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Second Expert Technical Mining Report of SRK Consulting

April 13, 2016

Supplemental Report of Neal Rigby

Bear Creek Mining Corporation v. Republic of Peru ICSID Arbitration

Report Prepared by



SRK Consulting (U.S.), Inc. SRK Project Number 477900.010 April 13, 2016

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Appendix 1: Curriculum Vitae of Dr. Neal Rigby

Appendix 2: Documents Relied Upon

Introduction

1.1 Declaration

1

 Name and address: Dr. Neal Rigby, 1125 Seventeenth Street, Suite 600, Denver, Colorado, 80202.

1.2 Qualifications of Consultant

- 2. 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.
- 3. 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.

1.3 Nature of Relationship

- 4. SRK Consulting (U.S.), Inc. (SRK) was retained by Sidley Austin LLP (Sidley) on behalf of the Peruvian Government (Peru) to review, analyze and render considered opinions on a technical mining report from Roscoe Postle Associates, Inc. (RPA) and the damages report from FTI Consulting Canada ULC (FTI) regarding the Corani and Santa Ana properties (The Projects), in connection with a dispute between Bear Creek Mining (BCM) and Peru, which will be decided by a tribunal of the International Centre for Settlement of Investment Disputes (ICSID) in Case No. ARB/14/12.
- 5. SRK provided its first Technical Expert Opinion Report, dated October 6, 2015, based on the review of RPA's "Technical Review of the Santa Ana Project and Corani Project, Puno, Peru, dated May 29, 2015" & FTI's "Bear Creek Mining ("Claimant") vs. Republic of Peru ("Respondent"), dated May 29, 2015" initial reports.
- 6. This report serves as SRK's Supplemental Report in response to the RPA's "Response Report on the Santa Ana Project and Corani Project, Puno, Peru, dated January 6, 2016" & FTI's "Bear Creek Mining ("Claimant") vs. Republic of Peru ("Respondent") Reply Report, dated January 8, 2016."
- 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.
- 8. Neither SRK's nor my compensation is contingent upon the conclusions reached or ultimate resolution of this arbitration.

1.4 Sources of Information

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

2 Santa Ana

2.1 Cut-off Grade

- 10. To properly respond to RPA's rebuttal assertions it is necessary to fully understand the concept of cut-off grades as applied in the mining sector.
- 11. There are two basic types of cut-off grades, which we will refer to as the "Breakeven" cut-off grade and the "Milling/Internal"¹ cut-off grade. The Breakeven cut-off grade (often termed the ultimate pit cut-off grade) is defined as that grade at which the value of the recovered and sold metals equals the total costs incurred in recovering and selling the recovered metals. Simply put, if ore is mined at the breakeven cut-off grade no profit is made and no money is lost.
- 12. The initial stage in the mine design, evaluation and planning process is to run a pit design or optimization using the true breakeven cut-off grade. This typically involves determination of total costs including mining, processing, general & administrative (G&A) and any offsite transportation and selling costs, balanced against the revenue that is generated from sale of the contained metals, incorporating metallurgical recovery and downstream payability factors. Blocks that have a revenue factor higher than the cutoff grade can pay to remove overlying waste. The maximum open pit ore that is extracted, or the ultimate pit shell, is defined by the blocks that exceed the breakeven cut-off grade when incorporating the removal of required waste blocks, if any. The ultimate pit perimeter, pit slopes and the pit depth are thus defined. The total ore tonnes and total waste tonnes are also determined. These total ore tonnes comprise the first pass reserves.

¹ Industry terminology uses incremental, internal, milling, and marginal cut-off grade. For the purposes of this report and to remain consistent with RPA's Response Report, SRK will use the term Milling/Internal.

- 13. The second stage in the process is the application of the Milling/Internal cut-off grade to the waste material that is already selected to be mined (i.e. already included in the ultimate pit). This is done in the pit optimization algorithms on a block by block basis by posing the following question: I have to mine this block anyway to get at higher grade ore blocks peripheral to or below this particular block. In the first pass in open pit design this particular block was deemed to be waste. However, because it has to be mined anyway and the cost of doing so is carried by the revenue from the higher grade blocks beneath or peripheral to it, the mining of this particular block is already paid for. Therefore, if the potential recovered metal value within the block is greater than the processing cost incurred to extract that value (i.e. will I make a profit from processing the material and selling the recovered metals), it will be reclassified from waste to ore by sending it to the processing plant rather than the waste rock dump.
- 14. This is why the terms marginal, milling or incremental are so appropriate when describing the Milling/Internal cut-off grade. In other words, applying these cut-offs gives an incremental increase in ore tonnage and, because these blocks can be processed for a small profit (remember, the profit is not enough to pay for mining the block), they constitute an incremental increase in reserves. The total reserves are thus comprised of the sum of the first pass reserves plus the incremental or second pass reserves. The total reserves thus determined in the Updated Feasibility Study² (hereinafter referred to as "FSU") are shown in Table 7-1 of the first RPA report as 37,077 thousand tonnes (kt).³
- 15. The RPA Response Report states the following "Accepted practice in the industry, as used by RPA, is to first estimate the volume of material that can be mined and processed at a breakeven

 ² Revised Feasibility Study, Santa Ana Project Technical Report, Update to October 21, 2010 Technical Report, April 1, 2011 ("Revised Feasibility Study, Santa Ana Project") [Exhibit C-0061].

³ Expert Technical Report of RPA Inc., May 29, 2015 ("RPA Expert Report"), at pg 7-1.

cut-off grade (based on all costs including mining costs). The next step is to report Mineral Resources and Mineral Reserves from within that volume at the internal/milling cut-off grade (based on all costs, excluding mining costs).".⁴

- 16. I am in full agreement that this is standard industry practice as discussed in my section above. It is a two-step process whereby the first step applies the true breakeven cut-off grade and the second step applies the Milling/Internal cut-off grade giving an incremental increase in reserves.
- 17. It appears from the ambiguous wording in the text and footnotes to the tables used in the first RPA Report, that in the RPA Revised Case and the RPA Extended Case, RPA applied the much lower Milling/Internal cut-off grade in the first stage of the mine design process when they should have applied the breakeven or elevated cut-off grade as applied by IMC in the FSU. The fact that IMC applied the breakeven or elevated cut-off grade is confirmed by the following excerpts directly from the FSU⁵ and can be seen in Figure 2-1 below:⁶
 - For the first five years of mine life, the cutoff grade for ore has been raised above the **breakeven cutoff of 30 g/t.** The cutoff for each year in the schedule was established to maximize the project's return on investment.
 - The cutoff grade for low grade material in the first five years is increased from the **internal** cutoff of 24 g/t to 27 g/t to account for an added \$0.88/tonne cost to rehandle material from the low-grade stockpile to the crusher. Ore from the low-grade stockpile is sent to the crusher during year 10 and year 11.

⁴ Response Report of RPA Inc., January 6, 2016 ("RPA Response Report"), at pgs 3-1, ¶35.

⁵ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §22.1.6.1, pg 87 [Exhibit C-0061].

⁶ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at Table 17.6, pg 63 [Exhibit C-0061].

18. This is not the approach RPA took, which led RPA to grossly overstate the Reserves in the RPA Revised Case and in the RPA Extended Case. Even if RPA did in fact apply the two step process, and indeed did apply a Milling/Internal cut-off grade in the second step they should have applied the 27 grams per tonne (g/t) Milling/Internal cut-off grade as used in the FSU based on a silver (Ag) recovery of 70% and silver price of US\$13/oz.⁷ Had they done this there would have been no additional reserves in the RPA Revised Case as compared to the reserves published in the FSU viz 37,077 kt.⁸ Instead, if RPA did apply a Milling/Internal cut-off grade of 17.5 g/t based on a higher silver price of US\$16.50/oz and higher silver recovery of 75%. This resulted in a much higher tonnage to be mined in the RPA revised case.⁹

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		

Source: Revised Feasibility Study, Santa Ana, April 2011, Partial Excerpt of Table 1.1

Bear Cre	ek Mining Corpo	ration - Santa Ana	Project
Category	Tonnes	Silver	Contained Silver
	kt	g/t	Moz
Proven	11,336	47.7	17.4
Probable	34,608	43.9	48.9
Proven + Probable	45,944	44.9	66.3
1. CIM definitions were fol	lowed for Mineral Rese	erves.	
2. No lead and zinc will be	e recovered.		
 Cutoπ grade of 17.5 g/t Dilution = 5% 	Ag.		
 Mining Recovery = 95% 	b.		

Source: RPA Expert Report, May 2015

Figure 2-1: Comparison between FSU Reserves and RPA Revised Reserves

⁷ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §17.2.1, Table 17-5, pg 61 [Exhibit C-0061].

⁸ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §1.4, Table 1.1, pg 3 [Exhibit C-0061].

⁹ RPA Expert Report, May 29, 2015 at Table 7-7, pg 7-8.

19. I summarize the various cut-off grades used in the FSU and RPA reports below:

- Breakeven cut-off grade used in the FSU 30 g/t silver;¹⁰
- Elevated Breakeven cut-off grade used in the FSU 30-34 g/t silver in years 1 through 5;¹¹ (artificially increased high-grade the orebody in the early years to increase free cashflow and pay back capital as quickly as possible);
- Milling/Internal cut-off grades used in the FSU 24 g/t silver increased to 27 g/t silver for low-grade material sent to the stockpile;¹²
- Cut-off grade used to estimate Mineral Resources in the FSU 15 g/t silver;¹³ and
- Milling/Internal cut-off grades used in the RPA Revised and RPA Extended Cases, 17.5 g/t and 14 g/t silver respectively.¹⁴
- 20. SRK considers the Milling/Internal cut-off grades used by RPA in the RPA revised and extended cases, are far too low and depart too much from the Milling/Internal cut-off grades used in the FSU. This results in the overestimation of Mineral Resources by including material that would likely never be economic at realistic silver prices.
- 21. In the FSU 34,113 kt of ore is mined and sent to the crusher and 2,964 kt is sent to the stockpile for subsequent processing for a total of 37,077 kt of ore. Out of the total tonnes of ore only 8% is low-grade ore that is sent to the stockpile.¹⁵ This is the incremental tonnage gained by using the lower Milling/Internal cut-off grade of 27 g/t silver. Although not at all clear from either of

¹⁰ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §22.1.6.1, pg 87 [Exhibit C-0061].

¹¹ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at Table 17.6, pg 63 [Exhibit C-0061].

¹² Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §22.1.6.1, pg 87 [Exhibit C-0061].

¹³ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at , §17.3, pg 64 [Exhibit C-0061].

¹⁴ RPA Expert Report, May 29, 2015 atTable 3-1, pg 3-3 & Table 14-1, pg 14-1 & Table 14-2, pg 14-3.

¹⁵ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at , Table 17.6, pg 63[Exhibit C-0061].

the RPA reports, the RPA Revised Case appears to apply the lower Milling/Internal cut-off grade to determine the total tonnes and not the incremental tonnes gained by using their lower cut-off grade of 17.5 g/t silver. This results in an increase in tonnage of 24% compared to the FSU. In the RPA Extended Case they lower the cut-off grade still further to 14 g/t silver,¹⁶ mainly as a result of applying a substantially lower processing cost than that used in the FSU.¹⁷ They also include a substantial quantity of Inferred Resources, which were previously classified as waste, thereby substantially reducing the stripping ratio. The stripping ratio is the tonnes of waste mined per tonne of ore mined, it refers to the ratio of the volume of overburden (waste material) required to be handled in order to extract some volume of ore. The Stripping Ratio is also expressed as tonnes of ore to tonnes of waste. For example a 3:1 stripping ratio means that mining one cubic meter of ore will require mining three cubic meters of waste rock. Mining at a higher stripping ratio is less profitable than mining at a lower stripping ratio because more waste must be moved (at a cost per unit volume) for an equivalent volume of revenue generating ore. By reducing the stripping ratio it has the effect of reducing the total costs to mine a tonne of ore, yet another consequential increase in project value. But here again, I believe that RPA have made the same mistake and applied the Milling/Internal cut-off grade in Step 1 of the mine optimization process. Hence, the very high conversion ratio from their Mineral Resources to Mineral Potential¹⁸ of a staggering 87%.¹⁹ Compare this with the 37% conversion ratio in the FSU.²⁰

¹⁶ RPA Expert Report, May 29, 2015 at Table 14-2, pg 14-3.

¹⁷ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §17.3, pg 64 [Exhibit C-0061].

¹⁸ Mineral Potential advocates a pragmatic and basically subjective approach to the problem of definition, which synthesizes geologic, geochemical and geophysical characteristics in order to judge the resource potential.

¹⁹ RPA Expert Report, May 29, 2015 atTable 14-3, pg 14-3.

²⁰ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §17.3 and Table 17.8, pg 64 [Exhibit C-0061].

22. On the process cost, assuming that G&A is \$1.45/t as reported by RPA,²¹ then the process cost in the RPA Extended Case (\$3.49)²² is some 35% lower than in the RPA Revised Case (\$5.36).²³ Given that the production rate for all cases is fixed at 3.6 million tonnes per annum (Mtpa) there cannot be any justification whatsoever for reducing the unit process cost.²⁴ As you can see from RPA's Table 16-1 in their initial report, shown below, the production rate (which influences operating expenses ("Opex")), is the same for all cases. Therefore, there are no economics of scale to justify reducing process Opex.

Parameter	Units	FSU Base Case	RPA Revised Base Case	RPA Extended Life Case
Production Rate	Mtpa	3.6	3.6	3.6
Mine Life	years	11	13	24
Total Ore Production	Mt	37.1	45.9	81.3
LOM Metal Price	\$/oz Ag	14.50	24.71	23.76
Heap Leach Recovery	%	75.0	75.0	75.0
Payable Silver	%	99.8	99.8	99.8
TC/RC & Transport	\$/oz Ag	0.63	0.63	0.63
Net Revenue	\$M	653	1,185	1,845
Operating Cost	\$/t leached	10.26	10.41	9.93
Capital Cost	\$M	97	98	119
Undiscounted Pre-Tax Cash Flow	\$M	178	598	908

TABLE 16-1 PROJECT CASH FLOW PARAMETERS SUMMARY Bear Creek Mining Corporation – Santa Ana Project

23. Upon further investigation, treatment of process and crushed ore rehandling costs as applied by RPA gets even more confusing. In Table 6-1 of RPA's Response Report, the first three columns puts the ore rehandle and leach pad delivery fee of \$0.88/tonne in with the process cost of \$4.00²⁵ or \$5.36.²⁶ The \$0.88 can be found on page 61 of the FSU. In their last column they take the \$0.88/tonne out of the process cost, lower it to \$0.71/tonne per section 1.11 of the FSU,

²¹ RPA Expert Report, May 29, 2015 atTable 14-4, pg 14-4.

²² RPA Expert Report, May 29, 2015 at Table 14-1, pg 14-1.

²³ RPA Response Report, January 6, 2016 at Table 6-1, pg 6-2.

²⁴ RPA Expert Report, May 29, 2015 atTable 16-1, pg 15-1.

²⁵ Revised Feasibility Study, Santa Ana Project, April 1, 2011, at Table 17.5, pg 61 [Exhibit C-0061].

²⁶ RPA Response Report, January 6, 2016 at Table 6-1, pg 6-2.

and move it into an additional mining cost for ore. They don't discuss the increase from \$2.10 to \$2.81 for mining ore, but it is just clearly a rearranging of where the rehandling cost is accounted for. By my estimate the \$5.36 in milling cost in the middle two columns includes \$0.88 rehandling, and so they really only moved the milling cost from \$4.48/tonne to \$3.49/tonne, nevertheless, an unjustified 22% reduction in process operating costs.

		Resource	Reserve	Reserve	Reserve
Parameter	Unit	FSU Floating Cone	FSU Floating Cone	RPA Adjusted Base Case	RPA Extended Life
Pit Slopes	degrees	40	40	40	40
Mining Waste Cost	US\$/tonne	1.67	1.73	1.73	2.10
Mining Ore Cost	US\$/tonne	1.67	1.73	1.73	2.81
Process Cost	US\$/tonne	4.00	5.36	5.36	3.49
G&A Cost	US\$/tonne	1.30	1.33	1.33	1.45
Process and G&A Cost	US\$/tonne	5.30	6.69	6.69	4.94
Mining Extraction	%	100	100	100	95
Mining Dilution	%	0	0	0	5
Process Recovery	%	70	70	75	75
Refining Recovery	%	99.7	99.7	99.7	99.7
Ag Price	\$/oz Ag	16.00	13.00	16.50	16.50
TC/RC	\$/oz Ag	0.40	0.40	0.40	0.63
Royalties	\$/oz Ag	0.00	0.00	0.00	0.23
Total Charges	\$/oz Ag	0.40	0.40	0.40	0.86
Ag COG	g/t	15.0	24.0	17.5	14.0

TABLE 6-1 SUMMARY OF CUT-OFF GRADE INPUTS FOR RESOURCE AND RESERVES Bear Creek Mining Corporation – Santa Ana Project

Note: COGs are rounded to nearest 0.5 g/t

24. SRK has explained the concept, terminology and application of different cut-off grades used in Mineral Resource and Mineral Reserve estimation in the mining industry. There are several references in the RPA Response Report claiming that SRK confuses the cut-off grade used for determining reserves with the cut-off grade used for mine planning.²⁷ This is simply not true

²⁷ RPA Response Report, January 6, 2016 at ¶¶62, 66,72, 73.

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and appears to be a deliberate strategy to avoid a direct response to SRK's arguments by obfuscation.

25. There is no confusion whatsoever, since the total tonnage of ore determined from the mine planning and the resulting production schedule IS the Mineral Reserve. This is clearly seen in Tables 7-1²⁸ and 7-2²⁹ of the initial RPA report (shown below) where the total reserve tonnage of 37,077 kt is precisely the same as the total tonnage in the Production schedule determined from mine planning i.e. 34,113 kt plus 2,964 kt equals 37,077 kt.

Category	Tonnes	Silver	Lead	Zinc	Contained Silver
	kt	g/t	%	%	Moz
Proven	8,951	57.6	0.37	0.7	16.6
Probable	28,126	51.5	0.33	0.6	46.6
Proven + Probable	37,077	53.0	0.34	0.6	63.2

²⁸ RPA Expert Report, May 29, 2015 atpg 7-1.

²⁹ RPA Expert Report, May 29, 2015 at pg 7-3.

	Cr	usher Fee	d	Low Gra	de at 27	g/t	1.1.1.1.1
Time Period	Cut-off	Ore	Silver	To Stockpile	Silver	Waste	Total Material
	(g/t)	(kt)	(g/t)	(kt)	(g/t)	(kt)	(kt)
PPQ1	119-00	÷				23	23
PPQ2	34	37	52.6	16	29.9	599	652
PPQ3	34	182	49.3	67	30.5	1,260	1,509
PPQ4	34	196	49.0	100	30.4	1,115	1,411
Y1,Q1	34	721	51.8	254	30.7	2,085	3,060
Y1,Q2	34	791	56.4	269	30.5	2,000	3,060
Y1,Q3	34	832	62.1	219	30.5	2,009	3,060
Y1,Q4	34	841	66.5	173	30.4	2,046	3,060
Y2	30	3,600	60.5	329	28.4	8,571	12,500
Y3	32	3,600	59.1	494	29.6	8,606	12,700
Y4	33	3,600	57.6	953	30.0	8,147	12,700
Y5	28	3,600	59.0	90	27.5	8,550	12,240
Y6	24	3,600	55.6			7,725	11,325
Y7	24	3,600	53.1			7,552	11,152
Y8	24	3,600	49.7			5,844	9,444
Y9	24	3,600	47.0			4,706	8,306
Y10	24	1,713	44.8			1,789	3,502
Total	11	34,113	55.0	2,964	29.9	72,627	109,704

Source: FSU, Table 17.6, pg 63

⁽¹⁾Added for demonstration by SRK

- 26. For RPA to suggest that there is a difference in the tonnage to be mined in the production schedule (determined from mine planning) and the Mineral Reserve tonnage at Santa Ana is absurd. Even the FSU states "*The mineral reserve is the result of a detailed annual mine plan. The mineral reserve is the sum of all proven and probable class ore that is planned for processing during the mine life.*"³⁰
- 27. In summary, SRK believes that RPA made fundamental errors in both the nature of the cut-off grade applied (breakeven versus milling/internal) and quantum of the cut-off grade as a result of using inflated silver prices and unrealistic silver metallurgical recoveries. This

³⁰ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §17.2, pg 60.[Exhibit C-0061].

resulted in a gross overstatement of both resources and "reserves" in both the RPA Revised Case and the RPA Extended Cases.

2.2 Operating Costs

- 28. RPA contends that SRK is incorrect in its claim that the mine operating costs should be higher due to the remote location and altitude of the proposed mine sites. In its initial report RPA states that for a small hard rock mine RPA would expect mining costs to be in the \$2.00 to \$2.50 per tonne moved range based on in-house experience.³¹ They go on to state that *"Infomine estimates \$2.86 per tonne moved for same size operation (this would be somewhat lower based on lower labor costs in Peru)."* ³² In my first report my recommendation was a mining cost of \$2.50, which was at the upper end of the RPA range and significantly lower than the Infomine cost, in order to allow for lower labor costs in Peru. I note that there are important issues of lower productivity partly as a result of less incentivization with low wages and partly as a result of a difficult operating environment. These further support my recommendation for the use of \$2.50/t of material moved as a realistic mine operating cost.³³
- 29. RPA's attempts to rebut my assertions regarding operating costs are unconvincing. In RPA's Response Report there are a number of inconsistencies and what appear to be changes from RPA's initial report. For the RPA Adjusted Base Case in the Response Report, the table has \$1.73/t for the mining costs.³⁴ Yet in RPA's initial report they used a

³¹ RPA Expert Report, May 29, 2015 at Table 3-1, pg 3-3, pg 12-1.

³² RPA Expert Report, May 29, 2015 at pg 12-1.

³³ Expert Technical Report of SRK Consulting, October 6, 2015 ("SRK First Report"), at ¶¶11, 79, 80, 94 [Exhibit REX-005].

³⁴ RPA Response Report, January 6, 2016 at Table 6-1, pg 6-2.

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Report, RPA use \$2.10 for the mining waste cost and \$2.81/t for the mining ore cost.³⁶ There is no discussion by RPA as to why they have increased the mining ore and waste costs. Blending the mining waste cost and mining ore cost used in RPA's Response Report according to the stripping ratio would give an overall mining cost very close to my suggested \$2.50/t.

30. I therefore stand by my opinion on operating costs.

2.3 Silver Price

31. In my first report I stated that the silver price used in the FSU was US\$13/oz.³⁷ I also demonstrated that the consensus silver price projections were all trending downward since 2011.³⁸ Given my projected lengthening of timelines to first metal production it is likely that silver sales would not have commenced until sometime in 2014. Figure 2-2 shows silver prices over a five year period to the end of 2015. It can be seen that the silver price at the end of 2015 was US\$13/oz. I therefore reaffirm my opinion that for purposes of designing and evaluating the Santa Ana project a silver price of US\$13/oz was appropriate at the time and still is today and not US\$16.50/oz as suggested by RPA. This would lend further support to the use of a Breakeven cut-off grade of 30 g/t and a much higher Milling/Internal cut-off grade than the 17.5 g/t and 14 g/t adopted by RPA in their Revised and Extended Cases respectively. It is important to remember that the Milling/Internal cut-off grade applied by IMC in the FSU was 27 g/t.

³⁵ RPA Expert Report, May 29, 2015 atTable 3-1. pg 3-3, pg 7-4, pg 12-1.

³⁶ RPA Response Report, January 6, 2016 at Table 6-1, pg 6-2.

³⁷ SRK First Report, October 6, 2015 at ¶10 [Exhibit REX-005].

³⁸ SRK First Report, October 6, 2015 at Section 6.4, ¶77-78, Figures 6-3/6-4 [Exhibit REX-005].



Source: SRK Consulting

Figure 2-2: Silver Chart – October 2007 through April 2015

2.4 Metallurgical Recovery

32. The FSU assumed two stages of crushing and, from column leach tests, determined that at a crush size of 19 mm a silver recovery of 70% could be expected. Subsequent column leach testing demonstrated that if a third stage of crushing was adopted and the particle size of the material to be placed on the heap was reduced to 9.5 mm then metallurgical recovery could be increased to 75%.³⁹ But this is all extrapolated from column leach tests. As I said in my first report there is an industry rule of thumb that suggests a prudent reduction of between 3% and 5% from recoveries extrapolated from column leach tests to the likely performance in a full scale heap. 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*

³⁹ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §16.1, pg 45 [Exhibit C-0061]

into any single column test the equilibrium conditions that will be achieved in the field. Additionally, changes in ambient conditions, such as temperature and altitude, can not be attained unless the test work is conducted on site. And even then, the ambient conditions within a column are not what are experienced under actual leach conditions."⁴⁰ Consequently if a crush size of 19 mm was to be adopted I would recommend a 3% to 5% reduction from 70%. Similarly if a smaller crush size of 9.5 mm was to be adopted I would also recommend a 3% to 5% reduction from 75%. Therefore my suggested 70% metallurgical recovery to be used in the cut-off grade determination is entirely reasonable and, it could be argued is generous, if the coarser crush size was adopted. The following is excerpted from the first RPA report: "RPA has plotted the data and found that the actual recovery may be one or two percent lower since the leach curve (described by the formula in Figure 8-1) flattens significantly towards the end of the leach cycle. Also, assuming a recovery of 75% would not take into account the impact of other unit operations such as Merrill-Crowe Zn precipitation, which would reduce the Ag recovery somewhat from the extraction that occurs in heap leaching." ⁴¹

⁴⁰ Mineral Processing Plant Design, Practice and Control Proceedings, SME, Volume 2, 2002, pg 1582 [Exhibit SRK-021].

⁴¹ RPA Expert Report, May 29, 2015 at pg 8-1 to 8-2.



Source: RPA Expert Report, Figure 8-1

Figure 2-3: Column Test Recovery vs. Time

33. Consequently, RPA agrees with SRK that the silver recovery should be reduced but they do not say by how much and in actual fact do not reduce it at all in their Milling/Internal cut-off grade calculations. Further in their Response Report, RPA repeat Figure 8-1 from the initial report, which shows Column test recovery versus time. ⁴² The FSU adopted a leach cycle time of 180 days but the column leach testwork was terminated after 101⁴³ days.⁴⁴ Continued leaching was extrapolated between 101 and 180 days but the curve is already very flat (as acknowledged by RPA) and there is no guarantee that continued silver leaching would occur as this would have to be confirmed by scientific testing.

⁴² RPA Response Report, January 6, 2016 at Figure 5-4, pg 5-11.

⁴³ (Correction made from 110 days to 101 days, originally reported by RPA as 110 days and repeated in SRK's review of that report).

⁴⁴ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §16.1.3.3, pg 53 [Exhibit C-0061].

- 34. Another issue that needs to be considered is that of fines generation, i.e. fine ore particles that are difficult to collect and process. When ore is crushed fines are generated in the crushing process. The more the ore is crushed the more fines will be generated. The fines will be fine ore containing silver. There is no discussion of this in either RPA report, but it does not appear that a fines recovery and agglomeration process was to be adopted and hence the fines and the contained silver in the fines will be lost further reducing the silver recovered from the contained silver in the ore as mined. A third stage of crushing suggested by RPA to support an increased silver recovery of 75% would simply have produced more fines and would have resulted in more "lost" silver. This is a further justifiable reason for reducing the effective silver recovery.
- 35. Also, there is the issue of heap stability and compaction from mobile equipment traffic on the heap surface. A 9.5 mm particle size is 3/8 inch, a very small particle size and very close to the smallest particle size ever used in heap leaching. This creates stability issues with the required side slopes of the heap and potentially serious problems with compaction due to mobile equipment traffic on the surface of the heap. Compaction reduces the permeability of the heap and reduces the free percolation of the sodium cyanide through the heap which dissolves the silver. This could further impact silver recovery.
- 36. In their rebuttal report RPA introduce a new Figure 5-3, which shows the relationship between particle size and silver extraction.⁴⁵ Two curves are presented, one for Bottle Roll tests and one for Column Leach tests. It can be seen that for a particle size of 9.5 mm the silver recovery peaks at approximately 71%. At a particle size of 19 mm, the crush size proposed in the FSU, silver extraction is approximately 65%.

⁴⁵ RPA Response Report, January 6, 2016 at Figure 5-3, pg 5-10.

37. Given all of the above, collectively, there are very strong arguments for reducing the projected silver recovery substantially and for ALL cases. Given the above, an argument could be made for capping silver recovery at a level even lower than 70%, but SRK will not bias an analysis for cause.

2.5 Use of Additional Resources in RPA's Extended Case

- 38. RPA used 75% of the Additional Measured, Indicated and Inferred Resources for a DCF cashflow projection in their RPA Extended Case.⁴⁶ 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.⁴⁷ This is further compounded by my opinion that the Mineral Resources in totality were grossly overstated from the outset.
- 39. Securities Commissions throughout the world with substantial Resource sector transactions warn about investing in Inferred Resources. One such warning from the United States Securities Exchange Commission is listed below:

<u>United States Securities Exchange Commission - Cautionary Notes to US Investors</u>⁴⁸

Cautionary note to U.S. investors concerning estimates of indicated mineral resources: We advise U.S. investors that while this term is recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize it. U.S. investors are cautioned not to assume that any part or all of mineral deposits in this category will ever be converted into mineral reserves.

Cautionary note to U.S. investors concerning estimates of inferred mineral resources: We advise U.S. investors that while this term is recognized and required by National Instrument 43-101 under Canadian regulations, the U.S. Securities and Exchange Commission does not recognize it. "Inferred mineral resources" have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be

⁴⁷ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at Table 1.1 [Exhibit C-0061].
 ⁴⁸ U.S. Department of State-2011 Investment Climate Statement-Peru *available at*

⁴⁶ RPA Expert Report, May 29, 2015 at Table 14-3 (note 5).

http://www.state.gov/e/eb/rls/othr/ics/2011/157342.htm (last visited April 13, 2016) [Exhibit SRK-024].

assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of a feasibility or other economic study. U.S. investors are cautioned to assume that any part or all of an inferred mineral resource exists or is economically or legally mineable. Under Canadian rules, an "inferred resource estimate" is that part of a mineral resource for which the 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.

- 40. In the RPA Extended Case they applied a cut-off grade of 14 g/t and determined a new Resource of a staggering 93 Mt as shown in Table 14-2⁴⁹ and a new Mineral Potential of 81 Mt as shown in Table 14-3⁵⁰ The term Mineral Potential is broader than Mineral Reserves, because in addition to reserves, it includes additional material has not been subjected to a proper mine design, assumes a much higher silver price and includes Inferred Mineral Resources.
- 41. RPA's effective conversion rate is thus 87% which, given the 40% and 35% conversion rates referred to above, is yet another gross overstatement.
- 42. But it gets worse, because the 93 Mt of new resource and 81 Mt of new Mineral Potential were both determined using Milling/Internal cut-off grades and not true breakeven cut-off grades, which should have been used. You may recall as explained at the beginning of this report in Section 2.1, the Milling/Internal cut-off grade excludes the mining costs, while the breakeven cut-off grade includes the mining costs. By excluding the mining costs in the cut-off grade calculation and applying the RPA numbers in Table 14-1⁵¹, SRK was able to replicate the 14 g/t number, further confirming that this is indeed a Milling/Internal cut-off

⁴⁹ RPA Expert Report, Dated May 29, 2015 at §14, Table 14-2, pg 14-3.

⁵⁰ RPA Expert Report, Dated May 29, 2015 at §14, Table 14-3, pg 14-3.

⁵¹ RPA Expert Report, Dated May 29, 2015 at §14, Table 14-1, pg 14-1.

grade. In Table 14-3⁵², the RPA Extended Life Mineral Potential is determined by adding the 46 Mt 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.

Table 2-1: Explanation of RPA's Extended Life Case

New RPA Mineral Resources		93 Mt
Revised RPA Base Case	-	46 Mt
Net RPA Additional Resources (93-46)	=	47 Mt
RPA Assumed Mineability (no basis in fact)	х	75%
RPA New Mineable Material	=	35.25 Mt
RPA New Mineral Potential (46Mt + 35.25Mt)		81 Mt

- 43. This is a very odd way of determining the Mineral Potential quantum. There is no discussion or justification whatsoever of the 75% mineability ⁵³ assumption, nor breakdown of Measured, Indicated and Inferred tonnage for this new mineable material.
- 44. In the RPA Extended Life cashflow model the 46 Mt in the Revised RPA Base Case (which is flawed) is mined first from 2012 to 2026. ⁵⁴ 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. ⁵⁵ The tonnage, grade and stripping ratio are all simply held constant for the additional ten years, which is 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 pit 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 2-4 (below), which shows a

⁵² RPA Expert Report, Dated May 29, 2015 at §14, Table 14-3, pg 14-3.

⁵³ Mineability is the capability of being mined, especially profitability.

⁵⁴ RPA Expert Report, May 29, 2015 at Appendix A, pg 19-1.

⁵⁵ RPA Expert Report, May 29, 2015 at Appendix B, pg 20-1 to 20-2.

considerable amount of Inferred material in the FSU Base Case Reserve Pit, which presumably in the extended life case now qualifies as new Mineral Potential.⁵⁶ Why RPA did not attempt to schedule their mining of this material properly they do not say.



Source: RPA Expert Report, Figure 6-4

Figure 2-4: Mineral Resource and Reserve Pit Shell

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

⁵⁶ RPA Expert Report, May 29, 2015 at §6, Figure 6-4, pg 6-10.

2.6 **Project Implementation**

46. The following section discusses the many activities that have to be undertaken to implement a mining project.

2.6.1 Detailed Engineering

47. Three quarters projected in the FSU (and repeated in RPA's Response Report) for detailed engineering of site and project facilities is a reasonable timeline.⁵⁷

2.6.2 EPCM Contractor

48. An Engineering Procurement and Construction Management (EPCM) contractor would have to be appointed to implement the project. The appointment of such a contractor can be a lengthy process with first the preparation of contractor bid documents, bid preparation timeline, adjudication of bids and final negotiation of contract terms, scope of work, inclusions, exclusions, and an agreed mobilization schedule. This in itself can take several months.

2.7 **Permitting Timelines**

49. In my first report, I explained that 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

⁵⁷ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §1.10, pg. 7; RPA Response Report, January 6, 2016 at Table 5-3, pg 5-15.

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.⁵⁸ RPA's Response Report states that SRK is incorrect in assuming that the permitting process for Santa Ana would have taken much longer than planned and offers a couple of examples of projects that have not met with delays. ⁵⁹ Unfortunately in mining, there can be several reasons for permitting delays, but in a volatile environment of social unrest, it's just a matter of which mines the communities are targeting and their perception of harm to the community, which BCM can attest to as Santa Ana has met with severe social unrest and Corani has apparently not. One could speculate all day about if there would be permitting delays due to the ongoing protests in Peru, but nearly all mines that have experienced protests have had delays. A few mining companies that have met with delays and stalled projects as a result of social unrest in Peru are listed below:

⁵⁸ First SRK Report, October 6, 2015 at §6.9, ¶90, pg 23 [Exhibit REX-005].

⁵⁹ RPA Response Report, January 6, 2016 at ¶41.

•

Rio Blanco, Monterrico Metals (settled out-of-court claims with several local farmers in 2009). Re-established new management working on strengthening communications with the local community. New projected start-up is 2019.⁶⁰

MineSearch ID	112310
Also Known As	Henry's Hill, Soho
Property Type	Project
Commodity(s)	Copper, Molybdenum, Gold
In-situ Value ¹ (\$M)	50,937.7
Development Stage	Feasibility
Activity Status	Under Litigation
Projected Start Up	2019
Projected Closure	2031
Mine Type	Open Pit
Country	Peru
State/Province	Piura

Tia Maria, Grupo Mexico/Southern Copper, Community unrest has delayed construction permits since 2009. As of June 2015, the Peruvian government recommended the establishment of a development dialogue roundtable for the resolution of certain differences with community groups to resolve issues resulting in delay in grant of the construction permit, which has delayed the project for eight years. The projected start up is 2017.⁶¹

⁶⁰ SNL Financial Property Profile-Rio Blanco, 2016 – *available at*

https://www.snl.com/interactivex/briefingbook/mining/profile.aspx?id=31444&s_data=si%3d0%26kpa%3d0b648dd3-5 f82-489f-abcb-9e712d1656de%26sa%3d (last visited April 12, 2016) [Exhibit SRK-025].

⁶¹ SNL Financial Property Profile-Tia Maria, 2016- available at

https://www.snl.com/InteractiveX/BriefingBook/Mining/Profile.aspx?id=34259 (last visited April 12, 2016) [Exhibit SRK-026].

MineSearch ID	115695
Also Known As	Aunt Mary, Cocachacra, La Tapada, Rosa Maria, Virgen Maria, Virgin Mary
Property Type	Project
Commodity(s)	Copper
In-situ Value¹ (\$M)	16,657.4
Development Stage	Preproduction
Activity Status	Temporarily On Hold
Projected Start Up	2017
Mine Type	Open Pit
Country	Peru
State/Province	Arequipa

 Conga, Newmont, Production at the project was to have begun by early 2015 but has been stalled since November 2011. Protesters say they fear the mine will harm their water supplies.⁶² This has been and continues to be so serious that Newmont recently announced that uncertainty in receiving permits has caused them to downgrade Mineral Reserves to Mineral Resources.⁶³

MineSearch ID	110416
Also Known As	Cajamarca, Chailhuagon, El Perol, Gentiles, Lindero, Minas Conga, Misacocha, Mishacocha, Perol, Rinconada, Yanacocha
Property Type	Project
Commodity(s)	Gold, Copper, Silver
In-situ Value ¹ (\$M)	35,035.7
Development Stage	Preproduction
Activity Status	Temporarily On Hold
Projected Start Up	2017
Projected Closure	2035
Mine Type	Open Pit
Country	Peru
State/Province	Cajamarca

⁶² SNL Property Profile-Conga, 2016 available at

https://www.snl.com/interactivex/briefingbook/mining/profile.aspx?id=30204&s_data=si%3d1%26kpa%3ddc1914f5-8 4d5-434d-8dc5-7671d34dfe35%26sa%3d (last visited April 12, 2016) [Exhibit SRK-027].

⁶³ (During 2015, Newmont reclassified reserves at Conga into resources totaling 17.5 million oz Au, 2.2 mt Cu and 52.4 million Ag. (Newmont PR Feb 17, 2016)). SNL Financial Property Profile, 2016, *available at*

https://www.snl.com/interactivex/briefingbook/mining/profile.aspx?id=30204&s_data=si%3d1%26kpa%3de1ce3994-4 347-40cb-8100-2c6d6b5cae2c%26sa%3d (last visited April 12, 2016).

50. I therefore stand by my opinion in my first report that permitting timelines will likely be significantly longer.

2.8 **Procurement and Construction**

- 51. In Table 5-3 of their Response Report, RPA repeats the project execution plan for Santa Ana from their initial report and the FSU. This shows a very high level schedule of eight quarters or two years to "Production".⁶⁴
- 52. They then use in Figure 5-6 the Constancia Project Milestones and suggest that this project "is an excellent example of a project that met a similar schedule to the one presented for Santa Ana." And yet the Constancia Project shows a four year schedule to first commercial production.⁶⁵
- 53. In my first report I argued that it could take Santa Ana a further twelve months to first metal production and potentially much longer.⁶⁶ RPA's Table 5-3 and Figure 5-6 are shown below respectively to help demonstrate my point. It can be seen that the timeline for production at Santa Ana is two years and that for Constancia is four years for commercial production.
- 54. RPA's use of Constancia as an analogue for Santa Ana really does test the bounds of RPA's professional credibility.

⁶⁴ RPA Response Report, January 6, 2016 at Table 5-3, pg 5-15.

⁶⁵ RPA Response Report, January 6, 2016 at Figure 5-6, pg 5-15.

⁶⁶ First SRK Report, October 6, 2015 at ¶13 [Exhibit REX-005].

Item/Period		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	2010	2011	2011	2011	2011	2012	2012	2012	2012
ESIA Review									
Detailed Engineering									
Permitting									
Off-site Infrastructure Construction									
Site Development									
Production									

Source: RPA Response Report, Table 5-3, pg 5-15

Figure 2-5: Project Execution Plan – FSU Base Case (Table 5-3 in RPA Response Report)



Source: RPA Response Report, Figure 5-6, pg 5-15

Figure 2-6: Constancia Project Milestones

55. Figure 2-7 is an example of a Construction schedule for the Eagle heap leach project located in the Yukon, Canada⁶⁷ in an environment reasonably similar to Santa Ana. It can be seen that this is very detailed and demonstrates the importance of proper construction

⁶⁷ Eagle Gold Technical Report Construction Schedule, December 2011 [Exhibit SRK-023].

capital cost estimate. The construction schedule to mechanical completion of all site facilities for this project is 26 months. This would then be followed by commissioning and ramp-up in production as discussed below. In the FSU and RPA's Response Report, they identify just four quarters or 12 months for Offsite Construction and Site Development. ⁶⁸

56. So again I stand by my opinion in my first report that the Project Construction schedule would likely be substantially longer than projected in the FSU and adopted by RPA.



Source: Victoria Gold Corp. Technical Report Feasibility Study-Eagle Gold Project, Yukon, 2011

Figure 2-7: Construction Summary Schedule (Page 1 of 2)

⁶⁸ Revised Feasibility Study, Santa Ana Project, April 1, 2011 at §22.7, Table 0.12, pg 134 [Exhibit C-0061];RPA Response Report, January 6, 2016 at Table 5-3.

Victori	a EAC	VI	GOLD	A GOI	LD CORP JECT - YUKON	MERIT
Activity ID	Activity Name	Dur	Start	Finish	2013 2014 2015 2016 ECIMID AR IN TAXASCINIC IN AND TAXESCINIC ARMS TO TRANSCINCTION AND TAXES	CONSULTANTS INTERNATIONAL UNC 2017 2018 SCIND LIEL AM JUN SCIND JUEINA
CONSTRU	CTION SUMMARY - SYSTEM 70 - INFRASTRUCTURE	7/8=	57 Oct 12	20.00		
SUM-130	70510 - Communications for Construction Installation	900	02-00-12	30-Dac-12	7051D - Communications for Construction Installation	
SUM-105	70(70 - Permanent Camp Expansion for Construction	925	01 Apr-13	21-10-12	70170 Pertnanen Camp Expension for Construction	
SUM 175	70190 - Gelehouse & Fending Construction	19d	01Apr-13	19 Apr-13	To 190 - Gelenouse & Fencing Construction	
SUM-180	70310 - Propare Disibilition	925	01.Apr 13	ET NU.10	70310 Propane Databetion	
SUM-190	70150 Truck Shop / Truck Wash / Tim Charge Facility Construction	197d	01 Apr 15	15 04 13	70150 - Trick Stop / Trick Wash / Tim Charge Fadility Construction	
SUM 215	70260 Emergency Geneels installation	485	18 May 13	30 Jun 13	T1050 Emergen: Gensals installation	
SUM 220	70320 - Diesel Distribution	.55d	25 May-13	15 Jul 13	7332 Devel D Infordan	
SUM-225	70210 - Site Power Cistribution	956	24.Jun-13	21-Sep-13	10210 - Site Power Distribution	
SUM-230	70197 Colo Storage Construction	148	05Jul-13	18.01113	70197 - Cold Storage Construction	
SUM 240	70330 - Gasoline Distribution	195	14Jul 13	01 AUg 13	T0330 - Gasoline Distribution	
SUM 100	70130 Watchouse Construction	1126	19Aug 13	09-Dec 13	70130 Watehouse Constantion	
SUN-276	70420 & 70440 Polake & Firewater Construction	834	22 Aug 13	23-Oct-13	70429 & 2040 Potatie & Firewater Construction	
SUM 290	70610 Plant & instament Air Installation	1550	155m 13	27 Fab-ta	TOSTO - Plant & relationers for installation	
SUM 295	70120 - Assay Lab Construction	214	24.Sep 13	15-0d-13	10 70120 - AsasyLab Construction	
SUM 335	70510 - Communications for Operations Installation	900	27 Jup 14	25 Sep 14	10510 Communications for Operations Installation	
SUM 325	70185 Explosives Storage Facility Construction	78d	12 Jul 14	25-Sep-14	10186 Explosives Storage Facility Construction	
SUN:330	70187 - Explosives Magazine Construction	488	Meluter .	28 Aug-14	70 57 - Exploitives Magazine Construction	
SUM-345	70350 - Waste Oil Disposal	100	12-Oct-14	20-0d-14	70350 Waste Of Disposal	
CONSTRU	CTION SUMMARY - SYSTEM 11 - MINING	510	Al-nAite	SEAP 18		
SUM 185	11105 Open Pit Pre-Development	\$104	03Apr-13	25.Sep.14	1100 - Open Pit Pis-Development	
CONSTRU	CTION SUMMARY - CONSTRUCTION MANAGEMENT & COMMISSIONING	1755	12.034.12	05 109 14		
SUN:355	98110 / 68110 - Construction Mgnt (Ind-Plant Mobile Equip CM Services, Survey & Quality Assurance)	7210	020d 12	25-Sep-14	6110/881 0 - Construction Mart (ind Plant Mobile	Equip, CM Services, Survey & Quality Assurat
BUM 350	91230/91240 - Process (ADR Heap Leach, Crushing) Commissioning & Vendor Assistance	745	24 Aug 14	05 Nov-14	91233/91240 Process (ADP, Hespitesch, Onst	ing) Commealoring & Vencor Assistance
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Source: Victoria Gold Corp. Technical Report Feasibility Study-Eagle Gold Project, Yukon, 2011

Figure 2-8: Construction Summary Schedule (Page 2 of 2)

2.9 Commissioning and Ramp-Up

57. On mechanical completion of all onsite and offsite facilities, first crushed ore would be placed on the heap pad up to the first lift height. A cyanide irrigation system would be installed on the surface of the heap and cyanide irrigation would be commenced. First silver would likely be generated in a few days but with a leach cycle time of 180 days and my opinion that it will likely be longer, there will be a long, slow ramp-up in silver production throughout the entire system. This of course assumes that all goes according to plan. Figure 2-8 and Figure 2-9 are photographs of a heap leach facility in Uzbekistan taken by Dr. Rigby of SRK. Figure 2-8 shows a three lift heap pad and Figure 2-9 shows the pregnant leach pond, intermediate pond and barren solution pond ahead of the gold recovery plant.



Source: SRK Consulting site visit to the Vsokovoltnoye Heap Leach Facility in Uzbekistan, 2015

Figure 2-9: Three Lift Heap Pad



Source: SRK Consulting site visit to the Vsokovoltnoye Heap Leach Facility in Uzbekistan, 2015

Figure 2-10: Photo of a Pregnant Leach Pond, Intermediate Pond and Barren Solution Pond


Source: Bing.com-Images of Heap Leaching

Figure 2-11: Example of Heap Leach Operations

58. In summary, SRK believes that with a number of exceptions, the Santa Ana Project as presented in the 2011 FSU is a reasonable representation of the technical aspects of the Project. Exceptions include the use of overly optimistic (low) mine operating costs and likely project implementation delays. For the reasons discussed above SRK finds that the bases of the RPA Revised and RPA Extended Cases are fundamentally flawed and both cases give a biased (positive) and unrealistic view of the likely project outcome had the Santa Ana Project proceeded.

Page 33

3 Corani

- 59. In its Response Report, RPA make many references to SRK being incorrect in its analysis of Corani in its initial report, which SRK will demonstrate are simply not true. The merits of SRK's articulated arguments are simply ignored in what appears to be RPA's goal of maximizing project value and discrediting SRK. This, in SRK's view, does not help these arbitration proceedings.
- 60. The majority of SRK's comments and observations in its initial report were based on an assessment and review of the 2011 Corani FS, as this was published close to the effective date. RPA based its initial report on the 2015 Corani Optimized Feasibility Study (OFS) but subsequent to RPA's report, and after SRK's initial report was published the block model and related files for the 2011 Corani FS Mineral Resource estimate were conveniently made available. Why RPA did not base its initial report on this earlier data and information defeats me.
- 61. In paragraph 135 of RPA's Response Report, the second reference to the term Mineral Resource is misused and should be Mineral Reserve.⁶⁹
- 62. In its Response Report, RPA states that "*Economic credit was given to material classified as inferred*."⁷⁰ This is not standard industry practice since Inferred Mineral Resources are too speculative geologically to be used in the determination of net smelter return ("NSR") parameters. In fact, section 1.13 of the 2011 Corani FS states that "*No economic credit has been applied to inferred mineralization in the development of the mineral reserve*."⁷¹ This

⁶⁹ RPA Response Report, January 6, 2016 at ¶135, pg 5-20.

⁷⁰ RPA Response Report, January 6, 2016 at ¶136.1, pg 5-20.

⁷¹ M3 Engineering, Corani Project Form NI-43-101F1 Technical Report Feasibility Study, December 2011 ("Corani Feasibility Study"), at §1.13, pg 16 [Exhibit C-0066].

begs the question why should RPA depart from standard industry practice and indeed that

adopted by M3 in the 2011 Corani FS?

63. I reiterate again, the warnings given to investors by the SEC:

United States Securities Exchange Commission - Cautionary Notes to US Investors⁷²

Cautionary note to U.S. investors concerning estimates of indicated mineral resources: We advise U.S. investors that while this term is recognized and required by Canadian regulations, the U.S. Securities and Exchange Commission does not recognize it. U.S. investors are cautioned not to assume that any part or all of mineral deposits in this category will ever be converted into mineral reserves.

Cautionary note to U.S. investors concerning estimates of inferred mineral resources: We advise U.S. investors that while this term is recognized and required by National Instrument 43-101 under Canadian regulations, the U.S. Securities and Exchange Commission does not recognize it. "Inferred mineral resources" have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of a feasibility or other economic study. U.S. investors are cautioned to assume that any part or all of an inferred mineral resource exists or is economically or legally mineable. Under Canadian rules, an "inferred resource estimate" is that part of a mineral resource for which the 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.

3.1 Silver Price

64. RPA's Response Report quotes a silver price of US\$30/oz used in the determination of

NSR values for mineral resource estimation.⁷³ As per my observations on the Santa Ana

project I consider such a silver price to be much too high resulting in a gross overstatement

of Mineral Resources at Corani.

- 65. I stand by my arguments for the use of a substantially lower silver price that I made in my first report for the following reasons.⁷⁴
 - 1) 5-5-Year actual silver price curve;
 - 2) Analyst's projections of a progressively reducing silver price;

⁷² U.S. Department of State-2011 Investment Climate Statement-Peru *available at*

http://www.state.gov/e/eb/rls/othr/ics/2011/157342.htm (last visited April 13, 2016) [Exhibit SRK-024].

⁷³ RPA Response Report, January 6, 2016 at §5.4.2, ¶136.2, pg 5-20.

⁷⁴ First SRK Report, October 6, 2015 at §8.5, ¶121 [Exhibit REX-005].

- 3) Reduced silver recovery; and
- 4) Delayed first concentrate production.

3.2 Mining Costs

- 66. In my first report, I recommended increasing mine operating costs from US\$1.34/t used in the 2011 Corani FS to US\$1.75/t.⁷⁵ This was largely experiential given the scale of operation, the nature of the operating environment and also benchmarking against other mining operations in the Americas. In its rebuttal report, RPA criticized my findings on a number of fronts. However, these criticisms are totally irrelevant for the following reasons.
- 67. In RPA's initial report, mine operating costs are reported as US\$5.19/t milled or sent through the processing plant. ⁷⁶ The following is an excerpt from the first RPA report: "*The mine plan includes the entire Mineral Reserves shown in Table 17-2 and the movement of 232Mt of waste for a stripping ratio of 1.68 (waste:ore) and total material mined of 369Mt over the LOM*". ⁷⁷ So, for every tonne of ore mined and milled, 1.68 tonnes of waste have to be mined. Therefore, the mine operating cost per tonne milled is the ore mining cost plus the waste mining cost. To mill one tonne of ore requires 2.68 tonnes of total material to be mined (1t ore and 1.68t of waste). Therefore, by simply dividing the mining cost per tonne milled by the stripping ratio gives the mining cost per tonne of material moved, i.e. US\$5.19/2.68 =US\$1.94/t.

⁷⁵ First SRK Report, October 6, 2015 at §8.6, ¶122, pg 32 [Exhibit REX-005].

⁷⁶ RPA Expert Report, May 29, 2015 at § OPERATING COSTS, Table 17-4, pg 16-8.

⁷⁷ RPA Expert Report, May 29, 2015 at § MINING, pg 16-5.

TABLE 17-4 OPERATING COSTS – FSU BASE CASE

Bear Creek Mining Corporation - Santa Ana Project

Area	Units	Cost
Mine	\$/t milled	519
Process	\$/t milled	8.77
General & Administration	\$/t milled	1.55
Total	\$/t milled	15.50

68. Why RPA should object to my recommended "higher" mining cost of US\$1.75/t when they used an even higher mining cost of US\$1.94/t, I have no idea. This is yet another example of the errors and inconsistencies in RPA's work.

3.3 Reporting of Additional Resources

69. RPA's Response Report states that NO additional resources were reported for the Corani Project.⁷⁸ Table 17-1 of RPA's initial report is titled "*Corani Mineral Resources (May* 2015 Exclusive of Reserves)." Clearly this is the reporting of additional resources, over and above reserves that I was referring to in my first report.⁷⁹

TABLE 17-1 CORANI MINERAL RESOURCES (MAY 2015, EXCLUSIVE OF RESERVES)

		0	-			0	
Category	Tonnes Kt	Silver g/t	Lead %	Zinc %	Contained Silver Moz	Contained Lead Mlb	Contained Zinc Mlb
Measured	9,353	28.8	0.53	0.30	8.7	108.4	61.6
Indicated	64,059	26.1	0.48	0.36	53.7	682.2	512.8
Measured + Indicated	73,413	26.4	0.49	0.35	62	791	574
Inferred	31,231	40.6	0.74	0.51	40.8	510.6	352.4

Bear Creek Mining Corporation – Corani Project

1 CIM definitions were followed for Mineral Resources.

2 The Mineral Resource is the tonnage contained within the 30\$/oz silver, 1.425 \$/lb lead, and 1.50 \$/lb zinc prices Whittle pit using a 20\$/oz silver, 0.95 \$/lb lead, and 1.00 \$/lb zinc prices at a cut-off of 11\$/tonne NSR.

⁷⁸ RPA Response Report, January 6, 2016 at §5.4.11, ¶185.

⁷⁹ First SRK Report, October 6, 2015 at , ¶137 [Exhibit REX-005].

- 70. According to RPA these resources were determined by first creating a Whittle pit shell,⁸⁰ using metal prices of US\$30/oz for silver, \$1.425/lb for lead (Pb) and \$1.50/lb for zinc (Zn) and then selecting only those blocks above metals prices of US\$20/oz for silver, \$0.95/lb for lead and \$1.00/lb for zinc.⁸¹ As I explained in my first report, the use of such high metals prices in Resource estimation grossly overstates the Mineral Resource and reduces the resulting silver, lead and zinc grades to alarmingly low levels. Further, to then select only those ore blocks above a range of lower metals prices is not an industry standard approach and should have required that RPA re-run the Whittle Pit Optimization at the lower metals prices quoted. Again, I do not know why RPA did not do this. Also, there is no discussion or justification for the second suite of lower metals prices.
- 71. In Table 5-5 of their Response Report RPA includes the 2011 IMC Corani FS Mineral Resources. (December 2011, Exclusive of Reserves, determined at metals prices of US\$30/oz for silver, \$1.00/lb for lead and \$1.00/lb for zinc). This resulted in very high tonnage of additional Mineral Resources with extremely low lead and zinc grades, directly as a result of using such a high silver price as US\$30/oz.

⁸⁰ WhittleTM software is used to determine and optimize the economics of open pit mining projects. Its unique capabilities enable us to analyze pit designs in the context of all physical, economic and mining constraints. The WhittleTM software is considered the premier open pit optimizer and is used as a benchmark for mining studies throughout the world. Essentially, it answers the question "how big should my pit be to maximize the NPV of the project?"

⁸¹ M3 Engineering, Corani Project, Optimized and Final Feasibility Study, July 2015 ("Corani Optimized Feasibility Study"), at pg 17 [Exhibit SRK-020].

Bear Creek Mining Corporation - Corani Project									
Category	Tonnes	Tonnes Silver		Zinc	Contained Silver	Contained Lead	Contained Zinc		
	Kt	g/t	%0	%	Moz	Mlb	Mlb		
Measured	10,878	17.5	0.38	0.33	6.1	91.1	79.1		
Indicated	123,583	20.8	0.38	0.29	82.6	1,035.3	790.1		
Measured + Indicated	134,461	20.5	0.38	0.29	88.7	1,126.4	869.2		
Inferred	49,793	30	0.464	0.278	48	509.4	305.2		

TABLE 5-5: 2011 IMC CORANI FS MINERAL RESOURCES (DECEMBER 2011, EXCLUSIVE OF RESERVES)

_ _ _ _ .

Notes:

1. CIM definitions were followed for Mineral Resources.

2. The Mineral Resource is the tonnage contained within a pit shell produced using \$30.00/oz silver,

\$1.00/lb lead, and \$1.00/lb zinc prices and reported at an NSR cut-off grade of \$9.20/tonne.

- 72. I reiterate my observation from my first report that the average lead and zinc grades are simply too low at 0.38% lead and 0.29% zinc respectively, to produce marketable concentrates irrespective of the silver grade⁸² (in other words, you can't make these economic no matter what the price because the problem is technical).
- 73. In summary, if marketable concentrates could not be produced with such low lead and zinc grades, then this material would not qualify to be termed Mineral Resources.

3.4 Metallurgy and Process

- 74. In my initial report, I noted that "SRK is concerned that recoveries projected in the 2011 Feasibility Study may have been overstated, based on the following observations:⁸³
- The average grade of the test composites used for the locked-cycle testing, which formed the basis for the metal recovery predictions, 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

⁸² First SRK Report, October 6, 2015 at §8.2, ¶108, pg 27 [Exhibit REX-005].

⁸³ First SRK Report, October 6, 2015 at §8.9, ¶128, pg 33 [Exhibit REX-005].

silver and the average grade of the transitional ore composites was 2.1% Pb and 92 g/t silver. Whereas, the average grade of the Corani ore reserve is 0.94% Pb, 0.59% Zn and 51.6 g/t silver; and

- 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 silver, 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.
- 75. I also stated that, "In order to re-evaluate 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 RPA's Response Report, shown below). 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 silver from the mixed sulfide ore."⁸⁴
- 76. In paragraph 170 of its second report, RPA contends that SRK "conveniently" selected a data set to achieve a desired test result and that the recoveries shown in RPA's Table 5-9 (shown below) are appropriate.⁸⁵

⁸⁴ First SRK Report, October 6, 2015 at §8.9, ¶129, pg 34 [Exhibit REX-005].

⁸⁵ RPA Response Report, January 6, 2016 at §5.4.8, ¶170, pg 5-31.

TABLE 3-9 ZU				
Be	ear Creek Mining (Corporation – C	orani Project	
	-	•	-	
			Arr (Dh Carra)	Ar (Zn Cono)
	Pb Recovery, %	Zn Recovery, %	Ag (Pb Conc), %	Ag (Zn Conc), %

77. In response to RPA's assertion that SRK selected data to achieve a desired test result, SRK would first highlight the ore grades associated with Corani's life of mine (LOM) production schedule shown in Table 3-2 as provided in the 2015 Corani OFS. Lead grades range from 0.54 – 1.39% Pb and average 0.91% Pb. Zinc grades range from 0.22 – 0.99% Zn and average 0.59% Zn. Silver grades range from 23.8 – 110.5 g/t silver and average 51.6 g/t silver. Simply put, the metal tests were conducted on samples with metal grades many times higher than the average grades of the orebody.

Period	Ore KTonnes	Pb (%)	Zn (%)	Ag (g/t)
Year 1 Q1	752	1.07	0.23	106.0
Year 1 Q2	1,182	1.16	0.25	110.5
Year 1 Q3	1,736	1.26	0.71	104.3
Year 1 Q4	2,005	1.14	0.52	75.3
Year 2 Q1	1,942	1.19	0.73	87.0
Year 2 Q2	1,963	1.62	0.96	95.1
Year 2 Q3	1,854	1.53	0.95	82.1
Year 2 Q4	1,985	1.39	0.86	73.2
Year 3	7,897	1.20	0.85	73.3
Year 4	7,856	1.12	0.95	81.1
Year 5	7,890	1.13	0.99	79.9
Year 6	7,847	0.98	0.72	59.4
Year 7	7,921	1.04	0.25	62.9
Year 8	7,875	1.07	0.22	63.0
Year 9	7,875	0.96	0.32	47.3
Year 10	7,875	0.83	0.39	42.8
Year 11	7,826	0.80	0.37	43.3
Year 12	7,867	0.73	0.55	32.1
Year 13	7,875	0.67	0.49	28.5
Year 14	7,875	0.54	0.85	27.2
Year 15	7,897	0.65	0.49	36.1
Year 16	7,875	0.61	0.61	28.2
Year 17	7,858	0.64	0.54	26.3
Year 18	6,172	0.91	0.60	23.8
LOM	137,700	0.91	0.59	51.6

Table 3-1: Corani Production Schedule

Source: M3 Form 43-101F1 Technical Report, 2015

78. The results of the locked-cycle tests presented in the 2011 Corani FS are shown in Table 3-3.⁸⁶ The results of these tests were used in the 2011 Corani FS to predict metal recoveries from the mixed sulfide ore. Upon review of these test results, SRK noted that several of the test composites substantially exceeded anticipated ore grades. As an example, Composite 3 Zone Minas 3 contained 5.1% Pb, 1.9% Zn and 154 g/t silver and Composite

⁸⁶ Corani Feasibility Study, December 2011 at Table 13-6, pg 102 [Exhibit C-0066].

3 Zone Mixed Sulphide Master Composite contained 2.3% Pb, 2.5% Zn and 87 g/t silver. ⁸⁷ Both of which significantly exceed ore grade ranges established for Corani's LOM plan. In total, SRK deselected the results of four test composites from its review based on test composite grades that were substantially outside Corani's LOM plan grades. These tests were deselected based on test composite grade regardless of the corresponding test result. It is SRK's position that at a feasibility level of study it is essential that the test composites upon which the metallurgical studies are conducted represent the ore grades and ore characteristics that are anticipated. Table 3-4 shows the results of the locked-cycle tests used in SRK's review. These results show an average lead recovery into the lead concentrate of 70%, an average zinc recovery into the zinc concentrate of about 72%, an average silver recovery of 55% into the lead concentrate and 19% into the zinc concentrate (74% overall silver recovery).

 Table 3-2: Summary of Locked-Cycle Tests on Corani Mixed Sulphide

 Composites

Mixed Sulphide Composites												
		Head	Assay	r		LCI	F Recovery	7	LO	CT Concer	trate Gra	des
	Pb	Zn	Fe	Ag	Pb	Zn	Ag (Pb Conc)	Ag (Zn Conc)	Pb	Pb Conc		Con
	%	%	%	g/t	%	%	%	%	Pb, %	Ag, g/t	Zn, %	Ag, g/t
3 Zone Mixed Sulphide Master Comp LCT2	2.3	2.5	5.7	87	76.0	75.4	62.01	15.5	59.6	1686	53.1	390
Alphabet M Composite LCT1	2.2	1.4	4.2	69	80.3	69.4	79.7	7.2	53.5	1671	54.0	295
LCT1 U Composite	0.8	1.4	3.5	36	87.7	78.4	73.3	13.1	54.9	2392	55.2	283
Alphabet D Composite LCT1	1.6	1.9	1.4	58	72.3	82.1	51.9	35.3	65.0	1680	49.3	651
Alphabet G Composite LCT2	1.2	1.1		62	55.8	68.5	55.8	15.2	49.7	1646	51.8	374
Alphabet K Composite LCT1	1.1	1.6		27	80.5	65.3	54.3	12.8	50.2	904	58.1	192
Alphabet R Composite LCT1	2.6	0.7		25	81.6	60.2	56.3	9.1	57.4	441	46.6	297
3 Zone Minas 3 Composite LCT1	5.1	1.9		154	75.3	71.7	69	12.2	79.5	2199	52.0	729
1-5 Yr Mixed Sulphide Composite LCT2	0.9	1.3		50	53.6	64.4	40.2	19.5	51.2	2155	51.8	595
AVERAGE	2.0	1.5	3.7	63	73.7	70.6	60.3	15.5	57.9	1641	52.4	423
UNIT WEIGHTED					75.2	72.0	62.5	15.4	63.0	1830	52.7	524

Source: M3 2011 Corani Feasibility Study

⁸⁷ Corani Feasibility Study, December 2011 at Table 13-6, pg 102 [Exhibit C-0066].

	Head Grade		Pb Conc Grade Zn Conc		nc Grade	Grade Pb Conc Recovery (%)			Zn Conc Recovery (%)		
Composite	Pb (%)	Zn%)	Ag (g/t)	Pb (%)	Ag (g/t)	Zn (%)	Ag (g/t)	Pb	Ag	Zn	Ag
U	0.81	1.44	36	54.9	2,392	55.2	283	87.7	73.3	78.4	13.1
D	1.56	1.86	58	65.0	1,679	49.3	651	72.3	51.9	82.1	35.3
G	1.15	1.10	62	49.7	1,646	51.8	374	55.8	55.8	68.5	15.2
К	1.07	1.59	27	50.2	904	58.1	192	80.5	54.3	65.3	12.8
1-5 Year Master	0.89	1.32	50	51.2	2,155	51.8	595	53.6	40.2	64.4	19.5
Arithmetic Average ⁽¹⁾	1.10	1.46	6 46	54.2	1.755	53.2	419	70.0	55.1	71.7	19.2

Table 3-3: Projected Lead and Silver Recoveries into Mixed Sulfide Ore from Selected Locked-Cycle Test Results-SRK

Source: M3 2011 Corani Feasibility Study

⁽¹⁾SRK cannot calculate a weighted average from the information available.

79. SRK further notes that the reported test results were highly variable and internally inconsistent. As an example the results for the 1-5 Year master composite that was developed to represent the average ore grade and character during the first five years of mining resulted in only 53.6% lead recovery into the lead concentrate, 64.4% zinc recovery into the zinc concentrate, and only 59.7% overall silver recovery (40.2% into the lead concentrate and 19.5% into the zinc concentrate). The inconsistency in the test results observed by SRK raised significant questions with respect to metallurgical projections for the project, and prompted SRK to recommend additional confirmatory testing be conducted on test composites that can be considered representative with respect to grade and lithology (lithology is the general physical characteristics of rocks).⁸⁸

3.4.1 Recoverability: Mixed Transitional Ore

- 80. In paragraph 171 of its second report, RPA incorrectly states that, "SRK developed the following equations for projecting lead and silver recoveries from transition ore":
 - Lead Recovery = 38% + 10.9 * lead grade %; and

⁸⁸ First SRK Report, October 6, 2015 at §8.11, ¶134 [Exhibit REX-005].

- Silver Recovery = 38.5% + 0.2 * Silver grade g/t.
- 81. However, SRK did not develop these equations—these are the equations proposed in the 2011 Corani FS.⁸⁹ SRK believes that these equations are reasonable pending any further work that might be conducted, and that at the average ore grade of 0.91% Pb and 51.6 g/t silver an average lead recovery of 48% and an average silver recovery of 49% is projected from transition ore.
- 82. In paragraph 177 of its second report, RPA states that: "*RPA agrees with the estimated silver recovery in the 2011 Corani FS and recommends that no change be made*". SRK is in agreement.

3.4.2 Post 2011: Metallurgical Studies

83. In paragraph 178 of its second report, RPA quotes SRK's statement that "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, Global Resource Engineering (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."

⁸⁹ Corani Feasibility Study, December 2011 at Table 13-7, pg 103 [Exhibit C-0066].

- 84. In paragraph 179 of its Response Report, RPA states that "significant metallurgical work was completed following the 2011 FS, which is why the 2015 Corani OFS was completed". It appears from the references cited by RPA that the additional metallurgical programs conducted for the 2015 Corani FS included:
- Comminution modeling:
 - Alex G Doll Consulting Lt., 2014 Comminution Modeling Report Corani Project, Peru, prepared for Bear Creek Mining Corporation, August 29, 2014.
- Concentrate Regrinding Energy Tests on Corani Rougher Flotation Concentrates:
 - ALS Metallurgy Kamploops, Levin Tests on Corani Rougher Concentrates, KM4455, prepared for Bear Creek Mining Corporation, October 10, 2014.
- Filtration Tests:
 - Outotec Canada, 2014 Filtration Test Report, 109981T1, December 8, 2014.
- Geometallurgical Studies:
 - GRE, Geometallurgy, Block Model & Resource Estimate, Corani Project Feasibility Study, prepared for Bear Creek Mining, September 18, 2015.
- 85. Contrary to the recommendations in the Corani 2011 Feasibility Study, SRK notes that no new flotation studies appear to have been conducted on Corani Ore composites since the 2011 Feasibility Study. They did however conclude with recommendations for considerable further metallurgical testwork, including flotation studies. Although an in depth geometallurgical program was undertaken to re-evaluate earlier testwork, along with studies to assess grinding and filtration requirements, it is SRK's opinion that these

additional statistical analyses (re-evaluation) of previous data do not serve to resolve the inconsistencies and questions related to the flotation studies reported in the Corani 2011 FS.

- 86. In paragraph 182 of its second report, RPA states that, "The new work that has been completed in the 2015 Corani OFS is significantly more comprehensive than the locked cycle test work that was completed in the 2011 Corani FS. The 2011 Corani FS testwork is no longer relevant since the exploration drill core has been re-logged and reinterpreted and the ore types have been replaced based on additional information and updated models that have been developed".
- 87. SRK finds this statement from RPA to be alarmingly misguided, and notes that no additional flotation studies were conducted as part of the 2015 Corani OFS and that recovery predictions are based entirely on geometallurgical modeling of previous testwork reported in the 2011 Corani FS. It is SRK's strong opinion that no amount of re-logging, reinterpretation of ore types and statistical analysis of historical testwork can compensate for no additional new testwork data obtained from truly representative samples, as recommended in the 2011 Corani FS, which stated that:⁹⁰ "Following these tests, an evaluation should be prepared of whether or not a pilot plant test program is warranted to demonstrate the metallurgical behavior of the Project ore. If pilot testing is needed the test should be performed on a composite of representative material." Most metallurgical testwork and studies try to replicate the performance of a processing plant without having to build a pilot plant, which is a mini replica of the full scale processing plant; a pilot plant is operated to generate information about the behavior of the full scale

⁹⁰ Corani Feasibility Study, December 2011 at pgs 258-259 [Exhibit C-0066].

system which cannot be determined from testwork alone. Without any additional metallurgical testwork a pilot plant was a distinct possibility which suggests that there was considerable uncertainty in the proposed processing plant performance as designed and that projected metals recovery and concentrate grades carry a significant degree of uncertainty.

88. In paragraph 184 of its second report, RPA states "*RPA is of the opinion that the work that has been completed to support the 2015 Corani OFS, which estimates metal recovery on a block by block basis using the most modern methods available, are much more accurate than the empirical guesses that SRK proposes. Therefore, no changes to the 2015 Corani OFS economic analysis are warranted*" In response to RPA's opinion, SRK has reproduced the summary tables developed by Global Resource Engineering (GRE) based on the test results reported in the 2011 Corani FS that show GRE's estimated metal recoveries and concentrate grades based on the recovery and grade models that GRE developed for the 2015 Corani OFS. Table 3-5 shows the lead concentrate grades and recoveries by mine schedule.

Production	Tonnes	Feed Grade	(% or	Grade (g	g/at or %)	Recovery (%)		
Year	(000)	Ag	Pb	Ag	Pb	Ag	Pb	
Year 1	5,675	96	1.17	5772	56.6	67	69	
Year 2	7,744	84	1.43	3382	56.6	70	69	
Year 3	7,897	73	1.20	3390	56.6	70	71	
Year 4 to 5	15,745	80	1.12	3863	56.6	71	74	
Year 6 to 10	39,393	55	0.98	4380	56.6	62	45	
Year 11 to	69,120	27	0.61	2423	56.6	69	72	
LOM	137,698	52	0.91	3417	56.6	67	63	

 Table 3-4: Lead Concentrate Grades and Recoveries by Mine Schedule

Source: M3 Corani 2015 Feasibility Study⁹¹

⁹¹ Corani Optimized Feasibility Study, July 2015 at Table 13-11, pg 112 [Exhibit SRK-020].

Production	Tonnes	Feed Grade (% or g/t)	Gra	de (g/t or	Reco	Recovery (%)	
Year	(000)	Zn	Ag	Zn	Ag	Zn	
Year 1	5,675	0.48	385	52.9	2	54	
Year 2	7,744	0.88	385	52.9	5	63	
Year 3	7,897	0.85	385	52.9	6	69	
Year 4 to 5	15,745	0.97	385	52.9	7	76	
Year 6 to 10	39,393	0.38	385	52.9	2	49	
Year 11 to	69,120	0.50	365	52.9	7	56	
LOM	137,698	0.59	377	52.9	5	60	

Table 3-5: Zinc Concentrate Grades and Recoveries by Mine Schedule

Source: M3 Corani 2015 Feasibility Study⁹²

- 89. SRK makes the following key observations regarding the metal recovery predictions shown in these tables:
 - Lead recovery into a lead concentrate averages about 70% during the first 5 years of operation and are predicted to average 63% over the life of mine.
 - Zinc recovery into the zinc concentrate averages about 71% during the first 5 years of operation and 60% over the life of mine.
 - Silver recovery into the lead concentrate averages about 70% during the first 5 years of operation and 67% during the life of mine. Silver recovery into the zinc concentrate averages about 6% during the first 5 years and 5% during the life of mine. Overall silver recovery is estimated at 72% for the life of mine.
 - SRK notes that GRE's predicted lead and zinc recoveries for the first 5 years of operation are more consistent with earlier recovery estimates made by SRK based on selected locked-cycle test results than the recovery estimates that RPA stated as appropriate.

⁹² Corani Optimized Feasibility Study, July 2015 at Table 13-12, pg 112 [Exhibit SRK-020].

- GRE's predicted an average overall silver recovery of 75% into the lead and zinc concentrates is consistent with the earlier overall average silver recovery estimate made by SRK.
- SRK agrees with the lead and zinc recovery predictions made by GRE in the 2015 Corani OFS, and which are used in the OFS financial model. In addition, SRK generally agrees with the overall predicted average silver recovery into the lead plus zinc concentrates.
- SRK does not agree with the predicted silver recovery into the lead concentrate. 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 and the 60% average recovery from the whole suite locked cycle tests.
- The higher silver recovery to the lead concentrate is based on the premise that silver recovered into the zinc concentrate can be reduced to an average of about 5%, with the balance of the overall silver recovery shifted into the lead concentrate. This, however, is not supported by the results of the locked-cycle testwork presented in the 2011 Corani FS.
- In the locked-cycle tests reported in the 2011 Corani FS, silver recovery into the zinc concentrate averaged 15% (Table 3-3) and 19% (Table 3-4) with overall silver recovery into the lead concentrate ranging from 55-60%.
- 90. In paragraph 194 of its second report, RPA is incorrect in its comments regarding SRK's recovery projections for Corani, stating that SRK selected a data set that gave desired

results.⁹³ As detailed in Paragraph 135 of our first report,⁹⁴ SRK's recovery estimates are more closely supported by the geometallurgical studies than are the recovery estimates that RPA claimed as "appropriate."

- 91. In paragraph 195 of its second report, RPA is incorrect in its comments regarding SRK's silver recovery projections for Corani mixed sulfide ores. RPA seems to take the position that geometallurgical modeling can resolve fundamental flotation chemistry and selectivity issues and appears to be quite happy accepting silver recoveries into the lead concentrate that have yet to be demonstrated by reliable locked-cycle flotation studies on representative test composites.
- 92. The following is an excerpt from the 2011 Corani FS and is included here to demonstrate

just how much more testing was required for improve metallurgical confidence:

The primary mesh of grind for the Corani ore needs to be studied further. While the mill design was based on a grind of 106 microns, recent metallurgical tests show that some ore types may require finer or coarser grinds. In addition, grinding mills in closed circuit with cyclones tend to overgrind heavy mineral. This has been shown for copper sulfides and is very pronounced for lead sulfide. This may represent an opportunity for the operating mill to use coarser grinds and reduce unit power costs.

Metallurgical tests should be performed on composites of ore material that originate from the parts of the mine that make up the ore feed from the early years. The material should be handled in a manner that reduces the material aging and oxidation that may cause reductions in the metallurgical performance. Following these tests, an evaluation should be prepared of whether or not a pilot plant test program is warranted to demonstrate the metallurgical behavior of the Project ore. If pilot testing is needed the test should be performed on a composite of representative material.

Bench-top flotation tests, whether in batch or in lock cycles, may predict recoveries well but not plant concentrate grades. It is recommended that tests results be benchmarked against existing operations with similar grades. The effect of variations in floatability in the ore body to the process plant may also be predicted by performing simulations that use flotation kinetics parameters measured for the different ore types.

⁹³ RPA Response Report, January 6, 2016 at §5.5, ¶194, pg 5-37.

⁹⁴ First SRK Report, October 6, 2015, at §8.11, ¶135, pg 35 [Exhibit REX-005].

Additional studies are recommended to improve zinc recovery in general and, in particular, improve silver recovery in low-grade zinc ores.

Additional grindability tests are recommended to characterize the variability of hardness of the ore that will be delivered to the mill over the life of mine. Samples for these tests should come from locations in the mining cone that are somewhat evenly distributed in space and representing all the rock types. A geostatistic analysis of these results will allow prediction of the work index of each mining block and aid in estimating mill capacity over the life of mine.

Selectivity of the flotation process for Corani was shown to be optimal with the use of inert grinding media. Flotation tests are recommended to determine the best alloy to be used for grinding balls that will minimize unit cost per tonne of ore while maintaining the required chemistry for flotation.⁹⁵

- 93. In SRK's opinion, this is a very substantial outstanding metallurgical testwork program, which was required for a project that was purported to be at the feasibility level of evaluation and design. It is not standard industry practice to have so many outstanding metallurgical issues in a Feasibility Study. These issues should have largely been addressed before the Feasibility Study was published.
- 94. SRK seriously questions whether marketable concentrates could be produced with such low head grades. Some metrics excerpted from the Corani model in the Dec 2011 FS⁹⁶are given below:
 - Average Zn grade 0.52%, Minimum 0.2%; and
 - Average Pb grade 0.94%, Minimum 0.6%
- 95. The Zn concentrate grade is 53% and that for the Pb concentrate is 60%.⁹⁷ Using the minimum grades in the plan, these represent concentration ratios of 100 times or more. Conventional base metal processing plants simply cannot achieve this level of

⁹⁵ Corani Feasibility Study, December 2011 at §26.4, pg 259 [Exhibit C-0066].

⁹⁶ Corani Feasibility Study, December 2011 at Table 16-1, pg 130 [Exhibit C-0066].

⁹⁷ Corani Feasibility Study, December 2011 at Table 22-14, pg 240 [Exhibit C-0066].

performance. Even if they could the resulting Zn and Pb recoveries through the processing plant would be very low further questioning the viability of doing so.

- 96. To demonstrate this SRK benchmarked projected metallurgical performance with the Fresnillo base metal plant in Mexico. SRK conducts an annual audit of this project for the Fresnillo Plc Board.
- 97. Comparative metrics for Fresnillo are as follows:
 - Zn head grade 3.56% to produce a 53% concentrate at a concentration ratio of 15; and
 - Pb head grade 1.77% to produce a 40% Pb concentrate at a concentration ratio of 23.
- 98. These are substantially below the concentration ratio of 100, which I referred to for Corani. The 2011 Corani FS states that "Based on data thus far it is judged that 0.3% Zn should be considered the cut-off for workable zinc flotation. Such low zinc grades would likely result in lower Zn (and Ag) recoveries than the LCT average, with recoveries then projected to increase at 0.5% Zn and 0.7% zinc. Further work is required on low grade zinc samples to firm up these projections."⁹⁸ The 2015 Corani OFS states that "The separation of clean marketable lead and / or zinc concentrates was successful on only a portion of samples. For some samples, zinc or pyrite was recovered uncontrollably to the lead concentrate resulting in lower grade products. For other samples, flotation response was limited leading to very low recoveries"⁹⁹ and that "[a]dditional lock cycle testing is recommended for each deposit, particularly material representing moderate to low zinc grades which is under-represented in the current test database. This will allow for validation of the final estimated recoveries and the selected concentrate grades. This testing should include

⁹⁸ Corani Feasibility Study, December 2011 at §13.12, pg 103 [Exhibit C-0066].

⁹⁹ Corani Optimized Feasibility Study, July 2015 at §13.5, pg 92 [Exhibit SRK-020].

analysis of minor elements; limited test data is available regarding the concentration of minor elements in the final concentrate."¹⁰⁰

99. The Corani 2015 OFS reported the following on Concentrate Quality:

- The lead concentrates that SGS assayed, on average, graded 59 percent lead and 1815 g/t silver. The lead grade, particularly, is on the higher end of what is achievable for Corani mineralization. The concentrates, on average, graded about 0.8 percent antimony which would be expected to result in smelting penalties. Arsenic, mercury and cadmium were also elevated and there may also be penalties applied for these elements.¹⁰¹
- The zinc concentrates, assayed by SGS, on average graded 53.8 percent zinc and 331 g/tonne silver. Mercury was elevated in these concentrates, grading on average 56 g/tonne in the zinc concentrates. At this level, penalties, if not marketability issues, would be anticipated. Antimony and cadmium were also elevated in these concentrates and potential penalties may be applicable.¹⁰²
- 100. Collectively, all of the above viz very low head grades in the LoM Plan, poor metallurgical recovery, significant and, or unacceptable levels of penalty elements in the lead and zinc concentrates, could represent fatal flaws to the development of the Corani Project.

¹⁰⁰ Corani Optimized Feasibility Study, July 2015 at §1.15.4, pg 19 [Exhibit SRK-020].

¹⁰¹ Corani Optimized Feasibility Study, July 2015 at §13.5.9, pg 98 [Exhibit SRK-020].

¹⁰² Corani Optimized Feasibility Study, July 2015 at §13.5.9, pg 99 [Exhibit SRK-020].

3.5 Permitting Schedule and Construction and Ramp-Up Schedules

101. In its Response Report, RPA allege that SRK is unfounded in suggesting a longer timeline to first metal production without referencing specific circumstances.¹⁰³ I discuss the components and possible timelines for the Corani Project execution below. Some of these components would be sequential while others could be run in parallel.

3.5.1 ESIA Preparation/Review and Permitting – 17 months

102. An environmental and social baseline study is a precursor to the preparation of an ESIA. Typically, this must cover all seasons in a year requiring a minimum of 12 months of fieldwork. In its Response Report, RPA misinterprets SRK's suggestion of a minimum of 12 months of fieldwork as the total time required, which is not the case. The fieldwork is followed by the preparation of an ESIA, submission to the relevant regulatory authorities, response to queries and requests for further information, resubmission of amended ESIA and permit application. All of the aforementioned activities could take considerably longer than 17 months.¹⁰⁴

3.5.2 Detailed Engineering – 18 months

103. An 18 month provision in the Corani 2011 FS project schedule appears reasonable.¹⁰⁵

3.5.3 Recruitment of Owners Team – several months

104. A substantial experienced owner's team (owner's team consists of Project Managers by discipline, covering all engineering functions) would need to be recruited to manage the execution of the project and oversee the work of the EPCM contractor. This in itself could take several months to complete.

¹⁰³ RPA Response Report, January 6, 2016 at ¶50, pg 3-3.

¹⁰⁴ RPA Response Report, January 6, 2016 at ¶50, pg 3-3.

¹⁰⁵ Corani Feasibility Study, December 2011 at §24.1.2, pg 242 [Exhibit C-0066].

3.5.4 Procurement and Logistics

105. Procurement of plant components and equipment in a timely manner is critical to the project execution timeline. Long lead time items must be pre-ordered well in advance of when they are needed. It is likely that the majority of the plant components and equipment would be sourced external to Peru, requiring logistics systems to be in place for ocean freight port receipt and customs clearance and on-going road transport in Peru.

3.5.5 Construction – 24 months

106. SRK considers a realistic construction schedule would be 24 months, with a three month buffer as a contingency.

3.5.6 Recruitment and Training of work force – 3 - 6 months

107. It is unlikely that a trained workforce would be available to the Corani Project. Therefore, a workforce would have to be recruited and effectively trained in operational and health and safety procedures. This in itself could take at least three to six months.

3.5.7 Commissioning/Start-Up – 6 months

- 108. The wording used in the Corani 2011 FS is somewhat ambiguous, as there is no reference to ramp-up in mine production, ore throughput, metals recovery and concentrate production.¹⁰⁶
- 109. From the above, I stand by my conviction that a whole range of reasons, some within and some not within Bear Creek's control, could have delayed first concentrate production by at least one year and potentially substantially longer from that presented in the FS.

¹⁰⁶ Corani Feasibility Study, December 2011 at §24.1.2, pg 242 [Exhibit C-0066].

4 Truthful Statement

1. I declare under oath that the opinions expressed in this report are truthful.

Prepared by

N. Ligby

Neal Rigby, PhD, CEng, AIME, MIMMM

Appendices

Appendix 1: Curriculum Vitae of Dr. Neal Rigby

	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/	Chartered Engineer (1980)				
	Anniations	Member South Wales Institute of Engineers Member Institute of Materials, Mining and Metallurgy				
		Corporate Member of SME and AIME				
Specialization	Strategic planning and eva improvement managemen	aluation of mines. Mine performance and business t. Mining Finance and due diligence.				
Expertise	Dr. Neal Rigby has 40 yea the SRK Global Group Ch Consultant and Principal M Group companies. Neal ha management consulting industrial mineral projects years has been as the se competent person's report disposal and acquisition finance institutions. In this stock exchanges and fina and risks and opportunitie has been directed at the re implementation of busine positions in production, a projects in over 50 countrie America, the Middle East,	ars' experience in the international mining industry. He was hairman for 15 years (1995 – 2010), is a Corporate Mining Mining Engineer and serves on the boards of several SRK as performed mining engineering, project management and for a wide range of metalliferous, coal, diamond and b. The major focus of his consulting work for the past 20 enior participant in numerous major due diligence audits, ts and other reports supporting the rationalization, merger, activities of international mining companies and mining role Neal has been in a position to certify to shareholders, ancial institutions the "bankability" i.e. fundamental value s of mining projects. Most recently, Neal's consulting work estructuring and sale of mining assets and the scoping and ess improvement strategies. He has held a variety of cademia, business and consulting. Neal has undertaken es, in Europe, Africa, Australasia, North, Central and South the Far East, Asia, Russia and the FSU.				
Employment						
2005 – Present	SRK Consulting (U.S.), Ir	nc., Corporate Consultant – Mining, Lakewood, CO				
2003 – 2005	Steffen Robertson and Ki Cardiff, UK	irsten (UK) Limited, Corporate Consultant – Mining,				
1996 – 2003	Steffen Robertson and Ki Corporate Consultant Mir	irsten (U.S.), Inc. International Consulting Engineers, ning, Lakewood, CO				
1995 – 2010	Steffen Robertson and Ki	irsten Global Limited, Group Chairman, Lakewood, CO				
1981 – 1996	Steffen Robertson and Ki Founding Partner, Manag	irsten (UK) Limited, International Consulting Engineers, ging 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					

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.

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.

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

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

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

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

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

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

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

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	RPA Export Report, Dated May 29, 2015	08
2	RPA Response Report, Dated January 6, 2016	
3	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
4	Randolf E Scheffel on Heap Leach Design and Practice.	SRK-021
5	U.S. Department of State – 2011 Investment Climate Statement – Peru (Bureau of Economic, Energy and Business Affairs), March 2011	SRK-024
6	Eagle Gold Technical Report Construction Schedule	SRK-023
7	Corani Feasibility Study, dated December 2011	C-0066
8	Corani Optimized Feasibility Study, dated July 2015	SRK-020
9	SNL Financial Property Profile—Rio Blanco, 2016	SRK-025
10	SNL Financial Property Profile—Tia Maria, 2016	SRK-026
11	SNL Financial Property Profile—Conga, 2016	SRK-027