades and tonnages of the Corani Mineral Resource estimate as reported by GRE"*. In SRK's opinion this cannot be done using the current model provided, especially for the Mineral Reserve as Global Resource Engineering (GRE) used a variable cut-off based on the pushback sequence and location within the pit. This information/coding is not contained within the model referenced by RPA and provided to SRK. The concept for the variable cut-off is to allow mining of higher grade material during the early years, but in my opinion if material is economic at the lower cut-off at depth, then would it not be an option to stockpile the lower grade material during the early years, and feed it towards the end of the Life of Mine?

113. Interestingly RPA are silent and make no comment on the validity or otherwise of the Mineral Reserve Statement reported in Table 17-2.[53]

114. To compare the impact of the 2015 vs 2011 price and recovery changes, a common volume (Resource.dxf) was applied by SRK and the tonnes and grades (inclusive of Mineral Reserves) were computed. The results indicate a significant change in the combined Measured and Indicated tonnage (>37%), with a substantially lower tonnage reported using the historical price and recovery assumptions. The resultant grades show a slight increase, but overall the impact on the contained metal is between 13 – 23%, with an average change in the in-situ value (NSR) of approximately 16 %. The results are shown in Table 8-3 below.

[53] RPA Expert Report, Dated May 29, 2015, §16, Table 17-2, pg. 16-5.

Table 8-3: Comparison of Mineral Resource above $11 NSR/t within Limiting Resource.dxf using 2015 vs Historical Prices

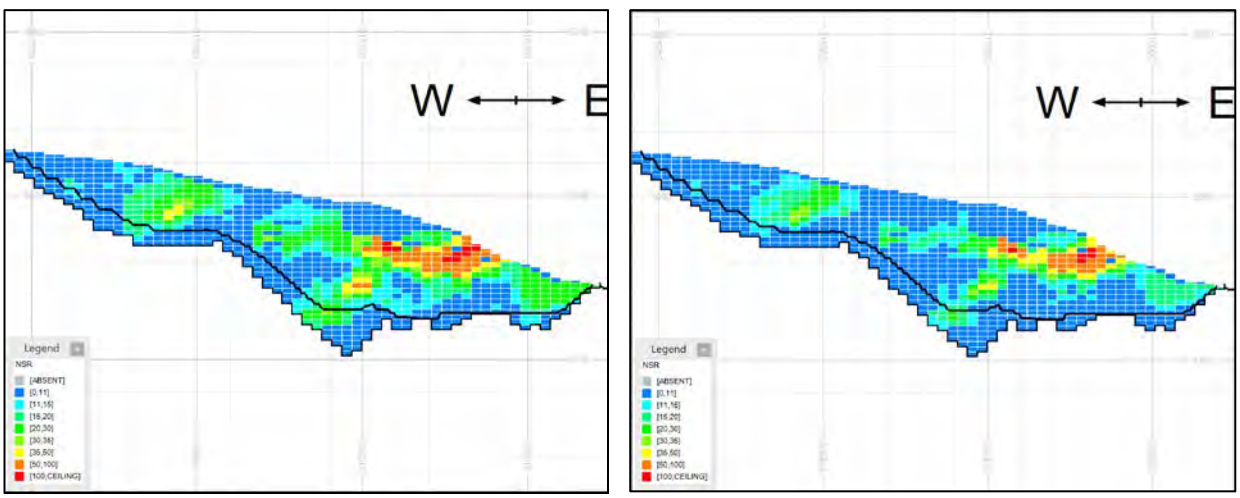
NSR(GRE) >= 11

CLASS	Total Ktonnes	Silver gpt	Lead %	Zinc %	Silver Million oz	Lead million lb	Zinc million lb	NSR $/t
Measured	29,222	56.18	0.91	0.58	52.8	587	375	33.21
Indicated	182,263	40.75	0.74	0.49	238.8	2,980	1,983	25.48
M&I	*211,485*	*49.76*	*0.89*	*0.59*	*291.6*	*3,567*	*2,357*	*58.69*
Inferred	34,499	35.89	0.64	0.43	39.8	488	325	21.24
TOTAL	245,984	41.90	0.75	0.49	331.4	4,056	2,682	25.81

NSR(SRK) >= 11

CLASS	Total Ktonnes	Silver gpt	Lead %	Zinc %	Silver Million oz	Lead million lb	Zinc million lb	NSR $/t
Measured	24,071	66.14	1.04	0.64	51.2	550	339	28.06
Indicated	129,533	49.20	0.88	0.55	204.9	2,519	1,576	22.57
M&I	*153,604*	*51.85*	*0.91*	*0.57*	*256.1*	*3,069*	*1,915*	*50.63*
Inferred	23,871	44.12	0.74	0.47	33.9	390	247	18.78
TOTAL	177,474	50.81	0.88	0.55	289.9	3,459	2,162	22.81
Variance M&I	-37.68%	4.05%	2.04%	-3.73%	-13.85%	-16.24%	-23.08%	-15.92%

Source: SRK Consulting (U.S.), Inc.



Source: Left is based on RPA Model / Right is based on SRK Model at 37% less

Figure 8-1: Comparison of E-W Section of 2015 vs 2011 NSR Values

115. To provide the equivalent comparison for the Mineral Reserves is a more difficult task due to the variable cut-off grades applied and a lack of coding or wireframes to support the application by SRK. To provide some context SRK produced tonnage and grade estimates within the Reserve.dxf wireframe surface provided. The FS report mentions that the cut-off varies from $23.0 - $11.0 NSR dependent on the pushback and area of the pit (ZONE). Given the lack of this information a single cut-off was defined by SRK for the Proven (class=1), and separate cut-off (lower) for the Probable. SRK considers this to be a reasonable assumption as the proven material is closer

to surface and therefore will more likely to be mined using the higher cut-off. The correlation between the Mineral Reserve statement and SRK approximated cut-off assessment is < 3 % in tonnes and grade confirming the validity of these assumptions.

116. In comparison, using the historical price assumptions and the capped recovery there is reduction in the tonnage of approximately 25%, but an increase in the grades of between 9.9 – 18.5%. The overall impact on the contained metal is variable between the different metals but is typically 10 – 15% lower using the historical prices. A straight comparison of NSR using the 2015 and 2011 calculated NSR is in the order of 12.6%.

117. SRK considers these variances to be of significance to the value of the Corani Project. Further in the absence of interaction with GRE, the originators of the Mineral Resources and Mineral Reserves, SRK had to make a judgement call and set the NSR assumptions. With full access to GRE and an opportunity to re-optimize the mine design, SRK considers it likely that the Reserve pit shell would be smaller and hence the resulting reserve would also be smaller.

Table 8-4: Comparison of Mineral Reserves $13 (probable) & $15 (proven) NSR/t within Limiting Resource.dxf using 2015 vs historical Prices

Cut-off	Classification	Total Ktonnes	Silver gpt	Lead %	Zinc %	Silver Million oz	Lead million lb	Zinc million lb	NSR
15 (assumed)	Proven	19,855	69.1	1.09	0.72	44.1	478.7	313.4	-
13 (assumed)	Probable	117,843	48.6	0.88	0.57	184.3	2289.2	1470.7	-
Subtotal	Proven & Probable	137,698	51.6	0.91	0.59	228	2,768	1,784	-
NSRSRK $15	Proven	15,960	80.3	1.21	0.82	41.2	425.7	288.5	34.9
NSRSRK $13	Probable	88,109	57.7	1.03	0.63	163.4	1993.5	1216.9	26.3
Subtotal	Proven & Probable	104,068	61.2	1.05	0.66	204.6	2419.2	1505.4	27.6
	% Difference Proven	19.6%	-16.2%	-11.0%	-13.9%	6.6%	11.1%	8.0%	13.8%
	% Difference Probable	25.2%	-18.7%	-16.6%	-9.9%	11.3%	12.9%	17.3%	12.6%
	% Difference Reserves	24.4%	-18.5%	-15.9%	-11.2%	10.3%	12.6%	15.6%	12.6%

Source: SRK Consulting (U.S.), Inc.

118. I have two further observations on the RPA report. Footnote 2 below Table 17-1[54] states "*The Mineral Resource is the tonnage contained within the 30 $/oz silver, 1.425 $/lb lead 1.50 $/lb zinc prices Whittle pit using 20 $/oz silver, 0.95 $/lb, and 1.00 $/lb zinc prices at a cutoff of 11 $/tonne NSR*." This language and terminology simply does not make sense.

119. On page 16-2 of the RPA report it states "*RPA understands that neither assay nor composite were capped to limit the influence of high grade samples*." On page 16-3 of the RPA report it states "*RPA was not provided with information on block grade estimation procedures, or Mineral Resource classification methodology*". Further under *RPA OBSERVATIONS AND CONCLUSIONS*[55] they state "*Assay, composite, and block model statistics were not provided to RPA, and search parameters used for metal grade interpolation into the block models are not known.*" From these revelations how they can possibly follow this with the statement that "*RPA was able to confirm the grades and tonnages of the Corani Mineral Resource estimate as reported by GRE*"[56] simply defeats

[54] RPA Expert Report, Dated May 29, 2015, §16, pg.16-4.
[55] RPA Expert Report, Dated May 29, 2015, §16, pg.16-4.
[56] RPA Expert Report, Dated May 29, 2015, §16, pg. 16-4.

me. These sentences are totally contradictory. Without an intimate knowledge of the fundamental parameters and methodology used for resource estimation there is no way that RPA or anyone else for that matter could confirm the grades and tonnages of the Corani Mineral Resource estimate. Again, this is simply not good enough at this level of evaluation and seriousness of the outcome. The mineral resource is the foundation upon which the mineral reserve is determined and from which a production schedule and cashflow projections are developed. If there are material issues with the robustness of the mineral resource then these automatically carry through to the mineral reserve and subsequent cashflow projections.

8.4 Cutoff Grade

120. As discussed above a NSR cutoff was used in the estimation of mineral resources and mineral reserves. This is an industry standard approach when dealing with polymetallic ores where multiple metals of economic interest are recovered for which each have different prices, metallurgical recoveries and smelter payabilities.

8.5 Silver Price

121. As discussed above a silver price of US$18 oz was used to estimate mineral reserves and in the cashflow model and economic analysis. A silver price of US$30 oz was used for the estimation of mineral resources. Of particular interest here is that the Feasibility Study for the Corani Project was published in July 2015. This used a silver price of US$18 per ounce for mineral reserves which, interestingly, over four years from the effective date, is not that much higher than was used in the 2011 FSU for Santa Ana. Further, as of the date of this report the silver price is languishing around US$14 oz. These observations lend further support to the use of modest long term silver price projections.

8.6 Mining Costs

122. Mining at Corani will be by owner mining. LoM mining operating costs were estimated at US$1.34 per tonne of ore and waste. This was the operating cost which was input to the pit optimization software. Even for owner operated mining and the economies of scale from a much higher production rate than at the Santa Ana Project, SRK consider this mining cost to be too low, SRK would increase mine operating costs to US$1.75 per tonne of ore and waste. In addition, the Corani mine is located at an altitude between 4,800 m and 5,100 masl. These extreme altitudes can cause health problems to the workforce and can result in equipment problems. Both of these challenges will likely result in lower labor and equipment productivity which also supports a higher operating cost. I can find no mention in the 2011 FS about how these real challenges were factored into labor and equipment productivities. Therefore, I can only conclude that they weren't.

8.7 Mineral Reserve

123. Increasing the mine operating cost and reducing the silver recovery (discussed below) will have a materially negative impact on the quantum of mineral reserves.

124. The RPA report states "*Low grade ore was not stockpiled due to the likelihood of the mineralization oxidizing over time. In RPA's opinion, low grade ore, which is above the economic cutoff but not included in the LOM, should be stockpiled separately from waste for potential future processing*[57]". The life of mine at Corani is of the order of 20 years. Oxidation of low grade ore is potentially a real issue. Research has shown that long term oxidation of sulfide

[57] RPA Expert Report, Dated May 29, 2015, §16, pg. 16-5

ores reduces metallurgical recovery should these subsequently be processed[58]. Therefore, in my opinion, not to include this material in the LoM was the correct decision.

8.8 Metallurgical Recovery

125. SRK reviewed the metallurgical programs for Bear Creek Mining's Corani Project as presented in the 2011 Feasibility study prepared by M3 Engineering and Technology Corp (M3) in order to assess the recoverability of lead, zinc and silver into marketable flotation concentrates.

126. The ore types in the Corani deposit have been categorized as Type I/II Ag-Pb-Zn mixed sulfide ore in which lead, silver and zinc can be recovered as marketable commodities, and a Type III Ag-Pb transitional material, which can be processed to produce a silver-bearing lead concentrate, but where the zinc content is too low to consider recovering zinc into a separate zinc concentrate. Generally the split between economic ore types is 84% Type I/II mixed sulfide ore and 14% Type III transitional ore. In the mixed sulfide ore lead occurs primarily as galena, zinc occurs as sphalerate and silver occurs in tetrahedrite and other silver-bearing minerals. In the transitional ore approximately 95% of the lead is present as galena and the remainder is present as plumbogummite and a fine-textured mix of gorceixite and plumbogummite. Silver occurs in tetrahedrite and other silver-bearing minerals. Zinc occurs as sphalerite, but at grades that do not warrant recovery.

8.9 Recoverability: Mixed Sulfide Ore

127. M3's 2011 Feasibility study projected the lead, zinc and silver recoveries presented in Table 8-5 for both the mixed sulfide and transitional ore types. Lead and silver recovery from mixed sulfide ore into a marketable grade lead flotation concentrate was projected at 75% and 62%, respectively. Zinc and silver recovery into a zinc flotation concentrate were variable depending upon the zinc grade of the ore.

Table 8-5: Projected Recoveries for Mixed Sulfide and Transitional Ore Types (BCML)

Ore Type	Recovery (%) to Lead Con			Recovery (%) to Zinc Con		
	Pb	Zn	Ag	Pb	Zn	Ag
Mixed Sulfide						
Zn > 0.7%	75	9	62	5.0	67.5	14.0
0.5% <= Zinc <0.7%	75	9	62	5.0	50.0	10.4
0.3% <= Zinc <0.5%	75	9	62	5.0	30.0	6.3
Zinc <0.3%	75	9	62	0	0	0
Transitional	38% +10.9*Lead Grade (%)-Max 65% Recovery	5	38.5% +0.2*Ag Grade (g/t)-Max 70% Recovery	0	0	0

Source: M3 2011 Feasibility Study[59]

128. SRK is concerned that recoveries projected in the 2011 Feasibility Study may have been overstated, based on the following observations:

- The average grade of the test composites used for the locked-cycle testing, which formed the basis for the metal recovery projections, were substantially higher grade than the ore reserve grade. The average of the mixed sulfide composites was 1.95% Pb, 1.53% Zn and 63 g/t Ag and the average grade of the transitional ore composites was 2.1% Pb and 92 g/t Ag. Whereas, the average grade of the Corani ore reserve is 0.94% Pb, 0.59% Zn and 51.6 g/t Ag; and

[58] SGS Minerals Services, Technical Bulletin 2009-07, *The Impact of Crushed Ore Ageing on Metallurgical Performance* (SRK-019).
[59] Corani Feasibility Study, Dated December 2011, Table 13-7. Pg. 103 (C-0066).

- The 1-5 Year Mixed sulfide composite, which presumably was put together to represent the mixed sulfide ore mined during the first 5 years of operations was closer to the projected reserve ore grade at 0.89% Pb, 1.32% Zn and 50 g/t Ag, but the locked-cycle test results on this composite resulted in 53.6% lead recovery and 40.2% silver recovery into the lead concentrate and 64.4% zinc recovery and 19.5% silver recovery into the zinc concentrate.

129.In order to reevaluate projected lead and silver recoveries from mixed sulfide ore into the lead concentrate, SRK selected the results of locked-cycle tests from composites that are closer to the anticipated ore grade. This includes the results of tests on U, D, G, K and 1-5 Year mixed sulfide composites as shown in Table 8-6. This resulted in an average of about 70% lead recovery and 55% silver recovery into the lead concentrate containing about 54% Pb and 1,755 g/t Ag from the mixed sulfide ore.

Table 8-6: Projected Lead and Silver Recoveries into Mixed Sulfide Ore – SRK

	Head Grade			Pb Conc Grade		Zn Conc Grade		Pb Conc Recovery %		Zn Conc Recovery %	
Composite	**Pb,%**	**Zn, %**	**Ag,%**	**Pb,%**	**Ag, g/t**	**Zn, %**	**Ag, g/t**	**Pb**	**Ag**	**Zn**	**Ag**
U	0.81	1.44	36	55	2,391	55	283	88	73	78	13
D	1.56	1.86	58	65	1,679	49	661	72	52	82	35
G	1.15	1.10	62	50	1,645	52	374	56	56	69	15
K	1.07	1.59	27	50	904	58	374	81	54	65	13
1-5 Year Master	0.89	1.32	50	51	2,155	52	385	54	40	64	20
Average	1.10	1.46	46	54	1,755	53	415	70	55	72	19

Source: SRK Consulting (U.S.), Inc.

130.The 2011 Feasibility Study recognized that projecting zinc recoveries for the mixed sulfide composite was difficult, particularly from the fact that all of the locked cycle tests were conducted on composites where the zinc grade substantially exceeded the average zinc grade of the reserve. As such, zinc recovery was projected on the basis of zinc head grade where:

Zinc>0.7% = 67% zinc recovery;
0.5%<Zinc<0.7% = 50% zinc recovery; and
0.3%<Zinc<0.5% = 30% zinc recovery.

131.SRK believes that zinc recovery projections for the mixed sulfide composite seem reasonable.

8.10 Recoverability: Transitional Ore

132.SRK developed the following equations for projecting lead and silver recoveries from the transition ore:

- Lead Recovery = 38% + 10.9* Lead Grade%; and
- Silver Recovery = 38.5% + 0.2* Silver Grade g/t.

133.At the average ore grade of 0.91% Pb and 51.6 g/t Ag, this results in the projection of an average lead recovery of about 48% and an average silver recovery of about 49% from transition ore. SRK believes that this is reasonable pending further work on test composites closer to the grade range anticipated.

8.11 Post 2011 Metallurgical Studies

134.It was SRK's understanding that following M3's 2011 Feasibility Study that new test composites would be prepared for confirmatory metallurgical testing under optimized conditions and that these composites would be formulated from new drill holes and be composited to represent both the mineralogy and ore grades that will be mined during the first five years of production. This does not appear to have happened based on a review of the M3's 2015 Feasibility Study for the Corani project. Instead, GRE was retained to conduct an evaluation of the geometallurgy, which resulted in a complex statistical analysis indicating that several measurable geological parameters could be used to make metallurgical predictions.[60]

135. While this geometallurgical evaluation offers some valuable insights into the parameters effecting metals recovery, SRK would make the following points regarding outcomes from this statistical evaluation:

- Lead recovery to the lead concentrate from mixed ore averages about 70% during the first five years, which is similar to the average lead recovery from selected test results (Table 7-3).
- Silver recovery into the lead concentrate during the first five years is predicted at about 70%, which is substantially higher than the 55% average silver recovery from selected locked cycle tests. The higher silver recovery to the lead concentrate is based on the premise that the distribution of silver to the zinc concentrate can be reduced, this, however, is not supported by the results of the locked-cycle testwork presented in the 2011 Feasibility Study.

136. It is SRK's opinion that recovery projections should be validated with confirmatory testing on metallurgical composites formulated from new drill holes that are composited to represent both the mineralogy and ore grades that will be mined during the first 5 years of production. Absent this, then SRK recommends that silver recoveries be maintained at 55%, considerably lower than the 70% projected.

8.12 Reporting of Additional Resources

137. By formally reporting and incorrectly so in my view, substantial additional resources, which are highly questionable, it is likely that the market was giving some value to these additional mineral resources.

8.13 Permitting Schedule

138. As noted above, over the past five years or so there has been a history of permitting delays for mining projects in Peru. Typically permitting timelines have increased from 6 months to 12 months or even longer. Peru has also experienced considerable public opposition to mining projects sometimes for genuine concerns and sometimes as a result of the actions of political activists or NGOs. Therefore, the "Social License to Operate," *i.e.*, support from the local communities, is becoming an increasingly important consideration for the mining sector.

8.14 Construction and Ramp-up Schedules

139. The project construction and ramp-up schedule presented is a reasonably detailed Gantt chart in the 2015 Corani Feasibility Study.[61]

140. SRK considers that by factoring in likely delays in permitting, difficult logistics associated with procurement and construction in a high Andes environment, collectively these could lengthen the time from project inception (a Go decision) to first concentrate production by at least one year from that presented in the FS.

8.15 Discount Rate

141. The application of a 5% discount rate by both Bear Creek and RPA in the discounted cashflow (DCF) analysis is inconsistent with industry practice which typically applies the Capital Asset Pricing Model. It underestimates the

[60] Corani Feasibility Study, Dated July 2015, Figure 24-2, pg. 301 (SRK-020).
[61] Corani Feasibility Study, Dated July 2015, §7 3 2. pg. 62-64 (SRK-020).

weighted average cost of capital (WACC), the permitting, construction, commissioning and operating risk and country risk, which will all apply to the project. At the very least SRK would recommend a discount rate of 10% with appropriate sensitivity analysis to show the impact of varying discount rates on project NPV.

8.16 SRK Adjustments to Cashflow Model Inputs

142. SRK recommend the following adjustments to the input parameters for the Corani Project:

- Increase mine operating costs from US$1.34/ tonne to US$1.75 /tonne;
- Limit the metallurgical recovery of silver in the lead concentrate to 55%; and
- Lengthen the timeline to first concentrate production by one year to account for SLTO issues and site operating conditions.

143. Clearly these adjustments will collectively negatively impact both the reserve quantum and the economics of the Corani Project.

9 Date and Signature Page

Prepared by

Appendices

Appendix 1: Curriculum Vitae of Dr. Neal Rigby

Neal Rigby

Corporate Consultant - Mining

Profession	Corporate Consultant - Mining
Education	B.Sc. (1st Class Honours) Mining Engineering, University of Wales, Cardiff, 1974 Ph.D. Mining Engineering, University of Wales, Cardiff, 1977 Participated in several residential senior management/business programs
Registrations/ Affiliations	Chartered Engineer (1980) Member South Wales Institute of Engineers Member Institute of Materials, Mining and Metallurgy Corporate Member of SME and AIME

Specialization

Strategic planning and evaluation of mines. Mine performance and business improvement management. Mining Finance and due diligence.

Expertise

Dr. Neal Rigby has 40 years' experience in the international mining industry. He was the SRK Global Group Chairman for 15 years (1995 – 2010), is a Corporate Mining Consultant and Principal Mining Engineer and serves on the boards of several SRK Group companies. Neal has performed mining engineering, project management and management consulting for a wide range of metalliferous, coal, diamond and industrial mineral projects. The major focus of his consulting work for the past 20 years has been as the senior participant in numerous major due diligence audits, competent person's reports and other reports supporting the rationalization, merger, disposal and acquisition activities of international mining companies and mining finance institutions. In this role Neal has been in a position to certify to shareholders, stock exchanges and financial institutions the "bankability" i.e. fundamental value and risks and opportunities of mining projects. Most recently, Neal's consulting work has been directed at the restructuring and sale of mining assets and the scoping and implementation of business improvement strategies. He has held a variety of positions in production, academia, business and consulting. Neal has undertaken projects in over 50 countries, in Europe, Africa, Australasia, North, Central and South America, the Middle East, the Far East, Asia, Russia and the FSU.

Employment

2005 – Present	SRK Consulting (U.S.), Inc., Corporate Consultant – Mining, Lakewood, CO
2003 – 2005	Steffen Robertson and Kirsten (UK) Limited, Corporate Consultant – Mining, Cardiff, UK
1996 – 2003	Steffen Robertson and Kirsten (U.S.), Inc. International Consulting Engineers, Corporate Consultant Mining, Lakewood, CO
1995 – 2010	Steffen Robertson and Kirsten Global Limited, Group Chairman, Lakewood, CO
1981 – 1996	Steffen Robertson and Kirsten (UK) Limited, International Consulting Engineers, Founding Partner, Managing Director and Principal Mining Engineer, Cardiff, UK
1981 – 1988	Department of Mining, University of Wales, Lecturer and Industrial Research Director in Mining and Minerals Engineering, Cardiff, UK

Neal Rigby

Corporate Consultant - Mining

1978 – 1981	Steffen Robertson and Kirsten Inc., Senior Mining Engineer, Johannesburg, South Africa
1978	Anglo American Corporation, South Africa. Coal Division, Graduate Mining Engineer. South Africa
1974 – 1977	Applied Research, Strata control aspects of longwall partial extraction systems, hydraulic powered support design and advanced technology mining, Cardiff, UK
1972	Gold Fields of South Africa, Libanon Gold Mine, Trainee Miner, South Africa

Publications

Numerous publications and presentations in the fields of Mining, Mining Finance, Due Diligence and Geomechanics

Languages

English, Basic French and Spanish

Academic

Visiting Lecturer in Mining Engineering and Continuing Education at the University of Wales, Cardiff, UK, the Colorado School of Mines, USA and the University of the Witwatersrand, South Africa

Appointments

Former Council Member, Institution of Mining Engineers

Former Council Member and President Elect, South Wales Institute of Engineers

Founding member, UK Joint Advisory Committee on Coal Mine Gas Outbursts, (Health and Safety Executive/British Coal Corporation)

Expert Reports for Litigation / Arbitration

Mechel Bluestone Inc., et al. vs James C. Justice Companies Inc., et al, Dispute

- Independent expert opinion on merger agreement, drilling program, reporting standards and results of the Mechel Bluestone coal properties in West Virginia. Settled in Favor of Subject Client.

Churchill Mining plc v the Government of Indonesia, ICSID Arbitration

- Independent expert opinion on evaluation, design, implementation plans and operating performance of the East Kutai Coal Project in Indonesia. An economic analysis and valuation of the fair market value was also provided. In Progress.

Oxus Gold plc v Republic of Uzbekistan, UNCITRAL Arbitration

- Independent expert opinion on evaluation, design, implementation plans and operating performance of the Amantaytau Project in Uzbekistan. In Progress.

Pac Rim Cayman, LLC v Republic of El Salvador, ICSID Arbitration

- Independent expert opinion on evaluation, design, implementation plans and operating performance of the El Dorado Gold and Silver Mine in El Salvador. In Progress.

Roshni Developers v Thiess Minecs India, International Arbitration

- Independent expert opinion regarding terms of the MOU and removal of Overburden for the Western Pit of Pakri Barwardih Coal Mining Block in the state of Jharkhand, India.

TNR Gold Corp v MIM Argentina Exploraciones S.A. Arbitration

- Independent expert opinion on property rights and exploration and option agreements. Settled in Favor of Subject Client.

Neal Rigby

Corporate Consultant - Mining

Western Aggregates LLC v Cal Sierra Development Inc, Dispute

- Independent expert opinion on property ownership, rights to minerals and mineral sterilization.

Minera San Cristobal v Washington Group Bolivia: International Arbitration

- Independent expert opinion on the circumstances surrounding the termination for cause and performance of the mining contract at the San Cristobal silver, lead, zinc project in Bolivia. Excused.

Gold Reserve Inc v Government of Venezuela: International Arbitration

- Independent expert opinion to the International Arbitration Council on the circumstances surrounding the denial of a mining permit, valuation and damages assessment in respect of the Las Brisas gold/copper project. In Progress.

MAG Silver v Fresnillo plc

- Independent expert opinion to the International Arbitration Council on the Fresnillo II prospect. Settled in Favour of Subject Client.

Vanessa Ventures v Government of Venezuela: International Arbitration

- Independent expert opinion to the International Arbitration Council on the valuation of the Las Cristinas gold project at the time of its confiscation. In Progress.

Metallica Resources v Washington Group International: At Arbitration

- Independent expert opinion on the circumstances surrounding the termination for cause versus termination for convenience of the US$100M mining contract between the parties in respect of the Cerro San Pedro mine in Mexico. Settled in Favour of Subject Client.

Ingwe v Total Coal South Africa: South Africa

- Independent expert opinion in respect of options for development of disputed JV mining licences. Excused.

INCO v Confidential Party: Canada

- Independent audit and valuation of a major Nickel asset and expert testimony. Settled in Favour of Subject Client.

Bateman v Nelson Gold: Bermuda

- Expert opinion on circumstances surrounding gold project failure in Uzbekistan. Settled in Favour of Subject Client.

UPAL v ARCO (subsequently Rio Tinto): Australia

- Multiple expert opinion commissions over a 10 year period concerning an underground coal project. Each case settled in Favour of Subject Client.

HM Government

- Expert testimony to Commission of Enquiry on the future of the British Coal Corporation.

Tilley v British Coal

- Expert opinion on the circumstances and cause of an underground coal mine accident leading to serious bodily injury. Settled in Favour of Subject Client.

Various:

- Numerous expert testimony commissions in the fields of project valuation, royalty payments, contract disputes, underground and ship cargo gas explosions, mining subsidence, groundwater pollution, shaft failure, open pit slope failure and surface and underground mine and quarry permitting.

Neal Rigby

Corporate Consultant - Mining

Current Corporate Advisory Services (2014)

Confidential Project #1:
- Underground copper operational and business improvements and preparation for potential IPO.

Confidential Project #2:
- Corporate support to merger negotiations between major iron ore producers.

Confidential Project #3:
- Corporate advice in relation to securing strategic investors in a major IOCG.

Confidential Project #4:
- Corporate advice in relation to sale of major coal asset.

Confidential Project #5:
- Corporate Support to strategic investor in major potash project.

Confidential Project #6:
- Corporate Support to procurement process with multi-lateral export credit and commercial banks in relation to project finance.

Key Experience (2006 – 2015)

Recent project experience includes:

Ministry of Mines and Petroleum (MOMP), Pashtunistan Watt, Kabul – Afghanistan
- Assist the Islamic Government of Afghanistan and International Development Association (IDA-World Bank) in its objective to strengthen institutional capacity within the MOMP

U.S. Department of Defense – Task Force for Business Stability and Operations (TFBSO) – Mineral Tender Development and Geological Services
- Team lead strategic advisor for the TFBSO sponsored advisory mandate to assist the Ministry of Mines and Petroleum (MOMP) in developing the mining and cement industry in Afghanistan

Carpathian Gold Inc., Romania and Hungary
- Project Manager for preliminary assessment of the various exploration properties held by Carpathian Gold Inc

U.S. Energy Corp. Uranium Assets
- Project Manager for due diligence review of the U.S. Energy Corp. Uranium Assets in Colorado, Utah and Wyoming, USA

Monte Cristo Mine
- Project Manager for the NI 43-101 Technical Report for the Monte Cristo Mine in the State of Mato Grosso, Brazil

Elkhorn Uranium Exploration Project
- Project Manager for the NI 43-101 Technical Report, initial resource estimate – Busfield deposit, Elkhorn Uranium Exploration Project in Wyoming, USA

Neal Rigby
Corporate Consultant - Mining

Minas-Rio Bovespa IPO
- Project Director for the Project Report summary of the Minas-Rio Project located in Brazil

Nome Placer Property, Nome, Alaska
- Project Manager for the Preliminary Assessment that was undertaken to determine the economic potential of the Nome Placer Property located near Nome, Alaska, USA

Trekkopje Uranium Project
- Project Director for the Definitive Feasibility Study for the Trekkopje Uranium Project located in Namibia, Africa

Las Cristinas/Brisas Ind. Appraisal
- Project Manager for the Fatal Flaw report on the Las Cristinas and Las Brisas Projects in Venezuela

Robinson Nevada Mining Company
- Project Manager for technical due diligence on the gold mining and associated operations of the Robinson Nevada Mining Company, a wholly owned subsidiary of Quadra Mining Ltd

Franke Copper Project
- Project Reviewer for an Independent Engineer report on the Franke Copper Project located in Chile

Phoenix Phosphate Mine
- Project Manager for a Technical Due Diligence report on the Phoenix Phosphate Mine located in Baja California Sur, Mexico

Borealis Gold Project
- Project Manager for a Due Diligence report on the Borealis Heap Leach Gold Project located in Nevada, owned by Gryphon Gold Corporation

Erdmin Copper Leach Project
- QA/QC for a NI 43-101 Technical report on Erdmin's Copper Leach project located in Mongolia

Helmer-Bovill Project
- Project Oversight and QA/QC for a Feasibility Study report on the Helmer-Bovill Feldspar, Quartz and Kaolin project located near Bovill, Idaho

Pascua-Lama Project
- Project Oversight and QA/QC for a NI 43-101 Royalty report on the Pascua-Lama project owned by Barrick Gold Corporation located in Region III, Chile and San Juan Province, Argentina

Minto Project
- Project Oversight and QA/QC for the retention of an independent technical consultant by Macquarie Bank Limited for the technical due diligence study of certain aspects of the Minto Copper and Gold Project located in Canada owned by Sherwood Mining Corporation

Santa Barbara
- Project Oversight for a review and site visit of the Santa Barbara Project – Pilar Target located in Minas Gerais, Brasil

Bear Creek and Nome Projects

- Project Director and QA/QC for Independent Reports for the Shell Alaskan Mining Trust in Alaska

Desarollo De Recursos Indigenas Tzukut, S.A.

- Project Oversight to assist in the first phase of exploration, project development and feasibility of the Companys' properties in Costa Rica

Aurizona Project

- Project Oversight and QA/QC for a Preliminary Assessment and an NI 43-101 Technical Report on the Aurizona Project in Maranhao State, Brazil

GME4

- Project Director and Corporate Consultant for Consulting Support to GME4 on their exploration prospects, corporate strategy and proposed work program so GME4 can achieve its goals

Koza Altın İşletmeleri A.Ş.

- QA/QC Review for a Competent Person's Report for Koza's mining operations and advanced exploration projects in Turkey

Florida and El Peñon

- Project Oversight and QA/QC for a Due Diligence Report on Koza's the Florida and El Peñon Mines in Chile

Fresnillo plc.

- Project Oversight and QA/QC for an Independent Audit of mining operations and advanced exploration projects in various locations in Mexico in support of an LSE IPO

Dyno Nobel Inc.

- Project Director and QA/QC for a Due Diligence Report on the Phoenix Phosphate Mine located in San Juan de la Costa, Baja, California Sur-Mexico

Relief Canyon Mine

- Project Review and QA/QC for an NI 43-101 Technical Report on the Relief Canyon Mine, owned by Firstgold Corp., located in Nevada

Santa Rita Nickel Project

- Project Director and QA/QC review for an Independent Engineer Report on the Santa Rita Nickel Project located in Bahia, Brazil for Lenders

Tamaya Resources

- Project Manager, Mining and Reserves and overall report review for a Phase I Fatal Flaw Assessment of the Cinabrio/Punitaqui (Chile) and Lichkvaz (Armenia) Projects owned by Tamaya Resources

Uranium One

- Project Oversight and QA/QC for an Independent Engineer Report on Uranium One's Akdala, South Inkai, and Kharasan mines in Kazakhstan and the Dominion Reefs mine in South Africa

Uranium One

- Project Oversight and QA/QC for an Audit of a Feasibility Study currently being prepared for Uranium One's Velvet and Frank M mines in Shootaring Canyon uranium operations in Utah

Posse Gold Project

- Project Reviewer and QA/QC for a Prefeasibility Study on the Posse Gold Project owned by Amarillo Gold Corporation, located in Brazil

Ambler Project

- Qualified Person and QA/QC for a Prefeasibility Study on the Ambler Project located in Alaska

Aranzazu Copper-Gold Project

- Project Review and QA/QC for a Fatal Flaw on the Aranzazu Copper-Gold Project located in Zacatecas, Mexico

Arava Copper Mine

- Project Director and QA/QC for a Prefeasibility Study on the Arava Copper Mine located in Timna Valley, Southern Israel

Bakyrchik and Bolshevik

- Project Manager and Review for a Technical Due Diligence Review of Altynalmas Gold Ltd.'s Bakyrchik Gold Mine Project and Bolshevik Exploration Project located in Kazakhstan

Black Diamonds

- Project Director for a Due Diligence Review of the Black Diamonds Project located in Minas Gerais, Brazil

Bloom Lake Project

- Project Director and QA/QC for an Independent Engineer report of the Bloom Lake Project located in Quebec, Canada

Blue Jay

- Project Principal and QA/QC for a Due Diligence report on Project Blue Jay Assets world-wide

Anzob Mine

- Project Oversight and Review for a Operations Review on the Anzob Mine located in Tajikistan

Condestable and Raul

- Project Review and QA/QC for the Independent Engineer role on the Condestable and Raul underground Cu mines located in Lima, Peru

Kitsault Molybdenum Project

- Project Review and QA/QC for an NI 43-101 Technical Report on Resources and a Preliminary Assessment on the Kitsault Molybdenum Project located in British Colombia, Canada

Lucky Jack Molybdenum Project

- Project Oversight for an NI 43-101 Technical Report on the Lucky Jack Molybdenum Project located in Crested Butte, Colorado

Mar Tungsten

- Project Oversight and QA/QC for an NI 43-101 Preliminary Assessment on the Mar Tungsten Project located in Yukon, Canada

Madaouela Uranium Project, Niger

- Project reviewer for the scoping study for this underground Uranium project

Neal Rigby
Corporate Consultant - Mining

Detour Lake Project, Canada
- Project Director for the Independent Engineer role to the lending banks for this open pit gold project

Molejon Project, Panama
- Project Director for the Independent Engineer role to the lending banks for this open pit gold project

El Chanate Project
- Technical assistance and project optimization

Mantaro Project, Peru

Peñoles Base Metals Mines, Mexico
- Project Director for the independent audit of resources and reserves for six base metal mines

Rosemont Copper Project, Arizona
- Project Director for the Independent Engineer role to the lending banks for this open pit Cu project

Black Diamonds II, Brazil
- Project Director overseeing due diligence for a suite of major iron ore projects

Arava Copper Mine, Israel
- Project Director for the prefeasibility and feasibility studies for this underground Cu project

DUSEL
- Project Reviewer for the design and construction aspects of the Deep Underground Scientific and Engineering Laboratory Project at the Lead Mine, South Dakota

Frankenstein Project, Chile
- Peer reviewer for the Independent Engineer role for this open pit Cu project

Palladon Iron Project, Utah
- Project Director for the NI 43-101 PEA report for this open pit iron ore project

Turmalina Project, Brazil
- Project Oversight for the pre-acuisition due diligence for a suite of iron ore projects

San Simon Project, Peru
- Technical Advisor for strategic business assessment and optimization alternatives for this open pit gold project

Hollister Project, Nevada
- Project Director for the Pre-Financing due diligence of this underground, narrow vein gold project

Rossing South Project, Namibia
- Project Director for the pre-participation due diligence of this open pit Uranium project

Salamanca Project, Spain
- Project Director for the pre-participation due diligence of a suite of open pit Uranium projects

Mineral Park Project, Arizona
- Project Director for the Independent Engineer role for this open pit Cu/Mo project

BrasAgro Project, Brazil

- Project Director for a pre-financing due diligence of this Phosphate project

Marenica Project, Namibia

- Peer reviewer for the scoping study of this open pit Uranium project

Mountain Pass Project, California

- Peer reviewer for the feasibility study for the restart plan for this Rare Earth project

Key Experience (1994 – 2005)

China Minmetals/Noranda

- Project director to a 36 person team performing pre-bid technical and economic due diligence and valuation of Noranda Inc's global base metals assets, assistance with bid strategy, pricing and corporate negotiations

SUEK, Russian Federation

- Project director for the independent technical and economic audit of SUEK's 40 Coal Mines located across the Russian Federation

Xstrata Coal, South Africa

- Independent technical audit of 5 coal mines and provision of expert opinion in connection with arbitration proceedings

Bloom Lake, Quebec

- Independent audit and valuation of this greenfields iron ore project for financing and a proposed IPO on AIM

Philippines Nickel

- Independent review of five nickel mines for corporate purposes

GAPCO, Guinea

- Independent engineer role to the syndicate banks of a greenfields bauxite and aluminum project

Voisey's Bay, Canada

- Project director for the Independent audit of the Voisey's Bay Nickel Project in Newfoundland for INCO corporate purposes

Harmony Gold

- Project reviewer for the independent resource and reserve assessment and preparation of an updated competent persons report on the assets of the company

Confidential Client

- Independent audit and valuation of 38 coal mines as a precursor to restructuring and offshore listing on a major stock exchange

Gambia Mineral Sands

- Technical advisor to the Government of the Gambia and the Commonwealth Secretariat on proposals to develop coastal mineral sands deposits

Kansanshi, Zambia

- Project director and senior reviewer for the independent engineer's report on this open pit copper project in support of project financing

Akyem, Ghana

- Senior project reviewer and project sponsor for the independent third party review of this open pit gold mine for Newmont Gold

Ma'aden, Saudi Arabia

- Project director and strategy advisor for the restructuring and proposed privatization of the gold assets of Ma'aden

Ahafo, Ghana

- Senior project reviewer and project sponsor for the independent third party review of this open pit gold mine for Newmont Gold

Ambaji, India

- Senior project reviewer for the feasibility study of this fully integrated zinc mine project. Subsequently involved in procuring financing for project implementation

Assarel, Bulgaria

- Senior project reviewer for the formulation of multiple business improvement strategies for this open pit copper operation

Trans Siberian Gold

- Project director for the preparation of an Industry Technical Expert's Report on the Company's gold assets in support of an AIM listing

Armgold/Harmony

- Independent Audit of the multiple mining assets and preparation of an independent Competent Persons Report for the merger of the companies

Konkola Copper Mines, Zambia

- Technical Advisor to the Government of Zambia and ZCCM-IH on the restructuring as a result of the exit of Anglo American PLC. Tasks involved full due diligence, assistance with the restructuring negotiations, optimization studies and sale and data room process. Subsequent involvement has focussed on multiple business improvement strategies to realize opportunities and reduce costs and technical support to negotiations with the preferred bidder. On-going support role post transaction

Glamis Gold

- Independent audit of 5 properties in North and South America in support of financing

Kemmess Mine, BC

- Independent due diligence audit of this open pit Cu, Au mine for project financing

BCL, Botswana

- Independent audit and strategic assessment of options for this underground, Ni- Cu multiple mine and smelter complex for the principal shareholders

Jilau Project, Uzbekistan
- Expert opinion in connection with litigation. Successful settlement

Breakwater Resources
- Independent audit and preparation of an OSC-TSE 43-101 compliant report on multiple zinc mines in Canada, Chile and Tunisia

Chinalco, China
- Independent audit of multiple bauxite mines and aluminum plants and smelters as technical adviser for the IPO on the New York and Hong Kong Stock Exchanges

Ken Snyder Mine, Nevada, USA
- Independent estimation of resources and reserves, trade-off studies and preparation of a LoM plan for this narrow vein underground gold mine

Amantaytau Gold Fields, Uzbekistan
- Independent technical due diligence of this multi-pit, heap leach oxide gold project for project financing

Casa Berardi, Quebec
- Independent review and valuation and pre-participation due diligence for a confidential client on this underground wide orebody gold mine

Iscor, South Africa
- Independent audit and preparation of a “Competent Persons” Report on the multiple mining assets of Iscor as part of the restructuring to form Minco and Steelco

Anglogold Limited
- Independent technical and economic audit of Anglogold’s global assets in Australia, North and South America and Africa

Ken Snyder Mine, Nevada
- Optimization of LOM Plan for this high grade, underground gold mine

Briggs Mine, California
- Independent due diligence of this open pit, heap leach gold mine in support of project financing

Spoornet Privatization, South Africa
- Independent technical advisor to the South African Government regarding the 30 year sustainability of coal and iron ore mining

Diamond Fields International
- Independent due diligence appraisal of Diamond Field’s Sea Bed diamonds project off the coast of Namibia on behalf of prospective investors

Franco Nevada, Gold Fields Merger
- Independent technical and economic audit of the gold and precious metals assets of the two companies and preparation of the Competent Persons’ Report

Shell Coal
- Pre-bid Due diligence evaluation of Shell Coal’s assets in Australia and Venezuela on behalf of Ingwe

Neal Rigby
Corporate Consultant - Mining

El Pachon, Argentina
- Strategic assessment and valuation of alternative joint development options with Los Pelambres mine

St. Helena
- Independent technical adviser and update of the Gold Fields Competent Person's Report for the disposal transaction

JCI/Western Areas/Randgold
- Independent technical adviser and preparation of the Competent Person's Report for the restructuring

Confidential Corporate Clients
- Independent valuation of multi-commodity group assets for a number of major mining houses

Dukat, Magadan
- Independent technical and economic audit of this underground silver project for project finance

Cerro Matoso S.A., Colombia
- Independent technical and economic audit of this ferro nickel expansion project for project finance. Ongoing Independent Engineer role

Hartley Platinum, Zimbabwe
- Independent evaluation of operational performance and alternative Life of Mine strategies

Vaal Reefs Gold Plant
- Independent audit of multi-source metal accounting from in-situ gold estimation to produced doré and source allocation

Randfontein Estates Limited, South Africa
- Independent Technical and Economic Review of underground and open pit gold mining operations

Questa Mine, Arizona U.S.A.
- Audit of molybdenum operations and LoM strategies

Anglogold Limited/Minorco Gold
- Preparation of the Independent Technical Advisors report on the acquisition by Anglogold of Minorco SA's gold assets

Bulyanhulu, Tanzania
- Independent technical and economic audit of this new underground gold project for bank financing

High Grade Ventures, Brazil
- Assistance with scoping appropriate sampling, evaluation and feasibility work for alluvial diamond prospects

Simsen Metals, China
- Preliminary technical and economic due diligence and prefeasibility studies on 3 Cu, Ni, Co. properties

Angren Gold Project, Uzbekistan, Newmont
- Technical evaluation of alternative mining strategies

Neal Rigby
Corporate Consultant - Mining

Evander Gold Holdings Limited, South Africa
- Independent technical and economic due diligence appraisal for the JSE and LSE listing

Minorco SA
- Independent technical and economic due diligence review of Minorco's N. and S. American gold operations (5 mines) and exploration prospects

Vametco, South Africa
- Independent review of the vanadium resources and reserves

Casmyn Corp.
- Independent review of the reserves, resources and development plans for Casmyn's Zimbabwe Operations

Minera Michilla SA, Chile
- Independent technical audit of this open pit and underground copper property

Equatorial Mining NL
- Technical due diligence appraisal of a confidential low grade gold property in Nevada for acquisition

Anglogold, South Africa
- Independent technical and economic due diligence appraisal of the operating gold assets and exploration prospects of the enlarged Anglogold as part of the formation of Anglogold

Gold Fields, South Africa
- Independent technical and economic due diligence appraisal of the operating gold assets and exploration prospects of Gold Fields of South Africa and Gencor as part of the formation of Gold Fields Limited

Vaal Reefs, South Africa
- Independent technical and economic due diligence appraisal of Vaal Reefs, South Vaal and East Vaal for their merger and JSE and LSE listing

Gold Fields Coal, South Africa
- Independent valuation of opencut and underground coal prospects

Sasol Coal, South Africa
- Operational audit of Twistdraai East and West Mines

Ingwe Coal
- Critical appraisal and comparison of Australian and US Longwall practice and performance

Refugio, Chile
- Independent technical design and operational review

Codelco, Chile
- Advice on project evaluation methodology and bankability

Tomi Project, Venezuela
- Independent due diligence technical audit in support of project financing

Neal Rigby
Corporate Consultant - Mining

Amplats, South Africa

- Independent review of company prepared competent persons report in respect of restructuring

Consolidated Nevada Goldfields Corporation

- Technical and economic review of gold and silver properties in Alaska, Nevada, and Mexico

Togara South, Queensland, Australia

- Peer Review of this underground export coal project for board investment approval

Pueblo Viejo Gold Mine, Dominican Republic

- Pre-tender technical investigations for this 32 Moz Open pit gold mine in a high rainfall, seismically active location. Specific emphasis was placed on factors affecting value, liability and risk

Julietta Gold Mine, Magadan, Siberia

- Technical and economic audit of this underground mine in a permafrost environment on behalf of project finance underwriting banks. Ongoing Independent Engineer role

Alluvial Gold Property, Kazakstan

- Design and implementation of exploration and evaluation programmes for this very substantial prospect

Cana Project, Panama

- Preparation of a conceptual mine plan for this underground gold property

Chrome Mines, Oman

- Independent audit of operating chrome mines and resource potential for equity investment

Confidential

- Detailed strategic assessment and ranking of potential African coal property acquisition for an international energy company

Merelane Graphite Mine, Tanzania

- Full independent review of all feasibility aspects for the African Development Bank

Salsigne, France

- Rock mass stability investigation and re-design of mining methods

Al Hajar, Saudi Arabia

- Prefeasibility and full feasibility study for this open pit heap leach gold project

Lenzoloto, Russia

- Independent review of operating alluvial gold mines

Varvarinskoye, Kazakstan

- Prefeasibility study of this gold property and stock exchange listing report

Gordonstone Coal Mine, Australia

- Provision of expert witness evidence on mine design and surface subsidence effects from long wall coal extraction in relation to compensation claims

Pongkor Mine, P.T. Aneka Tambang Indonesia

- Technical assistance and mine design

Neal Rigby
Corporate Consultant - Mining

Dunrobin, Zambia

- Independent audit of sponsor generated feasibility study of this open pit, heap leach property for bank financing

Namco, Namibia

- Technical audit, design, reserves verification and contract advice for offshore sea bed diamond mining

Udan Thani Potash Mine, Thailand

- Conceptual design and valuation for potential acquisition

TVX Hellas, Greece

- Mine design, planning and feasibility work for the Olympias mine, an underground Au, Zn, Pb mine

Anglo Vaal, RSA

- Independent Assessment and valuation of 20 gold, base metal, industrial mineral and coal properties as part of the restructuring of this major mining house

Evander Gold Holdings, RSA

- Independent audit, verification and valuation of Life of Mine reserves in respect of three gold mines to be merged: - Kinross, Winkelhaak and Leslie

Kinross Gold, RSA

- Independent Audit of Ore Reserves

Winkelhaak Gold Mine, RSA

- Independent Audit of Ore Reserves

Leslie Gold Mine, RSA

- Independent Audit of Ore Reserves

Oryx Gold Holdings, RSA

- Technical Audit and enhancement of the Life of Mine plan for Board presentation in support of a R600 million rights issue

Cluff Resources plc.

- Independent valuation of operating gold mining assets and prospects in Zimbabwe, Tanzania and Ghana and verification of proven and probable reserves

Tati, Botswana

- Independent review of mineable Nickel reserves in respect of the Phoenix and Selkirk mines for valuation purposes

Zimasco, Zimbabwe

- Independent verification of mineability and proven and probable chrome reserves base for stock exchange listing purposes

Hatfield Colliery MBO, UK

- Independent evaluation of reserves, mining potential, preparation of a ten year mine plan and financial valuation for investors. This included assistance with lease, license and financing negotiations

Neal Rigby
Corporate Consultant - Mining

Maloma Colliery, Swaziland
- Technical and economic pre-funding due diligence of this open cast and underground anthracite prospect covering all aspects from mineable reserves assessment through to marketing agreements

Betws Colliery MBO, UK
- Independent evaluation of reserves, mining potential, preparation of a ten year mine plan and financial negotiations. SRK have been retained by the Company and their financiers for on-going technical and monitoring services

Leeuwpan Bankable Document, RSA
- Independent appraisal of Company produced Coal project feasibility study and assistance in producing bankable project documentation for external financing

Durban Navigation Collieries, RSA
- Independent audit of alternative life of mine plans for an underground coal mine. Selection of preferred option, critical appraisal of planning process, benchmarking of operations, mine-wide rationalization of personnel and optimization of strategic plan and definition

British Coal Privatization
- Project Director for the independent evaluation and due diligence assessment of 20 collieries, 33 operating and 50 prospective opencast mines for Bank Lenders and Stock Exchange Listing. Retained by the international Underwriting Banks to monitor performance

Al Amar Gold Mine, Saudi Arabia
- Project Manager for the preparation of the pre-feasibility, feasibility study and bankable document for this underground mine

Connonish, Scotland
- Prefeasibility study for this underground vein-type gold mine

Parys Mountain Polymetallic Mine, **Wales U.K.**
- Technical and economic audit of this underground mine for project finance

Chessey Zinc/Lead Mine, France
- Technical and economic audit of this underground mine for bank finance and stock exchange listing. The mining method was underhand drift and fill under a very weak rhyolite hanging wall

Lisheen Zinc/Lead Project, Ireland
- Over a 4-year period, coordinated pre-feasibility and feasibility design activities of a large team of consultants for this 1.5 mtpa underground mine employing inter alia bench and fill mining. Specific technical involvement with mining method selection and backfill design and specification. On-going assistance with permitting, detailed engineering, selection of mining contractors and implementation
- Valuation of various Quarry/Industrial Mineral properties for bank lending
- Provision of Expert Witness Opinion for Public Inquiries, Claims and Litigation, principally in the fields of mining subsidence, accidents, pollution, mine valuation and contract disputes

Appendix 2: Documents Relied Upon

No.	Document	Exhibit
1	CRIRSCO (Committee for Mineral Reserves International Reporting Standards) International Reporting Template, July 2006	SRK-001
2	http://www.unece.org/#, Report of the Task Force on Mapping of the United Nations Framework Classification for Fossil Energy and Mineral Resources, UNECE Ad Hoc Group of Experts on Harmonization of Fossil Energy and Mineral Resources Terminology, May 16, 2008.	SRK-002
3	http://www.icmm.com/ International Council on Mining & Metals. ICMM Responsible reporting of mineral assets, April 2013.	SRK-003
4	http://www.jorc.org/ropo.htm. Recognized Overseas Professional Organization (ROPO).	SRK-004
5	http://www.jorc.org/. The JORC Code 2012. The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.	SRK-005
6	http//www.samcode.co.za. The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves published by the South African Mineral Resource Committee under the joint auspices of the Southern African Institute of Mining and Metallurgy and the Geological Society of South Africa, 2007.	SRK-006
7	http//www.samcode.co.za. The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves published by the South African Mineral Resource Committee under the joint auspices of the Southern African Institute of Mining and Metallurgy and the Geological Society of South Africa, 2007 **as amended July 2009.**	SRK-007
8	http://en.wikipedia.org/wiki/Merrill-Crowe_processhttp://en.wikipedia.org/wiki/Zinc	SRK-008
9	CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines, 5/30/2003-adopted 11/23/2003 (SRK-009).	SRK-009
10	CIM Exploration Best Practices Guidelines	SRK-010
11	http://www.smenet.org/. A Guide for Reporting Mineral Exploration Information, Mineral Resources and Mineral Reserves prepared by the US Society for Mining, Metallurgy and Exploration, The 2007 SME Guide, 9/29/2007.	SRK-011
12	The Pan European Resources Code jointly published by the UK Institute of Materials, Minerals, and Mining, the European Federation of Geologists, the Geological Society, and the Institute of Geologists of Ireland. PERC Reporting Standard 2013	SRK-012
13	http//www.minmineria.cl. The Mineral Resources Committee of the Institution of Mining Engineers of Chile (IIMCh), December 2004 Code for the Certification of Exploration Prospects, Mineral Resources and Ore Reserves as published by the Instituto de Ingenieros de Minas de Chile	SRK-013
14	Russian Code for the Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves prepared by the National Association for Subsoil Examination (“NAEN”) and the Society of Russian Experts on Subsoil Use (“OERN”). Russian Code for the Public Reporting of Exploration Results, Mineral Resources, Mineral Reserves (NAEN Code), 2011	SRK-014
15	http//www.bvl.com.pe. A Code for reporting on Mineral Resources and Ore Reserves, established by the Joint Committee of the Venture Capital Segment of the Lima Stock Exchange	SRK-015
16	United States Securities and Exchange Commission (SEC) Industry Guide 7 (IG7): Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations, 2001	SRK-016
17	http//www.cim.org. The CIM Guidelines, 2010 are the various standards and guidelines published and maintained by the Canadian Institute of Mining, Metallurgy and Petroleum, CIM Definition Standards, November 27, 2010	SRK-017
18	SME Mining Engineering Handbook-Third Edition, Volume 1, 2011	SRK-018
19	SGS Minerals Services, Technical Bulletin 2009-07, *The Impact of Crushed Ore Ageing on Metallurgical Performance.*	SRK-019
20	Corani Feasibility Study, dated July 2015	SRK-020
21	Randolf E Scheffel on Heap Leach Design and Practice.	SRK-021
22	488-295 EIA Observations 04-19-2011	SRK-022
23	Revised Feasibility Study, Santa Ana Project – Puno, Peru NI 43-101 Technical Report Update to the 21-Oct-2010 Report, dated 01 April 2011	C-0061
24	Corani Feasibility Study, dated December 2011	C-0066
25	RPA Export Report, Dated May 29, 2015	08
26	FTI Export Report, Dated May 29, 2015	07
27	SA – 5m Contour Topo DXF	4.a
28	SA – Resource Floating Cone-DXF	4.b
29	SA – Reserve Pit-DXF	4.c
30	Corani Block Model 20150428	6

31	0911-SA Financial Model 12OCT10 Rev 2 – finer crush – Herbs Rec	01
32	Global Resource Engineering, 2015n, resource_pit.dxf	
33	Global Resource Engineering, 2015o, resource and reserve-4.xlsx	
34	Global Resource Engineering, 2015p, topo.dxf	
35	Global Resource Engineering, 2-15m, reserve_pit.dxf	