

PCA CASE N° 2016-39/AA641

**ARBITRATION UNDER THE RULES OF ARBITRATION OF THE
UNITED NATIONS COMMISSION ON INTERNATIONAL TRADE
LAW**

GLENCORE FINANCE (BERMUDA) LTD

Claimant

-v-

PLURINATIONAL STATE OF BOLIVIA

Respondent

CLAIMANT'S POST-HEARING REPLY



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1. Glencore Finance (Bermuda) Ltd (*Claimant* or *Glencore Bermuda*) submits this Post-Hearing Reply pursuant to the Tribunal's letter dated 22 September 2021 and its Annex.¹

I. INTRODUCTION

2. Glencore Bermuda's Post-Hearing Brief demonstrated that the preponderance of the evidence presented at the Hearing supports the valuations of the Assets in the Joint Models that were prepared by Glencore Bermuda's valuation experts, Dr Abdala and Ms Chavich from Compass Lexecon.² Nothing that the Plurinational State of Bolivia (*Respondent* or *Bolivia*) stated or presented in its Post-Hearing Brief rebuts that conclusion.
3. Bolivia's Post-Hearing Brief could give a reader the misimpression that the Hearing did not happen or that Bolivia's witnesses were not crossed examined. Bolivia's Post-Hearing Brief rehashes the arguments from Bolivia's pre-hearing briefs, citing largely to those briefs and its counsel's opening statement at the Hearing. Bolivia occasionally cites to its experts' direct presentations at the Hearing, and the few times that Bolivia actually cites to testimony from a cross examination, it usually is testimony about undisputed issues (*eg*, that exploration is required to identify Reserves or that expanding an Asset requires capital investments). Remarkably, Bolivia's Post-Hearing Brief completely ignores that its expert witnesses made numerous concessions during cross examination at the Hearing.
4. Bolivia seeks to ignore that its witnesses made the following admissions, among others, at the Hearing:

Colquiri Mine

- Glencore Bermuda was expanding the Colquiri Mine at the time of the taking;³
- it was reasonably likely that Glencore Bermuda would have completed the expansion of the Mine and Concentrator Plant but for Bolivia's actions;⁴

¹ Capitalized terms not specifically defined in this Post-Hearing Reply are as defined in the Claimant's Reply on Quantum dated 22 January 2020 and Post-Hearing Brief dated 18 November 2021.

² Glencore Bermuda's Post-Hearing Brief, Section II.

³ Glencore Bermuda's Post-Hearing Brief, paras 13-14; Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 576:16 – 577:12, 579:14-18, 583:13-17, 585:3-9, 585:13-17; Direct Presentation of Dr Rigby, Day 4, Tr (Eng), 556:17-20.

⁴ Glencore Bermuda's Post-Hearing Brief, para 16; Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 581:1-6.

- the long history of replenishment at Colquiri suggests that it is likely that Glencore Bermuda would have continued to replenish Reserves after May 2012;⁵

Tailings Plant

- the Tailings Plant had “some value” at the time it was taken;⁶
- Glencore Bermuda had begun developing the Tailings Plant before the taking;⁷
- the Tailings Plant was technically feasible;⁸

Vinto Tin Smelter

- Vinto was a profitable enterprise that had generated profits of approximately US\$18 million in the approximately 18 months prior to the taking;⁹ and
- Bolivia estimated it could generate profits of US\$7 million a year if it nationalized Vinto.¹⁰

5. These concessions that Bolivia seeks to ignore contradict the valuations of the Assets that Bolivia proposes in the Joint Models. For example, these concessions by Bolivia’s witnesses cannot be reconciled with the following incorrect assumptions in Bolivia’s proposed valuations: (i) that Glencore Bermuda would not have expanded the Colquiri Mine or identified any additional Resources after December 2011; (ii) that Glencore Bermuda would not have developed the Tailings Plant and that it had zero value; and (iii) that the Vinto Tin Smelter was worth merely US\$17 million. Bolivia’s proposed valuations should therefore be rejected because, among other things, they are contrary to the admissions of Bolivia’s own expert and fact witnesses.

⁵ Glencore Bermuda’s Post-Hearing Brief, para 24; Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 606:16-23, 607:8-12.

⁶ Glencore Bermuda’s Post-Hearing Brief, para 32; Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 621:24 – 622:2, 621:19-20, 636:2-11.

⁷ Glencore Bermuda’s Post-Hearing Brief, para 31; Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 629:8-13, 631:4 – 632:14; Cross Examination of Dr D Flores, Day 5, Tr (Eng), 849:22 – 852:13.

⁸ Glencore Bermuda’s Post-Hearing Brief, para 31, Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 626:1-6.

⁹ Glencore Bermuda’s Post-Hearing Brief, paras 37(b), (d); First Expert Report of Neal Rigby, para 106, Table 6.

¹⁰ Glencore Bermuda’s Post-Hearing Brief, para 37(e); COMIBOL, Report on the reversion of the Complejo Metalúrgico Vinto to the Bolivian State, 29 January 2007, **R-247**, p 8 (English translation from Spanish original).

6. These admissions by Bolivia’s witnesses, in addition to discrediting Bolivia’s valuations, add to the abundant evidence in the record supporting the valuations that Glencore Bermuda presents for the Assets.
7. This Reply addresses why the preponderance of the evidence supports Glencore Bermuda’s valuations of the Assets (Section II), proposed discount rates for Colquiri and Vinto (Section III), proposed interest at the rates published by the Bolivian Central Bank and compounded annually (Section IV), and request that the award be net of taxes (Section V).¹¹ The Reply concludes with Glencore Bermuda’s request for relief.

II. THE PARTIES’ POST-HEARING BRIEFS CONFIRM THAT GLENCORE BERMUDA’S VALUATIONS OF THE ASSETS ARE SUPPORTED BY THE PREPONDERANCE OF THE EVIDENCE

8. The following subsections address the allegations in Bolivia’s Post-Hearing Brief regarding the key evidence presented at the Hearing regarding the fair market values of Colquiri, including the Colquiri Mine and Tailings Plant (subsection II.A), the Vinto Tin Smelter (subsection II.B), and the Antimony Smelter and Tin Stock (subsection II.C), and why that evidence overwhelmingly supports the valuations of the Assets that the Compass Lexecon experts, Dr Abdala and Ms Chavich, present in the Joint Models.

A. COLQUIRI

9. The evidence adduced at the Hearing demonstrates that the Colquiri Mine was expanding pursuant to the Triennial Plan at the time of the taking,¹² the Mine would have replenished Reserves to sustain expanded production levels through the end of the Colquiri Lease,¹³ and that the other factors in the Compass Lexecon experts’ valuation of Colquiri are correct. The evidence also demonstrates that the Tailings Plant has value.¹⁴ Bolivia’s Post-Hearing Brief fails to rebut this conclusive evidence.

¹¹ Bolivia’s Post-Hearing Brief rehashes not only the damages arguments in its pre-Hearing briefs, but also its arguments on jurisdiction and the merits. In this brief, Glencore Bermuda will address only Bolivia’s arguments on damages. Glencore Bermuda respectfully refers the Tribunal to its prior submissions on the Tribunal’s jurisdiction and the merits of its claims. *See* Statement of Claim, Sections IV (Jurisdiction), V (Merits), VI (Quantum); Reply on the Merits, Sections IV (Jurisdiction), V (Merits); Rejoinder on Jurisdictional Objections, Section II (Jurisdiction); Reply on Quantum, Sections II-VI (Quantum); Claimant’s Opening Statement at Merits Hearing, Day 1, Tr (Eng), 11:9 – 72:21; Claimant’s Closing Statement at Merits Hearing, Day 4, Tr (Eng), 799:5 – 839:10; Claimant’s Opening Statement at Quantum Hearing, Day 1, Tr (Eng), 9:23 – 78:7.

¹² Glencore Bermuda’s Post-Hearing Brief, paras 12-23 (and the sources cited therein).

¹³ Glencore Bermuda’s Post-Hearing Brief, paras 24-30 (and the sources cited therein).

¹⁴ Glencore Bermuda’s Post-Hearing Brief, paras 31-35 (and the sources cited therein).

1. Bolivia has failed to rebut the overwhelming evidence that the Colquiri Mine was expanding pursuant to the Triennial Plan

10. Bolivia's Post-Hearing Brief and the valuation recommended by its valuation expert, Dr Flores, assume that Glencore Bermuda would not have expanded the Colquiri Mine and Concentrator Plant, and that the Mine's Reserves would have depleted by 2025 and not been replenished.¹⁵ These positions are contradicted by the testimony of Bolivia's own witnesses at the Hearing, the documents in the record and testimony from Glencore Bermuda's fact and expert witnesses.
11. **Expansion:** As Glencore Bermuda highlighted in its Post-Hearing Brief, Bolivia's mining expert, Dr Rigby, testified at the Hearing that by the time Bolivia took the Colquiri Mine in May 2012, the construction of the Mine's Main Ramp and the expansion of the Concentrator Plant were underway.¹⁶ Dr Rigby also testified that it was reasonable to conclude that, but for Bolivia's interference, Glencore Bermuda would have completed the construction of the Main Ramp and the expansion of the Concentrator Plant.¹⁷ Similarly, Bolivia's valuation expert, Dr Flores, testified that all of the contemporaneous business plans on the record "have some forward-looking aspirations to increase production," showing Glencore Bermuda's intent to expand Colquiri.¹⁸
12. **Triennial Plan:** Bolivia's Post-Hearing Brief also denies that Glencore Bermuda was expanding Colquiri pursuant to the Triennial Plan.¹⁹ In doing so, Bolivia again ignores the testimony of *its* mining expert, Dr Rigby, which contradicted Bolivia's position. At the Hearing, Dr Rigby conceded that Glencore Bermuda's expansion of the Mine and Concentrator Plant prior to May 2012 could be considered proof of "partial approval" of the Triennial Plan.²⁰ Bolivia's Brief is equally contradicted by the testimony of Glencore Bermuda's witnesses, Messrs Eskdale and Lazcano, who testified that the Colquiri Mine was expanding pursuant to the Triennial Plan,²¹ and Glencore Bermuda's mining expert, Mr Clow, who confirmed that the

¹⁵ Bolivia's Post-Hearing Brief, Section 2.

¹⁶ Glencore Bermuda's Post-Hearing Brief, paras 13-17 (and the sources cited therein). Bolivia's witness, ██████████, had already conceded in writing that the Main Ramp was being built by May 2012. *See* First Witness Statement ██████████, para 45.

¹⁷ Glencore Bermuda's Post-Hearing Brief, para 16 (and the sources cited therein).

¹⁸ Glencore Bermuda's Post-Hearing Brief, para 17 (and the sources cited therein). As explained in the Post-Hearing Brief, Bolivia's experts only dispute whether the expansion was pursuant to the Triennial Plan, as they suggest that the March 2012 Plan would be the more appropriate expansion plan to value Colquiri. *See* Glencore Bermuda's Post-Hearing Brief, para 22 (and the sources cited therein).

¹⁹ Bolivia's Post-Hearing Brief, paras 20-26.

²⁰ Glencore Bermuda's Post-Hearing Brief, para 19 (and the sources cited therein).

²¹ Glencore Bermuda's Post-Hearing Brief, paras 20-21 (and the sources cited therein).

documents in the record—*eg*, Colquiri’s report from April 2012—corroborate that the Colquiri Mine and Concentrator Plant were expanding pursuant to the Triennial Plan.²²

13. **Expansion CAPEX:** Bolivia’s Post-Hearing Brief alleges that there is no evidence that Glencore Bermuda ever budgeted the necessary capital expenditures (**CAPEX**) for the expansion under the Triennial Plan.²³ But the Triennial Plan’s approved budget is in the record, was discussed at the Hearing and Mr Eskdale confirmed that he personally approved the budget in 2011.²⁴ Furthermore, the evidence presented at the Hearing demonstrated that the Triennial Plan budget that Mr Eskdale approved allocated expansion CAPEX in the 2012 budget for Colquiri and that those funds were used to initiate the expansions of the Mine and Concentrator Plant prior to May 2012. Indeed, the evidence presented at the Hearing proves that:

- (a) The Triennial Plan of July 2011 included a budget of US\$43.8 million in CAPEX to complete the expansion contemplated by the Plan;²⁵
- (b) Sinchi Wayra’s Medium-Term Budget for 2012, approved in November 2011, evidences the approval of US\$43.1 million in expansion CAPEX.²⁶ Mr Eskdale testified that this was the budget for the Triennial Plan that he approved, and Mr Lazcano confirmed that the expansion CAPEX in this budget was for the expansion of the Mine and Concentrator Plant under the Triennial Plan.²⁷ Further, Glencore Bermuda’s

²² Glencore Bermuda’s Post-Hearing Brief, para 21 (and the sources cited therein).

²³ Bolivia’s Post-Hearing Brief, paras 23, 29, 61-64, 74, 85.

²⁴ Sinchi Wayra SA, Budget 2012, November 2011, **R-430-16-GB013733**, pp 135-39; Cross Examination of Mr C Eskdale, Day 2, Tr (Eng), 206:16-22 (confirming that Glencore’s executives, including Mr Eskdale, would have approved the Triennial Plan’s budget in late 2011), 209:19-20 (“[T]he approval that was given [by Glencore] was for the budget [of the Triennial Plan].”); Redirect Examination of Mr C Eskdale, Day 2, Tr (Eng), 251:16-22, 254:8-18 (confirming that exhibit **R-430-16-GB013733** “is the financials of the Triennial Plan. ... [T]his is the Triennial Plan turned into the budget and the Project forecast for Glencore to use going forward, and for the Mine to be judged by going forward. So, this is--these are the financials of the [Triennial] plan, as far as Glencore is concerned.”). Bolivia would question Mr Eskdale’s credibility on this respect, but it relies on Mr Eskdale’s concessions on budget approvals when it advances its case. *See, eg*, Bolivia’s Post-Hearing Brief, para 94. The Tribunal should not allow Bolivia’s “heads I win, tails you lose” approach. Mr Lazcano further confirmed that this document “represent[s] the official numbers for the Triennial Plan which was official and it was submitted in 2011 in June or, rather, in July, and then we wanted to get up to 550,000, and this was based on a budget that was going to be executed starting in 2012.” Redirect Examination of Mr E Lazcano, Day 3, Tr (Eng), 368:11-15.

²⁵ Triennial Plan, July 2011, **C-108**, pp 36, 88, 115-19.

²⁶ Sinchi Wayra SA, Budget 2012, November 2011, **R-430-16-GB013733**, p 139.

²⁷ Cross Examination of Mr C Eskdale, Day 2, Tr (Eng), 209:19-20, 213:12-16; Redirect Examination of Mr C Eskdale, Day 2, Tr (Eng), 251:1-22, 254:8-18. Mr Lazcano confirmed further that this document showed the approved investments of the Triennial Plan. Redirect Examination of Mr E Lazcano, Day 3, Tr (Eng), 369:3-9 (“Here it says ‘Expansion [CAPEX]’ and this refers to the Triennial Plan and the Project to get to [a production of] 550,000 [tonnes per year by] 2014, and here we’re talking about [\$]9 million in 2012, [\$]25 [million] in 2013, and then in 2014 would be [\$]8 [million]. So, these were ... the amounts that were going to be invested to implement all of the [projects] included in the Triennial Plan.”).

experts, Dr Abdala from Compass Lexecon and Mr Clow from RPA, testified that the small variations between the projections in the Medium-Term Budget and the Triennial Plan did not materially affect the consistency of the two documents;²⁸

- (c) Colquiri's investment budgets and approvals for 2012 demonstrate that, as of May 2012, Colquiri had approved the use of US\$10.5 million of expansion CAPEX at the Mine, and that US\$5.5 million of that amount had already been designated to specific projects.²⁹ As Mr Eskdale testified at the Hearing, this expenditure process showed that Colquiri's management was exercising its discretion to determine how best to implement the expansion of the Mine;³⁰ and
- (d) Contemporaneous documents confirm that Colquiri was spending the approved budget to expand the Mine, including by building the Main Ramp and the Concentrator Plant.³¹ In addition, Mr Lazcano, Colquiri's former General Manager, testified at the Hearing that the investments that Colquiri was making in the Mine in early 2012 were exploration and expansion works under the Triennial Plan.³²

14. The above referenced evidence contradicts Bolivia's proposed valuation of Colquiri, which assumes no expansion, and instead supports Glencore Bermuda's valuation of Colquiri provided in the Joint Model.

²⁸ Dr Abdala explained that "[the] November 2011 three-year budget, it's actually a budget but it also has 3-year investment projections and those are similar to the Triennial Plan with the only differences of a 2012 delay on CAPEX as well as expected ore processing production. But other than that, *the numbers are the same of the Triennial Plan.*") Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 672:11-17 (emphasis added). Mr Clow explained that RPA reviewed such adjustments and continued to rely on the Triennial Plan because those adjustments are normal reassessments of the investment plan and, "plans change all the time, but the overall objective of [expanding] to 2000 [tonnes] a day ... did not change and, therefore, [Glencore Bermuda] would have got[ten] there, and that's how [RPA] assessed it."). Cross Examination of Mr G Clow, Day 3, Tr (Eng), 472:8-20.

²⁹ Compañía Minera Colquiri Investment Plan for 2012, 2011, **R-34**, tab "Datos," columns AA, AB, AE, AF, rows 336-79, 553-626, 644; **R-427**, tab "Datos," columns AA, AE, AF, rows 337-80, 554-627, 645, 648. The record also includes a document dated February 2012, which tracks the approval of authorization for expenditures, and shows that, by February 2012, Colquiri had approved expenditures of US\$6.8 million (including authorizations opened prior to 2012). **R-432**, tab "COLQUIRI," column O, rows 10-23.

³⁰ See Cross Examination of Mr C Eskdale, Day 2, Tr (Eng), 199:8-15, 200:23 – 201:10.

³¹ Colquiri's report for Q1 2012 dated April 2012 shows it had spent 1.8% of the budget to expand the Concentrator Plant and had agreed with third parties to spend monies equivalent to 27.3% of the Plant's expansion costs. Colquiri first quarter analysis, April 2012, **C-326**, p 34. The construction contract of the Main Ramp signed in March 2012 confirms that Colquiri was investing in the expansion. Construction contract between Colquiri and Arcal Mineros, 14 March 2012, **C-325**.

³² Redirect Examination of Mr E Lazcano, Day 3, Tr (Eng), 360:8-14, 362:14-24, 363:7 – 364:1; see also Colquiri first quarter analysis, April 2012, **C-326**, pp 32, 40, 47.

15. **March 2012 Plan:** In its effort to claim that Glencore Bermuda was not expanding Colquiri as of May 2012 and had not planned to do so, Bolivia even tries to distance itself from the March 2012 Plan by asserting that it was never approved nor implemented.³³ While the evidence overwhelmingly shows that Glencore Bermuda was expanding Colquiri pursuant to the Triennial Plan,³⁴ Bolivia cannot assert that Colquiri was not expanding by May 2012 at least pursuant to the March 2012 Plan. Bolivia’s mining *and* damages experts, Dr Rigby and Dr Flores, both testified that the March 2012 Plan is a “good starting point” for valuing Colquiri.³⁵
16. In sum, the preponderance of the evidence, including the admissions of Bolivia’s own experts at the Hearing, supports Glencore Bermuda’s experts’ valuation of Colquiri, which provides for expansion of the Mine and Concentrator Plant, and rebuts Dr Flores’s competing valuation which assumes no expansion.

2. Bolivia has failed to rebut the overwhelming evidence that Colquiri would have replenished Reserves through the end of the Colquiri Lease

17. Bolivia’s proposed valuation of Colquiri is premised on two incorrect assumptions regarding the amount of mineable minerals available at the Mine. *First*, Bolivia assumes that Colquiri would not have identified additional Reserves and Resources after May 2012—*ie*, Bolivia assumes no replenishment. *Second*, Bolivia discounts Glencore’s certified Reserves and Resources to 4.16 million tonnes of mineable material.
18. Bolivia’s assumption that Glencore Bermuda would not have replenished Reserves and Resources at Colquiri after May 2012 is unsupported and contrary to the evidence adduced at the Hearing. As Glencore Bermuda described in its Post-Hearing Brief, Dr Rigby conceded at the Hearing that:
- (a) Colquiri had a long history of replenishing mineral Reserves and Resources, and would likely have continued to do so after May 2012, corroborating the testimony of Glencore Bermuda’s mining experts in this regard,³⁶ and Colquiri’s exploration data

³³ Bolivia’s Post-Hearing Brief, para 25.

³⁴ Glencore Bermuda’s Post-Hearing Brief, para 22 (and the sources cited therein).

³⁵ Glencore Bermuda’s Post-Hearing Brief, paras 18, 22 (and the sources cited therein). This plan assumes an expansion CAPEX of US\$44.6 million over a five-year period. March 2012 Investment Plan, 4 April 2012, **EO-7**, pp 17, 20-22.

³⁶ Glencore Bermuda’s Post-Hearing Brief, paras 24, 26 (and the sources cited therein).

demonstrating that as of May 2012 there were ample minerals at Colquiri to sustain replenishment;³⁷ and

(b) willing buyers pay for un-delineated or potential resources, just as Glencore Bermuda's mining experts testified.³⁸

19. Dr Rigby's admissions directly contradict Bolivia's valuation of Colquiri, which assumes that Glencore Bermuda would not have replenished Reserves and Resources, and support the valuation proposed by Glencore Bermuda's experts, which projects that but for Bolivia's actions Colquiri would have continued its historical practice of replenishing Reserves and Resources after May 2012.
20. If the Tribunal concludes that Colquiri would have continued to replenish Reserves and Resources after May 2012, it need not even consider Bolivia's arguments regarding the amount of Reserves and Resources that had been delineated at Colquiri as of May 2012. As the parties demonstrated at the Hearing, the amount of Reserves and Resources identified at Colquiri as of May 2012 is only relevant if the Tribunal were to assume *zero* replenishment.³⁹ In that unlikely scenario (which would be contrary to the overwhelming evidence of replenishment), the evidence in the record demonstrates that Glencore's Reserves and Resources statement of 4.18 million tonnes as of 31 December 2011 is authoritative. It was prepared pursuant to the JORC Code, which is accepted by various securities regulators (along with other similar codes), and it was certified by a Competent Person who was expert in preparing such estimates.⁴⁰ On cross examination, Bolivia's mining expert, Dr Rigby, even admitted that Glencore's Reserves and Resources statement was prepared pursuant to the JORC Code by a Competent Person, and that JORC-compliant Reserves already include all necessary modifying factors (*ie*, discounts).⁴¹
21. Despite Dr Rigby's concession, Bolivia maintains that Glencore's Reserves and Resources statement should be further discounted. Bolivia tries to justify this reduction by relying on a theory that Dr Rigby introduced for the first time at the Hearing.⁴² Pursuant to this theory, Dr

³⁷ Glencore Bermuda's Post-Hearing Brief, paras 27, 29 (and the sources cited therein).

³⁸ Glencore Bermuda's Post-Hearing Brief, paras 25, 28 (and the sources cited therein).

³⁹ See Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 600:15-24. This is because a scenario that assumes replenishment, like Dr Abdala and Ms Chavich recommend, assumes that the discounted Resources and Reserves are replenished together with the extracted Reserves.

⁴⁰ See Glencore International PLC, Annual Report 2011, March 2012, **RPA-31**, p 72.

⁴¹ Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 589:2-19.

⁴² At the Hearing, Glencore Bermuda objected to the introduction of a new argument for the first time at the Hearing and requested that it be struck from the record. Glencore Bermuda maintains that objection. Glencore Bermuda's

Rigby recommends discounting Resources by 15% for geological uncertainty and by 25% for mining recovery, while he recommends discounting Reserves by 10% for mining recovery.⁴³ This theory has no factual basis, as Dr Rigby conceded on cross examination.

22. With respect to his proposed 15% discount to Resources, Dr Rigby testified that “I *felt* I ... had to apply a discount, and I *felt* that 15 percent was appropriate.”⁴⁴ Dr Rigby could not identify any support for his 25% discount to Resources. Instead, Dr Rigby asserted that the discount was “implicitly included” in Colquiri’s Resources statements.⁴⁵ But that makes no sense. If the discount was “implicitly included” in Glencore’s Resources statement, then there would be no basis to apply the 25% discount a second time. Similarly, in relation to his proposed discount for Reserves, Dr Rigby testified that “I don’t believe” that the Reserves certified by Glencore’s Competent Person have been properly reported.⁴⁶ When pressed on cross examination, Dr Rigby acknowledged that his proposed discounts were based on nothing more than advice he allegedly received from Bolivia’s witness, ██████████, who refused to attend the Hearing and whose alleged advice is not recorded in any document in the record,⁴⁷ and Dr Rigby’s unsupported “feelings” as to what was appropriate:

[Q]: So, we should adopt [the recommended discounts] on the basis of your feelings; is that correct?

[Dr Rigby]: Well, that’s my--as the Expert, that would be my advice, absolutely.⁴⁸

23. Faced with this overwhelming support for a valuation of Colquiri that provides for replenishment, Bolivia pivots to argue that Glencore Bermuda has assumed it could have replenished Reserves and Resources without investing in exploration.⁴⁹ Bolivia is incorrect. The Colquiri valuation proposed by Dr Abdala and Ms Chavich includes significant investments in exploration—US\$23.4 million between 2012 and 2027—to sustain

Objection to the Introduction of New Evidence, Day 4, Tr 4 (Eng), 531:13-25, 532:16-24, 534:14 – 535:15. In Bolivia’s opening statement, Bolivia’s counsel had initially summarized Dr Rigby’s explanation by characterizing it as a response to one of the Tribunal’s questions.

⁴³ Bolivia’s Post-Hearing Brief, paras 35-44; Bolivia’s Opening Statement, Day 1, Tr (Eng), 105:5 – 106:12; Direct Presentation of Dr N Rigby, Day 4, Tr (Eng), 547:17 – 549:25.

⁴⁴ Direct Presentation of Dr N Rigby, Day 4, Tr (Eng), 548:7-9 (emphasis added). *See also ibid*, 547:17 – 548:6.

⁴⁵ Direct Presentation of Dr N Rigby, Day 4, Tr (Eng), 549:2-11.

⁴⁶ Direct Presentation of Dr N Rigby, Day 4, Tr (Eng), 549:12-15.

⁴⁷ Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 599:1-20.

⁴⁸ Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 595:13-17. *See also ibid*, 592:3 – 593:13, 594:22 – 595:12, 599:1-17.

⁴⁹ Bolivia’s Post-Hearing Brief, paras 50-51.

replenishment.⁵⁰ The reasonableness of this amount is confirmed by the fact that Bolivia invested only US\$3.4 million in exploration between 2012 and 2016, and it still increased Reserves and Resources from 4.18 million tonnes in 2012 to 7.48 million tonnes in 2016, whereas Glencore Bermuda’s valuation model for Colquiri provides for materially larger capital investments in exploration to achieve more modest increases in Reserves and Resources.⁵¹

24. Finally, Bolivia asserts in its Post-Hearing Brief that that the Tribunal should not give value to potential replenishment because Glencore Bermuda allegedly only paid for certified Reserves when it acquired Colquiri.⁵² This is simply not true. Mr Eskdale’s testimony and related documentary evidence are clear that Glencore Bermuda paid for Colquiri “projecting a 12-year life of production” of Reserves and assuming Reserves and Resources for up to 16 years,⁵³ at a time when Colquiri had certified only four years of Reserves and five of Resources.⁵⁴

3. The evidence confirms that Glencore Bermuda’s technical assumptions are appropriate

25. As described above, instead of engaging with the evidence that was presented at the Hearing, Bolivia’s Post-Hearing Brief rehashes allegations from its pre-hearing submissions, often ignoring that these allegations were disproven at the Hearing and that the evidentiary record supports the Colquiri valuation presented in the Joint Model by Dr Abdala and Ms Chavich. Glencore Bermuda addresses a number of Bolivia’s arguments regarding Colquiri in the following paragraphs and respectfully refers the Tribunal to its prior submissions for a complete explanation of why the arguments in Bolivia’s Post-Hearing Brief are incorrect and contrary to the evidence in the record.⁵⁵

⁵⁰ Glencore Bermuda’s Post-Hearing Brief, para 27 (and the sources cited therein). *See* Joint Model for Colquiri, “Abdala-Chavich” macros button, “CAPEX” tab, row 8.

⁵¹ *See* Second Expert Report of SRK, para 27; Second Report of RPA, para 34, Table 1.

⁵² Bolivia’s Post-Hearing Brief, 19, 47-49, 53.

⁵³ Cross Examination of Mr C Eskdale, Day 1, Tr (Eng), 166:20 – 167:2.

⁵⁴ “Project Review Booklet for the Minera SA (Comsur) Operations,” Glencore internal report, July 2004, **C-308**, pp 2-3.

⁵⁵ *See* Claimant’s Opening Statement, Day 1, Tr (Eng), 20:3-25 (for the lack of credibility of Bolivia’s valuation), 21:1-12 (for the geological support of the expansion), 21:23 – 22:20 (for the legal reasons to rely on a contemporaneous business plan as the Triennial Plan or, in the alternative, the March 2012 Plan), 23:15 – 25:8 (for the technical feasibility of the expansion), 25:9-21 (for recovery rates), 33:22 – 36:4 (for the Valuation Date and the Rosario Agreement); Reply on Quantum, paras 57-60 (for Valuation Date), 68-71 (for the geological support for the expansion), 90-92 (for head grades), 93-100 (for the technical feasibility of the expansion), 101-03 (for recovery rates), 104-12 (for CAPEX), 113-20 (for OPEX); Glencore Bermuda’s Post-Hearing Brief, Section II.A (for Colquiri generally).

26. *RPA's Review of the Triennial Plan*: Bolivia asserts that Messers Clow and Lambert, Glencore's mining experts, took the Triennial Plan at face value and did not test it.⁵⁶ This assertion ignores Mr Clow's testimony at the Hearing and the cash-flow models that RPA prepared based on the Triennial Plan. When Bolivia's counsel asked at the Hearing whether RPA had taken the Triennial Plan at face value, Mr Clow responded: "No, of course not. No. We ... put together the model which you have [exhibits **RPA-16** and **RPA-55bis**]. ... [W]e took the assessment and the numbers in the Triennial Plan and put them into a model to assess ourselves [W]e did our own assessment [of the Triennial Plan]."⁵⁷ Bolivia's assertion also ignores that Dr Rigby conceded that the Triennial Plan has all the information required to assess its financial viability.⁵⁸
27. *Alleged Bottlenecks*: Bolivia submits that Glencore Bermuda could not have expanded the capacity of the Colquiri Mine to 550,000 tonnes of ore per year as provided in the Triennial Plan because the San José winze (for extracting ore from the deepest levels of the Mine to level -405) and the Victoria winze (for extracting ore from level -405 to the surface) allegedly lacked sufficient capacity.⁵⁹ This is incorrect. The evidence presented at the Hearing demonstrated that, at the time that Bolivia took the Mine, Glencore Bermuda was already expanding the mine to eliminate these bottlenecks in the ore extraction process.
28. With respect to the Victoria winze, Bolivia somehow ignores that the main objective of the Main Ramp was to bypass that winze and expand the Mine's capacity. Indeed, Dr Rigby conceded at the Hearing that the extraction rate of the Triennial Plan would have been achieved once the Main Ramp was built, that Colquiri was building the Main Ramp when Bolivia took the Mine in May 2012, and that, but for Bolivia's actions, Glencore Bermuda would have completed the construction of the Main Ramp (as Bolivia did post-May 2012) and thereby increased the Mine's extraction capacity (again, as Bolivia did post-May 2012).⁶⁰ Furthermore,

⁵⁶ Bolivia's Post-Hearing Brief, para 28.

⁵⁷ Cross Examination of Mr G Clow, Day 3, Tr (Eng), 473:18 – 474:1. *See also* Cross Examination of Mr G Clow, Day 3, Tr (Eng), 470:22-25 ("[RPA was] not instructed to rely on any particular document at all. [RPA was] told to assess documents provided [and] come to our own conclusion."), 489:4-9 ("Yes, [RPA] tested [the assumptions of the Triennial Plan], and this was our assessment of the best representation, as we said in our presentation, the most reasonable acceptance. So, in terms of reviewing and looking at when these expenditures might have been done... yes, we tested [the Triennial Plan].").

⁵⁸ Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 573:8 – 574:5.

⁵⁹ Bolivia's Post-Hearing Brief, paras 55-60.

⁶⁰ Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 577:4-11; 581:13-22, 582:4-9. *See also* Colquiri Annual Operations Report, 2017, **R-233**, p 17; Colquiri Mine Expansion Project, 2 March 2012, **C-324**, p 1; Alternatives for the expansion of the Colquiri Mine, Sinchi Wayra, July 2011, **C-321**, p 2.

before the construction of Main Ramp was completed, the Victoria winze had sufficient capacity to sustain increased production during the Triennial Plan's ramp-up period as shown in the documents that Bolivia's witness, ██████████, submitted to the record.⁶¹

29. Likewise, for the San José winze, documents that ██████████ introduced into the record confirm that the winze had sufficient capacity to support the extraction rates projected in the Triennial Plan's ramp-up period (360,000 and 390,000 tonnes of ore a year in 2012 and 2013, respectively).⁶² The Hearing also showed that, at the time of the taking, Colquiri had approved a US\$1.2 million investment to increase its extraction capacity during the ramp-up period.⁶³ In fact, ██████████ admitted in his written testimony that, after the expropriation, Bolivia expanded the San José winze's capacity as Glencore Bermuda had planned.⁶⁴
30. **Head grades:** Bolivia's expert's valuation of Colquiri relies on head grades of 1.17% for tin and 6.70% for zinc. Bolivia alleges that these grades are based on the historical performance of the Mine and the testimony of Mr Villavicencio—the Vinto Tin Smelter's (not Colquiri's) former General Manager under Bolivia's administration—who claims that head grades decrease as the Mine goes deeper.⁶⁵
31. Bolivia's argument regarding the Mine's historical performance is factually incorrect. Between 2005 and 2012, actual head grades were 1.29% for tin and 7.08% for zinc.⁶⁶ These historical head grades are consistent with head grades provided in Glencore Bermuda's valuation of Colquiri (1.29% for tin and 7.52% for zinc) and the Triennial Plan,⁶⁷ and are contrary to the

⁶¹ Technical characteristics of the San Jose and Victoria winches, 11 December 2017, **R-37**, p 2-3 (showing an extraction capacity of 396,200 tonnes—higher than the forecasted extraction of 360,000 tonnes by 2012 and 390,000 tonnes by 2013—corresponding to 1,400 tonnes of ore extracted per day and 283 days of operation at the Mine). *See also* Third Witness Statement of Mr Eduardo Lazcano, para 35; Direct Presentation of Messers G Clow and R Lambert, Day 3, Tr (Eng), 435:2-4. Indeed, Bolivia extracted more than 390,000 tonnes through the Victoria winze, before completion of the Main Ramp. *See* Summary of Monthly Metallurgical Balance, Certificates of Plant Operation Chemical Grades, and Monthly Reports of Minerals Movement, 28 November 2017, **R-41**, pp 4, 5.

⁶² Technical characteristics of the San Jose and Victoria winches, 11 December 2017, **R-37**, p 2-3; Third Witness Statement of Mr Eduardo Lazcano, para 35.

⁶³ Cross Examination of Mr E Lazcano, Day 2, Tr (Eng), 338:2-5; Compañía Minera Colquiri Investment Plan for 2012, 2011, **R-34**, "Datos", row 342; Third Witness Statement of Mr Eduardo Lazcano, para 38.

⁶⁴ First Witness Statement of ██████████, para 54; Third Witness Statement of ██████████, para 53.

⁶⁵ Bolivia's Post Hearing Brief, paras 65-68.

⁶⁶ *See* Second Expert Report of RPA, paras 73-74. In contrast, RPA's proposed head grades for zinc are consistent with the actual zinc head grade between 2009 and 2011, which averaged 7.48%. *See ibid*, para 78.

⁶⁷ Direct Presentation of Messers G Clow and R Lambert, Day 3, Tr (Eng), 447:15 – 448:7; Second Expert Report of RPA, paras 71-73; Glencore Annual Report, 2011, **R-252**, p 72. Mr Clow also explained that *ex-post* head grades for tin are even higher than the assumption included in Compass Lexecon experts' valuation. Direct Presentation of Messers G Clow and R Lambert, Day 3, Tr (Eng), 448:8-17.

grades proposed in Bolivia’s Colquiri valuation (1.17% for tin and 6.70% for zinc), which are materially lower than Colquiri’s historical figures.⁶⁸

32. Mr Villavicencio’s testimony with respect to the head grades of the deeper levels of the Mine is not credible. Mr Villavicencio is a metallurgist by training who never worked at the Colquiri Mine. Further, his testimony is directly contradicted by the actual data gathered at Colquiri, which shows that grades of both tin and zinc increased with depth between 2005 and 2012.⁶⁹
33. **“Catch-up” CAPEX:** In a bid to reduce Colquiri’s value, Bolivia continues to assert that US\$25 million of so-called “catch-up” CAPEX would have been necessary to continue to operate Colquiri post-May 2012. To support this baseless claim, Bolivia alleges that Mr Eskdale conceded that the “catch-up” CAPEX was necessary, though Mr Eskdale never did so and Bolivia cannot cite any testimony to support its allegation. Furthermore, Bolivia still has not proven that “catch-up” CAPEX was necessary to continue to operate or expand Colquiri, or how this large amount of CAPEX would have been spent.⁷⁰ The lack of support of the “catch-up” CAPEX was underscored by Dr Rigby’s testimony at the Hearing. Dr Rigby could not explain how he had come to his “catch-up” CAPEX figure, why it was needed or the projects on which he recommended spending the funds. Instead, Dr Rigby testified that he had asked himself “what *feels* like a right number?” and that he “*felt*” that the “asset wasn’t *loved*” so he “*thought it was appropriate to apply maybe five years of [‘catch-up’] capital.*”⁷¹ In short, there is *no* evidentiary basis for Bolivia’s request that the Tribunal include “catch-up” CAPEX in the Colquiri valuation.
34. **Operating Expenditures (OPEX):** Bolivia’s proposed valuation of Colquiri assumes OPEX of US\$71.10 per tonne of ore processed because its valuation expert, Dr Flores, alleges that this

⁶⁸ Bolivia’s underestimation of the head grade for tin has the greatest impact on the valuation of Colquiri because tin prices were ten times higher than zinc prices. *See* Second Expert Report of RPA, para 74.

⁶⁹ Direct Presentation of Messers G Clow and R Lambert, Day 3, Tr (Eng), 448:18-25; Second Expert Report of RPA, paras 76-77, Figures 3, 4.

⁷⁰ Cross Examination of Dr D Flores, Day 5, Tr (Eng), 826:19-23 (acknowledging that he did not identify any specific investments that would correspond for “catch-up” CAPEX, alleging that this is something that would have been done by Dr Rigby—but that is not the case), 826:24 – 827:11 (noting that it is not certain that “catch-up” CAPEX would have been invested and that, if accounted, said CAPEX would correspond to expansion CAPEX for an expanded production). *See* Direct Presentation of Messers G Clow and R Lambert, Day 3, Tr (Eng), 451:12-13 (noting that Bolivia’s allegations on “catch-up” CAPEX are not explained). *See also* Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 672:3-7 (noting that it is illogical to add a US\$25 million investment for “catch-up” CAPEX and not accounting for a correlative increase in the Mine’s production).

⁷¹ Direct Presentation of Dr N Rigby, Day 4, Tr (Eng), 559:2-18 (emphases added).

cost is supported by the information available to a willing buyer on the Valuation Date.⁷² This is wrong.

35. Dr Flores's recommendation is not based on actual information gathered at the Colquiri Mine. Instead, Dr Flores created an OPEX number by taking the Triennial Plan's forecasted OPEX for 2011 and applying a mark-up that he claims to represent average difference between Colquiri's budgeted and actual costs.⁷³ Dr Flores' approach for creating an OPEX number was not even endorsed by Bolivia's mining expert, Dr Rigby, who chose to rely on actual OPEX for 2011 with no further adjustments.⁷⁴ Furthermore, the most relevant OPEX data for a willing buyer as of May 2012 would have been Colquiri's actual OPEX for January-May 2012, which was US\$61.50 per tonne of ore processed.⁷⁵
36. This actual OPEX cost of US\$61.50 per tonne of ore is more closely aligned with Glencore Bermuda's forecast of an average OPEX of US\$57.97 per tonne for the full valuation period, than Bolivia's proposed OPEX of US\$71.10 per tonne.⁷⁶ As Messers Clow and Lambert explained, the modest decrease between actual OPEX in the first months of 2012 and Glencore Bermuda's proposed OPEX for the valuation is based on the costs savings realized through economies of scale as the Mine's extraction capacity and the Concentrator Plant's processing capacity increased pursuant to the expansion (which was underway at the time of taking).⁷⁷
37. Bolivia disputes that economies of scale would support reducing OPEX. To support its case, Bolivia's Post-Hearing Brief misconstrues Dr Abdala's testimony at the hearing. Contrary to Bolivia's assertion,⁷⁸ Dr Abdala never stated that Colquiri would have achieved economies of scale by reducing labor costs while increasing Colquiri's output. Bolivia selectively cites Dr Abdala's testimony. What Dr Abdala actually testified was that labor costs are one of the components of G&A costs, and that the Triennial Plan's estimate of G&A costs already

⁷² Bolivia's Post Hearing Brief on Quantum, paras 79-80, 83; Direct Presentation of Dr D Flores, Day 5, Tr (Eng), 768:19-23.

⁷³ See Direct Presentation of Dr D Flores, Day 5, Tr (Eng), 767:25 – 768:18.

⁷⁴ See Direct Presentation of Dr N Rigby, Day 4, Tr (Eng), 558:3-5 (noting that he instead took actual costs for 2011—US\$69.90 per tonne of ore processed—and flat-lined them going forward).

⁷⁵ Sinchi Wayra Monthly Report, December 2012, **CLEX-11-13**, pp 6-7; Second Expert Report of RPA, para 87.

⁷⁶ Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 674:20 – 675:12; Second Expert Report of RPA, para 87.

⁷⁷ See Second Expert Report of RPA, para 87.

⁷⁸ Bolivia's Post-Hearing Brief, paras 82-83.

accounted for the increases in personnel required to sustain Colquiri's expansion.⁷⁹ Furthermore, Glencore Bermuda's experts from RPA and Compass Lexecon both explained that there are multiple components that feed into economies of scale.⁸⁰ At the Hearing, Glencore Bermuda's mining expert, Mr Clow, provided concrete examples of mines that have achieved economies of scale because their overall unitary costs decrease as production increases, including other mines owned by Glencore in Peru and Bolivia.⁸¹ Bolivia's mining expert, Dr Rigby, did not refute that mines achieve economies of scale, but he explained that he did not account for economies of scale only because he did not account for an expansion at Colquiri.⁸² For his part, Bolivia's damages expert, Dr Flores, simply speculated that, with an expanded Mine, Sinchi Wayra's management in La Paz might have decided to move to a more expensive office, thereby offsetting reductions in fixed costs achieved by the expansion.⁸³

38. In sum, the evidence overwhelmingly supports the technical components of Glencore Bermuda's experts' valuation of Colquiri and contradicts Bolivia's proposed valuation.

4. Bolivia has failed to rebut the overwhelming evidence that the Tailings Plant had value

39. In its Post-Hearing Brief and proposed Colquiri valuation, Bolivia clings to its argument that the Tailings Plant has *zero* value.⁸⁴ This is contrary to the evidence adduced at the Hearing, including Dr Rigby's own admissions that the project was technically feasible, that Glencore Bermuda had adopted specific steps to implement it and that it should be given "some value."⁸⁵ It is also contrary to the fact that Glencore Bermuda paid close to US\$32 million for the rights

⁷⁹ See Questions from President Ramírez to Dr M Abdala, Day 5, Tr (Eng), 859:17 – 861:6. See also *ibid*, 877:20 – 882:7.

⁸⁰ Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 675:1-6 (noting that "up to 50 percent of the costs, around 50 percent of the costs are fixed . . ."); Questions from President Ramírez to Dr M Abdala, Day 5, Tr (Eng), 865:25 – 866:9 (noting that the increases in personnel were only one of the various components of fixed costs); Second Expert Report of RPA, para 90 (noting that fixed costs include labor, building operation and maintenance, office supplies, camp costs, consulting services, insurance and fixed portions of power, fuel and water supply).

⁸¹ Direct Presentation of Messers G Clow and R Lambert, Day 3, Tr (Eng), 450:19 – 451:4; *ibid*, slide 34; Second Expert Report of RPA, para 91 and Figure 6.

⁸² Direct Presentation of Dr N Rigby, Day 4, Tr (Eng), 558:1-5.

⁸³ Questions from President Ramírez to Dr D Flores, Day 5, Tr (Eng), 862:12-22.

⁸⁴ Bolivia's Post-Hearing Brief, paras 89-97.

⁸⁵ Glencore Bermuda's Post-Hearing Brief, paras 31-32 (and the sources cited therein). See also *ibid*, para 34 (and the sources cited therein).

to complete and operate the Tailings Plant and that the tailings had ten million tonnes of mineral Reserves that were readily available to be processed in the Plant.⁸⁶

40. Bolivia also still argues that Glencore Bermuda had not begun to implement the project at the time that Bolivia took Colquiri.⁸⁷ Yet, Bolivia’s own experts admitted that Glencore Bermuda had begun to develop the Tailings Plant prior to May 2012. Dr Rigby testified at the Hearing that Glencore Bermuda had “spent 1.2 million dollars on the Project [in] preparatory works and drilling,” among other works.⁸⁸ Similarly, Dr Flores testified that the evidence on the record showed “some movement” towards completing the project and that “some works had been developed” at the Tailings Plant.⁸⁹
41. The preponderance of the evidence in the record therefore confirms that the Tailings Plant had value at the time it was taken as Glencore Bermuda’s damages experts, Dr Abdala and Ms Chavich, provide in their valuation of Colquiri.

B. VINTO

42. The preponderance of the evidence supports the Compass Lexecon experts’ proposed valuation of Vinto (US\$53 million), and Bolivia’s Post-Hearing Brief fails to provide any reason to justify its precipitously lower valuation (US\$17 million). The evidence shows, and Bolivia has not disproven, that Vinto was a profitable Asset when Bolivia took it in February 2007. Vinto generated profits of approximately US\$18 million in the two years prior to the nationalization, and, in 2007, Bolivia forecasted “a net profit of USD 7,130,000 per year” if it nationalized Vinto.⁹⁰ These figures confirm that the Compass Lexecon experts’ valuation of Vinto is the most reasonable valuation in the Joint Models. Plus, that valuation is corroborated by the US\$52 million that Glencore Bermuda paid for Vinto in March 2005, less than two years before Vinto’s Valuation Date.⁹¹ These facts also highlight how Bolivia’s proposed US\$17 million valuation

⁸⁶ Glencore Bermuda’s Post-Hearing Brief, para 33 (and the sources cited therein).

⁸⁷ Bolivia’s Post-Hearing Brief, paras 91-92.

⁸⁸ Cross Examination of Dr N Rigby, Day 4, Tr (Eng), 629:8-13, 631:4 – 632:14. *See also* “Colquiri Tailings Project,” Sinchi Wayra presentation, August 2007, **C-315**, pp 7-8; Sinchi Wayra Monthly Report, January 2007, **R-428-05-GB009188**, p 11.

⁸⁹ *See* Cross Examination of Dr D Flores, Day 5, Tr (Eng), 849:25 – 852:13.

⁹⁰ Glencore Bermuda’s Post-Hearing Brief, paras 37(a), (b), (c) (and the sources cited therein).

⁹¹ Glencore Bermuda’s Post-Hearing Brief, paras 36(a), 37(a)-(b) (and the sources cited therein).

of Vinto is divorced from reality—Glencore Bermuda generated profits of over US\$17 million in less than *two years* and the valuation is intended to provide for *20 years* of operations.⁹²

43. To attack the Compass Lexecon experts' valuation of Vinto, Bolivia alleges that Vinto could not have reached the production levels that their valuation forecasts because in the approximately two years that Glencore Bermuda owned the Smelter it allegedly did not invest in the Tin Smelter.⁹³ To support this allegation, Bolivia claims that Mr Eskdale conceded at the Hearing "that there was 'nothing spent'" at the Tin Smelter.⁹⁴ This assertion pushes the acceptable limits of advocacy. Mr Eskdale actually testified that: "In this line [of locomotives in page 84 of exhibit **R-518**], there is no spen[d], nothing spent. On the previous spreadsheet that we looked at there was a massive [expenditure] at the bottom of others. ... To the best of my knowledge, the Company spent money on new locomotives."⁹⁵ Bolivia's selective quote misconstrues both the subject matter and content of Mr Eskdale's testimony.
44. Bolivia also claims that the Compass Lexecon experts' valuation underestimates Vinto's sustaining CAPEX (including remediation costs) and OPEX.⁹⁶ However, the Compass Lexecon experts and Bolivia's damages expert, Dr Flores, generally agree on costs for Vinto, including the same sustaining CAPEX (US\$23.5 million in total) and G&A, with only three exceptions.⁹⁷ The three exceptions were the cost of acquiring an Ausmelt Furnace, which Glencore Bermuda's mining experts explained was unnecessary for Vinto's operations (but if installed would have resulted in expanded output); the adjustments to OPEX for economies of scale, which Glencore Bermuda's experts explained were reasonable and should be obtained by increasing output at a smelter; and the amount of remediation costs, which have almost no impact in the valuation because they are incurred at the end of the 20-year valuation and discounted to the Valuation Date.⁹⁸

⁹² See Glencore Bermuda's Post-Hearing Brief, paras 37(c)-(d) (and the sources cited therein).

⁹³ Bolivia's Post-Hearing Brief, paras 108-109.

⁹⁴ Bolivia's Post-Hearing Brief, para 109.

⁹⁵ Cross Examination of Mr C Eskdale, Day 2, Tr (Eng), 234:14-19, 235:10-11.

⁹⁶ Bolivia's Post-Hearing Brief, paras 127-28, 136-37.

⁹⁷ Compare Joint Model for Vinto, "Abdala-Chavich" macros button, "CAPEX" tab, row 16, with *ibid*, "Flores" macros button. At the Hearing, Ms Chavich explained that the Compass Lexecon experts had adopted certain of Dr Flores's assumption, such as the sustaining CAPEX for 2007 and the G&A costs, to reduce the number of issues at dispute. See Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 684:23 – 685:5.

⁹⁸ Second Expert Report of RPA, paras 234, 225-28; Direct Presentation of Dr N Rigby, Day 4, Tr (Eng), 567:7-10 ("[W]ith the discounting effect of the Discounted Cash Flow Model, the impact on value [of remediation costs] in

45. [Redacted]

[Redacted]

46. [Redacted]

47. [Redacted]

terms of Net Present Value was really almost insignificant.”). *See also* Third Witness Statement of Christopher Eskdale, para 68.

99 [Redacted]

100 [Redacted]

101 [Redacted]

102 [Redacted]

103 [Redacted]

[REDACTED]

48.

[REDACTED]

C. ANTIMONY SMELTER AND TIN STOCK

49. The Joint Models for the Antimony Smelter and the Tin Stock include two options for calculating the fair market value of each Asset, one recommended by each party's valuation experts. Bolivia's Post-Hearing Brief has not raised any new arguments in relation to the valuation of these Assets. Accordingly, Glencore Bermuda respectfully refers the Tribunal to its prior submissions on these Assets.¹⁰⁷

104 [REDACTED]

105 [REDACTED]

106 [REDACTED]

¹⁰⁷ See Claimant's Opening Statement, Day 1, Tr (Eng), 48:12-20. See also Reply on Quantum, para 171.

III. GLENCORE BERMUDA'S DISCOUNT RATES FOR COLQUIRI AND VINTO ARE SUPPORTED BY THE PREPONDERANCE OF THE EVIDENCE AND BOLIVIA'S RESPONSE TO TRIBUNAL QUESTION 3

50. The Joint Models include the two following options for calculating the discount rate applicable to the valuations of Colquiri and Vinto:
- (a) the discount rate recommended by Glencore Bermuda's damages experts, Dr Abdala and Ms Chavich, of 12.3% and 15.7% for Colquiri and Vinto, respectively,¹⁰⁸ and
 - (b) the discount rate recommended by Quadrant's expert of 22.1% and 28.5% for Colquiri and Vinto, respectively.¹⁰⁹
51. At the Tribunal's request, the valuation experts have compromised on certain components of the discount rate, including the risk-free rate, the levered beta calculation and the corporate debt spread. Bolivia calls the Compass Lexecon experts' adoption of Quadrant's risk-free rate "opportunistic" because the risk-free rate increases Colquiri's valuation.¹¹⁰ However, Bolivia fails to mention that the experts' compromise reduces Vinto's valuation. Further, the Compass Lexecon experts' compromise achieves the desired goal of reducing the number of differences between the parties' valuations.
52. The evidence adduced at the Hearing demonstrated that the discount rates proposed by Dr Abdala and Ms Chavich are the most appropriate rates. Those rates—12.3% for Colquiri in May 2012 and 15.7% for Vinto in February 2007—are consistent with the 15.0% discount rate that Glencore Bermuda applied in October 2004 when it acquired Colquiri and Vinto,¹¹¹ and that the *Rurelec* and *Quiborax* tribunals applied to value assets in Bolivia in May 2010 (a rate of 14.3%) and June 2013 (a rate between 14.1% and 18.4%).¹¹² The rates proposed by Dr

¹⁰⁸ Joint Valuation Model for Colquiri, "Control Panel" tab, "Abdala-Chavich" macros button, cell J35; Joint Valuation Model for Vinto, "Control Panel" tab, "Abdala-Chavich" macros button, cell J39.

¹⁰⁹ Joint Valuation Model for Colquiri, "Control Panel" tab, "Flores" macros button, cell J35; Joint Valuation Model for Vinto, "Control Panel" tab, "Flores" macros button, cell J39.

¹¹⁰ Bolivia's Post-Hearing Brief, para 150.

¹¹¹ See Claimant's Opening Statement, Day 1, Tr (Eng), 50:7-15; DCF model prepared by Glencore Bermuda for the acquisition of the Assets, April 2005, C-311, "Summary valuation" tab, cell E19. The discount rate of the purchase is equivalent to 17%, adjusted for inflation by 2012.

¹¹² See Claimant's Opening Statement, Day 1, Tr (Eng), 51:1-23; *Rurelec v Bolivia*, Award, 31 January 2014, CLA-120, para 603. As explained at the Hearing, the tribunal in *Quiborax* calculated a 18.40% discount rate as of June 2013, based on Damodaran's estimate of Bolivia's country risk for 2004 because "the Parties have not pointed to the 2013 [country risk] figure" to be applied at the valuation date. All things equal, had the tribunal in *Quiborax* used Damodaran's estimate of Bolivia's country risk for 2013, the discount rate would have been 14.05%. See

Abdala and Ms Chavich also are consistent with country risk spread of countries comparable to Bolivia on the Valuation Dates. As demonstrated at the Hearing, those rates are within ten percent of the value of the Compass Lexecon experts' rates.¹¹³

53. The evidence presented at the hearing also confirmed that the rates proposed by Dr Flores—22.1% and 28.5% for Colquiri and Vinto, respectively—are simply not credible. This is true because, among other things, Dr Flores's rates are materially higher (often over 50% higher) than the benchmarks identified in the preceding paragraph. In fact, Dr Flores's proposed country risk for the discount rate is so high that it would only make sense if Bolivia was in default on its sovereign debt, but Bolivia was not and never has defaulted on its debt.¹¹⁴
54. There are two primary reasons that Dr Flores's discount rates are nearly 50% higher than Dr Abdala's and Ms Chavich's proposed rates and all comparable rates. They are Quadrant's (i) unorthodox calculation of Bolivia's country risk premium, and (ii) addition of an "illiquidity/size" premium for Colquiri and Vinto.¹¹⁵ Glencore Bermuda addresses these two differences in the following paragraphs.

A. GLENCORE BERMUDA'S PROPOSED COUNTRY RISK RATE IS APPROPRIATE AND BOLIVIA'S RATE SHOULD BE REJECTED

55. Dr Abdala and Ms Chavich calculate country risk premium using Bolivia's sovereign default risk premium, which is a standard and widely used method of calculating country risk premium.¹¹⁶ Because Bolivia had not issued sovereign debt in US dollars as of the Valuation Dates, Dr Abdala and Ms Chavich constructed Bolivia's sovereign default risk from the Emerging Markets Bond Index (*EMBI*) (ie, the spread of a country's sovereign bonds over US Treasuries) for countries with similar credit ratings as Bolivia from the three more reputable

Quiborax v Bolivia, Award, 16 September 2015, **CLA-127**, paras 488, 501. See also Claimant's Opening Presentation, slide 92.

¹¹³ See Claimant's Opening Statement, Day 1, Tr (Eng), 52:2 – 53:3; Claimant's Opening Presentation, slides 93-94.

¹¹⁴ See Claimant's Opening Presentation, slides 93-94; Compass Lexecon Discount Rate, Undated, **CLEX-38**, "Rating & EMBI_Moody" tab, cells D69, E69, I69, J69, O69, AJ69. See also Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 677:16 – 678:10 (explaining that Dr Flores's calculation of country risk assumes a sovereign default, which was not the case of Bolivia in either Valuation Date).

¹¹⁵ See Claimant's Opening Statement, Day 1, Tr (Eng), 49:21-25; Reply on Quantum, para 143.

¹¹⁶ Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 676:3-15. See Reply on Quantum, para 144; Bolivia's Post-Hearing Brief, paras 149-51.

rating agencies, Moody's, S&P and Fitch.¹¹⁷ The *Rurelec* tribunal used this approach for calculating Bolivia's sovereign default risk,¹¹⁸ and Dr Flores accepts that this EMBI proxy methodology is appropriate for developing Bolivia's sovereign default risk.¹¹⁹ Therefore, Bolivia's assertion in its Post-Hearing Brief that there is no precedent of a tribunal accepting a country risk premium calculated pursuant to the EMBI proxy methodology is false.¹²⁰ The EMBI proxy methodology also is consistent with Professor Damodaran's recommendations for calculating country risk premia for countries like Bolivia on the Valuation Dates that lack direct EMBI data.¹²¹

56. Bolivia's Post-Hearing Brief tries to attack the Compass Lexecon experts' country risk premium by using a selective snippet of testimony to allege that the experts "conceded" at the Hearing that they assume that the risk of doing business in Bolivia is equal to the risk of default by Bolivia.¹²² Bolivia's allegations and selective quotation are misleading. The truth is that when asked at the Hearing if he had assumed that there was no difference between investing in equity in Bolivia and investing in Bolivian sovereign debt, Dr Abdala, responded: "No, that's not true. That's absolutely not true."¹²³ Dr Abdala further testified that while sovereign debt risk and equity risk could differ for short-term valuations, "there is no difference for long term valuations" like the valuations of Colquiri and Vinto, which assume a 20-year investment (the same period that Glencore Bermuda assumed in 2005 when it acquired the Assets).¹²⁴
57. In contrast to Dr Abdala's and Ms Chavich's calculation of the country risk premium, Dr Flores relied on an unorthodox methodology to develop an inflated premium. As Dr Flores confirmed at the Hearing, he created a country risk premium by taking the premium constructed by Compass Lexecon's experts, applying a 1.5 multiplier, and then averaging the result with Bolivia's country risk premium under the Ibbotson/Morningstar Country Risk Rating Model

¹¹⁷ Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 676:3-15; Reply on Quantum, para 144; First Expert report of Compass Lexecon, para 119.

¹¹⁸ *Rurelec v Bolivia*, Award, 31 January 2014, **CLA-120**, paras 558-60.

¹¹⁹ See Second Expert Report of Dr D Flores (Quadrant), paras 160-61.

¹²⁰ Bolivia's Post-Hearing Brief, para 155.

¹²¹ Aswath Damodaran, *Equity Risk Premiums (ERP): Determinants, Estimation and Implications*. New York: Stern School of Business, March 2012, **CLEX-35**, pp 51, 53. See Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 676:16-18.

¹²² Bolivia's Post-Hearing Brief, para 152.

¹²³ Cross Examination of Dr M Abdala, Day 5, Tr (Eng), 729:3-8.

¹²⁴ Cross Examination of Dr M Abdala, Day 5, Tr (Eng), 729:1-2, 714:7-12.

(*Ibbotson*).¹²⁵ Bolivia’s answers in its Post-Hearing Brief to the Tribunal’s question 3(a)-(c) confirm that Dr Flores’s methodology is flawed and should be rejected by this Tribunal.

58. **Question 3(a):** The Tribunal asked if there is any precedent where “[a] tribunal has calculated a country risk premium in the same way as the Respondent proposes for this case.”¹²⁶ Bolivia admitted that “there is none.”¹²⁷
59. This is because Dr Flores’s proposed 1.5 multiplier is only appropriate for valuations of short-term investments.¹²⁸ In fact, to try to justify this multiple, Bolivia relied at the Hearing on examples proposed by Professor Damodaran for a five-year valuation.¹²⁹ The Compass Lexecon experts objected to Bolivia’s characterizations of these examples, and testified that they are inapplicable here because the parties are valuing Colquiri and Vinto as long-term (20-year), not short-term investments.¹³⁰ Dr Flores also proposed the 1.5 multiplier in the *Rurelec* arbitration, and that tribunal rejected Quadrant’s argument because “Professor Damodaran is on the record favouring [the] multiplier ... *only for short term valuations*.”¹³¹
60. **Question 3(b):** The Tribunal’s second question on discount rate asked whether there is an example where “[a] tribunal has used [*Ibbotson*] as a basis to determine a country risk premium.”¹³² There is no precedent of a tribunal that has relied on *Ibbotson* in the manner that Dr Flores recommends here.

¹²⁵ See Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 676:19-23; Second Expert Report of Compass Lexecon, para 88.

¹²⁶ Tribunal’s Question No 3(a).

¹²⁷ Bolivia’s Post-Hearing Brief, para 155.

¹²⁸ Cross Examination of Dr M Abdala, Day 5, Tr (Eng), 706:3-6 (“[F]or Country Risk Premium, Damodaran ... for short-term valuation recommends potentially the addition of the multiplier ..., but only for short-term investments.”), 713:15-17 (noting that adding a multiplier “is an additional separate method which Damodaran ... recommends for the short-term and not for the long-term investment”), 717:21-22 (“[A]s you can see in the headings of Damodaran’s separate sheet [exhibit **CLEX-52**], Damodaran also doesn’t recommend 1.5 [multiplier] for Bolivia.”), 718:15.17 (adding a multiplier “is an alternative methodology which tends to be used in the case of Damodaran recommended [country risk] for short-term investments”); Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 676:23 – 677:3 (“[W]e object that the 1.5 multiplier really doesn’t apply to long-term valuations because in longer term valuations you shouldn’t be looking at any differential between equity and bond returns, and, therefore you just use the Credit Rating or the yield without that multiplier.”). See Reply on Quantum, para 145.

¹²⁹ See Cross Examination of Dr M Abdala, Day 5, Tr (Eng), 720:13 – 722:4.

¹³⁰ Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 676:23 – 677:3.

¹³¹ *Rurelec v Bolivia*, Award, 31 January 2014, **CLA-120**, para 578 (emphasis added).

¹³² Tribunal’s Question No 3(b).

61. Ibbotson is not a market-based measure of country risk. It is a subjective assessment based on the opinions of a limited number of bankers. This methodology has flaws and drawbacks that have been thoroughly identified in the financial literature.¹³³ Other tribunals that have had to consider Dr Flores’s proposed methodology have rejected doing so. In *Quiborax*, the tribunal noted that both valuation experts agreed on the starting point for calculating sovereign debt risk—there, Professor Damodaran’s estimate; here, the EMBI proxy—and it decided to rely on the agreed starting point and did not adopt Dr Flores’s recommendation to average Professor Damodaran’s estimate with Ibbotson’s country risk premium.¹³⁴
62. Bolivia submits that the tribunal in *Tidewater v Venezuela* used Ibbotson to calculate the country risk premium.¹³⁵ Bolivia’s reliance on *Tidewater* is misplaced. The *Tidewater* tribunal did not rely on Ibbotson in the manner that Quadrant is recommending here—*ie*, as one of two measures of country risk to be averaged with each other.
63. The tribunal in *Tidewater* relied on Ibbotson as the country risk premium. It did that because the tribunal (*i*) rejected the claimants’ unreasonably low country risk premium of 1.5%, which it called unrealistic; and (*ii*) the tribunal found the Ibbotson risk premium to be consistent with the country risk premia for Venezuela adopted by other tribunals.¹³⁶ Here, Dr Flores did not demonstrate that Bolivia’s Ibbotson country risk premium is consistent with any other source. On the contrary, Dr Flores’s two calculations of country risk lead to widely divergent results: 18.45% for 2007 and 15.51% for 2012 under Ibbotson, and 7.81% for 2007 and 5.54% for 2012

¹³³ See Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 677:6-14 (“Ibbotson reports this based on a survey conducted by Institutional Investor, which is not a market-based survey. It’s basically a survey among bankers which has very subjective criteria, has an econometric model that is substandard and has lots of flaws. And it also comes from this agency, which is not a qualified agency, which is an important requirement because then that means that it’s not subject to financial oversight by financial regulators.”), 677:17-18 (noting that Ibbotson’s country risk for Bolivia “is problematic because it’s equivalent to being under default”); Cross Examination of Dr M Abdala, Day 5, Tr (Eng), 708:10-14 (“[I]t’s well known in the practitioners’ world, that default spreads of a thousand basis points—above a thousand basis points [*ie*, Ibbotson’s] generally reflect countries that are either near default or default situation.”); Second Expert Report of Compass Lexecon, paras 92-95; Reply on Quantum, para 146.

¹³⁴ *Quiborax v Bolivia*, Award, 16 September 2015, **CLA-127**, paras 481-88.

¹³⁵ Bolivia’s Post-Hearing Brief, para 155.

¹³⁶ *Tidewater v Venezuela*, Award, 13 March 2015, **RLA-60**, paras 182 (referring to claimant’s proposed country risk premium of 1.5%), 187 (referring to the country risk of the respondent State that a recent tribunal had adopted), 189 (“[The CRP] was derived from the Ibbotson-Morningstar International Cost of Capital Report for 2009 *and validated by comparison with the method* adopted by Professor Damodaran.”) (emphasis added).

under the EMBI proxy with the 1.5 multiplier.¹³⁷ Quadrant then averages them in a transparent attempt to increase the country risk premium.

B. THERE IS NO BASIS TO APPLY THE “ILLIQUIDITY/SIZE” PREMIUM THAT BOLIVIA PROPOSES

64. The Tribunal’s third question regarding discount rate concerns the “illiquidity/size” premium that Quadrant asserts should be included in the discount rate.
65. **Question 3(c):** The Tribunal asked Bolivia to provide a precedent where “[a] tribunal has included in a DCF model both a size/illiquidity premium together with an additional *size* premium.”¹³⁸ Bolivia responded that there is no such precedent.¹³⁹ Glencore Bermuda understands that this is true, but it also understands that the Tribunal intended to ask if there is a precedent of a tribunal that has adopted a DCF model that includes a size/illiquidity premium and an additional *risk* premium as Quadrant recommends (*ie*, Ibbotson’s country risk premium).¹⁴⁰ Bolivia did not respond to this question because the answer, which is no, demonstrates that its proposed application of those two factors is unprecedented, unsound and should be denied.
66. The evidence presented at the Hearing, proved that the use of a *size premium* is not standard practice in international finance. Other tribunals have also rejected the application of additional premia for size or illiquidity.¹⁴¹ As Dr Abdala testified, it is incorrect to apply a US-based size premium to a company in an emerging market (like Colquiri and Vinto).¹⁴²
67. Compass Lexecon’s experts also testified at the Hearing that it is inappropriate to include an illiquidity premium in the discount rates for the valuations of Colquiri and Vinto because selling all of the shares of a company has the same prospective selling time (*ie*, illiquidity) whether the

¹³⁷ Reply on Quantum, para 147; Second Expert Report of Compass Lexecon, para 88.

¹³⁸ Tribunal’s Question No 3(c).

¹³⁹ Bolivia’s Post-Hearing Brief, para 158.

¹⁴⁰ See Second Expert Report of Dr D Flores (Quadrant), para 146.

¹⁴¹ See *Valores Mundiales v Venezuela*, Award, 25 July 2017, **CLA-227**, paras 776-7 (rejecting the application of a size premium because such premiums were US-based and did not reflect the size of companies operating elsewhere); *Flemingo Duty v Poland*, Award, 12 August 2016, **CLA-223**, para 900 (rejecting the application of a size premium because the valued company was part of a large multinational consortium); *Tidewater v Venezuela*, Award, 13 March 2015, **RLA-60**, para 197 (not computing the size/illiquidity premium that Dr Flores recommended, albeit with no analysis).

¹⁴² Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 678:11-19. See Reply on Quantum, para 150.

company is publicly traded or not.¹⁴³ Furthermore, the experts had already explained in their written submissions that, in the but-for scenario, Glencore Bermuda had no compulsion to divest the Assets and therefore the value of the Assets should not be subject to a discount associated with a rush to liquidate the Assets.¹⁴⁴

68. In its Post-Hearing Brief, Bolivia asserts that the Compass Lexecon experts' testimony was internally inconsistent because Dr Abdala allegedly testified that there was no difference in liquidity between shares of large US corporations traded in the stock market and private firms in Bolivia, like Colquiri and Vinto.¹⁴⁵ In reality, what Dr Abdala testified and Bolivia has failed to rebut, is that "for very, very small stakes, if you're traded, you will be able to sell in the marketplace without any consequences without affecting the price If you have a controlling stake, that would never be the case because a controlling stake will take about the same time [to sell] whether you're traded or non-traded."¹⁴⁶ Therefore, there is no basis to apply an illiquidity premium to Colquiri or Vinto.
69. In sum, the discount rates that Glencore Bermuda proposes are supported by the preponderance of the evidence, and the rates proposed by Bolivia are unsupported, have never been adopted by another tribunal and should be rejected.

IV. GLENCORE BERMUDA'S RIGHT TO COMPOUND INTEREST AT THE RATES PUBLISHED BY BOLIVIA'S CENTRAL BANK IS SUPPORTED BY THE PREPONDERANCE OF THE EVIDENCE AND BOLIVIA'S RESPONSE TO TRIBUNAL QUESTION 4

70. The Hearing confirmed that under Article 5 of the Treaty Glencore Bermuda is entitled to interest at the rates published by the Bolivian Central Bank on the Valuation Dates. Article 5 requires that Bolivia pays "interest at a normal commercial or legal rate ... applicable in the

¹⁴³ Questions of President Ramírez to Dr M Abdala, Day 5, Tr (Eng), 741:3-10 ("[F]or very, very small stakes, if you're traded, you will be able to sell in the marketplace without any consequences without affecting the price, but that's normally for stakes that are less than 1 percent. ... [Selling] a controlling stake will take about the same time whether you're traded or non-traded."), 741:21-25 ("[S]uppose you're Colquiri and you want to sell 100 percent of your stock, ... there is no difference in the time it will take to sell or to find a new Buyer, whether you're traded or not traded. There will be no difference at all."); Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 678:20 – 679:8 (nothing that "[It] would take about the same time or the exit costs would be the same if you tried to sell it hundred percent of your stakes, whether you're a public or private company. So, that Illiquidity Premium doesn't apply").

¹⁴⁴ Second Expert Report of Compass Lexecon, para 100.

¹⁴⁵ See Bolivia's Post-Hearing Brief, para 156.

¹⁴⁶ Questions of President Ramírez to Dr M Abdala, Day 5, Tr (Eng), 741:3-10.

territory of the expropriating Contracting Party.”¹⁴⁷ Based on the ordinary meaning of the Treaty’s term,¹⁴⁸ interest rates published by the Bolivian Central Bank are the rates at which regular businesses (*ie*, a “commercial ... rate”) normally obtain financing (*ie*, “a normal ... rate”) in Bolivia (*ie*, “in the territory of the expropriating Contracting Party”).

71. In its Post-Hearing brief, Bolivia alleges that the Central Bank’s rates are not representative of normal rates in the Bolivian market. This assertion is contrary to the evidence in the record. Glencore Bermuda’s expert, Ms Chavich, testified at the Hearing that “[a] normal commercial rate is a rate at which regular business can obtain financing, and we relied on the Interest Rate for loans granted from banks to corporations in Bolivia ... as published by the Central Bank of Bolivia.”¹⁴⁹ Ms Chavich further testified that the Central Bank rates represent an average of all commercial rates that Bolivian banks report to the Central Bank.¹⁵⁰ For its part, Bolivia has failed to offer any evidence that the interest rates published by the Bolivian Central Bank are not representative of a “normal commercial ... rate” in Bolivia.
72. Bolivia’s Post-Hearing Brief also argues that the application of the Central Bank rates would create a windfall for Glencore Bermuda.¹⁵¹ Bolivia is incorrect. As Dr Abdala testified, the rates published by the Central Bank do not even “restore Claimant to the position it would have been but for [Bolivia’s] breach[es]” because the rates are “below and [are] not reflective of the expected return when making the investment decision.”¹⁵² In addition, Compass Lexecon’s experts confirmed the reasonableness of the Central Bank rates as compared to other sources of interest and financing in Latin America, and the cost of debt of Colquiri and Vinto.¹⁵³

¹⁴⁷ Treaty, **C-1**, Art 5.

¹⁴⁸ See Vienna Convention on the Law of Treaties, 23 May 1969, **CLA-6**, Art 31(1).

¹⁴⁹ Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 689:18-22.

¹⁵⁰ Cross Examination of Ms C Chavich, Day 5, Tr (Eng), 756:24 - 757:3 (“[The] information that we have publicly available is something that the Central Bank of Bolivia published and it shows an average of what is the Interest Rate that local corporations pay[] in dollars in Bolivia.”). See also Second Expert Report of Compass Lexecon, para 117.

¹⁵¹ Bolivia’s Post-Hearing Brief, para 162.

¹⁵² Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 690:20-23. See also Second Expert Report of Compass Lexecon, paras 117-28.

¹⁵³ Cross Examination of Ms C Chavich, Day 5, Tr (Eng), 751:4-6 (“[W]e also [validated] with our other sources of interest and financing in Latin America.”). See also Second Expert Report of Compass Lexecon, paras 120, n214, and 121.

73. As explained at the Hearing, the application of the interest rates published by the Central Bank of Bolivia also is supported by the decisions of the tribunals in *Rurelec* and *South American Silver*, which share Glencore Bermuda’s interpretation of Article 5 of the Treaty.¹⁵⁴ Those tribunals also rejected Bolivia’s request to apply interest at an essentially risk-free rate.¹⁵⁵ The tribunal in *South American Silver* rejected Bolivia’s request because “the debtor of the compensation is [Bolivia] and [Bolivia’s] obligations ... are subject to an additional premium attributable to the risk over and above the risk-free rate.”¹⁵⁶ That same reasoning applies here.
74. **Question 4:** The Tribunal requested that Bolivia explain how its proposed risk-free interest rate “would be consistent with a Vienna Convention interpretation of the text of Article [5] of the [Treaty].”¹⁵⁷ Bolivia does not respond to this question and there is no evidence to support that a risk-free interest rate is a “normal commercial” rate in Bolivia as Article 5 requires.
75. Instead of answering the Tribunal’s question, Bolivia introduces a new argument for applying a US LIBOR-based interest rate. There is no support for this rate either. Bolivia argues that Glencore Bermuda’s interpretation of Article 5 of the Treaty leads to a “manifestly absurd or unreasonable result” and therefore justifies the interpretation of Article 5 through “recourse to supplementary means of interpretation” under Article 32 of the VCLT.¹⁵⁸ Bolivia does not, however, identify what these “supplementary means” would be, but it further argues that these unidentified means justify an interest rate of US LIBOR +1%.¹⁵⁹
76. The Tribunal should dismiss this new argument for several reasons. Among other things, it is untimely, unreasoned and there is no evidence to suggest that US LIBOR-based interest rate is consistent with “normal commercial” rates in Bolivia as Article 5 requires. To the contrary, as Ms Chavich testified at the Hearing, the rates “proposed by Dr. Flores do[] not reflect the cost

¹⁵⁴ *Rurelec v Bolivia*, Award, 31 January 2014, **CLA-120**, para 617; *South American Silver v Bolivia*, Award, 22 November 2018, **CLA-252**, paras 891-92. See Claimant’s Opening Statement, Day 1, Tr (Eng), 53:18-24.

¹⁵⁵ See *Rurelec v Bolivia*, Award, 31 January 2014, **CLA-120**, paras 610, 617.

¹⁵⁶ *South American Silver v Bolivia*, Award, 22 November 2018, **CLA-252**, para 889.

¹⁵⁷ Tribunal’s Question No 4.

¹⁵⁸ Bolivia’s Post-Hearing Brief, para 165.

¹⁵⁹ Bolivia’s Post-Hearing Brief, para 166.

of financing of companies in Bolivia ... and [they do not] represent the cost of financing of Latin America[n] corporations.”¹⁶⁰

77.

[REDACTED]

78. Finally, Bolivia also submits in its Post-Hearing brief that Glencore Bermuda has no right to compound interest.¹⁶³ Glencore Bermuda respectfully refers the Tribunal to its prior submissions on this issue, including at the Hearing.¹⁶⁴

79. The preponderance of the evidence therefore proves that Glencore Bermuda is entitled to compound interest at the rates published by the Central Bank of Bolivia, and Bolivia’s proposed rates should be rejected.

V. GLENCORE BERMUDA IS ENTITLED TO AN AWARD NET OF TAXES

80. Glencore Bermuda responded in its Post-Hearing Brief to the Tribunal’s Question 2, which requested that Glencore Bermuda comment on Bolivia’s objection to an award net of taxes.¹⁶⁵ In its Post-Hearing Brief, Bolivia reiterated its objection.¹⁶⁶ Glencore Bermuda will make two points in response to Bolivia’s renewed objection and respectfully refer the Tribunal to its response to Question 2 in its Post-Hearing Brief for a more complete response. *First*, Bolivia’s

¹⁶⁰ Direct Presentation of Dr M Abdala and Ms C Chavich, Day 4, Tr (Eng), 690:9-15. Indeed, the only attempt to explain why such rates represent a normal rate in Bolivia came from Dr Flores, who alleged that “Bolivian citizens are not prevented from investing in U.S. Treasury Bonds.” Cross Examination of Dr D Flores, Day 5, Tr (Eng), 803:10-12. Whether a Bolivian citizen is legally allowed to invest in US sovereign debt is irrelevant when interpreting Article 5 of the Treaty per the VCLT, as the Tribunal requested.

¹⁶¹

[REDACTED]

¹⁶²

[REDACTED]

¹⁶³ Bolivia’s Post-Hearing Brief, paras 167-70.

¹⁶⁴ Claimant’s Opening Statement, Day 1, Tr (Eng), 15:24 – 16:6 (“[C]ompound interest is necessary to ensure full reparation for the loss suffered, as noted ... in all recent investment-arbitration decisions.”); Reply on Quantum, paras 188-93.

¹⁶⁵ Tribunal’s Question No 2.

¹⁶⁶ Bolivia’s Post-Hearing Brief, para 172.

statement that the parties have not agreed on all applicable existing Bolivian taxes because there is disagreement in relation to the 3% tax applicable to the Antimony Smelter's valuation is false and Bolivia knew it was false at the time it submitted its Post-Hearing Brief.¹⁶⁷ The parties agreed to include the 3% tax in the Joint Model for the Antimony Smelter, and Glencore Bermuda has already explained that the disagreement with respect to the 3% tax no longer exists.¹⁶⁸ The parties therefore have agreed on all applicable existing Bolivian taxes, and the valuations in the Joint Models are net of all existing Bolivian taxes.

81. *Second*, Bolivia's assertion that it has the right to levy additional taxes on the award beyond the existing taxes confirms that an award net of taxes is necessary and not at all speculative.¹⁶⁹ Glencore Bermuda is not asking that the Tribunal limit Bolivia's sovereign power or to be exempted from the taxes it owes in Bolivia. Glencore Bermuda requests that the award be net of taxes to reflect the fact that the Joint Valuations are net of taxes, and to protect the finality and efficacy of the award because any further taxation would disallow the full reparations to which it is entitled under international law.¹⁷⁰ This is Glencore Bermuda's only opportunity to request that the Tribunal ensure the integrity of its award by declaring it net of taxes.¹⁷¹

VI. REQUEST FOR RELIEF

82. Glencore Bermuda respectfully refers the Tribunal to its request for relief at paragraph 65 of its Post-Hearing Brief.

¹⁶⁷ Bolivia's Post-Hearing Brief, para 173.

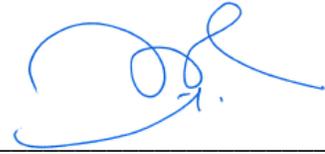
¹⁶⁸ Glencore Bermuda's Post-Hearing Brief, paras 51, n84 and 59, n97.

¹⁶⁹ Glencore Bermuda's Post-Hearing Brief, para 60.

¹⁷⁰ Glencore Bermuda's Post-Hearing Brief, para 53.

¹⁷¹ Glencore Bermuda's Post-Hearing Brief, para 61.

Respectfully submitted on behalf of the Claimant on 30 December 2021



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